1. Identification

Call	Date of submission
C1	26/04/2022

1.1. Full name of the project

Baltic Ports as Lighthouses for Sustainable Electrification and Circular Transition in Core and Comprehensive TEN-T Network across the Baltic Sea by 2030 on the Way towards Fit for 55

183 / 250 characters

1.2. Short name of the project

BalticLightPorts2030

20 / 20 characters

1.3. Programme priority

2. Water-smart societies

1.4. Programme objective

2.2 Blue 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 project aims at improving sustainability and resilience capacity of min. 30 BSR Ports acting as both Core and Comprehensive Ports in the TEN-T Network (out of 87 total ports in the network) along the four TEN-T Corridors (Baltic-Adriatic, Scandinavian-Mediterranean, North Sea-Baltic and Orient-East Mediterranean) by the end of 2025. The goal is set out to be achieved by establishing and institutionalising carbon-free / zero emission BSR Lighthouse Port Service Innovation Excellence Center for sustainable, resilient and carbon-free future. It is referred to as a strategic and operational service portfolio and dashboard for BSR ports for the purpose of idea management and sustainable innovation development towards carbon capturing through electrification solutions that support emergence of sustainable (circular) supply and value chains. In order to enable circularity along the BSR ports' value chains, a transnational character is indispensable.

960 / 1,500 characters

1.8. Summary of the partnership

BalticLightPorts2030 consortium is a key competitive strength. We claim that we have all necessary competencies and capacities to fulfil project obligations and achieve sustainable and smart goals. The consortium is a balanced network of partners guided by the principles of multidisciplinary coverage, transparency, commitment, equal representation of geographical and sectoral coverage. The project involved both – experienced partners, professionals and newcomers. In this, equal opportunities are given to all partners. The partnership brings the following individual strengths with:
1) Cross-sectorality. Direct and associated project partners represent academic & research, industry, policy (port authorities) and umbrella associations (multipliers). Associated partners cover the main target groups of this call – ports, port authorities, technology suppliers, forwarders, policy makers. Each of the pilot port is supported in the project by the inputs from academic & research partners, intermediaries like science parks and umbrella organisations.
2) Interoperability, regional integration and cohesion enhancement. The project addresses cross-sectoral and multi-level EU policies and objectives. It ensures cross-fertilisation through the improved accessibility of the TEN-T Core and Comprehensive Network by involving pilot ports located in direct or close proximity to the four TEN-T corridors.
3) Balanced commitment. BalticLightPorts2030 ensures that all other partners except those of working with the ports will contribute with resources and capacity to support the implementation of the Lighthouse port pilots. The threshold and breakdowns of 80% and 20% allocation of funds are ensured. Transferability of the results achieved from the demonstration pilot implementation is clear and representative in the budget breakdowns.
4) Scientific knowhow: all involved partners (universities, institutes, technology parks) have expertise in dealing with ports, freight transportation and passenger mobility as well as implementation of the TEN-T Core and Comprehensive Network.
5) Common challenge and need basis. All pilot ports belong to the small and medium-sized ports (SMSPs). Challenge and needs of them are similar. Due to their nature, SMSPs should start any innovation pilots now in order to comply with the regulations to be achieved by the 2030 and 2050. The consortium gathers together partners and key target groups who show burning needs and due to their limited financial capacity need the EU funding to kick-start innovations and generate the spill-over effects.
6) Administrative experience and reliability in EU project implementation, thus ensuring efficient and effective implementation of the project.
7) Strong capabilities and resource basis: the partners have necessary resources (human capital; financial; infrastructural and entrepreneurship) to effectively and efficiently use the gained programme grants.

2,948 / 3,000 characters

1.11. Project Budget Summary

Financial resources [in EUR]		Preparation costs	Planned project budget
ERDF	ERDF co-financing	0.00	2,662,400.00
	Own contribution ERDF	0.00	665,600.00
	ERDF budget	0.00	3,328,000.00
NO	NO co-financing	0.00	105,900.00
	Own contribution NO	0.00	105,900.00
	NO budget	0.00	211,800.00
NDICI	NDICI co-financing	0.00	0.00
	Own contribution NDICI	0.00	0.00
	NDICI budget	0.00	0.00
RU	RU co-financing	0.00	0.00
	Own contribution RU	0.00	0.00
	RU budget	0.00	0.00
TOTAL	**Total Programme co-financing**	0.00	2,768,300.00
	Total own contribution	0.00	771,500.00
	Total budget	0.00	3,539,800.00

2. Partnership

2.1. Overview: Project Partnership

2.1.1 Project Partners

No.	LP/PP	Organisation (English)	Organisation (Original)	Country	Type of partner	Legal status	Partner budget in the project	Active/inactive	
								Status	from
1	LP	Klaipeda Science and Technology Park	Klaipėdos mokslo ir technologijų parkas	LT	Business support organisation	a)	317,700.00 €	Active	22/09/2022
2	PP	Klaipeda State Seaport Authority	VĮ Klaipėdos valstybinio jūrų uosto direkcija	LT	Infrastructure and public service provider	a)	41,100.00 €	Active	22/09/2022
3	PP	Klaipeda Stevedoring Company BEGA, JSC	Klaipėdos jūrų krovinių kompanija BEGA, UAB	LT	Large enterprise	b)	366,900.00 €	Active	22/09/2022
4	PP	Shipping & Offshore Network	Shipping & Offshore Network	NO	Business support organisation	b)	211,800.00 €	Active	22/09/2022
5	PP	University of Applied Sciences Wismar: Technology, Business and Design	Hochschule Wismar, University of Applied Sciences: Technology, Business and Design	DE	Higher education and research institution	a)	271,400.00 €	Active	22/09/2022
6	PP	University of Southern Denmark	Syddansk Universitet	DK	Higher education and research institution	a)	243,700.00 €	Active	22/09/2022
7	PP	Port of Pietarsaari Ltd	Pietarsaaren satama Oy	FI	Infrastructure and public service provider	a)	242,000.00 €	Active	22/09/2022
8	PP	Centria University of Applied Ssciences	Centria-ammattikorkeakoulu Oy	FI	Higher education and research institution	a)	201,300.00 €	Active	22/09/2022
9	PP	Blue Science Park	Blue Science Park	SE	Business support organisation	a)	128,700.00 €	Active	22/09/2022
10	PP	Blekinge Institute of Technology	Blekinge Tekniska Högskola	SE	Higher education and research institution	a)	352,300.00 €	Active	22/09/2022
11	PP	Maritime University of Szczecin	Akademia Morska w Szczecinie	PL	Higher education and research institution	a)	186,100.00 €	Active	22/09/2022
12	PP	University of Turku	Turun yliopisto	FI	Higher education and research institution	a)	255,900.00 €	Active	22/09/2022
13	PP	Centrum Balticum Foundation	Centrum Balticum Foundation	FI	Interest group	a)	191,000.00 €	Active	22/09/2022
14	PP	BANKE ApS	Banke ApS	DK	Small and medium enterprise	b)	327,500.00 €	Active	22/09/2022
15	PP	DFDS A/S	DFDS A/S	DK	Large enterprise	b)	202,400.00 €	Active	22/09/2022

2.1.2 Associated Organisations

No associated organisations found

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	Klaipėdos mokslo ir technologijų parkas (39 / 250 characters)
Organisation in English	Klaipeda Science and Technology Park (36 / 250 characters)
Department in original language	n/a (3 / 250 characters)
Department in English	n/a (3 / 250 characters)

Partner location and website:

Address	Vilhelmo Berbomo g. 10 (22 / 250 characters)	**Country**	Lithuania
Postal Code	LT-92221 (8 / 250 characters)	**NUTS1 code**	Lietuva
Town	Klaipėda (8 / 250 characters)	**NUTS2 code**	Vidurio ir vakarų Lietuvos regionas
Website	www.kmtp.lt (11 / 100 characters)	**NUTS3 code**	Klaipėdos apskritis

Partner ID:

Organisation ID type	Legal person's code (Juridinio asmens kodas)
Organisation ID	142105464
VAT Number Format	LT + 12 digits
VAT Number	N/A ☐ LT100001305412 (14 / 50 characters)
PIC	986376996 (9 / 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)	70.22 - Business and other management consultancy activities	

Partner financial data:

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

Role of the partner organisation in this project:

Klaipeda Science and Technology Park (KSTP) acts as Lead Partner as well as WP3 Leader for the project, looking back to great experience in leading a project in different Interreg programs, including BSR. In addition, KSTP is Task Leder for A.1.1, A.2.5 & A.3.5.
KSTP is a business support agency focused on promoting innovations. KSTP is actively involved in international project activities, as well as in the formation and coordination of partnerships and clusters.
The organisation's specialists provide consultations for companies and individuals which are mostly related to the issues of establishing and developing their business, and creating new products and services.
The mission of the KSTP is to promote the development of modern scientifically susceptible technologies, to provide infrastructural and consulting services for innovative enterprises and business ideas in western Lithuania and in the whole country.

927 / 1,000 characters

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

○ Yes ○ No

2.2 Project Partner Details - Partner 2

LP/PP Project Partner

Partner Status Active

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

Partner name:

Organisation in original language VĮ Klaipėdos valstybinio jūrų uosto direkcija

46 / 250 characters

Organisation in English Klaipeda State Seaport Authority

33 / 250 characters

Department in original language Komunikacijos ir rinkodaros skyrius

35 / 250 characters

Department in English Communications and Marketing Department

40 / 250 characters

Partner location and website:

Address J.Janonio 24

12 / 250 characters

Postal Code LT-92251

8 / 250 characters

Town Klaipėda

8 / 250 characters

Website https://www.portofklaipeda.lt/

30 / 100 characters

Country Lithuania

NUTS1 code Lietuva

NUTS2 code Vidurio ir vakarų Lietuvos regionas

NUTS3 code Klaipėdos apskritis

Partner ID:

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

Organisation ID 240329870

VAT Number Format LT + 9 digits

VAT Number N/A ☐ LT403298716

11 / 50 characters

PIC 951975364

9 / 9 characters

Partner type:

Legal status a) Public

Type of partner Infrastructure and public service provi — Public transport, utility company (water supply, electricity supply, sewage, gas, waste collection, airport, port, railway, etc.)

Sector (NACE) 52.22 - Service activities incidental to water transportation

Partner financial data:

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

Role of the partner organisation in this project:

KLAIPĖDA PORT is Lithuania's largest transportation centre providing all maritime business services: stevedoring, shipbuilding, ship repair, logistics, cargo forwarding and agency services, etc. The Port is
situated at the crossroad of two international transport corridors and serves as a bridge between the CIS, the Asian regions and Europe.
The port is supporting and consulting the project in pilot development and implementation, share knowledge and best practices from own electrification measurements outside the project implementation. Klaipėda State Seaport Authority (established in 1991) assures the efficient management, and systematic development of the port coherent implementation of the maritime policy. Klaipėda Port is a state port: port land, port waters, hydrotechnical installations, navigational fairways and all infrastructural facilities belong to the state.

886 / 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 Klaipėdos jūrų krovinių kompanija BEGA, UAB

43 / 250 characters

Organisation in English Klaipeda Stevedoring Company BEGA, JSC

38 / 250 characters

Department in original language n/a

3 / 250 characters

Department in English n/a

3 / 250 characters

Partner location and website:

Address Nemuno str.2B

13 / 250 characters

Country Lithuania

Postal Code	LT-91199 (8 / 250 characters)	**NUTS1 code**	Lietuva
Town	Klaipėda (8 / 250 characters)	**NUTS2 code**	Vidurio ir vakarų Lietuvos regionas
Website	http://www.bega.lt/en/ (22 / 100 characters)	**NUTS3 code**	Klaipėdos apskritis

Partner ID:

Organisation ID type	Legal person's code (Juridinio asmens kodas)
Organisation ID	140451567
VAT Number Format	LT + 9 digits
VAT Number	N/A ☐ LT404515610 (11 / 50 characters)
PIC	891957875 (9 / 9 characters)

Partner type:

Legal status	b) Private	
Type of partner	Large enterprise	≥ 250 employees
Sector (NACE)	45.20 - Maintenance and repair of motor vehicles	

Partner financial data:

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

Financial data	**Reference period**	01/01/2021 –	31/12/2021
	Staff headcount [in annual work units (AWU)]		250.0
	Employees [in AWU]		250.0
	Persons working for the organisation being subordinated to it and considered to be employees under national law [in AWU]		0.0
	Owner-managers [in AWU]		0.0
	Partners engaged in a regular activity in the organisation and benefiting from financial advantages from the organisation [in AWU]		0.0
	Annual turnover [in EUR]		30,000,000.00
	Annual balance sheet total [in EUR]		5,000,000.00
	Operating profit [in EUR]		2,000,000.00

Role of the partner organisation in this project:

Klaipeda Stevedoring Company BEGA is one of the Klaipeda seaport operators, operating specialized terminals. Company's specialization is handling dry and liquid bulk cargo. Most of the cargo from or to the terminals is transported by rail, company has a well-developed internal railway network with a total length of about 16 km. 70 000 rail wagons per year are loaded or unloaded at specialized stations in the terminals. As Company has set the goal becoming a Zero-emission terminal by 2030, a program of conversion and refurbishing of diesel locomotives to electric locomotives was launched in 2016. Modernization of locomotives takes place using the company's internal engineering and human, as well as technical-technological resources. The project directly involves 2 leading technical managers, 4 automation and electrical engineers, 4 specialists in other fields. BEGA takes over Task Leadership of A.2.4 and will jointly develop a pilot in Klaipeda within the project.

977 / 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 4

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

Partner name:

Organisation in original language	Shipping & Offshore Network (27 / 250 characters)
Organisation in English	Shipping & Offshore Network (27 / 250 characters)
Department in original language	n/a (3 / 250 characters)
Department in English	n/a (3 / 250 characters)

Partner location and website:

Address	Rådhusgata 25 (13 / 250 characters)	**Country**	Norway
Postal Code	0158 (4 / 250 characters)	**NUTS1 code**	Norge
Town	Oslo (4 / 250 characters)	**NUTS2 code**	Oslo og Viken
Website	https://shippingoffshorenetwork.no/ (35 / 100 characters)	**NUTS3 code**	Oslo

Partner ID:

Organisation ID type	Organisation number (Organisasjonsnummer)
Organisation ID	987903260
VAT Number Format	NO + 9 digits + MVA
VAT Number	N/A ☑ (0 / 50 characters)
PIC	(0 / 9 characters)

Partner type:

Legal status	b) Private	
Type of partner	Business support organisation	Chamber of commerce, chamber of trade and crafts, business incubator or innovation centre, business clusters, etc.
Sector (NACE)	94.12 - Activities of professional membership organisations	

Partner financial data:

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

Financial data	**Reference period**	01/01/2021	–	31/12/2021
	Staff headcount [in annual work units (AWU)]			1.0
	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]			0.0
	Partners engaged in a regular activity in the organisation and benefiting from financial advantages from the organisation [in AWU]			0.0
	Annual turnover [in EUR]			104,000.00
	Annual balance sheet total [in EUR]			0.00
	Operating profit [in EUR]			3,519.00

Role of the partner organisation in this project:

Established in 1981, Shipping & Offshore Network is a well established industry association for the maritime and offshore industry in Norway and abroad, with members from several countries. As one of three partners in the Maritime Oslofjord Alliance, we have teamed up with Oslo Shipowners' Association and Ocean Industry Forum Oslofjord and have a total of 150+ members covering the entire ocean industries in the Oslofjord region and beyond. As an industry association our main task is to organize meeting places, events, conferences, courses and to connect ocean expertise. Our general manager is extremely well connected after some 20 years in the industry. Our 7 person board has vast knowledge, experience and network that we use constantly, in addition to the boards of the other two associations in the Alliance.
As project partner, we will be responsible for Task A.1.3 implementation.

896 / 1,000 characters

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

○ Yes ○ No

2.2 Project Partner Details - Partner 5

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

Partner name:

Organisation in original language	Hochschule Wismar, University of Applied Sciences: Technology, Business and Design (82 / 250 characters)
Organisation in English	University of Applied Sciences Wismar: Technology, Business and Design (70 / 250 characters)
Department in original language	Fakultät für Wirtschaftswissenschaften | European Project Center (64 / 250 characters)
Department in English	Wismar Business School | European Project Center (48 / 250 characters)

Partner location and website:

Address	Philipp-Müller-Str.14 (21 / 250 characters)	**Country**	Germany
Postal Code	23966 (5 / 250 characters)	**NUTS1 code**	Mecklenburg-Vorpommern
Town	Wismar (6 / 250 characters)	**NUTS2 code**	Mecklenburg-Vorpommern
Website	https://www.hs-wismar.de (24 / 100 characters)	**NUTS3 code**	Nordwestmecklenburg

Partner ID:

Organisation ID type	Tax (identification) number (Steuer(identifikations)nummer)
Organisation ID	183844642 (9 / 50 characters)
VAT Number Format	DE + 9 digits
VAT Number	N/A ☐ DE183844642 (11 / 50 characters)
PIC	972468457 (9 / 9 characters)

Partner type:

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

Partner financial data:

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

Role of the partner organisation in this project:

Hochschule Wismar, University of Applied Sciences: Technology, Business and Design (HSW) will act as Work Package Leader of WP1, being responsible in monitoring the content development and harmonize the activities towards sufficient preparation of project pilots and solutions.
HSW builds upon interdisciplinary and practice-oriented concept integrating three disciplines of Technology, Business and Design under one roof. Due to cross-linkage of key competences in teaching, research and innovation HSW acts as a cut surface between theory and practice. The European Project Center as responsible body for the implementation of EU funded projects in the Wismar Business School Department of the university can rely on established experiences and expertise in the frame of project coordination and implementation and distinguish itself to have the necessary abilities and competences for innovation development and practical implementation in the maritime sector.

