



## EUROPEAN EDUCATION AND CULTURE EXECUTIVE AGENCY (EACEA)

EACEA.A – Erasmus+, EU Solidarity Corps  
A.4 – **International Capacity Building**

### GRANT AGREEMENT

**Project 101129169 — CirculEC**

#### PREAMBLE

This **Agreement** ('the Agreement') is **between** the following parties:

**on the one part,**

the **European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and**

**on the other part,**

1. 'the coordinator':

**D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU)**, PIC 997354971, established in SERIKBAYEV STREET 19, UST-KAMENOGORSK 070004, Kazakhstan,

and the following other beneficiaries, if they sign their 'accession form' (see Annex 3 and Article 40):

2. **SH.UALIKHANOV ATYNDAGY KOKSHETAU MEMLEKETTİK UNIVERSITETI (KoKSU)**, PIC 948627603, established in AKMOLA OBLAST ABAY STREET 76, KOKSHETAU 020000, Kazakhstan,

3. **THE TURKMEN STATE INSTITUTE OF ECONOMICS AND MANAGEMENT (TSIEM)**, PIC 898629438, established in 1972 (ATA TURK) STREET 73, ASHGABAT 744036, Turkmenistan,

4. **TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN (TUT)**, PIC 953846300, established in N KARABAYEV STREET 63 3, DUSHANBE 734061, Tajikistan,

5. **ALIKHAN BOKEIKHAN UNIVERSITY (ABU)**, PIC 934164321, established in MANGILIK EL STR. 11, SEMEY 071400, Kazakhstan,

6. **TOSHKENT SHAHRIDAGI XALQARO WESTMINSTER UNIVERSITETI (WIUT)**, PIC 933536828, established in 12 ISTQBOL STR, TASHKENT 100047, Uzbekistan,

7. **TAJIK STATE UNIVERSITY OF COMMERCE (TSUC)**, PIC 936722502, established in 1/2 DEHOTY STR, DUSHANBE 734055, Tajikistan,

8. **CENTRAL ASIAN UNIVERSITY MCHJ (CAU)**, PIC 885299116, established in MILLIY BOG STREET 264, BARKAMOL MFY, MIRZO ULUGBEK DISTRICT, TASHKENT 111221, Uzbekistan,
9. **KARAGANDA UNIVERSITY OF KAZPOTREBSOYUZ (KarUK)**, PIC 934473848, established in AKADEMICHESKAYA STREET 9, KARAGANDA 100009, Kazakhstan,
10. **TURKMEN STATE INSTITUTE OF FINANCE (TSIF)**, PIC 933076369, established in 112 1987 STR. HERO OF TURKMENISTAN ATAMYRAT NYYZAZO, ASHGABAT 744027, Turkmenistan,
11. **TURKMENISTAN YLYMLAR AKADEMIYASY (AST)**, PIC 968678473, established in BITARAP TURKMENISTAN SL 15, ASHGABAT 744000, Turkmenistan,
12. **AYECONOMICS RESEARCH CENTRE SL (AY)**, PIC 909523896, established in EDIFIC EMPRENDIA CAMPUS VIDA SN, SANTIAGO 15782, Spain,
13. **UNIVERSIDAD DE SANTIAGO DE COMPOSTELA (USC)**, PIC 999829635, established in COLEXIO DE SAN XEROME PRAZA DO OBRADOIRO S/N, SANTIAGO DE COMPOSTELA 15782, Spain,
14. **UNIVERSITA DEGLI STUDI DI NAPOLI FEDERICO II (UNINA)**, PIC 999976590, established in CORSO UMBERTO I, 40, NAPOLI 80138, Italy,
15. **FACHHOCHSCHULE DES MITTELSTANDES (FHM) GMBH - UNIVERSITY OF APPLIED SCIENCE - (FHM)**, PIC 950486123, established in RAVENSBERGER STRASSE 10G, BIELEFELD 33602, Germany,

Unless otherwise specified, references to ‘beneficiary’ or ‘beneficiaries’ include the coordinator and affiliated entities (if any).

If only one beneficiary signs the grant agreement (‘mono-beneficiary grant’), all provisions referring to the ‘coordinator’ or the ‘beneficiaries’ will be considered — mutatis mutandis — as referring to the beneficiary.

The parties referred to above have agreed to enter into the Agreement.

By signing the Agreement and the accession forms, the beneficiaries accept the grant and agree to implement the action under their own responsibility and in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

The Agreement is composed of:

Preamble

Terms and Conditions (including Data Sheet)

- Annex 1 Description of the action<sup>1</sup>
- Annex 2 Estimated budget for the action
- Annex 3 Accession forms (if applicable)<sup>2</sup>
- Annex 3a Declaration on joint and several liability of affiliated entities (if applicable)<sup>3</sup>
- Annex 4 Model for the financial statements
- Annex 5 Specific rules (if applicable)

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<sup>1</sup> Template published on [Portal Reference Documents](#).

<sup>2</sup> Template published on [Portal Reference Documents](#).

<sup>3</sup> Template published on [Portal Reference Documents](#).

## TERMS AND CONDITIONS

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## DATA SHEET

### 1. General data

Project summary:

Project summary
The CircuLEC (Development of innovative curricula and modules in Circular Economy and Sustainable Development) project is aimed to build the capacity of the human capital in the HEIs of Central Asian countries on a circular economy in order to provide staff, students and wider public with skills and competences aligned to the needs of local labour markets and environmental challenges CA countries faces. Project will update current disciplines that HEIs have in the circular economy adapted to the needs of each country (KZ, TKM, TJ, UZ).

Keywords:

- Sustainable Development Goals - Quality Education

Project number: 101129169

Project name: Development of innovative curricula and modules in Circular Economy and Sustainable Development

Project acronym: CircuLEC

Call: ERASMUS-EDU-2023-CBHE

Topic: ERASMUS-EDU-2023-CBHE-STRAND-2

Type of action: ERASMUS Lump Sum Grants

Granting authority: European Education and Culture Executive Agency

Grant managed through EU Funding & Tenders Portal: Yes (eGrants)

Project starting date: first day of the month following the entry into force date

Project end date: starting date + months of duration

Project duration: 36 months

Consortium agreement: Yes

### 2. Participants

**List of participants:**

N°	Role	Short name	Legal name	Ctry	PIC	Max grant amount
1	COO	EKTU	D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY	KZ	997354971	62 063.00
2	BEN	KoKSU	SH.UALIKHANOV ATYNDAGY KOKSHETAU MEMLEKETTİK UNIVERSITETI	KZ	948627603	47 522.00
3	BEN	TSIEM	THE TURKMEN STATE INSTITUTE OF ECONOMICS AND MANAGEMENT	TM	898629438	33 289.00
4	BEN	TUT	TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	TJ	953846300	40 232.00
5	BEN	ABU	ALIKHAN BOKEIKHAN UNIVERSITY	KZ	934164321	46 653.00
6	BEN	WIUT	TOSHKENT SHAHRIDAGI XALQARO WESTMINSTER UNIVERSITETI	UZ	933536828	57 779.00
7	BEN	TSUC	TAJIK STATE UNIVERSITY OF COMMERCE	TJ	936722502	40 744.00
8	BEN	CAU	CENTRAL ASIAN UNIVERSITY MCHJ	UZ	885299116	58 116.00
9	BEN	KarUK	KARAGANDA UNIVERSITY OF KAZPOTREBSOYUZ	KZ	934473848	51 036.00

N°	Role	Short name	Legal name	Ctry	PIC	Max grant amount
10	BEN	TSIF	TURKMEN STATE INSTITUTE OF FINANCE	TM	933076369	33 289.00
11	BEN	AST	TURKMENISTAN YLYMLAR AKADEMIYASY	TM	968678473	9 929.00
12	BEN	AY	AYECONOMICS RESEARCH CENTRE SL	ES	909523896	41 400.00
13	BEN	USC	UNIVERSIDAD DE SANTIAGO DE COMPOSTELA	ES	999829635	64 598.00
14	BEN	UNINA	UNIVERSITA DEGLI STUDI DI NAPOLI FEDERICO II	IT	999976590	42 026.00
15	BEN	FHM	FACHHOCHSCHULE DES MITTELSTANDES (FHM) GMBH - UNIVERSITY OF APPLIED SCIENCE -	DE	950486123	80 198.00
<b>Total</b>						708 874.00

**Coordinator:**

- D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU)

**3. Grant**

**Maximum grant amount, total estimated eligible costs and contributions and funding rate:**

Maximum grant amount (Annex 2)	Maximum grant amount (award decision)
708 874.00	708 874.00

**Grant form:** Lump Sum

**Grant mode:** Action grant

**Budget categories/activity types:** Lump sum contributions

**Cost eligibility options:** n/a

**Budget flexibility:** No

**4. Reporting, payments and recoveries**

**4.1 Continuous reporting** (art 21)

**Deliverables:** see Funding & Tenders Portal Continuous Reporting tool

**4.2 Periodic reporting and payments**

**Reporting and payment schedule** (art 21, 22):

Reporting					Payments	
Reporting periods			Type	Deadline	Type	Deadline (time to pay)
RP No	Month from	Month to				
					Initial prefinancing	30 days from entry into force/ financial guarantee (if required) – whichever is the latest
1	1	36	Periodic report	60 days after end of reporting period	Final payment	90 days from receiving periodic report

**Prefinancing payments and guarantees:**

Prefinancing payment		Prefinancing guarantee		
Type	Amount	Guarantee amount	Division per participant	
Prefinancing 1 (initial)	496 211.80	n/a	1 - EKTU	n/a
			2 - KoKSU	n/a
			3 - TSIEM	n/a
			4 - TUT	n/a
			5 - ABU	n/a
			6 - WIUT	n/a
			7 - TSUC	n/a
			8 - CAU	n/a
			9 - KarUK	n/a
			10 - TSIF	n/a
			11 - AST	n/a
			12 - AY	n/a
			13 - USC	n/a
			14 - UNINA	n/a
			15 - FHM	n/a

**Reporting and payment modalities (art 21, 22):**

Mutual Insurance Mechanism (MIM): No

Restrictions on distribution of initial prefinancing: The prefinancing may be distributed only if the minimum number of beneficiaries set out in the call conditions (if any) have acceded to the Agreement and only to beneficiaries that have acceded.

Interim payment ceiling (if any): 100% of the maximum grant amount

No-profit rule: n/a

Late payment interest: ECB + 3.5%

Bank account for payments:

KZ07998LTB0001671613

Conversion into euros: n/a

Reporting language: Language of the Agreement

**4.3 Certificates** (art 24): n/a

**4.4 Recoveries** (art 22)

**First-line liability for recoveries:**

Beneficiary termination: Beneficiary concerned

Final payment: Coordinator

After final payment: Beneficiary concerned

**Joint and several liability for enforced recoveries (in case of non-payment):**

Limited joint and several liability of other beneficiaries — up to the maximum grant amount of the beneficiary

Joint and several liability of affiliated entities — n/a

**5. Consequences of non-compliance, applicable law & dispute settlement forum**

**Applicable law (art 43):**

Standard applicable law regime: EU law + law of Belgium

**Dispute settlement forum (art 43):**

Standard dispute settlement forum:

EU beneficiaries: EU General Court + EU Court of Justice (on appeal)

Non-EU beneficiaries: Courts of Brussels, Belgium (unless an international agreement provides for the enforceability of EU court judgements)

**6. Other**

**Specific rules (Annex 5):** Yes

**Standard time-limits after project end:**

Confidentiality (for X years after final payment): 5

Record-keeping (for X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

Reviews (up to X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

Audits (up to X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

Extension of findings from other grants to this grant (no later than X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

Impact evaluation (up to X years after final payment): 5 (or 3 for grants of not more than EUR 60 000)

## **CHAPTER 1 GENERAL**

### **ARTICLE 1 — SUBJECT OF THE AGREEMENT**

This Agreement sets out the rights and obligations and terms and conditions applicable to the grant awarded for the implementation of the action set out in Chapter 2.

### **ARTICLE 2 — DEFINITIONS**

For the purpose of this Agreement, the following definitions apply:

**Actions** — The project which is being funded in the context of this Agreement.

**Grant** — The grant awarded in the context of this Agreement.

**EU grants** — Grants awarded by EU institutions, bodies, offices or agencies (including EU executive agencies, EU regulatory agencies, EDA, joint undertakings, etc.).

**Participants** — Entities participating in the action as beneficiaries, affiliated entities, associated partners, third parties giving in-kind contributions, subcontractors or recipients of financial support to third parties.

**Beneficiaries (BEN)** — The signatories of this Agreement (either directly or through an accession form).

**Affiliated entities (AE)** — Entities affiliated to a beneficiary within the meaning of Article 187 of EU Financial Regulation 2018/1046<sup>4</sup> which participate in the action with similar rights and obligations as the beneficiaries (obligation to implement action tasks and right to charge costs and claim contributions).

**Associated partners (AP)** — Entities which participate in the action, but without the right to charge costs or claim contributions.

**Purchases** — Contracts for goods, works or services needed to carry out the action (e.g. equipment, consumables and supplies) but which are not part of the action tasks (see Annex 1).

**Subcontracting** — Contracts for goods, works or services that are part of the action tasks (see Annex 1).

**In-kind contributions** — In-kind contributions within the meaning of Article 2(36) of EU Financial

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<sup>4</sup> For the definition, see Article 187 Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012 ('EU Financial Regulation') (OJ L 193, 30.7.2018, p. 1): "**affiliated entities** [are]:

- (a) entities that form a sole beneficiary [(i.e. where an entity is formed of several entities that satisfy the criteria for being awarded a grant, including where the entity is specifically established for the purpose of implementing an action to be financed by a grant)];
- (b) entities that satisfy the eligibility criteria and that do not fall within one of the situations referred to in Article 136(1) and 141(1) and that have a link with the beneficiary, in particular a legal or capital link, which is neither limited to the action nor established for the sole purpose of its implementation".

Regulation 2018/1046, i.e. non-financial resources made available free of charge by third parties.

**Fraud** — Fraud within the meaning of Article 3 of EU Directive 2017/1371<sup>5</sup> and Article 1 of the Convention on the protection of the European Communities' financial interests, drawn up by the Council Act of 26 July 1995<sup>6</sup>, as well as any other wrongful or criminal deception intended to result in financial or personal gain.

**Irregularities** — Any type of breach (regulatory or contractual) which could impact the EU financial interests, including irregularities within the meaning of Article 1(2) of EU Regulation 2988/95<sup>7</sup>.

**Grave professional misconduct** — Any type of unacceptable or improper behaviour in exercising one's profession, especially by employees, including grave professional misconduct within the meaning of Article 136(1)(c) of EU Financial Regulation 2018/1046.

**Applicable EU, international and national law** — Any legal acts or other (binding or non-binding) rules and guidance in the area concerned.

**Portal** — EU Funding & Tenders Portal; electronic portal and exchange system managed by the European Commission and used by itself and other EU institutions, bodies, offices or agencies for the management of their funding programmes (grants, procurements, prizes, etc.).

## **CHAPTER 2 ACTION**

### **ARTICLE 3 — ACTION**

The grant is awarded for the action **101129169 — Circulec** ('action'), as described in Annex 1.

### **ARTICLE 4 — DURATION AND STARTING DATE**

The duration and the starting date of the action are set out in the Data Sheet (see Point 1).

## **CHAPTER 3 GRANT**

### **ARTICLE 5 — GRANT**

#### **5.1 Form of grant**

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<sup>5</sup> Directive (EU) 2017/1371 of the European Parliament and of the Council of 5 July 2017 on the fight against fraud to the Union's financial interests by means of criminal law (OJ L 198, 28.7.2017, p. 29).

<sup>6</sup> OJ C 316, 27.11.1995, p. 48.

<sup>7</sup> Council Regulation (EC, Euratom) No 2988/95 of 18 December 1995 on the protection of the European Communities financial interests (OJ L 312, 23.12.1995, p. 1).

The grant is an action grant<sup>8</sup> which takes the form of a lump sum grant for the completion of work packages.

## 5.2 Maximum grant amount

The maximum grant amount is set out in the Data Sheet (see Point 3) and in the estimated budget (Annex 2).

## 5.3 Funding rate

Not applicable

## 5.4 Estimated budget, budget categories and forms of funding

The estimated budget for the action (lump sum breakdown) is set out in Annex 2.

It contains the estimated eligible contributions for the action (lump sum contributions), broken down by participant and work package.

Annex 2 also shows the types of contributions (forms of funding)<sup>9</sup> to be used for each work package.

## 5.5 Budget flexibility

Budget flexibility does not apply; changes to the estimated budget (lump sum breakdown) always require an amendment (see Article 39).

Amendments for transfers between *work packages* are moreover possible only if:

- the work packages concerned are not already completed (and declared in a financial statement) and
- the transfers are justified by the technical implementation of the action.

## ARTICLE 6 — ELIGIBLE AND INELIGIBLE CONTRIBUTIONS

### 6.1 and 6.2 General and specific eligibility conditions

Lump sum contributions are eligible ('eligible contributions'), if:

- (a) they are set out in Annex 2 and
- (b) the work packages are completed and the work is properly implemented by the beneficiaries and/or the results are achieved, in accordance with Annex 1 and during in the period set out in Article 4 (with the exception of work/results relating to the submission of the final periodic report, which may be achieved afterwards; see Article 21)

They will be calculated on the basis of the amounts set out in Annex 2.

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<sup>8</sup> For the definition, see Article 180(2)(a) EU Financial Regulation 2018/1046: '**action grant**' means an EU grant to finance "an action intended to help achieve a Union policy objective".

<sup>9</sup> See Article 125 EU Financial Regulation 2018/1046.

### 6.3 Ineligible contributions

‘Ineligible contributions’ are:

- (a) lump sum contributions that do not comply with the conditions set out above (see Article 6.1 and 6.2)
- (b) lump sum contributions for activities already funded under other EU grants (or grants awarded by an EU Member State, non-EU country or other body implementing the EU budget), except for the following case:
  - (i) Synergy actions: not applicable
- (c) other:
  - (i) country restrictions for eligible costs: not applicable.

### 6.4 Consequences of non-compliance

If a beneficiary declares lump sum contributions that are ineligible, they will be rejected (see Article 27).

This may also lead to other measures described in Chapter 5.

## CHAPTER 4 GRANT IMPLEMENTATION

### SECTION 1 CONSORTIUM: BENEFICIARIES, AFFILIATED ENTITIES AND OTHER PARTICIPANTS

#### **ARTICLE 7 — BENEFICIARIES**

The beneficiaries, as signatories of the Agreement, are fully responsible towards the granting authority for implementing it and for complying with all its obligations.

They must implement the Agreement to their best abilities, in good faith and in accordance with all the obligations and terms and conditions it sets out.

They must have the appropriate resources to implement the action and implement the action under their own responsibility and in accordance with Article 11. If they rely on affiliated entities or other participants (see Articles 8 and 9), they retain sole responsibility towards the granting authority and the other beneficiaries.

They are jointly responsible for the *technical* implementation of the action. If one of the beneficiaries fails to implement their part of the action, the other beneficiaries must ensure that this part is implemented by someone else (without being entitled to an increase of the maximum grant amount and subject to an amendment; see Article 39). The *financial* responsibility of each beneficiary in case of recoveries is governed by Article 22.

The beneficiaries (and their action) must remain eligible under the EU programme funding the grant



for the entire duration of the action. Lump sum contributions will be eligible only as long as the beneficiary and the action are eligible.

The **internal roles and responsibilities** of the beneficiaries are divided as follows:

(a) Each beneficiary must:

- (i) keep information stored in the Portal Participant Register up to date (see Article 19)
- (ii) inform the granting authority (and the other beneficiaries) immediately of any events or circumstances likely to affect significantly or delay the implementation of the action (see Article 19)
- (iii) submit to the coordinator in good time:
  - the prefinancing guarantees (if required; see Article 23)
  - the financial statements and certificates on the financial statements (CFS): not applicable
  - the contribution to the deliverables and technical reports (see Article 21)
  - any other documents or information required by the granting authority under the Agreement
- (iv) submit via the Portal data and information related to the participation of their affiliated entities.

(b) The coordinator must:

- (i) monitor that the action is implemented properly (see Article 11)
- (ii) act as the intermediary for all communications between the consortium and the granting authority, unless the Agreement or granting authority specifies otherwise, and in particular:
  - submit the prefinancing guarantees to the granting authority (if any)
  - request and review any documents or information required and verify their quality and completeness before passing them on to the granting authority
  - submit the deliverables and reports to the granting authority
  - inform the granting authority about the payments made to the other beneficiaries (report on the distribution of payments; if required, see Articles 22 and 32)
- (iii) distribute the payments received from the granting authority to the other beneficiaries without unjustified delay (see Article 22).

The coordinator may not delegate or subcontract the above-mentioned tasks to any other beneficiary or third party (including affiliated entities).

However, coordinators which are public bodies may delegate the tasks set out in Point (b)(ii) last

indent and (iii) above to entities with ‘authorisation to administer’ which they have created or which are controlled by or affiliated to them. In this case, the coordinator retains sole responsibility for the payments and for compliance with the obligations under the Agreement.

Moreover, coordinators which are ‘sole beneficiaries’<sup>10</sup> (or similar, such as European research infrastructure consortia (ERICs)) may delegate the tasks set out in Point (b)(i) to (iii) above to one of their members. The coordinator retains sole responsibility for compliance with the obligations under the Agreement.

The beneficiaries must have **internal arrangements** regarding their operation and co-ordination, to ensure that the action is implemented properly.

If required by the granting authority (see Data Sheet, Point 1), these arrangements must be set out in a written **consortium agreement** between the beneficiaries, covering for instance:

- the internal organisation of the consortium
- the management of access to the Portal
- different distribution keys for the payments and financial responsibilities in case of recoveries (if any)
- additional rules on rights and obligations related to background and results (see Article 16)
- settlement of internal disputes
- liability, indemnification and confidentiality arrangements between the beneficiaries.

The internal arrangements must not contain any provision contrary to this Agreement.

## ARTICLE 8 — AFFILIATED ENTITIES

Not applicable

## ARTICLE 9 — OTHER PARTICIPANTS INVOLVED IN THE ACTION

### 9.1 Associated partners

Not applicable

### 9.2 Third parties giving in-kind contributions to the action

Other third parties may give in-kind contributions to the action (i.e. personnel, equipment, other goods, works and services, etc. which are free-of-charge), if necessary for the implementation.

Third parties giving in-kind contributions do not implement any action tasks. They may not charge contributions to the action (no lump sum contributions) and the costs for the in-kind contributions are not eligible (may not be included in the estimated budget in Annex 2).

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<sup>10</sup> For the definition, see Article 187(2) EU Financial Regulation 2018/1046: “Where several entities satisfy the criteria for being awarded a grant and together form one entity, that entity may be treated as the **sole beneficiary**, including where it is specifically established for the purpose of implementing the action financed by the grant.”

The third parties and their in-kind contributions should be set out in Annex 1.

### 9.3 Subcontractors

Subcontractors may participate in the action, if necessary for the implementation.

Subcontractors must implement their action tasks in accordance with Article 11. The beneficiaries' costs for subcontracting are considered entirely covered by the lump sum contributions for implementing the work packages (irrespective of the actual subcontracting costs incurred, if any).

The beneficiaries must ensure that their contractual obligations under Articles 11 (proper implementation), 12 (conflict of interest), 13 (confidentiality and security), 14 (ethics), 17.2 (visibility), 18 (specific rules for carrying out action), 19 (information) and 20 (record-keeping) also apply to the subcontractors.

The beneficiaries must ensure that the bodies mentioned in Article 25 (e.g. granting authority, OLAF, Court of Auditors (ECA), etc.) can exercise their rights also towards the subcontractors.

### 9.4 Recipients of financial support to third parties

If the action includes providing financial support to third parties (e.g. grants, prizes or similar forms of support), the beneficiaries must ensure that their contractual obligations under Articles 12 (conflict of interest), 13 (confidentiality and security), 14 (ethics), 17.2 (visibility), 18 (specific rules for carrying out action), 19 (information) and 20 (record-keeping) also apply to the third parties receiving the support (recipients).

The beneficiaries must also ensure that the bodies mentioned in Article 25 (e.g. granting authority, OLAF, Court of Auditors (ECA), etc.) can exercise their rights also towards the recipients.

## ARTICLE 10 — PARTICIPANTS WITH SPECIAL STATUS

### 10.1 Non-EU participants

Participants which are established in a non-EU country (if any) undertake to comply with their obligations under the Agreement and:

- to respect general principles (including fundamental rights, values and ethical principles, environmental and labour standards, rules on classified information, intellectual property rights, visibility of funding and protection of personal data)
- for the submission of certificates under Article 24: use qualified external auditors which are independent and comply with comparable standards as those set out in EU Directive 2006/43/EC<sup>11</sup>
- for the controls under Article 25: allow for checks, reviews, audits and investigations (including on-the-spot checks, visits and inspections) by the bodies mentioned in that Article (e.g. granting authority, OLAF, Court of Auditors (ECA), etc.).

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<sup>11</sup> Directive 2006/43/EC of the European Parliament and of the Council of 17 May 2006 on statutory audits of annual accounts and consolidated accounts or similar national regulations (OJ L 157, 9.6.2006, p. 87).

Special rules on dispute settlement apply (see Data Sheet, Point 5).

## 10.2 Participants which are international organisations

Participants which are international organisations (IOs; if any) undertake to comply with their obligations under the Agreement and:

- to respect general principles (including fundamental rights, values and ethical principles, environmental and labour standards, rules on classified information, intellectual property rights, visibility of funding and protection of personal data)
- for the submission of certificates under Article 24: to use either independent public officers or external auditors which comply with comparable standards as those set out in EU Directive 2006/43/EC
- for the controls under Article 25: to allow for the checks, reviews, audits and investigations by the bodies mentioned in that Article, taking into account the specific agreements concluded by them and the EU (if any).

For such participants, nothing in the Agreement will be interpreted as a waiver of their privileges or immunities, as accorded by their constituent documents or international law.

Special rules on applicable law and dispute settlement apply (see Article 43 and Data Sheet, Point 5).

## 10.3 Pillar-assessed participants

Pillar-assessed participants (if any) may rely on their own systems, rules and procedures, in so far as they have been positively assessed and do not call into question the decision awarding the grant or breach the principle of equal treatment of applicants or beneficiaries.

‘Pillar-assessment’ means a review by the European Commission on the systems, rules and procedures which participants use for managing EU grants (in particular internal control system, accounting system, external audits, financing of third parties, rules on recovery and exclusion, information on recipients and protection of personal data; see Article 154 EU Financial Regulation 2018/1046).

Participants with a positive pillar assessment may rely on their own systems, rules and procedures, in particular for:

- record-keeping (Article 20): may be done in accordance with internal standards, rules and procedures
- currency conversion for financial statements (Article 21): may be done in accordance with usual accounting practices
- guarantees (Article 23): for public law bodies, prefinancing guarantees are not needed
- certificates (Article 24):
  - certificates on the financial statements (CFS): may be provided by their regular internal or external auditors and in accordance with their internal financial regulations and procedures

- certificates on usual accounting practices (CoMUC): are not needed if those practices are covered by an ex-ante assessment

and use the following specific rules, for:

- recoveries (Article 22): in case of financial support to third parties, there will be no recovery if the participant has done everything possible to retrieve the undue amounts from the third party receiving the support (including legal proceedings) and non-recovery is not due to an error or negligence on its part
- checks, reviews, audits and investigations by the EU (Article 25): will be conducted taking into account the rules and procedures specifically agreed between them and the framework agreement (if any)
- impact evaluation (Article 26): will be conducted in accordance with the participant's internal rules and procedures and the framework agreement (if any)
- grant agreement suspension (Article 31): certain costs incurred during grant suspension are eligible (notably, minimum costs necessary for a possible resumption of the action and costs relating to contracts which were entered into before the pre-information letter was received and which could not reasonably be suspended, reallocated or terminated on legal grounds)
- grant agreement termination (Article 32): the final grant amount and final payment will be calculated taking into account also costs relating to contracts due for execution only after termination takes effect, if the contract was entered into before the pre-information letter was received and could not reasonably be terminated on legal grounds
- liability for damages (Article 33.2): the granting authority must be compensated for damage it sustains as a result of the implementation of the action or because the action was not implemented in full compliance with the Agreement only if the damage is due to an infringement of the participant's internal rules and procedures or due to a violation of third parties' rights by the participant or one of its employees or individual for whom the employees are responsible.

Participants whose pillar assessment covers procurement and granting procedures may also do purchases, subcontracting and financial support to third parties (Article 6.2) in accordance with their internal rules and procedures for purchases, subcontracting and financial support.

Participants whose pillar assessment covers data protection rules may rely on their internal standards, rules and procedures for data protection (Article 15).

The participants may however not rely on provisions which would breach the principle of equal treatment of applicants or beneficiaries or call into question the decision awarding the grant, such as in particular:

- eligibility (Article 6)
- consortium roles and set-up (Articles 7-9)
- security and ethics (Articles 13, 14)

- IPR (including background and results, access rights and rights of use), communication, dissemination and visibility (Articles 16 and 17)
- information obligation (Article 19)
- payment, reporting and amendments (Articles 21, 22 and 39)
- rejections, reductions, suspensions and terminations (Articles 27, 28, 29-32)

If the pillar assessment was subject to remedial measures, reliance on the internal systems, rules and procedures is subject to compliance with those remedial measures.

Participants whose assessment has not yet been updated to cover (the new rules on) data protection may rely on their internal systems, rules and procedures, provided that they ensure that personal data is:

- processed lawfully, fairly and in a transparent manner in relation to the data subject
- collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes
- adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed
- accurate and, where necessary, kept up to date
- kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the data is processed and
- processed in a manner that ensures appropriate security of the personal data.

Participants must inform the coordinator without delay of any changes to the systems, rules and procedures that were part of the pillar assessment. The coordinator must immediately inform the granting authority.

Pillar-assessed participants that have also concluded a framework agreement with the EU, may moreover — under the same conditions as those above (i.e. not call into question the decision awarding the grant or breach the principle of equal treatment of applicants or beneficiaries) — rely on provisions set out in that framework agreement.

## **SECTION 2 RULES FOR CARRYING OUT THE ACTION**

### **ARTICLE 11 — PROPER IMPLEMENTATION OF THE ACTION**

#### **11.1 Obligation to properly implement the action**

The beneficiaries must implement the action as described in Annex 1 and in compliance with the provisions of the Agreement, the call conditions and all legal obligations under applicable EU, international and national law.

#### **11.2 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

## **ARTICLE 12 — CONFLICT OF INTERESTS**

### **12.1 Conflict of interests**

The beneficiaries must take all measures to prevent any situation where the impartial and objective implementation of the Agreement could be compromised for reasons involving family, emotional life, political or national affinity, economic interest or any other direct or indirect interest ('conflict of interests').

They must formally notify the granting authority without delay of any situation constituting or likely to lead to a conflict of interests and immediately take all the necessary steps to rectify this situation.

The granting authority may verify that the measures taken are appropriate and may require additional measures to be taken by a specified deadline.

### **12.2 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28) and the grant or the beneficiary may be terminated (see Article 32).

Such breaches may also lead to other measures described in Chapter 5.

## **ARTICLE 13 — CONFIDENTIALITY AND SECURITY**

### **13.1 Sensitive information**

The parties must keep confidential any data, documents or other material (in any form) that is identified as sensitive in writing ('sensitive information') — during the implementation of the action and for at least until the time-limit set out in the Data Sheet (see Point 6).

If a beneficiary requests, the granting authority may agree to keep such information confidential for a longer period.

Unless otherwise agreed between the parties, they may use sensitive information only to implement the Agreement.

The beneficiaries may disclose sensitive information to their personnel or other participants involved in the action only if they:

- (a) need to know it in order to implement the Agreement and
- (b) are bound by an obligation of confidentiality.

The granting authority may disclose sensitive information to its staff and to other EU institutions and bodies.

It may moreover disclose sensitive information to third parties, if:

- (a) this is necessary to implement the Agreement or safeguard the EU financial interests and
- (b) the recipients of the information are bound by an obligation of confidentiality.

The confidentiality obligations no longer apply if:

- (a) the disclosing party agrees to release the other party
- (b) the information becomes publicly available, without breaching any confidentiality obligation
- (c) the disclosure of the sensitive information is required by EU, international or national law.

Specific confidentiality rules (if any) are set out in Annex 5.

### **13.2 Classified information**

The parties must handle classified information in accordance with the applicable EU, international or national law on classified information (in particular, Decision 2015/444<sup>12</sup> and its implementing rules).

Deliverables which contain classified information must be submitted according to special procedures agreed with the granting authority.

Action tasks involving classified information may be subcontracted only after explicit approval (in writing) from the granting authority.

Classified information may not be disclosed to any third party (including participants involved in the action implementation) without prior explicit written approval from the granting authority.

Specific security rules (if any) are set out in Annex 5.

### **13.3 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

## **ARTICLE 14 — ETHICS AND VALUES**

### **14.1 Ethics**

The action must be carried out in line with the highest ethical standards and the applicable EU, international and national law on ethical principles.

Specific ethics rules (if any) are set out in Annex 5.

### **14.2 Values**

The beneficiaries must commit to and ensure the respect of basic EU values (such as respect for

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<sup>12</sup> Commission Decision 2015/444/EC, Euratom of 13 March 2015 on the security rules for protecting EU classified information (OJ L 72, 17.3.2015, p. 53).



human dignity, freedom, democracy, equality, the rule of law and human rights, including the rights of minorities).

Specific rules on values (if any) are set out in Annex 5.

### **14.3 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

## **ARTICLE 15 — DATA PROTECTION**

### **15.1 Data processing by the granting authority**

Any personal data under the Agreement will be processed under the responsibility of the data controller of the granting authority in accordance with and for the purposes set out in the Portal Privacy Statement.

For grants where the granting authority is the European Commission, an EU regulatory or executive agency, joint undertaking or other EU body, the processing will be subject to Regulation 2018/1725<sup>13</sup>.

### **15.2 Data processing by the beneficiaries**

The beneficiaries must process personal data under the Agreement in compliance with the applicable EU, international and national law on data protection (in particular, Regulation 2016/679<sup>14</sup>).

They must ensure that personal data is:

- processed lawfully, fairly and in a transparent manner in relation to the data subjects
- collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes
- adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed
- accurate and, where necessary, kept up to date
- kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the data is processed and
- processed in a manner that ensures appropriate security of the data.

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<sup>13</sup> Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC (OJ L 295, 21.11.2018, p. 39).

<sup>14</sup> Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC ('GDPR') (OJ L 119, 4.5.2016, p. 1).

The beneficiaries may grant their personnel access to personal data only if it is strictly necessary for implementing, managing and monitoring the Agreement. The beneficiaries must ensure that the personnel is under a confidentiality obligation.

The beneficiaries must inform the persons whose data are transferred to the granting authority and provide them with the Portal Privacy Statement.

### **15.3 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

## **ARTICLE 16 — INTELLECTUAL PROPERTY RIGHTS (IPR) — BACKGROUND AND RESULTS — ACCESS RIGHTS AND RIGHTS OF USE**

### **16.1 Background and access rights to background**

The beneficiaries must give each other and the other participants access to the background identified as needed for implementing the action, subject to any specific rules in Annex 5.

‘Background’ means any data, know-how or information — whatever its form or nature (tangible or intangible), including any rights such as intellectual property rights — that is:

- (a) held by the beneficiaries before they acceded to the Agreement and
- (b) needed to implement the action or exploit the results.

If background is subject to rights of a third party, the beneficiary concerned must ensure that it is able to comply with its obligations under the Agreement.

### **16.2 Ownership of results**

The granting authority does not obtain ownership of the results produced under the action.

‘Results’ means any tangible or intangible effect of the action, such as data, know-how or information, whatever its form or nature, whether or not it can be protected, as well as any rights attached to it, including intellectual property rights.

### **16.3 Rights of use of the granting authority on materials, documents and information received for policy, information, communication, dissemination and publicity purposes**

The granting authority has the right to use non-sensitive information relating to the action and materials and documents received from the beneficiaries (notably summaries for publication, deliverables, as well as any other material, such as pictures or audio-visual material, in paper or electronic form) for policy information, communication, dissemination and publicity purposes — during the action or afterwards.

The right to use the beneficiaries’ materials, documents and information is granted in the form of a royalty-free, non-exclusive and irrevocable licence, which includes the following rights:

- (a) **use for its own purposes** (in particular, making them available to persons working for the granting authority or any other EU service (including institutions, bodies, offices, agencies, etc.) or EU Member State institution or body; copying or reproducing them in whole or in part, in unlimited numbers; and communication through press information services)
- (b) **distribution to the public** (in particular, publication as hard copies and in electronic or digital format, publication on the internet, as a downloadable or non-downloadable file, broadcasting by any channel, public display or presentation, communicating through press information services, or inclusion in widely accessible databases or indexes)
- (c) **editing or redrafting** (including shortening, summarising, inserting other elements (e.g. meta-data, legends, other graphic, visual, audio or text elements), extracting parts (e.g. audio or video files), dividing into parts, use in a compilation)
- (d) **translation**
- (e) **storage** in paper, electronic or other form
- (f) **archiving**, in line with applicable document-management rules
- (g) the right to authorise **third parties** to act on its behalf or sub-license to third parties the modes of use set out in Points (b), (c), (d) and (f), if needed for the information, communication and publicity activity of the granting authority and
- (h) **processing**, analysing, aggregating the materials, documents and information received and **producing derivative works**.

The rights of use are granted for the whole duration of the industrial or intellectual property rights concerned.

If materials or documents are subject to moral rights or third party rights (including intellectual property rights or rights of natural persons on their image and voice), the beneficiaries must ensure that they comply with their obligations under this Agreement (in particular, by obtaining the necessary licences and authorisations from the rights holders concerned).

Where applicable, the granting authority will insert the following information:

“© – [year] – [name of the copyright owner]. All rights reserved. Licensed to the [name of granting authority] under conditions.”

#### 16.4 Specific rules on IPR, results and background

Specific rules regarding intellectual property rights, results and background (if any) are set out in Annex 5.

#### 16.5 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such a breach may also lead to other measures described in Chapter 5.

## ARTICLE 17 — COMMUNICATION, DISSEMINATION AND VISIBILITY

### 17.1 Communication — Dissemination — Promoting the action

Unless otherwise agreed with the granting authority, the beneficiaries must promote the action and its results by providing targeted information to multiple audiences (including the media and the public), in accordance with Annex 1 and in a strategic, coherent and effective manner.

Before engaging in a communication or dissemination activity expected to have a major media impact, the beneficiaries must inform the granting authority.

### 17.2 Visibility — European flag and funding statement

Unless otherwise agreed with the granting authority, communication activities of the beneficiaries related to the action (including media relations, conferences, seminars, information material, such as brochures, leaflets, posters, presentations, etc., in electronic form, via traditional or social media, etc.), dissemination activities and any infrastructure, equipment, vehicles, supplies or major result funded by the grant must acknowledge the EU support and display the European flag (emblem) and funding statement (translated into local languages, where appropriate):



Funded by the  
European Union



Co-funded by the  
European Union



Funded by the  
European Union



Co-funded by the  
European Union

The emblem must remain distinct and separate and cannot be modified by adding other visual marks, brands or text.

Apart from the emblem, no other visual identity or logo may be used to highlight the EU support.

When displayed in association with other logos (e.g. of beneficiaries or sponsors), the emblem must be displayed at least as prominently and visibly as the other logos.

For the purposes of their obligations under this Article, the beneficiaries may use the emblem without first obtaining approval from the granting authority. This does not, however, give them the right to

exclusive use. Moreover, they may not appropriate the emblem or any similar trademark or logo, either by registration or by any other means.

### **17.3 Quality of information — Disclaimer**

Any communication or dissemination activity related to the action must use factually accurate information.

Moreover, it must indicate the following disclaimer (translated into local languages where appropriate):

“Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or [name of the granting authority]. Neither the European Union nor the granting authority can be held responsible for them.”

### **17.4 Specific communication, dissemination and visibility rules**

Specific communication, dissemination and visibility rules (if any) are set out in Annex 5.

### **17.5 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

## **ARTICLE 18 — SPECIFIC RULES FOR CARRYING OUT THE ACTION**

### **18.1 Specific rules for carrying out the action**

Specific rules for implementing the action (if any) are set out in Annex 5.

### **18.2 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such a breach may also lead to other measures described in Chapter 5.

## **SECTION 3 GRANT ADMINISTRATION**

### **ARTICLE 19 — GENERAL INFORMATION OBLIGATIONS**

#### **19.1 Information requests**

The beneficiaries must provide — during the action or afterwards and in accordance with Article 7 — any information requested in order to verify eligibility of the lump sum contributions declared, proper implementation of the action and compliance with the other obligations under the Agreement.

The information provided must be accurate, precise and complete and in the format requested, including electronic format.

## 19.2 Participant Register data updates

The beneficiaries must keep — at all times, during the action or afterwards — their information stored in the Portal Participant Register up to date, in particular, their name, address, legal representatives, legal form and organisation type.

## 19.3 Information about events and circumstances which impact the action

The beneficiaries must immediately inform the granting authority (and the other beneficiaries) of any of the following:

- (a) **events** which are likely to affect or delay the implementation of the action or affect the EU's financial interests, in particular:
  - (i) changes in their legal, financial, technical, organisational or ownership situation (including changes linked to one of the exclusion grounds listed in the declaration of honour signed before grant signature)
  - (ii) linked action information: not applicable
- (b) **circumstances** affecting:
  - (i) the decision to award the grant or
  - (ii) compliance with requirements under the Agreement.

## 19.4 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

## ARTICLE 20 — RECORD-KEEPING

### 20.1 Keeping records and supporting documents

The beneficiaries must — at least until the time-limit set out in the Data Sheet (see Point 6) — keep records and other supporting documents to prove the proper implementation of the action (proper implementation of the work and/or achievement of the results as described in Annex 1) in line with the accepted standards in the respective field (if any); beneficiaries do not need to keep specific records on the actual costs incurred.

The records and supporting documents must be made available upon request (see Article 19) or in the context of checks, reviews, audits or investigations (see Article 25).

If there are on-going checks, reviews, audits, investigations, litigation or other pursuits of claims under the Agreement (including the extension of findings; see Article 25), the beneficiaries must keep these records and other supporting documentation until the end of these procedures.

The beneficiaries must keep the original documents. Digital and digitalised documents are considered

originals if they are authorised by the applicable national law. The granting authority may accept non-original documents if they offer a comparable level of assurance.

## 20.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, lump sum contributions insufficiently substantiated will be ineligible (see Article 6) and will be rejected (see Article 27), and the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

## ARTICLE 21 — REPORTING

### 21.1 Continuous reporting

The beneficiaries must continuously report on the progress of the action (e.g. **deliverables, milestones, outputs/outcomes, critical risks, indicators**, etc; if any), in the Portal Continuous Reporting tool and in accordance with the timing and conditions it sets out (as agreed with the granting authority).

Standardised deliverables (e.g. progress reports not linked to payments, reports on cumulative expenditure, special reports, etc; if any) must be submitted using the templates published on the Portal.

### 21.2 Periodic reporting: Technical reports and financial statements

In addition, the beneficiaries must provide reports to request payments, in accordance with the schedule and modalities set out in the Data Sheet (see Point 4.2):

- for additional prefinancings (if any): **an additional prefinancing report**
- for interim payments (if any) and the final payment: a **periodic report**

The prefinancing and periodic reports include a technical and financial part.

The technical part includes an overview of the action implementation. It must be prepared using the template available in the Portal Periodic Reporting tool.

The financial part of the additional prefinancing report includes a statement on the use of the previous prefinancing payment.

The financial part of the periodic report includes:

- the financial statement (consolidated statement for the consortium)
- the explanation on the use of resources (or detailed cost reporting table): not applicable
- the certificates on the financial statements (CFS): not applicable.

The **financial statement** must contain the lump sum contributions indicated in Annex 2, for the work packages that were completed during the reporting period.

For the last reporting period, the beneficiaries may exceptionally also declare partial lump sum

contributions for work packages that were not completed (e.g. due to force majeure or technical impossibility).

Lump sum contributions which are not declared in a financial statement will not be taken into account by the granting authority.

By signing the financial statement (directly in the Portal Periodic Reporting tool), the coordinator confirms (on behalf of the consortium) that:

- the information provided is complete, reliable and true
- the lump sum contributions declared are eligible (in particular, the work packages have been completed, that the work has been properly implemented and/or the results were achieved in accordance with Annex 1; see Article 6)
- the proper implementation and/or achievement can be substantiated by adequate records and supporting documents (see Article 20) that will be produced upon request (see Article 19) or in the context of checks, reviews, audits and investigations (see Article 25).

In case of recoveries (see Article 22), beneficiaries will be held responsible also for the lump sum contributions declared for their affiliated entities (if any).

### **21.3 Currency for financial statements and conversion into euros**

The financial statements must be drafted in euro.

### **21.4 Reporting language**

The reporting must be in the language of the Agreement, unless otherwise agreed with the granting authority (see Data Sheet, Point 4.2).

### **21.5 Consequences of non-compliance**

If a report submitted does not comply with this Article, the granting authority may suspend the payment deadline (see Article 29) and apply other measures described in Chapter 5.

If the coordinator breaches its reporting obligations, the granting authority may terminate the grant or the coordinator's participation (see Article 32) or apply other measures described in Chapter 5.

## **ARTICLE 22 — PAYMENTS AND RECOVERIES — CALCULATION OF AMOUNTS DUE**

### **22.1 Payments and payment arrangements**

Payments will be made in accordance with the schedule and modalities set out in the Data Sheet (see Point 4.2).

They will be made in euro to the bank account indicated by the coordinator (see Data Sheet, Point 4.2) and must be distributed without unjustified delay (restrictions may apply to distribution of the initial prefinancing payment; see Data Sheet, Point 4.2).

Payments to this bank account will discharge the granting authority from its payment obligation.



The cost of payment transfers will be borne as follows:

- the granting authority bears the cost of transfers charged by its bank
- the beneficiary bears the cost of transfers charged by its bank
- the party causing a repetition of a transfer bears all costs of the repeated transfer.

Payments by the granting authority will be considered to have been carried out on the date when they are debited to its account.

## 22.2 Recoveries

Recoveries will be made, if — at beneficiary termination, final payment or afterwards — it turns out that the granting authority has paid too much and needs to recover the amounts undue.

The general liability regime for recoveries (first-line liability) is as follows: At final payment, the coordinator will be fully liable for recoveries, even if it has not been the final recipient of the undue amounts. At beneficiary termination or after final payment, recoveries will be made directly against the beneficiaries concerned.

Beneficiaries will be fully liable for repaying the debts of their affiliated entities.

In case of enforced recoveries (see Article 22.4):

- the beneficiaries will be jointly and severally liable for repaying debts of another beneficiary under the Agreement (including late-payment interest), if required by the granting authority (see Data Sheet, Point 4.4)
- affiliated entities will be held liable for repaying debts of their beneficiaries under the Agreement (including late-payment interest), if required by the granting authority (see Data Sheet, Point 4.4).

## 22.3 Amounts due

### 22.3.1 Prefinancing payments

The aim of the prefinancing is to provide the beneficiaries with a float.

It remains the property of the EU until the final payment.

For **initial prefinancings** (if any), the amount due, schedule and modalities are set out in the Data Sheet (see Point 4.2).

For **additional prefinancings** (if any), the amount due, schedule and modalities are also set out in the Data Sheet (see Point 4.2). However, if the statement on the use of the previous prefinancing payment shows that less than 70% was used, the amount set out in the Data Sheet will be reduced by the difference between the 70% threshold and the amount used.

Prefinancing payments (or parts of them) may be offset (without the beneficiaries' consent) against amounts owed by a beneficiary to the granting authority — up to the amount due to that beneficiary.

For grants where the granting authority is the European Commission or an EU executive agency,

offsetting may also be done against amounts owed to other Commission services or executive agencies.

Payments will not be made if the payment deadline or payments are suspended (see Articles 29 and 30).

### 22.3.2 Amount due at beneficiary termination — Recovery

In case of beneficiary termination, the granting authority will determine the provisional amount due for the beneficiary concerned.

This will be done on the basis of work packages already completed in previous interim payments. Payments for ongoing/not yet completed work packages which the beneficiary was working on before termination (if any) will therefore be made only later on, with the next interim or final payments when those work packages have been completed.

The **amount due** will be calculated in the following step:

Step 1 — Calculation of the total accepted EU contribution

#### Step 1 — Calculation of the total accepted EU contribution

The granting authority will first calculate the ‘accepted EU contribution’ for the beneficiary, on the basis of the beneficiary’s lump sum contributions for the work packages which were approved in previous interim payments.

After that, the granting authority will take into account grant reductions (if any). The resulting amount is the ‘total accepted EU contribution’ for the beneficiary.

The **balance** is then calculated by deducting the payments received (if any; see report on the distribution of payments in Article 32), from the total accepted EU contribution:

$$\left\{ \begin{array}{l} \text{total accepted EU contribution for the beneficiary} \\ \text{minus} \\ \text{prefinancing and interim payments received (if any)} \end{array} \right\}.$$

If the balance is **negative**, it will be **recovered** in accordance with the following procedure:

The granting authority will send a **pre-information letter** to the beneficiary concerned:

- formally notifying the intention to recover, the amount due, the amount to be recovered and the reasons why and
- requesting observations within 30 days of receiving notification.

If no observations are submitted (or the granting authority decides to pursue recovery despite the observations it has received), it will confirm the amount to be recovered and ask this amount to be paid to the coordinator (**confirmation letter**).

### 22.3.3 Interim payments

Interim payments reimburse the eligible lump sum contributions claimed for work packages implemented during the reporting periods (if any).

Interim payments (if any) will be made in accordance with the schedule and modalities set out the Data Sheet (see Point 4.2).

Payment is subject to the approval of the periodic report and the work packages declared. Their approval does not imply recognition of compliance, authenticity, completeness or correctness of their content.

Incomplete work packages and work packages that have not been delivered or cannot be approved will be rejected (see Article 27).

The **interim payment** will be calculated by the granting authority in the following steps:

Step 1 — Calculation of the total accepted EU contribution

Step 2 — Limit to the interim payment ceiling

#### Step 1 — Calculation of the total accepted EU contribution

The granting authority will first calculate the ‘accepted EU contribution’ for the action for the reporting period, by calculating the lump sum contributions for the approved work packages.

After that, the granting authority will take into account grant reductions from beneficiary termination (if any). The resulting amount is the ‘total accepted EU contribution’.

#### Step 2 — Limit to the interim payment ceiling

The resulting amount is then capped to ensure that the total amount of prefinancing and interim payments (if any) does not exceed the interim payment ceiling set out in the Data Sheet (see Point 4.2).

Interim payments (or parts of them) may be offset (without the beneficiaries’ consent) against amounts owed by a beneficiary to the granting authority — up to the amount due to that beneficiary.

For grants where the granting authority is the European Commission or an EU executive agency, offsetting may also be done against amounts owed to other Commission services or executive agencies.

Payments will not be made if the payment deadline or payments are suspended (see Articles 29 and 30).

### **22.3.4 Final payment — Final grant amount — Revenues and Profit — Recovery**

The final payment (payment of the balance) reimburses the remaining eligible lump sum contributions claimed for the implemented work packages (if any).

The final payment will be made in accordance with the schedule and modalities set out in the Data Sheet (see Point 4.2).

Payment is subject to the approval of the final periodic report and the work packages declared. Their approval does not imply recognition of compliance, authenticity, completeness or correctness of their content.

Work packages (or parts of them) that have not been delivered or cannot be approved will be rejected (see Article 27).

The **final grant amount for the action** will be calculated in the following steps:

Step 1 — Calculation of the total accepted EU contribution

Step 2 — Limit to the maximum grant amount

Step 3 — Reduction due to the no-profit rule

#### Step 1 — Calculation of the total accepted EU contribution

The granting authority will first calculate the ‘accepted EU contribution’ for the action for all reporting periods, by calculating the lump sum contributions for the approved work packages.

After that, the granting authority will take into account grant reductions (if any). The resulting amount is the ‘total accepted EU contribution’.

#### Step 2 — Limit to the maximum grant amount

Not applicable

#### Step 3 — Reduction due to the no-profit rule

Not applicable

The **balance** (final payment) is then calculated by deducting the total amount of prefinancing and interim payments already made (if any), from the final grant amount:

$$\begin{aligned} & \{\text{final grant amount} \\ & \text{minus} \\ & \{\text{prefinancing and interim payments made (if any)}\} \}. \end{aligned}$$

If the balance is **positive**, it will be **paid** to the coordinator.

The final payment (or part of it) may be offset (without the beneficiaries’ consent) against amounts owed by a beneficiary to the granting authority — up to the amount due to that beneficiary.

For grants where the granting authority is the European Commission or an EU executive agency, offsetting may also be done against amounts owed to other Commission services or executive agencies.

Payments will not be made if the payment deadline or payments are suspended (see Articles 29 and 30).

If the balance is **negative**, it will be **recovered** in accordance with the following procedure:

The granting authority will send a **pre-information letter** to the coordinator:

- formally notifying the intention to recover, the final grant amount, the amount to be recovered and the reasons why

- requesting observations within 30 days of receiving notification.

If no observations are submitted (or the granting authority decides to pursue recovery despite the observations it has received), it will confirm the amount to be recovered (**confirmation letter**), together with a **debit note** with the terms and date for payment.

If payment is not made by the date specified in the debit note, the granting authority will **enforce recovery** in accordance with Article 22.4.

### 22.3.5 Audit implementation after final payment — Revised final grant amount — Recovery

If — after the final payment (in particular, after checks, reviews, audits or investigations; see Article 25) — the granting authority rejects lump sum contributions (see Article 27) or reduces the grant (see Article 28), it will calculate the **revised final grant amount** for the beneficiary concerned.

The **beneficiary revised final grant amount** will be calculated in the following step:

Step 1 — Calculation of the revised total accepted EU contribution

#### Step 1 — Calculation of the revised total accepted EU contribution

The granting authority will first calculate the ‘revised accepted EU contribution’ for the beneficiary, by calculating the ‘revised accepted contributions’.

After that, it will take into account grant reductions (if any). The resulting ‘revised total accepted EU contribution’ is the beneficiary revised final grant amount.

If the revised final grant amount is lower than the beneficiary’s final grant amount (i.e. its share in the final grant amount for the action), it will be **recovered** in accordance with the following procedure:

The **beneficiary final grant amount** (i.e. share in the final grant amount for the action) is calculated as follows:

$$\left\{ \begin{array}{l} \text{\{total accepted EU contribution for the beneficiary} \\ \text{divided by} \\ \text{total accepted EU contribution for the action\}} \\ \text{multiplied by} \\ \text{final grant amount for the action\}}. \end{array} \right.$$

The granting authority will send a **pre-information letter** to the beneficiary concerned:

- formally notifying the intention to recover, the amount to be recovered and the reasons why and
- requesting observations within 30 days of receiving notification.

If no observations are submitted (or the granting authority decides to pursue recovery despite the observations it has received), it will confirm the amount to be recovered (**confirmation letter**), together with a **debit note** with the terms and the date for payment.

Recoveries against affiliated entities (if any) will be handled through their beneficiaries.

If payment is not made by the date specified in the debit note, the granting authority will **enforce recovery** in accordance with Article 22.4.

## 22.4 Enforced recovery

If payment is not made by the date specified in the debit note, the amount due will be recovered:

- (a) by offsetting the amount — without the coordinator or beneficiary's consent — against any amounts owed to the coordinator or beneficiary by the granting authority.

In exceptional circumstances, to safeguard the EU financial interests, the amount may be offset before the payment date specified in the debit note.

For grants where the granting authority is the European Commission or an EU executive agency, debts may also be offset against amounts owed by other Commission services or executive agencies.

- (b) by drawing on the financial guarantee(s) (if any)
- (c) by holding other beneficiaries jointly and severally liable (if any; see Data Sheet, Point 4.4)
- (d) by holding affiliated entities jointly and severally liable (if any, see Data Sheet, Point 4.4)
- (e) by taking legal action (see Article 43) or, provided that the granting authority is the European Commission or an EU executive agency, by adopting an enforceable decision under Article 299 of the Treaty on the Functioning of the EU (TFEU) and Article 100(2) of EU Financial Regulation 2018/1046.

The amount to be recovered will be increased by **late-payment interest** at the rate set out in Article 23.5, from the day following the payment date in the debit note, up to and including the date the full payment is received.

Partial payments will be first credited against expenses, charges and late-payment interest and then against the principal.

Bank charges incurred in the recovery process will be borne by the beneficiary, unless Directive 2015/2366<sup>15</sup> applies.

For grants where the granting authority is an EU executive agency, enforced recovery by offsetting or enforceable decision will be done by the services of the European Commission (see also Article 43).

## 22.5 Consequences of non-compliance

**22.5.1** If the granting authority does not pay within the payment deadlines (see above), the beneficiaries are entitled to **late-payment interest** at the reference rate applied by the European Central Bank (ECB) for its main refinancing operations in euros, plus the percentage specified in the Data Sheet (Point 4.2). The ECB reference rate to be used is the rate in force on the first day of the

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<sup>15</sup> Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC (OJ L 337, 23.12.2015, p. 35).

month in which the payment deadline expires, as published in the C series of the *Official Journal of the European Union*.

If the late-payment interest is lower than or equal to EUR 200, it will be paid to the coordinator only on request submitted within two months of receiving the late payment.

Late-payment interest is not due if all beneficiaries are EU Member States (including regional and local government authorities or other public bodies acting on behalf of a Member State for the purpose of this Agreement).

If payments or the payment deadline are suspended (see Articles 29 and 30), payment will not be considered as late.

Late-payment interest covers the period running from the day following the due date for payment (see above), up to and including the date of payment.

Late-payment interest is not considered for the purposes of calculating the final grant amount.

**22.5.2** If the coordinator breaches any of its obligations under this Article, the grant may be reduced (see Article 28) and the grant or the coordinator may be terminated (see Article 32).

Such breaches may also lead to other measures described in Chapter 5.

## **ARTICLE 23 — GUARANTEES**

### **23.1 Prefinancing guarantee**

If required by the granting authority (see Data Sheet, Point 4.2), the beneficiaries must provide (one or more) prefinancing guarantee(s) in accordance with the timing and the amounts set out in the Data Sheet.

The coordinator must submit them to the granting authority in due time before the prefinancing they are linked to.

The guarantees must be drawn up using the template published on the Portal and fulfil the following conditions:

- (a) be provided by a bank or approved financial institution established in the EU or — if requested by the coordinator and accepted by the granting authority — by a third party or a bank or financial institution established outside the EU offering equivalent security
- (b) the guarantor stands as first-call guarantor and does not require the granting authority to first have recourse against the principal debtor (i.e. the beneficiary concerned) and
- (c) remain explicitly in force until the final payment and, if the final payment takes the form of a recovery, until five months after the debit note is notified to a beneficiary.

They will be released within the following month.

### **23.2 Consequences of non-compliance**



If the beneficiaries breach their obligation to provide the prefinancing guarantee, the prefinancing will not be paid.

Such breaches may also lead to other measures described in Chapter 5.

## ARTICLE 24 — CERTIFICATES

Not applicable

## ARTICLE 25 — CHECKS, REVIEWS, AUDITS AND INVESTIGATIONS — EXTENSION OF FINDINGS

### 25.1 Granting authority checks, reviews and audits

#### 25.1.1 Internal checks

The granting authority may — during the action or afterwards — check the proper implementation of the action and compliance with the obligations under the Agreement, including assessing lump sum contributions, deliverables and reports.

#### 25.1.2 Project reviews

The granting authority may carry out reviews on the proper implementation of the action and compliance with the obligations under the Agreement (general project reviews or specific issues reviews).

Such project reviews may be started during the implementation of the action and until the time-limit set out in the Data Sheet (see Point 6). They will be formally notified to the coordinator or beneficiary concerned and will be considered to start on the date of the notification.

If needed, the granting authority may be assisted by independent, outside experts. If it uses outside experts, the coordinator or beneficiary concerned will be informed and have the right to object on grounds of commercial confidentiality or conflict of interest.

The coordinator or beneficiary concerned must cooperate diligently and provide — within the deadline requested — any information and data in addition to deliverables and reports already submitted. The granting authority may request beneficiaries to provide such information to it directly. Sensitive information and documents will be treated in accordance with Article 13.

The coordinator or beneficiary concerned may be requested to participate in meetings, including with the outside experts.

For **on-the-spot visits**, the beneficiary concerned must allow access to sites and premises (including to the outside experts) and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

On the basis of the review findings, a **project review report** will be drawn up.

The granting authority will formally notify the project review report to the coordinator or beneficiary concerned, which has 30 days from receiving notification to make observations.



Project reviews (including project review reports) will be in the language of the Agreement.

### 25.1.3 Audits

The granting authority may carry out audits on the proper implementation of the action and compliance with the obligations under the Agreement.

Such audits may be started during the implementation of the action and until the time-limit set out in the Data Sheet (see Point 6). They will be formally notified to the beneficiary concerned and will be considered to start on the date of the notification.

The granting authority may use its own audit service, delegate audits to a centralised service or use external audit firms. If it uses an external firm, the beneficiary concerned will be informed and have the right to object on grounds of commercial confidentiality or conflict of interest.

The beneficiary concerned must cooperate diligently and provide — within the deadline requested — any information (including complete accounts, individual salary statements or other personal data) to verify compliance with the Agreement. Sensitive information and documents will be treated in accordance with Article 13.

For **on-the-spot** visits, the beneficiary concerned must allow access to sites and premises (including for the external audit firm) and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

On the basis of the audit findings, a **draft audit report** will be drawn up.

The auditors will formally notify the draft audit report to the beneficiary concerned, which has 30 days from receiving notification to make observations (contradictory audit procedure).

The **final audit report** will take into account observations by the beneficiary concerned and will be formally notified to them.

Audits (including audit reports) will be in the language of the Agreement.

## 25.2 European Commission checks, reviews and audits in grants of other granting authorities

Where the granting authority is not the European Commission, the latter has the same rights of checks, reviews and audits as the granting authority.

## 25.3 Access to records for assessing simplified forms of funding

The beneficiaries must give the European Commission access to their statutory records for the periodic assessment of simplified forms of funding which are used in EU programmes.

## 25.4 OLAF, EPPO and ECA audits and investigations

The following bodies may also carry out checks, reviews, audits and investigations — during the action or afterwards:

- the European Anti-Fraud Office (OLAF) under Regulations No 883/2013<sup>16</sup> and No 2185/96<sup>17</sup>
- the European Public Prosecutor's Office (EPPO) under Regulation 2017/1939
- the European Court of Auditors (ECA) under Article 287 of the Treaty on the Functioning of the EU (TFEU) and Article 257 of EU Financial Regulation 2018/1046.

If requested by these bodies, the beneficiary concerned must provide full, accurate and complete information in the format requested (including complete accounts, individual salary statements or other personal data, including in electronic format) and allow access to sites and premises for on-the-spot visits or inspections — as provided for under these Regulations.

To this end, the beneficiary concerned must keep all relevant information relating to the action, at least until the time-limit set out in the Data Sheet (Point 6) and, in any case, until any ongoing checks, reviews, audits, investigations, litigation or other pursuits of claims have been concluded.

## **25.5 Consequences of checks, reviews, audits and investigations — Extension of findings**

### **25.5.1 Consequences of checks, reviews, audits and investigations in this grant**

Findings in checks, reviews, audits or investigations carried out in the context of this grant may lead to rejections (see Article 27), grant reduction (see Article 28) or other measures described in Chapter 5.

Rejections or grant reductions after the final payment will lead to a revised final grant amount (see Article 22).

Findings in checks, reviews, audits or investigations during the action implementation may lead to a request for amendment (see Article 39), to change the description of the action set out in Annex 1.

Checks, reviews, audits or investigations that find systemic or recurrent errors, irregularities, fraud or breach of obligations in any EU grant may also lead to consequences in other EU grants awarded under similar conditions ('extension to other grants').

Moreover, findings arising from an OLAF or EPPO investigation may lead to criminal prosecution under national law.

### **25.5.2 Extension from other grants**

Findings of checks, reviews, audits or investigations in other grants may be extended to this grant, if:

- (a) the beneficiary concerned is found, in other EU grants awarded under similar conditions, to have committed systemic or recurrent errors, irregularities, fraud or breach of obligations that have a material impact on this grant and
- (b) those findings are formally notified to the beneficiary concerned — together with the list of

<sup>16</sup> Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council of 11 September 2013 concerning investigations conducted by the European Anti-Fraud Office (OLAF) and repealing Regulation (EC) No 1073/1999 of the European Parliament and of the Council and Council Regulation (Euratom) No 1074/1999 (OJ L 248, 18/09/2013, p. 1).

