1. Identification

Call	Date of submission
C1	26/04/2022

1.1. Full name of the project

Supporting decarbonised housing and living through energy self-assessment

73 / 250 characters

1.2. Short name of the project

SMARTY

6 / 20 characters

1.3. Programme priority

3. Climate-neutral societies

1.4. Programme objective

3.2 Energy transition

1.6. Project duration

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

1.7. Project summary

The aim of the SMARTY is to provide replicable and feasible solution enabling the energy efficiency by incremental renovation and smart operations in less favourable conditions. The SMARTY web-based toolbox as a gateway serves various socio-energy contexts with less successful roll-out of the policies testing the tool and services as a simple and seamless integrated solution for the self-assessment among households. Households and communities in the Pirkanmaa (FI), Pärnumaa (EE), non-metropolitan Latvia (LV) and Mazovia (PL) and Västernorrland (SE) will test combinations of different modest engineering and operation models, adjusting their performance as a unique self-assessment system, in view of scaling up and wide replication using both physical and virtual advisory system in the framework of One-Stop Shop model. The experimental elements are modelled during the testing. Focus is on tailoring mainstream and innovative technologies as well smart operating in an integrated approach combining support design. The seamless processing and flexible service packages can couple with the appropriate place-based, engineering and socio-economic incentives. A end-user driven and personalised approach will be rolled out for a holistic energy and climate vision signaling not just energy saving but also the carbon footprint. SMARTY co-creates and drives incremental and modest energy improvement in addition to structural, with great focus on wide replication of tool and related services.

1,499 / 1,500 characters

1.8. Summary of the partnership

SMARTY is a strong BSR wide collaboration aligned with the socio-energy bottom-up model and ICT-supported artificial intelligent and Internet of Things applications. In the project, advanced system developers and designers work as developing partners together with energy agencies and local government as implementing partners as well as end-users. Target groups represented by the project partners are homeowners, the real estate companies, energy advisors, municipal authorities and building inspection authorities.
Composition of partners:
SMARTY project consortium has tool design and system developer organizations (TREA, UT, TAMK and RTU) and implementing partners in tool testing, transfer and user organizations (Ecofellows, MIUN, TREA, UT and MAE). There are also associated partners using and transferring the tool on regional and country level. All partners have solid working networks to energy agencies, municipalities, and building authorities.
Competences of partners:
TAMK is SMARTY coordinator with experience of EU framework programme projects including Interreg BSR AREA21. TAMK has a long term experience working in energy efficiency of buildings, energy community development and building code development impact analysis. TAMK is a member of national working group of implementation of EPBD directive.
In SMARTY, TREA brings Interreg AREA21 project solutions expertise and wide experience of several EU framework programme projects. ITREA is networking with energy advisors in Estonia and is ready to full scale implementation of the SMARTY tool.
RTU has a long term experience in practical applications of energy efficiency measures and energy auditing. Also their staff is a part of working group in Ministry of economy in the field of implementation of new EPBD directive and relevant standards.
MAE, Mazovia Energy Agency, has a wide experience in building sector. MAE experts possess competences and all the necessary know-how to perform technical analyses and energy audits concerning energy efficiency in buildings. MAE employees possess long-term experience in the field of international cooperation in the area of energy technologies, innovative financing and sustainable development and participation in EC's programs.
MIUN University has experience to develop an understanding of the driving force the property owners and tenants in the buildings have for doing refitting and energy saving activities. Also consultants and energy advisors are addressed in the project which can influence the results. MIUN will be responsible for surveying and understanding these actors and their behavior in each country with support from all partners.
EcoFellows is a non-profit organisation owned by the city of Tampere with expertise in energy advising and sustainability. They are a part of the European network of Energy Agencies.
University Tartu has experience of the carbon accounting and consumption-based methods and formulas in developing energy advice tools.

2,996 / 3,000 characters

1.11. Project Budget Summary

Financial resources [in EUR]		Preparation costs	Planned project budget
ERDF	ERDF co-financing	0.00	1,514,080.00
	Own contribution ERDF	0.00	378,520.00
	ERDF budget	0.00	1,892,600.00
NO	NO co-financing	0.00	0.00
	Own contribution NO	0.00	0.00
	NO budget	0.00	0.00
NDICI	NDICI co-financing	0.00	0.00
	Own contribution NDICI	0.00	0.00
	NDICI budget	0.00	0.00
RU	RU co-financing	0.00	0.00
	Own contribution RU	0.00	0.00
	RU budget	0.00	0.00
TOTAL	**Total Programme co-financing**	0.00	1,514,080.00
	Total own contribution	0.00	378,520.00
	Total budget	0.00	1,892,600.00

2. Partnership

2.1. Overview: Project Partnership

2.1.1 Project Partners

No.	LP/PP	Organisation (English)	Organisation (Original)	Country	Type of partner	Legal status	Partner budget in the project	Active/inactive	
								Status	from
1	LP	Tampere University of Applied Sciences Ltd	Tampereen ammattikorkeakoulu Oy	FI	Higher education and research institution	a)	445,440.00 €	Active	22/09/2022
2	PP	Tartu Regional Energy Agency	Tartu Regiooni Energiaagentuur	EE	Sectoral agency	a)	231,725.00 €	Active	22/09/2022
3	PP	Riga Technical University	Rīgas Tehniskā universitāte	LV	Higher education and research institution	a)	220,760.00 €	Active	22/09/2022
4	PP	Mazovia Energy Agency	Mazowiecka Agencja Energetyczna Sp. z o.o.	PL	Sectoral agency	a)	164,600.00 €	Active	22/09/2022
5	PP	Mid Sweden University	Mitt Universitetet	SE	Higher education and research institution	a)	366,160.00 €	Active	22/09/2022
6	PP	EcoFellows Ltd	Ekokumppanit Oy	FI	Small and medium enterprise	a)	276,920.00 €	Active	22/09/2022
7	PP	University of Tartu	Tartu Ülikool	EE	Higher education and research institution	a)	186,995.00 €	Active	22/09/2022

2.1.2 Associated Organisations

No.	Organisation (English)	Organisation (Original)	Country	Type of Partner
AO 1	Association of Heat, Gas and Water Technology Engineers of Latvia	Latvijas Siltuma, Gāzes un Ūdens Tehnoloģijas Inženieru Savienība	LV	NGO
AO 2	The Finnish Real Estate Federation Pirkanmaa	Kiinteistöliitto Pirkanmaa	FI	Sectoral agency
AO 3	Association of Local Authorities of Pärnu County	Pärnumaa Omavalitsuste Liit	EE	Regional public authority
AO 4	Rõuge Energy Centre	Rõuge Energiakeskus	EE	Sectoral agency
AO 5	City of Warsaw	Miasto Warszawa	PL	Local public authority
AO 6	Region of Västernorrland	Region Västernorrland	SE	Regional public authority
AO 7	Mazovia Development Agency	Agencja Rozwoju Mazowsza S.A.	PL	Sectoral agency

2.2 Project Partner Details - Partner 1

LP/PP Lead Partner

Partner Status Active

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

Partner name:

Organisation in original language Tampereen ammattikorkeakoulu Oy

31 / 250 characters

Organisation in English Tampere University of Applied Sciences Ltd

42 / 250 characters

Department in original language Rakennettu ympäristö ja biotalous

33 / 250 characters

Department in English School of Built Environment and Bioeconomy

42 / 250 characters

Partner location and website:

Address Kuntokatu 3

11 / 250 characters

Postal Code 33520

5 / 250 characters

Town Tampere

7 / 250 characters

Website www.tuni.fi

11 / 100 characters

Country Finland

NUTS1 code Manner-Suomi

NUTS2 code Länsi-Suomi

NUTS3 code Pirkanmaa

Partner ID:

Organisation ID type Business Identity Code (Y-tunnus)

Organisation ID 1015428-1

VAT Number Format FI + 8 digits

VAT Number N/A ☐ FI10154281

10 / 50 characters

PIC 986178728

9 / 9 characters

Partner type:

Legal status a) Public

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

Sector (NACE) 85.42 - Tertiary education

Partner financial data:

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

Role of the partner organisation in this project:

Tampere University of Applied Sciences Ltd is the Lead Partner (LP) of the SMARTY project. As an LP, TAMK takes the main managerial and financial responsibilities in managing, coordinating and leading the project. TAMK signs the subsidy contract (SC) with the BSR programme authorities as well as the partnership agreement with project partners. TAMK functions as the key contact point towards the MA throughout the project duration, coordinates and submits the content and financing reports of high quality in timely manner as defined in the SC. TAMK is also responsible for the coordination of dissemination and communication activities (both internal and external) and has professional communication and graphical design experts assigned to these tasks. In addition, TAMK leads the WP3 and participates in its activities. In WP1, TAMK takes the responsibility of build up and programming of the self-assessment tool. In WP2 TAMK will make the necessary adjustments to the tool.

980 / 1,000 characters

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

○ Yes ○ No

State aid relevance

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

○ Yes ○ No

2.2 Project Partner Details - Partner 2

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

Partner name:

Organisation in original language	Tartu Regiooni Energiaagentuur (30 / 250 characters)
Organisation in English	Tartu Regional Energy Agency (28 / 250 characters)
Department in original language	n/a (3 / 250 characters)
Department in English	n/a (3 / 250 characters)

Partner location and website:

Address	Narva mnt 3 (12 / 250 characters)	**Country**	Estonia
Postal Code	50009 (5 / 250 characters)	**NUTS1 code**	Eesti
Town	Tartu (5 / 250 characters)	**NUTS2 code**	Eesti
Website	www.trea.ee (11 / 100 characters)	**NUTS3 code**	Lõuna-Eesti

Partner ID:

Organisation ID type	Registration code (Registrikood)
Organisation ID	80292666
VAT Number Format	EE + 9 digits
VAT Number	N/A ☐ EE101576572 (11 / 50 characters)
PIC	965054262 (9 / 9 characters)

Partner type:

Legal status	a) Public	
Type of partner	Sectoral agency	Local or regional development agency, environmental agency, energy agency, employment agency, etc.
Sector (NACE)	71.12 - Engineering activities and related technical consultancy	

Partner financial data:

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

Role of the partner organisation in this project:

TREA will chair the development of the energy assessment tool and contribute in its designing and adaptation (WP1). The TREA's role in the developing and designing the energy tool will be omnipresent. The partner will be involved in testing the solution in various Southern and Western Estonian counties. Also, the integration with the One-Stop Shop in supporting the renovation wave in an effective way will be coordinated by TREA (WP2). TREA staff and networks will be involved in the full-scale implementation of the tool in communities as well using the tool in empowerment of local authorities and energy experts (WP3).

628 / 1,000 characters

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

○ Yes ○ No

State aid relevance

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

○ Yes ○ No

2.2 Project Partner Details - Partner 3

LP/PP Project Partner

Partner Status Active

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

Partner name:

Organisation in original language Rīgas Tehniskā universitāte

28 / 250 characters

Organisation in English Riga Technical University

25 / 250 characters

Department in original language Siltuma inženierijas un tehnoloģijas katedra

45 / 250 characters

Department in English Department of Heat Engineering and Technology

46 / 250 characters

Partner location and website:

Address Meža street 1 k1

16 / 250 characters

Postal Code LV-1048

7 / 250 characters

Town Rīga

4 / 250 characters

Website www.sguti.rtu.lv

17 / 100 characters

Country Latvia

NUTS1 code Latvija

NUTS2 code Latvija

NUTS3 code Rīga

Partner ID:

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

Partner type:

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

Partner financial data:

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

Role of the partner organisation in this project:

RTU will bring expertise in buildings and their engineering systems energy efficiency. RTU staff has a long term experience in practical application of energy efficient measures and energy auditing. Also staff is a part of working group in Ministry of economy in field of implementation of new EPBD directive and relevant standards.
Based on RTU experience, it will responsible for in-depth analysis of existing energy audits methods in project partners countries and testing of alternative solutions.