965 / 1,000 characters

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

○ Yes ○ No

State aid relevance

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

○ Yes ○ No

2.2 Project Partner Details - Partner 6

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

Partner name:

Organisation in original language	Syddansk Universitet (20 / 250 characters)
Organisation in English	University of Southern Denmark (30 / 250 characters)

Department in original language	n/a (3 / 250 characters)
Department in English	Engineering Operations Management, Technical Faculty (52 / 250 characters)

Partner location and website:

Address	Campusvej 55 (12 / 250 characters)	**Country**	Denmark
Postal Code	5230 (4 / 250 characters)	**NUTS1 code**	Danmark
Town	Odense M (8 / 250 characters)	**NUTS2 code**	Syddanmark
Website	https://sdunet.dk/da/enheder/institutter/iti (44 / 100 characters)	**NUTS3 code**	Fyn

Partner ID:

Organisation ID type	Civil registration number (CPR)
Organisation ID	29283958
VAT Number Format	DK + 8 digits
VAT Number	**N/A** ☐ DK29 28 39 58 (13 / 50 characters)
PIC	999904616 (9 / 9 characters)

Partner type:

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

Partner financial data:

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

Role of the partner organisation in this project:

SDU conduct world-class research and are one of the top fifty young universities in the world. SDU staff from the Section for Engineering Operations Management and optionally Center for Industrial Electronics will engage in this project to complete case / pilot tasks on electrification of terminal tractors and decarbonization of cargo operations for RoRo vessels:
• WP1-2: SDU will contribute to the development and testing of technology for fast charging and electrification of 4-wheel electric yard tractors. Also, solutions for fleet management/scheduling of jobs, charging and service activities of terminal tractors might be in scope
• WP3: Assessment of electrification solutions and pilot activity from environmental, energy, technical, and economic perspectives
A cross-disciplined team of experts (researchers) from relevant units will be set up to accomplish planned tasks to the benefit of the whole consortium.

927 / 1,000 characters

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

○ Yes ○ No

State aid relevance

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

○ Yes ○ No

2.2 Project Partner Details - Partner 7

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

Partner name:

Organisation in original language	Pietarsaaren satama Oy (22 / 250 characters)
Organisation in English	Port of Pietarsaari Ltd (23 / 250 characters)
Department in original language	n/a (3 / 250 characters)
Department in English	n/a (3 / 250 characters)

Partner location and website:

Address	Alholmintie 76 (14 / 250 characters)	**Country**	Finland
Postal Code	68600 (5 / 250 characters)	**NUTS1 code**	Manner-Suomi
Town	Pietarsaari (11 / 250 characters)	**NUTS2 code**	Länsi-Suomi
Website	https://portofpietarsaari.fi/ (29 / 100 characters)	**NUTS3 code**	Pohjanmaa

Partner ID:

Organisation ID type	Business Identity Code (Y-tunnus)
Organisation ID	2650921-9
VAT Number Format	FI + 8 digits
VAT Number	N/A ☐ FI26509219 (10 / 50 characters)
PIC	(0 / 9 characters)

Partner type:

Legal status	a) Public	
Type of partner	Infrastructure and public service provi	Public transport, utility company (water supply, electricity supply, sewage, gas, waste collection, airport, port, railway, etc.)
Sector (NACE)	52.22 - Service activities incidental to water transportation	

Partner financial data:

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

Role of the partner organisation in this project:

Port of Pietarsaari (Task Leader A.3.3) is specialised in handling pulp, sawn timber, paper, chemicals and mixed goods. It is situated in the proximity of Europe's largest pulp mills of UPM and other manufacturers from Alholmen's Industrial Park. 1,5 million tonnes are handled in the port every year.
Commitment to the environment the Port of Pietarsaari demonstrates by applying a certified ISO 14001 environmental management system. We contribute to the environmental work of all parties that operate in the port area and take responsibility for the environmental education of personnel. Monitoring the situation by digital solutions and taking instantly actions for improvements, optimisation of port's transport and logistics operations, use of low-carbon fuel and less emitting power supply reduce local pollutions, improve the health of port workers and residential areas near the port, it also might reduce noise in a surrounding and therefore improve overall, sustainability of the port.

997 / 1,000 characters

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

○ Yes ○ No

2.2 Project Partner Details - Partner 8

LP/PP Project Partner

Partner Status Active

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

Partner name:

Organisation in original language Centria-ammattikorkeakoulu Oy

29 / 250 characters

Organisation in English Centria University of Applied Ssciences

39 / 250 characters

Department in original language n/a

3 / 250 characters

Department in English Research and Development

25 / 250 characters

Partner location and website:

Address Talonpojankatu 2

16 / 250 characters

Postal Code FIN-67100

9 / 250 characters

Town Kokkola

7 / 250 characters

Website https://tki.centria.fi/en

25 / 100 characters

Country Finland

NUTS1 code Manner-Suomi

NUTS2 code Pohjois- ja Itä-Suomi

NUTS3 code Keski-Pohjanmaa

Partner ID:

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

Partner type:

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

Partner financial data:

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

Role of the partner organisation in this project:

Centria activities are an integral part of regional development strategy not only in education and R&D, but also in support of industry and community in the region. The role is defined also by the Finnish “Universities of Applied Sciences Act” 932/2014.
Thematic competence for this project (Task Leader A.1.4) is related to 1) low-carbon energy, which includes energy efficiency, low-carbon renewable energy processing and storage, 2) life cycle assessment (LCA), which includes environmental and financial aspects of products, production processes and services LCA, creation of road maps for reducing the impacts and the costs, 3) digital solutions, which includes designing and setting up pilots in for data gathering, analysing and utilising data for decision making. Expertise includes also cyber security, electronics and hardware design, game development, augmented and virtual reality technologies.
Each theme will be directly represented by at least one expert (3 together).

986 / 1,000 characters

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

○ Yes ○ No

State aid relevance

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

○ Yes ○ No

2.2 Project Partner Details - Partner 9

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

Partner name:

Organisation in original language	Blue Science Park (17 / 250 characters)
Organisation in English	Blue Science Park (17 / 250 characters)

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

Partner location and website:

Address	Minervavägen 4 (14 / 250 characters)	**Country**	Sweden
Postal Code	37175 (5 / 250 characters)	**NUTS1 code**	Södra Sverige
Town	Karlskrona (10 / 250 characters)	**NUTS2 code**	Sydsverige
Website	https://www.bluesciencepark.se/ (31 / 100 characters)	**NUTS3 code**	Blekinge län

Partner ID:

Organisation ID type	Organisation number (Organisationsnummer)
Organisation ID	559031-0321
VAT Number Format	SE + 12 digits
VAT Number	**N/A** ☐ SE559031032101 (14 / 50 characters)
PIC	905817041 (9 / 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)	70.22 - Business and other management consultancy activities	

Partner financial data:

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

Role of the partner organisation in this project:

Blue Science Park (WP2 Leader & Task Leader A.2.1) established in 2016 is a triple helix structure owned by the university Blekinge Institute of Technology, regional government/municipalities and businesses in Blekinge, Sweden. Blue Science Park is a non-profit organisation well versed in it´s two main areas of interest; digitalisation and Marine Technology. From a Maritime Technology perspective Blue Science Park focuses on three different areas of competence; Offshore Energy, Sustainable Oceans and Defense. BSP is project driven organisation handling national and international projects as a core business. Connected to Blue Science Park is an extensive network of competences and knowledge in the field of ICT, digitalisation and Marine Technology. From a Blue Science Park perspective, this project would most likely involve one individual as a coordinating role, who in-turn engages competences in the surrounding network of partners and members to execute on the pilot.

981 / 1,000 characters

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

○ Yes ○ No

2.2 Project Partner Details - Partner 10

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

Partner name:

Organisation in original language	Blekinge Tekniska Högskola (26 / 250 characters)
Organisation in English	Blekinge Institute of Technology (32 / 250 characters)
Department in original language	n/a (3 / 250 characters)
Department in English	n/a (3 / 250 characters)

Partner location and website:

Address	Blekinge Tekniska Högskola (26 / 250 characters)	**Country**	Sweden
Postal Code	37179 (5 / 250 characters)	**NUTS1 code**	Södra Sverige
Town	Karlskrona (10 / 250 characters)	**NUTS2 code**	Sydsverige
Website	www.bth.se (10 / 100 characters)	**NUTS3 code**	Blekinge län

Partner ID:

Organisation ID type	Organisation number (Organisationsnummer)
Organisation ID	202100-4011
VAT Number Format	SE + 12 digits
VAT Number	N/A ☑ (0 / 50 characters)
PIC	(0 / 9 characters)

Partner type:

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

Partner financial data:

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

Role of the partner organisation in this project:

Blekinge Institute of Technology - BTH (Task Leader A.2.2), is one of the most distinctly profiled universities in Sweden, where applied IT and innovation for sustainable growth are in focus. Everything we do at BTH has three distinct perspectives: innovation, sustainability and in real life which means cooperation and exchange with both business and industry as well as and society. BTH conducts research since 2000 on ports and terminals at a high international level and is among the top six in the world in systems and software engineering and sustainability. Research on ports, terminals and logistics systems is internationally recognised and cited in hundreds of articles globally. Through established links with Port Equipment firms via PEMA (Port Equipment Manufacturer's Association), Ports in Blekinge, Sweden, Europe and Globally, and IT companies, BTH is in excellent position to help foster Digitalisation for Small Ports.

938 / 1,000 characters

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

○ Yes ○ No

State aid relevance

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

○ Yes ○ No

2.2 Project Partner Details - Partner 11

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

Partner name:

Organisation in original language	Akademia Morska w Szczecinie (28 / 250 characters)
Organisation in English	Maritime University of Szczecin (31 / 250 characters)
Department in original language	n/a (3 / 250 characters)
Department in English	Faculty of Navigation, Department of Maritime Simulation (56 / 250 characters)

Partner location and website:

Address	Wały Chrobrego 1-2 (18 / 250 characters)	**Country**	Poland
Postal Code	70-500 (6 / 250 characters)	**NUTS1 code**	Makroregion północno-zachodni
Town	Szczecin (8 / 250 characters)	**NUTS2 code**	Zachodniopomorskie
Website	www.am.szczecin.pl (18 / 100 characters)	**NUTS3 code**	Miasto Szczecin

Partner ID:

Organisation ID type	Tax identification number (NIP)
Organisation ID	8510006388
VAT Number Format	PL + 10 digits
VAT Number	N/A ☐ PL8510006388 (12 / 50 characters)
PIC	972636267 (9 / 9 characters)

Partner type:

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

Partner financial data:

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

Role of the partner organisation in this project:

The Maritime University of Szczecin (Task Leader A.3.4) is a public, technical university with a long-established tradition that dates back to 1947.Today, the Maritime University of Szczecin, with its landmark main building and a network of other facilities spread in the area is composed of five faculties: Faculty of Navigation, Faculty of Marine Engineering, Faculty of Engineering and Economics of Transport, Faculty of Computer Science and Telecommunications, Faculty of Mechatronics and Electrical Engineering. We train maritime professionals including merchant, passenger and fishing fleet personnel (navigators, deck officers, mechanical and electrical engineers), as well as qualified on-shore operators and managers for shipowners and port service companies involved in maritime shipping. Another part of our mission is developing scientific research with a profound commitment to innovative technologies. We strongly support close cooperation between the University, business and society.

1,000 / 1,000 characters

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

○ Yes ○ No

State aid relevance

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

○ Yes ○ No

2.2 Project Partner Details - Partner 12

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

Partner name:

Organisation in original language	Turun yliopisto (15 / 250 characters)
Organisation in English	University of Turku (19 / 250 characters)

Department in original language	n/a (3 / 250 characters)
Department in English	Pan-European Institute, Department of Marketing and International Business, Turku School of Economics (101 / 250 characters)

Partner location and website:

Address	Yliopistonmäki (14 / 250 characters)	**Country**	Finland
Postal Code	20014 (5 / 250 characters)	**NUTS1 code**	Manner-Suomi
Town	Turku (5 / 250 characters)	**NUTS2 code**	Etelä-Suomi
Website	www.utu.fi (10 / 100 characters)	**NUTS3 code**	Varsinais-Suomi

Partner ID:

Organisation ID type	Business Identity Code (Y-tunnus)
Organisation ID	0245896-3
VAT Number Format	FI + 8 digits
VAT Number	**N/A** ☐ FI02458963 (10 / 50 characters)
PIC	999903064 (9 / 9 characters)

Partner type:

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

Partner financial data:

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

Role of the partner organisation in this project:

University of Turku (UTU) is the only Finnish university where maritime studies have been selected as a university-wide strategic research and education profile theme. Within UTU, Turku School of Economics (TSE) has a strong reputation in maritime research through its active and expanding community of professionals from different business studies disciplines. Under TSE, Pan-European Institute has wide experience of international research on maritime industry networks, digitalisation and sustainability. Through the Task Leadership in A.3.1 & A.3.2, the project will benefit indirectly from the highly competent business research community at TSE by involving experts to share their ideas and know-how concerning e.g. business model development, port infrastructure and digital solution development.

804 / 1,000 characters

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

○ Yes ○ No

State aid relevance

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

○ Yes ○ No

2.2 Project Partner Details - Partner 13

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

Partner name:

Organisation in original language	Centrum Balticum Foundation (27 / 250 characters)
Organisation in English	Centrum Balticum Foundation (27 / 250 characters)
Department in original language	n/a (3 / 250 characters)
Department in English	n/a (3 / 250 characters)

Partner location and website:

Address	Vanha Suurtori 7 (16 / 250 characters)	**Country**	Finland
Postal Code	20500 (5 / 250 characters)	**NUTS1 code**	Manner-Suomi
Town	Turku (5 / 250 characters)	**NUTS2 code**	Etelä-Suomi
Website	www.centrumbalticum.org (23 / 100 characters)	**NUTS3 code**	Varsinais-Suomi

Partner ID:

Organisation ID type	Business Identity Code (Y-tunnus)
Organisation ID	2112927-6
VAT Number Format	FI + 8 digits
VAT Number	N/A ☑ (0 / 50 characters)
PIC	902552409 (9 / 9 characters)

Partner type:

Legal status	a) Public	
Type of partner	Interest group	Trade union, foundation, charity, voluntary association, club, etc. other than NGOs
Sector (NACE)	70.21 - Public relations and communication 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:

Centrum Balticum Foundation is an expert in Baltic Sea region cooperation and has worked for more than a decade to promote competitiveness, cohesion and environmental protection in the region.
Centrum Balticum's area of speciality is project communication, and the Foundation has worked as a communication partner in several international projects. In addition to communication, Centrum Balticum has experience in project leadership and management, as well as project development and public affairs.
In the BalticLightPorts project, Centrum Balticum would be taking care of the communication manager's role as described in the Programme Manual, p. 116. There would be one communication advisor to act as a communication manager.

731 / 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 14

LP/PP Project Partner

Partner Status Active

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

Partner name:

Organisation in original language Banke ApS

9 / 250 characters

Organisation in English BANKE ApS

9 / 250 characters

Department in original language n/a

3 / 250 characters

Department in English a/a

3 / 250 characters

Partner location and website:

Address Ormstoft 5

10 / 250 characters

Postal Code 6400

4 / 250 characters

Town Sønderborg

10 / 250 characters

Website www.banke.pro

13 / 100 characters

Country Denmark

NUTS1 code Danmark

NUTS2 code Syddanmark

NUTS3 code Sydjylland

Partner ID:

Organisation ID type	Civil registration number (CPR)
Organisation ID	32773974
VAT Number Format	DK + 8 digits
VAT Number	N/A ☐ DK32 77 39 74 (13 / 50 characters)
PIC	899646095 (9 / 9 characters)

Partner type:

Legal status	b) Private	
Type of partner	Small and medium enterprise	Micro, small, medium enterprises < 250 employees, ≤ EUR 50 million turnover or ≤ EUR 43 million balance sheet total
Sector (NACE)	28.11 - Manufacture of engines and turbines, except aircraft, vehicle and cycle engines	

Partner financial data:

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

Financial data	**Reference period**	01/01/2021 –	31/12/2021
	Staff headcount [in annual work units (AWU)]		19.0
	Employees [in AWU]		19.0
	Persons working for the organisation being subordinated to it and considered to be employees under national law [in AWU]		0.0
	Owner-managers [in AWU]		0.0
	Partners engaged in a regular activity in the organisation and benefiting from financial advantages from the organisation [in AWU]		0.0
	Annual turnover [in EUR]		2,100,000.00
	Annual balance sheet total [in EUR]		3,100,000.00
	Operating profit [in EUR]		24,000.00

Role of the partner organisation in this project:

Established in 2011, Banke ApS is a leading supplier of solutions used for electrification of propulsion and work function on working vehicles. Banke ApS masters an essential range of relevant competences including battery configuration and optimisation, battery management systems, mechanical engineering – 2D/3D, software development and integration, CAN architecture, vehicle engineering, FE Analysis, hydraulic engineering, electrical engineering and rapid prototyping. Banke ApS entire development organisation will be available to participate in the project. BANKE will also be responsible in transnational pilot development and implementation (WP2) dedicated to transformation in port infrastructures towards electrification usage.

