

1. Identification

Call

Date of submission

C1

26/04/2022

1.1. Full name of the project

Developing sustainable cities by creating industrial symbiosis ecosystem

72 / 250 characters

1.2. Short name of the project

Simba

5 / 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

Industrial Symbiosis (IS) is the process by which wastes or by-products of an industry or industrial process become the raw materials. The transition to such an economy is the goal of the European Commission Circular Economy Action Plan. It forms a part of the European Green Deal to increase competitiveness and resilience and reduce greenhouse emissions.

Based on local statistical data in the partner regions on industrial production and waste flows, the SIMBA project will create a model for the inter-industrial linkages and residual waste flows. This model will be tested and used for creating an IT tool with the purpose of fostering Industrial Symbiosis (IS) and disseminating the findings to the stakeholders. The IT tool created by the project may be used in any European region to visualize the potential and is envisaged to trigger decisions in IS.

The SIMBA project approach. In the first step, the project prepares a model for evaluating IS, scoping the potential of IS in the local economy. In the next step, the project gathers evidence or data on how to proceed with industrial symbiosis. This involves evaluating the approach and verifying underlying assumptions against actual data, and improving the functioning of the tool. The functioning is improved by verifying the solutions with different user categories. The third step involves transferring the solution to concerned stakeholders working in the field of IS and tutoring in the use of the tool.

1,474 / 1,500 characters

1.8. Summary of the partnership

The partnership consists of 9 partners from 5 different countries. The Vaasa University and the Warsaw University of Technology are very experienced in model building and implementing such models in software (cf. the IT tool). The municipality of Korsholm, together with the cities of Wrocław and Panevėžys, will participate in testing the tool from the perspective of a public decision-maker and their activities concerning business development agencies. The Vidzeme planning region will use the results in their planning on how to trigger Industrial Symbiosis. The Wrocław Technology Park and the Parkri Industrial Park will participate in testing the tool in relation to companies and provide input on how it can be used for triggering company actions on IS. Finally, the Lithuanian Innovation Center will be the project coordinator and, together with the partners, will be involved in the project dissemination and ensuring durability of the results.

There are different target groups for the project. We will target clusters with a potential for IS, mainly the SMEs in these clusters, as the project's discoveries are assumed to trigger IS decisions among SMEs. We will also target local authorities, as they are decision-makers in the field, both as actors in their own and as actors in a multi-level dialogue. The visualization of the IS potential will empower them as decision-makers. The business development agencies will form a part of the SME support structure, and the IT tool will be used in this context. It can be noted that the partners are themselves parts of the target groups and stand in close vicinity with businesses in the field.

The partners have different levels of experience in program-based development work, represent various administrative traditions, and are also different in size. Thus, the partnership brings a multitude of perspectives which assures that the IT tool will work in different settings. The first part of the project building the IT tool being the responsibility of the universities is complemented from a user perspective both from local governments and business agencies. The partners are also apt for the uptake of the final IT tool as they are in the vicinity of European policy making and multi-level governance.

2,269 / 3,000 characters

1.11. Project Budget Summary

Financial resources [in EUR]		Preparation costs	Planned project budget
ERDF	ERDF co-financing	0.00	2,010,854.48
	Own contribution ERDF	0.00	502,713.62
	ERDF budget	0.00	2,513,568.10
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	2,010,854.48
	Total own contribution	0.00	502,713.62
	Total budget	0.00	2,513,568.10

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	Lithuanian Innovation Centre	Lietuvos inovacijų centras	LT	Business support organisation	a)	454,096.00 €	Active	22/09/2022
2	PP	The Municipality of Korsholm	Korsholms kommun - Mustasaaren kunta	FI	Local public authority	a)	294,556.00 €	Active	22/09/2022
3	PP	The University of Vaasa	Vaasan Yliopisto	FI	Higher education and research institution	a)	375,252.00 €	Active	22/09/2022
4	PP	Panevėžys city municipality	Panevėžio miesto savivaldybė	LT	Local public authority	a)	99,999.90 €	Active	22/09/2022
5	PP	Vidzeme Planning Region	Vidzemes Planosanas Regions	LV	Regional public authority	a)	226,672.00 €	Active	22/09/2022
6	PP	Estonian Chamber of Commerce and Industry	Eesti Kaubandus-Tööstuskoda	EE	NGO	b)	265,264.00 €	Active	22/09/2022
7	PP	Wrocław Technology Park	Wrocławski Park Technologiczny S.A.	PL	Business support organisation	a)	220,480.20 €	Active	22/09/2022
8	PP	Municipality of Wrocław	Gmina Wrocław	PL	Local public authority	a)	180,440.00 €	Active	22/09/2022
9	PP	Warsaw University of Technology	Politechnika Warszawska	PL	Higher education and research institution	a)	396,808.00 €	Active	22/09/2022

2.1.2 Associated Organisations

No.	Organisation (English)	Organisation (Original)	Country	Type of Partner
AO 1	Kaunas Chamber of Commerce, Industry and Crafts	Kauno prekybos, pramonės ir amatų rūmai	LT	Interest group
AO 2	Klaipėda Scienc and Technology Park	Klaipėdos mokslo ir technologijų parkas	LT	Business support organisation
AO 3	Šiauliai Business Incubator	Šiaulių verslo inkubatorius	LT	Business support organisation
AO 4	Visoriai Information Technology Park	Visorių informacinių technologijų parkas	LT	Business support organisation
AO 5	Lithuanian Confederation of Industrialists	Lietuvos pramoninkų konfederacija	LT	Business support organisation
AO 6	Vilnius Chamber of Commerce, Industry and Crafts	Vilniaus prekybos, pramonės ir amatų rūmai	LT	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	Lietuvos inovacijų centras	26 / 250 characters
Organisation in English	Lithuanian Innovation Centre	30 / 250 characters
Department in original language	N/A	3 / 250 characters

Department in English 3 / 250 characters

Partner location and website:

<p>Address <input type="text" value="Moksliniku 6A, Vilnius"/> 22 / 250 characters</p> <p>Postal Code <input type="text" value="LT-08412"/> 8 / 250 characters</p> <p>Town <input type="text" value="Vilnius"/> 7 / 250 characters</p> <p>Website <input type="text" value="www.lic.lt"/> 10 / 100 characters</p>	<p>Country <input type="text" value="Lithuania"/></p> <p>NUTS1 code <input type="text" value="Lietuva"/></p> <p>NUTS2 code <input type="text" value="Sostinės regionas"/></p> <p>NUTS3 code <input type="text" value="Vilniaus apskritis"/></p>
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Partner ID:

Organisation ID type

Organisation ID

VAT Number Format

VAT Number N/A 0 / 50 characters

PIC 9 / 9 characters

Partner type:

Legal status

Type of partner Chamber of commerce, chamber of trade and crafts, business incubator or innovation centre, business clusters, etc.

Sector (NACE)

Partner financial data:

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

Role of the partner organisation in this project:

Lithuanian Innovation Centre 's (LIC) mission is providing innovation support services by implementing Lithuanian innovation policy. This includes fostering capacities and stimulate business innovations. The Lithuanian Innovation Centre will function as the lead-partner of the project that falls within its strategic role. Leading the project implies working, preparing the biannual project steering group meetings of the consortium, following the progress of the project during the past 6 months, and leading the discussion clarifying for every partner on how to advance. The LIC will work in close contact with the different WP leaders coordinating their work and the WP outcome with the total objective of the project, assuring the consistency and quality of the outputs. The Lead-partner will represent the project in relation to the program assigned program officer and handle and coordinate the reporting of the partners and in handling of the financial flows.

967 / 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 2

LP/PP

Partner Status

Active from **Inactive from**

Partner name:

Organisation in original language 36 / 250 characters

Organisation in English 28 / 250 characters

Department in original language 3 / 250 characters

Department in English 3 / 250 characters

Partner location and website:

Address	<input type="text" value="Smedsbyvägen 4"/> <small>14 / 250 characters</small>	Country	<input type="text" value="Finland"/>
Postal Code	<input type="text" value="65410"/> <small>5 / 250 characters</small>	NUTS1 code	<input type="text" value="Manner-Suomi"/>
Town	<input type="text" value="Korsholm"/> <small>8 / 250 characters</small>	NUTS2 code	<input type="text" value="Länsi-Suomi"/>
Website	<input type="text" value="https://en.korsholm.fi/"/> <small>23 / 100 characters</small>	NUTS3 code	<input type="text" value="Pohjanmaa"/>

Partner ID:

Organisation ID type

Organisation ID

VAT Number Format

VAT Number 10 / 50 characters

PIC 9 / 9 characters

Partner type:

Legal status

Type of partner

Sector (NACE)

Partner financial data:

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

Role of the partner organisation in this project:

In the Finnish society large power lies within the city/municipalities that are govern by a politically elected assembly. The spatial planning and planning linked to circular solutions lies under the municipal jurisdiction. This makes the municipalities in Finland central stakeholders in the EGD. Korsholm is an implementer but also stand in dialogue with the Finnish government. The municipality is part of the owning structure of VASEK (Vaasa Region Development Company) and of the Waste treatment company Stormossen and will be able to draw on joint experiences when testing the tool. The Korsholm municipality will also be a part of the project communication and up-take of the findings. The municipality will also be part of the testing of the tool together with the cities of Panzevys and Wroclaw.

804 / 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 3

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

Partner name:

Organisation in original language	Vaasan Yliopisto			16 / 250 characters
Organisation in English	The University of Vaasa			23 / 250 characters
Department in original language	Johtamisen laitos			17 / 250 characters
Department in English	School of Accounting and Finance, Economics			43 / 250 characters

Partner location and website:

Address	Yliopistoranta 10		17 / 250 characters	Country	Finland
Postal Code	65101		5 / 250 characters	NUTS1 code	Manner-Suomi
Town	Vaasa		5 / 250 characters	NUTS2 code	Länsi-Suomi
Website	https://www.uwasa.fi/en		23 / 100 characters	NUTS3 code	Pohjanmaa

Partner ID:

Organisation ID type	Business Identity Code (Y-tunnus)			
Organisation ID	0209599-6			
VAT Number Format	FI + 8 digits			
VAT Number	N/A <input type="checkbox"/>	FI02095996		10 / 50 characters
PIC	999847289			9 / 9 characters

Partner type:

Legal status	a) Public
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Type of partner

Sector (NACE)

Partner financial data:

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

Role of the partner organisation in this project:

The Vaasa University Department of Economics is specialized in Regional Economy and territorial innovation model and is also working closely with the Vaasa Energy cluster developing new decentralised RES-energy solutions. The department is also an experienced project partner being currently a coordinator in Horizon Europe project Globalinto 2019-22 (www.globalinto.eu) in the role of intangibles for innovation. The department also counts on experiences from the 7th,6th, and 5th framework programs.

The partner will be leading the WP1.1. in designing the model for the data capture, work with the Korsholm municipality in fitting the analytical features to the forthcoming IT-application. Designing the data regressions for the model implies working very closely with the Warsaw University of technology when designing the data entry and when finding a suitable format for the IT-application. Model building and IT solutions adopted needs to go together for producing a successful result.

995 / 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 MAJS for a plausibility check on the State aid relevance. Does the partner want to do this?

Yes No

2.2 Project Partner Details - Partner 4

LP/PP

Partner Status

Active from **Inactive from**

Partner name:

Organisation in original language 28 / 250 characters

Organisation in English 27 / 250 characters

Department in original language 22 / 250 characters

Department in English 28 / 250 characters

Partner location and website:

Address 34 / 250 characters **Country**

Postal Code	<input type="text" value="LT-35200"/> <small>9 / 250 characters</small>	NUTS1 code	<input type="text" value="Lietuva"/>
Town	<input type="text" value="Panevėžys"/> <small>10 / 250 characters</small>	NUTS2 code	<input type="text" value="Vidurio ir vakarų Lietuvos regionas"/>
Website	<input type="text" value="https://www.panevezys.lt/lt/titulinis.html"/> <small>43 / 100 characters</small>	NUTS3 code	<input type="text" value="Panevėžio apskritis"/>

Partner ID:

Organisation ID type	<input type="text" value="Legal person's code (Juridinio asmens kodas)"/>		
Organisation ID	<input type="text" value="288724610"/>		
VAT Number Format	<input type="text" value="LT + 9 digits"/>		
VAT Number	<input checked="" type="checkbox"/> N/A	<input type="text"/> <small>0 / 50 characters</small>	
PIC	<input type="text" value="N/A"/> <small>3 / 9 characters</small>		

Partner type:

Legal status	<input type="text" value="a) Public"/>		
Type of partner	<input type="text" value="Local public authority"/>	<input type="text" value="Municipality, city, etc."/>	
Sector (NACE)	<input type="text" value="84.11 - General public administration activities"/>		

Partner financial data:

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

Role of the partner organisation in this project:

The Panevėžys city municipality having around 113.000 inhabitants making it the 6th city counted by size in Lithuania. The city has a strong role in agriculture but also in metal industry making it for a suitable candidate for the testing of the IS-tool. The city will be participating in the development of the IT-tool in WP1 by providing inputs. In the WP2 it will be part of the testing or the piloting of the tool. The usability perspective will be tested in Finland, Lithuania, and Poland. In the WP3 Panevėžys will be engaging in selected the trainees for the IS-tool and in implementing the training.

