

1. Identification

Call

C1

Date of submission

26/04/2022

1.1. Full name of the project

Better paper packaging management

33 / 250 characters

1.2. Short name of the project

BePacMan

8 / 20 characters

1.3. Programme priority

3. Climate-neutral societies

1.4. Programme objective

3.1 Circular economy

1.6. Project duration

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

1.7. Project summary

The paper packaging materials are omnipresent and the problem became more emerging during the COVID-19 pandemic as it facilitated the consumers behavior and caused an increase in online, ecommerce and social media market. The average consumer collects several boxes per week which end up in the waste management facility. Imperfection and leakages in the segregation and collection systems result in only partial recovery of paper packaging and contamination of the portion that ends up in the paper recycling facilities resulting in higher cost and environmental impact of the recycling process. Instead of recycling, recovery and regeneration, the share of the reuse could be increased to reduce the environmental footprint of the life cycle. The solutions developed within the project will enable the improvement of waste management system for authorities and contribute to transformation of business models in logistic, parcel and ecommerce businesses. Those stakeholders make a significant contribution to the life cycle of packaging and should be responsible and obliged to mitigate the footprint. Many of the companies operate in different countries, with different frameworks, cultures and consumer awareness. The goal is to help them adopt and to point out effective solutions, together with increasing social awareness, providing new solutions for household waste management and opportunities for additional savings on packaging for people, small sales companies and local stores.

1,490 / 1,500 characters

1.8. Summary of the partnership

The partnership is based on 3 countries between which the transport of materials is performed mainly using land. The focus is put on that area in order to provide strong, comparable data of environmental footprint at the all stages of the life cycle of paper packaging materials. The partnership has been composed in order to provide all the knowledge, experience and resources needed for project implementation and development of the valuable outputs. The partnership is composed of:

- 1) Gdańsk University of Technology (GUT) - leader partner responsible for the project management. GUT is highly experienced in project implementation and international cooperation with strong practical focus. It provides extensive knowledge needed for the development of the solutions and transferring of solutions. It has highly development network of cooperating parties and is able to ensure efficient transfer of solutions not only to the stakeholders and market but also to the society with a strong focus on the early stages of education.
- 2) Lithuanian Innovation Centre (LIC) - partner responsible for the development of solutions and strongly involved in transferring of solutions. LIC has a wide knowledge on the market and business models, LIC cooperates with about 280 international partners and provides innovations for companies in regard to the solutions, capacity building, technologies and many more.
- 3) EnviMV - is a scientific and commercial company in the field of waste management, energy and environmental technology. The company has its field of activity in the field of environmentally friendly recycling and settlement material flows.

1,653 / 3,000 characters

1.11. Project Budget Summary

| Financial resources [in EUR] | | Preparation costs | Planned project budget |
|------------------------------|-------------------------------------|-------------------|------------------------|
| ERDF | ERDF co-financing | 0.00 | 1,054,698.08 |
| | Own contribution ERDF | 0.00 | 263,674.52 |
| | ERDF budget | 0.00 | 1,318,372.60 |
| NO | NO co-financing | 0.00 | 0.00 |
| | Own contribution NO | 0.00 | 0.00 |
| | NO budget | 0.00 | 0.00 |
| NDICI | NDICI co-financing | 0.00 | 0.00 |
| | Own contribution NDICI | 0.00 | 0.00 |
| | NDICI budget | 0.00 | 0.00 |
| RU | RU co-financing | 0.00 | 0.00 |
| | Own contribution RU | 0.00 | 0.00 |
| | RU budget | 0.00 | 0.00 |
| TOTAL | Total Programme co-financing | 0.00 | 1,054,698.08 |
| | Total own contribution | 0.00 | 263,674.52 |
| | Total budget | 0.00 | 1,318,372.60 |

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 | Gdańsk University of Technology | Politechnika Gdańska | PL | Higher education and research institution | a) | 479,697.00 € | Active | 22/09/2022 |
| 2 | PP | Lithuanian Innovation Centre | Lietuvos inovacijų centras | LT | Business support organisation | a) | 345,441.60 € | Active | 22/09/2022 |
| 3 | PP | enviMV e. V. Network of environmental technologies of Mecklenburg-Vorpommern, Germany | enviMV e. V. Umwelttechnologienetzwerk Mecklenburg-Vorpommern | DE | Business support organisation | b) | 493,234.00 € | Active | 22/09/2022 |

2.1.2 Associated Organisations

| No. | Organisation (English) | Organisation (Original) | Country | Type of Partner |
|------|--------------------------------|----------------------------------|---------|--------------------------------------|
| AO 1 | Center of Continuous Education | Centrum Kształcenia Ustawicznego | PL | Education/training centre and school |
| AO 2 | Gdynia City Hall | Urząd Miasta Gdyni | PL | Regional public authority |

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 | Politechnika Gdańska | 20 / 250 characters |
| Organisation in English | Gdańsk University of Technology | 31 / 250 characters |
| Department in original language | Katedra Inżynierii Procesowej i Technologii Chemicznej, Wydział Chemiczny | 73 / 250 characters |
| Department in English | Department of Process Engineering and Chemical Technology, Faculty of Chemistry | 79 / 250 characters |

Partner location and website:

| | | | | |
|--------------------|-------------------|---------------------|-------------------|----------------------|
| Address | Narutowicza 11/12 | 17 / 250 characters | Country | Poland |
| Postal Code | 80-233 | 6 / 250 characters | NUTS1 code | Makroregion północny |
| Town | Gdańsk | 6 / 250 characters | NUTS2 code | Pomorskie |
| Website | www.pg.edu.pl | 13 / 100 characters | NUTS3 code | Gdański |

Partner ID:

| | |
|-----------------------------|--|
| Organisation ID type | Tax identification number (NIP) |
| Organisation ID | 5840203593 |
| VAT Number Format | PL + 10 digits |
| VAT Number | <input type="checkbox"/> N/A <input type="checkbox"/> PL5840203593 12 / 50 characters |
| PIC | n/a 3 / 9 characters |

Partner type:

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

Partner financial data:

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

Role of the partner organisation in this project:

Gdańsk University of Technology (GUT) has extensive experience in European Projects and is constantly involved and cooperates in actions related to protection and restoring the environment, waste management and circular economy. GUT is the leader for the project and is responsible for the management. Within the project GUT will be involved in implementation of WP1, mainly in the assessment of the environmental footprints of the paper packaging and preparation of the solutions. In WP2 GUT will take care of the management of the pilots implementation. GUT is responsible for WP3 management and impemention of several activities: organizing conferences and workshops in Poland, performing case studies for polish stakeholders and development of guidelines fot the business model transformations.

799 / 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 2

| | | | |
|-----------------------|-----------------|----------------------|--|
| LP/PP | Project 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 29 / 250 characters |
| Department in original language | Inovacijų analizės ir politikos departamentas 45 / 250 characters |

Department in English

Innovation analysis and policy department 41 / 250 characters

Partner location and website:

Address

Mokslininkų g. 6A 17 / 250 characters

Country

Lithuania

Postal Code

08412 5 / 250 characters

NUTS1 code

Lietuva

Town

Vilnius 7 / 250 characters

NUTS2 code

Sostinės regionas

Website

www.lic.lt 10 / 100 characters

NUTS3 code

Vilniaus apskritis

Partner ID:

Organisation ID type

Legal person's code (Juridinio asmens kodas)

Organisation ID

110066875

VAT Number Format

Please select

VAT Number

N/A 0 / 50 characters

PIC

n/a 3 / 9 characters

Partner type:

Legal status

a) Public

Type of partner

Business support organisation

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

Sector (NACE)

69.10 - Legal activities

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:

Lithuanian Innovation Centre (LIC) is a leader of the WP1. LIC will be strongly involved in the WP 3 due to the extensive experience in building innovation capacity and bringing innovations to public institutions, business support structures, and non-governmental organizations. They have a broad cooperation network both nationally and internationally. LIC extensive knowledge of the market will make a major contribution to the development of solutions and expert assistance to the public sector in shaping and implementing innovation policy and its instruments will contribute to recommendations and guidelines.

615 / 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 | enviMV e. V. Umwelttechnologienetzwerk Mecklenburg-Vorpommern | 61 / 250 characters |
| Organisation in English | enviMV e. V. Network of environmental technologies of Mecklenburg-Vorpommern, Germany | 85 / 250 characters |
| Department in original language | Geschäftsstelle Rostock, Mecklenburg-Vorpommern, Deutschland | 60 / 250 characters |
| Department in English | Office Rostock, Mecklenburg-Vorpommern, Germany | 47 / 250 characters |

Partner location and website:

| | | | | |
|--------------------|-----------------------------|---------------------|-------------------|---------------------------|
| Address | Petridamm 26, 18146 Rostock | 27 / 250 characters | Country | Germany |
| Postal Code | 18146 | 5 / 250 characters | NUTS1 code | Mecklenburg-Vorpommern |
| Town | Rostock | 7 / 250 characters | NUTS2 code | Mecklenburg-Vorpommern |
| Website | www.envimv.de | 13 / 100 characters | NUTS3 code | Rostock, Kreisfreie Stadt |

Partner ID:

| | | | |
|-----------------------------|---|--------------------|--|
| Organisation ID type | Company registration number (Handelsregisternummer) | | |
| Organisation ID | VR10016 | 7 / 50 characters | |
| VAT Number Format | DE + 9 digits | | |
| VAT Number | N/A <input type="checkbox"/> DE260293157 | 11 / 50 characters | |
| PIC | n/a | 3 / 9 characters | |

Partner type:

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

Partner financial data:

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

| Financial data | Reference period | 01/01/2019 | - | 31/12/2019 |
|---|------------------|------------|---|------------|
| Staff headcount [in annual work units (AWU)] | | | | 2.0 |
| Employees [in AWU] | | | | 1.0 |
| 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] | | | | 1.0 |
| Partners engaged in a regular activity in the organisation and benefiting from financial advantages from the organisation [in AWU] | | | | 0.0 |
| Annual turnover [in EUR] | | | | 107,300.00 |
| Annual balance sheet total [in EUR] | | | | 72,100.00 |
| Operating profit [in EUR] | | | | 5,000.00 |

Role of the partner organisation in this project:

enviMV e. V. is the Network of environmental technologies of Mecklenburg-Vorpommern (enviMV) and have extensive experiences in fields of circular economy as well as climate and resource protection. enviMV is responsible for the cross-partner coordination of WP2 and will provide all the knowledge, experience and resources needed for the pilot implementation, mainly in the technical analysis, networking and knowledge transfer. Within the project enviMV will organizing workshops for stakeholders in Germany, performing potential analysis and case studies for target groups and developing concepts for the business model transformations.

639 / 1,000 characters

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

Yes No

2.3 Associated Organisation Details - AO 1

Associated organisation name and type:

| | | |
|--|--|---|
| Organisation in original language | Centrum Kształcenia Ustawicznego | 32 / 250 characters |
| Organisation in English | Center of Continuous Education | 31 / 250 characters |
| Department in original language | Sopocki Ośrodek Doskonalenia Nauczycieli | 41 / 250 characters |
| Department in English | The Sopot Teacher Training Center | 33 / 250 characters |
| Legal status | a) Public | |
| Type of associated organisation | Education/training centre and school | Primary, secondary, pre-school, vocational training, etc. |

Associated organisation location and website:

| | | | | |
|--------------------|------------------|---------------------|----------------|--------|
| Address | Kościuszki 22-24 | 16 / 250 characters | Country | Poland |
| Postal Code | 81-704 | 7 / 250 characters | | |
| Town | Sopot | 5 / 250 characters | | |
| Website | https://sodn.pl/ | 16 / 100 characters | | |

Role of the associated organisation in this project:

The partner will enable contact and encouragement of teachers and school for promoting project idea in schools. In WP3 the partner will share the rooms for the events and workshops and will organize workshops for teachers to "train the trainer" and spread the knowledge to teachers and with their assistance to students.