739 / 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 15

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

Partner name:

Organisation in original language	DFDS A/S (8 / 250 characters)
Organisation in English	DFDS A/S (8 / 250 characters)
Department in original language	n/a (3 / 250 characters)
Department in English	Innovation and Partnerships (27 / 250 characters)

Partner location and website:

Address	Marmorvej 18 (12 / 250 characters)	**Country**	Denmark
Postal Code	2100 (4 / 250 characters)	**NUTS1 code**	Danmark
Town	Copenhagen (10 / 250 characters)	**NUTS2 code**	Hovedstaden
Website	www.dfds.com (12 / 100 characters)	**NUTS3 code**	Byen København

Partner ID:

Organisation ID type	Civil registration number (CPR)
Organisation ID	14194711
VAT Number Format	DK + 8 digits
VAT Number	**N/A** ☐ DK14 19 47 11 (13 / 50 characters)
PIC	937659231 (9 / 9 characters)

Partner type:

Legal status	b) Private	
Type of partner	Large enterprise	≥ 250 employees
Sector (NACE)	50.10 - Sea and coastal passenger water transport	

Partner financial data:

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

Financial data				
	Reference period	01/01/2021	_	31/12/2021
	Staff headcount [in annual work units (AWU)]			11,000.0
	Employees [in AWU]			11,000.0
	Persons working for the organisation being subordinated to it and considered to be employees under national law [in AWU]			0.0
	Owner-managers [in AWU]			0.0
	Partners engaged in a regular activity in the organisation and benefiting from financial advantages from the organisation [in AWU]			0.0
	Annual turnover [in EUR]			2,403,000,000.00
	Annual balance sheet total [in EUR]			4,131,000,000.00
	Operating profit [in EUR]			181,000,000.00

Role of the partner organisation in this project:

DFDS A/S is an international shipping and logistics company. Established in 1866, DFDS has been a part of the Danish industrial and maritime industry for more than 150 years. DFDS operates more than 60 vessels, moving freight and passengers on ferry routes in Europe, and provide transport and logistics solutions for a wide range of businesses. DFDS owns and operates a number of RORO and container terminals across Europe. Presently 300+ Yard tractors are operated and maintained by DFDS. DFDS will be a core partner for the iplementation of the pilot A electrification and retrofiting of the RO-RO terminal tractor (WP2).

625 / 1,000 characters

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

(•) Yes ( ) No

3. Relevance

3.1 Context and challenge

"Fit for 55" package was published by the European Commission (EC) in July 2021, with the aim to reduce the Greenhouse Gas Emission (GHG) by at least 55% by 2030 and thus pave the way for climate neutrality by 2050. For the first time the portfolio of legislative proposals was extended to the maritime sector, meaning higher pressure on all economic actors involved in seaborne activities. First, the EU Emissions' Trading System is extended to the maritime transport. Second, new obligations will apply to use of Onshore Power Supply (OPS) or zero-emission technologies as well as new limits on the GHG intensive of energy used on ships. On the top of that, the initial GHG Strategy by the International Maritime Organisation (IMO) will be revised in 2023, with short-term carbon control measures. From the 1st of January 2023, the IMO Carbon Intensity Indicator (CII) will be applicable for all cargo, RoPax and cruise vessels above 5.000 GT (Gross-Tonnage) and trading internationally. These new regulations will enter into force on the 01.11.2022. Therefore, timeframes are short, affected actors as ports, shipping companies and regulators are not fully aware of the implications and procedures they need to complete nor have strategies / action plans to initiate the necessary transformation. New pressure arising from environmental regulations will bring disruption in current transport and logistics operations, followed by the need to adopt existing supply & value chains as well as business models too. However, there is no transnational contact point / institution assisting ports in this process, e.g. support in necessary fund acquisition. Considering a huge number of ports (where majority is comprehensive ones) in the BSR and the traffic intensity, ports might face harsher competition as a result of insufficient investment capacities for sustainability strategies, lower human capacities for innovation application as well as less technological readiness for green transition.

1,996 / 2,000 characters

3.2 Transnational value of the project

Transnational collaboration has proven as an accelerator in nearly all thematic areas, bringing together knowledge, experiences and ideas from several different perspectives putting this approach into the centre of open innovation processes, value creation and the heart of European cooperation culture. The consortium is strongly believing and supporting this transnational approach, as it is the key to work in a partnership from different European countries (DK, DE, FI, LT, SE & PL). Especially in the thematic field of maritime transport and ports, borders between municipalities, regions and countries are soaked which offensively claims for cross-border and transnational approaches when it comes to future design of ports as connecting assets and gateways alongside TEN-T networks.
Even though port development seems to be a local or regional issue, only a transnational approach can overcome lacking knowledge, offer best practices and accelerate the innovativeness of measurement to truly contribute to greening ports and contribute to GHG emission reduction through electrification. In addition, in a time of transition for European ports, similar challenges and obstacles can be identified across countries, which can be tackled sufficiently and jointly in a collaborative approach to support ports in becoming greener, smarter, more resilient and economic competitive.
BSR ports are not only core or comprehensive parts of TEN-T network on macro-level, but also become more and more globalised, which allows and demands business collaboration not only on local but European level. Hence, new concepts have to refer to this development requiring another key aspect to be tackled in a transnational manner – harmonisation. Greening initiatives for BSR ports can't only profit from the transnational approach in their development and implementation, but need to vice versa satisfy European standards to really be a sustainable open and co-creative innovation solution.

1,979 / 2,000 characters

3.3 Target groups

Target group	Sector and geographical coverage	Its role and needs
Small and medium enterprise	Both TEN-T Core and Comprehensive Ports and Terminals in the BSR, incl. shipowners, shipping companies, terminal operations, logistics service providers (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 215 / 500 characters	Small and medium-sized ports (SMSPs) being integrated into the TEN-T network as comprehensive ports or not even listed are the core target group of the envisaged project. They build the majority of ports located in the BSR. As mentioned under 3.1 several regulations and target values are creating pressure to act for ports, whereas bigger ports have more opportunities to initiate disruptive changes towards green transition compared to smaller ones. Hence, SMSPs rely on transnationals approaches, best practices adoption, experience sharing and knowledge distribution as offered by cross-border project initiatives like BalticLightPorts2030. The project consortium can rely on a broad existing network concerning SMSPs in the BSR, allowing the project to continuously involve SMSPs representatives in activity implementation as well as evaluation processes of the developed Solutions. 889 / 1,000 characters

Target group	Sector and geographical coverage	Its role and needs
Infrastructure and public service provid	Electrification solutions providers for ground infrastructure, railer, tractors, yard trucks, digital monitoring and IoT service providers (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 201 / 500 characters	Towards the transition of BSR ports in terms of greening operations through electrification approaches, infrastructure and service providers being involved in the operations of port ecosystems are important actors and accelerators of the process. Port Authorities are obliged to push the process, but in close cooperation with local / regional infrastructure and service providers, e.g. IoT experts, vehicle providers, etc. Vice versa, ports themselves can initiate a re-thinking and acceleration for such kind of target group in joining innovation processes and upgrade the own product / service portfolio with higher share of "green" solutions. Though BaltiLightPorts2030 serves also as a testbed for infrastructure and service providers in testing new solutions in a real port ecosystem. 791 / 1,000 characters
Business support organisation	Science and Technology Parks, business intermediaries, investors, transitional technologies providers, innovation start-ups (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 186 / 500 characters	Business support organizations are an important group not only for project dissemination but actual implementation. As ports should be understood as ecosystems, severals different levels of businesses are affected from port development. In addition, the cooperation of ports with local BSOs is already strong in terms of innovation application. The BalticLightPorts2030 project relies on these existing network from the partnership to include BSOs strongly in preparing, developing and transferring the solutions. 514 / 1,000 characters
Regional public authority	Authorities responsible for regional development, compliance with the EU policy for the European Green Deal, Fit for 55 Legislative Package (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 202 / 500 characters	Min. 10 regional policy making will be involved, which are responsible for Smart Specialisation Strategies (S3) and the EU policy adaptation. With the exception of PP17, further 10 will be involved (as we count in total 11 regions). They will be reached out via direct PPs, who collaborate and work with regional authorities on a daily basis, or via Associated Partners (APs), having close proximity with regional authorities. The project aims to include regional politicians into the innovation sprints as well. Policy makers are needed to be involved, as they are essential creators and implementors of the regional innovation policy. They need to learn potential of co-creation for needed innovation in port sectors. They also rely on new tools / methods for upgrading S3 for sustainable development – Smart Specialisation Strategies for Sustainability (S4) and re-thinking the potential and importance of ports for regional innovation application and development. 970 / 1,000 characters
National public authority	Ministries responsible for transition in transport, maritime shipping as well as health and environmental monitoring issues □ Interoperability, regional integration and cohesion enhancement (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 252 / 500 characters	Ports are logistical nodes and gateways for transport of goods and passengers between countries, pushing also national political interest into the discourse of their development. Hence, it is necessary for the project to be not only in line with national strategies and regulations, but to include ministries responsible for transport issues into the development of solutions as well as transfer the key results by the project to them (e.g. A.3.2 policy recommendations). 471 / 1,000 characters

3.4 Project objective

Your project objective should contribute to:

Blue economy

By addressing challenges towards environmental and digital transition in the ports as two key building blocks and performance domains addressed by the proposal, the partnership sets out also facilitating sustainable Blue Growth in both established and emerging Blue Economy sectors. Simultaneously, according to the 2020 Blue Economy Report, blue sectors contribute to the recovery and pave the way for the European Green Deal . As a result, by focusing on Blue Economy aspects and its strengthening, the project aims at increasing better environmental, economic and social cohesion. In particular, the cross-cutting objectives (EGD and Blue Growth) are covered and contribution envisaged as follows:
1) Established Blue Economy sectors:
a. sea, coastal and inland waterways freight and passenger water transport – improved through reduced emissions as a result of demonstration pilots in Lighthouse Ports
b. port activities such as freight handling – improved through innovative equipment introduction in port terminal operation electrification
c. shipbuilding and repair – improved by synergies using state-of-the-art knowledge and applying it for pilot demonstration on electrification
2) Emerging Blue Economy sectors:
a. coastal and environmental protection by reduction of GHG emissions in port areas and regions,
b. marine research and education – improved by sustainable and responsible innovation capacity building through Innovation Excellence Center institutionalization and capacity build activities
c. ocean energy – improved utilisation of green energy supply (e.g. off shore) and showcasing necessity for its development in the BSR
As a result, the projected mechanisms will be integrated and dovetailed with the existing solutions and / or project results transferred to the topical and interlinked green port initiatives and projects covering the same or similar issues.

1,888 / 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 Innovation

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

Action 1: Challenge-driven innovation
The project is supporting ports in the BSR to overcome environmental and economic challenges by applying innovation and demonstration pilots with high potential for adaption and transition to other ports alongside the TEN-T network and beyond. The BSR Lighthouse Port BluePrint is subsuming best practices, up to date knowledge and innovation capacity for the region and supports the establishment of a Port Innovation Ecosystem Excellence Center BSR dedicated to support ports in their transformation towards green solutions (electrification) by supporting / consulting / connecting them turning challenges into opportunities for sustainable growth.
Action 2: Digital Innovation and Transformation
Electrification of logistical, operational and multimodal processes in ports is strongly relying on IoT applications and digital framework available in port ecosystem. Project will ensure to improve digital competencies and capacities through piloting to support digital and environmental transition, which are actually intertwined.
Action 3: Co-Creative Innovation
Co-creation is in the center of the planned outputs. The Port Innovation Ecosystem Excellence Center BSR is reflecting this approach as innovation institution itself and the BSR Lighthouse Port BluePrint including the Lighthouse pilots are results of cross-border co-creation (Innovation Sprints WP1) connecting ports, academics, businesses, etc. in final developing and preparing phase.

1,493 / 1,500 characters

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

PA Ship
The project is in line with the objective of this PA to upgrade facilities and structures in ports of the BSR by exchanging best practices and experiences as well as supporting investments and cooperation. Electrification of port operations also creates positive synergies and effects towards maritime transport and shipping itself. In addition, supporting the transition process towards greener ports will lead to spillover effects to apply clean shipping facilities for usage of alternative fuels in the BSR.
PA Transport
The TEN-T network of European transport is the backbone of the project proposal and rationale to develop Lighthouse Ports. We do understand ports not as an independent unit, but as an ecosystem with a lot of connections in their respective regions (hinterland, port cities, businesses, academics and politics) and a certain regional economic importance as well as transnational gateways to connect BSR countries (and more).

956 / 1,500 characters

3.6 Other political and strategic background of the project

Strategic documents

The European Green Deal (EGD) and its ambitious goals are the driving initiative for BalticLightPorts2030. The EGD calls for 90% reduction in transport emissions by 2050. In the Communication of the Commission (COM(2020) 780 final) on “Sustainable and Smart Mobility Strategy”, there is a need to create zero-emission ports by 2050. Hence, this project contributes to achieve such goals for participating and all other ports (transferring and adapting solutions) of the BSR.

474 / 500 characters

BalticLightPorts2030 is in line with and supports several Sustainable Development Goals of the UN such as No. 8 Economic growth and No. 9 Industry, Innovation and Infrastructure but also contributes to other goals such as No. 11 Sustainable Communities and No. 13 Climate Action as well as No. 17 Partnership for the Goals.

324 / 500 characters

A research article shows huge potential for improvements on the integration of ports as blue actors in a region to the respective Smart Specialisation Strategies (S3) priorities. Even though, a lot of regions can utilize from a strong maritime sector and the existence of ports as logistical hubs, these blue actors are not well represented in their respective regional innovation strategy yet. Hence, the project actively promotes and showcases the importance of BSR ports to be integrated into S3.

499 / 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
Power4Ports 11 / 200 characters	Swedish Institute 17 / 200 characters	Power4Ports project is funded as Seed Money project by the Swedish Institute and the starting point for the proposal development of BalticLightPorts2030. The Partners of Blue Science Park, Maritime University of Szczecin, Klaipeda Science Park and University of Wismar are working collaborative on the topic of electrification in this small project since Autumn 2021. In line with this implementation, the partnership has been set up, the pilots have been elaborated and most important, a study on the status quo of electrification in BSR ports is in the final stages. The study is based on online audits made with BSR ports and will serve as important document for BalticLightPorts2030 to start with, especially in Activity 1.1. 729 / 1,000 characters

Full name of the project	Funding Source	Use of the project outcomes and/or planned cooperation
Connect2SmallPorts 18 / 200 characters	INTERREG South Baltic Programme 2014 - 2020 43 / 200 characters	The Connect2SmallPorts project in the frame of the INTERREG South Baltic Programme 2014 - 2020 supported small and medium-sized ports of the South Baltic Sea in upscaling their digital competencies and capacities. In total, eight digitalization pilots have been jointly developed and implemented in Karlskrona, Klaipeda, Lubmin, Stralsund, Vordingborg, Wismar, and Ystad. In addition, port representatives from Gdynia, Helsini, Stockholm, Tallinn and Valencia have been actively contributed in cooperation with digitalization and cyber-security companies to achieve the project outcomes. As the partnership of Connect2SmallPorts regain in the partnership of BalticLightPorts2030, the project benefits from the established network and easy access to ports for the project purposes. https://connect2smallports.eu 814 / 1,000 characters
DigiTechPort 12 / 200 characters	INTERREG South Baltic Programme 2014 - 2020 43 / 200 characters	The DigiTechPort project is funded as a Seed Money project in the INTERREG South Baltic Programme 2014 - 2020 with the aim to be transferred into a big-scale project in the new funding programme. The DigiTechPort initiative was born within the mentioned Connect2SmallPorts project as strategy to establish an Excellence Center for digitalization in small and medium-sized ports of the South Baltic. This initial idea was taken up by the consortium and transferred to the BSR with the clear objective to put the theoretical concept of establishing the Excellence Center into practice by achieving the aspired output of a Port Innovation Ecosystem Excellence Center BSR. The DigiTechPort Seed Money project is starting in summer 2022 and aims to develop a strategy to transform small ports into smarter ports with focus on resource-efficiency and competitiveness. The gained insights from this project will directly be transferred and utilised on in BalticLightPorts2030. https://smallports.eu 996 / 1,000 characters

3.10 Horizontal principles

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

4. Management

Allocated budget 10%

4.1 Project management

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

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

The project builds upon the principle of the shared leadership. It's effective and sufficient for a bigger number of different partners working on a common goal / objective. Through this approach the project partners feel more responsible for the implementation of their activities on a project level, resulting into larger motivation to contribute and design the actions jointly implemented. This leads not only to a better team spirit, but also higher quality and value of the project results.

495 / 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.

The project builds upon a thorough and user-driven communications strategy. Communication must be as simple as possible, not making issues to complicate, and will be done throughout the entire project life, supported by all partners. To coordinate communication measures as effective as possible, a Marketing and Branding Plan will be developed including a Project Corporate Identity. Responsible Communication Manager is PP13 - Centrum Balticum Foundation.