607 / 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	<input type="text" value="Project Partner"/>		
Partner Status	<input type="text" value="Active"/>		
Active from	<input type="text" value="22/09/2022"/>	Inactive from	<input type="text"/>

Partner name:

Organisation in original language
34 / 250 characters

Organisation in English	Vidzeme Planning Region	23 / 250 characters
Department in original language	Alltītibas un projektu nodaļa	43 / 250 characters
Department in English	Development and planning department	43 / 250 characters

Partner location and website:

Address	Berzaines street 5	31 / 250 characters	Country	Latvia
Postal Code	LV-4101	15 / 250 characters	NUTS1 code	Latvija
Town	Cēsis	13 / 250 characters	NUTS2 code	Latvija
Website	www.vidzeme.lv/en/about_Vidzeme	39 / 100 characters	NUTS3 code	Vidzeme

Partner ID:

Organisation ID type	Unified registration number (Vienotais reģistrācijas numurs)			
Organisation ID	90002180246			
VAT Number Format	LV + 11 digits			
VAT Number	N/A <input type="checkbox"/>	LV90002180246	13 / 50 characters	
PIC	986260596			9 / 9 characters

Partner type:

Legal status	a) Public		
Type of partner	Regional public authority	Regional council, etc.	
Sector (NACE)	84.11 - General public administration activities		

Partner financial data:

Is your organisation entitled to recover VAT related to the EU funded project activities?	No
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Role of the partner organisation in this project:

Vidzeme Planning Region (VPR) is one of the five planning regions in Latvia. Since 2006 it represents 25 municipalities and the city of national significance. The VPR organizes and implements regional spatial development planning, as well as ensures the regional and local representation in development of business, employment, and social policy. VPR serves as a development platform for local governments of Vidzeme Region. VPR has gained extensive experience in implementation of international cooperation projects.

The partner will participate in the dialogue of the project and form part of the creation of the IS-tool. The VPR will take part in piloting actions in Latvia and evaluate the solution. The VPR will also contribute to transferring of the solution organizing workshops and consulting about the tool in Latvia and implement the training with stakeholders.

874 / 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 6

LP/PP	<input type="text" value="Project Partner"/>		
Partner Status	<input type="text" value="Active"/>		
Active from	<input type="text" value="22/09/2022"/>	Inactive from	<input type="text"/>

Partner name:

Organisation in original language	<input type="text" value="Eesti Kaubandus-Tööstuskoda"/> <small>44 / 250 characters</small>		
Organisation in English	<input type="text" value="Estonian Chamber of Commerce and Industry"/> <small>49 / 250 characters</small>		
Department in original language	<input type="text" value="Teenuste osakond"/> <small>17 / 250 characters</small>		
Department in English	<input type="text" value="Service department"/> <small>18 / 250 characters</small>		

Partner location and website:

Address	<input type="text" value="Toom-Kooli 17"/> <small>22 / 250 characters</small>	Country	<input type="text" value="Estonia"/>
Postal Code	<input type="text" value="10130"/> <small>14 / 250 characters</small>	NUTS1 code	<input type="text" value="Eesti"/>
Town	<input type="text" value="Tallinn"/> <small>16 / 250 characters</small>	NUTS2 code	<input type="text" value="Eesti"/>
Website	<input type="text" value="www.koda.ee"/> <small>20 / 100 characters</small>	NUTS3 code	<input type="text" value="Põhja-Eesti"/>

Partner ID:

Organisation ID type	<input type="text" value="Registration code (Registrikood)"/>		
Organisation ID	<input type="text" value="80004733"/>		
VAT Number Format	<input type="text" value="EE + 9 digits"/>		
VAT Number	<input type="checkbox"/> N/A	<input type="text" value="EE100559448"/> <small>11 / 50 characters</small>	
PIC	<input type="text" value="999937111"/> <small>9 / 9 characters</small>		

Partner type:

Legal status	<input type="text" value="b) Private"/>		
Type of partner	<input type="text" value="NGO"/>	<input type="text" value="Non-governmental organisations, such as Greenpeace, WWF, etc."/>	
Sector (NACE)	<input type="text" value="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?

Financial data	Reference period		
	01/01/2021	-	31/12/2021
Staff headcount [in annual work units (AWU)]			29.0
Employees [in AWU]			29.0
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]			1,681,768.00
Annual balance sheet total [in EUR]			4,966,247.00
Operating profit [in EUR]			78,375.00

Role of the partner organisation in this project:

The Estonian Chamber of Commerce is a business support organisation in Estonia. The Working Packages involvement in the project will be on the implementation of pilot action. The Chamber will be involved in the recruitment of pilot candidates, which will verify the application developed within the project. The Chamber will also support the dissemination of the project results through wide network (including cluster network). A particular role for the Chamber is in its leadership of WP3.1. consisting of the training in the use of the IS-tool.

549 / 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

Partner Status

Active from **Inactive from**

Partner name:

Organisation in original language 36 / 250 characters

Organisation in English 23 / 250 characters

Department in original language 43 / 250 characters

Department in English 37 / 250 characters

Partner location and website:

Address 15 / 250 characters

Country

Postal Code	<input type="text" value="54-424"/> <small>7 / 250 characters</small>	NUTS1 code	<input type="text" value="Makroregion południowo-zachodni"/>
Town	<input type="text" value="Wrocław"/> <small>8 / 250 characters</small>	NUTS2 code	<input type="text" value="Dolnośląskie"/>
Website	<input type="text" value="www.technologpark.pl"/> <small>21 / 100 characters</small>	NUTS3 code	<input type="text" value="Wrocławski"/>

Partner ID:

Organisation ID type	<input type="text" value="Tax identification number (NIP)"/>		
Organisation ID	<input type="text" value="8992218663"/>		
VAT Number Format	<input type="text" value="PL + 10 digits"/>		
VAT Number	<input type="checkbox"/> N/A	<input type="checkbox"/> <input type="text" value="PL8992218633"/>	<small>12 / 50 characters</small>
PIC	<input type="text" value="952492762"/> <small>9 / 9 characters</small>		

Partner type:

Legal status	<input type="text" value="a) Public"/>		
Type of partner	<input type="text" value="Business support organisation"/>	<input type="text" value="Chamber of commerce, chamber of trade and crafts, business incubator or innovation centre, business clusters, etc."/>	
Sector (NACE)	<input type="text" value="82.99 - Other business support service activities n.e.c."/>		

Partner financial data:

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

Role of the partner organisation in this project:

Wrocław Technology Park is a business support organisation in south-western Poland. WPT's involvement in the project will focus primarily on the implementation of pilot action. WTP will take over recruitment of pilot candidates, which will verify the application developed within the project. WTP will support also transfer of project results through wide network (including cluster network). The WTP will also function as a task-leader in the WP2.1

450 / 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	<input type="text" value="Project Partner"/>		
Partner Status	<input type="text" value="Active"/>		
Active from	<input type="text" value="22/09/2022"/>	Inactive from	<input type="text"/>

Partner name:

Organisation in original language	<input type="text" value="Gmina Wrocław"/> <small>21 / 250 characters</small>
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Organisation in English	Municipality of Wrocław	23 / 250 characters
Department in original language	"Biuro Rozwoju Gospodarczego Wydział Zarządzania Funduszami"	75 / 250 characters
Department in English	Economic Development Office Funds Management Division	59 / 250 characters

Partner location and website:

Address	pl. Nowy Targ 1-8	25 / 250 characters	Country	Poland
Postal Code	50-141	14 / 250 characters	NUTS1 code	Makroregion południowo-zachodni
Town	Wrocław	15 / 250 characters	NUTS2 code	Dolnośląskie
Website	www.wroclaw.pl	22 / 100 characters	NUTS3 code	Wrocławski

Partner ID:

Organisation ID type	Tax identification number (NIP)		
Organisation ID	8971383551		
VAT Number Format	PL + 10 digits		
VAT Number	N/A <input type="checkbox"/>	PL8971383551	12 / 50 characters
PIC	998000215		
			9 / 9 characters

Partner type:

Legal status	a) Public	
Type of partner	Local public authority	Municipality, city, etc.
Sector (NACE)	84.12 - Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security	

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:

The Municipality of Wrocław is a city of around 640.000 inhabitants in south-western Poland. The city will together with the municipalities of Korsholm and Panevėžys form part of the testing structure of the IS-tool. The city will make inputs to the construction of the program in the WP1, be part of the piloting and testing in WP2 and finally be part of the training and transfer of solution in WP3

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 9

LP/PP	<input type="text" value="Project Partner"/>		
Partner Status	<input type="text" value="Active"/>		
	Active from	<input type="text" value="22/09/2022"/>	Inactive from
		<input type="text"/>	<input type="text"/>

Partner name:

Organisation in original language	<input type="text" value="Politechnika Warszawska"/>		
			<small>31 / 250 characters</small>
Organisation in English	<input type="text" value="Warsaw University of Technology"/>		
			<small>31 / 250 characters</small>
Department in original language	<input type="text" value="Wydział Elektryczny"/>		
			<small>27 / 250 characters</small>
Department in English	<input type="text" value="Faculty of Electrical Engineering"/>		
			<small>42 / 250 characters</small>

Partner location and website:

Address	<input type="text" value="pl.Politechniki 1"/>	Country	<input type="text" value="Poland"/>
	<small>17 / 250 characters</small>		
Postal Code	<input type="text" value="00-661"/>	NUTS1 code	<input type="text" value="Makroregion województwo mazowieckie"/>
	<small>6 / 250 characters</small>		
Town	<input type="text" value="Warszawa"/>	NUTS2 code	<input type="text" value="Warszawski stołeczny"/>
	<small>8 / 250 characters</small>		
Website	<input type="text" value="www.pw.edu.pl/engpw"/>	NUTS3 code	<input type="text" value="Miasto Warszawa"/>
	<small>19 / 100 characters</small>		

Partner ID:

Organisation ID type	<input type="text" value="Tax identification number (NIP)"/>		
Organisation ID	<input type="text" value="5250005834"/>		
VAT Number Format	<input type="text" value="PL + 10 digits"/>		
VAT Number	<input type="checkbox" value="N/A"/> <input type="checkbox" value="PL5250005834"/>		<small>12 / 50 characters</small>
PIC	<input type="text" value="999884052"/>		<small>9 / 9 characters</small>

Partner type:

Legal status	<input type="text" value="a) Public"/>		
Type of partner	<input type="text" value="Higher education and research instituti"/>	<input type="text" value="University faculty, college, research institution, RTD facility, research cluster, etc."/>	
Sector (NACE)	<input type="text" value="85.42 - Tertiary education"/>		

Partner financial data:

Is your organisation entitled to recover VAT related to the EU funded project activities?	<input type="text" value="Yes"/>
--	----------------------------------

Role of the partner organisation in this project:

The Warsaw University of Technology will be the partner responsible for providing the Input-Output model with a IT-solutions for the tool (WP1.1) This implies working closely with Vaasa University in the design, finding a solutions with the Korsholm municipality for supporting the tool with analytical features and bench-mark analytical support (WP1.2) It will design the data entry in WP1.3 , how any user of the tool will be able to enter background data for achieving estimation on IS flows but also the function for an intermittent updating of the flows. In WP1.4 the Warsaw University of Technology will responsible for programming of the tool and after the evaluation in WP2 design possible alternations to the tool. Finally will the university be part of the project communication structure.

800 / 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 MAJS for a plausibility check on the State aid relevance. Does the partner want to do this?

Yes No

2.3 Associated Organisation Details - AO 1

Associated organisation name and type:

Organisation in original language	Kauno prekybos, pramonės ir amatų rūmai	39 / 250 characters
Organisation in English	Kaunas Chamber of Commerce, Industry and Crafts	47 / 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	Interest group	Trade union, foundation, charity, voluntary association, club, etc. other than NGOs

Associated organisation location and website:

Address	Gedimino g. 43	14 / 250 characters	Country	Lithuania
Postal Code	LT-44352	8 / 250 characters		
Town	Vilnius	7 / 250 characters		
Website	chamber.lt	10 / 100 characters		

Role of the associated organisation in this project:

This associated partner will be engaged in the project activities reaching out to companies. The participating of companies will be needed in WP 2.1 Pilot case execution and WP 2.2 Pilot case evaluation. In transfer stage of the project – WP 3 partner will participate in trainings and will take the use of the tool further after the project is finished. Associated partner will also promote Industrial Symbiosis approach.

423 / 1,000 characters

2.3 Associated Organisation Details - AO 2

Associated organisation name and type:

Organisation in original language	Klaipėdos mokslo ir technologijų parkas	39 / 250 characters
Organisation in English	Klaipėda Scienc and Technology Park	35 / 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	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	Vilhelmo Berbomo str. 10	24 / 250 characters	Country	Lithuania
Postal Code	LT-92221	8 / 250 characters		
Town	Klaipėda	8 / 250 characters		
Website	www.kmtp.lt	11 / 100 characters		

Role of the associated organisation in this project:

The associated partner will be engaged in the project activities reaching out to companies. The participating of companies will be needed in WP 2.1 Pilot case execution and WP 2.2 Pilot case evaluation. In transfer stage of the project – WP 3 partner will participate in trainings and will take the use of the tool further after the project is finished. Associated partner will also promote Industrial Symbiosis approach.

422 / 1,000 characters

2.3 Associated Organisation Details - AO 3

Associated organisation name and type:

Organisation in original language	<input type="text" value="Šiaulių verslo inkubatorius"/> <small>27 / 250 characters</small>	
Organisation in English	<input type="text" value="Šiauliai Business Incubator"/> <small>27 / 250 characters</small>	
Department in original language	<input type="text" value="n/a"/> <small>3 / 250 characters</small>	
Department in English	<input type="text" value="n/a"/> <small>3 / 250 characters</small>	
Legal status	<input type="text" value="a) Public"/>	
Type of associated organisation	<input type="text" value="Business support organisation"/>	<input type="text" value="Chamber of commerce, chamber of trade and crafts, business incubator or innovation centre, business clusters, etc."/>

Associated organisation location and website:

Address	<input type="text" value="Aušros al. 66A"/> <small>14 / 250 characters</small>	Country	<input type="text" value="Lithuania"/>
Postal Code	<input type="text" value="76233"/> <small>5 / 250 characters</small>		
Town	<input type="text" value="Šiauliai"/> <small>8 / 250 characters</small>		
Website	<input type="text" value="svi.lt"/> <small>6 / 100 characters</small>		

Role of the associated organisation in this project:

The associated partner will be engaged in the project activities reaching out to companies. The participating of companies will be needed in WP 2.1 Pilot case execution and WP 2.2 Pilot case evaluation. In transfer stage of the project – WP 3 partner will participate in trainings and will take the use of the tool further after the project is finished. Associated partner will also promote Industrial Symbiosis approach.