<sup>17</sup> Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities (OJ L 292, 15/11/1996, p. 2).

grants affected by the findings — within the time-limit for audits set out in the Data Sheet (see Point 6).

The granting authority will formally notify the beneficiary concerned of the intention to extend the findings and the list of grants affected.

If the extension concerns **rejections of lump sum contributions**: the notification will include:

- (a) an invitation to submit observations on the list of grants affected by the findings
- (b) the request to submit revised financial statements for all grants affected
- (c) the correction rate for extrapolation, established on the basis of the systemic or recurrent errors, to calculate the amounts to be rejected, if the beneficiary concerned:
  - (i) considers that the submission of revised financial statements is not possible or practicable or
  - (ii) does not submit revised financial statements.

If the extension concerns **grant reductions**: the notification will include:

- (a) an invitation to submit observations on the list of grants affected by the findings and
- (b) the **correction rate for extrapolation**, established on the basis of the systemic or recurrent errors and the principle of proportionality.

The beneficiary concerned has **60 days** from receiving notification to submit observations, revised financial statements or to propose a duly substantiated **alternative correction method/rate**.

On the basis of this, the granting authority will analyse the impact and decide on the implementation (i.e. start rejection or grant reduction procedures, either on the basis of the revised financial statements or the announced/alternative method/rate or a mix of those; see Articles 27 and 28).

## 25.6 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, lump sum contributions insufficiently substantiated will be ineligible (see Article 6) and will be rejected (see Article 27), and the grant may be reduced (see Article 28).

Such breaches may also lead to other measures described in Chapter 5.

## ARTICLE 26 — IMPACT EVALUATIONS

### 26.1 Impact evaluation

The granting authority may carry out impact evaluations of the action, measured against the objectives and indicators of the EU programme funding the grant.

Such evaluations may be started during implementation of the action and until the time-limit set out in the Data Sheet (see Point 6). They will be formally notified to the coordinator or beneficiaries and will be considered to start on the date of the notification.

If needed, the granting authority may be assisted by independent outside experts.

The coordinator or beneficiaries must provide any information relevant to evaluate the impact of the action, including information in electronic format.

## **26.2 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the granting authority may apply the measures described in Chapter 5.

# **CHAPTER 5 CONSEQUENCES OF NON-COMPLIANCE**

## **SECTION 1 REJECTIONS AND GRANT REDUCTION**

### **ARTICLE 27 — REJECTION OF CONTRIBUTIONS**

#### **27.1 Conditions**

The granting authority will — at interim payment, final payment or afterwards — reject any lump sum contributions which are ineligible (see Article 6), in particular following checks, reviews, audits or investigations (see Article 25).

The rejection may also be based on the extension of findings from other grants to this grant (see Article 25).

Ineligible lump sum contributions will be rejected.

#### **27.2 Procedure**

If the rejection does not lead to a recovery, the granting authority will formally notify the coordinator or beneficiary concerned of the rejection, the amounts and the reasons why. The coordinator or beneficiary concerned may — within 30 days of receiving notification — submit observations if it disagrees with the rejection (payment review procedure).

If the rejection leads to a recovery, the granting authority will follow the contradictory procedure with pre-information letter set out in Article 22.

#### **27.3 Effects**

If the granting authority rejects lump sum contributions, it will deduct them from the lump sum contributions declared and then calculate the amount due (and, if needed, make a recovery; see Article 22).

### **ARTICLE 28 — GRANT REDUCTION**

#### **28.1 Conditions**

The granting authority may — at beneficiary termination, final payment or afterwards — reduce the grant for a beneficiary, if:

- (a) the beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed:
  - (i) substantial errors, irregularities or fraud or
  - (ii) serious breach of obligations under this Agreement or during its award (including improper implementation of the action, non-compliance with the call conditions, submission of false information, failure to provide required information, breach of ethics or security rules (if applicable), etc.), or
- (b) the beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed — in other EU grants awarded to it under similar conditions — systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (extension of findings; see Article 25.5).

The amount of the reduction will be calculated for each beneficiary concerned and proportionate to the seriousness and the duration of the errors, irregularities or fraud or breach of obligations, by applying an individual reduction rate to their accepted EU contribution.

## **28.2 Procedure**

If the grant reduction does not lead to a recovery, the granting authority will formally notify the coordinator or beneficiary concerned of the reduction, the amount to be reduced and the reasons why. The coordinator or beneficiary concerned may — within 30 days of receiving notification — submit observations if it disagrees with the reduction (payment review procedure).

If the grant reduction leads to a recovery, the granting authority will follow the contradictory procedure with pre-information letter set out in Article 22.

## **28.3 Effects**

If the granting authority reduces the grant, it will deduct the reduction and then calculate the amount due (and, if needed, make a recovery; see Article 22).

# **SECTION 2 SUSPENSION AND TERMINATION**

## **ARTICLE 29 — PAYMENT DEADLINE SUSPENSION**

### **29.1 Conditions**

The granting authority may — at any moment — suspend the payment deadline if a payment cannot be processed because:

- (a) the required report (see Article 21) has not been submitted or is not complete or additional information is needed
- (b) there are doubts about the amount to be paid (e.g. ongoing extension procedure, queries about eligibility, need for a grant reduction, etc.) and additional checks, reviews, audits or investigations are necessary, or

(c) there are other issues affecting the EU financial interests.

## 29.2 Procedure

The granting authority will formally notify the coordinator of the suspension and the reasons why.

The suspension will **take effect** the day the notification is sent.

If the conditions for suspending the payment deadline are no longer met, the suspension will be **lifted** — and the remaining time to pay (see Data Sheet, Point 4.2) will resume.

If the suspension exceeds two months, the coordinator may request the granting authority to confirm if the suspension will continue.

If the payment deadline has been suspended due to the non-compliance of the report and the revised report is not submitted (or was submitted but is also rejected), the granting authority may also terminate the grant or the participation of the coordinator (see Article 32).

## ARTICLE 30 — PAYMENT SUSPENSION

### 30.1 Conditions

The granting authority may — at any moment — suspend payments, in whole or in part for one or more beneficiaries, if:

- (a) a beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed or is suspected of having committed:
  - (i) substantial errors, irregularities or fraud or
  - (ii) serious breach of obligations under this Agreement or during its award (including improper implementation of the action, non-compliance with the call conditions, submission of false information, failure to provide required information, breach of ethics or security rules (if applicable), etc.), or
- (b) a beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed — in other EU grants awarded to it under similar conditions — systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (extension of findings; see Article 25.5).

If payments are suspended for one or more beneficiaries, the granting authority will make partial payment(s) for the part(s) not suspended. If suspension concerns the final payment, the payment (or recovery) of the remaining amount after suspension is lifted will be considered to be the payment that closes the action.

### 30.2 Procedure

Before suspending payments, the granting authority will send a **pre-information letter** to the beneficiary concerned:

- formally notifying the intention to suspend payments and the reasons why and
- requesting observations within 30 days of receiving notification.

If the granting authority does not receive observations or decides to pursue the procedure despite the observations it has received, it will confirm the suspension (**confirmation letter**). Otherwise, it will formally notify that the procedure is discontinued.

At the end of the suspension procedure, the granting authority will also inform the coordinator.

The suspension will **take effect** the day after the confirmation notification is sent.

If the conditions for resuming payments are met, the suspension will be **lifted**. The granting authority will formally notify the beneficiary concerned (and the coordinator) and set the suspension end date.

During the suspension, no prefinancing will be paid to the beneficiaries concerned. For interim payments, the periodic reports for all reporting periods except the last one (see Article 21) must not contain any financial statements from the beneficiary concerned (or its affiliated entities). The coordinator must include them in the next periodic report after the suspension is lifted or — if suspension is not lifted before the end of the action — in the last periodic report.

## ARTICLE 31 — GRANT AGREEMENT SUSPENSION

### 31.1 Consortium-requested GA suspension

#### 31.1.1 Conditions and procedure

The beneficiaries may request the suspension of the grant or any part of it, if exceptional circumstances — in particular *force majeure* (see Article 35) — make implementation impossible or excessively difficult.

The coordinator must submit a request for **amendment** (see Article 39), with:

- the reasons why
- the date the suspension takes effect; this date may be before the date of the submission of the amendment request and
- the expected date of resumption.

The suspension will **take effect** on the day specified in the amendment.

Once circumstances allow for implementation to resume, the coordinator must immediately request another **amendment** of the Agreement to set the suspension end date, the resumption date (one day after suspension end date), extend the duration and make other changes necessary to adapt the action to the new situation (see Article 39) — unless the grant has been terminated (see Article 32). The suspension will be **lifted** with effect from the suspension end date set out in the amendment. This date may be before the date of the submission of the amendment request.

During the suspension, no prefinancing will be paid. Moreover, no work may be done. Ongoing work packages must be interrupted and no new work packages may be started.



## 31.2 EU-initiated GA suspension

### 31.2.1 Conditions

The granting authority may suspend the grant or any part of it, if:

- (a) a beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed or is suspected of having committed:
  - (i) substantial errors, irregularities or fraud or
  - (ii) serious breach of obligations under this Agreement or during its award (including improper implementation of the action, non-compliance with the call conditions, submission of false information, failure to provide required information, breach of ethics or security rules (if applicable), etc.), or
- (b) a beneficiary (or a person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed — in other EU grants awarded to it under similar conditions — systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (extension of findings; see Article 25.5)
- (c) other:
  - (i) linked action issues: not applicable
  - (ii) additional GA suspension grounds: not applicable.

### 31.2.2 Procedure

Before suspending the grant, the granting authority will send a **pre-information letter** to the coordinator:

- formally notifying the intention to suspend the grant and the reasons why and
- requesting observations within 30 days of receiving notification.

If the granting authority does not receive observations or decides to pursue the procedure despite the observations it has received, it will confirm the suspension (**confirmation letter**). Otherwise, it will formally notify that the procedure is discontinued.

The suspension will **take effect** the day after the confirmation notification is sent (or on a later date specified in the notification).

Once the conditions for resuming implementation of the action are met, the granting authority will formally notify the coordinator a **lifting of suspension letter**, in which it will set the suspension end date and invite the coordinator to request an amendment of the Agreement to set the resumption date (one day after suspension end date), extend the duration and make other changes necessary to adapt the action to the new situation (see Article 39) — unless the grant has been terminated (see Article 32). The suspension will be **lifted** with effect from the suspension end date set out in the lifting of suspension letter. This date may be before the date on which the letter is sent.



During the suspension, no prefinancing will be paid. Moreover, no work may be done. Ongoing work packages must be interrupted and no new work packages may be started.

The beneficiaries may not claim damages due to suspension by the granting authority (see Article 33).

Grant suspension does not affect the granting authority's right to terminate the grant or a beneficiary (see Article 32) or reduce the grant (see Article 28).

## ARTICLE 32 — GRANT AGREEMENT OR BENEFICIARY TERMINATION

### 32.1 Consortium-requested GA termination

#### 32.1.1 Conditions and procedure

The beneficiaries may request the termination of the grant.

The coordinator must submit a request for **amendment** (see Article 39), with:

- the reasons why
- the date the consortium ends work on the action ('end of work date') and
- the date the termination takes effect ('termination date'); this date must be after the date of the submission of the amendment request.

The termination will **take effect** on the termination date specified in the amendment.

If no reasons are given or if the granting authority considers the reasons do not justify termination, it may consider the grant terminated improperly.

#### 32.1.2 Effects

The coordinator must — within 60 days from when termination takes effect — submit a **periodic report** (for the open reporting period until termination).

The granting authority will calculate the final grant amount and final payment on the basis of the report submitted and taking into account the lump sum contributions for activities implemented before the end of work date (see Article 22). Partial lump sum contributions for work packages that were not completed (e.g. due to technical reasons) may exceptionally be taken into account.

If the granting authority does not receive the report within the deadline, only lump sum contributions which are included in an approved periodic report will be taken into account (no contributions if no periodic report was ever approved).

Improper termination may lead to a grant reduction (see Article 28).

After termination, the beneficiaries' obligations (in particular Articles 13 (confidentiality and security), 16 (IPR), 17 (communication, dissemination and visibility), 21 (reporting), 25 (checks, reviews, audits and investigations), 26 (impact evaluation), 27 (rejections), 28 (grant reduction) and 42 (assignment of claims)) continue to apply.

### 32.2 Consortium-requested beneficiary termination

### 32.2.1 Conditions and procedure

The coordinator may request the termination of the participation of one or more beneficiaries, on request of the beneficiary concerned or on behalf of the other beneficiaries.

The coordinator must submit a request for **amendment** (see Article 39), with:

- the reasons why
- the opinion of the beneficiary concerned (or proof that this opinion has been requested in writing)
- the date the beneficiary ends work on the action ('end of work date')
- the date the termination takes effect ('termination date'); this date must be after the date of the submission of the amendment request.

If the termination concerns the coordinator and is done without its agreement, the amendment request must be submitted by another beneficiary (acting on behalf of the consortium).

The termination will **take effect** on the termination date specified in the amendment.

If no information is given or if the granting authority considers that the reasons do not justify termination, it may consider the beneficiary to have been terminated improperly.

### 32.2.2 Effects

The coordinator must — within 60 days from when termination takes effect — submit:

- (i) a **report on the distribution of payments** to the beneficiary concerned
- (ii) a **termination report** from the beneficiary concerned, for the open reporting period until termination, containing an overview of the progress of the work
- (iii) a second **request for amendment** (see Article 39) with other amendments needed (e.g. reallocation of the tasks and the estimated budget of the terminated beneficiary; addition of a new beneficiary to replace the terminated beneficiary; change of coordinator, etc.).

The granting authority will calculate the amount due to the beneficiary on the basis of the reports submitted in previous interim payments (i.e. beneficiary's lump sum contributions for completed and approved work packages).

Lump sum contributions for ongoing/not yet completed work packages will have to be included in the periodic report for the next reporting periods when those work packages have been completed.

If the granting authority does not receive the report on the distribution of payments within the deadline, it will consider that:

- the coordinator did not distribute any payment to the beneficiary concerned and that
- the beneficiary concerned must not repay any amount to the coordinator.

If the second request for amendment is accepted by the granting authority, the Agreement is **amended** to introduce the necessary changes (see Article 39).

If the second request for amendment is rejected by the granting authority (because it calls into question the decision awarding the grant or breaches the principle of equal treatment of applicants), the grant may be terminated (see Article 32).

Improper termination may lead to a reduction of the grant (see Article 31) or grant termination (see Article 32).

After termination, the concerned beneficiary's obligations (in particular Articles 13 (confidentiality and security), 16 (IPR), 17 (communication, dissemination and visibility), 21 (reporting), 25 (checks, reviews, audits and investigations), 26 (impact evaluation), 27 (rejections), 28 (grant reduction) and 42 (assignment of claims)) continue to apply.

### **32.3 EU-initiated GA or beneficiary termination**

#### **32.3.1 Conditions**

The granting authority may terminate the grant or the participation of one or more beneficiaries, if:

- (a) one or more beneficiaries do not accede to the Agreement (see Article 40)
- (b) a change to the action or the legal, financial, technical, organisational or ownership situation of a beneficiary is likely to substantially affect the implementation of the action or calls into question the decision to award the grant (including changes linked to one of the exclusion grounds listed in the declaration of honour)
- (c) following termination of one or more beneficiaries, the necessary changes to the Agreement (and their impact on the action) would call into question the decision awarding the grant or breach the principle of equal treatment of applicants
- (d) implementation of the action has become impossible or the changes necessary for its continuation would call into question the decision awarding the grant or breach the principle of equal treatment of applicants
- (e) a beneficiary (or person with unlimited liability for its debts) is subject to bankruptcy proceedings or similar (including insolvency, winding-up, administration by a liquidator or court, arrangement with creditors, suspension of business activities, etc.)
- (f) a beneficiary (or person with unlimited liability for its debts) is in breach of social security or tax obligations
- (g) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has been found guilty of grave professional misconduct
- (h) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed fraud, corruption, or is involved in a criminal organisation, money laundering, terrorism-related crimes (including terrorism financing), child labour or human trafficking

- (i) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) was created under a different jurisdiction with the intent to circumvent fiscal, social or other legal obligations in the country of origin (or created another entity with this purpose)
- (j) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed:
  - (i) substantial errors, irregularities or fraud or
  - (ii) serious breach of obligations under this Agreement or during its award (including improper implementation of the action, non-compliance with the call conditions, submission of false information, failure to provide required information, breach of ethics or security rules (if applicable), etc.)
- (k) a beneficiary (or person having powers of representation, decision-making or control, or person essential for the award/implementation of the grant) has committed — in other EU grants awarded to it under similar conditions — systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (extension of findings; see Article 25.5)
- (l) despite a specific request by the granting authority, a beneficiary does not request — through the coordinator — an amendment to the Agreement to end the participation of one of its affiliated entities or associated partners that is in one of the situations under points (d), (f), (e), (g), (h), (i) or (j) and to reallocate its tasks, or
- (m) other:
  - (i) linked action issues: not applicable
  - (ii) additional GA termination grounds: not applicable.

### 32.3.2 Procedure

Before terminating the grant or participation of one or more beneficiaries, the granting authority will send a **pre-information letter** to the coordinator or beneficiary concerned:

- formally notifying the intention to terminate and the reasons why and
- requesting observations within 30 days of receiving notification.

If the granting authority does not receive observations or decides to pursue the procedure despite the observations it has received, it will confirm the termination and the date it will take effect (**confirmation letter**). Otherwise, it will formally notify that the procedure is discontinued.

For beneficiary terminations, the granting authority will — at the end of the procedure — also inform the coordinator.

The termination will **take effect** the day after the confirmation notification is sent (or on a later date specified in the notification; ‘termination date’).

### 32.3.3 Effects

(a) for **GA termination**:

The coordinator must — within 60 days from when termination takes effect — submit a **periodic report** (for the last open reporting period until termination).

The granting authority will calculate the final grant amount and final payment on the basis of the report submitted and taking into account the lump sum contributions for activities implemented before termination takes effect (see Article 22). Partial lump sum contributions for work packages that were not completed (e.g. due to technical reasons) may exceptionally be taken into account.

If the grant is terminated for breach of the obligation to submit reports, the coordinator may not submit any report after termination.

If the granting authority does not receive the report within the deadline, only lump sum contributions which are included in an approved periodic report will be taken into account (no contributions if no periodic report was ever approved).

Termination does not affect the granting authority's right to reduce the grant (see Article 28) or to impose administrative sanctions (see Article 34).

The beneficiaries may not claim damages due to termination by the granting authority (see Article 33).

After termination, the beneficiaries' obligations (in particular Articles 13 (confidentiality and security), 16 (IPR), 17 (communication, dissemination and visibility), 21 (reporting), 25 (checks, reviews, audits and investigations), 26 (impact evaluation), 27 (rejections), 28 (grant reduction) and 42 (assignment of claims)) continue to apply.

(b) for **beneficiary termination**:

The coordinator must — within 60 days from when termination takes effect — submit:

- (i) a **report on the distribution of payments** to the beneficiary concerned
- (ii) a **termination report** from the beneficiary concerned, for the open reporting period until termination, containing an overview of the progress of the work
- (iii) a **request for amendment** (see Article 39) with any amendments needed (e.g. reallocation of the tasks and the estimated budget of the terminated beneficiary; addition of a new beneficiary to replace the terminated beneficiary; change of coordinator, etc.).

The granting authority will calculate the amount due to the beneficiary on the basis of the reports submitted in previous interim payments (i.e. beneficiary's lump sum contributions for completed and approved work packages).

Lump sum contributions for ongoing/not yet completed work packages will have to be included in the periodic report for the next reporting periods when those work packages have been completed.

If the granting authority does not receive the report on the distribution of payments within the deadline, it will consider that:

- the coordinator did not distribute any payment to the beneficiary concerned and that
- the beneficiary concerned must not repay any amount to the coordinator.

If the request for amendment is accepted by the granting authority, the Agreement is **amended** to introduce the necessary changes (see Article 39).

If the request for amendment is rejected by the granting authority (because it calls into question the decision awarding the grant or breaches the principle of equal treatment of applicants), the grant may be terminated (see Article 32).

After termination, the concerned beneficiary's obligations (in particular Articles 13 (confidentiality and security), 16 (IPR), 17 (communication, dissemination and visibility), 21 (reporting), 25 (checks, reviews, audits and investigations), 26 (impact evaluation), 27 (rejections), 28 (grant reduction) and 42 (assignment of claims)) continue to apply.

## **SECTION 3 OTHER CONSEQUENCES: DAMAGES AND ADMINISTRATIVE SANCTIONS**

### **ARTICLE 33 — DAMAGES**

#### **33.1 Liability of the granting authority**

The granting authority cannot be held liable for any damage caused to the beneficiaries or to third parties as a consequence of the implementation of the Agreement, including for gross negligence.

The granting authority cannot be held liable for any damage caused by any of the beneficiaries or other participants involved in the action, as a consequence of the implementation of the Agreement.

#### **33.2 Liability of the beneficiaries**

The beneficiaries must compensate the granting authority for any damage it sustains as a result of the implementation of the action or because the action was not implemented in full compliance with the Agreement, provided that it was caused by gross negligence or wilful act.

The liability does not extend to indirect or consequential losses or similar damage (such as loss of profit, loss of revenue or loss of contracts), provided such damage was not caused by wilful act or by a breach of confidentiality.

### **ARTICLE 34 — ADMINISTRATIVE SANCTIONS AND OTHER MEASURES**

Nothing in this Agreement may be construed as preventing the adoption of administrative sanctions (i.e. exclusion from EU award procedures and/or financial penalties) or other public law measures, in addition or as an alternative to the contractual measures provided under this Agreement (see,

for instance, Articles 135 to 145 EU Financial Regulation 2018/1046 and Articles 4 and 7 of Regulation 2988/95<sup>18</sup>).

## **SECTION 4 FORCE MAJEURE**

### **ARTICLE 35 — FORCE MAJEURE**

A party prevented by force majeure from fulfilling its obligations under the Agreement cannot be considered in breach of them.

‘Force majeure’ means any situation or event that:

- prevents either party from fulfilling their obligations under the Agreement,
- was unforeseeable, exceptional situation and beyond the parties’ control,
- was not due to error or negligence on their part (or on the part of other participants involved in the action), and
- proves to be inevitable in spite of exercising all due diligence.

Any situation constituting force majeure must be formally notified to the other party without delay, stating the nature, likely duration and foreseeable effects.

The parties must immediately take all the necessary steps to limit any damage due to force majeure and do their best to resume implementation of the action as soon as possible.

## **CHAPTER 6 FINAL PROVISIONS**

### **ARTICLE 36 — COMMUNICATION BETWEEN THE PARTIES**

#### **36.1 Forms and means of communication — Electronic management**

EU grants are managed fully electronically through the EU Funding & Tenders Portal (‘Portal’).

All communications must be made electronically through the Portal in accordance with the Portal Terms and Conditions and using the forms and templates provided there (except if explicitly instructed otherwise by the granting authority).

Communications must be made in writing and clearly identify the grant agreement (project number and acronym).

Communications must be made by persons authorised according to the Portal Terms and Conditions. For naming the authorised persons, each beneficiary must have designated — before the signature of this Agreement — a ‘legal entity appointed representative (LEAR)’. The role and tasks of the LEAR are stipulated in their appointment letter (see Portal Terms and Conditions).

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<sup>18</sup> Council Regulation (EC, Euratom) No 2988/95 of 18 December 1995 on the protection of the European Communities financial interests (OJ L 312, 23.12.1995, p. 1).



If the electronic exchange system is temporarily unavailable, instructions will be given on the Portal.

### **36.2 Date of communication**

The sending date for communications made through the Portal will be the date and time of sending, as indicated by the time logs.

The receiving date for communications made through the Portal will be the date and time the communication is accessed, as indicated by the time logs. Formal notifications that have not been accessed within 10 days after sending, will be considered to have been accessed (see Portal Terms and Conditions).

If a communication is exceptionally made on paper (by e-mail or postal service), general principles apply (i.e. date of sending/receipt). Formal notifications by registered post with proof of delivery will be considered to have been received either on the delivery date registered by the postal service or the deadline for collection at the post office.

If the electronic exchange system is temporarily unavailable, the sending party cannot be considered in breach of its obligation to send a communication within a specified deadline.

### **36.3 Addresses for communication**

The Portal can be accessed via the Europa website.

The address for paper communications to the granting authority (if exceptionally allowed) is the official mailing address indicated on its website.

For beneficiaries, it is the legal address specified in the Portal Participant Register.

## **ARTICLE 37 — INTERPRETATION OF THE AGREEMENT**

The provisions in the Data Sheet take precedence over the rest of the Terms and Conditions of the Agreement.

Annex 5 takes precedence over the Terms and Conditions.

The Terms and Conditions take precedence over the Annexes other than Annex 5.

Annex 2 takes precedence over Annex 1.

## **ARTICLE 38 — CALCULATION OF PERIODS AND DEADLINES**

In accordance with Regulation No 1182/71<sup>19</sup>, periods expressed in days, months or years are calculated from the moment the triggering event occurs.

The day during which that event occurs is not considered as falling within the period.

‘Days’ means calendar days, not working days.

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<sup>19</sup> Regulation (EEC, Euratom) No 1182/71 of the Council of 3 June 1971 determining the rules applicable to periods, dates and time-limits (OJ L 124, 8/6/1971, p. 1).



## ARTICLE 39 — AMENDMENTS

### 39.1 Conditions

The Agreement may be amended, unless the amendment entails changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

Amendments may be requested by any of the parties.

### 39.2 Procedure

The party requesting an amendment must submit a request for amendment signed directly in the Portal Amendment tool.

The coordinator submits and receives requests for amendment on behalf of the beneficiaries (see Annex 3). If a change of coordinator is requested without its agreement, the submission must be done by another beneficiary (acting on behalf of the other beneficiaries).

The request for amendment must include:

- the reasons why
- the appropriate supporting documents and
- for a change of coordinator without its agreement: the opinion of the coordinator (or proof that this opinion has been requested in writing).

The granting authority may request additional information.

If the party receiving the request agrees, it must sign the amendment in the tool within 45 days of receiving notification (or any additional information the granting authority has requested). If it does not agree, it must formally notify its disagreement within the same deadline. The deadline may be extended, if necessary for the assessment of the request. If no notification is received within the deadline, the request is considered to have been rejected.

An amendment **enters into force** on the day of the signature of the receiving party.

An amendment **takes effect** on the date of entry into force or other date specified in the amendment.

## ARTICLE 40 — ACCESSION AND ADDITION OF NEW BENEFICIARIES

### 40.1 Accession of the beneficiaries mentioned in the Preamble

The beneficiaries which are not coordinator must accede to the grant by signing the accession form (see Annex 3) directly in the Portal Grant Preparation tool, within 30 days after the entry into force of the Agreement (see Article 44).

They will assume the rights and obligations under the Agreement with effect from the date of its entry into force (see Article 44).

If a beneficiary does not accede to the grant within the above deadline, the coordinator must — within

30 days — request an amendment (see Article 39) to terminate the beneficiary and make any changes necessary to ensure proper implementation of the action. This does not affect the granting authority's right to terminate the grant (see Article 32).

#### **40.2 Addition of new beneficiaries**

In justified cases, the beneficiaries may request the addition of a new beneficiary.

For this purpose, the coordinator must submit a request for amendment in accordance with Article 39. It must include an accession form (see Annex 3) signed by the new beneficiary directly in the Portal Amendment tool.

New beneficiaries will assume the rights and obligations under the Agreement with effect from the date of their accession specified in the accession form (see Annex 3).

Additions are also possible in mono-beneficiary grants.

### **ARTICLE 41 — TRANSFER OF THE AGREEMENT**

In justified cases, the beneficiary of a mono-beneficiary grant may request the transfer of the grant to a new beneficiary, provided that this would not call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

The beneficiary must submit a request for **amendment** (see Article 39), with

- the reasons why
- the accession form (see Annex 3) signed by the new beneficiary directly in the Portal Amendment tool and
- additional supporting documents (if required by the granting authority).

The new beneficiary will assume the rights and obligations under the Agreement with effect from the date of accession specified in the accession form (see Annex 3).

### **ARTICLE 42 — ASSIGNMENTS OF CLAIMS FOR PAYMENT AGAINST THE GRANTING AUTHORITY**

The beneficiaries may not assign any of their claims for payment against the granting authority to any third party, except if expressly approved in writing by the granting authority on the basis of a reasoned, written request by the coordinator (on behalf of the beneficiary concerned).

If the granting authority has not accepted the assignment or if the terms of it are not observed, the assignment will have no effect on it.

In no circumstances will an assignment release the beneficiaries from their obligations towards the granting authority.

### **ARTICLE 43 — APPLICABLE LAW AND SETTLEMENT OF DISPUTES**

#### **43.1 Applicable law**

The Agreement is governed by the applicable EU law, supplemented if necessary by the law of Belgium.

Special rules may apply for beneficiaries which are international organisations (if any; see Data Sheet, Point 5).

### **43.2 Dispute settlement**

If a dispute concerns the interpretation, application or validity of the Agreement, the parties must bring action before the EU General Court — or, on appeal, the EU Court of Justice — under Article 272 of the Treaty on the Functioning of the EU (TFEU).

For non-EU beneficiaries (if any), such disputes must be brought before the courts of Brussels, Belgium — unless an international agreement provides for the enforceability of EU court judgements.

For beneficiaries with arbitration as special dispute settlement forum (if any; see Data Sheet, Point 5), the dispute will — in the absence of an amicable settlement — be settled in accordance with the Rules for Arbitration published on the Portal.

If a dispute concerns administrative sanctions, offsetting or an enforceable decision under Article 299 TFEU (see Articles 22 and 34), the beneficiaries must bring action before the General Court — or, on appeal, the Court of Justice — under Article 263 TFEU.

For grants where the granting authority is an EU executive agency (see Preamble), actions against offsetting and enforceable decisions must be brought against the European Commission (not against the granting authority; see also Article 22).

## **ARTICLE 44 — ENTRY INTO FORCE**

The Agreement will enter into force on the day of signature by the granting authority or the coordinator, depending on which is later.

### **SIGNATURES**

For the coordinator

For the granting authority



## ANNEX 1



## **Erasmus+ (ERASMUS+)**

### **Description of the action (DoA)**

**Part A**

**Part B**

## DESCRIPTION OF THE ACTION (PART A)

### COVER PAGE

Part A of the Description of the Action (DoA) must be completed directly on the Portal Grant Preparation screens.

<b>PROJECT</b>	
<i>Grant Preparation (General Information screen) — Enter the info.</i>	
<b>Project number:</b>	101129169
<b>Project name:</b>	Development of innovative curricula and modules in Circular Economy and Sustainable Development
<b>Project acronym:</b>	CirculEC
<b>Call:</b>	ERASMUS-EDU-2023-CBHE
<b>Topic:</b>	ERASMUS-EDU-2023-CBHE-STRAND-2
<b>Type of action:</b>	ERASMUS-LS
<b>Service:</b>	EACEA/A/04
<b>Project starting date:</b>	first day of the month following the entry into force date
<b>Project duration:</b>	36 months

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## PROJECT SUMMARY

### Project summary

*Grant Preparation (General Information screen) — Provide an overall description of your project (including context and overall objectives, planned activities and main achievements, and expected results and impacts (on target groups, change procedures, capacities, innovation etc)). This summary should give readers a clear idea of what your project is about.*

*Use the project summary from your proposal.*

The CirculEC (Development of innovative curricula and modules in Circular Economy and Sustainable Development) project is aimed to build the capacity of the human capital in the HEIs of Central Asian countries on a circular economy in order to provide staff, students and wider public with skills and competences aligned to the needs of local labour markets and environmental challenges CA countries faces.

Project will update current disciplines that HEIs have in the circular economy adapted to the needs of each country (KZ, TKM, TJ, UZ).

## LIST OF PARTICIPANTS

### PARTICIPANTS

*Grant Preparation (Beneficiaries screen) — Enter the info.*

Number	Role	Short name	Legal name	Country	PIC
1	COO	EKTU	D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY	KZ	997354971
2	BEN	KoKSU	SH.UALIKHANOV ATYNDAGY KOKSHETAU MEMLEKETTİK UNIVERSITETI	KZ	948627603
3	BEN	TSIEM	THE TURKMEN STATE INSTITUTE OF ECONOMICS AND MANAGEMENT	TM	898629438
4	BEN	TUT	TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	TJ	953846300
5	BEN	ABU	ALIKHAN BOKEIKHAN UNIVERSITY	KZ	934164321
6	BEN	WIUT	TOSHKENT SHAHRIDAGI XALQARO WESTMINSTER UNIVERSITETI	UZ	933536828
7	BEN	TSUC	TAJIK STATE UNIVERSITY OF COMMERCE	TJ	936722502
8	BEN	CAU	CENTRAL ASIAN UNIVERSITY MCHJ	UZ	885299116
9	BEN	KarUK	KARAGANDA UNIVERSITY OF KAZPOTREBSOYUZ	KZ	934473848
10	BEN	TSIF	TURKMEN STATE INSTITUTE OF FINANCE	TM	933076369
11	BEN	AST	TURKMENISTAN YLYMLAR AKADEMIYASY	TM	968678473
12	BEN	AY	AYECONOMICS RESEARCH CENTRE SL	ES	909523896
13	BEN	USC	UNIVERSIDAD DE SANTIAGO DE COMPOSTELA	ES	999829635
14	BEN	UNINA	UNIVERSITA DEGLI STUDI DI NAPOLI FEDERICO II	IT	999976590

**PARTICIPANTS***Grant Preparation (Beneficiaries screen) — Enter the info.*

<b>Number</b>	<b>Role</b>	<b>Short name</b>	<b>Legal name</b>	<b>Country</b>	<b>PIC</b>
15	BEN	FHM	FACHHOCHSCHULE DES MITTELSTANDES (FHM) GMBH - UNIVERSITY OF APPLIED SCIENCE -	DE	950486123

## LIST OF WORK PACKAGES

<b>Work packages</b>						
<i>Grant Preparation (Work Packages screen) — Enter the info.</i>						
<b>Work Package No</b>	<b>Work Package name</b>	<b>Lead Beneficiary</b>	<b>Effort (Person-Months)</b>	<b>Start Month</b>	<b>End Month</b>	<b>Deliverables</b>
WP1	Project management	1 - EKTU	70.00	1	36	D1.1 – Kick-off meeting D1.2 – Progress report D1.3 – Project Management Plan
WP2	Market needs and capacitation of Cental Asian staff	12 - AY	17.02	4	12	D2.1 – CE education at higher education in CA countries D2.2 – Action Plan for CE implementation in higher education
WP3	Environmental Management	15 - FHM	18.00	7	18	D3.1 – Syllabus development of Environmental Management D3.2 – Content development of Environmental Management
WP4	Sustainable competitiveness	14 - UNINA	22.00	7	18	D4.1 – Syllabus development of Sustainable Competitiveness D4.2 – Content development of the Sustainable competitiveness
WP5	Environmental entrepreneurship	13 - USC	18.00	6	18	D5.1 – Syllabus of Circular & Sustainable Entrepreneurship module D5.2 – Contents of the Circular & Sustainable Entrepreneurship module
WP6	Capacity building in Circular economy	12 - AY	7.08	16	27	D6.1 – Organisation of the trainings for enhancing teaching staff capacity for CA partners D6.2 – Organisation of hackathon in the circular economy.
WP7	Piloting	9 - KarUK	13.05	19	30	D7.1 – Pilot Plan



<b>Work packages</b>						
<i>Grant Preparation (Work Packages screen) — Enter the info.</i>						
<b>Work Package No</b>	<b>Work Package name</b>	<b>Lead Beneficiary</b>	<b>Effort (Person-Months)</b>	<b>Start Month</b>	<b>End Month</b>	<b>Deliverables</b>
						D7.2 – Pilot Report D7.3 – Monitoring meeting
WP8	Quality Assurance	15 - FHM	14.00	1	36	D8.1 – Quality Assurance and Monitoring Plan D8.2 – Quality Assurance progress report D8.3 – Quality Assurance Final report
WP9	Impact and dissemination.	7 - TSUC	16.00	1	36	D9.1 – Dissemination strategy D9.2 – Project website D9.3 – Sustainability Plan D9.4 – Impact and dissemination progress report D9.5 – Impact and dissemination Final report

## Work package WP1 – Project management

<b>Work Package Number</b>	WP1	<b>Lead Beneficiary</b>	1. EKTU
<b>Work Package Name</b>	Project management		
<b>Start Month</b>	1	<b>End Month</b>	36

Objectives
<p>The objective of the Work Package (WP) 1 is to provide high quality project management and coordination of activities during the project implementation. Project management and coordination ensures that the project goals and objectives are completed, the outcomes, deliverables and results achieved, and that the dissemination of the activities lead to project impact and sustainability, ensuring high quality and decision-making structures throughout the project and it guarantee the achievement of specific objectives. Its main objectives are:</p> <ul style="list-style-type: none"> <li>• To lead the project to successful completion;</li> <li>• To ensure good co-ordination of the partners' activities;</li> <li>• To ensure efficient legal, contractual, financial and administrative management of the project;</li> <li>• To assure high quality of the project work and project's results;</li> <li>• To provide effective project management at all stages throughout the duration of the project;</li> <li>• To supervise the progress of the project, to guide and direct the partners, and to lead them towards accomplishment of the goals and towards success of the project;</li> <li>• To advise and help the partners in performing their project work;</li> <li>• To regularly report project activities, especially to the EACEA;</li> <li>• To establish and maintain effective communication between project partners, work package managers and other project participants;</li> <li>• To organize project and review meetings; To perform administration, financial management and accounting of the project.</li> </ul> <p>Overall, the Management activity is built around a two-level structure: the project will be managed by two committees, namely the Project Management Board and the Academic Board. The Project Management Board, chaired by the Project Coordinator, has full executive responsibility for the project and is composed of one representative for each partner of the consortium. The Academic Board is led by the Academic Coordinator who chairs the board and the Work-package Leaders. Together they are responsible for managing the project. Each WP is implemented by a core group of partners, led by the WP leader. Each Task within every WP is also led by the Task owner. These are the key components responsible for managing the implementation of the project ensuring that every activity is in-line with the original application, the grant agreement with EACEA and the Consortium Agreement. In Q1, each partner will be asked to nominate 1 representative for the Project Management Board and the Academic Board, who will have to be a highlevel manager competent to take important operational decisions on behalf of its organisation. Additionally, all consortium members will have to provide nominations for core groups (WP and Task managers), as per allocated roles within each work package.</p>

Description
<p>Task 1.1 Initiation of the project: Online Kick Off Meeting</p> <p>Initiation of the project covers setting up the management structures and processes needed for effective project management of this large consortium where 15 members will collaborate, 10 of which from Central Asia Region. EKTU appoints a Academic Board Lead, and a project secretary to manage the activities with appropriately trained experts with experience in coordinating CBHE-projects. The Project Management Board consists of each partner's WP leaders, and it is the highest decision-making organ responsible for overseeing and assessing the project progress and quality results. EKTU is the Project Management Board chair. For structural and policy level advice of the project, Academic Board is established. AB members are nominated by Consortium members, and USC is the chair. A project management guideline is prepared based on the project partners' previous experiences in CBHE projects. The guideline will contain joint templates for reports of the meetings of the project members, travel reports (official EACEA form), financial reporting forms (timesheets + staff declarations -official EACEA forms), and Work Package Reports. To ensure the overall coordination, a detailed plan of the project activities and tasks, mobility and events for each project year will be collected into a Detailed project plan. The kick-off meeting will be organised to gain mutual understanding and commitment to overall project and work package contents. EKTU as the coordinator prepares the required official documents for signing and ensures that the</p>

guidelines set in the Grant Agreement are clear to all partners. EKTU communicates with the EACEA and will supply all documents and requested information. The Grant Agreement is a legally binding document, and it is explained through on-line meetings and discussed together with all partners. Partners must have understanding about the content and commitments set in the Grant Agreement before the start of the project. EKTU clarifies all questions addressed by partners. The Partnership Agreement will be prepared to be signed in the kick-off meeting.

#### Task 1.2 Project implementation, and coordination

EKTU as the coordinator will monitor that the project is implemented properly. The project implementation follows the agreed timetable and responsibilities. Project partners are responsible for activities as indicated in the WP's work plans and in the Partnership Agreement defining the roles and responsibilities of all partners. The aim is to involve all partners to planning and management and enable up-to-date information and real time working processes.

1. Organisation of Academic Board meetings annually.

2. Organising regular meetings for the Project Management

Board to monitor the project's process. The WP leaders and coleaders take the responsibility of coordination, monitoring and reporting of the outcomes of their WPs.

3. Organisation of the WP leadership, implementation, and follow-up. WP Core teams, QA team, and DS team will organise monthly meetings for their activity periods defined in their WP descriptions. Central Asian partners ensure efficient information sharing to all associate partners and local stakeholders as well as effective coordination.

4. Internal communication is carried out by using online tools such as email, Slack, Zoom, WhatsApp, Telegram, and Google Drive, which have been already jointly used to plan the project.

#### Task 1.3 Financial management and Administration

EKTU project team will be in charge of managing the finances of the project including the following: distribution of partner's budget shares according to the Consortium Agreement; monitoring, collecting and storing properly all the documents proving expenses, coordination and control of annual cost claims and certificates of financial statements; reporting of financial issues and consulting project partners on financial rules stated by the EACEA; follow-up of EACEA payments. The allocation of costs is divided between managers and administrative staff. Managers will be involved in participation in all project meetings, organisation of project meetings, where such is envisaged for the perspective partner; communication activities related to the project management; participation in MB meetings, and consolidation of report activities. Managers will be supported by administrative staff. Administrative specialists will be responsible for overall administrative tasks of the project – collection of information, monitoring and review of project documentation. Administration staff will review all progress activities and will assist the Manager in preparing progress reports. TSIEM and TSIF will have less (3 months) each, since the most part of project coordination will be done by AST. The AST, unlike the classical academy of sciences of other countries, functions as a ministry of science and conducts a policy in the field of science for all educational institutions. In this regard, the Academy coordinates scientific activity of institutes, universities and educational organizations. The required efforts per partner also cover the organisation and attendance of the foreseen project and the described project meetings. Every six months all partners will submit to EKTU financial reports which will summarise the expenses of their tasks, staff costs, and purchases which were completed. EKTU communicates with the EACEA and will supply all documents and requested information concerning financial reporting to EACEA.

#### T1.4 Reporting

Reporting consists of those activities that are carried out based on EACEA guidelines, Grant agreement, CircuEC Technical description and Project Management Guideline. This activity is led by EKTU. Collecting evidence of project activities, outcomes, and impact systematically according to set milestones during the project lifetime. This includes all documentation, minutes, participant lists and reports. The reporting activities are carried out following the set timetable and guidelines. EKTU will request and review documents or information required by the granting authority and verify their correctness. The Interim and Final reports are composed according to the EACEA guidelines. EKTU as the coordinator will submit the deliverables and reports in the system. In cooperation with the other partners, EKTU guarantees that the reporting is efficient and of high quality throughout the project implementation. Immediate and constant documentation ensures that data is available for analysis and reporting without delays.

#### Task 1.5 2nd Management Meeting

The 2nd MB online meeting is scheduled before starting the pilot stage.

Task 1.6 3rd Managemnt meeting.

The 3rd MB online meeting will be devoted to evaluation of the pilot project results in order to provide recommendations.

### Work package WP2 – Market needs and capacitation of Cental Asian staff

<b>Work Package Number</b>	WP2	<b>Lead Beneficiary</b>	12. AY
<b>Work Package Name</b>	Market needs and capacitation of Cental Asian staff		
<b>Start Month</b>	4	<b>End Month</b>	12

**Objectives**

The objectives of Work Package 2 – Preparation includes: (1) Policies analysis, current situation and strategies of Central Asian states in circular economy, green economy, sustainable development, and other relevant questions to support capacity development in the field of interest, (2) quality market research and stakeholder analysis, and trends in the labor and education market, (3) baseline situation analysis and current capacity of HEIs – university partners to develop Circular Economy and Sustainable Development education programs.

First, it is important to understand current situation in the region, particularly:

1. Baseline situation and needs in Central Asian countries – identify knowledge, skills, employment related indicators
2. Analysis of current HEIs capacity and development trends – reforms, investment, etc.

Second core component aims is to understand the stakeholder engagement which composes three main stages:

- 1) Stakeholder mapping
- 2) Assess and prioritise the stakeholders
- 3) Develop an understanding of stakeholders

The stakeholders are expected to include students and faculty members, current / future employers, policy makers, and in general both public and private sectors representatives, community representatives, and others to be determined during the stakeholder mapping. This will provide the information about the potential for the implementation of green technologies in the region. Conducting a qualitative study will determine what is the potential for the implementation of the project in the region. Also, this aspect will be important in the preparation of the educational program. Geographical, environmental and economic factors specific to the region will be taken into account when forming the key competencies of the educational program. The results are expected to provide needs of the market information to the development of education programs at undergraduate, postgraduate and professional development level courses, considering regional and country specific features and adjustment to teacher’s competences. The third component in the preparation phase – stakeholders will participate in workshop to facilitate the process and identify the stages of the engagement. Each workshop will be convened by the local partners involving stakeholders from a range of organisations, including national and regional public authorities, international organisations, academic institutions, local, national environmental and health non-governmental organisations and civil society organisations, community groups, local businesses, students, etc.

And the fourth, the preparation stage will provide a report that will describe regional and country level analysis, current capacity and opportunities of HEIs in the region, and market needs. It will also provide best regional and international practices, milestones, and potential solutions to best develop and implement the curriculum in Circular Economy and Sustainable Development.

**Description**

Task 2.1 State of play analysis

Baseline situation and needs assessment at regional and country level. This task aims to identify problems and current situation at national and regional levels. The task will provide information on exiting socio-economic, community, climate challenges Central Asian countries face today, and provide justification for the importance of investment in education and capacity development in green economy, circular economy, sustainable development. It will also include quality market research, and trends in the labour and education market. Analysis of existing curricular in partner universities. This sub-task will support identification of current capacities and needs at university level

**Task 2.2 Stakeholder analysis**

This task aims to provide information about the potential for the implementation of green technologies in the region. Conducting a qualitative study will determine what is the potential for the implementation of the project in the region. Also, this aspect will be important in preparation of educational program.

- Stakeholder mapping
  - Assessment and prioritization of stakeholders
  - Develop an understanding of stakeholders
  - Qualitative data collection – interviews and focus group discussions
  - Analysis of qualitative data
  - Preliminary findings and recommendations
- WIUT will be communicating with partner universities to support the stakeholder analysis in each country

**Task 2.3 Capacitation: International experience**

Workshop start in Bielefeld then Neapoli and finish in Santiago, two days per institution aim to share experience of EU partners of implementing CE disciplines in curriculum.

The goal of this activity is to equip /provide/ give professors from the Central Asia region (CA) with the skills to effectively implement changes and ensure the success and sustainability of the project. To achieve this, a “Masterclass on Circular and sustainable Economy” will be developed. The three sub-tasks involved in its development are: 1) creating the Masterclass materials and contents, 2) planning and organizing the Masterclass, and 3) preparing materials that will serve as teaching resources for the CA professors. The Master Class will be held in the EU hosted by EU partners.

**Task 2.4 Action Plan: CE introduction for higher education in CA**

A roadmap with policy recommendations for modules in a circular economy degree program: outline the steps, timeline for developing and delivering a series of modules. Clearly define the objectives, goals and roles CE modules. Determine the program's target audience, including the types of students who will enrol in the modules. Determine the resources required to develop and deliver the modules, including training for trainers.

**Task 2.5 Validation online workshop**

The validation of the results with the stakeholders and CA partners will be done using DELPHI analysis to ensure that results reflect the reality and that opinion of all stakeholders are taken into account. 1. Methodology and interview questions will be developed in M3 by AYe in collaboration and implemented by partner countries. AYe is responsible for providing online instructions, support realisation, and analysing research outcomes. The software proposed for the online surveys is questionpro (<https://www.questionpro.com>), since it allows conditional questions depending on answers. 2. Several rounds of questionnaires will be sent out to key stakeholder groups in the targeted region, and the anonymous responses will be aggregated and shared with the group after each round in M4. The stakeholders will be allowed to adjust their answers in subsequent rounds. Since multiple rounds of questions will be asked, and the panel will be informed what the group thinks as a whole, the Delphi method will reach the common response through consensus. 3. After the validation step, Report will be provided in M8. In M6, the report will be sent for Quality Assurance, and in M8, it will be publicly available.

**Work package WP3 – Environmental Management**

<b>Work Package Number</b>	WP3	<b>Lead Beneficiary</b>	15. FHM
<b>Work Package Name</b>	Environmental Management		
<b>Start Month</b>	7	<b>End Month</b>	18

**Objectives**

- Design of short courses for 3 levels – Bachelor, Master and further (academic) training and appropriate training materials in the area of Circular Economy aiming

to familiarise learners from with the fundamentals of Circular Economy considering the specific needs of the target groups;

- Peer reviewing the courses on the internal institutional level by the university teachers and stakeholders as well as the external educators from European universities; Peer reviewing;
- Piloting of the courses and evaluation by the learners

Description
<p><b>Task 3.1 Development of course description</b></p> <p>Every Central Asia partner university will create training courses, taking especially the needs of the particular target group and already the regional peculiarities and the profile of the HEI. Tailored content allows to reduce the competence and knowledge gap and lead to a faster transition to Circular Economy. The process of designing the courses will start with the consideration of the analysis previously carried out and specify the competencies to be improved for different target groups (Bachelor /Master Students or Further Education learners). A competence map will be generated. Based on these findings and competence requirements the course will be designed indicating: Course content; Number of ECTS; Learning outcomes; Learning activities and teaching methods; Assessment methods; Resources etc.; Assignment Bachelor level – will concentrate on introducing the CE principles and fundamentals and demonstrating the relevance of the transition towards circularity. Difference between the linear and circular economy.</p> <p>Master Level – Understanding the relevance of Sustainability and CE as guiding principles and a high priority among decision makers. Changing the mindset towards circularity and its benefits. Business learners (further education) will also be familiarised with CE and outfitted with knowledge and also ideas for practical implementation of CE principles in the working environment. They will be enabled to elaborate sustainable solutions and incorporate CE principles. While developing the courses and content the European Green Deal and the Circular Economy Action Plan will be consulted to get impulses and input, which can be adapted to the specific situation and aspiration of the Partner universities.</p> <p><b>Task 3.2 Peer reviewing the courses by the teachers from European universities</b></p> <p>Once the course description is completed, colleagues from European universities will conduct an examination. As the courses must not be accredited by any external authority, a multiple peer review process will be carried out – in the first step project partners from EU countries will evaluate and voice recommendations or suggestions for improvement if necessary.</p> <p><b>Task 3.3 Peer review</b></p> <p>In the next the developed courses will be reviewed by the peers and external reviewers, e.g. relevant stakeholders from the region representing the business sector (min 3 per CA country) and policy makers (min 3 per CA country). The courses will be revised based on the suggestions/ recommendations given by the reviewers. The refined final version of the courses will be used for teaching the first intake. These quality loops ensure that the designed courses comply with the national standards and also incorporate appropriate ideas and good practices from EU practices, policies and strategies. In total, 9 courses for partner universities will be designed and peer/ reviewed. Allocated ECTS will vary between 8 and 10 ECTS.</p> <p><b>Task 3.4 Testing and evaluation</b></p> <p>After the peer review (project) internal and external all developed courses will be piloted by the CA HEI. Partners will initiate relevant organisational, personnel and infrastructural preparation and start the application process of the courses. Learners will be enrolled for all educational levels – bachelor, Master, Further Education. The testing of the module will be carried out and completed by the evaluation done by the learners. Assessment will be used to execute required adjustment and modifications in different levels –content, teaching/learning methods, materials and tools as well as assessment. All partners strive to integrate the courses into the educational program of the own university</p>

### Work package WP4 – Sustainable competitiveness

<b>Work Package Number</b>	WP4	<b>Lead Beneficiary</b>	14. UNINA
<b>Work Package Name</b>	Sustainable competitiveness		
<b>Start Month</b>	7	<b>End Month</b>	18



Objectives
<p>The objective of Work Package (WP) 4 is to provide a quantitative analysis to evaluate the territorial attractiveness for new activities and services localisation in terms of social, economic, and environmental sustainability. This output is obtained throughout the state of the art on the relationship between urban competitiveness and achieving sustainable development and circular economy goals, with some examples of international studies and rankings in this issue. To define and measure the physical, functional, and environmental characteristics of a territorial system that favours the competitiveness and sustainable development of the system itself.</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• To learn the main international rankings and best practices for territorial and urban competitiveness;</li> <li>• To identify suitable locations to favour sustainable and circular development models.</li> </ul>

Description
<p><b>Task 4.1 Identification the needs and development of course description</b></p> <p>A course description clearly communicates the goals and objectives of the course, the topics to be covered, the instructional methods, and any requirements or prerequisites.</p> <ol style="list-style-type: none"> <li>1. Define the course goals and objectives: Define the overall purpose and objectives of the course, and what learners will be able to do after completing the course.</li> <li>2. Identify the discipline topics relevant for CA: Identify three key topics that will be covered, based on the needs assessment.</li> <li>3. Choose the instructional/teaching methods: Choose the instructional methods that will be used to deliver the course content, such as lectures, hands-on exercises, case studies, or simulations.</li> <li>4. Determine the course requirements: Determine any prerequisites or requirements for taking the course, such as prior knowledge or experience.</li> <li>5. Develop the course description: Write a concise and clear description of the course, including the goals and objectives, topics covered, instructional methods, and any requirements or prerequisites.</li> <li>6. Review and revise: Review the course description and revise as needed to ensure it accurately reflects the needs of the learners and the goals of the course.</li> </ol> <p><b>Task 4.2 Validating the Course Draft with the Consortium and Stakeholders</b></p> <p>Validating the course draft with the consortium and stakeholders is an important step in the course development process. This involves obtaining feedback and input from the stakeholders who will be impacted by the course and ensuring that the course aligns with their needs and expectations. Based on listed stakeholders from the WP2: Disciplines Draft will be shared with key stakeholders; feedback will be gathered; feedback provided by stakeholders will be reviewed, feedback will be incorporated into the course materials. The last step final course draft will be validated by stakeholders.</p> <p><b>Task 4.3 Creating the content of the course “Sustainable competitiveness”</b></p> <p>Create final content of the course “Sustainable competitiveness” ready to deliver.</p>

### Work package WP5 – Environmental entrepreneurship

<b>Work Package Number</b>	WP5	<b>Lead Beneficiary</b>	13. USC
<b>Work Package Name</b>	Environmental entrepreneurship		
<b>Start Month</b>	6	<b>End Month</b>	18

Objectives
<p>The objective of this work package is to train professionals who can contribute to the strengthening and design of</p>

strategies for sustainable and circular development in the public and private sectors through entrepreneurship. This module will train the participants in innovation and sustainability, two essential drivers for the dynamization of Sustainable Societies, capable of responding to the objectives of social welfare, inclusive and respectful of the ecological limits of the Planet.

By the end of the module, students should have acquired the following competences:

- To understand the different approaches of the green economy, circular economy and eco-innovation in order to formulate proposals and strategies for a just ecological transition.
- Conceive, design and implement Circular Business Models, Circular Business Plans and circular social initiatives for a just ecological transition.
- Undertake innovative social, community, cooperative or business projects and initiatives based on parameters of sustainability, circularity and justice.
- Formulate, integrate and synthesise new and complex ideas in collaborative and participatory processes for the development of strategic plans for sustainability and Circular Economy.

Conceive, design, implement and manage circular economy, innovation or sectoral development programmes and actions

Description
<p>Task 5.1 Identification the needs to change the approach to teaching and learning in Circular and sustainable entrepreneurship Analysis statements and report to Developing Modules</p> <p>Task 5.2 Benchmarking in Circular and sustainable Entrepreneurship Study Implementation the best EU practices in Environmental Entrepreneurship into the Partners’ curriculum</p> <p>Task 5.3 Creating the contents, implementing and delivering the course “Circular &amp; Sustainable Entrepreneurship</p> <p>5.3.1 With the results of identification needs and benchmarking activities, the partners will agree on the curriculum design with module adaptations for BA/MA/LLL programs</p> <p>5.3.2. The partners will create course materials that emphasise the importance of stakeholder engagement in organisational strategies related to sustainability and the circular economy. Among the topics include in the module will be the following ones:</p> <ul style="list-style-type: none"> <li>· Circular Economy</li> <li>· Resources and sustainable development</li> <li>· Tools for Circular Economy Assessment</li> <li>· Circular and Sustainable Business models</li> <li>· Financing the Circular Economy business models</li> </ul> <p>The course will aim to help participants convert entrepreneurship challenges into green business opportunities, understand the potential for new ventures, strategies, products, and technologies that address society's Circular Economy and Sustainability.</p> <p>Task 5.4 Strengthening the knowledge and capacities through workshops for stakeholders in Central Asia Region</p> <p>USC, in collaboration with ABU, will plan at least two online workshops with relevant stakeholders in the Central Asia Region (CAR) to identify, discuss and address the sustainability and circular economy needs.</p> <p>The two workshops will include a networking activity with the involvement of relevant stakeholders in the development of educational programs, as a first step for set a potential partnership in Circular and sustainable entrepreneurship.</p> <p>The workshop will be hosted in the CAR countries by local partners, together with the EU partners, will conduct a post-workshop assessment to produce a report with recommendations for future actions.</p>

### Work package WP6 – Capacity building in Circular economy

<b>Work Package Number</b>	WP6	<b>Lead Beneficiary</b>	12. AY
<b>Work Package Name</b>	Capacity building in Circular economy		
<b>Start Month</b>	16	<b>End Month</b>	27

#### Objectives



The main purpose of the work package is primarily to provide access to the developed project materials for partners and future users from the beneficiary universities.  
 During the development of materials, the electronic platform can serve to study the views of project partners and discuss the issues and materials being developed.

**Description**

**Task 6.1 Organisation of the trainings for enhancing teaching staff capacity for CA partners**

TUT and TSUC will coordinate the Training programme and scheduler in cooperation with host EU HEI. Each module will be hosted by its Lead (EU partner: Naples, Santiago de Compostela; Bielefeld). CA partner will provide min 2 persons per module (6 teachers per HEI). Teachers will have round trips to three EU HEIs.

1. Based on the participants and scope of the Trainings will be chosen delivery methods such as in-person, online, or a hybrid of both. Project expects to involve a max number of local teachers online who will not be able to travel for example.
2. Once the training content and delivery method will be determined, schedule the training and coordinate all the logistics, such as reserving a venue, arranging for equipment, and communicating with participants.
3. During the training, the facilitator should follow a structured agenda and actively engage participants (online as well) to ensure they are learning and applying the new skills.
4. After the training is complete, it's important to evaluate the effectiveness of the training program to determine whether the goals and objectives were met and to identify areas for improvement.

**T6.2 Organisation of hackathon in the circular economy.**

During the piloting: One hackathon in the circular economy will be organised in each CA country moderated by each EU partner based of their expertise: Design challenges (USC): Hackathons can be used to challenge participants to design products, systems, or processes that are circular in nature, such as closedloop supply chains or circular business models. Materials innovation (FHM Bielefeld ): Hackathons can focus on finding new uses for waste materials or developing new materials that are more sustainable and environmentally friendly. Digital solutions (AYeconomics): Hackathons can explore the potential of digital technologies, such as blockchain or IoT, to improve traceability and transparency in supply chains, or to enable circular business models. Circular cities (UNINA): Hackathons can focus on developing circular solutions for cities, such as waste reduction, energy efficiency, or sustainable transportation. AYeconomics will develop methodology, guideline and evaluation survey for the event

**Work package WP7 – Piloting**

<b>Work Package Number</b>	WP7	<b>Lead Beneficiary</b>	9. KarUK
<b>Work Package Name</b>	Piloting		
<b>Start Month</b>	19	<b>End Month</b>	30

**Objectives**

The aim of WP7 is to develop innovative, interdisciplinary modules in Circular Economy for the existing curricula in bachelor, Master levels and for life-long learning.  
 As part of this work package, a test check of the training materials and content and obtaining feedback from participants are provided. Conducting research using the online questionnaire method to identify emerging or potential problems, as well as weaknesses for their solution and making adjustments for improvement.  
 Processes for ensuring monitoring of the pilot implementation of modules are of paramount importance. The CA partners undertake to provide all the information necessary for the KarUK to develop a research program and the content of the questionnaires, conduct a survey and analyze the final results. The research methodology and interview questions will be developed by the KarUK and implemented by the CA partners. KarUK is responsible for providing online instructions, implementation support and analysis of research results. The presentation of the research results will be held during the meeting of all partners

Description
<p>T7.1 Coordination and monitoring over the pilot implementation of modules in CA partners.</p> <p>Coordination and monitoring over the pilot implementation of modules in CA partners. Develop a pilot plan: A detailed pilot plan will be developed that outlines the timelines, budget, resources, and stakeholders involved in the program. Monitor and evaluate the program: The pilot program will be monitored and evaluated to determine its effectiveness. This will be done through surveys and focus groups. Make adjustments: Based on the feedback received from monitoring and evaluation, adjustments will be made to the program to improve its effectiveness (M25). Scale up the program plan: to provide a scale up plan.</p> <p>Report on the pilot implementation of modules in the educational process of CA partners based on Monitor and Evaluation and Adjustment.</p> <p>T7.2 Monitoring Meeting Round trip to CA HEIs to monitor how pilot is implementing.</p>

### Work package WP8 – Quality Assurance

<b>Work Package Number</b>	WP8	<b>Lead Beneficiary</b>	15. FHM
<b>Work Package Name</b>	Quality Assurance		
<b>Start Month</b>	1	<b>End Month</b>	36

Objectives
<p>The objective is to ensure the quality of the project and to ensure that the declared results can be realized through timely implemented tasks and activities set in Consolidated project plan. The aim is to ensure the high-quality project implementation. Quality Assurance and monitoring also confirms impact and sustainability of the results and deliverables.</p>

Description
<p>T8.1 Initiation of the Quality Assurance and Development of Quality Assurance and Monitoring Plan</p> <p>Quality assurance and monitoring of the project comply with the Erasmus+ guidelines, project proposal and Quality Assurance and Monitoring Plan (QAM-plan) for the project.</p> <p>The leader of the work package is the FHM Bielefeld (4) The main objective of QAM-plan is to provide the project consortium with a set of quality assurance measures, quality standards, quality control measures and criteria, procedures and mechanisms that should be implemented throughout the project lifecycle. to ensure:</p> <ul style="list-style-type: none"> <li>• Monitoring and documenting the progress of project activities so that deviations can be detected at an early stage and corrective measures can be taken as soon as possible.</li> <li>• High level of quality in the structure, processes and results of the project.</li> <li>• Effective risk management.</li> <li>• Relevant improvement actions.</li> </ul> <p>Initiation of the quality assurance process.</p> <p>1. A Quality Assurance and Monitoring Team (QAM-team) will be established, which is responsible for developing a Quality Assurance and Monitoring Plan (QAM-plan). The QAM team will include representatives of all universities to perform all the quality activities in their university and to ensure full understanding on the importance of the quality activities and performance indicators. These members are nominated by each partner in the Kick off meeting.</p> <p>2. Development of a quality assurance and monitoring plan Quality assurance tasks will be coordinated by FHM Bielefeld + EKTU, as the head of the WP. The document describes the main guidelines and criteria for the quality assurance of the project by defining, planning and implementing a list of methods, quality standards, quality assurance measures and various tools and means to be applied for the entire duration of the project. In addition, it includes indicators that will be put into effect to assess whether and to what extent the project is achieving its goals and results. It also ensures the required level of quality and improvements at each stage of the project implementation.</p>

Quality monitoring and reporting will be applied at two levels: internal and external.

T8.2 Constant Quality Assurance and Monitoring of the project Internal quality control will include collection of information for reviews and following systematically the progress and quality of the project and the achievement of the deliverables.

The activities consist of collecting:

- Feedback from level of WP Core teams and DE-team working methods, mutual understanding, satisfaction, communication, and problems encountered
- Evaluation of the master classes and workshops
- Evaluation of the online course
- Evaluation of the materials and tools
- Evaluation of the events and conferences
- Outcome testing (ex-ante) of the capacity building. Target groups will be directly involved in testing the results.
- Evaluation of the equality of deliverables.

T8.3 Regular quality reviews Regular quality reviews are the bases of the quality assurance activity. They consist of bi-annual internal quality reports and mid-term quality report, external evaluation and final quality assessment report.