509 / 1,000 characters

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

○ Yes ○ No

State aid relevance

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

○ Yes ○ No

2.2 Project Partner Details - Partner 4

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

Partner name:

Organisation in original language	Mazowiecka Agencja Energetyczna Sp. z o.o. (42 / 250 characters)
Organisation in English	Mazovia Energy Agency (21 / 250 characters)
Department in original language	n/a (3 / 250 characters)

Department in English n/a

3 / 250 characters

Partner location and website:

Address Nowogrodzka 31/330

18 / 250 characters

Postal Code 00-511

6 / 250 characters

Town Warsaw

6 / 250 characters

Website www.mae.com.pl

14 / 100 characters

Country Poland

NUTS1 code Makroregion województwo mazowieckie

NUTS2 code Warszawski stołeczny

NUTS3 code Miasto Warszawa

Partner ID:

Organisation ID type Tax identification number (NIP)

Organisation ID 1132760903

VAT Number Format PL + 10 digits

VAT Number N/A ☐ PL1132760903

12 / 50 characters

PIC 972351863

9 / 9 characters

Partner type:

Legal status a) Public

Type of partner Sectoral agency

Local or regional development agency, environmental agency, energy agency, employment agency, etc.

Sector (NACE) 71.12 - Engineering activities and related technical consultancy

Partner financial data:

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

Role of the partner organisation in this project:

Mazovia Energy Agency has wide experience in building sector. MAE experts possess competences and all the necessary know how to perform technical analyses and energy audits concerning energy efficiency in buildings. MAE employees possess long-term experience in the field of international cooperation in the area of innovative energy technologies, innovative financing and sustainable development, participation in EC's programs. MAE will contribute to the development of the energy assessment tool (WP1) and will pilot the solution with the integration of OSS in dedicated area in Mazovia (WP2). MAE will also support Consortium in transferring solution to empower all relevant stakeholders and replicate the solution (WP3).

728 / 1,000 characters

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

○ Yes ○ No

State aid relevance

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

○ Yes ○ No

2.2 Project Partner Details - Partner 5

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

Partner name:

Organisation in original language	Mitt Universitetet (18 / 250 characters)
Organisation in English	Mid Sweden University (21 / 250 characters)
Department in original language	Institutionen för Design (24 / 250 characters)
Department in English	Department of Design (21 / 250 characters)

Partner location and website:

Address	Holmgatan 10 (12 / 250 characters)	**Country**	Sweden
Postal Code	S-851 70 (8 / 250 characters)	**NUTS1 code**	Norra Sverige
Town	Sundsvall (9 / 250 characters)	**NUTS2 code**	Mellersta Norrland
Website	www.miun.se (11 / 100 characters)	**NUTS3 code**	Västernorrlands län

Partner ID:

Organisation ID type	Organisation number (Organisationsnummer)
Organisation ID	202100-4524
VAT Number Format	SE + 12 digits
VAT Number	N/A ☐ SE202100452401 (14 / 50 characters)
PIC	999579860 (9 / 9 characters)

Partner type:

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

Partner financial data:

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

Role of the partner organisation in this project:

MIUN is a partner with a role as a tester in WP1, WP2 and WP3 and development support in WP1 and 2. MIUN has one extra task which is to develop an understanding of the driving force the property owners and tenants in the buildings have for doing refitting and energy saving activities . Also consultants and energy advisors are addressed in the project which can influence the result. MIUN will be responsible for these actors and their different behavior in each country with support from all partners. This will be done in WP1 and WP2 under the title development support.

581 / 1,000 characters

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

○ Yes ○ No

State aid relevance

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

○ Yes ○ No

2.2 Project Partner Details - Partner 6

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

Partner name:

Organisation in original language: Ekokumppanit Oy
15 / 250 characters

Organisation in English: EcoFellows Ltd
14 / 250 characters

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

Department in English: n/a
3 / 250 characters

Partner location and website:

Address: Valssipadonraitti 3
19 / 250 characters

Postal Code: 33100
5 / 250 characters

Town: Tampere
7 / 250 characters

Website: ekokumppanit.fi
15 / 100 characters

Country: Finland

NUTS1 code: Manner-Suomi

NUTS2 code: Länsi-Suomi

NUTS3 code: Pirkanmaa

Partner ID:

Organisation ID type	Business Identity Code (Y-tunnus)
Organisation ID	1801748-4
VAT Number Format	FI + 8 digits
VAT Number	**N/A** ☐ FI18017484 (10 / 50 characters)
PIC	936441008 (9 / 9 characters)

Partner type:

Legal status	a) Public	
Type of partner	Small and medium enterprise	Micro, small, medium enterprises < 250 employees, ≤ EUR 50 million turnover or ≤ EUR 43 million balance sheet total
Sector (NACE)	71.12 - Engineering activities and related technical consultancy	

Partner financial data:

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

Role of the partner organisation in this project:

EcoFellows is a non-profit organisation owned by the city of Tampere, with expertise in energy advising and sustainability. EcoFellows Ltd is also part of the European network of Energy Agencies. EcoFellows is a partner with a role as a tester in WP1, WP2 and WP3 and development support in WP1 and 2. EcoFellows will participate in the tool development in WP1 and WP2 with knowledge on energy advising process. Ecofellows will also pilot the tool in WP2 as part of the energy-advising process and collaborating with TAMK in the transfer of the results in WP3.

561 / 1,000 characters

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

○ Yes ○ No

2.2 Project Partner Details - Partner 7

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

Partner name:

Organisation in original language	Tartu Ülikool (13 / 250 characters)
Organisation in English	University of Tartu (19 / 250 characters)
Department in original language	n/a (3 / 250 characters)
Department in English	n/a (3 / 250 characters)

Partner location and website:

Address	Ülikooli 18 (11 / 250 characters)	**Country**	Estonia
Postal Code	50090 (5 / 250 characters)	**NUTS1 code**	Eesti
Town	Tartu (5 / 250 characters)	**NUTS2 code**	Eesti
Website	www.ut.ee (9 / 100 characters)	**NUTS3 code**	Lõuna-Eesti

Partner ID:

Organisation ID type	Registration code (Registrikood)
Organisation ID	74001073
VAT Number Format	EE + 9 digits
VAT Number	N/A ☐ EE100030417 (11 / 50 characters)
PIC	999895013 (9 / 9 characters)

Partner type:

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

Partner financial data:

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

Role of the partner organisation in this project:

UT will contribute in tool's conceptual designing, adding functionalities and smart solutions in WP1. UT will implement the carbon accounting and consumption-based methods and formulas in developing energy tool. UT coordinates the testing in its piloting and regional networks.

283 / 1,000 characters

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

◉ Yes ○ No

State aid relevance

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

○ Yes ◉ No

2.3 Associated Organisation Details - AO 1

Associated organisation name and type:

Organisation in original language
Latvijas Siltuma, Gāzes un Ūdens Tehnoloģijas Inženieru Savienība
65 / 250 characters

Organisation in English
Association of Heat, Gas and Water Technology Engineers of Latvia
65 / 250 characters

Department in original language
n/a
3 / 250 characters

Department in English
n/a
3 / 250 characters

Legal status
a) Public

Type of associated organisation
NGO
Non-governmental organisations, such as Greenpeace, WWF, etc.

Associated organisation location and website:

Address
STIRNU IELA 34
14 / 250 characters

Country
Latvia

Postal Code
1084
4 / 250 characters

Town
Riga
4 / 250 characters

Website
https://www.lsgutis.lv/
23 / 100 characters

Role of the associated organisation in this project:

Association is responsible for certification of energy auditors and actively participates in national initiatives in field of energy efficiency and energy certifications and audits. The members are involved in several working groups on EPBD adoption and implementation in Latvia. In scope of this project, organization will be responsible for project results dissemination among energy auditors, municipalities, ministries and end-users. It will organize seminars and trainings for all interested parties.
508 / 1,000 characters

2.3 Associated Organisation Details - AO 2

Associated organisation name and type:

Organisation in original language
Kiinteistöliitto Pirkanmaa
26 / 250 characters

Organisation in English
The Finnish Real Estate Federation Pirkanmaa
44 / 250 characters

Department in original language
Jäsenneuvonta
13 / 250 characters

Department in English
Membership counseling
21 / 250 characters

Legal status
b) Private

Type of associated organisation
Sectoral agency
Local or regional development agency, environmental agency, energy agency, employment agency, etc.

Associated organisation location and website:

Address
Hallituskatu 11 C
17 / 250 characters

Country
Finland

Postal Code
33200
5 / 250 characters

Town
TAMPERE
7 / 250 characters

Website
https://pirkanmaa.kiinteistoliitto.fi/
38 / 100 characters

Role of the associated organisation in this project:

Kiinteistöliitto Pirkanmaa will transfer the project output to use in 3200 housing owners in Pirkanmaa region. Those owners are Housing Corporations and rental housing real estate companies
189 / 1,000 characters

2.3 Associated Organisation Details - AO 3

Associated organisation name and type:

Organisation in original language
Pärnumaa Omavalitsuste Liit
27 / 250 characters

Organisation in English
Association of Local Authorities of Pärnu County
48 / 250 characters

Department in original language
n/a
3 / 250 characters

Department in English
n/a
3 / 250 characters

Legal status
a) Public

Type of associated organisation
Regional public authority
Regional council, etc.

Associated organisation location and website:

Address
Ringi 35
8 / 250 characters

Country
Estonia

Postal Code
80012
5 / 250 characters

Town
Pärnu
5 / 250 characters

Website
https://pol.parnumaa.ee/defaulten
33 / 100 characters

Role of the associated organisation in this project:

Association of Local Authorities of Pärnu County supports to conceptual design to enhance the pre-assessment of the housing renovation. Also, the association will pre-select the testing in special unfavourable conditions with multiple socio-economic barriers. The association supports raise the quality of support services and implementation of the tool among its member authorities and local communities. In general, the association acts in contributing to the implementation of the renovation strategy of Estonia. The association can ensure the context and engagement in delivering the renovation process.

607 / 1,000 characters

2.3 Associated Organisation Details - AO 4

Associated organisation name and type:

Organisation in original language: Rõuge Energiakeskus
19 / 250 characters

Organisation in English: Rõuge Energy Centre
19 / 250 characters

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

Department in English: n/a
3 / 250 characters

Legal status: a) Public

Type of associated organisation: Sectoral agency

Local or regional development agency, environmental agency, energy agency, employment agency, etc.

Associated organisation location and website:

Address: Ööbikuoru 4
11 / 250 characters

Country: Estonia

Postal Code: 66201
5 / 250 characters

Town: Rõuge
5 / 250 characters

Website: https://rouge.kovtp.ee/en/web/eng/
34 / 100 characters

Role of the associated organisation in this project:

The centre as a local energy agency having 20 years experience in the energy policy and delivering bottom-up action models advises in developing the tool and designing the services. The centre will promote selecting the households in the rural communities for testing. The centre supports the further wider use of the energy tool and services in Southern Estonia. The Rõuge Energy Centre can consult the project team in relation to the rural housing and energy poverty.

