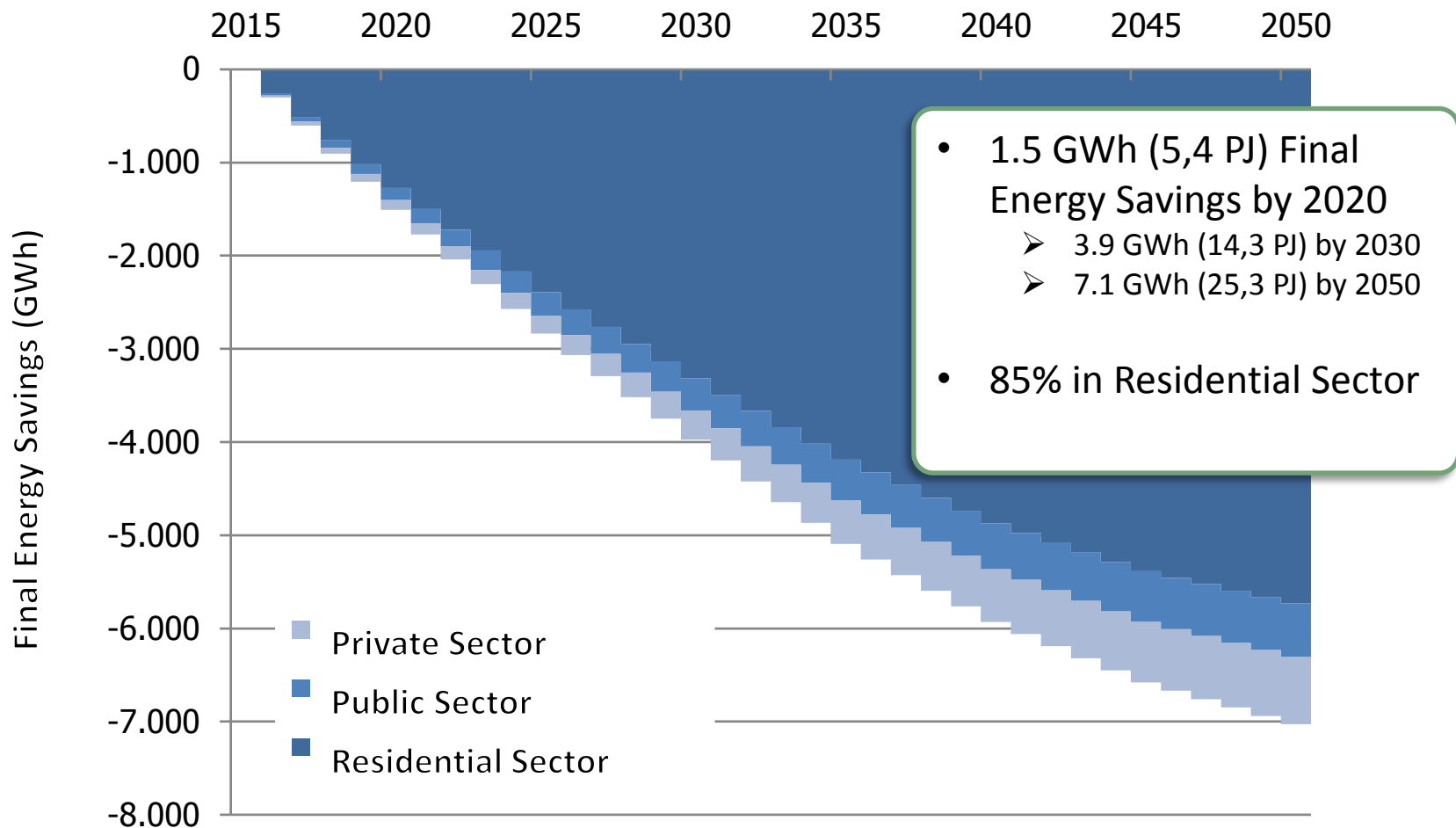


The state of the art and the results of deep energy renovation of public buildings in Slovenia