320 / 1,000 characters

2.3 Associated Organisation Details - AO 2

Associated organisation name and type:

| | | |
|--|---|---|
| Organisation in original language | <input type="text" value="Urząd Miasta Gdyni"/> | 18 / 250 characters |
| Organisation in English | <input type="text" value="Gdynia City Hall"/> | 16 / 250 characters |
| Department in original language | <input type="text" value="Wydział Kultury Urzędu Miasta Gdyni"/> | 35 / 250 characters |
| Department in English | <input type="text" value="Department of Culture Gdynia City Hall"/> | 38 / 250 characters |
| Legal status | <input type="text" value="a) Public"/> | |
| Type of associated organisation | <input type="text" value="Regional public authority"/> | <input type="text" value="Regional council, etc."/> |

Associated organisation location and website:

| | | | | |
|--------------------|--|---------------------|----------------|-------------------------------------|
| Address | <input type="text" value="ul. Jana z Kolna 25"/> | 19 / 250 characters | Country | <input type="text" value="Poland"/> |
| Postal Code | <input type="text" value="81-354"/> | 6 / 250 characters | | |
| Town | <input type="text" value="Gdynia"/> | 6 / 250 characters | | |
| Website | <input type="text" value="https://bip.um.gdynia.pl/wydzial-kultury,106/wydzial-kultury,484709"/> | | | |
| | | 67 / 100 characters | | |

Role of the associated organisation in this project:

The partner will be involved in WP1 in a consultations at the stage of preparation of solutions and enabling contacts wil NGOs and other interested parties. In WP3 the partner will be involved in dissemination of knowledge and solutions, promotional campaigns during cultural events, organising film presentations etc. During the implementation the activities promoting the idea and the project will be undertaken.

413 / 1,000 characters

3. Relevance

3.1 Context and challenge

According to the 'Marketresearch' the Europe Corrugated Boxes market was over 49,000 million square meters in 2019. Pitney Bowes Parcel Shipping Index reported global parcels volume of 131 billion in 2020 and forecasted 200 billion in 2025, in 1028 in Europe 9.3 billion parcel shipments were generated. In regards to the Baltic Sea region the highest rate is observed in Germany, at the same time Polish CEP (Courier, Express and Parcel) market is considered to be the one of the fastest growing. The Europe Paper Packaging Market is expected to still grow due to changes in consumers behavior. This project addresses the importance of multiple use of resources and cross-sectoral and cross-border approaches to facilitate the transition to the sustainable circular economy and its impact on climate change mitigation in the Baltic Sea region. The goal is to keep the packaging in its form in use for as long as possible to extend the life cycle of the packaging materials and thus facilitate the shift from linear to circular resource use. The challenge is to develop supply chains that either are reversible or can provide a resources for the next supply chains. This could be done by direct collection of packaging by companies delivering the goods or by enabling leaving cardboard boxes directly at parcel lockers, developing neighbourhood or city hubs, innovations in on-demand packaging or returnable packaging systems. Existing procedures need to be adopted to the new approach and these solutions need optimization to be efficient and economically feasible taking into account diversity of the market conditions within the region and across the branches. The project takes advantage of the growing need of societies to exert a relevant influence on the improvement of environment and to educate children as the future consumers. People intuitively feel that it is inappropriate to throw away a good cardboard box.

1,925 / 2,000 characters

3.2 Transnational value of the project

Paper packaging come a long way until they reach they destination, from the manufacturer to the seller and then to the buyer. Due to the opening of markets, import, export, more and more often, the transport of materials takes place cross-border, which means that materials produced in one country become problematic waste in another country. Moreover, large logistics companies operate in many countries, with different legal conditions, different cultures and consumer awareness. That is why it is so important to act in the international field. The project addresses business and social awareness of the circular opportunities and tracks the journey of paper packaging materials to develop solutions that will contribute to transformation of business models from linear to circular and will help stakeholders to adopt circular approaches. Those stakeholders make a significant contribution to the life cycle of packaging and should be responsible and obliged to mitigate the footprint. Many of the companies operate in different countries, with different frameworks, cultures and consumer awareness.

1,103 / 2,000 characters

3.3 Target groups

| Target group | Sector and geographical coverage | Its role and needs |
|---|---|---|
| <div data-bbox="44 1503 97 1529" data-label="Text"> <p>NGO</p> </div> | <div data-bbox="418 1328 948 1545" data-label="Text"> <p>NGO's involved in the project implementation should be directly and indirectly engaged in policy frameworks consultations and will be cooperating with local authorities in terms of Sustainable Development. The NGO's should be active in society, promote commitment of the individuals to achieve the goals and act as hubs of expertise on numerous issues of packaging, waste management and reuse, sustainable business models. The NGOs are planned to cover the land strip from Denmark to Estonia.</p> </div> <div data-bbox="831 1576 951 1597" data-label="Text"> <p>496 / 500 characters</p> </div> | <div data-bbox="963 1167 1490 1599" data-label="Text"> <p>In order to keep the paper packaging materials in the original form on the market it is essential to reach the individuals and convince them that each action counts on the road to sustainability. In the achieving the aims, the practical contribution of civil society are is an important element of this process and essential for the functioning of resilient society and the improvement of well-being. This could be done by social campaigns and events. In the process NGOs can force the data flow from individuals to local authorities to national ministries to small, medium and large enterprises to promote responsible, affordable and inclusive services for the benefit of all, environment and climate. This could help tackle the challenge in development of the policies regulating packaging and logistic sector to ensure environmental friendliness of products and services In order to do that data from the development and implementation of solutions will be needed.</p> </div> <div data-bbox="1372 1630 1501 1648" data-label="Text"> <p>967 / 1,000 characters</p> </div> |

| Target group | Sector and geographical coverage | Its role and needs |
|---|---|---|
| <p>Education/training centre and school</p> | <p>Schools (primary and secondary) and educational facilities both for students and teachers should be involved in promoting responsible attitudes. They will be selected in each project partner country and located in a close neighbourhood of the projects partners headquarters in order to ensure efficient flow of information, possibility of physical participation in meetings and events.</p> <p style="text-align: right;">385 / 500 characters</p> | <p>Children as the future generation of consumers have a real impact on behaviors, so it is important to make them aware from an early age of the benefits of acting in the spirit of sustainable development and a closed-loop economy. Work on positive attitudes and is the most efficient at schools, where information can be woven into the core programme and related to specific disciplines, which provides an understanding of the multidisciplinary nature of the idea of sustainable development. Additionally, events involving students and practical activities effectively support the teaching process and bring amazing results. In order to be able to provide students the right information and spread the knowledge, teachers also need to be trained in this field, they must creatively and openly propose solutions to students. To do that they will have the opportunity to participate in workshops devoted to teachers.</p> <p style="text-align: right;">916 / 1,000 characters</p> |
| <p>Regional public authority</p> | <p>Regional public authorities responsible for waste management frameworks for the environment and cooperating with e-commerce market.</p> <p style="text-align: right;">131 / 500 characters</p> | <p>The stakeholders from logistic, e-commerce markets make a significant contribution to the life cycle of packaging and should be responsible and obliged to mitigate the footprint. Many of the companies operate in different countries, with different frameworks, cultures and consumer awareness. Authorities can significantly contribute to the policy frameworks and to waste management systems. Taking that into account they are essential in the process of transformation. With all the data resulting from workpackages 1 and 2 they are able to evaluate the benefits and ensure the results are used efficiently for the real change.</p> <p style="text-align: right;">626 / 1,000 characters</p> |
| <p>Large enterprise</p> | <p>Logistic enterprises taking care for the delivery of products to the individuals and SMEs both door to door and to the smart parcel boxes.</p> <p style="text-align: right;">138 / 500 characters</p> | <p>Enterprises that have a significant contribution to the life cycle of paper packaging should be involved in the process of building secondary materials market as they have all the resources needed for that, they can directly pick up carton boxes from the individuals, they can deliver them to logistics centres where the boxes can be used by other senders, customers can leave the boxes in the parcel lockers, etc. Therefore, these enterprises are essential at the stage of piloting, evaluating and testing solutions. To do that, they will be provided the results of WP1.</p> <p style="text-align: right;">572 / 1,000 characters</p> |

3.4 Project objective

Your project objective should contribute to:

Circular economy

The aim of the project is to extend the life cycle of cardboard packaging by reusing it. An enormous amount of packaging will go into the hands of people. From the point of view of the challenges posed in the project, the participation of non-governmental organizations, which are mainly civic initiatives and those that work for the good of a specific social group or for the general good, is necessary. These types of organizations are highly valued in the society as they do not operate solely for their own benefit, therefore the messages spread by them have a chance to reach a wide audience. This is crucial in showing people how they can make a real contribution to the development of the circular economy and what benefits we will all get from doing so. Moreover, spreading good attitudes, cause-and-effect learning should be implemented from an early age of every human being, hence the involvement of teachers and schools in this process is an important goal of the project. Children can teach adults like no other, therefore the learning paths are two-way and thus the knowledge effectively reaches the older generations. The aim of the solutions proposed in the project is to keep the packaging in its proper shape in circulation as long as possible. Achieving this goal is possible thanks to the involvement of companies that participate in various stages of the packaging life cycle, from production, through use, transport, collection, processing, recycling and disposal. Hence, the priority is to reach the largest group of companies and to develop solutions that will be attractive to these companies both in terms of ecology and business. Nevertheless, pressure from local and regional authorities should make entrepreneurs aware that by taking part in the life cycle of packaging, they are responsible for the impact of this life cycle on the environment.

1,872 / 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 project idea is directly linked to the Bioeconomy Policy Area. The primary idea of the project is to provide solutions, enhance and encourage sustainable consumption by providing solutions that facilitate reuse of bio-based products, by encouraging stakeholders to transform business from linear to circular by education and increasing awareness of sustainable practices that can be implemented by each of us. The project enhances inclusive growth by making people aware of the possibilities and opportunities and by sharing the sustainable attitudes and business models. The increase in reuse of paper packaging contributes to the reduction of carbon dioxide emissions in the value chain and thus results in more sustainable resource management and more resilient ecosystems.

779 / 1,500 characters

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

The project contributes also to broadly understood sustainable transport, in PA Transport of EUSBSR by facilitating an efficient transport system. Moreover it includes educational issues contributing to PA Education. The solutions developed within the project bring support for entrepreneurship and business development which will allow to build the region's competitiveness in terms of sustainable development which is the aim of PA Innovation.

443 / 1,500 characters

3.6 Other political and strategic background of the project

Strategic documents

EU Circular Economy Action Plan - the project strongly contributes to EU Circular Economy Action Plan as it accelerates transition by extending the product lifecycles through greater recycling and re-use and also brings benefits for the environment and at the same time for the economy.

