

Submission Date: 25/04/2022 17:36:32

Project Number:

Project Version Number: 1

1. Identification				
Call		D	ate of submission	
C1				25/04/2022
1.1. Full name of the project				
Closing local water circuits by recirc	ulating nutrients and water and using t	hem in nature		
				90 / 250 characters
1.2. Short name of the project				
ReNutriWater				12 / 20 characters
1.3. Programme priority				127 ZU Ukarawers
2. Water-smart societies				
1.4. Programme objective				
2.1 Sustainable waters				
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

### 1.7. Project summary

Closure start

Climate change and environmental pollution make saving water resources crucial also in the BSR. Due to climate change and rising pollution of the environment, freshwater has become more valuable in the Baltic Sea Region. Despite the extensive initial treatment, freshwater is still being discharged after single use in many countries. This practice wastes money, energy, and human labour, which could be reduced with water recovery from wastewater. However, such practice poses some challenges due to specific requirements of reclaimed water quality. The goal is to reduce the risk of the potentially harmful impact of untreated WWTP effluent on the environment and human health. Reclaimed water can be used by local authorities and private entities for various purposes, like street cleaning, carwashes, fountains and pond recharge, recreational area watering, plant breeding, and, after proper treatment, also for domestic use or drinking. The key is to develop solutions for the recovery of safe water, free from pathogens and micropollutants, with the right amount of nutrients. Overcoming the "yuck factor" in society is also crucial. The risk assessment is a necessary tool to create effective protective barriers. This project is meant to tackle these challenges to accelerate policymaking, which would facilitate water reuse implementation in the cities of Europe. This good practice addresses circular economy and SDG #6 "Clean water and sanitation for all".

Closure end

01/01/2026

1,467 / 1,500 characters

31/03/2026

## 1.8. Summary of the partnership

The consortium is structured to cover all the necessary competencies and provide the critical mass to reach the BSR Interreg programme aim. Starting from wastewater treatment plant operators (infrastructure and public service providers), through institutions with knowledge of existing solutions (higher education and research institutions, business support organizations, interest groups, SMEs), to recipients who know their local needs (local authorities, SME). Local authorities, interest groups and business support organizations are the strategic target group. There are users with specific requirements that they will articulate during the project. The solutions will be checked and refined during pilots to make them duplicable in many places. This group will influence infrastructure and public service providers to apply the solutions resulting from the pilots. We want to create interaction and free the needs (operators of green areas, tourist facilities) and opportunities (operators of treatment plants) locally. The project partners represent five BSR countries: DK, FI, LT LV, and PL. Thanks to this, the project drive solutions in three international pilot cases. The pilots' cases purpose is not only direct reimplementation and upscaling but also to trigger innovation (that's why the project targets SMEs). Thanks to the experience gained during the pilots, a universal manual will be created, taking into account local aspects, such as specific legal requirements, location, or climate. We don't have all Baltic countries onboard; however, we would like to reach most countries. We invited several entities to the Advisory Council, composed of associated partners from different countries. The handbook (O 2.5), which is one of the three project outputs, is not only a technical and technological guide; it is also a guideline for risk management and a tool for popularizing knowledge and breaking taboos and stereotypes. The second output is a self-assessment tool. Thanks to the cooperation of partners and the support of as

2,262 / 3,000 characters



# 1.11. Project Budget Summary

Financial res	sources [in EUR]	Preparation costs	Planned project budget
	ERDF co-financing	0.00	3,077,786.88
ERDF	Own contribution ERDF	0.00	769,446.73
	ERDF budget	0.00	3,847,233.61
	NO co-financing	0.00	0.00
NO	Own contribution NO	0.00	0.00
	NO budget	0.00	0.00
	NDICI co-financing	0.00	0.00
NDICI	Own contribution NDICI	0.00	0.00
	NDICI budget	0.00	0.00
	RU co-financing	0.00	0.00
RU	Own contribution RU	0.00	0.00
	RU budget	0.00	0.00
	Total Programme co-financing	0.00	3,077,786.88
TOTAL	Total own contribution	0.00	769,446.73
	Total budget	0.00	3,847,233.61



# 2. Partnership

# 2.1. Overview: Project Partnership

## 2.1.1 Project Partners

	I D/D=		0 1 11 (011 1			e of partner Legal	Partner	Active/inactive	
No.	LP/PP	Organisation (English)	Organisation (Original)	Country Type of partner		status	budget in the project	Status	from
1	LP	Chamber of Economy Polish Waterworks	Izba Gospodarcza Wodociągi Polskie	■ PL	Interest group	a)	319,152.00 €	Active	22/09/2022
2	PP	Centrum Balticum Foundation	Centrum Balticum Foundation	⊕ FI	Interest group	a)	310,610.00 €	Active	22/09/2022
3	PP	Klaipeda Chamber of Commerce Industry and Crafts	Klaipėdos prekybos, pramonės ir amatų rūmai	■ LT	Business support organisation	b)	172,376.00 €	Active	22/09/2022
4	PP	University of Latvia	Latvijas Universitāte	<b>■</b> LV	Higher education and research institution	a)	317,820.00 €	Active	22/09/2022
5	PP	Mineral and Energy Economy Research Institute of the Polish Academy of Sciences	Instytut Gospodarki Surowcami Mineralnymi i Energią Polskiej Akademii Nauk	■ PL	Higher education and research institution	a)	296,507.30 €	Active	22/09/2022
6	PP	Savonia University of Applied Sciences Ltd.	Savonia ammattikorkeakoulu oy	<b>⊕</b> FI	Higher education and research institution	b)	497,525.00 €	Active	22/09/2022
7	PP	Warsaw University of Technology	Politechnika Warszawska	■ PL	Higher education and research institution	a)	318,873.00 €	Active	22/09/2022
8	PP	Samsø Municipality	Samsø Kommune	<b>∷</b> DK	Local public authority	a)	110,420.00 €	Active	22/09/2022
9	PP	Schwander	Schwander Polska sp. z o.o. spółka komandytowa	■ PL	Small and medium enterprise	b)	137,507.64 €	Active	22/09/2022
10	PP	Municipal Water and Sewerage Company in Warsaw	Miejskie Przedsiębiorstwo Wodociągów i Kanalizacji w m.st. Warszawie	■ PL	Infrastructure and public service provider	a)	399,322.30 €	Active	22/09/2022
11	PP	Samsø Wastewater Utility	Samsø Spildevand A/S	<b>∷</b> DK	Infrastructure and public service provider	a)	71,989.10 €	Active	22/09/2022
12	PP	Jurmala Water Utility (Jurmalas udens Ltd.)	sabiedrība ar ierobežotu atbildību "Jūrmalas ūdens"	<b>≡</b> LV	Infrastructure and public service provider	a)	490,000.00 €	Active	22/09/2022
13	PP	Siauliai Chamber of Commerce, Industry and Crafts	Šiaulių prekybos, pramonės ir amatų rūmai	■ LT	Business support organisation	b)	233,400.00 €	Active	22/09/2022
14	PP	VNK serviss, Ltd.	SIA "VNK serviss"	<b>■</b> LV	Infrastructure and public service provider	a)	171,731.27 €	Active	22/09/2022

## 2.1.2 Associated Organisations



No.	Organisation (English)	Organisation (Original)	Country	Type of Partner
AO 1	WWF Poland	WWF Polska	■ PL	NGO
AO 2	Estonian Water Works Association	Eesti Vee-ettevotete Liit	■ EE	Interest group
AO 3	Regional Council of Pohjois-Savo	Pohjois-Savo Liitto	<b>⊕</b> FI	Regional public authority
AO 4	Klaipeda water	Klaipėdos vanduo	<u>■</u> LT	Infrastructure and public service provider
AO 5	Administration of Jurmala local government	Jūrmala	<b>=</b> LV	Local public authority
AO 6	Kursenu vandenys	Kuršėnų vandenys	<b>■</b> LT	Infrastructure and public service provider
AO 7	Latvia Center for Environment, Geology and Meteorology	Latvijas Vides, ģeoloģijas, meteoroloģijas centrs	<b>≡</b> LV	National public authority
AO 8	Samsø Farmers Association	Samsø Landboforening	<b>∷</b> DK	Interest group
AO 9	EurEau	EurEau	<b>■</b> BE	Interest group
AO 10	VIA University College	VIA University College	<b>∷</b> DK	Higher education and research institution
AO 11	Ministry of Infrastructure	Ministerstwo Infrastruktury	PL	National public authority
AO 12	Tahko Village Association	Tahkon kyläyhdistys ry	<b>⊕</b> FI	Interest group
AO 13	Tahko Development Oy	Tahkon Kehitys Oy	<b>⊕</b> FI	Business support organisation
AO 14	Ecoloop	Ecoloop AB	■ SE	Small and medium enterprise
AO 15	Water and sewerage company in Minsk Mazowiecki	Przedsiębiorstwo Wodociągów i Kanalizacji sp. z o.o. w Mińsku Mazowieckim	■ PL	Infrastructure and public service provider
AO 16	Municipal and housing enterprise in Dzialdowo	Przedsiębiorstwo Gospodarki Komunalnej i Mieszkaniowej Sp. z o.o. w Działdowie	■ PL	Infrastructure and public service provider
AO 17	Urban Waterworks and Sewerage in Bydgoszcz	Miejskie Wodociągi i Kanalizacja w Bydgoszczy	■ PL	Infrastructure and public service provider
AO 18	Hydrosphere Józefów	Hydrosfera Józefów	■ PL	Infrastructure and public service provider
AO 19	Council of Oulu Region/EUSBSR PAC Tourism	Pohjois-Pohjanmaan Liitto	<b>⊕</b> FI	Regional public authority
AO 20	Tukums Municipality	Tukuma novada pašvaldības	<b>L</b> V	Local public authority
AO 21	The Pomeranian Regional Tourist Organization/ PAC Tourism	Pomorska Regionalna Organizacja Turystyczna	■ PL	Sectoral agency

AO 19	Council of Oulu l	Region/EUSBSR PAC	Tourism	Pohjois	s-Pohjanmaan Liitto	<b>⊕</b> FI	Regional public authority
AO 20	Tul	ukums Municipality Tukuma novada pašvaldības			<b>≡</b> LV	Local public authority	
AO 21		Regional Tourist Orga PAC Tourism	anization/	Pomorska Region	nalna Organizacja Turystyczna	■ PL	Sectoral agency
2.2 Project Pa	rtner Details - Part	ner 1					
LP/PP		Lead Partner					
Partner Status	5	Active					
		Active from		22/09/2022	Inactive	from	
Partner name	e:						
Organisation i language	in original	Izba Gospodarcza W	odociągi l	Polskie			
							34 / 250 characters
Organisation i	in English	Chamber of Economy	y Polish W	/aterworks			
							36 / 250 characters
Department in language	original	n/a					
							3 / 250 characters
Department in	English	n/a					
							3 / 250 characters
Partner locat	ion and website:						



Address	J.Kasprowicza 2							
		15	/ 250 characters	Country	Poland			
Postal Code	85-073							
		6	/250 characters	NUTS1 code	Makroregion półr	ocny		
Town	Bydgoszcz							
		9	/ 250 characters	NUTS2 code	Kujawsko-pomors	skie		
Website	www.igwp.org.pl							
		15	/ 100 characters	NUTS3 code	Bydgosko-toruńs	ĸi		
Partner ID:								
Organisation ID type	Tax identification number (NIP)							
Organisation ID	5540312444							
VAT Number Format	PL + 10 digits							
VAT Number	<b>N/A</b> PL554031244	4				12 / 50 characters		
PIC	n/a					3/9 characters		
Partner type:								
Legal status	a) Public							
Type of partner	Interest group		Trade union. fo	undation, charity, voluntary	association, club, e	tc. other than NGOs		
		-	,					
Sector (NACE)	94.12 - Activities of pr	rofessional membershi	ip organisations					
Partner financial data:								
Is your organisation entitled to	recover VAT related	to the EU funded pro	oject activities	?	No			
Dale of the neutron ennouicet	ion in this project.							
Role of the partner organisat								
	providers) and constar	nt international coopera	ation with other	organizations in BSR, the	Chamber will actively	participate in transferring solutions.		
It will also participate in the implication coordinate the preparation of all						risk assessment guidelines and will		
						648 / 1,000 characters		
Has this organisation ever be	en a partner in the pr	roiect(s) implemented	d in the Interre	g Baltic Sea Region Proc	ıramme?			
		, ()		3				
° Yes ° No								
2.2 Project Partner Details - Part	tner 2							
LP/PP	Project Partner							
Partner Status	Active							
	Active from		22/09/2022	lr	nactive from			
Partner name:								
Organisation in original	Centrum Balticum Fou	ındation						
language						27 / 250 characters		



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Organisation in English	Centrum Balticum Foundation				
					27 / 250 characters
Department in original language	n/a				2 / 250 characters
Department in English	n/a				3 / 250 characters
Department in English	iva				
					3 / 250 characters
Partner location and website	:				
Address	Vanha Suurtori 7				
			Country	Finland	
		250 characters	•		
Postal Code	20500				
	5/2	250 characters	NUTS1 code	Manner-Suomi	
Town	Turku				
			NUTS2 code	Etelä-Suomi	
\Mahaita		250 characters			
Website	www.centrumbalticum.org		NUTS3 code	Varsinais-Suomi	
	23/	100 characters	NU133 code	varsinais-suomi	
Partner ID:					
Organisation ID type	Business Identity Code (Y-tunnus)				
Organization ID	2112927-6				
Organisation ID					
VAT Number Format	FI + 8 digits				
VAT Number	N/A 🗾				
PIC	n/a				0 / 50 characters
FIG	IVA				3 / 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 a	activities			
Partner financial data:					
ls your organisation entitled to	o recover VAT related to the EU funded pro	No			

### Role of the partner organisation in this project:

Centrum Balticum will take care of leading WP3 and coordinating communication. Centrum Balticum will create communication strategy and plan, and communication materials (presentations, main messages, etc.) and establish external communication channels (digital) and update information distributed through these channels. All reports and other project results will be distributed via project website. Centrum Baltic will identify — with the help of partners — the relevant stakeholders and plan how to reach them. Workshops, field trips and dialogue sessions with stakeholders will be organised in cooperation with partners, but international information seminars and an international conference will be organised by Centrum Balticum. Centrum Balticum will also organise WP3 meetings in connection to project meetings and coordinate partners' communication activities. Mentors in mentoring programme.

902 / 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 - Par	rtner 3						
LP/PP	Project Partner						
Partner Status	Active						
Tarthor Status	Active from		22/09/2022		Inactive from		
Partner name:							
Organisation in original language	Klaipėdos prekybos,	pramonės ir amatų r	rūmai				
Organisation in English	Klaipeda Chamber of Commerce Industry and Crafts						
Department in original language	n/a						
Department in English	n/a					3 / 250 characters	
Partner location and website	<b>:</b>					3 / 250 characters	
Address	Naujoji Uosto str. 9-9		22 / 250 characters	Country	Lithuania		
Postal Code	LT-92121		8/250 characters	NUTS1 code	Lietuva		
Town	Klaipeda			NUTS2 code	Vidurio ir vakarų Liet	uvos regionas	
Website	www.kcci.lt		8 / 250 characters	NUTS3 code	Klaipėdos apskritis		
Partner ID:			11 / 100 characters				
Organisation ID type	Legal person's code	(Juridinio asmens ko	odas)				
Organisation ID	110067781						
VAT Number Format	LT + 9 digits						
VAT Number	<b>N/A</b> LT110067781					11 / 50 characters	
PIC	999779777					9 / 9 characters	
Partner type:							
Legal status	b) Private						
Type of partner	Business support org	anisation	Chamber of combusiness cluster		trade and crafts, business in	cubator or innovation centre,	
Sector (NACE)	82.99 - Other busines	ss support service a	ctivities n.e.c.				
Partner financial data:							



Is your organisation entitled to recover VAT related to the EU funded project activities?						
Financial data	Reference period			01/01/2021	I [	31/12/2021
	•	n annual work units (Al	MUN1	0 1/0 1/2021	<b>-</b>	10.0
	-	mployees [in AWU]	,,,,			10.0
		Persons working for the	organisation bei	ng subordinated to it		0.0
		nd considered to be er				0.0
	C	Owner-managers [in AW	/U]			0.0
	b	artners engaged in a re enefiting from financia WU]				0.0
	Annual turnover [in	n EUR]				593,889.00
	Annual balance sh	eet total [in EUR]				976,747.00
	Operating profit [in	n EUR]				56,965.00
Role of the partner organisat	ion in this project:					
Regular project partner – acting WP3- responsible for dissemina development, etc. Having a stroi associated partners.	tion activities, also th	ne organization of the wo	rkshops, help in org ors also joins WP1	ganizing the final conferer . Disseminates surveys a	nce, activities nd indicates	potential organizations for tests, invites
						434 / 1,000 characters
Has this organisation ever be	en a partner in the	project(s) implemented	d in the Interreg E	Baltic Sea Region Progra	amme?	
○ Yes ○ No						
2.2 Project Partner Details - Part	tner 4					
LP/PP	Project Partner					
Partner Status	Active					
	Active from		22/09/2022	Ina	ctive from	
Partner name:						
Organisation in original language	Latvijas Universitāte	Э				
Oursele of our to Fuellah						21 / 250 characters
Organisation in English	University of Latvia					
Department in original language	Vides zinātnes noda	aļa				20 / 250 characters
Department in English	Department of Envi	ironmental Science				21 / 250 characters
Department in English	Department of Envi	ii Offit Terital Science				
						35 / 250 characters
Partner location and website:						
Address	Raina blvd 19					
		13	/ 250 characters	Country	Latvia	



Postal Code	LV 1586					
			7 / 250 characters	NUTS1 code	Latvija	
Town	Riga					
			4 / 250 characters	NUTS2 code	Latvija	
Website	www.lu.lv					
			9 / 100 characters	NUTS3 code	Rīga	
Partner ID:						
rather is.						
Organisation ID type	Unified registration n	umber (Vienotais reģis	strācijas numur	5)		
Organisation ID	9000076669					
VAT Number Format	LV + 11 digits					
	-					
VAT Number	<b>N/A</b> LV900000766	669				13 / 50 characters
PIC	999871830					107 00 Gibiladol3
						9 / 9 characters
Partner type:						
Legal status	a) Public					
Type of partner	Higher education and	research instituti	University fac	culty, college, research institut	ion, RTD facility, re	esearch cluster, etc.
Sector (NACE)	85.42 - Tertiary educ	cation				
Partner financial data:						
				_		
Is your organisation entitled to	o recover VAT related	d to the EU funded p	roject activitie	es?	No	
Role of the partner organisat	tion in this project:					
University of Latvia team will pa	•	•				pecially phosphorus) recovery, r, considering requests of local and
other project partner UL team v best solutions for the nutrient lo	vill participate in pilot si ading reduction. UL wil	tudies, and monitoring I organize seminars fo	programs as v or target groups	vell as in analysis of obtained s, disseminate project results	results and elabora in international conf	ation of recommendations on the erences and will participate in the
development of recommendatio programme.	ns for national level au	thorities. Project resul	ts will be used	for training of students and el	aboration of thesis	works. Mentors in mentoring
						891 / 1,000 characters
Has this organisation ever be	een a partner in the n	project(s) implemente	ed in the Inter	reg Baltic Sea Region Progr	amme?	0317 1,000 Gidduels
· Yes · No		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
State aid relevance						
For the partner type selected, activities are not State aid rele						
○ Yes ○ No						
2.2 Project Partner Details - Par	tner 5					
LP/PP	Project Partner					
Partner Status	Active					
	Active from		22/09/2022	In	active from	



Partner name:								
Organisation in original	Institut Gospodarki Surawcami Minaralnym	ni i Enorgia Polskia	oi Akadamii Nauk					
language	Instytut Gospodarki Surowcami Mineralnymi i Energią Polskiej Akademii Nauk							
Organisation in English	Minoral and Energy Economy Decearch Inc	74/250 cha Mineral and Energy Economy Research Institute of the Polish Academy of Sciences						
Organisation in English	willerar and Energy Economy Research ins	titule of the Polisi	r Academy of Sciences					
Department in original	December O. was to Diagramic much				79 / 250 characters			
Department in original language	Pracownia Surowców Biogenicznych							
Demonstructure in English	D: : : D M ( : )				32 / 250 characters			
Department in English	Division of Biogenic Raw Materials							
					34 / 250 characters			
Partner location and website	:							
Address	ul. Wybickiego 7A							
	17	7 / 250 characters	Country	Poland				
Postal Code	31-261							
	6	6 / 250 characters	NUTS1 code	Makroregion południowy				
Town	Kraków							
	6	6 / 250 characters	NUTS2 code	Małopolskie				
Website	www.min-pan.krakow.pl/en/							
	25	5 / 100 characters	NUTS3 code	Miasto Kraków				
Partner ID:								
Organisation ID type	Tax identification number (NIP)							
Organisation ID	6750001900							
VAT Number Format	PL + 10 digits							
VAT Number	<b>N/A</b> PL6750001900				12 / 50 characters			
PIC	998501705				12 / 30 Granacters			
					9/9 characters			
Partner type:								
Legal status	a) Public							
Type of partner	Higher education and research instituti	University faculty	, college, research instituti	on, RTD facility, research cluster, etc.				
Sector (NACE)	72 10 - Other research and experimental de	evelopment on nat	tural sciences and engineer	rina				
Partner financial data:								
Is your organisation entitled to	o recover VAT related to the EU funded pr	oject activities?		No				
Role of the partner organisat	ion in this project:							
Note of the partitle organisat	ion in this project.							

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MEERI PAS will coordinate the idetification of target group networks in WP1.2; identify and analyse the opportunities for developing circular business models for water resuse solutions in WP1.5. Moreover, MEERI PAS will lead the task related to idetification of the scope of functionality of WaterSafe Tool (WP1.5), which will be further verified by representatives of the target group networks. Based on the obtained results, the final veriosn of WaterSafe Tool will be developed. MEERI PAS will actively participate in disseminating knowledge about the project and its results (transferring solutions), including through scientific and non-scientific publications, participation in conferences, etc., coordinator of the mentoring programme (WP3).

748 / 1,000 characters

# ° Yes ° No

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

#### 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 Savonia ammattikorkeakoulu oy language 29 / 250 characters Organisation in English Savonia University of Applied Sciences Ltd. 43 / 250 characters Department in original N/A language 3 / 250 characters Department in English N/A 3 / 250 characters Partner location and website: Address Microkatu 1 Finland Country 11 / 250 character **Postal Code** 70201 **NUTS1** code Manner-Suomi 5 / 250 character Town Kuopio **NUTS2** code Pohjois- ja Itä-Suomi 6 / 250 character Website www.kuopiowatercluster.com **NUTS3** code Pohjois-Savo



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Partner ID:								
Organisation ID type	Business Identity Code (Y-tunnus)	Business Identity Code (Y-tunnus)						
Organisation ID	2629463-3							
VAT Number Format	FI + 8 digits							
VAT Number	N/A   F126294633		10 / 50 characters					
PIC	934620221		9/9 characters					
Partner type:								
Legal status	b) Private							
Type of partner	Higher education and research instituti	University faculty, college, research institution	on, RTD facility, research cluster, etc.					
Sector (NACE)	72.19 - Other research and experimental	development on natural sciences and engineer	ring					
Partner financial data:								
ls your organisation entit	led to recover VAT related to the EU funded	project activities?	Partly					
VAT explanation	administration office (Verohallinto) has giv		n the project. Also it depends on if the Finnish tax juidance of Verohallinto the projects actions are s of the costs.					
			386 / 1,000 characters					
Financial data	Reference period	01/01/2021	_ 31/12/2021					
	Staff headcount [in annual work units (	AWU)]	502.0					
	Employees [in AWU]		502.0					
	and considered to be	he organisation being subordinated to it employees under national law [in AWU]	0.0					
	Owner-managers [in A	<del>-</del>	0.0					
		regular activity in the organisation and ial advantages from the organisation [in	0.0					
	Annual turnover [in EUR]		56,551,499.00					
	Annual balance sheet total [in EUR]		76,844,545.00					
	Operating profit [in EUR]		4,288,555.00					

### Role of the partner organisation in this project:

Savonia will be leader and coordinator of joint partner efforts in WP2 – Piloting and evaluating solutions. The role will include coordinating interregional piloting efforts across selected participating countries. Savonia will use own testing and demonstrating facilities in Kuopio, Finland (WaterLAB and SuperDMA) for hands-on validation of candidate water reuse approaches (adapting and testing the chosen technologies in the local environment with relevant actors and international dimension). Savonia has long-term experience and an excellent track of RDI and commercial projects in which was responsible for the preparation and conducting of custom tests to demonstrate the feasibility of concepts in laboratory and/or pilot-scale (up to TRL 7). Savonia is an integral part of the innovation ecosystem in Kuopio, Finland - leading the Kuopio Water Cluster (KWC) and in this dimension will contribute to WP3 (A 3.1). Mentors in mentoring programme.

