1. Identification

Call	Date of submission
C1	26/04/2022

1.1. Full name of the project

Unified legal framework and procedures for carbon footprint calculation and environmental life cycle assessment for electronics products

138 / 250 characters

1.2. Short name of the project

CaFootEI

8 / 20 characters

1.3. Programme priority

3. Climate-neutral societies

1.4. Programme objective

3.1 Circular economy

1.6. Project duration

Contracting start	22/09/2022	**Contracting end**	31/12/2022
Implementation start	01/01/2023	**Implementation end**	31/12/2025
		Duration of implementation phase (months)	36
Closure start	01/01/2026	**Closure end**	31/03/2026

1.7. Project summary

The main goal of the CAFootEI project is to create a unified framework and procedures for carbon footprint calculation and environmental life cycle assessment of electronic products and integrate it into product design for environmental sustainability to ensure the electronic business is competitive.
The project enables reliable comparison of environmental benefits that are brought through the use of biobased and/or recycled materials, profound manufacturing technologies, more durable products with longer lifetimes, less energy-consuming devices, circular loops like reuse, repair, recycling as materials and therefore promotes more environmentally sustainable solutions in the market. The project will contribute to facilitating behavioural change and integrated planning of production materials and energy sources.
Setting up strong regional consortia based on the quadruple helix, i.e. involving HEI, government/ regional authorities, business & society will result in a robust gateway for the development of BSR, European & beyond Europe's unified legal framework & procedures.
The main project outputs are: 46 interregional learning events, 15 pilot actions addressing carbon footprint calculation and environmental LCA of electronics products, at least 18 good practices will be analysed & shared, 19 organisations cooperating across borders, 65 organizations will increase their capacities, society and regular people will increase their awareness on climate change issues.

1,487 / 1,500 characters

1.8. Summary of the partnership

The consortium of a CaFootEI partnership consists of a partner from more and less developed EU countries and regions. The exchange of experiences and mutual learning from on one hand developed regions (FI&DE partners) and from less developed ones (PL, LV, LT partners) is especially significant and represents a good knowledge and resources exchange. Research organizations, regional & national public authorities, as well as business support organisations and SMEs from 6 European regions, will exchange practices, knowledge and ideas on the way the development of a unified framework and procedures for carbon footprint calculation
and environmental life cycle assessment of electronics products that take into account the need for businesses to remain competitive.
The consortium involves industry and businesses (SMEs) that are interested in decarbonization processes and the life cycle of carbon devices, willing to collaborate with HEIs on the development of solutions that increase energy efficiency in industrial production processes as well as in public and private building stock.
The CaFootEI partnership is developed as a network of universities holding open-access R&D and innovation infrastructure, industry, regions and public authorities providing support for possible Circular Economy solutions and actions related to the reduction of greenhouse gas emissions. The partnership is led by Vilnius Gediminas Technical University (LT) and consists of:
Applied Research Institute for Prospective Technologies, LT
Centria University of Applied Sciences, FI
CLIC Innovation, FI
Warsaw University of Technology, PL
Polish Chamber of Commerce for Electronics and Telecommunications, PL
Semicon Sp. z o.o, PL
Riga Technical University, LV
JLU Technologies Ltd, LV
University of Applied Sciences: Technology, Business and Design (Hochschule, Wismar), DE.
Associated partners: Ministry of Environmental Protection and Regional Development, LV, University of Latvia, LV, Ministry of Environmental of Lithuania, associations working in the project scope, other industrial confederations, innovation & business support organizations, SMEs acting in bio-economy, renewable energy solutions and able to contribute to the project activities, participate in piloting actions.
As the project consortium is based on the quadruple helix, i.e. involving HEI, government/ regional authorities, business & society, creating a collaborative platform where all stakeholders can operate together. It opens the pathway to transnational, interregional and cross-sectoral collaboration. This collaboration is important because the issue at stake is of pan-European relevance. Once the solutions have been implemented and tested in the Baltic Sea Region, they can be scaled up on a wider scale. Climate change is an international issue, and solutions must be implemented at the international level.

2,885 / 3,000 characters

1.11. Project Budget Summary

Financial resources [in EUR]		Preparation costs	Planned project budget
ERDF	ERDF co-financing	0.00	1,899,573.60
	Own contribution ERDF	0.00	474,893.40
	ERDF budget	0.00	2,374,467.00
NO	NO co-financing	0.00	0.00
	Own contribution NO	0.00	0.00
	NO budget	0.00	0.00
NDICI	NDICI co-financing	0.00	0.00
	Own contribution NDICI	0.00	0.00
	NDICI budget	0.00	0.00
RU	RU co-financing	0.00	0.00
	Own contribution RU	0.00	0.00
	RU budget	0.00	0.00
TOTAL	**Total Programme co-financing**	0.00	1,899,573.60
	Total own contribution	0.00	474,893.40
	Total budget	0.00	2,374,467.00

2. Partnership

2.1. Overview: Project Partnership

2.1.1 Project Partners

No.	LP/PP	Organisation (English)	Organisation (Original)	Country	Type of partner	Legal status	Partner budget in the project	Active/inactive	
								Status	from
1	LP	Vilnius Gediminas Technical university	Vilniaus Gedimino technikos universitetas	LT	Higher education and research institution	a)	343,715.00 €	Active	22/09/2022
2	PP	Applied Research Institute for Prospective Technologies	Perspektyvinių technologijų taikomųjų tyrimų institutas	LT	Higher education and research institution	a)	237,285.00 €	Active	22/09/2022
3	PP	Centria University of Applied Sciences Ltd	Centria-ammattikorkeakoulu Oy	FI	Higher education and research institution	a)	372,232.00 €	Active	22/09/2022
4	PP	CLIC Innovation	CLIC Innovation Oy	FI	Business support organisation	b)	266,490.00 €	Active	22/09/2022
5	PP	Warsaw University of Technology	Politechnika Warszawska	PL	Higher education and research institution	a)	216,240.00 €	Active	22/09/2022
6	PP	Polish Chamber of Commerce for Electronics and Telecommunications	Krajowa Izba Gospodarcza Elektroniki i Telekomunikacji	PL	Business support organisation	b)	144,160.00 €	Active	22/09/2022
7	PP	Semicon Ltd.	Semicon Sp. z o.o.	PL	Small and medium enterprise	b)	144,160.00 €	Active	22/09/2022
8	PP	Riga Technical University	Rīgas Tehniskā universitāte	LV	Higher education and research institution	a)	254,990.00 €	Active	22/09/2022
9	PP	JLU Technologies Ltd	SIA "JLU Technologies"	LV	Small and medium enterprise	b)	135,745.00 €	Active	22/09/2022
10	PP	Hochschule Wismar, University of Applied Sciences: Technology, Business and Design	Hochschule Wismar, University of Applied Sciences: Technology, Business and Design	DE	Higher education and research institution	a)	259,450.00 €	Active	22/09/2022

2.1.2 Associated Organisations

No.	Organisation (English)	Organisation (Original)	Country	Type of Partner
AO 1	Electronics Research and Development Cooperation Body KOTEL Ry	Elektroniikan tutkimuksen ja kehityksen yhteistyöelin KOTEL Ry	FI	Interest group
AO 2	LITHUANIAN CONFEDERATION OF INDUSTRIALISTS	LIETUVOS PRAMONININKU KONFEDERACIJA	LT	Interest group
AO 3	National Electrotechnical Standardization Organization (SESKO Ry)	Kansallinen sähkötekniikan standardointijärjestö (SESKO Ry)	FI	Interest group
AO 4	Ministry of Environment of the Republic of Lithuania	Lietuvos Respublikos Aplinkos ministerija	LT	National public authority
AO 5	Ministry of the Economy and Innovation of the Republic of Lithuania	Lietuvos Respublikos ekonomikos ir inovacijų ministerija	LT	National public authority
AO 6	Latvian Ministry of Environmental Protection and Regional Development	Vides aizsardzības un reģionālās attīstības ministrija	LV	National public authority
AO 7	University of Latvia	LATVIJAS UNIVERSITĀTI	LV	Higher education and research institution
AO 8	Ministry of Climate and Environment of the Republic of Poland	Ministerstwa Klimatu i Środowiska	PL	National public authority
AO 9	Latvian Association of Power Engineers and Energy Constructors	LATVIJAS ELEKTROENERĢĒTIĶU UN ENERGOBŪVNIEKU ASOCIĀCIJA	LV	Business support organisation

2.2 Project Partner Details - Partner 1

LP/PP Lead Partner

Partner Status Active

Active from 22/09/2022 **Inactive from**

Partner name:

Organisation in original language Vilniaus Gedimino technikos universitetas
41 / 250 characters

Organisation in English Vilnius Gediminas Technical university
38 / 250 characters

Department in original language Žinių ir technologijų perdavimo centras
39 / 250 characters

Department in English Knowledge and technology transfer center
40 / 250 characters

Partner location and website:

Address Sauletekis ave. 11-801
22 / 250 characters

Postal Code 10223
5 / 250 characters

Town Vilnius
7 / 250 characters

Website www.vilniustech.lt
19 / 100 characters

Country Lithuania

NUTS1 code Lietuva

NUTS2 code Sostinės regionas

NUTS3 code Vilniaus apskritis

Partner ID:

Organisation ID type Legal person's code (Juridinio asmens kodas)

Organisation ID 111950243

VAT Number Format LT + 9 digits

VAT Number N/A ☐ LT119502413
11 / 50 characters

PIC 999647857
9 / 9 characters

Partner type:

Legal status a) Public

Type of partner Higher education and research instituti — University faculty, college, research institution, RTD facility, research cluster, etc.

Sector (NACE) 85.42 - Tertiary education

Partner financial data:

Is your organisation entitled to recover VAT related to the EU funded project activities? No

Role of the partner organisation in this project:

CaFootEI Lead partner Vilnius Tech is responsible for leading the project and coordinating all project implementation. Vilnius Tech will appoint a management structure and working groups for the project activities. Vilnius Tech will coordinate the division of budget and monitor the expenses of the total project budget as well as each partner's budget. P1 will ensure that the expenditures collected from all partners are by
the requirements of the MA/JS. Vilnius Tech will be involved in all WP activities to ensure that all the plans would be executed in time. Will be responsible for the organization of national workshops and Advisory Board creation. Will lead together with CLIC Innovation the Communication and dissemination activities. Will organize the partner kick off meeting back to back to the interregional workshop on waste management and bio-circular economy application in the decarbonization process, including site visits into the good practice cases.

970 / 1,000 characters

Has this organisation ever been a partner in the project(s) implemented in the Interreg Baltic Sea Region Programme?

○ Yes ○ No

State aid relevance

For the partner type selected, the Programme sees a medium to high risk for implementing State aid relevant activities. If the partner is of the opinion that its activities are not State aid relevant, it can ask the MA/JS for a plausibility check on the State aid relevance. Does the partner want to do this?

○ Yes ○ No

Justification why the partner's activities are not State aid relevant

The project activities are to support the industry, results are public and open to any stakeholder. Vilnius Tech will not gain any economic advantage in the market. The organisation provides expertise and needed infrastructure for the benefit of the project.

258 / 3,000 characters

2.2 Project Partner Details - Partner 2

LP/PP	Project Partner		
Partner Status	Active		
Active from	22/09/2022	**Inactive from**	

Partner name:

Organisation in original language: Perspektyvinių technologijų taikomųjų tyrimų institutas
55 / 250 characters

Organisation in English: Applied Research Institute for Prospective Technologies
55 / 250 characters

Department in original language: n/a
3 / 250 characters

Department in English: n/a
3 / 250 characters

Partner location and website:

Address: Vismaliuko str. 34
20 / 250 characters

Postal Code: 10243
5 / 250 characters

Town: Vilnius
7 / 250 characters

Website: www.protechnology.lt
20 / 100 characters

Country: Lithuania

NUTS1 code: Lietuva

NUTS2 code: Sostinės regionas

NUTS3 code: Vilniaus apskritis

Partner ID:

Organisation ID type	Legal person's code (Juridinio asmens kodas)
Organisation ID	300129749
VAT Number Format	LT + 12 digits
VAT Number	N/A ☐ LT100002835613 (14 / 50 characters)
PIC	998116615 (9 / 9 characters)

Partner type:

Legal status	a) Public
Type of partner	Higher education and research instituti — University faculty, college, research institution, RTD facility, research cluster, etc.
Sector (NACE)	72.19 - Other research and experimental development on natural sciences and engineering

Partner financial data:

Is your organisation entitled to recover VAT related to the EU funded project activities? Yes

Role of the partner organisation in this project:

Will co-lead WP1 together with Centria. Will lead the WP1.2. I will assist Vilnius Tech will organize the national workshops and creating an Advisory board. Will contribute to the WP3 activities.
ProTech will select an electronic product, calculate its carbon footprint and comprise the product's LCA. The product is planned to be a solar module. ProTech will also participate in the calculation of carbon footprint and preparation of LCA for other products selected by the project partners. ProTech will work on the modification of the solar module production technology. ProTech will take a part in drafting the unified methodology of CO2 calculation and LCA preparation and discussions on the legal framework for reducing CO2 emissions acceptable to both public authorities and businesses.

793 / 1,000 characters

Has this organisation ever been a partner in the project(s) implemented in the Interreg Baltic Sea Region Programme?

○ Yes ○ No

State aid relevance

For the partner type selected, the Programme sees a medium to high risk for implementing State aid relevant activities. If the partner is of the opinion that its activities are not State aid relevant, it can ask the MA/JS for a plausibility check on the State aid relevance. Does the partner want to do this?

○ Yes ○ No

Justification why the partner's activities are not State aid relevant

The project activities are to support the industry, results are public and open to any stakeholder. ProTech will not gain any economic advantage in the market. The organisation provides expertise and needed infrastructure for the benefit of the project.