422 / 1,000 characters

2.3 Associated Organisation Details - AO 4

Associated organisation name and type:

Organisation in original language	<input type="text" value="Visorių informacinių technologijų parkas"/>		<small>41 / 250 characters</small>
Organisation in English	<input type="text" value="Visoriai Information Technology Park"/>		<small>36 / 250 characters</small>
Department in original language	<input type="text" value="n/a"/>		<small>3 / 250 characters</small>
Department in English	<input type="text" value="n/a"/>		<small>3 / 250 characters</small>
Legal status	<input type="text" value="a) Public"/>		
Type of associated organisation	<input type="text" value="Business support organisation"/>	<input type="text" value="Chamber of commerce, chamber of trade and crafts, business incubator or innovation centre, business clusters, etc."/>	

Associated organisation location and website:

Address	<input type="text" value="Mokslininkų str. 2A"/>	<small>19 / 250 characters</small>	Country	<input type="text" value="Lithuania"/>
Postal Code	<input type="text" value="08412"/>	<small>5 / 250 characters</small>		
Town	<input type="text" value="Vilnius"/>	<small>7 / 250 characters</small>		
Website	<input type="text" value="www.vitp.lt"/>	<small>11 / 100 characters</small>		

Role of the associated organisation in this project:

The associated partner will be engaged in the project activities reaching out to companies. The participating of companies will be needed in WP 2.1 Pilot case execution and WP 2.2 Pilot case evaluation. In transfer stage of the project – WP 3 partner will participate in trainings and will take the use of the tool further after the project is finished. Associated partner will also promote Industrial Symbiosis approach.

422 / 1,000 characters

2.3 Associated Organisation Details - AO 5

Associated organisation name and type:

Organisation in original language	Lietuvos pramoninkų konfederacija		<small>34 / 250 characters</small>
Organisation in English	Lithuanian Confederation of Industrialists		<small>42 / 250 characters</small>
Department in original language	n/a		<small>3 / 250 characters</small>
Department in English	n/a		<small>3 / 250 characters</small>
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	Vilniaus g. 31	<small>14 / 250 characters</small>	Country	Lithuania
Postal Code	LT-01402	<small>8 / 250 characters</small>		
Town	Vilnius	<small>7 / 250 characters</small>		
Website	www.lpk.lt	<small>10 / 100 characters</small>		

Role of the associated organisation in this project:

The associated partner will be engaged in the project activities reaching out to companies. The participating of companies will be needed in WP 2.1 Pilot case execution and WP 2.2 Pilot case evaluation. In transfer stage of the project – WP 3 partner will participate in trainings and will take the use of the tool further after the project is finished. Associated partner will also promote Industrial Symbiosis approach.

422 / 1,000 characters

2.3 Associated Organisation Details - AO 6

Associated organisation name and type:

Organisation in original language	<input type="text" value="Vilniaus prekybos, pramonės ir amatų rūmai"/>		<small>42 / 250 characters</small>
Organisation in English	<input type="text" value="Vilnius Chamber of Commerce, Industry and Crafts"/>		<small>48 / 250 characters</small>
Department in original language	<input type="text" value="n/a"/>		<small>3 / 250 characters</small>
Department in English	<input type="text" value="n/a"/>		<small>3 / 250 characters</small>
Legal status	<input type="text" value="b) Private"/>		
Type of associated organisation	<input type="text" value="Business support organisation"/>	<input type="text" value="Chamber of commerce, chamber of trade and crafts, business incubator or innovation centre, business clusters, etc."/>	

Associated organisation location and website:

Address	<input type="text" value="Kosciuškos str. 30,"/>	<small>20 / 250 characters</small>	Country	<input type="text" value="Lithuania"/>
Postal Code	<input type="text" value="LT-01100"/>	<small>8 / 250 characters</small>		
Town	<input type="text" value="Vilnius"/>	<small>7 / 250 characters</small>		
Website	<input type="text" value="www.cci.lt"/>	<small>10 / 100 characters</small>		

Role of the associated organisation in this project:

The associated partner will be engaged in the project activities reaching out to companies. The participating of companies will be needed in WP 2.1 Pilot case execution and WP 2.2 Pilot case evaluation. In transfer stage of the project – WP 3 partner will participate in trainings and will take the use of the tool further after the project is finished. Associated partner will also promote Industrial Symbiosis approach.

422 / 1,000 characters

3. Relevance

3.1 Context and challenge

The globalisation of the economy implies specialisation, global production chains and vertically integrated industries, also in the peripheral regions. While this produces economic efficiency and lower production costs through specialisation, it also produces residual production wastes. The specialisation also increases economic dependency and reduces resilience and volatility. To meet these challenges, there is a need to create a larger industrial Symbiosis (IS) by fomenting a larger regional downstream effect by circularity.

This is currently being implemented in different fields, but the activities are often fragmented. There are examples of industries of IS that have been achieved spontaneously where industrialists have found common ground and seen an economic potential in selected fields. Still, the IS would benefit from a more place-based systemic approach, where flows are systematically analysed with a larger than a company perspective. Building an IS is a discovery process that requires cooperation, commitment and trust among the 4H stakeholders in the selected fields. The quest for the solutions requires an identification of the fields with the most promising outlook for IS.

It also requires a methodology and tools that are informative, accessible and easy to apply. The work on IS is ongoing, and data show that IS is in reality limited to more farsighted companies with larger resources. For this reason, SME support structures need to be developed, and tools to support the work need to be created. This may be achieved through a co-creation, but this requires a common ground or methodology involving not only mapping of the potentials but also an analysis of the market and non-market barriers and tools to pursue the IS. The discoveries are found in the granularity and in the dialogue between actors. Examples of challenges on the local level, when analysed, may have leverage in a larger context. Nevertheless, this requires a tool for pursuing the work.

1,995 / 2,000 characters

3.2 Transnational value of the project

There is a need for transnational cooperation as the challenges addressed are at the same time common and specific. To achieve an Industrial Symbiosis (IS), methods of scoping, mapping and analysing the potentials are similar, and the partners may draw from each other's insights. Comparing and contrasting experiences for bench-marking is apart from a source of knowledge and also a development inspiration for the partners involved. It functions as a "critical mass".

The IS is achieved when the SME support structures succeed in triggering an IS at the local level, and this occurs in different ways. We expect that the partners will have different ways of working with similar hands-on approaches when approaching companies and public entities in the IS field. Building trust and inspiration for the development are well needed for the discoveries and the triggering of IS. We expect that the partners have different traditions and face different types of market and non-market hurdles. This heterogeneity is the base for transnational learning among the partners and needs to be built into the design of the IT tool.

We also expect that the partners enter the project with different types of previous experiences and are at different stages of the work. More advanced partners may share their experiences, while the challenges faced by the followers may provide insights also into the advanced regions when the IS is extended to new economic domains.

These perspectives will contribute to the generality of the tool that will be created through the project and in prolongation to the whole result of the project promoting IS and sustainability.

1,654 / 2,000 characters

3.3 Target groups

Target group	Sector and geographical coverage	Its role and needs
<p>Large enterprise</p>	<p>Large enterprises have an international geographical coverage. The group are usually vertically well integrated and have an access to resources and a knowledge base in the field. The residual flows of these companies may be turned into a regional incomes and contribute to a vertical integration of the companies.</p> <p style="text-align: right;">316 / 500 characters</p>	<p>The companies possess knowledge in the field and how also the resources. It is expected that they particularly have knowledge of the residual flows in the economy and the market and non-market barriers in implementing IS that need to be constructed into the tool.</p> <p style="text-align: right;">263 / 1,000 characters</p>
<p>Small and medium enterprise</p>	<p>The SMEs are the core focus of the project. Opposite to large companies SMEs do not generally have large resources but possess a flexibility to engage in new activities in the locally. We also expect the SMEs to have a larger degree of entrepreneurship. The tool that will be developed in the project will function as a trigger as it helps to visualize the field.</p> <p style="text-align: right;">364 / 500 characters</p>	<p>The target group seeks a new solution to minimise costs and create new circular economy businesses. The role is also to create regional downstream effects by entering and extending the value-chains of large businesses. The SMEs will be the beneficiaries of the information in the tool and also of the better support that they will receive through the instrument.</p> <p style="text-align: right;">362 / 1,000 characters</p>
<p>Local public authority</p>	<p>The local public authorities have an important role to play within their territory. Public policies contributes to financing of business support and the authorities are also partners in a multi-level governance when formulating policies. The public authorities to also create large flows of residuals and wastes. This typically in health and education sectors but also in other field. Typically for smaller cities the public authorities are among the larger employers</p> <p style="text-align: right;">467 / 500 characters</p>	<p>The role of the public authorities is two-fold first, to consider their own flows of wastes that may be utilised in a circular economy and secondly, to work in a 3H format with the other stakeholders with the purpose of receiving a common view on the challenge and identify barriers to circularity</p> <p style="text-align: right;">297 / 1,000 characters</p>
<p>Business support organisation</p>	<p>The business support organisations are implementing public policies. The support organisations may communicate any concern of their main focus group but they may also support the SMEs in new fields.</p> <p style="text-align: right;">198 / 500 characters</p>	<p>The role of the business support organisations is the uptake of the project results and how they can gear the activities based on this and produce quality services to the SMEs.</p> <p style="text-align: right;">177 / 1,000 characters</p>
<p>International governmental organisation</p>	<p>In the European policies the EU makro regions have an increasing role. The EU strategy for the Baltic Sea Region and the Baltic Sea Macro Region an important and increasing role for policy implementation. The countries around the Baltic Sea sea basin from the macro region. The origin or the EUBSR-strategy in the common concern of pollution of the Baltic Sea. Under the umbrella of the EUBSR there are a network of international organisations working in the field looking for IS solutions.</p> <p style="text-align: right;">494 / 500 characters</p>	<p>The last leg of the project - the dissemination, will be of interest to the EUBSR. An overreaching objective like "save the sea" and "increasing prosperity" have a clear bearing on the objectives of the project. Under this overall objective there is a number of institutions working on the objective. It is possible that they may have a role in the construction of the tool, but it is believed that they will have a larger role in the dissemination of the findings and the uptake of the policy tool.</p> <p style="text-align: right;">501 / 1,000 characters</p>

3.4 Project objective

Your project objective should contribute to:

Circular economy

The Industrial Symbiosis (IS) is another word for a circular economy, and the project aims at creating a tool for formulating the policy. This will make the concept of IS less elusive and will support the co-creation and discoveries among the target groups. It will provide information on the potential for the public sector decision process. It will also provide a mapping of the waste flows within the sector, supporting in itself decision-making. This will help set priorities and channel resources to the business organization for their work aimed at supporting SMEs in the IS transition. The large enterprises will be able to envisage the flows on residual and waste production in a region that will create possibilities for their downstream regional production.

Project objective is two fold: a) to create methodology and IT tool (IS tool) based on this methodology for IS potential evaluation for cities/regions in order to help in the process of decision making for local authorities and b) to create IS potential evaluation tool for companies to foster IS cooperation cases.

The governance of the project will take place in cooperation with the stakeholders that are important for providing input information and formulating the needs for the tool. They will elaborate on the details of the challenges identified and formulate the needs. They will be part of the iterative process leading to the result. Finally they will be the target for the up-take of the project results. The EUSBSR was originally formulated with the three so called "NOs". Still the strategy has led to a large discussion on different arenas and a large interaction between stakeholders. The main arena is the annual conference of the EUSBSR annual forum. The project aims to be present at these forums and present the ideas and the findings.

1,839 / 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 Bio-economy

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

The Nordic Council of Ministers is Policy Area Coordinator for Bio-economy in EU's Baltic Sea Region Strategy. The policy area covers also agriculture, forestry, fisheries and rural development. The actions in the strategy is implemented to Bio-economy policies, promoting Bio-based business, R&D Innovation in the field, outreach and policies towards the civil society. The objectives for this policies are

- Competitive bio-based industries

In this field the project may contribute in identifying and analyzing possibilities for new bio-based industries. Residual flows holding bio-mass maybe turned into business by providing information on opportunities and creation a common vision,

- Sustainable resource management

Clearly the IS promoted by the project works towards the objective. This in the case when the flows are in the fields of biomass which is expected when considering the structure of the partners.

· Resilient and diverse ecosystems

The resilience of promoted by the project constitutes in larger regional down-stream production. New industries contributes to an economic resilience against economic chocks

· Inclusive economic development

The effect on an inclusive economic development is more indirect,

1,236 / 1,500 characters

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

The project will be implemented through a co-creation when looking for residuals waste flows and is expected to lead to new discoveries. Discoveries through interaction is linked to the new enlarged smart specialization concept on experience base innovations. Thus the contribution of the project may also be in the field of PA innovation,

340 / 1,500 characters

3.6 Other political and strategic background of the project

Strategic documents

The Nordic Bio economy program under the Nordic Council of Ministers. The Council is also the coordinator of the PA Bio Economy. The program is found on:
<http://norden.diva-portal.org/smash/record.jsf?pid=diva2%3A1222743&dswid=-6311>

233 / 500 characters

The European Commission adopted the new circular economy action plan (CEAP) in March 2020. It is one of the main building blocks of the European Green Deal, Europe's new agenda for sustainable growth. The EU's transition to a circular economy will reduce pressure on natural resources and will create sustainable growth and jobs. The plan is an all-over umbrella for the action and is found on:

https://ec.europa.eu/environment/strategy/circular-economy-action-plan_fi#ecl-inpage-874

484 / 500 characters

The project partner regional strategies and visions for Industrial Symbiosis

76 / 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
Learning Among Region on Smart Specialization <small>46 / 200 characters</small>	Interreg Baltic Sea <small>19 / 200 characters</small>	The method of value-chain analysis analysis and stakeholder salience analysis. The current lead-partner LIC was a partner in the project. <small>137 / 1,000 characters</small>
Green transformation - A Policy tool for smart specialization <small>63 / 200 characters</small>	Interreg Baltic Sea <small>19 / 200 characters</small>	The further policy advice based on the stakeholder salience concept and and the experiences in the working with circularity. The current lead-partner LIC was a partner in the project. <small>183 / 1,000 characters</small>
Smart Circular Procurement (CircPro) <small>36 / 200 characters</small>	Interreg Europe <small>15 / 200 characters</small>	Know how about circular economy procurement will be used in the project while constructing the IS tool. Also the same stakeholders will be involved in the project. <small>164 / 1,000 characters</small>

3.10 Horizontal principles

Horizontal principles	Projects's direct impact
Sustainable development	positive
Non-discrimination including accessibility	positive
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.