1. Performing QAM reporting every 6 months FHM Bielefeld, as the project quality leader will lead the process on analysing the collected data. FHM Bielefeld will review and produce a report every 6 months to the PMG. It will also provide a summary with recommendations on the project progress and quality of the outcomes and deliverables annually. All relevant risks will be elaborated.
2. Reporting on the quality of the project in the Mid-term report
3. External evaluation

An international external evaluator will be selected on the basis of an open competition to evaluate the quality of the content and to provide recommendations for the 3rd year. This evaluation will be conducted Q3-Q4 of the second project year.

### Work package WP9 – Impact and dissemination.

<b>Work Package Number</b>	WP9	<b>Lead Beneficiary</b>	7. TSUC
<b>Work Package Name</b>	Impact and dissemination.		
<b>Start Month</b>	1	<b>End Month</b>	36

**Objectives**

The Work Package ensures optimised project outputs, results, large-scale impact and sustainability during and after project lifecycle. Dissemination and exploitation will go beyond partner organisations and countries to a wider range of public all over Europe and CA countries. WP aims at establishing the brand of the project, to raise awareness among partners, health industrial companies, stakeholders, policy makers and other HEIs. WP is horizontal to the project duration, since it is relevant to all project activities. It is also inextricably related to the Management and coordination work package and the Quality Assurance and monitoring work package.

TSUC (P13) + CAU (P15) will illuminate the importance of the project activities; promote dissemination of the project results and outcomes to different groups at HEIs, stakeholders, and research audience together with all partners.

**Description**

T9.1 Developing dissemination (DS) strategy

This task aims to develop a dissemination strategy to be carried out during and after the completion of the project. It will comprise of activities to be performed by each project member based on project outcomes, success stories and opportunities. The dissemination plan establishes

communication goals, identifies target groups for these messages (taking into consideration, for example, Internet penetration data, mobile users data, to better reach target groups), identifies tools for reaching these groups and sets out processes for measuring the success of communication activities. The project's dissemination strategy will be adjusted periodically to ensure that activities associated with production and distribution of materials and planning and delivery of events run concurrently to the availability of the project deliverables.

The strategy will be discussed with partners in an online workshop.

**T9.2 Stakeholder engagement** This task aims to inform stakeholders about new educational programs available in HEIs and engage them to cooperate.

In particular, meetings, seminars, webinars, job fairs, etc. would be organised by CA universities to bring stakeholders into discussion on matters of curriculum development, staff training opportunities, getting feedback on programs, provision of internship/employment opportunities for students, tailor-made programs, etc. Events might be organised by associated partners in each country jointly. Reports of events held would be provided on an annual basis. Events will be highlighted in news, social and web media, including HEI and project websites.

**T9.3 Web site and visual identity** A web-site of the CIRCULEC project will be created.

Associated partners may create their own web-pages under respective institutional web-sites. The web-site will have an in-depth information about the project and its opportunities, and be periodically updated with news and information about events to be held in CA partner HEIs.

**T9.4 Social media and communication**

Events to be held within the scope of the project will be periodically highlighted in social, news, and web media.

Short reports of the events (including outreach statistics) held should be generated.

**T9.5 Articles and publications** This task aims to generate articles on the project

outcomes and success stories. To keep track of articles and publications produced on the project, related information would be stored on its web-site.

**T9.6 Dissemination, promotional campaigns, info and open days**

Promotional campaigns, info and open days will be organised by CA universities to raise public awareness of the program/project and its opportunities.

Online publication as well as printed publications will be distributed to audiences drawn using mailing lists owned by project participants, or from specially

prepared lists assembled with reference to university, industry directories, sectoral associations, and other sources.

In addition, brochures and leaflets can be offered to site visitors, and to participants in meetings, conferences and exhibitions – including those

organised in close cooperation with EU partners.

**T9.7 Sustainability Plan**

This task aims to prepare a thorough plan that describes how to sustain the project objectives, keep project partners tied with each other and continue

cooperation in related dimensions, how to enrich the project through sharing experience on a periodic basis, etc.

## STAFF EFFORT

<b>Staff effort per participant</b>										
<i>Grant Preparation (Work packages - Effort screen) — Enter the info.</i>										
<b>Participant</b>	<b>WP1</b>	<b>WP2</b>	<b>WP3</b>	<b>WP4</b>	<b>WP5</b>	<b>WP6</b>	<b>WP7</b>	<b>WP8</b>	<b>WP9</b>	<b>Total Person-Months</b>
1 - EKTU	12.00	1.00		6.00		0.01	1.00	1.00	1.00	22.01
2 - KoKSU	5.00	1.00	4.00	1.00	1.00	0.01	1.00	1.00	1.00	15.01
3 - TSIEM	3.00	1.00	1.00	1.00	1.00	0.01	1.00	1.00		9.01
4 - TUT	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	13.00
5 - ABU	5.00	1.00	1.00	1.00	4.00	0.01	1.00	1.00	1.00	15.01
6 - WIUT	5.00	3.00	1.00	1.00	1.00	0.01	1.00	1.00	1.00	14.01
7 - TSUC	5.00	0.01	1.00	1.00	1.00	1.00	1.00	1.00	4.00	15.01
8 - CAU	5.00	0.01	1.00	1.00	1.00	0.01	1.00	1.00	4.00	14.02
9 - KarUK	5.00	1.00	1.00	1.00	1.00	0.01	4.00	1.00	1.00	15.01
10 - TSIF	3.00	1.00	1.00	1.00	1.00	0.01	1.00	1.00		9.01
11 - AST	5.00	1.00		1.00			0.01	1.00	2.00	10.01
12 - AY	3.00	3.00				2.00	0.01			8.01
13 - USC	3.00	1.00			6.00	1.00	0.01			11.01
14 - UNINA	3.00	1.00		6.00		1.00	0.01			11.01
15 - FHM	3.00	1.00	6.00			1.00	0.01	3.00		14.01
<b>Total Person-Months</b>	70.00	17.02	18.00	22.00	18.00	7.08	13.05	14.00	16.00	195.15

## LIST OF DELIVERABLES

<b>Deliverables</b>						
<i>Grant Preparation (Deliverables screen) — Enter the info.</i>						
<i>The labels used mean:</i>						
<i>Public — fully open (⚠ automatically posted online)</i>						
<i>Sensitive — limited under the conditions of the Grant Agreement</i>						
<i>EU classified — RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision <a href="#">2015/444</a></i>						
<b>Deliverable No</b>	<b>Deliverable Name</b>	<b>Work Package No</b>	<b>Lead Beneficiary</b>	<b>Type</b>	<b>Dissemination Level</b>	<b>Due Date (month)</b>
D1.1	Kick-off meeting	WP1	1 - EKTU	R — Document, report	SEN - Sensitive	3
D1.2	Progress report	WP1	1 - EKTU	R — Document, report	SEN - Sensitive	18
D1.3	Project Management Plan	WP1	1 - EKTU	R — Document, report	SEN - Sensitive	6
D2.1	CE education at higher education in CA countries	WP2	12 - AY	R — Document, report	PU - Public	12
D2.2	Action Plan for CE implementation in higher education	WP2	12 - AY	R — Document, report	PU - Public	12
D3.1	Syllabus development of Environmental Management	WP3	15 - FHM	OTHER	PU - Public	14
D3.2	Content development of Environmental Management	WP3	15 - FHM	OTHER	PU - Public	18
D4.1	Syllabus development of Sustainable Competitiveness	WP4	14 - UNINA	OTHER	PU - Public	14
D4.2	Content development of the Sustainable competitiveness	WP4	14 - UNINA	OTHER	PU - Public	18
D5.1	Syllabus of Circular & Sustainable Entrepreneurship module	WP5	13 - USC	OTHER	PU - Public	14

<b>Deliverables</b>						
<i>Grant Preparation (Deliverables screen) — Enter the info.</i>						
<i>The labels used mean:</i>						
<i>Public — fully open (⚠ automatically posted online)</i>						
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<i>EU classified —RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision <a href="#">2015/444</a></i>						
<b>Deliverable No</b>	<b>Deliverable Name</b>	<b>Work Package No</b>	<b>Lead Beneficiary</b>	<b>Type</b>	<b>Dissemination Level</b>	<b>Due Date (month)</b>
D5.2	Contents of the Circular & Sustainable Entrepreneurship module	WP5	13 - USC	OTHER	PU - Public	18
D6.1	Organisation of the trainings for enhancing teaching staff capacity for CA partners	WP6	4 - TUT	R — Document, report	PU - Public	18
D6.2	Organisation of hackathon in the circular economy.	WP6	12 - AY	OTHER	PU - Public	27
D7.1	Pilot Plan	WP7	9 - KarUK	R — Document, report	PU - Public	19
D7.2	Pilot Report	WP7	9 - KarUK	R — Document, report	PU - Public	25
D7.3	Monitoring meeting	WP7	9 - KarUK	DEM — Demonstrator, pilot, prototype	SEN - Sensitive	27
D8.1	Quality Assurance and Monitoring Plan	WP8	15 - FHM	R — Document, report	PU - Public	4
D8.2	Quality Assurance progress report	WP8	15 - FHM	R — Document, report	SEN - Sensitive	18
D8.3	Quality Assurance Final report	WP8	15 - FHM	R — Document, report	SEN - Sensitive	36
D9.1	Dissemination strategy	WP9	8 - CAU	R — Document, report	PU - Public	4
D9.2	Project website	WP9	7 - TSUC	DEC —Websites, patent filings, videos, etc	PU - Public	6
D9.3	Sustainability Plan	WP9	8 - CAU	R — Document, report	PU - Public	4
D9.4	Impact and dissemination progress report	WP9	8 - CAU	R — Document, report	PU - Public	18

**Deliverables**

*Grant Preparation (Deliverables screen) — Enter the info.*

*The labels used mean:*

*Public — fully open (⚠ automatically posted online)*

*Sensitive — limited under the conditions of the Grant Agreement*

*EU classified — RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision [2015/444](#)*

<b>Deliverable No</b>	<b>Deliverable Name</b>	<b>Work Package No</b>	<b>Lead Beneficiary</b>	<b>Type</b>	<b>Dissemination Level</b>	<b>Due Date (month)</b>
D9.5	Impact and dissemination Final report	WP9	8 - CAU	R — Document, report	PU - Public	36



## Deliverable D1.1 – Kick-off meeting

<b>Deliverable Number</b>	D1.1	<b>Lead Beneficiary</b>	1. EKTU
<b>Deliverable Name</b>	Kick-off meeting		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	SEN - Sensitive
<b>Due Date (month)</b>	3	<b>Work Package No</b>	WP1

Description
<p>The online kick-off meeting will be organised to gain mutual understanding and commitment to overall project and work package contents, where it will be defined as the Management Board (one representative per HEI), Dissemination board (DB), Academic Board (AB), Task Core Groups (TCGs). The agenda and report will be produced.</p> <p>Management Board (one representative per HEI) consists of one representative per HEI, which could be a senior administrator or leader within the institution. Overall, the role of a Management Board is to provide leadership, governance, and strategic oversight to ensure the institution's success, sustainability, and commitment to its mission and stakeholders.</p> <p>Dissemination board (DB) is responsible for the communication and distribution of information, updates, and outcomes to relevant stakeholders. Functions: Content Development, Information Sharing, Target Identification &amp; Stakeholder Engagement, Communication Strategy, Feedback Collection, Evaluation and Impact Assessment, Compliance and Ethical Considerations</p> <p>Academic Board (AB) plays a central role in shaping and overseeing the academic policies, curriculum, and educational quality of project. The board plays a pivotal role in curriculum development and revision. It approves new programs, courses, and major changes to existing curriculum structures. It ensures that the academic offerings align with the institution's mission and meet accreditation standards.</p> <p>Task Core Groups (TCGs) consists of the team that are responsible for particular tasks, it can include representatives from different HEIs and experts from different fields.</p> <p>Kick of meeting's dissemination level will be public WITHOUT personal data of participants.</p>

## Deliverable D1.2 – Progress report

<b>Deliverable Number</b>	D1.2	<b>Lead Beneficiary</b>	1. EKTU
<b>Deliverable Name</b>	Progress report		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	SEN - Sensitive
<b>Due Date (month)</b>	18	<b>Work Package No</b>	WP1

Description
<p>Mid-term report project written in English summarising project outcomes and results for the 18 months. The report will also include Dissemination report and Quality report.</p>

## Deliverable D1.3 – Project Management Plan

<b>Deliverable Number</b>	D1.3	<b>Lead Beneficiary</b>	1. EKTU
<b>Deliverable Name</b>	Project Management Plan		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	SEN - Sensitive
<b>Due Date (month)</b>	6	<b>Work Package No</b>	WP1

Description			
Project management Plan will be created will describe project management tools and establish modality of payments, reports, communication etc. Project management plan will be in English and will be provided and presented to partners.			

### Deliverable D2.1 – CE education at higher education in CA countries

<b>Deliverable Number</b>	D2.1	<b>Lead Beneficiary</b>	12. AY
<b>Deliverable Name</b>	CE education at higher education in CA countries		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	12	<b>Work Package No</b>	WP2

Description			
Report on CE education at higher education in CA countries. The aim of this report is to assess and highlight the current state of circular economy education in higher education institutions (HEIs) in Central Asia. The report seeks to evaluate the existing level of awareness and integration of circular economy principles within the higher education curriculum in Central Asian countries.			
Requirements: Number of pages: max 30 pages PDF-format.Languages: English, Russian, 4 CA languages., electronic version.			

### Deliverable D2.2 – Action Plan for CE implementation in higher education

<b>Deliverable Number</b>	D2.2	<b>Lead Beneficiary</b>	12. AY
<b>Deliverable Name</b>	Action Plan for CE implementation in higher education		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	12	<b>Work Package No</b>	WP2

Description			
Action Plan for CE implementation in higher education. The aim of this action plan is to systematically introduce and integrate circular economy modules into higher education institutions in order to promote awareness, knowledge, and expertise in circular economy principles among students, faculty, and the broader community in Central Asia. It is Road map for HEIs to act with concrete steps towards implementing circular economy modules effectively.			
Number of pages: max 20 pages PDF-format.Languages: English, Russian, 4 CA languages., electronic version			

### Deliverable D3.1 – Syllabus development of Environmental Management

<b>Deliverable Number</b>	D3.1	<b>Lead Beneficiary</b>	15. FHM
<b>Deliverable Name</b>	Syllabus development of Environmental Management		
<b>Type</b>	OTHER	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	14	<b>Work Package No</b>	WP3

Description			
The deliverable consists of a comprehensive syllabus in Environmental Management designed to be offered			

collaboratively to partner universities. The program comprises nine distinct courses, each thoughtfully designed to equip students with the knowledge, skills, and competencies required to excel in the field of environmental management. This syllabus serves as a detailed roadmap for the entire program, providing an overview of course titles, descriptions, learning objectives, and expected outcomes.

9 courses for partner universities will be designed and peer/ reviewed. Allocated ECTS will vary between 8 and 10 ECTS. Syllabus development will include internal peer review by the Academic Board.

Indicators will include: N of educational programmes by HEI where the modules will be included, name and N of degrees (bachelor, master or vocational trainings level)

### Deliverable D3.2 – Content development of Environmental Management

<b>Deliverable Number</b>	D3.2	<b>Lead Beneficiary</b>	15. FHM
<b>Deliverable Name</b>	Content development of Environmental Management		
<b>Type</b>	OTHER	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	18	<b>Work Package No</b>	WP3

#### Description

The contents of the module will be in English, it will include all the teaching materials for each subject included (ppts, Assessment Materials, case studies, web and papers resources)

External Peer review will be realized: Each module has to have recommendations/ review reports from 3 representatives from the private companies and 2 recommendations from professors/experts in this field to guarantee.

### Deliverable D4.1 – Syllabus development of Sustainable Competitiveness

<b>Deliverable Number</b>	D4.1	<b>Lead Beneficiary</b>	14. UNINA
<b>Deliverable Name</b>	Syllabus development of Sustainable Competitiveness		
<b>Type</b>	OTHER	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	14	<b>Work Package No</b>	WP4

#### Description

Documents in English that outline the basic elements of the module: which topics will be covered, learning outcomes, assessments, contents, and methodologies. Developing a syllabus for a course on Sustainable Competitiveness involves careful planning to outline the course's objectives, content, assessment methods, and schedule. 9 courses for partner universities will be designed and peer/ reviewed. Allocated ECTS will vary between 8 and 10 ECTS.

Internal Peer review will be done by the Academic Board.

### Deliverable D4.2 – Content development of the Sustainable competitiveness

<b>Deliverable Number</b>	D4.2	<b>Lead Beneficiary</b>	14. UNINA
<b>Deliverable Name</b>	Content development of the Sustainable competitiveness		
<b>Type</b>	OTHER	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	18	<b>Work Package No</b>	WP4

#### Description

Developing content (ppts, Assessment Materials, case studies, web and papers resources) on the topic of "Sustainable Competitiveness" involves creating educational materials that explore how businesses and organizations can thrive in the long term by integrating sustainability practices into their strategies. The contents of the module will be in English, it will include all the teaching materials for each subject included.

External peer review will be done by the 3 representatives from the private companies and 2 recommendations from professors/experts in this field to ensure the quality.

### Deliverable D5.1 – Syllabus of Circular & Sustainable Entrepreneurship module

<b>Deliverable Number</b>	D5.1	<b>Lead Beneficiary</b>	13. USC
<b>Deliverable Name</b>	Syllabus of Circular & Sustainable Entrepreneurship module		
<b>Type</b>	OTHER	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	14	<b>Work Package No</b>	WP5

#### Description

Developing a syllabus for a module on Circular & Sustainable Entrepreneurship involves structuring the course content, learning objectives, assessments, and topics to be covered. Document in English that outline the basic elements of the module: what topics

will be covered, learning outcomes, assessments, content, and methodologies. 9 courses for partner universities will be designed and peer/ reviewed. Allocated ECTS will vary between 8 and 10 ECTS.

Syllabus will be peer reviewed internally by the Academic Board.

### Deliverable D5.2 – Contents of the Circular & Sustainable Entrepreneurship module

<b>Deliverable Number</b>	D5.2	<b>Lead Beneficiary</b>	13. USC
<b>Deliverable Name</b>	Contents of the Circular & Sustainable Entrepreneurship module		
<b>Type</b>	OTHER	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	18	<b>Work Package No</b>	WP5

#### Description

The content of a Circular & Sustainable Entrepreneurship (ppts, Assessment Materials, case studies, web and papers resources) module should provide students with a comprehensive understanding of the principles, strategies, and practices involved in launching and managing sustainable businesses within a circular economy framework. The contents of the module will be in English, it will include all the teaching materials for each subject included.

Content developed will be peer reviewed by the representatives from the private sector and experts in the field.

### Deliverable D6.1 – Organisation of the trainings for enhancing teaching staff capacity for CA partners

<b>Deliverable Number</b>	D6.1	<b>Lead Beneficiary</b>	4. TUT
<b>Deliverable Name</b>	Organisation of the trainings for enhancing teaching staff capacity for CA partners		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	18	<b>Work Package No</b>	WP6

Description			
CA partner will provide min 2 persons per module (6 teachers per HEI). Teachers will have round trips to three EU HEIs. Trainings of 4 days will be organised in each EU HEI (Naples, Santiago de Compostela; Bielefeld). Based on the participants and scope of the Trainings will be chosen delivery methods such as in-person, online, or a hybrid of both. Training program, training materials, schedule the training, a structured agenda, list of participants (online as well), feedback and questionnaires, report of outcomes will be developed.			

### Deliverable D6.2 – Organisation of hackathon in the circular economy.

<b>Deliverable Number</b>	D6.2	<b>Lead Beneficiary</b>	12. AY
<b>Deliverable Name</b>	Organisation of hackathon in the circular economy.		
<b>Type</b>	OTHER	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	27	<b>Work Package No</b>	WP6

Description			
The event is an online (at projects website, CA HEIs websites and social media) hackathon focused on the circular economy, where participants from diverse backgrounds and disciplines collaborate to develop innovative solutions that promote sustainability, resource efficiency, and circular practices. Projects are presented virtually, and winners are determined through online voting, engaging a wide audience in celebrating multidisciplinary ideas. The event aims to create a dynamic and inclusive platform where multidisciplinary teams collaborate to generate innovative solutions that contribute to a more sustainable and circular economy, all while engaging and inspiring a wider online audience. English and local languages screens, N of participants, voters, reposts, likes, etc.			

### Deliverable D7.1 – Pilot Plan

<b>Deliverable Number</b>	D7.1	<b>Lead Beneficiary</b>	9. KarUK
<b>Deliverable Name</b>	Pilot Plan		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	19	<b>Work Package No</b>	WP7

Description			
A detailed pilot plan will be developed that outlines the timelines, budget, resources, and stakeholders involved in the program. Number of students enrolled that will be attending new module educational programs at 12 HEI of CA. Pilot plan will be min 30 pages Languages: English, electronic version			

### Deliverable D7.2 – Pilot Report

<b>Deliverable Number</b>	D7.2	<b>Lead Beneficiary</b>	9. KarUK
<b>Deliverable Name</b>	Pilot Report		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	25	<b>Work Package No</b>	WP7

Description			

Report on the pilot implementation of modules in the educational process of CA partners based on Monitor and Evaluation and Adjustment.  
 Number of students enrolled, number of educational programs.  
 Report on the pilot implementation of modules in the educational process of CA partners.  
 Number of pages: min 30 pages PDF-format. Languages: English, electronic version

### Deliverable D7.3 – Monitoring meeting

<b>Deliverable Number</b>	D7.3	<b>Lead Beneficiary</b>	9. KarUK
<b>Deliverable Name</b>	Monitoring meeting		
<b>Type</b>	DEM — Demonstrator, pilot, prototype	<b>Dissemination Level</b>	SEN - Sensitive
<b>Due Date (month)</b>	27	<b>Work Package No</b>	WP7

#### Description

Monitoring visit in the mode of Round trip to CA HEIs to monitor how pilot is implementing Agenda, signed presence list, duration of the event, report of the event, presentations

Report on monitoring in PDF-format, not less than 30 pages. Languages: English, electronic version

### Deliverable D8.1 – Quality Assurance and Monitoring Plan

<b>Deliverable Number</b>	D8.1	<b>Lead Beneficiary</b>	15. FHM
<b>Deliverable Name</b>	Quality Assurance and Monitoring Plan		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	4	<b>Work Package No</b>	WP8

#### Description

It is a comprehensive document that outlines the strategies, processes, and procedures of the project to ensure the consistent and high-quality delivery of project implementation, teaching materials and trainings provided. This plan serves as a roadmap for quality management and typically includes details such as quality standards, roles and responsibilities, quality control measures, monitoring and reporting mechanisms, and continuous improvement strategies. It is a key reference document for all partners and stakeholders involved in quality management and helps to establish and maintain a culture of quality within an project.

Document: Quality Assurance and Monitoring PlanPdf, 20 p.  
 English

### Deliverable D8.2 – Quality Assurance progress report

<b>Deliverable Number</b>	D8.2	<b>Lead Beneficiary</b>	15. FHM
<b>Deliverable Name</b>	Quality Assurance progress report		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	SEN - Sensitive
<b>Due Date (month)</b>	18	<b>Work Package No</b>	WP8

#### Description

Mid-term report: The report include information on the status of quality metrics, any deviations from the plan, actions taken to address issues or improvements made, and recommendations for adjustments if necessary. It serves as a snapshot of the project's quality performance midway through its lifecycle and guides decision-making for the remainder of the project. Document: Pdf, 20 p. English

Progress report by external evaluation (external consultant will be contracted at the beginning of the project to have )

### Deliverable D8.3 – Quality Assurance Final report

<b>Deliverable Number</b>	D8.3	<b>Lead Beneficiary</b>	15. FHM
<b>Deliverable Name</b>	Quality Assurance Final report		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	SEN - Sensitive
<b>Due Date (month)</b>	36	<b>Work Package No</b>	WP8

#### Description

It is a comprehensive document summarizing the quality management efforts and outcomes of a project, program, or organization upon its completion. It provides an overview of quality objectives, standards, implementation processes, assessment results, issue resolution, and recommendations for improvement. This report will serve as a valuable reference for stakeholders, helping to assess the project's overall quality performance and inform future quality management endeavors.

Final report, Document: Pdf, 20 p. English

Progress report by external evaluation

### Deliverable D9.1 – Dissemination strategy

<b>Deliverable Number</b>	D9.1	<b>Lead Beneficiary</b>	8. CAU
<b>Deliverable Name</b>	Dissemination strategy		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	4	<b>Work Package No</b>	WP9

#### Description

Languages: English, Russian, 4 CA languages, electronic version

### Deliverable D9.2 – Project website

<b>Deliverable Number</b>	D9.2	<b>Lead Beneficiary</b>	7. TSUC
<b>Deliverable Name</b>	Project website		
<b>Type</b>	DEC — Websites, patent filings, videos, etc	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	6	<b>Work Package No</b>	WP9

#### Description

Languages: English, Russian, 4 CA languages, electronic version

**Deliverable D9.3 – Sustainability Plan**

<b>Deliverable Number</b>	D9.3	<b>Lead Beneficiary</b>	8. CAU
<b>Deliverable Name</b>	Sustainability Plan		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	4	<b>Work Package No</b>	WP9

<b>Description</b>
Sustainability plan will contain indicators, qualitative and quantitative data. Languages: English, Russian, 4 CA languages, electronic version

**Deliverable D9.4 – Impact and dissemination progress report**

<b>Deliverable Number</b>	D9.4	<b>Lead Beneficiary</b>	8. CAU
<b>Deliverable Name</b>	Impact and dissemination progress report		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	18	<b>Work Package No</b>	WP9

<b>Description</b>
<p>Impact and dissemination Progress report will include report about Dissemination strategy, Operating Project website, Sustainability plan and Qualitative and quantitative data of Progress report including information about:</p> <ul style="list-style-type: none"> <li>- Periodic Web statistics</li> <li>- Number of local institutional websites and web statistic of local institutional websites</li> <li>- Number of promotional campaigns, info and open days</li> <li>- Number of articles and publications</li> <li>- Number of Mass media Publications by each beneficiary</li> <li>- Pictures, immediate feedbacks results from Seminars, round tables, workshops</li> <li>- Pictures and Feedbacks from conference presentations</li> <li>- Feedback forms and number of the project event through using Mass media</li> <li>- Publications, Local TV and radio, website</li> <li>- Number of dissemination elements produced (press releases, posts, internal information events) and quantifying the number of recipients expected to be tackled.</li> </ul> <p>Inner monitoring of all dissemination events will be reported with: pictures of the events and questionnaires/surveys of satisfaction.</p> <p>Languages: English, Russian, 4 CA languages, electronic version</p>

**Deliverable D9.5 – Impact and dissemination Final report**

<b>Deliverable Number</b>	D9.5	<b>Lead Beneficiary</b>	8. CAU
<b>Deliverable Name</b>	Impact and dissemination Final report		
<b>Type</b>	R — Document, report	<b>Dissemination Level</b>	PU - Public
<b>Due Date (month)</b>	36	<b>Work Package No</b>	WP9



**Description**

Final report will include monitoring of the dissemination activities throughout the whole period of the project. Based on Impact and Dissemination Strategy Final report focuses on :

Developed professional network.

Promotion of the Modules of Circular economy.

Sustainability

Web site and visual identity,

Social media and communication,

Articles and publications,

Dissemination, promotional campaigns, info and open days.

It will contain:

- Periodic Web statistics of Project website and local institutional websites
- Number of promotional campaigns, info and open days
- Number of articles and publications
- Number of Mass media Publications by each beneficiary
- Pictures, immediate feedbacks results from conference presentations, Seminars, round tables, workshops, info and open days,
- Number of project event through using Mass media Publications, Local TV and radio, website
- Number of dissemination elements produced (press releases, posts, internal information events) and quantifying the number of recipients expected to be tackled.

Inner monitoring of all dissemination events will be reported with: pictures of the events and questionnaires/surveys of satisfaction.

Languages: English, Russian, 4 CA

languages, electronic version

## LIST OF MILESTONES

<b>Milestones</b>					
<i>Grant Preparation (Milestones screen) — Enter the info.</i>					
<b>Milestone No</b>	<b>Milestone Name</b>	<b>Work Package No</b>	<b>Lead Beneficiary</b>	<b>Means of Verification</b>	<b>Due Date (month)</b>
1	Online Kick Off meeting	WP1	1-EKTU	Agenda, signed presence list, number of participants, feedback questionnaire	3
2	Capacitation: International experience	WP2	12-AY	Invitation, agenda, signed participant list, number of participants N, presentations, feedback questionnaire	6
3	Validation of the Situation analysis results with the partners stakeholders	WP2	12-AY	Agenda, video recording, number of participants N, presentations, feedback questionnaire	12
4	Competence map generated	WP2	15-FHM	Report in English and Russian describing competence map	15
5	9 Courses description designed	WP2	2-KoKSU	Teaching materials: PPT, case studies and etc	15
6	9 Courses description approved	WP2	2-KoKSU	Incorporated feedback and comments	18
7	Identification the needs and development of course description	WP5	14-UNINA	Report Identification the needs and development of course description which will include course goals and objective, Identified discipline topics relevant for CA; the instructional/teaching methods; the course requirement, the course description English: max 20 pages	14
8	Validating the Course Draft with the Consortium and Stakeholders	WP5	1-EKTU	Survey questionnaires, N of participants, Analytics form online survey	18
9	Online workshop with relevant stakeholders	WP5	5-ABU	Agenda of the workshop, list of participants, minutes of the meeting, dissemination news published in social networks	14
10	Developed methodology on the organisation of hackathon in the circular economy	WP6	12-AY	Report: max 10 pages, English&Russian	12

<b>Milestones</b>					
<i>Grant Preparation (Milestones screen) — Enter the info.</i>					
<b>Milestone No</b>	<b>Milestone Name</b>	<b>Work Package No</b>	<b>Lead Beneficiary</b>	<b>Means of Verification</b>	<b>Due Date (month)</b>
11	Pilot Adjustment report	WP7	9-KarUK	Report on the pilot adjustment of modules in the educational process of CA partners.Number of pages: min 15 pagesPDF-format.Languages: English, electronic version	27
12	Interim quality review	WP1	15-FHM	Pdf 20 p. English Report of the implementation and outcomes of the project and recommendations to further improve the project	18
13	Developing a dissemination strategy	WP9	8-CAU	Strategy	4
14	Creating and maintaining a project web-site	WP9	7-TSUC	Website	6
15	Developing a Sustainability plan	WP9	8-CAU	plan	4

## LIST OF CRITICAL RISKS

<b>Critical risks &amp; risk management strategy</b>			
<i>Grant Preparation (Critical Risks screen) — Enter the info.</i>			
<b>Risk number</b>	<b>Description</b>	<b>Work Package No(s)</b>	<b>Proposed Mitigation Measures</b>
1	Change of leadership. Impact: high Likelihood: low	WP1	Develop a smooth transition plan to other partner of Consortium: Ensure that there is a clear plan in place for the transition of leadership responsibilities and that all relevant parties are aware of their roles and responsibilities.

<b>Critical risks &amp; risk management strategy</b>			
<i>Grant Preparation (Critical Risks screen) — Enter the info.</i>			
<b>Risk number</b>	<b>Description</b>	<b>Work Package No(s)</b>	<b>Proposed Mitigation Measures</b>
2	Coronavirus Pandemic Impact: High Likelihood: low	WP2, WP3, WP5, WP1, WP4	Implement remote working options; Communicate regularly and transparently with stakeholders; Monitor and adapt to changing circumstances
3	Changes in the composition of the team itself Impact: low ; Likelihood: low	WP2, WP3, WP5, WP6, WP9, WP8, WP1, WP4, WP7	A team member may leave, so a potential replacement from the list of volunteers involved in the project will be laid
4	The implementation of the project goals in Turkmenistan requires the strong support of the Turkmen Government Impact: middle; Likelihood: middle	WP2, WP3, WP5, WP6, WP9, WP8, WP1, WP4, WP7	Project deliverable will be implemented basing on the governmental co-support, reporting and concordance
5	Lack of communication/ internet access Impact: high; Likelihood: middle	WP2, WP3, WP5, WP6, WP9, WP8, WP1, WP4, WP7	Use of alternative communication channels: For TKM: Slack, telegram, emails
6	English language competencies limitation Impact: low; Likelihood: low	WP2, WP3, WP5, WP6, WP9, WP8, WP1, WP4, WP7	More serious/distributed attention to the English language study
7	Weak access to the staff at Remote arias Impact: middle; Likelihood: low	WP2, WP3, WP5, WP6, WP9, WP8, WP1, WP4, WP7	An increase in activity with remote stakeholders by to disseminate findings widely across the participated institutions, and thus provide a high level of impact
8	Firms are not interested in contribute to the educational process Impact: high; Likelihood: low	WP2, WP3, WP5, WP6, WP9, WP8, WP1, WP4, WP7	test different approaches, tools of communication, small focus groups, explaining better benefits for them
9	Budget and cost overruns Impact: middle; Likelihood: low	WP2, WP3, WP5, WP6, WP9, WP8, WP1, WP4, WP7	Establish cost controls: Establish cost controls to ensure that costs do not exceed the project budget and take steps to address any cost overruns as soon as they are identified
10	Schedule delays Impact: low; Likelihood: middle	WP2, WP3, WP5,	Establish a project schedule monitoring system Have a regular review and assessment Communicate regularly with project team members

<b>Critical risks &amp; risk management strategy</b>			
<i>Grant Preparation (Critical Risks screen) — Enter the info.</i>			
<b>Risk number</b>	<b>Description</b>	<b>Work Package No(s)</b>	<b>Proposed Mitigation Measures</b>
		WP6, WP9, WP8, WP1, WP4, WP7	
11	Lack of resources: The project may require more resources than initially planned, such as personnel, equipment, or materials, which could result in delays or added costs Impact: middle; Likelihood: low	WP2, WP3, WP5, WP6, WP9, WP8, WP1, WP4, WP7	Have a contingencies budget Use a resource leveling approach: Use a resource leveling approach to ensure that resources are used efficiently and that resource shortages do not cause delays or added costs
12	Changes in regulations or laws: Changes in regulations or laws may require changes to the project, which could result in delays or added costs Impact: high; Likelihood: middle	WP2, WP3, WP5, WP6, WP9, WP8, WP1, WP4, WP7	Involve legal experts in the project, such as a lawyer or compliance officer, to ensure that the project is in compliance with all new relevant regulations and laws
13	Political and social instability Impact: high; Likelihood: low	WP2, WP3, WP5, WP6, WP9, WP8, WP1, WP4, WP7	Depends on individual case, develop adaptation implementation plan
14	Dependence on external factors: The project may be dependent on external factors such as weather, natural disasters, or the availability of equipment, which can cause delays or added costs. Impact: high; Likelihood: middle	WP2, WP3, WP5, WP6, WP9, WP8, WP1, WP4, WP7	Reschedule offline activities, move online if possible, use alternative channels of communication (phone, messengers)
15	Lack of clear communication: Miscommunication or lack of communication among project team members, stakeholders Impact: low; Likelihood: low	WP2, WP3, WP5, WP6, WP9, WP8, WP1, WP4, WP7	Use project management software (for example Slack) Encourage open communication Use clear and concise language when communicating information related to the project to ensure that it is easily understood by all parties involved. Provide training: Provide training for team members on effective communication techniques and how to use project management software.

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**PROJECT SUMMARY**
 Associated with document Ref. Ares(2023)7024660 - 16/10/2023
Project summary *(in English)*

See Abstract (Application Form Part A).

The CirculEC (Development of innovative curricula and modules in Circular Economy and Sustainable Development) project is aimed to build the capacity of the human capital in the HEIs of Central Asian countries on a circular economy in order to provide staff, students and wider public with skills and competences aligned to the needs of local labour markets and environmental challenges CA countries face.

Project will update current disciplines that HEIs have in the circular economy adapted to the needs of each country (KZ, TKM, TJ, UZ).

**1 RELEVANCE****1.1 Background and general objectives**

Background and general objectives

Enhancing the educational capacity of HEIs and cultivating the understanding of circular economy principles among students are essential for creating a sustainable future. The circular economy model fosters economic efficiency by minimizing waste and promoting the reuse and recycling of resources. Equipping students with an understanding of these principles can prepare them to apply circular economy practices and sustainable business models in their future careers and contribute to the development of a more sustainable and efficient economy.

By understanding the principles of the circular economy, students can learn how to apply these principles in their future careers and contribute to a more efficient and sustainable economy.

Aims of the project:

- To introduce and integrate the topics of Circular Economy and Sustainable Development into the educational programs of partner countries. It will be important not only to explain the principles of CE and SD but also to illustrate ways, approaches/methods as well as concrete activities and actions to introduce it in business entities and territorial authorities.
- To accelerate the transition to more circularity and foster the implementation of Sustainability Goals and Green Deal actions. The European Green Deal launched the strategy for a climate-neutral, resource-efficient, and competitive economy. This plan aims also at ensuring that the circular economy works for people, regions and cities, fully contributes to climate neutrality and harnesses the potential of research integration between different disciplines to promote innovation and digitalisation. Transition to CE and SD will play a crucial role and contribute to climate neutrality to a high degree.

The circular economy creates new business opportunities in areas such as recycling and material recovery, repairing, remanufacturing, as well as in the design and production of durable and repairable products. The traditional linear model of resource use has led to significant environmental impacts, such as pollution and resource depletion. By teaching students about the circular economy HEIs can help prepare them to contribute to the transition to a more sustainable future.

The CE initiatives are, in fact, one of the main priorities in the Political Agenda of the region, therefore, the CE practices will be implemented at different levels in each country, with diverse economic and political systems.

**Kazakhstan:**

In Kazakhstan, today the volume of accumulated municipal solid waste (MSW) is more than 100 million tons. At the same time, 5-6 million wastes are generated in the country annually, of which only 15% is recycled. Until 2025, the volume of municipal solid waste will gradually increase and reach the mark of 8 million tons annually. Harmful compounds formed as a result of the joint storage of MSW cause enormous damage to the environment, as well as increase the cost of improving it. Therefore, work is currently underway in the country to create "hubs" to ensure the collection and accumulation of secondary raw materials, to install lines for sorting municipal solid waste in those regions where there is no infrastructure for their separate collection and sorting. Separate collection of waste is carried out through the organization of stationary or mobile collection points, at landfills or directly at the places of waste generation

In 2018, the government of Kazakhstan launched a circular economy roadmap that aims to increase resource efficiency and reduce waste in key sectors such as agriculture, construction, and manufacturing. The roadmap includes measures such as increasing recycling rates, promoting the use of renewable resources, and supporting the development of circular economy businesses. Following the recommendations by the OECD, Kazakhstan introduced considerable changes in the 2021 Environmental Code, when compared with the 2007 version. The 2021 Environmental Code covers most items included in the EU environmental acquis, as well as some additional issues (protection of forests, protection of soils, environmental education and awareness raising, research and development, management of radioactive waste, specific environmental requirement for certain activities) and country-specific issues (Protected area in the northern part of the Caspian Sea). The transition to the best available technologies according to the new Eco-Codex is planned for 2025 where sufficient human capital will be needed to use such technologies.

According to the world environmental rating, Kazakhstan is classified as an ecological disaster zone. High education system is characterized by insufficient connections in the "science-education-production" system, the lack of the necessary scientific infrastructure in the field of circular economy and industrial safety, the disconnection of education and science with the real needs of production in scientific developments and specialists. Regulatory legal acts aligned with the objectives of Master's educational program.

**Tajikistan:** The Republic of Tajikistan is very concerned about the worsening environmental situation in the



country and taking measures to ensure that environmental impact is taken into account in production process. Today in Tajikistan, the infrastructure for the collection and processing of SDW (Solid domestic waste) is poorly developed. For example, about 700-800 tons of garbage are brought to the Dushanbe City Solid Waste Dump every day, and this number is increasing every year. Due to the fact that in Dushanbe, and in general in Tajikistan, there is no practice of separate collection of waste, this waste cannot be sorted and sent for processing on the territory of the landfill. According to the State Unitary Enterprise Khochagii Manziliyu Kommunal (SUE KMK), more than 1.5-2.0 million tons of SDW are generated annually in Tajikistan, excluding waste generated in rural areas. In total, there are about 70 SDW landfills in the regions and cities of the republic. The total landfill area is about 300 hectares.

The development of models of circular economy, or closed-loop economy, is now being promoted in many countries around the world to counteract global environmental threats, and above all climate change. The Republic of Tajikistan is not an exception in this regard. In the process of developing the National Development Strategy of the Republic of Tajikistan for the period up to 2030, the transition to a circular economy was identified as one of the priorities of the country's development. Important demographic and environmental challenges facing the country include increasing demand for housing and living conditions, habitat pollution and poor ecosystem management, biodiversity conservation, land degradation, vulnerability to the effects of climate change, access to clean water and sanitation, and household waste management.

The global environmental problems have created a new form of entrepreneurship - environmental entrepreneurship. With the development of this area of activity, the need for legal regulation of environmental business arose. For this purpose, a number of laws and other normative acts regulating this sector were adopted in the country.

According to the National Development Strategy of the Republic of Tajikistan for the period up to 2030 and other short- and medium-term state programs, the rapid growth of extraction and exploitation of natural resources leads to a wide range of negative environmental consequences. Air, water and soil pollution, acidification of ecosystems, loss of biodiversity, climate change and waste generation threaten economic and social well-being both immediately and in the medium and long term, which certainly dictates the need for rational use of natural resources and on this basis the formation of a circular economy. According to the new New green economy strategy, state support for entrepreneurial, innovative and other activities (including environmental insurance) aimed at introducing the best, progressive technologies and industries, non-traditional types of energy, the use of secondary resources and waste processing, as well as other effective measures to protect the environment.

#### **Uzbekistan:**

In Uzbekistan, 7 million tons of municipal solid waste is generated annually. In the country, more than 300 waste processing enterprises use only 1.8 million tons of this amount. That is, only 26% of household waste is recycled. 1,400 tons of products are produced from these wastes. In almost all countries, the amount of solid household waste per capita is growing by 1% per year. In Uzbekistan, the accumulation of waste is growing by 2% per year. The state of affairs in the system of their collection, sorting, processing and disposal is unsatisfactory. For example, only 10% of waste is recycled in Karakalpakstan, and only 20% in Fergana and Kashkadarya regions. The bulk of waste in the country is generated in industry. At the same time, the largest number falls on the mining and processing complexes.

The strategy for the transition of the Republic of Uzbekistan to a green economy in the period of 2019-2030 was approved by the Resolution of the President of the Republic of Uzbekistan dated 04.10.2019. This Resolution was adopted in order to ensure the fulfilment of obligations under the Paris Agreement on climate change signed by Uzbekistan on April 19, 2017, as well as the implementation of the Action Strategy for five priority areas of development of the Republic of Uzbekistan in 2017-2021 (The 2017-2021 strategy has been a core document along with the Paris Agreement to adopt the 2030 green economy strategy). The Resolution declares that the Strategy should bring the following results by 2030: reduction of emissions of greenhouse gas per unit of GDP by 10% of the 2010 level; a twofold increase of energy efficiency indicators and a decrease in the carbon intensity of GDP; further development of renewable energy sources, with coverage of more than 25% of the total volume of electricity generation; increase of the energy efficiency of industrial enterprises by at least 20% and etc. Moreover, it has approved the priority areas in Uzbekistan's strategy for transition to a green economy: improvement of energy efficiency in the basic sectors of the economy; diversification of energy consumption and development of the use of renewable energy sources; adaptation and mitigation of the effects of climate change, increase in the efficiency of natural resources and preservation of natural ecosystems; development of financial and non-financial support mechanisms for the green economy.

In 2022, Uzbekistan adopted its Development Strategy of New Uzbekistan for the period of 2022-2026. Among the strategy aims is green economy development with a focus on energy efficiency of the economy and reduction in emissions of harmful gases into the atmosphere. The strategy also mentions expansion of "green corridors" and transit opportunities in the transport system for foreign trade. Among other aims are investment in "green zones" to promote healthy lifestyle and sports among the population.

On December 2, 2022, the President of Uzbekistan adopted a decree on measures to improve the effectiveness of reforms aimed at the transition of the Republic of Uzbekistan to a green economy until 2030. The document supports green growth aims identified in the Development Strategy of New Uzbekistan for 2022-2026. The document targets reduction of greenhouse gas emissions; increasing the production capacity of renewable energy sources; reduction of energy intensity per unit of gross domestic product; introduction of water-saving irrigation technologies; bringing the indicator of the reserves of the forest fund; starting the system of "green certificates" for local producers; conducting fundamental and applied research in priority areas in the field of green economy; and other relevant aims.

Priority areas since the adoption of the 2030 Resolution envisage the implementation of measures in various sectors of the economy, including electricity, heat, oil and gas, renewable energy, construction, transportation and many more. The development of renewable energy sources implies the implementation of measures for the formation of modern and transparent methods for competitive selection of potential investors by introducing auction trading, as well as the localization of equipment production for energy generation from renewable energy sources.

In the oil and gas industry it is envisaged that losses of natural gas should be reduced in the extraction, processing, transportation and distribution of gas through the modernization of compressor stations the low and

medium pressure gas distribution networks and the gas transmission system through the introduction of effective technologies for the control of hydrocarbon resource losses (UNEP, 2022). Associated with document Ref. Ares(2023)7024660 - 16/10/2023

The Resolution also notes that the main objectives of Uzbekistan's transition to a green economy include the improvement of the energy efficiency of the economy and the rational consumption of natural resources, inclusion of green criteria in priority areas of public investment and expenditures, as well as assistance in the implementation of pilot projects in the areas of transition to a green economy.

In 2019, WIUT became the first Uzbekistan member to join the UN Sustainable Development Solutions Network (UN SDSN).

The curricula and modules of the Circular Economy and Sustainable Development program will be realised across three core pillars including education, research and innovation.

It will provide opportunities for bachelor and master level students:

- to understand how circular economy differs from a linear economy
- to discuss the potential values of Circular Economy for organisations
- to strategically develop circular economy solutions
- to understand main challenges and drivers in shifting to a circular economy
- other questions relevant to CE business models, value chains, processes and materials, etc.

Graduates of developed bachelor and master level modules will have employability opportunities after graduating from a course delivered at WIUT to support Uzbekistan's 2030 Green Growth strategy.

**Turkmenistan:** faces climate risks such as extreme hydro-meteorological phenomena such as drought, hail, gale, frosts, heatwaves, floods and mudflows, etc. One of the greatest risks to the socio-economic well-being of the country is drought caused by high air temperature and lack of water resources. Currently, there is a noticeable tendency of increasing the frequency of low water years of the main rivers of Turkmenistan. National Programme for Socio-Economic Development (NPSED) for 2022-2052 aims to ensure the sustainable development of Turkmenistan. This includes the economic, food, water, and environmental components to the climate change impact by creating reliable favorable conditions, determining an effective and coordinated process of climate change adaptation of all priority sectors, and developing effective mitigation measures that contribute to accelerating the country's low-carbon development, as well as the timely implementation of the international commitments. Project will aim to provide following skills in: Improvement of hydrometeorological observations of weather and climate change in the territory of Turkmenistan; Development and implementation of climate change adaptation and mitigation measures (to prevent climate change); Development of measures to save fuel and energy resources to stabilise greenhouse gas emissions through the use of energy-efficient and resource-saving technologies. And most importantly, the project will increase the level of scientific support and international cooperation in the field of development and implementation of climate change measures.

Turkmenistan shows a growing interest and takes measures in the field of waste management. For example, a modern waste treatment/recycling plant has recently been built near the city of Ashgabat. This plant accepts, for example, medical waste. Over the past year, Turkmenistan has made progress in the management of radioactive waste and has improved its practices in dealing with chemicals used in the oil and gas industry. The purpose behind the CirculEC project is **to build the capacity of the human capital in the HEIs of Central Asian countries on a circular economy aiming to provide students with skills and competences more aligned to the needs of local labour markets and environmental challenges the region faces**. Professionals, experts, and decision-makers will play a critical part in building the new future, both now and in the future, and education will play a critical role in preparing those specialists on Circular Economy for our near future<sup>1</sup>.

The circular economy is a complex and multi-faceted concept that requires a multidisciplinary approach to fully understand and effectively implement. This means that it involves the integration and collaboration of different disciplines, such as engineering, economics, design, sociology, and environmental science, among others.

**Stakeholder engagement** is an important aspect of circular economy education because it helps ensure that the needs and concerns of different groups are taken into account when making decisions about educational policies and practices. The project is aimed to engage different types of stakeholders since the beginning of project implementation. Besides the administrative staff, teachers and community, engaging with students will be the priority of the project to understand their needs and preferences, and can help ensure that the education they receive is relevant and meaningful. Moreover, investors will be important stakeholders in the circular economy because they provide the financial resources needed to fund new initiatives and technologies. Engaging with investors can help a company communicate its circular economy goals and progress, and can help build support for its efforts.

By incorporating circular economy principles into their operations and curricula, higher education institutions can help educate the next generation of leaders on the importance of sustainability and resource efficiency, and contribute to the transition to a more circular economy.

The project include following objectives:

- **Integrate circular economy concepts into coursework:** These courses can be updated to include content on the circular economy, such as case studies and examples of circular economic practices.
- **Partner with industry and community organizations:** Universities will collaborate with businesses and organizations that are implementing circular economy practices to create real-world learning opportunities for students. This will include internships, capstone projects, or research collaborations.
- **Host events and workshops:** Universities will host events and workshops on the circular economy, such as lectures, panel discussions, or hackathons, to engage students and faculty in this topic.

There are several challenges and issues that 4 countries of CA (Kazakhstan, Uzbekistan, Tajikistan and Turkmenistan) are sharing and facing when implementing a circular economy:

1. **Infrastructure:** Transitioning to a circular economy often requires significant investments in new infrastructure, such as recycling facilities, closed-loop systems, and advanced manufacturing processes. These investments can be costly and may require significant upfront capital.

2. **Regulation:** Governments play a key role in shaping the adoption of circular economy practices through policy and incentives. However, regulatory frameworks can be complex and may not always align with the goals of the circular economy.
3. **Consumer behavior:** Consumers play a critical role in the circular economy because their choices and behaviors can influence the demand for circular products and services. Changing consumer behavior can be challenging and may require the development of new business models and incentives.
4. **Supply chain:** The circular economy requires the integration of multiple industries and sectors, which can be challenging due to the complexity of supply chain networks. This can make it difficult to coordinate the flow of materials and resources within a circular system.
5. **Technological barriers:** Implementing circular economy practices often requires the development and adoption of new technologies, which can be challenging due to the high costs and risks associated with innovation.

To solve all these problems, the project starts with Market Need Analysis to identify trends and patterns and mapping areas for the implementation of circular economy initiatives. After that, the project will propose innovative business models that are well-suited to the circular economy, for example Product-as-a-service models, Sharing economy models, Repair and reuse models, Upcycling models, Closed-loop models.

#### *Higher education challenges:*

Central Asian countries have made coherent efforts to improve and reform higher education since independence, in an attempt to match their educational system with broader political and economic initiatives aimed at transitioning their social and economic institutions from centrally planned to market-based. Even though higher education underwent significant changes during this time, particularly in terms of increased admissions and institutional autonomy, not enough emphasis has been placed on improving empirical knowledge and policy debate about how the higher education system works and what its key problems are as it tries to become more relevant to the needs of a growingly diverse student body and a rapidly changing economy.

The importance of equal access to and quality of higher education is highlighted in Target 4.3 of Sustainable Development Goal 4 (SDG 4). It also emphasises the importance of bolstering international cooperation in the development of cross-border higher and university education and research programs, as well as increasing the number of scholarships available for developing countries to attend higher education in both developed and developing countries. In Central Asia that has pledged to shift away from natural resource-based economies toward information and knowledge-based societies, higher education is considered as critical for economic success. This is reflected in Kazakhstan's 2050 Strategy, which aims to increase labour opportunities; National Development Strategy for 2030 of Tajikistan, which finds higher education as a way of preparing learners for the labour market; 2022–2026 Development Strategy of New Uzbekistan, and the President's decree on measures to improve the effectiveness of reforms aimed at the transition of the Republic of Uzbekistan to a green economy until 2030, which includes a core priority area of capacity building and human capital development in green growth.

Turkmenistan's 2030 Agenda for Sustainable Development aims to ensure sustainable, progressive and inclusive growth, social integration and environmental protection, as well as to promote partnership for sustainable and resilient development. The main goal of the country's reforms implemented to overcome the raw material orientation of the economy, develop market transformations, efficiently use natural resources, and create favorable conditions for the life of people with a special attention to the environmental issues. The country has adopted the National Climate Change Strategy. This Strategy (reflected in the UN' SDG) is designed to promote the transition to integrated and dynamic planning for sustainable development of Turkmenistan and preparation of the country's economy to the potential effects of climate change by improving the economic, food, water and environmental security. Moreover, a range of adaptation measures is planned for rational use of natural resources, combating land degradation, forestry development and expanding forest areas, improving the condition of irrigated land and preventing soil salinization. All these changes require a serious effort based on educational approaches, which is also indicated in the country 2030 Strategy.

In recent years, there has been an increase in demand for higher education in Central Asian countries, which has posed some issues in terms of equity, access, and completion, as well as quality assurance and internationalisation. In Central Asia, there are several factors that contribute to a skills mismatch:

- **Limited access to quality education**
- **Lack of alignment between education and industry needs:** with over half of the region's companies having difficulty filling vacancies. According to studies, the skills mismatch is caused by a need to reform education on a systemic level to match the needs of the labour market, rather than by a lack of education.
- **Rapid economic changes:** The economies of Central Asian countries are rapidly changing, and new industries are emerging. This leads to a mismatch between the skills of the workforce and the skills required by the changing job market.

Limited engagement between education institutions and industry in Central Asia prevents the sharing of information and the development of partnerships to address skills gaps. The lack of employer and professional body engagement in quality assurance processes and methods allowing prediction of market demand for certain professions lead to a mismatch between the skills of the workforce and the skills required by businesses.

The utilisation of traditional methods of instruction, such as lectures and textbook-based learning, are still commonly used in many schools and universities in the region. In Kazakhstan, for example, the regulatory procedure for higher education implies that traditional teaching techniques with a significant emphasis on memorizing are prioritized, leading to the ignorance of other important socio-emotional skills.

Many schools and universities in the region lack access to technology, which can limit the use of modern teaching and learning methods, such as online learning and virtual classrooms. Many teachers have not

received training in modern teaching methods, such as problem-based learning and project-based learning. This can limit the use of these methods in the classroom. Universities lack the resources, such as textbooks and other materials, needed to implement modern teaching and learning methods.

Tajikistan likewise has a shortage of qualified teaching professionals due to a limited staff supply, whilst inflexible school administration in Uzbekistan has created worries that higher education will not be able to meet the needs of a progressive modern economy.

Due to the inherited centralised planning approach of HEIs management, education institutions are slow in adapting to new market demands of new skills and knowledge. Proposed project addresses mismatches between supply of HEIs (graduates) and demand of employers in order to increase the employability of students. Moreover, public funding of education and research is extremely low. The private sector usually does not consider academia as a source of the best expertise and research capability.

The main weakness and hence the key inherited challenge of the education system is its inflexibility and its inability to adapt to the changes. Due to the lack of HEI's capability to provide adequate education to cover the labour market needs, firms import a significant number of foreign workers for high qualified positions while there is a huge share of students going to Russian Universities to get a better education. Then, after graduation more than half of these students remain in Russia causing an important loss of human capital.

#### *Stakeholders engagement*

Project includes active stakeholders engagement through co-designing and validating of the Educational materials and Curriculum. Project implementation is based on multi-actors and multi-institutional approaches. Projects activities include needs analysis (to define a list of stakeholders), stakeholders engagement workshops (offline/online workshops (in CA), newsletters, material co-development (feedback, include the case studies of local companies based on their business problems), capacity building events enhancing research and innovation capacities, and dissemination. CirculEC includes measures and monitoring indicators (diversified proportion of stakeholders by size, sector, gender, location) to ensure their participation at all stages of project design.

Main stakeholders groups will be reached during the CirculEC project life and effective mechanism to sustain cooperation will be implemented:

- Public sector – policy makers of CA countries, ministries and officials agencies (local and national levels)
- Private sector: diversified companies NGOs, associations, incubators, technoparks
- Universities, research institutions International entities in the region
- NGOs, associations, incubators, technoparks
- Universities, research institutions
- International entities in the region

Several ways/steps for the stakeholders engagement will be elaborated: Regular communication with stakeholders in order to receive their feedback (online/offline meetings/videoconferences); Identification of potential mechanisms of collaborations on the national levels and based on national strategies/priorities; Analysis/Survey, participation at the working group meetings in local parliaments (maslihat /maslahat) if topic is related to Circular economy; To strengthen the capacity of interaction with the key stakeholders via decision-making processes concerning Project ideas by information and knowledge produced at local, national and international levels.

The project assumes an online platform as a tool that will serve two purposes:

- specifically designed to engage and communicate with stakeholders involved in the circular economy. This can include features such as discussion forums, survey tools, document sharing. This can be used to gather feedback, share updates, and collaborate on circular economy projects with stakeholders such as businesses, governments, and non-profit organizations.
- from the previous experience of running the projects in CA, TKM, TJ and UZ can have travel restrictions (special permission to go abroad). Therefore, the platform will be backup to be able to transfer knowledge and build capacity, uploading study material on the Platform. Usual sharing/ cloud platforms are prohibited in TKM such as Dropbox, Mega, and there are issues to open Google Drive as well.

Project will promote research, scientific and technological innovation by networking, knowledge exchange and active cooperation between partners.

## **1.2 Needs analysis and specific objectives**

### Needs analysis and specific objectives

Please address the specific conditions/objectives set out in the Call document/ Programme Guide, if applicable.

Describe how the objectives of the project are based on a sound needs analysis in line with the specific objectives of the call. What issue/challenge/gap does the project aim to address?

The objectives should be clear, measurable, realistic and achievable within the duration of the project. For each objective, define appropriate indicators for measuring achievement (including a unit of measurement, baseline value and target value)

Central Asia is a fast growing region with a big share of young population, to support such economic growth and provide sustainability, HEIs have to be able to deliver relevant to the market graduates. A lack of knowledge in circular economy can have a negative impact on the economy by limiting opportunities for growth, innovation and competitiveness, while increasing the environmental and social cost. Moreover, it can lead to:

- **Inefficient use of resources:** Without knowledge of circular economy principles, companies and individuals continue to use resources in a linear, "take-make-waste" model, which can lead to increased costs



and inefficiencies.

- **Missed opportunities for innovation and growth:** Lack of knowledge in circular economy

principles limit the ability of companies and individuals to identify new opportunities for innovation and growth, such as by developing new products and services that are more sustainable and efficient.

- **Limited competitiveness:** Without knowledge of circular economy principles, companies and countries find it difficult to compete in a global market that is increasingly focused on sustainability and resource efficiency.

- **Environmental and social costs:** A lack of knowledge in circular economy principles lead to a failure to address environmental and social issues such as pollution and poverty, which can have negative consequences for communities and the planet.

- **Limited access to funding:** Lack of knowledge in circular economy principles limit access to international and national funding, such as grants and loans, that are available for sustainable and circular projects.

**KZ:** Kazakhstan faces urgent environmental issues that require immediate actions and a sustainable education system that will support these actions. For example, UN sources report that, in some cases, contamination of rivers by industrial metals is 160 to 800 times beyond acceptable levels. Pollution from heavy industry has resulted in land and water resource degradation, including biodiversity loss, hindering development in many areas of the country. Kazakhstan is among the top five countries in the world in terms of carbon dioxide emissions per unit of GDP. In total, more than 2.5 million tons of waste are thrown into the air every year. This indicator increases annually by an average of 100 thousand tons. If no measures are taken, then by 2030 the number of emissions will amount to 3.6 million tons per year.

According to the assessment of the electronic government in the Republic of Kazakhstan, specialists in the field of ecology are among the TOP 10 in-demand professions for 2020. According to the Ministry of Labor of the Republic of Kazakhstan and the Ministry of Education and Science of the Republic of Kazakhstan, according to the list of "100 most popular service and industrial professions" until 2025, industrial safety, labor protection and safety engineers occupy the 25th position in Kazakhstan, and environmentalists, lean manufacturing and environmental protection engineers, and their assistants occupy the 28th position.

It is vital for businesses and citizens to have the necessary knowledge to participate in the transition to a circular economy. They must understand how, why, and what is required to transform their company from linear to circular. However, due to the novelty, complexity and disruptive nature of circular economy, people seem to lack the proper knowledge.

The Consortium includes two regions in Kazakhstan, one specialising in mining and another one in agriculture in food processing (North region). Each region of a partner country has a specialisation in a particular sector where the local market requires profound knowledge and expertise in. For example, regions from **KZ partners (EKTU & KarUK & ABU - mining)** need urgent knowledge in the application of the circular economy in the mining sector: how to recycle and reusing materials that would otherwise be discarded as waste; how to reduce waste minimising the amount of waste produced during their operations by adopting more efficient processes and technologies; how to collaborate with other industries to find new ways to reuse and recycle materials extracted from the earth.

The East region has 30 uranium mines, which add to the problem of uncontrolled release of radioactivity. Disposal of nuclear and biological waste from past testing programs are also among the most serious environmental issues of the region. Kazakhstan's total greenhouse gas (GHG) emissions are estimated to be around 250 million tons of carbon dioxide equivalent, the highest per capita in Central Asia and one of the highest carbon intensities in the world (5.41 kilograms of carbon dioxide per unit of gross domestic product in 2008). Climate change, in addition to current environmental issues, poses a severe threat to Kazakhstan's economic growth, quality of life, and energy security. The number of sources of pollution increases by an average of 14 percent annually. The volume of pollutants generated exceeded 1.5 million tons per year. Also, the territory of the region was exposed to the effects of the tests of the Semipalatinsk nuclear test site. More than 80 percent of all emissions into the atmosphere in the region fall on the cities of Ust-Kamenogorsk, Semey, Zyrjanovsk, Ridder. Exceeding the maximum permissible concentrations in Ust-Kamenogorsk is observed for nitrogen dioxide, phenol, formaldehyde, sulphur dioxide, dust. The East Kazakhstan region belongs to one of the water-supplied regions of Kazakhstan. However, there is high pollution of water with heavy metals. The reason for the negative impact on the environment is not so much in the growth of production, but also in the absence of complex processing of minerals, as well as the disposal of large volumes of industrial products, recycled materials, and waste. It is necessary to make significant investments to create closed technological cycles with integrated use of raw materials and waste, allowing to produce competitive products, dispose of valuable components and at the same time reduce the burden on the environment. There is a shortage of professional ecologists in the labour market, especially talented engineers in the field of industrial ecology. The chosen direction of the master's educational program "Environmental Engineering" is a synthesis of the development and implementation of green technologies in production, ensuring the growth of profitability and reduction of energy costs, research, and analysis of the natural environment – two priority tasks of world environmental policy.

Every year, the educational program "Life Safety and Environmental protection", which operates at EKTU (Partner 4), graduates about 60 specialists, of whom 90% are employed by large enterprises of the region and specialized organizations: "Kazzinc" LLP (10%), "KAZ Minerals" LLP (10%), "Vostoksvetmet" LLP (10%), Department of Ecology for East Kazakhstan Region (10%), Department of Emergency Situations of East Kazakhstan Region (25%). And about 25% for various enterprises of the supporting sector of the economy. Moreover, the University implement "Sustainable Development" project which is focused on the implementation of the principles of sustainable development in all areas of the university's activities with a quantitative assessment of the activities carried out within the framework of the questionnaire results, approaches to the integration of education, science, and production are widely used, which is an important component of innovative education. EKTU implements the following scientific projects:

1. "Sensing Kazakhstan" is a joint project with the Massachusetts Institute of Technology, MIT on

monitoring the atmospheric air of the city of Ust-Kamenogorsk.

2. "Comfortable City" to improve the quality of the urban environment by offering design and management solutions based on monitoring carried of the international rating Green Metric.

4. "Carbon neutrality", the aim of the project is to scientifically substantiate and develop effective measures to achieve carbon neutrality of the territory of the East Kazakhstan region based on the creation of a system for its comprehensive assessment of the carbon balance.

In addition, the East Kazakhstan Technical University conducts research on the effects of harmful substances into the atmosphere and soil protection for agricultural use within the framework of projects:

- Study of large sources of emissions of harmful substances into the atmospheric air of Ust-Kamenogorsk with the identification of the causes of the increased content of hydrogen sulfide (2020-2022 - under grant funding from the Ministry of Education and Science of the Republic of Kazakhstan for young scientists)
- Development of scientific and methodological approaches for the introduction of Earth remote sensing technologies for improving agricultural management (2021-2023 - under the program of purpose financing from the Ministry of Agriculture)

**(KoKSU - agriculture and food processing):** Akmola region is a large agro-industrial region of Kazakhstan and makes a significant contribution to ensuring the food security of the republic. In the region, much attention is paid to the development of meat, dairy farming and poultry farming. Growing and harvesting, processing, packaging, preserving and preparing for the sale of agricultural products generate a huge amount of solid waste. Agricultural specialists have found that of the total mass of corn grown for canning, approximately 50% is field waste, about 30% is processing waste, and less than 20% is the grain itself in canned form.