253 / 3,000 characters

2.2 Project Partner Details - Partner 3

LP/PP	Project Partner		
Partner Status	Active		
Active from	22/09/2022	**Inactive from**	

Partner name:

Organisation in original language	Centria-ammattikorkeakoulu Oy (29 / 250 characters)

Organisation in English	Centria University of Applied Sciences Ltd (42 / 250 characters)
Department in original language	Centria Tutkimus ja kehitys (27 / 250 characters)
Department in English	Centria Research and Development (32 / 250 characters)

Partner location and website:

Address	Talonpojankatu 2 (17 / 250 characters)	**Country**	Finland
Postal Code	67100 (6 / 250 characters)	**NUTS1 code**	Manner-Suomi
Town	Kokkola (7 / 250 characters)	**NUTS2 code**	Pohjois- ja Itä-Suomi
Website	https://web.centria.fi/en (25 / 100 characters)	**NUTS3 code**	Keski-Pohjanmaa

Partner ID:

Organisation ID type	Business Identity Code (Y-tunnus)
Organisation ID	1097805-3
VAT Number Format	FI + 8 digits
VAT Number	N/A ☐ FI10978053 (10 / 50 characters)
PIC	997172708 (9 / 9 characters)

Partner type:

Legal status	a) Public	
Type of partner	Higher education and research instituti	University faculty, college, research institution, RTD facility, research cluster, etc.
Sector (NACE)	72.19 - Other research and experimental development on natural sciences and engineering	

Partner financial data:

Is your organisation entitled to recover VAT related to the EU funded project activities?	No

Role of the partner organisation in this project:

Centria UAS activities are integral part of regional development strategy not only in training and research and development, but also in direct support of industry in the region. Regional development tasks are also part of Finnish “Universities of Applied Sciences Act” issued 932/2014. Centria’s specific expertise relevant to the project is good theoretical and practical knowledge of production technologies of materials, electronic components and products, recycling technologies of materials. This is crucial knowledge in creating framework for inventory to perform life cycle assessment. Centria will perform inventory number of materials and their recycling technologies to support LCA framework creation. Centria has SimaPro for LCA assessment. Centria will lead the WP1 in close cooperation with PROTECH. Will lead the WP1.1. Will assist CLIC Innovations in organization of national workshops and create Advisory board. Will contribute to the WP3 activities.

970 / 1,000 characters

Has this organisation ever been a partner in the project(s) implemented in the Interreg Baltic Sea Region Programme?

○ Yes ○ No

State aid relevance

For the partner type selected, the Programme sees a medium to high risk for implementing State aid relevant activities. If the partner is of the opinion that its activities are not State aid relevant, it can ask the MA/JS for a plausibility check on the State aid relevance. Does the partner want to do this?

○ Yes ○ No

Justification why the partner's activities are not State aid relevant

The project activities are to support the industry, results are public and open to any stakeholder. Centria will not gain any economic advantage in the market. The organisation provides expertise and needed infrastructure for the benefit of the project.

253 / 3,000 characters

2.2 Project Partner Details - Partner 4

LP/PP Project Partner

Partner Status Active

Active from 22/09/2022 **Inactive from**

Partner name:

Organisation in original language CLIC Innovation Oy

18 / 250 characters

Organisation in English CLIC Innovation

15 / 250 characters

Department in original language n/a

3 / 250 characters

Department in English n/a

3 / 250 characters

Partner location and website:

Address Eteläranta 10

13 / 250 characters

Postal Code 00130

5 / 250 characters

Town Helsinki

8 / 250 characters

Website https://clicinnovation.fi/

26 / 100 characters

Country Finland

NUTS1 code Manner-Suomi

NUTS2 code Helsinki-Uusimaa

NUTS3 code Helsinki-Uusimaa

Partner ID:

Organisation ID type Business Identity Code (Y-tunnus)

Organisation ID 2689612-4

VAT Number Format FI + 8 digits

VAT Number N/A ☐ FI26896124

10 / 50 characters

PIC 925710480

9 / 9 characters

Partner type:

Legal status	b) Private	
Type of partner	Business support organisation	Chamber of commerce, chamber of trade and crafts, business incubator or innovation centre, business clusters, etc.
Sector (NACE)	70.22 - Business and other management consultancy activities	

Partner financial data:

Is your organisation entitled to recover VAT related to the EU funded project activities? Yes

Financial data

Reference period	01/01/2021	–	31/12/2021
Staff headcount [in annual work units (AWU)]			9.0
Employees [in AWU]			9.0
Persons working for the organisation being subordinated to it and considered to be employees under national law [in AWU]			0.0
Owner-managers [in AWU]			0.0
Partners engaged in a regular activity in the organisation and benefiting from financial advantages from the organisation [in AWU]			0.0
Annual turnover [in EUR]			788,121.00
Annual balance sheet total [in EUR]			4,259,822.00
Operating profit [in EUR]			62,146.00

Role of the partner organisation in this project:

CLIC Innovation will coordinate the WP3 together with Vilnius Tech. CLIC Innovation will be directly involved in all WP3 activities and lead the 3.2. CLIC Innovation is an experienced facilitator of events, workshops and webinars and will assist deliver training for national Advisory Board meetings. CLIC will have a major role in WP2 if one of the pilots will be in Finland. CLIC is managing circular economy ecosystem 4Recyling and is leading the Industrial biotechnology cluster (IBC Finland) and will use this channel for dissemination. CLIC is also a member is A.SPIRE- Processes4Planet partnership. Will organize the partner meeting back to back to the interregional workshop on speeding up the commercialization of new information by initiating and orchestrating solution-oriented projects covering the entire innovation chain from curiosity research to demonstrations, including site visits into the good practice cases.

929 / 1,000 characters

Has this organisation ever been a partner in the project(s) implemented in the Interreg Baltic Sea Region Programme?

○ Yes ○ No

2.2 Project Partner Details - Partner 5

LP/PP	Project Partner		
Partner Status	Active		
Active from	22/09/2022	**Inactive from**	

Partner name:

Organisation in original language	Politechnika Warszawska
	23 / 250 characters
Organisation in English	Warsaw University of Technology
	31 / 250 characters
Department in original language	Instytut Mikroelektroniki i Optoelektroniki
	43 / 250 characters
Department in English	Institute of Microelectronics and Optoelectronics
	49 / 250 characters

Partner location and website:

Address	Koszykowa 75 (13 / 250 characters)	**Country**	Poland
Postal Code	00-662 (6 / 250 characters)	**NUTS1 code**	Makroregion województwo mazowieckie
Town	Warsaw (6 / 250 characters)	**NUTS2 code**	Warszawski stołeczny
Website	www.imio.pw.edu.pl (18 / 100 characters)	**NUTS3 code**	Miasto Warszawa

Partner ID:

Organisation ID type	Tax identification number (NIP)
Organisation ID	5250005834
VAT Number Format	PL + 10 digits
VAT Number	N/A ☐ PL5250005834 (12 / 50 characters)
PIC	999884052 (9 / 9 characters)

Partner type:

Legal status	a) Public	
Type of partner	Higher education and research instituti	University faculty, college, research institution, RTD facility, research cluster, etc.
Sector (NACE)	85.42 - Tertiary education	

Partner financial data:

Is your organisation entitled to recover VAT related to the EU funded project activities? No

Role of the partner organisation in this project:

WUT will take part in all WPs. Together with other Polish partners will organize a national Advisory Board meeting. WUT will calculate CO2 emissions and perform Life Cycle Analysis (LCA) of the products from companies, participate in the comparative assessment of this evaluation and discussion with semiconductors industry representatives. In WP2, WUT will participate in desk research studies regarding the legal frameworks related to improved energy and environmental performance of electronic products, and innovative solutions, and contribute to the development of a unified methodology of CO2 calculation and LCA.

620 / 1,000 characters

Has this organisation ever been a partner in the project(s) implemented in the Interreg Baltic Sea Region Programme?

○ Yes ○ No

State aid relevance

For the partner type selected, the Programme sees a medium to high risk for implementing State aid relevant activities. If the partner is of the opinion that its activities are not State aid relevant, it can ask the MA/JS for a plausibility check on the State aid relevance. Does the partner want to do this?

○ Yes ○ No

Justification why the partner's activities are not State aid relevant

The project activities are to support the industry, results are public and open to any stakeholder. WUT will not gain any economic advantage in the market. The organisation provides expertise and needed infrastructure for the benefit of the project.

249 / 3,000 characters

2.2 Project Partner Details - Partner 6

LP/PP	Project Partner
Partner Status	Active
Active from	22/09/2022
Inactive from	

Partner name:

Organisation in original language	Krajowa Izba Gospodarcza Elektroniki i Telekomunikacji (54 / 250 characters)
Organisation in English	Polish Chamber of Commerce for Electronics and Telecommunications (65 / 250 characters)
Department in original language	n/a (3 / 250 characters)
Department in English	n/a (3 / 250 characters)

Partner location and website:

Address	Stępińska 22/30 (15 / 250 characters)	**Country**	Poland
Postal Code	00-739 (6 / 250 characters)	**NUTS1 code**	Makroregion województwo mazowieckie
Town	Warsaw (6 / 250 characters)	**NUTS2 code**	Warszawski stołeczny
Website	kigeit.org.pl (13 / 100 characters)	**NUTS3 code**	Miasto Warszawa

Partner ID:

Organisation ID type	Tax identification number (NIP)
Organisation ID	5260029121
VAT Number Format	PL + 10 digits
VAT Number	N/A ☐ PL5260029121 (12 / 50 characters)
PIC	(0 / 9 characters)

Partner type:

Legal status	b) Private	
Type of partner	Business support organisation	Chamber of commerce, chamber of trade and crafts, business incubator or innovation centre, business clusters, etc.
Sector (NACE)	94.11 - Activities of business and employers membership organisations	

Partner financial data:

Is your organisation entitled to recover VAT related to the EU funded project activities?	No

Financial data			
Reference period	01/01/2021	–	31/12/2021
Staff headcount [in annual work units (AWU)]			21.0
Employees [in AWU]			10.0
Persons working for the organisation being subordinated to it and considered to be employees under national law [in AWU]			10.0
Owner-managers [in AWU]			1.0
Partners engaged in a regular activity in the organisation and benefiting from financial advantages from the organisation [in AWU]			0.0
Annual turnover [in EUR]			787,931.00
Annual balance sheet total [in EUR]			665,411.00
Operating profit [in EUR]			4,930.00

Role of the partner organisation in this project:

WIll be involved in organization of interregional and regional seminar in an international forum. Cooperation in the organization of pilots. Will assist WUT to organize the national workshops and create Advisory board. Will contribute to the WP3 activities. Promotion of the project results.

292 / 1,000 characters

Has this organisation ever been a partner in the project(s) implemented in the Interreg Baltic Sea Region Programme?

○ Yes ○ No

2.2 Project Partner Details - Partner 7

LP/PP Project Partner

Partner Status Active

Active from 22/09/2022 **Inactive from**

Partner name:

Organisation in original language Semicon Sp. z o.o.

18 / 250 characters

Organisation in English Semicon Ltd.

12 / 250 characters

Department in original language n/a

3 / 250 characters

Department in English n/a

3 / 250 characters

Partner location and website:

Address Zwoleńska 43/43A

16 / 250 characters

Postal Code 04-761

6 / 250 characters

Town Warsaw

6 / 250 characters

Website www.semicon.com.pl

18 / 100 characters

Country Poland

NUTS1 code Makroregion województwo mazowieckie

NUTS2 code Warszawski stołeczny

NUTS3 code Miasto Warszawa

Partner ID:

Organisation ID type	Tax identification number (NIP)
Organisation ID	5260303208
VAT Number Format	PL + 10 digits
VAT Number	N/A ☐ PL5260303208 (12 / 50 characters)
PIC	(0 / 9 characters)

Partner type:

Legal status	b) Private	
Type of partner	Small and medium enterprise	Micro, small, medium enterprises < 250 employees, ≤ EUR 50 million turnover or ≤ EUR 43 million balance sheet total
Sector (NACE)	46.52 - Wholesale of electronic and telecommunications equipment and parts	

Partner financial data:

Is your organisation entitled to recover VAT related to the EU funded project activities? Yes

Financial data	**Reference period**	01/01/2021 –	31/12/2021
	Staff headcount [in annual work units (AWU)]		111.0
	Employees [in AWU]		111.0
	Persons working for the organisation being subordinated to it and considered to be employees under national law [in AWU]		0.0
	Owner-managers [in AWU]		0.0
	Partners engaged in a regular activity in the organisation and benefiting from financial advantages from the organisation [in AWU]		0.0
	Annual turnover [in EUR]		14,898,485.00
	Annual balance sheet total [in EUR]		595,455.00
	Operating profit [in EUR]		941,012.00

Role of the partner organisation in this project:

Particapate in WP1 delivering data needed for performance of LCA. Provide knowledge on the possibilities to re-use decommissioned processors, memories, etc. in new designs again as a new life or prolonged life of electronic components on the market.

249 / 1,000 characters

Has this organisation ever been a partner in the project(s) implemented in the Interreg Baltic Sea Region Programme?