471 / 1,000 characters

2.3 Associated Organisation Details - AO 5

Associated organisation name and type:

Organisation in original language: Miasto Warszawa (15 / 250 characters)

Organisation in English: City of Warsaw (14 / 250 characters)

Department in original language: Biuro Infrastruktury (20 / 250 characters)

Department in English: Infrastructure Office (21 / 250 characters)

Legal status: a) Public

Type of associated organisation: Local public authority — Municipality, city, etc.

Associated organisation location and website:

Address: Plac Bankowy 3/5 (16 / 250 characters)

Country: Poland

Postal Code: 00-950 (6 / 250 characters)

Town: Warsaw (6 / 250 characters)

Website: https://um.warszawa.pl/ (23 / 100 characters)

Role of the associated organisation in this project:

Warsaw, like other European cities, faces challenges resulting from climate change. Ensuring the safety of the inhabitants of the capital requires real measures: investments in renewable energy sources and improvement of energy efficiency, especially in building sector. Actions contributing to the greening of Warsaw, saving water resources and the fight for clean air are indispensable. City of Warsaw is interested in SMARTY project outputs and results to integrate them with ongoing activities in term of building sector retrofitting.

540 / 1,000 characters

2.3 Associated Organisation Details - AO 6

Associated organisation name and type:

Organisation in original language: Region Västernorrland (21 / 250 characters)

Organisation in English: Region of Västernorrland (24 / 250 characters)

Department in original language: energikontoret i Västernorrland (31 / 250 characters)

Department in English: regional energy agency of Västernorrland. (43 / 250 characters)

Legal status: a) Public

Type of associated organisation: Regional public authority — Regional council, etc.

Associated organisation location and website:

Address: Storgatan 1 (11 / 250 characters)

Country: Sweden

Postal Code: 871 31 (7 / 250 characters)

Town: Härnösand (9 / 250 characters)

Website: https://www.rvn.se/en (21 / 100 characters)

Role of the associated organisation in this project:

Tester of the tool in WP3 and advisor giving input to the tool in WP2
The region of Västernorrland has many energy advisors which work closely with the municipalities in the region. They will follow the the progress of the project and evaluate the tools delivered.

268 / 1,000 characters

2.3 Associated Organisation Details - AO 7

Associated organisation name and type:

Organisation in original language
Agencja Rozwoju Mazowsza S.A.
29 / 250 characters

Organisation in English
Mazovia Development Agency
26 / 250 characters

Department in original language
n/a
3 / 250 characters

Department in English
n/a
3 / 250 characters

Legal status
a) Public

Type of associated organisation
Sectoral agency
Local or regional development agency, environmental agency, energy agency, employment agency, etc.

Associated organisation location and website:

Address
Świętojerska 9
14 / 250 characters

Country
Poland

Postal Code
00-236
6 / 250 characters

Town
Warsaw
6 / 250 characters

Website
https://www.armsa.pl/
21 / 100 characters

Role of the associated organisation in this project:

The mission of the Agency is to create and support the socio-economic development of Mazovia. ARMSA supports in the implementation and promotion of urban projects in the field of innovation, popularization of the idea of the information society, regeneration and smart specializations implemented in Mazovia. Agency participation will be of key importance in transferring and promoting SMARTY solutions.
403 / 1,000 characters

3. Relevance

3.1 Context and challenge

There is a need in Europe to speed up the energy transition and decarbonisation by the renovation wave. Housing as a demand sector with high potential for energy efficiency is still under-exploited at large and the scale of the task needs to be addressed and contextualised in the shrinking regions. The European Commission's proposal to recast the Energy Performance of Buildings Directive (EPBD) broadens and specifies the reduction of carbon emissions further. The SMARTY concept states that a low carbon future will depend on a mix of technological innovation by introducing new smart systems and improving the performance of technologies and more sustainable behaviours and living modes. Considering the social mix of households, low-carbon technologies and their associated behaviours are not universally equitable and feasible in the real living practices and socio-economic conditions across Baltic Sea Region.
The project calls for a "just energy efficiency first" targeting the regions and communities in the shrinking areas and towns affected by the housing market failure, depreciated housing stock, plus increasingly volatile energy prices. At the end, this inclines more households towards locked-in status and energy poverty. In this sensitive segment, the higher efficiency standards, and the mainstream of deep renovation cause trade-offs in up-scaling the renovation wave. Finding the right balance between enabling renovation without generating unbearable economic burden is a key. The policy implications should move forward not just on innovative high-tech engineering and substantial change in operations though also catch-up energy transition opportunities with technologically incremental progress and the modest change in practices leaving no one behind. Ambitious decarbonisation targets with over-regulating and strong institutionalisation entails the risk of losing feasibility and coherence of measures.

1,934 / 2,000 characters

3.2 Transnational value of the project

The SMARTY fullfills recommendation of the European Commission Assessment of the final national energy and climate plan of Finland, Estonia and Latvia to intensify regional cooperation with Nordic countries and the Baltic States. Also Sweden has recommend to intensify cooperation with Nordic countries. The direct exchange with stakeholders within various workshops as well as the peer visits facilitates the generation of new knowledge about processes of energy advising, -planning and implementation. It stimulates the finding of new solutions for reduction of energy consumption setting the support system. Through the cooperation the project partners are able to test novel process for energy improvements in the partner regions. The support of the associated organisations (local and regional energy consultants) enables transfer of project outputs to regions beyond the partnership.
According to each country LTRS, Long Term Renovation Strategy 2020-2050 and LTRS Roadmap all participating countries has plan to give more information to homeowners about energy efficiency status of the buildings and possibilities to decrease energy use and decarbonise the energy consumption.
For example, Latvia recommends accessible and transparent advisory tools, such as One-Stop-Shops for consumers and energy advisory services. It is also possible for potential beneficiaries to make use of municipal energy advisers or the sectoral agency's One-Stop Shop for seamless renovation as a service model. Finland recommends creating a renovation One-Stop Shop for consumers to provide them information on energy renovations. Estonian supports strengthening energy audits with more detailed and renovation settings. All these three country recommendation should be verified and tested in the joint support concept and test environments of the SMARTY project in Sweden, Poland and Finland, focusing in shrinking areas and less feasible transition majorities in housing.

1,961 / 2,000 characters

3.3 Target groups

Target group	Sector and geographical coverage	Its role and needs
Interest group	Households and homeowners as energy end users in the shrinking areas and towns in Finland, Estonia, Latvia, Poland and Sweden, also the English and German language supported interface of the tool enables households across BSR. 226 / 500 characters	Households and homeowners who are not located in the growth regions with balanced housing market as well families who belong to the lower quintiles are not well supported by the existing renovation models and innovation actions. The roll-out of the Renovation Wave Strategy and concurrent national strategies in the Nordic and Baltic countries need to be strengthened in less favourable areas as well among economically less feasible households seizing the sustainability and complexity of improvements, qualities and affordability of people's homes. The evolutionary steps should be truly considered, packaged and implemented. The user interfaces, graphical designs and gamification can attract the people's, family's and household's interest. At the household and homeowner level the progress rests on clarity and fine margins of energy efficiency solutions to avoid the dead end of the renovation and improvements of residential dwellings preventing the energy poverty. 975 / 1,000 characters

Target group	Sector and geographical coverage	Its role and needs
Local public authority	Local authorities in shrinking regions and more peripheral areas in Finland (e.g. Pirkanmaa), Estonia (e.g. Pärnu county), Latvia, Poland (peripheral Mazovia) and Sweden (e.g. Västerbotten County). The One-Stop Shop (OSS) model can be introduced in other municipalities of BSR countries with the similar conditions (Lithuania compared to Latvia, Denmark compared to Sweden) as the English and German language supported interface of the tool is available across BSR. 467 / 500 characters	The SMARTY toolbox can upgrade the OSS model, the national support instruments as well various the European programmes (European Local Energy Assistance, ELENA) in supporting renovation and households. The toolbox needs to be integrated and tailored to the formal processing, sometimes far too complex, slow and costly, motivating homeowners and households for the higher energy efficiency with the optimal set of measures. This process is coordinated and partly mandated by the local authorities. The local authorities have been supporting the renovation wave not just in their own public housing stock but also in the private housing by their start-up, innovation, demonstrations, advocacy and leadership roles. Besides a technological implementation and demonstration beyond the state of the art the local authorities can bring in the socio-economic, local place-based contexts to avoid unbearable economic burden if necessary financial components are not following the ambitious roadmaps. 993 / 1,000 characters
Sectoral agency	The energy agencies and local energy auditors who act as the One-Stop Shops and willing to introduce the OSS model. The energy agencies from Estonia and Poland are directly involved as the agencies in the partnership are to be joining the implementation the SMARTY solution via the partners, associated partners and professional networks in Finland, Sweden, and Latvia. 372 / 500 characters	The energy agencies and local energy auditors implement the One-Stop Shop in which the toolbox can be introduced in the inception phase of the renovation process, attracting customers. The certified energy auditing can be too costly or not needed. The toolbox can be integrated with the further labelling, cerfication and auditing to supplement this housing segment among other collaborations and demonstrations with the ambition to proceed further in targeted regions to show the toolbox's value, coherence and feasibilty in practice and and be ready for further instrumental scale-up. The energy agencies are dedication to adapt the solution to a local and regional context. The toolbox is replicable OSS element for local implementers. 739 / 1,000 characters

3.4 Project objective

Your project objective should contribute to:

Energy transition

The SMARTY aims to stimulate the renovation wave by providing a toolbox that can be used to address those areas, neighbourhoods and dwellings that may be in risk of falling outside of the current renovation schemes for social or technical reasons. The toolbox will provide a way to assess these dwellings and indicate an optimal way forward toward decarbonisation and increased energy efficiency by light self-auditing, motivation and education by households themselves in a seamless service design and intelligent setups. Additionally, the tool will be designed to pave the way for further in-depth energy assessment and integrated service system.

By using SMARTY toolbox, the dweller will get an easy to adopt walkthrough of the first steps needed to take to attract households and homeowners and proceed initial assessment. The toolbox will encourage the dweller to assess what are the targeted actions and success factors that are viable, feasible and affordable in each case. Local energy agencies acting as One-Stop Shops will benefit from the toolbox that can be utilised as a buy-in tool to attract and introduce customers to the guidance concept, introducing the renovation schemes and other saving options. The toolbox can aggregate renovation opportunities among this segment of households whose willingness to renovate needs additional efforts and rationales requiring far more time and resources from the public sector than anticipated.

Taking the personalised customer service path, the SMARTY will explore further digitalisation, elements of AI and IoT, forecasting and the intelligent self-learning process design enabling the processing of the cases and enhancing the one-stop-shop model. Also, the SMARTY intends to fill the gaps in carbon accounting in the current energy performance certification and auditing. Outcomes as a gateway are fed into the renovation framework and signal new energy performance, carbon footprinting, sustainable consumption metrics to the public.

