

## STEPPING PLUS – Output 3.2

# **ACTION PLAN**

## **for the EPC schemes roll-out in the public buildings sector of the Pomurje region**

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Prepared by LEA Pomurje



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## 2. Introduction

In compliance with the EU Renovation Wave Strategy for buildings, the aim of the STEPPING PLUS project is to boost the adoption of EPC contracts for an effective improvement of public buildings energy efficiency in the Mediterranean countries. While EPC models are indeed diffuse in the Northern Europe, many barriers and obstacles are still in place in the Southern countries for their proper implementation.

The purpose of the present Action Plan is to design a regional roadmap for the future roll-out of EPC schemes, taking into account the intrinsic patterns (legislative framework, market conditions and actors, financing institutions, governance, etc) of the Pomurje region.

The Action Plan reports also about regional stakeholders' consultation and preliminary investigation of future investment program in the public buildings sector.

The Action Plan results from a STEPPING PLUS pathway of mutual learning and exchange among project's partners and it highlights especially how outputs, methods, tools, lessons learnt and recommendations from STEPPING PLUS project can be actually transferred in the concerned territory, paving the way for a full EPC implementation in the short-medium period.

In order for EPC contracts to play a role in future regional policies/investment programmes, the Action Plan is finally expected to be integrated / adopted in official strategic planning tools of the Pomurje region.

In fact, Slovenia has no regional government, so Pomurje does not have central authority. The main instruments / policies are adopted by the Ministry at national level. Municipalities still play a key role by decisions for investment in Pomurje region. However, by preparation and implementation of the actual Regional development programme has a crucial role the Development council of the Pomurje region and Council of Pomurje development region, where municipalities / mayors again participate as decision-makers.

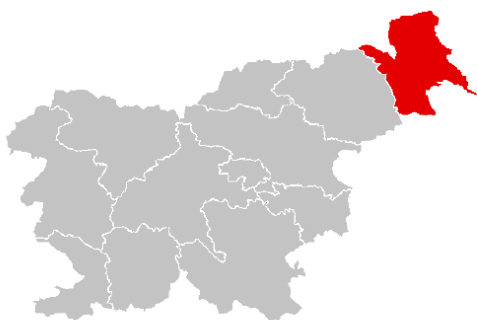
So, after all, confirmation of the present Action Plan by municipalities is key indicator of the readiness and effectiveness of this Action Plan, on the other hand the Memorandum of understanding (MoU) from Regional development agency and / or Participating development institution of RDA for Pomurje is a good starting point for placement and acceptance in the Pomurje region.

### 3. Pomurje region specific EPC context for public buildings

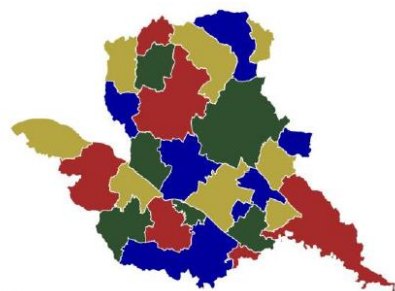
EPC context for public buildings can be a very important aspect for improvement of public buildings energy efficiency in the Pomurje region, but we must take into account all the relevant aspects and characteristics of the region, which we present below.

#### 3.1 *Region-specific indicators and situation*

Pomurje region is located in the North-East of Slovenia by the central stream of the river Mura and bordering to Austria, Hungary and Croatia. Its relatively restrictive area of 1.337 km<sup>2</sup> (6,6% of total Slovenia surface) has about 116,500 inhabitants, which represents approximately 6% of the total inhabitants of Slovenia. The density of population is 87,1 in/km<sup>2</sup> and the average monthly gross wage in the region is 1,385€. Pomurje faced high unemployment - the registered unemployment rate is more than 18.9%. Another problem is the high educated people, which cannot find a suitable job and are leaving the Region. In other hand, region faced with lack of skilled staff on fields such as technical, marketing and sales with specialization on specific area and with lack of staff with suitable additional functional knowledge and foreign language skills. Paradox in all this is the existence of need and the fact that this kind of staff is not available. The reason for this situation probably lies in fear of high educated and skilled staff and the lack of means for this staff.



*Pomurje region on the Slovenia map*



*Pomurje municipalities in different colours*

The region is one of 12 statistical regions in Slovenia. In Republic of Slovenia does not exist administrative regions by law (as administrative districts), but only 12 statistical regions. The Pomurje Region includes 27 municipalities and has no official government, but the Development Council of Region and Region Council for Regional Development Program, which decided about mayor regional projects, guidelines, objectives, priorities, etc. The regional centre is Murska Sobota (19,000 inhabitants). Pomurje Region is in line with the EU methodology; where Slovenia is divided into two cohesion regions, part of the Cohesion region Eastern Slovenija.

It is presented in the table below the current consumption of heat energy in Pomurje region.<sup>1</sup>

Energy source	Amount/year	MWh/year	t CO <sub>2</sub> /year
Wood biomass	559.000 m <sup>3</sup>	548.971	0
Heating oil	39.485.286 l	394.853	110.164
Natural gas	19.330.481 Sm <sup>3</sup>	183.060	36.978
Geothermal energy	54.666 MWh	54.666	0
Biogas	22.791 MWh	22.791	0
LPG	600.753 m <sup>3</sup>	16.821	3.818
Coal	1.424 t	8.862	3.022
Solar energy	643,4 MWh	643,4	0
Electric energy	479.767 MWh	479.767	267.230
<b>SUM</b>		<b>1.710.434</b>	<b>421.212</b>

It is presented in the table below for consumption of energy for heating and technological heat in Pomurje region for all sectors.

CONSUMPTION OF ALL ENERGY IN MUNICIPALITIES IN ONE YEAR																					
Consumption of energy for heating and technological heat																					
	FOSSIL FUELS								RENEWABLE ENERGIES									ELECTRICITY	TOTAL		
	Heating oil		LPG		Natural gas		Coal		WOOD BIOMASS			GEO THERMAL	SOLAR ENERGY	BIOGAS							
	l	kWh	m3	kWh	Sm3	kWh	kg	kWh	WOOD		PELLETS				CHIPS						
									m³	kWh	kg				kWh	nm²	kWh				
Residential buildings	32.307.589	323.075.894	272.957	7.642.810	2.538.067	24.035.497	1.199.591	7.463.856	219.829	529.788.774	1.079.222	5.104.720	2.096	1.676.800	2.659.140	643.370	431.250	15.486.922	918.009.833		
Tertiary buildings	4.873.371	48.733.708	255.570	7.155.967	14.246.827	134.917.455	223.810	1.392.543	4.827	11.633.300	0	0	139	111.220	51.301.000	0	22.360.000	319.350	277.926.543		
Municipal buildings	2.304.326	23.043.256	72.225	2.022.305	2.545.587	24.106.707	940	5.850	243	585.000	0	0	89	71.340	703.620	0	0	406.632	50.944.710		
TOTAL	39.485.286	394.852.858	600.753	16.821.082	19.330.481	183.059.658	1.424.341	8.862.249	224.899	542.007.074	1.079.222	5.104.720	2.324	1.859.360	54.665.760	643.370	22.791.250	16212904	1.246.880.285		
	603.595.847								548.971.154				627.071.534								
	TOTAL energy and heat in kWh																				

<sup>1</sup> Consumption of energy in all tables is shown on the basis of data collected for the last available period from the LEA Pomurje and data of suppliers of some energy sources.