285 / 500 characters

EU Waste Framework Directive, Directive 2008/98/EC - directive in which one of the core objectives is to increase re-use of waste materials like paper, plastic, glass from households. The focus of the Directive is on prevention and preparation for re-use and this is in line with the objectives of the BePacMan project.

319 / 500 characters

HELCOM Baltic Sea action plan - one of the goals is to substantially reduce waste generation by prevention or reuse, this is also the direct goal of the BePacMan project.

169 / 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 |
|---|---|---|
| <p>Baltic Industrial Symbiosis (BIS)</p> <p>33 / 200 characters</p> | <p>Interreg Baltic Sea Region, Programme 2014-2020</p> <p>47 / 200 characters</p> | <p>Outcomes used:</p> <ul style="list-style-type: none"> - Increased knowledge and capacity regarding alternative solutions for resource recovering and closing the loops, - Accelerated industrial symbiosis development in the BSR, - Better understanding of waste-to-resource capacities, - Cooperation with regions with unique experiences. <p>Particularly knowledge gained during implementation of a living lab with Paper Province - A Forest Bioeconomy Cluster in Sweden, which demonstrated the value of sustainable and circular strategy for paper and board handling. It enabled to identify gaps and challenges for better material flow, and inspired for a better management of waste cardboard in the spirit of circular economy in BePacMan project.</p> <p>Another incorporated outcome is extended cooperation with Solid Waste Management Plant from Gdansk, which in the BePacMan project, will enable valuable consultations and discussions on challenges and important issues regarding circular waste management strategy in respect to paper and cardboard.</p> <p>1,000 / 1,000 characters</p> |

| Full name of the project | Funding Source | Use of the project outcomes and/or planned cooperation |
|--|--|---|
| <p>Central Europe Repair & Re-use Centres and Networks (CERREC)</p> <p>61 / 200 characters</p> | <p>Interreg Central Europe, Programme 2007 - 2013</p> <p>47 / 200 characters</p> | <p>BePacMan integrate into challenges presented in a project CERREC. CERREC project was facing problems of insufficiently effective reuse and repair sector of waste management. Its aim was convergent with BePacMan project to bring the approach to stakeholders and general public on effective „re-use“. BePacMan project will continue efforts on sustainable handling of valuable materials, so to meet the goals of European environmental policies and regulations.</p> <p>457 / 1,000 characters</p> |
| <p>Waste Management Intelligent Systems and Policies (WINPOL)</p> <p>59 / 200 characters</p> | <p>Interreg Europe, Programme 2014-2020</p> <p>36 / 200 characters</p> | <p>BePacMan project will uptake some of the outputs from WINPOL project, particularly waste management strategies presented in a “Good practices guide” being a part of Interreg Europe Good Practices database. Similarly to WINPOL, BePacMan is also aimed at promoting the use of digital solutions for waste minimization in regions. However, the uptake of WINPOL outputs, will integrate into BePacMan activities as we gain more insight during implementation the project.</p> <p>464 / 1,000 characters</p> |
| <p>Smart Circular Procurement (CircPro)</p> <p>36 / 200 characters</p> | <p>Interreg Europe, Programme 2014-2020</p> <p>36 / 200 characters</p> | <p>BePacMan will support challenges presented in a project CircPro, which incorporates circular economy principles and criteria to policy instruments referring to circular procurement. Through meetings with local authorities the BePacMan will transfer the knowledge about the need for actions aimed at closing the loops in accordance to sustainable and green development. Since Lithuanian Innovation Centre is involved in both Smart Circular Procurement and BePacMan, the cooperation and exchange of best practices and learnings will be facilitated.</p> <p>546 / 1,000 characters</p> |
| <p>Developing Innovative, Modern and Hands-on Digital Teaching Materials with a Focus on Robotics, Cloud and IoT for VET (RIOTC4VET)</p> <p>130 / 200 characters</p> | <p>Erasmus+ Programme of the European Union</p> <p>40 / 200 characters</p> | <p>RIOTC4VET is aimed at developing new approaches and training methods for the qualifications of educators. BePacMan project also aims to improve the qualifications of teachers and provide tools to facilitate learning. In both projects, the Lithuanian Innovation Center is favorably involved, which enhance the uptake of outputs. The BePacMan project will seek cooperation in identifying and disseminating good practices regarding circularity and training techniques.</p> <p>466 / 1,000 characters</p> |

3.10 Horizontal principles

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

4. Management

Allocated budget

10%

4.1 Project management

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

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

To ensure efficient implementation of the project and appropriate participation and contribution of all partners, a management structure consisting of Lead Partner (LP), and Work Package Leaders (WPLs) will be formed. All these bodies will have their distinctive functions to contribute to the overall management and balanced decision-making. LP will be responsible for the project administration, supervision and monitoring of the progress. WPLs will report and support LP in fulfilling objectives.

499 / 500 characters

4.2 Project financial management

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

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

0 / 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.

LP will organize a project kick-off meeting and will be responsible for regular scheduling of project meetings to discuss the progress, results and to share knowledge and experiences.

In addition regular online meetings and emails will be practiced to ensure that project activities are correctly implemented and results are communicated towards the external audience. Information about the project and its progress will be disseminated on the project website, in social media and newsletter.

494 / 500 characters

4.4 Cooperation criteria

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

Cooperation criteria

Joint Development

Joint Implementation

Joint Staffing

Joint Financing

5. Work Plan

| Number | Work Package Name |
|---------------|---|
| 1 | WP1 Preparing solutions |
| Number | Group of Activity Name |
| 1.1 | Determination of the preconditions |
| 1.2 | Life cycle and environmental footprints assessment |
| 1.3 | Preparation of the digital solutions |
| 1.4 | Preparation of physical solutions |
| 2 | WP2 Piloting and evaluating solutions |
| Number | Group of Activity Name |
| 2.1 | Pilot action of the physical solutions |
| 2.2 | Pilot action on the digital solutions |
| 2.3 | Pilot action on the returnable packaging materials, pick up drop off points |
| 3 | WP3 Transferring solutions |
| Number | Group of Activity Name |
| 3.1 | Conferences and workshops for stakeholders |
| 3.2 | The case studies |
| 3.3 | Promotional campaigns |
| 3.4 | Guidelines for the business model transformations |

Work plan overview

| | Period: 1 | 2 | 3 | 4 | 5 | 6 | Leader |
|---|-----------|---|---|---|---|---|------------|
| WP.1: WP1 Preparing solutions | | | | | | | PP2 |
| A.1.1: Determination of the preconditions | | | | | | | PP2 |
| D.1.1: Report on the preconditions for preparation of solutions | | | D | | | | PP1 |
| A.1.2: Life cycle and environmental footprints assessment | | | | | | | PP2 |
| D.1.2: Report on environmental footprint of paper packaging | | | | D | | | PP2 |
| A.1.3: Preparation of the digital solutions | | | | | | | PP2 |
| D.1.3: Report on the digital tools for paper packaging management | | | | | D | | PP2 |
| A.1.4: Preparation of physical solutions | | | | | | | PP2 |
| D.1.4: Report on the physical solutions for paper packaging management | | | | | D | | PP3 |
| WP.2: WP2 Piloting and evaluating solutions | | | | | | | PP3 |
| A.2.1: Pilot action of the physical solutions | | | | | | | PP3 |
| O.2.1: Depot for Recyclable materials as a central transfer point for paper packaging | | | | | | O | PP3 |
| A.2.2: Pilot action on the digital solutions | | | | | | | PP3 |
| O.2.2: Digital platform for the exchange of functional packaging | | | | | O | | PP3 |
| A.2.3: Pilot action on the returnable packaging materials, pick up drop off points | | | | | | | PP3 |
| O.2.3: Pick up drop off points | | | | | O | | PP1 |
| WP.3: WP3 Transferring solutions | | | | | | | PP1 |
| A.3.1: Conferences and workshops for stakeholders | | | | | | | PP1 |
| D.3.1: Thematic presentations | | | | D | D | D | PP1 |
| A.3.2: The case studies | | | | | | | PP1 |
| D.3.2: Report from the case studies | | | | | D | | PP1 |
| A.3.3: Promotional campaigns | | | | | | | PP1 |
| O.3.3: Educational film | | | | | | O | PP1 |
| A.3.4: Guidelines for the business model transformations | | | | | | | PP1 |
| O.3.4: Guidelines for paper packaging market | | | | | | O | PP1 |

Outputs and deliverables overview

| Code | Title | Description | Contribution to the output | Output/ deliverable contains an investment |
|-------|--|---|--|--|
| D 1.1 | Report on the preconditions for preparation of solutions | The aim the report is to compile a list of needs, expectations and opportunities of the parties involved in the paper packaging life cycle at all stages from sourcing to utilization. All the preconditions included in the report will help to make environmental life cycle assessment and preparation of solutions. By compiling all the data, it will be possible to develop solutions that will meet the needs of the market, take into account the possibilities and at the same time complement the value chain. | 2.1; 2.2; 2.3; 3.4 | |
| D 1.2 | Report on environmental footprint of paper packaging | The aim of the report is to provide evidence of the environmental benefits of the solutions developed within the project. The goal is to give data to all the parties that can help in implementation of the solutions, that can spread the knowledge or stakeholders that are not convinced that are able to make a change for better future. | Guidelines for paper packaging market | |
| D 1.3 | Report on the digital tools for paper packaging management | The aim of the deliverable is to provide specifications of the digital tool, including algorithm for its development. The specifications will be made based on the results of previous activities, stakeholders and target groups consultations. Requirements for the applications will be specified. | Application for the digital secondary materials market | |
| D 1.4 | Report on the physical solutions for paper packaging management | The report will describe the concept of integrating central reloading points with the ongoing operations of the local waste management system. Preparing solutions will make it possible to determine the technical potential of creating new deposits. Its goal will also cover the recommendation activities for better management of cardboard waste through properly organized collection, taking into account the conditions specific to selected regions. The report will be a necessary document to properly prepare a pilot - Depot for Recyclable materials as a central transfer point for paper packaging. | 2.1, 2.3, 3.4 | |
| O 2.1 | Depot for Recyclable materials as a central transfer point for paper packaging | The overall output objective of O2.1 for the purposes of BePacMan should be the sustainable establishment of new depots for recyclable materials or the restructuring of existing ones. According to the structure of the pilots and case studies, the report describes a concept for the integration of central transfer points into the ongoing operations of the local waste management system. In terms of content, it deals with the evaluated data from the technical potential determination and the experiences from the realized pilots and case studies. The identification of the experimental designs that can be realized in the project in cooperation with suitable local companies is also represented. So, for the future implementation of innovative solutions in the restructuring of the waste regime the report should also function as a recommendation for action for the establishment of such networks. | | |
| O 2.2 | Digital platform for the exchange of functional packaging | The output is the free application for materials exchange. The development of the the digital solution adapted to the specific region and is oriented towards the possibilities for cooperation with existing platforms and/or companies as well as the creation of own tools for the transfer of functional packaging based on paper and cardboard. The output is useful for privately but also commercially purposes. | | |
| O 2.3 | Pick up drop off points | The aim is the sustainable establishment of local pick-up and drop-off points for paper packaging. The aim is to collect the repackaging and new packaging as well as transport packaging in the private and commercial sector. Within the project the connection of the operational level with the digital solution is a very important factor by evolving innovative waste management structure concepts for the future. The scientific approaches and efforts in practice are ideally in line with the socio-economic needs and opportunities of a modern society. A multifaceted commitment to public relations is therefore essential. On this basis, the vision of BePacMan can grow as a sustainable pillar of innovative waste management. | | |
| D 3.1 | Thematic presentations | For meetings with stakeholders, materials in the form of expert presentations, thematic studies and other promotional materials will be prepared, which will be made available on the project website. Thus, they will be communicated externally in order to reach a wider stakeholders from the Baltic Sea region, beyond the project partnership. | 3.3, 3.4 | |
| D 3.2 | Report from the case studies | The report will be compiled of the performed case studies, at least 1 case study per country. The aim of the deliverable is to bring real business examples | Guidelines for paper packaging market | |
| O 3.3 | Educational film | The aim of the output is to reach to the large audience with the help of culture. The output will present the paper packaging life cycle from the sourcing to the utilization stage. It will present the impact on the environment and actions that can be taken to mitigate this impact. It will highlight the little things that everyone can do for the better future for all of us. The film will be made in a way that is viewer friendly and will be available with english subtitles or dubbing. It will be distributed through different channels: social media and with the help of associated partners in schools or if possible at city events, cinneas, etc. | | |
| O 3.4 | Guidelines for paper packaging market | The output will include guidelines for the implementation of digital and physical solutions for enabling paper packaging reuse. It will present opportunities for including several parties to the process of transpofmation from the youngest individuals, through SMEs, authorities, NGOs, and other to the large companies. | | |