The main monitoring and advisory body of the project is the Steering Group (SG), which consist of the representatives of the project partners. SG gives advice and monitors the project progress, spreads the info, and provides its contacts and networks for the success of the project. SG online meetings will take two times per year. Project managers of each PP consist Management Team (MT), which together with LP plan and monitor the content progress of the project. MT has a meeting 1 time a month.

500 / 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.

All PPs take care of their financial operations by their own in-house accountant. Project Financial Management brings together planning, budgeting, accounting, financial reporting, internal control, auditing, procurement, disbursement, and the physical performance of the project with the aim of managing project resources properly and achieving the project's objectives. All PPs have either part-time financial assistants or accountants for compiling the partner financial reports.

485 / 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.

To ensure effective project communication, Communication Manager (CM) will prepare an overall communication plan for the project and provide partners with templates and manuals. Each partner will also be responsible for communicating their project activities and outcomes through social media channels and LP will assist in a broader exposure of the project to the BSR (contributions to BSR program events, publications, etc). At the end of the project, it's planning to organize the closing event.

498 / 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										
	<table border="1"> <thead> <tr> <th>Number</th> <th>Group of Activity Name</th> </tr> </thead> <tbody> <tr> <td>1.1</td> <td>Creation of Industrial Symbiosis potential evaluation methodology</td> </tr> <tr> <td>1.2</td> <td>Creation of Industrial Symbiosis Market and Non-Market Hurdles Detection Method</td> </tr> <tr> <td>1.3</td> <td>Development of the Industrial Symbiosis Tool input data formats</td> </tr> <tr> <td>1.4</td> <td>Implementation of the Industrial Symbiosis Tool</td> </tr> </tbody> </table>	Number	Group of Activity Name	1.1	Creation of Industrial Symbiosis potential evaluation methodology	1.2	Creation of Industrial Symbiosis Market and Non-Market Hurdles Detection Method	1.3	Development of the Industrial Symbiosis Tool input data formats	1.4	Implementation of the Industrial Symbiosis Tool
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2	WP2 Piloting and evaluating solutions										
	<table border="1"> <thead> <tr> <th>Number</th> <th>Group of Activity Name</th> </tr> </thead> <tbody> <tr> <td>2.1</td> <td>Pilot case execution</td> </tr> <tr> <td>2.2</td> <td>Pilot case evaluation</td> </tr> <tr> <td>2.3</td> <td>Adjustment to the Industrial Symbiosis tool and methodology</td> </tr> </tbody> </table>	Number	Group of Activity Name	2.1	Pilot case execution	2.2	Pilot case evaluation	2.3	Adjustment to the Industrial Symbiosis tool and methodology		
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3	WP3 Transferring solutions										
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Number	Group of Activity Name										
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3.2	Dissemination of the IS-tool										
3.3	Durability plan development										

Work plan overview

	Period: 1	2	3	4	5	6	Leader
WP.1: WP1 Preparing solutions							PP3
A.1.1: Creation of Industrial Symbiosis potential evaluation methodology							PP3
D.1.1: Industrial Symbiosis Potential Evaluation Methodology		D					PP3
A.1.2: Creation of Industrial Symbiosis Market and Non-Market Hurdles Detection Method							PP2
D.1.2: Report on Industrial Symbiosis Market and Non-Market Hurdles Detection Method		D					PP2
A.1.3: Development of the Industrial Symbiosis Tool input data formats							PP9
D.1.3: Report on the Industrial Symbiosis Tool input data formats			D				PP9
A.1.4: Implementation of the Industrial Symbiosis Tool							PP9
D.1.4: Industrial Symbiosis IT Tool Prototype			D				PP9
WP.2: WP2 Piloting and evaluating solutions							PP7
A.2.1: Pilot case execution							PP7
D.2.1: Piloting of the IS Tool				D			PP7
A.2.2: Pilot case evaluation							PP1
D.2.2: Pilot case evaluation				D			PP1
A.2.3: Adjustment to the Industrial Symbiosis tool and methodology							PP9
O.2.3: Industrial Symbiosis IT Tool					O		PP9
WP.3: WP3 Transferring solutions							PP1
A.3.1: Training in support of transferring the IS-tool							PP6
D.3.1: Training for transferring the IS Tool to business and local public authorities					D		PP6
A.3.2: Dissemination of the IS-tool							PP1
D.3.2: Communication report for the IS-tool towards larger stakeholder groups.					D		PP1
A.3.3: Durability plan development							PP1
O.3.3: Durability plan for the project						O	PP1

Outputs and deliverables overview

Code	Title	Description	Contribution to the output	Output/ deliverable contains an investment
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D 1.1	Industrial Symbiosis Potential Evaluation Methodology	The report will describe the process in the participating regions initiating the work in evaluating the presented specialization and cluster concept as a base for capturing related industries, residual flows and visualizing the sectors concerned. It will assess the suggested approach through the data collected and describe possible adjustments made and their justification. It will provide guidance on how to use hard statistical data and soft data consisting of public administrative records and selected company statistics. The report will establish the inter-industrial linkages and their connection to residual waste flows. These relations are stable in the short run but will require and intermittent updating every 5th year. The report is part of the total deliverable of WP1 that is completed simultaneously with the WP1.4 but is more reporting on the ways of constructing the model while the latter is reporting on the IT-tool itself. The methodology will constitute of 2 parts: a) methodology for IS evaluation in regions/cities and b) evaluation of IS potential in companies.	The Deliverable is a IS potential methodology that contributes to O2.3 Industrial Symbiosis IT Tool	
D 1.2	Report on Industrial Symbiosis Market and Non-Market Hurdles Detection Method	A report on the solutions on the findings of the PESTLE analysis and how it will form a feature in the IT-tool, identifying particular challenges when converting residual waste production into intermediate consumption of local companies. The report will also include the proceedings of the partner learning seminar reporting on the workshops in the partner regions.	The deliverable in a non-piloted prototype of O2.3 Industrial Symbiosis IT Tool	
D 1.3	Report on the Industrial Symbiosis Tool input data formats	The report will describe the developed input data formats for the Industrial Symbiosis Tool. It will include the exact requirements for each defined format and for which cases it is intended. The final number of formats will be concluded during the project and will stem from the methodology created in WP1.1. The developed data input formats will be implemented into the Industrial Symbiosis Tool (O2.3) in WP1.4 and WP2.3.	O2.3 Industrial Symbiosis IT Tool	
D 1.4	Industrial Symbiosis IT Tool Prototype	The deliverable will be ready for the pilot prototype of the Industrial Symbiosis IT Tool. The Industrial Symbiosis IT Tool Prototype uses the results of all other activities in WP1. It implements the methodology from WP1.1, the method from WP1.2, and uses the input data formats from WP1.3. The Industrial Symbiosis Tool Prototype will be used in all activities within WP2 for piloting. After final adjustments in GoA 2.3 using the feedback gained during the pilots, it will become O2.3 Industrial Symbiosis IT Tool. The amount and type of adjustments and changes are not known at this moment and will depend on the results of the pilots. The Industrial Symbiosis IT Tool Prototype will be a software code stored in a git repository. It will be summarised and documented in a short report that will be used used in activities in WP2. The created Tool will allow for detecting Industrial Symbiosis opportunities in different regions using a transnational methodology developed in GoA 1.1 that considers the local specifics of industries and legal regulations.	O2.3 Industrial Symbiosis IT Tool	
D 2.1	Piloting of the IS Tool	The report describes how the piloting of the IS-tool was done and forms an assessment of the quality of the report. The report will elaborate on the pilots carried out in Korsholm in Finland, Panevėžys in Lithuania, and Wrocław in Poland . In light of this assessment, it provides guidance on any alteration that would be needed in the report. It provides an insight on the territorial approach on IS based on the experience of the pilots. In the report there will be piloting results on 2 elements of the solution: a) pilots evaluating IS in the city/region and b) companies IS potential evaluation.	The deliverable links to O2.3 Industrial Symbiosis IT Tool	
D 2.2	Pilot case evaluation	The report describes the process, first on the final solutions when opting for indicators for evaluating the piloting of the IT-tool. The indicators will reflect the usability if the tool complementing the verification of the tool. The verification will consist of 2 parts: a) verification of all the processes and results obtained piloting the IS tool element for IS evaluation in regions/cities and b) verification of all the processes and results obtained piloting the IS tool element for evaluating IS potential for companies.	The deliverable links to O2.3 Industrial Symbiosis IT Tool	
O 2.3	Industrial Symbiosis IT Tool	The result of this GoA is the main output of the project. The Industrial Symbiosis IT tool will contain the final, adjusted version of the software developed in WP1.4, improved following the evaluation activities. The output will be provided as a software source code in an open-source code repository. It will also be accompanied by comprehensive documentation, consisting of design specifications (architectural models, detailed subsystem models) and user guides. When providing the tool and its documentation, we will assure its accessibility to different groups of users in all the countries of the Baltic Sea Region. Through this, the tool will significantly assist various decision-makers in fostering Industrial Symbiosis in the Baltic Sea Region and companies to evaluate their potential to participate in IS cases.		

D 3.1	Training for transferring the IS Tool to business and local public authorities	The deliverable will describe the process when transferring the solutions i.e., reflecting on the experiences when the IS-tool is being transferred to business and local authorities. The transfer to the stakeholders materializes through the training to use the IS Tool provided and through an enhanced understanding the IS-tool provided results. To document the process and to provide guidance for future needs a training manual is also provided as a part of the deliverable. The manual will consist of list of the training sessions provided, forming the base for an introduction of the tool in a city/region that would be interested in pursuing the IS through the tool. The manual will encompass the learning of the project. It will present the underlying estimation of the project and the usability of the tool. This is needed for the understanding of the nature of the data, vital for understanding how the results should be interpreted. In a similar manner the manual will also present the experiences in detecting market and non-market hurdles. Manual also will provide technical assistance in following the process of using the IS tool. The focus for the manual will still be on presenting the technical IT solution and learning to apply the IS Tool for fostering IS decision making in local public authorities and IS cooperation cases in companies. The manual will be for learning to use the tool and understand the results obtained by IS evaluation at any region by local public authorities and companies. Planned training manual parts: 1) entering the data; 2) interpretation of data visualizations; 3) analysis of obtained results; 4) the use of recommendations for IS policy (for local public authorities) or IS cooperation cases (for companies);	The deliverable will contribute to the output WP3.3 Durability plan for the IS-tool
Work package 1			
5.1 WP1 Preparing solutions	The communication report for the IS-tool will report on the communication of the tool, essentially reiterating the experience gained in the training conducted to business and local government stakeholders. but also communicate the wider significance of the IS-tool. The communication message will reiterate that it has been transferred to several core stakeholders and that the IS-tool also have a role among a wider group of stakeholders. Part of the message is also to communicate that the tool is a feasible solution when addressing issues on industrial waste residuals. The deliverable will		The deliverable will play into the the output 3.3. the Durability Planning of
5.2 Aim of the work package	Communication report for the IS-tool towards larger		
D 3.2			
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	The durability plan will sum the project findings and report on topics of: 1. Integration of the tool into academic teaching and research; 2. Intermittent updating of the IS-tool after stakeholder's consultations on its usability 3. Systematization of the training modules used when teaching the use of the IS-tool; 4. Marketing of the existence and		
O 3.3	Durability plan for the project		
Work package leader 1	PP 3 - The University of Vaasa		
Work package leader 2	PP 9 - Warsaw University of Technology		

5.4 Work package budget

Work package budget

5.5 Target groups

	Target group	How do you plan to reach out to and engage the target group?
1	<p>Large enterprise</p> <p>Large enterprises have an international geographical coverage. The group are usually vertically well integrated and have an access to resources and a knowledge base in the field. The residual flows of these companies may be turned into a regional incomes and contribute to a vertical integration of the companies.</p> <p style="text-align: right;">316 / 500 characters</p>	<p>The large companies have perspectives that are useful for the design on the IS. Future regional plans may give insights on waste flows. Perspective on new technologies that may be useful for the conversion of wastes into input are expected to be known by the large companies. In the design on how to capture the flows the large companies are expected to be relevant informants that may verify the assumptions made by the project alternatively provide guidance on how to re-orientate the approach. Large companies will also give input for IS potential evaluation on company level.</p> <p style="text-align: right;">580 / 1,000 characters</p>

	Target group	How do you plan to reach out to and engage the target group?
2	<p>Small and medium enterprise</p> <p>The SMEs are the core focus of the project. Opposite to large companies SMEs do not generally have large resources but possess a flexibility to engage in new activities in the locally. We also expect the SMEs to have a larger degree of entrepreneurship. The tool that will be developed in the project will function as a trigger as it helps to visualize the field.</p> <p>364 / 500 characters</p>	<p>The SMEs are among the stakeholders (together with the large companies) that will verify the approach. Verifying implies indicating if the proposed solutions is useful or not and suggest correction measures for the analysis. The SMEs also have a role of making the analysis concrete by commenting on dysfunctional analysis. SMEs will give input or IS potential evaluation on company level and IS cooperation analysis</p> <p>417 / 1,000 characters</p>
3	<p>Local public authority</p> <p>The local public authorities have an important role to play within their territory. Public policies contributes to financing of business support and the authorities are also partners in a multi-level governance when formulating policies. The public authorities to also create large flows of residuals and wastes. This typically in health and education sectors but also in other field. Typically for smaller cities the public authorities are among the larger employers</p> <p>467 / 500 characters</p>	<p>The public organisation in the project will participate in the work and will contribute with a feed-back on the usability in their work of the solutions that are being developed.</p> <p>178 / 1,000 characters</p>
4	<p>Business support organisation</p> <p>The business support organisations are implementing public policies. The support organisations may communicate any concern of their main focus group but they may also support the SMEs in new fields.</p> <p>198 / 500 characters</p>	<p>The business support organisation in the project will participate in the work and will contribute with a feed-back on the usability in their work of the solutions that are being developed.</p> <p>188 / 1,000 characters</p>
5	<p>International governmental organisation</p> <p>In the European policies the EU makro regions have an increasing role. The EU strategy for the Baltic Sea Region and the Baltic Sea Macro Region an important and increasing role for policy implementation. The countries around the Baltic Sea sea basin from the macro region. The origin or the EUBSR-strategy in the common concern of pollution of the Baltic Sea. Under the umbrella of the EUBSR there are a network of international organisations working in the field looking for IS solutions.</p> <p>494 / 500 characters</p>	<p>In this first stage of the project not at all. The outreach to these organisation will come in WP3</p> <p>98 / 1,000 characters</p>

5.6 Activities, deliverables, outputs and timeline

No.	Name
1.1	Creation of Industrial Symbiosis potential evaluation methodology
1.2	Creation of Industrial Symbiosis Market and Non-Market Hurdles Detection Method
1.3	Development of the Industrial Symbiosis Tool input data formats
1.4	Implementation of the Industrial Symbiosis Tool

WP 1 Group of activities 1.1

5.6.1 Group of activities leader

Group of activities leader

A 1.1

5.6.2 Title of the group of activities

66 / 100 characters

5.6.3 Description of the group of activities

Eurostat statistics on industrial environmental protection expenditure in each country describe the expenditure arising from environmental protection to industry. The statistics show the magnitudes of investments in environmental protection and operating expenditure by industry and use. Input-output (I-O) data available are used to analyse the expected flows in clusters, relevant to IS.