1,996 / 2,000 characters

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

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

◉ Yes ○ No

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

PA Energy

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

SMARTY's actions and results contribute to EUBSR's PA 'Energy' policy action 1 'Streamlining efforts on energy efficiency in the region by deepening regional cooperation'. Action 1 emphasizes the importance of full implementation of the existing legislation by sharing best practices and putting in place processes to facilitate application of the "energy efficiency first" principle in policy planning and investment decisions, and facilitate the implementation of the NECPs, and of the long-term renovation strategies to decarbonise the national building stock by 2050. SMARTY has a direct influence in the policy action 1 in implementing the 'energy efficiency first principle' in buildings in the context of EED Energy Efficiency Directive, EPBD Energy Performance of Building Directive and RESII Renewable Energy Sources Directive. In particular, the SMARTY project contributes to reaching the target of EPBD One-Stop Shop and Building Renovation Passport in BSR area as a part of long-term renovation strategies. It highlights the regional cooperation between different stakeholders in BSR area, but also in partner countries and cities. In addition, the project contributes to PA 'Energy' policy action 4 'Increase the share of renewable energy' by promoting the utilization of renewable electricity solutions (PV's) in electricity grid connected buildings and implementation of heat pumps as a part of long-term renovation plans and operational routines.

1,462 / 1,500 characters

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

In addition, the SMARTY support PA 'Innovation' Action 1: Challenge-driven innovation at fostering disruptive and breakthrough innovations to respond to the climate and energy challenges. The SMARTY will act in line with Action 2: Digital innovation and transformation, specifically contributing in the smart city path by developing common standards for interoperable energy assessment tools, addressing harmonizing of data, providing opportunities to analyze, evaluate, develop, co-create and test new energy and climate support services together. SMARTY will promote via its virtual hub knowledge sharing and institutional capacity building within digitalization to facilitate digital transformation.

703 / 1,500 characters

3.6 Other political and strategic background of the project

Strategic documents
The SMARTY project has direct influence in the context of the EU Green Deal, EPBD Energy Performance of Building Directive, EED Energy Efficiency Directive and RESII Renewable Energy Sources Directive and also Circular Economy Action Plan. The SMARTY contributes to reaching the target of EPBD One-Stop Shop and Building Renovation Passport. SMARTY is a toolbox for homeowner how to implement the long term building strategy at the end-user level including both energy renovation and operation.
495 / 500 characters
SMARTY is coherent with the programming documents, strategies and regulations of the territories involved in the project. It contributes to achievement of the climate and energy efficiency goals set by the partner cities and regions e.g. National EPBD LTRS Long Term Renovation Strategies 2020-2050, LTRS Roadmaps and becoming EPBD Revision based Action Plans, National and Local Energy and Climate Action Plans.
412 / 500 characters
The SMARTY project supports achieving "Fit for 55" targets towards climate neutrality. In practice, building CO2 decrease must be at least 60% to achieve 55% target because there will be at the same time increase of CO2 emission of the increasing renovation work (added embodied impact of CO2 of the newly added components in LCA).
332 / 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

Full name of the project	Funding Source	Use of the project outcomes and/or planned cooperation
AREA 21 Baltic Smart City Areas for the 21st century 52 / 200 characters	Interreg, Baltic Sea Programme 2014-2020 41 / 200 characters	AREA 21 delivered 3 ICT-based energy tools to involve citizens, tenants, homeowners and technical experts in the planning and implementation of energy efficiency measures: 1) The benchmarking tool for building energy, called the 'Energiamonitor', developed in Tartu, Estonia. 2) An energy monitoring tool for real-time monitoring of energy consumption and indoor conditions, developed in Tampere, Finland. 3) A demand-response tool for identifying and quantifying smart energy solutions, developed in Helsingborg, Sweden. Dedicated to citizen involvement in energy planning and operationalisation, lessons learnt in AREA 21 can be taken account in SMARTY reaching the end-users among households and supporting the one stop shop services in the pre-assessment phase to harness the full energy savings potential of renovation value chain structures. The core team in Finland and Estonia continues to capitalise the AREA 21 outputs and deliverables. 946 / 1,000 characters
EMPOWER More carbon reduction by dynamically monitoring energy efficiency 73 / 200 characters	Interreg Europe 16 / 200 characters	EMPOWER, More carbon reduction by dynamically monitoring energy efficiency project works on the exchange of good practices on dynamically monitoring energy efficiency in buildings, with special focus on the use of innovative financial instruments, in order to achieve more carbon reduction and to improve low-carbon economy policies. The project's main outputs benefit the building users, key decision-makers, SMEs working in energy, investors, by new projects that innovate by applying cost-effective energy monitoring to reduce energy demand, using new technology and improved governance between different levels of government, using the plan–do-act-check principle and providing quality data to attract and reassure commercial investors. Project outputs and good practice database can contribute to the energy assessment tool development and OSS and advisory system creation which can be coordinated boldly within the SMARTY solution support. 948 / 1,000 characters
Development and advanced prefabrication of innovative, multifunctional building envelope elements for MOdular REtrofitting and CONNECTions 141 / 200 characters	EU HORIZON2020 (H2020-EE-2014-1-PPP) 40 / 200 characters	Developed solutions for modular renovation process using prefabricated durable, innovative, modular composed building envelope elements for the total renovation of the building envelope. This solutions allows reach the same or higher energy performance levels as for standard retrofitting solutions. These results give direct link towards the reference values for renovated buildings and will help to allocate reduction potential for each renovation measure, such as insulation of the envelop, window change, ventilation with heat recovery etc. The engineering scheme of refabricated building systems requires further standardisation, digitalisation and optimisation which can be supported in the pre-assessment phase by the SMARTY toolbox. 742 / 1,000 characters

Full name of the project	Funding Source	Use of the project outcomes and/or planned cooperation
BOOSTEE-CE Boosting Energy Efficiency in Central European Cities through Smart Energy Management) 97 / 200 characters	Interreg Central Europe 25 / 200 characters	Project BOOSTEE-CE (Boosting Energy Efficiency in Central European Cities through Smart Energy Management) aims to enhance energy efficiency in public buildings in Central Europe by offering best practices, databases of contractors and appliances, financial expertise and a 3D Energy Management System - all in the OnePlace platform. Project results and developed platform can have added value in creating the energy assessment tool. Lessons learned from a created database and the One Place Platform can support the creation of One-Stop Shop and advisory system which is the primary support model for homeowners and households in the SMARTY. The project follow-up can be capitalised in Poland and transferred to the Nordic and Baltic countries. 748 / 1,000 characters
A New Concept for Sustainable and Nearly Zero-Energy Buildings 64 / 200 characters	ERAF 4 / 200 characters	The Latvian project created prototypes of structures, to optimize the composition of innovative materials and the structures and connections created from industrially tested ecological building materials such as: efficient and ecological enclosing materials (natural fiber composites and nanomodified foam concrete), high-performance cement composites with innovative dispersion reinforcement, thermal energy storage high-performance cement composites with indoor temperature control. Developed structures were integrated into multi-storey residential buildings in a 3D model, which was used in the building's energy efficiency calculations. Thus reference values of energy performance levels for buildings built from ecological and innovative materials can be adopted and further developed in the SMARTY partnership across BSR. The know how will be delivered and tailored by the Riga Technical University in WP1 and WP2. 923 / 1,000 characters

3.10 Horizontal principles

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

4. Management

Allocated budget 10%

4.1 Project management

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

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

The project management will be carried out with the Steering Committee (SC) and the Project Management Team responsible for the operational implementation and progress, utilisation of resources and budget, reporting and schedule. An advisory board consisting of most important stakeholders will be nominated to guarantee the engagement of the target groups in the transfer process. Project management, quality assurance, risk management and sustainability plans will be jointly designed and agreed.

498 / 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.

Lead Partner is responsible for the financial management of the whole project as will be agreed in the Grant Contract. LP will nominate the project manager to coordinate the financial management as well as assign a professional financial expert to guarantee sound financial management. Likewise, each Project Partner will assign a financial expert to serve the reporting, accounting, procurement and internal controls. The auditing of LP and PPs will be organised according to the Programme rules.

497 / 500 characters

4.3 Input to Programme communication

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

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

LP will nominate a Communication Manager and a graphical designer to ensure effective and professional dissemination and communication. A communication plan will set the framework and activities for internal and external communication, dissemination (events, workshops, publications, social media). Each partner will be responsible for communicating and disseminating the project in their regions. LP will coordinate the dissemination in the BSR and EU. The hybride events to be supported.

492 / 500 characters

4.4 Cooperation criteria

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

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

5. Work Plan

Number	Work Package Name
1	WP1 Preparing solutions

Number	Group of Activity Name
1.1	Conceptual design of the energy tool
1.2	Development and programming the energy tool

Number	Work Package Name
2	WP2 Piloting and evaluating solutions

Number	Group of Activity Name
2.1	Testing setup
2.2	Testing and feedback
2.3	Modification of the toolbox and adaptation for the transfer

Number	Work Package Name
3	WP3 Transferring solutions

Number	Group of Activity Name
3.1	Implementation of the SMARTY toolbox and services across BSR
3.2	Support for policy dissemination and communication

Work plan overview

Period:	1	2	3	4	5	6	Leader
WP.1: WP1 Preparing solutions							**PP2**
A.1.1: Conceptual design of the energy tool							PP2
D.1.1: Report of conceptual design	D						
A.1.2: Development and programming the energy tool							PP1
D.1.2: Early access toolbox (beta application)			D				
WP.2: WP2 Piloting and evaluating solutions							**PP3**
A.2.1: Testing setup							PP3
D.2.1: Testing protocol of energy self-assessment tool		D					
A.2.2: Testing and feedback							PP3
D.2.2: Testing report				D			
A.2.3: Modification of the toolbox and adaptation for the transfer							PP1
O.2.3: Web-based toolbox for energy self-assessment				O			
WP.3: WP3 Transferring solutions							**PP1**
A.3.1: Implementation of the SMARTY toolbox and services across BSR							PP1
D.3.1: A tool dissemination dossier					D		
A.3.2: Support for policy dissemination and communication							PP2
D.3.2: Virtual hub for energy self-assessment and policy support						D	

Outputs and deliverables overview

Code	Title	Description	Contribution to the output	Output/ deliverable contains an investment
D 1.1	Report of conceptual design	The report on energy assessment tool's architecture, modules and functionalities of energy performance and carbon accounting indicating various social profiles, living modes (described in 5.6.3). The report (>20 p) documents the body of context, content and protocol for the tool designing and programming, and following inter-linkages with the other ongoing housing and building initiatives such as energy performance certification and On-Stop Shop infrastructure. The guiding principles of the tool completeness, robustness, consistency, smartness, transparency, balance, accuracy, and relevance are validated and described. The report will formulate an enhanced energy guidance process, renovation as a service and linkages that are provided in the virtual advisory as well enhancing one-stop shop services via the SMARTY tool.	Web-based toolbox for energy self-assessment	
D 1.2	Early access toolbox (beta application)	The self-assessment toolbox with the renovation and energy efficiency modules integrated with the both physical and virtual advisory system in the framework of One-Stop Shop model. The experimental elements are included and provided for the testing. Pop-up boxes are set in the websites (partners, associated partners, housing associations).	Web-based toolbox for energy self-assessment	