Work package 1

5.1 WP1 Preparing solutions

5.2 Aim of the work package

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

5.3 Work package leader

Work package leader 1

PP 2 - Lithuanian Innovation Centre

Work package leader 2

PP 1 - Gdańsk University of Technology

5.4 Work package budget

Work package budget

35%

5.5 Target groups

| | Target group | How do you plan to reach out to and engage the target group? |
|---|--|---|
| 1 | <p>NGO</p> <p>NGO's involved in the project implementation should be directly and indirectly engaged in policy frameworks consultations and will be cooperating with local authorities in terms of Sustainable Development. The NGO's should be active in society, promote commitment of the individuals to achieve the goals and act as hubs of expertise on numerous issues of packaging, waste management and reuse, sustainable business models. The NGOs are planned to cover the land strip from Denmark to Estonia.</p> <p>496 / 500 characters</p> | <p>Recognition of work package leaders and their experience will facilitate establishing cooperation with NGOs.</p> <p>The project partnership will involve NGO engagement through email and individual meetings. They will be invited to consultations and discussions on the results of life cycle assessment and building capacity regarding the knowledge spread in the area of sustainable cardboard waste management. NGO will be informed about project deliverables, which they will be able to use for transfer of good practices on their territories.</p> <p>536 / 1,000 characters</p> |
| 2 | <p>Education/training centre and school</p> <p>Schools (primary and secondary) and educational facilities both for students and teachers should be involved in promoting responsible attitudes. They will be selected in each project partner country and located in a close neighbourhood of the projects partners headquarters in order to ensure efficient flow of information, possibility of physical participation in meetings and events.</p> <p>385 / 500 characters</p> | <p>Reaching and engaging the target group should be facilitated by the partners' experience in the area of cooperation with education/training centers and schools.</p> <p>At the stage of WP1 implementation, the involvement of a target group - Education/training centre and school - will concern the identification of schools and training centers interested in participating in the project. To this end, invitations will be sent, and meetings with representatives will be held to determine the possibility of involvement in the project.</p> <p>Information about the project will also be presented through promotional materials.</p> <p>612 / 1,000 characters</p> |
| 3 | <p>Regional public authority</p> <p>Regional public authorities responsible for waste management frameworks for the environment and cooperating with e-commerce market.</p> <p>131 / 500 characters</p> | <p>Information about the project will be presented through promotional materials, social media and campaigns.</p> <p>Regional public authorities can significantly contribute to the policy frameworks and to waste management systems. With the start of the project, preparations for meetings with regional public authorities, will begin. An incentive to participate in the project will be access to good practices and experiences and increasing knowledge about the circular economy.</p> <p>The benefits of involving regional public authorities in the project will be mutual. On the one hand, interregional learning and building capacity on circularity, on the other, support for activities will enable reaching a wider audience.</p> <p>Cooperation with Regional public authority will be carried out throughout the duration of the project. It will start at the first stage, and will intensify at the during transferring solutions (WP3), when output and deliverables will be presented externally.</p> <p>969 / 1,000 characters</p> |

| | Target group | How do you plan to reach out to and engage the target group? |
|---|---|---|
| 4 | <div data-bbox="98 472 667 506" style="border: 1px solid black; padding: 2px;">Large enterprise</div> <div data-bbox="98 517 667 618" style="border: 1px solid black; padding: 2px;">Logistic enterprises taking care for the delivery of products to the individuals and SMEs both door to door and to the smart parcel boxes.</div> <div data-bbox="555 622 667 645" style="font-size: small;">138 / 500 characters</div> | <div data-bbox="689 282 1567 432" style="border: 1px solid black; padding: 2px;"> <p>The project partnership will involve Large enterprises engagement through email and individual meetings. Engaging large enterprises will be facilitated by partners' experience and recognition in the economic environment. Initial research on the topic and discussions allows to believe that enterprises are interested in implementing better solutions enabling operation in the circular economy concept.</p> </div> <div data-bbox="689 450 1567 528" style="border: 1px solid black; padding: 2px;"> <p>The results of the project itself will be an incentive, not only in the form of studies and guides that enterprises will be able to use, but also the public perception that may influence further strategic decisions made in companies.</p> </div> <div data-bbox="1442 555 1567 577" style="font-size: x-small;">637 / 1,000 characters</div> |

5.6 Activities, deliverables, outputs and timeline

| No. | Name |
|-----|---|
| 1.1 | Determination of the preconditions |
| 1.2 | Life cycle and environmental footprints assessment |
| 1.3 | Preparation of the digital solutions |
| 1.4 | Preparation of physical solutions |

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

Determination of the preconditions

34 / 100 characters

5.6.3 Description of the group of activities

The aim of the activities planned within this group is to identify and characterize factors occurring in the life cycle of cardboard packaging, i.e. identify market participants, identify their share in the product life cycle, estimate the size of the impact, identify the areas of introduction of possible actions that influence the life cycle. The mapping of distribution pathways will be performed in order to provide data for sub-task 1.2 where a comprehensive assessment of the environmental impact of the carton's life cycle will be made. The process must be based on the companies' knowledge and experience, therefore a series of meetings and consultations with companies will be organized, at least 1 meeting in each partner country, during which needs and opportunities will also be identified. As part of the subtask, surveys will be carried out among companies and through logistics companies and e-commerce market also among buyers about their needs, proposed solutions and the willingness to implement them, which will allow, at the stage of preparing solutions, to better adjust them to market requirements.

One of the sub-tasks in this group is to track the life cycle of packages by using GPS transmitters. This will allow you to very accurately determine the path of the material and provide a lot of data for the process of preparing solutions. The mapping of cross-border paths will allow the assessment of the size of the exchange of packaging materials between countries. As packaging produced in one country usually becomes waste for another country, therefore the developed solutions are international and require joint actions.

The areas for integration of safe and circular solutions in the paper packaging life cycle will be determined. This is to ensure that the packaging stays in a useful state for as long as possible and adds value to the processes.

1,883 / 3,000 characters

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



D 1.1

Title of the deliverable

Report on the preconditions for preparation of solutions

56 / 100 characters

Description of the deliverable

The aim the report is to compile a list of needs, expectations and opportunities of the parties involved in the paper packaging life cycle at all stages from sourcing to utilization. All the preconditions included in the report will help to make environmental life cycle assessment and preparation of solutions. By compiling all the data, it will be possible to develop solutions that will meet the needs of the market, take into account the possibilities and at the same time complement the value chain.

504 / 2,000 characters

Which output does this deliverable contribute to?

2.1; 2.2; 2.3; 3.4

18 / 100 characters

5.6.6 Timeline

| | Period: 1 | 2 | 3 | 4 | 5 | 6 |
|---|-----------|---|---|---|---|---|
| WP.1: WP1 Preparing solutions | | | | | | |
| A.1.1: Determination of the preconditions | | | | | | |
| D.1.1: Report on the preconditions for preparation of solutions | | | | | | |

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 1 - Gdańsk University of Technology

A 1.2

5.6.2 Title of the group of activities

Life cycle and environmental footprints assessment

50 / 100 characters

5.6.3 Description of the group of activities

Based on data from deliverable 1.1 the life cycle assessment and environmental footprints of paper boxes will be determined. The scope of the analysis will be set to cover all relevant stages from the sourcing of raw materials to the disposal of the product. The analysis will be performed using specialized software. The analysis will be done for the initial state and for the potential future situation when the solutions prepared within the project are implemented. This will indicate the benefits of the solutions and encourage the stakeholders and target groups to take actions. The analysis will provide hard evidence and numbers that will be effective in convincing local authorities, society, organizations for positive attitudes.

736 / 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 environmental footprint of paper packaging

52 / 100 characters

Description of the deliverable

The aim of the report is to provide evidence of the environmental benefits of the solutions developed within the project. The goal is to give data to all the parties that can help in implementation of the solutions, that can spread the knowledge or stakeholders that are not convinced that are able to make a change for better future.

334 / 2,000 characters

Which output does this deliverable contribute to?

Guidelines for paper packaging market

39 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

WP.1: WP1 Preparing solutions

A.1.2: Life cycle and environmental footprints assessment

D.1.2: Report on environmental footprint of paper packaging



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 2 - Lithuanian Innovation Centre

A 1.3

5.6.2 Title of the group of activities

Preparation of the digital solutions

36 / 100 characters

5.6.3 Description of the group of activities

In recent years digital solutions are blooming. Digital applications are used on a daily basis and can assist in many activities, also in materials exchange. As part and innovative impulse of this hype, the project "BePacMan" wants to use a digital platform for the exchange of functional cardboard packaging. This can be used privately but also commercially. It is also conceivable to expand an already existing exchange with another product, contacting and negotiating with existing platforms. When selecting potential partners, it is important to match the target groups. BePacMan wants to reach both the private and the commercial sector. The free of charge application will be developed. Each individual, company, stakeholder, store, etc. will be able to enter their packaging resources into the application, everyone in need of the packaging will be able to search the application for the users that have the spare packages available, arrange the pickup. The application will be intuitive to use, available on the phone, so that every user can easily use it.

1,067 / 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 digital tools for paper packaging management

58 / 100 characters

Description of the deliverable

The aim of the deliverable is to provide specifications of the digital tool, including algorithm for its development. The specifications will be made based on the results of previous activities, stakeholders and target groups consultations. Requirements for the applications will be specified.

293 / 2,000 characters

Which output does this deliverable contribute to?

Application for the digital secondary materials market

54 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

WP.1: WP1 Preparing solutions

A.1.3: Preparation of the digital solutions

D.1.3: Report on the digital tools for paper packaging management

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 2 - Lithuanian Innovation Centre

A 1.4

5.6.2 Title of the group of activities

Preparation of physical solutions

33 / 100 characters

5.6.3 Description of the group of activities

Joint development of the solutions will be performed by all the project partners, associated partners and target groups. The physical solutions will reflect the challenges, needs and opportunities of parties involved. Within the planned activities is preparation of the physical depot for materials exchange, preparation of the solution based on pick up drop off points, ex. automatic parcel lockers, direct return of cardboard boxes to suppliers or leaving them in lockers. The activities will involve all the project partners and interested stakeholders, authorities, SMEs etc. to provide a solutions that meet the expectations and enable the most efficient use of existing resources.