In the table below, we have aggregated and shown only consumption for important energy sources in public buildings. As we can see, the consumption of fossil fuels is 49.172.268 kWh, renewable energy sources are 656.340 kWh and electricity 406.632 kWh.

CONSUMPTION OF ALL ENERGY IN PUBLIC BUILDINS IN ONE YEAR												
Consumption of energy for heating												
	FOSSIL FUELS						RENEWABLE ENERGIES				ELECTRICITY	TOTAL
	Heating oil		LPG		Natural gas		WOOD BIOMASS					
							WOOD		CHIPS			
	l	kWh	m3	kWh	Sm3	kWh	m³	kWh	nm³	kWh		
Municipal buildings	2.304.326	23.043.256	72.225	2.022.305	2.545.587	24.106.707	243	585.000	89	71.340	406.632	
Total	49.172.268						656.340				406.632	50.235.240
TOTAL energy and heat in kWh												

The table below shows CO<sub>2</sub> emissions by individual energy sources and total CO<sub>2</sub> emissions at the annual level in public buildings in Pomurje region.

CO <sub>2</sub>					
CO <sub>2</sub> in tons	Heating oil	Natural gas	LPG	Electricity	TOTAL
Public sector	6.429	4.870	459	226	11.984

Total CO<sub>2</sub> emissions in public sector buildings represent 7,35% of the total CO<sub>2</sub> emissions from all sectors in Pomurje on an annual basis.

### 3.2 Public buildings in the Pomurje region

We have prepared an overview of the building sector in Pomurje and so we gathered data of the most important public buildings, as a basis for the preparation of a list of public buildings that could be included later in the EPC model - the most suitable buildings or buildings for which the owners / user shows an interest for the energy refurbishment. The buildings are in principle divided into two sets, namely buildings with a total floor area of over 300 m<sup>2</sup> and those with a total floor area of less than 300 m<sup>2</sup>.

	Public buildings - over 300 m <sup>2</sup>				Public buildings – under 300 m <sup>2</sup>	
1	Elementary school and kindergarten Apače	4.058,0		1	Municipal building Apače	84
2	GD Apače	761,0		2	ZP Apače	261
3	Municipal building Beltinci	543,0		3	Kindergarten Lipovci Beltinci	242
4	Elementary school Beltinci	6.702,0		4	Kindergarten Gančani Beltinci	296
5	Kindergarten Beltinci	771,0		5	Kindergarten Ižakovci Beltinci	178
6	Elementary school Melinci and kindergarten Beltinci	411,0		6	Municipal building Cankova	288

7	Elementary school Dokležovje Beltinci	449,0		7	KD Črenšovci	230
8	Kindergarten Dokležovje Beltinci	303,0		8	NK Črenšovci	212
9	Castle Beltinci	1.390,0		9	KD Gornja Bistrica Črenšovci	260
10	GD Beltinci	892,0		10	Lednar's tannery Grad	137
11	Elementary school Cankova	2.980,0		11	Youth hostel Hodoš	150
12	Kindergarten Cankova	400,0		12	Etnocollection Krplivnik Hodoš	84
13	Municipal building Črenšovci	800,0		13	EKO Krplivnik Hodoš	98
14	Elementary school Franceta Prešerna Črenšovci	3.672,0		14	ECO Hodoš	220
15	Elementary school Srednja Bistrica Črenšovci	2.474,0		15	Municipal building Križevci	150
16	Kindergarten Črenšovci	476,0		16	ZD Križevci	100
17	Elementary school Gornja Radgona	3.550,0		17	KD Križevci	200
18	Kindergarten Manka Golarja, Kocljeva 4, Gornja Radgona	898,0		18	Kindergarten Gresovščak Ljutomer	231
19	Kindergarten Manka Golarja, Kocljeva 2, Gornja Radgona	936,0		19	ŠIM Ljutomer	240
20	Kindergarten Manka Golarja, enota Črešnjevc, Gornja Radgona	413,0		20	Golarjeva house Ljutomer	250
21	Elementary school Dr. Anton Trstenjak Negova, Gornja Radgona	9.020,0		21	Hippodrome Ljutomer	60
22	Library Gornja Radgona	740,0		22	Kindergarten Bogojina Moravske Toplice	215
23	PO Gornja Radgona	730,0		23	Kindergarten Fokovci Moravske Toplice	172
24	Municipal building Gornji Petrovci	300,0		24	Kindergarten Prosenjakovci Moravske Toplice	184
25	Elementary school Gornji Petroci	2.700,0		25	Kindergarten Martjanci Moravske Toplice	265
26	Apartment block Gornji Petrovci	1.070,0		26	Kindergarten MS - Srnica Krog Murska Sobota	256
27	Municipal building Grad	795,0		27	Kindergarten MS - Pušča	275

28	Elementary school and kindergarten Grad	2.867,0		28	Kindergarten MS - Rakičan	176
29	Putarov mill Grad	346,0		29	GD Odranci	210
30	Vulkanija Grad	546,0		30	NK Odranci	60
31	Municipal building Hodoš	320,0		31	ŽU urad Odranci	128
32	Elementary school and kindergarten Hodoš	600,0		32	Municipal building Puconci	200
33	Senior Center Hodoš	1.000,0		33	Kindergarten Puconci	156
34	Municipal building Kobilje	400,0		34	Kindergarten Brezovci Puconci	250
35	Elementary school Kobilje	1.380,0		35	Municipal building Radenci	251
36	Elementary school Križevci	4.500,0		36	Kindergarten hribčku-Janžev Vrh	200
37	Kindergarten Križevci	546,0		37	Municipal building Razkrižje	45
38	Elementary school Stročja vas Križevci	2.000,0		38	ZD Razkrižje	132
39	Elementary school Janka Ribiča Križevci	1.500,0		39	Municipal building Rogašovci	255
40	Municipal building Kuzma	300,0		40	ZD Rogašovci	262
41	Elementary school and kindergarten Kuzma	2.124,0		41	KD Rogašovci	243
42	Municipal building Kuzma old	890,0		42	VP Sveti Jurij ob Ščavnici	120
43	Elementary school I Lendava	6.400,0		43	Municipal building Tišina	210
44	Elementary school II Lendava	1.050,0		44	Elementary school Gederovci Tišina	270
45	Elementary school Genterovci Lendava	2.000,0		45	Municipal building Veržej	116