953 / 1.000 characters

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

○ Yes ○ No



Submission Date : 25/04/2022 17:36:32

Project Number:

Project Version Number: 1

## 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 - Par	tner 7						
LP/PP	Project Partner						
Partner Status	Active						
	Active from		22/09/2022		Inactive from		
Partner name:							
Organisation in original language	Politechnika Warszaw	vska					23 / 250 characters
Organisation in English	Warsaw University of	Technology					
Department in original language	Wydział Instalacji Bud	dowlanych, Hydrotech	niki i Inżynierii	Środowiska			31 / 250 characters
Department in English	Faculty of Building Se	ervices Hydro and En	vironmental En	naineerina			69 / 250 characters
	r doubty of Building oo	, vices, riyare and Em	VII OTIITIOTICAL EL				65 / 250 characters
Partner location and website	:						
Address	pl. Politechniki 1						
		1	18 / 250 characters	Country	Poland		
Postal Code	00-661						
		6 / 250 characters		NUTS1 code	Makroregion w	ojewództwo mazowieckie	
Town	Warszawa		0, 200 dilaidabio				
			8 / 250 characters	NUTS2 code	Warszawski sto	ołeczny	
Website	www.pw.edu.pl						
		1	13 / 100 characters	NUTS3 code	Miasto Warsza	wa	
Partner ID:							
Overnication ID toma		(AUD)					
Organisation ID type	Tax identification num	iber (NIP)					
Organisation ID	5250005834						
VAT Number Format	PL + 10 digits						
VAT Number	N/A PL525000583	34					
PIC	999884052						12 / 50 characters
							9/9 characters
Partner type:							
Legal status	a) Public						
Type of partner	Higher education and	research instituti	University fac	culty, college, research i	nstitution, RTD facility,	research cluster, etc.	
Sector (NACE)	85.42 - Tertiary educ	ation					



Website

www.samsoe.dk

Project Acronym: ReNutriWater Submission Date: 25/04/2022 17:36:32 Project Number: Project Version Number: 1

Partner financial data:					
Is your organisation entitled	to recover VAT related	d to the EU funded project activities	2	N	
io your organication ontition		a to the 20 randou project detivities	•	No	
Role of the partner organis	sation in this project:				
research phase, prepare resepilot stations, in terms of prepare role will also consist on prepare	earch plans and proposition cise analysis of the samplementation of research papers pernational conferences on	y will be to provide the knowledge of vons of experiments. Its role will consistles and interpretation of the results. We that can be published in journals from circular economy and water managen	t also on carrying out th UT can also offer its lat n JCR list to share the r	e research according to coratories to collaborate esults of experiments, a	the plan, in the laboratory and on with other Partners. University's as well as promotion of the project
					925 / 1,000 character
Has this organisation ever	been a partner in the p	project(s) implemented in the Interre	g Baltic Sea Region P	rogramme?	
○ Yes ○ No					
State aid relevance					
		s a medium to high risk for implement MA/JS for a plausibility check on the			
2.2 Project Partner Details - F	Partner 8				
-					
LP/PP	Project Partner				
Partner Status	Active	00/00/0000		langeth of frame	
	Active from	22/09/2022		Inactive from	
Partner name:					
Organisation in original language	Samsø Kommune				0.000
Organisation in English	Samsø Municipality				13 / 250 character
Organisation in English	Carrist Ividi licipality				
Department in original language	Teknisk Forvaltning				18 / 250 character
Department in English	Technical Administrat	tion			19 / 250 character
					24 / 250 character
Partner location and webs	ite:				
Address	Søtofte 10				
			Country	Denmark	
D / 10 :		10 / 250 characters	-		
Postal Code	8305			_	
		4 / 250 characters	NUTS1 code	Danmark	
Town	Samsø				
			NUTS2 code	Midtjylland	
		5 / 250 characters			

Vestjylland

NUTS3 code



Partner ID:										
Organisation ID type	Civil registration num	nber (CPR)								
Organisation ID	23795515									
VAT Number Format	DK + 8 digits	K + 8 digits								
VAT Number	<b>N/A</b> DK23 79 55	15					13 / 50 characters			
PIC	919340878						9/9 characters			
Partner type:										
Legal status	a) Public									
Type of partner	Local public authority	у	Municipality, c	ity, etc.						
Sector (NACE)	84.11 - General pub	lic administration activi	ties							
Partner financial data:										
ls your organisation entitled t	o recover VAT relate	d to the EU funded p	roject activities	s?	Partly					
VAT explanation	In the projects, the \	/AT in bookkeeping de	pends on wheth	er the VAT is eligible or not	in the project.		(			
							101 / 1,000 characters			
Role of the partner organisa	tion in this project:									
Samsø will be leader of pilot ar	nd partner in another pi	lots in WP2 – piloting a	and evaluating s	olutions.						
							103 / 1,000 characters			
Has this organisation ever b	een a partner in the p	oroject(s) implemente	d in the Interre	eg Baltic Sea Region Prog	ramme?					
○ Yes ○ No										
2.2 Project Partner Details - Par	tner 9									
LP/PP	Project Partner									
Partner Status	Active									
	Active from		22/09/2022	In	active from					
Partner name:										
Organisation in original language	Schwander Polska s	p. z o.o. spółka komar	ndytowa							
Organisation in English	Schwander						46 / 250 characters			
Department in original language	N/A						9 / 250 characters			
Department in English	N/A						3 / 250 characters			
Partner location and website							3 / 250 characters			
raither location and website										



Address	Stadła 234				
	1	0 / 250 characters	Country	Poland	
Postal Code	33-330	07200 Gilardoo13			
1 Octai Octai	33-330		NUTS1 code	Makroregion południowy	,
		6 / 250 characters	NOTOT COde	Maki or egion poludinowy	
Town	Grybów				
			NUTS2 code	Małopolskie	
Mahaita		6 / 250 characters			
Website	www.schwander.pl		NUITO0 I-	N. I. I.	
	1	6 / 100 characters	NUTS3 code	Nowosądecki	
Partner ID:					
raitile ib.					
Organisation ID type	Tax identification number (NIP)				
	, ,				
Organisation ID	7343516422				
VAT Number Format					
VAI Number Format	PL + 10 digits				
VAT Number	<b>N/A</b> PL7343516422				12 / 50 characters
PIC	WA				
					3 / 9 characters
Partner type:					
Legal status	b) Private				
Type of partner	Small and medium enterprise			nployees, ≤ EUR 50 million	n turnover or ≤ EUR 43 million
		balance sheet to	ial		
0()(0.00)					
Sector (NACE)	33.20 - Installation of industrial machinery a	and equipment			
Partner financial data:					
	MAT 14 14 11 THE 1				
Is your organisation entitled to	o recover VAT related to the EU funded p	roject activities?		Yes	
Financial data	Deference newled		0.4/0.4/0.000		0.4.4.0.10.000
Filialiciai data	Reference period		01/01/2020		31/12/2020
	Staff headcount [in annual work units (A	WU)]			24.8
	Employees [in AWU]				0.0
	Persons working for the				23.8
	and considered to be e		national law [in AWU]		
	Owner-managers [in AV	_			1.0
	Partners engaged in a r benefiting from financia				0.0
	AWU]	ai auvaillages iro	in the organisation [in		
	Annual turnover [in EUR]				6,593,230.41
	Annual balance sheet total [in EUR]				4,621,046.15
	· · · · · · · · · · · · · · · · · · ·	1			7.021.070.10
	Operating profit [in FIID]				
	Operating profit [in EUR]				573,254.18



Submission Date: 25/04/2022 17:36:32

Project Number:

Project Version Number: 1

Schwander will designate a wastewater treatment plant suitable for pilot installation, taking into account local opportunities for treated wastewater reuse, ensuring the design and implementation of the pilot technology intended to reclaim water from domestic/urban wastewater for combined irrigation and fertilization purpose.

Overall system will allow producing high-quality effluent meeting the European regulatory standards for irrigation of crops, while preserving the content of nutrients relevant for the fertilization effect (Regulation EU 2020/741 of European Parliament and of Council on minimum requirements for water reuse). The technology will combine Membrane Bioreactor and UV disinfection and will be equipped with a control and monitoring unit.

Partner will conduct systematic research to confirm the effectiveness of the pilot, collect and document test results for data analysis and ensure their translation into the languages of other partners. Mentors in mentoring programme.

mas this organisation ever	been a partner in the project(s) impleme	ented in the interre	eg bailic Sea Region P	rogramme?					
○ Yes ○ No									
2.2 Project Partner Details - F	Partner 10								
LP/PP	Project Partner								
Partner Status	Active								
	Active from	Active from 22/09/2022 Inactive from							
Partner name:									
Organisation in original language	Miejskie Przedsiębiorstwo Wodociągów	v i Kanalizacji w m.s	t. Warszawie		00/050				
Organisation in English	Municipal Water and Sewerage Compa	any in Warsaw			68 / 250 characters				
Department in original language	Biuro Badań i Nowych Technologii	Biuro Badań i Nowych Technologii							
					32 / 250 characters				
Department in English	Research and New Technologies Office	Э							
					36 / 250 characters				
Partner location and webs	ite:								
Address	Plac Starynkiewicza 5								
		21 / 250 characters	Country	Poland					
Postal Code	02-015								
		6 / 250 characters	NUTS1 code	Makroregion województwo mazowieckie	)				
Town	Warsaw								
		6 / 250 characters	NUTS2 code	Warszawski stołeczny					
Website	https://www.mpwik.com.pl								
		24 / 100 characters	NUTS3 code	Miasto Warszawa					
Partner ID:									
Organisation ID type	Tax identification number (NIP)								
Organisation ID	5250005662								
VAT Number Format	PL + 10 digits								
VAT Number	N/A   PL5250005662				12 / 50 characters				
PIC	n/a				3 / 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 airport, port, railway, etc.)			
Sector (NACE)	36.00 - Water collection, treatment and su	pply				
Partner financial data:						
Is your organisation entitled	to recover VAT related to the EU funded p	roject activities	?	V		
io your organioation ontition	10 100000 17 11 10 alou to the <b>20</b> 1 an aba p	. ojoot uotivitioo	•	Yes		
Role of the partner organis	eation in this project:					
treatment plants, a pilot static the removal of micropollutants We will tackle every-day oper technology that allows to obta	in Work Package 2. Our task is to implement on will be set up to test various processes aimes, including ozonation, coagulation and adsorptitation, sampling, physio-chemical analyzes and ain water meeting the most restrictive requirem vice provider" status. Mentors in mentoring program	ed at increasing d on on various sor data collection. <sup>-</sup> ents - water for h	lisinfection efficiency, limit bents. We will prepare ar Thanks to many years of a	the formation of by nalysis of reclaimed activity, we have ex	r-products and in order to increase water towards the reuse for needs. tensive experience and can develop a e a target group due to our	
					946 / 1,000 characters	
Has this organisation ever	been a partner in the project(s) implemente	ed in the Interre	g Baltic Sea Region Prog	gramme?		
○ Yes ○ No						
2.2 Project Partner Details - P	artner 11					
LP/PP	Project Partner					
Partner Status	Active					
	Active from	22/09/2022	l	nactive from		
Partner name:						
Organisation in original	Samsø Spildevand A/S					
language	Сапа бриатала т					
Organisation in English	Samsø Wastewater Utility				20 / 250 characters	
g	Carros tractoriates camy					
Department in original language	Teknik				24 / 250 characters	
Department in English	Technical Planning				6 / 250 characters	
Department in English	rediffical Figures					
					19 / 250 characters	
Partner location and websi	te:					
Address	Slagterivej 28					
		4 / 250 characters	Country	Denmark		
Postal Code	8305	47250 Characters				
			NUTS1 code	Danmark		
Town	Brundby Mark	4 / 250 characters				
10111	Didilaby Iviair		NUTS2 code	Midtjylland		
		2 / 250 characters	<del></del>	. ,,		
Website	www.samsoespildevand.dk		MIITO2 anda	Cioti: Illam -l		
	2	23 / 100 characters	NUTS3 code	Østjylland		



Partner ID:			
raither ib.			
Organisation ID type	Civil registration number (CPR)		
Organisation ID	32749429		
VAT Number Format	DK + 8 digits		
VAT Number	N/A DK32 74 94 29		
			13 / 50 characters
PIC	920442992		9/9 characters
Partner type:			
Legal status	a) Public		
Type of partner	Infrastructure and public service provi	Public transport, utility company (water sup airport, port, railway, etc.)	oply, electricity supply, sewage, gas, waste collection,
Sector (NACE)	37.00 - Sewerage		
Partner financial data:			
Is your organisation entitled to	o recover VAT related to the EU funded p	project activities?	Doub
year ergameanen ermieu i	,		Partly
VAT explanation	In the projects, the VAT in bookkeeping de	epends on whether the VAT is eligible or not in	n the project.
			101 / 1,000 characters
Role of the partner organisat	tion in this project:		
Samsø will be partner in pilot(s)	in WP2 – piloting and evaluating solutions.	Mentors in mentoring programme.	
			110 / 1,000 characters
Has this organisation ever be	een a partner in the project(s) implement	ed in the Interreg Baltic Sea Region Progra	amme?
○ Yes ○ No			
2.2 Project Partner Details - Par	tner 12		
LP/PP	Project Partner		
Partner Status	Active		
	Active from	22/09/2022 Ina	ctive from
Partner name:			
Organisation in original language	sabiedrība ar ierobežotu atbildību "Jūrmal	as ūdens"	51 / 250 characters
Organisation in English	Jurmala Water Utility (Jurmalas udens Ltd	.)	
Department in original language	Projekta ieviešanas vienība		43 / 250 characters
Department in English	Project implementation unit		27 / 250 characters
Dopartinent in English	i roject impiementation unit		
Detection in the second			27 / 250 characters
Partner location and website			



Address	1a Promenades iela							
			18 / 250 characters	Country	Latvia			
Postal Code	LV-2015	<u>'</u>	107 200 GHarladicis					
				NUTS1 code	Latvija			
Town	Jurmala		7 / 250 characters		-			
TOWIT	Jumaia			NUTS2 code	Latvija			
			7 / 250 characters					
Website	www.jurmalasudens.lv	/		NUTS2 and	Diowīma			
		2	20 / 100 characters	NUTS3 code	Pierīga			
Partner ID:								
Organisation ID type	Unified registration nu	mber (Vienotais reģis	strācijas numurs)					
Organisation ID	40003275333							
VAT Number Format	LV + 11 digits							
	1. 3.9.00							
VAT Number	<b>N/A</b> LV400032753	33						
PIC	n/a							13 / 50 characters
PIC	IVa							3 / 9 characters
Partner type:								
Legal status	a) Public							
Type of partner								ste collection
. <b>)</b>	Infrastructure and public service provi Public transport, utility company (water supply, electricity supply, sewage, gas, waste collection, airport, port, railway, etc.)							
Sector (NACE)	37.00 - Sewerage							
Partner financial data:								
Is your organisation entitled to	o recover VAT related	to the EU funded p	roject activities	?	Yes			
Role of the partner organisat	tion in this project:							
Project partner, main activity - p	nilot project realisation in	wP2 Mentors in m	entorina program	nme				
r roject partner, main activity	onot project realisation in	T VVI 2. WOIROIS IITIII	eritoring program					
								98 / 1,000 characters
Has this organisation ever be	een a partner in the pr	oject(s) implemente	ed in the Interre	g Baltic Sea Region	Programme?			
○ Yes ○ No								
2.2 Project Partner Details - Par	rtner 13							
LP/PP	Project Partner							
Partner Status	Active							
	Active from		22/09/2022		Inactive from			
Partner name:								
Owners and a substant	Ŏ:II:							
Organisation in original language	Šiaulių prekybos, prar	nones ir amatų rumai	I					
								41 / 250 characters



Organisation in English	Siauliai Chamber of Commerce, Industry an	d Crafts		
				49 / 250 characters
Department in original language	-			
Demonstrate of the Fredhole				1 / 250 characters
Department in English	-			
				1 / 250 characters
Partner location and website:				
Address	\r_1 : 00			
Address	Vilniaus 88			Town .
	11	/ 250 characters	Country	Lithuania
Postal Code	LT-76285			
			NUTS1 code	Lietuva
	9	/ 250 characters		
Town	Siauliai			
	8	/ 250 characters	NUTS2 code	Vidurio ir vakarų Lietuvos regionas
Website	www.rumai.lt	7 250 Criaracters		
vvensite	www.rumai.it		NUTS3 code	Čiauliu anakritia
	13	/ 100 characters	NO 133 code	Šiaulių apskritis
Partner ID:				
Organisation ID type	Legal person's code (Juridinio asmens koda	ıs)		
Organisation ID	110067596			
VAT Number Format	LT + 9 digits			
VAT Number	<b>N/A</b> LT100675917			11/50 characters
PIC	940751300			
				9 / 9 characters
Partner type:				
Legal status	b) Private			
Type of partner	Business support organisation	Chamber of	commerce, chamber of trade	and crafts, business incubator or innovation centre,
	3	business clus		and states, pacificate incapation of innovation control,
Sector (NACE)	94.11 - Activities of business and employers	s membership	organisations	
Partner financial data:				
	was your VAT related to the Filting to the	alaat aatii Jel	2	
is your organisation entitled to	recover VAT related to the EU funded pr	oject activitie	es r	No



Financial data	Reference perio	d		01/01/2020	]	31/12/2020
	•	[in annual work units (A	.WU)]	0.70.72020		10.0
		Employees [in AWU]				10.0
				being subordinated to it er national law [in AWU]		0.0
		Owner-managers [in AV				0.0
		benefiting from financia		in the organisation and from the organisation [in		0.0
		AWU]				
	Annual turnover					469,275.00
		sheet total [in EUR]				186,760.00
	Operating profit	[III EOK]				0.00
Role of the partner organis	ation in this projec	t:				
and expertise in water microp Fanplesstic – sea. https://ww	lastic pollution and c w.swedenwaterrese communicate stakel	apacity building of decissic arch.se/en/projekt/fanples: nolders and engage releval	on makers (Publ stic-2/. SCCIC h	lic authorities, businesses and nas a well-developed coopera	d community) gai ation network of I	ecision makers. SCCIC has knowledge ned during BSR Interreg project businesses, governmental, educational target groups in order to bring
Has this organisation ever	heen a nartner in t	he project(s) implemente	ad in the Interre	an Baltic Sea Region Progr	ammo?	
· Yes · No	soon a partner in a	no project(e) implemente		og Danie God Rogiem Fog.	unano i	
2.2 Project Partner Details - P	artner 14					
LP/PP	Project Partner					
Partner Status	Active					
	Active from		22/09/2022	Ina	active from	
Partner name:			-			
i dittiei fidifie.						
Organisation in original language	SIA "VNK serviss	6"				
Organisation in English	VNK serviss, Ltd					17 / 250 characters
						17 / 250 characters
Department in original language	N/A					
Department in English	N/A					3 / 250 characters
						3 / 250 characters
Partner location and websi	te:					
Address	Rūpnīcas iela 2-3	31				
	·			Country	Latvia	
Postal Code	LV-3615	1.	8 / 250 characters			
. 55141 5546	E v - JU I J			NUTS1 code	Latvija	
T	11 -		7 / 250 characters		•	
Town	Ugāle			NLITS2 code	Latvija	
			5 / 250 characters	NUTS2 code		
Website	www.vnkserviss.	lv				
		1	7 / 100 characters	NUTS3 code	Kurzeme	



Partner ID:							
Organisation ID type	Unified registration number (Vienotais reģis	Unified registration number (Vienotais reģistrācijas numurs)					
Organisation ID	41203017566						
VAT Number Format	LV + 11 digits						
VAT Number	<b>N/A</b> LV41203017566		13 / 50 characters				
PIC	n/a		3/9 characters				
Partner type:							
Legal status	a) Public						
Type of partner	Infrastructure and public service provi	Public transport, utility company (water superport, port, railway, etc.)	oply, electricity supply, sewage, gas, waste collection,				
Sector (NACE)	37.00 - Sewerage						
Partner financial data:							
Is your organisation entitled t	to recover VAT related to the EU funded p	roject activities?	Yes				
Role of the partner organisa	tion in this project:						
Project partner, main activity -	pilot project realisation in WP2. Mentors in me	entoring programme.					
			98 / 1,000 characters				

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

○ Yes ⊙ No



2.3 Associated Organisation De	tails - AO 1					
Associated organisation nam	e and type:					
Organisation in original language	WWF Polska					
Organisation in English	WWF Poland					10 / 250 characters
						10 / 250 characters
Department in original language	x					4 (050 shares have
Department in English	x					1 / 250 characters
						1 / 250 characters
Legal status	b) Private					
Type of associated organisation	NGO	Non-governi	mental organisations, s	such as G	reenpeace, WWF, etc.	
Associated organisation loca	tion and website:					
Address	Usypiskowa 11		Country		Poland	
	13.	/ 250 characters	Country		FUIATIU	
Postal Code	02-386					
	6	6 / 250 characters				
Town	Warszawa					
	8.	/ 250 characters				
Website	www.wwf.pl					
	10.	/ 100 characters				
Role of the associated organ	isation in this project:					
	t environmental risk by performing an advisory	y role for pro	oject partners. Support	s activitie	s related to WP3.	



Member of Advisory board of the project. Mentors in mentoring programme.

Project Acronym: ReNutriWater Submission Date: 25/04/2022 17:36:32 Project Number: Project Version Number: 1

2.3 Associated Organisation D	etails - AO 2					
Associated organisation na	me and type:					
Organisation in original language	Eesti Vee-ettevotete Liit					
Organisation in English	Estonian Water Works Association					25 / 250 characters
Department in original language	n/a					33 / 250 characters
Department in English	n/a					3 / 250 characters
Legal status	a) Public					3 / 250 characters
Type of associated organisation	Interest group	Trade union,	foundation, charity, v	voluntary as	ssociation, club, etc. other th	nan NGOs
Associated organisation loc	ation and website:					
Address	Jarvevana tee 3		Country	ſ	Estonia	
Postal Code	10132	15 / 250 characters	Country	Į.	LStor na	
		5 / 250 characters				
Town	Tallinn					
		7 / 250 characters				
Website	www.evel.ee					
		11 / 100 characters				
Role of the associated orga	nisation in this project:					
The Estonian association will b water plant operators.	pe consulted on the project deliverables. Bed	cause we don't ha	ave a partner from E	stonia, EVI	EL will serve as a contact po	oint with Estonian waste



2.3 Associated Organisation	Details - AO 3			
Associated organisation n	ame and type:			
Organisation in original language	Pohjois-Savo Liitto			
Organisation in English	Regional Council of Pohjois-Savo			19 / 250 characters
Department in original	N/A			32 / 250 characters
language				3 / 250 characters
Department in English	NA			3 / 250 characters
Legal status	a) Public			
Type of associated organisation	Regional public authority Regional	council, etc.		
Associated organisation lo	ocation and website:			
Address	Sepänkatu 1	Country	Finland	
Postal Code	70100	s		
	5 / 250 characte	ers		
Town	Kuopio			
Website	www.pohjois-savo.fi/en/	's		
	23 / 100 character	rs .		
Role of the associated org	panisation in this project:			
_				
Connecting new possible targ	get groups, networking. Member of Advisory board of the	project. Mentors in mento	ring programme.	



2.3 Associated Organisation D	etails - AO 4					
Associated organisation nar	me and type:					
Organisation in original	Klaipėdos vanduo					
language						16 / 250 characte
Organisation in English	Klaipeda water					
Department in original	n/a					14 / 250 characte
language						3 / 250 characte
Department in English	n/a					
						3 / 250 characte
Legal status	a) Public					
Type of associated organisation	Infrastructure and public service provi		nsport, utility company (w ort, railway, etc.)	ater supp	ly, electricity supply, sew	vage, gas, waste collection,
Associated organisation loc	ation and website:					
Address	Ryšininkų str. 11					
	1	7 / 250 characters	Country		Lithuania	
Postal Code	LT-91116					
		9 / 250 character	S S			
Town	Klaipėda					
		8 / 250 characters				
Website	https://www.vanduo.lt/					
	2:	2 / 100 characters				
Role of the associated organ	nisation in this project:					

The utility will facilitate the contact with other water utilities. Member of Advisory board of the project. Mentors in mentoring programme.



2.3 Associated Organisation	Details - AO 5							
Associated organisation n	ame and type:							
Organisation in original language	Jūrmala							
Organisation in English	Administration of Jurmala local government	Administration of Jurmala local government						
Department in original	Dovelonment department					42 / 250 characters		
language	Development department					22 / 250 characters		
Department in English	Development department							
Legal status	a) Public					22 / 250 characters		
Type of associated organisation	Local public authority	Municipality,	city, etc.					
Associated organisation lo	ocation and website:							
Address	Dubultu prospekts 2		Country	Latvia				
Postal Code	LV 2015	9 / 250 characters	·					
		7 / 250 characters						
Town	Jurmala							
		7 / 250 characters						
Website	www.jurmala.lv							
	14	1/100 characters						
Role of the associated org	anisation in this project:							
The municipality will be coope	erating with the Jurmala water utility and other n	nunicipalities.	It will facilitate contact	with other munici	palities			



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2.3 Associated Organisation De	tails - AO 6					
Associated organisation nam	e and type:					
9	, , , , , , , , , , , , , , , , , , ,					
Organisation in original language	Kuršėnų vandenys					
						16 / 250 characters
Organisation in English	Kursenu vandenys					
						16 / 250 characters
Department in original language	-					
						1 / 250 characters
Department in English	-					
						1 / 250 characters
Legal status	a) Public					
Type of associated organisation	Infrastructure and public service provi		nsport, utility company (wate ort, railway, etc.)	r supply, electricity su	pply, sewage, gas, waste	collection,
Associated organisation loca	tion and website:					
Address	Gergždelių g. 44					
Audiess	Gergzdelią g. 44		Country	Lithuania		
		16 / 250 characters	Country	Littidatila		
Postal Code	LT-81140					
		8 / 250 characters	I :			
Town	Kursenai					
		8 / 250 characters				
Website	www.kursenuvandenys.lt					
		22 / 100 characters				

Role of the associated organisation in this project:

Expertize in water quality, contamination and flows situation, needs of consumers and possibility of pilots practical application, network of water supply organisations in the region.



