

Interview with persons in the EPC-market

NORWAY

General information

Item	
Organisation name	Kjell Gurigard AS and Elverum Municipality
Organisation type	Private company and municipality
Date of interview	29. January 2014
Name of interviewed person	<i>Kjell Gurigard (facilitator) and Svein Arild Nyhus (EPC client)</i>
Function of interviewed person	Facilitator and municipality

Potential project	
Facility (project title)	EPC in Elverum Municipality
City, Region (site)	Elverum in Hedmark county, Norway
Type of customer	<ul style="list-style-type: none"> • Municipality
Sector	<ul style="list-style-type: none"> • Public buildings • schools, city hall, kindergartens and nursing homes
Goals of the project <i>(e.g. comprehensive reconstruction of the energy system during six months by implementing measures saving heat, electricity and water)</i>	<ul style="list-style-type: none"> • The goal is to implement measures to save 20 – 25 % of the total energy consumption within 2015
Number of buildings of each type <i>(e.g. 25 schools, 11 healthcare facilities, etc.)</i>	<ul style="list-style-type: none"> • 43 buildings in total • schools, city hall, kindergartens, nursing homes

Interview

Question	Answer
What was the impulse to start thinking about realising an EPC project?	Elverum Municipality is a "big brother" in the municipal cooperation in the Sør-Østerdal region. This is an inter-municipal cooperation, also including energy efficiency, between Elverum and four other neighbouring municipalities (the regional council for Sør-

	<p>Østerdalen).</p> <p>Elverum choose to announce a tender for the EPC-competition by themselves ahead of the others. Later the four other municipalities have followed and these projects are also up and running. The cooperation project on EPC was started in 2010 and includes the municipalities Elverum, Engerdal, Stor-Elvdal, Trysil and Åmot.</p> <p>Combined the five municipalities administer more than 250.000 m2 building agglomeration. The buildings included are special purpose buildings such as schools, city hall, kindergardens and nursing homes – all important public buildings in the municipality.</p>								
<p>What would be the main reasons for your organisation for choosing an EPC project? <i>(remove not-valid answers and put remaining answers in order of decreasing importance)</i></p>	<ul style="list-style-type: none"> • Reduce energy costs • Additional maintenance measures • Training of maintenance personnel and other target groups in the course of the project • Transfer of knowledge from ESCO/entrepreneur to municipal personnel in all cooperating municipalities • Energy labelling of buildings • Energy Certificates • Reduction of energy use: approximately 4,5 GWh/year 								
<p>What are in your opinion the main barriers the realisation of an EPC-project in your organisation? <i>(remove not-valid answers and put remaining answers in order of decreasing importance)</i></p>	<ul style="list-style-type: none"> • Political and administrative prioritizing • Lack of technical competence and/or personnel • Capacity of personnel 								
<p>What is the expected size of the first EPC project in your organisation?</p>	<p>Number of selected buildings in the pool: 43 buildings Energy cost of the pool:</p> <table border="0"> <tr> <td>Oil consumption</td> <td>0,023 mill EUR (0,214 GWh/year)</td> </tr> <tr> <td>Electrical energy</td> <td>1,03 mill EUR (10.27 GWh/year)</td> </tr> <tr> <td>District heating</td> <td>0,57 mill EUR (5,72 GWh/year)</td> </tr> <tr> <td>Sum</td> <td>1,623 mill EUR/year</td> </tr> </table> <p>Potential investment volume: approximately 33,5 mill NOK (4,2 mill EUR) Reduction of energy use: approximately 4,5 GWh/year Potential savings: 20 – 25 % of the total energy consumption within 2015.</p>	Oil consumption	0,023 mill EUR (0,214 GWh/year)	Electrical energy	1,03 mill EUR (10.27 GWh/year)	District heating	0,57 mill EUR (5,72 GWh/year)	Sum	1,623 mill EUR/year
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Sum	1,623 mill EUR/year								

Other information on the project

To fill in only available information

Timing of the project		From	Till
Project identification		2010	
Procurement procedure (competition w negotiations)		2010	
Installation of energy efficiency measures		2011	2013
Contract duration (guarantee duration)		2013	2022
Period of repayment (if the same, do not fill in)			
Contract duration [years]		11 years (all three phases)	
Project specifications			
Measures (short description – max. 5 points)		<p>Approximately 300 energy efficiency measures were assessed</p> <p>The most extensive/most common measures were:</p> <ul style="list-style-type: none"> • Energy monitoring systems • Heat pumps • Regulation systems for heating plants • Light control systems 	
Total investment [EUR]		Approximately 33,5 mill NOK (4,2 mill EUR)	
Co-financing of customer		Own financing by the municipality. Guaranteed saving in kWh.	
Initial energy consumption before the project (baseline)	Heat	[kWh/GJ]	
	Cooling	[kWh/GJ]	
	Natural gas	[kWh]	
	Electricity	[kWh]	
	Hot water	[kWh/GJ]	
	Water	[m3]	
Total energy consumption costs before the project		[EUR]	16,204 GWh/year, app 1,623 mill EUR/year
Savings		Guaranteed	Achieved
Total savings		[%]	4,5 GWh/year
Heat		[kWh/GJ]	Just entered phase 3
Cooling		[kWh/GJ]	
Natural gas		[kWh]	
Electricity		[kWh]	
Hot water		[kWh/GJ]	



Water	[m3]		
Decrease of other operational costs <i>(wages, maintenance, etc.)</i>	[EUR]		
Total guaranteed savings	[EUR]	0,45 mill EUR	
If there are other important aspects of the project, innovations and client's advantages, not mentioned above, please, describe here <i>(e.g. other type of cost saved, different form of financing such as leasing, exceptionality of the project, direct link to another energy efficiency project such as building insulation)</i>			