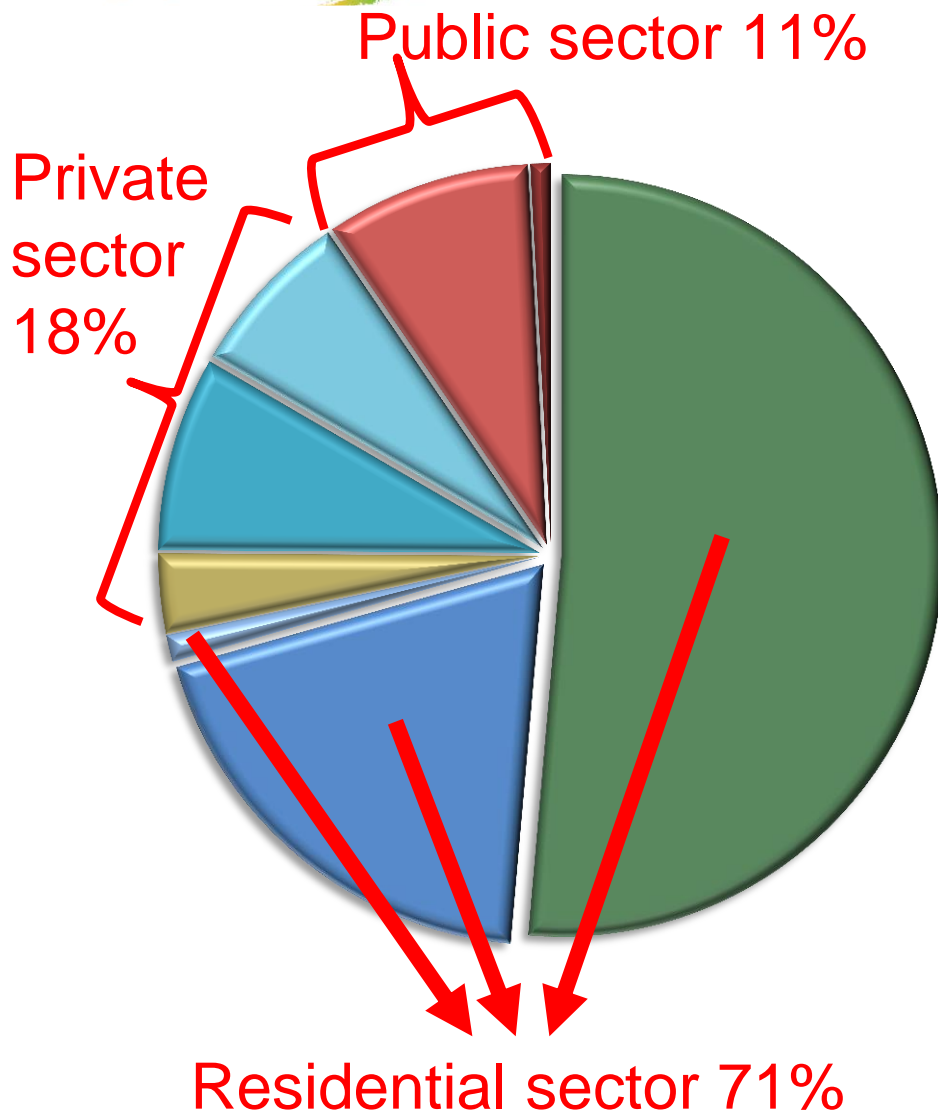
M. Sc. Branka Bugarin

Project Unit – Office for Energy-Saving Building Renovations

Savings Estimates



Building Stock



BUILDING TYPE	SURFACE (000 m ²)	SURFACE (%)
Single apartment	46.146	71%
Multi apartment	17.291	
Special purpose apartments	1.008	
Catering	3.008	18%
Business & Administration	7.409	
Commercial & other services	6.415	
General Public use	7.817	11%
Government	708	

TOTAL 89.802

Key assumptions

- **Long-Term Strategy for Mobilising Investments in the Energy Renovation of Buildings:**
 - The average value of investments: 208 €/m² (VAT excluded)
 - The estimated volume of investment: 415 million € (VAT included)
 - Co-funding: up to 40 % of investment's eligible costs
 - Test of suitability for PPP
- **Financial Construction:**
 - Grants (OP ECP 2014-2020): 146,7 million €
 - Refundable Cohesion Funds (OP ECP 2014-2020): 25 million €
 - Private funds (ESCO)
 - Public partners' funds