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2.3 Associated Organisation	Details - AO 7							
Associated organisation na	ame and type:							
Organisation in original language	Latvijas Vides, ģeoloģijas, meteoro	Latvijas Vides, ģeoloģijas, meteoroloģijas centrs						
Organisation in English	Latvia Center for Environment, Geo	ology and Meteorology			49 / 250 characters			
					54 / 250 characters			
Department in original language	lekšzemes ūdeņu nodaļa							
Department in English	Department of inland waters				22 / 250 characters			
					27 / 250 characters			
Legal status	a) Public							
Type of associated organisation	National public authority	Ministry, etc.						
Associated organisation lo	cation and website:							
Address	Maskavas iela 165		Country	Latvia				
Postal Code	LV - 1019	17 / 250 characters						
		9 / 250 characters						
Town	Riga							
		4 / 250 characters						
Website	https://videscentrs.lvgmc.lv/							
		29 / 100 characters						
Role of the associated org	anisation in this project:							
As organisation, responsible	about implementation of Water Framew	vork Directive. LVGMC	will be directly intere	sted in the implementation of nutrient re	eduction activities			



2.3 Associated Organisation	Details - AO 8				
Associated organisation n	ame and type:				
Organisation in original language	Samsø Landboforening				
Organisation in English	Samsø Farmers Association				20 / 250 characters
					25 / 250 characters
Department in original language	n/a				
Department in English	n/a				3 / 250 characters
					3 / 250 characters
Legal status	a) Public				
Type of associated organisation	Interest group	Trade union,	foundation, charity, vo	oluntary association, club, etc. ot	her than NGOs
Associated organisation lo	ocation and website:				
Address	Museumsvej 1		Country	Denmark	
		12 / 250 characters		201110111	
Postal Code	8305				
		4 / 250 characters			
Town	Samsø				
		5 / 250 characters			
Website	velas.dk				
		8 / 100 characters			
Role of the associated org	anisation in this project:				
Forly involvement, networking	a and connecting solutions with relevant	target groups Come	x Landbafaranina ia ma	anagad with Volce consulting gra	un



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2.3 Associated Organisation Det	tails - AO 9							
Associated organisation nam	e and type:							
Overalization in original	E. wE							
Organisation in original language	EurEau							
							e	6 / 250 characters
Organisation in English	EurEau							
							6	6 / 250 characters
Department in original language	n/a							
							3	3 / 250 characters
Department in English	n/a							
							3	3 / 250 characters
Legal status	b) Private							
Type of associated organisation	Interest group	Trad	de union	n, foundation, chari	ty, voluntary a	association, club, etc. other	than NGOs	
-								
Associated organisation local	tion and website:							
Address	D d l							
Address	Rue du Luxembourg 47-51			• •		B		
		23 / 250 ch	naracters	Country		Belgium		
Postal Code	B-1050							
		6/250 c	characters					
Town	Brussels							
		8 / 250 ch	naracters					
Website	www.eureau.org							
		14 / 100 ch	naracters					

### Role of the associated organisation in this project:

Eureau is an organization of water operators in Europe. It has a strong representation of the countries of the Baltic Sea region. Competence building is a very important task of EurEau. EurEau has a working group on water reuse that exchanges knowledge about good practices and elaborates opinions and positions on the EU policy on water reuse (Regulation 2020/741, guidelines of the JRC). The results of WP2 will be presented during the working group meetings. Thanks to the holistic approach of the working group to the issue of water recovery (all of Europe), project partners can be inspired by solutions from other regions. Mentors in mentoring programme.



2.3 Associated Organisation De	etails - AO 10						
Associated organisation nam	ne and type:						
Organisation in original language	VIA University College						
Organisation in English	VIA University College				22 / 250 characters		
Department in original	VIA Byggeri, Energi, Vand & Klima				22 / 250 characters		
language					33 / 250 characters		
Department in English	Research Centre for Built Environment, Energy, Water and Climate						
Legal status	a) Public				64 / 250 characters		
Type of associated organisation	,	ersity faculty, college, rese	earch instituti	ion, RTD facility, research cluster, etc.			
Associated organisation local	ation and website:						
Address	Chr. M. Østergaardsvej 4	Country		Denmark			
Postal Code	24/250 ct	aracters					
	4/250 c	haracters					
Town	Horsens						
Website	https://en.via.dk/research/built-environment-energy water-and-climate						
	69 / 100 ch	aracters					
Role of the associated organ	nisation in this project:						

VIA University College will provide support for pilot activities in WP2, connecting with all other ongoing water reuse projects to multiply ReNutriWater project impact.



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2.3 Associated Organisation De	etails - AO 11								
Associated organisation nan	ne and type:								
Organisation in original	Ministerstwo Infrastruktury								
language								27	7 / 250 characters
Organisation in English	Ministry of Infrastructure								
								26	6 / 250 characters
Department in original language	Departament Gospodarki Wodnej i Żeglugi Śródlądowej								
								51	/ 250 characters
Department in English	Department of Water Management and Inland Navigation								
								52	2 / 250 characters
Legal status	a) Public								
Type of associated organisation	National public authority Ministry, etc.								
Associated organisation local	ation and website:								
Address	Obalidations 4/0								
Address	Chałubińskiego 4/6			0		B. I. I			
		18 / 250 ch	aracters	Country		Poland			
Postal Code	00-928								
		6/250 c	naracters						
Town	Warsaw								
		6 / 250 ch	aracters						
Website	www.gov.pl								
		10 / 100 ch	aracters						

## Role of the associated organisation in this project:

The Ministry is responsible for the implementation of the provisions of the EU regulation on water reuse (2020/741). It declares an interest in collecting good practices. Through its legislative obligations, it is also interested in organizational solutions and provisions related to risk assessment. The ministry will participate in workshops and consultations. We also intend to encourage it to fill in the questionnaire and establish cooperation with national authorities from other BSR countries.



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2.3 Associated Organisation De	tails - AO 12						
Associated organisation nam	e and type:						
Organisation in original language	Tahkon kyläyhdistys ry						
Organisation in English	Tahko Village Association						22 / 250 characters
							25 / 250 characters
Department in original language	n/a						
							3 / 250 characters
Department in English	n/a						
	h) Deiterte						3 / 250 characters
Legal status	b) Private						
Type of associated organisation	Interest group	_   1	Trade unio	n, foundation, charit	ty, voluntary	association, club, etc. other than NGOs	
Associated organisation loca	tion and website:						
Address	Lukkarinkatu 3 B 14			Country		Fisher	
		19/2	250 characters	Country		Finland	
Postal Code	70100						
		5/	250 characters				
Town	Kuopio						
		6/2	250 characters				
Website	www.tahkonkylayhdistys.com						
		26/1	100 characters				
Role of the associated organ	isation in this project:						

Tahko Village Association is a partnership of small touristic business in Tahko region. Tahko Village Association will be connected to the project (in WP1 and WP2) and allow for increase uptake of solutions proposed in the project.



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2.3 Associated Organisation De	tails - AO 13							
Associated organisation name	ne and type:							
Organisation in original language	Tahkon Kehitys Oy							
Organisation in English	Tahko Development Oy					17 / 250 characters		
						20 / 250 characters		
Department in original language	n/a							
Department in English	n/a					3 / 250 characters		
						3 / 250 characters		
Legal status	b) Private							
Type of associated organisation	Business support organisation  Chamber of commerce, chamber of trade and crafts, business incubator or innovation centre, business clusters, etc.							
Associated organisation loca	tion and website:							
Address	Tahkolaaksontie 4 A				[ <del>-</del>			
	19	9 / 250 characters	Country		Finland			
Postal Code	73310							
		5 / 250 characters						
Town	Tahkovuori							
	10	) / 250 characters						
Website	https://www.tahkonkehitys.fi							
	28	3 / 100 characters						

### Role of the associated organisation in this project:

Tahko Development is a partnership of companies operating for future development in smart and sustainable Tahko touristic region. Tahko Development will be connected to the project (in WP1 and WP2) and allow for increase uptake of solutions proposed in the project.



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2.3 Associated Organisation D	etails - AO 14				
Associated organisation nar	me and tyne:				
Associated organisation had	ne and type.				
Organisation in original language	Ecoloop AB				
					10 / 250 characters
Organisation in English	Ecoloop				
	-				7 / 250 characters
Department in original language	₩a				
					3 / 250 characters
Department in English	N/a				
					3 / 250 characters
Legal status	b) Private				
Type of associated organisation	Small and medium enterprise	Micro, sma balance sh		250 employees, ≤ EUR 50 ı	million turnover or ≤ EUR 43 million
Associated organisation loc	ation and website:				
	- · · · · · · · · · · · · · · · · · · ·				
Address	Ringvägen 100				
			Country	Sweden	
		3 / 250 characters			
Postal Code	11860				
		5 / 250 characters			
Town	Stockholm				
	!	9 / 250 characters			
Website	www.ecoloop.se				
	1.	4 / 100 characters			

## Role of the associated organisation in this project:

Ecoloop is an environmental consulting company driving development for a sustainable use of water, materials and energy. Ecoloop is also a co-owner of VA-guiden AB, which is an independent company promoting knowledge transfer in water and sewage management. In this project, Ecoloop is a target group for communications and transferring solutions. Mentors in mentoring programme.



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2.3 Associated Organisation Det	tails - AO 15						
Associated organisation nam	e and type:						
Organisation in original language	Przedsiębiorstwo Wodociągów i Kanalizacji s	sp. z o.o. '	w Mińsku Mazowieckir	n			
Organisation in English	Water and sewerage company in Minsk Maz	zowiecki					74 / 250 characters
							46 / 250 characters
Department in original language	Na						
Department in English	N/a						3 / 250 characters
							3 / 250 characters
Legal status	a) Public						
Type of associated organisation			nsport, utility company ort, railway, etc.)	(water sup	oly, electricity supply	, sewage, gas, was	te collection,
Associated organisation local	tion and website:						
Address	Józefa Mireckiego 20		_				
	20/	250 characters	Country		Poland		
Postal Code	05-300						
	6	/ 250 characters	I i				
Town	Mińsk Mazowiecki						
	16/	250 characters					
Website	pwikminsk.pl						
Pole of the associated organi		100 characters					

Organization will be sharing the results of the project to other wastewater treatment plants. It will be also interested in implementing project ideas at own WWTP. Member of Advisory board of the project. Mentors in mentoring programme.



2.3 Associated Organisation De	tails - AO 16					
Associated organisation nam	ne and type:					
Organisation in original language	Przedsiębiorstwo Gospodarki Komunalnej i	Mieszkanio	wej Sp. z o.o. w Działd	owie		
Organisation in English	Municipal and housing enterprise in Dzialdo	wo				78 / 250 characters
						45 / 250 characters
Department in original language	Wa					
						3 / 250 characters
Department in English	Wa					
Logol etetue	a) Public					3 / 250 characters
Legal status	,					
Type of associated organisation	Infrastructure and public service provi		nsport, utility company ( ort, railway, etc.)	water supply, elec	tricity supply, sewage,	gas, waste collection,
Associated organisation loca	ation and website:					
Address	Gen. J. Hallera 32					
	41	8 / 250 characters	Country	Poland		
Postal Code	13-200	57230 Glaraciers				
		6 / 250 characters				
Town	Działdowo					
	9	9 / 250 characters				
Website	www.pgkim.com.pl					
	16	6 / 100 characters				
Role of the associated organ	isation in this project:					

Organization will be sharing the results of the project with other wastewater treatment facilities, it will be also interested in implementing project solutions at own WWTP



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2.3 Associated Organisation De	etails - AO 17		
Associated organisation nam	ne and type:		
Organisation in original language	Miejskie Wodociągi i Kanalizacja w Bydgoszczy		
Organisation in English	Urban Waterworks and Sewerage in Bydgoszcz		45 / 250 characters
Department in original	n/a		42 / 250 characters
language			3 / 250 characters
Department in English	n/a		
Legal status	a) Public		3 / 250 characters
Type of associated organisation		ansport, utility company (water support, railway, etc.)	oply, electricity supply, sewage, gas, waste collection,
Associated organisation loca	ation and website:		
Address	Toruńska 103		
	12 / 250 characte	Country	Poland
Postal Code	85-817		
	6 / 250 charac	ers	
Town	Bydgoszcz		
Website	9/250 characte www.mwik.bydgoszcz.pl	rs	
<del>-</del>	21/100 characte	rs	
Role of the associated organ	nisation in this project:		

This organization is in the target group. It declared involvement in all the WPs as consulting expert with experience and knowledge about the needs.



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2.3 Associated Organisation De	tails - AO 18				
Associated organisation nam	ne and type:				
Organisation in original language	Hydrosfera Józefów				
Organisation in English	Hydrosphere Józefów				18 / 250 characters
					19 / 250 characters
Department in original language	Dział Eksploatacji				
Department in English	Operation Department				18 / 250 characters
					20 / 250 characters
Legal status	a) Public				
Type of associated organisation	Infrastructure and public service provi	Public transp airport, port,		vater supply, electricity supply	, sewage, gas, waste collection,
Associated organisation loca	tion and website:				
Address	Aleja Drogowców 20				
	1	8 / 250 characters	Country	Poland	
Postal Code	05-420				
		6 / 250 characters			
Town	Józefów				
		7 / 250 characters			
Website	www.hydrosfera-jozefow.pl				
	2	5 / 100 characters			

# Role of the associated organisation in this project:

This water utility was asked by a hotel and a golf course operator to supply it with reclaimed water for irrigation. Hydrosfera Józefów is looking for a solution and will follow our deliverables, consult and provide ideas.



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2.3 Associated Organisation De	etails - AO 19				
Associated organisation nan	ne and type:				
Organisation in original language	Pohjois-Pohjanmaan Liitto				
Organisation in English	Council of Oulu Region/EUSBSR PAC Touris	sm			25 / 250 characters
Department in original	n/a				41 / 250 characters
language					3 / 250 characters
Department in English	n/a				
Legal status	a) Public				3 / 250 characters
Type of associated organisation	Regional public authority	Regional c	ouncil, etc.		
Associated organisation local	ation and website:				
Address	Poratie 5 A			[ <del></del>	
	12	/ 250 characters	Country	Finland	
Postal Code	90140				
		5 / 250 characters			
Town	OULU				
	4	/ 250 characters			
Website	www.pohjois-pohjanmaa.fi				
	24	/ 100 characters			

# Role of the associated organisation in this project:

PA Tourism is an important target group for project information and results. Pohjois-Pohjanmaan liitto will be invited to participate project activities, events and workshops, and requested to distribute project infomation if applicable to their target groups.



2.3 Associated Organisation I	Details - AO 20				
Associated organisation na	me and type:				
Organisation in original language	Tukuma novada pašvaldības				
Organisation in English	Tukums Municipality				25 / 250 characters
					19 / 250 characters
Department in original language	Attīstības nodaļa				
Department in English	Development Department				17 / 250 characters
Dopartment in English	Бечористь Вераниеть				22 / 250 characters
Legal status	a) Public				22 / 250 characters
Type of associated organisation	Local public authority	Municipality, city,	, etc.		
Associated organisation lo	cation and website:				
Address	Talsu iela 4		Country	Labia	
		2 / 250 characters	Country	Latvia	
Postal Code	LV-3101				
		7 / 250 characters			
Town	Tukums				
	e	6 / 250 characters			
Website	www.tukums.lv				
	13	3 / 100 characters			
Role of the associated orga	nisation in this project:				
The municipality will participat	e in workshops and consultationsvfrt. It will con	nsider implementin	g one of the soluti	ons.	



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2.3 Associated Organisation De	tails - AO 21				
Associated organisation nam	e and type:				
Organisation in original language	Pomorska Regionalna Organizacja Turyst	tyczna			
Organisation in English	The Pomeranian Regional Tourist Organiz	zation/ PAC 1	Fourism		45 / 250 characters
Department in original language	n/a				57 / 250 characters
Department in English	n/a				3 / 250 characters
Legal status	a) Public				3 / 250 characters
Type of associated organisation	Sectoral agency	Local or r agency, e		jency, environmental ag	ency, energy agency, employment
Associated organisation loca	tion and website:				
Address	Wały Jagiellońskie 2a, Brama Wyżynna		Country	Poland	
Postal Code	80.887	36 / 250 characters	Country	i dala	
Town	GDANSK	6 / 250 character	5		
Website	https://www.prot.gda.pl/	6 / 250 characters			
Dala of the appointed argani		24 / 100 characters			

PA Tourism is an important target group for project information and results. The Pomeranian Regional Tourist Organisation will be invited to participate project activities, events and workshops, and requested to distribute project infomation if applicable to their target groups.



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#### 3. Relevance

## 3.1 Context and challenge

The drought of 2018 caused significant economic losses in many countries in the Baltic Sea region. This affects not only agriculture but also cities and recreational areas. Prolonged drought also reduces the amount of drinking water available to society, and water utilities may also need to regulate water use by consumers and industry. Therefore, the challenge is to save drinking water and groundwater by recovering water from wastewater. Using recovered, nutrient-rich effluent will also lead to a reduction in artificial fertilisation. However, this requires making local, regional, and national authorities aware that the requirements for the quality of treated wastewater (especially levels of nitrogen and phosphorus removal) must meet local needs. Properly prepared water can reduce fertilisation. So the general challenge is to save water, resources, and nutrients. A specific challenge is to propose solutions, popularise knowledge and break stereotypes, i.e. education. An important aspect is to show that water reuse can be an attractive economic activity and innovation driver. Hence the involvement of SMEs, which can commercialise new solutions in partnership with future end-users. With a population of over 60 mln, the BSR market size provides significant opportunities for local companies and widens cooperation with southern countries tackling water stress.

1,377 / 2,000 characters

### 3.2 Transnational value of the project

All Baltic Sea region countries are responsible for mitigating eutrophication of the Baltic Sea. We can do it by reducing the use of fertilisers and using appropriate wastewater treatment systems. If nutrients are not discharged into water, they can replace or supplement fertilisation. Adequate drinking water preparation techniques exist in many places. Still, since there are varied techniques, implementation processes, and needs, international knowledge transfer would significantly increase capacity building in the region. International cooperation can provide knowledge exchange, pilot different solutions and practices and give guidelines on how to increase the sustainability of local, regional and national water management. ReNutriWater will improve water reclamation in the BSR by harnessing the knowledge and identifying partners' needs from several countries, capitalising on the critical mass of international target groups engaged at the project proposal phase for successful implementation. The choice of partners reflects the diversification of challenges but also opportunities. Poland will provide a pilot case in the capital city and a case for an individual business, where specific needs for the maintenance of recreational areas (e.g. irrigation, production of artificial snow) with simultaneous care for the lake are needed. The Samsø island in Denmark will test solutions for local use in areas where groundwater is scarce. In Latvia, the pilot is located in a seaside tourist city. Incorporating cases in Finland supports the perspective of application in harsh environments and contrasting water management drivers. By collecting and analysing experience from these different pilots, ReNutriWater can provide extensive guidance to stakeholders with diverse challenges, regardless of the country.

1,825 / 2,000 characters

### 3.3 Target groups

Target group	Sector and geographical coverage	Its role and needs
Local public authority	We will focus on local government units responsible for the maintenance of green and recreational areas in cities and departments supervising infrastructure and providers of public services. Representatives of this target group are not numerous, which is the best proof of how much there is to do in building awareness. We want to reach them through operators and local organizations like PP3 and PP13. This group should be presented with ready-made solutions.	The local public authorities (LPA) are the strategic target group for reclaimed water use in BSR regions. They are crucial for making decisions unlocking the enormous potential urban water reuse has - if only the need to maintain green areas, street maintenance, or dust control measures. LPA must conserve water resources, limit drinking water consumption, and ensure the well-being of cities today and in the future. However, they need to be familiar with and convinced of water reuse solutions. For this purpose, it is necessary to clarify risk management issues and build local competencies. International exchange and collaboration are essential. This target group need to understand the challenge and learn about the possibilities for the sewage treatment plant operators (another target group included in the ReNutriWater project).
	460 / 500 characters	838 / 1,000 characters



Target group	Sector and geographical coverage	Its role and needs
Infrastructure and public service provid	The infrastructure and public service providers' (IPS) activities are closely related to the local public authorities. Wastewater treatment plant operators are the most significant target group because they have the infrastructure and competencies to build solutions for water recovery. In the consortium, they come from Denmark, Poland, and Latvia. Thanks to the interest groups and Associated Organisations, we want to cover more BSR countries (Estonia, Lithuania, Finland, Germany).	The infrastructure and public service providers' (IPS) target group is crucial as it is responsible for wastewater treatment and can close the local water cycle. Wastewater treatment plant operators can implement, expand and maintain the water reclamation solutions proposed in this project. Providing infrastructure is crucial for building local solutions in WP2 and beyond. It is necessary to adapt and expand the technology to the local infrastructure thanks to applying the developed achievements. The pilots will prove that the solutions are technically and financially viable. It will be in the interest of this target group to maintain and continue to apply the solutions after the end of the project. This target group needs specific solutions and competencies related to risk management and business models (addressed in WP1).
Small and medium enterprise	SMEs cover a wide range of stakeholders. However, we want to focus on two core groups: technology providers such as Schwander (Poland) and leisure operators - hotels, golf courses, ski areas, tourist regions associations etc. Reaching SMEs is possible thanks to interest groups and business organizations (Poland, Lithuania, Finland). SMEs are essential for promoting business solutions based on the closure of local water circuits - a practical expression of the circular economy concept.	SMEs are interested in exploiting possibilities to offer full-scale solutions for interested end-users. SMEs include potential end-users i.e. hotels, golf course owners, touristic regions development companies and recreational establishment owners/managers. But also, water reuse is driving innovation and possibility for SMEs and large companies (e.g. service and technology providers, machinery and infrastructure vendors).
	489 / 500 characters	426 / 1,000 characters
Interest group	We want to focus on Interest Group (IG) throughout the BSR, as building awareness and knowledge about the advantages and disadvantages of water reuse is crucial. We have a significant representation of IG (and one NGO) among our partners, including Centrum Balticum, IGWP, Kuopio Water Cluster (from Savonia ecosystem), Klaipeda, and Siauliai chambers of commerce. Among the Associated Organizations is WWF (NGO), with whom we will work closely.	The social impact is essential for the short- and long-term success of the ReNutriWater project. Interest Groups and other consumer organisations help us reach out to stakeholders who want to know with an understandable message. As part of WP3, we aim not only to inform about solutions but also to educate and provide tools for risk management or building business models. The participation of Interest Groups in building awareness is crucial. We will provide them with solutions, IT tools, and guidelines. In addition, interest Groups (as well as NGOs) can support sustainable measures, i.e. the use of reclaimed water, thereby helping the public gain greater awareness and acceptance of reclaimed water.



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### 3.4 Project objective

### Your project objective should contribute to:

### Sustainable waters

The project provides adjusted solutions, ready-to-use thanks to the output which is composed not only of confirmed technologies but also guidelines on how to check local capacities and how to implement the water reuse system locally. Thanks to it they will take the challenge to reduce water and fertiliser use. Reclaimed water will also be safe due to its proven disinfection capabilities. The risk assessment will indicate possible sources of threats to mitigate.

The overall project goal is to support the sustainable water management in BSR by implementing various methods of water recovery. The specific project objectives include:

- development of an action plan (scope of pilots with procedures) focused on water reuse, that will support the sustainable and curcular water management in BSR,
- implementation of pilots (set of water resuse methods) supporting water reuse in selected regions of BSR,
- establishing the local target group networks which will actively participate in the implementation of project activities and pilots, and will be of a transnational nature, and their activities will take into account the activities of various entities depending on the region of their origin and thir needs,
- development of WaterSafe IT Tool, the that will be used by individual target groups to assess their water & nutrients saving potentials,
- development of Handbook on water reuse (including i.a. description of water resuse methods, risk assessment and sustainable & circular business models),
- transferring of set of solutions (water resuse methods indicated in pilots), WaterSafe IT Tool and Handbook on water reuse to target groups by various activities indicated in communication plan,
- development and implementation of "Safe Water" mentoring programme to support the target gropus in a prepartion of action plans dedicated to implementation of water reuse solutions in their organisations.

All above objectives will be achieved jointly by project partners.

1,980 / 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 Nutri

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

Action 3 indicates the need to properly manage nutrients. The project contributes to the reduction of the use of artificial fertilizers in favor of the use of reclaimed water, in which the content of nutrients is strictly defined. It is a solution in line with the circular economy. Promote solutions to recover and reuse nutrients in municipalities, and encourage new business models where recipients green areas operators) cooperate with water reclamation plants (mostly ww treatment plants operators). Action 3 also supports the promotion and implementation of the HELCOM Regional Nutrient Recycling Strategy, which is in line with the Project.