458 / 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	Identification and Benchmarking of Green & Sustainable Electrification Concepts
1.2	Innovation Sprints preparatory Actions, Implementation & Evaluation
1.3	Building Open Lab Excellence concept for decarbonization of ports in BSR
1.4	Design of Lighthouse Port Demonstration Pilots
1.5	Upgrade Benchmarking to Lighthouse Port Business Decision-Making Tool

Number	Work Package Name
2	WP2 Piloting and evaluating solutions

Number	Group of Activity Name
2.1	Design and Accomplishiment of Contracts
2.2	Launch and Implementation Seaport Pilots
2.3	Cross-Pilot Monitoring and Corrective Actions
2.4	Evaluation of Lighthouse Port Pilots & Lessons learnt
2.5	Establishment of LighthousePorts Innovation lab

Number	Work Package Name
3	WP3 Transferring solutions

Number	Group of Activity Name
3.1	Solving business-level bottlenecks in pilot solution transfer
3.2	Solving policy-level bottlenecks in pilot solution transfer
3.3	Development of Port Feasibility Studies for Decarbonization
3.4	Capacity Building and Know-how Distribution
3.5	Portathon Baltic and Investor network

Work plan overview

Period:	1	2	3	4	5	6	Leader
WP.1: WP1 Preparing solutions							**PP5**
A.1.1: Identification and Benchmarking of Green & Sustainable Electrification Concepts							PP1
D.1.1: Port Electrification Radar and Guideline	D						
A.1.2: Innovation Sprints preparatory Actions, Implementation & Evaluation							PP5
D.1.2: Evaluated and capitalized on Pilot Innovation Sprints		D					
A.1.3: Building Open Lab Excellence concept for decarbonization of ports in BSR							PP4
D.1.3: BSR Open Lab Excellence Center for Ports		D					
A.1.4: Design of Lighthouse Port Demonstration Pilots							PP8
D.1.4: Harmonised Port Demonstration Pilot Roadmap		D					
A.1.5: Upgrade Benchmarking to Lighthouse Port Business Decision-Making Tool							PP5
D.1.5: Lighthouse Port Transition Tool			D				
WP.2: WP2 Piloting and evaluating solutions							**PP10**
A.2.1: Design and Accomplishment of Contracts							PP9
D.2.1: Pilot Development and Implementation Contracts accomplished			D				
A.2.2: Launch and Implementation Seaport Pilots							PP10
A.2.3: Cross-Pilot Monitoring and Corrective Actions							PP6
O.2.3: BSR Lighthouse Port BluePrint				O			
A.2.4: Evaluation of Lighthouse Port Pilots & Lessons learnt							PP3
D.2.4: Pilots finalised and validated				D			
A.2.5: Establishment of LighthousePorts Innovation lab							PP1
O.2.5: Port Innovation Ecosystem Excellence Center BSR				O			
WP.3: WP3 Transferring solutions							**PP1**
A.3.1: Solving business-level bottlenecks in pilot solution transfer							PP12
D.3.1: Business opportunities and recommendations in transferring lighthouse port solutions					D		
A.3.2: Solving policy-level bottlenecks in pilot solution transfer							PP12
D.3.2: Policy recommendations for supporting greener ports and lighthouse port solution transfer					D		
A.3.3: Development of Port Feasibility Studies for Decarbonization							PP7
D.3.3: Proof of Concept for Lighthouse Port BluePrint					D		
A.3.4: Capacity Building and Know-how Distribution							PP11
A.3.5: Portathon Baltic and Investor network							PP1
D.3.5: BSR Port Sector Excellence Distribution & Sustainability						D	

Outputs and deliverables overview

Code	Title	Description	Contribution to the output	Output/ deliverable contains an investment
D 1.1	Port Electrification Radar and Guideline	Radar offers easy accessible benchmarking of available and market-ready solutions for improving electrification of ports and their operations with focus on key aspects for decision-making towards transforming and greening the ports. The radar is supported by guideline on how to implement these technologies in port areas of the Baltic Sea Region. It allows easy comparison of different technologies alongside several for the users (target groups), providing easy access into the challenge and potential measurements for port electrification.	O.2.3 - BSR Lighthouse Port BluePrint	
D 1.2	Evaluated and capitalized on Pilot Innovation Sprints	Evaluation forms and working materials of each innovation sprint are harmonized and reviewed. Lessons learnt, best practices, transnational experiences and new ideas collected and utilized on in designing and planning the project pilots.	O.2.3 - BSR Lighthouse Port BluePrint	
D 1.3	BSR Open Lab Excellence Center for Ports	Institutionalisation concept for Excellence Center with focus on servitisation approach and port consultancy models for applying green (electrification) technologies in BSR port ecosystems.	O.2.5 - Port Innovation Ecosystem Excellence Center BSR	
D 1.4	Harmonised Port Demonstration Pilot Roadmap	Harmonised planning framework for cross-border piloting concepts for port planners, politicians and decision-makers developed, used and tested by the project in electrification pilots application of WP2. The framework serves as roadmap with great potential for adaption by other ports and target groups.	O.2.3 - BSR Lighthouse Port BluePrint	
D 1.5	Lighthouse Port Transition Tool	Online tool for port planners, port operators, target groups and political decision-makers implemented and offered digitally. The tool will be based on all activities, lessons learnt, materials, experiences shared, best practices identified and roadmaps developed undertaken within WP1. As an online tool, easy and open access can be granted allowing easy adaption for other ports in the Baltic Sea Area (and beyond) for the own purposes and plans in electrifying port operations. As an interactive tool, the users will be able to access partly tailor-made guidelines / action plans for applying electrified technologies in ports.	O.2.3 - BSR Lighthouse Port BluePrint	
D 2.1	Pilot Development and Implementation Contracts accomplished	Legal framework conditions of piloting are clarified at an early implementation stage, all necessary tenders are implemented according to European, national and institutional regularities and contracts are signed by all affected parties.	O.2.3 - BSR Lighthouse Port BluePrint	

O 2.3	BSR Lighthouse Port BluePrint	The anticipated innovation demonstration Lighthouse Pilots will deliver different types of innovations that are claimed to be smart, sustainable, responsible, user-driven pilots (Pilot Group A & Pilot Group B) including sufficient business models for electrification transition in ports of the BSR. Pilot implementation will lead to different levels of impacts for port ecosystems: 1) Direct impacts: innovation pilots implemented with innovation capacity enhanced in four participating pilot ports (short-term); improved port capacity with financial resources and creation of new jobs (short-term); improved innovation capacity of authorities (participating port authorities) on the long-run; port competition enhanced through greening port operations and generating green incentives (long-term); access to new markets with green products (long-term); 2) Medium impacts: improved organisational innovation capacity through knowledge transfer in innovation development and launch on the market in all four participating EU Member States (industry, academic, research and policy partners); improved residence health conditions through carbon dioxide capture in ports and port-city areas (long-term); improved natural resources conditions (e.g. environmental situation) of the highly protected areas at the intersection thereof ports are located, such as national parks, reserves; generating jobs through EU funding (short-term); 3) Indirect impacts: investments attracted to the sites compliant with EU regulations (first-mover advantage) (long-term); supporting Blue Economy growth and competitiveness in the EU (long-term); creation of new jobs (long-term). The BSR Lighthouse Port BluePrint will showcase the whole innovation process from co-creative development (WP1) towards the actual physical implementation of electrification measurements (WP2) to support other ports in the BSR of adapting technologies and solutions overcoming the challenges and hurdles of electrifying port operations and minimize the environmental footprint of port ecosystems. The project will make sure efficient knowledge transfer of the BluePrint towards target groups in WP3 as well.		
D 2.4	Pilots finalised and validated	Finalisation activities including internal reporting document completed by pilot ports. The whole progress is validated using KPIs, impact analysis and benchmarking activities. Reporting documents are used for development of promotion materials for dissemination and communication of pilot implementation process.	O.2.3 - BSR Lighthouse Port BluePrint; O.2.5 - Port Innovation Ecosystem Excellence Center BSR	
O 2.5	Port Innovation Ecosystem Excellence Center BSR	To overcome well-known obstacles for small and medium-sized ports in green transition, such as lack of financial resources or capacities, a useful tool to raise their competitiveness and environmental potential is enhancing and supporting cooperation with maritime experts, companies and institutions as well as access to funding projects. Thus, the consortium will design an excellence center as contact point for European small and medium-sized ports acting as experts and intermediates for ports to open up potential cooperation and access to quadruple-helix actors. This includes also a pooling of available funding sources for ports, access to service providers, availability of latest research in environmental and port sector for European small and medium-sized ports, projects and best practices. Furthermore, agreements among partnership will be signed for institutional integration into partner's capacity portfolios. The Excellence Center will be launched within an international conference to raise awareness among potential stakeholders, presenting the key facts on what to offer for ports in Europe. The Excellence Center will also be added to project's sustainability strategy and continue its intermediary work for European ports after project lifetime with the objective to establish itself as on-going institution in the European Port sector.		
D 3.1	Business opportunities and recommendations in transferring lighthouse port solutions	Small and Medium-Sized Ports (SMSPs) recognize a specific role for regional development as well as partly individual challenges and obstacles in the maritime sector. However, besides the growing economic and environmental pressure mentioned, SMSPs lack on policy conformity and compliance when it comes to governmental strategy and financing exploitation. This especially includes disadvantageous positioning for fund allocation. Hence, the Deliverable will serve as guide for BSR ports for funding acquisition to apply technologies which ensure GHG reduction but also competitiveness of ports and the whole BSR maritime sector. Based on interviews and an intensive, future-oriented business workshop, this group of activities produces detailed and action-oriented information about the solution transferability opportunities from the business perspective. It involves both the pros and cons of applying the piloted solutions in different potential port contexts, providing also predigested ideas about the solution transferability problems around the BSR. The findings are divided to actor and ecosystem level matters, and while this content is developed and disseminated through the activities throughout the project, it will also be compiled into a public report.	O.2.5 - Port Innovation Ecosystem Excellence Center BSR	

D 3.2	Policy recommendations for supporting greener ports and lighthouse port solution transfer	Political regulations are setting the scene for sustainable development of the port sector and enable but also prevent innovation application through their design. Within the project implementation, the consortium collects all challenges, hurdles and problems occurring from legal and political regulations and offers a series of potential solutions in re-designing policies in the maritime / port sector of the BSR. Yet, the activities result in material comprising policy recommendations that pinpoint business-policy synergies in sustainable innovation creation and solutions for solving policy-level bottlenecks in such processes. While actively disseminated through the transfer activities, these recommendations will also be compiled into a deliverable report. To improve future collaboration as well as policy design in terms of maritime innovation and greener ports, this policy brief report will cover the project's pilot processes and their interferences with political level actions. It will present the lessons learned, insights gained, knowledge created, and best practices identified, together with the policy-related problem areas identified at different levels. Most importantly, to provide stepping stones for supporting the project solution transferability as well as the collective development and adoption of new ones around the BSR, the report compiles the identified development needs and progress avenues. Thus, the results of the activities will be transformed into policy recommendations for planning the means and measurements in greening ports as part of green and smart transformation of the BSR. Besides feeding the project's communication activities, the recommendations and the report will be distributed directly to key policymakers and institutions as well as published for the general public.	O.2.5 - Port Innovation Ecosystem Excellence Center BSR	
D 3.3	Proof of Concept for Lighthouse Port BluePrint	Feasibility Studies are developed in close cooperation with ports outside the consortium and published afterwards to proof the BSR Lighthouse Port BluePrint.	O.2.3 - BSR Lighthouse Port BluePrint; O.2.5 - Port Innovation Ecosystem Excellence Center BSR	
D 3.5	BSR Port Sector Excellence Distribution & Sustainability	International Hackathons will be implemented annually with focus on Start-Ups and Tech-Companies to solve real challenges proposed by ports. Project results will be utilized on in the events and potential investment concepts to acquire new financing sources for ports and stakeholders to further develop electrification solutions based on the pilots developed in the project. Hence, the project outputs shall be continuously and sustainably be used even after project lifetime.	O.2.5 - Port Innovation Ecosystem Excellence Center BSR	

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 5 - University of Applied Sciences Wismar: Technology, Business and Design

Work package leader 2 PP 1 - Klaipeda Science and Technology Park

5.4 Work package budget

Work package budget 20%

5.5 Target groups

	Target group	How do you plan to reach out to and engage the target group?
1	Small and medium enterprise Both TEN-T Core and Comprehensive Ports and Terminals in the BSR, incl. shipowners, shipping companies, terminal operations, logistics service providers (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 215 / 500 characters	Ports will be directly approached through the existing network of the consortium. Previous projects and work in the maritime field yielded to a broad contact base for the project partners to benefit from. Port representatives will be approached directly and invited to the open innovation sprints and to join the discussion and preparation of project pilots. In addition, new contacts of this target group will be gathered by social media campaigns, highlighting the project challenge and aims to overcome these for ports in the BSR. 535 / 1,000 characters
2	Infrastructure and public service provider Electrification solutions providers for ground infrastructure, railer, tractors, yard trucks, digital monitoring and IoT service providers (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 201 / 500 characters	At a first glance, the pilot ports will share information on the project purpose with their local and regional providers by direct communication, local dissemination events, bilateral meetings, etc. Furthermore, new service providers for electrification solutions will be identified through benchmarking and innovation measurements in WP1, being engaged through communication activities jointly agreed on in the project Communication Strategy and Stakeholder Plan - responsibility of communication partner PP13. 512 / 1,000 characters
3	Business support organisation Science and Technology Parks, business intermediaries, investors, transitional technologies providers, innovation start-ups (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 186 / 500 characters	Business Support Organisations (BSOs) are a key part of port innovation ecosystem and will be incorporated into the Innovation Sprints ensuring sufficient co-creation for the final pilot roadmaps. The project can utilize on existing local and regional networks and will also use social media channels to raise awareness as well as start an online marketing campaign to acquire innovation sprint participants. 409 / 1,000 characters
4	Regional public authority Authorities responsible for regional development, compliance with the EU policy for the European Green Deal, Fit for 55 Legislative Package (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 202 / 500 characters	Regional policy maker are planned to be integrated to the innovation sprints as well to guarantee co-creation application within a quadruple helix approach (academics, businesses, politics and society). Bilateral meetings and presentations towards local and regional public authorities have been proven as sufficient actions to get in touch and convince political level in contributing and benefitting from Interreg projects and there solutions. 446 / 1,000 characters
5	National public authority Ministries responsible for transition in transport, maritime shipping as well as health and environmental monitoring issues Interoperability, regional integration and cohesion enhancement (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 252 / 500 characters	Sufficient contribution of national policy level is not expected as this stage of the project, e.g. active participation in innovation sprints by national politicians. However, the project will prepare and implement communication activities to raise awareness for the target group already from the beginning of the project lifetime. 333 / 1,000 characters

5.6 Activities, deliverables, outputs and timeline

No.	Name
1.1	**Identification and Benchmarking of Green & Sustainable Electrification Concepts**
1.2	**Innovation Sprints preparatory Actions, Implementation & Evaluation**
1.3	**Building Open Lab Excellence concept for decarbonization of ports in BSR**
1.4	**Design of Lighthouse Port Demonstration Pilots**
1.5	**Upgrade Benchmarking to Lighthouse Port Business Decision-Making Tool**

WP 1 Group of activities 1.1

5.6.1 Group of activities leader

Group of activities leader PP 1 - Klaipeda Science and Technology Park

A 1.1

5.6.2 Title of the group of activities

Identification and Benchmarking of Green & Sustainable Electrification Concepts

79 / 100 characters

5.6.3 Description of the group of activities

In-depth analysis of market solutions for greening ports with focus on electrification characteristics. The analysis includes relevant fields for application in ports such as: economics, social impact, emission reduction, power supply demand, financing, etc. Analysis includes available indices such as the Environmental Port Index, Green Port Performance Index, Digital Readiness Index for Ports etc. to measure impacts of application in ports. Results of the analysis will provide a sufficient overview of the status-quo in terms of electrification potentials for ports in the Baltic Sea Area. In addition, results will be used and transformed into guidelines for technology application, supporting decision-makers in applying electrification technologies in ports.
Results of this group of activities will be used as basis for own pilot development and upscaling in the following activities of this WP. Form: Benchmarking Report on Port Electrification Concepts

965 / 3,000 characters

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

D 1.1

Title of the deliverable

Port Electrification Radar and Guideline

40 / 100 characters

Description of the deliverable

Radar offers easy accessible benchmarking of available and market-ready solutions for improving electrification of ports and their operations with focus on key aspects for decision-making towards transforming and greening the ports. The radar is supported by guideline on how to implement these technologies in port areas of the Baltic Sea Region. It allows easy comparison of different technologies alongside several for the users (target groups), providing easy access into the challenge and potential measurements for port electrification.

543 / 2,000 characters

Which output does this deliverable contribute to?