The use of raw materials is combined with the industry, industry output, the environmental protection measures and waste creation taken by the industry. Data are beyond the standard fields in Eurostat environmental data that cover mainly production. Information on firms is also used to separate SMEs and large firms. The outcome is company profiles of expected raw material use and waste creation in the selected industry clusters with respect to industry, company size, output and environmental protection activities. Our aim is to use in creating the IS management tool statistical data on environmental protection activities as surveyed in the statistics on industrial production materials and supplies, output and environmental protection expenditure following the Eurostat standard in EU countries. We will apply a number of information sources for the evaluation of economic flows at the local level: regional I-O table, public administrative records, waste treatment company statistics, tax records, public budgets, published statistics and interviews with informants.

Analysis of inter dependencies across main clusters in the region. Such analysis is based on a statistical analysis of the relationship across the firms. For selecting the most promising intervention areas the information needs to be compiled and analysed. This implies that following criterion need to be verified as a source for mapping industrial linkages and flows for visualizing the potential of IS:

- 1) Inter-dependencies of the firms and institutions in the selected industry clusters evaluated on I-O data and the degree specialization
- 2) Industrial production materials and supplies used in the selected industry clusters are examined on the basis of purchasing information on the materials and supplies used in the manufacture of goods
- 3) Analysis of waste management and how the potential waste flows are related to operating costs in the major actors in waste recycling covering the energy producers.
- 4) Relate the raw material use and waste flow in the selected industry clusters to the statistics on those clusters' industrial output and environmental protection activities.
- 5) Complexity how generic are the clusters in relation to other regions i.e. are they unique or can they be found in other regions?
- 6) Related density is the share of related industries to the specialization found in the region. The density contributes to finding related areas that can open up IS.

2nd element of the methodology will be evaluation the IS potential for the companies based on questionnaire and regional data.

2,996 / 3,000 characters

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

D 1.1

Title of the deliverable

54 / 100 characters

Description of the deliverable

The report will describe the process in the participating regions initiating the work in evaluating the presented specialization and cluster concept as a base for capturing related industries, residual flows and visualizing the sectors concerned. It will assess the suggested approach through the data collected and describe possible adjustments made and their justification. It will provide guidance on how to use hard statistical data and soft data consisting of public administrative records and selected company statistics. The report will establish the inter-industrial linkages and their connection to residual waste flows. These relations are stable in the short run but will require and intermittent updating every 5th year. The report is part of the total deliverable of WP1 that is completed simultaneously with the WP1.4 but is more reporting on the ways of constructing the model while the latter is reporting on the IT-tool itself.

The methodology will constitute of 2 parts: a) methodology for IS evaluation in regions/cities and b) evaluation of IS potential in companies.

1,092 / 2,000 characters

Which output does this deliverable contribute to?

99 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

WP.1: WP1 Preparing solutions

A.1.1: Creation of Industrial Symbiosis potential evaluation methodology

D.1.1: Industrial Symbiosis Potential Evaluation Methodology

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 - The Municipality of Korsholm

A 1.2

5.6.2 Title of the group of activities

Creation of Industrial Symbiosis Market and Non-Market Hurdles Detection Method

79 / 100 characters

5.6.3 Description of the group of activities

The WP1.1 is creating a system for identifying clusters and concentrations of economic activities which are likely to be the source of industrial wastes, i.e., method for identifying flows for IS. In this WP1.2 these flows are fitted with a PESTLE-analysis (Political, Economic, Social, Technological, Legal, Environmental) for assessing the potential of IS. This analysis will be made as a bench-mark analysis with the purpose of supporting corresponding analysis when using the IT-tool and the format of the analysis will be fitted into the tool. The analysis in WP1.1 is expected to provide new knowledge on flows of industrial waste residuals that may form the base for IS. There may however be market and non-market hurdles to pursue IS and this needs to be identified as a part of constructing the IT-tool. The purpose of the tool is to trigger decision on IS and the PESTLE-analysis will add a qualitative dimension into the mapping of the flows in an Input-Output format.

Identifying the most promising clusters for IS also implies that it is possible to identify the 4H stakeholders in the activities. The stakeholders are needed for making a qualitative assessment of the usability of the waste flows for IS. Although the primary function of the assessment is to serve direct business-decisions on IS there is also a secondary function of the analysis. It will serve as identifying hurdles being a part of stakeholder tacit knowledge to the attention of political decision-makers to form a part of the political dialogue. Due to the complexity of the economy political decisions may have unintended secondary effects affecting IS and the analysis is expected to share light on these.

The task-leader will provide the partners with a template and instruction for the analysis and the activities will include arranging workshops with all the participating regions. The challenge in the analysis that is made with respect to the identified flows in WP1.1 is to find the level of aggregation. A very high degree of generality in the analysis leads to that the conclusions are valid but not very applicable. Correspondingly a very detailed analysis leads to that the transfer of the format will become difficult and difficult to understand for external actors.

Conducting of a SWOT-analysis in relation to the identified flows and particularly on the OT the opportunities found, performing a PESTLE analysis drawing on the opportunities and avoiding the threats. The PESTLE-analysis made in the regions and summarized in a project learning seminar after the period is finished is expected to reveal new insights on the challenges of the IS. The analytical features for lifting these insights may be entered into the IT-tool but the insights will also form part of the project's communication on project findings on the IS-challenges.

2,844 / 3,000 characters

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

D 1.2

Title of the deliverable

Report on Industrial Symbiosis Market and Non-Market Hurdles Detection Method

77 / 100 characters

Description of the deliverable

A report on the solutions on the findings of the PESTLE analysis and how it will form a feature in the IT-tool, identifying particular challenges when converting residual waste production into intermediate consumption of local companies. The report will also include the proceedings of the partner learning seminar reporting on the workshops in the partner regions.

366 / 2,000 characters

Which output does this deliverable contribute to?

The deliverable in a non-piloted prototype of O2.3 Industrial Symbiosis IT Tool

79 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

WP.1: WP1 Preparing solutions

A.1.2: Creation of Industrial Symbiosis Market and Non-Market Hurdles Detection Method
 D.1.2: Report on Industrial Symbiosis Market and Non-Market Hurdles Detection Method

5.6.7 This deliverable/output contains productive or infrastructure investment

WP 1 Group of activities 1.3

5.6.1 Group of activities leader

Group of activities leader PP 9 - Warsaw University of Technology

A 1.3

5.6.2 Title of the group of activities

Development of the Industrial Symbiosis Tool input data formats

63 / 100 characters

5.6.3 Description of the group of activities

The Industrial Symbiosis Tool (IS Tool) has to operate with different types of input data to provide the information required to bolster the Industrial Symbiosis (IS). The IS Tool will require data on both the production input and output resource relations and the residual waste flow in the region. Such input data can come from different sources, including government data or regional survey results. The exact methodology for selecting companies with potential for IS will be developed in WP1.1.

Because of technical limitations (every different type of input significantly increases the complexity of software Tools), the final input data formats for IS Tool have to be developed in strong cooperation of the Tool creators (WP1.4) and the methodology developers (WP1.1). The final data formats have to include as wide a range of data sources as possible while still keeping the IS Tool technical complexity at the level that allows for relatively easy future updates and extensions. Additionally, the data formats should operate on existing economic classifications, especially the Statistical Classification of Economic Activities in the European Community (NACE).

The exact supported classifications and data formats are a crucial part of the durability plan. The IS Tool should require as little additional transformation of data as possible to be helpful for decision-makers in governments and local municipalities to foster IS in their regions.

1,458 / 3,000 characters

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

D 1.3

Title of the deliverable

Report on the Industrial Symbiosis Tool input data formats

58 / 100 characters

Description of the deliverable

The report will describe the developed input data formats for the Industrial Symbiosis Tool. It will include the exact requirements for each defined format and for which cases is it intended. The final number of formats will be concluded during the project and will stem from the methodology created in WP1.1. The developed data input formats will be implemented into the Industrial Symbiosis Tool (O2.3) in WP1.4 and WP2.3.

424 / 2,000 characters

Which output does this deliverable contribute to?

O2.3 Industrial Symbiosis IT Tool

33 / 100 characters

5.6.6 Timeline

	Period: 1	2	3	4	5	6
WP.1: WP1 Preparing solutions						
A.1.3: Development of the Industrial Symbiosis Tool input data formats						
D.1.3: Report on the Industrial Symbiosis Tool input data formats						

5.6.7 This deliverable/output contains productive or infrastructure investment

WP 1 Group of activities 1.4

5.6.1 Group of activities leader

Group of activities leader PP 9 - Warsaw University of Technology

A 1.4

5.6.2 Title of the group of activities

Implementation of the Industrial Symbiosis Tool

47 / 100 characters

5.6.3 Description of the group of activities

Industrial Symbiosis Tool (IS Tool) will be implemented by an experienced team from the Warsaw University of Technology. The IS Tool must be an easy-to-use application that uses the data about local industries, their required resources, and produced waste. The IS Tool has to implement the data formats developed in GoA1.3 and use the implementation of the methodology created in GoA1.1 to detect Industrial Symbiosis opportunities in the region. This involves estimation of the total industrial production and waste flows making up the supply to be matched with estimations of total company intermediate consumption constituting a potential demand when fostering circular solutions.

The IS Tool has to be built modularly to allow for easier future updates and extensions. For the same reason, it has to use currently popular solutions and frameworks. The IS Tool will consist of three main parts called layers. The first layer will be the Graphical User Interface that is used by the end-user of the IS Tool. This part of the system will allow for uploading the input data and will present the data to the end-user. The end-user has to be able to visualise the data whenever possible and to perform operations on the data like drill-down (increasing the detailedness of the data, e.g., from each week summary to each day summary). The second layer, called Application Logic, will be responsible for performing the operations started by the end-user. This will include all the operations on data stored in the third layer. The third layer will be responsible for storing the data of both the IS Tool users (with all the access permissions and saved results) and the industry data. For this purpose, multiple database solutions will be used to allow for easier operations on different types of stored data. The IS Tool will be documented with both a user guide (for the end-user) and a technical guide (for the software developers working with the IS Tool).

IS tool will reflect the created methodology in WP 1.1 and it will consist of 2 elements: a) evaluation of IS in the regions/cities and b) evaluation of IS potential in the companies.

2,144 / 3,000 characters

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



D 1.4

Title of the deliverable

Industrial Symbiosis IT Tool Prototype

38 / 100 characters

Description of the deliverable

The deliverable will be ready for the pilot prototype of the Industrial Symbiosis IT Tool. The Industrial Symbiosis IT Tool Prototype uses the results of all other activities in WP1. It implements the methodology from WP1.1, the method from WP1.2, and uses the input data formats from WP1.3. The Industrial Symbiosis Tool Prototype will be used in all activities within WP2 for piloting. After final adjustments in GoA 2.3 using the feedback gained during the pilots, it will become O2.3 Industrial Symbiosis IT Tool. The amount and type of adjustments and changes are not known at this moment and will depend on the results of the pilots. The Industrial Symbiosis IT Tool Prototype will be a software code stored in a git repository. It will be summarised and documented in a short report that will be used used in activities in WP2. The created Tool will allow for detecting Industrial Symbiosis opportunities in different regions using a transnational methodology developed in GoA 1.1 that considers the local specifics of industries and legal regulations.

1,060 / 2,000 characters

Which output does this deliverable contribute to?