Food production has more than doubled in 25 years and continues to rise, with a concomitant rise in solid waste. Pets produce about 1 billion faecal waste per year and over 400 million tons of liquid waste. The volume of solid waste from livestock (used bedding for livestock, carcasses of dead animals, etc.) exceeds 2 billion tons per year. Over 50% of animal waste is generated in the process of accelerated fattening. The use of these animal rearing methods has developed rapidly over the last twenty years.

One feedlot for 10,000 heads of cattle can produce 260 tons of manure per day, and in the immediate vicinity of the city. A dairy farm with 100 dairy cows produces 14 tons of solid waste per day. At a poultry farm with a capacity of 1 million eggs per day, 50 tons of waste is generated per day.

Thus, the problem of utilization and processing of agricultural waste in the Akmola region is very acute and every year it becomes more and more urgent. To solve this problem, specialists are needed with knowledge of the basics of the circular economy, knowledge of the features of the technologies necessary for the technical and aesthetic solution of the problem of agricultural waste in the Akmola region, as well as to ensure the sustainable development of the region.

The training of such specialists can be provided by Sh. Ualikhanov Kokshetau University, which is the main supplier of personnel for the agriculture and food processing industry in the Akmola region.

Monitoring compliance with the rules of industrial and environmental safety is a strategic priority of companies in Industry 4.0. The training of highly qualified personnel in the field of environmental and industrial safety capable of carrying out various works using the latest technologies will be carried out taking into account the needs of enterprises in Kazakhstan. Upon completion of the training, undergraduates will receive the following additional competencies: knowledge of "Industry 4.0" technologies; use of the latest achievements in the field of industrial and environmental safety in the region; conducting risk assessment calculations for life safety and environmental protection using modern software; knowledge of modern design methods and principles of building automated production processes.

**TJ:** Tajikistan is a landlocked country located in Central Asia, with a primarily agrarian economy. The food processing industry in Tajikistan is relatively small, but it has been growing in recent years. The main food products that are processed in Tajikistan include fruits and vegetables, grains, and livestock products. Meat and dairy products are also produced and processed in the country, although the sector is limited by a lack of modern processing facilities. The government of Tajikistan is investing in upgrading existing processing facilities and encouraging private-sector investment in the industry to improve the quality and safety of food products. Capacity built in a circular economy can bring benefits to farmers reducing food waste, such as by finding new markets for surplus produce or by using innovative storage and preservation techniques to extend the shelf life of their products. Furthermore, Circular economy principles can also be applied by creating a local food system that prioritizes locally-sourced, seasonal produce and reducing the carbon footprint of food transportation, farmers can improve the resilience of their operations, reduce costs and increase profits. A circular economy can create new business opportunities and foster innovation. Implementing a circular economy approach throughout a value chain promote collaboration and cooperation among different actors. With very small reserves of oil and gas, difficulties for the industrial development of coal deposits, Tajikistan has huge, inexhaustible reserves of hydropower resources (527 billion kWh per year), ranking 8th, and in terms of specific (per unit of territory and per capita), respectively first or second place in the world. This potential is 3 times higher than the existing electricity consumption throughout Central Asia, and if they are used effectively, the region can be provided with cheap and environmentally friendly electricity. This can become a real contribution to the development of a "green" economy throughout the Central Asian region.

In the project, it would be advisable to study the experience of many European countries in the transition from brown to low-carbon, then to the "green" economy, which makes it possible to apply modern methods and experience in the natural-geographical and socio-economic conditions of Central Asia, which do not contradict the development of market mechanisms, support for small and medium-sized businesses aimed at developing innovative energy-efficient and resource-saving technologies, providing a scientific and technical fund for the development of "green" energy, rational use and management of water and irrigation potential, creating funds and financing the reconstruction of hydraulic structures, etc. An important factor in the transition to "green" energy "models are the improvement of knowledge, qualification and retraining of personnel - fundamental and applied research, the development of educational institutions engaged in the training of highly qualified personnel, allowing to effectively apply new scientific developments in the country. various sectors of the economy.

The process of reforming and modernizing the education system is one of the key issues in the policy of the

Government of the Republic of Tajikistan. To achieve this goal, the use of international experience and the coordination of educational programs with EU countries is one of the ways to achieve this strategic goal of the country.

**TKM:** The economy of Turkmenistan is primarily based on the country's vast reserves of natural gas, which accounts for a significant portion of the country's GDP and exports. The government of Turkmenistan has placed a strong emphasis on the development of other industries, such as textiles, agriculture, and petrochemicals. Given the importance of irrigation for the country's agricultural production, without adaptation measures, climate change is likely to negatively affect agricultural production and have a significant impact on the country's socio-economic development, affecting other priority sectors as well. In accordance with the National Socio Economic Programme new knowledge and application in the circular economy can improve the situation and will help in situation improvement through successful use of market mechanisms, building human capital and further sustainable development through the effective management and use of the existing rich natural resources.

Companies face the problem of water scarcity, energy efficiency and lack of skills in such topics like Environmental assessment, Life Cycle Assessment, Clean technologies and energy intensification of processes. TKM is heavily dependent on gas mining and many years of environmental impacts associated with the extraction and processing of gas have caused environmental problems. As well, TKM suffers from water scarcity that affects the whole population especially remote rural areas. The Government introduced a strategy aimed at widely introducing innovative, resource-saving, environmentally sound technologies regarding alternative energy as a priority trend in the development of the national industry sector. The transition to alternative energy produced by renewable energy sources is the main important contribution to sustainable economic development. It will reduce an adverse industrial impact on the quality of the environment and the health of people and help to address global challenges of the modern world such as climate change. In Turkmenistan, rich in energy resources (oil and gas sector), addressing the issues related to reducing human impact on the environment is of priority. Turkmenistan faces climate risks such as extreme hydro- meteorological phenomena such as drought, hail, gale, frosts, heatwaves, floods and mudflows, etc. One of the greatest risks to the socio-economic well-being of the country is drought caused by high air temperature and lack of water resources. Currently, there is a noticeable tendency of increasing the frequency of low water years of the main rivers of Turkmenistan.

The project is very important for the country, TKM partners are committed to implement all activities, actively contribute for the sake of the country 's social and economic development. 80% of the country is occupied by the desert and mountains, remote rural regions of the country heavily suffer from water deficit, climate change is not tomorrow's problem for our country, rather it is today's urgent challenge that requires immediate actions.

**UZ:** Uzbekistan's remarkable economic growth has been mainly supported by natural resource extraction and the mining and manufacturing sectors of the economy. However, there is a price in terms of sustainability in climate change. Uzbekistan's economy is now the fifth most intensive in terms of greenhouse gas (GHG) emissions in the world and is the most intensive in Europe and Central Asia due to a fossil-fuel heavy energy mix and an energy-intensive industrial sector<sup>2</sup>. Uzbekistan's main objectives in transition to a green economy include the improvement of the energy efficiency of the economy and the rational consumption of natural resources.

There is a demand for experts and further dialogue including in sustainable and inclusive urbanisation, green finance, capacity building and human capital development, innovative and effective - green public investment, effective institutions in a transition to a green economy. WIUT's core education and research areas such as Economics, Management, Finance, Commercial Law, Computing, as well as research capacity of the Center for Policy Research and Outreach (CPRO), and professional development capacity of the Centre for Professional and Lifelong Education (CPLE) can support to fill the gap of the experts in the Circular Economy in the labour market of Uzbekistan, and other Central Asian countries.

In "Strategy on the Transition of the Republic of the Republic of Uzbekistan to a "Green" Economy for the Period 2019-2030", Uzbekistan highlighted the education sector as main actors in transition to Green Economy. In section 19 the government highly encouraged all education establishments to integrate the principles of "green" economy into education and science. Three main tasks on education establishments are: a) Create curriculum in fundamentals of the "green" economy, the introduction of renewable energy sources, the development of "clean" transport and energy saving and also create the relevant (in areas) educational literature in the field of green economy. Currently without help and experience of European partners it will be very challenging. We need exchange of experience and ideas in curriculum development. b) introduction of the fundamentals of the "green" economy into the retraining and advanced training programs for teachers and scientists, including the topics "Green technologies" Fundamentals of environmental regulation taking into account "green" criteria", "Technologies of renewable energy sources", "Problems of energy saving and energy efficiency"; providing support for scientific research and innovative developments in the field of "green" technologies, providing support for research and innovation in the field of green technologies. Project is a good catalyst to start this government's aims. Network of scholars and HEI will facilitate the above government strategy. c) Create professionals and develop the personnel energy and resources sector. Raising qualifications of industry personnel, providing international standard qualifications to administrative staff, managers and engineering staff and working foreign scientific organisations in the qualification development field. Strengthening cooperation foreign scientific organisations in the field of promoting "green" technologies.

Targeted countries are developing countries with relatively high economic growth and inherited economic structure from Soviet Union share a similar level of economic development, cultural and language similarities which provide better program adjusting, knowledge spillover and economy of scale for developing the master programs. Most of the partners have cooperation experience previously in MIETC, CBHE Project- 610198- EPP-1-2019-1-ES-EPPKA2-CBHE-JP.

The project's aim is **to strengthen academic capacity of Central Asian HEIs in the Circular economy**, developing teaching materials and build capacity of local teachers in the Circular Economy. Based on the



experts of EU partners and the needs of Central Asian countries, three topics have been chosen:

1. **Environmental management**
2. **Sustainable Competitiveness**
3. **Environmental entrepreneurship**

Subjects were preliminarily defined by the CA partners based on preliminary analysis of regional market needs. There are 3 EU HEIs responsible for modules material development, complementing each other in expertise: University of Santiago de Compostela, Università Degli Studi di Napoli Federico II; FHM Bielefeld.

The objectives of the project include:

1. **Integrate circular economy concepts into coursework:** These courses can be updated to include content on the circular economy, such as case studies and examples of circular economic practices. In total 9 disciplines will be developed, each discipline will be adapted to bachelor, master levels and for lifelong learning courses.

*Baseline value:* Nowadays, only two HEIs have environmental discipline in their programme ("Life Safety and Environmental protection" - EKTU and KarUK), the rest of partners do not have such disciplines in their programme. None of the HEIs have circular economy courses as lifelong learning trainings.

*Target value:* 9 new disciplines developed adapted to each CA market (KZ: 2 regions (North, Center-East); TJ; UZ; TKM) and for three levels of education: bachelor, master and life-long learning. One discipline consists of 10 credits. Each discipline has a Working Package managed by co-paired leadership (EU Partner + CA partner) to guarantee the best adaptation of developed materials to local needs.

2. **Partner with industry and community organizations.** Partnering with industry and government organizations to provide students with hands-on experience in circular economy projects and initiatives. To establish strong university-industry cooperation to facilitate knowledge exchange among stakeholders of the project. The curriculum and syllabuses will be on open-access mode to widen the audience reached. Academic and business consortium members will be collaboratively designing and testing the curriculum. Additionally, the training validation and foresight exercises will effectively mix academic insights with real-world cases and entrepreneurial practical examples for the benefit of all target-groups. In these central Asian countries, there is not much collaboration between HEI's and local industries, so this project will also address this problem. This will guarantee the sustainability of the programme since knowledge transferred will be not limited just to receivers but they will spread it to future generations of the students. Vocational trainings in Circular economy will be designed and offered to the private sector which will strengthen cooperation, co-design and update of the teaching materials. CirculEC is a highly relevant and timely project, especially for Transition Countries suffering from lack of knowledge and skills gap to fight against climate change, pollution from heavy industry, land and water resource degradation, biodiversity loss which at end hindering development in many areas of the country. By our knowledge there is no such programme provided by local HEIs. Universities will collaborate with businesses and organizations that are implementing circular economy practices to create real-world learning opportunities for students. This will include internships, capstone projects, or research collaborations. For companies will be available new knowledge in circular economy and the methods to apply it in practice.

Most partners have established relationships with companies for providing life-long learning (like centers of excellence in EKTU, center of employment in KarUK). Governments develop policies that encourage and support lifelong learning in TKM and TJ. However, there is a lack of knowledge and qualified teachers to provide training in the circular economy. HEIs from Kz have disciplines such as Ecology and Environmental Protection that are in demand for industrial companies.

Business faculties from UZ, TJ and TKM do not have any disciplines in environment, circular economy or sustainability to offer to private sectors.

*Baseline value:* EKTU and UZ partners have established cooperation with stakeholders (5-7 key stakeholders). Their experience can be shared with the rest of the partners. The rest of partners have underdeveloped business-university cooperation (2-3 key stakeholders), and stakeholder mapping will help to map key stakeholders, prioritize them and define the most effective channels to establish sustainable collaboration.

*Target value:*

1. Number of key stakeholders attending to workshops, and other project events: 10 per region (KarUK, ABU are small regions where 7 stakeholders will be enough)
2. No. of stakeholders taking lifelong learning courses: 5 per HEIs; KarUK & ABU: 3
3. No. of collaboration projects initiated: 3 per HEIs; KarUK & ABU: 1
4. No. of memorandums, agreement signed with industrial partners (internship agreement, sponsor agreements and etc): 3 per HEIs; KarUK & ABU: 1
5. No. of stakeholders participated in Courses evaluation survey: 10 per region (KarUK, ABU are small regions where 7 stakeholders will be enough)

3. **Encouraging collaborations with other universities and research institutions to share resources and expertise, and to foster a more robust community of researchers and practitioners working on circular economy issues.** To facilitate the internationalisation of HEIs, local business and students through building long-term cooperation between participants. Academic partners will provide academic exchange between students of the different partner countries to support culture and knowledge exchange. Associated partners from private sectors will provide internships for graduates of the project keeping some openings for students from the master of the other partner countries. Host events and workshops: Universities will host events and workshops on the circular economy, such as lectures, panel discussions, or hackathons, to engage students and faculty in this topic. One hackathon in the circular economy will be organized in each CA country moderated by each EU partner:



- a. Design challenges (USC): Hackathons can be used to challenge participants to design products, systems, or processes that are circular in nature, such as closed-loop supply chains or circular business models.
- b. Materials innovation (FHM Bielefeld): Hackathons can focus on finding new uses for waste materials or developing new materials that are more sustainable and environmentally friendly.
- c. Digital solutions (AYeconomics): Hackathons can explore the potential of digital technologies, such as blockchain or IoT, to improve traceability and transparency in supply chains, or to enable circular business models.
- d. Circular cities (UNINA): Hackathons can focus on developing circular solutions for cities, such as waste reduction, energy efficiency, or sustainable transportation.

*Baseline value: 0*

*Target value: 4 hackathons in the circular economy, one in each CA country.*

#### **Targets groups includes:**

*Entrepreneurs/businesses:* Beyond technical issues, the lack of information about CE concepts represents a real barrier as many times firms are involved in CE actions because of their need to stay competitive and reduce costs without knowing the actions involve CE processes. All these constraints deter firms from becoming more circular and engaging them in further collaboration between different stakeholders (e.g. firms belonging to different sectors). Some businesses don't see why they should join the circular economy. The primary reason is that they find it difficult to identify the monetary value in becoming better for the environment and society. They are unaware of the potential advantages of participating in a circular economy despite CE potential for more resilient firms. Beyond environmental concerns, many times firms do not identify the need to be more resilient to shocks in international markets of commodities. In the last two decades, we have seen several of these events related to rocking prices on energy resources, food, and many materials (metallic and nonmetallic)..

Accordingly, entrepreneurs and manufacturing companies need qualified employees with knowledge in CE with international vision, up-to-date expert knowledge, proficiency in measuring environmental impact. The companies will benefit with better trained graduates and also opportunity to train current employees in CE (lifelong learning courses). This exercise will enhance commercial ideas, products and services. Industrial companies will be significant multipliers in the project's dissemination and exploitation activities. Engagement helps in the generation of information, the strengthening of ownership, the reduction of conflict, and the encouragement of collaboration. Stakeholder engagement also enhances equity in decision-making by facilitating inclusive decision-making.

Project assume to share international experience at how industry leaders in the circular economy are implementing circular principles, and use this information to identify areas where the company can improve.

Policy makers from regional government, research institutions, International organisations, NGO, Associations  
Policy makers from regional government, research institutions, international organisations, NGO and different civil society associations, will be invited to workshops and open days organised within the project, and participate in focus groups exercises, surveys, etc. They will benefit from new knowledge that can be implemented in policy designing of CE initiatives. Many barriers and difficulties must be overcome, as well as new rules and regulations, in order to provide a sustainable economic future.

Governments can provide the regulatory grounds to accelerate decisions to go in this direction by enacting new legislation and policies that focus on resource recovery and reuse, accelerating the transition to a circular economy. In this regard, governments at different levels should go beyond "end of pipe" initiatives (e.g. minimising waste and disposal), by developing CE strategies supporting a sustainable transition (reducing, ecodesign, green public procurement, stakeholder's involvement through networking activities, research and innovation).

#### *Teaching staff*

The implementation of the project allows participating academic partners to move towards modernizing and internationalizing their education offer, acquiring strategic advantage against their counterparts and disseminating training results above and beyond the current consortium. Accordingly, participating HEIs will be benefitted by the project's training methodologies and the co-creation and co-deployment of the curriculum with the commercial partners, entrepreneurs, policy makers, research institutions, international organizations, NGO and civil society associations. This process ensures tight collaboration, strong relevance and value-added educational offering to this particular target group.

The circular economy modules will provide teachers with new and innovative teaching materials, including case studies, real-world examples, and hands-on activities, that can engage students and improve their learning outcomes. Project will provide teachers with opportunities to network with other teachers, researchers, and industry professionals, enhancing their professional development and career opportunities as well as an inspiration for new research projects and opportunities to collaborate with other researchers in the field.

*HEIs are main beneficiaries of the project who will benefits from the project in several ways:*

*Attraction of students:* The inclusion of circular economy modules will help universities attract students who are interested in sustainability, the environment, and innovative business practices.

*Preparation of students for the workforce:* By teaching students about the circular economy, universities will prepare them for careers in a rapidly growing and important area, increasing their employability and competitiveness in the job market.

*Partnership opportunities with industry:* Universities incorporate circular economy modules will develop partnerships with companies and organizations that are committed to sustainability, providing opportunities for research, internships, and other collaborative activities.


*Reputation and credibility:* By demonstrating a commitment to sustainability and innovation, universities will enhance their reputation and credibility, attracting top talent, researchers, and funding opportunities.

*Leadership in sustainability:* Universities will position themselves as leaders in sustainability and innovation by incorporating circular economy modules into their curricula, demonstrating their commitment to addressing environmental challenges and promoting a more sustainable future.

*Research opportunities:* By incorporating circular economy modules, universities will create new opportunities for

research in this important area, contributing to the development of knowledge and best practices in the field.

*Students:*

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The circular economy is an emerging area, and by learning about it, students can gain exposure to new and developing industries that focus on sustainability. Knowledge of the circular economy can make students more competitive in the job market, as companies seek employees with a deep understanding of sustainable business practices. A circular economy module will raise students' awareness of environmental issues, encouraging them to become more environmentally conscious citizens. By examining the challenges and opportunities of transitioning to a circular economy, students develop their critical thinking and problem-solving skills.

Teaching methodology will include Project-based learning where students will work on real-world projects that allow them to apply the concepts they have learned and develop practical skills. Presenting students with real-world problems or scenarios, encouraging them to use critical thinking and problem-solving skills to find solutions.

Participating HEIs and stakeholders will embed certain aspects of the developed curriculum, integrating mechanisms for examination and validation as they roll-out the deployment and testing of the elaborated training programme. As a result, students will be benefitted by the project's timely and value-added curriculum as they will be familiarised with significant aspects of technical, political, social and business dimensions.

*Citizens and wider society*

Consumers must, of course, be on board if circular strategies are to succeed. It is critical for a company's success that potential customers hear its message. Whereas most linear businesses do this by describing how the benefits of the product or service outweigh the costs, circular firms often do so by discussing how their business model is circular and why that is essential. However, getting that last message over has proven difficult. In the same way, CE strategies and actions developed by governments at different levels, NGO and different civil society associations, should be able to pass their messages to citizens.

The project aims to widely disseminate the project's objectives, aims and results to engage as much as possible with the audience (via social media, website, TV and open/info days). And also providing instruments to the stakeholders to succeed in passing their messages to citizens.

The platform will offer information and educational resources to help citizens understand the circular economy and how they can participate; citizens will have opportunities to provide feedback and suggestions for improving the platform and promoting the transition to a circular economy. As well, the platform can inspire and enable citizens to take local action by providing resources and tools for starting circular projects and initiatives in their communities.

### 1.3 Complementarity with other actions and innovation — European added value

*Complementarity with other actions and innovation*

*Explain how the project builds on the results of past activities carried out in the field, and describe its innovative aspects (if any).*

*Explain how the activities are complementary to other activities carried out by other organisations (if applicable).*

*Illustrate the trans- national dimension of the project; its impact/interest in the EU area; possibility to use the results in other countries, potential to develop /cross-border cooperation among Programme countries and Partner countries, if applicable, etc.*

*If your proposal is based on the results of one or more previous or ongoing projects, please provide precise references to these projects.*

“Currently, the UN's Global Action Programme on Education for Sustainable Development aims to contribute substantially to the 2030 development agenda, through two objectives:

- Reorienting education and learning so that all people have the opportunity to acquire the knowledge, skills, values and attitudes that empower them to contribute to a sustainable future.
- Strengthening education and learning in all agendas, programmes and activities that promote sustainable development.

In parallel with this UN Programme, the European Commission has launched the European Green Deal [11], a new growth strategy aiming to transform the European Union (EU) into a fair and prosperous society, with a modern, resource-efficient and competitive economy. Its main goals are, on the one hand, zero net emissions of greenhouse gases by 2050 and, on the other hand, keeping economic growth decoupled from resource use. Besides, the new Circular Economy Action Plan announces initiatives along the entire life cycle of products, such as targeting their design, promoting Circular Economy processes, fostering sustainable consumption and ensuring that all resources used are kept in the EU economy as long as possible.”

Despite the announced national priorities of CA countries in improving higher education and introducing environmental concern in education, they are not always matched with the necessary resource allocation in order to reach specific goals.

While increasing “know how” on new program and technology for CA students, specialists, businesses and communities is a priority area for our project, we are contributing significantly to social, community and business development in order to be greener. This provides us the impetus to align our developmental initiatives with the EU and CA energy policies. Through this project we strive to bring tangible benefits to all University, Governmental, research and industrial partners to ensure they remain empowered and sustainable well beyond our cooperative and innovative work.

There is no sense that the present project goals cannot be reached without EU partners' support. EU partners are leading universities with a large-scale experience in the education system providing modern educational programs. In the context of the system of higher education in EU and CA countries, its content, the methodology and technique of education is still different. The experience of the European education system (including the Bologna system) is important for CA countries. One of the objectives of this project idea is to bring the Asian

training program closer to the European standards.

Use of learning elaborated in the frame of this project allows to organize various kinds of students' project work.

The most significant is the independent search and work on the different education level what forming voluntarily or involuntarily their individual knowledge base.

Optimization of training in this project is closely related to its intensification because both processes (online and offline) are, most important principles associated with increased productivity educational work of the teacher and student, use of more efficient technologies, advanced methods of work and achievements. All of these innovative approaches will be used in the training program.

Since the project related and based on the study of the European system of preparation for highly skilled experts this experience can be learned only in cooperation with EU universities. It should be emphasized that this project is very important as it has a new unique approach to training.

With regard to general education, the project supports the aim to modernise the system in line with additional key competences as specified by the European Reference Framework, which sets out eight key competences for the education of all individuals in terms of personal fulfilment and development, active citizenship, social inclusion and employment.

The project is aligned with the objectives of other International Organisations working in the region, for example, the World Bank. The World Bank's five-year Climate and Environment (CLIENT) Program helps Central Asia achieve sustainable, resilient, and inclusive economic growth by using cutting-edge creative environmental and economic analytical methodologies, focusing on climate resilience; resilient landscape restoration; urban air pollution management and circular economy; resilient, environmentally friendly, and inclusive recovery of COVID-19. The program assists Central Asian countries with shared borders and ecosystems in facilitating transboundary collaboration and catalysing collaborative measures to improve climate change resilience, restore landscapes, and preserve lives and livelihoods. Central Asian countries have the potential to transition to a greener, cleaner, and more resilient growth model that is effective in the use of natural resources, clean in the reduction of pollution and environmental effects, and resilient in the consideration of natural hazards and the role of environmental management and natural capital in avoiding physical disaster. The World Bank's CLIENT Analytical Program helps countries in Central Asia achieve this aim by supporting three pillars of activities: Resilient Landscapes in Central Asia, Circular Economy and Pollution Management for Green Growth, and Communication for Climate and Awareness.

Another activity regarding the environment is carried out by Asian Development Bank (ADB): "Project Readiness Support for the Environment, Natural Resources, and Agriculture Sector in Central and West Asia". The regional knowledge and support TA will help in improving project's readiness throughout the processing and initial implementation stages for projects in the agriculture, natural resources, and rural development (ANR) sector in Central and West Asia Department (CWRD) developing member countries (DMCs) with significant pipeline and ongoing projects in the sector. Environmentally sustainable growth and inclusive economic growth are the project's strategic goals. Agriculture, natural resources and rural development, agricultural output, irrigation, rural water policy, institutional and capacity development are among the sectors and subsectors considered in the project.

Another ADB initiative is "Developing the Central Asia Regional Economic Cooperation Water Pillar", according to which the TA will help to develop the CAREC water pillar, focusing on economic concerns and long-term financing of water resource management. The TA is in line with the ADB's 2030 Strategy, notably in terms of operational goals such as combating climate change, developing climate and disaster resilience, and improving environmental sustainability; and fostering regional cooperation and integration. The suggested activities created under the CAREC water pillar will be appropriate for use throughout the CAREC region.

#### *Turkmenistan:*

Also, on the example of Turkmenistan, a number of projects in the environment, circular economy and related areas can be identified. Some of the projects implemented jointly with European and international organizations are described below:

To continue the process of modernization of education through revision and the development of new contents to ensure coherence with the socio-economic needs of Turkmenistan and reflecting international practices. The content of general education will follow the approach of the European Reference Framework for Lifelong Learning. The Academy of Sciences of Turkmenistan (AST) has participated in a numerous projects (Tempus-Tacis-cp/tme (1999/2000): "Internationale beziehungen technischer universitäten eu - turkmenistan", tempus tacis jep 23020-2002/tme:"World standard education at tme universities", Tempus Tacis Jep 24020-2003/Tme:"Distant training of trainers in new curricula in tme", Tempus Tacis Jep Cd Jep 27028-2006/tme, "Ict as a tool in postgraduate training and vet practices", 144791-tempus-2008-es-jpcr, "Solar cell technology courses for vet and industry in tm", EU Erasmus+ 610198-EPP-1-2019-1-ES-EPPKA2-CBHE-JP (2019 - 2151/001 - 001) - ongoing, EU project ist-026546 organizing caucasus and central asian internet offerings to NRENS "Occasion", EU project "Central asian research and education network".)

AST is the centre of a Turkmen scientific-educational network and includes an operational center for remote training. There are numerous experienced professors and experts having a wide experience with the international projects, including projects of the Erasmus program working in the AST.

The most relevant strategies tackling the above-mentioned challenges were identified as those: National Strategy for the Development of Renewable Energy in Turkmenistan for the period until 2030

The goal of the strategy: diversification of fuel and energy resources; an increase of the export potential of natural gas and electric energy; provide remote regions with affordable and clean energy; improve the living standards of the population and development of industry sector; as well as contribute to achieving the SDG's goals and commitments on the Paris Agreement on climate.

Turkmenistan receives a considerably small size of climate-related development finance from international sources, compared with the amounts committed to the other Central Asian countries. The main sources of climate finance are the Global Environment Facility and the Adaptation Fund, but there have also been projects co-financed by other donors within the last 5 years (BMU, UNCCD, WB, USAID, etc). Examples: GEF project: Outline of the PRE-FEASIBILITY STUDY FOR THE PROJECT CONCEPT: scaling up Afforestation efforts to combat desertification and land degradation and adapt to climate change in the Aral Sea basin; GEF, UNDP: Supporting climate-resilient livelihoods in agricultural communities in drought-prone areas of Turkmenistan" (SCRL); UNCCD: Regional approaches for combating sand and dust storms and Drought

**Kazakhstan:**

Central Asia, taking into account the scale of land degradation in the region, was selected by the Secretariat of the Global Environment Facility (GEF) as a region for pilot cooperation of countries within the framework of the implementation of the Operational Program on Sustainable Land Management (GEF OP 15). Thus, the project to improve the national action plan to combat desertification in the Republic of Kazakhstan was developed to combat land degradation by promoting sustainable land management (SLM), which, in turn, will contribute to ensuring environmental integrity, as well as improving the standard of living of the rural population in the Republic of Kazakhstan.

Kazakhstan has a well-developed system of laws related to sustainable land management (SLM), but most of the laws are not acts of direct action and their implementation requires the development of many by-laws at various levels. There are some gaps, duplications, and contradictions in the legislation, which are being systematically eliminated. Shortcomings in the enforcement of these laws should also be noted. The legislation on forest and land resources has not developed a legal framework for joint resource management. Frequent changes in legal regulation create some legal uncertainty that hinders the sustainable management of land resources.

**Uzbekistan:**

Currently, international investment projects are being implemented for the construction of 4 solar power plants with a total capacity of 1057 MW and 2 projects for the construction of wind farms with a total capacity of 1500 MW.

Also, tenders are being held for the construction project of a wind power plant with a total capacity of 100 MW in the Republic of Karakalpakstan on the basis of PPP, it is planned to hold tenders for 4 projects for the construction of solar power plants with a total capacity of 800 MW. Financial advisory services of the International Finance Corporation, the European Bank for Reconstruction and Development and the Asian Development Bank were attracted to conduct international tenders.

Along with this, with the support of the Green Climate Fund, a National Sectoral Adaptation Plan (NAP) is being prepared, a draft Strategy of the Republic of Uzbekistan on climate change until 2030 is being developed, a draft Environmental Code has been prepared, providing for the creation of a single comprehensive regulatory legal act regulating all issues in the field of protection environment and rational use of natural resources.

At the same time, a letter of commitment was signed by the Deputy Prime Minister - Minister of Economic Development and Poverty Reduction of the Republic of Uzbekistan D. A. Kuchkarov on the implementation of the German Climate Action Group on Nitric Acid (NACAG) measures for the consistent installation / equipping of all nitric acid producers with modern technologies located on the territory of Uzbekistan, both existing and new / designed in order to effectively prevent emissions of N<sub>2</sub>O (nitrogen oxide) into the atmosphere at the expense of allocated grant funds.

**Financing and encouraging private sector**

In Uzbekistan, the GEF (Green Economy Financing Facility) pilot project provides funding, advice and grants to private companies to improve their competitiveness through high-impact technologies and practices.

The GEF mechanism supports this transition by providing funding for investments in Green Technologies, i.e.:

- Technologies minimizing energy use;
- Technologies that generate energy from renewable sources;
- Technologies that protect water resources.

In turn, IpakYuli Bank received a \$5 million credit line from the EBRD to finance private companies in the green economy. The facility will provide loans to small and medium-sized enterprises (SMEs) and corporations to invest in green technologies that reduce greenhouse gas emissions, as well as climate change adaptation and mitigation technologies.

Although the results of this master are country-specific, the developed program can be adjusted to be transferable to other countries. The project will deliver technical notes that will guide the process of use of its implementation also in other countries or regions. For instance, the project foresees extending the methodology and deliverables to other countries.

Knowledge transfer from European universities and capacity building to institutions in Central Asia in the field of circular economy can play a crucial role in promoting sustainable development in the region. Since the circular economy is emerging disciplines especially for Central Asia, without EU partner's development of competence and adaptation of circular economy disciplines in Central Asia seems challenging.

**2. QUALITY****2.1 PROJECT DESIGN AND IMPLEMENTATION***2.1.1 Concept and methodology**Concept and methodology*

*Please address all guiding points presented in the Call document/Programme Guide under the award criterion 'Quality of the project design and implementation'.*

*Outline the approach and methodology behind the project. Explain why they are the most suitable for achieving the project's objectives.*

The project has clear and measurable aims and objectives that are aligned with the overall national priorities and strategy of CA countries as well as of the HEIs' strategy, and the needs of stakeholder groups. Consortium partners have a shared vision and commitment to achieve the project's objectives. Partners were chosen based on complementary skills and expertise, having previous experience working together and establishing a communication system (different channels, voting system, sharing documents and materials platforms) which enables effective decision-making, coordination, and problem-solving. To guarantee sustainability the project design involves meaningful engagement and collaboration with stakeholders, including students, private companies, teaching staff, community, and employees.

Project has a detailed and comprehensive plan that includes timelines, budgets, risk assessments, and performance indicators. Quality WP will ensure the quality of the project deliverables and effective project management will guarantee that the project stays on track and achieves its goals.



**WP1: Management.** All partners have experience in running International Projects including EU and Capacity Building Project with exception of the AGFA University and Al-Balqa University who are the newcomers to CBHE project. Being a Chair of the Academic Board, USC will facilitate the achievement of exceptional academic standards of teaching materials.

At the first month of the project the online kick-off meeting will be organized, where it will be defined as the Management Board (one representative per HEI), Dissemination board (DB), Academic Board (AB), Task Core Groups (TCGs). The Management Board, chaired by the Project Coordinator, has full executive responsibility for the project and it is composed of one representative for each partner of the consortium. Each Working Package has a leading partner (EU partner co-paired with CA partner) who will be in charge of WP management and will be reporting to MB of WP activities. The close cooperation with partner university internal stakeholders will guarantee the relevance of the work. The management structure will efficiently address the specific objectives via a clear distribution of tasks and authorities and achieve an effective administrative management. All partners will be engaged in the management activities.

Each WP is implemented by a core group of partners, led by the WP leader. These are the key components responsible for managing the implementation of the project ensuring that every activity is in-line with the original application.

The Management Board, chaired by the Project Coordinator (EKTU), has full executive responsibility for the project and it is composed of one representative for each partner of the consortium. The Coordinator will act as the leader of the overall management. Key persons from each Partner will be part of the Management Team (MT). The MT will control the administrative and methodological aspects of the project activities, monitor and evaluate the phases of the project in terms of its declared objectives and, in correspondence with the Working Plan, intervene for the resolution of any possible incoming problem.

**WP2: Market needs and capacitation of CA staff** WP includes two types of Analysis: internal State of play analysis and Stakeholders analysis. The stakeholder engagement composes three main stages: (1) Stakeholder mapping, (2) Assess and prioritise the stakeholders, (3) Develop an understanding of stakeholders (Task 2.2). The analysis will provide the information about the potential for the implementation of green technologies in the region. Conducting a qualitative study will determine what is the potential for the implementation of the project in the region. Also, this aspect will be important in the preparation of the educational program. Geographical, environmental and economic factors specific to the region will be taken into account when forming the key competencies of the educational program. Considering the research practice of AYeconomics, leading partner of WP2, and its broad experience working in the Central Asia region, the results of Preparations activities are considered feasible. Chosen methodology guarantees perfect fit of developed disciplines to the needs of the market, adaptation to country specific features and adjustment to teacher's competences.

The stakeholder's identification process will be confirmed and extended at the beginning of the project and it will be reassessed frequently throughout the project, in order to be ensured that no groups or individuals have been missed. The second stage includes the assessment and analysis of stakeholders in order to prioritise them in relation to the necessity for their engagement through the Networking analysis, Stakeholder Analysis Matrix and Stakeholder Engagement Assessment Matrix. It will give information about main stakeholder's interests and roles in relation to the project, how to prioritise them according to their importance and the type of best engagement activities. Finally, we develop an understanding of stakeholders and plan activities to collaborate with them according to their role. Working with stakeholders is not a one-off activity, it is an ongoing process. In the Preparation phase, stakeholders will participate in a Validation Workshop (Task 2.5) developed in each partner country to facilitate the process and identify the stages of the engagement. Each Workshop will be convened by the local partners involving stakeholders from a range of organizations, including National and Regional Public Authorities, International organization (for example CAREC which is transnational organization dealing with water scarcity and other environmental issues in the region), Academic institutions, Local, national environmental and health Non-Governmental Organizations and Civil Society Organisations, Community groups, local businesses, students, etc.

**WP3-5: Development of disciplines.** This WP is the most part of the project. The objective of this Work Packages is to engage the participating HEIs, Research Institutes, Technoparks, Entrepreneurs and Policy makers into an evolving co-design of the project's curriculum and study materials ensuring its relevance to the market. During this process, all participants will be engaged in order to ensure a multi-disciplinary view on each subject including the interests and aspirations of all the project's target-audiences: students, startup entrepreneurs, industrial companies, investors, policy makers and professionals. The disciplines materials under the qualification framework and state educational standards will be developed. Training using a lean approach will place strong emphasis on personalized learning contexts and on learning-by-doing methods, thus, accomplishing greater student involvement. The project will go beyond traditional formal training, consisting of a 'transmissive' methodology, and it will promote action learning with real-world cases and assistance by mentors and coaches. The project will promote hands-on real-world cases and actionable learning practices (e.g. role-playing, gamification, etc.). Development of subject's materials will be based on the results of WP 2, making optimal adaptation of materials to the local needs.

**WP6 - Capacity building:** 9 local teachers from each CA HEI will travel to EU partner institutions to have 4 days intensive training based on developed disciplines materials, they will be trained in the topic of the one of the modules and the best pedagogical approaches. The purpose of this work package is to deploy, test and validate the materials and the content, adapt materials to the local market and get the participants' feedback. To this end, real-life testing and validation activities will be undertaken. Local professors will be taught in 3 Blocks. Three training blocks will be hosted by the three EU HEI partners. Training will be provided using lean approach: Placing strong emphasis on personalised learning contexts and on learning-by-doing methods. The project will go beyond traditional formal training, consisting of a 'transmissive' methodology, and it will promote action learning with real-world cases and assistance by mentors and coaches. Focusing on hands-on real-world cases and actionable learning practises (e.g. role-playing, gamification, etc.).

**WP7: Pilot Implementation include activities such as:**

- Student enrolment procedure (March-July, 2nd year)
- Full implementation;
- Follow-up reports. The course is evaluated as a whole through a survey administered before to the start of the course, as well as a particular face-to-face session at the end of the course in which

students discuss their learning experiences and the strengths and weaknesses of these disciplines are extracted. In addition, at the end of each course, a survey is given to students to evaluate their opinions about the teaching methodology;

- Follow-up meeting. Results of follow up analysis and report will be discussed at the meeting;

**WP8: Quality Plan.** The Quality assurance procedure will ensure that all the project's activities, outputs and deliverables comply with the overall objectives of the project and the specific objectives of each Work Package (WP). All project activities will be subject to a Quality Assurance procedure in order to ensure conformity with the objectives and results as they are foreseen in the project contract. Partners will support the work of the WP with regular information provision and taking corrective actions, if needed.

**WP10: Impact and dissemination.** The development of a dissemination strategy at the beginning of a project will be an effective tool for planning and implementation. As part of this, the dissemination plan establishes communication goals, identifies target groups for these messages (taking into consideration for example Internet penetration data mobile users data to better reach target groups), identifies tools for reaching these groups and sets out processes for measuring the success of communication activities. For example, in Tajikistan for some regions dissemination tools will include radio and TV instruments to reach remoted mountains regions. Social network tools will be used to promote programme among youngsters.

The project will be directed also on producing and distribution of the materials aimed at increasing awareness of the project work and the educational and technological implementation approaches being developed. The project' dissemination plan will be adjusted periodically to ensure that activities associated with production and distribution of materials and planning and delivery of events run concurrently to the availability of the project deliverables. Online publication as well as printed publications will be distributed to audiences drawn using mailing lists owned by project participants, or from specially prepared lists assembled with reference to university, industry directories, sectoral associations, and other sources. In addition, brochures and leaflets can be offered to site visitors, and to participants in meetings, conferences and exhibitions - including those organized in close cooperation with EU partners.

The working plan of the project has been prepared in a realistic way giving the time to different institutions to give their feedback in the material development, time for the local trainees to build capacity in the circular economy, and taking into account the official calendar of HEI's in each country. Additionally, there is some time to adapt the programme if the results are not satisfactory. The project feasibility is also supported by the real interest that the different social actors, HEI's, enterprises and policy makers have in the results of this project, since it is solving some of the main problems that these countries have with the capacitation of the human capital taking into account the labour market needs.

The project is well structured with measurable, clear deliverables and objectives. Management WP is aimed to structure the management process communications, monitoring, etc.

The project will encourage the exchange of experiences and students between the CA HEIs, institutions and companies participating in the project, giving them the opportunity to expand academic and research collaboration with the countries in the area, especially with Turkmenistan, the country that is considered closed for external cooperation.

The project's results will significantly contribute to the educational system in these countries as well to a better integration of HEI's and local industry. The practical activities of the project will be implemented in collaboration with European Partners where each of them provide their expertise in a particular field.

### 2.1.2 Project management, quality assurance and monitoring and evaluation strategy

#### **Project management, quality assurance and monitoring and evaluation strategy**

*Describe the measures foreseen to ensure that the project implementation is of high quality and completed in time. Describe the methods to ensure good quality, monitoring, planning and control.*

*Describe the evaluation methods and indicators (quantitative and qualitative) to monitor and verify the outreach and*

*coverage of the activities and results (including unit of measurement, baseline and target values). The indicators proposed to measure progress should be relevant, realistic and measurable.*

The allocation of resources will be initiated by the project coordinator and will be implemented through the Consortium Agreement process. The Consortium Agreement document will define important issues about the roles and rules of the partners during the implementation of the project, such as legal obligations, rights and responsibilities, conflict of interests, confidentiality, decision-making processes, voting methods, project oversight and Quality Control, conflict resolution processes, description of Tasks (detailed spreadsheet as per allocated role and responsibilities to include name of each WP and activity to take part in, specific task, expected input and output, comments on format/specificity, timing of activities (detailed spreadsheet with the specific timeframe for delivering each task, indicative start and end date), estimated budget (general overview of project budget, detailed overview of allocated budget as per agreed roles, responsibilities and programme rules, tasks to be carried out, cost to be covered, number of units allocated, budget per unit allocated), project Implementation plan (to include all rules /financial and management/ and requirements to be followed during the project lifetime) and the rest of the legal provisions related to suspension and termination, financial provisions, payment arrangements, recovery, reimbursement, etc. will be outlined. All specific payment and reporting arrangements, scope, timeframe, bank accounts; data controller and communication details of partners, applicable law, special provisions, etc. will also be included.

The Consortium Agreement documented will be prepared by the project's coordinator upon the EACEA's communication on the funding of the project and will be signed by all partners at a very early stage of the project, ensuring that each participant is clear on what, when and how they will be contributing to project delivery.

Overall, the Management activity is built around a two-level structure: the project will be managed by two committees, namely the Project Management Board and the Academic Board. The Project Management Board, chaired by the Project Coordinator, has full executive responsibility for the project and is composed of one representative for each partner of the consortium. The Academic Board is led by the Academic Coordinator who chairs the board and the Work-package Leaders. Together they are responsible for managing the project.

Each WP is implemented by a core group of partners, led by the WP leader. Each Task within every WP is also led by the Task owner. These are the key components responsible for managing the implementation of the project ensuring that every activity is in-line with the original application, the grant agreement with EACEA and the Consortium Agreement. In Q1, each partner will be asked to nominate 1 representative for the Project Management Board and the Academic Board, who will have to be a high-level manager competent to take important operational decisions on behalf of its organisation. Additionally, all consortium members will have to provide nominations for core groups (WP and Task managers), as per allocated roles within each work package.

The division of roles takes into consideration:

- Type of partner organization;
- Organizational capacity and specific expertise;
- Individual key experts profile and skills;
- Scope and content of WP. Resources allocation for each activity:

The resources to be assigned to the project are: time (staff input), budget (funding allocated) and people (specific expertise). The main approach, applied to allocating the required resources, aims at reaching maximum levels of quality, sustainability and cost-effectiveness.

Deadlines and duration of tasks were planned on the basis of previous experience of all partners involved in similar tasks (curriculum and training content development, Stakeholders engagement design and communication, events organisation). The majority of partners have experience in working together and running CBHE projects.

Human resources allocated were carefully planned and selected with the right expertise to match the specific objectives of each task. A major characteristic sought when appointing key experts, was their level of dedication to the challenge addressed and strive for creative solutions, which is evident from the summaries of relevant skills and experience provided in the project proposal.

Financial resources are allocated in compliance with the unit cost approach, based on the annual salary rate of each category, the level of complexity and expertise required for task implementation, and providing best value for money (economy, efficiency, effectiveness).

The evaluation and monitoring of the project's results will be thoroughly put into practice during the deployment of WP8 (Quality Assurance). Quality assurance measures are directly linked to the overall management of the project. Quality assurance, evaluation and monitoring processes are of utmost importance for the consortium.

The partners have committed for the following related tasks and deliverables:

The consortium will craft a detailed Quality Assurance Plan during the first months of the project, detailing issues, such as quality standards, quantitative/qualitative indicators to measure and monitor, reporting and revision procedures, learning modules' quality assurance mechanisms, methodological training means evaluation, monitoring of the satisfaction and needs' orientation of learning deployments, adoption levels of the e-learning platform and MOOC-style content, among others.

The consortium will designate a dedicated Quality Assurance (QA) manager to oversee the effective implementation of the above plan covering all related activities and involved partners.

The project will be evaluated by a dedicated External Evaluator. The External Evaluator will assess the project's results and processes, as well as its exploitation and sustainability levels. All partners, led by the QA managers, will provide to the External Evaluator all necessary information/data related to the Evaluation exercise. These quality assessments will identify potential project shortfalls, methods to address them, potential process redesign needs and other project implementation changes. This work package is horizontal to the project duration, since it is relevant to all project activities. It is also inextricably related to the Management work package. The WP will comprise periodic activities, running through the whole project lifetime and will be dependent on other WPs in terms of their data input for evaluation activities carried out. An Evaluation plan will be developed by the external evaluator and approved by all partners.

The roll-out of both the Offline as well as the Online training programme will be accompanied by self-evaluation exercises involving all learners and trainers.

All project's implementation, dissemination and exploitation events will also be followed by self-evaluation tasks, for which the hosting partners will be responsible (assisted by the project's QA manager)

Logical Framework provides a fully measurable and verifiable list of indicators which will guide the partners and the external evaluator during the process of quality assurance, assessment and monitoring. An indicative list of those is the following:

- No. of staff persons involved in project activities.
- Level of participants' satisfaction.
- No. of trained staff in CE
- No. of updated subjects
- No. of students received CE modules
- No. of hands-on real-world Case Studies.
- Level of increased understanding and practical know-how of CE
- Level of increased readiness for the project's sustainability well after the funding period.
- No. of new markets and services opportunities for startups in CE.
- Number of key stakeholders attending to workshops, and other project events
- No. of publications produced on international practices on stakeholder engagement and situation comparison of CA countries
- No. of key stakeholders and educators participating in master classes.
- No. of social media posts provided by participants
- No of stakeholders that have participated to the online training
- No. of brochures of the assessment tool to help capture the attention of various stakeholders in CA countries
- No. of social media posts (Twitter, Facebook, Instagram)
- No. of media outlets

**LOGICAL FRAMEWORK MATRIX TEMPLATE AND INSTRUCTIONS HOW TO FILL IT IN**

NARRATIVE SUMMARY OF THE INTERVENTION LOGIC	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS AND PREREQUISITES
<p>Goal (general objective) Identify the broader objective to which this project contributes</p> <p>The goal is to strengthen academic capacity of HEIs in the Circular economy, developing and offering interdisciplinary modules that focus on the circular economy, such as sustainability, materials science, and industrial ecology relevant for the CA region.</p>	<p>Developed 9 disciplines for three level of education each (B+M+LLL) in Circular Economy adapted to CA needs Development of strong collaboration between HEI and industry</p>	<p>Number of students enrolled 1st, 2nd years out the total number of openings N of employees who took LLL</p>	<p>No interest in CE, low motivation of teachers</p>
<p><b>Purpose (specific Objectives)</b> List the specific objectives that projects shall achieve</p> <ol style="list-style-type: none"> <li>1. <i>Integrate circular economy concepts into coursework: These courses can be updated to include content on the circular economy, such as case studies and examples of circular economic practices.</i></li> <li>2. <i>Partner with industry and community organizations: Universities will collaborate with businesses and organizations that are implementing circular economy practices to create real-world learning opportunities for students. This will include internships, capstone projects, or research collaborations.</i></li> <li>3. <i>Host events and workshops: Universities will host events and workshops on the circular economy, such as lectures, panel discussions, or hackathons, to engage students and faculty in this topic.</i></li> </ol>	<ul style="list-style-type: none"> <li>- Developed case studies and content materials for 9 Subjects At least 15 Stakeholders per city from different target group</li> <li>- Hybrid teaching materials (video, games, case studies)</li> <li>- Developed pedagogical guideline aimed to teach in inclusive way</li> <li>- N of trained staff (at least 6 per HEI)</li> <li>- Number of student exchanges between partners countries</li> <li>- N of memorandums and bilateral agreements signed of cooperation between HEI of Central Asia and Europe</li> </ul>	<ul style="list-style-type: none"> <li>- Teaching materials in Google Drive of project (ppts, docs, videos)</li> <li>- Documents on the teaching content of new developed - disciplines.</li> <li>- Google form Feedback Survey of Stakeholders Workshops</li> <li>- Number of stakeholders attending the meetings to co-design the curriculum (Attendance list)</li> <li>- Implementation report of Teaching trainings</li> <li>- Signed agreements and memorandums from Partners</li> <li>- Social media posts, website updates, TV news</li> </ul>	<ul style="list-style-type: none"> <li>- Firms are not interested in contribute to the educational process</li> <li>- There are not enough teachers at the university with the background or interested in participate in the traineeship</li> <li>- Companies are not interested in what HEIs can offer</li> <li>- Insufficient student enrolment Insufficient number of students willing to move</li> </ul>



<p><b>Outputs (deliverables)</b>  WP1: D1.1 Kick-off meeting  D1.2 Progress report  D 1.3 Project Management Plan</p> <p>WP2: D2.1 CE education at higher education in CA countries  D2.2 Action Plan for CE implementation in higher education</p> <p>WP3: D3.1 Syllabus development of Environmental Management  3.2 Content development of Environmental Management</p> <p>WP4: D4.1 Syllabus development of Sustainable Competitiveness  D4.2 Content development of Circular &amp; Sustainable Entrepreneurship module</p> <p>WP5: D5.1 Syllabus of Circular &amp; Sustainable Entrepreneurship module  D5.2. Contents of the Circular &amp; Sustainable Entrepreneurship module</p> <p>WP6: D6.1 Organisation of the trainings for enhancing teaching staff capacity for CA partners  D6.2 Organisation of hackathon in the circular economy.</p> <p>WP7: D7.1 Pilot Plan D7.2 Monitoring Meeting D7.3 Pilot report</p> <p>WP8: D8.1 Quality Assurance and Monitoring Plan D8.2 Quality Assurance progress report D8.3 Quality Assurance Final report</p> <p>WP9: D9.1 Dissemination strategy  9.2 Project website D9.3 Sustainability Plan D9.4 Impact and dissemination progress report D9.5 Impact and dissemination final report</p>	<ul style="list-style-type: none"> <li>- Performed Kick-off meeting.</li> <li>- Project Management Team in action</li> <li>- Set up Management Board</li> <li>- Set up of rules and agenda and referred channel of communication</li> <li>- Provided Stakeholders analysis report</li> <li>- Developed curriculum</li> <li>- Developed and approved course materials</li> <li>- Trained staff in new disciplines</li> <li>- Project activities reported during the project life time</li> <li>- MB monitor the program at the end of each project year</li> <li>- Stakeholders Feedback</li> <li>- Promotion and sharing expertise of the CE modules via mass media, web site and info days during; signed agreement with Industry</li> </ul>	<ul style="list-style-type: none"> <li>- Defined Project Management Team, MB and project management documentation (reports, evaluations, etc.)</li> <li>- Distribution task table</li> <li>- Arrangement and communication list (Skype, E-Mail, Intranet, Interactive)</li> <li>- Number of participants (each 3 target groups) in Survey and workshops</li> <li>- Satisfaction results of the survey in the workshops</li> <li>- Number of companies participated in the survey</li> <li>- Number of trained staff by subject <ul style="list-style-type: none"> <li>- Number of joint activities and projects initiated with Industry</li> <li>Number of student enrolled</li> </ul> </li> <li>- Monitoring reports</li> <li>- Satisfaction Survey of activities</li> <li>- Accreditation documents, Justification from mass media adds and records</li> <li>- Website (number of visitors, likes, reposts, shares),</li> <li>- Leaflets, photos and videos</li> <li>- From Info days, number of visitors at Info days</li> </ul>	<ul style="list-style-type: none"> <li>- The representative of some countries doesn't report on time and delay the decision process and the reports.</li> <li>- Commitment of project partners</li> <li>- Misuse of funding</li> <li>- Incorrect market and competence analysis</li> <li>- Commitment and support of the national authorities (Ministry of Higher Education, local agencies, etc.).</li> <li>- Support from participating universities to provide the necessary resources for the sustainability of the program</li> <li>- Providing the Reports on project activities on time</li> <li>- Low response rate in satisfaction survey</li> </ul>
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<p>Activities: List the key activities to be carried out (grouped in work packages) and in what sequence, in order to produce the expected results.</p> <p>1 Management and coordination</p>	<p>WP1 Management and coordination 106.697 Euros; 70 persons months WP2 Market needs and capacitation of CA staff 103.205 Euros; 17 persons months</p>		
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<p>Task 1.1 Initiation of the project: Kick Off Meeting  Task 1.2 Project implementation, and coordination  Task 1.3 Financial management and Administration  Task 1.4 Reporting  Task 1.5 2nd Management Meeting Task  1.6 3rd Management meeting</p> <p>Market needs and capacitation of CA staff  Task 2.1 State of play analysis  Task 2.2 Stakeholders' analysis (citizens, policy makers, staff, business)  Task 2.3 Capacitation: International experience Task 2.4 Action Plan: CE introduction for higher education in CA  Task 2.5 Validation of the Situation analysis results with the partners stakeholders</p> <p>Development of module 1: Environmental Management  Task 3.1 Development of course description  Task 3.2 Peer reviewing the courses by the teachers from European universities Task  3.3 Peer review by Consortium and Stakeholders  Task 3.4 Testing and evaluation</p> <p>Development of module 2: Sustainable competitiveness  Task 4.1 Identification the needs and development of course description  Task 4.2 Validating the Course Draft with the Consortium and Stakeholders  Task 4.3 Creating the content of the course "Sustainable competitiveness".</p> <p>Development module 3: Environmental entrepreneurship  Task 5.1 Identification the needs to change the approach to teaching and learning in Circular and sustainable entrepreneurship</p>	<p>WP3 Development of module 1: Environmental Management 40.725 Euros;  18 persons months, Round trip of CA partners to EU HEIs</p> <p>WP4 Development of module 2: Sustainable competitiveness 31.558 Euros, 22 persons months</p> <p>WP5 Development module 3: Environmental entrepreneurship - 40.580 Euros ; 18 persons months</p> <p>WP6 Capacity building and Platform development - 263.321 Euros ; 7 persons months; Trainings in EU partners, 6 persons per CA HEI</p> <p>WP7 Pilot - 86.131 Euros ; 13 persons months; Follow up trip of partners, round trip in 4 CA HEIs</p> <p>WP8 Quality assurance -15.601 Euros ; 3 persons months</p> <p>WP9 Impact and dissemination - 13.533 Euros ; 16 persons months</p>		
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<p>Task 5.2 Benchmarking in Circular and sustainable Entrepreneurship Study  Task 5.3 Creating the contents, implementing and delivering the course “Circular &amp; Sustainable Entrepreneurship  Task 5.4 Strengthening the knowledge and capacities through online workshops for stakeholders in Central Asia Region</p> <p>Capacity building in Circular Economy  Task 6.1 Organisation of the trainings for enhancing teaching staff capacity for CA partners  Task 6.2. Organisation of hackathon in the circular economy.</p> <p>Piloting  Task 7.1 Coordination and monitoring over the pilot implementation of modules in CA partners  Task 7.2 Follow up Meeting</p> <p>Quality assurance  Task 8.1 Initiation of the Quality Assurance and Development of Quality Assurance and Monitoring Plan</p> <p>Task 8.2 Constant Quality Assurance and Monitoring of the project  Task 8.3 Regular quality reviews</p> <p>Impact and dissemination Task 9.1  Developing dissemination (DS) strategy  Task 9.2 Stakeholder engagement Task 9.3 Web site and visual identity  Task 9.4 Social media and communication  Task 9.5 Articles and publications  Task 9.6 Dissemination, promotional campaigns, info and open days Task 9.7 Sustainability Plan</p>			
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## 2.1.3 Project teams, staff and experts

Project teams and staff			
Name and function	Organisation	Role/tasks	Professional profile and expertise
Adolfo Carballo Penela, Ph.D. in Applied Economics, 3s degrees in Tax Administration and Fisheries Economics. BA in Business Management from University of Santiago de Compostela. Professor in Management	University of Santiago de Compostela (USC) (P1)	Development of teaching materials for bachelor, Master and Lifelong learning levels WP5	<p>Adolfo Carballo Penela is a professor in Management at the University of Santiago de Compostela (USC). He holds a Ph.D. degree in Applied Economics, Masters degrees in Tax Administration and Fisheries Economics. BA in Business Management from University of Santiago de Compostela.</p> <p>Description of expertise and experience.</p> <p>His research activity has been focused on the analysis of sustainable development and business sustainability, being interested in integrating environmental sustainability issues in business decision-making. He is particularly interested in linking human resource management to business sustainability and sustainable development.</p> <p>Regarding circular economy, Adolfo Carballo has been interested in understanding in what extent companies use circular business models and which business models are used to improve their sustainable performance in order to achieve more circular economies.</p> <p>To develop this research, he has participated in two projects Transition from linear 2 circular: policy and innovation (R2PI) (2016-19) and Servicizing Policy for Resource Efficient Economy (SPREE) (2012-15), funded by the European Union programs Horizon 2020 (H2020) and VII Framework Program - Cooperation, respectively. These projects analyzed strategies and business models useful for reducing the environmental impact of companies and organizations, as well as promoting their participation in initiatives related to circular economy.</p> <p>He has also experience developing teaching materials for the subject "Circular and Sustainable Business Models", included in the DEIN master degree program in the USC.</p> <p>Some of his recent relevant publications are:</p> <p>Saifulina, N., Carballo-Penela, A., Ruzo-Sanmartín, E (2023). Effects of Personal Environmental Awareness and Environmental Concern on Employees' Voluntary Pro-Environmental Behavior: A Mediation Analysis in Emerging Countries. <i>Baltic Journal of Management</i>, 18(1), 1-18.</p> <p>Paillé, P., Valéau, P., Carballo-Penela, A., (2022). Green rewards for optimizing employee's environmental performance: Examining the role of perceived organizational support for the environment and internal environmental orientation. <i>Journal of Environmental Planning and Management</i>, 61(2), 348-369.</p> <p>Vila-Vázquez, G., Castro Casal, C., &amp; Carballo-Penela, A. (2022). Employees' CSR attributions and pro-environmental behaviors in the hotel industry: The key role of female supervisors, <i>The Service Industries Journal</i>, 1-19.</p>
Nailya Saifulina, PhD in Economics and Business Administration, MBA (USC) Professor in Management	University of Santiago de Compostela (USC) (P1)	Development of teaching materials for bachelor, Master and Lifelong learning levels WP5	<p>Prof. Dr. Nailya Saifulina is an Assistant Professor in the Department of Business Management at the Universidade de Santiago de Compostela (Spain). Her research stream lies in the area of sustainable development, corporate social responsibility and sustainable human resource management, particularly, focusing on the sustainable performance of the organisations. Nailya's works on the mentioned topics were published in some international journals such as Sustainable Development and Journal of Sustainability Research.</p> <p>Also, she has experience in CBHE projects as a member of USC that was one of the partners in "Development of a Master Programme in the Management of Industrial Entrepreneurship for Transition Countries / MIETC" project where she elaborated teaching materials in Business and Financial Analysis subjects. List of publications:</p> <p>Saifulina, N., Carballo-Penela, A., &amp; Ruzo-Sanmartín, E. (2022). Effects of Personal Environmental Awareness and Environmental Concern on Employees' Voluntary Pro-Environmental Behavior: A Mediation Analysis in Emerging</p>

			<p>Countries. <i>Baltic Journal of Management</i>. DOI: 10.1108/BJM-05-2022-0195.</p> <p>Carballo-Penela, A., Ruzo-Sanmartín, E., Álvarez-González, P., &amp; Saifulina, N. (2022). A systematic literature review of Green Human Resource Management practices and individual and organizational outcomes: the case of Pro-Environmental Behaviour at Work. Book Chapter in <i>Green Human Resource Management: Issues, Trends, and Challenges</i>. Palgrave Macmillan, Sustainable Development Goals Series. DOI: 10.1007/978-3-031-06558-3_5, ISBN 978-3-031-06558-3</p> <p>Saifulina, N., Carballo-Penela, A., &amp; Ruzo-Sanmartín, E. (2021). The antecedents of employees' voluntary pro-environmental behavior at work in developing countries: the role of employee affective commitment and organizational support. <i>Business Strategy &amp; Development</i>. <a href="https://doi.org/10.1002/bsd2.162">https://doi.org/10.1002/bsd2.162</a></p> <p>Saifulina, N., Carballo-Penela, A., &amp; Ruzo-Sanmartín, E. (2020). Sustainable HRM and Green HRM: The Role of Green HRM in Influencing Employee Pro-Environmental Behavior at Work. <i>Journal of Sustainability Research</i>, 2(3). <a href="https://doi.org/10.20900/jsr20200026">https://doi.org/10.20900/jsr20200026</a></p>
Xavier Vence Deza, PhD in Economics Professor	University of Santiago de Compostela (USC) (P1)	<p>Tasks in project</p> <p>WP 5: Coordination and supervision, contribution to the content of modules</p>	<p>Professor of Applied Economics at the University of Santiago de Compostela. With 6 sexenios (It is the recognition of a six-year period of research by ANECA). Coordinator of the ICEDE Research Group (Competitive Reference Group) from 1998 and coordinator of the USC Master's Degree in Economic Development and Innovation (this master has a speciality in Circular Economy and Sustainability). The research has been focusing on economics of innovation in industry and services, regional innovation systems, strategic innovation policies and new activities, European policies, and cohesion. I was a pioneer in Spain in the study of the economics of innovation in the 1990's. In recent years my research is focusing on circular economy, sustainability, eco-innovation and servicing and the strategic policies to promote them (e.g., taxation and innovation). Participation as a coordinator in the following international research projects:</p> <p>"Next generation water-smart management systems: large scale demonstrations for a circular economy and society (Water - mining)",</p> <p>"Transition from linear to circular: Policy and Innovation"</p> <p>"The European strategy of transition to the circular economy: a prospective legal analysis and changes in global value chains"</p> <p>"Servicizing Policy for Resource Efficient Economy"</p> <p>"Targeted R&amp;D policies"</p> <p>Recent relevant publication publications:</p> <p>Vence, Xavier &amp; López P, Suguey De J. (2022). <u><a href="#">Reformar el IVA para impulsar los servicios de reparación y la economía circular</a></u> <u><a href="#">Reforming VAT to boost repair services and the circular economy</a></u>. <i>Contaduría y Administración</i>. 67. 304-329. <a href="https://doi.org/10.22201/fca.24488410e.2022.3233">10.22201/fca.24488410e.2022.3233</a>.</p> <p>López Pérez, S.d.J.; Vence, X. When Harmful Tax Expenditure Prevails over Environmental Tax: An Assessment on the 2014 Mexican Fiscal Reform. <i>Sustainability</i> 2021, 13, 11269. <a href="https://doi.org/10.3390/su132011269">https://doi.org/10.3390/su132011269</a></p> <p>Llorente González, Leandro &amp; Vence, Xavier (2020): "How labour-intensive is the circular economy? A policy-orientated structural analysis of the repair, reuse and recycling activities in the European Union" <i>Resources Conservation and Recycling</i>. Vol:162. Art. 105033. <a href="https://doi.org/10.1016/j.resconrec.2020.105033">https://doi.org/10.1016/j.resconrec.2020.105033</a></p> <p>Pereira, Angeles &amp; Vence, Xavier (2020) "Les systèmes produit-service comme business models pour l'économie circulaire: potentialités et limites" <i>Technologie et innovation</i>, Vol: 5 n°1 Online publication</p> <p>Books:</p>

			<p>Vence, Xavier &amp; Nogueira López (Dir.) (2021). "Redondear la Economía Circular. Del discurso oficial a las políticas necesarias". Ed. Thomson Reuters Aranzadi, ISBN: 978-84-1390-966-0</p> <p>Vence, Xavier (Dir. ) (2022, Publication in progress) "Economía circular y cambio sistémico. Límites planetarios vs límites del capitalismo" Ed. Fondo de Cultura Económico, ISBN: 978-84-375-0818-4</p>
<p>Ángeles Pereira Sánchez, PhD in Economics</p>	<p>University of Santiago de Compostela (USC) (P1)</p>	<p>Tasks in project</p> <p>WP 5: contribution to the content of modules</p>	<p>PhD in Economics and Business, international mention by the USC (2016), degree in Journalism (2004) and Economics (2008). Master's Degree in Economic Development and Innovation (2010) and Master's Degree in Teacher Training for Secondary Education and Vocational Training (2018). Assistant Professor at the USC. Since the beginning of the training period leading to the PhD degree and my integration in the Icede research group in 2011, I have participated in the development of research projects and their implementation. As a result of these projects, I have participated in various scientific meetings and conferences, developing my skills for communication and debate in international multidisciplinary contexts. I have also published, in collaboration with other authors, numerous articles in high impact journals, contributing to the dissemination of scientific knowledge. Participation as a researcher in the following projects: Servicing Policy for Resource Efficient Economy (SPREE) Ref.308376 (VIIIFP EU) (2012-2015) Transition from linear 2 circular: Policy and Innovation (R2PI) Ref.730378 (Horizon 2020 EU) (2016-2019) Next generation water-smart management systems: large scale demonstrations for a circular economy and society (WATER-MINING) Ref.869474 (Horizon 2020 EU) (2020-2024) Relevant publications: Pereira, Á., Carballo-Penela, A., Guerra, A., &amp; Vence, X. (2018). Designing a policy package for the promotion of servicing: A case study of vineyard crop protection in Galicia (Spain). <i>Journal of Environmental Planning and Management</i>, 61(2). <a href="https://doi.org/10.1080/09640568.2017.1308317">https://doi.org/10.1080/09640568.2017.1308317</a> Pereira, Á., Villanueva-Rey, P., Vence, X., Moreira, M. T., &amp; Feijóo, G. (2018). Fresh milk supply through vending machines: Consumption patterns and associated environmental impacts. <i>Sustainable Production and Consumption</i>, 15. <a href="https://doi.org/10.1016/j.spc.2018.05.003">https://doi.org/10.1016/j.spc.2018.05.003</a> Taboada, G. L., Seruca, I., Sousa, C., &amp; Pereira, Á. (2020). Exploratory data analysis and data envelopment analysis of construction and demolition waste management in the European economic area. <i>Sustainability (Switzerland)</i>, 12(12). <a href="https://doi.org/10.3390/su12124995">https://doi.org/10.3390/su12124995</a> Vence, X., &amp; Pereira, Á. (2019). Eco-innovation and Circular Business Models as drivers for a circular economy. <i>Contaduría y Administración</i>, 64(1), 119. <a href="https://doi.org/https://doi.org/10.22201/fca.24488410e.2019.1806">https://doi.org/https://doi.org/10.22201/fca.24488410e.2019.1806</a> Pereira, Á., &amp; Vence, X. (2021). The role of KIBS and consultancy in the emergence of Circular Oriented Innovation. <i>Journal of Cleaner Production</i>, 302. <a href="https://doi.org/10.1016/j.jclepro.2021">https://doi.org/10.1016/j.jclepro.2021</a>.</p>
<p>Sugey de Jesús López Perez, PhD in Fiscal studies Associated Researcher</p>	<p>University of Santiago de Compostela (USC) (P1)</p>	<p>WP 5: Coordination and supervision, contribution to the content of modules</p>	<p>PhD in Fiscal Studies, honorable mention from the Autonomous University of Sinaloa (UAS) in 2021. Degree in Public Accounting from the Instituto Tecnológico de Sonora (ITSON) (2009) and Master in Business Administration and Development from ITSON (2011). Associate Researcher of the ICEDE group at USC. My training as a researcher stems from the development of my doctoral thesis, with an international stay at USC (2019), which allowed me to carry out a pioneering thesis in the field of study and to be recognised by the SNI (National Research System) of CONACyT (National Council for Science and Technology) Mexico, as a level 1 researcher</p>



			member (2023-2027), which is exceptional for a recent doctoral
			<p>student. The results of my doctoral thesis have also led to publications [3, 4, 5, 6, 7 and 8] and several book chapters, including one published [9].</p> <p>The research projects in which I have participated are listed below:</p> <p>Consolidation and structuring 2018 GRC GI-1178 Innovation, structural change and development (ICEDE) (2018-PG055) Ref. ED431C 2018/23.</p> <p>Member of the research team of the project: Potentialities of the circular economy for sustainable and inclusive development in Latin American countries (2021-2022).</p> <p>Recent relevant publications:</p> <p>López Pérez, S. d.J. (2023). Ingresos tributarios en México en un contexto de pandemia COVID19 y de brechas estructurales. Revista ICA 2022, (aceptado).</p> <p>López Pérez, S. d.J., Turnes, J. A. y Vence, X. (2023). Fiscalidad y la Economía Circular en España: Situación actual y potencialidades del uso de los beneficios fiscales. Revista Gallega de Economía 2022, (aceptado)</p> <p>López Pérez, S. d.J.; Vence, X. (2021). When Harmful Tax Expenditure Prevails over Environmental Tax: An Assessment on the 2014 Mexican Fiscal Reform. Sustainability 2021, 13, 11269. <a href="https://doi.org/10.3390/su132011269">https://doi.org/10.3390/su132011269</a></p> <p>Vence, X.; López Pérez, S. d.J. Taxation for a Circular Economy: New Instruments, Reforms, and Architectural Changes in the Fiscal System. Sustainability 2021, 13, 4581. <a href="https://doi.org/10.3390/su13084581">https://doi.org/10.3390/su13084581</a></p> <p>Vence, X., &amp; López, S. d.J. (2022). Economía Circular y Actividades de Reparación y mantenimiento en México: Especificidades y heterogeneidad de su estructura productiva y laboral. Nova Economía, 32(21):231-260. <a href="https://doi.org/10.1590/0103-6351/6498">https://doi.org/10.1590/0103-6351/6498</a></p>
Francisco López Bermúdez Pre-doctoral researcher	University of Santiago de Compostela (USC) (P1)	WP 5: contribution to the content of modules	<p>Graduate in Economics, extraordinary bachelor's degree award (2018). Master's degree in Economic Development and Innovation, extraordinary master's degree award (2019). Predoctoral researcher, beneficiary of a grant to support the predoctoral stage of the Xunta de Galicia since 2020. I am currently developing my doctoral thesis under the direction of Professor Xavier Vence on repair practices in the framework of the circular economy and its contribution to sustainable regional development. Recent relevant publication publications</p> <p>López-Bermúdez, F. (2019). A economía circular na Unión Europea: unha aproximación en base á batería de indicadores de Eurostat. ICEDE Working Paper Series 23. ISSN 2254-7487 López-Bermúdez, F. &amp; Vence, X. (2023). Las actividades de reparación: proximidad, distribución territorial y contribución al desarrollo regional y local. En X. Vence (Dir.), Economía circular y cambio sistémico. Límites Planetarios vs. límites del capitalismo [accepted for publication]. Fondo de Cultura Económica.</p> <p>Vence, X. &amp; López-Bermúdez, F. (2023). Globalización comercial, transporte y economía circular: las emisiones (ignoradas) del transporte marítimo internacional. En X. Vence (Dir.), Economía circular y cambio sistémico. Límites Planetarios vs. límites del capitalismo [accepted for</p>



			publication]. Fondo de Cultura Económica.
Aizhan Samambayeva	AYeconomics Research Centre (AYeconomics) (P2)	Coordination and supervision, contribution to the content of WP 2,6	Co-founder of AYeconomics Research Centre, Head of Innovation Division, she was leading the WP2 of Market Needs analysis in CBHE project, she has MBA in Marketing. She is involved in several research projects in Kazakhstan funded by the Science Fund of Kz.
Yolanda Pena Boquete	AYeconomics Research Centre	Researcher WP 2,6	Cofounder of AYeconomics, and also the Head of the Research Division. She has extensive experience as a researcher in topics related to sustainability. She coordinated the project Local strategy for promoting the circular economy for the City Council of Santiago de Compostela, developed in 2021, funded
	(AYeconomics) (P2)		by City Council of Santiago de Compostela. Previously, she participated in two publications in 2017: "The social benefits of WEEE reuse schemes. A cost benefit analysis for PCs in Spain"; "Carbon intensity changes in the Asian Dragons. Lessons for climate policy design"; and one publication in 2016: "Revisiting Environmental Kuznets Curves through the energy price lens"
Iria Dios-Murcia	AYeconomics Research Centre (AYeconomics) (P2)	Researcher WP 2,6	Iria Dios-Murcia is Project Manager and Researcher at AYeconomics, participating in national and international projects and proposals. She has experience in the Circular Economy field, being part of the project Local strategy for promoting the circular economy for the City Council of Santiago de Compostela, developed in 2021, funded by City Council of Santiago de Compostela.