Analysis of Pilot projects



Pilot project	Characteristics	A_{net_floor} (m ²)	Investment (VAT excl.) (mio EUR)	Grant (mio EUR)	Total final energy savings (kWh/a)
CŠOD Bohinj	ZNEB	2.105*	1,2	0,3	247.300
3 sodišča – Celje, Slovenj Gradec, Murska Sobota	Bundled buildings	14.077*	2	0,7	623.840
Upravna stavba Šmarje pri Jelšah	Multiple managers per one building	3.618*	0,8	0,3	493.030
5 stavb kulturne dediščine	Cultural heritage building	55.477*	4,1	1,6	3.543.580

Analysis of OJS



Call		<i>OJS 2016 - PP</i>	<i>OJS 2016 - PPP</i>	<i>Share of PPP (%)</i>	<i>OJS 2017 - PPP</i>
No of operations		2	1	33	1
Investment (VAT excl.)	(mio EUR)	2.616.963,85	852.961,30	25	6.523.475,43
Grant	(mio EUR)	1.031.164,45	328.767,85	24	2.606.245,57
Net floor area	(m2)	14.168,54	8.448,46	37	35.172,50
Total increase in the use of energy from RES	(kWh/a)	26.000,00	0,00	0	699.734,60
Total final energy savings	(kWh/a)	1.360.118,00	613.403,75	31	3.327.492,00
Eligible costs	(EUR)	2.577.911,13	821.919,62	24	6.515.613,93

OJS - Central Government
 RES - Renewable Energy Source

PP - Public Procurement
 PPP - Public-Private Partnership

Note: The operation is considered to be a PPP if at least 50% of the value of the operation (VAT excluded) is a PPP.

Analysis of ŠJS



Call		ŠJS 2016 - PP	ŠJS 2016 - PPP	Share of PPP (%)	ŠJS 2017 - PP	ŠJS 2017 - PPP	Share of PPP (%)
No of operations		7	2	22	2	2	50
Investment (VAT excl.)	(mio EUR)	13.082.676,14	3.981.371,00	23	2.335.987,77	1.765.654,52	43
Grant	(mio EUR)	2.644.836,86	1.521.657,04	37	680.516,30	698.855,00	51
Net floor area	(m2)	34.238,98	41.933,00	55	8.016,31	13.287,47	62
Total increase in the use of energy from RES	(kWh/a)	301.251,00	2.243.648,60	88	312.812,00	208.108,51	40
Total final energy savings	(kWh/a)	2.427.652,41	2.235.724,65	48	1.078.567,00	1.386.447,00	56
Eligible costs	(EUR)	6.612.092,19	3.804.142,61	37	1.801.515,23	1.747.137,51	49

ŠJS - Wider Government Sector
 RES - Renewable Energy Source

PP - Public Procurement
 PPP - Public-Private Partnership

Note: The operation is considered to be a PPP if at least 50% of the value of the operation (VAT excluded) is a PPP.

Analysis of JOB 2016-2017



Public Tender		JOB 2016 - PP	JOB 2016 - PPP	Share of PPP (%)	JOB 2017 - PP	JOB 2017 - PPP	Share of PPP (%)
No of operations		11	4	27	9	4	31
Investment (VAT excl.)	(mio EUR)	12.481.550,88	7.549.195,30	38	10.011.305,20	13.755.847,62	58
Grant	(mio EUR)	3.760.971,46	2.903.352,96	44	2.306.025,89	5.486.613,55	70
Net floor area	(m2)	44.848,01	40.049,30	47	22.858,08	83.455,77	78
Total increase in the use of energy from RES	(kWh/a)	1.531.447,14	1.297.496,63	46	278.310,00	1.285.205,62	82
Total final energy savings	(kWh/a)	3.020.782,91	3.183.742,94	51	1.559.593,68	7.422.928,63	83
Eligible costs	(EUR)	9.501.815,65	7.255.933,97	43	5.765.064,75	13.716.533,87	70

JOB – Public tender for Municipalities
 RES - Renewable Energy Source

PP - Public Procurement
 PPP - Public-Private Partnership

Note: The operation is considered to be a PPP if at least 50% of the value of the operation (VAT excluded) is a PPP.