O2.3 Industrial Symbiosis IT Tool

33 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

WP.1: WP1 Preparing solutions

A.1.4: Implementation of the Industrial Symbiosis Tool

D.1.4: Industrial Symbiosis IT Tool Prototype

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

Work package leader 2

5.4 Work package budget

Work package budget

5.4.1 Number of pilots

Number of pilots

5.5 Target groups

	Target group	How do you plan to reach out to and engage the target group?
1	<input type="text" value="Large enterprise"/> Large enterprises have an international geographical coverage. The group are usually vertically well integrated and have an access to resources and a knowledge base in the field. The residual flows of these companies may be turned into a regional incomes and contribute to a vertical integration of the companies. <small>316 / 500 characters</small>	Large enterprises will form part of the clusters identified and participate in pilot action, testing the module of IS tool dedicated for companies and their potential evaluation, determining connections. This target group input is very needed for evaluation of the IS tool. Large enterprises will provide input testing pilots for regional data and actively participate in testing the IS tool element for companies potential evaluation. <small>436 / 1,000 characters</small>
2	<input type="text" value="Small and medium enterprise"/> The SMEs are the core focus of the project. Opposite to large companies SMEs do not generally have large resources but possess a flexibility to engage in new activities in the locally. We also expect the SMEs to have a larger degree of entrepreneurship. The tool that will be developed in the project will function as a trigger as it helps to visualize the field. <small>364 / 500 characters</small>	Small and medium enterprises together with large enterprises will form part of the clusters identified and participate in pilot action, testing the module of IS tool dedicated for companies and their potential evaluation, determining connections. This target group input is very needed for evaluation of the IS tool. SMEs actively participate in testing the IS Tool element for companies IS potential evaluation. <small>413 / 1,000 characters</small>
3	<input type="text" value="Local public authority"/> The local public authorities have an important role to play within their territory. Public policies contributes to financing of business support and the authorities are also partners in a multi-level governance when formulating policies. The public authorities to also create large flows of residuals and wastes. This typically in health and education sectors but also in other field. Typically for smaller cities the public authorities are among the larger employers <small>467 / 500 characters</small>	Local public authorities will participate in pilot actions and evaluation process. They will be part of the verification of IS tool dedicated for regions and we expect that they possess a tacit knowledge that will be useful for verifying the usability of the IS Tool in the regions <small>282 / 1,000 characters</small>

	Target group	How do you plan to reach out to and engage the target group?
4	<p>Business support organisation</p> <p>The business support organisations are implementing public policies. The support organisations may communicate any concern of their main focus group but they may also support the SMEs in new fields.</p> <p style="text-align: right;">198 / 500 characters</p>	<p>They will be part of the verification and we expect that they possess a tacit knowledge that will be useful for verifying the usability of the tool. With respect to the SMEs we expect that the project will be able to draw on particular knowledge that they are having.</p> <p style="text-align: right;">268 / 1,000 characters</p>
5	<p>International governmental organisation</p> <p>In the European policies the EU makro regions have an increasing role. The EU strategy for the Baltic Sea Region and the Baltic Sea Macro Region an important and increasing role for policy implementation. The countries around the Baltic Sea sea basin from the macro region. The origin or the EUBSR-strategy in the common concern of pollution of the Baltic Sea. Under the umbrella of the EUBSR there are a network of international organisations working in the field looking for IS solutions.</p> <p style="text-align: right;">494 / 500 characters</p>	<p>They will be part of the communication and the uptake to be designed in WP3</p> <p style="text-align: right;">75 / 1,000 characters</p>

5.6 Activities, deliverables, outputs and timeline

No.	Name
2.1	Pilot case execution
2.2	Pilot case evaluation
2.3	Adjustment to the Industrial Symbiosis tool and methodology

WP 2 Group of activities 2.1

5.6.1 Group of activities leader

Group of activities leader PP 7 - Wroclaw Technology Park

A 2.1

5.6.2 Title of the group of activities

Pilot case execution

21 / 100 characters

5.6.3 Description of the group of activities

The developed IS Tool in WP1.4 is considered to be a pilot, that will be evaluated in 3 of the partner countries by selected municipalities and by their business organisation partners. The piloting is a core activity in the project, with the main objective of providing a full set of consistent and high-quality information. It will partially run overlapping with the creation of the IS-tool with the purpose that the process could be mutually reinforcing.

Piloting will constitute 2 elements of the solution created in WP 1.4 : a) IS evaluation for regions /cities b) IS potential evaluation for companies

The local governments will pilot the tool by entering data background variables and observe the particular results in the different regions. The results will also be used by business development organisation working with SME piloting the "triggering" effect of the analysis. The latter have a more concrete short-run bearing on IS while the former is more of indirect nature increasing the understanding of the potential of IS in the region. The experiences gained in the piloting will be used in the training.

Companies will pilot the IS potential evaluation element of the tool for the company by entering the data of the company and using the results for the obtaining information for decision making on the company level.

Part of the verification is also concluding on the relevant territorial approach for the IS. This depends on the degree of specialization and on the density in the piloting regions. A very high degree of specialization may produce large size of residual products that may not have a user at a NUTS5 level. Hence the verification needs to address should the analyse be made at a NUTS3 or any other level. On the other hand, in local levels with a very high density like a large city the NUTS5 level may be very relevant for pursuing IS. We expect that the partner region will provide different answers to this question and the final tool need to have a flexibility to handle these differences.

In WP1.4 the SWOT and PESTLE analysis made in WP1.2 will also be piloted. The analysis made is a bench-mark analysis with the purpose of supporting the use of the tool. In providing the tool with an IT-format the format for this analysis have been entered into the tool. This format will be piloted with the stakeholders for assessing its usability. Likewise will the documenting format and the support provided by the IT-tool be assessed. Documenting the estimations is an important part of the use of the IS-tool. The IS-tool is based on an estimation of the technological coefficients between different economic activities. These coefficient changes with time as new technologies are being applied. Also in small regions particularities of some industries may cause that the estimation becomes bold. If this becomes an issue in the estimation it may be needed to complement the information with survey data.

2,946 / 3,000 characters

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

D 2.1

Title of the deliverable

Piloting of the IS Tool

23 / 100 characters

Description of the deliverable

The report describes how the piloting of the IS-tool was done and forms an assessment of the quality of the report. The report will elaborate on the pilots carried out in Korsholm in Finland, Panevėžys in Lithuania, and Wroclaw in Poland . In light of this assessment, it provides guidance on any alteration that would be needed in the report. It provides an insight on the territorial approach on IS based on the experience of the pilots. In the report there will be piloting results on 2 elements of the solution: a) pilots evaluating IS in the city/region and b) companies IS potential evaluation.

602 / 2,000 characters

Which output does this deliverable contribute to?

The deliverable links to O2.3 Industrial Symbiosis IT Tool

58 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

WP.2: WP2 Piloting and evaluating solutions

A.2.1: Pilot case execution

D.2.1: Piloting of the IS Tool

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 1 - Lithuanian Innovation Centre

A 2.2

5.6.2 Title of the group of activities

Pilot case evaluation

22 / 100 characters

5.6.3 Description of the group of activities

The developed IT-tool in WP1.4 is considered to be a pilot, that will be evaluate in 3 of the partner countries by selected municipal/ business organisation partners. The local governments will evaluate the tool against the background how it can support local governments a tool for political decision-making on IS. The second partly overlapping testing of the tool is carried out by business agencies with the perspective of how the tool may function as a base for encouraging SMEs to pursue IS business ideas. The latter have a more concrete short-run bearing on IS while the former is of indirect nature.

The third category of evaluation category will concern the evaluation of data capture that is the data capture approach has foreseen any important source of industrial residual wastes. That is we are combining the quantitative estimations with a qualitative stakeholder assessment.

The activity of testing consists in entering the input data from the partners into the model and evaluating the validity and reliability of the model suggested in the WP1. The testing also consists in concluding on technical aspects like:

- The availability of data and access to timely data describing the flows.
- The ease of data entry and updating of the tool
- How user friendly the tool is for the user groups
- The interface and support functions like explaining
- The documentation format for supporting the use of the tool
- The flexibility of the tool to display different features linked to IS
- The adaptability of the tool to different circumstances i.e., different NUTS categories and cross-classifications

This will be tested through interviews with informants describing the flows in the region and assessing the validity and suggesting other possible solutions to capture the data flows. The generality of these suggestion will be evaluated and if found valid they will be entered into the revised version of the tool. The testing will also involve an assessment by the informants on the usability and features that needs to be improved. The usability features involve.

- The validity of the analytical formats suggested in the tool
- Assessment on how the tool will support decision-making on IS
- Assessment on how the tool will function as support to business development agencies supporting SMEs in the field of IS.
- Capacity of the tool to match supply and use of industrial flows.

The testing will be "checked" against these and possible other parameters in all partner regions, even if the focus lies in the decision-makers (local governments) and implementers (business development agencies). The suggested format for the testing will be complemented and possibly altered when the tool is ready. However, the basic feature will remain that it will test the ease of using the tool and the working of the tool as a mean to develop policies and support the implementation of IS. The purpose of this task is to verify or alter the suggested criteria.

2,999 / 3,000 characters

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

D 2.2

Title of the deliverable

Pilot case evaluation

21 / 100 characters

Description of the deliverable

The report describes the process, first on the final solutions when opting for indicators for evaluating the piloting of the IT-tool. The indicators will reflect the usability if the tool complementing the verification of the tool. The verification will consist of 2 parts: a) verification of all the processes and results obtained piloting the IS tool element for IS evaluation in regions/cities and b) verification of all the processes and results obtained piloting the IS tool element for evaluating IS potential for companies.

531 / 2,000 characters

Which output does this deliverable contribute to?

The deliverable links to O2.3 Industrial Symbiosis IT Tool

58 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

WP.2: WP2 Piloting and evaluating solutions

A.2.2: Pilot case evaluation
 D.2.2: Pilot case evaluation

5.6.7 This deliverable/output contains productive or infrastructure investment

WP 2 Group of activities 2.3

5.6.1 Group of activities leader

Group of activities leader

A 2.3

5.6.2 Title of the group of activities

59 / 100 characters

5.6.3 Description of the group of activities

This activity rounds up activities in WP1 and WP2 and concludes the Industrial Symbiosis IT tool, including the process of the evaluation of the tool. In WP1.4, the prototype of the tool was ready, and it was piloted in WP2.1, and the evaluation of the pilot was made in WP2.2. Based on these findings, a reflection over the findings will be made, and the results of that reflection will enter into the final tool. The adjustment of the IT tool will be the responsibility of the task leader, and the adjustment will consist in programming adjusted features that need to be entered into the IT tool. For this purpose, the WP leaders will send the partners a template for reflecting on the experiences and issues linked to the testing of the IT tool. Based on this, the adjustment will be conducted. The adjustment will consist in programming any changes that would be needed for better functioning of the tool in line with the experiences gained when testing the tool. Included in the adjustment is also the documentation of the solutions adopted, including the results and conclusion of the testing. This will be part of the project's dissemination together with the underlying rationale of producing an IT tool for fostering Industrial Symbiosis.

1,250 / 3,000 characters

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

O 2.3

Title of the output

28 / 100 characters

Description of the output

The result of this GoA is the main output of the project. The Industrial Symbiosis IT tool will contain the final, adjusted version of the software developed in WP1.4, improved following the evaluation activities. The output will be provided as a software source code in an open-source code repository. It will also be accompanied by comprehensive documentation, consisting of design specifications (architectural models, detailed subsystem models) and user guides. When providing the tool and its documentation, we will assure its accessibility to different groups of users in all the countries of the Baltic Sea Region. Through this, the tool will significantly assist various decision-makers in fostering Industrial Symbiosis in the Baltic Sea Region and companies to evaluate their potential to participate in IS cases.

827 / 3,000 characters

Target groups and uptake of the solution presented in this output

Target groups	How will this target group apply the output in its daily work?
<p>Target group 1</p> <p>Local public authority</p> <p>The local public authorities have an important role to play within their territory. Public policies contributes to financing of business support and the authorities are also partners in a multi-level governance when formulating policies. The public authorities to also create large flows of residuals and wastes. This typically in health and education sectors but also in other field. Typically for smaller cities the public authorities are among the larger employers</p>	<p>The local public authorities will use the ready-made tool as a base for political decisions and actions in the field of IS.</p> <p style="text-align: right;">123 / 1,000 characters</p>
<p>Target group 2</p> <p>Business support organisation</p> <p>The business support organisations are implementing public policies. The support organisations may communicate any concern of their main focus group but they may also support the SMEs in new fields.</p>	<p>The primary use is by the business support organisations that will use the IS tool when supporting the SMEs in decisions in engaging in IS.</p> <p style="text-align: right;">139 / 1,000 characters</p>
<p>Target group 3</p> <p>Large enterprise</p> <p>Large enterprises have an international geographical coverage. The group are usually vertically well integrated and have an access to resources and a knowledge base in the field. The residual flows of these companies may be turned into a regional incomes and contribute to a vertical integration of the companies.</p>	<p>Large enterprises will use this tool to identify the company's potential in IS and available partners for IS approach cooperation cases. They will use the help of business support organisations to develop IS cooperation cases based on the IS tool findings.</p> <p style="text-align: right;">257 / 1,000 characters</p>
<p>Target group 4</p> <p>Small and medium enterprise</p> <p>The SMEs are the core focus of the project. Opposite to large companies SMEs do not generally have large resources but possess a flexibility to engage in new activities in the locally. We also expect the SMEs to have a larger degree of entrepreneurship. The tool that will be developed in the project will function as a trigger as it helps to visualize the field.</p>	<p>Small and medium enterprises will use this tool to identify the potential of the company in IS and available partners for IS approach cooperation cases. They will use the help of business support organizations to develop IS cooperation cases based on the IS tool findings.</p> <p style="text-align: right;">273 / 1,000 characters</p>

Durability of the output

The durability of this output will be assured by implementing the Durability Plan developed in WP3.3. In regard to the tool itself, we will provide all the components of O2.3 (code, executables, documentation) through an open-source repository. The repository will be accessible to everyone interested. Its maintenance using public repository systems will not need additional financing. The lead partner will be responsible for further maintenance of this output.

