

# Interview with persons in the EPC-market

## NORWAY

### General information

Item	
Organisation name	Øvre Eiker municipality
Organisation type	Municipality, EPC client
Date of interview	21. January 2014
Name of interviewed person	<i>Bjørn Steinar Andersen</i>
Function of interviewed person	head of the operation and maintenance division

Potential project	
Facility (project title)	Energy Efficiency in Øvre Eiker municipality
City, Region (site)	Øvre Eiker municipality, Buskerud county, Norway
Type of customer	<ul style="list-style-type: none"> <li>• Municipality</li> </ul>
Sector	The buildings included are special purpose buildings such as schools, city hall, kindergartens and nursing homes – all important public buildings in the municipality. The project only includes buildings, not infrastructure.
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"> <li>– Energy savings</li> <li>– Upgrade and/or exchange of technical installations</li> <li>– Technical measures needed on buildings and could be implemented within the scope of the project</li> <li>– General quality upgrade of indoors climate</li> <li>– Technical qualification upgrade of maintenance personnel</li> </ul>
Number of buildings of each type <i>(e.g. 25 schools, 11 healthcare facilities, etc.)</i>	18 buildings were included: <ul style="list-style-type: none"> <li>• 7 schools</li> <li>• 5 kindergartens</li> <li>• 4 nursing homes</li> <li>• 1 city hall</li> <li>• 1 technical facility</li> </ul>



## Interview

Question	Answer
What was the impulse to start thinking about realising an EPC project?	
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>	<ul style="list-style-type: none"> <li>• Control with energy efficiency work in the municipality</li> <li>• Energy savings</li> <li>• Established Central building control systems</li> <li>• Several general operation benefits</li> <li>• Upgrade and/or exchange of technical installations – e.g. ventilation plants</li> <li>• Financial support from the Norwegian Energy Agency – Enova SF</li> <li>• Large parts of prior technical measures needed on buildings could be implemented within the scope of the project</li> <li>• General quality upgrade of indoors climate</li> <li>• Technical qualification upgrade of maintenance personnel</li> <li>• Positive contribution in relation to get the Norwegian certificate for sustainable organisations</li> </ul>
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>There were few barriers as the project was developed in accordance with political decisions and with financial support from Enova SF.</p> <p>Barrier in relation to choice of ESCO:</p> <ul style="list-style-type: none"> <li>• <u>Complicated public tendering procedure</u></li> </ul>
What is the expected size of the first EPC project in your organisation?	<p>Number of selected buildings in the pool: 18 buildings</p> <p>Energy cost of the pool: 12 909 600 kWh and appx 1,614 mill euro/year</p> <p>Potential investment volume: 3,2 mill euro</p> <p>Potential savings: 26 %</p>
Other comments	

## Other information on the project

To fill in only available information

Timing of the project		From	Till
Project identification		2003	2006
Procurement procedure		3004	2004
Installation of energy efficiency measures		2004	2014
Contract duration (guarantee duration) – phase 3		01.07.2007	31.06.2014
Period of repayment <i>(if the same, do not fill in)</i>			
Contract duration [years]		7 years	
Project specifications			
Measures <i>(short description – max. 5 points)</i>		<p>Totally 75 concrete measures in 13 buildings were implemented. In addition training courses was held for maintenance personnel, covering the total agglomeration of buildings in the municipality.</p> <ul style="list-style-type: none"> <li>• Lighting</li> <li>• Control systems for heat and lighting</li> <li>• Insulation of pipes and valves</li> <li>• Ventilation/dehumidification installations</li> <li>• Central building control systems</li> </ul>	
Total investment [EUR]		3,2 mill EUR including maintenance measures	
Co-financing of customer		Own financing of EPC client/municipality	
Initial energy consumption before the project (baseline)	Heat	[kWh/GJ]	7 034 000 kWh
	Cooling	[kWh/GJ]	
	Natural gas	[kWh]	
	Electricity	[kWh]	5 875 600 kWh
	Hot water	[kWh/GJ]	
	Water	[m3]	
Total energy consumption costs before the project		[EUR]	12 909 600 kWh
Savings		Guaranteed	Achieved
Total savings		[%]	26 %
Heat and electrical energy		[kWh/GJ]	3 300 000 kWh/year 3 061 300 kWh on average first 6 years
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]	appx 2,2 mill EUR	18 367 700 kWh (in 6 years)
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>			