<p>Carmela Gargiulo Full professor</p> <p>at Department of Civil, Architectural and Environmental Engineering</p>	<p>University of Naples Federico II (UNINA) (P3)</p>	<p>Manager WP4</p>	<p>She is full professor of Urban Planning at the University of Naples Federico II. Since 1987 she has been involved in studies on the management of urban and territorial transformations. Her research interests focus on the processes of urban requalification, on relationships between urban transformations and mobility, and on the estate exploitation produced by urban transformations. On these subjects she has co-ordinated several research teams. Author of more than 150 publications.</p> <p>Following, a list of five publications most relevant to the themes promoted by the project:</p> <p>Battarra R., Gargiulo C., Tremiterra M.R., Zucaro F. (2018). Smart mobility in Italian metropolitan cities: A comparative analysis through indicators and actions. <i>Sustainable Cities and Society</i>, Volume 41, 556-567, <a href="https://doi.org/10.1016/j.scs.2018.06.006">https://doi.org/10.1016/j.scs.2018.06.006</a>.</p> <p>Gargiulo C., &amp; Papa R. (2021). Chaos and chaos: the city as a complex phenomenon. <i>TeMA - Journal of Land Use, Mobility and Environment</i>, 14(2), 261-270. <a href="https://doi.org/10.6093/1970-9870/8273">https://doi.org/10.6093/1970-9870/8273</a></p> <p>Gaglione F., Cottril C., Gargiulo C., (2021). Urban services, pedestrian networks and behaviors to measure elderly accessibility. <i>Transportation Research Part D: Transport and Environment</i>, Volume 90,102687, <a href="https://doi.org/10.1016/j.trd.2020.102687">https://doi.org/10.1016/j.trd.2020.102687</a></p> <p>Gargiulo C., Guida N., &amp; Sgambati S. (2022). NextGenerationEU in major Italian cities. <i>TeMA - Journal of Land Use, Mobility and Environment</i>, 15(2), 287-305. <a href="https://doi.org/10.6093/1970-9870/9260">https://doi.org/10.6093/1970-9870/9260</a></p>
<p>Gerardo Carpentieri - Researcher at Department of Civil, Architectural and Environmental Engineering</p>	<p>University of Naples Federico II (UNINA) (P3)</p>	<p>Researcher WP4</p>	<p>He is an engineer, Ph.D. in Civil Systems Engineering at the University of Naples Federico II and Lecture of Land Use Planning at the Department of Civil, Architectural and Environmental Engineering of the University of Naples Federico II. From 2020, he is a member of Unina research group for the ERASMUS+ Key Action2: Project "Development of a Master Programme in the Management of Industrial Entrepreneurship for Transition Countries" (MIETC). From 2023, he is coordinating the Unina research group for the research project "STEP UP- Walkability for Women in Milan" financed by Fondazione Cariplo.</p>
<p>Floriana Zucaro - Researcher at Department of Civil, Architectural and Environmental Engineering</p>	<p>University of Naples Federico II (UNINA) (P3)</p>	<p>Researcher WP4</p>	<p>She is an engineer, she received a M.Sc. in Environmental and Territorial Engineering at the University of Naples Federico II with a specialization in management of urban and territorial transformations. In April 2015 she holds a PhD in Hydraulic, Transport and Territorial Systems Engineering at University of Naples Federico II. From 2018 to 2020, she has been a research fellow on the "MOBILAGE - Mobility and aging: daily life and welfare supportive networks at the neighborhood level" project financed by Fondazione Cariplo. From 2023, she is coordinating the Unina research group for the research project "STEP UP- Walkability for Women in Milan" financed by Fondazione Cariplo.</p> <p>Following, a list of five publications most relevant to the themes promoted by the project:</p>

			<p>Battarra, R., Gargiulo, C., Zucaro, F. (2020). Future Possibility of Smart and Sustainable Cities in the Mediterranean Basin. <i>Journal of Urban Planning and Development</i>, 146(4), 04020036.  <a href="https://doi.org/10.1061/(ASCE)UP.1943-5444.0000610">https://doi.org/10.1061/(ASCE)UP.1943-5444.0000610</a>;</p> <p>Zucaro, F., &amp; Carpentieri, G. (2019). Transformative Actions towards Sustainable Development. The Case of Boscoreale Municipality, Italy. <i>Journal of Settlements and Spatial Planning</i>, 10(2), 111-119.  <a href="https://doi.org/10.24193/jssp.2019.2.04">https://doi.org/10.24193/jssp.2019.2.04</a>;</p> <p>Morosini, R., &amp; Zucaro, F. (2019). Land use and urban sustainability assessment: a 3D-GIS application to a case study in Gozo. <i>City, Territory and Architecture</i>, 6(1), 1-20.  <a href="https://doi.org/10.1186/s40410-019-0106-z">https://doi.org/10.1186/s40410-019-0106-z</a>;</p> <p>Gargiulo C., Sforza, A., Sterle C., Zucaro F. (2018). An Optimization Model Fitting the Neighborhood Sustainability Assessment Tools. <i>Sustainability</i>, 10(10), 3365.  <a href="http://dx.doi.org/10.3390/su10103365">http://dx.doi.org/10.3390/su10103365</a>;</p>
<p>Carmen Guida - Researcher at Department of Civil, Architectural and Environmental Engineering</p>	<p>University of Naples Federico II (UNINA) (P3)</p>	<p>Teacher WP4</p>	<p>She is an engineer, PhD in Civil Systems Engineering, Postdoctoral Researcher and Adjunct Professor at the Department of Civil, Architectural and Environmental Engineering of the University of Naples Federico II. Her research activities concern adapting the urban environment to climate change-related hazards and accessibility to urban services for older adults to minimise social exclusion and inequalities within urban areas.</p> <p>Following, a list of five publications most relevant to the themes promoted by the project:</p> <p>Gargiulo C., Battarra R., Guida C., Tremitera M.R. (2023). Chapter 26 - A GIS-based tool for planning resilient climate cities, in Allam A., Chabaud D., Gall C., Pralong F., Moreno C. (2023), <i>Resilient and Sustainable Cities</i>, Elsevier, 473-494, ISBN 9780323917186, <a href="https://doi.org/10.1016/B978-0-323-91718-6.00017-7">https://doi.org/10.1016/B978-0-323-91718-6.00017-7</a>.</p> <p>Guida, C. (2022). Energy saving and efficiency in urban environments: integration strategies and best practices. <i>TeMA Journal of Land Use, Mobility and Environment</i>, 15(3), 517-531. <a href="https://doi.org/10.6093/1970-9870/9549">https://doi.org/10.6093/1970-9870/9549</a>.</p> <p>Guida, C. &amp; Carpentieri, G. (2021). Quality of life in urban environment and primary health services for the elderly during Covid-19 pandemic: An application to the city of Milan (Italy). <i>Cities</i>, 110, 103038.  <a href="https://doi.org/10.1016/j.cities.2020.103038">https://doi.org/10.1016/j.cities.2020.103038</a></p> <p>Guida, C., &amp; Caglioni, M. (2020). Urban accessibility: the paradox, the paradigms and the measures. A scientific review. <i>TeMA-Journal of Land Use, Mobility and Environment</i>, 13(2), 149-168. <a href="https://doi.org/10.6092/1970-9870/6743">https://doi.org/10.6092/1970-9870/6743</a></p>
<p>Sabrina Sgambati - PhD student at Department of Civil, Architectural and Environmental Engineering</p>	<p>University of Naples Federico II (UNINA) (P3)</p>	<p>Teacher WP4</p>	<p>She is an engineer, Ph.D. student in Civil Systems Engineering at Department of Civil, Architectural and Environmental Engineering of University of Naples Federico II. Her research activities concern the competitiveness of urban areas.</p> <p>Following, a list of five publications most relevant to the themes promoted by the project:</p> <p>Gargiulo, C., Guida, N., &amp; Sgambati, S. (2022). NextGenerationEU in major Italian cities. <i>TeMA-Journal of Land Use, Mobility and Environment</i>, 15(2), 287-305.  <a href="https://doi.org/10.6093/1970-9870/9260">https://doi.org/10.6093/1970-9870/9260</a>;</p> <p>Sgambati, S., Carpentieri, G., &amp; Gargiulo, C. (2022). Measuring Urban Competitiveness Through the Lens of Sustainability: An Application at the Urban Districts Level in the City of Naples (Italy). In <i>International Conference on Computational Science and Its Applications</i> (pp. 93-108). Springer, Cham. <a href="https://doi.org/10.1007/978-3-031-10592-0_9">https://doi.org/10.1007/978-3-031-10592-0_9</a>;</p> <p>Sgambati, S., &amp; Gargiulo, C. (2022). The evolution of urban competitiveness studies over the past 30 years. A bibliometric analysis. <i>Cities</i>, 128, 103811.  <a href="https://doi.org/10.1016/j.cities.2022.103811">https://doi.org/10.1016/j.cities.2022.103811</a>;</p> <p>Gargiulo, C., Sgambati S. (2022) Active mobility in historical centres: towards an accessible and competitive city. <i>The</i></p>

			Case
			<p>study of Pizzofalcone in Naples. TeMA - Journal of Land Use, Mobility and Environment, 31-55.  <a href="https://doi.org/10.6092/1970-9870/8395">https://doi.org/10.6092/1970-9870/8395</a>;  - Gargiulo, C., Sgambati S. (2022) Active mobility in historical centres: towards an accessible and competitive city. Transportation Research Procedia. ISSN 2352-1465.  <a href="https://doi.org/10.1016/j.trpro.2021.12.071">https://doi.org/10.1016/j.trpro.2021.12.071</a></p>
Prof. Dr. Volker Wittberg	FHM Bielefeld (P4)	Researcher	<p>Volker Wittberg is Vice-Rector for Research and Development at the FHM since 2014. In addition, he heads the Center for Sustainable Governance (CSG) and the National Center for Bureaucracy Cost Reduction, both established at the FHM under his leadership and curation. For almost 20 years Volker Wittberg has been Professor for SME Management. His research focuses on global SME Management, administrative burden control and sustainable governance. He has carried out numerous studies in collaboration with the Federal governments in Germany, which were presented and awarded at the Climate Change Conference (2012) and at the OECD Good Governance Conference (2013). In this field, he has performed several research, evaluation and accreditation tasks for the Bundestag and Federal Parliament committees. He has published more than 50 papers and conference presentations, co-authored and edited a number of books. Besides, Volker Wittberg has been Visiting Professor at the University of Gloucestershire (UK) for almost 10 years.</p>
ELISA GOLDMANN MBA:	FHM Bielefeld (P4)	Project Manager	<p>Elisa has been working in the field of national and international projects for 7 years. Since 2019 she has been supporting ERASMUS + projects at the FHM. As a research assistant she focuses on sustainability, sustainable education, digitalisation and bureaucracy reduction. Since her MBA Programme, she has been working on the implementation of sustainability concepts in medium-sized companies and is supporting the FHM Institute Center for Sustainable Governance (CSG). She is currently working on ERASMUS + project "GoBeEco - Gamification of eco-friendly habits in adult education (2020-2023).</p>
Prof. Dr. Melanie Eikenbusch,	FHM (P4)	Teaching staff	<p>Since 2020 scientific co-leader of the national project "Open Innovation City" (OIC)  Major subject and field research:  Innovation management  Open Innovation in ecosystem of a city Sustainability Management  She is developing the OIC Index and the Master program M.A. Sustainability and Climate management</p>
Prof. Dr. Metje Rocklage, Lecturer, Professor at Faculty of Economics	FHM (P4)	Teaching Staff	<p>Professor for sustainability management and reporting, Researcher at the Centre for Sustainable Governance and Programme lead of "Sustainability Manager (FHM)". Metje participated in a number of projects of CSG, having a practical reference and involvement of SME  She recently complete the work in the national project IBNE "Indicators of career training of sustainable development" funded by the Federal Ministry of Education and Research (BMBF), aiming to define indicators for Educating sustainability topics in the VET sector.  Metje is a member of the steering group "Global sustainable City Bielefeld", Bielefeld and is model town council of the project "Global sustainable council within North Rhine Westphalia (NRW)".  Currently Metje co-lead the E+ "Linear turs Circular – Fostering circular economy for SME".</p>

Zhadyra Konurbayeva, Candidate of Economic Sciences,	D. Serikbayev East Kazakhstan technical	Project manager WP9, WP7, WP6, WP8	Vice-Rector for Academic Work, Candidate of Economic Sciences. She has over twenty years of experience in teaching as an Assistant, Teacher, Senior Lecturer, Associate Professor at the Department of Management, Marketing and Audit, Innovation
Associate professor	university (EKTU) (P5)		Management, Management of Innovation. In 2010 Zhadyra Konurbayeva started serving as a Head of the Department of Innovative Management and as a Dean of School of Business and Entrepreneurship from 2017. Since 2019, Ministry of Education and Science appointed Zhadyra Konurbayeva as a vice-rector for Academic Affairs. Since 2021, Konurbayevs has been a member of the Board - Vice-Rector for Academic Affairs. In 2012-2014, 2018-2020 years she led projects of the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan. Zhadyra Konurbayeva is a developer of 12 socio-economic projects on East Kazakhstan in various industries and agro-industrial complex. Relevant publications: Denisova, O., Konurbaeva, Zh., Zakimova, A., Rakhimberdieva, M. Evaluation of import substitution potential of products from secondary raw materials of animal husbandry/ Journal of Environmental Management and Tourism, 2021, 12(2), pp. 341–356 Konurbaeva, Z., Denisova, O., Rakhimberdieva, M., Zakimova, A. Food security as a formation factor of the import substitution potential of the economy/ Journal of Applied Economic Sciences, 2018, 13(8), pp. 2251–2260
Oxana Denissova, Candidate of Economic Sciences, Associate professor	D. Serikbayev East Kazakhstan technical university (EKTU) (P5)	Administrative personnel WP7, WP6	Head of the department of organization and monitoring of the educational process, Candidate of Economic Sciences. Work experience: 2006-2018—senior lecturer: Her teaching scope includes the following courses: “Economics of sustainable development”, “Management of natural resources in the economy”, “Economics of industry markets” and others.2018-present – head of the department of organization and monitoring of the educational process, She develops education strategies, develop programs to improve education process.She participated in a grant project from the Ministry of Education such as: «Modernization of the economy of Kazakhstan on the principles of "green growth": a regional perspective. She is actively engaged in the study of green economics problems, completed a scientific internship "Green" Economy as a new course of development: global and Regional aspects, Eurasian Union of Academic Mobility and International Cooperation, Prague, Czech Republic She has over 60 publications, 7 articles in foreign journals with a non-zero impact factor, for example, O.Denissova, M. Kozlova, M. Rakhimberdinova, Ye. Varavin, M. Ordabayeva International Experience in the Development of Green Economy //Journal of Environmental Managementand Tourism. – №3(27). – 2018. – C. 564-576. J, Vikulenko, A.Belgibayeva, O. Denissova, G.Abauova, A. Tulemetova, R.Sadykova Analysis of the Development of Innovative Entrepreneurship for the Assess Their Competitiveness and Environmental Impact Factors // Journal of Environmental Managementand Tourism. – №7 (55). – Winter 2021. – C. 1862-1875

<p>Madina Rakhimberdinova, Associate professor, PhD, Associate professor</p>	<p>D. Serikbayev East Kazakhstan technical university (EKTU) (P5)</p>	<p>Teachers WP2, WP3, WP4</p>	<p>Associate professor, Researcher, PhD. Winner of the grant of the Ministry of Education and Science of the Republic of Kazakhstan "The best university teacher – 2019". Member of the Erasmus+ Project working Group 610198-EPP- 1-2019-1- ES-EPPKA2-CBHE-JP – "Development of a Master's program in industrial entrepreneurship management for countries with economies in transition". Publications in publications recommended by the Committee of the Ministry of Education and Science of the Republic of Kazakhstan, 2 international patents included in the database of Clarivate Analytics (Web of Science Core Collection), in scientific journals included in the 1st, 2nd, 3rd quartile of journals according to the Journal Citation Reports of Clarivate Analytics.</p>
<p>Alfiya Zakimova, Candidate of Economic Sciences, Senior lecturer</p>	<p>D. Serikbayev East Kazakhstan technical university (EKTU) (P5)</p>	<p>Researcher WP2, WP3, WP4</p>	<p>Dean of the School of Business and Entrepreneurship, Candidate of Economic Sciences. Participated in the working group of 2 grant research projects of the Ministry of Education and Science of the Republic of Kazakhstan on agricultural economics. Also, as part of the working group, she conducted marketing research for the PCF project. Lectures to students enrolled in the LEE program - Leaders of Engineering education. The courses are aimed at developing inventive potential. . Relevant publications: Konurbayeva Zh.T., Denisova O.K., Zakimova A.M. International practice of using secondary raw materials in the livestock industry //Problems of the agricultural market. – No. 2 (April-June). – 2019. – pp. 138-136. Konurbayeva Zh.T., Zakimova A.M. Determination of the market potential of secondary raw materials of animal husbandry as a basis for diversification Zakimova A.M., Konurbayeva Zh.T., Denisova O.K. Innovative technologies of recycling of secondary raw materials as a factor of waste-free production in the livestock sector of the agro- industrial complex //Bulletin of D. Serikbayev EKSTU. – Ust- Kamenogorsk. - No. 4. – 2018. – pp. 108-114.</p>



Zhanat Idrisheva, Candidate of Technical Sciences, Associate professor	D. Serikbayev East Kazakhstan technical university (EKTU) (P5)	Teachers WP2, WP3, WP4	<p>Associate professor, Researcher, Candidate of Technical Sciences.</p> <p>Work experience: From 2002 to the present time - Associate Professor of the educational program "Life safety and environmental protection" of D. Serikbayev EKTU. From 2022 the senior researcher of the Center of Competence in the field of ecology and Life safety. She is also a lecturer of the advanced training course "Radiation protection and safety".</p> <p>2012-2013 Leading researcher of the state budgetary research. 2022 - Leading researcher of the scientific and technical program within the framework of program-targeted financing of research of the Republican Research Institute for Labor Protection of the Ministry of Health and Safety of the Republic of Kazakhstan.</p> <p>Auyeshov A., Satimbekova A., Arynov K., Bekaulova A., Yeskibayeva S., Idrisheva Zh. Environmentally friendly and resource-saving technology for disposal of dusty asbestos-containing wastes and production of magnesium /ARPN Journal of Engineering and Applied Sciences Том 16, Выпуск 9, Страницы 987 – 990 May 2021;</p> <p>Idrisheva Zh.K., Ermukhanova N.B., Samonin V.V., Kerimbekova Z.M. and others. Development of methods for detoxification of soils containing heavy metals and radionuclides /Bulletin of D. Serikbayev East Kazakhstan Technical University. Ust-Kamenogorsk-2020.-No. 1 (87), pp. 43-48</p> <p>Satimbekova A., Bekaulova A., Dikanbayeva A., Auyeshov A., Idrisheva Zh. Recycling of chrysotile asbestos production waste as a factor of environmental safety/Bulletin of D. Serikbayev East Kazakhstan Technical University. Ust-Kamenogorsk.- 2019. - №1 (83), pp.173-177.</p>
Gulzhan Daumova, Candidate of Technical Sciences, Associate professor	D. Serikbayev East Kazakhstan technical university (EKTU) (P5)	Researcher WP2, WP3, WP4	<p>Associate professor, Researcher, Candidate of Technical Sciences.</p> <p>She also obtained 4 innovative patents of the Republic of Kazakhstan, 1 patent of the Republic of Kazakhstan for an invention, 2 patents of the Russian Federation for an invention and 4 international patents included in the database of Clarivate Analytics (Web of Science).</p>
			<p>Has more than 100 scientific works, including 19 articles in foreign journals with a non-zero impact factor, for example, Daumova G., Seraya N., Azbanbayev E., Assanov D., Aubakirova R., Reutova G. Utilization of Spent Sorbent in the Production of Ceramic Bricks. ChemEngineering, 2022, 6, 82. <a href="https://doi.org/10.3390/chemengineering6050082">https://doi.org/ 10.3390/chemengineering6050082</a></p> <p>Litvinov V., Daumova G., Shaikhov M., Sergeyeva N. Analysis of the Composition of Municipal Wastewater Sludge from Small Settlements in East Kazakhstan. Journal of Ecological Engineering, 2022, 23(7), P. 105–112, DOI: <a href="https://doi.org/10.12911/22998993/149896">10.12911/22998993/149896</a></p> <p>Yerbolov S., Daumova G. Waste Water Purification from Metal Ions by Ultra-Dispersed Natural Sorbents // Journal of Ecological Engineering, 2022, 23(1), P. 43–50, DOI: <a href="https://doi.org/10.12911/22998993/143867">10.12911/22998993/143867</a></p> <p>Aubakirova R, Daumova G, Seraya N, Afanasenkova I. Sorption Extraction of Heavy Metal Ions from Wastewater by Natural and Synthetic Sorbents // Chemical engineering transactions, Italia, Vol. 81, 2020, P.343-348, DOI:10.3303/CET2081058</p> <p>Baimukhanbetova E., Onaltayev D., Daumova G., Amralinova B., Amangeldiyev A. Improvement of informational technologies in ecology// E3S Web of Conferences 159, The 1st International Conference on Business Technology for a Sustainable Environmental System (BTSES), 2020. – 01008. DOI: <a href="https://doi.org/10.1051/e3sconf/202015901008">10.1051/e3sconf/202015901008</a></p>

Petrova Olga, Candidate of Technical Sciences	D. Serikbayev East Kazakhstan technical university (EKTU) (P5)	Teachers WP2, WP3, WP4	Senior lecturer, Researcher, Candidate of Technical Sciences. · Petrova O., Daumova G., Idrisheva Zh.K., Mashekenova A., Kaissina M. Research on Potential Application of a New Fertilizer based on Natural Sorbents for Toxic Soils Chemical Engineering Transactions, 2022, 94, 349-354 DOI:10.3303/CET2294058 · Yurlov V.L., Daumova G.K., Idrisheva Zh.K., Petrova O.A. Investigation of the optimal composition of a mixture of oil-containing sludge for reclamation/ Bulletin of EKSTU, Ust-Kamenogorsk. – 2019. – №2(84), May – pp. 174-181 · Daumova G.K., Petrova O.A., Azamatova Zh.K., Kalekenov N. Application of bentonite clays as an insulating material in sludge accumulators/ Materials of the International Scientific and Technical Conference dedicated to the 60th anniversary of D. Serikbayev EKSTU "The role of universities in creating an innovative economy", September 26. 2018 – Oskemen: SHKMTU, 2018. – pp. 211-218. · Petrova O.A., Daumova G.K., Sherubaeva D.S. Reducing the negative environmental impact of waste from ferroalloy production enterprises/ New Technologies - EXPO-2017: Materials of the m-n-t conference, October 20, 2017. - U-Ka: EKSTU, 2017 - pp.235-239
Bezler Oxana, PhD, Senior Lecturer of the Department of Economics and Entrepreneurship	KARAGANDA UNIVERSITY OF KAZPOTR EBSOYUZ (KarUK) (P6)	Manager 1	23 years of research and teaching experience. Among the main functions: the management of research work in the scientific direction of the department, the development of curricula of educational programs, syllabuses in disciplines, the planning, organization and control of educational and methodological work in discipline. Experience in participating of ERASMUS+ CBHE projects as a HEI's Coordinator : "Compleat" and "MIETC". Relevante publication: - Bezler, O.D., Zhidkoblinova O. V., Stavbunik E. A., Stepanova B. K. (2022) Development of technological entrepreneurship in Kazakhstan: problems and prospects. Bulletin of the Kazakh University of Economics, Finance and International Trade, - 2(47). - p. 76-81. doi: 10.52260/2304-7216.2022.2(47).10
Tyan Olga, Candidate of Sciences, Director of the Department of Academic Development of Higher and Postgraduate Education	KARAGANDA UNIVERSITY OF KAZPOTR EBSOYUZ (KarUK) (P6)	Manager 2	Experience in participating in Erasmus+ projects. Expert experience: - member of attestation commissions for the State Attestation of the Ministry of Education and Science of the Republic of Kazakhstan; expert of the Independent Agency for Quality Assurance in Education; invited expert of the Institute for Accreditation, Certification and Quality Assurance, ACQUIN (Germany)
Kalkabayeva Gaukhar, Candidate of Economic Sciences, Professor of the Department of Finance	KARAGANDA UNIVERSITY OF KAZPOTR EBSOYUZ (KarUK) (P6)	Teacher/researcher 1	Experience in participating of projects: - 1/11/2022-1/11/2025 ERASMUS-JMO-2022-MODULE Project 101082914 - European practice of sustainable development management towards green transformation; and other Projects by Ministry of Education and Science of Kazakhstan. Some relevante publications: Financing of eco-innovations: sources and trends in Kazakhstan// International Journal of Energy Economics and Policy, 2021, 11(1), 1-7. – <a href="https://doi.org/10.32479/ijeeep.10762">https://doi.org/10.32479/ijeeep.10762</a> Problems of Research Funding in the Agro-Industrial Complex of Kazakhstan. // Journal of Asian and African Studies. 2022. 1- 9. <a href="https://doi.org/10.1177/00219096221097664">https://doi.org/10.1177/00219096221097664</a>



<p>Puntus Yevgeniya, Master of Social Sciences, Chief Expert of the Research Center, Senior Lecturer, Department of Social Sciences</p>	<p>KARAGANDA UNIVERSITY OF KAZPOTR EBSOYUZ (KarUK) (P6)</p>	<p>Teacher/researcher 2</p>	<p>Experience in participating of projects: - 17/01/2020-17/01/2024 "Development of a Master's program in Industrial entrepreneurship management for countries with economies in transition" MIETC (commissioned by ERASMUS+ with the participation of the European coordinator of Universidade de Santiago de Compostela, Spain); and other Grant for research and projects by Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan and the World Bank.</p>
<p>Nevmatulina Karina PhD, docent, Head of the Department of Economics and Entrepreneurs hip</p>	<p>KARAGANDA UNIVERSITY OF KAZPOTR EBSOYUZ (KarUK) (P6)</p>	<p>Administrative 1</p>	<p>Experience in participating in Erasmus+ projects from January 15, 2020 to the present –Manager for the implementation of the project "Development of a Master's program in Industrial entrepreneurship management for countries with economies in transition" MIETC (commissioned by ERASMUS+ with the participation of the European coordinator of Universidade de Santiago de Compostela, Spain). Some relevant publications: Nevmatulina, K.; Tsvyrko, A. and Azarova, N. (2022). Research on the Quality of Economic Development of Regional Innovation Systems, Taking into Account Human Potential. In Proceedings of the 1st International Scientific Forum on Sustainable Development of Socio-economic Systems - WFSDS, ISBN 978-989-758-597-5, pages 165-171. DOI: 10.5220/0010665500003223 S. S. Shakeev, K. A. Nevmatulina, S. B. Baibosynov Development tendencies of special economic zones of the Republic of Kazakhstan // Bulletin of "Turan" University. - #2. - 2021. - pp. 30-36.Nabiev E.N., Shakeev S.S., Nevmatulina K.A. Analysis of the economic efficiency of the development of mining industry of the Republic of Kazakhstan // Economic series of the journal of ENU named L.N. Gumileva. - No. 1. - 2021.</p>
<p>Svetlana Glazunova, Master of Economics, Director of the Strategic Development Department</p>	<p>KARAGANDA UNIVERSITY OF KAZPOTR EBSOYUZ (KarUK) (P6)</p>	<p>Administrative 2</p>	<p>Experience of participating in Erasmus+ projects: - Project: "Transition to Autonomy of Universities in Kazakhstan/TRUNAK"-2017 - EAC/A03/2016 (completed), Project: 101082914 - EPOS - ERASMUS-JMO-2022-HEITCH-RSCH "European practice of sustainable development management towards green transformation" (current). Some publications: Indicators of measuring human capital in the context of the company's innovative development. Bulletin of KazUEFMT No. 3(48), 2022 Analysis of financial and economic aspects of the companies functioning and their impact on the tourism cluster in the conditions of socialization. ECONOMY Series. No. 1(105)/2022</p>

Alexandr Koichubayev - Project Manager at International Cooperation Center	Alikhan Bokeikhan University (ABU) (P7)	Manager (WP 5)	<p>Experienced manager-researcher on international projects, PhD in Economics, He has published more than 60 significant scientific papers in various journals and collections as well as the monograph and tutorials.</p> <p>He carried out scientific execution of Research Projects financed by Grant of Ministry of Education and Sciences of the Republic of Kazakhstan; GeKaVoc, funded by Federal Ministry of Education and Research (Germany) (Institutional Coordinator 2018-2021); ERASMUS+ (National Coordinator for Project COMPLETE 2015-2018, and Institutional Coordinator for Project KazDUAL 2021-2024) and other funds.</p> <p>His sphere of scientific interests: development of regional economy, logistics, project management. He accumulated up valuable experience with the foreign organizations of education. Experienced in organisation 2d International Green Economy Forum in Kazakhstan 2015 (Concept and Agenda Design Group)</p>
Elena Shustova - Vice-Rector for Internationalisation	Alikhan Bokeikhan University (ABU) (P7)	Manager (WP 5)	<p>Holds MBA, Ph.D. in Finance and Associate Professor in the Department "Finance and Accounting"</p> <p>His research interests are about financial market, banking management and banking risks.</p> <p>Published 4 textbooks and 1 monograph, and more than 80 scientific publications, including scientific articles in international scientific journals included in the database Scopus and Web of Science.</p>
Zhanat Baigazinov - Associate Prof. at the Department Applied Biology	Alikhan Bokeikhan University (ABU) (P7)	Teacher/Trainer/ Researcher (WP 5)	<p>Scientific researcher, both as a responsible executor and as a project manager of the national and international projects (Special Doctoral grants in the framework of International Science and Technology Center supported by the European Union (2019-2023); "Assessment of stable elements as proxy for radionuclides in transfer processes" European Radioecological Alliance (2017); European Commission project SEMI-NUC (2013-2016). ); ISTC project K-2085, 2013-2015;</p> <p>Joint study of Kazakhstan and Japan on the impact of radiation on human health, 2007-2009).</p> <p>The main area of scientific activity is radioecology and radiobiology of farm animals and birds; cytogenetics, epidemiology and biodosimetry.</p>
Rimma Takhtayeva - Senior Lecturer at the Department of Business and Management	Alikhan Bokeikhan University (ABU) (P7)	Teacher/Trainer/ Researcher (WP 5)	<p>BSc in Finance, MSc in Economics, Candidate of Economic Sciences (PhD) degree. Has over 18 years of research and teaching experience. Published over 120 scientific works, including: 5 monographs; 12 textbooks and 3 books. Took participation on internships and trainings in Poland, Bulgaria, Russia. For her contribution to science in the field of tourism she was awarded the Vernandsky Medal, and is a Corresponding Member of the European Academy of Natural Sciences (Honnower, Germany);</p> <p>Participant of the forum of the Organizing Committee of the World Congress of Engineers and Scientists WSEC-2017: "Future Energy: Innovative Scenarios and Methods of Implementation", where she made a presentation on "Rational Use of FER: Socio-Economic Significance".</p>
Aizhan Orynbasarova – Head of the Department of Business and Management	Alikhan Bokeikhan University (ABU) (P7)	Administrative Staff	<p>PhD in Economics. Head of the educational process, creator and manager of educational programmes. She has studied and upgraded her qualifications in Kazakhstan and at the foreign countries. In different years was repeatedly awarded with diplomas and medals of the Ministry of Science and Higher Education.</p> <p>She has published more than 50 scientific works on enterprise economics, audit and economic analysis. She is a member of the Republican Training and Methodological Council.</p>

Gulnar Kassymkhano va – Head of the Financial Management Department, Chief Accountant	Alikhan Bokeikhan University (ABU) (P7)	Administrative Staff	Has experience in financial management, project budgeting, and procurement. Certified professional accountant. She teaches accounting and finance at the ABU Department of Business and Management.
Anuarbek Kakabayev, PhD, Rector's advisor on International projects management	Sh. Ualikhanov Kokshetau University (KoKSU) (P8)	Project management and coordination, development, dissemination	<p>Professor of the Department of Mining, Construction and Ecology of KokSU, local coordinator of Tempus and Erasmus Mundus projects.</p> <p>Fields of specialization: educational technologies, environmental education, environmental management, agro-ecology, ecological genetics and biohazards. Teacher and local coordinator 585761-EPP-1-2017-1-FI-EPPKA2-CBHE-JP</p> <p>Enhancing Competences of Sustainable Waste Management in Russian and Kazakh HEIs /EduEnvi. Teacher in the project 618715-EPP-1-2020-1-DE-EPPKA2-CBHE-JP</p> <p>Advancing circular economy in partner countries by development and implementation of Master programme "Waste management"/ UnWaste.</p> <p>Author of more than 50 scientific papers and 5 didactic publications.</p> <p>List of relevant publications:</p> <p>Waste accumulation and Geoecological assessment of the territories around the landfills in Kokshetau / Kurmanbayeva A., Bayazitova Z., Talal A., Kakabayev A., Zhaparova S. // International Journal of GEOMATE.- 2022.- №23(96).- Pp.179- 185</p> <p>Investigating the Influence of Fly Attractant on Food Waste Recovery through Fly Larvae Production / Meiramkulova K., Devrishov D., Kakabayev A., Kydyrbekova A., Mkilima T. // Sustainability (Switzerland).- 2022.- №14(17).- 1049 and other articles</p>
Belgibayeva Anargul, Candidate of economic Sciences, associate Professor. Professor of the Department of Business and Services	Sh. Ualikhanov Kokshetau University (KoKSU) (P8)	Teacher / researcher Course development, dissemination	<p>Experience in participating in Erasmus+ projects:</p> <p>«Development of circular economy (closed-loop economy) in partner countries based on the development and implementation of the Master's Program "Waste Management" researcher.</p> <p>«Sustainable Agriculture and Rural Development (SARUD)», 2015 - 2018 - local coordinator.</p> <p>Member of the project working group - No. AP08856316 "Development of technology for efficient processing of organic waste by thermophilic fermentation to obtain biological fertilizer", grant funding of the Ministry of Education and Science of the Republic of Kazakhstan.</p> <p>The Scopus h-index - 1. Published more than 120 scientific articles, 4 the author of textbooks and monographs.</p> <p>List of publications:</p> <p>1. Amanova S., Abdrakhmanova A., Belgibayeva A., Zhumabekova G., Saduakassova K., Sartov U., Serikbaeva S. State and Challenges of Environmental Accounting in the Republic of Kazakhstan // Journal of Environmental Management and Tourism.- 2017.- V.8.- Iss.1.- P.155-167</p>

			<p>Vikulenko J., Belgibayeva A., Denissova O., Abauova G., Tulemetova A., Sadykova R. Analysis of the development of innovative entrepreneurship for the assess their competitiveness and environmental impact factors // Journal of Environmental Management and Tourism.- Volume 12, Issue 7, P. 1861-1874.-Winter 2021, DOI 10.14505/jemt.v12.7(55).11</p> <p>Belgibayeva A., Denissova O., Kozlova M., Savchenko I., Tleubayev A., Siximbayeva G. Analysis of Sustainable Development of SMEs in Agriculture //Journal of Environmental Management and Tourism.- Volume 13,Issue 3.-Summer 2022.- P.681-694 DOI 10.14505/jemt.v13.3(59).09 and other articles</p>
<p>Aigul Kurmanbayeva, PhD with a degree in Biological sciences, associate professor in Ecology. Head of the Department of Mining, Construction and Ecology</p>	<p>Sh. Ualikhanov Kokshetau University (KoKSU) (P8)</p>	<p>Teacher/ researcher, Course development , dissemination</p>	<p>Participated of projects Erasmus programs:</p> <ol style="list-style-type: none"> <li>1. -1-2017-1- FI- EPPKA2-CBHE-JP "Improving competence in the field of sustainable waste management in the training of specialists at universities in Russia and Kazakhstan (EduEnvi)" - researcher;</li> <li>2. "Development of circular economy (closed-loop economy) in partner countries based on the development and implementation of the Master's Program "Waste Management" – local coordinator.</li> </ol> <p>Member of the project working group - No. AP08856316 "Development of technology for efficient processing of organic waste by thermophilic fermentation to obtain biological fertilizer", grant funding of the Ministry of Education and Science of the Republic of Kazakhstan.</p> <p>The Scopus h-index - 3. Published more than 150 scientific articles, 7 the author of textbooks and monographs.</p> <p>List of publications:</p> <p>Waste accumulation and geocological assessment of the territories around the landfills in Kokshetau. Kurmanbayeva A., Bayazitova Z., Talal A., Kakabayev A., Zhaparova S. International journal of geomateth is link is disabled, 2022, 23(96), стр. 179–185</p> <p>Innovative online technologies as a tool of qualified specialists training in the field of waste management. IOP Conf. Series: Materials Science and Engineering 826 (2020) 012026 IOP DOI:10.1088/1757- 899X/826/1/012026 and other articles</p>
<p>Zulfiya Bayazitova, the candidate of biological sciences, associate professor in Ecology. Professor of the Department of Mining, Construction and Ecology</p>	<p>Sh. Ualikhanov Kokshetau University (KoKSU) (P8)</p>	<p>Teacher / researcher Course development , dissemination</p>	<p>Professional experience:</p> <p>Project Manager under the grant of the Ministry of Education and Science of the Republic of Kazakhstan No. 3807/GF4 "Development of integrated technology for collecting, sorting and processing plastic bottles in small towns of Akmola region", 2015-2017.</p> <p>Executer of the project under the grant of the Ministry of Education and Science of the Republic of Kazakhstan IRN AP08956247 "Innovative application of technology for manufacturing paving slabs using household plastic waste", 2020-2021.</p> <p>Project manager under the grant of the Ministry of Education and Science of the Republic of Kazakhstan, IRN AP09259015 "Development of technology for efficient processing of organic waste by thermophilic fermentation to obtain biological fertilizer.", 2021-2023</p> <p>Participated of projects Erasmus programs:</p> <p>"Improving competence in the field of sustainable waste management in the training of specialists at universities in Russia and Kazakhstan (EduEnvi)" - researcher;</p> <p>"Development of circular economy (closed-loop economy) in partner countries based on the development and implementation of the Master's Program "Waste Management" – researcher</p> <p>Published more than 140 scientific articles, 9 the author of textbooks and monographs.</p> <p>List of publications:</p>

			<p>Waste accumulation and geocological assessment of the territories around the landfills in Kokshetau. Kurmanbayeva A., Bayazitova Z., Talal A., Kakabayev A., Zhaparova S. International journal of geomateth is link is disabled, 2022, 23(96), ctp. 179–185</p> <p>Development of integrated technology of collection and recycling of plastic in small towns Mukhamadeyeva R., Bayazitova Z., Elyubaev S., Makeyeva L., Nurmaganbetov Z. // Journal of Environmental Management and Tourism.-2018.- №7, P.1367-13765 and other articles</p>
Orynbayeva Ainur, master degree, Head of the Center of international projects management	Sh. Ualikhanov Kokshetau University (KoKSU) (P8)	Administrative staff, dissemination	<p>MSc in Natural Sciences. Fields of specialization: water resources management. Passed a scientific internship at ENU L. Gumilyov University (Nur-Sultan). List of publications: The impact of the COVID-19 pandemic on the environment / Orynbayeva A.E., Fakhrukenova I.B., Karnaukhova T.V., Tazetdinova R.M. // Proceedings of the International Scientific and practical conference "Actual scientific research in the modern world". – 2021. – №3(9). – Pp. 120-124.</p> <p>Rational use of water resources in the city of Kokshetau / Orynbayeva A.E., Fakhrukenova I.B., Karnaukhova T.V., Tazetdinova R.M. // Collection of scientific articles based on the results of the round table with All-Russian and international participation. May 15-16. – 2021 – Moscow. – Pp. 23-26.</p>
Prof. Charyyar Amansahedov Chief scientific secretary	ACADEMY OF SCIENCES OF TURKMENISTAN (AST) (P9)	Administrative staff Support for the management from AST side. Coordination of all project activity in TKM, contact to local authorities	<p>Chief Scientific Secretary, Senior expert of International Relation Department. During the last 10 years, he has coordinated UNDP projects, Tacis Erasmus, and coordinated the project of the European Commission "CAREN". Previously implemented the tasks as dean of the faculty, Vice Rector and Rector. Experienced in development of high education system of Turkmenistan. He was responsible for the curriculum and education program development in industrial engineering Programme. Coordinated MIETC Project from TKM side.</p> <p>Professor in Mechanics Engineer at Moscow State Construction University, Russia, 1991. Magister in Construction Engineering at Moscow State Construction University, Russia, 1974</p>
Orazmamed Vasov Dr. Head of Dep.	ACADEMY OF SCIENCES OF TURKMENISTAN (AST) (P9)	Teacher/researcher staff	<p>Simultaneously Dr. O.Vasov being the chief of department International relation of Academy of Sciences of Turkmenistan provides as obliged realization of a policy in the field of international scientific and technical cooperation. Supported management and coordination MIETC Project from TKM side. Implemented his tasks as head of Division of the Supreme Council for Science and Technology under the President of Turkmenistan, Department of Forecasting Scientific Trends and Development of International Relations. He has many of publications and one of them "Deep structure and geophysical features of the earth's crust in the territory of Turkmenistan"</p>
Rustam Gadzhiyev Mr. Chief Expert	ACADEMY OF SCIENCES OF TURKMENISTAN (AST) (P9)	Administrative staff	<p>Senior expert at Department of International relations. An enthusiastic professional with flexibility and strong teamwork skills, Significant skills gained over last 20 years through previous work in international projects and responsibilities. Several years Implemented task as a teacher at the Turkmen Institute of Transport and Communication.</p> <p>Most important activity in the Tacis, Erasmus, NATO, UNDP and education system of Turkmenistan, more than 20 trainings involved and about 10 projects implemented locally. R.Gadzhiyev has about 10 publications. Implemented Daily work on 2019-2151 /001-001 Project (MIETC)</p>
Dr. Charymuhammet Shallyyev	(TSIEM) (P10)	Administrative staff	<p>He is trained in Japan, US, Spain and participated in numerous international conferences organized by international financial institutions. His experience tied to the standard of the high education system in Turkmenistan. He</p>

			was responsible for the educational and curriculum development on economics. Partner in Erasmus+ “MIETC” Project. Ch. Shallyev has more than 30 publications.
Nurmammet Altyev	(TSIEM) (P10)	Teacher/research staff	Senior Lecturer, Department of World Economy. Has experience in Erasmus + projects. Participated in trainings and on-line conferences organized by various universities within the framework of Erasmus+ projects. He has written the textbook on International Ethics, 2021.
Gadam Tachmuhammedov	(TSIEM) (P10)	Technical staff	Senior Lecturer, Department of Economics. Has experience in Erasmus + projects. Participated in trainings and on-line conferences organized by various universities within the framework of Erasmus+ projects. Publications Textbook on World Economy, 2020.
Kerim Muhammedov	(TSIEM) (P10)	Teaching staff	Lecturer, Department of Accounting. Highly qualified specialist. Has experience in Erasmus + projects. Was a member of TSIF technical staff on two Erasmus+ projects. Participated in trainings and conferences organized within the framework of Erasmus + projects.
Tahyr Shallyev	(TSIEM) (P10)	Technical staff	Lecturer, Department of Accounting. Highly qualified specialist. Has experience in Erasmus + projects. Was a member of TSIF researcher staff on Erasmus + projects. Participated in trainings and conferences organized within the framework of Erasmus + projects. Publications Textbook on macroeconomics. Ashgabat 2022.
Shohrat Bashimov	(TSIF) (P11)	Administrative staff	Senior Lecturer, Department of Banking, Dean of the Department of Banking, highly qualified specialists in the field of management. He has experience in organizing and conducting Erasmus + projects. He was the coordinator of TSIF in three projects of Erasmus +. He participated in trainings and conferences organized as part of the Erasmus + projects. Publications Textbook on Bank Management. Ashgabat 2016; Textbook on International Payment Systems. Ashgabat 2019; Textbook on Banking Risks and Their Insurance. Ashgabat 2019. Textbook on financial analysis. Ashgabat 2020.
Ahror JAFAROV (Mr.)	Technological University of Tajikistan (TUT) (P12)	Manager/coordinator WP 9, WP 6, WP 7,	Head of the Centre of Computer and Educational Technologies of the Technological University of Tajikistan. Former Coordinator of TEMPUS-PROMIS Project “Professional Master’s Degree in Computer Science as a Second Competence in Central Asia”, former Coordinator of TEMPUS- DoQuP project “Documentation for the quality assurance of the study programs”, former Coordinator of TEMPUS MAPREE project “Master Program on Renewable Energy and Energy Efficiency in Buildings in Central Asia and Russia”, former Deputy Dean of the Engineering Faculty. He teaches the disciplines Non-traditional and renewable energy sources. In addition, he has very rich experience in the implementation of international projects, including TEMPUS, EIFL and CAREN projects. He is an Erasmus Mundus scholarship holder. He speaks English and Russian.



<p>Abdurasul SATTOROV (Dr.) - Dean of the Faculty of Economics and Finance of the Technological University of Tajikistan</p>	<p>Technological University of Tajikistan (TUT) (P12)</p>	<p>Teaching staff WP 2, WP 3, WP 6</p>	<p>He is actively involved in the implementation of several international programs, has repeatedly participated in professional development courses abroad, such as the People's Republic of China, the Russian Federation, Hungary, Kazakhstan, Uzbekistan. He received international certificates and improved his knowledge and skills.</p> <p>In 2013, he defended his dissertation on "The main directions of increasing the efficiency of grain production in the region (on the example of Khatlon region of the Republic of Tajikistan)" in 08.00.0 Economics and Management of National Economy (region economy) and was awarded the degree of Candidate of Economic Sciences. He is a researcher of effective teaching methods and introduces innovations in his lecture materials every day.</p> <p>He teaches economic theory, micro and macroeconomics, development economics. In addition, he has a very rich experience in the implementation of international projects, including TEMPUS projects, Erasmus. He speaks English, Russian languages</p>
<p>Uktam KIMSANOV (Dr.)</p>	<p>Technological University of Tajikistan (TUT) (P12)</p>	<p>Teaching staff WP 2, WP 3, WP 6</p>	<p>Professor, PhD on economical sciences at the Department of economics and management Technological University of Tajikistan. Author of a monograph and above 50 scientific publications.</p> <p>In the period from 2015 to 2016, he did research in the field of economics as part of the Postdoctoral program TEMPUS (Erasmus Mundus CANEM 2) at the University of Genoa (Italy). From 2019 to the present, he continues scientific research in the field of Green Economy at the Research Institute at the National University of Tajikistan.</p> <p>The area of scientific interests is Water and Energy resources, as well as green energy. He teaches the disciplines Water management, Implementation of hydropower projects and their impact on Sustainable Development, Economic evaluation of water resources, Sustainable Water use strategy/</p>
<p>Mehrangez DAVLYATOVA (Mrs.)</p>	<p>Technological University of Tajikistan (TUT) (P12)</p>	<p>Teaching staff WP 6</p>	<p>Assistant at the Department of Economics and Management, Technological University of Tajikistan. Author of above 18 scientific publications. From 2017 to the present, she continues scientific research in the field of Green Economy. The area of scientific interests is green energy. She teaches the disciplines Water for sustainable development, water management, Implementation of hydropower projects and their impact on Sustainable Development, Economic evaluation of water</p>
<p>Mehri MIRZOEVA (Mrs.)</p>	<p>Technological University of Tajikistan (TUT) (P12)</p>	<p>Administrative WP 7, WP 8</p>	<p>A specialist in the field of economics and finance, she works in the administrative and economic department as an economist in budget planning. Completed special advanced training courses in International Financial Reporting Standards (IFRS). She has many years of experience in office work in the financial and accounting field. Holder of a certificate from the Asian Development Bank for the development of a professional card for accountants according to the standard "training based on competence".</p>



Dr Zarrina Kadyrova	Tajik State University of Commerce (TSUC) (P13)	Project Manager	<p>Coordinator of projects, Professor of the Economic and Business organization Department.</p> <p>She has many years of experience as an international project manager, and has worked at TSUC for more than 10 years as Vice-Rector for Science and International Relations. Working in the international activities of the university (Erasmus +, World Bank, Soros Foundation, Eurasia Foundation), she assisted in the introduction of credit technology of education at the university, the creation of a quality management system at TSUC and in the improvement of educational programs based on ESG. She also has a contribution to the implementation of the new master's program in technology entrepreneurship in the framework of the Erasmus + project with EU and CA partners. Research interests: TVET and /Business. Author of more than 40 scientific papers in the field of higher professional education and TVET reform..</p>
Dr. Farkhod Sharopov	Tajik State University of Commerce (TSUC) (P13)	Teacher/Researcher	<p>Vice-Rector for Science and International Relations of TSUC. He began his career at the university as a lecturer in the Department of Economics and Business Organization, then worked as the head of this department, Since 2011 he was a dean of the Faculty of International Economic Relations and Law. Since 2015 - head of the department of science and innovation. Since 2020, he has been working as Vice-Rector for Science and International Relations. Dr SHaropov is Chairman of the dissertation council at TSUC, responsible for scientific activities at the university. Currently he is the supervisor of 5 dissertations in the field of economics and business, including the circular economy. Author of 50 works in the field of economics of trade and professional education.</p>
Bakhtiyor Abdulloev Candidate of Technical Science	Tajik State University of Commerce (TSUC) (P13)	Teacher/Researcher	<p>Head of the International Relations Department at TSUC. Candidate of technical Science. He has more than 10 years extensive practical experience in the implementation of international projects at the university, for instance: Internationalization of International Relations Department, Development of Educational Program (Curriculum). Also, he has experience in organizing training, seminars, and international scientific conferences with participation of partners from Tajik HEIs and from other countries of CA, Europe, Russian Federation, Belorussia. Research interests: energy conversion technologies, produced by renewable sources, energy saving.</p>
Nurmuhammad Abdullozoda Senior Lecturer	Tajik State University of Commerce (TSUC) (P13)	Researcher/Administrative staff	<p>He has been working in the department of international relations for more than 5 years. Has experience in project implementation as an admin staff. Competently holds financial and substantive documentation of projects. Conducts internal monitoring of the implementation of projects, prepares reports on the results of monitoring. He is a graduate student, completing his scientific work in the field of economic diplomacy. Author of more than 10 scientific papers in the field of diplomacy.</p>
Zamira Kadyrova Senior lecturer	Tajik State University of Commerce (TSUC) (P13)	Teacher/Researcher	<p>She is a young researcher at the World Economy Department of TSUC. Field of her research interest is financing of higher education and training of qualified specialists for the country's economy. She is a recipient of grants from the Soros Foundation, Eurasia Foundation for young research. She made presentations the results of her research at international conferences in Dushanbe (Soros Foundation) and Tashkent (GIZ). She has more than 10 publications in the field of training specialist for the economy, including for the green economy. She cooperates with the international relations department in organizing international events, including seminars, trainings, round tables and conferences</p>

<p>Mr. Alisher Pulatov, Senior Staff</p> <p>PhD candidate in Law, LLB</p> <p>Dean of School of Law, Technology and Education</p>	<p>Westminster International University in Tashkent (WIUT) (P14)</p>	<p>Management of the project's WP2.</p> <p>State of play analysis and Stakeholders analysis.</p> <p>State of play analysis analyse current situation in CA HEIs - deliverables (report 9 HEIs). Task 2.1.</p> <p>Monitoring, reporting, assessment.</p>	<p>Last 10 year, Alisher Pulatov has been an employee of WIUT and taught in the fields like Contract Law, Public Law, International Trade Law, Law of International Organizations. Currently, he is PhD candidate in the University of Law, has LLB and European Relation degree from Surrey University, did postgraduate studies in Groningen University and LLM in International Commercial Law degree from Westminster University. Last 9 year, He validated 4 master degree courses, one of them part of the CBHE project, 6 bachelor degree courses. Lead more than 15 CPD courses, in area of law, women empowerment, insurance law, legal aspects of business for more than 300 delegated. Currently coordinating 3 Erasmus project in WIUT.</p> <p>Research interest areas are Multinational Corporations, International Trade, Digital Economy and Taxation. Prior to the academic experience, Alisher Pulatov worked in different law firms, international and local private companies as an in-house lawyer.</p>
<p>Ms. Dildora Karimova Research / Teaching staff</p> <p>Master's degree in Law</p> <p>Lecturer</p>	<p>Westminster International University in Tashkent (WIUT) (P14)</p>	<p>(1) Stakeholder mapping, (2) Assess and prioritise the stakeholders , (3) Develop an understanding of stakeholders (will be responsible for working with private and public sectors).</p>	<p>Has been working as a Lecturer in Westminster International University in Tashkent (WIUT) for 9 years. Prior to joining the WIUT she was a lecturer in the University of World Economy and Diplomacy. She obtained her Master's degree at a Programme in Law and Economics from Bilkent University in Turkey.</p> <p>She completed her Bachelor's degree in Public International Law graduating from University of World Economy and Diplomacy in 2010 (Tashkent/Uzbekistan). For the last 9 years she has taught various modules like International Banking and Finance Law, Law of International Organizations, Dissertation in Law and currently she is teaching two modules, Public International Law and Corporate Crime. Her Research Interests include Public International Law, Human Rights, Women Empowerment, Corporate Criminal Liability. She has also been coaching WIUT's Jessup team for 8 years and her team won the National Rounds in Uzbekistan and got into the top 60 ranking in the International Rounds several times.</p>
<p>Mr. Omonjon Ganiev Teaching staff</p> <p>Master's Degree in Public Policy Analysis</p> <p>Senior Lecturer</p>	<p>Westminster International University in Tashkent (P14)</p>	<p>Assessment and analysis of stakeholders : Networking analysis, Stakeholder Analysis Matrix and Stakeholder Engagement Assessment Matrix.</p> <p>Tasks 2.1 and 2.2.</p>	<p>For the last 9 years he has been teaching in the field like Financial Accounting, Banking and Financial Markets, Financial Econometrics.</p> <p>His research interests include Green Finance, Public Finance, Pension, Financial Literacy. Currently he is a member of the research team of Green Growth Indicators project financed by OECD. For the last 3 years he has been a faculty mentor for CFA Research Institute Challenge WIUT students' team.</p> <p>Prior to his academic career Omonjon Ganiev worked in the Ministry of Finance of Uzbekistan and was involved in international projects related to Public Financial Management.</p>

<p>Dr. Dildora Ibragimova Research / Teaching staff</p> <p>PhD in Business Management</p>	<p>Westminster International University in Tashkent (WIUT) (P14)</p>	<p>Assessment and analysis of stakeholders : Networking analysis, Stakeholder Analysis Matrix and Stakeholder Engagement Assessment Matrix. Tasks 2.1 and 2.2.</p> <p>Will be responsible for working with financial and banking sectors / data / desk review</p>	<p>I am a professional, with expertise in academic and industry both in local and international contexts. Particularly, I have working experience in educational sector, consultancy, commercial and investment banking, and the sustainable environment field.</p> <p>My excellent interpersonal skills enable me to effectively communicate with different levels of customers, be it C-level executives or government officials. In my position of Head of Risk Management at a bank, an Assistant of director of microlending project and a Project implementor of environmental project, I gained experience in negotiating with different counterparties including board members, government representatives, and business owners on project issues.</p> <p>Thanks to my experience in the academic field, I am proficient in making and delivering presentations for different types of audience. I have excellent critical-thinking and problem-solving skills and can work well independently with little oversight due to my PhD experience and be a valuable member of a team.</p> <p>I constantly refresh and update my professional knowledge. Besides teaching financial modules at one of the leading universities in Central Asia – Westminster International University in Tashkent, I studied for and received a professional certificate in risk management - FRM (Financial Risk Manager) in February 2022.</p>
<p>Dr. Waqas Ahmed Research/Teaching Staff MBA, MA, PhD, PG Cert T&amp;L Senior Lecturer</p>	<p>Westminster International University in Tashkent (WIUT) (P14)</p>	<p>Responsible for design of field survey for qualitative research Will conduct Stakeholder Mapping and Entropy to design relevant themes Will suggest policy suggestions for policy development based on regional interests.</p> <p>Tasks 2.1, 2.2, 2.3 and 2.4</p>	<p>Ph.D. in Management Science &amp; Engineering from Nanjing University of Aeronautics &amp; Astronautics, China, in 2021, his MBA from Quaid-e-Azam University Pakistan in 2004, and his MA Management from the London Metropolitan University, UK, in 2012. He got the prestigious Chinese Government Scholarship (2015-2019) and was awarded Best Researcher and Service Oriented Employee for AY2020/21.</p> <p>He has published over 13 SCI/Scopus publications. His areas of interest include sustainability, innovation management, regional economics, decision sciences, conflict management, public policy, environmental issues, and entrepreneurship.</p> <p>Ali, S., Ahmed, W., Solangi, Y. et al. (2021) Strategic analysis of single-use plastic ban policy for environmental sustainability: the case of Pakistan. <i>Clean Techn Environ Policy</i>. <a href="https://doi.org/10.1007/s10098-020-02011-w">https://doi.org/10.1007/s10098-020-02011-w</a></p> <p>Ahmed, W., Tan, Q., Shaikh, G. M., et al. (2020). Assessing and Prioritizing the Climate Change Policy Objectives for Sustainable Development in Pakistan. <i>Symmetry</i>, 12(8), 1203. doi:10.3390/sym12081203</p> <p>Ahmed, W., Tan, Q., Solangi, Y. A., &amp; Ali, S. (2020). Sustainable and Special Economic Zone Selection under Fuzzy Environment: A Case of Pakistan. <i>Symmetry</i>, 12(2), 242. doi:10.3390/sym12020242</p>
<p>Dr. Nilufar Rashitova, MSc in Applied Economics, PhD Acting Associate Dean</p>	<p>Westminster International University in Tashkent (WIUT) (P14)</p>	<p>Research &amp; Administrative Works Data Collection and Analysis for Tasks 2.1 and 2.2. Financial reporting, contracts, monitoring and evaluation, other administrative works.</p>	<p>She received her PhD degree in Econometrics and Statistics field from Tashkent Institute of Finance. Besides her administrative responsibilities, she teaches modules related to quantitative methods, such as Quantitative Methods, Financial Mathematics. Prior to joining WIUT, she was a Head of the Statistics Department and acting Associate Professor at the Tashkent Institute of Finance. During this period, she has taught various modules related to Statistics: Statistics, Financial Statistics, International Statistics, Econometrics, and System of National accounts. While working at the Tashkent Institute of Finance she was involved in the curriculum development process.</p> <p>Dr. Rashitova is the author of many textbooks, manuals, and research articles. Her research interests include System of National Accounts, Green GDP, Development Economics, and Structural Changes in the Economy.</p>

<p>Mr. Akhtem Useinov</p> <p>BSc (Hons) Economics with Finance MSc in Applied Economics - Class of 2023 Senior Research Development Officer</p>	<p>Westminster International University in Tashkent (WIUT) (P14)</p>	<p>Research &amp; Administrative Works</p>	<p>Research interests in Development Economics, Labor Economics, Agricultural Economics, Health Economics, and Public Health. Akhtem practises evidence-based research with a focus on Uzbekistan and other Central Asian countries. Teaching project: "Applied Econometrics" training course for PhD students and lecturers of Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIAME) within the project "Establishment of Agricultural Innovations and Resources Lab", 2021 Technical implementation of the Price and market information system and related policy analysis for selected agricultural value chains in Uzbekistan, FAO, 2021-2022, <a href="https://fpma.wiut.uz/">https://fpma.wiut.uz/</a></p>
<p>Dr. Sardor Azam</p> <p>DSc in Economics Head of the Centre for Interdisciplinary Applied Research</p>	<p>Akfa University (Akfa) (P15)</p>	<p>Project Manager WP9</p>	<p>He graduated from the University of World Economy and Diplomacy (BA in International Economics [2005], MA in World Economy and Geopolitics [2007]) and Portland State University (MS in Economics [2012]). He worked in teaching, research and management positions in several local universities, research institutes, and the Presidential Administration. While at the Institute of Forecasting and Macroeconomic Research, a government think-tank, he was involved in different research projects (on macroeconomic development, international trade-related issues, etc.). He served as a consultant for UNDP, GEF and other international organisations. He was a deputy project manager for several local research projects too. While at the Presidential Administration, he managed a variety of higher education projects at a country-level, and contributed substantially to the preparation and adoption of such Presidential decrees on higher and secondary specialised education issues as "Strategy of development of higher education system of Uzbekistan till 2030" (Oct, 2019), "On measures of providing financial and academic independence to several higher education institutions" (Dec, 2021), etc. He holds a Doctor of Science degree [2018] and a Senior Scientific Researcher rank [2017]. He has over 20 research articles published in local and international peer-reviewed journals. Main areas of his research interest are development economics, international trade and industrialization.</p>
<p>Dr. Shoirahon Odilova</p> <p>PhD in Enterprise Management Professor</p>	<p>Akfa University (Akfa) (P15)</p>	<p>Teaching Staff/Researcher WP9</p>	<p>Senior Lecturer at Akfa University with managerial experience in Shanghai. She is also an experienced professional with a demonstrated history of working in the higher education industry in major cities of China and competent at facilitating research projects within designated time frames. She holds a PhD degree in Enterprise Management from Donghua University, Shanghai (2017). She has published more than 10 scientific papers in various journals and conferences. She is also currently working in a research project financed by Ministry of Innovation of the Republic of Uzbekistan on "Development of a methodology for assessing the innovative and economic potential of regions and sectors of the economy of the Republic of Uzbekistan, as well as identifying factors influencing them", "Result Based Management in local executive authorities of Uzbekistan" of UNDP and other funds. Her scientific research interests are: business economics, sustainability, intelligence, innovative markets and intellectual property (IP).</p>

<p>Dr. Mansurkhon Kamalov</p> <p>PhD in Law Associate Professor</p>	<p>Akfa University (Akfa) (P15)</p>	<p>Teaching Staff</p> <p>WP9</p>	<p>He graduated from the University of World Economy and Diplomacy (BA in International Law [2001], LLM in International Commercial Law from the University of Westminster [2003]). He did PhD in Law at Tashkent State University of Law [2010]. He started working as a junior teacher at the University of World Economy and Diplomacy in Tashkent in 2001. Later he worked in teaching positions in several local universities and as a lawyer at business organisations.</p> <p>He was a vice rector on academic affairs at Tashkent State University of Law. He was leading as a head the fundamental research project on Corporate Governance financed by Uzbek government and also was involved in Jean Monnet project while he was teaching at the University of World Economy and Diplomacy. He has over 50 research articles published in local and international peer-reviewed journals.</p>
<p>Raufhon Salahodjaev</p> <p>PhD in Economics Senior Research Fellow at the Centre for Interdisciplinary Applied Research</p>	<p>Akfa University (Akfa) (P15)</p>	<p>Researcher</p> <p>WP9</p>	<p>Dr. Raufhon Salahodjaev conducts academic and policy research on international economics, institutions, gender equality, energy economics, sustainable development and human capital in both Eurasia and around the world. He has published more than 70 peer-reviewed journal articles in top journals across social sciences.</p> <p>He has published academic books with Edward Elgar Publisher and Nova Science Publisher. He also founded ERGO Analytics, a private research think tank in Uzbekistan aimed at conducting high quality policy relevant research. He holds a PhD in Economics.</p>
<p>Bobir Odilov</p> <p>MBA</p>	<p>Akfa University (Akfa) (P15)</p>	<p>Teaching/Administrative Staff</p>	<p>He has completed his Bachelors as well as Masters degrees at Ritsumeikan Asia Pacific University (Bachelor of Business Management and Master of Business Management). His specialisation is International Management and Marketing.</p>
<p>Senior Lecturer and Academic Advisor</p>		<p>WP9</p>	<p>He has performed a manager role at Apple, Inc. in Japan for over 5 years, and has been researching Customer Value Creation in Retail Environment, along with Corporate Social Responsibility of firms.</p> <p>His research interests: Value Creation, Behavioral Marketing, CSR, Sustainability.</p>

### 2.1.4 Cost effectiveness and financial management

#### Cost effectiveness and financial management (n/a for prefixed Lump Sum Grants)

The process of budget allocation began with thorough understanding of the project's aims. This has been synthesised to describe the work packages and the project's deliverables. Each partner was then able to estimate, based on previous European project work experience, the effort required from each key role (Manager, Teaching, Technical, Admin). Once this was accomplished, the lead partner adapted the work packages and deliverables to ensure that the right mix of deliverables was included, so that appropriate resources were allocated. Each WP has been allocated a lead partner who will be responsible of archiving the objective in time with the proposed budget.