	Public buildings - over 300 m <sup>2</sup>				Public buildings - over 300 m <sup>2</sup>	
46	Kindergarten Župančičeva Lendava	820,0		86	Theater Park	1.493,3
47	Kindergarten Tomšičeva Lendava	800,0		87	Partizan	1.015,5
48	ZD Lendava	2.100,0		88	Castle M.Sobota	3.176,0
49	Library Lendava	300,0		89	RIS Rakičan	2.804,9
50	Music school Lendava	1.000,0		90	PISK MS	6.698,5
51	Municipal building Ljutomer	1.640,0		91	Gallery Murska Sobota	816,0
52	Elementary school Ivana Cankarja Ljutomer	4.260,0		92	School G.	1.695,4
53	Elementary school Stročja vas Ljutomer	3.207,0		93	Business Incubator	1.643,5
54	Elementary school Janka Ribiča Cezanjec Ljutomer	1.290,0		94	Student d. MS	5.317,9
55	Elementary school Mala Nedelja Ljutomer	1.858,0		95	Municipal building Odranci	307,0
56	Elementary school Cven Ljutomer	750,0		96	Elementary school in vrtec Odranci	2.900,0
57	Elementary school Cvetka Golarja Ljutomer	1.306,0		97	Elementary school Puconci	2.650,0
58	Kindergarten Ljutomer	1.287,0		98	Elementary school Bodonci Puconci	770,0
59	School Slavka Osterca Ljutomer	1.300,0		99	Elementary school Mačkovci Puconci	680,0
60	Municipal building Ljutomer	2.200,0		100	Elementary school Radenci	3.918,0
61	ŠIC Ljutomer	3.936,0		101	Kindergarten Mehurčki-Radenci	1.900,0
62	Gymnasium Franca Miklošiča Ljutomer	3.400,0		102	Kindergarten Grozdek-Kapela	3.096,0
63	DSO Ljutomer	4.800,0		103	SČGT Radenci	1.080,0
64	DK Ljutomer	1.400,0		104	Student d. Radenci	1.580,0
65	KD Mala Nedelja Ljutomer	369,0		105	Elementary school and kindergarten Razkrižje	2.207,0
66	Pomurski tehnološki park Ljutomer	520,0		106	Dom kulture Razkrižje	600,0

67	VDC Ljutomer	500,0		107	Elementary school Sv. Jurij and vrtec Rogašovci	3.367,0
68	GD Ljutomer	580,0		108	Elementary school Pertoča Rogašovci	579,0
69	Elementary school Bogojina Moravske Toplice	2.082,0		109	Municipal building Sveti Jurij ob Ščavnici	500,0
70	Elementary school Fokovci Moravske Toplice	1.826,0		110	Elementary school Sveti Jurij ob Ščavnici	3.400,0
71	Elementary school Prosenjakovci Moravske Toplice	2.871,0		111	Kindergarten Sveti Jurij ob Ščavnici	467,0
72	Kindergarten Filovci Moravske Toplice	728,0		112	KD Sveti Jurij ob Ščavnici	300,0
73	Municipal building Murska Sobota	6.010,1		113	Municipal building Šalovci	800,0
74	Elementary school I. Murska Sobota	7.766,0		114	Elementary school Šalovci	1.600,0
75	Elementary school II. Murska Sobota	2.816,4		115	Elementary school Markovci Šalovci	600,0
76	Elementary school III. Murska Sobota	10.118,0		116	Elementary school Tišina	1.272,0
77	Elementary school IV. Murska Sobota	1.185,0		117	Kindergarten Tišina	808,0
78	Elementary school Bakovci Murska Sobota	2.907,6		118	ŠD Tišina	1.550,0
79	Elementary school II. - Krog Murska Sobota	1.487,1		119	Municipal building Turnišče	987,0
80	Kindergarten MS Gozdiček Murska Sobota	1.633,2		120	Elementary school Turnišče	3.913,0
81	Kindergarten MS Miške, Ringa raja, Krtek Murska Sobota	2.755,5		121	Kindergarten Turnišče	665,0
82	Kindergarten MS - enota Prešernova Murska Sobota	581,0		122	ZP Turnišče	521,0
83	ZD Murska Sobota	3.286,7		123	Municipal building Velika Polana	675,0
84	Econ. school Murska Sobota - new	14.762,0		124	Elementary school and kindergarten Miška Kranjca Velika Polana	3.359,0
85	SPTŠ Murska Sobota	11.018,0		125	KD Veržej	600,0

We have in Pomurje region 45 buildings with total floor area less than 300 m<sup>2</sup> and 125 buildings with a total floor area of over 300 m<sup>2</sup>. The total floor area of the buildings is more than 271.400 m<sup>2</sup>. The average energy number of public buildings in Pomurje is 185 kWh/m<sup>2</sup>, but we must take into account that some larger buildings are usable as not permanently heated area.

In order to have a complete picture of public sector buildings in Pomurje, we also analysed buildings that are owned by national authorities - regional services. All buildings with basic data are shown in the table below. The fact is that the Pomurje region does not have a direct impact on the renovation of these buildings, but all these buildings consume energy and generate GHG emissions in our region.

No.	User	Location of building (Municipality)	floor area (m <sup>2</sup> )
1.	Financial administration of the Republic of Slovenia Murska Sobota	MURSKA SOBOTA	796
2.	Financial administration of the Republic of Slovenia Murska Sobota	MURSKA SOBOTA 1	620
3.	UJP - Administration of the Republic of Slovenia for Public Payments	MURSKA SOBOTA	388
4.	GURS - Surveying and Mapping Authority of the Republic of Slovenia	MURSKA SOBOTA	299
5.	Financial administration of the Republic of Slovenia Murska Sobota	MURSKA SOBOTA 2	1.836
6.	MNZ - Police station	LENDAVA 1	693
7.	MNZ - Police station	LENDAVA 2	623
8.	MNZ - Police station	LENDAVA 3	450
9.	MNZ - Police station	MURSKA SOBOTA	2.001
10.	Police station MURSKA SOBOTA	MURSKA SOBOTA	3.499
11.	MNZ - Police station	TIŠINA	367
12.	MORS - military facility	MURSKA SOBOTA 1	978
13.	MORS - military facility	MURSKA SOBOTA 2	1.136
14.	MORS - military facility	MURSKA SOBOTA 3	330
15.	MORS - military facility	MURSKA SOBOTA 4	338
16.	MORS - military facility	MURSKA SOBOTA 5	337
17.	District Court Gornja Radgona	GORNJA RADGONA	1.744
18.	District Court Lendava	LENDAVA	931
19.	District Court Ljutomer	LJUTOMER	1.167
20.	Administration for the Execution of Criminal Sanctions	MURSKA SOBOTA	863
21.	District Court Murska Sobota	MURSKA SOBOTA	5.317
22.	District State Prosecutor's Office Murska Sobota	MURSKA SOBOTA	662

In Slovenia, the total floor area of the 522 buildings owned by the Republic of Slovenia or legal entity that we assume represents the property of the Republic of Slovenia (ministries, funds, institutes, ....) is 957,014 m<sup>2</sup>.