○ Yes ○ No

2.2 Project Partner Details - Partner 8

LP/PP	Project Partner		
Partner Status	Active		
	Active from 22/09/2022	**Inactive from**	

Partner name:

Organisation in original language	Rīgas Tehniskā universitāte (27 / 250 characters)
Organisation in English	Riga Technical University (25 / 250 characters)
Department in original language	Vides aizsardzības un siltuma sistēmu institūts (48 / 250 characters)
Department in English	Institute of Energy Systems and Environment (43 / 250 characters)

Partner location and website:

Address	Azenes street 12-1 (18 / 250 characters)	**Country**	Latvia
Postal Code	LV-1048 (7 / 250 characters)	**NUTS1 code**	Latvija
Town	Riga (4 / 250 characters)	**NUTS2 code**	Latvija
Website	www.rtu.lv (10 / 100 characters)	**NUTS3 code**	Rīga

Partner ID:

Organisation ID type	Unified registration number (Vienotais reģistrācijas numurs)
Organisation ID	90000068977
VAT Number Format	LV + 11 digits
VAT Number	N/A ☐ LV90000068977 (13 / 50 characters)
PIC	999920718 (9 / 9 characters)

Partner type:

Legal status	a) Public	
Type of partner	Higher education and research instituti	University faculty, college, research institution, RTD facility, research cluster, etc.
Sector (NACE)	85.42 - Tertiary education	

Partner financial data:

Is your organisation entitled to recover VAT related to the EU funded project activities?	No

Role of the partner organisation in this project:

RTU is involved in all WPs. In WP1, RTU will calculate CO2 emissions and perform Life Cycle Analysis (LCA) of the products from companies, participate in the comparative assessment of this evaluation and discussion with industry representatives. RTU will together with HSW lead WP2 and will participate in desk research studies regarding the legal frameworks related to improved energy and environmental performance of electronic products, and innovative solutions, and contribute to the development a unified methodology of CO2 calculation and LCA. In WP3, RTU will organize national workshop for target group entities and governmental bodies in Latvia on legal frameworks and CO2 emission calculation and estimation methods. Also, will lead the WP2 together with WUT. Will organize the partner meeting back to back to the interregional workshop on the novel textiles developed solutions, including site visits into the goods practice cases.

942 / 1,000 characters

Has this organisation ever been a partner in the project(s) implemented in the Interreg Baltic Sea Region Programme?

○ Yes ○ No

State aid relevance

For the partner type selected, the Programme sees a medium to high risk for implementing State aid relevant activities. If the partner is of the opinion that its activities are not State aid relevant, it can ask the MA/JS for a plausibility check on the State aid relevance. Does the partner want to do this?

○ Yes ○ No

Justification why the partner's activities are not State aid relevant

The project activities are to support the industry, results are public and open to any stakeholder. RTU will not gain any economic advantage in the market. The organisation provides expertise and needed infrastructure for the benefit of the project.

249 / 3,000 characters

2.2 Project Partner Details - Partner 9

LP/PP	Project Partner
Partner Status	Active
Active from	22/09/2022
Inactive from	

Partner name:

Organisation in original language	SIA "JLU Technologies" (22 / 250 characters)
Organisation in English	JLU Technologies Ltd (20 / 250 characters)
Department in original language	n/a (3 / 250 characters)
Department in English	n/a (3 / 250 characters)

Partner location and website:

Address	Ilukstes Street 107/1-16 (24 / 250 characters)	**Country**	Latvia
Postal Code	LV-1082 (7 / 250 characters)	**NUTS1 code**	Latvija
Town	Riga (4 / 250 characters)	**NUTS2 code**	Latvija
Website	www.jlutechnologies.lv (23 / 100 characters)	**NUTS3 code**	Rīga

Partner ID:

Organisation ID type	Unified registration number (Vienotais reģistrācijas numurs)
Organisation ID	40103190287
VAT Number Format	LV + 11 digits
VAT Number	N/A ☐ LV40103190287 (13 / 50 characters)
PIC	890321679 (9 / 9 characters)

Partner type:

Legal status	b) Private	
Type of partner	Small and medium enterprise	Micro, small, medium enterprises < 250 employees, ≤ EUR 50 million turnover or ≤ EUR 43 million balance sheet total
Sector (NACE)	72.11 - Research and experimental development on biotechnology	

Partner financial data:

Is your organisation entitled to recover VAT related to the EU funded project activities? Yes

Financial data	**Reference period**	01/01/2021 –	31/12/2021
	Staff headcount [in annual work units (AWU)]		6.0
	Employees [in AWU]		3.0
	Persons working for the organisation being subordinated to it and considered to be employees under national law [in AWU]		2.0
	Owner-managers [in AWU]		1.0
	Partners engaged in a regular activity in the organisation and benefiting from financial advantages from the organisation [in AWU]		0.0
	Annual turnover [in EUR]		15,132.00
	Annual balance sheet total [in EUR]		18,469.00
	Operating profit [in EUR]		2,816.00

Role of the partner organisation in this project:

JLU will be involved in assistance to target group bodies in setting/improvement of CO2 emissions evaluation procedures and methodology and green products certification rules. Also, they will significantly contribute to the consultation and cooperation with businesses and their organizations to make the legal framework for reducing CO emissions acceptable to both public authorities and business.

400 / 1,000 characters

Has this organisation ever been a partner in the project(s) implemented in the Interreg Baltic Sea Region Programme?

○ Yes ○ No

2.2 Project Partner Details - Partner 10

LP/PP	Project Partner		
Partner Status	Active		
	Active from 22/09/2022	**Inactive from**	

Partner name:

Organisation in original language	Hochschule Wismar, University of Applied Sciences: Technology, Business and Design
	82 / 250 characters
Organisation in English	Hochschule Wismar, University of Applied Sciences: Technology, Business and Design
	82 / 250 characters
Department in original language	Fakultät für Wirtschaftswissenschaften, European Project Center
	63 / 250 characters
Department in English	Wismar Business School, European Project Center
	47 / 250 characters

Partner location and website:

Address	Philipp-Müller-Str. 14 (22 / 250 characters)	**Country**	Germany
Postal Code	23966 (5 / 250 characters)	**NUTS1 code**	Mecklenburg-Vorpommern
Town	Wismar (6 / 250 characters)	**NUTS2 code**	Mecklenburg-Vorpommern
Website	www.hs-wismar.de (16 / 100 characters)	**NUTS3 code**	Nordwestmecklenburg

Partner ID:

Organisation ID type	Tax (identification) number (Steuer(identifikations)nummer)
Organisation ID	0080/144/02722/K12 (18 / 50 characters)
VAT Number Format	DE + 9 digits
VAT Number	N/A ☐ DE183844642 (11 / 50 characters)
PIC	972468457 (9 / 9 characters)

Partner type:

Legal status	a) Public	
Type of partner	Higher education and research instituti	University faculty, college, research institution, RTD facility, research cluster, etc.
Sector (NACE)	85.42 - Tertiary education	

Partner financial data:

Is your organisation entitled to recover VAT related to the EU funded project activities? No

Role of the partner organisation in this project:

HSW is experienced not only in the field of education, science and research but also as a knowledge transfer institution. HSW is capable to benefit from transdisciplinary knowledge and expertise. HSW has sound expertise in running projects both on CCIS, Industry 4.0, Circular Economy, Responsible Research and Innovation. HSW will be responsible for developing circular business models as well as testing Ecosystem Innovation Approach (EIA), Living Lab Business Models (LLBM) and Learning Ecosystem Living Lab (LELL). HSW will lead the WP2 together with RTU. Will organize the partner meeting back to back to the interregional workshop on interdisciplinary and practice-oriented concepts integrating three disciplines of Technology, Business and Design under one roof., including site visits into the good practice cases.

822 / 1,000 characters

Has this organisation ever been a partner in the project(s) implemented in the Interreg Baltic Sea Region Programme?

◉ Yes ○ No

State aid relevance

For the partner type selected, the Programme sees a medium to high risk for implementing State aid relevant activities. If the partner is of the opinion that its activities are not State aid relevant, it can ask the MA/JS for a plausibility check on the State aid relevance. Does the partner want to do this?

◉ Yes ○ No

Justification why the partner's activities are not State aid relevant

The project activities are to support the industry, results are public and open to any stakeholder. HSW will not gain any economic advantage in the market. The organisation provides expertise and needed infrastructure for the benefit of the project.

249 / 3,000 characters

2.3 Associated Organisation Details - AO 1

Associated organisation name and type:

Organisation in original language
Elektroniikan tutkimuksen ja kehityksen yhteistyöelin KOTEL Ry
63 / 250 characters

Organisation in English
Electronics Research and Development Cooperation Body KOTEL Ry
62 / 250 characters

Department in original language
KOTEL Ry
8 / 250 characters

Department in English
KOTEL RY
8 / 250 characters

Legal status
b) Private

Type of associated organisation
Interest group
Trade union, foundation, charity, voluntary association, club, etc. other than NGOs

Associated organisation location and website:

Address
Talonpojankatu 2
16 / 250 characters

Country
Finland

Postal Code
67100
5 / 250 characters

Town
Kokkola
7 / 250 characters

Website
www.kotel.fi
12 / 100 characters

Role of the associated organisation in this project:

Centria UAS Egidija Rainosalo will participate in KOTEL TR 19 group activities and gather needed information for framework development. We encourage several KOTEL companies to test the framework and evaluate it. Furthermore, development work will be informed to SESKO, standardization body in Finland.
303 / 1,000 characters

2.3 Associated Organisation Details - AO 2

Associated organisation name and type:

Organisation in original language
LIETUVOS PRAMONININKU KONFEDERACIJA
35 / 250 characters

Organisation in English
LITHUANIAN CONFEDERATION OF INDUSTRIALISTS
42 / 250 characters

Department in original language
PLĖTROS DEPARTAMENTAS
21 / 250 characters

Department in English
DEPARTMENT OF DEVELOPMENT
25 / 250 characters

Legal status
b) Private

Type of associated organisation
Interest group
Trade union, foundation, charity, voluntary association, club, etc. other than NGOs

Associated organisation location and website:

Address
VILNIAUS STR. 31
16 / 250 characters

Country
Lithuania

Postal Code
LT-01104
8 / 250 characters

Town
Vilnius
7 / 250 characters

Website
WWW.LPK.LT
10 / 100 characters

Role of the associated organisation in this project:

The role of the associated partner will be involvement into the WP2 and WP3 project activities. They will gather and provided needed information for framework development. Also, will engage the companies (members of association) to test the framework and evaluate it. Furthermore, association has close contacts to the ministries of Economy and Innovation as well as Environmental issues. Therefore, will be able to lobbying the development work to the officials of both ministries, regulation bodies in Lithuania.

514 / 1,000 characters

2.3 Associated Organisation Details - AO 3

Associated organisation name and type:

Organisation in original language
Kansallinen sähkötekniikan standardointijärjestö (SESKO Ry)
59 / 250 characters

Organisation in English
National Electrotechnical Standardization Organization (SESKO Ry)
65 / 250 characters

Department in original language
n/a
3 / 250 characters

Department in English
n/a
3 / 250 characters

Legal status
a) Public

Type of associated organisation
Interest group
Trade union, foundation, charity, voluntary association, club, etc. other than NGOs

Associated organisation location and website:

Address
Takomotie 8,
13 / 250 characters

Country
Finland

Postal Code
00380
6 / 250 characters

Town
HELSINKI
8 / 250 characters

Website
https://sesko.fi/en/
20 / 100 characters

Role of the associated organisation in this project:

Associated partner will be involved into the organization and implementation of regional workshop and seminar, in Finland. Also will take part into the other regional Partner meetings back to back to the workhops and interregional seminars.
240 / 1,000 characters

2.3 Associated Organisation Details - AO 4

Associated organisation name and type:

Organisation in original language
Lietuvos Respublikos Aplinkos ministerija
41 / 250 characters

Organisation in English
Ministry of Environment of the Republic of Lithuania
52 / 250 characters

Department in original language
Klimato politikos grupė
23 / 250 characters

Department in English
Climate Policy Group
20 / 250 characters

Legal status
a) Public

Type of associated organisation
National public authority
Ministry, etc.

Associated organisation location and website:

Address
A. Jakšto g. 4
14 / 250 characters

Country
Lithuania

Postal Code
LT-01105
9 / 250 characters

Town
Vilnius
7 / 250 characters

Website
https://am.lrv.lt/en/
21 / 100 characters

Role of the associated organisation in this project:

Associated partners will be involved in the organization and implementation of regional workshops and seminars, in Lithuania. Also will take part in the other regional Partner meetings back to back the workshops and interregional seminars. This assoc. partner is directly interested in the final outputs of the project and in receiving and executing the project's proposed recommendations on the legal framework. Also will increase their capacities on CO footprint calculation methods.
485 / 1,000 characters

2.3 Associated Organisation Details - AO 5

Associated organisation name and type:

Organisation in original language
Lietuvos Respublikos ekonomikos ir inovacijų ministerija
56 / 250 characters

Organisation in English
Ministry of the Economy and Innovation of the Republic of Lithuania
67 / 250 characters

Department in original language
Inovacijų ir pramonės departamentas
35 / 250 characters

Department in English
Department of Innovation and Industry
37 / 250 characters

Legal status
a) Public

Type of associated organisation
National public authority
Ministry, etc.

Associated organisation location and website:

Address
Gedimino Ave. 38
16 / 250 characters

Country
Lithuania

Postal Code
LT-01104
8 / 250 characters

Town
Vilnius
7 / 250 characters

Website
https://eimin.lrv.lt/en/
24 / 100 characters

Role of the associated organisation in this project:

Associated partners will be involved in the organization and implementation of regional workshops and seminars, in Lithuania. Also will take part in the other regional Partner meetings back to back the workshops and interregional seminars. This assoc. partner is directly interested in the final outputs of the project and in receiving and executing the project's proposed recommendations on the legal framework. Also will increase their capacities on CO footprint calculation methods.

485 / 1,000 characters

2.3 Associated Organisation Details - AO 6

Associated organisation name and type:

Organisation in original language
Vides aizsardzības un reģionālās attīstības ministrija
54 / 250 characters

Organisation in English
Latvian Ministry of Environmental Protection and Regional Development
69 / 250 characters

Department in original language
n/a
3 / 250 characters

Department in English
n/a
3 / 250 characters

Legal status
a) Public

Type of associated organisation
National public authority
Ministry, etc.