D 2.1	Testing protocol of energy self-assessment tool	The protocol will set and specify the entire testing process. The protocol documentation will guide and instruct how test cases should be processed, advanced in specific cases of exploration and adaptation. Also, the means of exploration (questionnaire, testing instructions and meetings etc.) and the documentation format will be set. While elaborating the testing protocol the testing protocol and process intends to simulate the translation of insights from energy efficiency needs, measures, engineering workflows and administrative processing into new routines, operational protocols, and stakeholder engagement methods among homeowners, local authorities and energy agencies in various One-Stop Shop modulations, stages and elements. The socio-demographic and place-based features and implications (socio-economic and geographic domain) will be covered with the equal importance as engineering, building and operation domain.	Web-based toolbox for energy self-assessment	
D 2.2	Testing report	The test report will provide comprehensive and structured information and feedback on conducted test cases in five regions (20 p). The report will address the solutions on blunders and issues and summarises the lessons learnt in testing and what adjustments should be done to the energy self-assessment tool, also critical notes and recommendation on what methods are most successful in the replication and tool dissemination. The end user needs will be boldly communicated including the further adjustements in designing the support system. The risk assessment and mitigation measures will be included.	Web-based toolbox for energy self-assessment	
O 2.3	Web-based toolbox for energy self-assessment	The SMARTY toolbox with the energy self-assessment core modules and service support, instructions, manuals, quick start guide, preset demo cases, archetypical and dynamic energy efficiency packages, lessons learnt and Q&A section, templates, links to the supporting agencies. The readiness includes tool supporting service design, list and describe features, functionalities, data input-output, security, privacy, support, helpdesk, virtual assistance and training system with the several items structured in the toolbox. GDPR will be strictly followed.		
D 3.1	A tool dissemination dossier	A collection of documents in relation to the toolbox dissemination will be created in the GoA 3.1. These documents consist of the training material used to support the planning and implementation of the dissemination of the tool as well as a report on the completed dissemination. The dossier will include quick start guide, what's in the toolbox, first time use, service package, connecting to my home. The comprehensive pack will include the description of modules, functions, and controls, links to the further services and other relevant tools. All toolbox elements will be structured and supplemented by assisting items for the dissemination. Early in this group of activities a 7-language (english, finnish, estonian, swedish, latvian, polish, german) training package will be created to guide the use of the energy self-assessment tool. This training package will consist of a quick-audit-guide, onepagers on self-assessment, process and support, the manual and technical advisor's protocol, communication newsletter. Additionally GoA 3.1 will produce a summary report on the dissemination activities completed. Experiences and recommendations from these activities will be collected in structured manner to support further activities in GoA 3.2.	Web-based toolbox for energy self-assessment	
D 3.2	Virtual hub for energy self-assessment and policy support	To ensure lasting impact of the tool and the lessons learned during the project a web based and publicly available hub will be created. In addition to providing home to the energy self assessment tool developed and tested in this project, the hub will consist of all the knowledge accumulated during the project. All the reports, presentations and publications generated jointly in different phases of the project in different regions will be collected, uniformed and stored into the web based hub. The hub will then serve as a go to place for upscaled dissemination and its support material i.e. clear instructions, frequently asked questions and other support information can be found in one place, taking into account the needs and language of the each region in the dissemination scope. The purpose of this virtual hub is to provide lasting platform for the target groups to engage with the tool and the accumulated regional knowledge. Additionally it aims to provide support for future policymaking on one-stop shops in renovation passport framework by showcasing the lessons learnt from the light auditing procedure implemented in the project and by providing recommendations. To ensure the wider distribution and the durability of the tool one of the regional testing partners will take the responsibility to maintain the availability of the virtual hub and the tool box along with it’s web domain. The results and toolbox will be presented in the showcasing final conference to inspire as many BSR stakeholders as possible. The conference will be preceded by communication campaign to engage residents, households, technical consultancy bodies and companies and municipalities.	Web-based toolbox for energy self-assessment	

Work package 1

5.1 WP1 Preparing solutions

5.2 Aim of the work package

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

5.3 Work package leader

Work package leader 1	PP 2 - Tartu Regional Energy Agency
Work package leader 2	Please select

5.4 Work package budget

Work package budget	30%

5.5 Target groups

	Target group	How do you plan to reach out to and engage the target group?
1	Interest group Households and homeowners as energy end users in the shrinking areas and towns in Finland, Estonia, Latvia, Poland and Sweden, also the English and German language supported interface of the tool enables households across BSR. 226 / 500 characters	The households and homeowners are directly involved in co-creation activities physically, joining the development meetings, the mapping workshop and synthesising sources and inputs using the partner's networks, the real support actions and technical assessment. When communicating to the households and homeowners the current support frameworks, toolboxes and best practices to be showcased how solutions apply to their lives and how the toolboxes they apply to their technical expertise and how they will be able to benefit from toolbox-type solutions. The real renovation processing among partners and associated partners provides the direct contact and important input from end-users. The areas and towns in less favourable conditions are preselected by the partners. Also, partners contact potentially interested and relevant areas and towns. The general public will be reached most successfully on social media, with a focus on Facebook and Twitter. 954 / 1,000 characters
2	Local public authority Local authorities in shrinking regions and more peripheral areas in Finland (e.g. Pirkanmaa), Estonia (e.g. Pärnu county), Latvia, Poland (peripheral Mazovia) and Sweden (e.g. Västerbotten County). The One-Stop Shop (OSS) model can be introduced in other municipalities of BSR countries with the similar conditions (Lithuania compared to Latvia, Denmark compared to Sweden) as the English and German language supported interface of the tool is available across BSR. 467 / 500 characters	This institutionalised target group is reached by structured and targeted communication events, briefs and mutually agreed harmonised workplans. Relevant departments (construction, housing, social services etc.) of local authorities are involved in the meeting and workshops. The municipalities can contribute in particular on the social dimension and energy poverty. The workshop and meetings include presentations on best practices, balanced success stories, facts, explanatory infographics and other visual materials to raise interest and awareness on sustainable housing in communities, cities, towns and rural areas. Social media, website and already available local authorities communication channels, including traditional newsletters etc. will be used. 762 / 1,000 characters
3	Sectoral agency The energy agencies and local energy auditors who act as the One-Stop Shops and willing to introduce the OSS model. The energy agencies from Estonia and Poland are directly involved as the agencies in the partnership are to be joining the implementation the SMARTY solution via the partners, associated partners and professional networks in Finland, Sweden, and Latvia. 372 / 500 characters	The energy agencies work directly in supporting the renovation and can instantly provide the input on their experiences, practices and positioning on housing improvement and renovation. The agencies cover specific professional input on energy system, ICT and interoperability, business innovation and market knowledge related to high dynamics in the energy efficiency actions. The agencies also are keys to provide good practices, methodological issues, procedures navigating and locating answers to a certain local conditions. Already set professional network will provide direct trusted contacts with the energy consultants. 626 / 1,000 characters

5.6 Activities, deliverables, outputs and timeline

No.	Name
1.1	**Conceptual design of the energy tool**
1.2	**Development and programming the energy tool**

WP 1 Group of activities 1.1

5.6.1 Group of activities leader

Group of activities leader PP 2 - Tartu Regional Energy Agency

A 1.1

5.6.2 Title of the group of activities

Conceptual design of the energy tool

36 / 100 characters

5.6.3 Description of the group of activities

The inception will consider the standardised approaches, best practices in the energy assessment and carbon accounting, and inputs from target groups in BSR countries aiming to develop the gateway and tailored instrument to the different segments of the building stock, ownership tenures, and socio-demographic profiles. Developing the SMARTY toolbox with the dominant energy self-assessment tool will refine the system architecture and functionalities by the modules of energy performance and carbon accounting indicating various social profiles, living modes, comfort qualities, smart readiness, and pre-selected renovation, prosumer and behavioural schemes, in the same time keeping the system simple and robust. The input will combine intelligent adaptive data settings as a default, the robust energy data, and the set of structured questionnaires. The consumer based carbon accounting will supplement the current energy calculation and modelling. The system architecture will integrate the technical, structural, and social readiness of a household for the take up of renovation packages, maintenance adjustments and operations improvements. The sub-modules will include the country-specific sections. The tool will also have a built-in option to contact an energy advisory for further professional consultation as self-assessment will shortlist the optimal choices. Functional requirements will be described what the system must do enabling and supporting the household's choices in the building renovation and operation. Key responsibilities are shared between TREA, TAMK, and UT. The system designing will consider the stakeholder feedback in all partner regions, by functioning networks and associated bodies. Key elements of the evaluation methodology are discussed among partners seeking the compromises between BSR and country-specific cases. Success factors of early adopters in the renovation value chain are collected and considered in the detailed configuration of the system architecture. The synergies across BSR cases will facilitate the system development with the critical specificities. The process will facilitate the energy planning process, encouraging energy consumers into prosumers, raising awareness of individual energy consumption, and promoting not just technological progress, but also social innovation and behavioural change. The mapping and development workshops will be held during the first period. The series of national and module-specific workshops engaging transnational and national networks are held to define the pre-conditions, current toolification, system architecture, tool modules and functionalities. The feedback will be collected via the associated partners. The messages of the development stage will be distributed by social networks. The strategic national, regional and local partners are involved in the process of conceptual design to harmonise and streamline the multiple housing and renovation wave initiatives.

2,978 / 3,000 characters

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

D 1.1

Title of the deliverable

Report of conceptual design

27 / 100 characters

Description of the deliverable

The report on energy assessment tool's architecture, modules and functionalities of energy performance and carbon accounting indicating various social profiles, living modes (described in 5.6.3). The report (>20 p) documents the body of context, content and protocol for the tool designing and programming, and following inter-linkages with the other ongoing housing and building initiatives such as energy performance certification and On-Stop Shop infrastructure. The guiding principles of the tool completeness, robustness, consistency, smartness, transparency, balance, accuracy, and relevance are validated and described. The report will formulate an enhanced energy guidance process, renovation as a service and linkages that are provided in the virtual advisory as well enhancing one-stop shop services via the SMARTY tool.

830 / 2,000 characters

Which output does this deliverable contribute to?

Web-based toolbox for energy self-assessment

44 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.1: WP1 Preparing solutions						
A.1.1: Conceptual design of the energy tool						
D.1.1: Report of conceptual design						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

WP 1 Group of activities 1.2

5.6.1 Group of activities leader

Group of activities leader PP 1 - Tampere University of Applied Sciences Ltd

A 1.2

5.6.2 Title of the group of activities

Development and programming the energy tool

43 / 100 characters

5.6.3 Description of the group of activities

This development of the tool will include the detailed modulation of the system and programming. Different ways to input data (the numeric, textual, visual and selective) will be possible with the system. The system will enable inserting the energy, building, socio-demographic and living mode data which will be processed for the short-listing of choices and schemes. The tool will rate the most relevant and critical factors on engineering, costs, energy and CO2 emissions effect, indoor climate, and security of energy supply. The tool's modules such as dashboard, energy performance, prosumer, benchmarking, virtual advisor and sharing consumer behaviour will be programmed. Message boxes and pop-up windows to be exploited in the activation and targeted communication with the users. User interface with input controls, navigation and information components and containers will exploit functionality with controlling consistency and clarity for energy service provision. The interactivity of the tool will be a priority using the attractive graphical design, gamification etc. Prototyping will support the developing parties to get an initial idea of the user interface of the system. It will be easy to explore the socio-energy profile of the households and homeowners with the desktop design. One can assign multiple viewers for sites and objects, and an option to export profile data to an Excel file and other formats. Test cases with sequenced test scenarios are developed for the following actions in WP2. The development process will remain under regular review of partners coordinated by TAMK.
The joint meetings will be held among developing partners and the pre-testing modules will be consulted with the associated partners, public and professional stakeholders in partner regions.
The launching the beta application of the toolbox will be communicated via direct channels and social media.

1,907 / 3,000 characters

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

D 1.2

Title of the deliverable

Early access toolbox (beta application)

39 / 100 characters

Description of the deliverable

The self-assessment toolbox with the renovation and energy efficiency modules integrated with the both physical and virtual advisory system in the framework of One-Stop Shop model. The experimental elements are included and provided for the testing. Pop-up boxes are set in the websites (partners, associated partners, housing associations).