The total floor area of these buildings in Pomurje is 25.375m<sup>2</sup>, however, as far as energy consumption is concerned in these buildings, not all data are even available and had to be done in certain parts the estimation. We can see that we have in the Pomurje region only 2,65 % of all the buildings of this part of the public sector.

### **3.3 *Legislative and market framework of EPC context for public buildings***

Given that the Pomurje region applies national legislation, as it has no regional legislation and regulations, we will present below Legislative and market framework of EPC context for public buildings on Slovenian level. Slovenia has over 2 decades of experience in carrying out energy renovation of existing buildings through energy performance contracting. As in other EU countries Slovenia recognized positive benefits of EPC early on, such as engagement of private capital, economic viability, transferring risk to private investors, facilitation of technical expertise, measurement of savings, provided assistance in financing individual projects and transparency of individual projects. However, the market development in Slovenia has been volatile due to its heavy dependence on national policy and external factors such as the economic instability, unexpected trends of energy prices, ect. Despite the fact, that all EPC models that exist in EU also exist in Slovenia, the dynamic development of this area hasn't happened yet and the energy contracting market in Slovenia remains underdeveloped.

The main legislative and regulatory framework in Slovenia is represented by the aforementioned laws and regulations, but all indirectly. The Energy Act (Energetski zakon, EZ-1, Official Journal of the Republic of Slovenia – OJ RS, No 17/14, 81/15), Public-Private Partnership Act (Zakon o javno-zasebnem partnerstvu /ZJZP/, OJ RS, No. 127/06) and Public Procurement Act (Zakon o javnem naročanju /ZJN-3/, OJ RS, No. 91/2015) all outline EPC indirectly, which leads to implementation risk, as potential EPC project could be subject to variable interpretation of regulatory conditions. On the other hand, non-binding regulation on the operational level has seen several improvements in recent years. A project office for energy renovation of buildings was established within the Ministry of Infrastructure in 2015 with a purpose of guiding and navigating the vast scope of the energy renovation field. Within this effort an important document „Detailed guidelines for public partners for energy renovation of public buildings” was elaborated in 2018 that outlines the budgetary, legal and implementation aspects of EPC in public buildings in Slovenia.

The size of the market continues to be a major restraint to further development, particularly from the perspective of the supply side, where only a few ESCOs remain operational, making the market extremely uncompetitive. According to the latest data of Ministry of Infrastructure of Slovenia 8 ESCO companies currently exist and operate in Slovenia. The reasons for such small number of ESCO companies in Slovenia are mainly high barriers obstructing the entry into the industry, related to financing and the complexity as well as length of development cycles of ESCO projects. Smaller companies have difficulty sustaining cycles lasting 12 or 18 months while maintaining financial stability. For better development of EPC in Slovenia several project promoters and additional players in the field of financing (investment funds for guarantees) are needed as well as quality monitoring system and certification of ESCO companies.

In early stages of EPC introduction, Slovenia has experienced boost in EPC projects, as EPC became one of the key measures of Operational Programme for the Implementation of the EU Cohesion Policy in the period 2014 – 2020. EPC was strongly encouraged in combination with cohesion funds in the ratio 40 % cohesion funds and 60 % ESCO company investment (either through bank loans, their private funds or other). EPC also became one of the key measures within the Slovenian Energy Efficiency Action Plan (until 2020), that provided some more concrete actions for mechanisms supporting EPC.

Indeed, the number of projects has risen sharply, from an average of two new projects per year to more than 15 in 2013, and this growth continued in a similar way in 2016. The dominating EPC model was the guaranteed savings scheme. Most EPC projects that were implemented within this operative programme (the latest data is until 2019) were implemented by municipalities.

The reason for municipalities being in the forefront of EPC market was possibility to combine EPC with other instruments, such as ELENA, and because of strong local promoters and facilitators, such as energy agencies. Municipalities such as Ljubljana and Celje, as well as association of 25 municipalities in West Slovenia implemented 80 public building renovations (39,9 mio EUR) until 2019 through EPC. But the numbers still leave a lot to be desired. In 2019 a strong decline in EPC as well as in other energy renovation projects was apparent. In 2019 only 44,7 % of the building area was renovated of the planned value for that year. While Slovenian ESCO market has been able to overcome a few critical barriers in the early years, many problems remain, with some of the barriers reduced only temporarily. The most crucial barrier currently is related to high-risk perception. Market actors fear the changing environment linked to legislative changes, lack of information, lack of trust, and complex accounting/booking rules (Staničič, 2015), because of which they tend to evaluate the risks to be higher than in general investment projects.

Furthermore, while there is a legislative framework, there are issues with interpretation, which leaves space for misunderstandings. This is somewhat mitigated by local energy agencies acting as EPC projects facilitators, but a more systematic resolution of this problem is needed. EPC projects in the public sector are performed in the framework of the Public Private Partnership Act and in line with Public Procurement Act, both introducing additional complexity into an already complex EPC implementation process and consequently increasing costs. Strong decline in EPC projects in Slovenia is also related to the specifics of the building stock. As most of the buildings that had high savings potential were renovated in the first years of widespread introduction of EPC in Slovenia, allowing ESCO companies to have their investment returning in 10 to 20 years, now only buildings remain that are no longer interesting enough for private investors, as they do not represent safe and relatively risk-free return investment.

New strategy was implemented in 2021, after a long preparation period: Long-Term Strategy for Energy Renovation of Buildings until 2050 (DSEPS). The strategy foresees that around 825 mio EUR investments are needed in the period 2021-2030 for renovation public building sector and emphasizes once again the importance of engaging private capital through ESCO companies. Strategy aims at reviving ESCO market with measures such as:

- developing appropriate financial products for EPC service providers, such as ensuring guarantees for the bank loans
- developing mechanism for encouraging more companies to step on the ESCO market
- supporting the development of the EPC through appropriate support measures, such as training, professional and technical assistance in project preparation, quality assurance program for EPC projects, preparation of tools for evaluation of EPC projects, certification of ESCO companies ect.

## 4. Former experience on EPC schemes in the Pomurje region

In the past, we had one case in the Pomurje region. On the basis of the adopted Public-Private partnership<sup>2</sup> by the implementation of the energy contracting project for the comprehensive energy renovation of the facilities of the Veržej Primary School, the Veržej Educational Home, the Kobilje Primary School and Radenci Sports Hall, a decision was made on implementation of the project in one of the forms of public-private partnership.

The key guideline by the implementation of the project was:

- a) implementation of measures to improve energy efficiency in facilities
- b) ensuring contractually guaranteed savings energy while respecting user comfort standards.

Measures for improving energy efficiency in those buildings include measures that result in energy savings (measures to prepare hot water sanitary water, electricity use and ventilation, measures in the field of heating technology, construction measures: thermal insulation of the facade, replacement windows...). All these measures for improving energy efficiency and reducing energy consumption allow savings through which the project investment pays off - guaranteed energy savings.