Analysis of JOB preliminary 2018



Public Tender		Share of PPP (%)	Share of PPP (%)	JOB 2018 - PP	JOB 2018 - PPP	Share of PPP (%)
No of operations		27	31	3	6	67
Investment (VAT excl.)	(mio EUR)	38	58	4.000.535,71	21.693.187,56	84
Grant	(mio EUR)	44	70	713.754,30	8.283.462,07	92
Net floor area	(m2)	47	78	6.243,90	121.981,55	95
Total increase in the use of energy from RES	(kWh/a)	46	82	145.852,00	2.382.137,16	94
Total final energy savings	(kWh/a)	51	83	536.740,00	8.722.401,57	94
Eligible costs	(EUR)	43	70	1.784.385,75	20.708.655,18	92

JOB – Public tender for Municipalities
 RES - Renewable Energy Source

PP - Public Procurement
 PPP - Public-Private Partnership

Note: The operation is considered to be a PPP if at least 50% of the value of the operation (VAT excluded) is a PPP.

Joint Analysis of Calls and Public Tenders

- Total No. of operations: 52 (20 PPP, 32 PP)
- Total net floor area of buildings: $\approx 450.000 \text{ m}^2$ (**73% PPP**, 27% PP)
- Total value of eligible costs: 73 million € (**64% PPP**, 36% PP)
- Avg. energy saving $Q_f / A_{\text{net floor area}}$: $\approx 75 \text{ kWh/m}^2\text{a}$
- Avg. increase in en. production from RES / $A_{\text{net floor area}}$: $\approx 20 \text{ kWh/m}^2\text{a}$

Public Tender data (Municipalities only)	PPP	PP
En. savings $Q_f / A_{\text{net floor area}}$ (kWh/m ² a)	86	68
Eligible costs / $A_{\text{net floor area}}$ (€/m ²)	170	225

Future prospects



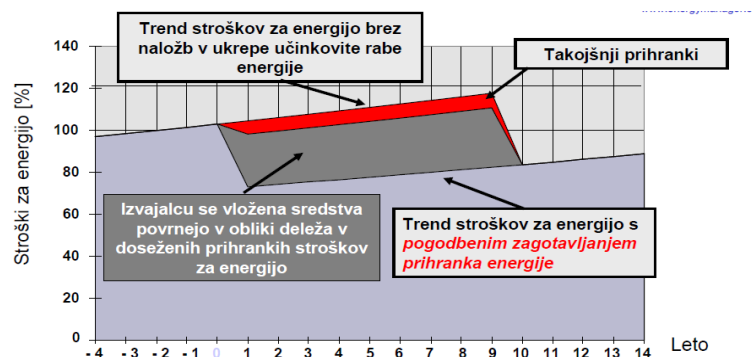
- Bankable projects – today: with the support of EU cohesion funds (up to 40% of eligible costs)
- Bankable projects – near future:
 - support from EU cohesion (grants),
 - additional challenges – coastal regions with moderate savings potential, buildings of cultural heritage, nZEBs, sustainable building (statics etc.)



ESCO market



- **4** different ESCO companies have been selected in the tenders, and at least **3** other companies are on the market
- Slovenian ESCO market **analysis**
- Introduction of a **system for monitoring the quality of service delivery and certification of ESCO companies**
- Financial instruments



Financial instruments



- **Key Elements of Financial Instruments for the 2014-2020 programming period:**
- **reimbursable** EU cohesion policy funds,
- **fund of funds** and/ or the financial intermediary,
- SID Bank.
- **25 million** € of reimbursable funds,
- **leverage 1,5,**
- **total of 36 million** €,
- starting date: Autumn 2018.



Technical assistance ELENA



- **1.7 million €** worth **grant** for technical assistance;
- a grant of up to **90% of the eligible costs** for the preparation of the following documentation:
 - Energy audits,
 - Investment documentation,
 - Test of suitability for Public-Private-Partnership,
 - Project documentation;
- available over **2018-2020** period;
- condition **leverage of at least 20** times the value of the approved technical assistance.



Public Tender JOB_2018

Published: 16. 2. 2018

Closing dates in 2018:

1. CD	2. CD	3. CD	4. CD	5. CD
March 12	April 16	May 14	September 17	November 12

Funds available: **17,6 mio EUR**



**Thank you for
your attention!**

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