343 / 2,000 characters

Which output does this deliverable contribute to?

Web-based toolbox for energy self-assessment

44 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.1: WP1 Preparing solutions						
A.1.2: Development and programming the energy tool		■	■			
D.1.2: Early access toolbox (beta application)			■			

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

Work package 2

5.1 WP2 Piloting and evaluating solutions

5.2 Aim of the work package

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

5.3 Work package leader

Work package leader 1 PP 3 - Riga Technical University

Work package leader 2 Please select

5.4 Work package budget

Work package budget 30%

5.4.1 Number of pilots

Number of pilots 1

5.5 Target groups

	Target group	How do you plan to reach out to and engage the target group?
1	Interest group Households and homeowners as energy end users in the shrinking areas and towns in Finland, Estonia, Latvia, Poland and Sweden, also the English and German language supported interface of the tool enables households across BSR. 226 / 500 characters	The guidance for all project partners will be introduced how to test proposed solutions. The main idea is to present two main differences: 1) on energy assessment procedures across project countries and 2) using and comparing easy to use SMARTY tool. Testing will focus on proposed tool use in each project country, assessing its limitation and benefits in comparison to statutory approach across various dwelling types, social groups, and living modes. There will be 2 joint BSR testing workshops in addition to regional and local targeted events with end-users (homeowners, energy auditors, housing companies, municipalities). The areas and towns in less favourable conditions are involved in testing. Partners contact potentially interested and relevant areas and towns. The general public will be reached for testing most successfully on social media, with a focus on Facebook and Twitter, using already established networks. 930 / 1,000 characters
2	Local public authority Local authorities in shrinking regions and more peripheral areas in Finland (e.g. Pirkanmaa), Estonia (e.g. Pärnu county), Latvia, Poland (peripheral Mazovia) and Sweden (e.g. Västerbotten County). The One-Stop Shop (OSS) model can be introduced in other municipalities of BSR countries with the similar conditions (Lithuania compared to Latvia, Denmark compared to Sweden) as the English and German language supported interface of the tool is available across BSR. 467 / 500 characters	After experience from all partners and associated partners will be collected and analyzed, the separate events/information for municipalities will be arranged to test the SMARTY tool. This will serve as the service designing harmonising with other housing support in those testbed municipalities. The primary piloting regions are Pirkanmaa (FI), Pärnu county (EE), non-metropolitan Latvia, peripheral Mazovia as well energy poverty segment in Warzawa (PL) and Västerbotten County (SE). The Smart City networks will be deployed in targeting testing municipalities. 564 / 1,000 characters
3	Sectoral agency The energy agencies and local energy auditors who act as the One-Stop Shops and willing to introduce the OSS model. The energy agencies from Estonia and Poland are directly involved as the agencies in the partnership are to be joining the implementation the SMARTY solution via the partners, associated partners and professional networks in Finland, Sweden, and Latvia. 372 / 500 characters	The energy agencies of the project (TREA, MEA, Ecofellows) work directly in supporting the renovation and can instantly to arrange testing in their workflow. UT will support testing in the Pärnu county and other peripheral Estonia. RTU in cooperation with Association of Heat, Gas and Water Technology Engineers of Latvia and Latvian regional energy agencies will hold a regular meetings and trainings in field of energy efficiency alike other 5 testbed counties with their associated expert partners. The consortia partners will ensure inviting target groups to have representative testing sample and professional support in this process. The agencies cover specific professional input on energy system, ICT and interoperability, business innovation and market knowledge. The information on testing will be disseminated to the agencies transnationally using testing workshops and already established energy efficiency groupings. 929 / 1,000 characters

5.6 Activities, deliverables, outputs and timeline

No.	Name
2.1	**Testing setup**
2.2	**Testing and feedback**
2.3	**Modification of the toolbox and adaptation for the transfer**

WP 2 Group of activities 2.1

5.6.1 Group of activities leader

Group of activities leader PP 3 - Riga Technical University

A 2.1

5.6.2 Title of the group of activities

Testing setup

13 / 100 characters

5.6.3 Description of the group of activities

To ensure smooth and productive testing GoA 2.1 focuses on setting the framework and protocol as a foundation for the testing process. Testing will examine how to align the experiment with engineering and socio-economic content, digital technologies, energy management and renovation services with exploitation by bringing the tool and its functions and services to the public use. This will entail specification on what kind of buildings, dwellings in which neighborhood inhabited by socio-demographic household type and living mode should be targeted in testing, how many test cases is needed in each testing area and case, testing protocol and supporting instructions, workflow on how to conduct each test case and structured templates for reporting findings.
Potential target groups are to be involved in the preparation testing process through existing communication channels and regional networks.
The testing protocol will be agreed in the SMARTY testing launch workshop.
Preparatory meetings on testing protocol will be held by TAMK, Estonia by UT, Latvia (LV) by RTU, Mazovia (PL) by the regional energy agency and Västernorrland (SE) by MSU.

1,153 / 3,000 characters

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

D 2.1

Title of the deliverable

Testing protocol of energy self-assessment tool

47 / 100 characters

Description of the deliverable

The protocol will set and specify the entire testing process. The protocol documentation will guide and instruct how test cases should be processed, advanced in specific cases of exploration and adaptation. Also, the means of exploration (questionnaire, testing instructions and meetings etc.) and the documentation format will be set. While elaborating the testing protocol the testing protocol and process intends to simulate the translation of insights from energy efficiency needs, measures, engineering workflows and administrative processing into new routines, operational protocols, and stakeholder engagement methods among homeowners, local authorities and energy agencies in various One-Stop Shop modulations, stages and elements. The socio-demographic and place-based features and implications (socio-economic and geographic domain) will be covered with the equal importance as engineering, building and operation domain.

932 / 2,000 characters

Which output does this deliverable contribute to?

Web-based toolbox for energy self-assessment

44 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.2: WP2 Piloting and evaluating solutions						
A.2.1: Testing setup		■				
D.2.1: Testing protocol of energy self-assessment tool		■				

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

WP 2 Group of activities 2.2

5.6.1 Group of activities leader

Group of activities leader PP 3 - Riga Technical University

A 2.2

5.6.2 Title of the group of activities

Testing and feedback

20 / 100 characters

5.6.3 Description of the group of activities

The elements, modules and functionalities of the toolbox are tested through feedbakc loops with the sample of end-users as well supporting experts and professional bodies (partnership and external organisations). The deployment and use of toolbox will be analysed by features of the tool, assessing of applicability by predefined settings of the regional, building, socio-demographic specificities. The assessment indicators will be refined. Testing will report active users, passive users, households, experts, dwellings, buildings, areas covered etc. The major changes, adaptations, and amendments will documented and follow-up compromises will discussed interactively by the development team and implementing team.
User experience is surveyed by feedback questionnaire aiming to explore end-user satisfaction of the tool and related services. The testing survey will be executed in online format and direct face-to-face communication in the core testing groups (using Likert scale questions on user experience, functionality, data, services, profiling and support). Similarly, the user experience (UX) will be assessed. The list of feedback, Q&A section in the toolbox, interviews from end-users will be elaborated that includes the issues and solutions that related to the testing. Automated tools for collecting user experience data will be experimented. The documentation of testing will cover also tool's feasibility and replicability aspects.
Testing and feasibility assessment of replicability, including programming limitations will be done in all testing regions.
As a result of testing system and software-related technical corrections, upgrading and adaptation will be provided. The documentation of testing will include reporting issues, blunders, and errors in the testing report using testing report tables and textual briefings. The physical and online sessions will be arranged. The screenshots, visual and other additional value will be collected to advance the tool functionalities and to provide the seamless services to households and homeowners as well to provide assisting tool to the service providers and supporting experts. Help desk, privacy settings, privacy policy, cookie policy, terms & conditions will be finalised in the process of testing considering the feedback.
Testing meetings and sessions will be held in Pirkanmaa (FI) by TAMK, Pärnumaa (EE) by UT, non-metropolitan Latvia (LV) by RTU, Mazovia (PL) by the regional energy agency and Västernorrland (SE) by MSU, in-depth comprehensive testing will reach 2 municipalities, 4 technical consultants and 15 buildings in each testing region.
Two BSR joint (online, hybrid or physical) testing workshops will be held during the testing period to examine and provide information on the testing progress.

2,791 / 3,000 characters

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

D 2.2

Title of the deliverable

Testing report

15 / 100 characters

Description of the deliverable

The test report will provide comprehensive and structured information and feedback on conducted test cases in five regions (20 p). The report will address the solutions on blunders and issues and summarises the lessons learnt in testing and what adjustments should be done to the energy self-assessment tool, also critical notes and recommendation on what methods are most successful in the replication and tool dissemination. The end user needs will be boldly communicated including the further adjustements in designing the support system. The risk assessment and mitigation measures will be included.

604 / 2,000 characters

Which output does this deliverable contribute to?

Web-based toolbox for energy self-assessment

44 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.2: WP2 Piloting and evaluating solutions						
A.2.2: Testing and feedback						
D.2.2: Testing report						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

WP 2 Group of activities 2.3

5.6.1 Group of activities leader

Group of activities leader PP 1 - Tampere University of Applied Sciences Ltd

A 2.3

5.6.2 Title of the group of activities

Modification of the toolbox and adaptation for the transfer

60 / 100 characters

5.6.3 Description of the group of activities

Based on the testing report and the lessons learnt in the testing period the tool will be modified by developing partners and tool masters the before further dissemination in WP3. Fine-turning of the tool, content drafting and blunder elimination will be done by the TAMK, supported by TREA, RTU and UT. The quality control procedures will be set and implemented internally and externally according QA coordinated by TAMK. The final testing will be performed in the core team including the AP roll-out. The modified modules and subsections of the toolbox will be presented and demonstrated to the implementing partners, associated partners and region-specific networks sections in the pre-launch workshop (Tampere).

718 / 3,000 characters

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

O 2.3

Title of the output

Web-based toolbox for energy self-assessment

44 / 100 characters

Description of the output

The SMARTY toolbox with the energy self-assessment core modules and service support, instructions, manuals, quick start guide, preset demo cases, archetypical and dynamic energy efficiency packages, lessons learnt and Q&A section, templates, links to the supporting agencies. The readiness includes tool supporting service design, list and describe features, functionalities, data input-output, security, privacy, support, helpdesk, virtual assistance and training system with the several items structured in the toolbox. GDPR will be strictly followed.