The provision of energy contracting services includes: design and installation of new intelligent or energy efficient appliances, financing, management and control of operation, servicing, maintenance, eliminating disruptions and motivating consumers to energy efficiency. The concession relationship was concluded for 15 years. The private partner in the project was Esotech, družba za razvoj in izvajanje ekoloških in energetskih projektov, d.d., Preloška cesta 1, 3320 Velenje.

All key information about EPC schemes in the Pomurje region is shown in the table below.

Project/initiative	Year of implementation	Public Authorities involved	Type of tendering procedure adopted	Amount of investments awarded (€)  <i>the amounts are with tax included</i>	Energy savings targets (%) and/or MWh	If a PDA service has been provided, please indicate the leverage factor (cost of PDA/Investments launched)
Renovation of 3 public buildings Veržej Primary School, Veržej Educational Home, Kobilje Primary School and Radenci Sports Hall	2020	Municipality of Veržej, Ministry of Education, Science and Sport, Municipality of Kobilje and Municipality of Radenci	Public-Private Partnership	The value of investment: 1.157.850,94:  40 % EU cohesion co-funding 450.262,86  ESCO company (ESOTECH): 482.231,52  Municipality of Veržej - 43.101,10	55,97 %  441,41 MWh/a  31.997,65 €/a	No

<sup>2</sup> <http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED7788>



				Municipality of Kobilje - 70.296,89 Municipality of Radenci - 42.185,00, Ministry of Education, Science and Sport - 69.773,57		
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In addition to the above project, we also have an example of EPC scheme. The building of the District Court Murska Sobota which was built year 1911 was renovated in the frame of *Operational Programme* for the Implementation of the *EU Cohesion Policy* in the period 2014 – 2020. The building is own by the Slovenian Ministry of Justice, so this isn't real regional experience, but the building is situated in region.

Total floor area of the building of the District Court Murska Sobota is 5.317 m<sup>2</sup>. The project starts in 2016<sup>3</sup> and the contract was signed in 2017 for the duration of 15 years.

The private partners in the project were Petrol, slovenska energetska družba, d.d., Dunajska cesta 50, 1000 Ljubljana and RESALTA, družba za upravljanje energetskih storitev, d. o. o., Šlandrova ulica 4B, 1231 Ljubljana – Črnuče.

Financial frameworks of the investment in measures to improve energy efficiency were financed<sup>4</sup>:

- a. concessionaire's own funds in the amount of EUR 908,083.51 excluding VAT,
- b. Ministry of Justice own resources in the amount of EUR 350.569,85 excluding VAT and
- c. cohesion funds in the amount of EUR 553.888,57 excluding VAT, of which 85% from the Cohesion Fund and 15% from the Slovenian participation.



District Court Murska Sobota (Source: [www.sobotainfo.com](http://www.sobotainfo.com))

<sup>3</sup> <http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED7389>

<sup>4</sup> The presented structure of project financing is for all three buildings of the courts in Celje, Murska Sobota and Slovenj Gradec, which were included in the so-called national demonstration project and is difficult to divide the investment amount for the court building in Murska Sobota.

## 5. Barriers for the EPC implementation in the Pomurje region

Given the specifics of the region and the related specifics at the national level, we need to highlight a few key barriers for the EPC implementation in the Pomurje region:

- low level of awareness of EPC implementation by decision makers
- distrust and ignorance of the EPC model
- much of the public buildings have been renovated through direct subsidies
- lack of energy service providers

The first two obstacles low level of awareness of decision makers and distrust and ignorance of the EPC model in the Pomurje region are closely related. The project STEEPING PLUS and the Action Plan can play a key role by removing these two obstacles. Of course, considerable efforts are still needed to consolidate public buildings and raise awareness among municipalities

Quite important reason and now also an obstacle to bigger use of the EPC model is also the situation that majority of the most energy inefficient public buildings have been renovated through direct subsidies from the State (Ministry of Infrastructure/EU), which covered the eligible costs between 80 and 100%.

Despite the fact that the Energy Efficiency Directive (2012/27 / EU) (<https://www.energetika-portal.si/podrocja/energetika/energetska-prenova-javnih-stavb/esco-ponudniki/>) in Article 18 (1) (c) stipulates that Member States shall promote the market for energy services and access to that market for small and medium-sized enterprises (SMEs) by publishing and regularly update the list of available energy service providers, we still meet at the national level with a problem of lack of energy service providers.

Ministry of Infrastructure is publishing a list of energy service providers and the current energy service providers in Slovenija are:

- PETROL d.d., oddelek Energetske rešitve, Pot na Lisce 7, 4260 Bled
- RESALTA d.o.o., Šlandrova ulica 4b, 1231 Ljubljana - Črnuče
- STIN d.o.o., Trg 4. julija 67, 2370 Dravograd
- TAMES d.o.o., Ormoška cesta 14, 2250 Ptuj
- PLISTOR, d.o.o., Zadružni trg 10, 2250 Ptuj
- Interenergo d.o.o., Tivolska cesta 48, Ljubljana
- Esotech, d.d., Preloška cesta 1, 3320 Velenje.
- Synco d.o.o., Litostrojska cesta 56, 1000 Ljubljana
- MAKED ENERGEA, d.o.o., Ulica Gradnikove brigade 11, 1000 Ljubljana



## **6. STEPPING PLUS mutual exchange: recommendations/lessons learnt to be transferred in the Pomurje Region**

### **Enabling elements for the EPC market uptake**

Various interviews and presentations of STEPPING PLUS were performed between April 2021 and April 2022. The target groups were representatives from institutions / organizations at national, regional and local level with experience in the field of EPC and in particular representatives of local authorities. The selection of the interviewees was performed keeping in mind that the STEPPING PLUS project can help to make the ECP approach more effective in region.

At the moment there is no ECP running in the region and no general action plan for ECP is prepared and this connection and coordination is totally necessary for a key aspect to guarantee the success of regional development in the future.

Through the project implementation process of STEPPING PLUS project and implementation of the interviews and preliminary energy audits we can argue that most important recommendations / lessons learnt from STEPPING PLUS mutual exchange, which could and need to be transferred in the Pomurje Region are in the first place the possibility for raising awareness of EPC implementation by decision makers – presentation of success stories and projects carried out in the framework of a project partnership.

Experience and knowledge related to process of selection and aggregation of the buildings it is also an important process that has already been used to some extent. We will definitely have to use the process of selection and aggregation of the buildings when the action plan will be implemented, as it is now included in the list too many buildings to start with the whole list of buildings. STEPPING PLUS has provided knowledge and guidelines on how to combine several buildings in a single project to make the project more appealing for investors.