649 / 1,500 characters

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

The Project contributes to Action 2 of PA Nutri reducing nutrient emissions from urban areas thanks to promoting to use of less fertilizer. Municipalities will be able to apply less fertilizer in parks or lawns by watering with the correct nutrients content. The Project also contributes to PA-Bio-economy, mainly Action 3 because promotes the reusing of water and nutrients strengthening a circular bio-economy. Drinking water requires energy, chemicals, and human work. The use of water that had to be treated in the ww treatment plant anyway can contribute to savings. The Project contributes to PA-Tourism, mainly Action 3 because of protecting natural resources in tourism destinations. Thanks to the opportunity to use reclaimed water in recreational areas (ski areas, golf courses, parks), freshwater resources are saved, and the amount of used drinking water is reduced



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## 3.6 Other political and strategic background of the project

## Strategic documents

Baltic Sea Action Plan (BSAP)

Project will support BSAP by implementation environmental improvements such as a reduction in nutrient and pollutants inputs to the sea to increase good ecological status of the sea (counteracting eutrophication; counteracting sea pollution) & strengthening science-business-government cooperation to create solutions for municipalities, to address the local needs and their transfer to other regions in baltic countries (environmentally sustainable sea-based activities)

500 / 500 characters

European Green Deal (EGD)

Project will support BSAP by implementation of solutions that focus on reducing water pollution (reducation of nutrient-rich and unsufficently treated sewage to the sea); moving towards a circular economy (reuse of water for economic & agriculture purposes) and improving waste management (reduction of sewage indicated as waste and its and its recycling to the economic cycle & control of nutrients content in sewage sludge and sewage sludge ash).

474 / 500 characters

Integrated Nutrient Management Action Plan (INMAP) - integral part of 2nd CE Action Plan (2020)

Project will support INMAP by engagement of wider community of stakeholders affected by nutrient pollution and implementation of solutions for sustainable water management, that can be used to fulfill policy gaps for a more coherent and integrated approach to reducing pollution throughout the nutrient cycles in Baltic Sea region.

427 / 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
Monitoring of water and sewage management in the context of the implementation of the circular economy assumptions (acronym MonGOS)  131/200 characters	Polish National Agency for Academic Exchange (NAWA) under the International Academic Partnerships Programme (2020 - 2022)	MonGOS project produced the Cirrcular Economy (CE) Monotoring Framework for water and wastewater sector in Europe, that proritises the solutions that can be implemented as a part of green transition in EU (six actions - Rethink, Reduce, Remove, Reuse, Recucle, Recover). Project summarizes sustainable and circular management strategies for use of water, nutrients and water-based wastes (sewage sludge, sludges, ashes, etc.). The list of good pratcises (Best practices descriptor "Circular economy in the water and sewage sector") will be used for hierarchization of the most recommended wastewater treatment solutions in the proposed Intereg project. MonGOS also produced a set of indicators for evaluation of solutions of sustainable water and water-based management and treatment (set of environmental, scial and economic indicators for each area of MonGOS CE framework) Those indicators can be used for evaluation of the effectiveness of solutions implemented in the proposed Interreg proposal.



chosphorus in the Baltic region (acronym InPhos)  74/200 characters  Sectoral skills council in water, waste	izon 2020 program, European Institute of Innovation Technology - Raw Materials (EIT RMs), under the gional Innovation Scheme (RIS) Call (2018 - 2021)  158/200 characters  Operational Programme Knowledge Education	InPhos project produced a strategy for sustainable phosphorus (P) management in the Baltic Sea Region by a working group of experts from the Baltic countries — Poland, Germany, Sweden, Finland, Latvia, Lithuania, Estonia and Italy. This strategy is used for evaluation of the P needs/ restrictions in the areas (local and regional context) where pilots in the proposed Interreg proposal will be evaluated. Project InPhos also produced a international networking group (Phoshorus Friends Club) that will be involved in the stakeholders consultations (according to GDPR restrictions). Project InPhos also produced several education materials on sustainable P management in Baltic Sea Region that can be shared with partners of the current proposal, and also can be partly used during the meetings with stakeholders and education activities in the current proposal (raising environmental awareness of the inhabitants of the Baltic Sea Region).  The sectoral skills council is composed of experts of different specializations in the water sector. It provides knowledge about the necessary competencies in water services. Their description are useful when preparing solutions (WP1). Then we have to adapt the pilots to the local context, but with the possibility of the future expansion of applications in many places. Appropriate knowledge and competencies are key here. On the other hand, in WP3, by sharing the results, we will be able to define the necessary competencies and propose to the Council to include them in the Sectoral Qualifications Framework. The characteristics of international sectoral qualifications can be useful in all the BSR. Cooperation with the Council will be based on consultations and the participation of willing members of the Council as consultants. We will also propose that one meeting of the Council should be devoted to building
water and reclamation Deve		The sectoral skills council is composed of experts of different specializations in the water sector. It provides knowledge about the necessary competencies in water services. Their description are useful when preparing solutions (WP1). Then we have to adapt the pilots to the local context, but with the possibility of the future expansion of applications in many places. Appropriate knowledge and competencies are key here. On the other hand, in WP3, by sharing the results, we will be able to define the necessary competencies and propose to the Council to include them in the Sectoral Qualifications Framework. The characteristics of international sectoral qualifications can be useful in all the BSR. Cooperation with the Council will be based on consultations and the participation of willing members of the Council as consultants. We will also propose that one meeting of the Council should be devoted to building
water and reclamation Deve		different specializations in the water sector. It provides knowledge about the necessary competencies in water services. Their description are useful when preparing solutions (WP1). Then we have to adapt the pilots to the local context, but with the possibility of the future expansion of applications in many places. Appropriate knowledge and competencies are key here. On the other hand, in WP3, by sharing the results, we will be able to define the necessary competencies and propose to the Council to include them in the Sectoral Qualifications Framework. The characteristics of international sectoral qualifications can be useful in all the BSR. Cooperation with the Council will be based on consultations and the participation of willing members of the Council as consultants. We will also propose that one meeting of the Council should be devoted to building
	relopment (2020 - 2023) 70 / 200 characters	competences in the activities of water reuse.  965/1,000 characters
Sustainable Manure and Nutrient management for reduction of nutrient oss in the BSR region (acronym SuMaNu)	rreg Baltic Sea Region Programme (2018 - 2021)	SuMaNu project summarized and syntesized results from several international agri-environmental projects focusing on nutrient management. The policy recommendations based on that work were submitted as proposals for measures in the HELCOM's Baltic Sea Regional Nutrient Recycling Strategy and for the updating of the Baltic Sea Action Plan. The results of the SuMaNu project - recommendations for more sustainable use of manure and nutrients in the Baltic Sea Region, are the basis for taking action to protect water in the region under the proposed
108 / 200 characters		ReNutriWater project. The developed recommendations are international in nature, taking into account national conditions, and therefore ideally correspond to the challenges defined in the proposed ReNutriWater project.



Full name of the project	Funding Source	Use of the project outcomes and/or planned cooperation
Water reuse policies advancement for resource efficient European regions (acronym AQUARES)	Interreg Europe Programme (2018 - 2023)	AQUARES addresses the issue of water reuse and aims at 'identifying viable strategies for water reuse' and 'promoting public dialogue to address conflicting interests. We analyzed good practices already elaborated during this project. We plan to cooperate with the project partners to learn from their experience and exchange ideas. The ReNutriWater project will support the implementation of action plans for water resuse, developed by AQUARES project. The collaboration between those two project will be a great networking and experience sharing opportunities on the specific identified topic (water reuse). The ReNutriWater project also will use the 5 joint thematic studies and analyses reports on territorial needs and opportunities for water reuse pathways, developed by the AQUARES project.
		797 / 1,000 characters



# 3.10 Horizontal principles

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



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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 lead partner is fully responsible for the project's general management, with a delegated Project manager (to monitor and coordinate the project implementation/each month). An Advisory board with representatives of target groups, policymakers, industry organizations & individual experts in water/sewage sector is a body to support, advise, and suggest corrective activities for project strategy. Local working groups will be created for each pilot case study to work on case study implementation.

500 / 500 characters

### 4.2 Project financial management

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

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

The lead partner is fully responsible for the financial management of the project. With the collaboration with project participants representing all partners and with the President of the lead partner, the delegated financial manager will be conducting all financial activities, including internal monitoring (every 6 months). All financial activities will be carried out and reported following public procurement regulations, Interned call and internal regulations of project partners.

486 / 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.

Centrum Balticum will assign manager&assistant to take care of planning and coordinating project communication. A project management tool will be established for internal communication. External communication will include project website (within Interreg), social media profiles, and project promotion materials (digital and printed). Comms Manager will coordinate interaction with stakeholders (face-to-face and digital). The kick-off event will be organised by lead partner, closing event by CB.

497 / 500 characters

### 4.4 Cooperation criteria

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

Cooperation criteria

Joint	Development	6

Joint

Implementation

~

Joint Staffing

Joint Financing

50/0



# 5. Work Plan

Number		Work Package Name	
1		WP1 Preparing solutions	
	Number	Group of Activity Name	
	1.1	Determining preconditions for pilots	
	1.2	Establishing the local target group networks	
	1.3	Validating final conditions for pilots	
	1.4	Determining a scope of the risk assessment for pilots	
	1.5	Identifying business opportunities and defining scope of functionality of WaterSafe-tool	
2		WP2 Piloting and evaluating solutions	
	Number	Group of Activity Name	
	2.1	Pilot 1 (P1): Disinfection efficiency of reclaimed water	
	2.2	Pilot 2 (P2): Composition adjustment of reclaimed water	
	2.3	Pilot 3 (P3): Breaking barriers for reclaimed water use	
	2.4	Implementing and testing WaterSafe IT Tool	
	2.5 Developing a Handbook on water reuse		
3		WP3 Transferring solutions	
	Number	Group of Activity Name	
	3.1	Transfering solutions - communication, activities and tools	
	3.2	Conducting survey analysis to measure and expand awareness	

Work plan overview							
Period:	1	2	3	4	5	6	Leader
WP.1: WP1 Preparing solutions	•	_		•			PP5
A.1.1: Determining preconditions for pilots							DD4
D.1.1: System boundaries defined (report)		D					PP4
A.1.2: Establishing the local target group networks							PP5
D.1.2: 5 local target group networks created	D						PPS
A.1.3: Validating final conditions for pilots							PP7
D.1.3: Final conditions for pilots defined – set of water & nutrients reuse techniques (report)		D					117
A.1.4: Determining a scope of the risk assessment for pilots							PP1
D.1.4: Validated scope of the risk analysis for pilots and other BSR regions (report)		D					
A.1.5: Identifying business opportunities and defining scope of functionality of WaterSafe-tool							PP5
D.1.5: Sustainable and circular business models & determined functionality of WaterSafe-tool		D					-
WP.2: WP2 Piloting and evaluating solutions							PP6
A.2.1: Pilot 1 (P1): Disinfection efficiency of reclaimed water							PP10
D.2.1: Summary of results from pilots, data collection and analysis, reporting					D		
A.2.2: Pilot 2 (P2): Composition adjustment of reclaimed water							PP9
D.2.2: Gathering results from pilots, data collection and analysis, reporting					D		
A.2.3: Pilot 3 (P3): Breaking barriers for reclaimed water use							PP8
D.2.3: Demonstrating smart reclaimed water use and irrigation symbiosis					D		
A.2.4: Implementing and testing WaterSafe IT Tool							PP5
O.2.4: WaterSafe IT Tool					0		
A.2.5: Developing a Handbook on water reuse							PP1
O.2.5: Handbook on safe water reuse					0		
WP.3: WP3 Transferring solutions							PP2
A.3.1: Transfering solutions - communication, activities and tools							PP2
O.3.1: Transferred solutions - final report						0	
A.3.2: Conducting survey analysis to measure and expand awareness			PP1				
D.3.2: Awareness survey - report					D		
A.3.3: Developing and implementing a mentoring programme "Safe Water"						D	PP5
D.3.3: Mentoring programme "Safe Water" for target groups						D	



# Outputs and deliverables overview

Code	Title	Description	Contribution to the output	Output/ deliverable contains an investment
D 1.1	System boundaries defined (report)	Water system networks include various stages with specific tasks and isn't identical in BSR countries. In project main focus will be to effective use of water resources and reuse options of wastewaters. Since there is different quality of wastewaters, technologies and will be implemented different pilot sites it is necessary to estimate criteria of water flows, nutrients, pollutants, quality standards, size ect. in such systems. Therefore the deliverable will be detailed system boundaries for all pilots, elaborated considering local situation (topicalities, resources and problems) as well as analysis of best known technologies providing solutions for water reuse and recycling especially in respect to nutrient flows. The deliverable includes research framework and research procedures, including identification and description of analytical methods used, timetable of the analysis, reporting and responsibilities of parties and the technical set-up of pilot activity. The deliverable includes proposals from project partners for logistics and expected results for pilot scale demonstrations. Defined system boundaries allow to more precisely analyse system efficiency as well as provides opportunity to compare these systems. This approach allows choosing best available technologies in regard to environmental and economic factors. Deliverable of activity WP1.1.1. will be used to realize further project activities.	O.2.4 WaterSafe IT Tool and O.2.5 Handbook on	
D 1.2	5 local target group networks created	The local target group networks will be a gropus of key stakeholders in the regions covered by the project activities (PL, FL, LV, LT, DK) that will be involved in the verification of the technological solutions used in piloting phase (WP2) and for development of IT tool (WaterSafe-tool). The 5 target group networks will be established with the lokal stakeholders invited. The local target gropus networks will consist of a minimum of 20 representatives of local organizations (business, entrepreneurs, science, society) who may have a direct impact on the implementation of final solutions. Each network will have its own board (chairman, deputy, secretary) and will act as a body supporting the implementation of the project and actively participating in the improvement of solutions and the possibility of their adaptation to local conditions. The general regulation, outlining the roles and responsibilities of the members of the network, translated from the English language into the national language will be confirmed by all targert groups networks and the report of their activities will be provided. The results of networks activities will be integrated on international (project) level to support design of final outputs (O1 & O2). The establishment of local groups is crucial for the implementation of O1 and O2, which require the real involvement of their end-users. Cooperation with these groups will influence the development of final solutions that can be easily implemented in local conditions. The local target group networks will actively participate in the project until the end of its duration.		
D 1.3	defined – set of water &	Action's deliverable will be the final detailed research framework for all pilots, including precise identification and research procedures, that would take into account present and future water reclamation opportunities, especially those concerning partner countries of the project. The report will contain precise description of methodology and scope of research planned on every pilot station. For pilot station 1, disinfection systems for treated wastewater will be defined, depending on chosen disinfection method. Contact times and/or dosages will be defined, as well as duration of different stages of experiments. For pilot 2, maximum levels of nutrients in reused water will be defined, depending on its application. Methodology of phosphorus and nitrogen removal will be described. For pilot 3, an experimental use of reclaimed water will be explained, regarding watering edible and non-edible plants grown in glasshouses or setup fields. Minimal requirements for reclaimed water to be used for watering edible plants will be determined. Necessary equipment and utilities will be listed, so pilot operators will obtain a detailed description of each action. For each pilot, a schedule of testing and sampling frequency will be listed, considering the impact of seasonality. All indicators having to be checked will be described, together with their methods and frequency of analysis. Entire model of results presentation will be developed, to make gathered results coherent and easy to compare. Such model will allow not only to compare results obtained on different pilot stations, but also to elaborate multivariant conceptions of technological systems for water reuse.	water reuse	



D 1.4	Validated scope of the risk analysis for pilots and other BSR regions (report)	It is impossible to check the effectiveness of pilots and make them multiplied if the risks related to the state of the environment, health, and well-being of people and the natural environment are not assessed. The result of the group of activities will be the development of guidelines for risk analysis in the future work in WP2. The guidelines will contain the necessary descriptions and definitions, indicate hazards and risks, and explain their importance in water recovery processes. The data in the report will be based on the already existing guidelines and the results from consulting the Target Groups and partners responsible for launching pilots. It will be the basis for the risk assessment conducted during the pilots. The aim of the deliverable is to prepare the outputs section, which will contain information on the risks associated with water recovery. It is part of education aimed at target groups, which aims to build awareness, but also provide tools for risk assessment and its mitigation in water recovery systems. Both the output IT tool and the Handbook will contain instructions related to risk assessment regardless of the location of the recovery system. Any work on the guidelines for risk analysis will involve partners, and at a later stage Target Groups in regions not covered by the project.	O.2.4 WaterSafe IT Tool and O.2.5 Handbook on safe water reuse	
D 1.5	Sustainable and circular business models & determined functionality of WaterSafe-tool	The purpose of this deliverable is to identify and organise the knowledge of business opportunities related to water recovery in the BSR and indicate the scope of the online tool functionality - WaterSafe IT Tool. This deliverable is divided into two sub-areas: 1)  The first sub-area is dedicated to the description of the sustainable and circular business models that will be defined for all pilots. It will include a detailed description of different business opportunities (water - resources - energy savings) resulting from the implementation of different technologies of water reuse (P1 - disinfection of reclaimed water; P2 - adjusting the nutrients composition, mainly phosphorus, to the needs of target groups for intended use, e.g., irrigation for agriculture or landscaping; P3 - irrigation symbiosis). They will be integrated into so-called sustainable and circular business models, that will include nine specific areas: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. 2) The second sub-area is dedicated to a description of the functionality of WaterSafe-tool, which aims to help European companies, especially SMEs, to save energy, material and water costs. This tool will include pathways in the field of water/nutrient recovery; options for the technology selection depending on local needs; initial costs estimations; benefits and risks; final recommendation for specific case studies). The tool will be legible, easy to use, with instructions (manual). The business models and IT tool will have a transnational level due to the integration of knowledge and engagement of local target groups networks from different countries, covered by the project. This deliverable is crucial for the implementation and testing of the IT WaterSafe-tool (O2.4) in piloting phase of the project (WP2.4). Based on this deliverable, the output "O2.4 - IT WaterSafe-tool" will	O.2.4 WaterSafe IT Tool and O.2.5 Handbook on safe water reuse	
D 2.1		Pilot 1 deliverable will provide science-based recommendations for suitable disinfection processes for the conventional wastewater treatment chain (e.g. based on secondary treatment, disinfection and filtration) across three countries. The results of the individual pilot cases will be summarized individually and then consolidated into Handbook (O 2.5). Moreover, a description of model solutions to be implemented in municipalities and guidelines for implementing the tested solutions will be concluded for general dissemination in WP3. Some key results are necessary for finalizing WaterSafety Tool (O 2.4). The core international action group for P1 activities consists of Municipal Water and Sewerage Company in Warsaw, Warsaw University of Technology, University of Latvia, Savonia, VNK Serviss, Siauliai CCIC, Klaipeda CCIC. Concluded parameters of the system and reclaimed water usage and their quality criteria (defined in WP1) will be evaluated in pilot sites and supported by continuous laboratory tests in each participating country (due to the nature of some samples, measurements have to be done in-situ, not all can be preserved for storage). To meet optimal criteria for reuse of wastewater disinfection plays an essential role not only to provide water quality requirements but also due to use of chemicals or other applied methods, which can create costs for running pilot sites and include elements in defined water reclamation systems and their boundaries (technical feasibility and cost-effectiveness). The interregional dimension is secured within the realities of the planned budget frame, competencies, in-house expertise, and overall partner profile. Each project partner and associate organization were selected in the preliminary phase to complement each other for reaching the overall target with direct pilot activities, knowledge sharing and uptake or adaptation tasks.		



D 2.2	Gathering results from pilots, data collection and analysis, reporting	This deliverable aims to confirm the pilot's effectiveness and ensure the stable level of nutrients in treated wastewater, supported by the development and implementation of a process control software to ensure meeting the expected parameters. The results of the pilot case will be consolidated into Handbook (O 2.5). This will specifically contribute to this outcome by demonstrating adjustment of the treated effluent quality parameters to the needs of the target groups. Moreover, P2 will provide a concrete example of water reclamation as an effective way to protect water resources. The core P2 action group consists of Schwander Polska, Savonia Jurmala water utility, University of Latvia, Warsaw University of Technology, VNK Serviss, Siauliai and Klaipeda CCIC etc. The core P2 actions are carried out in Poland (Białka Tatrzańska) - due to the full-scale implementation (not mobile unit), replicating a similar setup in other locations is not feasible. VNK serviss will enrich effluent with developed nutritional compositions (by other partners) and will deliver this enriched water for tests to target groups. Other partners and target groups involved will take an active role in planning, knowledge sharing, and assessing reapplication potential based on local requirements. Partners will provide intensive measurement campaigns to provide a seasonal characterization of wastewater effluents and evaluate possible technologies for nutrients adjustments with the technological partner (Schwander) in P2. Obtained real system boundary conditions (Poland), water quality requirements for specific usage of water will be tested in selected partner locations (Finland, Latvia) and reclaimed water will prepared with chosen technologies and tested their efficiency to reach deliverable. SMEs offering reclaimed water composition solutions will be connected by the lead of the Savonia and other interest groups offering a diverse network of partners in the Baltic region and EU.	O.2.4 WaterSafe IT Tool and O.2.5 Handbook on safe water reuse	
D 2.3	Demonstrating smart reclaimed water use and irrigation symbiosis	The purpose of the deliverable is to show that it is possible to reuse wastewater as irrigation and nutrient for agricultural purposes without significant investments into altering existing wastewater treatment systems. P3 is a logical extension to approaches piloted in P1 and P2 (focused on reclaimed water safety and risk assessment) to emphasise actual implementation in the form of demonstration sites which are easy to maintain and will last beyond the duration of the project - because, in most cases, the target group is preparing the site. The results of the individual pilot cases will be summarised individually and then consolidated into Handbook (O 2.5). In addition, some key results are necessary for WaterSafety Tool (O 2.4). The core international action group for P3 consists of Samsø Municipality, Samsø Wastewater Utility, Savonia, Warsaw University of Technology, Warsaw Waterworks, University of Latvia, and VNK Serviss. The diverse and international group in P3 will work together. Each partner was selected to complement the overall target with direct pilot activities, knowledge sharing, and uptake and adaptation tasks in the preliminary phase. Locating pilot greenhouses or city plots irrigated with reclaimed water in four countries (DK, FI, PL and LV) allows for direct exposure of these solutions to target groups and society and collecting hands-on experiences and practicals. Each country site brings a different perspective on the same challenge while securing the same outcome. The geographical spread of demonstration sites in the Baltics allows for convenient access among all members.	O.2.4 WaterSafe IT Tool and O.2.5 Handbook on safe water reuse	
O 2.4	WaterSafe IT Tool	The purpose of the WaterSafe IT Tool is to serve the knowledge on how much different measures and technological solutions would cost and how much money and resources they can save for unit that would like to implement water reuse method. This IT tool will support national, regional and local organisations across BSR that work with local governments, municipalities, sewage treatment plant operators, SMEs to improve their environmental performance, helping them to become more resource (including water) efficient. The WaterSafe IT Tool will contain a set of procedure algorithms that are to allow for self assessment of water resuse possibilities to help target groups save resources (incl. water) and reduce operating costs, enable the introduction of rational inventory management, effective organization of production, construction and design improvements. The final version of WaterSafe IT Tool will be published based on the scope proposed in WP1.3 and verified by target group networks, and real results coming from WP2.1-WP2.3. There is significant gap between laboratory and pilot or real scale solutions. Therefore closing this gap (based on results from real scale tested solutions in pilots in WP2.1, WP2.2.WP2.3) demands high risk investments for further interested target groups. The WaterSafe IT Tool will have transnational level, due to it will integrate the experiences from three different regions where pilots are conducted, as well as the results of interregional workshops during which the IT tool will be verified by local target group networks. This WaterSafe IT Tool will support the target groups, incl. decision makers & public authorities to improve the implementation of regional development policies and programmes regarding water efficiency (based on real tested technological solutions), generating green growth opportunities and jobs for businesses.		