O.2.3 - BSR Lighthouse Port BluePrint

37 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.1: WP1 Preparing solutions						
A.1.1: Identification and Benchmarking of Green & Sustainable Electrification Concepts						
D.1.1: Port Electrification Radar and Guideline						

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 5 - University of Applied Sciences Wismar: Technology, Business and Design

A 1.2

5.6.2 Title of the group of activities

Innovation Sprints preparatory Actions, Implementation & Evaluation

67 / 100 characters

5.6.3 Description of the group of activities

Before going into implementation of the sprints, preparatory actions will be undertaken. This includes preparation of the sprint content materials, using latest creative tools and procedures, enabling cross-sectoral discussion and idea creation. Furthermore, relying on creative tools enables clear problem identification (if existing) between port sector and communities around, dealing with infrastructural up-scaling of the ports in line with living areas nearby. in addition, an internal schedule on the sprint implementation, marketing activities as well as organisational activities will be prepared.
The actual sprint implementation will take place in lighthouse and fellow ports. In addition, at least three further ports (consortium and external) will implement innovation sprints to accelerate and spread the green port mindset and innovation prototypes / pilots. The sprints will involve regional actors of the port locations and implemented as 1,5 day events. All implemented sprints will be documented for reporting purposes, including short internal reports on the created impacts.
For each Lighthouse Port Pilot, one cross-border innovation sprint will be organized, supported by the whole partnership. Besides port representatives, SMEs, students, social innovators and academics from different fields will be incorporated to ensure co-creation environment and implement open innovation processes. The main objective of the participants in innovation sprints is to up-scale the pre-planned pilots to develop pilots with high innovation potential.
Based on results, feedback and insights yielded from the sprint implementation, all events will be evaluated. Focus of the evaluation is the impact of results on planned port pilots on big-scale including potential increase of innovative activities. This includes an analysis and validation whether adjustments of planned pilots are feasible at early stage of the implementation. Gained insights of sprints as preparatory activity are crucial for final designing and planning of the pilots. Form: 6 innovation sprints in piloting ports; Evaluation matrix and report

2,132 / 3,000 characters

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

D 1.2

Title of the deliverable

Evaluated and capitalized on Pilot Innovation Sprints

53 / 100 characters

Description of the deliverable

Evaluation forms and working materials of each innovation sprint are harmonized and reviewed. Lessons learnt, best practices, transnational experiences and new ideas collected and utilized on in designing and planning the project pilots.

237 / 2,000 characters

Which output does this deliverable contribute to?

O.2.3 - BSR Lighthouse Port BluePrint

37 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.1: WP1 Preparing solutions						
A.1.2: Innovation Sprints preparatory Actions, Implementation & Evaluation						
D.1.2: Evaluated and capitalized on Pilot Innovation Sprints						

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 4 - Shipping & Offshore Network

A 1.3

5.6.2 Title of the group of activities

Building Open Lab Excellence concept for decarbonization of ports in BSR

72 / 100 characters

5.6.3 Description of the group of activities

Ports are undergoing substantial changes as the shipping business are challenged by sustainability regulations, evolution of business model, digitalization. The major structural change requires new collaboration models and technical capabilities to develop new technological solutions and transform services and operations in ports. To apply innovation and support technological transformation in ports it is crucial to develop an innovation ecosystem that gathers science, startups, and industry to provide the collaboration platform to ensure transformation of port industry.
Ports in BSR have different challenges in terms of decarbonization. Project gathers the relevant changes from ports and offer those to science and startup community as technology development directions and provide port infrastructure for testing and applying technological solutions in real environments. We will gather 5 ports in BSR into the excellence center that would provide testbed for technology development and set up at least 10 technological challenges resulting from innovation sprints (A.1.2) and Benchmarking (A.1.1) that would be addressed the project consortium in pilot development and implementation. Form: Agreement of grounding members

1,233 / 3,000 characters

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

D 1.3

Title of the deliverable

BSR Open Lab Excellence Center for Ports

40 / 100 characters

Description of the deliverable

Institutionalisation concept for Excellence Center with focus on servitisation approach and port consultancy models for applying green (electrification) technologies in BSR port ecosystems.

191 / 2,000 characters

Which output does this deliverable contribute to?

O.2.5 - Port Innovation Ecosystem Excellence Center BSR

55 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.1: WP1 Preparing solutions						
A.1.3: Building Open Lab Excellence concept for decarbonization of ports in BSR						
D.1.3: BSR Open Lab Excellence Center for Ports						

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 8 - Centria University of Applied Ssciences

A 1.4

5.6.2 Title of the group of activities

Design of Lighthouse Port Demonstration Pilots

46 / 100 characters

5.6.3 Description of the group of activities

The upscaled demonstration pilots will be planned in detail in terms of application / implementation in partner ports. This action plan will focus not only on the application process itself, but also on sufficient transnational and cross-border cooperation throughout the process. Hence, such a cross-border development framework will be a planning instrument for the pilot implementation with strong focus on transnational and cross-border harmonization of the planning and implementation processes. The objective is to identify potentials for synergies and benefits of a cross-border approach for piloting concepts with high environmental and sustainable impact for the participating ports & regions. The framework will be set up and tested by the project alongside WP2 implementation and later on being published as a strategy document for European ports, especially established maritime partnerships will be able to retrieve great benefits from this harmonised strategic documents in their green transition through electrification. In addition, the consortium will be able to put the Action Plan into practice already during project lifetime by using it for the planned pilots. Form: Cross-border pilot framework / Action Plan

1,230 / 3,000 characters

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

D 1.4

Title of the deliverable

Harmonised Port Demonstration Pilot Roadmap

43 / 100 characters

Description of the deliverable

Harmonised planning framework for cross-border piloting concepts for port planners, politicians and decision-makers developed, used and tested by the project in electrification pilots application of WP2. The framework serves as roadmap with great potential for adaption by other ports and target groups.

304 / 2,000 characters

Which output does this deliverable contribute to?

O.2.3 - BSR Lighthouse Port BluePrint

37 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.1: WP1 Preparing solutions						
A.1.4: Design of Lighthouse Port Demonstration Pilots						
D.1.4: Harmonised Port Demonstration Pilot Roadmap						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

WP 1 Group of activities 1.5

5.6.1 Group of activities leader

Group of activities leader PP 5 - University of Applied Sciences Wismar: Technology, Business and Design

A 1.5

5.6.2 Title of the group of activities

Upgrade Benchmarking to Lighthouse Port Business Decision-Making Tool

69 / 100 characters

5.6.3 Description of the group of activities

The developed Port Electrification Radar, the associated guidelines as well as the results of innovation sprints will be upgraded into an online self-configuration tool, using metrics on how, when, by whom or what future small and medium-sized ports need to implement in order to be compliant with European, international and other regulations on terms of environmental impacts through elefctrification. The project will be a proof of concept by applying the tool in WP2 and transferring best practices, tools and knowledge to other ports, maritime cluster or authorities. Form: Online Tool; Target groups: Small and medium-sized ports

636 / 3,000 characters

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

D 1.5

Title of the deliverable

Lighthouse Port Transition Tool

31 / 100 characters

Description of the deliverable

Online tool for port planners, port operators, target groups and political decision-makers implemented and offered digitally. The tool will be based on all activities, lessons learnt, materials, experiences shared, best practices identified and roadmaps developed undertaken within WP1. As an online tool, easy and open access can be granted allowing easy adaption for other ports in the Baltic Sea Area (and beyond) for the own purposes and plans in electrifying port operations. As an interactive tool, the users will be able to access partly tailor-made guidelines / action plans for applying electrified technologies in ports.

630 / 2,000 characters

Which output does this deliverable contribute to?

O.2.3 - BSR Lighthouse Port BluePrint

37 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.1: WP1 Preparing solutions						
A.1.5: Upgrade Benchmarking to Lighthouse Port Business Decision-Making Tool						
D.1.5: Lighthouse Port Transition Tool						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

Work package 2

5.1 WP2 Piloting and evaluating solutions

5.2 Aim of the work package

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

5.3 Work package leader

Work package leader 1	PP 10 - Blekinge Institute of Technology
Work package leader 2	PP 1 - Klaipeda Science and Technology Park

5.4 Work package budget

Work package budget	45%

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	Small and medium enterprise Both TEN-T Core and Comprehensive Ports and Terminals in the BSR, incl. shipowners, shipping companies, terminal operations, logistics service providers (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 215 / 500 characters	The target group of small and medium-sized ports, terminals, operators, shipping companies and maritime logistics services will continuously be informed on the pilot progress as a part of the transparent communication approaches of the project. This includes regular visual updates on the process to raise awareness of the BSR Lighthouse Port Pilots. In addition, the project will call for open participation to join the Excellence Center and further collaborative innovation measurements towards greening port ecosystems. In addition, the joint communication strategy will elaborate different tools for smooth communication and raising awareness within this target group (social media campaign, digital port visits, exchange forums, etc.). 740 / 1,000 characters
2	Infrastructure and public service provider Electrification solutions providers for ground infrastructure, railer, tractors, yard trucks, digital monitoring and IoT service providers (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 201 / 500 characters	Infrastructure and service providers directly involved in piloting measurements have been identified in WP1 / A.1.4 already, necessary (legal) contracts for pilot measurements are part of this WP2. However, representatives of this target group which joined the pilot development, e.g. through innovation sprints will stay in the network towards establishment of the BSR Innovation Excellence Center including dedicated news updates on the project progress, e.g. tailor-made newsletter, blog posts, etc. 503 / 1,000 characters
3	Business support organisation Science and Technology Parks, business intermediaries, investors, transitional technologies providers, innovation start-ups (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 186 / 500 characters	BSOs have been integrated to the pilot development already in WP1, hence, the consortium can utilize on existing contacts allowing direct communication and dissemination as well as involvement into the piloting processes when needed. In addition, towards establishment of the excellence center, BSOs who joined the development of pilots will be selected for grounding the necessary network of the excellence center and kind of database for services offered within this institution. Nevertheless, BSOs will be targeted continuously through social media channels and dissemination of pilot progress. 597 / 1,000 characters
4	Regional public authority Authorities responsible for regional development, compliance with the EU policy for the European Green Deal, Fit for 55 Legislative Package (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 202 / 500 characters	The BSR Lighthouse Port Pilot implementation and progress in participating ports will be distributed through regional and local channels such as newspapers, partner websites and partner's social media accounts (also dissemination in national languages). In addition, each pilot will invite regional policy makers for an open study visit to demonstrate pilot measurements as well as initiate a discussion with regional politicians on future innovation applications in ports. Furthermore, on project level, marketing measurements are jointly developed for policy level to increase project's awareness. 599 / 1,000 characters
5	National public authority Ministries responsible for transition in transport, maritime shipping as well as health and environmental monitoring issues □ Interoperability, regional integration and cohesion enhancement (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 252 / 500 characters	Reaching out national public bodies follows the same principle as for regional authorities. National representatives will directly involved for open study visits in ports as well. 180 / 1,000 characters

5.6 Activities, deliverables, outputs and timeline

No.	Name
2.1	Design and Accomplishiment of Contracts
2.2	Launch and Implementation Seaport Pilots
2.3	Cross-Pilot Monitoring and Corrective Actions
2.4	Evaluation of Lighthouse Port Pilots & Lessons learnt
2.5	Establishment of LighthousePorts Innovation lab

WP 2 Group of activities 2.1

5.6.1 Group of activities leader

Group of activities leader PP 9 - Blue Science Park

A 2.1

5.6.2 Title of the group of activities

Design and Accomplishiment of Contracts

39 / 100 characters

5.6.3 Description of the group of activities

The legal conditions will be elaborated on European as well as national level for pilot development and implementation in the specific maritime sector according to the developed roadmap for pilot implementation in WP1. This includes individual pilot analysis on technical capacities and market conditions as well as further requirements for pilot implementation in ports, which affect any legal characteristics. This activities will ensure clarification on pilot implementation for the ports at early stage to avoid any interruption in the implementation phase, thus, this activity contributes to project risk management by minimising legal risks at the beginning.
To comply with programme rules and official tender procedures for pilot development and implementation, all ports will be assisted in the preparation and implementation of the tenders to avoid any problems arising due to incorrect tendering activities, such as stopping tendering or cancelation of contracts. This is a key activity to minimise risk and delay in the pilot implementation.
After successful tendering procedures (WP2.4), the specific bilateral contracts have to be developed, reviewed and signed by all involved parties for pilot development and implementation. This activity ensures legal security for all parties and minimises any risks on pilot implementation. Form: Package of signed contracts for all demonstration pilots

1,406 / 3,000 characters

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

☑

D 2.1

Title of the deliverable

Pilot Development and Implementation Contracts accomplished

60 / 100 characters

Description of the deliverable

Legal framework conditions of piloting are clarified at an early implementation stage, all necessary tenders are implemented according to European, national and institutional regularities and contracts are signed by all affected parties.

237 / 2,000 characters

Which output does this deliverable contribute to?

O.2.3 - BSR Lighthouse Port BluePrint

37 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.2: WP2 Piloting and evaluating solutions						
A.2.1: Design and Accomplishiment of Contracts						
D.2.1: Pilot Development and Implementation Contracts accomplished						

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 10 - Blekinge Institute of Technology

A 2.2

5.6.2 Title of the group of activities

Launch and Implementation Seaport Pilots

40 / 100 characters

5.6.3 Description of the group of activities

Under this activity, the actual pilot implementation in lighthouse and fellow ports is subsumed. The pilot implementation is based on the developed roadmap (A.1.4) which includes the upscaled demonstration pilots on port electrification as a result of the Innovation Sprints (A.1.2) and their evaluation (A.1.3).
During the planning phase of the project proposal, the following Lighthouse Port Pilots have been jointly developed in close collaboration within the potential partnership covering different segments of the supply and value chain:
1) Pilot group A – electrification of port (trans)shipment equipment – ports of Gothenburg (DFDS), Sonderborg (BANKE ApS) and Klaipeda. The rationale for combining these ports are existing shipping routes and trades (through DFDS) and transferability of the pilot due to similar port operational scope and scale. Whereas DFDS and port of Gothenburg aims at Ro-Ro terminal tractor electrification, Banke will develop a powertrain that will be used for retrofitting diesel powered Ro-Ro terminal tractors towards fully electric vehicles and the port of Klaipeda will work on the pilot converting shunting diesel locomotive into an electric-battery-powered one.
2) Pilot group B – future electrification through changes in the supra-structure: automation, digitalisation and monitoring energy efficiency – ports of Karlskrona, Pietarsaari and Wismar. The rationale for combining these ports is associated with supra-infrastructure changes as preconditions for electrification, e.g. Karlskrona (digital twin through IoT based sensor modelling), Pietarsaari (alternative energy sources' simulation, modelling and monitoring along all logistics chains in the port ecosystem) and Wismar (autonomous driving as a service and integration within port operation system – digital platform).

1,826 / 3,000 characters

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

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.2: WP2 Piloting and evaluating solutions						
A.2.2: Launch and Implementation Seaport Pilots						

WP 2 Group of activities 2.3

5.6.1 Group of activities leader

Group of activities leader PP 6 - University of Southern Denmark

A 2.3

5.6.2 Title of the group of activities

Cross-Pilot Monitoring and Corrective Actions

45 / 100 characters

5.6.3 Description of the group of activities

Having applied a multiple concept principle in the project, the backbone of the project itself – demonstration pilot implementation – was prepared using harmonised approach among the involved ports. The description of the pilots with the anticipated goals in carbon capturing and sustainable and responsible freight and passenger transportation and mobility enabled in the ports through the implemented pilots is therefore reflecting real-demands, needs and challenges of the ports; innovation potentials; ecosystem performance areas pinpointing with clear qualified and quantified indicators.
Based on results and actions undertaken in activity A.2.2, internal monitoring activities of the pilot implementation will be emphasised to deviate recommendations for corrective actions on the pilot implementation. This is a crucial activity to minimise the risk of delayed pilot implementation and internal support for the lighthouse and fellow ports to ensure smooth pilot implementation. Thus, the internal monitoring will on the one hand be used for the evaluation on the pilot implementation later on (A.2.4) but on the other hand add more dimensions such as coordination, dissemination or finances of the respective ports responsible for pilot development / implementation. Based on the regular monitoring, the consortium will be able to identify and apply corrective actions if needed to ensure smooth pilot implementation. The idea behind this activities is to deviate lessons learnt, problems, challenges and best practices out of the pilot implementation within the project to be offered as knowledge transfer for other European ports in WP3 as well. Form: Monitoring reports

1,680 / 3,000 characters

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

O 2.3

Title of the output

BSR Lighthouse Port BluePrint

29 / 100 characters

Description of the output

The anticipated innovation demonstration Lighthouse Pilots will deliver different types of innovations that are claimed to be smart, sustainable, responsible, user-driven pilots (Pilot Group A & Pilot Group B) including sufficient business models for electrification transition in ports of the BSR. Pilot implementation will lead to different levels of impacts for port ecosystems:
1) Direct impacts: innovation pilots implemented with innovation capacity enhanced in four participating pilot ports (short-term); improved port capacity with financial resources and creation of new jobs (short-term); improved innovation capacity of authorities (participating port authorities) on the long-run; port competition enhanced through greening port operations and generating green incentives (long-term); access to new markets with green products (long-term);
2) Medium impacts: improved organisational innovation capacity through knowledge transfer in innovation development and launch on the market in all four participating EU Member States (industry, academic, research and policy partners); improved residence health conditions through carbon dioxide capture in ports and port-city areas (long-term); improved natural resources conditions (e.g. environmental situation) of the highly protected areas at the intersection thereof ports are located, such as national parks, reserves; generating jobs through EU funding (short-term);
3) Indirect impacts: investments attracted to the sites compliant with EU regulations (first-mover advantage) (long-term); supporting Blue Economy growth and competitiveness in the EU (long-term); creation of new jobs (long-term).
The BSR Lighthouse Port BluePrint will showcase the whole innovation process from co-creative development (WP1) towards the actual physical implementation of electrification measurements (WP2) to support other ports in the BSR of adapting technologies and solutions overcoming the challenges and hurdles of electrifying port operations and minimize the environmental footprint of port ecosystems. The project will make sure efficient knowledge transfer of the BluePrint towards target groups in WP3 as well.