464 / 1,000 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

WP.2: WP2 Piloting and evaluating solutions

A.2.3: Adjustment to the Industrial Symbiosis tool and methodology
 O.2.3: Industrial Symbiosis IT Tool



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

Work package leader 2

5.4 Work package budget

Work package budget

5.5 Target groups

	Target group	How do you plan to reach out to and engage the target group?
1	<p>Large enterprise</p> <p>Large enterprises have an international geographical coverage. The group are usually vertically well integrated and have an access to resources and a knowledge base in the field. The residual flows of these companies may be turned into a regional incomes and contribute to a vertical integration of the companies.</p> <p>316 / 500 characters</p>	<p>The large enterprises will be part of the uptake of the project results. The information of the final tool will be communicated to the target group as it is being assumed that they the information provided in the tool may form a part of their business considerations. Companies will have possibility to evaluate their potential in IS field using IS tool.</p> <p>355 / 1,000 characters</p>
2	<p>Small and medium enterprise</p> <p>The SMEs are the core focus of the project. Opposite to large companies SMEs do not generally have large resources but possess a flexibility to engage in new activities in the locally. We also expect the SMEs to have a larger degree of entrepreneurship. The tool that will be developed in the project will function as a trigger as it helps to visualize the field.</p> <p>364 / 500 characters</p>	<p>Like in the case of large companies' small companies will we part of the uptake of the project. We expect that the information provided by the tool will reveal business opportunities that would trigger decisions among SMEs, companies will have possibility to evaluate their potential in IS field.</p> <p>297 / 1,000 characters</p>
3	<p>Local public authority</p> <p>The local public authorities have an important role to play within their territory. Public policies contributes to financing of business support and the authorities are also partners in a multi-level governance when formulating policies. The public authorities to also create large flows of residuals and wastes. This typically in health and education sectors but also in other field. Typically for smaller cities the public authorities are among the larger employers</p> <p>467 / 500 characters</p>	<p>The local public authorities will be among the target group for the training in the use of the IT-tool and using the tool decision making recommendations. The will also be a part of the project communication structure contributing to the project durability</p> <p>256 / 1,000 characters</p>
4	<p>Business support organisation</p> <p>The business support organisations are implementing public policies. The support organisations may communicate any concern of their main focus group but they may also support the SMEs in new fields.</p> <p>198 / 500 characters</p>	<p>The business support organisation will be among the target group for the training in the use of the IT-tool. The will also be a part of the project communication structure contributing to the project durability. Business support organizations will consult further on the cases suggested by the IS-tool.</p> <p>303 / 1,000 characters</p>
5	<p>International governmental organisation</p> <p>In the European policies the EU makro regions have an increasing role. The EU strategy for the Baltic Sea Region and the Baltic Sea Macro Region an important and increasing role for policy implementation. The countries around the Baltic Sea sea basin from the macro region. The origin or the EUBSR-strategy in the common concern of pollution of the Baltic Sea. Under the umbrella of the EUBSR there are a network of international organisations working in the field looking for IS solutions.</p> <p>494 / 500 characters</p>	<p>They will be a part of the target group for the project communication. The results will be brought to the attention of the EUBSR dialogue with the purpose of contributing to the project durability-</p> <p>197 / 1,000 characters</p>

5.6 Activities, deliverables, outputs and timeline

No.	Name
3.1	Training in support of transferring the IS-tool
3.2	Dissemination of the IS-tool
3.3	Durability plan development

WP 3 Group of activities 3.1

5.6.1 Group of activities leader

Group of activities leader

A 3.1

5.6.2 Title of the group of activities

47 / 100 characters

5.6.3 Description of the group of activities

The training forms part of project transferring solution. The main target groups for the training are the local governments and business development agencies. The training will be based on the project findings.

The first module of the training will be to understand the the data capture and modelling of the nature of the data provided i.e. strengths and weaknesses of the underlying model. The training on the module will also include central statistical classifications used when building the estimation. The second module of the training will be on the analyse made in relation to the flows experiences when making the analysis and on the findings of this analysis. The third module of the training will include using the IT-tool in a multi-user environment, entering of background variable and the process of intermittent updating of the underlying estimation. Finally, the fourth training model will be on the project assumption that is how the tool will function as a trigger of decision on Industrial Symbiosis (IS). This module also include a recapitulation of the IS concept in the context of the European Green Deal. The training and the preparation of the training material will also draw on the piloting of the tool with the purpose of identifying difficulties in the use of the IS-tool. The training will be carried out in all of the participating regions. For the training the partners will requite the stakeholders that will consist in municipal and business agency potential of the tool. During the training a compendium of the modules will be gathered with the purpose to contribute to the sustainability for the IS-tool.

The project will arrange 2 workshops for local public authorities and 2 workshops for companies in every region. We estimate that 10 public organisation partners and 30 company representatives would participate in every region. In this way we are expecting to reach 60 public organisations and 150 companies with and increased capacity in using the IS-tool and in understanding the potential of IS.

Training will enable transfer of solution to local public authorities in BSR , gained knowledge will increase capacity to use the IS tool and obtain the results for decision making. Training for companies will enable them to use the IS tool to evaluate IS potential in the company and identify potential IS cooperation cases. The cases of IS cooperation identified by IS tool will be followed by business consultants to foster the cooperation between companies increasing the benefit of the IS tool. All this process will be facilitated by project partners to help regions and companies to obtain needed results smoothly, data and business consulting will be provided as well as technical assistance if needed. Scaling up problems which might occur will be solved in this WP.

2,830 / 3,000 characters

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

D 3.1

Title of the deliverable

Training for transferring the IS Tool to business and local public authorities

78 / 100 characters

Description of the deliverable

The deliverable will describe the process when transferring the solutions i.e., reflecting on the experiences when the IS-tool is being transferred to business and local authorities. The transfer to the stakeholders materializes through the training to use the IS Tool provided and through an enhanced understanding of the IS-tool provided results. To document the process and to provide guidance for future needs a training manual is also provided as a part of the deliverable.

The manual will consist of list of the training sessions provided, forming the base for an introduction of the tool in a city/region that would be interested in pursuing the IS through the tool. The manual will encompass the learning of the project. It will present the underlying estimation of the project and the usability of the tool. This is needed for the understanding of the nature of the data, vital for understanding how the results should be interpreted. In a similar manner the manual will also present the experiences in detecting market and non-market hurdles. Manual also will provide technical assistance in following the process of using the IS tool.

The focus for the manual will still be on presenting the technical IT solution and learning to apply the IS Tool for fostering IS decision making in local public authorities and IS cooperation cases in companies. The manual will be for learning to use the tool and understand the results obtained by IS evaluation at any region by local public authorities and companies. Planned training manual parts: 1) entering the data; 2) interpretation of data visualizations; 3) analysis of obtained results; 4) the use of recommendations for IS policy (for local public authorities) or IS cooperation cases (for companies);

1,770 / 2,000 characters

Which output does this deliverable contribute to?

The deliverable will contribute to the output WP3.3 Durability plan for the IS-tool

83 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

WP.3: WP3 Transferring solutions

A.3.1: Training in support of transferring the IS-tool						
D.3.1: Training for transferring the IS Tool to business and local public authorities						

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 1 - Lithuanian Innovation Centre

A 3.2

5.6.2 Title of the group of activities

Dissemination of the IS-tool

28 / 100 characters

5.6.3 Description of the group of activities

In the WP3.1 the tool is used for training business and local government stakeholders. In this WP.3.2 a wider dissemination of the project is conducted to promote a Baltic Sea wide uptake of the project findings. The purpose is to communicate the project's goal to foster IS through the creation of a tool. The message in this dissemination is that a tool will be created and that a set of stakeholders have been piloting the tool and have also been trained in using the IS-tool. However, for the durability and the wider up-take of the results a communication is made towards the actors in the fringe of the work. This will also contribute to the durability of the tool as we see that the IS-tool will be spread and used by different stakeholders and will continue to provoke and interest and further developed as new technological solutions and better data emerge. When the use of the IS-tool is spread from the initial partners to new actors it creates a wider leverage for the results.

For this we need to consider the target group for this communication in the BSR-area. There are currently around 80 different international organisations cooperating in the EU Baltic Sea Region macro-strategy. The driver and the glue in this cooperation is in the common concern of the environmental stage of the Baltic Sea. It is also one of the pillars of the strategy "Save the Sea". A major concern in this respect is the flow of nutrients and other industrial wastes that in one way or another ends up in the sea, threatening to break its ecosystem. Throughout the span of the project will strive to participate in events, seminars and workshops and communicate in different articles the messages and findings of the project. There are for instance of the annual event of the EUBSR strategy but also other similar events where the project will strive to convey its message.

In addition, the project will also contribute to an increased awareness and the results will be communicated to stakeholders in the EUSBSR, being international organisation. One focus will be on the EUSBSR Priority Area (PA) Bio Economy, being coordinated by the Nordic Council of Ministers. The Nord Regio works under the auspices of the Council being a research organisation and a channel for reaching not only a larger but also a relevant audience.

This SIMBA project solutions addresses this question of industrial wastes that ends up one or another way in the Baltic Sea. There is not one solution to the issue on nutrients, but they need to be solved one by one in the regions. By addressing local economies and looking for IS-solutions it provides a way to diminish the waste flows into the seas. In this respect the EUSBSR provided a wider leverage and durability for the results of the project. This as the IS-tool helps in turning wastes into raw material for local production providing a viable solution to diminish the waste flows.

2,918 / 3,000 characters

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



D 3.2

Title of the deliverable

Communication report for the IS-tool towards larger stakeholder groups.

71 / 100 characters

Description of the deliverable

The communication report for the IS-tool will report on the communication of the tool, essentially reiterating the experience gained in the training conducted to business and local government stakeholders. but also communicate the wider significance of the IS-tool. The communication message will reiterate that it has been transferred to several core stakeholders and that the IS-tool also have a role among a wider group of stakeholders. Part of the message is also to communicate that the tool is a feasible solution when addressing issues on industrial waste residuals. The deliverable will report on the activities carried out in relation to different stakeholders, the message conveyed and elaborate on the reception received. The purpose of the deliverable is that it will support the durability of the IS-tool by reporting on its outreach to wider stakeholder groups to ease further outreach. This is as circularity stands in a central position for reaching the "fit-for-55" goals.

989 / 2,000 characters

Which output does this deliverable contribute to?

The deliverable will play into the the output 3.3. the Durability Planning of the IS-tool

90 / 100 characters

5.6.6 Timeline

	Period:	1	2	3	4	5	6
WP.3: WP3 Transferring solutions							
A.3.2: Dissemination of the IS-tool							
D.3.2: Communication report for the IS-tool towards larger stakeholder groups.							

5.6.7 This deliverable/output contains productive or infrastructure investment



WP 3 Group of activities 3.3

5.6.1 Group of activities leader

Group of activities leader

A 3.3

5.6.2 Title of the group of activities

27 / 100 characters

5.6.3 Description of the group of activities

Planning for the durability of the project will run through all the project plans, and the durability of the project encompasses the final IS tool and the process that led to the tool. The durability plan consists of the following steps.

1. Integration of the tool into academic teaching and research
2. Intermittent updating of the IS tool after stakeholder consultations on its usability
3. Systematization of the training modules used when teaching the use of the IS-tool
4. Marketing of the existence and use of the tool, particularly to International governmental organisations
5. Summing up the project with a final conference

On the WP1.1. "Creation of Industrial Symbiosis potential evaluation methodology" and WP1.2 "Creation of Industrial Symbiosis Market and Non-Market Hurdles Detection Method" the results will be integrated into the teaching of the Vaasa University. We count on being able to draw on the analysis made within the project in education modules in "Environmental Economics" and Environmental and Energy Law" being taught at the University. The Vaasa Energy Cluster is the largest in the Nordic Countries, and the companies within the cluster specialise in decentralised RES-energy solutions. Linked to the University, the Vaasa Energy Business Innovation Center (VEBIC) is working in close cooperation with the industry; see <https://www.uwasa.fi/en/research/research-platforms/vebic>.

After being tested by the project partners, the final IS tool will form a part of their consultations with SMEs and will provide a picture that will trigger IS business decisions. This will also enable the organisations to gain experience in using the IS tool and find new features that may be added to the IS tool. This may be used in the updating of the estimations. The analysis establishes technological coefficients between the sectors of the economy. With technological development, these coefficients will alter, and the coefficients will be modified. There is no absolute rule for when this should be made as it depends on the sector development, but a rule of the thumb is every fifth year, and the underlying IS tool estimation will be scrutinized.

The dissemination also forms part of the durability strategy, particularly the dissemination directed towards the EUBSR strategy. If the IS tool becomes known to the transnational community, it will have continuous demand among the actors in the BSR. The existence of the IT tool in combination with the training modules will be able to respond to this demand, which will keep the stakeholder aware of the tool. Finally, a final conference will be arranged to sum up the project and provide the conference proceedings for the continued development of the tool.

2,741 / 3,000 characters

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

O 3.3

Title of the output

31 / 100 characters

Description of the output

The durability plan will sum the project findings and report on topics of:

1. Integration of the tool into academic teaching and research;
2. Intermittent updating of the IS-tool after stakeholder's consultations on its usability
3. Systematization of the training modules used when teaching the use of the IS-tool;
4. Marketing of the existence and use of the tool particularly to International governmental organizations
5. Summing up the project with a final conference

476 / 3,000 characters

Target groups and uptake of the solution presented in this output

Target groups	How will this target group apply the output in its daily work?
<p>Target group 1</p> <p>Local public authority</p> <p>The local public authorities have an important role to play within their territory. Public policies contributes to financing of business support and the authorities are also partners in a multi-level governance when formulating policies. The public authorities to also create large flows of residuals and wastes. This typically in health and education sectors but also in other field. Typically for smaller cities the public authorities are among the larger employers</p>	<p>Local public authorities y will continue to work in the field and the IS-tool will serve as a guide and benchmark for the work. The tool can be used repeatedly in some years to see the change.</p> <p style="text-align: right;">194 / 1,000 characters</p>
<p>Target group 2</p> <p>Business support organisation</p> <p>The business support organisations are implementing public policies. The support organisations may communicate any concern of their main focus group but they may also support the SMEs in new fields.</p>	<p>Business support organizations will continue to work in the field and the IS-tool will serve as a guide for the consultations with companies entering the field of symbiosis</p> <p style="text-align: right;">172 / 1,000 characters</p>
<p>Target group 3</p> <p>International governmental organisation</p> <p>In the European policies the EU makro regions have an increasing role. The EU strategy for the Baltic Sea Region and the Baltic Sea Macro Region an important and increasing role for policy implementation. The countries around the Baltic Sea sea basin from the macro region. The origin or the EUBSR-strategy in the common concern of pollution of the Baltic Sea. Under the umbrella of the EUBSR there are a network of international organisations working in the field looking for IS solutions.</p>	<p>International governmental organizations will keep the IS-tool on the EUBSR strategic agenda particularly under PA</p> <p style="text-align: right;">114 / 1,000 characters</p>
<p>Target group 4</p> <p>Large enterprise</p> <p>Large enterprises have an international geographical coverage. The group are usually vertically well integrated and have an access to resources and a knowledge base in the field. The residual flows of these companies may be turned into a regional incomes and contribute to a vertical integration of the companies.</p>	<p>Durability plan will provide the clear guidelines for large enterprises how long and in what capacity the results of the project can be used in day to day activities while solving IS challenges in company level or cluster level.</p> <p style="text-align: right;">232 / 1,000 characters</p>