Associated organisation location and website:

Address
Peldu iela 25
13 / 250 characters

Country
Latvia

Postal Code
LV-1494
7 / 250 characters

Town
Rīga
4 / 250 characters

Website
https://www.varam.gov.lv/en
27 / 100 characters

Role of the associated organisation in this project:

Associated partners will be involved in the organization and implementation of regional workshops and seminars, in Latvia. Also will take part in the other regional Partner meetings back to back the workshops and interregional seminars. This assoc. partner is directly interested in the final outputs of the project and in receiving and executing the project's proposed recommendations on the legal framework. Also will increase their capacities on CO footprint calculation methods.
482 / 1,000 characters

2.3 Associated Organisation Details - AO 7

Associated organisation name and type:

Organisation in original language: LATVIJAS UNIVERSITĀTI (21 / 250 characters)

Organisation in English: University of Latvia (20 / 250 characters)

Department in original language: n/a (3 / 250 characters)

Department in English: n/a (3 / 250 characters)

Legal status: a) Public

Type of associated organisation: Higher education and research instituti — University faculty, college, research institution, RTD facility, research cluster, etc.

Associated organisation location and website:

Address: Raiņa bulvāris 19 (17 / 250 characters)

Country: Latvia

Postal Code: LV-1586 (7 / 250 characters)

Town: Rīga (4 / 250 characters)

Website: https://www.lu.lv/en/ (21 / 100 characters)

Role of the associated organisation in this project:

Associated partner will be involved into the organization and implementation of regional workshop and seminar, in Latvia. Also will take part into the other regional Partner meetings back to back to the workhops and interregional seminars.

239 / 1,000 characters

2.3 Associated Organisation Details - AO 8

Associated organisation name and type:

Organisation in original language: Ministerstwa Klimatu i Środowiska
33 / 250 characters

Organisation in English: Ministry of Climate and Environment of the Republic of Poland
61 / 250 characters

Department in original language: n/a
3 / 250 characters

Department in English: n/a
3 / 250 characters

Legal status: a) Public

Type of associated organisation: National public authority — Ministry, etc.

Associated organisation location and website:

Address: ul. Wawelska 52/54
18 / 250 characters

Country: Poland

Postal Code: 00-922
7 / 250 characters

Town: Warsaw
6 / 250 characters

Website: https://www.gov.pl/web/klimat
29 / 100 characters

Role of the associated organisation in this project:

Associated partners will be involved in the organization and implementation of regional workshops and seminars, in Poland. Also will take part in the other regional Partner meetings back to back the workshops and interregional seminars. This assoc. partner is directly interested in the final outputs of the project and in receiving and executing the project's proposed recommendations on the legal framework. Also will increase their capacities on CO footprint calculation methods.

482 / 1,000 characters

2.3 Associated Organisation Details - AO 9

Associated organisation name and type:

Organisation in original language	LATVIJAS ELEKTROENERĢĒTIĶU UN ENERGOBŪVNIEKU ASOCIĀCIJA	55 / 250 characters
Organisation in English	Latvian Association of Power Engineers and Energy Constructors	62 / 250 characters
Department in original language	n/a	3 / 250 characters
Department in English	n/a	3 / 250 characters
Legal status	b) Private	
Type of associated organisation	Business support organisation	Chamber of commerce, chamber of trade and crafts, business incubator or innovation centre, business clusters, etc.

Associated organisation location and website:

Address	Šmerļa iela 1	13 / 250 characters	**Country** Latvia
Postal Code	LV-1006	7 / 250 characters	
Town	Rīga	4 / 250 characters	
Website	https://www.bleea.lv/leea-asociacija	36 / 100 characters	

Role of the associated organisation in this project:

Associated partner will be involved into the organization and implementation of regional workshop and seminar, in Latvia. Also will take part into the other regional Partner meetings back to back to the workhops and interregional seminars.

239 / 1,000 characters

3. Relevance

3.1 Context and challenge

Based on Eurostat, ca. 20 kg/inhabitant in well-developed countries of electrical and electronic equipment (EEE) products are placed on the market early, the amount is growing. Manufacturing EEE components for various applications puts stress on the availability of materials, EEE devices increase energy consumption, the amount of electronics waste is constantly growing (≈ 6,5% yearly) & only some 20% is efficiently recycled. The carbon footprint (CF) of EEE is about 3.7% of global greenhouse emissions (The Shift Project, 2019). EU backs plan to impose carbon emissions tariff on imports from 3rd countries whose production & transport exceed established CF limits. It is clear, when the tariff is introduced, other countries will apply similar requirements. Thus, the creation of an international unified legal framework to ensure that CO2 emissions for each life cycle stage are calculated by uniform rules is essential. The calculation/estimation of CF throughout the production, transport, use & various circularity loops of electronics must be validated as part of these procedures and rules. Currently, the LCA in electronics is standardised by EN 50693:2019, & the CF is calculated according to the standard ISO 14067. However, no legal framework includes & describes the usages of such standards, furthermore, these standards can differ in various countries and/or companies. Setting up strong regional consortia could result in a robust gateway for the development of European & beyond Europe unified legal framework & procedures. The legal framework should also ensure that estimating & following efforts to reduce CO2 emissions as well as other environmental impacts, related to land & water use, would benefit businesses due to both regulatory & market impacts. Verifiable through e.g. standardised method environmental performance would allow reliable comparison of various solutions & choose the most profound & therefore promote CO2-reducing innovations during all life cycle.

1,998 / 2,000 characters

3.2 Transnational value of the project

The consortium of a CaFootEI partnership consists of a partner from more and less developed EU countries and regions. The exchange of experiences and mutual learning from on one hand developed regions (Finnish and German partners) and from less developed ones (Polish, Latvian and Lithuanian partners) is especially significant and represents a good knowledge and resources exchange. Research organisations, regional & national public authorities, as well as business support organisations and SMEs from 6 European regions, will exchange practices, knowledge and ideas on the way of the development of a unified framework and procedures for carbon footprint calculation and environmental life cycle assessment of electronics products that take into account the need for businesses to remain competitive. As the project consortium is based on the quadruple helix, i.e. involving HEI, government/ regional authorities, business & society, creating a collaborative platform where all stakeholders can operate together. It opens the pathway to transnational, interregional and cross-sectoral collaboration. This collaboration is important because the issue at stake is of pan-European relevance. Once the solution has been implemented, tested and validated in the Baltic Sea Region, it will be scaled up on a wider scale. Climate change is an international issue, and solutions must be implemented at international level.

1,418 / 2,000 characters

3.3 Target groups

Target group	Sector and geographical coverage	Its role and needs
National public authority	Ministry of the Environment of the Republic of Lithuania and Ministry of Economy and Innovation (Lithuania, Vilnius region); Latvian Ministry of Environmental Protection and Regional Development (Latvia); Ministry of Climate and Environment of the Republic of Poland (Poland, Warsaw region). 291 / 500 characters	National public authorities, with their expertise and knowledge, will contribute while creating and using to employing the legal framework and procedures for LCA and CF calculation of electronics products. This target group will join the project activities and share their ideas and expertise. 293 / 1,000 characters
Business support organisation	Business support organization in the field of EEE development, manufacturing, consultation etc. (Latvia); Chamber of Commerce in Electronics and Telecommunications (Poland); CLIC Innovation (FI), Solar energy association (LT) 225 / 500 characters	This target group will significantly contribute to the dissemination of the project results among manufacturers of electronic devices. They will be involved in to the piloting actions. Their significant role will be to contribute to the lobbying to both sides – companies and policy makers 289 / 1,000 characters
Higher education and research instituti	HEI institutions holding open-access R&D and innovation infrastructure (LT, LV, PL, FI, DE). 92 / 500 characters	Partners representing HEIs will calculate CO2 emissions and perform a Life Cycle Analysis of different electronics products. They also contribute to research and innovation activities while changing the production technology in order to obtain novel product with lower carbon footprint. Their significant role also will be to contribute to the lobbying to both sides – companies and policy makers. 397 / 1,000 characters
Small and medium enterprise	Wholesale of electronic and telecommunications equipment and parts (Poland, Warsaw); Research and experimental development on biotechnology (Latvia, Riga) 154 / 500 characters	Industry and businesses (SMEs) that are interested in decarbonization processes and the life cycle of carbon devices, will collaborate with HEI on development of solutions that increase energy efficiency in industrial production processes. SMEs will contribute to WP1 and WP2 by providing the data for the LCA and CF calculations of their manufacturing EEE and testing their production line to reduce their carbon footprint. 424 / 1,000 characters
Interest group	Electronics Research and Development Cooperation Body (Finland, Kokkola); The Lithuanian Confederation of Industrialists (LT, Vilnius), National Electrotechnical Standardization Organization (Finland, Helsinki), the Latvian Association of Power Engineers and Energy Constructors (LV) 284 / 500 characters	The target group will gather and provide needed information for framework development. Also, they will engage the companies (members of associations, their own contacts) to test the framework and evaluate it. Their significant role will be to contribute to the lobbying to both sides – companies and policy makers. 314 / 1,000 characters

3.4 Project objective

Your project objective should contribute to:

Circular economy

The main goal of the CAFootEI project is to create a unified framework and procedures for carbon footprint calculation and environmental life cycle assessment of electronic products and integrate it into product design for environmental sustainability to ensure the electronic business is competitive.
The project aims to deliver a uniform method of assessing greenhouse gas emissions as CO2 equivalent to enable technological development in creating electronics that have a higher share of recycled materials, longer product lifetimes, reuse, repair, recycling as materials and therefore promote more sustainable solutions. It will contribute to the implication of keeping products and materials in use for as long as possible with the reduced CO2. The project will contribute also to facilitating behavioral change and integrated planning of production materials and energy sources.
The project promotes the implementation of EU Circular Economy Action Plan as it focuses on the electronics sector that produces a considerable amount of products to the market, uses a large quantity of resources and has a high need for improved circularity.

1,145 / 2,000 characters

3.5 Project's contribution to the EU Strategy for the Baltic Sea Region

Please indicate whether your project contributes to the implementation of the Action Plan of the EU Strategy for the Baltic Sea Region (EUSBSR).

◉ Yes ○ No

Please select which Policy Area of the EUSBSR your project contributes to most.

PA Energy

Please list the action of this Policy Area that your project contributes to and explain how.

The main action that this project aims to contribute to is the policy area of Energy, especially the principle of "energy efficiency first". Ensuring energy efficiency is a key component of long-lasting energy-using devices and is one of the results expected from a unified legal framework into life cycle assessments of electric and electronic appliances. Furthermore, the amount of electronics and the pace of replacing products is rapid, which contributes negatively to electricity consumption through embedded energy in materials and the production stage. Developed framework and implemented as regulation with set baselines for carbon footprint certain products will need to comply with, will streamline the choice of materials with less embedded energy (e.g. recycled materials), more energy-efficient production, prolonged use of the product through various circular loops (reuse, repair, remanufacture) and as a natural consequence will enable efficiency of the entire energy use.

989 / 1,500 characters

If applicable, please describe which other Policy Areas of the EUSBSR your project contributes to and how.

PA Innovation. This project also contributes to the policy area of Innovation as the purpose of the unified legal framework is to enable new CO2-reducing innovations within the field of electronics. In addition, this project will contribute to new innovations that are sustainable and enable sustainable growth within the field of electronics. New and sustainable innovations promote entrepreneurship and with the target of unification and synchronisation of the field, will create an optimal environment for ecosystems and further technological advancements. These contributions also help to strengthen the Baltic Sea region and further develop the market and society.
PA Hazards. The project will also be able to influence the policy area of Hazards by ensuring that future electronics will be produced with renewable and safe materials. Such electronics will not only be safe to use for the primary users but also will minimize the hazardous substances that leak into land and waters if inappropriately disposed. Yet, the project aims to promote more efficient recycling and utilization of valuable materials found in electronics, thus reducing, or better yet ensuring that no waste ends up in nature.

1,206 / 1,500 characters

3.6 Other political and strategic background of the project

Strategic documents

The project is aligned with the goals of the Green Deal and provides a unified framework to assess the baseline, reliable comparison of environmental sustainability of possible solutions and assessment of achievements of actions related to the reduction of greenhouse gas emissions (as CO2 equivalent) and therefore support sustainability claims. The project provides means for investors to assess compliance with taxonomy regulations and policymakers' to set requirements for emissions.

488 / 500 characters

The project promotes the implementation of EU Circular Economy Action Plan as it focuses on the electronics sector that uses a large quantity of resources but still has a high potential for circularity. The project aims to deliver a uniform method of assessing CO2 emissions to enable technological development in creating electronics that have a higher share of recycled materials, longer product lifetimes, reuse, repair, recycling as materials and therefore promote more sustainable solutions.

497 / 500 characters

3.7 Seed money support

Please indicate whether your project is based on a seed money project implemented in the Interreg Baltic Sea Region Programme 2014-2020.