Preparation works will be made to prepare a documentation and all necessary requirements for establishing a pilot. An analysis of the available solutions will be carried out, both from the technical and formal side, depending on the place and region where the pilots will stand. The task will require include consultations, among others with representatives of the public authorities and with companies involved in the marketing and processing of cardboard packaging, for exchanging knowledge and to implement the most available solutions.

1,225 / 3,000 characters

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

D 1.4

Title of the deliverable

Report on the physical solutions for paper packaging management

63 / 100 characters

Description of the deliverable

The report will describe the concept of integrating central reloading points with the ongoing operations of the local waste management system. Preparing solutions will make it possible to determine the technical potential of creating new deposits. Its goal will also cover the recommendation activities for better management of cardboard waste through properly organized collection, taking into account the conditions specific to selected regions. The report will be a necessary document to properly prepare a pilot - Depot for Recyclable materials as a central transfer point for paper packaging.

597 / 2,000 characters

Which output does this deliverable contribute to?

2.1, 2.3, 3.4

13 / 100 characters

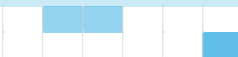
5.6.6 Timeline

Period: 1 2 3 4 5 6

WP.1: WP1 Preparing solutions

A.1.4: Preparation of physical solutions

D.1.4: Report on the physical solutions for paper packaging management



5.6.7 This deliverable/output contains productive or infrastructure investment

Work package 2

5.1 WP2 Piloting and evaluating solutions

5.2 Aim of the work package

The aim of this work package is to pilot, evaluate and adjust solutions. Plan one or several pilots to validate the usefulness of the solutions prepared in Work Package 1. Start Work Package 2 early enough to have time to pilot, evaluate and adjust solutions, together with your target groups. By the end of this work package implementation the solutions should be ready to be transferred to your target groups in Work Package 3.

The piloted and adjusted solution should be presented in one project output.

Organise your activities in up to five groups of activities. Describe the deliverables and outputs as well as present the timeline.

5.3 Work package leader

| | |
|------------------------------|--|
| Work package leader 1 | PP 3 - enviMV e. V. Network of environmental technologies of Mecklenburg-Vorpommern, Germany |
| Work package leader 2 | PP 2 - Lithuanian Innovation Centre |

5.4 Work package budget

| | |
|----------------------------|-----|
| Work package budget | 25% |
|----------------------------|-----|

5.4.1 Number of pilots

| | |
|-------------------------|---|
| Number of pilots | 3 |
|-------------------------|---|

5.5 Target groups

| | Target group | How do you plan to reach out to and engage the target group? |
|---|--|---|
| 1 | <p>NGO</p> <p>NGO's involved in the project implementation should be directly and indirectly engaged in policy frameworks consultations and will be cooperating with local authorities in terms of Sustainable Development. The NGO's should be active in society, promote commitment of the individuals to achieve the goals and act as hubs of expertise on numerous issues of packaging, waste management and reuse, sustainable business models. The NGOs are planned to cover the land strip from Denmark to Estonia.</p> <p style="text-align: right;"><small>496 / 500 characters</small></p> | <p>To reach the target group enviMV organizes information events and training courses in the partner region. An important aspect is the creation of training material. To multiply knowledge and efforts of the project BePacMan social media and other solutions were used. Additionally the successful Qualification of employees in the waste industry can have an accompanying positive effect.</p> <p style="text-align: right;"><small>388 / 1,000 characters</small></p> |
| 2 | <p>Education/training centre and school</p> <p>Schools (primary and secondary) and educational facilities both for students and teachers should be involved in promoting responsible attitudes. They will be selected in each project partner country and located in a close neighbourhood of the projects partners headquarters in order to ensure efficient flow of information, possibility of physical participation in meetings and events.</p> <p style="text-align: right;"><small>385 / 500 characters</small></p> | <p>To reach the target group BePacMan use of a mix of innovative analog and digital solutions. An important aspect is the preparation of consistent education material. Also the analysis and presentation of image-supporting data like the ratio of successful reuse to disposal/material recycling of paper packaging or the frequency of use of the digital platform for the exchange of functional paper packaging. By organizing guided tours and trainings we create awareness for CO2 balance due to the successful remanufacturing and reuse compared to the conventional handling of paper packaging in the waste management sector. The Qualification of employees in the science of Waste and Resource Management can have an accompanying positive effect.</p> <p style="text-align: right;"><small>739 / 1,000 characters</small></p> |
| 3 | <p>Regional public authority</p> <p>Regional public authorities responsible for waste management frameworks for the environment and cooperating with e-commerce market.</p> <p style="text-align: right;"><small>131 / 500 characters</small></p> | <p>A working group consisting of stakeholders from politics and industry will be founded consult and advise companies and institutions in the Baltic Sea Region. The developed concepts for the implementation of the planned pilots will be coordinated in cooperation with actors from municipal politics and business together.</p> <p style="text-align: right;"><small>320 / 1,000 characters</small></p> |
| 4 | <p>Large enterprise</p> <p>Logistic enterprises taking care for the delivery of products to the individuals and SMEs both door to door and to the smart parcel boxes.</p> <p style="text-align: right;"><small>138 / 500 characters</small></p> | <p>The key here is to identify major partners with local sites. Potential partners in this network could be companies such as dhl, amazon or edeka, which have their own vehicles and logistics centers as well as an extensive range of packaging. A potential location could be the amazon logistics center in Dummerstorf (next to Rostock). Additionally regional waste management and treatment companies such as REMONDIS, Veolia and Nehlsen are members of enviMV and will draw on their experience in the separate collection, transport and recycling of all types of paper packaging to advise on which manual and (partially) automated process steps and arrangements can be used. Targeted advertising campaigns together with partners are planned.</p> <p style="text-align: right;"><small>734 / 1,000 characters</small></p> |

5.6 Activities, deliverables, outputs and timeline

| No. | Name |
|-----|---|
| 2.1 | Pilot action of the physical solutions |
| 2.2 | Pilot action on the digital solutions |
| 2.3 | Pilot action on the returnable packaging materials, pick up drop off points |

WP 2 Group of activities 2.1

5.6.1 Group of activities leader

Group of activities leader PP 3 - enviMV e. V. Network of environmental technologies of Mecklenburg-Vorpommern, Germany

A 2.1

5.6.2 Title of the group of activities

Pilot action of the physical solutions

38 / 100 characters

5.6.3 Description of the group of activities

The aim of the activities is to establish new depots for recyclable materials or to restructure an existing one. These central transfer points integrate into the ongoing operations of the local waste management system. After collection and any treatment, the packaging is to be returned to the market. Start-ups specializing in the processing and marketing of packaging would be useful partners for this. In addition to the location of these transfer points, the identification of the demand and the target groups in general is crucial here. In order to make the market attractive, the identification of suitable partners is very important. Another essential point in the redesign of existing utilization structures is to deal with bureaucratic as well as legal hurdles. In order to achieve these goals, a comprehensive data acquisition and the realization of case studies are planned. In addition, a working group consisting of the participating actors from politics and industry will be founded and companies and institutions will be consulted and advised. Regional waste management and treatment companies such as REMONDIS, Veolia and Nehlsen are members of enviMV and will draw on their experience in the separate collection, transport and recycling of all types of paper packaging to advise on which manual and (partially) automated process steps and arrangements can be used. Based on the collected data and the conducted studies, concepts for the implementation of the planned pilots will be developed in cooperation with actors from municipal politics and business. The goal and strategy for setting up and implementing the pilot activities will be formulated uniformly for the entire project region. The type and scope of the pilots are adapted to the regional framework conditions of the partner countries. Ultimately, the regionally specific municipal and economic interests must be satisfied.

1,904 / 3,000 characters

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

O 2.1

Title of the output

Depot for Recyclable materials as a central transfer point for paper packaging

78 / 100 characters

Description of the output

The overall output objective of O2.1 for the purposes of BePacMan should be the sustainable establishment of new depots for recyclable materials or the restructuring of existing ones. According to the structure of the pilots and case studies, the report describes a concept for the integration of central transfer points into the ongoing operations of the local waste management system. In terms of content, it deals with the evaluated data from the technical potential determination and the experiences from the realized pilots and case studies. The identification of the experimental designs that can be realized in the project in cooperation with suitable local companies is also represented. So, for the future implementation of innovative solutions in the restructuring of the waste regime the report should also function as a recommendation for action for the establishment of such networks.

898 / 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>NGO</p> <p>NGO's involved in the project implementation should be directly and indirectly engaged in policy frameworks consultations and will be cooperating with local authorities in terms of Sustainable Development. The NGO's should be active in society, promote commitment of the individuals to achieve the goals and act as hubs of expertise on numerous issues of packaging, waste management and reuse, sustainable business models. The NGOs are planned to cover the land strip from Denmark to Estonia.</p> | <p>For the implementation of the objectives it is important to find partners who are also in line with the future challenges and needs of the region so the regionally specific municipal and economic interests are satisfied. NGOs show themselves to be well suited for that. By their nature alone as NGOs, they must remain constantly in evolution with the market, with one eye on the future, in order to live up to their ambitions as viable enterprises of high social importance. Such partners often have a high strategic impact and a number of them in the project region are suitable taking up the idea of BePacMan. Multiplication takes place through direct contact via the broad network of the consortium as well as targeted campaigns for partner acquisition (info events, etc.).</p> <p style="text-align: right;">777 / 1,000 characters</p> |
| <p>Target group 2</p> <p>Regional public authority</p> <p>Regional public authorities responsible for waste management frameworks for the environment and cooperating with e-commerce market.</p> | <p>The scientific and practical findings will be discussed in close consultation with the political level. In addition, expert discussions will take place and a working group consisting of representatives of the waste management industry will be formed. The existing possibilities on the most different financing and funding levels for the realization of the objectives will be examined. During the project period, the consortium is to introduce corresponding drafts of political relevance.</p> <p style="text-align: right;">488 / 1,000 characters</p> |
| <p>Target group 3</p> <p>Large enterprise</p> <p>Logistic enterprises taking care for the delivery of products to the individuals and SMEs both door to door and to the smart parcel boxes.</p> | <p>Incentives must be created for the development of BePacMan to continue after the project. Therefore, together with decision makers and municipalities in the Baltic Sea Region, bonus tools will be implemented to make the idea of BePacMan visible and valuable and to raise awareness for the next generation of sustainable development plans. Tax breaks or image campaigns, such as awards and targeted advertising campaigns together with partners are a small part of broad possibilities. In addition, the complex and far-reaching structures of the consortium are used to convince companies throughout the project region of the benefits of their involvement.</p> <p style="text-align: right;">652 / 1,000 characters</p> |

Durability of the output

A decisive factor, also in the long-term implementation of the project goals, is the search for reliable, sustainable useful partners like regional waste management and treatment companies as Network partners with high reach or Start-ups specializing in the processing and marketing of packaging. All project partners develop regionally specific concepts for the realization, which are scientifically based, politically and socially competent and practical. Together with local decision-makers, use existing funding instruments and draft ideas for new ones. Incentives should be created on a supraregional level for companies to become involved, even far beyond the scope of the project. To this end, communication strategies must be developed and expert discussions held.