O 2.5	Handbook on safe water reuse	An important element of the project are 3 pilots that provide solutions for Target Groups. However, the results of work on the development, matching, and universalization of pilots must be collected and properly described so that during WP3 they can be presented to the widest possible group of stakeholders. Besides the pilots themselves, ready for duplication, a Handbook is needed to facilitate further implementation activities. The purpose of developing a Handbook is therefore to organize the results of pilots and describe them in a way that is accessible to recipients. In fact, the Handbook is the main output of the project with several solutions and deliverables. Based on the local target group network created in WP1, the individual deliverables making up the Handbook will be systematically consulted. In this way, we will get an output that will already be reviewed and known to Target Groups. So it will be easier to present it to a wider group of stakeholders. Certain elements of the Handbook (deliverables) are targeted at a specific group. Thus, the risk assessment should be of interest to producers of reclaimed water (Infrastructure and public service providers), but also to local public authorities and some SMEs (recreational area operators). Risk assessment also needs to be presented in some respects to NGOs that care about the environmental and welfare context. In turn, sustainable and circular business models defined for pilots should be described in such a way as to facilitate their implementation through the cooperation of all Target Groups. The pilots developed in WP2 differ from each other, but they propose solutions depending more on the existing infrastructure than on the location in the BSR. All countries need to meet the challenges of fresh water conservation and wise nutrients management. This breaks down borders. However, it should be borne in mind that language may be a barrier in using the Handbook. That is why translation is necessary. The transnational aspect is crucial. All project partn		
O 3.1	Transferred solutions - final report	The purpose of this output is to provice the holistic knowledge generated during the project. This will be the final output of the project that will make it possible to evaluate the effectiveness of the entire project, all deliverables, and previous outputs. This output combines all the developed deliverables and will indicate the number and types of stakeholders involved in the project. The output will consist of a description of the communication plan and its implementation. It will contain information about the implementations undertaken by stakeholders, their plans, needs, successes, and barriers that they did not overcome. Thanks to this, a base will be created for further actions and improvements in order to promote safe water. reuse. The output will be an assessment of the quality of the outputs made in WP2 i.e. Handbook and IT tool. Thanks to transferring solutions, it will be possible to recommend changes to the Handbook and IT tool, plan improvements so that the tools developed in WP2 are interesting and useful for as many stakeholders as possible. The output will show how entities from different countries and different target groups were involved.		
D 3.2	Awareness survey - report	Based on the work on activity WP2 with local target groups, further identification and definition of national and transnational target groups will be provided. The survey will be carried out in the final phase of the project, when solutions from pilots in WP2 are already developed. The survey aims to expand target groups to include entities that need to start water reuse education from the very beginning. Thanks to the survey, we will build new capacities, and also obtain information about the lack of knowlegde and the needs of target groups. So we will obtain information from local governments and infrastructure operators about the barriers that prevent them from developing water reuse solutions. The survey will also provide information about doubts and questions the target groups have and which we will address with project communication (WP3.1.). Thanks to the survey, we will obtain a database of stakeholders who are looking for partners in other BSR locations. It will be an opportunity to revive international cooperation. The result of the survey will help to direct the activities in the last period (6) of the project to the target groups most in need. All partners will be involved.	O 3.1 Transferred solutions - final report	
D 3.3	Mentoring programme "Safe Water" for target groups	The purpose of the "Safe Water" mentoring programme is to develop the competences of employees of target gropus, based on the transferred knowledge and sharing experience by representatives of project partners, while building a partnership relationship. This mentoring programme will help the target groups to prepare an action plan dedicated to implementation of water reuse solutions in their organisations, with the support of the project partners (regular and accosiated). This deliverable will include the description of mentoring programme, roles & resonsibilities of project partners (Mentors and coordinators, and selection committee) and participants in mentoring programme (mentees - representatives of target groups). It will also include the list ans short description of the action plans developed by the target groups during the programme. This deliverable will be integral part of the last project output "O 3.1 Transferred solutions - final report", which will show the effectiveness of the entire project.	O 3.1 Transferred solutions - final report	



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Project Number:

Project Version Number: 1

W	ork	package	•

## 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 - Mineral and Energy Economy Research Institute of the Polish Academy of Sciences

Work package leader 2

PP 1 - Chamber of Economy Polish Waterworks

## 5.4 Work package budget

Work package budget

20%



2

Project Acronym: ReNutriWater

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Project Version Number: 1

### 5.5 Target groups

# Target group

## How do you plan to reach out to and engage the target group?

## Local public authority

We will focus on local government units responsible for the maintenance of green and recreational areas in cities and departments supervising infrastructure and providers of public services. Representatives of this target group are not numerous, which is the best proof of how much there is to do in building awareness. We want to reach them through operators and local organizations like PP3 and PP13. This group should be presented with ready-made solutions.

Local public authorities in most BSR countries have usually very solid connections with waterworks and sewage managing companies. Moreover, in many cases, municipalities have the majority stake in these companies. Therefore, it is planned to act using the fact that the project partnership and the group of associated organisations consist of several water and wastewater managing companies from various BSR countries. With this asset, the project partners will be able to reach key departments responsible for water and wastewater management and through them engage local public authorities and use their experience e.g. for determining preconditions for pilots (WP 1.1) and validating the risk analysis for pilots (WP 1.4).

725 / 1,000 characters

460 / 500 characters

### Infrastructure and public service provider

The infrastructure and public service providers' (IPS) activities are closely related to the local public authorities. Wastewater treatment plant operators are the most significant target group because they have the infrastructure and competencies to build solutions for water recovery. In the consortium, they come from Denmark, Poland, and Latvia. Thanks to the interest groups and Associated Organisations, we want to cover more BSR countries (Estonia, Lithuania, Finland, Germany).

Infrastructure and public service providers are among key stakeholders in the transformation toward circular economy in the water and sewage sector. Therefore, the project plans to involve wastewater treatment plants from the BSR countries that are feasible for applying water recovery methods in terms of the used treatment technology (nutrient removal) and wastewater effluent quality (nutrient concentration and harmful substances content). By using the partnership and associated organisation that already represent Infrastructure and public service providers it is planned to extend the interest group by their activity in water/sewage associations trades and other important events for this sector. This target group will help the project partners to verify the preconditions for pilots elaborated in WP 1.1 and WP 1.3 by confronting them with the actual needs of infrastructure owners and operators.

486 / 500 characters

906 / 1,000 character

# Small and medium enterprise

SMEs cover a wide range of stakeholders. However, we want to focus on two core groups: technology providers such as Schwander (Poland) and leisure operators - hotels, golf courses, ski areas, tourist regions associations etc. Reaching SMEs is possible thanks to interest groups and business organizations (Poland, Lithuania, Finland). SMEs are essential for promoting business solutions based on the closure of local water circuits - a practical expression of the circular economy concept.

SMEs will be reached using the existing connections between the well-represent in the partnership infrastructure and public service providers that have been previously involved in the modernisation and development activities in wastewater treatment plants. Moreover, research-oriented partners will use their connections with SMEs that have been established during the implementation of other R&D projects. As the project involves the participation of chambers of commerce/economy from various BSR countries and innovative SMEs it is assumed to engage more SMEs that will be interested in developing sustainable and circular solutions in wastewater treatment plants in their countries. Leisure operators (hotels, golf courses, ski resorts), will be reached individually by project partners in each BSR country. SMEs will contribute to the identification of business opportunities and defining the scope of functionality of the WaterSafe-tool in WP 1.5.

952 / 1,000 characters

489 / 500 characters

## Interest group

We want to focus on Interest Group (IG) throughout the BSR, as building awareness and knowledge about the advantages and disadvantages of water reuse is crucial. We have a significant representation of IG (and one NGO) among our partners, including Centrum Balticum, IGWP, Kuopio Water Cluster (from Savonia ecosystem), Klaipeda, and Siauliai chambers of commerce. Among the Associated Organizations is WWF (NGO), with whom we will work closely.

The project aims to extend the network of already involved interest groups within the partnership and associated organisations. It is planned to use the bottom-up initiative by the members of such groups (associations, chambers of commerce/economy) in different BSR countries. Wastewater utilities involved in the project will aim to promote water reuse from treated wastewater concept by explaining the details of planned pilot actions in the projects. The involvement of interest groups will be useful to conduct a survey on the existing technological solutions in project partner countries (WP 1.1.). Moreover, the existing networks within the interest groups will help during the identification and hierarchisation of other methods of water reuse in WP 1.1.

762 / 1,000 characters

445 / 500 characters



# 5.6 Activities, deliverables, outputs and timeline

No.	Name
1.1	Determining preconditions for pilots
1.2	Establishing the local target group networks
1.3	Validating final conditions for pilots
1.4	Determining a scope of the risk assessment for pilots
1.5	Identifying business opportunities and defining scope of functionality of WaterSafe-tool



Submission Date: 25/04/2022 17:36:32

**Project Number:** 

Project Version Number: 1

WP 1 Group of activities 1.1

5.6.1 Group of activities leader

Group of activities leader PP 4 - University of Latvia

A 1.1

5.6.2 Title of the group of activities

Determining preconditions for pilots

36 / 100 characters

### 5.6.3 Description of the group of activities

Objective of WP1.1. is to create system boundaries for the following pilot activities. To reach the aim a survey on the existing technological solutions in project partner countries will be done including analysis of existing technologies, already now functioning solutions for water reuse and recycling. The key attention will be dedicated to used practices on nutrient, especially phosphorous recovery and reuse. Besides to this task best available technologies for wastewater reuse will be analysed and their applicability for the possible piloting situations in the project partner countries will be done. Activity will be split into 2 sub-activities:

WP1.1.1. Preparation of detailed system boundaries that involves all pilots, dedicated to the local current situation and based on local expertise, provided by responsible project partners. Description of the existing technologies and solutions for water reuse & recycling (defined at the application stage), that will be adapted to local conditions of analysed pilots). Definition of system boundaries will include also analysis of legal boundaries (limitations) in respect to nutrient recovery in project partner countries as well as analysis of attitudes in respect to recover nutrients in waste streams. This part of the Work package tasks will help to identify major obstacles and risks in respect to implementation of technologically advanced solutions. This WP includes also identification and hierarchisation of other methods of water reuse that could also be used in the analysed regions, and comparison them with the methods that will be used in the pilotong phase of the project. Lead University of Latvia.

WP1.1.2. Preparation of the research framework and research procedures, including identification and description of analytical methods used for physico-chemical parameters (nutrients, pollutants, etc.), timetable of the analysis, internal reporting and responsibilities of parties. This sub-activity will provide the technical set-up of following piloting activity to convincingly demonstrate the feasibility of the pilot cases and significance of the obtained results. Lead Warsaw University of Technology.

2,183 / 3,000 characters

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

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D 1.1

Title of the deliverable

System boundaries defined (report)

34 / 100 characters

## Description of the deliverable

Water system networks include various stages with specific tasks and isn't identical in BSR countries. In project main focus will be to effective use of water resources and reuse options of wastewaters. Since there is different quality of wastewaters, technologies and will be implemented different pilot sites it is necessary to estimate criteria of water flows, nutrients, pollutants, quality standards, size ect. in such systems. Therefore the deliverable will be detailed system boundaries for all pilots, elaborated considering local situation (topicalities, resources and problems) as well as analysis of best known technologies providing solutions for water reuse and recycling especially in respect to nutrient flows. The deliverable includes research framework and research procedures, including identification and description of analytical methods used, timetable of the analysis, reporting and responsibilities of parties and the technical set-up of pilot activity. The deliverable includes proposals from project partners for logistics and expected results for pilot scale demonstrations. Defined system boundaries allow to more precisely analyse system efficiency as well as provides opportunity to compare these systems. This approach allows choosing best available technologies in regard to environmental and economic factors. Deliverable of activity WP1.1.1. will be used to realize further project activities.

1,428 / 2,000 characters

### Which output does this deliverable contribute to?

O.2.4 WaterSafe IT Tool and O.2.5 Handbook on safe water reuse

62 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

WP.1: WP1 Preparing solutions

A.1.1: Determining preconditions for pilots D.1.1: System boundaries defined (report)

ort)



Submission Date: 25/04/2022 17:36:32

Project Number:

Project Version Number: 1

WP 1 Group of activities 1.2

5.6.1 Group of activities leader

Group of activities leader PP 5 - Mineral and Energy Economy Research Institute of the Polish Academy of Sciences

A 1.2

5.6.2 Title of the group of activities

Establishing the local target group networks

44 / 100 characters

### 5.6.3 Description of the group of activities

Objective of WP1.2 is to establish the local target group networks in the Baltic region, where the project activities (pilots) are conducted (PL, FL, LV, LT, DK) and involve representatives of these groups in creating and verifying solutions that should be adapted to local conditions and needs.

WP1.2.1. Establishing cooperation with local target groups in all regions covered by project (PL, FL, LV, LT, DK) that will be involved in verifying solutions proposed in WP1.1. This taks includes local target groups analysis that will be conducted in three stages: 1) local target groups identification (desk research method - revision of organization registers - national, regional and local; brainstorming, benchmarking & internal datasources of project partners); 2) local target groups assessment (developing a matrix of target grupus in a local area - based on two criteria - Interest / likelihood of conflict - understood as interest in the success / failure of project & Impact - understood as the stakeholder's influence on the project); 3) local target groups management (maintenance and management of local groups networks, including organisation of local target groups meetings, min.2 meetings/ semester / local network). One general regulation, outlining roles and responsibilities of the members of the network, translated from English language into the national language will be developed. Kick-off meeting will be organised by lead partner.

WP1.2.2. Development, distribution and collection of questionnaire aimed at identyfication of determinants influencing a possibility of usage of selected water resuse methods by target groups (including selection of most recommended for local conditions in a given target group unit). The questionaire will include set of legal, technological, social, environmental, economic factors, that are integral part of preconditions defined in WP1.1, as well as the initial scope of functionality of IT tool (WaterSafe-tool) to verify its understandability, usefulness and readability for recipients. Then, focus group interview and in-depth interviews will be conducted during local target groups meetings and individually with selected representatives (face-to-face & digital). These interviews aim to revision of solutions designed in WP1.1 by local target gropus, and verification of proposed condictions for the possible use of proposed solutions in local areas, covered by local target groups networks. This is to collect input from target groups to prepare the final solutions. The results of questionaire analysis and interviews will be utilised in WP1.3 for final desingning the framework of solutions and for final research scheme that will be conducted in pilots phase (WP2). This stage is crucial for the success of the project, as the developed solutions should be adapted to the real needs of these target groups (especially in regions where pilots will be conducted).

2.929 / 3.000 characters

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

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D 1.2

### Title of the deliverable

5 local target group networks created

37 / 100 characters

### Description of the deliverable

The local target group networks will be a gropus of key stakeholders in the regions covered by the project activities (PL, FL, LV, LT, DK) that will be involved in the verification of the technological solutions used in piloting phase (WP2) and for development of IT tool (WaterSafe-tool). The 5 target group networks will be established with the lokal stakeholders invited. The local target gropus networks will consist of a minimum of 20 representatives of local organizations (business, entrepreneurs, science, society) who may have a direct impact on the implementation of final solutions. Each network will have its own board (chairman, deputy, secretary) and will act as a body supporting the implementation of the project and actively participating in the improvement of solutions and the possibility of their adaptation to local conditions. The general regulation, outlining the roles and responsibilities of the members of the network, translated from the English language into the national language will be confirmed by all targert groups networks and the report of their activities will be provided. The results of networks activities will be integrated on international (project) level to support design of final outputs (O1 & O2). The establishment of local groups is crucial for the implementation of O1 and O2, which require the real involvement of their end-users. Cooperation with these groups will influence the development of final solutions that can be easily implemented in local conditions.

The local target group networks will actively participate in the project until the end of its duration.

1.617 / 2.000 characters

### Which output does this deliverable contribute to?

O.2.4 WaterSafe IT Tool and O.2.5 Handbook on safe water reuse

62 / 100 characters

5.6.6 Timeline

Period: 1 2 3 5

WP.1: WP1 Preparing solutions

A.1.2: Establishing the local target group networks

D.1.2: 5 local target group networks created



Submission Date: 25/04/2022 17:36:32

Project Number:

Project Version Number: 1

WP 1 Group of activities 1.3

5.6.1 Group of activities leader

Group of activities leader PP 7 - Warsaw University of Technology

A 1.3

5.6.2 Title of the group of activities

Validating final conditions for pilots

38 / 100 characters

### 5.6.3 Description of the group of activities

Objective of WP1.3. is to verify preconditions and establish a final research framework for all pilots, considering the system boundaries developed in WP1.1 and the results of surveys from local target group networks conducted in WP1.2. Detailed identification of pilots' assumptions will be carried out, including necessary physicochemical processes, equipment, materials, activities and systems that will lead to the planned outcomes. The aim of this action is to define three different types of pilot plants, that will be implemented in Partners' countries. One regarding disinfection of treated wastewater for municipal reuse, second regarding composition adjustment of reclaimed water for specific needs of touristic venue in mountain area and third one regarding barriers breaking for reclaimed water reuse for agricultural purposes.

For pilot 1, different disinfection methods will be listed, focusing on advanced oxidation methods, such as ozonation, hydrogen peroxide, UV, LED. Each pilot plant in WP2.1. will be assigned with different disinfection method. For pilot 2, various methods of treatment will be described, changing throughout the year, depending on different use of water. During summer months, methodology will present treatment and adjustments so water can be reused for slopes irrigation. During winter months, so that water could be reused for artificial snow production. Treatment aimed towards discharge to a river will also be considered. For pilot 3, experimental setup will be described, regarding the use of reclaimed water for irrigation of edible and non-edible plants. Each pilot plant in WP2.3. will obtain detailed description of water and soil sampling, depending on its specific use.

Specific guidelines for setup and operation of these pilot plants will be identified in the report, taking into account also the impact of seasonality. Detailed methodology of research activities will be described, pointing out which experiments are necessary to be carried out at each pilot station. Such identification will help to navigate through the entire work package 2, so the final results of experiments will be innovative and point out focus areas of possible further research. The outcome of these actions will be elaboration of preliminary research framework.

Next step will be the verification of developed report. It will be carried out during the workshop meeting with all of the Partners taking part in WP1 and WP2. Based on that, the final research framework will be defined.

The final research framework will describe unified methods of analysis and results presentation, obtained on each pilot plant. Common ties between different pilots will be defined, thanks to which it will be possible to create flexible water reuse systems, concerning different local needs, that will also provide water safe to use and, in case of agricultural use, will allow for intensification of nutrients recycle.

2.947 / 3.000 characters

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

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D 1.3

## Title of the deliverable

Final conditions for pilots defined – set of water & nutrients reuse techniques (report)

88 / 100 characters

### Description of the deliverable

Action's deliverable will be the final detailed research framework for all pilots, including precise identification and research procedures, that would take into account present and future water reclamation opportunities, especially those concerning partner countries of the project. The report will contain precise description of methodology and scope of research planned on every pilot station. For pilot station 1, disinfection systems for treated wastewater will be defined, depending on chosen disinfection method. Contact times and/or dosages will be defined, as well as duration of different stages of experiments. For pilot 2, maximum levels of nutrients in reused water will be defined, depending on its application. Methodology of phosphorus and nitrogen removal will be described. For pilot 3, an experimental use of reclaimed water will be explained, regarding watering edible and non-edible plants grown in glasshouses or setup fields. Minimal requirements for reclaimed water to be used for watering edible plants will be determined. Necessary equipment and utilities will be listed, so pilot operators will obtain a detailed description of each action. For each pilot, a schedule of testing and sampling frequency will be listed, considering the impact of seasonality. All indicators having to be checked will be described, together with their methods and frequency of analysis. Entire model of results presentation will be developed, to make gathered results coherent and easy to compare. Such model will allow not only to compare results obtained on different pilot stations, but also to elaborate multivariant conceptions of technological systems for water reuse.

1.683 / 2.000 characters

### Which output does this deliverable contribute to?

O.2.5 Handbook on safe water reuse

34 / 100 characters

5.6.6 Timeline

# WP.1: WP1 Preparing solutions

A.1.3: Validating final conditions for pilots

D.1.3: Final conditions for pilots defined – set of water & nutrients reuse techniques (report)

Period: 1 2 3 4 5 6



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Project Number:

Project Version Number: 1

### 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 1 - Chamber of Economy Polish Waterworks

A 1.4

5.6.2 Title of the group of activities

Determining a scope of the risk assessment for pilots

53 / 100 characters

### 5.6.3 Description of the group of activities

EU Regulation 2020/741 requires a risk assessment in water reuse installations. Risk analysis and assessment are essential to ensure the safety of water recovery. However, these are difficult challenges for users of reclaimed water (Local public authorities, SME). The solution aims to present the problem in a way understandable to Target Groups and to develop guidelines that will be checked and refined within WP2.

Therefore, objective of WP1.4 is to determine a scope of the risk assessment for pilots. It will be conducted in the following steps:

WP 1.4.1. Assessing existing (collected during the application preparation) regulations and standards (guidelines from European Commission and other regions, ISO, etc.). Possible supplementing them, collecting them in a comprehensible for Target Groups form.

WP 1.4.2. Developing the scope of risk analysis for 3 pilots. This analysis will consist of the basis for the risk assessment provided during pilots' work in WP2. It is impossible to check the effectiveness of pilots and copy them in different locations if the risks related to the state of the environment, health, and well-being of people and the environment are not assessed.

WP 1.4.3. Involvement of the local Target Groups networks for the verification of the developed scope of the risk analysis for pilots, and validation of the final scope of the risk analysis for pilots. Consulting with representatives of Target Groups (partners, associated organizations), and collecting input. is part of building Target Groups awareness from the beginning of the project. It is to eliminate taboos and stereotypes and ensure confidence in the solutions developed.

WP1.4.4. Elaboration of the final scope of the risk analysis for pilots (1,2,3 as planned in WP2).

WP 1.4.5. Identification of conditions for the scope of the risk analysis in min. 5 other regions in the BSR region.

As a result of this group of activities, guidelines for risk analysis will be prepared, which will be carried out based on the results of the pilots' work. Target groups will be involved in the os process from the outset. This makes it easier for them to understand the entire process, but also to identify and assess risks. Work on these activities will lead to a deliverable, which will be the guidelines for water recovery risk analysis in pilots. The issue of international cooperation has been of key importance from the very beginning. So we will be based on the exchange of knowledge among all partners. All project partners will participate in the consultation on the scope of the risk analysis, regardless of their knowledge of the issue.

2,636 / 3,000 characters

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

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D 1.4

### Title of the deliverable

Validated scope of the risk analysis for pilots and other BSR regions (report)

78 / 100 characte

### Description of the deliverable

It is impossible to check the effectiveness of pilots and make them multiplied if the risks related to the state of the environment, health, and well-being of people and the natural environment are not assessed. The result of the group of activities will be the development of guidelines for risk analysis in the future work in WP2. The guidelines will contain the necessary descriptions and definitions, indicate hazards and risks, and explain their importance in water recovery processes. The data in the report will be based on the already existing guidelines and the results from consulting the Target Groups and partners responsible for launching pilots. It will be the basis for the risk assessment conducted during the pilots. The aim of the deliverable is to prepare the outputs section, which will contain information on the risks associated with water recovery. It is part of education aimed at target groups, which aims to build awareness, but also provide tools for risk assessment and its mitigation in water recovery systems. Both the output IT tool and the Handbook will contain instructions related to risk assessment regardless of the location of the recovery system.

Any work on the guidelines for risk analysis will involve partners, and at a later stage Target Groups in regions not covered by the project.

Period: 1 2

1,326 / 2,000 characters

## Which output does this deliverable contribute to?

O.2.4 WaterSafe IT Tool and O.2.5 Handbook on safe water reuse

62 / 100 characters

## 5.6.6 Timeline

# WP.1: WP1 Preparing solutions

A.1.4: Determining a scope of the risk assessment for pilots

D.1.4: Validated scope of the risk analysis for pilots and other BSR regions (report)

3 4 5 6



Submission Date: 25/04/2022 17:36:32

Project Number:

Project Version Number: 1

WP 1 Group of activities 1.5

5.6.1 Group of activities leader

Group of activities leader PP 5 - Mineral and Energy Economy Research Institute of the Polish Academy of Sciences

A 1.5

5.6.2 Title of the group of activities

Identifying business opportunities and defining scope of functionality of WaterSafe-tool

88 / 100 characters

### 5.6.3 Description of the group of activities

The objective of WP1.5 is to identify business opportunities resulting from the implementation of water reuse methods in specific conditions and define the scope of functionality of the WaterSafe-tool that will be one of the key outputs of the project. Currently, business opportunities, including financial value, are allocated for energy production but not for nutrient and water reuse. This gap will be fulfilled in WP1.5 and verified in WP3.4. The WP2 is divided into the following activities:

WP1.5.1. Identification of business opportunities with a more sustainable use of water and nutrients in a closed cycle in all pilots areas. It includes the identification of a business framework for the implementation of circular economy (CE) solutions dedicated to sustainable water management. The Strategic management tool to describe how an organization creates, delivers and captures value will be defined, in nine specific areas: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. The three layers for the identified business model will be defined - economic, social and environmental, with specific indicators determined (based on Sustainable Development Indicators and EU CE monitoring framework), with the focus on energy, material and water areas. Water reuse can be a key way to promote resource efficiency in areas of BSR with water scarcity, to profit from opportunities in the expanding water market, and to alleviate the pressure on European water resources.

WP1.5.2. Determination of the scope of functionality of the IT tool (WaterSafe-tool) that will be used by individual target groups to assess their water & nutrients saving potentials. IT tool will provide information and define business opportunities that show new and better ways to be water and nutrients resource efficient and benefit from CE business models which turn waste water into an asset. This activity will also involve the local target groups networks for the verification of the proposed scope of functionality of the WaterSafe-tool. This scope will be verified with the use of the focus groups method, which will meet in each region where pilots work will be carried out (min. 3 meetings of local target groups networks of at least 20 people). These activities will allow the engagement of target groups to create final solutions, and will also allow for the keeping the transnational level of the IT tool.