○ Yes ◉ No

3.8 Other projects: use of results and planned cooperation

Full name of the project	Funding Source	Use of the project outcomes and/or planned cooperation
Laboratory network for testing, characterisation and conformity assessment of electronic products developed by SMEs (TEST-4-SME) (129 / 200 characters)	ERDF, granted from Interreg BSR programme (2017-2020) (53 / 200 characters)	TEST-4-SME project gathered knowledge on regulations related to the development, manufacturing and placing into market electronic products. The set of regulation include also eco-design directive, WEEE (end of life and waste handling of electronic products related directive), energy labelling and other directives which is directly related to the development of new products. This project will capitalise on the knowledge gathered. TEST-4-SME has reached a large number of companies (more than 100) around the Baltic Sea region countries, which will be used for engagement of companies in CaFootEl project communication and opinion. (634 / 1,000 characters)
Climate Indicator - Material and Energy Efficiency for Minimizing Carbon Footprint and Life-Cycle Costs (103 / 200 characters)	ERDF, granted by the Regional Council of Central Ostrobothnia, Finland, (2020-2023) (83 / 200 characters)	The Climate indicators project by calculating LCA determined carbon footprint as a climate indicator of various industrial sectors, calculated example production life-cycle costs and proposed to participating industries alternative actions to minimize the carbon footprint and life-cycle costs. A framework for analysis of emissions and all environmental impact categories was created and tested for several specific cases. Gained knowledge and experience dealing with applying various methodologies in the industry will be applied in creating a unified framework for the electronic industry. (594 / 1,000 characters)
Improving Cold Chain Energy Efficiency (ICCEE) (47 / 200 characters)	Horizon 2020 (2019-2022) (24 / 200 characters)	The project facilitates SMEs in the cold chains of the food and beverage sector to undertake energy efficiency measures after carrying out supply chain energy audits. The project has a similar approach based on a holistic approach that moves from a single company perspective to the assessment of the entire supply chain. One of the main results of the project is a practical tool that assists companies in estimating the benefits of improving energy efficiency as well as energy flows, benchmarking and life cycle impacts. The results of this tool can be integrated into the initial design and analysis of product improvement scenarios under WP2 (Piloting). (660 / 1,000 characters)
SHifting towards Renewable Energy for Transition to Low Carbon Energy (SHREC) (77 / 200 characters)	ERDF, granted from Interreg Europe (2019-2023) (47 / 200 characters)	The SHREC project addresses the challenge of transition to a low carbon economy, in relation to the renewable energy use of businesses and households facilitating them to invest in low-carbon, renewable energy measures reducing CO2 producing activities and shifting to activities with a low CO2 footprint. To achieve the project goals partners stimulate technological development in the renewable energy sector (support for the energy business, industry to develop new technologies) as well as the use of social innovation concepts to involve consumers (households, communities, industry, business representatives) and public authorities in the transition process shifting towards renewable energy production and consumption. Within this project, close cooperation with the Ministry of Energy is taking place. The best practices of this project on how to approach business, society and authorities in order to ease the transition process towards reduction of CO2 emission will be used in CaFootEl. (997 / 1,000 characters)

3.10 Horizontal principles

Horizontal principles	Projects's direct impact
Sustainable development	positive
Non-discrimination including accessibility	neutral
Equality between men and women	neutral

4. Management

Allocated budget 10%

4.1 Project management

☑ **Please confirm that the lead partner and all project partners will comply with the rules for the project management as described in the Programme Manual.**

If relevant, please indicate any other important aspects of the project management, e.g. external entity supporting the lead partner in the management of the project, advisory board, steering committee, any other relevant working groups, etc.

CaFootEI Lead partner VILNIUS TECH (LP1) is responsible for leading & managing a project. The major CaFootEI decision-making body is the Steering Committee (SC). SC is responsible for setting the project strategic policy & working guidelines. SC is composed of representatives from all partners & is chaired by LP1. Each partner nominates 1 representative as an official member of SC. SC discusses & officially approves all project relevant implementation rules, progress reports & financial issues.

499 / 500 characters

4.2 Project financial management

☑ **Please confirm that the lead partner and all project partners will comply with the rules for the financial management and control as described in the Programme Manual.**

If relevant, please indicate any other important aspects of the financial management, e.g. external entity supporting the lead partner, positions planned for financial management, involvement of special financial experts (e.g. for public procurement), etc.

LP1 will coordinate the division of budget & monitor the expenses of the total project budget as well as each partner's budget. LP1 will appoint Financial manager (FM). FM is responsible for the accounts, financial reporting, the internal handling of ERDF funds & national contributions. FM will work in close contact with the controllers & the partners supervising the budget management. FM prepares overall project financial reports and submits them to the MA/JS within the deadlines.

487 / 500 characters

4.3 Input to Programme communication

☑ **Please confirm that you are aware of the obligatory inputs to Programme communication that must be submitted along the pre-defined progress reports, as described in the Programme Manual.**

If relevant, please describe other important aspects of project communication that you plan to introduce, e.g. a communication plan, opening and closing events, social media channel(s) etc.

The LP1 will set up the Project Communication Management Team (CMT). The CMT will prepare the project communication strategy. CMT will be responsible for creating overall visibility for the project, identifying communication opportunities & coordinating participation & presentations in relevant events. CMT will use project & partners' websites, internal & external events, press releases, social networks etc. CMT will try to find the best channels to reach the project's target groups.

488 / 500 characters

4.4 Cooperation criteria

Please select the cooperation criteria that apply to your project. In your project you need to apply at least three cooperation criteria. Joint development and joint implementation are the obligatory ones you need to fulfill in your project.

Cooperation criteria	
Joint Development	☑
Joint Implementation	☑
Joint Staffing	☐
Joint Financing	☑

5. Work Plan

Number	Work Package Name
1	WP1 Preparing solutions

Number	Group of Activity Name
1.1	Development of a framework for the calculation of carbon footprint
1.2	LCA as a driver to innovate for more sustainable product

Number	Work Package Name
2	WP2 Piloting and evaluating solutions

Number	Group of Activity Name
2.1	Piloting a unified framework for carbon footprint calculation and environmental LCA
2.2	A unified framework for carbon footprint calculation and environmental LCA

Number	Work Package Name
3	WP3 Transferring solutions

Number	Group of Activity Name
3.1	Awareness raising, communication and transfer to the target groups
3.2	Develop a roadmap to make the outcomes of the project last beyond project implementation

Work plan overview

Period:	1	2	3	4	5	6	Leader
WP.1: WP1 Preparing solutions							**PP3**
A.1.1: Development of a framework for the calculation of carbon footprint D.1.1: Initial unified framework to calculate the carbon footprint and environmental LCA	D						PP3
A.1.2: LCA as a driver to innovate for more sustainable product D.1.2: Initial guide to improving design and circular loops of the electronic products		D					PP2
WP.2: WP2 Piloting and evaluating solutions							**PP10**
A.2.1: Piloting a unified framework for carbon footprint calculation and environmental LCA D.2.1: Report on piloting activities with the selected electronic devices			D				PP10
A.2.2: A unified framework for carbon footprint calculation and environmental LCA D.2.2: The unified framework and procedures for carbon footprint calculation and environmental LCA					D		PP8
WP.3: WP3 Transferring solutions							**PP4**
A.3.1: Awareness raising, communication and transfer to the target groups D.3.1: Awareness raising, communication and transition to the target groups activity plan	D						PP1
A.3.2: Develop a roadmap to make the outcomes of the project last beyond project implementation D.3.2: Developed a sustainability roadmap of the project results						D	PP4

Outputs and deliverables overview

Code	Title	Description	Contribution to the output	Output/ deliverable contains an investment
D 1.1	Initial unified framework to calculate the carbon footprint and environmental LCA	Initial unified framework with the set of instructions for data collection and LCA will be delivered, based on 3 chosen products and calculated by 4 partners independently. The document will be used by partners and the industry in piloting activities. The document will also be shared with national/regional authorities and standardisation organisations to assess its suitability for being used as a standard.	RCO 116 – Jointly developed solutions	
D 1.2	Initial guide to improving design and circular loops of the electronic products	PROTECH will gather the data into an initial guide to improving design and circular loops of the product to reduce carbon footprint and improve environmental LCA with options and their impact on the reduction of carbon footprint: bio-based and recycled materials, various options of energy management tools, new circular loops to prolong products' lifetime, etc. The guide will be used to pilot the re-design of conventional electronic products and show the benefits it would bring. Involving National Advisory Board, and other stakeholder groups working in the field of electronics in a discussion about the possibilities will allow shared best practices and finding the most profound solutions to promote further outside the working groups in this project (WP3).	RCO 116 – Jointly developed solutions	

D 2.1	Report on piloting activities with the selected electronic devices	Deliverable will be performed after the successful implementation of WP2.1 activity and efficient partner and especially industry (producers) involvement and engagement. After the piloting activities, partners will discuss and compare the piloting results for initial and redesigned model products, and highlight and explain the differences in results and their reasons. Contribution from the Advisory Board also is expected. RTU will organize the workshop "A life cycle approach to product environmental impact assessment and product design improvement" for the project partners, Advisory Board members and other related stakeholders. After this discussion the final report on piloting activities with the selected electronic devices. The report will be presented and detailed discussed with the national/ regional public authorities, and industry. Their opinion will be taken into the account. This deliverable is the basis for the WP 2.2 action - when all partners in close cooperation with the Advisory Board will deliver a unified methodology of CO2 calculation and LCA.	RCO 116 – Jointly developed solutions	
D 2.2	The unified framework and procedures for carbon footprint calculation and environmental LCA	The deliverable is the framework for carbon footprint and environmental LCA for electronic products. The validated framework will be used for assessing those in existing products, also when designing new products and choosing more profound solutions. The framework will also be used by legislative bodies to estimate the need for new legislation. The unified framework and procedures for carbon footprint calculation and environmental LCA will be presented and discussed in detail with the national/ regional public authorities, and industry. This deliverable is the basis for the WP3 action - the development of a roadmap to make the outcomes of the project last beyond project implementation.	RCO 116 – Jointly developed solutions	
D 3.1	Awareness raising, communication and transition to the target groups activity plan	Awareness raising, communication and transition to the target groups' activity plan will provide an umbrella of activities related to the smooth dissemination, awareness-raising campaigns, involvement of target groups in the seminars and training events on legal frameworks on the subject of other countries, CO2 emission validated calculation and estimation methods, including special programs and databases, for CO2 emissions during the entire life cycle of products organized by partners. Seminars and workshops for relevant governmental institutions will also be foreseen. The plan will consist of: 1 compilation of a list of target group entities 2 engagement actions of the target group, providing the beneficial detailed/ thematic information for them 3 introduction to project results, involvement in the project meetings and seminars 4 Awareness-raising actions for all kinds of target groups, especially national/ regional public authorities. The main project outputs of the developed plan will be: 46 interregional learning events, transferred results of 15 pilot actions addressing carbon footprint calculation and environmental LCA of electronics products, at least 18 good practices will be analyzed & shared, 19 organizations will be cooperating cooperating across borders, 65 organizations will increase their capacities, society and regular people will increase their awareness on climate.change issues.	PSR 1 - Organisations with increased institutional capacity	
D 3.2	Developed a sustainability roadmap of the project results	Developing a sustainability roadmap will help project partners ensure that the outcomes of the project would last beyond project implementation. This is very important as the creation of an international unified legal framework that will help to ensure that CO2 emissions for each life cycle stage are calculated by uniform rules is essential. The roadmap of the sustainability of project outcomes (developed legal framework) will also ensure that estimating and following efforts to reduce CO2 emissions as well as other environmental impacts, related to land and water use, and will impact the benefit for businesses due to both regulatory and market impacts. In addition, the roadmap will enable partners to seek the verification through e.g. standardized method environmental performance as it could allow reliable comparison of various solutions and choose the most profound and therefore promote CO2-reducing innovations during all life cycle. The roadmap will enable to open the pathway to new transnational, interregional and cross-sectoral collaboration and results transition. This collaboration is important because the issue at stake is of pan-European relevance. Once the solution has been implemented, tested and validated in the Baltic Sea Region, it will be scaled up on a wider scale. Climate change is an international issue, and solutions must be implemented at international level.	RCR 104 - Solutions taken up or up-scaled by organizations	

Work package 1

5.1 WP1 Preparing solutions

5.2 Aim of the work package

The aim of this work package is to prepare solutions to help address the identified challenge. You can either develop entirely new solutions or adapt existing solutions to the needs of your target groups. Prepare your solutions in a way that you can pilot them in Work Package 2. Consider how you involve your target groups in preparation of the solutions.
Organise your activities in up to five groups of activities to present the actions you plan to implement. Describe the deliverables and outputs as well as present the timeline.

5.3 Work package leader

Work package leader 1	PP 3 - Centria University of Applied Sciences Ltd
Work package leader 2	PP 2 - Applied Research Institute for Prospective Technologies

5.4 Work package budget

Work package budget	30%

5.5 Target groups

	Target group	How do you plan to reach out to and engage the target group?
1	National public authority Ministry of the Environment of the Republic of Lithuania and Ministry of Economy and Innovation (Lithuania, Vilnius region); Latvian Ministry of Environmental Protection and Regional Development (Latvia); Ministry of Climate and Environment of the Republic of Poland (Poland, Warsaw region). 291 / 500 characters	This target group is the most important for the project. Partners before the development of an application already approached their national public authorities and discussed the need, the scope, selection of the area and the importance of the project and especially its outcomes. The importance of the project is shown with the signed Letters of Support and also their agreement to be directly involved in the project's national workshops by taking a proactive part in the project's Advisory Board. They also will take part in the project meetings back to back with the interregional workshops and seminars, to increase their capacities as well as to share their knowledge and experience. 688 / 1,000 characters
2	Business support organisation Business support organization in the field of EEE development, manufacturing, consultation etc. (Latvia); Chamber of Commerce in Electronics and Telecommunications (Poland); CLIC Innovation (FI), Solar energy association (LT) 225 / 500 characters	The target group will take place in the project as full partners or as associated partners. The full partners will be involved directly in all project activities (in some more, in some less): Chamber of Commerce in Electronics and Telecommunications (Poland); CLIC Innovation (FI). The rest are associated partners. The importance of the project is shown with the signed Letters of Support and also their agreement to be directly involved in the project's national workshops by taking a proactive part in the project's Advisory Board. They also will take part in the project meetings back to back with the interregional workshops and seminars, to increase their capacities as well as to share their knowledge and experience. Especially their role is important in the dissemination and exploitation of the project results when it comes to lobbying both sides – companies and policymakers. 888 / 1,000 characters
3	Higher education and research institution HEI institutions holding open-access R&D and innovation infrastructure (LT, LV, PL, FI, DE). 92 / 500 characters	The HEI target groups are important in WP1 activities as the preparatory phase is the most important so that the piloting (WP2) phase would go smoothly. Project partnerships already have a lot of HEIs that are ready t contribute to the efficient execution of the project activities. therefore, the project partners' HEI organizations will be directly and actively involved in WP1 and WP2 actions and will implement them directly. 430 / 1,000 characters
4	Small and medium enterprise Wholesale of electronic and telecommunications equipment and parts (Poland, Warsaw); Research and experimental development on biotechnology (Latvia, Riga) 154 / 500 characters	They will actively participate in the activities related to choosing the products and choosing the replacements (materials, energy sources, place, etc.). This is important as they will take an active role in WP2 - when it comes to the piloting activities. They will also be directly involved in the project's national workshops by taking a proactive part in the project's Advisory Board. As full partners, they will take part in the project meetings back to back with the interregional workshops and seminars, to increase their capacities as well as to share their knowledge and experience. 590 / 1,000 characters
5	Interest group Electronics Research and Development Cooperation Body (Finland, Kokkola); The Lithuanian Confederation of Industrialists (LT, Vilnius), National Electrotechnical Standardization Organization (Finland, Helsinki), the Latvian Association of Power Engineers and Energy Constructors (LV) 284 / 500 characters	The target group will take place in the project as associated partners. They will be involved proactively in most of the project activities (in some more, in some less). The importance of the project is shown with the signed Letters of Support and also their agreement to be directly involved in the project's national workshops by taking a proactive part in the project's Advisory Board. They also will take part in the project meetings back to back with the interregional workshops and seminars, to increase their capacities as well as to share their knowledge and experience. Especially their role is important in the dissemination and exploitation of the project results when it comes to lobbying both sides – companies and policymakers. 742 / 1,000 characters