2,171 / 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 Small and medium enterprise Both TEN-T Core and Comprehensive Ports and Terminals in the BSR, incl. shipowners, shipping companies, terminal operations, logistics service providers (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden)	The BSR Lighthouse Port BluePrint will be used as easy accessible but comprehensive tool to support small and medium-sized ports of the BSR in their strategic positioning and, more important, decision making in electrifying their port operations. As the project showcases the full process transparently - problems occured, challenges overcome, technologies applied, business models used, financing sources identified, etc. - which allows other ports to retrace the process. Hence, the output will be crucial for other port's strategy development for greening transition of the own ecosystem. 592 / 1,000 characters
Target group 2 Infrastructure and public service provider Electrification solutions providers for ground infrastructure, railer, tractors, yard trucks, digital monitoring and IoT service providers (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden)	Providers of necessary infrastructure and services for pilot implementation are directly involved and contracted (A.3.1). 121 / 1,000 characters
Target group 3 Business support organisation Science and Technology Parks, business intermediaries, investors, transitional technologies providers, innovation start-ups (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden)	BSOs are a crucial part of the innovation process leading towards the final output of Lighthouse Ports Pilots. This target group is directly involved in the development on the one hand side, but also benefits from innovation capacity building through electrification in a port ecosystem as new business opportunities will occur and further technology application is enabled. 375 / 1,000 characters
Target group 4 Regional public authority Authorities responsible for regional development, compliance with the EU policy for the European Green Deal, Fit for 55 Legislative Package (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden)	As mentioned in previous sections of the application, port ecosystems bear high potential to support regional development. Even more, ports are multiport gateways connecting region across countries, fostering economic and political cooperation cross-border. Hence, showcasing innovation application including significant reduction of environmental impact of ports serves as we call it: Lighthouses for the regions. Therefore, through regional authorities the necessary political support will be ensured to be not only a lighthouse in terms of electrifying port ecosystem through innovation application but also as a regional lighthouse for economic, environmental and social development. 688 / 1,000 characters
Target group 5 National public authority Ministries responsible for transition in transport, maritime shipping as well as health and environmental monitoring issues Interoperability, regional integration and cohesion enhancement (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden)	The maritime sector and especially ports are bounded in national regulations, besides European one's as mention in the Relevance part of this application. National public authorities see themselves in a dilemma of significantly reduce environmental impacts in maritime transport and shipping, but on the same time ensure smooth business development and global competitiveness. The BSR Lighthouse Port Pilot will demonstrate different approaches to tackle this dilemma which can be utilized on national policy making level as well. Especially, A.3.2 will analyze existing policy regulations which might hinder innovation application towards green transition and share these insights with clear recommendations targeted to the national public authorities of BSR countries. 771 / 1,000 characters

Durability of the output

The BSR Lighthouse Port BluePrint is consisting of the demonstration pilots as well as the corresponding roadmaps, reports, development documentation, innovation sprint materials and results. The Lead Partner KSTP will be responsible to provide these documentation even after project lifetime. The BluePrint itself will actively promoted by the whole consortium and serves as starting point for future innovation application and best practice for other ports in the BSR. As the project activities A.3.4 & A.3.5 are dedicated also for investments attraction and challenge solving events in cooperation with ports and businesses (Portathon Baltic), new financing models and opportunities are expected to be identified and utilized on for the developed pilot measurements.

769 / 1,000 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.2: WP2 Piloting and evaluating solutions						
A.2.3: Cross-Pilot Monitoring and Corrective Actions						
O.2.3: BSR Lighthouse Port BluePrint						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

WP 2 Group of activities 2.4

5.6.1 Group of activities leader

Group of activities leader PP 3 - Klaipeda Stevedoring Company BEGA, JSC

A 2.4

5.6.2 Title of the group of activities

Evaluation of Lighthouse Port Pilots & Lessons learnt

53 / 100 characters

5.6.3 Description of the group of activities

All pilots will be evaluated on internal and external level as interim-evaluation within the implementation phase. This includes the development of an internal evaluation matrix in advance, which will be used after the first and second year to elaborate the pilot implementation status. Furthermore, external evaluation with maritime experts and professors on the pilot implementation status will be done as well with focus on innovative character as well as environmental impact of the pilots. For this task (internal and external), tools like survey, in-depth interviews with experts or pitch feedbacks will be used. Form: Evaluation Matrix and external evaluation reports on each pilot

688 / 3,000 characters

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

D 2.4

Title of the deliverable

Pilots finalised and validated

31 / 100 characters

Description of the deliverable

Finalisation activities including internal reporting document completed by pilot ports. The whole progress is validated using KPIs, impact analysis and benchmarking activities. Reporting documents are used for development of promotion materials for dissemination and communication of pilot implementation process.

313 / 2,000 characters

Which output does this deliverable contribute to?

O.2.3 - BSR Lighthouse Port BluePrint; O.2.5 - Port Innovation Ecosystem Excellence Center BSR

94 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.2: WP2 Piloting and evaluating solutions						
A.2.4: Evaluation of Lighthouse Port Pilots & Lessons learnt						
D.2.4: Pilots finalised and validated						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

WP 2 Group of activities 2.5

5.6.1 Group of activities leader

Group of activities leader PP 1 - Klaipeda Science and Technology Park

A 2.5

5.6.2 Title of the group of activities

Establishment of LighthousePorts Innovation lab

47 / 100 characters

5.6.3 Description of the group of activities

Ports are undergoing substantial changes as the shipping business are challenged by sustainability regulations, evolution of business model, digitalization. The major structural change requires new collaboration models and technical capabilities to develop new technological solutions and transform services and operations in ports. To apply innovation and support technological transformation in ports it is crucial to develop an innovation ecosystem that gathers science, startups, and industry to provide the collaboration platform to ensure transformation of port industry. Such an ecosystem will be institutionalized as an Excellence Center Pilot by the project consortium by designing and implementing electrification diversification portfolio (technologies, products, services, processes, etc), i.e. developing associated business / investment models and carbo emissions capturing / trade profiles that are transferrable to other BSR ports. This portfolio will include crowdfunding, revenue models, port incentives, applicable to TEN-T Core and Comprehensive Ports, Ro-Ro, Ro-Pax terminals, as well as covering different port operation areas – receiving facilities, daily operations and hinterland servitisation. Pilot C: Establishing sustainable service provision through an Excellence Center for BSR ports

1,316 / 3,000 characters

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

O 2.5

Title of the output

Port Innovation Ecosystem Excellence Center BSR

47 / 100 characters

Description of the output

To overcome well-known obstacles for small and medium-sized ports in green transition, such as lack of financial resources or capacities, a useful tool to raise their competitiveness and environmental potential is enhancing and supporting cooperation with maritime experts, companies and institutions as well as access to funding projects. Thus, the consortium will design an excellence center as contact point for European small and medium-sized ports acting as experts and intermediates for ports to open up potential cooperation and access to quadruple-helix actors. This includes also a pooling of available funding sources for ports, access to service providers, availability of latest research in environmental and port sector for European small and medium-sized ports, projects and best practices. Furthermore, agreements among partnership will be signed for institutional integration into partner's capacity portfolios. The Excellence Center will be launched within an international conference to raise awareness among potential stakeholders, presenting the key facts on what to offer for ports in Europe. The Excellence Center will also be added to project's sustainability strategy and continue its intermediary work for European ports after project lifetime with the objective to establish itself as on-going institution in the European Port sector.

1,362 / 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 Small and medium enterprise Both TEN-T Core and Comprehensive Ports and Terminals in the BSR, incl. shipowners, shipping companies, terminal operations, logistics service providers (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden)	The Excellence Center serves as a daily contact point for ports of the BSR to support electrification processes in port ecosystems through various kinds of assistance, which includes to open up the own network, share experience on innovation application in ports, serve as funding consultants, jointly develop applications for fund acquisitions dedicated for ports, connect actors from different levels, support th organization of topic-related events and more. 462 / 1,000 characters
Target group 2 Infrastructure and public service provider Electrification solutions providers for ground infrastructure, railer, tractors, yard trucks, digital monitoring and IoT service providers (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden)	Infrastructure and service providers are incorporated to the Excellence Center, those who have been working on the pilot implementation as well as those who have been acquired to actively participate in the project implementation in WP1 as well as later on in WP3. 264 / 1,000 characters
Target group 3 Business support organisation Science and Technology Parks, business intermediaries, investors, transitional technologies providers, innovation start-ups (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden)	Business Support Organisations will be associated to the Excellence Center as well to improve its linkage towards businesses that can benefit from this institution. Even though ports are the main target group, it is necessary to understand ports as ecosystems covering different kind of businesses, which can retrieve add-value from the services provided. 355 / 1,000 characters
Target group 4 Regional public authority Authorities responsible for regional development, compliance with the EU policy for the European Green Deal, Fit for 55 Legislative Package (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden)	The project proposal will pinpoint regional economic potentials resulting from upscaling ports in the BSR. To utilize on these potentials, it is necessary to include regional decision makers to the Excellence Center, or, in other words, establish a sufficient and fruitful cooperation between the transnational Excellence Center and particular regional planners of the participating countries. The responsibility on that is shared among the partners respectively. 463 / 1,000 characters

Durability of the output

The Port Innovation Ecosystem Excellence Center BSR is planned to be a long lasting institution, once established, the Excellence Center and its members will be able to build up on a strong network and service portfolio allowing on-going monitoring of funding opportunities for enhancements. In addition, the Lead Partner Klaipeda Science and Technology Park will connect the Excellence Center to the Lithuanian Maritime Cluster creating synergies and up-scaling opportunities. Also, PP5 University of Wismar is institutionalizing a contact point for digitalization of small and medium-sized ports in cooperation with the LP, PP9, PP10 and PP11 which will be subsumed into the Port Innovation Ecosystem Excellence Center BSR.

726 / 1,000 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.2: WP2 Piloting and evaluating solutions						
A.2.5: Establishment of LighthousePorts Innovation lab						
O.2.5: Port Innovation Ecosystem Excellence Center BSR						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

Work package 3

5.1 WP3 Transferring solutions

5.2 Aim of the work package

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

5.3 Work package leader

Work package leader 1	PP 1 - Klaipeda Science and Technology Park
Work package leader 2	PP 12 - University of Turku

5.4 Work package budget

Work package budget	25%

5.5 Target groups

	Target group	How do you plan to reach out to and engage the target group?
1	Small and medium enterprise Both TEN-T Core and Comprehensive Ports and Terminals in the BSR, incl. shipowners, shipping companies, terminal operations, logistics service providers (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 215 / 500 characters	The project consortium will rely on a jointly developed Communication Strategy to ensure sufficient reach out to all target groups, responsible communication partner: PP13 - Centrum Balticum Foundation. The strategy will be developed and implemented from the beginning of the project lifetime to utilize on communication activities especially in WP3. To enable ports of the BSR to have an easier access to these solutions, we will not only spread information about the developed solutions, but aim to tackle also the applicability challenges in advance. Based on the identified business bottlenecks, we will organize an international business workshop to discuss (1) the transferability of the piloted solutions to ports around the BSR and (2) to enhance the co-innovation of further ones. The workshops will bring together business representatives and experts with the aim of presenting the pilots and together solving the key bottlenecks. 941 / 1,000 characters
2	Infrastructure and public service provider Electrification solutions providers for ground infrastructure, railer, tractors, yard trucks, digital monitoring and IoT service providers (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 201 / 500 characters	The developed pilots will be remolded for communication, dissemination and marketing purposes including short videos, infographics and blogs to easily spread information on pilot implementation including the applied infrastructure and service changes made. Showcasing the pilots is crucial to encourage others to adapt or newly develop new solutions for electrification of ports, but also other sectors where the project solutions may be adopted as well. In addition, the project will provide a proof of concept for new technologies being feasible for application in real scenarios - ports of the BSR. 601 / 1,000 characters
3	Business support organisation Science and Technology Parks, business intermediaries, investors, transitional technologies providers, innovation start-ups (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 186 / 500 characters	BSOs will be reached out and engaged by Improving their consultancy capacity for innovation by engaging them also as active participants within the workshops, capacity building measurements, conferences etc.This will also increase their international awareness through better and more tailored marketing and promotion of the innovation capacity and provide opportunities for connecting with other topical networks and excellence centres, e.g. through open study visits. Furthermore, the excellence center will include them as innovation service consultancy with their competence profiles, contact details, services offered in the center. 637 / 1,000 characters
4	Regional public authority Authorities responsible for regional development, compliance with the EU policy for the European Green Deal, Fit for 55 Legislative Package (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 202 / 500 characters	Guided by the responsible communication partner PP13, the consortium will identify key issues and relevant themes risen by the project implementation on local and regional policy level and share in cross-border Policy Exchange Forums. Policy makers will be invited directly by national partners providing opportunities to share experiences and bottlenecks on transnational level as well as jointly develop (co-create) adaption opportunities resulting from pilot development as well as A.3.1 & A.3.2. In addition, open study visits to the port's sites will be organized locally including invitation for regional policy makers for sharing best practices and dissemination manners. 679 / 1,000 characters
5	National public authority Ministries responsible for transition in transport, maritime shipping as well as health and environmental monitoring issues Interoperability, regional integration and cohesion enhancement (Lithuania, Denmark, Finland, Germany, Norway, Poland, Sweden) 252 / 500 characters	To support the solution transferability, we will not only spread information about the pilots but aim to tackle the applicability challenges beforehand, also at policy-level. We will organize international policy workshops to discuss and solve the key policy-level challenges currently (1) hindering the transferability of the piloted solutions to ports around the BSR, and (2) limiting the collective development of new, eco-efficient port solutions. The workshops will be organized with invited policymakers, with the aim of presenting our pilots and together generating solutions to the key development bottlenecks. In addition, the communication strategy will exploit potential events, conferences, seminars and similar to join for the consortium and get in close contact with representatives of this target group. 819 / 1,000 characters

5.6 Activities, deliverables, outputs and timeline

No.	Name
3.1	**Solving business-level bottlenecks in pilot solution transfer**
3.2	**Solving policy-level bottlenecks in pilot solution transfer**
3.3	**Development of Port Feasibility Studies for Decarbonization**
3.4	**Capacity Building and Know-how Distribution**
3.5	**Portathon Baltic and Investor network**

WP 3 Group of activities 3.1

5.6.1 Group of activities leader

Group of activities leader PP 12 - University of Turku

A 3.1

5.6.2 Title of the group of activities

Solving business-level bottlenecks in pilot solution transfer

61 / 100 characters

5.6.3 Description of the group of activities

Based on monitoring activities and collected data from piloting ports, a report will be elaborated to emphasise the project's contribution to affected EU policies on greening ports including Green Deal, Green Ports, Blue Growth, etc. Thus, the KPIs and data on environmental impact will be compared to policy targets deviating precise contribution made within the project activities. These activities shall rise awareness in the affected sectors for EU related strategies, regulations and initiatives as well. The demonstration pilots serve as good practices of EU programs (funding, cross-border cooperation, etc.) and shall engage more ports in the Baltic Sea Area to contribute and participate in European programs to benefit from and accelerate the own transition towards a greener port.
The focus of the activities is on solving business-level bottlenecks in pilot solution transfers alongside funding opportunities and follows a three step approach: (1) Identifying internal solution application challenges and enablers: The focus is on enablers and challenges of taking advantage of the related business opportunities, stemming from the perspectives of the involved organizations to the level of networked business ecosystems. At the individual firm/port level, the issues considered involve required innovation development and adoption capabilities, funding, business models and incentives, and human and process management. At the ecosystem level, we focus on inter-firm implications of new solution development and implementation, including open innovation systems development, systems integration challenges, change stewardship in business networks, and collective foresight. (2) Identifying external solution transfer challenges and opportunities: The work continues by reflecting the identified application problems with potential end-user contexts around the BSR. We will analyze for example the relevant actor capabilities, business and operational models, infrastructure setups, and electrification development plans to get an understanding of the applicability of the piloted solutions to other contexts. This work will be based on interviews with port actor representatives, and as a result, we will have a clear understanding of the context-related (e.g. port size, country) solution transferability challenges and potential around BSR (3) Building tailored material for further solution transfer and dissemination: Synthesizing the pilot transfer opportunities, the identified transferability bottlenecks, and the developed solutions/strategies to those. These issues will be compiled into a report "Business opportunities and recommendations in transferring lighthouse port solutions" (working title). Besides the report, the findings will continuously feed communication activities, allowing targeted dissemination of project solutions to different port contexts.
Form: Best practices report with focus on EU regulations and initiatives

2,959 / 3,000 characters

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

D 3.1

Title of the deliverable

Business opportunities and recommendations in transferring lighthouse port solutions

84 / 100 characters

Description of the deliverable

Small and Medium-Sized Ports (SMSPs) recognize a specific role for regional development as well as partly individual challenges and obstacles in the maritime sector. However, besides the growing economic and environmental pressure mentioned, SMSPs lack on policy conformity and compliance when it comes to governmental strategy and financing exploitation. This especially includes disadvantageous positioning for fund allocation. Hence, the Deliverable will serve as guide for BSR ports for funding acquisition to apply technologies which ensure GHG reduction but also competitiveness of ports and the whole BSR maritime sector.
Based on interviews and an intensive, future-oriented business workshop, this group of activities produces detailed and action-oriented information about the solution transferability opportunities from the business perspective. It involves both the pros and cons of applying the piloted solutions in different potential port contexts, providing also predigested ideas about the solution transferability problems around the BSR. The findings are divided to actor and ecosystem level matters, and while this content is developed and disseminated through the activities throughout the project, it will also be compiled into a public report.