555 / 3,000 characters

Target groups and uptake of the solution presented in this output

Target groups	How will this target group apply the output in its daily work?
Target group 1 Interest group Households and homeowners as energy end users in the shrinking areas and towns in Finland, Estonia, Latvia, Poland and Sweden, also the English and German language supported interface of the tool enables households across BSR.	The energy self-assessment tool is directly used by households who want to address their excessive energy consumption, housing energy cost, living quality in relation to poor indoor climate and building and engineering issues which might raise in operating, maintaining and improving the building elements. The toolbox can be used to initiate the process of energy assessment, without any external assistance. Homeowners can get instantly the preliminary assessment report with further advisory package and technical support links. The advisory will be given by the virtual energy expert too. The user interfaces, graphical designs and gamification can attract and simplify the general public's uses as the uptake and integration with other elements in OSS rests on clarity and fine margins of process and information. 821 / 1,000 characters
Target group 2 Local public authority Local authorities in shrinking regions and more peripheral areas in Finland (e.g. Pirkanmaa), Estonia (e.g. Pärnu county), Latvia, Poland (peripheral Mazovia) and Sweden (e.g. Västerbotten County). The One-Stop Shop (OSS) model can be introduced in other municipalities of BSR countries with the similar conditions (Lithuania compared to Latvia, Denmark compared to Sweden) as the English and German language supported interface of the tool is available across BSR.	The SMARTY toolbox upgrades the OSS model. It can be used as pre-assessment tool in the framework of the national support instruments as well various the European programs. The renovation campaign is coordinated and supported directly by the local authorities who are in charge of delivering housing policy in their territory. The tool need to be integrated to the energy efficiency initiatives, projects, innovative actions, and demonstrations to design and implement of the optimal renovation pathways according to the local energy and climate plans. Besides a technological implementation and demonstration beyond the state of the art the local authorities can bring in the socio-economic and local contexts, addressing the energy poverty to avoid unbearable economic burden if necessary financial components are not following the ambitious roadmaps. 854 / 1,000 characters
Target group 3 Sectoral agency The energy agencies and local energy auditors who act as the One-Stop Shops and willing to introduce the OSS model. The energy agencies from Estonia and Poland are directly involved as the agencies in the partnership are to be joining the implementation the SMARTY solution via the partners, associated partners and professional networks in Finland, Sweden, and Latvia.	Energy agencies and energy auditors use the tool to attract residents and household to the energy auditing and renovation passport OSS scheme and to do preliminary assessment for customers. The energy agencies and local energy auditors implement the One-Stop Shop in which the toolbox can be introduced in the inception phase of the renovation process. The certified full-scale energy auditing can be too costly or not needed. However, the toolbox can be integrated with the further certification and auditing to supplement this housing segment among other collaborations and demonstrations with the ambition to proceed further to show the toolbox's value in practice and and be ready for further instrumental scale-up. The energy agencies are dedicated to adapt the solution to a local and regional context. In short, the toolbox is replicable OSS element for local implementers. 880 / 1,000 characters

Durability of the output

The toolbox with its modules and data requires a cloud storage and web page to remain usable. After the project, Ecofellows in Tampere will assume the responsibility of maintaining and keeping up the public tool and its web page / cloud storage. Ecofellows will be entirely in charge of GDPR and other security and privacy terms after the project end.

352 / 1,000 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.2: WP2 Piloting and evaluating solutions						
A.2.3: Modification of the toolbox and adaptation for the transfer						
O.2.3: Web-based toolbox for energy self-assessment						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

Work package 3

5.1 WP3 Transferring solutions

5.2 Aim of the work package

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

5.3 Work package leader

Work package leader 1	PP 1 - Tampere University of Applied Sciences Ltd
Work package leader 2	PP 2 - Tartu Regional Energy Agency

5.4 Work package budget

Work package budget	30%

5.5 Target groups

	Target group	How do you plan to reach out to and engage the target group?
1	Interest group Households and homeowners as energy end users in the shrinking areas and towns in Finland, Estonia, Latvia, Poland and Sweden, also the English and German language supported interface of the tool enables households across BSR. 226 / 500 characters	Marketing material will be made that can be used to attract general public and household into the scheme of light self-assessment. This material can be used in local web campaigns by local agencies. The means and plans for reaching out to households will be further assessed based on the findings of the testing activities in WP2. 330 / 1,000 characters
2	Local public authority Local authorities in shrinking regions and more peripheral areas in Finland (e.g. Pirkanmaa), Estonia (e.g. Pärnu county), Latvia, Poland (peripheral Mazovia) and Sweden (e.g. Västerbotten County). The One-Stop Shop (OSS) model can be introduced in other municipalities of BSR countries with the similar conditions (Lithuania compared to Latvia, Denmark compared to Sweden) as the English and German language supported interface of the tool is available across BSR. 467 / 500 characters	This institutionalised target group is reached by structured and targeted communication events. An uptake workshop will be arranged to introduce the SMARTY concept to the wider audience of public authorities. They shall be invited to the workshop to attend personally on-site or online. Relevant departments (construction, housing, social services etc.) of local authorities are involved in the meeting and workshops. The workshop and meetings include presentations on the use of the tested toolbox, stories, facts, explanatory infographics and other visual materials to raise interest and awareness of sustainable housing in communities, cities, towns and rural areas. 671 / 1,000 characters
3	Sectoral agency The energy agencies and local energy auditors who act as the One-Stop Shops and willing to introduce the OSS model. The energy agencies from Estonia and Poland are directly involved as the agencies in the partnership are to be joining the implementation the SMARTY solution via the partners, associated partners and professional networks in Finland, Sweden, and Latvia. 372 / 500 characters	The pool of involved energy agencies and auditors will be expanded by direct contacts and through partner networks. Additionally new contacts are explored via seminars and conferences. Involved parties will be invited to workshops that will be arranged for training on tool utilization. 286 / 1,000 characters

5.6 Activities, deliverables, outputs and timeline

No.	Name
3.1	**Implementation of the SMARTY toolbox and services across BSR**
3.2	**Support for policy dissemination and communication**

WP 3 Group of activities 3.1

5.6.1 Group of activities leader

Group of activities leader PP 1 - Tampere University of Applied Sciences Ltd

A 3.1

5.6.2 Title of the group of activities

Implementation of the SMARTY toolbox and services across BSR

61 / 100 characters

5.6.3 Description of the group of activities

Based on the experience gained from testing and evaluation, the features and instructions of the tool will be delivered for upscaled distribution in implementing partner regions but also expanded outside partnership. This activity takes into account the complementary national needs for wider dissemination of the tool in addition to wider distribution to regions not yet covered in testing phase. To support the dissemination a web based training material will be produced. This training material along with the energy self assessment tool it self will form the core of dissemination campaigns.

This activity includes plans and implementations for the tool's regional dissemination campaigns. To achieve the required communication for tool dissemination with potential users and with regional stakeholders the tool and its training material will be presented in regional workshops and seminars. Partners will establish new connections with local energy agencies, energy advisers, national energy use and construction development agencies, housing associations and energy companies. The aim is to establish at least 5 new connections (municipalities) in each partner region. In this group of activities these dissemination events are planned, prepared, implemented and reported.

Implementation and dissemination meetings will be coordinated by TAMK and held in Pirkanmaa (FI), Pärnumaa (EE) by UT, non-metropolitan Latvia (LV) by RTU, Mazovia (PL) by the regional energy agency and Västernorrland (SE) by MSU. BSR joint (online or hybrid Riga) uptake workshop will be held during the transfer collect and disseminate information on the transfer progress to engage public and private actors in the field of energy efficiency.

1,729 / 3,000 characters

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

D 3.1

Title of the deliverable

A tool dissemination dossier

28 / 100 characters

Description of the deliverable

A collection of documents in relation to the toolbox dissemination will be created in the GoA 3.1. These documents consist of the training material used to support the planning and implementation of the dissemination of the tool as well as a report on the completed dissemination. The dossier will include quick start guide, what's in the toolbox, first time use, service package, connecting to my home. The comprehensive pack will include the description of modules, functions, and controls, links to the further services and other relevant tools. All toolbox elements will be structured and supplemented by assisting items for the dissemination.

Early in this group of activities a 7-language (english, finnish, estonian, swedish, latvian, polish, german) training package will be created to guide the use of the energy self-assessment tool. This training package will consist of a quick-audit-guide, onepagers on self-assessment, process and support, the manual and technical advisor's protocol, communication newsletter. Additionally GoA 3.1 will produce a summary report on the dissemination activities completed. Experiences and recommendations from these activities will be collected in structured manner to support further activities in GoA 3.2.

1,255 / 2,000 characters

Which output does this deliverable contribute to?

Web-based toolbox for energy self-assessment

44 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.3: WP3 Transferring solutions						
A.3.1: Implementation of the SMARTY toolbox and services across BSR						
D.3.1: A tool dissemination dossier						

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

WP 3 Group of activities 3.2

5.6.1 Group of activities leader

Group of activities leader PP 2 - Tartu Regional Energy Agency

A 3.2

5.6.2 Title of the group of activities

Support for policy dissemination and communication

50 / 100 characters

5.6.3 Description of the group of activities

Building on the current policies on the renovation wave and building renovation passport framework the aim is to provide a web-based hub that will gather all the knowledge, reports and tools created and collected in the project. The hub will also combine the knowledge of this project with relevant information already available on energy renovation one-stop shops via hyperlinks. This is done with comparative and instructive commentary to paint a holistic and coherent picture of the renovation schemes and how the project is contributing to them.
The action and communication towards responsible and related institutions on energy efficiency involved at national, regional and local level contribute to creating a favourable framework and environment for establishing, redesigning or adapting support services in offering replicable elements of the SMARTY toolbox. The communication actions will focus in standardised and similarly specified practices explored within the SMARTY workflow and know how transfer that can be deployed in other regions of partner countries as well across BSR.
In the GoA 3.2 the information and knowledge gathered in 3.1 will be analysed and condensed into insights and recommendations which will be presented in a form of schemes and templates that can be used in initiation and execution of light energy auditing and policy making. This will allow policymakers, commercial actors and regional agencies to gather information about the insights on how to approach the building renovation of one-stop shops from the perspective of social and technical challenges.

1,596 / 3,000 characters

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

D 3.2

Title of the deliverable

Virtual hub for energy self-assessment and policy support

58 / 100 characters

Description of the deliverable

To ensure lasting impact of the tool and the lessons learned during the project a web based and publicly available hub will be created. In addition to providing home to the energy self assessment tool developed and tested in this project, the hub will consist of all the knowledge accumulated during the project. All the reports, presentations and publications generated jointly in different phases of the project in different regions will be collected, uniformed and stored into the web based hub. The hub will then serve as a go to place for upscaled dissemination and its support material i.e. clear instructions, frequently asked questions and other support information can be found in one place, taking into account the needs and language of the each region in the dissemination scope.

The purpose of this virtual hub is to provide lasting platform for the target groups to engage with the tool and the accumulated regional knowledge. Additionally it aims to provide support for future policymaking on one-stop shops in renovation passport framework by showcasing the lessons learnt from the light auditing procedure implemented in the project and by providing recommendations. To ensure the wider distribution and the durability of the tool one of the regional testing partners will take the responsibility to maintain the availability of the virtual hub and the tool box along with it's web domain.

The results and toolbox will be presented in the showcasing final conference to inspire as many BSR stakeholders as possible. The conference will be preceded by communication campaign to engage residents, households, technical consultancy bodies and companies and municipalities.

1,687 / 2,000 characters

Which output does this deliverable contribute to?