5.6 Activities, deliverables, outputs and timeline

No.	Name
1.1	**Development of a framework for the calculation of carbon footprint**
1.2	**LCA as a driver to innovate for more sustainable product**

WP 1 Group of activities 1.1

5.6.1 Group of activities leader

Group of activities leader PP 3 - Centria University of Applied Sciences Ltd

A 1.1

5.6.2 Title of the group of activities

Development of a framework for the calculation of carbon footprint

66 / 100 characters

5.6.3 Description of the group of activities

In order to develop a common framework for the calculation of CO2 equivalent as greenhouse gas emission indicator, we need to compare the methodologies each country is using, and also estimate how methodology suits different types of electronic products. For this purpose, at least 3 different electronic products (preliminary products: solar panels, smart textile, semiconductor device) will be chosen and their carbon footprint evaluated through the calculation of CO2 equivalent emissions during all life cycle (LCA) using the existing methodologies. The life cycle of the product will include materials, production, transport, use stage, and various circularity loops, like reuse, repair, remanufacture, and material recycling of electronics. The model products will be described in detail and 4 partners will perform LCA for the same products using national frameworks and own interpretation of standards. Results compared to understand the differences of frameworks used by different countries, and the initial unified framework for testing in WP2 developed.
Despite the fact that we already identified types of electronic products, it is extremely important before final selection to get advice from relevant stakeholders, so that the final project outputs would be relevant and accepted by the main target groups. Partners will create the National Advisory Boards, including representatives from industries, society, legislation bodies, innovation financing bodies, and public authorities to discuss the framework and assist in the selection of products for which LCA would be calculated in WP2 to pilot it.
Roles of partners: Centria is leading the activity and together with RTU will develop an initial methodology for data collection for LCA of all products and framework for LCA. A workshop for partners to learn the methodology of gathering reliable data for LCA and the general principles of LCA will be held. Further, PROTECH will deliver product description and inventory data needed for LCA analysis for solar panels, JLU Technologies for smart textile, Semicon for semiconductor device. RTU, WUT, PROTECH and Centria will perform LCA individually for all three products. Results will be compared and a unified framework for piloting in WP2 prepared. All partners will be trained to implement the unified framework in their countries for piloting. Centria and CLIC will organise a meeting with SESCO to estimate the usability of the framework in drawing new standards.

2,491 / 3,000 characters

5.6.4 This group of activities leads to the development of a deliverable ✔

D 1.1

Title of the deliverable

Initial unified framework to calculate the carbon footprint and environmental LCA

81 / 100 characters

Description of the deliverable

Initial unified framework with the set of instructions for data collection and LCA will be delivered, based on 3 chosen products and calculated by 4 partners independently. The document will be used by partners and the industry in piloting activities. The document will also be shared with national/regional authorities and standardisation organisations to assess its suitability for being used as a standard.

410 / 2,000 characters

Which output does this deliverable contribute to?

RCO 116 – Jointly developed solutions

37 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.1: WP1 Preparing solutions						
A.1.1: Development of a framework for the calculation of carbon footprint						
D.1.1: Initial unified framework to calculate the carbon footprint and environmental LCA						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

WP 1 Group of activities 1.2

5.6.1 Group of activities leader

Group of activities leader PP 2 - Applied Research Institute for Prospective Technologies

A 1.2

5.6.2 Title of the group of activities

LCA as a driver to innovate for more sustainable product

57 / 100 characters

5.6.3 Description of the group of activities

Potential solutions to improve environmental sustainability by redesigning new products are still not fully utilized. Challenges are related to limiting information on benefits in terms of the carbon footprint they could bring. Companies are choosing solutions mainly based on price and their potential to comply with the regulations for the product. Other environmental implications and the full life cycle of the product are rarely taken into consideration. In this activity, products chosen in WP1 will be provided with the new solutions, related to material choices, production technology choices, improved reparability, and later recyclability as a material with a clear indication of savings in CO2 emissions and improvements in overall LCA they bring. The carbon footprint and full LCA for the modified product will be calculated and the economic aspects will be assessed and compared with the results for the initial product.
Electronic product materials and technologies are in many cases universal and are not country-specific, while especially circular solutions might be country-specific. It depends on existing business for repairing, how end-users accept second-hand products, and how collection and recycling infrastructure is developed.
Country-specific issues will be discussed in national workshops with Advisory Boards and incorporated into LCA analysis.
PROTECH will organize the workshop (back to back with the second partner meeting) on the choice of the electronic product's design of 3 different model products for calculation of CO2 emissions and performing an LCA using the existing methodology in the country. During the workshop, each partner presents their choice and after, partners will discuss a comparison of the results and discussion of the differences. The discussion also will engage the Advisory Board organizations, so that partners would be able to hear their opinion on the selection. Moreover, partners will approach the national industries (through the associated partners and more) to seek their opinion and advice on the scope and products.
Results of this activity will be reported as recommendations for the industry to better choices when designing new products. Recommendations will be applied in a redesign of a product in WP2 piloting.
Partners engaged in A1.1. will continue also in this activity.
Other partner roles: Centria will work on identifying biobased and recycled polymer materials potentially used in the electronics industry, WUT semiconductors, conductors and software solutions to improve energy efficiency, RTU recycling, HSW and Semicon circular loops of electronics, PROTECH alternative manufacturing technologies. RTU, WUT, PROTECH, Centria will perform LCA for the alternatives. PROTECH will develop initial guidelines for new product design to be piloted in WP2.

2,853 / 3,000 characters

5.6.4 This group of activities leads to the development of a deliverable ✔

D 1.2

Title of the deliverable

Initial guide to improving design and circular loops of the electronic products

79 / 100 characters

Description of the deliverable

PROTECH will gather the data into an initial guide to improving design and circular loops of the product to reduce carbon footprint and improve environmental LCA with options and their impact on the reduction of carbon footprint: bio-based and recycled materials, various options of energy management tools, new circular loops to prolong products' lifetime, etc. The guide will be used to pilot the re-design of conventional electronic products and show the benefits it would bring. Involving National Advisory Board, and other stakeholder groups working in the field of electronics in a discussion about the possibilities will allow shared best practices and finding the most profound solutions to promote further outside the working groups in this project (WP3).

764 / 2,000 characters

Which output does this deliverable contribute to?

RCO 116 – Jointly developed solutions

37 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.1: WP1 Preparing solutions						
A.1.2: LCA as a driver to innovate for more sustainable product						
D.1.2: Initial guide to improving design and circular loops of the electronic products						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

Work package 2

5.1 WP2 Piloting and evaluating solutions

5.2 Aim of the work package

The aim of this work package is to pilot, evaluate and adjust solutions. Plan one or several pilots to validate the usefulness of the solutions prepared in Work Package 1. Start Work Package 2 early enough to have time to pilot, evaluate and adjust solutions, together with your target groups. By the end of this work package implementation the solutions should be ready to be transferred to your target groups in Work Package 3.
The piloted and adjusted solution should be presented in one project output.
Organise your activities in up to five groups of activities. Describe the deliverables and outputs as well as present the timeline.

5.3 Work package leader

Work package leader 1	PP 10 - Hochschule Wismar, University of Applied Sciences: Technology, Business and Design
Work package leader 2	PP 8 - Riga Technical University

5.4 Work package budget

Work package budget	35%

5.4.1 Number of pilots

Number of pilots	15

5.5 Target groups

	Target group	How do you plan to reach out to and engage the target group?
1	National public authority Ministry of the Environment of the Republic of Lithuania and Ministry of Economy and Innovation (Lithuania, Vilnius region); Latvian Ministry of Environmental Protection and Regional Development (Latvia); Ministry of Climate and Environment of the Republic of Poland (Poland, Warsaw region). 291 / 500 characters	This target group is the most important for the project. Public authorities will be involved in to the piloting activities indirectly. Partners will work with the national public authorities and will present them the piloting results, approach when it needed and during the process (if needed to advice or adjust to some changes of legal basis). Partners will also present them the initial results of piloting on other partner regions. As the national Advisory Board meetings will take place during WP2, so they will be involved as well. They also will take part in the project meetings back to back with the interregional workshops and seminars, to increase their capacities as well as to share their knowledge and experience. 729 / 1,000 characters
2	Business support organisation Business support organization in the field of EEE development, manufacturing, consultation etc. (Latvia); Chamber of Commerce in Electronics and Telecommunications (Poland); CLIC Innovation (FI), Solar energy association (LT) 225 / 500 characters	The target group will take place in the project as full partners or as associated partners. The full partners will be involved directly in all project activities (in some more, in some less): Chamber of Commerce in Electronics and Telecommunications (Poland); CLIC Innovation (FI). The rest are associated partners. They will be involved in piloting activities indirectly and will take part in the project national workshops by taking a proactive part in the project's Advisory Board. They also will take part in the project meetings back to back with the interregional workshops and seminars, to increase their capacities as well as to share their knowledge and experience. Especially their role is important in the dissemination and exploitation of the project results when it comes to lobbying both sides – companies and policymakers. 837 / 1,000 characters
3	Higher education and research institution HEI institutions holding open-access R&D and innovation infrastructure (LT, LV, PL, FI, DE). 92 / 500 characters	The HEI target groups is the most important in WP2 activities as the piloting phase results are the basis for the main project output legal framework and procedures for carbon footprint calculation and environmental life cycle assessment of electronics products that take into account the need for businesses to remain competitive. would go smoothly. Project partner representing HEIs are the main executors of the piloting actions. 434 / 1,000 characters
4	Small and medium enterprise Wholesale of electronic and telecommunications equipment and parts (Poland, Warsaw); Research and experimental development on biotechnology (Latvia, Riga) 154 / 500 characters	They will actively participate in the activities related to piloting the chosen electronic devices and choosing the replacements (materials, energy sources, place, etc.). They will also be directly involved in the project's national workshops by taking a proactive part in the project's Advisory Board. As full partners, they will take part in the project meetings back to back with the interregional workshops and seminars, to increase their capacities as well as to share their knowledge and experience. 505 / 1,000 characters
5	Interest group Electronics Research and Development Cooperation Body (Finland, Kokkola); The Lithuanian Confederation of Industrialists (LT, Vilnius), National Electrotechnical Standardization Organization (Finland, Helsinki), the Latvian Association of Power Engineers and Energy Constructors (LV) 284 / 500 characters	The target group will take place in the project as associated partners. They will be involved proactively in most of the project activities (in some more, in some less). They agreed to be directly involved into the project national workshops by taking proactive part into the project's Advisory Board. They also will take part into the project meetings back to back with the interregional workshops and seminars, in order to increase their capacities as well as to share their knowledge and experience. Especially their role is important in the dissemination and exploitation of the project results when it come to lobbying to both sides – companies and policy makers. 668 / 1,000 characters

5.6 Activities, deliverables, outputs and timeline

No.	Name
2.1	**Piloting a unified framework for carbon footprint calculation and environmental LCA**
2.2	**A unified framework for carbon footprint calculation and environmental LCA**

WP 2 Group of activities 2.1

5.6.1 Group of activities leader

Group of activities leader PP 10 - Hochschule Wismar, University of Applied Sciences: Technology, Business and Design

A 2.1

5.6.2 Title of the group of activities

Piloting a unified framework for carbon footprint calculation and environmental LCA

83 / 100 characters

5.6.3 Description of the group of activities

Partners will work on a piloting framework to estimate carbon footprint as CO2 equivalent calculated through assessing life cycle emissions of the product.
Each country will involve three SMEs and together will choose at least one electronics product for piloting. The initial framework, developed in WP1, will be applied to gather the data and perform LCA analysis. Feedback to the development team will be provided for needed improvements or challenges related to application of the framework, which will be further integrated into the final framework (A2.2.). Which will be used in the next step when assessing improvements in re-designed products.
Partners will further collaborate with the chosen companies in redesigning the products to improve environmental performance. A combination of options identified in WP1 (D1.2) will be introduced into new products, such as replacing materials with bio-based and recycled, using various options of energy management tools, and introducing new circular loops to prolong the product's lifetime, etc. Carbon footprint reduction potential and impact on the overall LCA of the products will be performed to assess the most beneficial option for carbon footprint reduction.
After the piloting activities, partners will discuss and compare the piloting results for initial and re-designed model products, and highlight and explain the differences in results and their reasons. FHW and RTU will organize the workshop "A life cycle approach to product environmental impact assessment and product design improvement" for the project partners, Advisory Board members and other related stakeholders. The workshop will take place in Germany back to back with the third project partner meeting.
All partners will participate in this activity with the provision of the best knowledge.