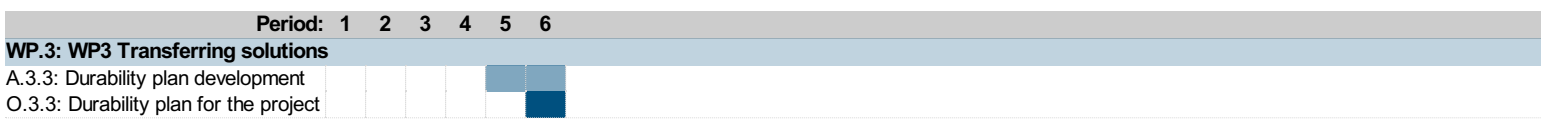
Target groups	How will this target group apply the output in its daily work?
<p>Target group 5</p> <p>Small and medium enterprise</p> <p>The SMEs are the core focus of the project. Opposite to large companies SMEs do not generally have large resources but possess a flexibility to engage in new activities in the locally. We also expect the SMEs to have a larger degree of entrepreneurship. The tool that will be developed in the project will function as a trigger as it helps to visualize the field.</p>	<p>Durability plan will provide the clear guidelines for SMEs how long and in what capacity the results of the project can be used in day to day activities while solving IS challenges in company level or cluster level.</p> <p style="text-align: right;"><small>217 / 1,000 characters</small></p>

Durability of the output

The PP1 Lithuanian Innovation Center will take responsibility for the following durability planning of the output. This implies intermittent follow-up of the partners using the IS tool in their daily work. The teaching based on the tool is assumed to be carried out mainly by PP3 as it will be part of the teaching conducted by the Vaasa Uni and VEBIC. Also, participation in the annual conference of the EUBSR will be a part of ensuring the durability of the IS tool

471 / 1,000 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	2	N/A	N/A	RCR 104 - Solutions taken up or up-scaled by organisations	2	<p>The universities in the consortium are leading the work on methodology creation and this work will be integrated in the line-activity both within teaching and research. For instance, the field of "environmental law an economics" being a subject at the Vaasa University may directly draw on the results of the project.</p> <p>The IS-tool will also provide new information to the SME business support structures on the territorial potential of IS in their region. This constitutes an up-scale as it adds to their activities and may be up-scaled by other similar organizations as more experiences are gained.</p> <p>The mechanism for the upscale of the project lies in the delivering the tool and market the potential and the experiences received on triggering investment decisions whenever using the IS-tool.</p>
RCO 116 – Jointly developed solutions	2	<p>O.2.3: Industrial Symbiosis IT Tool</p> <p>O.3.3: Durability plan for the project</p>	<p>The project will develop a new solution as it will establish based on data the relations between industrial waste flows and production on the local level. The tool for Industrial Symbiosis will be available in an IT-format. This implies that it may be given to and used by business support structures in consultations with SMEs to "trigger" investments decisions on IS.</p> <p>369 / 1,000 characters</p> <p>The project has provided a durability plan for the IS-solution. The essence of the plan is the a) integration of the IS-tool into the line-activity of the partners b) intermittent up-dating of the solutions adopted; c) teaching materials for the transfer of the IS-solution to new users; d) network marketing of the IS-tool and communication with and to selected stakeholders.</p> <p>377 / 1,000 characters</p>			795 / 2,000 characters

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	15	PSR 1 - Organisations with increased institutional capacity due to their participation in cooperation activities across borders		<p>All the 9 project partners will participate in the development of the IS-tool. The tool will be tested in 3 regions and in addition to the testing partners the testing will involve the central 4H partners adding 9 organisation that will be in the orbit of the project activities. Associated partners (6) will participate in testing phase as well. Participation in the development work and in the testing of the IS-tool is a learning experience for the involved persons that will convert into an increased organisational capacity of the involved organisations.</p> <p style="text-align: right;">564 / 1,500 characters</p>
			225	<p>The increased capacity making-up the estimated number that the partnership will engage with the IS-tool constructed by the project is represented by the number indicated. This is constructed by the business; business affiliates and public organisation being trained and thus receiving and increased capacity through the project. We estimate that the figure will be made up by 60 local public authorities and 150 companies in addition to the 9-project partner and 6 associated partner organizations.</p> <p>In addition, in a wider sense the project will also contribute to an increased awareness as the results will be communicated to stakeholders in the EUSBSR being international organisation. There are currently around 80 different international organisations cooperating in the EU Baltic Sea Region macro-strategy. The driver and the glue in this cooperation is in the common concern of the environmental stage of the sea. It is also one of the pillars of the strategy "Save the Sea". A major concern in this respect is the flow of nutrients to the sea threatening to break the ecosystem.</p> <p>This SIMBA project solutions addresses this question. By addressing local economies and looking for IS-solutions it provides a way to diminish the waste flows into the seas. There is not one solution to the issue on nutrients, but they need to be solved one by one in the regions. In this respect the EUSBSR provided an upscale for the results of the project.</p> <p style="text-align: right;">1,453 / 1,500 characters</p>

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	Lithuanian Innovation Centre	Active 22/09/2022	24,000.00	293,920.00	44,088.00
2 - PP	The Municipality of Korsholm	Active 22/09/2022	0.00	213,120.00	31,968.00
3 - PP	The University of Vaasa	Active 22/09/2022	0.00	282,240.00	42,336.00
4 - PP	Panevėžys city municipality	Active 22/09/2022	0.00	76,923.00	11,538.45
5 - PP	Vidzeme Planning Region	Active 22/09/2022	0.00	157,440.00	23,616.00
6 - PP	Estonian Chamber of Commerce and Industry	Active 22/09/2022	0.00	183,280.00	27,492.00
7 - PP	Wroclaw Technology Park	Active 22/09/2022	0.00	160,754.00	24,113.10
8 - PP	Municipality of Wroclaw	Active 22/09/2022	0.00	118,800.00	17,820.00
9 - PP	Warsaw University of Technology	Active 22/09/2022	0.00	292,160.00	43,824.00
Total			24,000.00	1,778,637.00	266,795.55

No. & role	Partner name	CAT3 - Travel & accommodation	CAT4 - External expertise & services	CAT5 - Equipment	Total partner budget
1 - LP	Lithuanian Innovation Centre	44,088.00	46,500.00	1,500.00	454,096.00
2 - PP	The Municipality of Korsholm	31,968.00	16,000.00	1,500.00	294,556.00
3 - PP	The University of Vaasa	42,336.00	8,340.00	0.00	375,252.00
4 - PP	Panevėžys city municipality	11,538.45	0.00	0.00	99,999.90
5 - PP	Vidzeme Planning Region	23,616.00	20,500.00	1,500.00	226,672.00
6 - PP	Estonian Chamber of Commerce and Industry	27,492.00	25,500.00	1,500.00	265,264.00
7 - PP	Wroclaw Technology Park	24,113.10	10,000.00	1,500.00	220,480.20
8 - PP	Municipality of Wroclaw	17,820.00	24,500.00	1,500.00	180,440.00
9 - PP	Warsaw University of Technology	43,824.00	7,000.00	10,000.00	396,808.00
Total		266,795.55	158,340.00	19,000.00	2,513,568.10

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. Lithuanian Innov	Events/meetings	CAT4-PP1-A-0	Organisation of 5 workshops, partner meeting/workshop and final project event <small>77 / 100 characters</small>	No	1.2 3.1	37,500.00
1. Lithuanian Innov	Other	CAT4-PP1-G-0	Statistics data for Lithuania <small>29 / 100 characters</small>	No	1.1 1.3 1.4	8,000.00
1. Lithuanian Innov	National control	CAT4-PP1-F-0	FLC costs <small>10 / 100 characters</small>	No	1.1 1.2 1.3 1.4 2.1 2.2 2.3 3.1 3.3	1,000.00
2. The Municipality	Events/meetings	CAT4-PP2-A-0	Organisation of 5 workshops and partner meeting/workshop <small>56 / 100 characters</small>	No	1.1 1.2 3.1	16,000.00
3. The University of	Other	CAT4-PP3-G-0	Statistics data for Finland <small>28 / 100 characters</small>	No	1.1 1.3 1.4	8,340.00
5. Vidzeme Plannin	Events/meetings	CAT4-PP5-A-0	Organisation of 5 workshops and partner meeting/workshop <small>56 / 100 characters</small>	No	1.2 2.2 2.3 3.1	12,500.00
5. Vidzeme Plannin	Other	CAT4-PP5-G-0	Statistics data for Latvia <small>26 / 100 characters</small>	No	1.1 1.3 1.4	8,000.00
7. Wroclaw Technol	Events/meetings	CAT4-PP7-A-0	Organisation of 5 workshops <small>27 / 100 characters</small>	No	3.1	4,000.00
7. Wroclaw Technol	Specialist support	CAT4-PP7-E-0	external expert costs for pilot methodology and recommendations <small>63 / 100 characters</small>	No	2.1 2.2	6,000.00
Total						158,340.00

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
8. Municipality of W	Events/meetings	CAT4-PP8-A-1	Organisation of 1 workshop and partner meeting/workshop <small>55 / 100 characters</small>	No	1.2 2.1 2.2	7,500.00
8. Municipality of W	Specialist support	CAT4-PP8-E-1	expert in data - proprietary rights, data security, the use of artificial intelligence etc. <small>93 / 100 characters</small>	No	1.1 1.2	6,000.00
8. Municipality of W	Communication	CAT4-PP8-C-1	translation into Polish of the solutions developed in the project <small>66 / 100 characters</small>	No	2.1 3.3	3,000.00
8. Municipality of W	Other	CAT4-PP8-G-1	Statistics data for Poland <small>26 / 100 characters</small>	No	1.1 1.3 1.4	8,000.00
9. Warsaw Universi	Communication	CAT4-PP9-C-1	technical communication fees <small>28 / 100 characters</small>	No	3.2	2,000.00
9. Warsaw Universi	Events/meetings	CAT4-PP9-A-1	Organization of partner meeting/workshop <small>40 / 100 characters</small>	No	1.3 1.4	5,000.00
6. Estonian Chamb	Events/meetings	CAT4-PP6-A-1	Organisation of 5 workshops and partner meeting/workshop <small>56 / 100 characters</small>	No	1.2 2.2 2.3 3.1	17,500.00
6. Estonian Chamb	Other	CAT4-PP6-G-1	Statistics data for Estonia <small>27 / 100 characters</small>	No	1.1 1.3 1.4	8,000.00
	Total					158,340.00

7.1.2 Equipment

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
	Total					19,000.00

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
1. Lithuanian Innov	IT hardware and soft	CAT5-PP1-B-0	Computer workstation <small>21 / 100 characters</small>	No	1.1 1.2 1.3 1.4 2.1 2.2 2.3 3.1 3.2 3.3	1,500.00
2. The Municipality	IT hardware and soft	CAT5-PP2-B-0	Computer workstation <small>21 / 100 characters</small>	No	1.1 1.2 1.3 1.4 2.1 2.2 2.3 3.1 3.2 3.3	1,500.00
5. Vidzeme Plannin	IT hardware and soft	CAT5-PP5-B-0	Computer workstation <small>21 / 100 characters</small>	No	1.1 1.2 1.3 1.4 2.1 2.2 2.3 3.1 3.2 3.3	1,500.00
6. Estonian Chamb	IT hardware and soft	CAT5-PP6-B-0	Computer workstation <small>21 / 100 characters</small>	No	1.1 1.2 1.3 1.4 2.1 2.2 2.3 3.1 3.2 3.3	1,500.00
7. Wroclaw Technol	IT hardware and soft	CAT5-PP7-B-0	Computer workstation <small>21 / 100 characters</small>	No	1.1 1.2 1.3 1.4 2.1 2.2 2.3 3.1 3.2 3.3	1,500.00
Total						19,000.00

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
8. Municipality of W	IT hardware and soft	CAT5-PP8-B-0	Computer workstation <small>21 / 100 characters</small>	No	1.1 1.2 1.3 1.4 2.1 2.2 2.3 3.1 3.2 3.3	1,500.00
9. Warsaw Universi	IT hardware and soft	CAT5-PP9-B-0	IT equipment for software development and software licenses <small>60 / 100 characters</small>	No	1.3 1.4 2.3 3.3	10,000.00
Total						19,000.00

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	 <small>0 / 100 characters</small>	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	Lithuanian Innovation Centre	Active 22/09/2022	LT	ERDF	80.00 %	454,096.00	363,276.80	90,819.20	For each partner, the State aid relevance and applied aid measure are defined in the State aid section
2-PP	The Municipality of Korsholm	Active 22/09/2022	FI	ERDF	80.00 %	294,556.00	235,644.80	58,911.20	
3-PP	The University of Vaasa	Active 22/09/2022	FI	ERDF	80.00 %	375,252.00	300,201.60	75,050.40	
4-PP	Panevėžys city municipality	Active 22/09/2022	LT	ERDF	80.00 %	99,999.90	79,999.92	19,999.98	
5-PP	Vidzeme Planning Region	Active 22/09/2022	LV	ERDF	80.00 %	226,672.00	181,337.60	45,334.40	
6-PP	Estonian Chamber of Commerce and Industry	Active 22/09/2022	EE	ERDF	80.00 %	265,264.00	212,211.20	53,052.80	
7-PP	Wroclaw Technology Park	Active 22/09/2022	PL	ERDF	80.00 %	220,480.20	176,384.16	44,096.04	
8-PP	Municipality of Wroclaw	Active 22/09/2022	PL	ERDF	80.00 %	180,440.00	144,352.00	36,088.00	
9-PP	Warsaw University of Technology	Active 22/09/2022	PL	ERDF	80.00 %	396,808.00	317,446.40	79,361.60	
Total ERDF						2,513,568.10	2,010,854.48	502,713.62	
Total						2,513,568.10	2,010,854.48	502,713.62	

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	347,568.10	278,054.48	347,568.10	278,054.48
Period 2	452,000.00	361,600.00	452,000.00	361,600.00
Period 3	430,000.00	344,000.00	430,000.00	344,000.00
Period 4	410,000.00	328,000.00	410,000.00	328,000.00
Period 5	450,000.00	360,000.00	450,000.00	360,000.00
Period 6	400,000.00	320,000.00	400,000.00	320,000.00
Total	2,513,568.10	2,010,854.48	2,513,568.10	2,010,854.48