Web-based toolbox for energy self-assessment

44 / 100 characters

5.6.6 Timeline

Period:	1	2	3	4	5	6
WP.3: WP3 Transferring solutions						
A.3.2: Support for policy dissemination and communication				■	■	■
D.3.2: Virtual hub for energy self-assessment and policy support						■

5.6.7 This deliverable/output contains productive or infrastructure investment ☐

6. Indicators

Indicators

Output indicators

Output indicators	Total target value in number	Project outputs	Please explain how the solution presented in this output serves the target group(s).
RCO 84 – Pilot actions developed jointly and implemented in projects	1	N/A	N/A
RCO 116 – Jointly developed solutions	1	O.2.3: Web-based toolbox for energy self-assessment	The solution will provide an easy to follow walkthrough of energy self-assessment for households. It's also functions as a buy-in tool that local energy agencies and technical advisors can use and market in their daily work of marketing energy renovation schemes and processing energy audits. It also signals the carbon footprint and sustainable living to end-users and citizens. The toolbox will offer a seamless first-step support, forming a trustworthy process for the homeowner to find reliable and accredited experts, and reliable advice. Showcasing of tested and incremental cases will be provided to exemplify the 'normal', optimal and least-cost pathways in improving energy efficiency and decarbonising the housing energy, also in areas characterized by high energy poverty and poor condition of buildings. The General Data Protection Regulation and other data protection laws are strictly applied throughout of SMARTY processing and digitalisation (being activated by consent).
			988 / 1,000 characters

Result indicators

Result indicator	Total target value in number	Please explain how organisations in the target groups within or outside the partnership will take up or upscale each solution.
RCR 104 - Solutions taken up or up-scaled by organisations	1	The SMARTY toolbox with guidelines and pre-set socio-energy profiles for local implementers will be integrated in OSS and other institutionalised settings in partner regions as well in neighboring regions. The profiled and localised packages with the presetting of the toolbox will be distributed to the other regions in Finland, Estonia, Latvia, Poland and Sweden at the project events, other thematic events, network meetings. The English and German language interface enables the dissemination across BSR. In addition to the preset localised packages the consortium will define messages which are tailored to the target areas and social groups. Printed media, though more extentively digital media platforms will be deployed in targeted mass distribution using website articles, press releases, social media posts (hashtagging, linking, reposting), electronic newsletters, workshops and relevant energy-climate panels and the final SMARTY conference. The SMARTY templates and infographics with the distinctive appealing visual identity following the programme requirements will strengthen the outreach.
		1,105 / 2,000 characters

Output indicators		Result indicators			
Output indicator	**Total target value in number**	**Result indicator**	**Total target value in number**	**Please describe what types of organisations are planned to actively participate in the project. Explain how this participation will increase their institutional capacity. These types of organisations should be in line with the target groups you have defined for your project.**	
RCO 87 - Organisations cooperating across borders	14	**PSR 1 - Organisations with increased institutional capacity due to their participation in cooperation activities across borders**	25	Project partners and associated organisations	The institutional capacity of the partners will be increased by enhanced innovation ecosystem in relation to energy efficiency, housing and renovation, which is ensured by the climate plans and implemented by the quadruple helix innovation model in all participating regions. The partners are already the nodes of housing sector progress involved in many ongoing actions and promoting initiatives, possessing the capacity to advance the renovation and housing in general. The partners and associates will get additional BSR-wide recognition and know how which can be replicated and scaled up in their region and via their professional networks. 645 / 1,500 characters
				Other organisations	The regional public authorities present the regional and local interest in the renovation wave having a key role in citizens engagement and awareness raising to facilitate energy transition. The associations of civil and energy engineers who representing also certified auditors can get the cross-Baltic knowledge I using the support tools. The national and regional real estate and housing association unions (e.g. The Estonian Union of Co-operative Housing Associations EKYL with 1400 members, Latvian Union of Apartment Associations) to represent households can facilitate their institutional capacities as a clear advantage to advise the households, tenants, and house owners. The organisational model in such dynamic and politically important sector can be upgraded in the cooperation and joint actions. The roles, responsibilities, interests and worksflows will be validated in designing the assessment and other support in the implementation and operation of toolbox components, modules and elements. 1,008 / 1,500 characters

7. Budget

7.0 Preparation costs

Preparation Costs

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

Other EU support of preparatory cost

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

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

No. & role	Partner name	Partner status	CAT0 - Preparation costs	CAT1 - Staff	CAT2 - Office & administration
1 - LP	Tampere University of Applied Sciences Ltd	Active 22/09/2022	12,000.00	298,800.00	44,820.00
2 - PP	Tartu Regional Energy Agency	Active 22/09/2022	7,000.00	167,330.00	25,099.50
3 - PP	Riga Technical University	Active 22/09/2022	1,000.00	151,200.00	22,680.00
4 - PP	Mazovia Energy Agency	Active 22/09/2022	1,000.00	108,000.00	16,200.00
5 - PP	Mid Sweden University	Active 22/09/2022	1,000.00	259,200.00	38,880.00
6 - PP	EcoFellows Ltd	Active 22/09/2022	1,000.00	194,400.00	29,160.00
7 - PP	University of Tartu	Active 22/09/2022	1,000.00	133,690.00	20,053.50
Total			24,000.00	1,312,620.00	196,893.00

No. & role	Partner name	CAT3 - Travel & accommodation	CAT4 - External expertise & services	CAT5 - Equipment	Total partner budget
1 - LP	Tampere University of Ap	44,820.00	45,000.00	0.00	445,440.00
2 - PP	Tartu Regional Energy A	25,099.50	7,196.00	0.00	231,725.00
3 - PP	Riga Technical University	22,680.00	23,200.00	0.00	220,760.00
4 - PP	Mazovia Energy Agency	16,200.00	23,200.00	0.00	164,600.00
5 - PP	Mid Sweden University	38,880.00	28,200.00	0.00	366,160.00
6 - PP	EcoFellows Ltd	29,160.00	23,200.00	0.00	276,920.00
7 - PP	University of Tartu	20,053.50	12,198.00	0.00	186,995.00
Total		196,893.00	162,194.00	0.00	1,892,600.00

7.1.1 External expertise and services

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value
1. Tampere Univers	Specialist support	CAT4-PP1-E-0	External expert services including translation services 55 / 100 characters	No	1.1 1.2 3.1 3.2	15,000.00
1. Tampere Univers	Communication	CAT4-PP1-C-0	Dissemination, conference and publication. Social media activities, other information materials. 96 / 100 characters	No	3.1 3.2	20,000.00
1. Tampere Univers	Events/meetings	CAT4-PP1-A-0	Organization of project and steering Committee meetings and including catering services 87 / 100 characters	No	1.1 1.2 3.1 3.2	10,000.00
2. Tartu Regional E	Communication	CAT4-PP2-C-0	Dissemination, conference and publication. Social media activities, other information materials. 96 / 100 characters	No	3.1 3.2	5,000.00
2. Tartu Regional E	Events/meetings	CAT4-PP2-A-0	Organization of project meetings and including catering services 64 / 100 characters	No	1.1 1.2 3.1 3.2	2,196.00
3. Riga Technical U	Specialist support	CAT4-PP3-E-0	External expert services 24 / 100 characters	No	1.1 1.2 3.1 3.2	5,000.00
3. Riga Technical U	Communication	CAT4-PP3-C-0	Dissemination, conference and publication. Social media activities, other information materials. 96 / 100 characters	No	3.1 3.2	10,000.00
3. Riga Technical U	Events/meetings	CAT4-PP3-A-0	Organization of project meetings and including catering services 64 / 100 characters	No	1.1 1.2 3.1 3.2	8,200.00
	Total					162,194.00

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value	
4. Mazovia Energy	Specialist support	CAT4-PP4-E-0	External expert services 24 / 100 characters	No	1.1 1.2 3.1 3.2	5,000.00	
4. Mazovia Energy	Communication	CAT4-PP4-C-1	Dissemination, conference and publication. Social media activities, other information materials. 96 / 100 characters	No	3.1 3.2	10,000.00	
4. Mazovia Energy	Events/meetings	CAT4-PP4-A-1	Organization of project meetings and including catering services 64 / 100 characters	No	1.1 1.2 3.1 3.2	8,200.00	
5. Mid Sweden Univ	Communication	CAT4-PP5-C-1	Dissemination, conference and publication. Social media activities, other information materials. 96 / 100 characters	No	3.1 3.2	10,000.00	
5. Mid Sweden Univ	Other	CAT4-PP5-G-1	Report layout 13 / 100 characters	No	3.1 3.2	5,000.00	
5. Mid Sweden Univ	Events/meetings	CAT4-PP5-A-1	Organization of project meetings and including catering services 64 / 100 characters	No	1.1 2.1 3.1 3.2	8,200.00	
5. Mid Sweden Univ	Specialist support	CAT4-PP5-E-1	External expert services 24 / 100 characters	No	1.1 1.2 3.1 3.2	5,000.00	
6. EcoFellows Ltd	Specialist support	CAT4-PP6-E-1	External expert services 24 / 100 characters	No	1.1 2.1 3.1 3.2	5,000.00	
6. EcoFellows Ltd	Communication	CAT4-PP6-C-1	Dissemination, conference and publication. Social media activities, other information materials. 96 / 100 characters	No	3.1 3.2	10,000.00	
6. EcoFellows Ltd	Events/meetings	CAT4-PP6-A-1	Organization of project meetings and including catering services 64 / 100 characters	No	1.1 2.1 3.1 3.2	8,200.00	
	Total					162,194.00	

Contracting partner	Group of expenditure	Item no.	Specification	Investment item?	Group of activities no.	Planned contract value	
7. University of Tart	IT	CAT4-PP7-B-1	Development, modifications and updates to IT systems and website, analysis tools 80 / 100 characters	No	2.1 2.2 2.3	10,000.00	
7. University of Tart	Events/meetings	CAT4-PP7-A-2	Organization of project meetings and including catering services 64 / 100 characters	No	1.1 2.1 3.1 3.2	2,198.00	
	Total					162,194.00	

7.1.2 Equipment

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

7.1.3 Infrastructure and works

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

7.2 Planned project budget per funding source & per partner

No. & role	Partner name	Partner status	Country	Funding source	Co-financing rate [in %]	Total [in EUR]	Programme co-financing [in EUR]	Own contribution [in EUR]	State aid instrument
1-LP	Tampere University of Applied Sciences Ltd	Active 22/09/2022	FI	ERDF	80.00 %	445,440.00	356,352.00	89,088.00	For each partner, the State aid relevance and applied aid measure are defined in the **State aid section**
2-PP	Tartu Regional Energy Agency	Active 22/09/2022	EE	ERDF	80.00 %	231,725.00	185,380.00	46,345.00	
3-PP	Riga Technical University	Active 22/09/2022	LV	ERDF	80.00 %	220,760.00	176,608.00	44,152.00	
4-PP	Mazovia Energy Agency	Active 22/09/2022	PL	ERDF	80.00 %	164,600.00	131,680.00	32,920.00	
5-PP	Mid Sweden University	Active 22/09/2022	SE	ERDF	80.00 %	366,160.00	292,928.00	73,232.00	
6-PP	EcoFellows Ltd	Active 22/09/2022	FI	ERDF	80.00 %	276,920.00	221,536.00	55,384.00	
7-PP	University of Tartu	Active 22/09/2022	EE	ERDF	80.00 %	186,995.00	149,596.00	37,399.00	
Total ERDF						1,892,600.00	1,514,080.00	378,520.00	
Total						1,892,600.00	1,514,080.00	378,520.00	

7.3 Spending plan per reporting period

	EU partners (ERDF)		Total	
	Total	Programme co-financing	Total	Programme co-financing
Preparation costs	24,000.00	19,200.00	24,000.00	19,200.00
Period 1	310,000.00	248,000.00	310,000.00	248,000.00
Period 2	315,000.00	252,000.00	315,000.00	252,000.00
Period 3	345,000.00	276,000.00	345,000.00	276,000.00
Period 4	345,000.00	276,000.00	345,000.00	276,000.00
Period 5	288,000.00	230,400.00	288,000.00	230,400.00
Period 6	265,600.00	212,480.00	265,600.00	212,480.00
Total	1,892,600.00	1,514,080.00	1,892,600.00	1,514,080.00