1,827 / 3,000 characters

5.6.4 This group of activities leads to the development of a deliverable ✔

D 2.1

Title of the deliverable

Report on piloting activities with the selected electronic devices

66 / 100 characters

Description of the deliverable

Deliverable will be performed after the successful implementation of WP2.1 activity and efficient partner and especially industry (producers) involvement and engagement. After the piloting activities, partners will discuss and compare the piloting results for initial and redesigned model products, and highlight and explain the differences in results and their reasons. Contribution from the Advisory Board also is expected. RTU will organize the workshop "A life cycle approach to product environmental impact assessment and product design improvement" for the project partners, Advisory Board members and other related stakeholders. After this discussion the final report on piloting activities with the selected electronic devices. The report will be presented and detailed discussed with the national/ regional public authorities, and industry. Their opinion will be taken into the account. This deliverable is the basis for the WP 2.2 action - when all partners in close cooperation with the Advisory Board will deliver a unified methodology of CO2 calculation and LCA.

1,076 / 2,000 characters

Which output does this deliverable contribute to?

RCO 116 – Jointly developed solutions

37 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.2: WP2 Piloting and evaluating solutions						
A.2.1: Piloting a unified framework for carbon footprint calculation and environmental LCA						
D.2.1: Report on piloting activities with the selected electronic devices						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

WP 2 Group of activities 2.2

5.6.1 Group of activities leader

Group of activities leader PP 8 - Riga Technical University

A 2.2

5.6.2 Title of the group of activities

A unified framework for carbon footprint calculation and environmental LCA

74 / 100 characters

5.6.3 Description of the group of activities

After the piloting and evaluating phase, partners will work on finalising the unified framework for carbon footprint calculation and environmental LCA.
In addition, in WP2.2, partners will verify if the framework will allow reliable comparison of various solutions and can be used as a tool to choose the most profound and therefore promote carbon footprint reducing innovations during all the life cycles.
RTU will work in active and close collaboration with all partners and stakeholders (Advisory Board and other relative stakeholders) to finalise a unified framework and procedures for carbon footprint calculation and environmental LCA of the selected electronic devices that consider the need for businesses to remain competitive

739 / 3,000 characters

5.6.4 This group of activities leads to the development of a deliverable ✔

D 2.2

Title of the deliverable

The unified framework and procedures for carbon footprint calculation and environmental LCA

91 / 100 characters

Description of the deliverable

The deliverable is the framework for carbon footprint and environmental LCA for electronic products. The validated framework will be used for assessing those in existing products, also when designing new products and choosing more profound solutions. The framework will also be used by legislative bodies to estimate the need for new legislation. The unified framework and procedures for carbon footprint calculation and environmental LCA will be presented and discussed in detail with the national/ regional public authorities, and industry. This deliverable is the basis for the WP3 action - the development of a roadmap to make the outcomes of the project last beyond project implementation.

694 / 2,000 characters

Which output does this deliverable contribute to?

RCO 116 – Jointly developed solutions

37 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.2: WP2 Piloting and evaluating solutions						
A.2.2: A unified framework for carbon footprint calculation and environmental LCA						
D.2.2: The unified framework and procedures for carbon footprint calculation and environmental LCA						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

Work package 3

5.1 WP3 Transferring solutions

5.2 Aim of the work package

In Work Package 3, communicate and transfer the ready solutions to your target groups. Plan at least one year for this work package to transfer your solutions to the target groups, considering their respective needs. Select suitable activities to encourage your target groups to use the solutions in their daily work.
Organise your activities in up to five groups of activities. Describe the deliverables and outputs as well as present the timeline.

5.3 Work package leader

Work package leader 1	PP 4 - CLIC Innovation
Work package leader 2	PP 1 - Vilnius Gediminas Technical university

5.4 Work package budget

Work package budget	25%

5.5 Target groups

	Target group	How do you plan to reach out to and engage the target group?
1	National public authority Ministry of the Environment of the Republic of Lithuania and Ministry of Economy and Innovation (Lithuania, Vilnius region); Latvian Ministry of Environmental Protection and Regional Development (Latvia); Ministry of Climate and Environment of the Republic of Poland (Poland, Warsaw region). 291 / 500 characters	The target group will take place in the project as associated partners. They will be involved proactively in most of the project activities, especially in WP3. These are the group of the most important and primarily for whom the project results are important for several aspects: to increase awareness and knowledge and for the successful implementation of the developed roadmap. 380 / 1,000 characters
2	Business support organisation Business support organization in the field of EEE development, manufacturing, consultation etc. (Latvia); Chamber of Commerce in Electronics and Telecommunications (Poland); CLIC Innovation (FI), Solar energy association (LT) 225 / 500 characters	The target group will take place in the project as full and associated partners. They will be involved proactively in most of the project activities, especially in WP3. They are the group that can contribute to the successful implementation of the developed roadmap. Especially their role is important in the dissemination and exploitation of the project results when it comes to lobbying both sides – companies and policymakers. 429 / 1,000 characters
3	Higher education and research institution HEI institutions holding open-access R&D and innovation infrastructure (LT, LV, PL, FI, DE). 92 / 500 characters	The HEI target groups are important in WP3 activities as the HEIs are the first for the Awareness-raising actions for all kinds of target groups. They will take part in assistance to target group bodies in setting/improvement and providing consultations and cooperation with businesses and their organizations to make the legal framework for reducing CO2 emissions acceptable to both public authorities and businesses. Especially their role is important in the dissemination and exploitation of the project results when it comes to lobbying both sides – companies and policymakers. 581 / 1,000 characters
4	Small and medium enterprise Wholesale of electronic and telecommunications equipment and parts (Poland, Warsaw); Research and experimental development on biotechnology (Latvia, Riga) 154 / 500 characters	The target group will take place in the project as full partners. Their role is also important in WP3, as they also will contribute to the successful implementation of the developed roadmap. Especially their role is important in the dissemination and exploitation of the project results when it comes to lobbying both sides – companies and policymakers. 353 / 1,000 characters
5	Interest group Electronics Research and Development Cooperation Body (Finland, Kokkola); The Lithuanian Confederation of Industrialists (LT, Vilnius), National Electrotechnical Standardization Organization (Finland, Helsinki), the Latvian Association of Power Engineers and Energy Constructors (LV) 284 / 500 characters	The target group will take place in the project as associated partners. They will be involved proactively in most of the project activities, especially in WP3. They are the group that can contribute to the successful implementation of the developed roadmap. Especially their role is important in the dissemination and exploitation of the project results when it comes to lobbying both sides – companies and policymakers. 420 / 1,000 characters

5.6 Activities, deliverables, outputs and timeline

No.	Name
3.1	Awareness raising, communication and transfer to the target groups
3.2	Develop a roadmap to make the outcomes of the project last beyond project implementation

WP 3 Group of activities 3.1

5.6.1 Group of activities leader

Group of activities leader PP 1 - Vilnius Gediminas Technical university

A 3.1

5.6.2 Title of the group of activities

Awareness raising, communication and transfer to the target groups

66 / 100 characters

5.6.3 Description of the group of activities

Project partners will organize seminars and training events for target group entities on legal frameworks on the subject of other countries, CO2 emission validated calculation and estimation methods, including special programs and databases, for CO2 emissions during the entire life cycle of products, examples of innovations and use of local green energy sources that reduce CO2 emissions. Seminars and workshops are foreseen for relevant governmental institutions. Vilnius Tech together with the CLIC Innovation will work on the development of the Awareness raising, communication and transition of the developed framework with the target groups activity plan. All project partners will be involved in the national/regional:
1. compilation of a list of target group entities, establishing contacts and setting interests and goals;
2. introducing the target group entities to the latest trends and good practices in the calculation and reduction of CO2 emissions in the EU and its countries, involving them in the national/ regional seminar and workshops, partner meetings;
3. Introduction the target group entities the piloting results by sharing with them the project final report on piloting actions and also a detailed presenting the regional piloting approach and results: to CO2 calculation and LCA results of the model product, discussion of results differences.
Vilnius Tech will organize together with all partners on awareness-raising campaigns for target groups by assisting target group bodies in setting/improvement of CO2 emissions evaluation procedures and LCA methodology and green products certification rules. Partners will make various related consultations and cooperation's with businesses and their organizations to make the legal framework for reducing CO2 emissions acceptable to both public authorities and businesses.

1,848 / 3,000 characters

5.6.4 This group of activities leads to the development of a deliverable ✔

D 3.1

Title of the deliverable

Awareness raising, communication and transition to the target groups activity plan

82 / 100 characters

Description of the deliverable

Awareness raising, communication and transition to the target groups' activity plan will provide an umbrella of activities related to the smooth dissemination, awareness-raising campaigns, involvement of target groups in the seminars and training events on legal frameworks on the subject of other countries, CO2 emission validated calculation and estimation methods, including special programs and databases, for CO2 emissions during the entire life cycle of products organized by partners. Seminars and workshops for relevant governmental institutions will also be foreseen.
The plan will consist of:
1 compilation of a list of target group entities
2 engagement actions of the target group, providing the beneficial detailed/ thematic information for them
3 introduction to project results, involvement in the project meetings and seminars
4 Awareness-raising actions for all kinds of target groups, especially national/ regional public authorities.
The main project outputs of the developed plan will be: 46 interregional learning events, transferred results of 15 pilot actions addressing carbon footprint calculation and environmental LCA of electronics products, at least 18 good practices will be analyzed & shared, 19 organizations will be cooperating cooperating across borders, 65 organizations will increase their capacities, society and regular people will increase their awareness on climate.change issues.

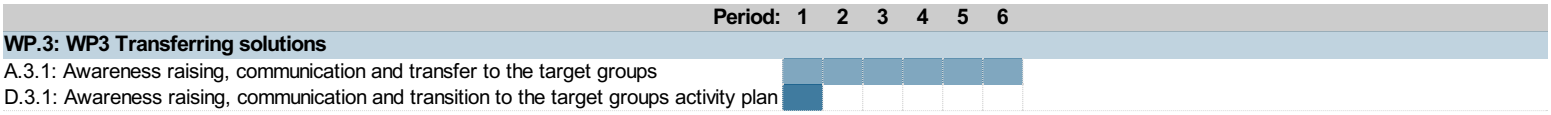
1,423 / 2,000 characters

Which output does this deliverable contribute to?

PSR 1 - Organisations with increased institutional capacity

60 / 100 characters

5.6.6 Timeline



5.6.7 This deliverable/output contains productive or infrastructure investment ☐

WP 3 Group of activities 3.2

5.6.1 Group of activities leader

Group of activities leader PP 4 - CLIC Innovation

A 3.2

5.6.2 Title of the group of activities

Develop a roadmap to make the outcomes of the project last beyond project implementation

88 / 100 characters

5.6.3 Description of the group of activities

CLIC Innovation will be leading this activity. In close cooperation with a partner, the seminars and training events for target group entities, especially for national/ regional public authorities on legal frameworks on the subject of other countries, CO2 emission validated calculation and estimation methods, including special programs and databases, for CO2 emissions during the entire life cycle of products, examples of innovations and use of local green energy sources that reduce CO2 emissions will be organized. The roadmap to make the outcomes of the project last beyond project implementation will be developed as a joint effort of all partners by providing the information to CLIC Innovation on partner region/ country specific conditions and selected electronic devises field. The successful sustainability of the project outcome will depend in the future on how partners will succeed in implementation of the roadmap.

931 / 3,000 characters

5.6.4 This group of activities leads to the development of a deliverable ☑

D 3.2

Title of the deliverable

Developed a sustainability roadmap of the project results

57 / 100 characters

Description of the deliverable

Developing a sustainability roadmap will help project partners ensure that the outcomes of the project would last beyond project implementation. This is very important as the creation of an international unified legal framework that will help to ensure that CO2 emissions for each life cycle stage are calculated by uniform rules is essential. The roadmap of the sustainability of project outcomes (developed legal framework) will also ensure that estimating and following efforts to reduce CO2 emissions as well as other environmental impacts, related to land and water use, and will impact the benefit for businesses due to both regulatory and market impacts. In addition, the roadmap will enable partners to seek the verification through e.g. standardized method environmental performance as it could allow reliable comparison of various solutions and choose the most profound and therefore promote CO2-reducing innovations during all life cycle.
The roadmap will enable to open the pathway to new transnational, interregional and cross-sectoral collaboration and results transition. This collaboration is important because the issue at stake is of pan-European relevance. Once the solution has been implemented, tested and validated in the Baltic Sea Region, it will be scaled up on a wider scale. Climate change is an international issue, and solutions must be implemented at international level.

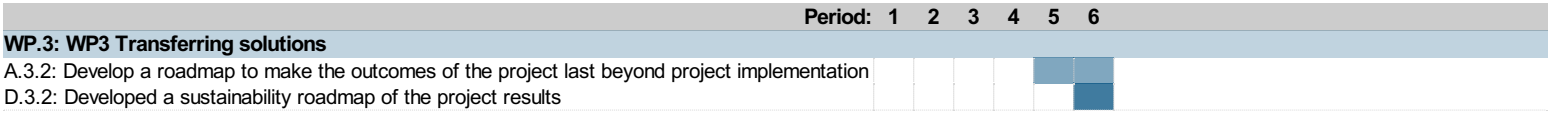
1,403 / 2,000 characters

Which output does this deliverable contribute to?