1,269 / 2,000 characters

Which output does this deliverable contribute to?

O.2.5 - Port Innovation Ecosystem Excellence Center BSR

55 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.3: WP3 Transferring solutions						
A.3.1: Solving business-level bottlenecks in pilot solution transfer					■	
D.3.1: Business opportunities and recommendations in transferring lighthouse port solutions					■	

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

WP 3 Group of activities 3.2

5.6.1 Group of activities leader

Group of activities leader PP 12 - University of Turku

A 3.2

5.6.2 Title of the group of activities

Solving policy-level bottlenecks in pilot solution transfer

59 / 100 characters

5.6.3 Description of the group of activities

To improve future collaboration as well as policy design referring to maritime innovation and greener ports, a policy series will be developed, covering the whole pilot process and its interferences with the political level.
Lessons learned, Insights gained, Knowledge created, Best Practices identified and Experiences made will be transformed into policy recommendations for planning measurements in greening port as part of green and smart transformation of the Baltic Sea Area.
An international policy workshop will be organized to discuss and solve the key policy-level challenges currently (1) hindering the transferability of the piloted solutions to ports around the BSR, and (2) limiting the collective development of new, eco-efficient port solutions. The workshop will be organized with invited policymakers, with the aim of presenting our pilots and together generating solutions to the key development bottlenecks.
The political focus is on country-level aspects as well as international matters, ranging from regional & national priorities, regulations and socio-economic development to linkages with EU-level sustainability goals, regional strategies and trade policies. Based on this analysis, key policy-level solution transferability benefits and development challenges discovered during the pilots will be pinpointed. Hence, the policy papers will formulate clear policy recommendation from the ports perspective to improve the political environmental framework for greening ports and innovation pilot implementation. The policy brief will be distributed directly to key policy maker and institutions as well as published for general public using the established communication measurements of the project.
In addition, the collaborative work with policy makers will lead to a policy roadmap to advance pilot solution transfer and green port development, covering the identified policy-level synergies of the pilots, their transferability bottlenecks, and the developed solutions/strategies to solve these bottlenecks. Besides this policy paper, the activities and the gained findings will provide direct input to the project's policy-level dissemination activities, allowing the right actors to receive targeted information and recommendations of how to support green port development around the BSR
Form: 3 policy brief articles and roadmap

2,365 / 3,000 characters

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

D 3.2

Title of the deliverable

Policy recommendations for supporting greener ports and lighthouse port solution transfer

89 / 100 characters

Description of the deliverable

Political regulations are setting the scene for sustainable development of the port sector and enable but also prevent innovation application through their design. Within the project implementation, the consortium collects all challenges, hurdles and problems occurring from legal and political regulations and offers a series of potential solutions in re-designing policies in the maritime / port sector of the BSR.
Yet, the activities result in material comprising policy recommendations that pinpoint business-policy synergies in sustainable innovation creation and solutions for solving policy-level bottlenecks in such processes. While actively disseminated through the transfer activities, these recommendations will also be compiled into a deliverable report. To improve future collaboration as well as policy design in terms of maritime innovation and greener ports, this policy brief report will cover the project's pilot processes and their interferences with political level actions. It will present the lessons learned, insights gained, knowledge created, and best practices identified, together with the policy-related problem areas identified at different levels. Most importantly, to provide stepping stones for supporting the project solution transferability as well as the collective development and adoption of new ones around the BSR, the report compiles the identified development needs and progress avenues. Thus, the results of the activities will be transformed into policy recommendations for planning the means and measurements in greening ports as part of green and smart transformation of the BSR. Besides feeding the project's communication activities, the recommendations and the report will be distributed directly to key policymakers and institutions as well as published for the general public.

1,827 / 2,000 characters

Which output does this deliverable contribute to?

O.2.5 - Port Innovation Ecosystem Excellence Center BSR

55 / 100 characters

5.6.6 Timeline

	Period: 1	2	3	4	5	6
WP.3: WP3 Transferring solutions						
A.3.2: Solving policy-level bottlenecks in pilot solution transfer						
D.3.2: Policy recommendations for supporting greener ports and lighthouse port solution transfer						

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 PP 7 - Port of Pietarsaari Ltd

A 3.3

5.6.2 Title of the group of activities

Development of Port Feasibility Studies for Decarbonization

60 / 100 characters

5.6.3 Description of the group of activities

The associated ports / partners of as well as fellow ports (in addition to planned pilots) will develop detailed feasibility studies, using the pilots developed in the lighthouse ports and elaborate their transferability to other ports. Thus, concrete validation on transferability of pilot innovation to other ports can be emphasised including pilot SWOT analysis for implementation in other ports. The ports will be assisted by national academic partners in study design as well as lighthouse ports by providing necessary data for pilot feasibility.
the studies reflect the identified application problems with potential end-user contexts around the BSR. It analyzes for example the relevant actor capabilities, business and operational models, infrastructure setups, and electrification development plans to get an understanding of the applicability of the piloted solutions to other contexts. This work will be based on interviews with port actor representatives to receive a clear understanding of the context-related (e.g. port size, country) solution transferability challenges and potential around BSR.
Hence, the studies synthesize the pilot transfer opportunities, the identified transferability bottlenecks, and the developed solutions/strategies for ports. Besides the reports, findings will continuously feed communication activities, allowing targeted dissemination of project solutions to different port contexts.
Form: 6 Feasibility Studies on transferability of lighthouse pilots to other ports

1,515 / 3,000 characters

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

D 3.3

Title of the deliverable

Proof of Concept for Lighthouse Port BluePrint

46 / 100 characters

Description of the deliverable

Feasibility Studies are developed in close cooperation with ports outside the consortium and published afterwards to proof the BSR Lighthouse Port BluePrint.

157 / 2,000 characters

Which output does this deliverable contribute to?

O.2.3 - BSR Lighthouse Port BluePrint; O.2.5 - Port Innovation Ecosystem Excellence Center BSR

94 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.3: WP3 Transferring solutions						
A.3.3: Development of Port Feasibility Studies for Decarbonization						
D.3.3: Proof of Concept for Lighthouse Port BluePrint						

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 11 - Maritime University of Szczecin

A 3.4

5.6.2 Title of the group of activities

Capacity Building and Know-how Distribution

43 / 100 characters

5.6.3 Description of the group of activities

The consortium will host ex-post pilot implementation events in all pilot ports' regions on what and how can other ports learn from the pilots and their innovation implementation. The event organisation and implementation will be assisted by all partners. Capacity building and knowledge sharing will be connected to regional roadshows to reach regional and national target groups of port sector and increase project awareness as well as share knowledge.
Gained knowledge and experiences in pilot development and implementation (WP1 & WP2) will be shared on a cross-project approach as well. Project representative will join a number of policy and industry workshops, exhibitions or events organised by umbrella organisations such as DNVGL, ESPO or BPO to connect with key actors in the port sector.
Form: 0,5-1 day sprint events in each piloting port's venue, seminars, conferences, Hackathon, workshops

906 / 3,000 characters

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

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.3: WP3 Transferring solutions						
A.3.4: Capacity Building and Know-how Distribution						■

WP 3 Group of activities 3.5

5.6.1 Group of activities leader

Group of activities leader PP 1 - Klaipeda Science and Technology Park

A 3.5

5.6.2 Title of the group of activities

Portathon Baltic and Investor network

37 / 100 characters

5.6.3 Description of the group of activities

Hackathons are events for creative problem solving that gathers experts of different fields and young professionals to work on the technological challenges by creating software and hardware solutions. The challenges identified by the project network will serve as a content for the port hackathons in BSR organized by project consortia. There will be 3 hackathons (in and after project lifetime) organized that will gather 300 participants form Baltic Sea Region to work on the technological challenges of the ports.
The investor network is a crucial part of any innovation ecosystem, to facilitate the startup development different investment project consortia will provide a roadmap of venture capital and angel investor funds of EU that have a focus on the port and shipping industry startup. The number of funds will be included into project activities by providing representatives to the advisory board of hackathons. Form: 3 Hackathons

941 / 3,000 characters

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

D 3.5

Title of the deliverable

BSR Port Sector Excellence Distribution & Sustainability

57 / 100 characters

Description of the deliverable

International Hackathons will be implemented annually with focus on Start-Ups and Tech-Companies to solve real challenges proposed by ports. Project results will be utilized on in the events and potential investment concepts to acquire new financing sources for ports and stakeholders to further develop electrification solutions based on the pilots developed in the project. Hence, the project outputs shall be continuously and sustainably be used even after project lifetime.

478 / 2,000 characters

Which output does this deliverable contribute to?

O.2.5 - Port Innovation Ecosystem Excellence Center BSR

55 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.3: WP3 Transferring solutions						
A.3.5: Portathon Baltic and Investor network						
D.3.5: BSR Port Sector Excellence Distribution & Sustainability						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

6. Indicators

Indicators

Output indicators

Output indicators	Total target value in number	Project outputs	Please explain how the solution presented in this output serves the target group(s).
RCO 84 – Pilot actions developed jointly and implemented in projects	3	N/A	N/A
RCO 116 – Jointly developed solutions	2	O.2.3: BSR Lighthouse Port BluePrint	Research studies have shown that small and medium-sized ports of the BSR are occupied heavily with their daily operations, leading to a lack of time capacity and partly knowledge to initiate disruptive innovation applications. Nevertheless, the SMSPs are highly interested in innovation application as pilots as well as drivers towards becoming smarter and greener ports. Hence, the developed BluePrint serves as supporting strategic decision-making instrument on several levels covering economic, social, technological, environmental and sustainable spheres in terms of electrifying operations within a port ecosystem. 620 / 1,000 characters
		O.2.5: Port Innovation Ecosystem Excellence Center BSR	Whereas the BluePrint O.2.3 serves as demonstration of the piloting processes in different areas of a port ecosystem, the Port Innovation Ecosystem Excellence Center BSR serves as a contact point for the target groups to support the adaptation of the BluePrint and initiate real innovation measurements in port ecosystems based on the project results. Hence, the Excellence Center itself can provide the necessary services and / or contacts required for tailor-made challenges in port electrification. 502 / 1,000 characters

Result indicators

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.
RCR 104 - Solutions taken up or up-scaled by organisations	2	Developed solutions are planned to be upscaled by both a) direct partners that contributed to the implementation, and b) organisations outside the consortium: a) Direct PPs contributed to the transnational pilot implementation and thus solution developed with their innovation capacity being up-scaled through the project implementation as well. Therefore, the results and lessons learnt will be reintegrated into further development of the individual placed-based maritime initiatives. For this reason, the majority of the direct PPs will upscale their future competencies and knowledge by, e.g. developing further financing / business models for the electrification pilots; attracting and securing additional funding in order to expand service portfolio, which is provided by the developed Excellence Center and replicate innovation processes in other places of the participating regions. b) Other ports / port authorities / terminal operators / shipping companies / regional planners will use the developed solutions through methodologies, roadmaps, guideline and tools that can be applied on daily basis, when it concerns real-life challenge / problem solving within port ecosystems towards green transition. Digital blueprint deployment enables to design, test and implement the best alternative for innovation challenge solving not only in physical environment, but also simulating, planning and choosing the best option / pathway for greening port ecosystem through electrification. This solution will allow others to safe additional resources by testing alternatives, giving financial, time or competence constraints. 1,628 / 2,000 characters

Output indicators		Result indicators			
Output indicator	**Total target value in number**	**Result indicator**	**Total target value in number**	**Please describe what types of organisations are planned to actively participate in the project. Explain how this participation will increase their institutional capacity. These types of organisations should be in line with the target groups you have defined for your project.**	
RCO 87 - Organisations cooperating across borders	15	**PSR 1 - Organisations with increased institutional capacity due to their participation in cooperation activities across borders**	45	Project partners and associated organisations	The project consortium consists of 15 direct partners and representing Port Authorities, BSOs, academics and businesses. Since the project includes all partners in the full project implementation, direct partners will be able to increase the own institutional and innovation capacity through different aspects: 1) Operational added value: improved formal and informal collaboration modes among actors approach in networking and among the BSR regions, including innovation co-creation and absorption competence. In addition, innovation governance forms combining both horizontal (thematic) as well as vertical governance structures (bottom-up and top-down) were combined, aiming at improving dialog and strengthening recognition and role of transnational partnerships for innovation measurements in the port sector; 2) Enhanced social cohesion – exchanging among sectors and different multi-level governance stakeholders; learning different cultural and mentality aspects; learning potential and competitive edge of culture for innovation; 3) Reduced innovation gaps in terms of readiness for transition and resilience compared among the BSR regions, which still show huge disparities; 4) Cohesion added value – involving both big players and small players, pioneering regions, smaller ports and partners, who are still learners, which is usually seldom in real-life scenarios. 1,379 / 1,500 characters
				Other organisations	BalticLightPorts2030 project is based on transnational, cross-border and co-creative mindset in the partnership. Hence, the work plan foresees integration of several different organisation outside of the consortium. Through participation in project activities, other organisation will be able to increase the own institutional and innovation capacities in different ways: 1) Innovation Sprint participation: Get to know new tools and methods for co-creation from Creative Industries, which can be transferred into the own institution as well. This will not only spread the co-creation approach itself in the BSR, but also lead to replications of innovation sprints in other organisations across various industries; 2) Open Study Visits in piloting ports: Study Visits in piloting ports within the progress itself will be open for any interested target group, however, the consortium will focus on integrating regional and national policy makers to showcase the application of regulations at the site to minimize the gaps between regulation determination on policy level and actual consequences at the basis; 3) Tailor-made transfer of solutions: Participants in the events as planned in WP3 will gain new knowledge and build up their own capacities on greening port ecosystem through electrification measurements as well as on how to plan, develop, finance, implement and evaluate such measurements. In total, the project aspires to increase institutional capacity of 30 other organisations. 1,491 / 1,500 characters

7. Budget

7.0 Preparation costs

Preparation Costs

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

Other EU support of preparatory cost

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

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

No. & role	Partner name	Partner status	CAT0 - Preparation costs	CAT1 - Staff	CAT2 - Office & administration
1 - LP	Klaipeda Science and Technology Park	Active 22/09/2022	24,000.00	169,000.00	25,350.00
2 - PP	Klaipeda State Seaport Authority	Active 22/09/2022	0.00	27,000.00	4,050.00
3 - PP	Klaipeda Stevedoring Company BEGA, JSC	Active 22/09/2022	0.00	103,000.00	15,450.00
4 - PP	Shipping & Offshore Network	Active 22/09/2022	0.00	136,000.00	20,400.00
5 - PP	University of Applied Sciences Wismar: Technology, Business and Design	Active 22/09/2022	0.00	158,000.00	23,700.00
6 - PP	University of Southern Denmark	Active 22/09/2022	0.00	159,000.00	23,850.00
7 - PP	Port of Pietarsaari Ltd	Active 22/09/2022	0.00	80,000.00	12,000.00
8 - PP	Centria University of Applied Ssciences	Active 22/09/2022	0.00	131,000.00	19,650.00
9 - PP	Blue Science Park	Active 22/09/2022	0.00	99,000.00	14,850.00
10 - PP	Blekinge Institute of Technology	Active 22/09/2022	0.00	121,000.00	18,150.00
11 - PP	Maritime University of Szczecin	Active 22/09/2022	0.00	117,000.00	17,550.00
12 - PP	University of Turku	Active 22/09/2022	0.00	193,000.00	28,950.00
13 - PP	Centrum Balticum Foundation	Active 22/09/2022	0.00	125,000.00	18,750.00
14 - PP	BANKE ApS	Active 22/09/2022	0.00	105,000.00	15,750.00
15 - PP	DFDS A/S	Active 22/09/2022	0.00	128,000.00	19,200.00
Total			24,000.00	1,851,000.00	277,650.00

No. & role	Partner name	CAT3 - Travel & accommodation	CAT4 - External expertise & services	CAT5 - Equipment	Total partner budget
1 - LP	Klaipeda Science and Te	25,350.00	74,000.00	0.00	317,700.00
2 - PP	Klaipeda State Seaport A	4,050.00	6,000.00	0.00	41,100.00
3 - PP	Klaipeda Stevedoring Co	15,450.00	33,000.00	200,000.00	366,900.00
4 - PP	Shipping & Offshore Net	20,400.00	35,000.00	0.00	211,800.00
5 - PP	University of Applied Scie	23,700.00	66,000.00	0.00	271,400.00
6 - PP	University of Southern De	23,850.00	37,000.00	0.00	243,700.00
7 - PP	Port of Pietarsaari Ltd	12,000.00	63,000.00	75,000.00	242,000.00
8 - PP	Centria University of Appl	19,650.00	31,000.00	0.00	201,300.00
9 - PP	Blue Science Park	14,850.00	0.00	0.00	128,700.00
10 - PP	Blekinge Institute of Tech	18,150.00	45,000.00	150,000.00	352,300.00
11 - PP	Maritime University of Sz	17,550.00	34,000.00	0.00	186,100.00
12 - PP	University of Turku	28,950.00	5,000.00	0.00	255,900.00
13 - PP	Centrum Balticum Found	18,750.00	28,500.00	0.00	191,000.00
14 - PP	BANKE ApS	15,750.00	41,000.00	150,000.00	327,500.00
15 - PP	DFDS A/S	19,200.00	6,000.00	30,000.00	202,400.00
Total		277,650.00	504,500.00	605,000.00	3,539,800.00