In addition, project management time of each partner is allocated under the 'Project Management' WP1 to enable them to attend the partner meetings and to coordinate the project at their respective institutions. This resulted in a 36-months planned project, necessary time for all the partners to properly address the project's objectives.

To ensure the preparation according to guidelines and cost effectively, monthly salaries for different staff categories, the travel distances, costs, accommodation costs and subsistence costs in each country, and the supporting national documentation were collected from all partners. All expenses were checked for authenticity and adjusted openly. Equipment purchases were agreed to be minimal.

Attention has been paid to allocate the budget and workload fairly between partners as well as between EU and all CA partners. Budget allocation is planned in the project application phase in mutual understanding. WP and tasks are planned and budgeted by HEI pairs to complete the tasks of each WP and to be responsible of archiving the objective in time with the proposed budget. Budget was finally consolidated by EKTU, and the partners have accepted it.

Majority of meetings will be organized online. Travels and face-to-face meetings are combined to project events and trainings when possible. As many as possible of the trainings and workshops are arranged online or hybrid mode to allow also stakeholders from more distance and rural areas to participate. Project involves partners in all WPs in an economic way by using digital tools as much as possible. Project materials and products are easy to access and easy to spread with the common e-platform, Google Drive. The project's face-to-face meetings are planned to be in every half year. Meetings have both a common management agenda (concerning finance, staff days, and travel) and a WP content agenda. Minutes are recorded and saved on an on-line platform timely. The dissemination activities utilized the documents in electrical forms as much as possible. This will cut down the printing costs and make the dissemination faster and more efficient. Co-financing covers: associated partners' workdays, translation and interpretations needed in meetings and everyday project activities, wider participation to project events by partners' staff, publications in each HEI's own journals and series.

### 2.1.5 Risk management

#### Critical risks and risk management strategy

Risk	Description	Work package	Proposed risk-mitigation measures
1	Change of leadership Impact: high Likelihood: low	WP1	Develop a smooth transition plan to other partner of Consortium: Ensure that there is a clear plan in place for the transition of leadership responsibilities and that all relevant parties are aware of their roles and responsibilities.
2	Coronavirus Pandemic Impact: high; Likelihood: low	All WP	Implement remote working options; Communicate regularly and transparently with stakeholders; Monitor and adapt to changing circumstances
3	Changes in the composition of the team itself Impact: low ; Likelihood: low	All WP	A team member may leave, so a potential replacement from the list of volunteers involved in the project will be laid
4	The implementation of the project goals in Turkmenistan requires the strong support of the Turkmen Government Impact: middle; Likelihood: middle	All WP	Project deliverable will be implemented basing on the governmental co-support, reporting and concordance



5	Lack of communication/ internet access Impact: high; Likelihood: middle	All WP	Use of alternative communication channels: For TKM: Slack, telegram, emails
6	English language competencies limitation Impact: low; Likelihood: low	All WP	More serious/distributed attention to the English language study
7	Weak access to the staff at Remote arias Impact: middle; Likelihood: low	All WP	An increase in activity with remote stakeholders by to disseminate findings widely across the participated institutions, and thus provide a high level of impact
8	Firms are not interested in contribute to the educational process Impact: high; Likelihood: low	All WP	Test different approaches, tools of communication, small focus groups, explaining better benefits for them
9	Budget and cost overruns Impact: middle; Likelihood: low	All WP	Establish cost controls: Establish cost controls to ensure that costs do not exceed the project budget and take steps to address any cost overruns as soon as they are identified
10	Schedule delays Impact: low; Likelihood: middle	All WP	Establish a project schedule monitoring system Have a regular review and assessment Communicate regularly with project team members
11	Lack of resources: The project may require more resources than initially planned, such as personnel, equipment, or materials, which could result in delays or added costs Impact: middle; Likelihood: low	All WP	Have a contingencies budget Use a resource leveling approach: Use a resource leveling approach to ensure that resources are used efficiently and that resource shortages do not cause delays or added costs
12	Changes in regulations or laws: Changes in regulations or laws may require changes to the project, which could result in delays or added costs Impact: high; Likelihood: middle	All WP	Involve legal experts in the project, such as a lawyer or compliance officer, to ensure that the project is in compliance with all new relevant regulations and laws
13	Political and social instability Impact: high; Likelihood: low	All WP	Depends on individual case, develop adaptation implementation plan
14	Dependence on external factors: The project may be dependent on external factors such as weather, natural disasters, or the availability of equipment, which can cause delays or added costs. Impact: high; Likelihood: middle	All WP	Reschedule offline activities, move online if possible, use alternative channels of communication (phone, messengers)
15	Lack of clear communication: Miscommunication or lack of communication among project team members, stakeholders Impact: low; Likelihood: low	All WP	Use project management software (for example Slack) Encourage open communication Use clear and concise language when communicating information related to the project to ensure that it is easily understood by all parties involved. Provide training: Provide training for team members on effective communication techniques and how to use project management software.



## 2.2 PARTNERSHIP AND COOPERATION ARRANGEMENTS

### 2.2. 1 Consortium set-up

Consortium cooperation and division of roles (if applicable)

#### **P1. University of Santiago de Compostela (USC)**

USC has coordinated several projects in Central Asia such as lot 9 "CENTAURI", MARCO XXI and ARCADE in Central Asia, etc. As well, USC has numerous bilateral agreements with CA HEIs, receiving students from Central Asia on the constant annually.

USC is an historical University, founded in 1495, with more than 2,070 Teaching and Researcher Staff (about 38% female) and more than 300 research groups. Today, USC typically ranks within the top 5 of Spanish universities and is one of the International Campus of Excellence. USC has participated actively in more than 200 projects under various European Union RTD Framework Programmes, H2020 and Initiatives, being the resources obtained by R&D accounting for more than 20% of its total budget.

USC has coordinated several projects in Central Asia such as lot 9 "CENTAURI", MARCO XXI, MIETC and ARCADE in Central Asia. As well, USC has numerous bilateral agreements with CA HEIs, receiving students from Central Asia on the constant annually. Regarding Circular Economy and Sustainability, USC researchers have participated in several projects on the topic: Transition from linear 2 circular: policy and innovation (R2PI) (2016-19) and Servicizing Policy for Resource Efficient Economy (SPREE) (2012-15), funded by the European Union programs Horizon 2020 (H2020) and VII Framework Program - Cooperation, respectively. Nowadays, USC is participating as a member in the project "Next generation water-smart management systems: large scale demonstrations for a circular economy and society (WATER- MINING)"(H2020). These projects analysed strategies and business models useful for reducing the environmental impact of companies and organisations, as well as promoting their participation in initiatives related to the circular economy.

Apart from bachelor degree, it is remarkable the Master Degree Program Economic development and innovation that includes in its curriculum the speciality of Sustainability and Circular Economy. Some of the relevant subjects taught in this speciality include Circular Economy, Circular and Sustainable Business Models, Tools for Circular Economy Assessment and other related subjects. USC counts on a diversified international team of professors to support the project.

#### **P2. AYeconomics Research Centre (AY)**

AYeconomics Research Centre (P2), is an innovative company specializing in the socio-economic development of transition countries, especially from Central Asia. AYeconomics has experience running market analysis in this region, taking into account language barriers (data is available in Russian and local language) and data scarcity problems. They have run two research projects funded by the Ministry of Education of Kazakhshtan. AY participated in the elaboration of the Local Strategy for the City Council of Santiago de Compostela (2022), the first Strategy of Circular Economy in this municipality. It included proposals for different fields related to Circular Economy, as eco-design, urban planning, mobility, water and waste management. They are one of the partners in CBHE project "Development of a Master Programme in the Management of Industrial Entrepreneurship for Transition Countries / MIETC" where we contribute into Stakeholders engagement, mapping and communication. AYeconomics has international team to support the project and adequate resources to implement their tasks.

AYeconomics has experience in developing online platform and software ([www.smart-tio.com](http://www.smart-tio.com)), they will co- lead WP 6 and WP2.

#### **P3. University of Naples Federico II (UNINA)**

Founded in 1224, the University of Naples Federico II (P3) is the oldest public non-sectarian university in the world. It was Europe's first university dedicated to training secular administrative staff, and one of the oldest academic institutions in continuous operation. Federico II is the third University in Italy by number of students enrolled, but despite its huge size it is still one of the best universities in Italy, being particularly notable for research. University of Naples Federico II offers 141 courses in 13 teaching areas (Agriculture, Architecture, Economics, Pharmacy, Law, Engineering, Medicine and Surgery, Veterinary Medicine, Biotechnological Sciences, Mathematics, Physics and Natural Sciences, Political Sciences, Sociology, Humanities). So, it offers courses in every existing academic discipline, which lead to 155 graduate level degrees. Research facilities provide support for all these courses. Students have the chance both to pursue intellectual development and to acquire professional skills.

The Department of Civil, Architectural and Environmental Engineering (Dicea) of the University of Napoli Federico II has been established in 2013. The main objective of research and educational activities at Dicea is to develop appropriate tools and train new generations of highly skilled engineers, technicians and researchers, and to promote technological innovation and processes in the fields of civil engineering.

Dicea staff consists of 22 full professors, 22 associate professors and 28 young researchers and its education supply is made of four bachelor degree, four master degree and one PhD course.

Within the Dicea, the Urban and Territory Planning research unit (TeMALab) works both for education and for scientific research in the field of Land use planning, urban mobility, urban competitiveness, transport-land use interaction, real estate valuation and sustainable development. This research group conducted several researches related to improve the quality of life of the citizens and attractiveness for the localization of new economic activities. We offer to learn skills to design GIS governance tools, in order to support decision- making of stakeholders in economic challenges of urban areas. For further information [http://www.tema\\_lab.unina.it](http://www.tema_lab.unina.it)

This research team was involved in some national and international projects related the topic of sustainable development of urban and territorial. In particular, P3 participated to the the Erasmus+ project MIETC. University of Naples Federico II (P3) has experience in running projects in territorial analysis to support the ecological transition and sustainable development of territorial and urban areas. The P3 work team will contribute with other partners to the development of subjects related to sustainable

competitiveness.

#### **P4. FHM Bielefeld**

The FHM is a private, non-profit, and state-approved University of Applied Sciences. The FHM has been founded in 2000 by medium-sized enterprises and educational institutions. Since then, it has developed into one of the most successful private universities in Germany with a strong focus on the needs of SMEs. The FHM's goal is to provide students with necessary theoretical and hands-on skills for their later business career. The FHM' concept focuses on practical career orientation, individual tutoring, and small group sizes. At present, there are approx. 5200 students in BA, MA and MBA programs, 100 in doctoral programs, and 630 in scientific further education. The programs on offer include 32 BA study programs, 9 MA programs, 1 doctoral program in cooperation with the British universities of Gloucestershire and Worcester, and 9 programs in the field of scientific further education. Study programs cover 3 main areas: Economics; Media & Communication; HR, Health, and Social Work. The FHM employs 95 professors and cooperates with about 240 experts from business sector as guest lecturers. Apart from the central FHM campus located in Bielefeld, the FHM maintains 8 further locations in Cologne, Frechen, Hanover, Rostock, Schwerin, Bamberg, Dueren, and Berlin. The study programs are offered in full, part time, and as distance learning. Various educational provisions for supporting Lifelong learning are coordinated and managed by the FHM' Institute of Continuing Education and Competence Development, which responds to the needs of target groups with different professional, educational, and social backgrounds. Flexible mechanisms on recognition of available skills and competences have been elaborated and implemented. Department of Competence Diagnostics and Development provides different tools and measures for detecting, estimating, and developing potentials of learners and employees. In addition, the FHM maintains the Center for Sustainable Governance (CSG) which is working closely with the Federal Ministry of the North-Rhine Westphalia. The mission of the CSG is to elaborate the ecological, social, and economic criteria for industries and companies, to monitor their compliance and to control their sustainable development. To this end, CSG develops reliable and practical tools and solutions for measuring sustainability of state, municipalities, and companies.

The FHM's Center for Sustainable Governance CSG is actively engaged in the design and implementation of strategies and tools towards promoting sustainable development at federal state, regional and local level. One example is the so-called Sustainability Compass that allows transparent and systematic assessment of various sustainability criteria in relation to any level of action. Another example is open information portal for sustainability issues that is centrally coordinated by CSG. This portal is being maintained in 2 languages – German and English – and provides daily updates all around sustainability topics (<http://www.csg-today.org/>).

Currently, FHM is coordinating two E+ CP projects that address the challenges of sustainable growth, particularly the needs of SMEs in transitioning to Circular Economy (L2C) and reducing packaging or turning to more sustainable forms of packages (Packless). Both project are placed in the sector of VET and aims to produce trainings and solutions for the business sector to pave the way towards more circularity and sustainable growth. These experiences and concrete solutions will be incorporated and sharing within project, offering a solid foundation for further adaptation and development according to countries' specific needs and peculiarities.

#### **P5. D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU)**

D.Serikbayev EKTU is a leading technical university that has been successfully raising highly qualified engineering personnel since 1958.

The University holds leading positions in international and national rankings, bachelor's and master's degree programs are internationally accredited, including with the assignment of the EuroAce mark. The university is a member of international associations, more than 6,000 students study at the university, classes are taught by about 600 highly qualified teachers, including foreign scientists from partner universities.

East Kazakhstan is an industrial center of innovative economy in the field of non-ferrous metallurgy, nuclear industry, power engineering and agro-industrial complex, and D.Serikbayev EKTU plays an important role in the development of the region.

The main academic goal of our university is to form a practice-oriented platform for organizing academic activities for high-tech production. To achieve this goal, in the period from October 11 to 13, 2022, the delegation of the EKTU took part in the CDIO Asian Regional Meeting at the Singapore Polytechnic, Singapore. Within the framework of the meeting, the university successfully passed the regional stage of joining the representatives of the CDIO Global Initiative to Reform and develop a unified quality of engineering education in the global world.

EKTU develops information and educational infrastructures (LMS, educational services export platform) integrated with external global resources. Which corresponds to the relevance and sufficiency of experience to participate in such an important project.

For more than 40 years, the Faculty of "School of Business and Entrepreneurship" of EKTU has been training specialists in economics, management, finance, accounting and auditing, and taxation. Graduates of the faculty, and now the school, occupy leadership positions in large industrial enterprises of the region and Kazakhstan. Faculty members regularly undergo advanced training and internships in their subject area, adopting best practices. Faculty scientists participate in grant funding projects from the Ministry of Science and other funded programs.

Specialists in the field of economics are supplemented by employees of the educational program "Life safety and environmental protection". They have been involved in environmental issues for many years, including research, recycling, recycling and waste disposal projects. The work of the educational program is based on the material base of the Competence Center in the field of ecology and life safety. The Center has a laboratory "Environmental Health improvement". The teaching staff of the educational program also conducts advanced training courses for employees of enterprises of the mining and metallurgical industry

of East Kazakhstan region.

#### **P6. KARAGANDA UNIVERSITY OF KAZPOTREBSOYUZ (KarUK)**

Karaganda University of Kazpotrebsoyuz (formerly Karaganda Economic University of Kazpotrebsoyuz) has been operating in the educational services market since 1966. The University trains personnel at all three levels of the national education system: bachelor's degree - master's degree - doctoral PhD. In accordance with the state license, the university implements 28 educational programs of higher and 17 postgraduate education. Three recently opened educational programs are innovative. The university has an internal quality assurance system, all educational programs are accredited. The number of students is about 5500 people at all levels of education.

Karaganda University of Kazpotrebsoyuz signed the Magna Carta and is a member of the International Association of Universities, the Association of Asian Universities, the Eurasian Association of Economic Universities, the Network University "Cooperation". It has over 100 valid international agreements with universities from 28 countries of the world.

The KarU of Kazpotrebsoyuz has repeatedly taken part in international projects and has experience in implementing the best EU practices.

#### **P7. ALIKHAN BOKEIKHAN UNIVERSITY (ABU)**

Alikhan Bokeikhan University- ABU (previous name: Educational institution "Kazakh Humanitarian Juridical Innovative University") has its origin since 1998. ABU is largest one private multi-disciplinary university in Kazakhstan having a highly qualified teaching staff.

ABU has 3 faculties (Law, Humanitarian, Information Technologies and Economics), 9 Departments, providing 32 bachelor programs, 20 master programs, 6 doctoral programs (PhD) for over 7,5 thousand students. .

ABU is a signatory to the Great Charter of Universities (Bologna, Italy, 2010); and member of the Association of Asian Universities (since 2012); the Association of Economic Universities of South and Eastern Europe and the Black Sea Region (ASECU) (since 2019), etc.

University accredited by the Independent Agency for Accreditation and Expertise of the Quality of Education until February 21, 2024 (Certificate's registration number is HE-IA-00003).

ABU has concluded a cooperation agreement with universities in Uzbekistan, Kyrgyzstan, Turkey, Russia, Greece, Italy, Poland and Bulgaria, etc. In total over 90 partnership HEIs and organizations.

In order to implement creativity among teachers and students, ABU created Business Incubator, Abai IT-Valley Regional Technology Cluster (supported by the Ministry of Digital Development, Innovation and Aerospace Industry of the Republic of Kazakhstan, Astana Hub, the Center for the Development of Payment and Financial Technologies of the National Bank), Center for Inclusive Education (Kazakhstan-Israel), Silver University (Third Age University) and other projects. The management of the university actively supports the initiatives and projects of students, civil society of the city, and it is the university of the third mission.

The students of ABU have a great potential in the implementation of eco-friendly projects. Thus, a paper recycling project is being implemented (special bins are available for collection). The university has introduced an electronic document management system.

ABU has cooperation agreements with organizations and industrial enterprises. More than 150 partnership agreements and MOUs with companies in the region and the country.

ABU has not previously participated in ERASMUS+ CBHE projects, which will be a good experience of implementing EU best practices. The ABU Team will co-lead WP5.

#### **P8. Sh.UALIKHANOV KOKSHETAU UNIVERSITY (KoKSU)**

Sh.Ualikhanov Kokshetau University is one of the leading regional universities in the Northern Kazakhstan. Ualikhanov University was established in 1962. Today Sh.Ualikhanov Kokshetau State University is a modern, actively developing higher education institution with a worthy tradition, great potential and serious plans for the future.

Academic staff consists of over 500 professors. More 7000 students study at the university. The university offers 58 educational programs on Bachelor (4 years), 40 Master (2 years), 10 Ph.D (3 years).

One of the priority tasks of the KokSU is to ensure the competitiveness and demand for the graduates, international recognition of diplomas, and high economic and social status of the teaching staff. Today the university gradually build a strategy integration with the world educational and scientific information system.

Lecturers and students participate in international educational programs such as: DAAD, IREX, LOGO, Erasmus +, Erasmus Mundus, State Scholarship "Bundestag", "Bolashak. The university actively pursue a program of academic mobility for teachers and students.

KokSU ranks fifth in terms of the number of implemented and ongoing joint European educational projects in the Republic of Kazakhstan. We have successfully implemented 6 European educational projects TEMPUS IV, 2 Erasmus Mundus projects and 5 ERASMUS+KA1 "International Credit Mobility" projects, 9 ERASMUS+KA2 "Capacity Building for Higher Education" projects.

In 2009, Sh. Ualikhanov Kokshetau State University awarded the International Award "Millenium" for effective use in the professional field of advanced technologies, the development and implementation of extraordinary, innovative solutions within the framework of the program "Leaders of the XXI Century".

According to the rating of the Independent Kazakhstan Agency for Quality Assurance Sh.Ualikhanov Kokshetau State University ranks twelfth among multidisciplinary universities of the country.

#### **P 9. ACADEMY OF SCIENCES OF TURKMENISTAN (AST)**

Academy of Sciences of Turkmenistan (re-established in 2009) is the higher research institution, aimed to

consolidate efforts of scientists for implementation of fundamental researches in different spheres of science, national economy, rich centuries-old spiritual heritage and solution of social and economic problems. AST is the center of a Turkmen scientific-educational network where the main basic server and the center of remote training are located. The main duties are development of international scientific and technical collaboration of research and education support, creation of a highly effective system of state support for international scientific and technical cooperation to ensure the concentration of the scientific potential in priority directions for our country, and the development of science and technology.

AST is committed to receive strong and enduring partnerships with all project partner countries organisations, Turkmen higher education, R&D and Governmental Institutions and developed a form of consultation processes with Turkmen auditoriums, professors and researchers. At present 6 research (and Center of Technology) institutes work under authority of Academy of Sciences of Turkmenistan. Important researches on physics and mathematics, chemistry, geology and technical sciences, medicine, biology, agricultural sciences and humanities are carried out in them; these researches will increase power and international authority of our state. Academy of Sciences of Turkmenistan is the coordinating centre of researches, carried out by the higher educational establishments and research institutes of different ministries and agencies. AST, unlike the classical academy of sciences of other countries, functions as a ministry of science and conducts a policy in the field of science for all educational institutions. In this regard, the Academy coordinates scientific activity of institutes, universities and educational organizations. In the Academy, there is a commission for the approval of curricula, study programs, textbooks for higher educational institutions. In connection with the foregoing, the Academy of Sciences has a great opportunity to introduce and extend the education and training systems in various branches of the economy. AST can contribute to the project and provide support in all WPs as well as in other Project WPs. AST will support the leading partner of WPs and make all effort in collaboration with all key stakeholders to actively engage with the National associated partners in implementation project ideas and submitting those for potential inclusion into the project line.

The concept of development of the education system in Turkmenistan is aimed at creating and wide range educational environment and providing the education system at all levels with improving the quality and improving teaching methods as well as preparation of new programmes.

Modernization of the economy system is impossible without the training of new generated specialists, corresponding to high quality standards and the implementation of continuous professional development of the existing personnel. In these conditions, the improvement of the system of training young specialists is of particular importance and AST will provide significant support in the project implementation.

#### **P10. TURKMEN STATE INSTITUTE OF ECONOMICS AND MANAGEMENT (TSIEM)**

Turkmen State Institute of Economics and Management, which trains specialists in the field of economics, was established in 1980, January 31 (TINE) based on the Faculty of Economics of Turkmen State University and named Turkmen Institute of National Economy. On April 14, 2008 the Turkmen Institute of National Economy was renamed to Turkmen State Institute of Economics and Management, due to the objectives with the direct assistance and attendance of the President, on September 28, 2011 was opened-the-art economic town, equipped with the latest hi-tech that meets international standards. There are the faculties of Economics, Finance, Management, Marketing and Professional Development in Turkmen State Institute of Economics and Management, which has the following departments: Economics, Accounting, Economic Analysis and Audit Statistics, Economics and Law, Finance, Banking, Public Science, Economic Informatics, Management, Information Systems; Foreign languages, Marketing, Labor Economics, Advanced Mathematics, and Physical Education. For the implementation of the interactive learning process in each school building there are lecture halls equipped with modern computers, training projectors, and also specialized lecture rooms for banking, stock exchanges, accounting, marketing, assessment of food products, marketing and expertise of non-food products, commodity research and designing; the laboratories for quality of food and non-food products. At present, the departments conduct several scientific research works on various industry areas of the economy. Their results were implemented in the ministries and agencies of the country. Dozens of young teachers and students of the institute participate and win prize-winning places in competitions for young scientists, which are held in the country. The use of technology-enhanced tools has increased, and important achievements have been made in enhancing the diversity and quality of the Institute, products and services, and in results-based management.

#### **P11. TURKMEN STATE INSTITUTE OF FINANCE (TSIF)**

Turkmen State Institute of Finance was founded July 8, 2011, is engaged in preparation of specialists and bachelors in the field of finance and banking. The institute operates 4 faculties (finance, banking, tax and taxation, accounting and auditing) and 10 departments (Social sciences, Finance, Banking, Economic theory, Accounting, Taxes and taxation, Higher mathematics, Insurance, Information technology, Foreign languages; Physical training).

Institute preparing specialists and bachelors for the economic sector. The institute also has training programs - Research Centre; Development educational center. Institute since its foundation took part in 3 such projects and successfully implemented its role.

The legislation of Turkmenistan in the field of education provides a 2-level training of qualified specialists, one of which is the European credit system, bachelors and masters degrees. In this regard, the participation of our students and teachers in this project will allow us to acquire the necessary experience of the European universities in the field of higher education. For the implementation of the interactive learning process in each school building there are lecture halls equipped with modern computers, training projectors, and also specialized lecture rooms for banking, stock exchanges, accounting, marketing, assessment of food products, marketing and expertise of non-food products, commodity research and designing; the laboratories for quality of food and non-food products. At present, the departments conduct



several scientific research works on various industry areas of the economy. Their results were implemented in the ministries and agencies of the country.

#### **P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN (TUT)**

Technological University of Tajikistan (TUT) prepares high qualified specialists in the areas of Information and Communication Technologies, Food and Light Industrial Technologies, Management, Economics and Design. TUT has 9 faculties and 23 graduation departments, students are prepared in 39 fields of study. Presently, 6000 students are enrolled in TUT based in three-cycled education (Bachelor, Master, and PhD). In 2005 TUT was selected by the Ministry of Education and Sciences of the Republic of Tajikistan as a pilot university on introduction of Bolognese credit education system. Therefore, taking into account the complete introduction of the system and based on achieved positive results, Ministry of Education and Sciences of the Republic of Tajikistan recommended other HEIs in the country to launch credit education. TUT has signed cooperation agreements with more than 78 foreign HEIs. In the frame of the established cooperation there is being carried out a number of scientific-research works, are made students and teachers' exchanges with the purpose of internships and participation in various mobility, symposiums and conferences. In regards to participation in the TEMPUS Program, TUT since 2008 actively has been participating in the implementation of several TEMPUS and Erasmus+ projects of European Commission. The university participates in the implementation of the project as a beneficiary and operates according to the distribution of project tasks through close cooperation with European partners based on the work plan. Beneficiaries gather the necessary experience by participating in planned events and professional seminars and trainings by learning modern and advanced methods and methods, as well as studying the best practices of European universities. Also, in order to gain the necessary experience, the beneficiaries can share their experience through the use of consultative methods, through the creation of an electronic portal for the exchange of work information and the collection of documents to be developed. At the same time, the organization of special seminars between the beneficiaries on the exchange of opinions in the direction of considering the project issues will be a good means of exchange and cooperation between the beneficiaries. Technological University of Tajikistan will contribute to the project through the implementation of a special Work Package for the development of an electronic platform and its implementation at the regional level for all project partners. For this, the university has adequate resources, especially human resources, which have honed their professional skills and project-based skills as a result of the implementation of more than 16 Erasmus+ projects.

#### **P13. TAJIK STATE UNIVERSITY OF COMMERCE (TSUC)**

Tajik State University of Commerce (TSUC) is one of the leading HEIs in Tajikistan in the fields of economics and management. TSUC founded in 1987 on the basis of the Trade Institute. Today, TSUC, with more than 5 thousand students and more than 250 teaching staff. University is a main player in the market of education services in the Republic of Tajikistan.

Tajik State University of Commerce provides 17 programs in the fields of economics and business. The university has a branch in the form of the Institute of Economy and Trade in Sogd region, the Gymnasium in Dushanbe, three faculties (, and 14 academic departments.

Training is conducted on Tajik, Russian, and English. TSUC degrees are given in economics, finance, accounting, audit, management, marketing, international relations, state and local governance, tourism, information systems, computing, etc. It has several dozen international partner universities in more than 12 countries. Currently, the student and staff mobility program is implemented with universities in Europe, the Russian Federation, Belarus, Ukraine, Kazakhstan, Uzbekistan, South Korea, China, etc. TSUC is an active member of the Erasmus+, Eurasia Foundation, and OSI programs.

Without a doubt, at TSUC you will find a very hardworking group of people who are highly motivated and qualified to undertake new tasks eagerly to solve any challenges that may arise, as we have had a long-years' experience in the framework both in Erasmus+ KA1 and KA2.

#### **P14. Westminster International University in Tashkent (WIUT)**

Westminster International University in Tashkent (WIUT) is the first international university in Uzbekistan. It was established in 2002, in partnership with the University of Westminster (London). WIUT's mission is to provide International Standards of Education and Research Opportunities that contribute to the Intellectual, Social and Professional development of the Central Asian communities as well as Global Community.

WIUT students are taught by an academic team with significant international experience using a dynamic, student-centered teaching and learning philosophy. Classes are taught in English, with entry requirements and degree certificates meeting international standards. Undergraduate and postgraduate courses offered at WIUT are designed and validated in partnership with the University of Westminster (London), and are subject to the same quality assurance and control regulations as those taught in the UK. Many WIUT faculty have international degrees and experience in international organizations. Faculty have earned doctoral degrees from leading universities in Australia, Belgium, China, Czech Republic, England, France, Germany, Iran, Korea, Spain and USA. From the first cohort of 120 students in 2002, WIUT now hosts more than 5,000 students. With a growing supervisory capacity, in 2020, WIUT established the Scientific Council in response to high demand in the labor market of Uzbekistan for qualified researchers and higher education professionals with PhD and DSc degrees.

WIUT faculty have published research in respected peer-reviewed international journals such as World Development, The Lancet Global Health, and others. WIUT scholars and students have engaged in research in Uzbekistan, Central Asia, and throughout the world. Ongoing, policy reforms in the region have multiplied the need to support government and private sector decision-making with evidence from solid research. With a strong independent voice, WIUT is the choice of many organizations when they need

quality analysis and recommendations.

WIUT has previously participated in a number of research & education projects funded by Erasmus+ (The list of selected projects is listed in the “List of Previous Projects” section). WIUT has developed new programs in response to global environment, social, and economic challenges. University and regional capacity building in Circular Economy and Sustainable Development is in our agenda by applying to this grant opportunity in the consortium of regional and European universities. Our university recognizes the role that we have as an institution based at the heart of Central Asia in achieving sustainable development. Westminster International University in Tashkent is committed to using the SDGs as a mechanism to effectively report on our progress and achievements whilst embedding these goals across university activities which will benefit students, colleagues and other stakeholders.

#### **P15 Akfa University**

Established in 2019 with the initiative of the President of Uzbekistan Shavkat Mirziyoyev, Akfa University (AU) is the first private university in Uzbekistan. The educational process was given a start in October 2019 with establishing a partnership with Gachon University, South Korea, in the medical area.

Since then AU has partnered with other leading higher education and research institutions such as Lancaster University (UK), KAIST (South Korea), Ted University (Turkey), Monash University (Australia), Cologne Business School (Germany), Colorado State University (US), Medical Center “Akfa Medline” (Uzbekistan), and Artel, the biggest home appliances and electronics producer in Uzbekistan.

Currently there are 18 departments under 5 schools at AU providing undergraduate and graduate programs: Medical School, Dental School, School of Engineering, School of Business, School of Arts and Humanities. The Medical and Dental Schools deliver education services across four majors: general medicine, pharmacy, nursing, and dentistry. The School of Engineering operates four majors: computer science, electrical and electronics engineering, architecture and design, and civil engineering. The School of Business delivers higher education services across six majors: accounting and finance, economics, international business, startup management, digital marketing, and law. The School of Arts and Humanities operates three majors: English education, journalism, and applied mathematics. AU also offers special programs such as Akfa University Part-Time Student Program (AUPSP) and Pre-uni Courses. Currently, AU has more than 2000 students and more than 90 professors. Most of the local professors are graduates of renowned foreign universities and 18 of them are international professors from foreign countries. AU is a student-oriented institution with a variety of resources available to students to support their academic endeavors – from well-equipped labs and libraries to seminars, workshops, and conferences aimed at promoting knowledge exchange.

In 2020 AU became the first non-governmental higher education institution of Uzbekistan that was included in the Times Higher Education (THE) Impact Ranking.

In terms of quantity and caliber of publications in foreign peer-reviewed journals in the Scopus database, AU is currently among the top 3 private and international higher education institutions in the country. AU hasn't previously taken part in ERASMUS+ programs, therefore this will be a useful opportunity to apply best practices from the EU.

### 2.2.2 Consortium management and decision-making

#### Consortium management and decision-making (if applicable)

**Clear Goals and Objectives:** The consortium has a clear understanding of its goals and objectives, which is agreed by all members. It can be proved by joint contribution of all members in Application preparation. The project has been developed by the contribution of all partners and based on preliminary analysis of needs of participating regions. Each Partner country was responsible for contributing to the application to the part related to their HEI. The application was uploaded to Google Doc where each partner can write at the same time and make comments (a track mode) to the project at the same avoiding incompatibility issues. It increases the project's ownership of partners, increase the responsibility of partners and involvement by observing contributions of the other partners in real time. As well, it gives the feeling of belonging to the common group building basement for stronger team for implementing the project in future. The coordinator (P5) then was accepting, editing, revising and commenting the final version of the application. In case of doubts, questions or proposals partners had Skype meeting, Whatsapp calls and emails conversations. Each WP has a leading HEI, so he/she was in charge to write their WP description, costs involved, time needed, and etc.

**Clear Roles and Responsibilities:** All members have a clear understanding of their roles and responsibilities within the consortium, and these should be defined in a formal agreement. Timeline of the project and WP distribution were developed by all members where partners committed to fulfill their obligations. Each WP leader develops and details its WP setting up tasks, milestones, deliverables and budget.

**Effective Communication:** Regular and open communication is essential for the smooth functioning of the consortium. Project include regular online meetings through different communication platforms (Slack, Zoom, Google Drive, emails, whatsapp and telegram), and other forms of communication. The Project Coordinator is responsible for the overall management of the project and the correct execution of the contract. The partner responsible for the implementation of an individual Task will appoint a local coordinator who will ensure timely execution of the Task and coordination with all the other partners involved. The Project Coordinator will be the project's interface with the EACEA, editing and forwarding reports to the EACEA, forwarding requests, information etc. from the partners to the EACEA. On top of the official project meetings which will be conducted, the partners will meet before and/or after the implementation of each event, and, whenever necessary the Project Coordinator will call ad-hoc plenary meetings using on-line communication tools such as skype or WhatsApp.

**Decision-Making Process:** The consortium has a clear and transparent decision-making process, which is agreed upon by all members. **Conflict Resolution:** Conflicts may arise within the consortium, and it is important to have a process in place to resolve these conflicts in a constructive and effective manner.

Decision may be taken as per email communication, via e-voting or skype/video conference. No response in a requested period of time will be considered as an agreement. It is the obligation of MB member to agree/consult on the decision with home university.

**Performance Monitoring and Evaluation:** The consortium regularly monitor its performance and evaluate its progress against its goals and objectives. This help to identify areas for improvement and ensure that the consortium remains on track.

**Flexibility:** The consortium is flexible and adaptable to changing circumstances, and prepared to modify its approach as needed to achieve its goals.

The set-up and the roles of each partner were described in 2.2.1 and are further elaborated in each WP. The management structure will efficiently address the specific objectives via a clear distribution of tasks and authorities and achieve an effective administrative management. The coordinator will act as the leader of the overall management. All partners will be engaged in the management of the consortium.

The management and decision-making structure:

The Project Management Board (MB), chaired by the project coordinator (EKTU), has full executive responsibility for the project and is composed of one representative from each partner of the consortium. The MB will control the administrative and methodological aspects of the project activities, monitor and evaluate the phases of the project in terms of its declared objectives, and, in correspondence with the Detailed project Plan, intervene for the resolution of any possible incoming problems.

An Academic Board (AB) will be established to ensure that the project's science and innovation outputs are of high impact and relevant to the European and CA reform targets. AB will be chaired by USC and have one academically distinguished member from each country of the project and representatives from stakeholders. AB will give recommendations and ensure the sustainability of the project.

In addition to MB, there will be two other managerial teams established: one for Quality Assurance and Monitoring (QAM team) and one for Dissemination and Sustainability (DS team).

Each WP has a leading partner (WP lead) who will be in charge of WP management and will be reporting to MB of the WP activities based on their accomplishments. In the project, we use co-lead principle to learn from each other and to mitigate the risks of changes in leadership. These are the key components responsible for managing the implementation of the project ensuring that every activity is in-line with the original application, the Grant Agreement with EACEA, and the Partnership Agreement. In addition, this managerial structure with all partners' project staff is fully engaged and pertain the true ownership of the project.

The timeline of the project has been planned and presented in this application. In each WP and in the deliverables, there is a set target time for uploading to the EACEA portal. The timelines will be planned in more detail in the Kick off and specified in the Detailed project plan. Especially, the travelling will be agreed in MB for one year with agreed dates to take into account the time needed for CA partners for official invitations as well as VISA processes.

In the first quarter of the project, each partner will be asked to nominate representative for the MB, who will



have to be a high-level manager competent to take important operational decisions on behalf of its organisation. Additionally, all consortium members will have to provide nominations for core teams, as per allocated roles within each WP.

The Detailed Project plan, the Quality Assurance and Monitoring (QAM) plan, and the Dissemination and Sustainability (DS) plan will be prepared at the beginning of the project and approved by MB to establish effective project implementation, risk management, and effective internal and external communication. The Detailed Project plan will state the milestones, deliverables, deadlines, responsible partners, and status of planned activities, while the DE plan will set the strategy for internal and external communication. The appointed responsible person will lead constant monitoring of project activities, allowing timely delivery of project results, incl. bi-annual, Mid-term and Final reports. Effective communication will be ensured by written, on-site and online ways including reporting about activities, risks, possible changes, and budget issues.

Decision making regarding specific tasks will be done within the WPs including the WP Leader and involved partners in the framework of the Detailed Project plan. Decisions on changes in activities will be approved by the MB and documented. Every potential conflict or risk has to be communicated directly to EKTU. In case of a conflict, mediation will be done by coordinator, involving relevant parties. Every strategic decision will be followed by written confirmation (e.g., minutes of meeting, protocols). In addition, all the core information, contacts, and announcements will be contained in electronic format according to the management guideline.

### 3 IMPACT

#### 3.1 Impact and ambition

##### Impact and ambition

Impact: The implementation of the proposed program can make an important contribution to education and dissemination of knowledge in the field of circular economy, as well as the development and implementation of various subprograms at the regional, national and international levels. The project can raise awareness about the importance of resource conservation and waste reduction, and promote a greater understanding of closed-loop systems. By studying circular economy, students can develop the skills and knowledge necessary to support the implementation of circular economy initiatives in their careers. Project can foster innovation, as students are exposed to new ideas and approaches for resource conservation and waste reduction. Circular economy is a rapidly growing field, and students who study circular economy can have a competitive advantage in the job market, as they are equipped with the skills and knowledge necessary to support the implementation of closed-loop systems.

CA partners will strengthen the internationalization of higher education by introducing a new innovative module component into educational programs, modernizing and developing educational programs, teaching and learning methods, increasing the competence of universities in the circular economy and environmental protection in the context of programs and training, strengthening the integration of higher education and corporate sector.

Influence at the institutional level: Along with the introduction of a modernized educational program into the educational process of the university, the project will also have an impact on the activities of the university as a whole. Gradual improvement in the involvement of employers in the development of programs will help to increase the practice orientation of the program. Relationships established with employers through non-academic project partners will become available to other departments of the university.

Influence at the local/regional level: By involving stakeholders in the development of the EP, the project will have an indirect impact on employers and local authorities in their regions. Conducting joint round tables and other events will help to establish links with the world of work. Involving different categories of stakeholders in the dissemination activities of the project will not only increase the visibility of the project and the program as a whole, but will also help to increase the dissemination and use of the project results.

Influence at the individual level: The most valuable results of the project will be the following: capacity building of the teaching staff, which will eventually lead to the creation of a national and institutional talent pool of experts in the fields related to the project theme. Along with the knowledge and competencies directly related to the specifics of the project, the skills of developing educational programs will improve, understanding of European and world trends in the development of higher education, new approaches to the conduct of the educational process and teaching methods will be mastered, the language skills of academic staff, education managers, teamwork skills will improve.

Entrepreneurs/businesses:

Short term: Project will assist entrepreneurs, startups, companies (especially in the fields of manufacturing, minings, water management, design) to renew their business models according to emerging CE concepts. Their business processes will be optimised and new strategic directions will take effect. Investors and incubator managers will be equipped with new insights and will be able to explore investment and support opportunities in the field of green investments.

Long term: the project will facilitate entrepreneurs and startups to gradually develop a new set of services/business models and a source of revenue based on green technology applications, leading to high growth and strategic competitive advantage. Investors will create a diversified investment portfolio with accelerated and growing yields, while incubators will be able to offer dedicated training and support services to sustainable startups.

Teaching staff and HEIs: Short term: Project will incentivise other HEIs to update their educational offering with a renewed syllabus on an emerging and timely topic. The Research Institute will embark on new research avenues (mainly through PhD theses). The implementation of this program will give a new impetus to the training of highly qualified managers in the field of green energy, who have knowledge both in the field of technological processes underlying renewable energy sources and in the field of making quality management decisions.

Long term: HEIs which will embed the project's syllabus and training deployment methods into their educational products and on-going processes will gain a significant competitive advantage over their counterparts, attracting more students, researchers and collaboration opportunities.

University students at undergraduate level and employees in industry who would like to advance their education:

Short term: the project will infuse timely, relevant and applicable knowledge to students through hands-on and practical teaching methods.

Long term: Project will encourage students to explore entrepreneurial pathways and startup their own business in the Circular and sustainable field. The project's mentors, coaches, real-world startup founders and investors will guide them through the process and undertake their on-going support.

Policy makers from regional government, research institutions, International organisations, NGO,

Associations Short term: They will benefit from new knowledge that can be implemented in policy designing of CE initiatives. Many barriers and difficulties must be overcome, as well as new rules and regulations, in order to provide a sustainable economic future.

Long term: Governments can provide the regulatory grounds to accelerate decisions to go in this direction by enacting new legislation and policies that focus on resource recovery and reuse, accelerating the transition to a circular economy. For example: minimising waste and disposal, developing CE strategies supporting a sustainable transition (reducing, ecodesign, green public procurement, stakeholders involvement through networking activities, research and innovation).

#### Citizens

Short term: The project aims to widely disseminate the project's objectives, aims and results to engage as much as possible with the audience (via builded platform, social media, website, TV and open/info days).

Long term: The implementation of the project will contribute to the development of green energy, which is one of the main directions for the development of the green economy. Project results will lead to the efficient use of natural resources and the choice of the right path of development, environmentally friendly.

### 3.2 Communication, dissemination and visibility

#### Communication, dissemination and visibility of funding.

The CirculEC project aims to increase the capacity of Central Asian higher education institutions in the field of circular economy and sustainable development in order to give staff, students, business executives and the general public access to knowledge and expertise that are in line with the demands of regional labor markets and the environmental issues that CA countries must address. Indeed, regional economies and local companies may find it challenging to compete in a global market that is increasingly concerned with sustainability and resource efficiency without an understanding of the principles of the circular economy. This is why this project is timely, and aims to close this gap.

By running the project, the Central Asia region benefits in several dimensions.

First, as an incubator of ideas and solutions for local problems, regional universities would learn European best practice in the area. Through joint development of innovative curricula for undergraduate, graduate and lifelong learning levels on Sustainable Development and Circular Economy with EU partner universities and local industry, CA HEIs would initially get their professors trained in this field.; Second, these trainers would launch various programs on sustainability with the help of their employers.; Third, on an annual basis new cohorts of students would be prepared for the needs of the industry. This would result in expansion of students' knowledge on best practices in sustainability research, such as life cycle assessment of products or services, circular business models, natural resources management practices, responsible production methods and responsible consumption patterns. In this way the project will work to shape student's mindsets so that they become lifelong advocates for sustainability in whatever field they may pursue after graduation thus creating strong networks of people from different backgrounds who share similar concerns regarding the current state of our planet whilst pursuing a planned action towards its improvement instead of passive observation. Most importantly, having an increased number of graduates raised within an environment promoting sustainable policies constitutes a formidable force capable of turning their vision into reality one day, because large scale changes rarely occur overnight but need continuous effort over extended periods of times before visible results start appearing.; Fourth, other non-participating local universities, study centres, and the general public would learn from the positive experience of the Erasmus consortium. This would result in a spillover effect of such a practice and new similar programs/green movements would emerge.

Fifth, wide array of environmental problems and economic concerns would find their solutions: companies would start operating in a more efficient and sustainable way; a new wave of companies would emerge offering smart technologies and services that are eco-friendlier; Central Asian economies would start pursuing greener development paths and aligning their public policymaking with the demands of the circular economy principles, etc. ; Sixth, a new cohort of local green developers and business leaders would help Central Asian countries meet United Nations' Sustainable Development Goals by 2030, NetZero Initiative by 2050, and other sustainability initiatives. The project provides a balanced approach to economic development by exploring ways to reduce waste, increase energy efficiency, foster resource efficiency, and adopt climate change mitigation strategies. This will enable more informed decision-making concerning environmental protection as well as economic growth. ; Last but not the least, the society would accept the benefits of green development and learn to act accordingly. As a result, socio-economic gains are maximised for everybody involved in the process: consumers get better products; producers have efficient production systems thus reducing environmental damage; workers gain access to decent jobs; governments can improve policy implementation directed at sustainable development efforts; investors have profitability opportunities; businesses remain competitive; etc. Such a positive externality, as economists word it, would eventually spread to other parts of the world.

Generally speaking, local human capital, industry, and national economies would gain from the project. The principles of circular economy and sustainable development would help local governments to cope with environmental, resource-related, food safety, industrial and other concerns.

The project would also affect the research in the area. New research articles and findings would be published both locally and internationally. Universities, private companies as well as research institutions may start providing consultancy services on sustainability. Environmentally-friendly startups and spin-offs could be created within the premises of HEIs and beyond. These all would by no means contribute to raising public awareness on sustainability issues.

The communication, dissemination and visibility of the project will be provided via strong links to the project

planned activities. It will emphasise the importance of dissemination to promote the project activities and expand the project results and outcomes to a multitude of audiences. The project would build a roadmap for Dissemination strategy. This strategy will illuminate the importance of dissemination to promote the project activities and disseminate the project results and outcomes to a multitude of audiences. The Strategy will describe the objectives, planned target groups and channels to measure the realisation of the planned in the project activities.

The work package on dissemination and exploitation aims at establishing the Project's brand, raising awareness among the all possible audience: companies, students, policy makers and other institutions. To this end, dissemination will be a key to the project's success. It will ensure the visibility of EU funding in every possible way.

Special attention will be paid to reaching target groups: administrative bodies/policy makers (related Ministries, Cabinets of Ministers), public servants/society, HEIs and research structures, public/private entities. The following methodology will be applied to reach target groups:

- informing and reporting;
- experience and knowledge sharing among the wider audience;
- distribution of innovative teaching and research methodology;
- attracting the industry into the sustainability issues, facilitate academic/research collaborations;
- carrying out conferences, events, seminars, workshops, briefings, and/or round tables;
- reaching out to the target audience through different means of printed media (newsletters, reports, success stories, brochures, leaflets, etc).

Further information dissemination about the results of the project will be carried out through websites, platform and resource centres of universities, creation and effective functioning of the association of alumni for this project, continuation of the activities of the Sustainable Lab. In particular, an informative website that serves as a central hub for all of the data gathered from the project will be created and updated regularly, making it easily accessible to both experts in the field as well as to people who may not be familiar with the project's intricacies.

An engaging social media presence through relevant platforms such as Twitter, LinkedIn, Facebook, or Instagram will also be developed to spread awareness of the results of the project among potential stakeholders and decision makers who may have influence or power when it comes to implementing any recommendations made by the project.

The project ensures a tangible impact on its target groups and relevant stakeholders at local, national or regional level. To that end, the following measures will be taken:

- an effective communication plan will be established to ensure project objectives are clearly understood and communicated by all stakeholders;
- a comprehensive evaluation framework, including measurable goals and indicators, will be created for monitoring progress;
- a management and reporting system that can track overall progress throughout the life of the project will be developed;
- changes in relevant policies, legislation, and budget allocations will be monitored to help assess long- term impact.

The above measures will help reach the following goals:

- Increased access to quality services for target populations;
- Improved coordination between stakeholders to better leverage resources and achieve better outcomes;
- Developed sustainable solutions within the specific organisational context;
- Enhanced capacity of relevant stakeholders in navigating institutional procedures or reaching set targets.

The project performance will be monitored through the following indicators:

- Number of people reached by the project;
- Program/course/training program evaluation scores (for effectiveness/quality);
- Number of awareness raising campaigns conducted (or number participants in awareness-raising events);
- Statutory compliance with policies and regulations related to the project topic;
- Changes in funding allocated or other resource investments made as a result of the project initiatives.

Financial sustainability of the project results will be ensured through the following channels:

- attractive student tuitions and performance-based scholarship opportunities;
- information campaigns to attract interested external donors and investors;
- information campaigns to increase public awareness of the program and its opportunities;
- establishing reliable industry-HEI linkages (e.g. by provision of executive courses);
- seeking funds to generate income from consultancy work and activities associated with the project's outcomes, etc.

Institutional sustainability of the project can be achieved through measures such as strengthening existing structures, systems, and capacities to ensure their effective implementation and management. Close relationships with EU partner universities will be maintained in other formats.

In addition, local ownership of the project will be encouraged through activities such as forming stakeholder partnerships between government institutions, local communities, and other institutions involved in implementing the projects. The local stakeholders will also be invited to participate in decision-making processes related to implementation and monitoring of the project results.

### 3.3 Sustainability and continuation

#### Sustainability, long-term impact and continuation

The Consortium has already drafted a preliminary plan for the exploitation of the project's results after its lifetime, which will be elaborated in detail in WP9. The preliminary approach foresees: 1) the provision of fully free and open-access training curriculum and training materials, 2) the provision of research and training funding acquisition through national and European sources, and, 3) the provision of paid consulting and training services. In addition, we foresee specific mentoring editions, based on the developed experience, in which the consortium's academic and company staff will offer similar training to other organisations based on the project training framework. The training and support exploitation model is employed for building significant training and education capacity, and based on that experience, for attracting relevant funds from national and European programmes. The support exploitation model is based on relevant actions for attracting the interest of investors and policy-makers at a national and international levels. The commercial exploitation model implies the utilisation of consulting and educational services towards companies, investors, HEIs/Research Institutions, incubators and mainly startups.

Transition to self-funding: The project has a viable business model, it may transition to being self-funded through revenue generated by its products or services such as lifelong learning training provided to private sectors. Building the capacity of local partners, and leveraging technology (CE platform) and other resources (online materials) to maximize the reach and impact of the project.

Engaging with stakeholders, including project beneficiaries, partners, and other relevant actors, will help to build a shared understanding of the project's goals and outcomes and strengthens support for its continued impact.

Ensuring that project results and lessons are documented and shared widely (CE platform + project webpage) will help to spread best practices and maximize the impact of the project. This includes publishing research articles, sharing data and tools, and organizing workshops and conferences to disseminate the project's findings.

Based on the results of the project, it is planned to jointly develop methodological recommendations, manuals, and articles on circular economy practical implementation with partners.

The sustainability and continuity of the project will be ensured by employees who have completed courses and training, who have received the required qualifications in the process of working on the project.

Information about the progress of the project and its results will be posted on the university's website, the results will be broadcast via social networks.

## 4 WORK PLAN, WORK PACKAGES, ACTIVITIES, RESOURCES AND TIMING

### 4.1 Work plan

#### Work plan

Provide a brief description of the overall structure of the work plan (list of work packages or graphical presentation (Pert chart or similar)).

The Work plan contains seven (9) Work Packages (WPs) in total: WP1 Management and coordination; WP2: Market needs and capacitation of CA staff; WP3: Development of module 1: Environmental Management; WP4: Development of module 2: Sustainable competitiveness; WP5: Development module 3: Environmental entrepreneurship; WP6: Capacity building and Platform development; WP7: Pilot; WP8: Quality assurance; WP9: Impact and dissemination.

WP 1 is a managerial WP led by the Project Academic Director and Project Manager. Its aim is to ensure high quality of management, coordination, and follow-up of project activities in cooperation with project partners. WPs 2, will provide a deep understanding of market needs, WP3-5 will follow each other and build teaching materials for CE. cumulatively the understanding on SE. WP6-7 is the capacity building element and will continue until the end of the project and will also be sustained after the project. WP8 aims to ensure a high quality of the project activities through continuous monitoring, feedback, and assessment. Aim of the WP9 is to ensure the dissemination, exploitation, and sustainability of the project results. Please find below the timetable and the tasks in more detail.

### 4.2 Work packages, activities, resources and timing

#### Work Package 1

Work Package 1: Project management and coordination

Duration:

M1-M36

Lead Beneficiary:

EKTU (P5)

#### Objectives

The objective of the Work Package (WP) 1 is to provide high quality project management and coordination of activities during the project implementation. Project management and coordination ensures that the project goals and objectives are completed, the outcomes, deliverables and results achieved, and that the dissemination of the activities lead to project impact and sustainability, ensuring high quality and decision-making structures throughout the project and it guarantee the achievement of specific objectives. Its main objectives are:

- To lead the project to successful completion;
- To ensure good co-ordination of the partners' activities;
- To ensure efficient legal, contractual, financial and administrative management of the project;
- To assure high quality of the project work and project's results;
- To provide effective project management at all stages throughout the duration of the project;
- To supervise the progress of the project, to guide and direct the partners, and to lead them towards accomplishment of the goals and towards success of the project;
- To advise and help the partners in performing their project work;
- To regularly report project activities, especially to the EACEA;
- To establish and maintain effective communication between project partners, work package managers and other project participants;
- To organize project and review meetings; To perform administration, financial management and accounting of the project. Project management plan will be created.

Overall, the Management activity is built around a two-level structure: the project will be managed by two committees, namely the Project Management Board and the Academic Board. The Project Management Board, chaired by the Project Coordinator, has full executive responsibility for the project and is composed of one representative for each partner of the consortium. The Academic Board is led by the Academic Coordinator who chairs the board and the Work-package Leaders. Together they are responsible for managing the project.