RCR 104 - Solutions taken up or up-scaled by organizations

58 / 100 characters

5.6.6 Timeline



5.6.7 This deliverable/output contains productive or infrastructure investment ☐

6. Indicators

Indicators

Output indicators				Result indicators		
Output indicators	**Total target value in number**	**Project outputs**	**Please explain how the solution presented in this output serves the target group(s).**	**Result indicator**	**Total target value in number**	**Please explain how organisations in the target groups within or outside the partnership will take up or upscale each solution.**
RCO 84 – Pilot actions developed jointly and implemented in projects	15	N/A	N/A	**RCR 104 - Solutions taken up or up-scaled by organisations**	N/A	Setting up strong regional consortia based on the quadruple helix, i.e. involving HEI, government/ regional authorities, business & society will result in a robust gateway for the development of European & beyond Europe's unified legal framework & procedures. It opens the pathway to transnational, interregional and cross-sectoral collaboration. This collaboration is important because the issue at stake is of pan-European relevance. Once the solutions have been implemented, tested and validated in the Baltic Sea Region, it will be scaled up on a wider scale. Climate change is an international issue, and solutions must be implemented at international level. 663 / 2,000 characters
RCO 116 – Jointly developed solutions	N/A					

Output indicators		Result indicators			
Output indicator	**Total target value in number**	**Result indicator**	**Total target value in number**	**Please describe what types of organisations are planned to actively participate in the project. Explain how this participation will increase their institutional capacity. These types of organisations should be in line with the target groups you have defined for your project.**	
RCO 87 - Organisations cooperating across borders	19	**PSR 1 - Organisations with increased institutional capacity due to their participation in cooperation activities across borders**	65	Project partners and associated organisations	During the project implementation, partners and associated partners consisting of research organisations, regional & national public authorities, business support organisations and SMEs from 6 European regions, will exchange practices, knowledge and ideas on the way the development of a unified framework and procedures for carbon footprint calculation and environmental life cycle assessment of electronics products that take into account the need for businesses to remain competitive. It will help them to increase their knowledge and capacities. Moreover, partners will execute a real 4 pilot action, which will lead to the development of 5 regionally adjusted and unified frameworks and procedures for carbon footprint calculation and environmental life cycle assessment of electronics products that take into account the need for businesses to remain competitive. Therefore, the number of good practices cases identified will lead to increased institutional capacities and their staff (people) that will take part in project meetings, dissemination events will increase professional capacity due to their participation in interregional cooperation activities. 1,166 / 1,500 characters
				Other organisations	Project partners will organize a series of thematic seminars and training events for other organizations (beyond participating organizations) trying to approach and engaged broader pool of stakeholders, especially industry, public organizations, cities and regions, European organizations via dissemination events and international forums (through the practical thematic workshops, seminars) on legal frameworks on the subject of other countries, CO2 emission validated calculation and estimation methods during the entire life cycle of products, examples of innovations (LV will organize the workshop with a topic in relation to the novel textiles developed) and use of local green energy sources that reduce CO2 emissions. Throughout the dissemination channels (events, international, interregional thematic forums, social media) these 15 adjusted frameworks will be disseminated and introduced to the audience beyond the project partnership. The society and people that will take part in project dissemination events will increase the thematic knowledge and capacity due to their participation in interregional cooperation activities. The dissemination activities like appearances in media (e.g. press), proactive communication and engagement through the social media channel will also significantly contribute to the awareness raising amount. 1,348 / 1,500 characters

7. Budget

7.0 Preparation costs

Preparation Costs

Would you like to apply for reimbursement of the preparation costs?	Yes

Other EU support of preparatory cost

Did you receive any other EU funds specifically designated to the development of this project application?	No

7.1 Breakdown of planned project expenditure per cost category & per partner

No. & role	Partner name	Partner status	CAT0 - Preparation costs	CAT1 - Staff	CAT2 - Office & administration
1 - LP	Vilnius Gediminas Technical university	Active 22/09/2022	24,000.00	220,550.00	33,082.50
2 - PP	Applied Research Institute for Prospective Technologies	Active 22/09/2022	0.00	162,712.00	24,406.80
3 - PP	Centria University of Applied Sciences Ltd	Active 22/09/2022	0.00	278,640.00	41,796.00
4 - PP	CLIC Innovation	Active 22/09/2022	0.00	185,760.00	27,864.00
5 - PP	Warsaw University of Technology	Active 22/09/2022	0.00	154,800.00	23,220.00
6 - PP	Polish Chamber of Commerce for Electronics and Telecommunications	Active 22/09/2022	0.00	103,200.00	15,480.00
7 - PP	Semicon Ltd.	Active 22/09/2022	0.00	103,200.00	15,480.00
8 - PP	Riga Technical University	Active 22/09/2022	0.00	185,760.00	27,864.00
9 - PP	JLU Technologies Ltd	Active 22/09/2022	0.00	92,880.00	13,932.00
10 - PP	Hochschule Wismar, University of Applied Sciences: Technology, Business and Design	Active 22/09/2022	0.00	170,160.00	25,524.00
Total			24,000.00	1,657,662.00	248,649.30

No. & role	Partner name	CAT3 - Travel & accommodation	CAT4 - External expertise & services	CAT5 - Equipment	Total partner budget
1 - LP	Vilnius Gediminas Techni	33,082.50	33,000.00	0.00	343,715.00
2 - PP	Applied Research Institut	24,406.80	25,759.40	0.00	237,285.00
3 - PP	Centria University of Appl	41,796.00	10,000.00	0.00	372,232.00
4 - PP	CLIC Innovation	27,864.00	25,002.00	0.00	266,490.00
5 - PP	Warsaw University of Te	23,220.00	15,000.00	0.00	216,240.00
6 - PP	Polish Chamber of Comm	15,480.00	10,000.00	0.00	144,160.00
7 - PP	Semicon Ltd.	15,480.00	10,000.00	0.00	144,160.00
8 - PP	Riga Technical University	27,864.00	13,502.00	0.00	254,990.00
9 - PP	JLU Technologies Ltd	13,932.00	15,001.00	0.00	135,745.00
10 - PP	Hochschule Wismar. Univ	25,524.00	38,242.00	0.00	259,450.00
Total		248,649.30	195,506.40	0.00	2,374,467.00

7.1.1 External expertise and services

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
1. Vilnius Gedimina	National control	CAT4-PP1-F-0	First level control 19 / 100 characters	No	N/A	12,000.00
1. Vilnius Gedimina	Events/meetings	CAT4-PP1-A-0	Facilities & catering for at least 4 workshops in LT. None of the contracts will exceed EUR 5.000. 98 / 100 characters	No	1.1 3.1	8,000.00
1. Vilnius Gedimina	Specialist support	CAT4-PP1-E-0	External support for the exchange of experience process, the development of the national roadmap 96 / 100 characters	No	3.1 3.2	10,000.00
1. Vilnius Gedimina	Communication	CAT4-PP1-C-0	Dissemination support and content production (e.g. video from events etc.) 74 / 100 characters	No	3.1	3,000.00
2. Applied Researc	National control	CAT4-PP2-F-0	First level control 19 / 100 characters	No	N/A	12,000.00
2. Applied Researc	IT	CAT4-PP2-B-0	LCA license for 3 years 23 / 100 characters	No	2.2	7,000.00
2. Applied Researc	Communication	CAT4-PP2-C-0	Dissemination support including digital and printed materials (articles, flyers, videos, etc.) 94 / 100 characters	No	3.1	6,759.40
3. Centria Universit	National control	CAT4-PP3-F-0	First level control 19 / 100 characters	No	N/A	1,000.00
3. Centria Universit	Communication	CAT4-PP3-C-0	Conference fees 15 / 100 characters	No	3.1	2,000.00
3. Centria Universit	IT	CAT4-PP3-B-1	LCA license for 3 years 23 / 100 characters	No	2.2	7,000.00
4. CLIC Innovation	National control	CAT4-PP4-F-1	First level control 19 / 100 characters	No	N/A	2,000.00
4. CLIC Innovation	Events/meetings	CAT4-PP4-A-1	Facilities & catering for at least 4 workshops in FI. None of the contracts will exceed EUR 5.000. 98 / 100 characters	No	1.1 3.1	8,000.00
	Total					195,506.40

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value	
4. CLIC Innovation	Events/meetings	CAT4-PP4-A-1	Facilities & catering for 3 national trainings with stakeholders. Contracts will not exceed EUR5.000 100 / 100 characters	No	2.1	7,002.00	
4. CLIC Innovation	Communication	CAT4-PP4-C-1	Dissemination support including project brandbook, digital and printed materials 80 / 100 characters	No	3.1	8,000.00	
5. Warsaw Universi	Events/meetings	CAT4-PP5-A-1	Facilities & catering for at least 4 workshops in PL. None of the contracts will exceed EUR 5.000. 98 / 100 characters	No	1.1 3.1	8,000.00	
5. Warsaw Universi	IT	CAT4-PP5-B-1	LCA license for 3 years 23 / 100 characters	No	2.2	7,000.00	
6. Polish Chamber	Events/meetings	CAT4-PP6-A-1	Facilities & catering for at least 3 workshops. None of the contracts will exceed EUR 5.000. 92 / 100 characters	No	2.1	6,000.00	
6. Polish Chamber	Events/meetings	CAT4-PP6-A-1	Facilities & catering for the seminar during the TIME Economic Forum. 69 / 100 characters	No	3.1	4,000.00	
7. Semicon Ltd.	Events/meetings	CAT4-PP7-A-1	Facilities & catering for at least 4 workshops. None of the contracts will exceed EUR 5.000. 92 / 100 characters	No	2.1	8,000.00	
7. Semicon Ltd.	Communication	CAT4-PP7-C-2	Dissemination support including digital and printed materials (articles, flyers, videos, etc.) 94 / 100 characters	No	3.1	2,000.00	
8. Riga Technical U	Events/meetings	CAT4-PP8-A-2	Facilities & catering for at least 4 workshops in LV. None of the contracts will exceed EUR 5.000. 98 / 100 characters	No	1.1 2.1 3.1	6,502.00	
8. Riga Technical U	IT	CAT4-PP8-B-2	LCA license for 3 years 23 / 100 characters	No	2.2	7,000.00	
9. JLU Technologie	Specialist support	CAT4-PP9-E-2	External support for the exchange of experience process, the development of the national roadmap 96 / 100 characters	No	3.1 3.2	11,001.00	
	Total					195,506.40	

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value	
9. JLU Technologie	Communication	CAT4-PP9-C-2	Dissemination support including digital and printed materials (articles, flyers, videos, etc.) 94 / 100 characters	No	3.1	4,000.00	
10. Hochschule Wis	National control	CAT4-PP10-F-	First level control 19 / 100 characters	No	N/A	10,000.00	
10. Hochschule Wis	Events/meetings	CAT4-PP10-A-	Facilities & catering for at least 4 workshops in DE. None of the contracts will exceed EUR 5.000. 98 / 100 characters	No	1.1 3.1	8,000.00	
10. Hochschule Wis	Specialist support	CAT4-PP10-E-	External expertise on methodology development 45 / 100 characters	No	2.1	10,121.00	
10. Hochschule Wis	Specialist support	CAT4-PP10-E-	External expertise for circular business model for the German SME involved into the project 91 / 100 characters	No	3.2	10,121.00	
	Total					195,506.40	

7.1.2 Equipment

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value	
Please select	Please select	CAT5-PP--01	0 / 100 characters	Please select		0.00	
	Total					0.00	

7.1.3 Infrastructure and works

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
Please select	Please select	CAT6-PP--01	0 / 100 characters	Please select		0.00
	Total					0.00

7.2 Planned project budget per funding source & per partner

No. & role	Partner name	Partner status	Country	Funding source	Co-financing rate [in %]	Total [in EUR]	Programme co-financing [in EUR]	Own contribution [in EUR]	State aid instrument
1-LP	Vilnius Gediminas Technical university	Active 22/09/2022	LT	ERDF	80.00 %	343,715.00	274,972.00	68,743.00	For each partner, the State aid relevance and applied aid measure are defined in the **State aid section**
2-PP	Applied Research Institute for Prospective Technologies	Active 22/09/2022	LT	ERDF	80.00 %	237,285.00	189,828.00	47,457.00	
3-PP	Centria University of Applied Sciences Ltd	Active 22/09/2022	FI	ERDF	80.00 %	372,232.00	297,785.60	74,446.40	
4-PP	CLIC Innovation	Active 22/09/2022	FI	ERDF	80.00 %	266,490.00	213,192.00	53,298.00	
5-PP	Warsaw University of Technology	Active 22/09/2022	PL	ERDF	80.00 %	216,240.00	172,992.00	43,248.00	
6-PP	Polish Chamber of Commerce for Electronics and Telecommunications	Active 22/09/2022	PL	ERDF	80.00 %	144,160.00	115,328.00	28,832.00	
7-PP	Semicon Ltd.	Active 22/09/2022	PL	ERDF	80.00 %	144,160.00	115,328.00	28,832.00	
8-PP	Riga Technical University	Active 22/09/2022	LV	ERDF	80.00 %	254,990.00	203,992.00	50,998.00	
9-PP	JLU Technologies Ltd	Active 22/09/2022	LV	ERDF	80.00 %	135,745.00	108,596.00	27,149.00	
10-PP	Hochschule Wismar, University of Applied Sciences: Technology, Business and Design	Active 22/09/2022	DE	ERDF	80.00 %	259,450.00	207,560.00	51,890.00	
Total ERDF						2,374,467.00	1,899,573.60	474,893.40	
Total						2,374,467.00	1,899,573.60	474,893.40	

7.3 Spending plan per reporting period

	EU partners (ERDF)		Total	
	Total	Programme co-financing	Total	Programme co-financing
Preparation costs	24,000.00	19,200.00	24,000.00	19,200.00
Period 1	235,046.66	188,037.35	235,046.66	188,037.35
Period 2	352,569.99	282,055.99	352,569.99	282,055.99
Period 3	470,093.32	376,074.65	470,093.32	376,074.65
Period 4	587,616.65	470,093.32	587,616.65	470,093.32
Period 5	470,093.32	376,074.65	470,093.32	376,074.65
Period 6	235,047.06	188,037.64	235,047.06	188,037.64
Total	2,374,467.00	1,899,573.60	2,374,467.00	1,899,573.60