773 / 1,000 characters

5.6.6 Timeline

| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| WP.2: WP2 Piloting and evaluating solutions | | | | | | |
| A.2.1: Pilot action of the physical solutions | | | | | | |
| O.2.1: Depot for Recyclable materials as a central transfer point for paper packaging | | | | | | |

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 3 - enviMV e. V. Network of environmental technologies of Mecklenburg-Vorpommern, Germany

A 2.2

5.6.2 Title of the group of activities

Pilot action on the digital solutions

37 / 100 characters

5.6.3 Description of the group of activities

In recent years, active networks for registering a wide variety of needs or exchanging goods and raw materials have been formed throughout Mecklenburg-Vorpommern, but also in Rostock in particular, on the initiative of a wide variety of institutions from administration and business. These information portals or exchanges are becoming increasingly popular. The driving force here is always the idea of sustainability, and this is becoming more and more prevalent in people's minds. As part and innovative impulse of this hype, the project "BePacMan" wants to use a digital platform for the exchange of functional cardboard packaging. This can be used privately but also commercially. It is also conceivable to expand an already existing exchange with another product. The challenges are contacting and negotiating with existing platforms. When selecting potential partners, it is important to match the target groups. BePacMan wants to reach both the private and the commercial sector. There, the exchange of cardboard packaging is to be tried out as a line of business in order to determine how this offer is accepted. If necessary, the test run will be followed by the creation and implementation of a dedicated platform.

The platform will be implemented and tested in each partner country. Data from the application use will be collected and analyzed .

1,358 / 3,000 characters

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



O 2.2

Title of the output

Digital platform for the exchange of functional packaging

57 / 100 characters

Description of the output

The output is the free application for materials exchange. The development of the the digital solution adapted to the specific region and is oriented towards the possibilities for cooperation with existing platforms and/or companies as well as the creation of own tools for the transfer of functional packaging based on paper and cardboard. The output is useful for privately but also commercially purposes.

408 / 3,000 characters

Target groups and uptake of the solution presented in this output

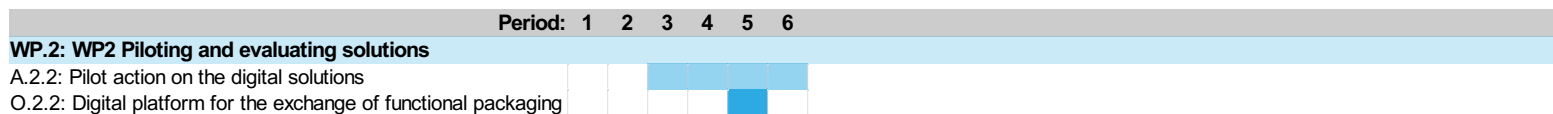
| Target groups | How will this target group apply the output in its daily work? |
|--|--|
| <p>Target group 1</p> <p>Large enterprise</p> <p>Logistic enterprises taking care for the delivery of products to the individuals and SMEs both door to door and to the smart parcel boxes.</p> | <p>The consortium will use a number of information and promotional events and other media tools to showcase the digital solutions to the public. The private sector or local and well-connected companies such as supermarket chains can use the digital output of BePacMan for the exchange of functional packaging, to improve the ecological fingerprint as well as for the qualification of employees.</p> <p>392 / 1,000 characters</p> |
| <p>Target group 2</p> <p>NGO</p> <p>NGO's involved in the project implementation should be directly and indirectly engaged in policy frameworks consultations and will be cooperating with local authorities in terms of Sustainable Development. The NGO's should be active in society, promote commitment of the individuals to achieve the goals and act as hubs of expertise on numerous issues of packaging, waste management and reuse, sustainable business models. The NGOs are planned to cover the land strip from Denmark to Estonia.</p> | <p>The platform is dedicated to serve stakeholder, authorities and society as well. NGOs will be able to directly use it or pass along to the society. We reach the target group through the organization of workshops and targeted advertising campaigns together with partners.</p> <p>270 / 1,000 characters</p> |
| <p>Target group 3</p> <p>Education/training centre and school</p> <p>Schools (primary and secondary) and educational facilities both for students and teachers should be involved in promoting responsible attitudes. They will be selected in each project partner country and located in a close neighbourhood of the projects partners headquarters in order to ensure efficient flow of information, possibility of physical participation in meetings and events.</p> | <p>For implementation of the efforts in the work package into the practice it is important to match the target groups. It is also important to keep outreach efforts high, for example, using next-generation media applications to also reach the next generation of waste management employees for BePacMan.</p> <p>299 / 1,000 characters</p> |

Durability of the output

BePacMan wants to find partners with which this platform can be operated after the project. The costs for operation and maintenance are manageable in this respect. It is possible that the project can benefit here from the reach of the enviMV network as well as the other partners in the consortium.

298 / 1,000 characters

5.6.6 Timeline



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 PP 3 - enviMV e. V. Network of environmental technologies of Mecklenburg-Vorpommern, Germany

A 2.3

5.6.2 Title of the group of activities

Pilot action on the returnable packaging materials, pick up drop off points

75 / 100 characters

5.6.3 Description of the group of activities

Activity 2.3 deals with the establishment of collection and drop-off points for paper packaging. According to the EU waste pyramid, the reuse of cardboard packaging should take place before material recycling. This reflects the requirements of the waste hierarchy according to Directive 2008/98/EC. So before the cardboard boxes are recycled, they are collected. The aim is to collect the repackaging and new packaging as well as transport packaging, as in the case of pallets, so that the delivery vehicles used do not drive back empty after their delivery tours. This represents a sensible use of existing transport capacity. The key here is to identify major partners with local sites. Potential partners in this network could be companies such as dhl, amazon or edeka, which have their own vehicles and logistics centers as well as an extensive range of packaging. A potential location could be the amazon logistics center in Dummerstorf (next to Rostock) with more than 1000 employees. In addition to the idea of sustainability, it is also important to create further incentives to motivate the population to prefer reuse. One instrument could be the introduction of a deposit system as for PET bottles and beverage cans. Isolated initiatives by private food producers already exist in Mecklenburg-Vorpommern and are becoming increasingly popular. In order to promote this movement nationwide, collection points such as those for the disposal of used batteries are to be established in cooperation with local and well-connected companies, such as supermarket chains. In order to create incentives for the commitment of these cooperative companies, a toolbox should be designed and negotiated with authorities at the state level. Content could be for example the support of the arising expenditure for the structure and the conversion of such a system by means of promotion funds of the country. In addition, tax relief as well as prizes awarded by the Rostock Chamber of Industry and Commerce could be considered.

2,018 / 3,000 characters

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

O 2.3

Title of the output

Pick up drop off points

23 / 100 characters

Description of the output

The aim is the sustainable establishment of local pick-up and drop-off points for paper packaging. The aim is to collect the repackaging and new packaging as well as transport packaging in the private and commercial sector. Within the project the connection of the operational level with the digital solution is a very important factor by evolving innovative waste management structure concepts for the future. The scientific approaches and efforts in practice are ideally in line with the socio-economic needs and opportunities of a modern society. A multifaceted commitment to public relations is therefore essential. On this basis, the vision of BePacMan can grow as a sustainable pillar of innovative waste management.

721 / 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? |
|--|---|
| Target group 1 Large enterprise Logistic enterprises taking care for the delivery of products to the individuals and SMEs both door to door and to the smart parcel boxes. | Potential partners in this network could be companies such as dhl, amazon or edeka, which have their own vehicles and logistics centers as well as an extensive range of packaging. A potential location could be the amazon logistics center in Dummerstorf (next to Rostock) with more than 1000 employees. |

301 / 1,000 characters

Durability of the output

In coordination with politics and business, a toolbox is being designed to create incentives in the private and commercial sectors. The motto BePacMan must be taken up by society. One aspiration could be to introduce a deposit system as for PET bottles and beverage cans. In addition, we are strongly in favor of supporting companies by in the future the restructuring of companies is to be financed by a support program.

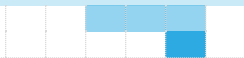
421 / 1,000 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

WP.2: WP2 Piloting and evaluating solutions

A.2.3: Pilot action on the returnable packaging materials, pick up drop off points
 O.2.3: Pick up drop off points



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>NGO</p> <p>NGO's involved in the project implementation should be directly and indirectly engaged in policy frameworks consultations and will be cooperating with local authorities in terms of Sustainable Development. The NGO's should be active in society, promote commitment of the individuals to achieve the goals and act as hubs of expertise on numerous issues of packaging, waste management and reuse, sustainable business models. The NGOs are planned to cover the land strip from Denmark to Estonia.</p> <p style="text-align: right;">496 / 500 characters</p> | <p>NGO's are a key player in the workpackage according to direct connection to individuals and recognition. NGO's in each partner country will be reached using different routes, already existing contacts, direct contacts, social media (Facebook, Twitter, Instagram), through city representatives, authorities, etc. The challenge is to highlight the importance of NGO's in sustainable development and point out the benefits they will result from the engagement in the project activities.</p> <p style="text-align: right;">482 / 1,000 characters</p> |
| 2 | <p>Education/training centre and school</p> <p>Schools (primary and secondary) and educational facilities both for students and teachers should be involved in promoting responsible attitudes. They will be selected in each project partner country and located in a close neighbourhood of the project partners headquarters in order to ensure efficient flow of information, possibility of physical participation in meetings and events.</p> <p style="text-align: right;">385 / 500 characters</p> | <p>Teachers and children willingly join all actions related to sustainable development. Through direct contact channels, also involving associated partners such as teacher training centers, it will be possible to involve them in the activities. Moreover, integrating the activities into the core curriculum implemented in schools will allow to diversify didactic activities, thus encouraging students to learn and develop, which is a benefit both for the project and the target group.</p> <p style="text-align: right;">481 / 1,000 characters</p> |
| 3 | <p>Regional public authority</p> <p>Regional public authorities responsible for waste management frameworks for the environment and cooperating with e-commerce market.</p> <p style="text-align: right;">131 / 500 characters</p> | <p>The project promotes models and attitudes that are a matter of concern of each public authority. Proper understanding of needs and expectations needs to be provided for the good cooperation to meet the mission, vision and development strategy. Authorities will be invited to participate in events so they can recognize the benefits of new solutions and can come closer to the business to understand their need as well for the mutual benefit.</p> <p style="text-align: right;">441 / 1,000 characters</p> |
| 4 | <p>Large enterprise</p> <p>Logistic enterprises taking care for the delivery of products to the individuals and SMEs both door to door and to the smart parcel boxes.</p> <p style="text-align: right;">138 / 500 characters</p> | <p>Large enterprises will be reached directly, still many contacts will already be initiated in workpackage 1. The real solutions being answers to real challenges at the same bringing a positive image of the enterprise to the society will interest business. They will be provided help with development of the beneficial approach.</p> <p style="text-align: right;">326 / 1,000 characters</p> |

5.6 Activities, deliverables, outputs and timeline

| No. | Name |
|-----|---|
| 3.1 | Conferences and workshops for stakeholders |
| 3.2 | The case studies |
| 3.3 | Promotional campaigns |
| 3.4 | Guidelines for the business model transformations |

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

43 / 100 characters

5.6.3 Description of the group of activities

Conferences and workshops for stakeholders will be organized in each project partner country (one per country). Participant from all the interested parties will be invited, for example representatives of e-commerce market, social media market, logistic companies, waste management companies and waste recycling industry. The assumptions for new digital and physical solutions will be introduced and discussed in order to systemic approach in achieving sustainability in the paper packaging handling. In order to help virtualize the problem and challenges the journey of the materials will be presented as a result of WP1. The challenges of adoption of new business models and solution will be discussed together with presenting social expectations. Several options of adjusting the developed solutions will be presented in order to emphasise the flexibility of the solutions and possibilities of finding the best option for the specific market situation. This should encourage stakeholders to adjust and use the solution in the daily work. Each stakeholder will be able to participate in the activity 3.2 to perform a case study of its own economic activity and evaluate the benefits of implementation of the solutions. At the same time, the goals of the project and assumptions related to the rational management of raw materials - in our case, used paper - will be promoted among students. For this purpose, workshops will be organized where the youngest will learn about the benefits of the circular economy model. The aim of 3.1 will be the facilitation of paper recovery and recycling solutions.