2,501 / 3,000 characters

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

V

D 1.5

### Title of the deliverable

Sustainable and circular business models & determined functionality of WaterSafe-tool

85 / 100 characters

## Description of the deliverable

The purpose of this deliverable is to identify and organise the knowledge of business opportunities related to water recovery in the BSR and indicate the scope of the online tool functionality - WaterSafe IT Tool. This deliverable is divided into two sub-areas:

- 1) The first sub-area is dedicated to the description of the sustainable and circular business models that will be defined for all pilots. It will include a detailed description of different business opportunities (water resources energy savings) resulting from the implementation of different technologies of water reuse (P1 disinfection of reclaimed water; P2 adjusting the nutrients composition, mainly phosphorus, to the needs of target groups for intended use, e.g., irrigation for agriculture or landscaping; P3 irrigation symbiosis). They will be integrated into so-called sustainable and circular business models, that will include nine specific areas: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure.
- 2) The second sub-area is dedicated to a description of the functionality of WaterSafe-tool, which aims to help European companies, especially SMEs, to save energy, material and water costs. This tool will include pathways in the field of water/nutrient recovery; options for the technology selection depending on local needs; initial costs estimations; benefits and risks; final recommendation for specific case studies). The tool will be legible, easy to use, with instructions (manual).

The business models and IT tool will have a transnational level due to the integration of knowledge and engagement of local target groups networks from different countries, covered by the project.

This deliverable is crucial for the implementation and testing of the IT WaterSafe-tool (O2.4) in piloting phase of the project (WP2.4). Based on this deliverable, the output "O2.4 - IT WaterSafe-tool" will be built.

1.996 / 2.000 characters

## Which output does this deliverable contribute to?

O.2.4 WaterSafe IT Tool and O.2.5 Handbook on safe water reuse

62 / 100 character

### 5.6.6 Timeline

## WP.1: WP1 Preparing solutions

A.1.5: Identifying business opportunities and defining scope of functionality of WaterSafe-tool

D.1.5: Sustainable and circular business models & determined functionality of WaterSafe-tool



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# 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 6 - Savonia University of Applied Sciences Ltd.				
Work package leader 2	PP 10 - Municipal Water and Sewerage Company in Warsaw				
5.4 Work package budget					
Work package budget	50%				
5.4.1 Number of pilots					
Number of pilots	3				



2

4

Project Acronym: ReNutriWater

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### 5.5 Target groups

# Target group

## How do you plan to reach out to and engage the target group?

## Local public authority

We will focus on local government units responsible for the maintenance of green and recreational areas in cities and departments supervising infrastructure and providers of public services. Representatives of this target group are not numerous, which is the best proof of how much there is to do in building awareness. We want to reach them through operators and local organizations like PP3 and PP13. This group should be presented with ready-made solutions.

Local public authorities (LPA) are partners and associated partners of the project. Danish LPA is leading A 2.3. Thanks to interest groups and business support organizations more LPA will be involved in consultations and observation of pilots. A survey planned in WP3 will help to raise their awareness. Project consortium secured diverse associated partners representing public authorities. It is already good starting point, to connect many more when the project will be active with the help of cluster and relevant interest groups involved. Due to role of LPA, it is not expected that this target group will be active in hands-on pilot activities. However, site visits will play important role in convincing LPA to act on sustainable and smart water management practices in their region. Site visit is providing opportunity to access first-hand local experience and look for specific answers at the source.

460 / 500 characters

909 / 1.000 characters

### Infrastructure and public service provider

The infrastructure and public service providers' (IPS) activities are closely related to the local public authorities. Wastewater treatment plant operators are the most significant target group because they have the infrastructure and competencies to build solutions for water recovery. In the consortium, they come from Denmark, Poland, and Latvia. Thanks to the interest groups and Associated Organisations, we want to cover more BSR countries (Estonia, Lithuania, Finland, Germany).

486 / 500 characters

Infrastructure and service providers (ISP) participate in key project pilots and make their infrastructure available for research. ISPs from all participating countries in ReNutriWater are involved. They adapt it to the needs and equip it with additional equipment. Some ISPs are inherently and immediately interested in providing alternative water resources. ISPs from countries with less water scarcity want to prepare for future challenges and break the existing barriers. Polish ISP is leading A 2.1, Danish ISP is involved in A 2.2, Latvian ISP are involved in all pilot actions planned. ISPs were shaping content of the pilots since PIF stage of project proposal. During realisation of WP2 pilot documentations will be gathered and prepared to reach target groups in best possible way, including demonstration site visits. To communicate results consortium will engage with water utility associations at every level - including EU (EurEau) using large scale events, newsletters etc.

988 / 1,000 characters

### Small and medium enterprise

SMEs cover a wide range of stakeholders. However, we want to focus on two core groups: technology providers such as Schwander (Poland) and leisure operators - hotels, golf courses, ski areas, tourist regions associations etc. Reaching SMEs is possible thanks to interest groups and business organizations (Poland, Lithuania, Finland). SMEs are essential for promoting business solutions based on the closure of local water circuits - a practical expression of the circular economy concept.

489 / 500 characters

Small and medium enterprise (SME) is leading A 2.2 with close cooperation with end-user. Technology providers are directly interested in providing solutions to end-users. Involvement of SMEs is boosting promotion of good practices among entrepreneurs, raising interest of SMEs in the process of water reuse (holiday homes, ski lifts, agro-tourism farms, hotels, car washes), promotion of available solutions among agri-food producers. SMEs will be addressed through direct contact via cluster business network (e.g. Kuopio Water Cluster and other connected through S3P Water Smart Territories in the Baltic Sea Region) and interest groups. SMEs are proactively interested in exploring new markets or applications for existing solutions that might have a potential to improve solutions proposed by ReNutriWater project. We will make public relevant technical information that will allow matchmaking innovation potential and identification of market gaps.

953 / 1,000 characters

## Interest group

We want to focus on Interest Group (IG) throughout the BSR, as building awareness and knowledge about the advantages and disadvantages of water reuse is crucial. We have a significant representation of IG (and one NGO) among our partners, including Centrum Balticum, IGWP, Kuopio Water Cluster (from Savonia ecosystem), Klaipeda, and Siauliai chambers of commerce. Among the Associated Organizations is WWF (NGO), with whom we will work closely.

Interest Groups (IG) are playing important role and are involved in project ideation and all actions planned in WP2. Project secured participation from significant number of Interest groups. It is proving that project consortium foresee important role for IG to connect wide network of members across Baltic Sea region (and beyond) to the solutions adapted and demonstrated by A 2.1-A 2.3. Role of Interest Groups is intertwined with other target groups as they are necessary bridge between diverse actors relevant for increased uptake of widespread use of reclaimed resources in smart and modern society. IG, NGO and clusters are regularly organising large scale events (international fairs, workshops, seminars) which are suitable vehicle for communication (WP1 and WP2), engagement (WP2) and promotion (WP3).

811 / 1,000 characters

445 / 500 characters



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### 5.6 Activities, deliverables, outputs and timeline

No.	Name
2.1	Pilot 1 (P1): Disinfection efficiency of reclaimed water
2.2	Pilot 2 (P2): Composition adjustment of reclaimed water
2.3	Pilot 3 (P3): Breaking barriers for reclaimed water use
2.4	Implementing and testing WaterSafe IT Tool
2.5	Developing a Handbook on water reuse

### WP 2 Group of activities 2.1

### 5.6.1 Group of activities leader

Group of activities leader PP 10 - Municipal Water and Sewerage Company in Warsaw

A 2.1

### 5.6.2 Title of the group of activities

Pilot 1 (P1): Disinfection efficiency of reclaimed water

56 / 100 characters

## 5.6.3 Description of the group of activities

Pilot 1 (P1) is dedicated to adapting and evaluating the effectiveness of disinfection for reclaimed water based on concrete cases located in Poland, Finland and Latvia, providing diverse national perspectives and drivers for reclaimed water resources. Pilot activities planned for implementation are based on international cooperation within the project consortium. One of the key target groups (infrastructure and public service provider) is leading pilot actions and connecting other relevant stakeholders. Local public authorities are involved in the early planning phase and the transfer of practices for future uptake. SMEs offering disinfection solutions will be connected by the lead of Savonia and other interest groups offering a diverse network of partners in the Baltic region and EU. The pilot studies are necessary to evaluate the scale-up effects between laboratory and pilot-scale and validate disinfection efficiency for different municipal wastewater effluents. Testing will include various advanced oxidation processes (AOPs e.g. ozonation, hydrogen peroxide, UV, LED). The mobile pilot will be placed within the budgetary limits in the selected location managed by Warsaw Waterworks (Poland) and project partners. Alternative or similar disinfection methods will be tested in Finland (Kuopio WaterLAB), Latvia (Tukums and Kurzeme regions) and Denmark (Samsø). Pilots are planned to be conducted for 12-18 months to allow for full-cycle seasonal and effect of weather conditions. Combined actions in WP2 and WP1 will provide information on important reclaimed water parameters to provide a clear path towards transfer to practical solutions that satisfy the target groups and meet regulations. These requirements will be used to monitor reclaimed water in terms of physico-chemical, organic and microbiological composition (focusing on regulation (EU) 2020/741 required: viruses, protozoa, bacteria, and optional identification of micropollutants). Deployment, adaptation and testing of various solutions will be in the relevant environment at a pilot scale (nominal capacity up to 1 m3/h). This approach allows to focus on specific applications of reclaimed water and assess the real advantage connected with the application of the proposed solution. The activities will be implemented in the transnational setting through the joint piloting effort to demonstrate and adopt concrete solutions to the requirements of the countries participating. Enriched with nutrition wastewater will be used again in selected cities (Latvia) grass and flowers watering (in dry season), washing the sports stadium (in autumn season), and also possibly for manufacturing companies equipment cleaning, etc. This practice will ensure the scalability and replicability of solutions. General conclusions from planned piloting activities will be a critical part of developing good practices that will be transferred in WP3.

2,923 / 3,000 characters



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

~

D 2.1

### Title of the deliverable

Summary of results from pilots, data collection and analysis, reporting

71 / 100 characters

### Description of the deliverable

Pilot 1 deliverable will provide science-based recommendations for suitable disinfection processes for the conventional wastewater treatment chain (e.g. based on secondary treatment, disinfection and filtration) across three countries. The results of the individual pilot cases will be summarized individually and then consolidated into Handbook (O 2.5). Moreover, a description of model solutions to be implemented in municipalities and guidelines for implementing the tested solutions will be concluded for general dissemination in WP3. Some key results are necessary for finalizing WaterSafety Tool (O 2.4). The core international action group for P1 activities consists of Municipal Water and Sewerage Company in Warsaw, Warsaw University of Technology, University of Latvia, Savonia, VNK Serviss, Siauliai CCIC, Klaipeda CCIC. Concluded parameters of the system and reclaimed water usage and their quality criteria (defined in WP1) will be evaluated in pilot sites and supported by continuous laboratory tests in each participating country (due to the nature of some samples, measurements have to be done in-situ, not all can be preserved for storage). To meet optimal criteria for reuse of wastewater disinfection plays an essential role not only to provide water quality requirements but also due to use of chemicals or other applied methods, which can create costs for running pilot sites and include elements in defined water reclamation systems and their boundaries (technical feasibility and cost-effectiveness). The interregional dimension is secured within the realities of the planned budget frame, competencies, in-house expertise, and overall partner profile. Each project partner and associate organization were selected in the preliminary phase to complement each other for reaching the overall target with direct pilot activities, knowledge sharing and uptake or adaptation tasks.

1,899 / 2,000 characters

## Which output does this deliverable contribute to?

O.2.4 WaterSafe IT Tool and O.2.5 Handbook on safe water reuse

62 / 100 character

5.6.6 Timeline

	Period: 1	2	3	4	5
WP.2: WP2 Piloting and evaluating solutions					

A.2.1: Pilot 1 (P1): Disinfection efficiency of reclaimed water

D.2.1: Summary of results from pilots, data collection and analysis, reporting



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Project Version Number: 1

WP 2 Group of activities 2.2

5.6.1 Group of activities leader

Group of activities leader PP 9 - Schwander

A 2.2

5.6.2 Title of the group of activities

Pilot 2 (P2): Composition adjustment of reclaimed water

55 / 100 characters

### 5.6.3 Description of the group of activities

The main topic of the second pilot is adjusting the nutrients composition, mainly phosphorus, to the needs of target groups for intended use, e.g., irrigation for agriculture or landscaping such as parks, rights-of-ways, and golf courses, or production of artificial snow, as well as to the specific use cases of a municipality. Key to the success of this pilot demonstration is the involvement of target groups which are very well represented in the action group. This full-scale implementation has a significant re-implementation value and will be potentially used to provide a hands-on example of a concrete reclaimed water use case. The pilot plant will be located at the WWTP for Bania Hotel in Białka Tatrzańska (Poland) with complementary actions planned in Finland, Denmark and Latvia. The pilot aims to continuously operate in automatic mode and conduct wastewater treatment processes generated by the hotel facilities (domestic wastewater). Measurements will be made for the recycled water, which will serve two purposes: discharge into the river Białka, a direct tributary of Czorsztyn Lake and water supply for the artificial snow cannons in winter and irrigation of the slope in summer (to prevent progressive soil erosion). Depending on its purpose, the reclaimed water will have a different composition. The reclaimed water used for slope irrigation will contain nutrients, whereas the reclaimed water discharged directly into the Białka river will not. The pilot's proposed effluent composition testing frequency is once a month by accredited laboratories - for six months. The mobile equipment will record periodical data. Data collected by the probes and analyzers at the pilot will be archived and forwarded to the Project Partners for further analysis. Based on cooperation within P2, partners will collect measurements to provide a seasonal characterization of local wastewater effluents and evaluate possible technologies for nutrients adjustments with the prospective technology providers. In addition, participating partners are interested in obtaining results that evaluate the broader possibilities of reusing treated wastewater. This data is necessary to proceed with technical and economic studies for possible applications in a local setting, specifically the provision of a cost estimate for the water reclamation process or the impact of water reuse on the price of water and sewerage services. Hand-over of the materials for WP3 will include the process scheme of the pilot and test results; the data acquisition system will enable online data transfer for WP3 (The project partner will provide access to the database); the applied methods and solutions in P2 will be used to develop model installation designs, which will be transferred transnationally to interested parties for implementation (WP3).

2,836 / 3,000 characters

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

V

D 2.2

### Title of the deliverable

Gathering results from pilots, data collection and analysis, reporting

70 / 100 characters

## Description of the deliverable

This deliverable aims to confirm the pilot's effectiveness and ensure the stable level of nutrients in treated wastewater, supported by the development and implementation of a process control software to ensure meeting the expected parameters. The results of the pilot case will be consolidated into Handbook (O 2.5). This will specifically contribute to this outcome by demonstrating adjustment of the treated effluent quality parameters to the needs of the target groups. Moreover, P2 will provide a concrete example of water reclamation as an effective way to protect water resources. The core P2 action group consists of Schwander Polska, Savonia Jurmala water utility, University of Latvia, Warsaw University of Technology, VNK Serviss, Siauliai and Klaipeda CCIC etc. The core P2 actions are carried out in Poland (Białka Tatrzańska) - due to the full-scale implementation (not mobile unit), replicating a similar setup in other locations is not feasible. VNK serviss will enrich effluent with developed nutritional compositions (by other partners) and will deliver this enriched water for tests to target groups. Other partners and target groups involved will take an active role in planning, knowledge sharing, and assessing reapplication potential based on local requirements. Partners will provide intensive measurement campaigns to provide a seasonal characterization of wastewater effluents and evaluate possible technologies for nutrients adjustments with the technological partner (Schwander) in P2. Obtained real system boundary conditions (Poland), water quality requirements for specific usage of water will be tested in selected partner locations (Finland, Latvia) and reclaimed water will prepared with chosen technologies and tested their efficiency to reach deliverable. SMEs offering reclaimed water composition solutions will be connected by the lead of the Savonia and other interest groups offering a diverse network of partners in the Baltic region and EU.

1.987 / 2.000 characters

### Which output does this deliverable contribute to?

O.2.4 WaterSafe IT Tool and O.2.5 Handbook on safe water reuse

62 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

## WP.2: WP2 Piloting and evaluating solutions

A.2.2: Pilot 2 (P2): Composition adjustment of reclaimed water

D.2.2: Gathering results from pilots, data collection and analysis, reporting



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WP 2 Group of activities 2.3

5.6.1 Group of activities leader

Group of activities leader PP 8 - Samsø Municipality

A 2.3

5.6.2 Title of the group of activities

Pilot 3 (P3): Breaking barriers for reclaimed water use

55 / 100 characters

### 5.6.3 Description of the group of activities

The third group of pilot actions focuses on creating applications that will allow breaking barriers for the practical use of reclaimed water. We will demonstrate an approach that assumes minor investments into existing wastewater treatment systems providing smart and cost-effective decentralized solutions that have a potential for full-scale application across Baltic Sea regions. This case will capitalize on the long-standing experiences of Samsø Island in building Irrigation Symbiosis. Although allocated to a separate group of activities, this pilot is closely connected with pilots P1 and P2. Pilot 3 (P3) is about conducting variable trials growing different plants in greenhouses or plots (parks, medians) using reclaimed wastewater as a source of nutrients and irrigation. This is important for countries and regions where reclaimed water is still not commonly accepted and/or where typical external circumstances (e.g. water scarcity) are not the primary drivers for change to sustainable water resource use. The pilots are planned to be carried out in Denmark (Samsø), Finland (Kuopio), Latvia (Kurzeme) and Poland (Warsaw). The main target group will be local farmers, local public authorities and infrastructure and public service providers that have shown an interest in a potential trial (linking to WP1). They will be involved from the beginning, so it will be easier for them to scale up later if the trials show a positive outcome. The involvement of wastewater utility is securing the complete supply chain to build up possible long-term symbiosis ecosystems. Individual results from diverse test locations planned will be generalized and concluded in the project outcomes for widespread use by target groups. International cooperation is a crucial element for possible reapplication to other countries. Working together will allow for levelling the playing field for regions with less experience and practical applications of using the reclaimed water. To diversify and adapt the solution, it is planned to adjust the trial set up from one testing period (vegetation period) to another. This will test different technologies and methods (e.g. dilution, disinfection) and provide conclusions for future reapplication (WP3). It is beyond the project scope and budget to address the longterm effects of using reclaimed water. These issues are addressed by fundamental science, EU and national regulations. Specifically addressing concentrations (in effluent and soil) of heavy metals, pesticides, disinfection by-products, pharmaceuticals, and other substances of emerging concern, including micropollutants and microplastics or antimicrobial resistance. The physical pilots will allow soil testing before and after the pilot to show the consequences of using wastewater for irrigation. By connecting relevant partners to P3, the project will provide end-results material (e.g. plant and soil samples) for science-based approaches on the sidelines of the ReNutriWater project.

2,996 / 3,000 characters

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

V

D 2.3

### Title of the deliverable

Demonstrating smart reclaimed water use and irrigation symbiosis

64 / 100 characters

## Description of the deliverable

The purpose of the deliverable is to show that it is possible to reuse wastewater as irrigation and nutrient for agricultural purposes without significant investments into altering existing wastewater treatment systems. P3 is a logical extension to approaches piloted in P1 and P2 (focused on reclaimed water safety and risk assessment) to emphasise actual implementation in the form of demonstration sites which are easy to maintain and will last beyond the duration of the project - because, in most cases, the target group is preparing the site. The results of the individual pilot cases will be summarised individually and then consolidated into Handbook (O 2.5). In addition, some key results are necessary for WaterSafety Tool (O 2.4). The core international action group for P3 consists of Samsø Municipality, Samsø Wastewater Utility, Savonia, Warsaw University of Technology, Warsaw Waterworks, University of Latvia, and VNK Serviss. The diverse and international group in P3 will work together. Each partner was selected to complement the overall target with direct pilot activities, knowledge sharing, and uptake and adaptation tasks in the preliminary phase. Locating pilot greenhouses or city plots irrigated with reclaimed water in four countries (DK, FI, PL and LV) allows for direct exposure of these solutions to target groups and society and collecting hands-on experiences and practicals. Each country site brings a different perspective on the same challenge while securing the same outcome. The geographical spread of demonstration sites in the Baltics allows for convenient access among all members.

1.621 / 2.000 characters

## Which output does this deliverable contribute to?

O.2.4 WaterSafe IT Tool and O.2.5 Handbook on safe water reuse

62 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

### WP.2: WP2 Piloting and evaluating solutions

A.2.3: Pilot 3 (P3): Breaking barriers for reclaimed water use

D.2.3: Demonstrating smart reclaimed water use and irrigation symbiosis

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### WP 2 Group of activities 2.4

### 5.6.1 Group of activities leader

Group of activities leader PP 5 - Mineral and Energy Economy Research Institute of the Polish Academy of Sciences

A 2.4

## 5.6.2 Title of the group of activities

Implementing and testing WaterSafe IT Tool

42 / 100 characters

### 5.6.3 Description of the group of activities

Objective of WP2.4 is to implement and test the developed WaterSafe IT Tool. This will include two stages:

WP2.4.1. Implementation of the scope of functionality of IT tool, that has been verified by the target group networks in WP1.5.2. The IT tool will have procedure paths (algorithms) for three different possibilities of water recovery (based on the results of pilots 1-3). The recipient (target group) will be able to choose the appropriate course of action (including the size of the sewage treatment plant, local conditions, the amount of recovered water, investment and operational costs, etc.). This activity also included the activities related to the launch of the IT system in which appropriate solutions for the paths will be introduced. This taks includes also development of the graphic design of the tool and the user manual. Moreover, elaboration of "risk" part of the IT Tool will be conducted. On the basis of the results of WP1 (action group 1.4) and the results of WP2 (3 pilots), it will be possible to include a part of the IT tool which will be devoted to hazard detection and simple (initial) risk assessment.

WP2.4.2. Testing of developed WaterSafe IT Tool. After the launched of the IT system, the access to this WaterSafe IT Tool will be shared with target groups networks. In order to test proposed IT tool 3 interregional workshops, will be organised. The delegated moderators will test with representatives of target groups networks will test the IT tool, along with verification of the usefulness of individual functions. Next, corrections will be made to the IT system. This will allow the validation of the developed IT tool, and then its transfer (in the WP3) to further target groups.

1.720 / 3.000 characters

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

O 2.4

### Title of the output

WaterSafe IT Tool

17 / 100 characters

## Description of the output

The purpose of the WaterSafe IT Tool is to serve the knowledge on how much different measures and technological solutions would cost and how much money and resources they can save for unit that would like to implement water reuse method. This IT tool will support national, regional and local organisations across BSR that work with local governments, municipalities, sewage treatment plant operators, SMEs to improve their environmental performance, helping them to become more resource (including water) efficient.

The WaterSafe IT Tool will contain a set of procedure algorithms that are to allow for self assessment of water resuse possibilities to help target groups save resources (incl. water) and reduce operating costs, enable the introduction of rational inventory management, effective organization of production, construction and design improvements. The final version of WaterSafe IT Tool will be published based on the scope proposed in WP1.3 and verified by target group networks, and real results coming from WP2.1-WP2.3. There is significant gap between laboratory and pilot or real scale solutions. Therefore closing this gap (based on results from real scale tested solutions in pilots in WP2.1, WP2.2.WP2.3) demands high risk investments for further interested target groups.

The WaterSafe IT Tool will have transnational level, due to it will integrate the experiences from three different regions where pilots are conducted, as well as the results of interregional workshops during which the IT tool will be verified by local target group networks.

This WaterSafe IT Tool will support the target groups, incl. decision makers & public authorities to improve the implementation of regional development policies and programmes regarding water efficiency (based on real tested technological solutions), generating green growth opportunities and jobs for businesses.

1,889 / 3,000 characters

### Target groups and uptake of the solution presented in this output



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#### Target groups

#### How will this target group apply the output in its daily work?

#### Target group 1

#### Local public authority

We will focus on local government units responsible for the maintenance of green and recreational areas in cities and departments supervising infrastructure and providers of public services. Representatives of this target group are not numerous, which is the best proof of how much there is to do in building awareness. We want to reach them through operators and local organizations like PP3 and PP13. This group should be presented with ready-made solutions.

Local public authorities will use the Tool to self-assess their own situation in the municipality. The tool will show them the strengths and weaknesses of local water recovery (where to use reclaimed water, why). The suggestions collected during the development of the Tool will be used to improve it. It will also be a tool to promote solutions. This will also be an opportunity to exchange ideas between stakeholders in BSR.

426 / 1,000 characters

#### Target group 2

#### Infrastructure and public service provider

The infrastructure and public service providers' (IPS) activities are closely related to the local public authorities. Wastewater treatment plant operators are the most significant target group because they have the infrastructure and competencies to build solutions for water recovery. In the consortium, they come from Denmark, Poland, and Latvia. Thanks to the interest groups and Associated Organisations, we want to cover more BSR countries (Estonia, Lithuania, Finland, Germany).

The operators will indicate the possibilities of using their infrastructure and solutions for the development of water recovery. They will participate in building this tool as infrastructure operators but also as service providers that know local needs. This will also be an opportunity to exchange ideas between stakeholders in BSR.

333 / 1,000 characters

#### Target group 3

#### Small and medium enterprise

SMEs cover a wide range of stakeholders. However, we want to focus on two core groups: technology providers such as Schwander (Poland) and leisure operators - hotels, golf courses, ski areas, tourist regions associations etc. Reaching SMEs is possible thanks to interest groups and business organizations (Poland, Lithuania, Finland). SMEs are essential for promoting business solutions based on the closure of local water circuits - a practical expression of the circular economy concept.