The preparation of an action plan also proved to be crucial the pooling of the municipalities. It will also need to be used in the same direction - making good building selection (from different municipalities) and comprising of pools of buildings for renovation that would be beneficial for the ESCO in terms of investment and returns. Not just because of that municipalities that want to include less profitable buildings but also because different municipalities have the same type of buildings and because the minimum limit of the ECP project is prescribed when obtaining a subsidy from the ministry (which is a very important aspect in our case).

Definitely, as well as use of the STEPPING PLUS simulation tool and measurement & verification practices, which is very important for good M&V plan, which is a key element of the contract and successful implementation of EPC project.

## 7. EPC implementation: connection and integration with SECAPs and planning tools in place

Slovenia has no regional government and consequently all legislation is at the national level. The main instruments / policies are adopted by the ministry at national level. The most important steps have already been taken in past by the Ministry of Infrastructure with the mandatory use of the EPC approach in the current financial perspective to obtain grants from the Operational Programme for the Implementation of the EU Cohesion Policy.

It was also prescribed by the ministry a few years ago compulsory of *Local energy concepts* for municipalities. Local energy concepts for the municipalities/local communities are binding documents, which includes a concept of the development of local community or more local communities in the field of supply and use of energy, which includes ways of future energy supply and also measures for rational use of energy, combined production of heat, electric power and use of renewable energy sources. Indirect objective is a reduction of CO<sub>2</sub> emissions. That means that one of the main points of the Local energy concepts of the municipalities is also the local carbon information.

Because it goes by Local energy concepts in terms of content for a similar strategic document as SECAPs, it is necessary to focus on the possibilities offered by the EPC model by preparation of both strategical documents. Organization that preparer any of the two strategic documents can play a key role by EPC project preparation, with the first step of identification of potential. In any case, the previous transfer of knowledge and good practices is important which, however, must be continued to organizing meeting / workshops for increasing awareness of the benefits of EPC in public sector, present project and success stories, provide knowledge on how to start the EPC process, provide assistance and support, ...

During preparation of SECAPs or Local energy concepts an overview on public buildings on municipality area need to be ready / prepared. The next step is to prepare measures for the action plan where is necessary to design preliminary ideas on how much it can save (energy / costs) in each public building by implementation of energy measures. As there are a total of 27 municipalities in our region and since the merging of buildings and pooling of municipalities at the same EPC project represents a potential, it is definitely necessary to take this potential into account. In the case of our region, the advantage is that in the big majority of municipalities we, as LEA Pomurje, are the preparers SECAPs and Local energy concepts and so we have an insight into the state and potentials.

It might be a good idea to connect more closely in the future with the EIT Regional Innovation Scheme accelerates climate innovation especially in the direction transfer of knowledge and good practices. EIT RIS facilitates connections into our established EIT Climate-KIC innovation hubs, currently in nine countries, which in turn act as a bridge into our pan-European network. Slovenia joined the EIT RIS<sup>5</sup> network in 2014 and has played a very active role since then. As of January 2021, the Hub is organized as a partnership of four organizations – E-ZAVOD as HUB Co-ordinator, National Institute of Chemistry, CO NOT and CER. With a network of dedicated and well-connected partners activities have grown in scale and depth. Being a small but highly innovative country, Slovenia hosts an important ecosystem for commercializing knowledge and technology in south-eastern Europe.

In any case, it is necessary to make the integration of action plan in to Regional development programme of Pomurje region as in presented in chapter 11.

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<sup>5</sup> <https://www.climate-kic.org/countries/slovenia/>

## 8. Regional stakeholders analysis

In the frame of analysis of the regional stakeholder we found out low level of awareness of EPC amongst municipalities and actors of regional development in the region. These are the key stakeholders who should be familiar with the ECP, trust in the EPC approach and implement the EPC in the region. Big majority of stakeholders who had some experience in EPC projects are on national level or from other regions where the EPC project were developed in the past. We also don't have in the region the facilitators / EPC advisers for local public authorities and not a single energy service provider.

In the analysis, we considered that the stakeholders are those public or private organizations that are involved in or affected by EPC. Stakeholders are private and public organizations and institutions, regional authorities, economic sectors representative which can be divided or categorized in the future as follows:

- I. Primary stakeholders: have impact directly on EPC
- II. Secondary stakeholders: do not have directly impact on EPC but have a (major) interest for implementation of EPC in region.

We were able to position the stakeholder from the content point of view in the following sections:

1. section – decision makers – municipalities in the Pomurje region
2. section - facilitators/advisers of local public authorities:
  - a. local energy agency - transfer of knowledge and good practices, energy audits, preparation of pool of buildings,
  - b. regional development agency - integration of the EPC action plan in the regional development program,
  - c. development agencies – support the regional development agencies integration of the EPC action plan in the regional development program
3. section – SME as potential energy service providers.

### List of 2. Section of stakeholder

- a. local energy agency:
  - Lokalna energetska agencija za Pomurje, Martjanci 36, 9221 Martjanci
- b. regional development agency:
  - Razvojni center Murska Sobota, Kardoševa ulica 2, 9000 Murska Sobota
- c. development agencies:
  - Razvojna agencija Sinergija, Kranjčeva 3, SI-9226 Moravske Toplice
  - PORA, razvojna agencija G. Radgona, Trg svobode 12, 9250 Gornja Radgona
  - Prleška razvojna agencija giz, Prešernova ulica 2, 9240 Ljutomer
  - Zavod za turizem in razvoj Lendava, Lendavska cesta 19, 9220 Lendava

Development Center Murska Sobota (RC MS) is the leading regional development agency in the Pomurje region, entered in the register of regional development agencies at the Ministry of Economic Development and Technology, which in cooperation with the Development Agency Sinergija d.o.o., Prlekija development agency giz, PORO, Development agency Gornja Radgona, and the Institute for Tourism and Development Lendava performs general development tasks in the public interest for Pomurje region.

## List of 1. Section of stakeholder

- Municipality Apače 42b, 9253 Apače
- Municipality Moravske Toplice, Kranjčeva 3, 9226 Moravske toplice
- Municipality Murska Sobota, Kardoševa ulica 2, 9000 Murska Sobota
- Municipality Beltinci, Mladinska ul. 2, 9231 Beltinci
- Municipality Cankova, Cankova 25, 9261 Cankova
- Municipality Črenšovci, Ul. prekmurske čete 20, 9232 Črenšovci
- Municipality Dobrovnik, Dobrovnik 297, 9223 Dobrovnik
- Municipality Gornja Radgona, Partizanska cesta 13, 9250 Gornja Radgona
- Municipality Gornji Petrovci, Gornji Petrovci 31/d, 9203 Gornji Petrovci
- Municipality Grad, Grad 172, 9264 Grad
- Municipality Hodoš, Hodoš 52, 9205 Hodoš
- Municipality Kobilje, Kobilje 35, 9237 Kobilje
- Municipality Križevci pri Ljutomeru, Križevci 11, 9206 Križevci pri Ljutomeru
- Municipality Kuzma, Kuzma 24, 9263 Kuzma
- Municipality Lendava, Trg ljudske pravice 5, 9220 Lendava
- Municipality Ljutomer, Vrazova 1, 9240 Ljutomer
- Municipality Odranci, Panonska ulica 33, 9233 Odranci
- Municipality Puconci, Puconci 80, 9201 Puconci
- Municipality Radenci, Radgonska cesta 9, 9252 Radenci
- Municipality Razkrižje, Šafarsko 42, 9240 Ljutomer
- Municipality Rogašovci, Rogašovci 14b, 9262 Rogašovci
- Municipality Sveti Jurij ob Ščavnici, Ulica Bratka Krefta 14, 9244 Sveti Jurij ob Ščavnici
- Municipality Šalovci, Šalovci 162, 9204 Šalovci
- Municipality Tišina, Tišina 4, 9251 Tišina
- Municipality Turnišče, Ul. Štefana Kovača 73, 9224 Turnišče
- Municipality Velika Polana, Velika Polana 111, 9225 Velika Polana
- Municipality Veržej, Ulica bratstva in enotnosti 8, 9241 Veržej