1,603 / 3,000 characters

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

D 3.1

Title of the deliverable

22 / 100 characters

Description of the deliverable

For meetings with stakeholders, materials in the form of expert presentations, thematic studies and other promotional materials will be prepared, which will be made available on the project website. Thus, they will be communicated externally in order to reach a wider stakeholders from the Baltic Sea region, beyond the project partnership.

340 / 2,000 characters

Which output does this deliverable contribute to?

8 / 100 characters

5.6.6 Timeline

| | Period: 1 | 2 | 3 | 4 | 5 | 6 |
|---|-----------|---|---|---|---|---|
| WP.3: WP3 Transferring solutions | | | | | | |
| A.3.1: Conferences and workshops for stakeholders | | | | | | |
| D.3.1: Thematic presentations | | | | | | |

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

A 3.2

5.6.2 Title of the group of activities

16 / 100 characters

5.6.3 Description of the group of activities

The case studies for the interested stakeholders will be performed. Each partner will be obliged to perform at least one case study in own country. This should help to recognize the best moment for the solution introduction, emphasize the benefits of the solutions and of the digitization of the process, highlight the strategy to go ahead the competition, gain social trust and become the trusted business partner. Moreover, this should help stakeholders to identify process that need adjusting and at the same time to adopt business models for the solutions developed within the project. The conclusions from case studies should highlight the options on how to give the customers positive experience and take the advantage of becoming more social to encourage the enterprises to implement new models. The case studies will be further analyzed and discussed to identify different approaches and options and to assess the feasibility of solutions. The environmental impact assessment will be performed at the initial state and compared to the impact for when the selected solution is implemented to evaluate the environmental benefits which contribute to social and economic benefits. Analyzes performed for the selected cases will show other companies operating in the industry the benefits of implementing sustainable solutions on real examples and will bring evidence that it is worth implementing solutions that are not only a real answer to the problems of the modern world, but can also contribute to brand development, economic benefits and social welfare.

1,565 / 3,000 characters

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

D 3.2

Title of the deliverable

28 / 100 characters

Description of the deliverable

155 / 2,000 characters

Which output does this deliverable contribute to?

37 / 100 characters

5.6.6 Timeline

| | Period: 1 | 2 | 3 | 4 | 5 | 6 |
|---|-----------|---|---|---|---|---|
| WP.3: WP3 Transferring solutions | | | | | | |
| A.3.2: The case studies | | | | | | |
| D.3.2: Report from the case studies | | | | | | |

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

21 / 100 characters

5.6.3 Description of the group of activities

The solutions will be spread through website and newsletter, The results will be presented, the questionnaires will be performed in order to recognize the social expectations and the attitudes to circularity. It is already known that social willingness to turn into more sustainable lifehood is growing and becoming stronger with the negative changes in the environment and the easier access to the information. People should know that there are many more options to deal with the challenges and to minimize the impact of the consumer behavior. If they know the options the social expectations will force market not to be interested in their income only but to introduce new solutions aiming at the better future. If people know their real influence on the environment and economy, the more willingly they will engage in the actions and the more ideas of sustainable living will grow.

The youngest ones will be encouraged to participate in a competition on the knowledge of the circular economy, including the recycling and recovery of paper and cardboard. During the campaign the game play is planned tracking the journey of the boxes. Each user of the box would write inside the start and end point so the next users of the box would be know how long was the journey.

The educational film will be made and distributed to the schools and presented on several events.

The developed solutions will be available to people willing to test for free. Participation in the WP3 activities will be rewarded with access to the materials and guide developed within the project.

1,566 / 3,000 characters

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

O 3.3

Title of the output

Educational film

16 / 100 characters

Description of the output

The aim of the output is to reach to the large audience with the help of culture. The output will present the paper packaging life cycle from the sourcing to the utilization stage. It will present the impact on the environment and actions that can be taken to mitigate this impact. It will highlight the little things that everyone can do for the better future for all of us. The film will be made in a way that is viewer friendly and will be available with English subtitles or dubbing. It will be distributed through different channels: social media and with the help of associated partners in schools or if possible at city events, cinemas, etc.

645 / 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>NGO</p> <p>NGO's involved in the project implementation should be directly and indirectly engaged in policy frameworks consultations and will be cooperating with local authorities in terms of Sustainable Development. The NGO's should be active in society, promote commitment of the individuals to achieve the goals and act as hubs of expertise on numerous issues of packaging, waste management and reuse, sustainable business models. The NGOs are planned to cover the land strip from Denmark to Estonia.</p> | <p>The NGOs will be entitled to use the film during events, workshops, in social media etc.</p> <p>88 / 1,000 characters</p> |
| <p>Target group 2</p> <p>Education/training centre and school</p> <p>Schools (primary and secondary) and educational facilities both for students and teachers should be involved in promoting responsible attitudes. They will be selected in each project partner country and located in a close neighbourhood of the projects partners headquarters in order to ensure efficient flow of information, possibility of physical participation in meetings and events.</p> | <p>The film will be distributed to the schools so the teachers can use at the daily lessons.</p> <p>89 / 1,000 characters</p> |

Durability of the output

Thank to its form the output will be valid until the contents are valid.

72 / 1,000 characters

5.6.6 Timeline

| Period: | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| WP.3: WP3 Transferring solutions | | | | | | |
| A.3.3: Promotional campaigns | | | | | | |
| O.3.3: Educational film | | | | | | |

5.6.7 This deliverable/output contains productive or infrastructure investment



WP 3 Group of activities 3.4

5.6.1 Group of activities leader

Group of activities leader PP 1 - Gdańsk University of Technology

A 3.4

5.6.2 Title of the group of activities

Guidelines for the business model transformations

49 / 100 characters

5.6.3 Description of the group of activities

The guidelines will be based on all the activities implemented within the project duration. The aim is to provide comprehensive overview of the proposed strategies, transformation process, management and benefits. Analysis of the current market state will be performed in order to develop strategies for adapting the solutions. External experts will be asked for consultations. market differences between the project partner countries will be identifies in regard to the impact on the efficiency of the developed solutions.

522 / 3,000 characters

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



O 3.4

Title of the output

Guidelines for paper packaging market

37 / 100 characters

Description of the output

The output will include guidelines for the implementation of digital and physical solutions for enabling paper packaging reuse. It will present opportunities for including several parties to the process of transpofrmation from the youngest individuals, through SMEs, authorities, NGOs, and other to the large companies.

318 / 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? |
|--|---|
| Target group 1 Large enterprise Logistic enterprises taking care for the delivery of products to the individuals and SMEs both door to door and to the smart parcel boxes. | The output can be used to build the process of transformation or to implement the solutions developed within the project. The Output can also help in evaluation of the benefits of implementing the solutions. |

206 / 1,000 characters

Durability of the output

The output will have a form of an ebook or a paper book which can be used as long as the statement are in line with the market conditions.

138 / 1,000 characters

5.6.6 Timeline

| | Period: 1 | 2 | 3 | 4 | 5 | 6 |
|--|-----------|---|---|---|---|---|
| WP.3: WP3 Transferring solutions | | | | | | |
| A.3.4: Guidelines for the business model transformations | | | | | | |
| O.3.4: Guidelines for paper packaging market | | | | | | |

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 | 3 | N/A | N/A | RCR 104 - Solutions taken up or up-scaled by organisations | 5 | <p>Within the project stakeholders and especially companies and organisations in the Baltic Sea Region receive extensive information and training in the innovative applications developed. For this purpose, training material is created and workshops for target groups are organized. With the digital survey of the amount of paper packaging actually saved from disposal/material recycling and the associated image boost for members the density of companies that will become part of this development increases.</p> <p style="text-align: right; font-size: small;">508 / 2,000 characters</p> |
| RCO 116 – Jointly developed solutions | 5 | O.2.1: Depot for Recyclable materials as a central transfer point for paper packaging | <p>Establishment of central transfer points for paper packaging in the project region.</p> <p>Qualification of employees in the waste industry and science.</p> <p>Image gain for waste management in the region.</p> <p style="text-align: right; font-size: small;">194 / 1,000 characters</p> | | | |
| | | O.2.2: Digital platform for the exchange of functional packaging | <p>Development of a digital platform for the exchange of functional packaging can be used for the privately but also commercially sector.</p> <p>Assessment of the sustainability of such a concept.</p> <p style="text-align: right; font-size: small;">187 / 1,000 characters</p> | | | |
| | | O.2.3: Pick up drop off points | <p>Establishment of local pick-up and drop-off points for paper packaging.</p> <p>Raising awareness in society for the life cycle of paper packaging.</p> <p style="text-align: right; font-size: small;">140 / 1,000 characters</p> | | | |
| | | O.3.3: Educational film | <p>The training film will be used by teachers as a tool for working with pupils and / or students. The topics of the circular economy, including industrial symbiosis, will be presented on examples, mainly of paper and cardboard waste. As a result, relatively new topics will be more interesting and easier to teach. The film can be used in lessons with the youngest, making them aware of the importance of development in accordance with sustainable approach.</p> <p style="text-align: right; font-size: small;">455 / 1,000 characters</p> | | | |

| Output indicators | Total target value in number | Project outputs | Please explain how the solution presented in this output serves the target group(s). |
|-------------------|------------------------------|---|---|
| | | O.3.4: Guidelines for paper packaging market | The developed materials will be open-source and disseminated through communication channels such as project website and social media. Guidelines will provide target groups with a starting point for further discussions. <small>218 / 1,000 characters</small> |

| 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 | 5 | PSR 1 - Organisations with increased institutional capacity due to their participation in cooperation activities across borders | 20 | <p>Project partners and associated organisations</p> <p>The network of enviMV with its large number of members from the field of environmental technology can be of great importance for achieving the goals in the project region. The intensive contact to the market enables a large multiplication of reach. The cooperation with authorities and companies in the field of resources, energy, waste or nutrition in Meckelnburg-Vorpommern and Schleswig Holstein as well as experience in research, establishment and maintenance of customer contacts and active public relations contribute to the radiation of the project idea.</p> <p>In Poland and Lithuania, it is planned to involve public authorities and companies in the field of innovation, waste and environmental protection, as well as educational centers and other parties involved in the life cycle. This will enhance transfer of good practices and experiences, as well as will strengthen and maintain the capabilities to set and achieve circular goals, particularly within waste paper packaging.</p> <p>Publicly available materials in a form of guidelines for paper packaging market will promote the implementation of similar capacity building beyond the project partnership and will document the learning experience.</p> <small>1,198 / 1,500 characters</small> |
| | | | | Other organisations |