Work Package 1: Project management and coordination					
<p>Each WP is implemented by a core group of partners, led by the WP leader. Each Task within every WP is also led by the Task owner. These are the key components responsible for managing the implementation of the project ensuring that every activity is in-line with the original application, the grant agreement with EACEA and the Consortium Agreement. In Q1, each partner will be asked to nominate 1 representative for the Project Management Board and the Academic Board, who will have to be a high-level manager competent to take important operational decisions on behalf of its organisation. Additionally, all consortium members will have to provide nominations for core groups (WP and Task managers), as per allocated roles within each work package.</p>					
Activities and division of work (WP description)					
Task No  (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T1.1	Initiation of the project: Online Kick Off Meeting	<p>Initiation of the project covers setting up the management structures and processes needed for effective project management of this large consortium where 15 members will collaborate, 10 of which from Central Asia Region. EKTU appoints a Academic Board Lead, and a project secretary to manage the activities with appropriately trained experts with experience in coordinating CBHE-projects. The Project Management Board consists of each partner's WP leaders, and it is the highest decision-making organ responsible for overseeing and assessing the project progress and quality results. EKTU is the Project Management Board chair. For structural and policy level advice of the project, Academic Board is established. AB members are nominated by Consortium members, and USC is the chair. A project management guideline is prepared based on the project partners' previous experiences in CBHE projects. The guideline will contain joint templates for reports of the meetings of the project members, travel reports (official EACEA form), financial reporting forms (timesheets + staff declarations - official EACEA forms), and Work Package Reports. To ensure the overall coordination, a detailed plan of the project activities and tasks, mobility and events for each project year will be collected into a Detailed project plan. The kick-off meeting will be organised to gain mutual understanding and commitment to overall project and work package contents. EKTU as the</p>	EKTU ALL partners	COO	NO



		<p>coordinator prepares the required official documents for signing and ensures that the guidelines set in the Grant Agreement are clear to all partners. EKTU communicates with the EACEA and will supply all documents and requested information. The Grant Agreement is a legally binding document, and it is explained through on-line meetings and discussed together with all partners. Partners must have understanding about the content and commitments set in the Grant Agreement before the start of the project. EKTU clarifies all questions addressed by partners. The Partnership Agreement will be prepared to be signed in the kick-off meeting.</p>			
T1.2	Project implementation, and coordination	<p>EKTU as the coordinator will monitor that the project is implemented properly. The project implementation follows the agreed timetable and responsibilities. Project partners are responsible for activities as indicated in the WP's work plans and in the Partnership Agreement defining the roles and responsibilities of all partners.</p> <p>The aim is to involve all partners to planning and management and enable up-to-date information and real time working processes.</p> <ol style="list-style-type: none"> <li>1. Organisation of Academic Board meetings annually.</li> <li>2. Organising regular meetings for the Project Management Board to monitor the project's process. The WP leaders and co- leaders take the responsibility of coordination, monitoring and reporting of the outcomes of their WPs.</li> <li>3. Organisation of the WP leadership, implementation, and follow-up. WP Core teams, QA team, and DS team will organise monthly meetings for their activity periods defined in their WP descriptions. Central Asian partners ensure efficient information sharing to all associate partners and local stakeholders as well as effective coordination.</li> <li>4. Internal communication is carried out by using online tools such as email, Slack, Zoom, WhatsApp, Telegram, and Google Drive, which have been already jointly used to plan the project.</li> </ol>	EKTU ALL partners	COO	NO

T1.3	Financial management and Administration	<p>EKTU project team will be in charge of managing the finances of the project including the following: distribution of partner's budget shares according to the Consortium Agreement; monitoring, collecting and storing properly all the documents proving expenses, coordination and control of annual cost claims and certificates of financial statements; reporting of financial issues and consulting project partners on financial rules stated by the EACEA; follow-up of EACEA payments. The allocation of costs is divided between managers and administrative staff. Managers will be involved in participation in all project meetings, organisation of project meetings, where such is envisaged for the perspective partner; communication activities related to the project management; participation in MB meetings, and consolidation of report activities. Managers will be supported by administrative staff. Administrative specialists will be responsible for overall administrative tasks of the project— collection of information, monitoring and review of project documentation. Administration staff will review all progress activities and will assist the Manager in preparing progress reports.</p> <p>TSIEM and TSIF will have less (3 months) each, since the most part of project coordination will be done by AST. The AST, unlike the classical academy of sciences of other countries, functions as a ministry of science and conducts a policy in the field of science for all educational institutions. In this regard, the Academy coordinates scientific activity of institutes, universities and educational organizations. The required efforts per partner also cover the organisation and attendance of the foreseen project and the described project meetings.</p> <p>Every six months all partners will submit to EKTU financial reports which will summarise the expenses of their tasks, staff costs, and purchases which were completed. EKTU communicates with the EACEA and will supply all documents and requested information concerning financial reporting to EACEA.</p>	EKTU ALL partners	COO	NO
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T1.4	Reporting	<p>Reporting consists of those activities that are carried out based on EACEA guidelines, Grant agreement, CirculEC Technical description and Project Management Guideline. This activity is led by EKTU.</p> <p>Collecting evidence of project activities, outcomes, and impact systematically according to set milestones during the project lifetime. This includes all documentation, minutes, participant lists and reports. The reporting activities are carried out following the set timetable and guidelines. EKTU will request and review documents or information required by the granting authority and verify their correctness. The Interim and Final reports are composed according to the EACEA guidelines.</p>			EKTU ALL partner	COO	NO
		<p>EKTU as the coordinator will submit the deliverables and reports in the system.</p> <p>In cooperation with the other partners, EKTU guarantees that the reporting is efficient and of high quality throughout the project implementation. Immediate and constant documentation ensures that data is available for analysis and reporting without delays.</p>					
T1.5	2nd Management Meeting	The 2nd MB online meeting is scheduled before starting the pilot stage.			EKTU ALL partner	COO	NO
T1.6	3rd Management meeting	The 3rd MB online meeting will be devoted to evaluation of the pilot project results in order to provide recommendations.			EKTU ALL partner	COO	NO
<b>Milestones and deliverables (outputs/outcomes)</b>							
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description	Due Date (month number)	Means of Verification	
MS1	Online Kick Off meeting	1	EKTU	The kick-off meeting will be organised to gain mutual understanding and commitment to overall project and work package contents. Content: preparatory work, roles, responsibilities, and tasks for partners on project management, WP Core, QA and DS team.	M3	Agenda, signed presence list, number of participants, feedback questionnaire	
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)

D1.1	Kick-off meeting	1	EKTU	[OTHER]	[SEN : Sensitive]	M3	The kick off meeting will be organised to gain mutual understanding and commitment to overall project and work package content
D1.2	Progress report	1	EKTU	[R — Document, report]	[SEN : Sensitive]	M18	Mid-term progress report of the project written in English summarising project outcomes and results, send to the EACEA
D.1.3	Project Management Plan	1	EKTU	[R — Document, report]	[SEN : Sensitive]	M6	Project management Plan will be created will describe project management tools and establish modality of payments, reports, communication etc. Project management plan will be in English and will be provided and presented to partners.

Work Package 1: Project management and coordination

Estimated budget — Resources *(n/a for prefixed Lump Sum Grants)*

Participant	Costs													
	A. Personnel		B. Subcontracting	C.1a Travel			C.1b Accommodation	C.1c Subsistence	C.2 Equipment	C.3 Other goods, works and services	D.1 Financial support to third parties		E. Indirect costs	Total costs
EKTU	12 person months	10950 EUR	7000 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	2000 EUR	0 grants	0 EUR	1397 EUR	21347 EUR
USC	3 person months	14220 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	995 EUR	15215 EUR

AYecon omics	3 person months	12000 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	840 EUR	12840 EUR
UNINA	3 person months	8000 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	560 EUR	8560 EUR
FHM Bielefel d	3 person months	14220 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	995 EUR	15215 EUR
KarUK	5 person months	4750 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	333 EUR	5083 EUR
ABU	5 person months	4300 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	301 EUR	4601 EUR
KokSU	5 person months	4750 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	333 EUR	5083 EUR
AST	5 person months	3000 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	210 EUR	3210 EUR
TSIEM	3 person months	1200 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	84 EUR	1284 EUR
TSIF	3 person months	1200 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	84 EUR	1284 EUR
TUT	5 person months	2152 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	151 EUR	2303 EUR
TSUC	5 person months	2152 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	151 EUR	2303 EUR

WUIT	5 person months	9450 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	662 EUR	10112 EUR
AKFA	5 person months	9450 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	662 EUR	10112 EUR
Total	70 person months	10179 4 EUR	7000 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	2000 EUR	0 grants 0 prizes	0 EUR	7758 EUR	118552 EUR

For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see [Portal Reference Documents](#)).

*Work Package 2*

<b>Work Package 2: Market needs and capacitation of CA staff</b>			
Duration:	M4-M12	Lead Beneficiary:	AYeconomics (P2) +WIUT (P14)
<b>Objectives</b>			
<p>The objectives of Work Package 2 – Preparation includes: (1) Policies analysis, current situation and strategies of Central Asian states in circular economy, green economy, sustainable development, and other relevant questions to support capacity development in the field of interest, (2) quality market research and stakeholder analysis, and trends in the labor and education market, (3) baseline situation analysis and current capacity of HEIs – university partners to develop Circular Economy and Sustainable Development education programs.</p> <p>First, it is important to understand current situation in the region, particularly:</p> <ol style="list-style-type: none"> <li>1. Baseline situation and needs in Central Asian countries – identify knowledge, skills, employment related indicators</li> <li>2. Analysis of current HEIs capacity and development trends – reforms, investment, etc.</li> </ol> <p>Second core component aims is to understand the stakeholder engagement which composes three main stages:</p> <ol style="list-style-type: none"> <li>1. Stakeholder mapping</li> <li>2. Assess and prioritise the stakeholders</li> <li>3. Develop an understanding of stakeholders</li> </ol> <p>The stakeholders are expected to include students and faculty members, current / future employers, policy makers, and in general both public and private sectors representatives, community representatives, and others to be determined during the stakeholder mapping. This will provide the information about the potential for the implementation of green technologies in the region. Conducting a qualitative study will determine what is the potential for the implementation of the project in the region. Also, this aspect will be important in the preparation of the educational program. Geographical, environmental and economic factors specific to the region will be taken into account when forming the key competencies of the educational program. The results are expected to provide needs of the market information to the development of education programs at undergraduate, postgraduate and professional development level courses, considering regional and country specific features and adjustment to teacher´s competences.</p> <p>The third component in the preparation phase – stakeholders will participate in workshop to facilitate the process and identify the stages of the engagement. Each workshop will be convened by the local partners involving stakeholders from a range of organisations, including national and regional public authorities, international organisations, academic institutions, local, national environmental and health non-governmental organisations and civil society organisations, community groups, local businesses, students, etc.</p> <p>And the fourth, the preparation stage will provide a report that will describe regional and country level analysis, current capacity and opportunities of HEIs in the region, and market needs. It will also provide best regional and international practices, milestones, and potential solutions to best develop and implement the curriculum in Circular Economy and Sustainable Development.</p>			



Activities and division of work (WP description)					
Task No  (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T2.1	State of play analysis	<p>Baseline situation and needs assessment at regional and country level.</p> <p>This task aims to identify problems and current situation at national and regional levels. The task will provide information on exiting socio-economic, community, climate challenges Central Asian countries face today, and provide justification for the importance of investment in education and capacity development in green economy, circular economy, sustainable development. It will also include quality market research, and trends in the labour and education market.</p> <p>Analysis of existing curricular in partner universities. This sub-task will support identification of current capacities and needs at university level.</p>	<p>WIUT</p> <p>EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa</p>	<p>COO</p> <p>BEN</p>	NO
T2.2	Stakeholder analysis	<p>This task aims to provide information about the potential for the implementation of green technologies in the region. Conducting a qualitative study will determine what is the potential for the implementation of the project in the region. Also, this aspect will be important in the preparation of the educational program.</p> <ul style="list-style-type: none"> <li>- Stakeholder mapping</li> <li>- Assessment and prioritization of stakeholders</li> <li>- Develop an understanding of stakeholders</li> <li>- Qualitative data collection – interviews and focus group discussions</li> <li>- Analysis of qualitative data</li> <li>- Preliminary findings and recommendations</li> </ul> <p>WIUT will be communicating with partner universities to support the stakeholder analysis in each country</p>	<p>AYeconomics</p> <p>EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa</p>	<p>COO</p> <p>BEN</p>	NO

T2.3	Capacitation: International	Workshop start in Bielefeld then Neapoli and finish in Santiago, two days per institution aim to share experience of EU partners of implementing CE disciplines in curriculum. The goal of this activity is to equip /provide/ give professors from the Central Asia region (CA) with the skills to effectively implement changes and ensure the success and sustainability of the project. To achieve this, a “Masterclass on Circular and sustainable Economy” will be developed. The three sub-tasks involved in its development are: 1) creating the Masterclass materials and contents, 2) planning and organizing the Masterclass, and 3) preparing materials that will serve as teaching resources for the CA professors. The Master Class will be held in the EU hosted by EU partners	FHM Bielefeld with support of EU partners. EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa	COO BEN	NO
T2.4	Action Plan: CE introduction for higher education in CA	A roadmap with policy recommendations for modules in a circular economy degree program: outline the steps, timeline for developing and delivering a series of modules. Clearly define the objectives, goals and roles CE modules. Determine the program's target audience, including the types of students who will enrol in the modules. Determine the resources required to develop and deliver the modules, including training for trainers.	WIUT  USC, UNINA, FHM Bielefeld EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa	COO AP BEN	NO
T.2.5	Validation online workshop	The validation of the results with the stakeholders and CA partners will be done using DELPHI analysis to	WIUT and AY	COO BEN	

		<p>ensure that results reflect the reality and that opinion of all stakeholders are taken into account. Methodology and interview questions will be developed in M3 by AYe in collaboration and implemented by partner countries. AYe is responsible for providing online instructions, support realisation, and analysing research outcomes. The software proposed for the online surveys is questionpro (<a href="https://www.questionpro.com">https://www.questionpro.com</a>), since it allows conditional questions depending on answers. Several rounds of questionnaires will be sent out to key stakeholder groups in the targeted region, and the anonymous responses will be aggregated and shared with the group after each round in M4. The stakeholders will be allowed to adjust their answers in subsequent rounds. Since multiple rounds of questions will be asked, and the panel will be informed what the group thinks as a whole, the Delphi method will reach the common response through consensus. After the validation step, Report will be provided in M8. In M6, the report will be sent for Quality Assurance, and in M8, it will be publicly available.</p>		EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa			
Milestones and deliverables (outputs/outcomes)							
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description		Due Date (month number)	Means of Verification
MS2	Capacitation: International experience	2	AY	The aim of Capacitation is to share EU experience in introducing CE concept, disciplines at their Institution.		6	Invitation, agenda, signed participant list, number of participants N, presentations, feedback questionnaire
MS3	Validation of the Situation analysis results with the partners stakeholders	2	AY	Online Workshops will be organised to validate the results of Situation analysis.		12	Agenda, video recording, number of participants N, presentations, feedback questionnaire
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D2.1	CE education at higher education in CA countries	2	AY	[R — Document, report]	[PU — Public]	12	Report on CE education at higher education in CA countries. The aim of this report

							<p>is to assess and highlight the current state of circular economy education in higher education institutions (HEIs) in Central Asia. The report seeks to evaluate the existing level of awareness and integration of circular economy principles within the higher education curriculum in Central Asian countries.</p> <p>Number of pages: max 30 pages PDF-format.</p> <p>Languages: English, Russian, 4 CA languages., electronic version</p>
D2.2	Action Plan for CE implementation in higher education	2	AY	[R — Document, report]	[PU — Public]	12	<p>Action Plan for CE implementation in higher education. Action Plan for CE implementation in higher education. The aim of this action plan is to systematically introduce and integrate circular economy modules into higher education institutions in order to promote awareness, knowledge, and expertise in circular economy principles among students, faculty, and the broader community in Central Asia. It is Road map for HEIs to act with concrete steps towards implementing circular economy modules effectively.</p> <p>Number of pages: max 20 pages PDF-format.</p> <p>Languages: English, Russian, 4 CA languages., electronic version</p>

Estimated budget — Resources <i>(n/a for prefixed Lump Sum Grants)</i>														
Participant	Costs													
	A. Personnel		B. Subcontracting	C.1a Travel			C.1b Accommodation	C.1c Subsistence	C.2 Equipment	C.3 Other goods, works and services	D.1 Financial support to third parties		E. Indirect costs	Total costs
USC	1 person months	5400 EUR	0 EUR	1 travel	2 persons travelling	1100 EUR	1120 EUR	960 EUR	0 EUR	0 EUR	0 grants	0 EUR	601 EUR	9181 EUR
UNINA	1 person months	3200 EUR	0 EUR	1 travel	2 persons travelling	1100 EUR	1120 EUR	960 EUR	0 EUR	0 EUR	0 grants	0 EUR	447 EUR	6827 EUR
FHM Bielefeld	1 person months	5400 EUR	0 EUR	1 travel	2 persons travelling	1100 EUR	1120 EUR	960 EUR	0 EUR	0 EUR	0 grants	0 EUR	601 EUR	9181 EUR
WIUT	3 person months	5050 EUR	0 EUR	1 travel	2 persons travelling	3100 EUR	1680 EUR	880 EUR	0 EUR	0 EUR	0 grants	0 EUR	750 EUR	11460 EUR
AYeconomics	3 person months	12000 EUR	0 EUR	1 travel	2 persons travelling	1100 EUR	1120 EUR	960 EUR	0 EUR	0 EUR	0 grants	0 EUR	1063 EUR	16243 EUR
EKTU	1 person months	900 EUR	0 EUR	1 travel	2 persons travelling	3100 EUR	1680 EUR	1280 EUR	0 EUR	0 EUR	0 grants	0 EUR	487 EUR	7447 EUR
KarUK	1 person months	900 EUR	0 EUR	1 travel	2 persons travelling	3100 EUR	1680 EUR	1280 EUR	0 EUR	0 EUR	0 grants	0 EUR	487 EUR	7447 EUR
ABU	1 person months	900 EUR	0 EUR	1 travel	2 persons travelling	3100 EUR	1680 EUR	1280 EUR	0 EUR	0 EUR	0 grants	0 EUR	487 EUR	7447 EUR

KoKSU	1 person months	900 EUR	0 EUR	1 travel	2 persons travelling	3100 EUR	1680 EUR	1280 EUR	0 EUR	0 EUR	0 grants	0 EUR	487 EUR	7447 EUR
AST	1 person months	700 EUR	0 EUR	1 travel	1 person travelling	1650 EUR	840 EUR	480 EUR	0 EUR	0 EUR	0 grants	0 EUR	257 EUR	3927 EUR
TSIEM	1 person months	700 EUR	0 EUR	1 travel	1 person travelling	1650 EUR	840 EUR	480 EUR	0 EUR	0 EUR	0 grants	0 EUR	257 EUR	3927 EUR
TSIF	1 person months	700 EUR	0 EUR	1 travel	1 person travelling	1650 EUR	840 EUR	480 EUR	0 EUR	0 EUR	0 grants	0 EUR	257 EUR	3927 EUR
TUT	1 person months	709 EUR	0 EUR	1 travel	2 persons travelling	3300 EUR	1680 EUR	1280 EUR	0 EUR	0 EUR	0 grants	0 EUR	488 EUR	5457 EUR
TSUC	0 person months	0 EUR	0 EUR	1 travel	2 persons travelling	3300 EUR	1680 EUR	1280 EUR	0 EUR	0 EUR	0 grants	0 EUR	438 EUR	5457 EUR
AKFA	0 person months	0 EUR	0 EUR	1 travel	2 persons travelling	3100 EUR	1680 EUR	880 EUR	0 EUR	0 EUR	0 grants	0 EUR	396 EUR	6056 EUR
Total	17 person months	37459 EUR	0 EUR	15 travels	27 persons travelling	34550 EUR	20440 EUR	14720 EUR	0 EUR	0 EUR	0 grants	0 EUR	7503 EUR	114672 EUR

For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see [Portal Reference Documents](#)).

*Work Package 3*

<b>Work Package 3: Development of module 1: Environmental Management</b>			
Duration:	M7-M18	Lead Beneficiary:	FHM Bielefeld (P4) + KoKSU (P8)
Objectives			
<ul style="list-style-type: none"> <li>- Design of short courses for 3 levels – Bachelor, Master and further (academic) training and appropriate training materials in the area of Circular Economy aiming to familiarise learners from with the fundamentals of Circular Economy considering the specific needs of the target groups;</li> <li>- Peer reviewing the courses on the internal institutional level by the university teachers and stakeholders as well as the external educators from European universities; Peer reviewing;</li> <li>- Piloting of the courses and evaluation by the learners</li> </ul>			

Activities and division of work (WP description)					
Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	



T3.1	Development of course description	<p>Every Central Asia partner university will create training courses, taking especially the needs of the particular target group and already the regional peculiarities and the profile of the HEI. Tailored content allows to reduce the competence and knowledge gap and lead to a faster transition to Circular Economy.</p> <p>The process of designing the courses will start with the consideration of the analysis previously carried out and specify the competencies to be improved for different target groups (Bachelor /Master Students or Further Education learners).</p> <p>A competence map will be generated.</p> <p>Based on these findings and competence requirements the course will be designed indicating: Course content; Number of ECTS; Learning outcomes; Learning activities and teaching methods; Assessment methods; Resources etc.; Assignment</p> <p><b>Bachelor level</b> – will concentrate on introducing the CE principles and fundamentals and demonstrating the relevance of the transition towards circularity.</p> <p>Difference between the linear and circular economy.</p> <p><b>Master Level</b> – Understanding the relevance of Sustainability and CE as guiding principles and a high priority among decision makers. Changing the mindset towards circularity and its benefits.</p> <p><b>Business learners</b> (further education) will also be familiarised with CE and outfitted with knowledge and also ideas for practical implementation of CE principles in the working environment. They will be enabled to elaborate sustainable solutions and incorporate CE principles.</p> <p>While developing the courses and content the European Green Deal and the Circular Economy Action Plan will be consulted to get impulses and input, which can be adapted to the specific situation and aspiration of the Partner universities.</p>	KoKSU + FHM Bielefeld Supported by EU partners	COO, BEN	No
T3.2	Peer reviewing the courses by the teachers from European universities	<p>Once the course description is completed, colleagues from European universities will conduct an examination. As the courses must not be accredited by any external authority, a multiple peer review process will be carried out – in the first step project partners from EU countries will evaluate and voice recommendations or suggestions for improvement if necessary.</p>	USC, Ayeconomics, UNINA, FHM Bielefeld	COO, BEN	No

T3.3	Peer review	<p>In the next the developed courses will be reviewed by the peers and external reviewers, e.g. relevant stakeholders from the region representing the business sector (min 3 per CA country) and policy makers (min 3 per CA country).</p> <p>The courses will be revised based on the suggestions/ recommendations given by the reviewers. The refined final version of the courses will be used for teaching the first intake.</p> <p>These quality loops ensure that the designed courses comply with the national standards and also incorporate appropriate ideas and good practices from EU practices, policies and strategies.</p> <p>In total, 9 courses for partner universities will be designed and peer/ reviewed. Allocated ECTS will vary between 8 and 10 ECTS</p>	KoKSU CA partners	COO, BEN	No
T3.4	Testing and evaluation	<p>After the peer review (project) internal and external all developed courses will be piloted by the CA HEI. Partners will initiate relevant organisational, personnel and infrastructural preparation and start the application process of the courses. Learners will be enrolled for all educational levels – bachelor, Master, Further Education. The testing of the module will be carried out and completed by the evaluation done by the learners. Assessment will be used to execute required adjustment and modifications in different levels – content, teaching/learning methods, materials and tools as well as assessment. All partners strive to integrate the courses into the educational program of the own university.</p>	KoKSU CA partners	COO, BEN	No

## Milestones and deliverables (outputs/outcomes)

Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description	Due Date (month number)	Means of Verification
MS4	Competence map generated	2	KoKSU + FHM Bielefeld	Competence map comprising core skills in every CA partner institution is available and is based on the identifies needs.	M15	Report in English and Russian describing competence map

MS5	9 Courses description designed	2	KoKSU + FHM Bielefeld	9 Courses are designed following the defined structure and contains information about learning outcomes, content, methods, etc		M15	Teaching materials: PPT, case studies and etc
MS6	9 Courses description approved	2	KoKSU + FHM Bielefeld	9 Courses are peer-reviewed and approved for piloting		M18	Incorporated feedback and comments
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D3.1	Syllabus development of Environmental Management	2	FHM Bielefeld + KoKSU	Other	PU	M14	<p>The deliverable consists of a comprehensive syllabus in Environmental Management designed to be offered collaboratively to partner universities. The program comprises nine distinct courses, each thoughtfully designed to equip students with the knowledge, skills, and competencies required to excel in the field of environmental management. This syllabus serves as a detailed roadmap for the entire program, providing an overview of course titles, descriptions, learning objectives, and expected outcomes.</p> <p>9 courses for partner universities will be designed and peer/ reviewed. Allocated ECTS will vary between 8 and 10 ECTS.</p> <p>Syllabus development will include internal peer review by the Academic Board.</p> <p>Indicators will include: N of educational programmes by HEI where the modules will be included, name and N of degrees (bachelor, master or vocational trainings level)</p>

D3.2	Content development of Environmental Management	2	FHM Bielefeld	Other	PU	M18	The contents of the module will be in English, it will include all the teaching materials for each subject included (ppts, Assessment Materials, case studies, web and papers resources), External Peer review will be realized: Each module has to have recommendations/ review reports from <b>3</b> representatives from the private companies and <b>2</b> recommendations from professors/experts in this field to guarantee.
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Estimated budget — Resources <i>(n/a for prefixed Lump Sum Grants)</i>														
Participant	Costs													
	A. Personnel		B. Subcontracting	C.1a Travel			C.1b Accommodation	C.1c Subsistence	C.2 Equipment	C.3 Other goods, works and services	D.1 Financial support to third parties		E. Indirect costs	Total costs
FHM Bielefeld	6 person months	30420 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	2129 EUR	32549 EUR
KoKSU	4 person months	3550 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	249 EUR	3799 EUR
USC	0 person months	0EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	0 EUR	0 EUR
AYeconomics	0 person months	0EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	0 EUR	0 EUR

UNINA	0 person months	0EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	0 EUR	0 EUR
EKTU	0 person months	0EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	0 EUR	0 EUR
KarUK	1 person months	900 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	63 EUR	963 EUR
ABU	1 person months	900 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	63 EUR	963 EUR
AST	0 person months	0EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	0 EUR	0 EUR
TSIEM	1 person months	700 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	49 EUR	749 EUR
TSIF	1 person months	700 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	49 EUR	749 EUR
TUT	1 person months	709 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	50 EUR	759 EUR
TSUC	1 person months	709 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	50 EUR	759 EUR
WIUT	1 person months	1850 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	130 EUR	1980 EUR
AKFA	1 person months	1850 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	130 EUR	1980 EUR

Total	18 person months	42288 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants 0 prizes	0 EUR	2962 EUR	45250 EUR
For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see <a href="#">Portal Reference Documents</a> ).														

#### Work Package 4

##### Work Package 4: Sustainable competitiveness

Duration: M7-M18      Lead Beneficiary: UNINA (P3) + EKTU (P5)

##### Objectives

The objective of Work Package (WP) 4 is to provide a quantitative analysis to evaluate the territorial attractiveness for new activities and services localization in terms of social, economic, and environmental sustainability. This output is obtained throughout the state of the art on the relationship between urban competitiveness and achieving sustainable development and circular economy goals, with some examples of international studies and rankings in this issue.

To define and measure the physical, functional, and environmental characteristics of a territorial system that favours the competitiveness and sustainable development of the system

Students will be able:

- To learn the main international rankings and best practices for territorial and urban competitiveness.
- To identify suitable locations to favour sustainable and circular development models

##### Activities and division of work (WP description)

Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	

T4.1	Identification the needs and development of course description	<p>A course description clearly communicates the goals and objectives of the course, the topics to be covered, the instructional methods, and any requirements or prerequisites.</p> <ol style="list-style-type: none"> <li>1. Define the overall purpose and objectives of the course, and what learners will be able to do after completing the course;</li> <li>2. Identify the discipline topics relevant for CA: identify three key topics that will be covered, based on the needs assessment;</li> <li>3. Choose the instructional methods: the instructional methods that will be used to deliver the course content, such as lectures, hands-on exercises, case studies, or simulations;</li> <li>4. Determine the course requirement: Determine any prerequisites or requirements for taking the course, such as prior knowledge or experience;</li> <li>5. Develop the course description: Write a concise and clear description of the course, including the goals and objectives, topics covered, instructional methods, and any requirements or prerequisites;</li> <li>6. Review and rReview the courses description and revise as needed to ensure it accurately reflects the needs of the learners and the goals of the course.</li> </ol>	<p>UNINA &amp; EKTU</p> <p>EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa</p>	COO BEN	No
T 4.2	Validating the Course Draft with the Consortium and Stakeholders	<p>Validating the course structure and content with the consortium and stakeholders is important step in the course development process. This involves obtaining feedback from the stakeholders impacted by the course and ensuring that it aligns with their needs and expectations.</p> <p>Based on the listed stakeholders from the WP2: the Discipline draft will be shared with key stakeholders; feedback will be gathered; feedback provided by stakeholders will be reviewed, and feedback will be incorporated into the course materials. The last step final course draft will be validated by Stakeholders.</p>	<p>EKTU</p> <p>EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa</p>	COO BEN	No
T 4.3	Creating the content of the course “Sustainable competitiveness”	Create final content of the course “Sustainable competitiveness” ready to deliver.	UNINA	COO	No



				EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa	BEN		
Milestones and deliverables (outputs/outcomes)							
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description	Due Date (month number)	Means of Verification	
MS7	Identification the needs and development of course description	5	UNINA EKTU	Draft: Identification the needs and development of course description which will include course goals and objective, Identified discipline topics relevant for CA; the instructional/teaching methods; the course requirement, the course description.	14	Report English: max 20 pages	
MS8	Validating the Course Draft with the Consortium and Stakeholders	5	EKTU	EKTU as a co-leader of the WP will validate and gather feedback from stakeholders how the Draft can be improved to ensure that market needs are met.	18	Survey questionnaires, N of participants, Analytics form online survey	
Deliverable No(continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D4.1	Syllabus development of Sustainable Competitiveness	4	UNINA	OTHER	[PU — Public]	14	Documents in English that outline the basic elements of the module: which topics will be covered, learning outcomes, assessments, contents, and methodologies. Developing a syllabus for a course on Sustainable Competitiveness involves careful planning to outline the course's objectives, content, assessment methods, and schedule. 9



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UNINA	6 person months	17600 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	1232 EUR	18832 EUR
EKTU	6 person months	5250 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	368 EUR	5618 EUR
USC	0 person months	0EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	0 EUR	0 EUR
AYecono mi cs	0 person months	0EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	0 EUR	0 EUR
FHM Bielefeld	0 person months	0EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	0 EUR	0 EUR
KarUK	1 person months	900 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	63 EUR	963 EUR
ABU	1 person months	900 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	63 EUR	963 EUR
KoKSU	1 person months	900 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	63 EUR	963 EUR
AST	1 person months	700 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	49 EUR	749 EUR
TSIEM	1 person months	700 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	49 EUR	749 EUR

TSIF	1 person months	700 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	49 EUR	749 EUR
TUT	1 person months	709 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	50 EUR	759 EUR
TSUC	1 person months	709 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	50 EUR	759 EUR
WIUT	1 person months	1850 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	130 EUR	1980 EUR
AKFA	1 person months	1850 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	130 EUR	1980 EUR
Total	22 person months	32768 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants 0 prizes	0 EUR	2296 EUR	35064 EUR

For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see [Portal Reference Documents](#)).

*Work Package 5*

<b>Work Package 5: Development module 3: Environmental entrepreneurship</b>			
Duration:	M7-M18	Lead Beneficiary:	USC (P1) + ABU (P7)
<b>Objectives</b>			
<p>The objective of this work package is to train professionals who can contribute to the strengthening and design of strategies for sustainable and circular development in the public and private sectors through entrepreneurship. This module will train the participants in innovation and sustainability, two essential drivers for the dynamization of Sustainable Societies, capable of responding to the objectives of social welfare, inclusive and respectful of the ecological limits of the Planet.</p> <p>By the end of the module, students should have acquired the following competences:</p> <ul style="list-style-type: none"> <li>- To understand the different approaches of the green economy, circular economy and eco-innovation in order to formulate proposals and strategies for a just ecological transition.</li> <li>- Conceive, design and implement Circular Business Models, Circular Business Plans and circular social initiatives for a just ecological transition.</li> <li>- Undertake innovative social, community, cooperative or business projects and initiatives based on parameters of sustainability, circularity and justice.</li> <li>- Formulate, integrate and synthesise new and complex ideas in collaborative and participatory processes for the development of strategic plans for sustainability and Circular Economy.</li> </ul> <p>Conceive, design, implement and manage circular economy, innovation or sectoral development programmes and actions.</p>			

<b>Activities and division of work (WP description)</b>					
Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T5.1	Identification the needs to change the approach to teaching and learning in Circular and sustainable entrepreneurship	Analysis statements and report to Developing Modules	ABU USC All the partners	COO BEN	NO
T5.2	Benchmarking in Circular and sustainable Entrepreneurship Study	Implementation the best EU practices in Environmental Entrepreneurship into the Partners' curriculum	ABU USC	COO BEN	NO

T5.3	Creating the contents, implementing and delivering the course "Circular & Sustainable Entrepreneurship	<p>With the results of identification needs and benchmarking activities, the partners will agree on the curriculum design with module adaptations for BA/MA/LLL programs</p> <p>The partners will create course materials that emphasise the importance of stakeholder engagement in organisational strategies related to sustainability and the circular economy. Among the topics include in the module will be the following ones:</p> <ul style="list-style-type: none"> <li>- Circular Economy</li> <li>- Resources and sustainable development</li> <li>- Tools for Circular Economy Assessment</li> <li>- Circular and Sustainable Business models</li> <li>- Financing the Circular Economy business models</li> </ul> <p>The course will aim to help participants convert entrepreneurship challenges into green business opportunities, understand the potential for new ventures, strategies, products, and technologies that address society's Circular Economy and Sustainability.</p>	ABU USC	COO BEN	NO
T5.4	Strengthening the knowledge and capacities through workshops for stakeholders in Central Asia Region	<p>USC, in collaboration with ABU, will plan at least two online workshops with relevant stakeholders in the Central Asia Region (CAR) to identify, discuss and address the sustainability and circular economy needs. The two workshops will include a networking activity with the involvement of relevant stakeholders in the development of educational programs, as a first step for set a potential partnership in Circular and sustainable entrepreneurship.</p> <p>The workshop will be hosted in the CAR countries by local partners, together with the EU partners, will conduct a post-workshop assessment to produce a report with recommendations for future actions.</p>	USC ABU All the partners	COO BEN	NO

## Milestones and deliverables (outputs/outcomes)

Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description	Due Date (month number)	Means of Verification
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MS9	Online workshop with relevant stakeholders	5	ABU + USC	The workshop will be organised in Central Asia with the participation of relevant stakeholders		14	Agenda of the workshop, list of participants, minutes of the meeting, dissemination news published in social networks
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D5.1	Syllabus of Circular & Sustainable Entrepreneurship module	5	USC	Other	[PU — Public]	14	Developing a syllabus for a module on Circular & Sustainable Entrepreneurship involves structuring the course content, learning objectives, assessments, and topics to be covered. Document in English that outline the basic elements of the module: what topics will be covered, learning outcomes, assessments, content, and methodologies. 9 courses for partner universities will be designed and peer/ reviewed. Allocated ECTS will vary between 8 and 10 ECTS. Syllabus will be peer reviewed internally by the Academic Board.
D5.2	Contents of the Circular & Sustainable Entrepreneurship module	5	USC	Other	[PU — Public]	18	The content of a Circular & Sustainable Entrepreneurship (ppts, Assessment Materials, case studies, web and papers resources) module should provide students with a comprehensive understanding of the principles, strategies, and practices involved in launching and managing sustainable businesses within a circular economy framework. The contents of the module will be in English, it will include





KarUK	1 person months	900 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	63 EUR	963 EUR
KoKSU	1 person months	900 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	63 EUR	963 EUR
AST	0 person months	0EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	0 EUR	0 EUR
TSIEM	1 person months	700 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	49 EUR	749 EUR
TSIF	1 person months	700 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	49 EUR	749 EUR
TUT	1 person months	709 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	50 EUR	759 EUR
TSUC	1 person months	709 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	50 EUR	759 EUR
WIUT	1 person months	1850 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	130 EUR	1980 EUR
AKFA	1 person months	1850 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	130 EUR	1980 EUR
Total	18 person months	42138 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	X EUR	0 grants 0 prizes	0 EUR	2951 EUR	45089 EUR

For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see [Portal Reference Documents](#)).

## Work Package 6

Work Package 6: Capacity building in Circular Economy			
Duration:	M16-M27	Lead Beneficiary:	AYeconomics (P2) + TUT (P12) + TSUC (P13)
Objectives			
<ul style="list-style-type: none"> <li>- The main purpose of the work package is primarily to provide access to the developed project materials for partners and future users from the beneficiary universities.</li> <li>- During the development of materials, the electronic platform can serve to study the views of project partners and discuss the issues and materials being developed.</li> </ul>			
Activities and division of work (WP description)			

Task No (continuo us numberin g linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T6.1	Organisation of the trainings for enhancing teaching staff capacity for CA partners	<p>TUT and TSUC will coordinate the Training programme and scheduler in cooperation with host EU HEI. Each module will be hosted by its Lead (EU partner: Naples, Santiago de Compostela; Bielefeld). CA partner will provide min 2 persons per module (6 teachers per HEI). Teachers will have round trips to three EU HEIs.</p> <ol style="list-style-type: none"> <li>1. Based on the participants and scope of the Trainings will be chosen delivery methods such as in-person, online, or a hybrid of both. Project expects to involve a max number of local teachers online who will not be able to travel for example.</li> <li>2. Once the training content and delivery method will be determined, schedule the training and coordinate all the logistics, such as reserving a venue, arranging for equipment, and communicating with participants.</li> <li>3. During the training, the facilitator should follow a structured agenda and actively engage participants (online as well) to ensure they are learning and applying the new skills.</li> <li>4. After the training is complete, it's important to evaluate the effectiveness of the training program to determine whether the goals and objectives were met and to identify areas for improvement.</li> <li>5.</li> </ol>	TUT and TSUC all partners	COO BEN	NO

T6.2	Organisation of hackathon in the circular economy.	<p>During the piloting: One hackathon in the circular economy will be organised in each CA country moderated by each EU partner based of their expertise: Design challenges (USC): Hackathons can be used to challenge participants to design products, systems, or processes that are circular in nature, such as closed-loop supply chains or circular business models. Materials innovation (FHM Bielefeld ): Hackathons can focus on finding new uses for waste materials or developing new materials that are more sustainable and environmentally friendly. Digital solutions (AYeconomics): Hackathons can explore the potential of digital technologies, such as blockchain or IoT, to improve traceability and transparency in supply chains, or to enable circular business models. Circular cities (UNINA): Hackathons can focus on developing circular solutions for cities, such as waste reduction, energy efficiency, or sustainable transportation. AYeconomics will develop methodology, guideline and evaluation survey for the event.</p>	<p>AYeconomics, UNINA, USC, University of Bielefeld</p> <p>CA partners</p>	<p>COO</p> <p>BEN</p>	NO
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Milestones and deliverables (outputs/outcomes)							
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description		Due Date (month number)	Means of Verification
MS10	Developed methodology on the organisation of hackathon in the circular economy.	6	AYeconomics	AYeconomics will provide a well-defined set of rules and guidelines, and a collaborative and iterative approach to solution-building. Event will be joined with the Follow up meeting form WP7 for saving costs purpose.		M12	Report: max 10 pages, English&Russian
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)

D6.1	Organisation of the trainings for enhancing teaching staff capacity for CA partners	6	TUT & TSUC	[OTHER]- Training of trainers:	[PU — Public]	M18	CA partner will provide min 2 persons per module (6 teachers per HEI). Teachers will have round trips to three EU HEIs. Trainings of 4 days will be organized in each EU HEI (Naples, Santiago de Compostela; Bielefeld). Based on the participants and scope of the Trainings will be chosen delivery methods such as in-person, online, or a hybrid of both. Training program, training materials, schedule the training, a structured agenda, list of participants (online as well), feedback and questionnaires will be developed.
D6.2	Organisation of hackathon in the circular economy.	6	AYeconomics	Event	[PU — Public]	M27	The event is an online (at projects website, CA HEIs websites and social media) hackathon focused on the circular economy, where participants from diverse backgrounds and disciplines collaborate to develop innovative solutions that promote sustainability, resource efficiency, and circular practices. Projects are presented virtually, and winners are determined through online voting, engaging a wide audience in celebrating multidisciplinary ideas. The event aims to create a dynamic and inclusive platform where multidisciplinary teams collaborate to generate innovative solutions that contribute to a more sustainable and circular economy, all while engaging and inspiring a wider online audience. English and local



KarUK	0 person months	0 EUR	0 EUR	3 travels	18 persons travelling	19206 EUR	2880 EUR	2880 EUR	0 EUR	0 EUR	0 grants	0 EUR	1748 EUR	26714 EUR
ABU	0 person months	0 EUR	0 EUR	3 travels	18 persons travelling	19206 EUR	2880 EUR	2880 EUR	0 EUR	0 EUR	0 grants	0 EUR	1748 EUR	26714 EUR
KoKSU	0 person months	0 EUR	0 EUR	3 travels	18 persons travelling	19206 EUR	2880 EUR	2880 EUR	0 EUR	0 EUR	0 grants	0 EUR	1748 EUR	26714 EUR
AST	0 person months	0 EUR	0 EUR	0 travel	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	0 EUR	0 EUR
TSIEM	0 person months	0 EUR	0 EUR	3 travels	18 persons travelling	19206 EUR	3192 EUR	2160 EUR	0 EUR	0 EUR	0 grants	0 EUR	1719 EUR	26277 EUR
TSIF	0 person months	0 EUR	0 EUR	3 travels	18 persons travelling	19206 EUR	3192 EUR	2160 EUR	0 EUR	0 EUR	0 grants	0 EUR	1719 EUR	26277 EUR
WIUT	0 person months	0 EUR	0 EUR	3 travels	18 persons travelling	20394 EUR	3192 EUR	1980 EUR	0 EUR	0 EUR	0 grants	0 EUR	1790 EUR	27356 EUR
AKFA	0 person months	0 EUR	0 EUR	3 travels	18 persons travelling	20394 EUR	3192 EUR	1980 EUR	0 EUR	0 EUR	0 grants	0 EUR	1790 EUR	27356 EUR
<b>Total</b>	<b>7 person months</b>	<b>22768 EUR</b>	<b>X EUR</b>	<b>30 travels</b>	<b>180 persons travelling</b>	<b>194436 EUR</b>	<b>30672 EUR</b>	<b>25560 EUR</b>	<b>0 EUR</b>	<b>0 EUR</b>	<b>0 grants 0 prizes</b>	<b>0 EUR</b>	<b>19143 EUR</b>	<b>292579 EUR</b>

For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see [Portal Reference Documents](#)).



## Work Package 7

Work Package 7: Piloting					
Duration:		M19 - M30	Lead Beneficiary:		KarUK (P6)
Objectives					
<p>The aim of WP7 is to develop innovative, interdisciplinary modules in Circular Economy for the existing curricula in bachelor, Master levels and for life-long learning. As part of this work package, a test check of the training materials and content and obtaining feedback from participants are provided. Conducting research using the online questionnaire method to identify emerging or potential problems, as well as weaknesses for their solution and making adjustments for improvement. Processes for ensuring monitoring of the pilot implementation of modules are of paramount importance. The CA partners undertake to provide all the information necessary for the KarUK to develop a research program and the content of the questionnaires, conduct a survey and analyze the final results. The research methodology and interview questions will be developed by the KarUK and implemented by the CA partners. KarUK is responsible for providing online instructions, implementation support and analysis of research results. The presentation of the research results will be held during the meeting of all partners.</p>					
Activities and division of work (WP description)					
Task No (continuous numbering linked to WP)	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role (COO, BEN, AE, AP, OTHER)	
T7.1	Coordination and monitoring over the pilot implementation of modules in CA partners	<p>Coordination and monitoring over the pilot implementation of modules in CA partners.</p> <p>Develop a pilot plan: A detailed pilot plan will be developed that outlines the timelines, budget, resources, and stakeholders involved in the program.</p> <p>Monitor and evaluate the program: The pilot program will be monitored and evaluated to determine its effectiveness. This will be done through surveys and focus groups.</p> <p>Make adjustments: Based on the feedback received from monitoring and evaluation, adjustments will be made to the program to improve its effectiveness (M25).</p> <p>Scale up the program plan: to provide a scale up plan.</p> <p><b>Report</b> on the pilot implementation of modules</p>	KarUK EKTU, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa	BEN	Yes S7.1

		in the educational process of CA partners based on Monitor and Evaluation and Adjustment.					
T7.2	Monitoring Meeting	Round trip to CA HEIs to monitor how pilot is implementing and report on monitoring will be developed.	KarUK ALL partners	BEN	Yes S7.3, S7.4		
Milestones and deliverables (outputs/outcomes)							
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description		Due Date (month number)	Means of Verification
MS11	Pilot Adjustment report	7	KarUK	Make adjustments: Based on the feedback received from monitoring and evaluation, adjustments will be made to the program to improve its effectiveness (M25).		M27	Report on the pilot adjustment of modules in the educational process of CA partners. Number of pages: min 15 pages PDF-format Languages: English Electronic version
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D7.1	Pilot Plan	7	KarUK	R	PU	M19	A detailed pilot plan will be developed that outlines the timelines, budget, resources, and stakeholders involved in the program. Number of students enrolled that will be attending new module EP at 12 HEI of CA. Number of pages: min 30 pages PDF-format. Languages: English, electronic version

D 7.2	Pilot Report	7	KarUK	R	PU	M25	Report on the pilot implementation of modules in the educational process of CA partners. Number of students enrolled, Number of EP, Number of pages: min 30 pages PDF-format. Languages: English, electronic version
D7.3	Monitoring Meeting	7	KarUK	DEM	SEN	M27	Monitoring visit in the mode of round trip to CA HEIs to monitor how pilot is implementing Agenda, signed presence list, duration of the event, report of the event, presentations. Report on monitoring in PDF-format, not less than 30 pages. Languages: English, electronic version

**Estimated budget — Resources** *(n/a for prefixed Lump Sum Grants)*

Participant	Cos ts													
	A. Personnel		B. Subcont ra cting	C.1a Travel			C.1b Accomo d ation	C.1c Subsis tence	C.2 Equipme nt	C.3 Other goods, works and services	D.1 Financial support to third parties		E. Indirect costs	Total costs
KarUK	4 person months	3800 EUR	0 EUR	3 travels	2 persons ravelling	1920 EUR	800 EUR	900 EUR	0 EUR	4500 EUR	0 grants	0 EUR	834 EUR	12754 EUR
USC	0 person months	0 EUR	0 EUR	4 travels	2 persons ravelling	5980 EUR	1280 EUR	1200 EUR	0 EUR	0 EUR	0 grants	0 EUR	592 EUR	9052 EUR
UNINA	0 person months	0 EUR	0 EUR	4 travels	2 persons ravelling	5980 EUR	1280 EUR	1200 EUR	0 EUR	0 EUR	0 grants	0 EUR	592 EUR	9052 EUR

FHM Bielefeld	0 person months	0 EUR	0 EUR	4 travels	2 persons travelling	5980 EUR	1280 EUR	1200 EUR	0 EUR	0 EUR	0 grants	0 EUR	592 EUR	9052 EUR
AYeconomics	0 person months	0 EUR	0 EUR	4 travels	2 persons travelling	5980 EUR	1280 EUR	1200 EUR	0 EUR	0 EUR	0 grants	0 EUR	592 EUR	9052 EUR
EKTU	1 person months	1100 EUR	0 EUR	4 travels	2 persons travelling	2200 EUR	1120 EUR	1200 EUR	0 EUR	0 EUR	0 grants	0 EUR	393 EUR	6013 EUR
ABU	1 person months	1100 EUR	0 EUR	4 travels	2	2200 EUR	1120 EUR	1200 EUR	0 EUR	0 EUR	0 grants	0 EUR	393 EUR	6013 EUR
					persons travelling									
KoKSU	1 person months	1100 EUR	0 EUR	4 travels	2 persons travelling	2200 EUR	1120 EUR	1200 EUR	0 EUR	0 EUR	0 grants	0 EUR	393 EUR	6013 EUR
AST	0 person months	0 EUR	0 EUR	4 travels	1 persons travelling	1100 EUR	400 EUR	240 EUR	0 EUR	0 EUR	0 grants	0 EUR	122 EUR	1862 EUR
TSIEM	1 person months	900 EUR	0 EUR	3 travels	1 persons travelling	1100 EUR	400 EUR	240 EUR	0 EUR	0 EUR	0 grants	0 EUR	185 EUR	2825 EUR
TSIF	1 person months	900 EUR	0 EUR	3 travels	1 persons travelling	1100 EUR	400 EUR	240 EUR	0 EUR	0 EUR	0 grants	0 EUR	185 EUR	2825 EUR
TUT	1 person months	581 EUR	0 EUR	3 travels	2 persons travelling	1900 EUR	800 EUR	600 EUR	0 EUR	0 EUR	0 prizes	0 EUR	272 EUR	4153 EUR
TSUC	1 person months	581 EUR	0 EUR	3 travels	2 persons travelling	1900 EUR	800 EUR	600 EUR	0 EUR	0 EUR	0 grants	0 EUR	272 EUR	4153 EUR
WIUT	1 person months	2700 EUR	0 EUR	3 travels	2 persons travelling	2100 EUR	800 EUR	420 EUR	0 EUR	0 EUR	0 grants	0 EUR	421 EUR	6441 EUR
AKFA	1 person months	2700 EUR	0 EUR	3 travels	2 persons	2100 EUR	800 EUR	420 EUR	0 EUR	0 EUR	0 grants	0 EUR	421 EUR	6441 EUR

					ravelling									
Total	13 person months	15462 EUR	0 EUR	0 travels	0 persons ravellin g	43740 EUR	13680 EUR	12060 EUR	0 EUR	4500 EUR	0 grants 0 prizes	0 EUR	6259 EUR	95701 EUR
For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see Portal Reference Documents).														

*Work Package 8*

<b>Work Package 8: Quality assurance</b>			
Duration:	M1-M36	Lead Beneficiary:	FHM Bielefeld + EKTU
Objectives			
<p>The objective of this Work Package “Quality assurance and monitoring” is to ensure the quality of the project and to ensure that the declared results can be realized through timely implemented tasks and activities set in Consolidated project plan. The aim is to ensure the high-quality project implementation. Quality Assurance and monitoring also confirms impact and sustainability of the results and deliverables.</p>			
Activities and division of work (WP description)			

Task No	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role	

T8.1	Initiation of the Quality Assurance and Development of Quality Assurance and Monitoring Plan	<p>Quality assurance and monitoring of the project comply with the Erasmus+ guidelines, project proposal and Quality Assurance and Monitoring Plan (QAM-plan) for the project. The leader of the work package is the FHM Bielefeld (4) The main objective of QAM-plan is to provide the project consortium with a set of quality assurance measures, quality standards, quality control measures and criteria, procedures and mechanisms that should be implemented throughout the project lifecycle. to ensure:</p> <ul style="list-style-type: none"> <li>- Monitoring and documenting the progress of project activities so that deviations can be detected at an early stage and corrective measures can be taken as soon as possible.</li> <li>- High level of quality in the structure, processes and results of the project.</li> <li>- Effective risk management.</li> <li>- Relevant improvement actions.</li> </ul> <p>. Initiation of the quality assurance process.</p> <ol style="list-style-type: none"> <li>1. A Quality Assurance and Monitoring Team (QAM-team) will be established, which is responsible for developing a Quality Assurance and Monitoring Plan (QAM-plan). The QAM team will include representatives of all universities to perform all the quality activities in their university and to ensure full understanding on the importance of the quality activities and performance indicators. These members are nominated by each partner in the Kick off meeting.</li> <li>2. Development of a quality assurance and monitoring plan Quality assurance tasks will be coordinated by FHM Bielefeld + EKTU, as the head of the WP.</li> </ol> <p>The document describes the main guidelines and criteria for the quality assurance of the project by defining, planning and implementing a list of methods, quality standards, quality assurance measures and various tools and means to be applied for the entire duration of the project. In addition, it includes indicators that will be put into effect to assess whether and to what extent the project is achieving its goals and results. It also ensures the required level of quality and improvements at each stage of the project implementation. Quality monitoring and reporting will be applied at two levels: internal and external.</p>	FHM Bielefeld + EKTU  CA partners	COO BEN	NO
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T8.2	Constant Quality Assurance and Monitoring of the project	<p>Internal quality control will include collection of information for reviews and following systematically the progress and quality of the project and the achievement of the deliverables.</p> <p>The activities consist of collecting:</p> <ul style="list-style-type: none"> <li>- Feedback from level of WP Core teams and DE-team working methods, mutual understanding, satisfaction, communication, and problems encountered</li> <li>- Evaluation of the master classes and workshops</li> <li>- Evaluation of the online course</li> <li>- Evaluation of the materials and tools</li> <li>- Evaluation of the events and conferences</li> <li>- Outcome testing (ex-ante) of the capacity building. Target groups will be directly involved in testing the results.</li> <li>- Evaluation of the equality of deliverables.</li> </ul>	<p>FHM Bielefeld + EKTU</p> <p>CA partners</p>	<p>COO BEN</p>	<p>NO</p>
T8.3	Regular quality reviews	<p>Regular quality reviews are the bases of the quality assurance activity. They consist of bi-annual internal quality reports and mid-term quality report, external evaluation and final quality assessment report.</p> <ol style="list-style-type: none"> <li><b>1. Performing QAM reporting every 6 months</b> FHM Bielefeld, as the project quality leader will lead the process on analysing the collected data. FHM Bielefeld will review and produce a report every 6 months to the PMG. It will also provide a summary with recommendations on the project progress and quality of the outcomes and deliverables annually. All relevant risks will be elaborated.</li> <li><b>2. Reporting on the quality of the project in the Mid-term report</b></li> <li><b>3. External evaluation</b> An international external evaluator will be selected on the basis of an open competition to evaluate the quality of the content and to provide recommendations for the 3rd year. This evaluation will be conducted Q3-Q4 of the second project year</li> <li><b>4. Final quality report</b> The final report will assess the overall effectiveness and first impact of the project.</li> </ol>	<p>FHM Bielefeld + EKTU</p> <p>CA partners</p>	<p>COO BEN</p>	<p>NO</p>

Milestones and deliverables (outputs/outcomes)							
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description		Due Date (month number)	Means of Verification
MS12	Interim quality review	1	FHM Bielefeld	Report of the implementation and outcomes of the project and recommendations to further improve the project		M18	Pdf 20 p. English
Deliverable No (continuous numbering linked to WP)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)
D8.1	Quality Assurance and Monitoring Plan	8	FHM Bielefeld + EKTU	[R — Document, report]	[PU — Public]	M4	It is a comprehensive document that outlines the strategies, processes, and procedures of the project to ensure the consistent and high-quality delivery of project implementation, teaching materials and trainings provided. This plan serves as a roadmap for quality management and typically includes details such as quality standards, roles and responsibilities, quality control measures, monitoring and reporting mechanisms, and continuous improvement strategies. It is a key reference document for all partners and stakeholders involved in quality management and helps to establish and maintain a culture of quality within a

							project. Document: Quality Assurance and Monitoring PlanPdf, 20 p. English Document: Quality Assurance and onitoring Plan Pdf, 20 p. English
D8.2	Quality Assurance Progress report	8	FHM	[R — Document, report	[SE — SENSITIVE]	18	<p>The report may include information on the status of quality metrics, any deviations from the plan, actions taken to address issues or improvements made, and recommendations for adjustments if necessary. It serves as a snapshot of the project's quality performance midway through its lifecycle and guides decision-making for the remainder of the project. Document: Pdf, 20 p. English</p> <p>Progress report by external evaluation (external consultant will be contracted at the beginning of the project)</p>
D8.3	Quality Assurance Final report	8	FHM	[R — Document, report	[SE — SENSITIVE]	36	<p>It is a comprehensive document summarizing the quality management efforts and outcomes of a project, program, or organization upon its completion. It provides an overview of quality objectives, standards, implementation processes, assessment results, issue resolution, and recommendations for improvement. This report will serve as a valuable reference for</p>



KarUK	1 person months	850 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	60 EUR	910 EUR
ABU	0 person months	700 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	49 EUR	749 EUR
KokSU	0 person months	850 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	60 EUR	910 EUR
AST	0 person months	400 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	28 EUR	428 EUR
TSIEM	0 person months	400 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	28 EUR	428 EUR
TSIF	0 person months	400 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	28 EUR	428 EUR
TUT	0 person months	330 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	23 EUR	353 EUR
TSUC	0 person months	330 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	23 EUR	353 EUR
WUIT	0 person months	1350 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	95 EUR	1445 EUR
AKFA	0 person months	1350 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	95 EUR	1445 EUR
Total	3 person months	24010 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants 0 prizes	0 EUR	1683 EUR	25693 EUR

For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see *Portal Reference Documents*).

## Work Package 9

Work Package 9: Impact and dissemination					
Duration:		M1-M36	Lead Beneficiary:		TSUC (P13) + Akfa (P15)
Objectives					
<p>The Work Package ensures optimised project outputs, results, large-scale impact and sustainability during and after project lifecycle. Dissemination and exploitation will go beyond partner organisations and countries to a wider range of public all over Europe and CA countries. WP aims at establishing the brand of the project, to raise awareness among partners, health industrial companies, stakeholders, policy makers and other HEIs. WP is horizontal to the project duration, since it is relevant to all project activities. It is also inextricably related to the Management and coordination work package and the Quality Assurance and monitoring work package. TSUC (P13) + Akfa (P15) will illuminate the importance of the project activities; promote dissemination of the project results and outcomes to different groups at HEIs, stakeholders, and research audience together with all partners.</p>					
Activities and division of work (WP description)					
Task No	Task Name	Description	Participants		In-kind Contributions and Subcontracting (Yes/No and which)
			Name	Role	
T9.1	Developing dissemination (DS) strategy	<p>This task aims to develop a dissemination strategy to be carried out during and after the completion of the project. It will comprise of activities to be performed by each project member based on project outcomes, success stories and opportunities.</p> <p>The dissemination plan establishes communication goals, identifies target groups for these messages (taking into consideration, for example, Internet penetration data, mobile users data, to better reach target groups), identifies tools for reaching these groups and sets out processes for measuring the success of communication activities.</p> <p>The project's dissemination strategy will be adjusted periodically to ensure that activities associated with production and distribution of materials and planning and delivery of events run concurrently to the availability of the project deliverables.</p> <p>The strategy will be discussed with partners in an online workshop.</p>	Akfa  EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC WIUT, Akfa	COO BEN	No

T9.2	Stakeholder engagement	<p>This task aims to inform stakeholders about new educational programs available in HEIs and engage them to cooperate.</p> <p>In particular, meetings, seminars, webinars, job fairs, etc. would be organised by CA universities to bring stakeholders into discussion on matters of curriculum development, staff training opportunities, getting feedback on programs, provision of internship/employment opportunities for students, tailor-made programs, etc. Events might be organised by associated partners in each country jointly. Reports of events held would be provided on an annual basis. Events will be highlighted in news, social and web media, including HEI and project web-sites.</p>	<p>Akfa</p> <p>EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa</p>	<p>COO BEN</p>	No
T9.3	Web site and visual identity	<p>A website of the CIRCULEC project will be created. Associated partners may create their own webpages under respective institutional web-sites.</p> <p>The website will have an in-depth information about the project and its opportunities and be periodically updated with news and information about events to be held in CA partner HEIs.</p>	<p>EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa</p>	<p>COO AP BEN</p>	Yes
T9.4	Social media and communication	<p>Events to be held within the scope of the project will be periodically highlighted in social, news, and web media.</p> <p>Short reports of the events (including outreach statistics) held should be generated.</p>	<p>TSUC EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa</p>	<p>COO BEN</p>	Yes
T9.5	Articles and publications	<p>This task aims to generate articles on the project outcomes and success stories.</p> <p>To keep track of articles and publications produced on the project, related information would be stored on its web-site.</p>	<p>Akfa EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT</p>	<p>COO BEN</p>	Yes



T9.6	Dissemination, promotional campaigns, info and open days	<p>Promotional campaigns, info and open days will be organised by CA universities to raise public awareness of the program/project and its opportunities.</p> <p>Online publication as well as printed publications will be distributed to audiences drawn using mailing lists owned by project participants, or from specially prepared lists assembled with reference to university, industry directories, sectoral associations, and other sources.</p> <p>In addition, brochures and leaflets can be offered to site visitors, and to participants in meetings, conferences and exhibitions – including those organised in close cooperation with EU partners.</p>	<p>TSUC</p> <p>EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, TSUC, WIUT, Akfa</p>	COO BEN	Yes
T9.7	Sustainability Plan	<p>This task aims to prepare a thorough plan that describes how to sustain the project objectives, keep project partners tied with each other and continue cooperation in related dimensions, how to enrich the project through sharing experience on a periodic basis, etc.</p> <p>The plan would be discussed with partners in an online workshop.</p>	<p>Akfa TSUC</p> <p>EKTU, KarUK, ABU, KoKSU, AST, TSIEM, TSIF, TUT, WIUT, Akfa</p>	COO BEN	No

Milestones and deliverables (outputs/outcomes)							
Milestone No (continuous numbering not linked to WP)	Milestone Name	Work Package No	Lead Beneficiary	Description	Due Date (month number)	Means of Verification	
MS13	Developing a dissemination strategy	9	Akfa	Dissemination strategy will be created and discussed with partners in an online workshop.	4	Strategy	
MS14	Creating and maintaining a project website	9	Akfa TSUC	A website of the CIRCULEC project will be created and maintained.	6	Website	
MS15	Developing a Sustainability plan	9	Akfa TSUC	A Sustainability plan will be created and discussed in an online workshop.	4	Plan	
Deliverable No (continuous numbering linked to)	Deliverable Name	Work Package No	Lead Beneficiary	Type	Dissemination Level	Due Date (month number)	Description (including format and language)

WP)							
D9.1	Dissemination strategy	9	AFKA	R	PU	4	Languages: English, Russian, 4 CA languages, electronic version
D9.2	Project website	9	AFKA TSUC	DEC	PU	6	Languages: English, Russian, 4 CA languages, electronic version
D9.3	Sustainability Plan	9	AFKA TSUC	R	PU	4	Sustainability plan will contain indicators, qualitative and quantitative data. Languages: English, Russian, 4 CA languages, electronic version
D9.4	Progress report of Impact and Dissemination	9	Akfa	R	PU-PUBLIC	18	Impact and dissemination Progress report will <u>include report about</u> <ul style="list-style-type: none"> <li>● Dissemination strategy</li> <li>● Operating Project website</li> <li>● Developed Sustainability plan.</li> <li>● Qualitative and quantitative data of Progress report: <ul style="list-style-type: none"> <li>-Periodic Web statistics</li> <li>-Number of local institutional websites and web statistic of local institutional websites</li> <li>-Number of promotional campaigns, info and open days</li> <li>-N of articles and publications</li> <li>-Number of Mass media Publications by each beneficiary</li> </ul> </li> </ul>

							<p>-Pictures, immediate feedbacks results from Seminars, round tables, workshops</p> <p>-Pictures and Feedbacks from conference presentations</p> <p>-Feedback forms and number of the project event through using Mass media Publications, Local TV and radio, website</p> <p>-N of dissemination elements produced (press releases, posts, internal information events) and quantifying the number of recipients expected to be tackled.</p> <p>Inner monitoring of all dissemination events will be reported with: pictures of the events and questionnaires/surveys of satisfaction.</p> <p>Languages: English, Russian, 4 CA languages, electronic version.</p>
D9.5	Final report of Impact and Dissemination	9	Akfa	R	PU-PUBLIC	36	<p>Impact and dissemination Final report will include monitoring of the dissemination activities throughout the whole period of the project. Based on Impact and Dissemination Strategy and it focuses on:</p> <ul style="list-style-type: none"> <li>● Developed professional network.</li> <li>● Promotion of the Modules of Circular economy.</li> <li>● Sustainability</li> </ul>

						<ul style="list-style-type: none"> <li>● Web site and visual identity,</li> <li>● Social media and communication,</li> <li>● Articles and publications,</li> <li>● Dissemination, promotional campaigns, info and open days.</li> </ul> <p><b>It will contain:</b></p> <ul style="list-style-type: none"> <li>● Periodic Web statistics of Project website and local institutional websites</li> <li>● N of promotional campaigns, info and open days</li> <li>● N of articles and publications</li> <li>● N of Mass media Publications by each beneficiary</li> <li>● Pictures, immediate feedbacks results from conference presentations, Seminars, round tables, workshops, info and open days,</li> <li>● N of project event through using Mass media Publications, Local TV and radio, website</li> <li>● N of dissemination elements produced (press releases, posts, internal information events) and quantifying the number of recipients expected to be tackled.</li> </ul> <p>Inner monitoring of all dissemination events will be reported with: pictures of the events and questionnaires/surveys of satisfaction.</p> <p>Languages: English,</p>
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ABU	1 person months	700 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	49 EUR	749 EUR
KoKSU	1 person months	850 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	60 EUR	910 EUR
AST	2 person months	800 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	56 EUR	856 EUR
TSIEM	0 person months	0 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	0 EUR	0 EUR
TSIF	0 person months	0 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	0 EUR	0 EUR
TUT	1 person months	330 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	23 EUR	353 EUR
WIUT	1 person months	1350 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	95 EUR	1445 EUR
Total	16 person months	14051 EUR	0 EUR	0 travels	0 persons travelling	0 EUR	0 EUR	0 EUR	0 EUR	0 EUR	0 grants	0 EUR	986 EUR	15037 EUR

For certain Lump Sum Grants, see detailed budget table/calculator (annex 1 to Part B; see [Portal Reference Documents](#)).