## 9. Preliminary investigation of future investment programmes in the public building sector

Based on preliminary assessment on energy consumption, state of the art, ongoing initiatives and level of interest in Pomurje region, we make an estimation of the volume of investments that we can address using EPC in near future. We calculate also the potential impact in terms of CO<sub>2</sub> emissions reduction and energy savings. This assessment can be intended as a potential market that you could ideally trigger.

Given the current situation in the Pomurje region, taking into account the specifics on the national level, according to what is written in this Action plan, we can conclude that if we carry out the set steps and implement the placement of planned steps in the Regional development programme of Pomurje region, we can ensure more than 22.733 m<sup>2</sup> refurbishment of public buildings, which will bring us saving of more than 1.155 MWh which represents in the region around 399,70 t CO<sub>2</sub> emission. It was estimated, if all suggested energy efficient measures are implemented in the buildings from list, can reach up to 50% of current use of energy in those public buildings which now represents energy consumption in the amount of 2.310.403 kWh on an annual basis.

The share of buildings covered by the action plan is 8,38%, compared to the surface of all buildings in the Pomurje region. Total investment is foreseen in the amount of 11.321.311,00 € in 16 public buildings.

No.	Municipality	Name of the public building / project	Estimated total value of the project in €	Total floor area in m <sup>2</sup>
1.	Municipality Cankova	Energy renovation gym and multipurpose room Cankova 30	350.000,00	770
2.	Municipality Cankova	Energy renovation Cankova 24	70.000,00	200
3.	Municipality Cankova	Energy renovation BC Cankova, Gerlinci and Korovci	90.000,00	150
4.	Municipality Dobrovnik	Energy renovation PB	1.600.000,00	2.557
5.	Municipality Gornja Radgona	Energy renovation PB	1.000.000,00	7.636
6.	Municipality Križevci	Energy renovation municipal buildings and KD	300.000,00	1.394
7.	Municipality Kuzma	Energy renovation KD Kuzma	300.000,00	300
8.	Municipality Ljutomer	Energy renovation municipal buildings, II. phase	1.721.311,00	1.474
9.	Municipality Sveti Jurij ob Ščavnici	Energy renovation Sveti Jurij ob Ščavnici	740.000,00	419
10.	Municipality Turnišče	Energy renovation municipal buildings Turnišče	300.000,00	987
11.	Municipality Velika Polana	Energy renovation of the business-residential building Velika Polana	1.900.000,00	1.790
12.	Municipality Šalovci	Energy renovation of the school and kindergarten construction	900.000,00	1.790
13.	Municipality Razkrižje	Energy renovation KD Razkrižje	250.000,00	645
14.	Municipality Črenšovci	Energy renovation NK Črenšovci	700.000,00	120
15.	Municipality Moravske Toplice	Energy renovation of the school DOŠ Prosenjakovci	600.000,00	1.872
16.	Municipality Moravske Toplice	Energy renovation Kocljevina Prosenjakovci	500.000,00	629

Taking into account all factors and current status we have prepared to-dos list with the steps/actions that commits to take in order to implement the EPC roadmap in Pomurje region:

	ACTION	RESPONSIBLE	DEADLINE	KPI
1.	Presentation of the Action Plan and signatures of the MoU	LEA Pomurje	On-going!	Latest 30.6.2022 min 2 x MoU
2.	Presentation of the Action Plan and collection of cooperation signatures by key actors	LEA Pomurje	On-going!	Latest 30.6.2022 min 8 x LoC / LoS
3.	Confirmation of the Regional development programme of Pomurje region by Development council of the Pomurje region	Regional development agency	13.6.2022	Decision of Development council of the Pomurje region
4.	Acceptance of the Regional development programme of Pomurje region by Council of Pomurje development region	Regional development agency	16.6.2022	Decision of Council of Pomurje development region
5.	Confirmation of the Operational Programme for the Implementation of the EU Cohesion Policy in the Period 2021-2027	Development Council of Cohesion Region Eastern Slovenia	second half of 2022	Decision of Development Council of Cohesion Region Eastern Slovenia
6.	Acceptance of the Operational Programme for the Implementation of the EU Cohesion Policy in the Period 2021-2027	European Commission	last quarter 2022	Decision of European Commission
7.	Organization of regional workshops to promote the EPC model (4 workshops for decision makers / municipalities)	Development Agency of Prlekija, LEA Pomurje,	2023	4 x workshops (40 participants)
8.	Financing solutions for the technical assistance service (such as ELENA,...)	KSENA, LEA Pomurje	2022 - 2024	New funded project
9.	Preparation of extended energy audits for all included buildings in the list	Municipalities, regional development agencies,	2023 -2024	17 extended energy audits
10.	Aggregation of municipalities with foreseen investments and energy savings / tender – see next table!	Municipalities, ESCO, LEA Pomurje	2024 - 2026	3 x Pomurje EPC projects

Based on the location of an individual buildings, we make aggregation of municipalities in the same sub-local areas in to the same EPC project proposal. Frames and effects of each project are shown in the table below.

	Name of the EPC project / participating municipalities)	Estimated total value of the project in €	Energy savings in MWh/a and CO2 saving /a	Total floor area in m2	Proposed timeline
1.	Pomurje EPC 1 / Municipality Cankova, Municipality Šalovci and Municipality Moravske Toplice (8 building)	2.810.000	5,71 157,11	5.711,00	2024 - 2025
2.	Pomurje EPC 2 / Municipality Dobrovnik, Municipality Turnišče, Municipality Velika Polana and Municipality Črenšovci (4 buildings)	4.500.000	5,45 66,23	5.454,00	2025 - 2026
3.	Pomurje EPC 3/ Municipality Gornja Radgona, Municipality Križevci, Municipality Ljutomer, Municipality Sveti Jurij ob Ščavnici and Municipality Razkrižje (5 buildings)	4.011.311	11,56 176,35	11.568,00	2026 - 2027



## **10. STEPPING PLUS roadmap for the EPC roll-out in the Pomurje region: 2030 objectives and performance indicators**

If we want to assess how much EPC scheme in Pomurje region / realization of our action plan, will contribute to the energy renovation of public buildings in Pomurje region, in connection with Energy Performance of Buildings Directive, prescribing that each year, it will be necessary to renovate 3% of the area of buildings owned and used by the public organisation or to adopt alternative cost-effective measures to achieve the same improvement in the energy efficiency of public buildings, we must start from the data on the total floor area of all public buildings in the Pomurje region. Considering the 271.400 m<sup>2</sup> as total floor area of all public buildings in the Pomurje region and the commitment of 3% rate of deep renovation to be achieved in the public sector yearly, we can assume that we need to renovate each year 8.142 m<sup>2</sup> of total floor area of public buildings in the Pomurje region.