7.1.1 External expertise and services

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
1. Klaipeda Science	National control	CAT4-PP1-F-0	FLC Costs 9 / 100 characters	No	N/A	6,000.00
12. University of Tu	Specialist support	CAT4-PP12-E-	Business workshop costs + external communication 48 / 100 characters	No	3.1 3.2	5,000.00
13. Centrum Balticu	Specialist support	CAT4-PP13-E-	VIsual works, layout AD 23 / 100 characters	No	N/A	5,000.00
13. Centrum Balticu	Specialist support	CAT4-PP13-E-	Technical support for events, events location, online events 60 / 100 characters	No	1.2 2.3 3.1 3.2 3.4 3.5	10,500.00
13. Centrum Balticu	Specialist support	CAT4-PP13-E-	VIdeo animations 16 / 100 characters	No	2.2 2.3 2.4 3.4 3.5	13,000.00
1. Klaipeda Science	Events/meetings	CAT4-PP1-A-0	Innovation Sprints (Organisation, experts, materials, etc.) 60 / 100 characters	No	1.2	5,000.00
1. Klaipeda Science	Events/meetings	CAT4-PP1-A-0	Regional business and policy workshop organisation 50 / 100 characters	No	3.1 3.2	7,000.00
1. Klaipeda Science	Events/meetings	CAT4-PP1-A-0	Partner Meetings 16 / 100 characters	No	N/A	6,000.00
1. Klaipeda Science	IT	CAT4-PP1-B-0	IT support for online tool application 38 / 100 characters	No	1.5	9,000.00
1. Klaipeda Science	Events/meetings	CAT4-PP1-A-1	Portathon organisation (annually), experts for evaluation committee, costs of stay for participatns 99 / 100 characters	No	3.4 3.5	15,000.00
1. Klaipeda Science	Communication	CAT4-PP1-C-1	Communication materials 24 / 100 characters	No	N/A	5,000.00
	Total					504,500.00

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value	
1. Klaipeda Science	Specialist support	CAT4-PP1-E-1	Costs related to the establishment of Excellence Center 55 / 100 characters	No	2.5 3.5	5,000.00	
1. Klaipeda Science	Specialist support	CAT4-PP1-E-1	Auditing experts, fees for information access, interview costs, etc. 68 / 100 characters	No	1.1	5,000.00	
1. Klaipeda Science	Specialist support	CAT4-PP1-E-1	Contribution to pilot development and implementation planned in Klaipeda Port 77 / 100 characters	No	2.1 2.2 2.3 2.4	11,000.00	
2. Klaipeda State S	National control	CAT4-PP2-F-1	FLC costs 9 / 100 characters	No	N/A	6,000.00	
3. Klaipeda Steved	National control	CAT4-PP3-F-1	FLC costs 9 / 100 characters	No	N/A	6,000.00	
3. Klaipeda Steved	Events/meetings	CAT4-PP3-A-1	Innovation Sprint Klaipeda contribution (organisation, experts, participants, etc.) 83 / 100 characters	No	1.2	3,000.00	
3. Klaipeda Steved	Events/meetings	CAT4-PP3-A-1	Capacity Building Workshop / Transfer event organisation 56 / 100 characters	No	3.4	3,000.00	
3. Klaipeda Steved	Specialist support	CAT4-PP3-E-1	Experts in pilot development and implementation (IT experts, consultancy, legal advocacy, etc.) 95 / 100 characters	No	2.1 2.2 2.3 2.4	21,000.00	
4. Shipping & Offsh	National control	CAT4-PP4-F-2	FLC costs 9 / 100 characters	No	N/A	6,000.00	
4. Shipping & Offsh	Events/meetings	CAT4-PP4-A-2	Partner Meetings 16 / 100 characters	No	N/A	5,000.00	
4. Shipping & Offsh	Communication	CAT4-PP4-C-2	Communication materials, translations, fees for regional publications 69 / 100 characters	No	N/A	2,000.00	
4. Shipping & Offsh	Events/meetings	CAT4-PP4-A-2	Contribution to Innovation Sprints 34 / 100 characters	No	2.2	2,000.00	
	Total					504,500.00	

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value	
4. Shipping & Offsh	Specialist support	CAT4-PP4-E-2	External Expert as consultant for task leadership implementation 64 / 100 characters	No	1.3	4,000.00	
4. Shipping & Offsh	Events/meetings	CAT4-PP4-A-2	Regional / national Business Workshop 38 / 100 characters	No	3.1 3.4	7,000.00	
4. Shipping & Offsh	Events/meetings	CAT4-PP4-A-2	Regional / national policy Workshop 36 / 100 characters	No	3.2	9,000.00	
5. University of Appl	National control	CAT4-PP5-F-2	FLC costs 9 / 100 characters	No	N/A	6,000.00	
5. University of Appl	Events/meetings	CAT4-PP5-A-2	Partner Meetings 16 / 100 characters	No	N/A	5,000.00	
5. University of Appl	Events/meetings	CAT4-PP5-A-2	Innovation Sprint Organisation, Experts and Participants, Trainers, CreativeBroker, Mentors 91 / 100 characters	No	1.2 1.3	12,000.00	
5. University of Appl	Communication	CAT4-PP5-C-3	Promotion Materials, Translations, Publications 47 / 100 characters	No	N/A	3,000.00	
5. University of Appl	Specialist support	CAT4-PP5-E-3	External support in auditing, benchmarking 43 / 100 characters	No	1.1 1.4 1.5	3,000.00	
5. University of Appl	IT	CAT4-PP5-B-3	IT Support in interactive digital tool development 50 / 100 characters	No	1.5	3,000.00	
5. University of Appl	Specialist support	CAT4-PP5-E-3	External Expertise in pilot implementation (planning, legal contracting, services) 82 / 100 characters	No	2.1 2.2 2.3 2.4	25,000.00	
5. University of Appl	Specialist support	CAT4-PP5-E-3	Expertise for feasibility study, data gathering, monitoring and report development 82 / 100 characters	No	3.3	9,000.00	
6. University of Sou	National control	CAT4-PP6-F-3	FLC costs 9 / 100 characters	No	N/A	6,000.00	
	Total					504,500.00	

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value	
6. Universitv of Sou	Events/meetings	CAT4-PP6-A-3	Innovation Sprint organisation, experts, participants 53 / 100 characters	No	1.2 1.3	5,000.00	
6. Universitv of Sou	Events/meetings	CAT4-PP6-A-3	Policy and business workshops for solution transfer 51 / 100 characters	No	3.1 3.2 3.4 3.5	7,000.00	
6. Universitv of Sou	Specialist support	CAT4-PP6-E-3	Experts in pilot monitoring, data and information gathering 60 / 100 characters	No	2.3	8,000.00	
6. Universitv of Sou	Communication	CAT4-PP6-C-3	Materials for Promotion in English and National language, Translations, Publications 85 / 100 characters	No	N/A	6,000.00	
7. Port of Pietarsaa	National control	CAT4-PP7-F-4	FLC costs (2 times in project lifetime) 39 / 100 characters	No	N/A	2,000.00	
7. Port of Pietarsaa	Events/meetings	CAT4-PP7-A-4	Innovation Sprints organisation, experts, broker, participants 62 / 100 characters	No	1.2 1.3	5,000.00	
7. Port of Pietarsaa	Communication	CAT4-PP7-C-4	Digital and printed materials, videos, publication fees 55 / 100 characters	No	N/A	10,000.00	
7. Port of Pietarsaa	Events/meetings	CAT4-PP7-A-4	Participation in events, registration fees, fairs, conferences, workshops 73 / 100 characters	No	3.1 3.2 3.4 3.5	6,000.00	
7. Port of Pietarsaa	Specialist support	CAT4-PP7-E-4	Consultancy in technology application for piloting 50 / 100 characters	No	1.4	15,000.00	
7. Port of Pietarsaa	Specialist support	CAT4-PP7-E-4	Economic, legal and technical support and feasibility experts for pilot implementation 86 / 100 characters	No	2.1 2.2 2.3 2.4	25,000.00	
8. Centria Universit	Events/meetings	CAT4-PP8-A-4	Partner Meetings organisation, venue, catering, etc. 52 / 100 characters	No	N/A	3,000.00	
	Total					504,500.00	

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value	
8. Centria Universit	National control	CAT4-PP8-F-4	FLC once in project lifetime 28 / 100 characters	No	N/A	1,000.00	
8. Centria Universit	IT	CAT4-PP8-B-4	Digital Tools as supporting methods for Business Modelling 58 / 100 characters	No	1.4 1.5	5,000.00	
8. Centria Universit	IT	CAT4-PP8-B-4	Software licenses for project purposes (simulation of pilots, databases, etc.) 78 / 100 characters	No	1.4	5,000.00	
8. Centria Universit	Events/meetings	CAT4-PP8-A-5	participation in conferences fee, communication material or similar 67 / 100 characters	No	3.1 3.2 3.4 3.5	6,000.00	
8. Centria Universit	Other	CAT4-PP8-G-5	Travel & accommodation for other organisations and target groups 64 / 100 characters	No	1.2 3.1 3.2 3.4 3.5	5,000.00	
8. Centria Universit	Events/meetings	CAT4-PP8-A-5	Contribution to Innovation Sprints, experts, materials, speaker, CreativeBroker, etc. 85 / 100 characters	No	1.2 1.3	6,000.00	
10. Blekinge Institut	National control	CAT4-PP10-F-	FLC Costs 9 / 100 characters	No	N/A	6,000.00	
10. Blekinge Institut	Events/meetings	CAT4-PP10-A-	Innovation Sprints Organisation (experts, participants, venue, moderators, speakers, CreativeBroker) 100 / 100 characters	No	1.2 1.3	7,000.00	
10. Blekinge Institut	Events/meetings	CAT4-PP10-A-	Regional B2B and policy workshops, capacity building events 59 / 100 characters	No	3.1 3.2 3.4	10,000.00	
10. Blekinge Institut	IT	CAT4-PP10-B-	Simulation modelling experts, IT software for piloting 55 / 100 characters	No	1.4 2.2 2.3 2.4	22,000.00	
11. Maritime Univer	Events/meetings	CAT4-PP11-A-	Partner Meetings 16 / 100 characters	No	N/A	5,000.00	
	Total					504,500.00	

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value	
11. Maritime Univer	National control	CAT4-PP11-F-	FLC Costs (if applicable to centralized system) 47 / 100 characters	No	N/A	6,000.00	
11. Maritime Univer	Events/meetings	CAT4-PP11-A-	Capacity Building and training events organisation, support of transnational meetings, venues etc. 98 / 100 characters	No	3.4	14,000.00	
11. Maritime Univer	Communication	CAT4-PP11-C-	Promotion Materials, Translations, Videos, etc. 47 / 100 characters	No	N/A	5,000.00	
11. Maritime Univer	Events/meetings	CAT4-PP11-A-	Participation costs for conferences, registration fees, seminars, exchange forums etc. 86 / 100 characters	No	3.1 3.2 3.4 3.5	4,000.00	
14. BANKE ApS	National control	CAT4-PP14-F-	FLC costs 9 / 100 characters	No	N/A	6,000.00	
6. Universitv of Sou	Events/meetings	CAT4-PP6-A-6	Partner Meetings 16 / 100 characters	No	N/A	5,000.00	
14. BANKE ApS	Events/meetings	CAT4-PP14-A-	Contribution to Innovation Sprints organisation 47 / 100 characters	No	1.2 1.3	3,000.00	
14. BANKE ApS	Events/meetings	CAT4-PP14-A-	Organisation of regional business and policy workshops 54 / 100 characters	No	3.1 3.2 3.4	6,000.00	
14. BANKE ApS	Specialist support	CAT4-PP14-E-	Experts in pilot implementation (legal, logistics, economic, planning experts, etc.) 84 / 100 characters	No	2.1 2.2 2.3 2.4	26,000.00	
15. DFDS A/S	National control	CAT4-PP15-F-	FLC Costs 10 / 100 characters	No	N/A	6,000.00	
	Total					504,500.00	

7.1.2 Equipment

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value	
3. Klaipeda Steved	Other specific equip	CAT5-PP3-H-0	Equipement for retrofitting locomotive, batteries, power station, green energy supply structures 96 / 100 characters	No	2.2 2.3 2.4	200,000.00	
10. Blekinge Institut	Other specific equip	CAT5-PP10-H-	Sensors for air & water quality measurement, process simulation software; hardware for digital twin 99 / 100 characters	No	2.2 2.3 2.4	150,000.00	
14. BANKE ApS	Vehicles	CAT5-PP14-G-	Powertrain for retrofitting diesel powered Ro-Ro terminal tractors to fully electric vehicles. 94 / 100 characters	No	2.2 2.3 2.4	150,000.00	
15. DFDS A/S	Vehicles	CAT5-PP15-G-	Electrical power train for terminal tractors operated,used for retrofitting & removing Diesel engine 100 / 100 characters	No	2.2 2.3 2.4	30,000.00	
7. Port of Pietarsaa	IT hardware and soft	CAT5-PP7-B-0	Specialised sensors and cameras, energy meters, monitoring devices 66 / 100 characters	No	2.2 2.3 2.4	75,000.00	
	Total					605,000.00	

7.1.3 Infrastructure and works

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

7.2 Planned project budget per funding source & per partner

No. & role	Partner name	Partner status	Country	Funding source	Co-financing rate [in %]	Total [in EUR]	Programme co-financing [in EUR]	Own contribution [in EUR]	State aid instrument
1-LP	Klaipeda Science and Technology Park	Active 22/09/2022	LT	ERDF	80.00 %	317,700.00	254,160.00	63,540.00	For each partner, the State aid relevance and applied aid measure are defined in the **State aid section**
2-PP	Klaipeda State Seaport Authority	Active 22/09/2022	LT	ERDF	80.00 %	41,100.00	32,880.00	8,220.00	
3-PP	Klaipeda Stevedoring Company BEGA, JSC	Active 22/09/2022	LT	ERDF	80.00 %	366,900.00	293,520.00	73,380.00	
4-PP	Shipping & Offshore Network	Active 22/09/2022	NO	Norway	50.00 %	211,800.00	105,900.00	105,900.00	
5-PP	University of Applied Sciences Wismar: Technology, Business and Design	Active 22/09/2022	DE	ERDF	80.00 %	271,400.00	217,120.00	54,280.00	
6-PP	University of Southern Denmark	Active 22/09/2022	DK	ERDF	80.00 %	243,700.00	194,960.00	48,740.00	
7-PP	Port of Pietarsaari Ltd	Active 22/09/2022	FI	ERDF	80.00 %	242,000.00	193,600.00	48,400.00	
8-PP	Centria University of Applied Ssciences	Active 22/09/2022	FI	ERDF	80.00 %	201,300.00	161,040.00	40,260.00	
9-PP	Blue Science Park	Active 22/09/2022	SE	ERDF	80.00 %	128,700.00	102,960.00	25,740.00	
10-PP	Blekinge Institute of Technology	Active 22/09/2022	SE	ERDF	80.00 %	352,300.00	281,840.00	70,460.00	
11-PP	Maritime University of Szczecin	Active 22/09/2022	PL	ERDF	80.00 %	186,100.00	148,880.00	37,220.00	
12-PP	University of Turku	Active 22/09/2022	FI	ERDF	80.00 %	255,900.00	204,720.00	51,180.00	
13-PP	Centrum Balticum Foundation	Active 22/09/2022	FI	ERDF	80.00 %	191,000.00	152,800.00	38,200.00	
14-PP	BANKE ApS	Active 22/09/2022	DK	ERDF	80.00 %	327,500.00	262,000.00	65,500.00	
15-PP	DFDS A/S	Active 22/09/2022	DK	ERDF	80.00 %	202,400.00	161,920.00	40,480.00	
Total ERDF						3,328,000.00	2,662,400.00	665,600.00	
Total Norway						211,800.00	105,900.00	105,900.00	
Total						3,539,800.00	2,768,300.00	771,500.00	

7.3 Spending plan per reporting period

	EU partners (ERDF)		Norwegian partners (Norway)		Total	
	Total	Programme co-financing	Total	Programme co-financing	Total	Programme co-financing
Preparation costs	24,000.00	19,200.00	0.00	0.00	24,000.00	19,200.00
Period 1	260,000.00	208,000.00	38,000.00	19,000.00	298,000.00	227,000.00
Period 2	400,000.00	320,000.00	42,000.00	21,000.00	442,000.00	341,000.00
Period 3	530,000.00	424,000.00	30,000.00	15,000.00	560,000.00	439,000.00
Period 4	940,000.00	752,000.00	21,000.00	10,500.00	961,000.00	762,500.00
Period 5	698,000.00	558,400.00	35,000.00	17,500.00	733,000.00	575,900.00
Period 6	476,000.00	380,800.00	45,800.00	22,900.00	521,800.00	403,700.00
Total	3,328,000.00	2,662,400.00	211,800.00	105,900.00	3,539,800.00	2,768,300.00