

# Why cooperate, and what is in it for us?

Concrete examples from Norwegian participation in Flagship projects within the EUSBSR

Liv R. Lindseth, LinKon AS

Contracted by Innlandet County Council

EPC market expert and project administration

February 2021

[effect4buildings.se](http://effect4buildings.se)

[Innlandetfylke.no/E4B](http://Innlandetfylke.no/E4B)



## EFFECT4buildings – a Flagship projects within the EUSBSR

---

«The flagship status has been crucial for this project.

From the start the status contributed to us being given priority for INTERREG funding at all.

During implementation it led to an increased status for the project, increased attention and hence became a door-opener for dissemination activities due to easier access to networks within the Baltic Sea Region.”



*Marit Ragnarsson,  
Country Board of Dalarna*



# EFFECT4buildings (E4B)

International project, 10 partners in 7 countries, Interreg Baltic Sea Region, 2017 – 2020

## BACKGROUND

- 40% of energy consumption and 36% of CO<sub>2</sub> emissions in the EU come from buildings
- Energy efficient investments are not happening fast enough with regards to global reduction targets

## MAIN GOALS

- Exchange experiences and expertise
- Reduce the risk of energy efficiency investments
- Highlight opportunities to upgrade buildings and reduce maintenance backlogs
- Cooperation with **building managers** to improve useful tools and instruments
- **Increase energy efficiency in public buildings**



# E4B Guides and tools

---

## Financial instruments

 <p>ENERGY PERFORMANCE CONTRACTING</p>	 <p>MULTI SERVICE CONTRACTING</p>
 <p>GREEN LEASE</p>	 <p>PROSUMERISM</p>

## Supportive tools

 <p>CONVINCING DECISION MAKERS</p>	 <p>FINANCIAL CALCULATIONS</p>
 <p>BUNDLING</p>	 <p>FUNDING</p>

## Technological solutions

 <p>TECHNOLOGICAL SOLUTIONS</p>
--

# Main values

---

## 1. Exchange of experiences

- Case studies and pilots on many of the tools from each partner country

## 2. Exchange knowledge

- Education and training courses – building capacity on the financial tools and instruments
- Market research and reports from several countries

## 3. Development needs detected

- Assessment of barriers and success factors
- Testing and evaluation

## 4. Tangible and user-friendly outcome

- Improved and adapted tool and instruments
- Tailored for the main target group (public building managers)



## E4B experiences – real EPC cases

EPC cases	Cases	Saving guarantee (average)	Achieved saving (average)	Duration/ y (average)	Financing PU/PV	Buildings	m <sup>2</sup>	Investment
Finland - PP2	2	29 %	21 %	6	Esco	4	20 000	2 M€
Estonia - PP8	2	37 %	30 %	5	Own	2	10 000	2 M€
Poland - PP11	2	30 %	37 %	15	1 Own 1 Esco	17		5 M€
Denmark - PP5	5	22 %	22 %	8	Own	238	~650000	35 M€
Norway - PP3	6	29 %	25 %	10	Own	114	360 000	12 M€
	<b>17</b>	<b>29 %</b>	<b>27 %</b>	<b>9</b>	<b>PU+PV</b>	<b>375</b>		<b>56 M€</b>

# EPC GUIDE and tools

## GUIDE ENERGY PERFORMANCE CONTRACTING



### GUIDE to Energy Performance Contracting (EPC)

with contract-based partnership during the analyses phase

#### EPC toolbox - documents and templates for implementing EPC

Phase 0 Start-up and tender	Phase 1 Energy analyses	Phase 2 Implementation	Phase 3 Guarantee
1. Guideline for EPC customers – how to start an EPC project			
2. EPC Presentation and Training material			
3. Tender for procurement of EPC supplier - Template	7. Partnership contract for phase 1, Analyses – Template		
4. EPC tender analyses – Template*	8. Project development report and energy analyses – Template		
5. Baseline data –Template*			
6. Checklist for qualification and award criteria – Template*		9. Attachment to contract terms for Phase 3, Guarantee - Template	

# E4B trigger real action and EE investments

## Examples from Norway

- EPC in Aurskog-Høland municipality (2-3 MEUR investment)
- Several Norwegian municipalities in the loop
- Mapping of EE in Innlandet as basis for future investments

## Added Value for Norway

- Invited as presenter on two national seminars by Norwegian Energy Agency, Enova SF – and they participated in E4B events
- High degree of knowledge among stakeholders (ESCOs, municipalities, energy authorities)

## Examples from BSR

- Pilot projects in several countries
- International presentations of E4B and specific tools
- E4B EE investments reported by all countries







Convincing Decision  
Makers



Financial Calculations



Bundling



Funding



Energy Performance  
Contracting



Multi Service Contracting



Green Lease Contracting



Prosumerism



Technological Solutions

## Specific value for BSR

- User-friendly tools and instruments targeted at public building managers in BSR
- A well-established network (partners/stakeholders)
- E4B tool evaluation, autumn 2020
  - 94 % will implement 1-3 tools in near future
  - 26 % will implement EPC within 2 years

## Further needs

- Dissemination of results
  - 34 % want to know more about EPC
- Training courses for stakeholders
  - Increase knowledge, build capacity
- More testing and pilot projects
- Best practise and success stories



EUROPEAN  
REGIONAL  
DEVELOPMENT  
FUND



**EFFECT4buildings**



**Innlandet**  
fylkeskommune

Contact

Liv R. Lindseth, Linkon AS  
Contracted by Innlandet County Council

[innlandetfylke.no/E4B](http://innlandetfylke.no/E4B)

[effect4buildings.se](http://effect4buildings.se)

[liv@linkon.no](mailto:liv@linkon.no)

+47 95 22 04 82