So, if we focus on the coming years until 2030, we should renovate together more than 65.000 m<sup>2</sup> of total floor area of public buildings in the Pomurje region in those 8 years.

According to goals of our Action plan, where we foresaw more than 22.733 m<sup>2</sup> refurbishment of public buildings, which will bring us saving of more than 1.155.202 kWh and represents saving of 399,70 t CO<sub>2</sub> emission, we can say that the EPC will contribute in share of almost 35 % to 2030 objectives and performance indicators on regional level.

However, if we focus on Long-Term Strategy for Energy Renovation of Buildings until 2050 (DSEPS) and the headline target for 2030, where the reduce greenhouse gas emissions in buildings by at least 70 percent compared to 2005 to be achieved, our action plane contributes 3.33% on regional level in public buildings.

And look at least 2/3 of energy use in buildings from renewable energy sources headline target for 2030, can in our case of public buildings in the region, according to experience, we say that it is almost ½ of energy use in buildings from renewable energy sources.

In any case, the implementation of the action plan contributes to a vision for 2050 from Long-Term Strategy for Energy Renovation of Buildings until 2050, because we will get closer to net zero emissions in the building sector by maintaining a high volume of energy renovations of buildings with low-carbon and renewable materials and focusing on heating with RES technologies and district heating systems. Orientation of new construction and energy renovation towards achieving almost zero emissions throughout life. Wider renovations of buildings are encouraged to ensure the safety, health, well-being and productivity of users. The area of construction and renovation of buildings will be a priority area for the transition to a low-carbon circular economy.



## **11. Strategic projects and plans where STEPPING PLUS roadmap can be adopted/integrated for the future deployment of EPC schemes.**

In Pomurje region is the most important regional (include also energy) action plan the Development Programme for Pomurje region, which is the key strategic document on the regional level, specifies the directive of future development of the region and follows the directives of national as well as European strategic documents in order to reach smart, inclusive, and sustainable growth.

Besides its vision and strategic goals, the development programme for Pomurje includes four development priorities, investment fields as well as measures to implement the set strategy. It also includes a list of planned investments and projects that will be implemented in this region during the period. It is important from this point of view to include the idea / initiative / list of buildings / EPC model in the Regional development program of Pomurje region as an important project – regional project. This is the next crucial step of realization and success of the action plan. This is the reason why we will make additional presentations of the action plan and gain commitments from the side organizations that are part of the Regional Development Partnership which is responsible for the planning of regional development strategies, regional cooperation and strategies implementation coordination, administrative and operational support to specific actions and projects, internationalisation, regional branding, regional cohesion and facilitation between the governmental agencies and local communities. The network's members are under leadership / responsibility of Razvojni center Murska Sobota as Lead Regional Development Agency.

As part of activities in the future, we plan to make different presentation, to gain confirmation and consent at different organizations / key stakeholders as by regional development agency, municipalities, development agency, possibly also at ESCO companies and other business support organizations from region an at national level.

With the aim of presenting the action plan, raising awareness and especially in the direction of the realization of what is written in the action plan, we intend to collect from different stakeholders some Letter of support, Letter of commitment and / or Memorandum of understanding.

By placing the action plan in the frame of Development Programme for Pomurje region we will ensure the possibility of obtaining a grant / subsidy from Operational Programme for the Implementation of the EU Cohesion Policy in the period 2020 – 2021.

## 12. Conclusion

Given the current situation in the Pomurje region, taking into account the specifics on the national level, according to what is written in this Action plan, we can conclude that if we carry out the set steps and implement the placement of planned steps in the Regional development programme of Pomurje region, we can ensure more than 22.733 m<sup>2</sup> refurbishment of public buildings, which will bring us saving of more than 1.155.202 kWh which represents in the region 399,70 t CO<sub>2</sub> emission.

The buildings covered by the action plan contribute in the amount of 8,38%, compared with the surface of all buildings in the Pomurje region to the realization of goals of Energy Performance of Buildings Directive.

Presentation, confirmation, consent at different organizations / key stakeholders:

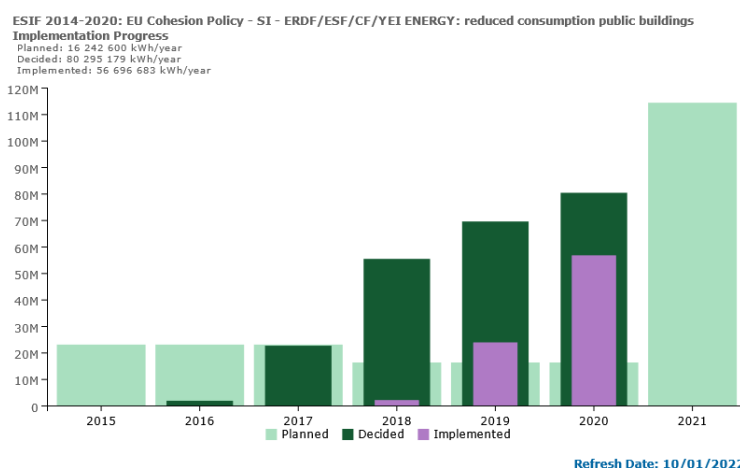
- Regional development agency
- Municipalities
- ESCO
- Business support organizations

With the aim of presenting the action plan, raising awareness and especially in the direction of the realization of what is written in the action plan, we intend to collect from different stakeholders:

- Letter of support
- Letter of commitment
- Memorandum of understanding

**To be included in the Regional development program of Pomurje region as an important project – regional project is the next crucial step of realization. After STEPPING PLUS project, we need to perform energy audits, using simulation tools, merging building and prepare EPC project.**

As a stimulation and starting point for the realization of the Action Plan in the future, we can take experience from the current financial perspective - implementation of the EU Cohesion Policy, especially if we look at implementation progress of reduced consumption in public buildings, where it was planned to decrease of annual primary energy consumption of public buildings in the amount of 16.242.600 kWh/year, with that we have already (January 2022) achieved 56.696.683 kWh/year, but it is expected until all projects are completed decrease of annual primary energy consumption of public buildings in the amount of 80.295.179 kWh/year.



## 13. Sources

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