7. Budget

7.0 Preparation costs

Preparation Costs

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

No

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

| No. & role | Partner name | Partner status | CAT1 - Staff | CAT2 - Office & administration | CAT3 - Travel & accommodation |
|--------------|---|----------------------|--------------------|--------------------------------------|-------------------------------------|
| 1 - LP | Gdańsk University of Technology | Active 22/09/2022 | 298,850.00 | 44,827.50 | 44,827.50 |
| 2 - PP | Lithuanian Innovation Centre | Active 22/09/2022 | 227,032.00 | 34,054.80 | 34,054.80 |
| 3 - PP | enviMV e. V. Network of environmental technologies of Mecklenburg-Vorpommern, Germany | Active 22/09/2022 | 360,180.00 | 54,027.00 | 54,027.00 |
| Total | | | 886,062.00 | 132,909.30 | 132,909.30 |

| No. & role | Partner name | CAT4 - External expertise & services | CAT5 - Equipment | Total partner budget |
|--------------|---|--|------------------------|----------------------|
| 1 - LP | Gdańsk University of Technology | 50,792.00 | 40,400.00 | 479,697.00 |
| 2 - PP | Lithuanian Innovation Centre | 26,800.00 | 23,500.00 | 345,441.60 |
| 3 - PP | enviMV e. V. Network of environmental technologies of Mecklenburg-Vorpommern, Germany | 20,000.00 | 5,000.00 | 493,234.00 |
| Total | | 97,592.00 | 68,900.00 | 1,318,372.60 |

7.1.1 External expertise and services

| Contracting partner | Group of expenditure | Item no. | Specification | Investment item? | Group of activities no. | Planned contract value |
|---------------------|----------------------|--------------|--|------------------|---|------------------------|
| 3. enviMV e. V. Net | Other | CAT4-PP3-G-0 | promotional campaigns <small>20 / 100 characters</small> | No | 2.2 2.3 | 2,000.00 |
| 3. enviMV e. V. Net | Specialist support | CAT4-PP3-E-0 | support of the experts in preparing solutions, material journey tracking <small>72 / 100 characters</small> | No | 2.2 2.3 | 5,500.00 |
| 1. Gdańsk Universit | IT | CAT4-PP1-B-0 | secure cloud subscription for data sharing <small>42 / 100 characters</small> | No | 1.1 1.2 1.3 1.4 2.1 2.2 3.1 3.2 3.3 3.4 N/A | 520.00 |
| 1. Gdańsk Universit | Specialist support | CAT4-PP1-E-0 | support of the experts in preparing solutions, material journey tracking <small>72 / 100 characters</small> | No | 1.1 1.3 1.4 | 15,500.00 |
| 1. Gdańsk Universit | Other | CAT4-PP1-G-0 | organisation of project conferences, meetings with stakeholders <small>64 / 100 characters</small> | No | 1.1 1.3 1.4 3.1 | 4,000.00 |
| 1. Gdańsk Universit | Specialist support | CAT4-PP1-E-0 | proofreading and language help <small>30 / 100 characters</small> | No | 3.1 3.2 3.3 3.4 | 4,000.00 |
| 1. Gdańsk Universit | Events/meetings | CAT4-PP1-A-0 | fees for external conference and trades <small>39 / 100 characters</small> | No | 3.1 3.3 | 1,500.00 |
| 1. Gdańsk Universit | Other | CAT4-PP1-G-0 | educational film for audience <small>29 / 100 characters</small> | No | 3.1 3.3 | 10,900.00 |
| 1. Gdańsk Universit | IT | CAT4-PP1-B-0 | educational application for students <small>36 / 100 characters</small> | No | 3.3 | 6,522.00 |
| 1. Gdańsk Universit | Other | CAT4-PP1-G-1 | promotional campaigns <small>20 / 100 characters</small> | No | 3.3 | 4,350.00 |
| Total | | | | | | 97,592.00 |

| Contracting partner | Group of expenditure | Item no. | Specification | Investment item? | Group of activities no. | Planned contract value |
|----------------------|----------------------|--------------|--|------------------|---------------------------------|------------------------|
| 1. Gdańsk Universit | Other | CAT4-PP1-G-1 | open access publication <small>23 / 100 characters</small> | No | 3.3 3.4 | 2,000.00 |
| 1. Gdańsk Universit | Communication | CAT4-PP1-C-1 | travels for associated partners <small>31 / 100 characters</small> | No | 1.1 3.1 | 1,500.00 |
| 2. Lithuanian Innova | Events/meetings | CAT4-PP2-A-1 | organisation of meetings, conferences, workshops <small>49 / 100 characters</small> | No | 1.1 1.3 1.4 3.1 3.4 | 8,000.00 |
| 2. Lithuanian Innova | Events/meetings | CAT4-PP2-A-1 | fees for external conference and trades <small>39 / 100 characters</small> | No | 3.1 | 1,500.00 |
| 2. Lithuanian Innova | Specialist support | CAT4-PP2-E-1 | language translations, corrections, proofreading <small>49 / 100 characters</small> | No | 3.1 3.2 3.3 3.4 | 3,000.00 |
| 2. Lithuanian Innova | Specialist support | CAT4-PP2-E-1 | support of the experts in preparing solutions, material journey tracking <small>72 / 100 characters</small> | No | 1.1 1.3 1.4 3.4 | 10,000.00 |
| 2. Lithuanian Innova | Other | CAT4-PP2-G-1 | promotional campaigns <small>21 / 100 characters</small> | No | 1.1 3.1 3.3 | 4,300.00 |
| 3. enviMV e. V. Net | IT | CAT4-PP3-B-1 | App Solutions <small>13 / 100 characters</small> | No | 2.2 | 5,000.00 |
| 3. enviMV e. V. Net | Events/meetings | CAT4-PP3-A-1 | organisation of project workshops, meetings with stakeholders <small>62 / 100 characters</small> | No | 2.1 2.2 2.3 | 4,000.00 |
| 3. enviMV e. V. Net | Communication | CAT4-PP3-C-2 | travels for associated partners <small>31 / 100 characters</small> | No | 2.1 2.3 | 1,500.00 |
| 3. enviMV e. V. Net | Specialist support | CAT4-PP3-E-2 | support of the experts in the field of technical analysis <small>57 / 100 characters</small> | No | 2.1 2.3 | 2,000.00 |
| Total | | | | | | 97,592.00 |

7.1.2 Equipment

| Contracting partner | Group of expenditure | Item no. | Specification | Investment item? | Group of activities no. | Planned contract value |
|----------------------|----------------------|--------------|--|------------------|--|------------------------|
| 1. Gdańsk Universit | Machines and instru | CAT5-PP1-E-0 | smart lockers for secondary market <small>34 / 100 characters</small> | No | 2.1 2.2 | 12,000.00 |
| 1. Gdańsk Universit | Tools or devices | CAT5-PP1-F-0 | GPS for packaging tracking <small>26 / 100 characters</small> | No | 1.1 1.2 | 4,350.00 |
| 1. Gdańsk Universit | IT hardware and soft | CAT5-PP1-B-0 | tablets for interactive workshops for kids and students, and for workshops for staakeholders <small>91 / 100 characters</small> | No | 1.1 1.3 1.4 3.1 3.3 | 10,900.00 |
| 1. Gdańsk Universit | IT hardware and soft | CAT5-PP1-B-0 | IT hardware for data collection, application operation and specialized software <small>80 / 100 characters</small> | No | 1.1 1.2 1.3 1.4 2.1 2.2 | 3,050.00 |
| 1. Gdańsk Universit | IT hardware and soft | CAT5-PP1-B-0 | software for life cycle analysis and environmental assessment <small>61 / 100 characters</small> | No | 1.1 1.2 3.2 3.3 | 7,300.00 |
| 1. Gdańsk Universit | Machines and instru | CAT5-PP1-E-0 | cutter and mobile stand for workshops for kids and students and for work on standarization <small>90 / 100 characters</small> | No | 1.3 1.4 3.3 | 2,800.00 |
| 2. Lithuanian Innova | IT hardware and soft | CAT5-PP2-B-0 | IT hardware for data collection, application operation and specialized software <small>80 / 100 characters</small> | No | 1.1 1.2 1.3 1.4 2.1 2.2 | 1,500.00 |
| Total | | | | | | 68,900.00 |

| Contracting partner | Group of expenditure | Item no. | Specification | Investment item? | Group of activities no. | Planned contract value |
|----------------------|----------------------|--------------|---|------------------|---------------------------------|------------------------|
| 2. Lithuanian Innova | IT hardware and soft | CAT5-PP2-B-0 | tablets for interactive wokshops for kids and students, and for workshops for staaakeholders <small>91 / 100 characters</small> | No | 1.1 1.3 1.4 3.1 3.3 | 10,000.00 |
| 2. Lithuanian Innova | Machines and instru | CAT5-PP2-E-0 | smart lockers for secondary market <small>34 / 100 characters</small> | No | 2.1 2.2 | 12,000.00 |
| 3. enviMV e. V. Net | IT hardware and soft | CAT5-PP3-B-1 | software licenses <small>17 / 100 characters</small> | No | 2.1 2.2 2.3 | 2,000.00 |
| 3. enviMV e. V. Net | Tools or devices | CAT5-PP3-F-1 | Expenses for the organization of workshops <small>42 / 100 characters</small> | No | 2.1 2.2 2.3 | 2,000.00 |
| 3. enviMV e. V. Net | Office equipment | CAT5-PP3-A-1 | Utensils of the official need / technical equipment in the office and mobile in the outside service <small>99 / 100 characters</small> | No | N/A | 1,000.00 |
| Total | | | | | | 68,900.00 |

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 | Gdańsk University of Technology | Active 22/09/2022 | PL | ERDF | 80.00 % | 479,697.00 | 383,757.60 | 95,939.40 | For each partner, the State aid relevance and applied aid measure are defined in the State aid section |
| 2-PP | Lithuanian Innovation Centre | Active 22/09/2022 | LT | ERDF | 80.00 % | 345,441.60 | 276,353.28 | 69,088.32 | |
| 3-PP | enviMV e. V. Network of environmental technologies of Mecklenburg-Vorpommern, Germany | Active 22/09/2022 | DE | ERDF | 80.00 % | 493,234.00 | 394,587.20 | 98,646.80 | |
| Total ERDF | | | | | | 1,318,372.60 | 1,054,698.08 | 263,674.52 | |
| Total | | | | | | 1,318,372.60 | 1,054,698.08 | 263,674.52 | |

7.3 Spending plan per reporting period

| | EU partners (ERDF) | | Total | |
|--------------|--------------------|------------------------|--------------|------------------------|
| | Total | Programme co-financing | Total | Programme co-financing |
| Period 1 | 189,814.40 | 151,851.52 | 189,814.40 | 151,851.52 |
| Period 2 | 168,414.20 | 134,731.36 | 168,414.20 | 134,731.36 |
| Period 3 | 297,790.00 | 238,232.00 | 297,790.00 | 238,232.00 |
| Period 4 | 273,259.00 | 218,607.20 | 273,259.00 | 218,607.20 |
| Period 5 | 201,093.70 | 160,874.96 | 201,093.70 | 160,874.96 |
| Period 6 | 188,001.30 | 150,401.04 | 188,001.30 | 150,401.04 |
| Total | 1,318,372.60 | 1,054,698.08 | 1,318,372.60 | 1,054,698.08 |