For SME - solution providers, it is a tool to promote the demand for solutions elaborated during the project. For SME-operators of recreational facilities, the tool will help to match the solution to the local needs. This will also be an opportunity to develop business models and cooperate with stakeholders in BSR.

316 / 1,000 characters



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#### Durability of the output

This WaterSafe IT Tool will be available free of charge on the project's developed website during and after the end of the project duration. The website with IT tool will be supervised by Kuopio Water Cluster. If necessary, the content will be revised by the other project partners (including MEERI PAS, Chamber of Commerce, Schwander, and other partners from each country participating in the project).

This WaterSafe IT Tool will be presented during the dissemination events organised during the project duration, and after it ends, by all project partners.

The link to WaterSafe IT Tool will be shared to all members of target groups networks (defined in WP1) and further stakeholders (defined in WP3). IT tool will be hosted and maintained in Kuopio Water Cluster server for at least 10 years.

798 / 1,000 characters

#### 5.6.6 Timeline

Period: 1 2 3 4 5 6

#### WP.2: WP2 Piloting and evaluating solutions

A.2.4: Implementing and testing WaterSafe IT Tool

O.2.4: WaterSafe IT Tool

#### 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 - Chamber of Economy Polish Waterworks

A 2.5

#### 5.6.2 Title of the group of activities

Developing a Handbook on water reuse

36 / 100 characters

#### 5.6.3 Description of the group of activities

This set of activities is not a classic WP2 pilot. However, it is a key element of WP2, especially in the context of evaluation and adjusting solutions together with the Target Groups. The pilots' results need to be translated into Target Groups in an accessible way. Appropriate editing and presentation of results are therefore crucial for the success of WP3 and the entire project.

The following activities are planned:

- 2.5.1. Collecting reports and results deliverables from WP1 and WP2 (3 pilots). During the handbook preparation, we will use defined post-conditions for pilots a set of water and nutrient reuse techniques reported in WP2. Data collection will take place successively according to the schedule of WP1 and pilots in WP2.
- 2.5.2. Evaluate the results for their understanding and use by Target Groups. The communication plan launched in WP3 will make it possible to consult the deliverables parts and adapt them to the text of the handbook. The content must be understandable to the Target Groups, and useful in implementing local projects. Hence the necessity to work closely with them. The consultations will also cover associated organizations. The consultation days will complement the activities on transferring solutions. Workshops and consultations will improve our communication tools.
- 2.5.3 Digital handbook on water reuse in English. The full version of the handbook will be in English in digital.
- 2.5.6 Partial translations into local languages. Depending on local needs and partners' capabilities, selected issues will be translated, which will eliminate language barriers. Completion of work on the handbook will only be possible when all activities related to WP1 and 3 pilots have ended. Activities 2.5.1. and 2.5.2 will therefore start before the WP1 ends.

1,796 / 3,000 characters

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

O 2.5

#### Title of the output

Handbook on safe water reuse

28 / 100 characters

Description of the output



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An important element of the project are 3 pilots that provide solutions for Target Groups. However, the results of work on the development, matching, and universalization of pilots must be collected and properly described so that during WP3 they can be presented to the widest possible group of stakeholders. Besides the pilots themselves, ready for duplication, a Handbook is needed to facilitate further implementation activities.

The purpose of developing a Handbook is therefore to organize the results of pilots and describe them in a way that is accessible to recipients. In fact, the Handbook is the main output of the project with several solutions and deliverables.

Based on the local target group network created in WP1, the individual deliverables making up the Handbook will be systematically consulted. In this way, we will get an output that will already be reviewed and known to Target Groups. So it will be easier to present it to a wider group of stakeholders.

Certain elements of the Handbook (deliverables) are targeted at a specific group. Thus, the risk assessment should be of interest to producers of reclaimed water (Infrastructure and public service providers), but also to local public authorities and some SMEs (recreational area operators). Risk assessment also needs to be presented in some respects to NGOs that care about the environmental and welfare context. In turn, sustainable and circular business models defined for pilots should be described in such a way as to facilitate their implementation through the cooperation of all Target Groups.

The pilots developed in WP2 differ from each other, but they propose solutions depending more on the existing infrastructure than on the location in the BSR. All countries need to meet the challenges of fresh water conservation and wise nutrients management. This breaks down borders. However, it should be borne in mind that language may be a barrier in using the Handbook. That is why translation is necessary. The transnational aspect is crucial. All project partners will have their share of data collection or Handbook writing. This will allow us to look from different perspectives, both regarding regions, local conditions, and types of Target Group.

The handbook will contain:

- description of pilots and their deliverables.
- guidelines for the risk assessment,
- sustainable circular business models
- IT Water-safe bacis tool description,
- chapters dedicated to selected Target Groups.

2 477 / 3 000 characters

#### Target groups and uptake of the solution presented in this output

#### Target groups

#### Target group 1

#### Infrastructure and public service provider

The infrastructure and public service providers' (IPS) activities are closely related to the local public authorities. Wastewater treatment plant operators are the most significant target group because they have the infrastructure and competencies to build solutions for water recovery. In the consortium, they come from Denmark, Poland, and Latvia. Thanks to the interest groups and Associated Organisations, we want to cover more BSR countries (Estonia, Lithuania, Finland, Germany).

#### How will this target group apply the output in its daily work?

The handbook will allow reach a large number of operators, as it will contain useful knowledge and specific solutions. Throughout the project, the Handbook will be developed and improved with the active participation of this target group. Operators will be able to find guidelines for implementing the proposed solutions, cooperate in BSR, and adjust their business model. They will also be ambassadors to promote solutions developed during the project.

Operators will implement selected solutions to use them in daily work.

524 / 1.000 characters

#### Target group 2

#### Local public authority

We will focus on local government units responsible for the maintenance of green and recreational areas in cities and departments supervising infrastructure and providers of public services. Representatives of this target group are not numerous, which is the best proof of how much there is to do in building awareness. We want to reach them through operators and local organizations like PP3 and PP13. This group should be presented with ready-made solutions.

The Handbook will reach a large number of operators as it will contain useful knowledge and specific solutions. So it will convey a clear message to administration employees who do not need to have technical knowledge. Throughout the duration of the project, the Handbook will be developed and improved with the active participation of this target group as well. Local authorities will be able to find guidelines for implementing the proposed solutions and cooperate in the BSR. They will also be ambassadors promoting solutions developed under the project.

Local authorities will support operators in the implementation of selected solutions to use them for the needs of the municipality (e.g. street cleaning, watering green areas).

734 / 1.000 characters

#### Target group 3

#### Small and medium enterprise

SMEs cover a wide range of stakeholders. However, we want to focus on two core groups: technology providers such as Schwander (Poland) and leisure operators - hotels, golf courses, ski areas, tourist regions associations etc. Reaching SMEs is possible thanks to interest groups and business organizations (Poland, Lithuania, Finland). SMEs are essential for promoting business solutions based on the closure of local water circuits - a practical expression of the circular economy concept.

For SMEs, the handbook will be a tool for business development and searching for new solutions. It will be part of strategies supporting a sustainable economy. SMEs will multiply the solutions proposed in the Handbook and adjust business models in their daily work.

265 / 1.000 characters



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#### Target groups How will this target group apply the output in its daily work? Target group 4 Interest group We want to focus on Interest Group (IG) throughout Interest groups are crucial in disseminating knowledge about the project. Therefore, they will have a the BSR, as building awareness and knowledge compendium of knowledge to popularize among BSR stakeholders. They know the regional and national about the advantages and disadvantages of water needs best and have a developed network of contacts. Interest Groups will therefore use the Handbook to reuse is crucial. We have a significant representation build competence in the water sector. The handbook will contribute to the development of sustainable of IG (and one NGO) among our partners, including economy. Centrum Balticum, IGWP, Kuopio Water Cluster (from Savonia ecosystem), Klaipeda, and Siauliai 413 / 1,000 characters chambers of commerce. Among the Associated Organizations is WWF (NGO), with whom we will work closely.

#### **Durability of the output**

The handbook will be a compendium of knowledge on water recovery. It will contain a description of all deliverables and indicate the sources of knowledge (IT tool). It will provide guidelines on how to adapt solutions to local needs, and where to exchange experiences with other BSR stakeholders. It will be a sustainable output that the partners and stakeholders will popularize also after the end of the project. The handbook will be available free of charge on the project's developed website during and after the end of the project duration.

This handbook will be presented during the dissemination events organised during the project duration, and after it ends, by all project partners. The file with The handbook will be shared to all members of target groups networks (defined in WP1) and further stakeholders (defined in WP3).

840 / 1,000 characters

#### 5.6.6 Timeline

# Period: 1 2 3 4 5 6 WP.2: WP2 Piloting and evaluating solutions A.2.5: Developing a Handbook on water reuse O.2.5: Handbook on safe water reuse

#### 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.



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#### 5.3 Work package leader

Work package leader 1

PP 2 - Centrum Balticum Foundation

Work package leader 2

PP 1 - Chamber of Economy Polish Waterworks

#### 5.4 Work package budget

Work package budget

20%

#### 5.5 Target groups

2

3

#### Target group

#### Local public authority

We will focus on local government units responsible for the maintenance of green and recreational areas in cities and departments supervising infrastructure and providers of public services. Representatives of this target group are not numerous, which is the best proof of how much there is to do in building awareness. We want to reach them through operators and local organizations like PP3 and PP13. This group should be presented with ready-made solutions.

460 / 500 characters

#### How do you plan to reach out to and engage the target group?

The relevant stakeholders will be mapped with the help of all project partners. The relevant stakeholders will receive information about the project and its goals, and they will be invited to join dialogue sessions, where their needs and the solutions the project can offer, will be discussed. In locations where pilots exists, visiting trips will be organised.

The awareness of the project and links to project handbook and IT tool will be made available by distributing the message via associations of local and regional authorities in partnering countries, and with direct emails to mapped stakeholders. A Q&A set of what kind of challenges the project can help municipalities to tackle will be published in the website, and when the pilots are running, a film/films will be created with a perspective of municipality.

825 / 1,000 characters

#### Infrastructure and public service provider

The infrastructure and public service providers' (IPS) activities are closely related to the local public authorities. Wastewater treatment plant operators are the most significant target group because they have the infrastructure and competencies to build solutions for water recovery. In the consortium, they come from Denmark, Poland, and Latvia. Thanks to the interest groups and Associated Organisations, we want to cover more BSR countries (Estonia, Lithuania, Finland, Germany).

486 / 500 characters

The relevant stakeholders will be mapped with the help of all project partners. The relevant stakeholders will receive information about the project and its goals, and they will be invited to join dialogue sessions, where their needs and the solutions the project can offer, will be discussed. In locations where pilots exists, visiting trips will be organised.

Industry events will be attended and industry networks used to increase the awareness of the project. International/national information seminars will be organised. The links to the project handbook and IT tool will be made known by the stakeholders via their networks and via direct emails to mapped stakeholders. They will also benefit from mentoring progamme through active participation (open recruitment on equal terms) result will be jointly prepared action plans for those solution implementation in their units.

883 / 1,000 characters

#### Small and medium enterprise

SMEs cover a wide range of stakeholders. However, we want to focus on two core groups: technology providers such as Schwander (Poland) and leisure operators - hotels, golf courses, ski areas, tourist regions associations etc. Reaching SMEs is possible thanks to interest groups and business organizations (Poland, Lithuania, Finland). SMEs are essential for promoting business solutions based on the closure of local water circuits - a practical expression of the circular economy concept.

SMEs are interested in taking advantage of the possibility of offering full-scale solutions to interested end-users. However, hotel operators, golf course owners, and leisure owners/managers must be provided with business solutions. That is why we will provide not only technical solutions but also guidelines and IT tools. The relevant stakeholders will be mapped with the help of all project partners and they will receive information about the solutions. They will be invited to join dialogue sessions. In pilots' locations, technical site visits will be organized. A film/animation from the perspective of SMEs will be created.

Industry events will be attended and industry networks used to increase the awareness of the project. International/national information seminars will be organized. The links to the project handbook and IT tool will be made known by the stakeholders via their networks and via direct emails to mapped stakeholders.

489 / 500 characters

948 / 1,000 characters



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#### Target group How do you plan to reach out to and engage the target group? Interest group We want to focus on Interest Group (IG) throughout the BSR, as building awareness and knowledge about the advantages We will establish with Interest Groups their knowledge and concerns about water reuse. We will and disadvantages of water reuse is crucial. We have a consult with them on the scope and form of the IT tool and the scope of the guidelines, in the significant representation of IG (and one NGO) among our context of their interest. partners, including Centrum Balticum, IGWP, Kuopio Water Cluster (from Savonia ecosystem), Klaipeda, and Siauliai 216 / 1.000 characters chambers of commerce. Among the Associated Organizations is WWF (NGO), with whom we will work closely. 445 / 500 characters

#### 5.6 Activities, deliverables, outputs and timeline

No.	Name
3.1	Transfering solutions - communication, activities and tools
3.2	Conducting survey analysis to measure and expand awareness
3.3	Developing and implementing a mentoring programme "Safe Water"

#### WP 3 Group of activities 3.1

#### 5.6.1 Group of activities leader

Group of activities leader PP 2 - Centrum Balticum Foundation

A 3.1

#### 5.6.2 Title of the group of activities

Transfering solutions - communication, activities and tools

59 / 100 characters

#### 5.6.3 Description of the group of activities

To introduce the solutions piloted in WP2 we need to elaborate and realize a communication plan with appropriate materials, and tools for target groups. Classic tools such as presentation templates, short films from pilots, animations, and materials for social media will be prepared. The communication plan will also include guidelines on how to interact with local, national, and transnational target groups.

Successful transfer of solutions requires interaction with the target groups. Interaction can aim to educate, raise awareness and change attitudes among target groups. With the help of partners in countries in question, the local government authorities and public infrastructure and services providers will be informed about the benefits of local water reuse.

Local workshops will be organized to build awareness of local authorities. Local opinion-makers will be invited to participate. The workshop will be an opportunity to clarify doubts by presenting the benefits of pilots. Workshops will be organized at the pilots' sites.

We will also connect infrastructure operators and local authorities from different regions, but with similar problems and challenges. The survey results from A 3.2 will be used to link stakeholders. We will advice infrastructure operators on how to build educational paths.

SMEs will be invited to workshops to exchange good practices among entrepreneurs, and present cost-benefits analysis (IT tool). They will also be informed (workshops, handbook, IT tool) about business models in the process of water reuse (holiday homes, ski lifts, agritourism farms, hotels, car washes).

Target groups will be informed about IT tool and the Handbook thanks to mailings, workshops, and social media. We will also collaborate with associated partners to use their networks in transferring solutions.

We plan to interest selected business groups (SMEs), such as hotels, ski resorts, and golf course operators. An important element in disseminating knowledge about safe water recovery will be the IT tool (WP2), which will enable operators to provide an overall assessment of the benefits of developing a water recovery business. Building partnerships will also be an important element of the activities. The results of the survey will make it possible to identify stakeholders from various target groups, that

Thematic workshops and dialogue sessions will be organized by project partners (physical and online).

can perfectly complement each other in building solutions based on the results of WP2.

We plan to organize a workshop dedicated to all locations. In addition, we will organize a conference on the handbook and IT tool.

The Communication plan includes development of Communication products indicated in the Call & contributions to an EU-wide or European Commission's event and campaign.

2.829 / 3.000 characters

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



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**Project Number:** 

Project Version Number: 1

O 3.1

#### Title of the output

Transferred solutions - final report

36 / 100 character

#### Description of the output

The purpose of this output is to provice the holistic knowledge generated during the project. This will be the final output of the project that will make it possible to evaluate the effectiveness of the entire project, all deliverables, and previous outputs. This output combines all the developed deliverables and will indicate the number and types of stakeholders involved in the project. The output will consist of a description of the communication plan and its implementation. It will contain information about the implementations undertaken by stakeholders, their plans, needs, successes, and barriers that they did not overcome. Thanks to this, a base will be created for further actions and improvements in order to promote safe water. reuse. The output will be an assessment of the quality of the outputs made in WP2 i.e. Handbook and IT tool. Thanks to transferring solutions, it will be possible to recommend changes to the Handbook and IT tool, plan improvements so that the tools developed in WP2 are interesting and useful for as many stakeholders as possible.

The output will show how entities from different countries and different target groups were involved.

1.176 / 3.000 characters

#### Target groups and uptake of the solution presented in this output

#### **Target groups**

## Target group 1 Local public authority

We will focus on local government units responsible for the maintenance of green and recreational areas in cities and departments supervising infrastructure and providers of public services. Representatives of this target group are not numerous, which is the best proof of how much there is to do in building awareness. We want to reach them through operators and local organizations like PP3 and PP13. This group should be presented with ready-made solutions.

How will this target group apply the output in its daily work?

This output is dedicated to all target groups. This target group will receive an IT tool for self-assessment, and determination of the state of knowledge, competencies, and needs. Local authorities will be encouraged to use the IT tool. Moreover, ready solutions and guidelines will be presented to local governments as ready for implementation. During WP3, we want to encourage several local governments to start the implementation process.

442 / 1,000 characters

#### Target group 2

Infrastructure and public service provider

The infrastructure and public service providers' (IPS) activities are closely related to the local public authorities. Wastewater treatment plant operators are the most significant target group because they have the infrastructure and competencies to build solutions for water recovery. In the consortium, they come from Denmark, Poland, and Latvia. Thanks to the interest groups and Associated Organisations, we want to cover more BSR countries (Estonia, Lithuania, Finland, Germany).

This output is dedicated to all target groups. Infrastructure and public service providers need information about solutions in order to build solutions for water recovery.

172 / 1,000 characters



Project Acronym: ReNutriWater Submission Date : 25/04/2022 17:36:32

5.6.7 This deliverable/output contains productive or infrastructure investment

Project Number:

Project Version Number: 1

Target groups	How will this target group apply the output in its daily work?	
Target group 3		
Small and medium enterprise		
SMEs cover a wide range of stakeholders. However, we want to focus on two core groups: technology providers such as Schwander (Poland) and leisure operators - hotels, golf courses, ski areas, tourist regions associations etc. Reaching SMEs is possible thanks to interest groups and business organizations (Poland, Lithuania, Finland). SMEs are essential for promoting business solutions based on the closure of local water circuits - a practical expression of the circular economy concept.	This output is dedicated to all target groups. SMEs need information about solutions in order to create and develop their business solutions.	
	142/1,000 characters	
Target group 4		
Interest group		
We want to focus on Interest Group (IG) throughout the BSR, as building awareness and knowledge about the advantages and disadvantages of water reuse is crucial. We have a significant representation of IG (and one NGO) among our partners, including Durabity թուշարին WP, Kuopio Water Cluster	This output is dedicated to all target groups. Awareness building of Interest groups is needed in order to present them advantages and disadvantage of water reuse, and to avoid resistance based on incorrect facts.	
the project duration. The website with IT tool will be supe MEERI PAS PP-5, IGWP - PP1, Schwander). This Tool will be presented during the dissemination even The link to WaterSafe IT Tool will be shared to all member maintained in Kuopio Water Cluster server for at least 10	ers of target groups networks (defined in WP1) and further stakeholders (defined in WP3). IT tool will be hosted a years. 2. All project partners will engage in communication activities and events with their local stakeholders.	
	951 / 1,000 cł	haracte
5.6.6 Timeline		
F	Period: 1 2 3 4 5 6	
WP.3: WP3 Transferring solutions	da. al.	
A.3.1: Transferring solutions - communication, activities and	J TOOIS	

80/96



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WP 3 Group of activities 3.2

5.6.1 Group of activities leader

Group of activities leader | PP 1 - Chamber of Economy Polish Waterworks

A 3.2

5.6.2 Title of the group of activities

Conducting survey analysis to measure and expand awareness

58 / 100 characters

#### 5.6.3 Description of the group of activities

This group of activities will involve more stakeholders by building their awareness. The survey will have modules depending on the Target group.

Based on the results in the WP2, we want to engage more stakeholders in the activities resulting in closing local water circuits. The aim of the survey is to reach target groups from solutions as widely as possible. For this, target groups need to be aware of the issue of water reuse. Online questions will be prepared within this group of activities. The questions will be tailored to each target group. Popularization and distribution of the survey will be carried out by partners, especially interest groups and business support organizations, mailing, information during meetings and workshops. The results of the survey will be used to create a list of stakeholders potentially interested in solutions. Respondents may be also Marketing Qualified Leads for SMEs. This deliverable will contribute to the output "Transferred solutions - final report."

All partners will be involved in this activity. The awareness of water recovery will also strengthen the need to use the IT tool and Handbook.

1.144 / 3.000 characters

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

V

D 3.2

Title of the deliverable

Awareness survey - report

25 / 100 characters

#### Description of the deliverable

Based on the work on activity WP2 with local target groups, further identification and definition of national and transnational target groups will be provided. The survey will be carried out in the final phase of the project, when solutions from pilots in WP2 are already developed. The survey aims to expand target groups to include entities that need to start water reuse education from the very beginning. Thanks to the survey, we will build new capacities, and also obtain information about the lack of knowlegde and the needs of target groups. So we will obtain information from local governments and infrastructure operators about the barriers that prevent them from developing water reuse solutions. The survey will also provide information about doubts and questions the target groups have and which we will address with project communication (WP3.1.). Thanks to the survey, we will obtain a database of stakeholders who are looking for partners in other BSR locations. It will be an opportunity to revive international cooperation. The result of the survey will help to direct the activities in the last period (6) of the project to the target groups most in need.

All partners will be involved.

1,205 / 2,000 characters

#### Which output does this deliverable contribute to?

O 3.1 Transferred solutions - final report

42 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

#### WP.3: WP3 Transferring solutions

A.3.2: Conducting survey analysis to measure and expand awareness

D.3.2: Awareness survey - report

5.6.7 This deliverable/output contains productive or infrastructure investment



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Project Number:

Project Version Number: 1

WP 3 Group of activities 3.3

5.6.1 Group of activities leader

Group of activities leader PP 5 - Mineral and Energy Economy Research Institute of the Polish Academy of Sciences

A 3.3

5.6.2 Title of the group of activities

Developing and implementing a mentoring programme "Safe Water"

62 / 100 characters

#### 5.6.3 Description of the group of activities

Objective of this activity is to develop the mentoring programme that will support the representatives of target groups in assessing the possibility of implementing the selected technological water reuse solution (evaluated in pilots) and its implementation in their organisation and will support the development of action plan for those solution implementation in their units. The objectives of the monitoring programme will be:

- directing participants to the areas of water recovery and nutrients that can be implemented in their local territory,
- stimulating the creativity for participants,
- familiarising participants with the specifics of building new business models focused on implementing sustainable and circular solutions,
- raise awareness of water reuse and the importance of water,
- popularisation of the project results,
- assistance in the implementation of water reuse solutions in the organisations target groups.

In the first stage, the assumptions of the mentoring programme will be proposed (scope, specific objectives, timetable will be determined, etc.). Then, the possible participants will be defined based on the results of the WP1.2 (members of target groups networks) and WP3.2 (further representatives of target groups in BSR). Then, the recruitment for the mentoring program will be carried out (the time frame will be determined, the selection committee, the number of possible participants will be determined depending on the number of identified target groups in WP1.2 and WP3.2. The recruitment will be carried out using the project's website. Project participants, both representing regular partners and associated partners, will be mentors in the mentoring programme. The course of the programme will include a minimum of 4 individual Mentee mentoring sessions (target groups) with Mentors; 2 workshops for Mentees devoted to conscious planning of the implementation of water reuse technologiies in the region; 2 substantive workshops for Mentors, supporting methodically conducting mentoring processes and building an effective relationship with Mentee; remote interventions for Mentors addressing current issues arising in the processes; a joint meeting of all Mentors and Mentees in the middle of the programme; Inauguration and completion of the Program; moderated networking sessions supporting building relationships between Program participants; access to substantive materials (Handbook, IT Tool, description of pilots, procedural documents); a diploma confirming participation in the program for Mentees.

The result of the programme for Mentees will be a developed action plan for their organisation aimed at implementing a water reuse solution along with an analysis of the sustainable and circular business model. This is a supporting activity for the IT tool developed in WP2.

2,832 / 3,000 characters

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

V

D 3.3

#### Title of the deliverable

Mentoring programme "Safe Water" for target groups

51 / 100 characters

#### Description of the deliverable

The purpose of the "Safe Water" mentoring programme is to develop the competences of employees of target gropus, based on the transferred knowledge and sharing experience by representatives of project partners, while building a partnership relationship. This mentoring programme will help the target groups to prepare an action plan dedicated to implementation of water reuse solutions in their organisations, with the support of the project partners (regular and accosiated). This deliverable will include the description of mentoring programme, roles & resonsibilities of project partners (Mentors and coordinators, and selection committee) and participants in mentoring programme (mentees - representatives of target groups). It will also include the list ans short description of the action plans developed by the target groups during the programme. This deliverable will be integral part of the last project output "O 3.1 Transferred solutions - final report", which will show the effectiveness of the entire project.