**Staff effort (n/a for Lump Sum Grants)**

Staff effort per work package Fill in the summary on work package information and effort per work package.						
Work Package No	Work Package Title	Lead Participant No	Lead Participant Short Name	Start Month	End Month	Person-Months
1	Management and coordination	BE 005	EKTU	M1	M36	70
2	Market needs and capacitation of CA staff	BE 002 BE 014	Ayeconomics WIUT	M4	M9	17
3	Development of module 1: Environmental Management	BE 004 BE 008	FHM Bielefeld KoKSU	M7	M18	18
4	Development of module 2: Sustainable competitiveness	BE 003 BE 005	UNINA EKTU	M7	M18	22
5	Development module 3: Environmental entrepreneurship	BE 001 BE 007	USC ABU	M7	M18	18
6	Capacity building and Platform development	BE 002 BE 012 BE 013	Ayeconomics TUT TSUC	M16	M27	7
7	Pilot	BE 006	KarUK	M19	M30	13
8	Quality assurance	BE 004	FHM Bielefeld	M1	M36	14
9	Impact and dissemination	BE 013 BE 015 BE 005	TSUC Akfa EKTU	M1	M36	16
					Total Person-Months	195



Staff effort per participant  
 Fill in the effort per work package and Beneficiary/Affiliated Entity.  
 Please indicate the number of person/months over the whole duration of the planned work.  
 Identify the work-package leader for each work package by showing the relevant person/month figure in bold.

Participant	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	WP9	Total Person-Months
BE001 USC	3	1	-	-	6	1	-	-	-	11
BE002 Ayeconomics	3	3	-	-	-	2	-	-	-	8
BE003 UNINA	3	1	-	6	-	1	-	-	-	11
BE004 FHM Bielefeld	3	1	6	-	-	1	-	3	-	14
BE005 EKTU	12	1	-	6	-	-	1	1	1	21
BE006 KarUK	5	1	1	1	1	-	4	1	1	14
BE007 ABU	5	1	1	1	4	-	1	1	1	14
BE008 KoKSU	5	1	4	1	1	-	1	1	1	14
BE009 AST	5	1	-	1	-	-	-	1	2	9
BE0010 TSIEM	3	1	1	1	1	-	1	1	-	8
BE0011 TSIF	3	1	1	1	1	-	1	1	-	8
BE0012 TUT	5	1	1	1	1	1	1	1	1	12
BE0013 TSUC	5	-	1	1	1	1	1	1	4	14
BE0014 WIUT	5	3	1	1	1	-	1	1	1	13
BE0015 Akfa	5	-	1	1	1	-	1	1	4	12

Total Person-Months	70	17	18	22	18	7	13	14	16	195
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E1.1	CA partners rotate to each EU partner country universities	Capacitation: International experience	Workshop	To share EU experience in CE in high education	Santiago de Compostela (Spain); Napoli (Italy); Bielefeld (Germany)	6	27
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Task 9.6	Dissemination, promotional campaigns, info and open days	Akfa +TSUC													
Task 9.7	Sustainability Plan	TSUC	D9.3 Sustainability Plan D9.4 Impact and dissemination progress report D9.5 Impact and dissemination Final report												

**OTHER**

**Ethics**

<p>Ethics (if applicable)                  If the Call document/Programme Guide contains a section on ethics, describe ethics issues that may arise during the project implementation and the measures you intend to take to solve/avoid them. Describe how you will ensure gender mainstreaming and children’s rights in the project activities.</p>
<p>Insert text</p>

**Security**

<p>Security</p>
<p>Not applicable.</p>

**DECLARATIONS**

<p>Double funding</p>	
<p>Information concerning other EU grants for this project                  ⚠ Please note that there is a strict prohibition of double funding from the EU budget (except under EU Synergies actions).</p>	<p>YES/NO</p>
<p>We confirm that to our best knowledge neither the project as a whole nor any parts of it have benefitted from any other EU grant (including EU funding managed by authorities in EU Member States or other funding bodies, e.g. Erasmus, EU Regional Funds, EU Agricultural Funds, etc). If NO, explain and provide details.</p>	<p>yes</p>
<p>We confirm that to our best knowledge neither the project as a whole nor any parts of it are (nor will be) submitted for any other EU grant (including EU funding managed by authorities in EU Member States or other funding bodies, e.g. Erasmus, EU Regional Funds, EU Agricultural Funds, etc). If NO, explain and provide details.</p>	<p>yes</p>

<p>Financial support to third parties (if applicable)                  If your project requires a higher maximum amount per third party than the threshold amount set in the Call document/Programme Guide, justify and explain why this is necessary in order to fulfil your project’s objectives.</p>
<p>Insert text</p>

<p>Seal of Excellence (if applicable)                  If provided in the Call document, proposals that pass the evaluation but are below the budget threshold (i.e. pass the minimum thresholds but are not ranked high enough to receive funding) will be awarded a Seal of Excellence.                  In this context we may share information about your proposal with other EU or national funding bodies through the Erasmus+ National Agencies.</p>	
<p>Do you agree that your proposal (including proposal data and documentation) is shared with other EU and national funding bodies to find funding under other schemes?</p>	<p>[YES]</p>

**ANNEXES****LIST OF ANNEXES**

Standard

Detailed budget table/Calculator (annex 1 to Part B) — mandatory for certain Lump Sum Grants (see [Portal Reference Documents](#))

CVs (annex 2 to Part B) — mandatory, if required in the Call document/Programme Guide

Annual activity reports (annex 3 to Part B) — not applicable

List of previous projects (annex 4 to Part B) — mandatory, if required in the Call document/Programme Guide

Special

Other annexes — mandatory, if required in the Call document/Programme Guide

**LIST OF PREVIOUS PROJECTS**

List of previous projects Please provide a list of your previous projects for the last 4 years.					
Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
P1. University of Santiago de Compostela	599092-EPP-1-2018-1-DE-EPPKA1-JMD-MOB - Erasmus - Erasmus Mundus Joint Master Degrees - EMLex - European Master in Lexicography	01/09/2018 - 31/08/2024	BEN	3.070.000	<a href="https://www.emlex.phil-fau.de/">https://www.emlex.phil-fau.de/</a>
P1. University of Santiago de Compostela	2018-1-CZ01-KA204-048094 - CICC - Erasmus + KA2 Strategic Partnership	01/09/2018 - 31/08/2021	BEN	202.557	
P1. University of Santiago de Compostela	2018-1-PL01-KA203-051106 - AIMED - Erasmus + KA2 Strategic Partnership	01/09/2018 - 30/04/2021	BEN	299.559	<a href="https://aimed.universit y /">https://aimed.universit y /</a>
P1. University of Santiago de Compostela	2018-1-PT01-KA203-047455 - SOS-Digital - Erasmus + KA2 Strategic Partnership	01/10/2018 - 31/08/2021	BEN	197.565	<a href="https://www.sosdigital.uminho.pt/pt">https://www.sosdigital.uminho.pt/pt</a>
P1. University of Santiago de	601063-EPP-1-2018-1-CY-EPPKA2-KA -	01/10/2018 -	BEN	990.680	<a href="http://dlt4all.eu/">http://dlt4all.eu/</a>

Compostela	DLT4ALL - Erasmus + KA2 Knowledge Alliance	01/10/2021			
P1. University of Santiago de Compostela	598243-EPP-1-2018-1-SE-EPPKA2-CBHE-JP - DIGIHEALTH - Erasmus + KA2 Capacity Building	15/10/2018 - 15/10/2021	BEN	998.418	<a href="http://digihealth-eu.aiu.edu.sy/home">http://digihealth-eu.aiu.edu.sy/home</a>
P1. University of Santiago de Compostela	597932-EPP-1-2018-1-IN-EPPKA2-CBHE-JP - ENPRENDIA - Erasmus + KA2 Capacity Building	15/10/2018 - 14/01/2023	BEN	981.676	<a href="http://enprendia.eu/">http://enprendia.eu/</a>
P1. University of Santiago de Compostela	606696-EPP-1-2018-2-IE-EPPKA3-PI-POLICY - ATS-STEM - Erasmus + KA3 Support for policy reform – European Policy Experimentations	28/02/2019 - 27/05/2022	BEN	1.755.000	<a href="http://www.atsstem.eu/">http://www.atsstem.eu/</a>
P1. University of Santiago de Compostela	2019-1-DK01-KA201-060283 - DLAB2 - Erasmus + KA2 Strategic Partnership	01/09/2019 - 31/08/2022	BEN	350.232	<a href="http://dlaberasmus.eu/">http://dlaberasmus.eu/</a>

List of previous projects Please provide a list of your previous projects for the last 4 years.					
Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
P1. University of Santiago de Compostela	2019-1-ES01-KA201-064187 - Schools21C - Erasmus + KA2 Strategic Partnership	01/09/2019 - 31/08/2021	COO	138.227	<a href="https://www.schools21cproject.eu/">https://www.schools21cproject.eu/</a>
P1. University of Santiago de Compostela	612414-EPP-1-2019-1-ES-EPPKA2-KA - EKT - Erasmus + KA2	01/11/2019 - 30/04/2023	COO	999.272,50	<a href="https://ektproject.eu/">https://ektproject.eu/</a>

	Knowledge alliances				
P1. University of Santiago de Compostela	610170-EPP-1-2019-1-ES-EPPKA2-CBHE-JP - ELBA - Erasmus + KA2 Capacity Building	15/11/2019 - 14/11/2022	COO	994.968	<a href="https://www.elba-project.eu/">https://www.elba-project.eu/</a>
P1. University of Santiago de Compostela	609897-EPP-1-2019-1-ES-EPPKA2-CBHE-JP - SDGsJR - Erasmus + KA2 Capacity Building	15/11/2019 - 14/11/2023	COO	997.630	<a href="https://www.journalism-reporting.eu/">https://www.journalism-reporting.eu/</a>
P1. University of Santiago de Compostela	610361-EPP-1-2019-1-DZ-EPPKA2-CBHE-JP - EL@N - Erasmus + KA2 Capacity Building	15/11/2019 - 14/11/2023	BEN	754.300	<a href="https://elan.univ-tlemcen.dz/index.php/">https://elan.univ-tlemcen.dz/index.php/</a>
P1. University of Santiago de Compostela	609741-EPP-1-2019-1-GE-EPPKA2-CBHE-SP - RURD - Erasmus + KA2 Capacity Building	15/11/2019 - 14/11/2022	BEN	602.097	<a href="http://rurd.atsu.edu.ge/">http://rurd.atsu.edu.ge/</a>
P1. University of Santiago de Compostela	2019-1-RO01-KA202-063211 - GAMEST - Erasmus + KA2 Strategic Partnership	01/12/2019 - 31/10/2021	BEN	154.282	<a href="https://www.gamest.eu/">https://www.gamest.eu/</a>
P1. University of Santiago de Compostela	612881-EPP-1-2019-1-IT-EPPKA3-PI-FORWARD - CAREERS - Erasmus + KA2 Strategic Partnership	01/12/2019 - 31/05/2022	BEN	409.740	<a href="https://www.careersproject.eu/index.php">https://www.careersproject.eu/index.php</a>
P1. University of Santiago de Compostela	610198-EPP-1-2019-1-ES-EPPKA2-CBHE-JP - MIETC - Erasmus + KA2 Capacity Building	15/01/2020 - 14/01/2024	COO	807.014	<a href="http://www.mietc.unina.it/">http://www.mietc.unina.it/</a>
P1. University of	609940-EPP-1-2019-1-	15/01/2020	BEN	944.190	<a href="https://i2latam.com/">https://i2latam.com/</a>

Santiago de Compostela	CO-EPPKA2-CBHE-JP - I2LATAM - Erasmus + KA2 Capacity Building	- 14/01/2023			
P1. University of Santiago de Compostela	609905-EPP-1-2019-1-IT-EPPKA2-CBHE-JP - DeSTT - Erasmus + KA2 Capacity Building	15/01/2020 - 14/01/2023	BEN	707.731	<a href="https://www.destt.info">https://www.destt.info</a>
P1. University of Santiago de Compostela	2020-1-FR01-KA203-080112 - SFBB - Erasmus + KA2 Strategic Partnership	01/09/2020 - 31/08/2023	BEN	231.012	<a href="https://sfbb-erasmusplus.eu/">https://sfbb-erasmusplus.eu/</a>

List of previous projects  
Please provide a list of your previous projects for the last 4 years.

Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
P1. University of Santiago de Compostela	2020-1-ES01-KA203-083219 - FacingFire - Erasmus + KA2 Strategic Partnership	01/09/2020 - 31/08/2023	COO	196.987	<a href="https://facingfire.eu/">https://facingfire.eu/</a>
P1. University of Santiago de Compostela	2020-1-IT02-KA201-079116 - Guiding Schools - Erasmus + KA2 Strategic Partnership	01/09/2020 - 31/08/2022	BEN	244.648	<a href="https://www.guidingschools.eu/">https://www.guidingschools.eu/</a>
P1. University of Santiago de Compostela	2019-1-DK01-KA201-060283 - CROSSLAND - Erasmus + KA2 Strategic Partnership	01/09/2020 - 31/08/2023	BEN	350.232	
P1. University of Santiago de Compostela	2020-1-UK01-KA201-079295 - UPPScale - Erasmus + KA2 Strategic Partnership	01/10/2020 - 31/08/2023	BEN	302.497	<a href="https://www.plymouth.ac.uk/research/education/university-practice-">https://www.plymouth.ac.uk/research/education/university-practice-</a>



	Partnership				partnerships
P1. University of Santiago de Compostela	2020-1-TR01-KA203-094180 - P2D - Erasmus + KA2 Strategic Partnership	02/11/2020 - 01/05/2023	BEN	124.670	<a href="http://p2dproject.eu/index.php/en/">http://p2dproject.eu/index.php/en/</a>
P1. University of Santiago de Compostela	618812-EPP-1-2020-1-GE-EPPKA2-CBHE-JP - SAFEMED - Erasmus + KA2 Capacity Building	15/11/2020 - 14/11/2023	BEN	868.482	<a href="https://www.safemedproject.com/events/">https://www.safemedproject.com/events/</a>
P1. University of Santiago de Compostela	2020-1-DE02-KA204-007385 - INMEDIA - Erasmus + KA2 Strategic Partnership	01/12/2020 - 31/05/2023	BEN	127.055	
P1. University of Santiago de Compostela	2020-1-UK01-KA202-078917 - OPMDTHP - Erasmus + KA2 Strategic Partnership	31/12/2020 - 30/12/2022	BEN	220.710	<a href="https://opmdcare.com/">https://opmdcare.com/</a>
P1. University of Santiago de Compostela	2020-1-UK01-KA204-078929 - Teach Digital - Erasmus + KA2 Strategic Partnership	31/12/2020 - 30/12/2022	BEN	253.296	<a href="https://www.teachdigital.eu/">https://www.teachdigital.eu/</a>
P1. University of Santiago de Compostela	617486-EPP-1-2020-1-ES-EPPKA2-CBHE-JP - YUCUNET - Erasmus + KA2 Capacity Building	15/01/2021 - 14/01/2024	COO	873.154	<a href="https://www.yucunet.org/">https://www.yucunet.org/</a>
P1. University of Santiago de Compostela	2020-1-ES01-KA227-SCH-096314 - EDUCinema ClimaTurAction - Erasmus + KA2 Strategic Partnership	01/03/2021 - 31/08/2023	COO	247.060	<a href="https://www.educinema-cta.org/">https://www.educinema-cta.org/</a>

P1. University of Santiago de Compostela	2020-1-ES01-KA226-SCH-095765 - e-InnoEduCO2activity One	01/03/2021 - 31/08/2023	BEN	251.305	<a href="https://www.innoeduco2.org/">https://www.innoeduco2.org/</a>
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List of previous projects Please provide a list of your previous projects for the last 4 years.					
Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
	Health - Erasmus + KA2 Strategic Partnership				
P1. University of Santiago de Compostela	2020-1-ES01-KA226-SCH-094966 - DTICQT - Erasmus + KA2 Strategic Partnership	01/03/2021 - 28/02/2023	COO	155.986	
P1. University of Santiago de Compostela	2020-1-DE02-KA226-VET-008289 - DITMEP - Erasmus + KA2 Strategic Partnership	01/05/2021 - 30/04/2023	BEN	261.120	<a href="https://www.ditmep.eu/">https://www.ditmep.eu/</a>
P1. University of Santiago de Compostela	KA220-SCH-ABD6E700 - ABILITI - Erasmus + KA2 Cooperation Partnerships	01/11/2021 - 01/03/2024	BEN	237.040	
P1. University of Santiago de Compostela	101081899 – CRETCHEU - EMJM- Design measures	01/09/2022 - 30/11/2023	COO	55.000	<a href="https://cretcheu.website/">https://cretcheu.website/</a>
P1. University of Santiago de Compostela	101083241 — EPSULA — ERASMUS-EDU-2022-CBHE	01/01/2023 - 31/12/2025	BEN	339.180,99	
P1. University of Santiago de Compostela	101082077 — SimS — ERASMUS-EDU-2022-CBHE	01/01/2023 - 31/12/2025	BEN	643.334	
P1. University of Santiago de Compostela	2022-1-ES01-KA220-HED-000087650 – CAXATO – Cooperation Partnership	01/10/2022 - 30/09/2024	COO	250.000	

P1. University of Santiago de Compostela	2022-1-ES01-KA220-ADU-000088556 – ApS(M) – Cooperation Partnership	01/09/2022 - 31/08/2025	COO	400.000	
P2. AYeconomics Research Centre	610198-EPP-1-2019-1-ES-EPPKA2-CBHE-JP Development of a Master Programme in the Management of Industrial Entrepreneurship for Transition Countries” - MIETC Erasmus+ K2	01.15.2020 - 01.14.2024	BE	63.000	<a href="http://www.mietc.unina.it/">http://www.mietc.unina.it/</a>
P3. University of Naples Federico II (UNINA)	610198-EPP-1-2019-1-ES-EPPKA2-CBHE-JP Development of a Master Programme in the Management of Industrial Entrepreneurship for Transition Countries” - MIETC Erasmus+ K2	01.15.2020 - 01.14.2024	AE	86.000	<a href="http://www.mietc.unina.it/">http://www.mietc.unina.it/</a>
P4. Fachhochschule des	2022-1-DE02-KA220-VET-000086355	01.11.2022 - 30.04.2025	COO	250.000€	Not yet

List of previous projects Please provide a list of your previous projects for the last 4 years.					
Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
Mittelstands (FHM)	PackLess - Supporting SME Sustainable Packaging Transformation (PACKLESS) Erasmus+ Cooperation Partnerships				
P4. Fachhochschule des	2022-1-DE01-KA220-HED-000087805	01.12.2022 -	COO	250.000€	Not yet

Mittelstands (FHM)	Empowering and Inspiring Higher Education students in the STEAM field (STEAM) Erasmus+ Cooperation Partnerships	30.11.2024			
P4.Fachhochsc hule des Mittelstands (FHM)	2022-1-LT01-KA220- HED-000086555 Challenge Based Learning in AI Enhanced Digital Transformation Curricular (ASSISTANT) Erasmus+ Cooperation Partnerships	01.10.2022 - 30.09.2024	BEN	250.000€	Not yet
P4.Fachhochsc hule des Mittelstands (FHM)	2022-1-IT02-KA220- HED-000089554 Innovative Supporting sErVICES for uNiversity Students with dEafness (ISENSE) Erasmus+ Cooperation Partnerships	01.11.2022 - 31.10.2025	BEN	400.000€	Not yet
P4.Fachhochsc hule des Mittelstands (FHM)	2022-1-BG01-KA220- HED-000086047 Formation of critical thinking and media literacy as protection against media manipulation, misinformation and fake news (CTML Protect) Erasmus+ Cooperation Partnerships	01.12.2022 - 30.11.2024	BEN	120.000€	Not yet
P4.Fachhochsc hule des	101087579 Network of Excellence for	01.12.2022 -	BEN	698.211€	Not yet

Mittelstands (FHM)	Applied Research in VET (NEAR VET)  Erasmus+ Partnerships for Innovation, Forward Looking projects	30.11.2024			
P4.Fachhochsc hule des Mittelstands (FHM)	2022-1-PL01-KA220- VET-000087856  Shift 2 Green - Promoting  Eco-friendly Habits at Work with Gamification (Shift 2 Green)	01.11.2022  -  30.04.2025	BEN	250.000€	Not yet

List of previous projects Please provide a list of your previous projects for the last 4 years.					
Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
	Erasmus+ Cooperation Partnerships				
P4.Fachhochsc hule des Mittelstands (FHM)	101082889 Strengthening the quality of online education in HEIs in Moldova and Armenia (MEDIA) Erasmus+ CBHE	01.02.2023 - 31.01.2027	BEN	967.241€	Not yet
P4.Fachhochsc hule des Mittelstands (FHM)	101083077 Universities- Communities: strengthening cooperation (UNIKOM) Erasmus+ CBHE	01.11.2022 - 30.04.2025	BEN	999.991€	Not yet
P4.Fachhochsc hule des Mittelstands (FHM)	101082858 MOOC-based micro- credentials for teacher professional development (CRED4TEACH) Erasmus+ CBHE	01.02.2023 - 31.01.2026	COO	731.330€	Not yet
P4.Fachhochsc hule des Mittelstands (FHM)	2021-1-DE02-KA220- VET-000029979 Responding to tourism market changes caused by C-19 and Green Deal through micro-credential- certified upskilling of SME tourism managers (CREDinGREEN) Erasmus+ Strategic Partnerships	01.01.2022 - 31.12.2023	COO	294.021€	<a href="https://www.credingreen.com/">https://www.credingreen.com/</a>

P4.Fachhochschule des Mittelstands (FHM)	2021-1-DE02-KA220-VET-000033003 Enhancing Cyber Security - Development or trainings using "Escape Room" Model (EyesOnCS) Erasmus+ Strategic Partnerships	01.01.2022 - 31.12.2023	COO	225.480€	<a href="https://www.eyesoncs.eu/">https://www.eyesoncs.eu/</a>
P4.Fachhochschule des Mittelstands (FHM)	2021-1-DE02-KA220-VET-000034893 Linear Turns Circular - Fostering SMEs Circular Economy Transition (L2C) Erasmus+ Strategic Partnerships	01.02.2022 - 31.07.2024	COO	263.035€	<a href="https://www.ltoc.eu/">https://www.ltoc.eu/</a>
P4.Fachhochschule des Mittelstands (FHM)	2021-1-IT01-KA220-VET-000033298 Green Innovation in the Fashion industry management (GIF) Erasmus+ Strategic Partnerships	01.01.2022 - 01.01.2024	BEN	247.404€	<a href="https://www.gifproject.eu/">https://www.gifproject.eu/</a>

List of previous projects Please provide a list of your previous projects for the last 4 years.					
Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
P4.Fachhochschule des Mittelstands (FHM)	2021-1-DE02-KA220-ADU-000028458 FOSTERING WOMEN'S ENTREPRENEURSHIP & EMPLOYABILITY IN THE DIGITAL BUSINESS (ADA) Erasmus+ Strategic Partnerships	01.11.2021 - 30.04.2024	COO	303.531€	<a href="http://www.ada-project.eu/">http://www.ada-project.eu/</a>
P4.Fachhochschule des Mittelstands (FHM)	2021-1-DE01-KA220-HED-000023203 Enhancing hybrid teaching in higher education through chatbots (HYBOT) Erasmus+ Strategic Partnerships	01.11.2021 - 01.11.2024	COO	281.075 €	<a href="http://www.hybot.eu">www.hybot.eu</a>
P4.Fachhochschule des Mittelstands (FHM)	2020-1-DE01-KA203-005765 Online Proctoring Manager - further education, program for supporting digital transformation at HEIs (PROVIDE) Erasmus+ Strategic Partnerships	30.06.2021 - 28.02.2023	COO	219.771€	<a href="http://www.proctoring-manager.eu">www.proctoring-manager.eu</a>

P4.Fachhochschule des Mittelstands (FHM)	2020-1-SI01-KA226-HE-093633 Promoting Digital Higher Education by Introducing Immersive Learning into Educational Studies (XR4Ped) Erasmus+ Strategic Partnerships	01.06.2021 - 31.12.2022	BEN	208.162€	<a href="https://www.xr4ped.eu/">https://www.xr4ped.eu/</a>
P4.Fachhochschule des Mittelstands (FHM)	2020-1-DE02-KA226-VET-008177 Mobile learning system for reinforcing skills retention (Mobilex) Erasmus+ Strategic Partnerships	01.04.2021 - 31.03.2023	COO	189.213€	<a href="http://www.mobilex-project.eu">www.mobilex-project.eu</a>
P4.Fachhochschule des Mittelstands (FHM)	2020-1-DE02-KA202-007572 Theater-based training for supporting innovations in enterprises (TheNoVa) Erasmus+ Strategic Partnerships	01.11.2020 - 30.04.2023	COO	264.095€	<a href="https://thenova.eu/">https://thenova.eu/</a>
P4.Fachhochschule des Mittelstands (FHM)	2020-1-DE02-KA204-007517 Gamification of eco-friendly habits in adult education (GoBeEco)	01.11.2020 - 30.04.2023	COO	216.674€	<a href="https://www.gobeeco.eu/">https://www.gobeeco.eu/</a>

List of previous projects Please provide a list of your previous projects for the last 4 years.					
Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
	Erasmus+ Strategic Partnerships				
P4.Fachhochschule des Mittelstands (FHM)	2020-1-CZ01-KA203-078407 Methodology of Interpretation of European Natural Heritage in Tourism (MIENAT) Erasmus+ Strategic Partnerships	01.09.2020 - 31.08.2023	BEN	301.577€	<a href="http://www.instagram.com/mienatproject/">www.instagram.com/mienatproject/</a>
P4.Fachhochschule des Mittelstands (FHM)	2019-1-FR01-KA203-063037 Developing International Experience for Students through Virtual Mobility (MOVIDIS) Erasmus + Strategic Partnerships	01.09.2019 - 31.08.2022	BEN	332 744€	<a href="https://www.movidis.eu/">https://www.movidis.eu/</a>



P4.Fachhochschule des Mittelstands (FHM)	2019-1-DE01-KA203-005051 Curricular modernization by implementing MOOCs model (MODE IT) Erasmus + Strategic Partnerships	01.10.2019 - 31.03.2022	COO	249.218€	<a href="https://www.mode-it.eu/">https://www.mode-it.eu/</a>
P4.Fachhochschule des Mittelstands (FHM)	2019-1-FR01-KA202-062965 Key competences for a European model of Industry 4.0. (I4EU) Erasmus + Strategic Partnerships	01.09.2019 - 31.08.2022	BEN	352.877€	<a href="https://www.i4eu-pro.eu/">https://www.i4eu-pro.eu/</a>
P4.Fachhochschule des Mittelstands (FHM)	612618-EPP-1-2019-1-DE-EPPKA2-KA University Business Cooperation for Promoting Virtual, Augmented and Mixed Reality Applications within Small and Medium-sized Manufacturing Companies (VAM*Rs) Erasmus + Knowledge Alliances	01.01.2020 - 31.12.2022	COO	999.185€	<a href="https://vam-realities.eu/">https://vam-realities.eu/</a>
P5.D.Serikbayev East Kazakhstan Technical University	610198-EPP-1-2019-1-ES-EPPKA2-CBHE-JP - “DEVELOPMENT OF A MASTER PROGRAMME IN THE MANAGEMENT OF INDUSTRIAL ENTREPRENEURSHIP FOR TRANSITION COUNTRIES”	2019-2014	BEN	€807 014	<a href="http://www.mietc.unina.it/">http://www.mietc.unina.it/</a>

List of previous projects Please provide a list of your previous projects for the last 4 years.					
Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
P6. KARAGANDA UNIVERSITY OF KAZPOTREBS OYUZ	545987-EM-1-2013-1-ES-ERA Mundus-EMA 21 «Central Asian Network of Economics and Management (CANEM)», Erasmus Mundus	2012-2013	BEN		<a href="http://www.canem.ulpgc.es/canem2">http://www.canem.ulpgc.es/canem2</a>
P6. KARAGANDA UNIVERSITY OF KAZPOTREBS OYUZ	145688-2008-BE-SMHES «Central Asian Network for Quality Assurance and Accreditation (CANQA)», Tempus	2009-2012	BEN		<a href="http://canqa.net">http://canqa.net</a>

P6. KARAGANDA UNIVERSITY OF KAZPOTREBS OYUZ	JEP_26 012-2005 «New Curricula in trade theory and econometrics (KAREC)», Tempus	2005-2008	BEN		-
P6. KARAGANDA UNIVERSITY OF KAZPOTREBS OYUZ	145171-TEMPUS-1-2008-1-ES-TEMPUS-SMHES «Plan to establish, science enterprise oriented universities for the benefit of society (PERSEUS)», Tempus	2009 – 2012	BEN		-
P6. KARAGANDA UNIVERSITY OF KAZPOTREBS OYUZ	CACTLE561495-EPP-1-2015-1-AT-EPPKA2-CBHE-JP «Implementing a Central Asian Centre for Teaching, Learning and Entrepreneurship (CACTLE)». Erasmus +	2015-2018	BEN	74 699	<a href="https://www.keu.kz/ru/s-ection-table/31-materialy/4157-the-cactle.html">https://www.keu.kz/ru/s-ection-table/31-materialy/4157-the-cactle.html</a>
P6. KARAGANDA UNIVERSITY OF KAZPOTREBS OYUZ	561603-EPP-1-2015-1-DE-EPPKA2-CBHE-JP «Establishment of Centre for Competence and Employability Development (COMPLETE)», Erasmus +	2015-2018	BEN	55 699	<a href="https://www.keu.kz/ru/s-ection-table/31-materialy/3305-dokumenty.html">https://www.keu.kz/ru/s-ection-table/31-materialy/3305-dokumenty.html</a>
P6. KARAGANDA UNIVERSITY OF KAZPOTREBS OYUZ	600571-EPP module-1-2018-1-KZ-EPPJMO-MODULE "Theory and practice of European integration", Modul Jean Monnet	2018-2021	COO	15 120	<a href="https://www.keu.kz/ru/s-ection-table/31-materialy/5914-jean-monnet-module.html">https://www.keu.kz/ru/s-ection-table/31-materialy/5914-jean-monnet-module.html</a>
P6. KARAGANDA UNIVERSITY OF KAZPOTREBS OYUZ	586205-EPP-1-2017-1-KZ-EPPKA2-CBHE-SP Transition to university autonomy in Kazakhstan (TRUNAK)", Erasmus +	2017-2021	BEN	53 509	<a href="https://trunak.eu/about">https://trunak.eu/about</a>

## List of previous projects

Please provide a list of your previous projects for the last 4 years.

Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
P6. KARAGANDA UNIVERSITY OF KAZPOTREBS OYUZ	610198-EPP-1-2019-1-ES-EPPKA2-CBHE-JP MIETC «Development of a Master Programme in the Management of Industrial Entrepreneurship for Transition Countries », Erasmus +	2020-2024	BEN	69 039	<a href="http://www.mietc.unina.it/">http://www.mietc.unina.it/</a>

P6. KARAGANDA UNIVERSITY OF KAZPOTREBS OYUZ	101082914 - GAP-101082914 "European practice of sustainable development management on the way to green transformation (EPOS) -Modul Jean Monnet	2022-2025	COO	21500	-
P6. KARAGANDA UNIVERSITY OF KAZPOTREBS OYUZ	101085024 - GAP-101085024 "The European Union migration policy (EUMP)", Modul Jean Monnet	2022-2025	COO	21500	-
P7. ALIKHAN BOKEIKHAN UNIVERSITY	ERASMUS + KA 1 of the University of Economics – Varna, BULGARIA	2019-2022	BEN	5700	-
P7. ALIKHAN BOKEIKHAN UNIVERSITY	ERASMUS + KA 1 of the University of National and World Economy, BULGARIA	2021-2027	BEN	1500	-
P7. ALIKHAN BOKEIKHAN UNIVERSITY	ERASMUS + KA 1 of the University of Finance and Management in Bialystok, POLAND	2021-2027	BEN	1500	-
P8.Sh.Ualikhan ov Kokshetau University	ERASMUS + KA2 CBHE 598377-EPP-1 -2018-1 - IT-EPPKA2-CBHE-SP Kazakh universities to foster quality assurance processes in technology enhanced learning KUTEL	2018-2021	BEN	72 670	<a href="https://shokan.edu.kz/ru/erasmus/ka2/kutel/">https://shokan.edu.kz/ru/erasmus/ka2/kutel/</a>
P8.Sh.Ualikhan ov Kokshetau University	ERASMUS + KA2 CBHE 597985-EPP-1-2018-1-KZ-EPPKA2-CBHE-JP New and innovative courses for precision agriculture NICoPA	2018-2022	BEN	67 291	<a href="https://shokan.edu.kz/ru/erasmus/ka2/nicopa/">https://shokan.edu.kz/ru/erasmus/ka2/nicopa/</a>

## List of previous projects

Please provide a list of your previous projects for the last 4 years.

Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
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P8.Sh.Ualikhanov Kokshetau University	ERASMUS + KA2 CBHE 618860-EPP-1-2020-1-EL-EPPKA2-CBHE-JP Professionalization of Bachelor's and Master's degrees in strategic management and risk management in healthcare within the framework of open and distance learning in Russia, Kazakhstan and Azerbaijan LMQS	2021-2024	BEN	35 711	<a href="https://shokan.edu.kz/ru/erasmus/ka2/lmqsl/">https://shokan.edu.kz/ru/erasmus/ka2/lmqsl/</a>
P8.Sh.Ualikhanov Kokshetau University	ERASMUS + KA2 CBHE 618715-EPP-1-2020-1-DE-EPPKA2-CBHE-JP Development of the closed-cycle economy in the partner countries through the development and implementation of the Master's program "Waste Management" UnWaste	2021-2024	BEN	94 445	<a href="https://shokan.edu.kz/ru/erasmus/ka2/unwaste/">https://shokan.edu.kz/ru/erasmus/ka2/unwaste/</a>
P 9. ACADEMY OF SCIENCES OF TURKMENISTAN	610198-EPP-1-2019-1-ES-EPPKA2-CBHE-JP, Erasmus+ KA2	15.01.2020 - 14.01.2023	BEN	807 014€	
TURKMEN STATE INSTITUTE OF ECONOMICS AND MANAGEMENT	610198-EPP-1-2019-1-ES-EPPKA2-CBHE-JP - "DEVELOPMENT OF A MASTER PROGRAMME IN THE MANAGEMENT OF INDUSTRIAL ENTREPRENEURSHIP FOR TRANSITION COUNTRIES"	2019-2014	BEN	€807 014	<a href="http://www.mietc.unina.it/">http://www.mietc.unina.it/</a>
TURKMEN STATE INSTITUTE OF FINANCE	610198-EPP-1-2019-1-ES-EPPKA2-CBHE-JP - "DEVELOPMENT OF A MASTER PROGRAMME IN THE MANAGEMENT OF INDUSTRIAL ENTREPRENEURSHIP FOR TRANSITION COUNTRIES"	2019-2014	BEN	€807 014	<a href="http://www.mietc.unina.it/">http://www.mietc.unina.it/</a>
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 158677 - TEMPUS-1-2009-1-DE-TEMPUS-JP CR Higher Education Initiative for Informatics in Central Asia (HEICA)	2009 – 2012	BEN	143255	<a href="http://heica.inf.tu-dresden.de">http://heica.inf.tu-dresden.de</a>

List of previous projects  
Please provide a list of your previous projects for the last 4 years.

Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 517340-TEMPUS-1-2011-1-IT-SMGR Documentation for Quality Assurance of Study Programmes (DOQUP)	2011 – 2014	BEN	40577	<a href="http://tempus-doqup.unige.it/consortium">http://tempus-doqup.unige.it/consortium</a>
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: JPCR-158982-09 Towards sustainable water management in CA (SWAN)	2010 – 2013	BEN	55625	<a href="http://swan-water.old.ogpi.ua.es">http://swan-water.old.ogpi.ua.es</a>
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 530793-TEMPUS-1-2012-1-SE-TEMPUS-JPCR Master programs on Renewable Energy and Energy Efficiency in Buildings in Central Asia and Russia (MAPREE)	2012 – 2015	BEN	49500	<a href="https://www.mapree.se/">https://www.mapree.se/</a>
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 544319-TEMPUS-1-2013-1-FR-TEMPUS-JPCR Professional network of Master's degrees in Informatics as a Second Competence (PROMIS)	2013 – 2017	BEN	54300	<a href="http://promisproject.kaznu.kz/">http://promisproject.kaznu.kz/</a>
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 544126-TEMPUS-ES-JPHES Strengthening Career Centres in Central Asia Higher Education Institutions to empower graduates in obtaining and creating quality employment (UNIWORK)	2013 – 2016	BEN	52300	<a href="http://www.uniwork-project.eu/">www.uniwork-project.eu/</a>
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 543746-TEMPUS-1-2013-1-ES-TEMPUS-JPHES 2013-4610/001-001  Innolabs in Central Asia for a sustainable catalyzation of innovation in the Knowledge Triangle (INOCAST)	2013 – 2016	BEN	55757	<a href="http://centresderecerca.uab">http://centresderecerca.uab</a>
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 544529-TEMPUS-LV-JPCR Modernization of higher education in the area of food quality and safety in Tajikistan (MFQSE)	2013 – 2016	BEN	44786	<a href="http://www.konso.lv/en/portfolio/the-project-modernisation-of-higher-education-in-the-area-of-food-quality-and-safety-in-tajikistan/">www.konso.lv/en/portfolio/the-project-modernisation-of-higher-education-in-the-area-of-food-quality-and-safety-in-tajikistan/</a>

List of previous projects Please provide a list of your previous projects for the last 4 years.					
Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 574099-EPP-1-2016-IT-EPPKA2-CBHE-JP Paving the way to interregional mobility and ensuring relevance, quality and equity of access (PAWER)	2016 – 2019	BEN	32524	<a href="http://pawer.univaq.it/">http://pawer.univaq.it/</a>
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 586060-EPP-1-2016-RO-EPPKA2-CBHE- JP Excellence on Engineering education through teacher training and new pedagogic approaches in Russia and Tajikistan (EXTEND)	2017 – 2020  (Extension till 2022)	BEN	62403	<a href="http://tut.tj/?page_id=2107">http://tut.tj/?page_id=2107</a>
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 561539-EPP-1-2015-ES-EPPKA2-CBHE- JP Management – Innovation – Development (MIND)	2015 – 2018	BEN	48282	<a href="https://tut.tj/?page_id=11480&amp;lang=en">https://tut.tj/?page_id=11480&amp;lang=en</a>
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 598092-EPP-1-2018-1-BG-EPPKA2-CBHE-SP Modernization of Higher Education in Central Asia through New Technologies (HiEdTec)	2018 – 2021 (Extension till 2022)	BEN	41966	<a href="https://hiedtec.ecs.uniruse.bg/?cmd=gsIndex">https://hiedtec.ecs.uniruse.bg/?cmd=gsIndex</a>
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 610170-EPP-1-2019-1-ES-EPPKA2-CBHE-JP Establishment of training and research centers and Courses development on Intelligent BigData Analysis in CA / ELBA	2019 - 2022	BEN	73658	<a href="https://tut.tj/?page_id=15345&amp;lang=en">https://tut.tj/?page_id=15345&amp;lang=en</a>
P12. TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN	Ref. No: 610198-EPP-1-2019-1-ES-EPPKA2-CBHE-JP Development of a Master Program in the Management of Industrial Entrepreneurship for Transition Countries / MIETC	2019 - 2022	BEN	68120	<a href="https://tut.tj/?page_id=15525&amp;lang=en">https://tut.tj/?page_id=15525&amp;lang=en</a>

P13. TAJIK STATE UNIVERSITY OF COMMERCE	Erasmus+ KA2, PAWER (Paving the way to interregional mobility and ensuring relevance, quality and equity of access), University of L'Aquila	2016-2019	BEN	97.970,00	<a href="http://pawer.univaq.it/">http://pawer.univaq.it/</a>
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List of previous projects Please provide a list of your previous projects for the last 4 years.					
Participant	Project Reference No and Title, Funding programme	Period (start and end date)	Role (COO, BEN, AE, OTHER)	Amount (EUR)	Website (if any)
P13. TAJIK STATE UNIVERSITY OF COMMERCE	Erasmus + KA2, MIETC-Master program in the management of industrial entrepreneurship for transition countries,	2020-2024	BEN	70 810,00	<a href="http://www.mietc.unina.it/">http://www.mietc.unina.it/</a>
P13. TAJIK STATE UNIVERSITY OF COMMERCE	Erasmus+ KA107, University of Cadiz, Spain	2021-2027	BEN	1 500,00	<a href="https://internacional.uca.es/21-22-erasmus-ka107-sms-in/">https://internacional.uca.es/21-22-erasmus-ka107-sms-in/</a>
P14. Westminster International University in Tashkent	EPLUS : Implementing a Central Asian Centre for Teaching, Learning and Entrepreneurship (CACTLE)	2015-2018	Partner		
P14. Westminster International University in Tashkent	EPLUS : TALENT Erasmus+ project: Establishing Master Programs in Human Resource Management and Talent Development in Central Asia	2018-2022	Partner	€ 72 642	<a href="https://hrmincentralasia.eu">https://hrmincentralasia.eu</a> <a href="https://www.wiut.uz/wiut-and-talent-erasmus-project">https://www.wiut.uz/wiut-and-talent-erasmus-project</a>
P14. Westminster International University in Tashkent	H2020-MSCA-RISE-2019 RISE Central Asian Law research and training project for understanding legal cultures and business environments in Central Asia	2020-2024	Partner	€ 1 104 000 (total EU contribution)	
P14. Westminster International University in Tashkent	ERASMUS2027: Legal Clinic (LCC)	2022-2024	Coordinator	€ 21 500	<a href="https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/org-details/933536828/project/101048196/program/43353764/details">https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/org-details/933536828/project/101048196/program/43353764/details</a>
P14. Westminster International University in Tashkent	ERASMUS-JMO-2022-HEI-TCH-RSCH (CACETL)	2022-2024	Partner	€ 31 000	

HISTORY OF CHANGES		
VERSION	PUBLICATION DATE	CHANGE
1.0	28.02.2023	Proposal
2.0	03.10.2023	The Progress Report was included as a Deliverable in WP1 (M18)
	03.10.2023	- D1.1 (Consortium agreement) and D1.3 (final report) have been deleted as deliverables.
	03.10.2023	- Dissemination level of D1.1 (Kick-off meeting) and D1.2 (Progress report) are changed from PU to SEN
	03.10.2023	D.1.3 (Project Management plan) (M6) was added
	03.10.2023	The duration of WP2 has been extended from M9 to M12.
	03.10.2023	All milestones have been renumbered due to clerical error in the application form.
	03.10.2023	Added more details and description to D2.1 and D.2.2.
	03.10.2023	The lead of D2.1 and D2.2 has been detailed (AY)
	03.10.2023	The due date of MS3 has changed from M9 to M12.
	03.10.2023	Deadlines for D2.1 & D2.2 were extended from M9 to M12
	03.10.2023	The due date of D5.1 and D.5.2 has been extended from M12 and M14 to M14 and M18
	03.10.2023	The description of D. 6.2 "Organisation of hackathon in circular economy was extended.
	03.10.2023	The due date of M11 has changed from M25 to M27, because D7.3 ends in M27.
	03.10.2023	Task 7.3 has been renumbered because due to clerical error Task 7.2 was missing in the application form.
	03.10.2023	We standardized (the same structure) the deliverables across working packages: 3,4 and 5. To make sure that the same set of deliverables / outcomes was used consistently for each working package. Each WP includes Deliverable: Syllabus Development and Content Development as suggested by Project officer. Type of deliverable was changed from Report to Other (ppts, Assessment Materials, case studies, web and papers resources).
	03.10.2023	D3.1 and D3.2 deliverables have been extended and renamed. Deliverable Peer review has been included in the D3.2
	03.10.2023	The titles of D4.1 & D4.2 have been changed and the content stayed the same but extended and detailed.
	03.10.2023	The lead of D4.2 has been changed from EKTU to UNINA (EU HEI content developer)
	03.10.2023	The D5.1 & D5.2 have been renamed and detailed. The Benchmarking and needs report has been included in the D5.1
	03.10.2023	The due date of M11 has been extended from M25 to M27
	03.10.2023	The description of the D7.1 (Pilot plan) was extended and its due date was changed from M21 to M19 as we added Deliverable "Pilot Report".
	03.10.2023	D.7.2 (Pilot report) was added.



03.10.2023	Description of D7.2 (Follow up meeting) was renumbered to 7.3 due to the addition of another deliverable, extended by adding report on monitoring visits, renamed and the dissemination level changed from PU to SEN.
03.10.2023	Due date of D9.2 was changed from M9 to M6
03.10.2023	Description of D9.3 "Sustainability plan" was extended.
03.10.2023	Deliverable 9.4 "Progress report of Impact and Dissemination" was added.
03.10.2023	Deliverable 9.5 "Final report of Impact and Dissemination" was added
03.10.2023	Deliverable 8.2 "Quality Assurance Progress report" has been added.
03.10.2023	Deliverable 8.3 "Quality Assurance Final report" has been added
03.10.2023	The due date of MS14 has changed from M9 to M6
03.10.2023	The legal name of Afka University has changed after the submission of the application form. The new name is Central Asian University MCHJ (CAU)

**Proposal Info**

Proposal ID	Call for Proposal	Topic	Type of Action
SEP-210926180	ERASMUS-EDU-2023-CBHE	ERASMUS-EDU-2023-CBHE-STRAND-2	ERASMUS-LS

**Objectives**

- Improve the quality of higher education in third countries not associated to the Erasmus+ programme and enhance its relevance for the labour market and society
- Improve the level of competences, skills and employability potential of students in HEIs in the third countries not associated to the Erasmus+ programme by developing new and innovative education programmes
- Promote inclusive education, equality, equity, non-discrimination and the promotion of civic-competences in higher education in the third countries not associated to the Erasmus+ programme
- Enhance the teaching, assessment mechanisms for HEI staff and students, quality assurance, management, governance, inclusion, innovation, knowledge base, digital and entrepreneurial capacities, as well the internationalisation of HEIs in the third countries not associated to the Erasmus+ programme
- Increase the capacities of HEI, bodies in charge of higher education and competent authorities of third countries not associated to the Erasmus+ programme to modernise their higher education systems, particularly in terms of governance and financing, by supporting the definition, implementation and monitoring of reform processes
- Improve the training of teachers and continuous professional development in order to impact the longer term quality of the education system in the third countries not associated to the Erasmus+ programme
- Stimulate cooperation of institutions, capacity building and exchange of good practice
- Foster cooperation across different regions of the world through joint initiatives

**Regional priority areas**

Region 6 - Central Asia

Green deal

**Regions involved in the project****Define the type of the project :**

- National project
- Multi-country project
- Cross-regional project

**Project implementation**

Number of higher education institutions (universities) located in remote regions/area 2

Number of newcomer/less experienced coordinating higher education institutions (universities) to the CBHE action

not yet involved in CBHE projects 11

Coordinating HEI - involved in 1 to 3 CBHE projects 9

Coordinating HEI - involved in 4 or more CBHE projects 0

Number of newcomer/less experienced partner higher education institutions (universities) to the CBHE action

not yet involved in CBHE projects 2

Partner HEI - involved in 1 to 3 CBHE projects 9

Partner HEI - involved in 4 or more CBHE projects 0

**People with fewer opportunities**

Is your project addressing people with fewer opportunities?

- Yes  No

**Target groups from the third country(ies) not associated to the Erasmus+ programme involved in the project**

Number of students following the courses/study programmes (at Bachelor, Master, PhD level) 1100


Number of students to be trained/involved in the mobility (studying) 0

Number of students/staff females to be involved in the project 120

Number of students/staff with practical placements 330

Number of academic staff to be trained 66

Number of university administrative staff to be trained 22

Number of staff from Ministries and other public authorities to be trained  0 Associated with document Ref. Ares(2023)7024660 - 16/10/2023  
Number of people to be trained that are not enrolled in HEIs 0

#### Higher Education Institutions (HEI) - Cooperation agreement(s)

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Is the project going to establish any cooperation agreement(s) with relevant stakeholders?

Yes

No

- HEIs not involved in the project
- Associations, civil society organisations and NGOs
- Public organisations
- Local authorities in the third countries not associated to the Erasmus+ programme
- Private sector
- Social enterprises
- Research institutions
- Others

#### Higher Education Institutions (HEI) - Courses/Study programmes/Placements/Structures

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Number of new courses 27

Number of new study programs 9

- New joint study programmes
- New interdisciplinary study programmes

Number of updated courses 27

Number of updated study programmes 0

- Updated joint study programmes
- Updated interdisciplinary study programmes

Number of study programmes with practical placements 9

Number of new or modernised structures/units/centres/hubs to be created 0

Number of new or modernised labs 0

#### Impact at the Higher Education sector

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Does the proposal intend to impact the Higher Education (HE) sector in the participating third countries not associated to the Erasmus+ programme?

Yes

No

- New national policies or legislative framework in HE
- New regional policies or legislative framework in HE
- Contribution to the creation of a regional HE area (facilitate national and cross-border recognition, support mobility of teachers, learners and workers)
- Include the active participation of students in governance and reform of the HE system
- Strengthen the links between education, research and innovation
- Contribute to the reform of higher education policies that respond to societal and labour market needs
- Develop schemes that facilitate the employability of graduates

#### Other sources of funding

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Does the proposal complement other local/national/international sources of funding?

Yes

No

**ANNEX 2****ESTIMATED BUDGET (LUMP SUM BREAKDOWN) FOR THE ACTION**

Estimated EU contribution										Maximum grant amount <sup>1</sup>
Estimated eligible lump sum contributions (per work package)										
WP1 Project management	WP2 Market needs and capacitation of Cental Asian staff	WP3 Environmental Management	WP4 Sustainable competitiveness	WP5 Environmental entrepreneurship	WP6 Capacity building in Circular economy	WP7 Piloting	WP8 Quality Assurance	WP9 Impact and dissemination.		
Forms of funding	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	Lump sum contribution	
	a	b	c	d	e	f	g	h	i	$j = a + b + c + d + e + f + g + h + i$
1 - EKTU	19 212.00	6 702.00	0.00	5 056.00	0.00	24 043.00	5 412.00	819.00	819.00	62 063.00
2 - KoKSU	4 575.00	6 702.00	3 419.00	867.00	867.00	24 042.00	5 412.00	819.00	819.00	47 522.00
3 - TSIEM	1 156.00	3 534.00	674.00	674.00	674.00	23 650.00	2 542.00	385.00	0.00	33 289.00
4 - TUT	2 073.00	6 711.00	683.00	683.00	683.00	25 025.00	3 738.00	318.00	318.00	40 232.00
5 - ABU	4 141.00	6 702.00	867.00	867.00	3 274.00	24 042.00	5 412.00	674.00	674.00	46 653.00
6 - WIUT	9 101.00	10 314.00	1 782.00	1 782.00	1 782.00	24 621.00	5 797.00	1 300.00	1 300.00	57 779.00
7 - TSUC	2 073.00	6 028.00	683.00	683.00	683.00	25 025.00	3 738.00	318.00	1 513.00	40 744.00
8 - CAU	9 101.00	5 450.00	1 782.00	1 782.00	1 782.00	24 620.00	5 797.00	1 301.00	6 501.00	58 116.00
9 - KarUK	4 575.00	6 702.00	867.00	867.00	867.00	24 041.00	11 479.00	819.00	819.00	51 036.00
10 - TSIF	1 156.00	3 534.00	674.00	674.00	674.00	23 650.00	2 542.00	385.00	0.00	33 289.00
11 - AST	2 889.00	3 534.00	0.00	674.00	0.00	0.00	1 677.00	385.00	770.00	9 929.00
12 - AY	11 556.00	14 619.00	0.00	0.00	0.00	7 079.00	8 146.00	0.00	0.00	41 400.00
13 - USC	13 694.00	8 263.00	0.00	0.00	29 294.00	5 200.00	8 147.00	0.00	0.00	64 598.00
14 - UNINA	7 704.00	6 144.00	0.00	16 949.00	0.00	3 082.00	8 147.00	0.00	0.00	42 026.00
15 - FHM	13 693.00	8 263.00	29 294.00	0.00	0.00	5 200.00	8 147.00	15 601.00	0.00	80 198.00
<b>Σ consortium</b>	106 699.00	103 202.00	40 725.00	31 558.00	40 580.00	263 320.00	86 133.00	23 124.00	13 533.00	708 874.00

<sup>1</sup> The 'maximum grant amount' is the maximum grant amount fixed in the grant agreement (on the basis of the sum of the beneficiaries' lump sum shares for the work packages).

**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**SH.UALIKHANOV ATYNDAGY KOKSHETAU MEMLEKETTIK UNIVERSITETI (KoKSU)**, PIC 948627603, established in AKMOLA OBLAST ABAY STREET 76, KOKSHETAU 020000, Kazakhstan,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — CirculeC** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**THE TURKMEN STATE INSTITUTE OF ECONOMICS AND MANAGEMENT (TSIEM),**  
PIC 898629438, established in 1972 (ATA TURK) STREET 73, ASHGABAT 744036, Turkmenistan,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — Circulec** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and**  
**the European Education and Culture Executive Agency (EACEA)** ('EU executive agency'  
or 'granting authority'), under the powers delegated by the European Commission ('European  
Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement,  
in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in  
accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**TECHNOLOGICAL UNIVERSITY OF TAJIKISTAN (TUT)**, PIC 953846300, established in N KARABAYEV STREET 63 3, DUSHANBE 734061, Tajikistan,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — Circulec** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**ALIKHAN BOKEIKHAN UNIVERSITY (ABU)**, PIC 934164321, established in MANGILIK EL STR. 11, SEMEY 071400, Kazakhstan,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — Circulec** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary



**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**TOSHKENT SHAHRIDAGI XALQARO WESTMINSTER UNIVERSITETI (WIUT)**, PIC 933536828, established in 12 ISTQBOL STR, TASHKENT 100047, Uzbekistan,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — Circulec** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**TAJIK STATE UNIVERSITY OF COMMERCE (TSUC)**, PIC 936722502, established in 1/2 DEHOTY STR, DUSHANBE 734055, Tajikistan,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — Circulec** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**CENTRAL ASIAN UNIVERSITY MCHJ (CAU)**, PIC 885299116, established in MILLIY BOG STREET 264, BARKAMOL MFY, MIRZO ULUGBEK DISTRICT, TASHKENT 111221, Uzbekistan,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — CirculeC** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**KARAGANDA UNIVERSITY OF KAZPOTREBSOYUZ (KarUK)**, PIC 934473848, established in AKADEMICHESKAYA STREET 9, KARAGANDA 100009, Kazakhstan,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — Circulec** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**TURKMEN STATE INSTITUTE OF FINANCE (TSIF)**, PIC 933076369, established in 112 1987 STR. HERO OF TURKMENISTAN ATAMYRAT NYIAZO, ASHGABAT 744027, Turkmenistan,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — Circulec** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**TURKMENISTAN YLYMLAR AKADEMIYASY (AST)**, PIC 968678473, established in BITARAP TURKMENISTAN SL 15, ASHGABAT 744000, Turkmenistan,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — Circulec** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**AYECONOMICS RESEARCH CENTRE SL (AY)**, PIC 909523896, established in EDIFIC EMPRENDIA CAMPUS VIDA SN, SANTIAGO 15782, Spain,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — Circulec** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**UNIVERSIDAD DE SANTIAGO DE COMPOSTELA (USC)**, PIC 999829635, established in COLEXIO DE SAN XEROME PRAZA DO OBRADOIRO S/N, SANTIAGO DE COMPOSTELA 15782, Spain,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — CirculeC** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary



**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**UNIVERSITA DEGLI STUDI DI NAPOLI FEDERICO II (UNINA)**, PIC 999976590, established in CORSO UMBERTO I, 40, NAPOLI 80138, Italy,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — CirculeC** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

**ANNEX 3**

**ACCESSION FORM FOR BENEFICIARIES**

**FACHHOCHSCHULE DES MITTELSTANDES (FHM) GMBH - UNIVERSITY OF APPLIED SCIENCE - (FHM)**, PIC 950486123, established in RAVENSBERGER STRASSE 10G, BIELEFELD 33602, Germany,

**hereby agrees**

**to become beneficiary**

**in Agreement No 101129169 — CirculeC** ('the Agreement')

**between D.SERIKBAYEV EAST KAZAKHSTAN TECHNICAL UNIVERSITY (EKTU) and the European Education and Culture Executive Agency (EACEA)** ('EU executive agency' or 'granting authority'), under the powers delegated by the European Commission ('European Commission'),

**and mandates**

**the coordinator** to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 39.

By signing this accession form, the beneficiary accepts the grant and agrees to implement it in accordance with the Agreement, with all the obligations and terms and conditions it sets out.

SIGNATURE

For the beneficiary

FINANCIAL STATEMENT FOR THE ACTION FOR REPORTING PERIOD [NUMBER]

EU contribution												
Eligible lump sum contributions (per work package)												Requested EU contribution
WP1 [name]	WP2 [name]	WP3 [name]	WP4 [name]	WP5 [name]	WP6 [name]	WP7 [name]	WP8 [name]	WP9 [name]	WP10 [name]	WP [XX]		
[ Lump sum contribution// Financing not linked to costs]	[ Lump sum contribution// Financing not linked to costs]	[ Lump sum contribution// Financing not linked to costs]	[ Lump sum contribution// Financing not linked to costs]	[ Lump sum contribution// Financing not linked to costs]	[ Lump sum contribution// Financing not linked to costs]	[ Lump sum contribution// Financing not linked to costs]	[ Lump sum contribution// Financing not linked to costs]	[ Lump sum contribution// Financing not linked to costs]	[ Lump sum contribution// Financing not linked to costs]	[ Lump sum contribution// Financing not linked to costs]	[ Lump sum contribution// Financing not linked to costs]	
Forms of funding												
Status of completion	COMPLETED	COMPLETED	COMPLETED	COMPLETED	COMPLETED	COMPLETED	COMPLETED	PARTIALLY COMPLETED	PARTIALLY COMPLETED	COMPLETED	NOT COMPLETED	
	a	b	c	d	e	f	g	h	i	j	k	$l = a + b + c + d + e + f + g + h + i + j + k$
1 – [short name beneficiary]												
1.1 – [short name affiliated entity]												
2 – [short name beneficiary]												
2.1 – [short name affiliated entity]												
X – [short name associated partner]												
Total consortium												

The consortium hereby confirms that:  
 The information provided is complete, reliable and true.  
 The lump sum contributions declared are eligible (in particular, the work packages have been completed and the work has been properly implemented and/or the results were achieved; see Article 6).  
 The proper implementation of the action/achievement of the results can be substantiated by adequate records and supporting documentation that will be produced upon request or in the context of checks, reviews, audits and investigations (see Articles 19, 21 and 25).

## ANNEX 5

### SPECIFIC RULES

#### INTELLECTUAL PROPERTY RIGHTS (IPR) — BACKGROUND AND RESULTS — ACCESS RIGHTS AND RIGHTS OF USE (— ARTICLE 16)

##### **Rights of use of the granting authority on results for information, communication, publicity and dissemination purposes**

The granting authority also has the right to exploit non-sensitive results of the action for information, communication, dissemination and publicity purposes, using any of the following modes:

- **use for its own purposes** (in particular, making them available to persons working for the granting authority or any other EU service (including institutions, bodies, offices, agencies, etc.) or EU Member State institution or body; copying or reproducing them in whole or in part, in unlimited numbers; and communication through press information services)
- **distribution to the public** in hard copies, in electronic or digital format, on the internet including social networks, as a downloadable or non-downloadable file
- **editing** or **redrafting** (including shortening, summarising, changing, correcting, cutting, inserting elements (e.g. meta-data, legends or other graphic, visual, audio or text elements extracting parts (e.g. audio or video files), dividing into parts or use in a compilation
- **translation** (including inserting subtitles/dubbing) in all official languages of EU
- **storage** in paper, electronic or other form
- **archiving** in line with applicable document-management rules
- the right to authorise **third parties** to act on its behalf or sub-license to third parties, including if there is licensed background, any of the rights or modes of exploitation set out in this provision
- **processing**, analysing, aggregating the results and **producing derivative works**
- **disseminating** the results in widely accessible databases or indexes (such as through ‘open access’ or ‘open data’ portals or similar repositories, whether free of charge or not.

The beneficiaries must ensure these rights of use for the whole duration they are protected by industrial or intellectual property rights.

If results are subject to moral rights or third party rights (including intellectual property rights or rights of natural persons on their image and voice), the beneficiaries must ensure that they

comply with their obligations under this Agreement (in particular, by obtaining the necessary licences and authorisations from the rights holders concerned).

### **Access rights for the granting authority, EU institutions, bodies, offices or agencies and national authorities to results for policy purposes**

The beneficiaries must grant access to their results — on a royalty-free basis — to the granting authority, other EU institutions, bodies, offices or agencies, for developing, implementing and monitoring EU policies or programmes.

Such access rights are limited to non-commercial and non-competitive use.

The access rights also extend to national authorities of EU Member States or associated countries, for developing, implementing and monitoring their policies or programmes in this area. In this case, access is subject to a bilateral agreement to define specific conditions ensuring that:

- the access will be used only for the intended purpose and
- appropriate confidentiality obligations are in place.

Moreover, the requesting national authority or EU institution, body, office or agency (including the granting authority) must inform all other national authorities of such a request.

### **Access rights for third parties to ensure continuity and interoperability**

Where the call conditions impose continuity or interoperability obligations, the beneficiaries must make the materials, documents and information and results produced in the framework of the action available to the public (freely accessible on the Internet under open licences or open source licences).

## **COMMUNICATION, DISSEMINATION AND VISIBILITY (— ARTICLE 17)**

### **Additional communication and dissemination activities**

The beneficiaries must engage in the following additional communication and dissemination activities:

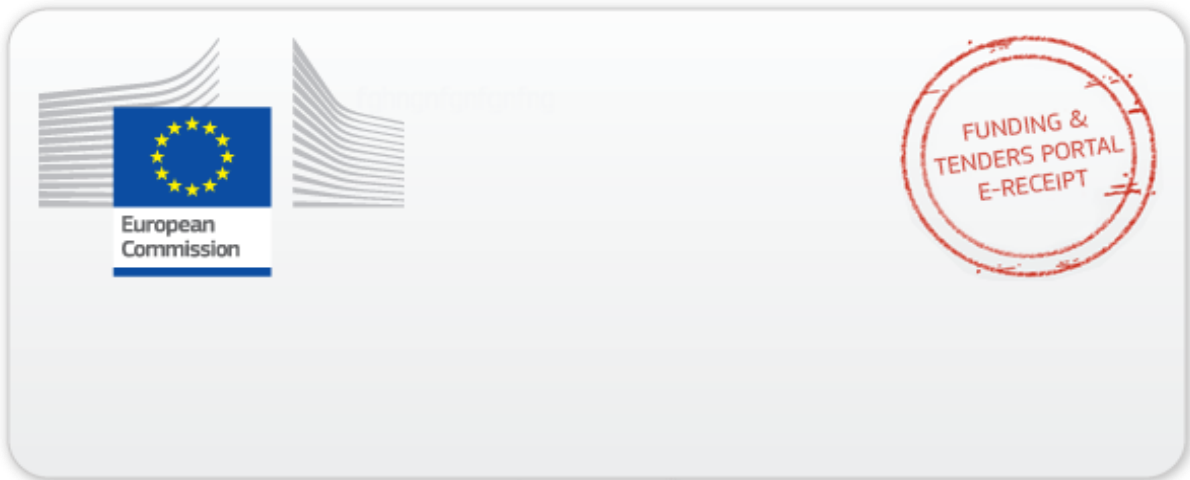
- **present the project** (including project summary, coordinator contact details, list of participants, European flag and funding statement and project results) on the beneficiaries' **websites** or **social media accounts**
- for actions involving public **events**, display signs and posters mentioning the action and the European flag and funding statement
- upload the public **project results** to the Erasmus+ Project Results platform, available through the Funding & Tenders Portal.

## **SPECIFIC RULES FOR CARRYING OUT THE ACTION (— ARTICLE 18)**

### **EU restrictive measures**

The beneficiaries must ensure that the EU grant does not benefit any affiliated entities, associated partners, subcontractors or recipients of financial support to third parties that are

subject to restrictive measures adopted under Article 29 of the Treaty on the European Union or Article 215 of the Treaty on the Functioning of the EU (TFEU).



This electronic receipt is a digitally signed version of the document submitted by your organisation. Both the content of the document and a set of metadata have been digitally sealed.

This digital signature mechanism, using a public-private key pair mechanism, uniquely binds this eReceipt to the modules of the Funding & Tenders Portal of the European Commission, to the transaction for which it was generated and ensures its full integrity. Therefore a complete digitally signed trail of the transaction is available both for your organisation and for the issuer of the eReceipt.

Any attempt to modify the content will lead to a break of the integrity of the electronic signature, which can be verified at any time by clicking on the eReceipt validation symbol.

More info about eReceipts can be found in the FAQ page of the Funding & Tenders Portal.

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/faq>