1,023 / 2,000 characters

#### Which output does this deliverable contribute to?

O 3.1 Transferred solutions - final report

42 / 100 characters

5.6.6 Timeline

Period: 1 2 3 4 5 6

#### WP.3: WP3 Transferring solutions

A.3.3: Developing and implementing a mentoring programme "Safe Water"

D.3.3: Mentoring programme "Safe Water" for target groups



5.6.7 This deliverable/output contains productive or infrastructure investment



#### 6. Indicators

#### Indicators

Total target value in	Project outputs	Please explain how the solution presented in this output serves the	Result indicator	Total	Please explain how organisations in the target
number		target group(s).	mulcator	target value in number	groups within or outside the partnership will take up or upscale each solution.
3	N/A	N∕A			The variety of needs and ideas of target groups will be used to enrich solutions. As a result of workshops, consultations, and surveys, we will reach stakeholder from outside the project partners. They will be able to express themselves, exchange opinions, and observe the course of the pilot work.  Due to the implementation of the EU Green Deal
	O.2.4: WaterSafe IT Tool	The purpose of the WaterSafe IT Tool is to serve the knowledge of how much different measures and technological solutions would cost and how much money and resources they can save for units that would like to implement the water reuse methods. This IT tool will support national, regional, and local organizations across BSR that work with local governments, municipalities, sewage treatment plant operators, SMEs to improve their environmental performance, helping them to become more resource (including water) efficient.	RCR 104 - Solutions taken up or up-scaled by organisations	3	Strategy for the entire EU, organisations in the BSR must also participate in the green transformation. One of most important challenges is the implementation of sustainable water and raw materials management practices (especially critical raw materials for the EU, such as phosphorus), therefore these organisations need the results of the project - tested water and nutrients reuse technologies, as well as tools that will allow to assess which technological solution is the most recommended for them (self-assessment IT too and sustainable and circular business models that the will be able to successfully implement.  Moreoever, a handbook with a description of how to make a risk analysis will be obligatory for all treatment plants and water intakes.  Moreover, thanks to the mentoring programme, the
3	O.2.5: Handbook on safe water reuse	The handbook is a collection of solutions developed during the project. It is a compendium of knowledge on how to safely develop water reuse for the benefit of local communities, waters, and the Baltic Sea protection. It shows the possibility of safely adjusting water quality to the needs without losing valuable substances.  From this result of the project, organisations will be able to directly take proposals for water reuse technologies, choose the business model that will be most suitable for them, as well as familiarise themselves with the risk assessment procedure, which will be obligatory throughout the EU for sewage and water treatment plants in the coming years.			representatives of target groups will have the individuactions plans dedicated to implementation of water reuse solutions in their organisations, which can be directly used to upscale each solution (implement water reuse solutions).  1,443/2,000 characteristics and the control of the contro
	3	O.2.4: WaterSafe IT Tool  O.2.5: Handbook on safe water reuse	The purpose of the WaterSafe IT Tool is to serve the knowledge of how much different measures and technological solutions would cost and how much money and resources they can save for units that would like to implement the water reuse methods. This IT tool will support national, regional, and local organizations across BSR that work with local governments, municipalities, sewage treatment plant operators, SMEs to improve their environmental performance, helping them to become more resource (including water) efficient.  The handbook is a collection of solutions developed during the project. It is a compendium of knowledge on how to safely develop water reuse for the benefit of local communities, waters, and the Baltic Sea protection. It shows the possibility of safely adjusting water quality to the needs without losing valuable substances.  From this result of the project, organisations will be able to directly take proposals for water reuse technologies, choose the business model that will be most suitable for them, as well as familiarise themselves with the risk assessment procedure, which will be obligatory throughout the EU for sewage and water treatment plants in the coming years.	The purpose of the WaterSafe IT Tool is to serve the knowledge of how much different measures and technological solutions would cost and how much money and resources they can save for units that would like to implement the water reuse methods. This IT tool will support national, regional, and local organizations across BSR that work with local governments, municipalities, sewage treatment plant operators, SMEs to improve their environmental performance, helping them to become more resource (including water) efficient.  The handbook is a collection of solutions developed during the project. It is a compendium of knowledge on how to safely develop water reuse for the benefit of local communities, waters, and the Baltic Sea protection. It shows the possibility of safely adjusting water quality to the needs without losing valuable substances. From this result of the project, organisations will be able to directly take proposals for water reuse technologies, choose the business model that will be most suitable for them, as well as familiarise themselves with the risk assessment procedure, which will be obligatory throughout the EU for sewage and water treatment plants in the coming years.	The purpose of the WaterSafe IT Tool is to serve the knowledge of how much different measures and technological solutions would cost and how much money and resources they can save for units that would like to implement the water reuse methods. This IT tool will support national, regional, and local organizations across BSR that work with local governments, municipalities, sewage treatment plant operators, SMEs to improve their environmental performance, helping them to become more resource (including water) efficient.  The handbook is a collection of solutions developed during the project. It is a compendium of knowledge on how to safely develop water reuse for the benefit of local communities, waters, and the Baltic Sea protection. It shows the possibility of safely adjusting water quality to the needs without losing valuable substances. From this result of the project, organisations will be able to directly take proposals for water reuse technologies, choose the business model that will be most suitable for them, as well as familiarise themselves with the risk assessment procedure, which will be obligatory throughout the EU for sewage and water treatment plants in the coming years.



Output indicators	Total target value in number	Project outputs	Please explain how the solution presented in this output serves the target group(s).
		O.3.1: Transferred solutions - final report	This will be the final output of the project that will make it possible to evaluate the effectiveness of the entire project, all deliverables, and previous outputs. Thanks to this, a base will be created for further actions and improvements in order to promote safe water. reuse. The output will show how entities from different countries and different target groups were involved. So it will consist of a database to use in future activities of Interest groups.



Output indic	ators			R	esult indicators
Output indicator	Total target value in	Result indicator	Total target value in number	Explain how this	t types of organisations are planned to actively participate in the project. sparticipation will increase their institutional capacity. These types of buld be in line with the target groups you have defined for your project.
	number				The project partners represent the Infrastructure and public service providers' target group, which shows local authorities what can be done with water and
RCO 87 - Organisations cooperating across borders	35			Project partners and associated organisations	how to close local water circuits. Therefore, local public authorities and the Infrastructure and public service providers are involved. There is one SME in the consortium, but thanks to the Interest group, business support organizations, and associated organizations, we will reach more of them. The interest group and business support organizations are crucial in building awareness and competence.
		PSR 1 - Organisations with increased institutional capacity due to their participation in	150		Other organisations include also members of the advisory board (associated organisations) from non-research organisations (including ministries, NGOs, intereted groups, etc.) that will support the project implementation by sharing the knowledge and assistance in advisory activities. By participating in meetings in target group networks, they will be able to increase their knowledge themselves through exchange with other target groups, as well as by sharing the preliminary results of the project with them. They will further disseminate the knowledge and skills gained in this project to their contacts, at home and abroad. Thanks to their participation in the project, they will also expand the network of contacts and will participate in the international network dedicated to sustainable anc circular water-nutrient management.
		cooperation activities across			1,393 / 1,500 characters
		borders		Other organisations	The higher education and research institutions will support pilots with experience and knowledge, shared during the several events organised as the part of the project, as well as provider of technical support for experiments. They will provide an analytical infrastructure and competencies in managing pilots. Moreover, they often combine the issues of scientific development with business implementations.  They will be invited to the workshops and other events organised during the project. They will have opportunity to participate in target groups networks and share their technical and non-technical knowledge. Thanks to the new networks of contacts and participation in target groups networks, they will extend their institutional capacity - their experts will extended knowledge and skills, which will allow them to participate in subsequent projects as experts.
					871 / 1,500 characters



7. Budget	
7.0 Preparation costs	
Preparation Costs	
Nould 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	No
his project application?	



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

No. & role	Partner name	Partner status	CAT0	CAT1	CAT2
			Preparation costs	Staff	Office & administration
1 - LP	Chamber of Economy Polish Waterworks	Active 22/09/2022	3,000.00	217,040.00	32,556.00
2 - PP	Centrum Balticum Found ation	Active 22/09/2022	3,000.00	201,240.00	30,186.00
3 - PP	Klaipeda Chamber of Co mmerce Industry and Cra fts	Active 22/09/2022	1,000.00	113,520.00	17,028.00
4 - PP	University of Latvia	Active 22/09/2022	2,000.00	206,400.00	30,960.00
5 - PP	Mineral and Energy Econ omy Research Institute o f the Polish Academy of Sciences	Active 22/09/2022	3,000.00	204,621.00	30,693.15
6 - PP	Savonia University of App lied Sciences Ltd.	Active 22/09/2022	3,000.00	280,250.00	42,037.50
7 - PP	Warsaw University of Te chnology	Active 22/09/2022	2,000.00	207,210.00	31,081.50
8 - PP	Samsø Municipality	Active 22/09/2022	1,000.00	76,856.00	11,528.40
9 - PP	Schwander	Active 22/09/2022	1,000.00	55,775.10	8,366.27
10 - PP	Municipal Water and Sew erage Company in Warsa	Active 22/09/2022	1,000.00	139,401.00	20,910.15
11 - PP	Samsø Wastewater Utilit y	Active 22/09/2022	1,000.00	42,711.00	6,406.65
12 - PP	Jurmala Water Utility (Jur malas udens Ltd.)	Active 22/09/2022	1,000.00	150,000.00	22,500.00
13 - PP	Siauliai Chamber of Commerce, Industry and Crafts	Active 22/09/2022	1,000.00	126,000.00	18,900.00
14 - PP	VNK serviss, Ltd.	Active 22/09/2022	1,000.00	80,254.83	12,038.22
Total			24,000.00	2,101,278.93	315,191.84



No. & role	Partner name	CAT3 - Travel & accommodation	CAT4 - External expertise & services	CAT5 - Equipment	Total partner budget
1 - LP	Chamber of Economy Pol	32,556.00	18,600.00	15,400.00	319,152.00
2 - PP	Centrum Balticum Found	30,186.00	42,998.00	3,000.00	310,610.00
3 - PP	Klaipeda Chamber of Co	17,028.00	23,800.00	0.00	172,376.00
4 - PP	University of Latvia	30,960.00	18,500.00	29,000.00	317,820.00
5 - PP	Mineral and Energy Econ	30,693.15	27,500.00	0.00	296,507.30
6 - PP	Savonia University of App	42,037.50	50,000.00	80,200.00	497,525.00
7 - PP	Warsaw University of Te	31,081.50	10,500.00	37,000.00	318,873.00
8 - PP	Samsø Municipality	11,528.40	9,507.20	0.00	110,420.00
9 - PP	Schwander	8,366.27	3,000.00	61,000.00	137,507.64
10 - PP	Municipal Water and Sew	20,910.15	108,447.00	108,654.00	399,322.30
11 - PP	Samsø Wastewater Utilit	6,406.65	5,896.00	9,568.80	71,989.10
12 - PP	Jurmala Water Utility (Jur	22,500.00	110,000.00	184,000.00	490,000.00
13 - PP	Siauliai Chamber of Com	18,900.00	64,500.00	4,100.00	233,400.00
14 - PP	VNK serviss, Ltd.	12,038.22	34,600.00	31,800.00	171,731.27
Total		315,191.84	527,848.20	563,722.80	3,847,233.61



#### 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. Chamber of Eco	Specialist support	CAT4-PP1-E-0	management support	No	N/A	5,200.00
			18 / 100 characters			
2. Centrum Balticu	Communication	CAT4-PP2-C-0	video/animations etc. digital communication  44/100 characters	No	1.1 1.2 1.3 1.4 1.5 2.1 2.2 2.3 2.4 2.5 3.1 3.2	16,000.00
2. Centrum Balticu	Events/meetings	CAT4-PP2-A-0	technical support on international digital information sessions  63/100 characters	No	1.4 1.5 2.1 2.2 2.3 2.4 2.5 3.1 3.2	9,166.60
11. Samsø Wastew	Specialist support	CAT4-PP11-E-	support to organise and control the pilot during WP2	No	2.1 2.2 2.3	5,896.00
8. Samsø Municipali	Specialist support	CAT4-PP8-E-0	support in pilot development 28/100 characters	No	2.1 2.2 2.3	9,507.20
2. Centrum Balticu	Events/meetings	CAT4-PP2-A-0	face-to-face events,	No	3.1	9,831.40
			information seminars, support to dialogue sessions etc.		3.2	
1 Chambar of E-	Communication	CATA DD4 C C	communication with Polish	No	2.1	2,100.00
1. Chamber of Eco	CONTINUINGALION	CAT4-PP1-C-0	communication with Polish stakeholders: press, mailing, internet	INU	3.1	2,100.00
3. Klaipeda Chamb	Specialist support	CAT4-PP3-E-0	External expert support in conducting the questionnaire	No	3.1 3.2	3,000.00
			and in-depth interviews			



Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
1. Chamber of Eco	Events/meetings	CAT4-PP1-A-0	2 meetings selected partners during WP2 (room, equipment)	No	2.1 2.2 2.3	2,100.00
5. Mineral and Ener	Specialist support	CAT4-PP5-E-1	External support in conducting the questionnaire and in-depth interviews	No	1.1	15,500.00
13. Siauliai Chambe	Specialist support	CAT4-PP13-E-	experts to training of stakeholders and decissionmakers,	No	1.1 1.2 1.4	6,000.00
			conducting the questionnaire, interviews  97/100 characters		3.1	
4. University of Latv	Events/meetings	CAT4-PP4-A-1	Project management meetings, conferences, workshops	No	1.1 2.1 2.2 3.1	18,500.00
5. Mineral and Ener	Events/meetings	CAT4-PP5-A-1	Organisation of local target groups meetings (6 in total, one per semester)	No	1.2	12,000.00
7. Warsaw Universi	Events/meetings	CAT4-PP7-A-1	meeting with project partners during WP1 (final framework discussion)	No	1.3	1,200.00
7. Warsaw Universi	Specialist support	CAT4-PP7-E-1	translations  12 / 100 characters	No	1.3 2.1 2.3	3,500.00
10. Municipal Water	Events/meetings	CAT4-PP10-A-	face-to-face events, information seminars, conferences, local authority meeting	No	1.3 2.1 2.2	9,523.00
1. Chamber of Eco	Specialist support	CAT4-PP1-E-1	data management, technology assessment	No	1.4	9,200.00
	Communication	CAT4-PP10-C-	38 / 100 characters	No	2.1	7,142.00
10. Municipal Water			12 / 100 characters			



Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
10. Municipal Water	Other	CAT4-PP10-G-	Specialized sample testing for micropollutants and toxins	No	2.1	87,021.00
10. Municipal Water	IT	CAT4-PP10-B-	running social media 20/100 characters	No	2.1	4,761.00
6. Savonia Universit	Other	CAT4-PP6-G-2	External laboratory services (external sample validation)  57/100 characters	No	2.1 2.2 2.3	25,000.00
6. Savonia Universit	Other	CAT4-PP6-G-2	Advanced sample characterisation including selected micro-pollutants. Average cost 200 EUR/sample.	No	2.1 2.2 2.3	25,000.00
14. VNK serviss. Lt	Other	CAT4-PP14-G-	External laboratory services (external sample validation). Average cost 200 EUR/sample.	No	2.1 2.3	21,600.00
			87 / 100 characters			
9. Schwander	Other	CAT4-PP9-G-2	External laboratory services  28 / 100 characters	No	2.2	3,000.00
3. Klaipeda Chamb	Events/meetings	CAT4-PP3-A-2	Meetings with stakeholders, local information seminars, dialogue sessions.	No	3.1	7,800.00
13. Siauliai Chambe	Communication	CAT4-PP13-C-	74/100 characters  communication campaigns: TV, press, social networks influencers	No	3.1 3.2	20,000.00
13. Siauliai Chambe	Events/meetings	CAT4-PP13-A-	events, information seminars, support to dialogue sessions: venue, promotional items	No	3.1 3.2	20,000.00
13. Siauliai Chambe	Other	CAT4-PP13-G-	85 / 100 characters travels of decisionmakers to pilot places	No	3.2	8,500.00
2. Centrum Balticu	Communication	CAT4-PP2-C-2	external visual/ad work for the presentation materials, reports etc.	No	3.2	8,000.00
			69 / 100 characters			
	Tatal					FOT 0 : 2 52
	Total					527,848.20



Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
3. Klaipeda Chamb	Communication	CAT4-PP3-C-3	Promotion of project material via SoMe, digital communication, press	No	3.2	7,000.00
13. Siauliai Chambe	Specialist support	CAT4-PP13-E-	Handbook, IT tool, other translation	No	3.2	5,000.00
13. Siauliai Chambe	National control	CAT4-PP13-F-	audit 6/100 characters	No	WA	5,000.00
3. Klaipeda Chamb	National control	CAT4-PP3-F-3	First level controller (audit) cost	No	WA	6,000.00
			35 / 100 characters			1
14. VNK serviss. Lt	Communication	CAT4-PP14-C-	Digital communication, press releases, representation materials.	No	2.3	3,000.00
			64 / 100 characters			
12. Jurmala Water	Other	CAT4-PP12-G-	sampling, necessary accessories, expert support and other	No	2.1 2.2 2.3	40,000.00
			57 / 100 characters			
12. Jurmala Water	Communication	CAT4-PP12-C-	materials for preparation environmental education, public information, project publicity	No	2.4 2.5 3.1 3.2	50,000.00
12. Jurmala Water	Other	CAT4-PP12-G-	transportation of reused water	No	2.1 2.2 2.3	20,000.00
			30 / 100 characters			
7. Warsaw Universi	Other	CAT4-PP7-G-3	service and calibration of equipment used in pilots	No	2.1	5,000.00
		_	52 / 100 characters			
7. Warsaw Universi	Other	CAT4-PP7-G-3	samples external transportation	No	2.1	800.00
1			31 / 100 characters			1
14. VNK serviss. Lt	Specialist support	CAT4-PP14-E-	support in pilot development  28 / 100 characters	No	2.3	6,500.00
14. VNK serviss. Lt	Other	CAT4-PP14-G-	transportation of reused water	No	2.3	3,500.00
			30 / 100 characters			-
	Total					527,848.20



### 7.1.2 Equipment

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
1. Chamber of Eco	Furniture and fittings	CAT5-PP1-C-0	office furniture to organise a place for the project management office	No	N/A	9,200.00
				[		0.000.00
1. Chamber of Eco	IT hardware and soft	CAT5-PP1-B-0	2xLaptop and software  21/100 characters	No	WA	6,200.00
2. Centrum Balticu	IT hardware and soft	CAT5-PP2-B-0	2xlaptop and software  21/100 characters	No	3.1 3.2	3,000.00
4. University of Latv	Laboratory equipmen	CAT5-PP4-D-0	Laboratory consumables, gases, chemicals	No	2.1	29,000.00
			40 / 100 characters			
13. Siauliai Chambe	Office equipment	CAT5-PP13-A-	Scanner/printer for project staff to implement project management and activities	No	WA	1,100.00
			80 / 100 characters			
13. Siauliai Chambe	IT hardware and soft	CAT5-PP13-B-	2 laptops with software to project staff to implement project management /activities	No	N/A	3,000.00
			85 / 100 characters			
6. Savonia Universit	Other specific equip	CAT5-PP6-H-0	Small components for test- rig construction.	No	2.1 2.2 2.3	50,000.00
			43 / 100 characters			
6. Savonia Universit	Other specific equip	CAT5-PP6-H-0	Laboratory and chemical consumables	No	2.1 2.2 2.3	30,200.00
			35 / 100 characters			
7. Warsaw Universi	Laboratorv equipmen	CAT5-PP7-D-0	Laboratory and chemical consumables	No	2.1	31,400.00
			35 / 100 characters			



Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
7. Warsaw Universi	IT hardware and soft	CAT5-PP7-B-1	2x laptop+software/license+mo nitor 34/100 characters	No	1.3 2.1 2.3 3.1	5,600.00
11. Samsø Wastew	Laboratorv equipmen	CAT5-PP11-D-	equipement needed to build the pilot	No	2.3	9,568.80
9. Schwander	Laboratorv equipmen	CAT5-PP9-D-1	portable analyser needed to test the characteristics of wastewater samples at the pilot site	No	2.2	61,000.00
10. Municipal Water	IT hardware and soft	CAT5-PP10-B-	control and measurement apparatus for the pilot station	No	2.1	35,714.00
10. Municipal Water	Laboratory equipmen	CAT5-PP10-D-	glass and laboratory reagents	No	2.1	5,084.00
10. Municipal Water	Machines and instru	CAT5-PP10-E-	30 / 100 characters  equipement needed to build the pilot  37 / 100 characters	No	2.1	61,904.00
10. Municipal Water	Other specific equip	CAT5-PP10-H-	Laboratory tent with equipment	No	2.1	5,952.00
14. VNK serviss. Lt	Laboratorv equipmen	CAT5-PP14-D-	Portable analyser needed to test the characteristics of wastewater samples at the pilot site	No	2.1 2.2 2.3	12,000.00
14. VNK serviss. Lt	Other specific equip	CAT5-PP14-H-	Laboratory reagents for internal tests, small laboratory equipment	No	2.1 2.2 2.3	16,800.00
14. VNK serviss. Lt	IT hardware and soft	CAT5-PP14-B-	Laptop and software	No	2.1 2.2 2.3	1,500.00
	Total					563,722.80



Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
14. VNK serviss. Lt	Other specific equip	CAT5-PP14-H-	Small components for building up pilot greenhouse.	No	2.3	1,500.00
12. Jurmala Water	Laboratorv equipmen	CAT5-PP12-D-	Facilities, instalation, methods, reagents  42/100 characters	No	2.1 2.2 2.3	184,000.00
	Total					563,722.80

7.1.3 Infrastructure ar	nd works					
Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
Please select	Please select	CAT6-PP01		Please select		0.00
			0 / 100 characters			
	Total					0.00

	ed project budget per	•	•						
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	Chamber of Economy Polish Waterworks	Active 22/09/2022	■ PL	ERDF	80.00 %	319,152.00	255,321.60	63,830.40	For each partner, the State aid
2-PP	Centrum Balticum Foundation	Active 22/09/2022	⊕ FI	ERDF	80.00 %	310,610.00	248,488.00	62,122.00	relevance and applied aid measure are defined in the
3-PP	Klaipeda Chamber of Commerce Industry and Crafts	Active 22/09/2022	<b>■</b> LT	ERDF	80.00 %	172,376.00	137,900.80	34,475.20	State aid section
4-PP	University of Latvia	Active 22/09/2022	<b>=</b> LV	ERDF	80.00 %	317,820.00	254,256.00	63,564.00	
5-PP	Mineral and Energy Economy Research Institute of the Polish Academy of Sciences	Active 22/09/2022	■ PL	ERDF	80.00 %	296,507.30	237,205.84	59,301.46	
Total EF	RDF					3,847,233.61	3,077,786.88	769,446.73	
Total						3,847,233.61	3,077,786.88	769,446.73	



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
6-PP	Savonia University of Applied Sciences Ltd.	Active 22/09/2022	⊕FI	ERDF	80.00 %	497,525.00	398,020.00	99,505.00	
7-PP	Warsaw University of Technology	Active 22/09/2022	■ PL	ERDF	80.00 %	318,873.00	255,098.40	63,774.60	
8-PP	Samsø Municipality	Active 22/09/2022	<b>∷</b> DK	ERDF	80.00 %	110,420.00	88,336.00	22,084.00	
9-PP	Schwander	Active 22/09/2022	■ PL	ERDF	80.00 %	137,507.64	110,006.11	27,501.53	
10-PP	Municipal Water and Sewerage Company in Warsaw	Active 22/09/2022	■ PL	ERDF	80.00 %	399,322.30	319,457.84	79,864.46	
11-PP	Samsø Wastewater Utility	Active 22/09/2022	<b>∷</b> DK	ERDF	80.00 %	71,989.10	57,591.28	14,397.82	
12-PP	Jurmala Water Utility (Jurmalas udens Ltd.)	Active 22/09/2022	<b>≡</b> LV	ERDF	80.00 %	490,000.00	392,000.00	98,000.00	
13-PP	Siauliai Chamber of Commerce, Industry and Crafts	Active 22/09/2022	<b>■</b> LT	ERDF	80.00 %	233,400.00	186,720.00	46,680.00	
14-PP	VNK serviss, Ltd.	Active 22/09/2022	<b>=</b> LV	ERDF	80.00 %	171,731.27	137,385.01	34,346.26	
Total E	RDF					3,847,233.61	3,077,786.88	769,446.73	
Total						3,847,233.61	3,077,786.88	769,446.73	

#### 7.3 Spending plan per reporting period

	EU partne	rs (ERDF)	Total		
	Total	Programme co-financing	Total	Programme co-financing	
Preparation costs	24,000.00	19,200.00	24,000.00	19,200.00	
Period 1	500,000.00	400,000.00	500,000.00	400,000.00	
Period 2	1,000,000.00	800,000.00	1,000,000.00	800,000.00	
Period 3	400,000.00	320,000.00	400,000.00	320,000.00	
Period 4	400,000.00	320,000.00	400,000.00	320,000.00	
Period 5	1,000,000.00	800,000.00	1,000,000.00	800,000.00	
Period 6	523,233.61	418,586.88	523,233.61	418,586.88	
Total	3,847,233.61	3,077,786.88	3,847,233.61	3,077,786.88	