



# Searching for consortium to join within 7<sup>th</sup> framework program under theme 5 – Energy

Call text: Energy 2012.8.8.2 Large scale systems for urban area heating and/or cooling supply

### **Background**

The main objective of the 7<sup>th</sup> framework program is to adapt the current energy system into a more sustainable one, which is less dependent on imported fuels and based on a diverse mix of energy sources.

Nordkalk and the municipality of Köping in Sweden has created a consortium to investigate how Köping's current energy system can be developed to reduce the amount of imported fuel in their district heating system.

Nordkalk is a company that mines lime and refines the mined material to different types of products within the sectors environmental conservation, industry and agriculture. Lime has many different utilization areas such as purification and neutralization. The main products are among others limestone, hydrated lime and burnt lime. Nordkalk uses large amounts of energy in their ovens to produce these products and the fume gas has a temperature of 600 - 750 °C. The energy in the fume gas is evenly distributed over the year and currently not being used. The fume gas is an energy source that can contribute with a substantial source to the municipality's energy demand. There is an idea that this energy can be used by leading the hot gas through a hot water boiler that is connected to the local district heating system.

#### Our project idea

Nordkalk has the intention to install an exhaust gas/heat boiler to utilize a portion of the energy from the fume gas. The purpose with the boiler is to provide heated water to the district heating system of Köping municipality and replace the fossil fuel that is currently used. Köping needs during peak periods around 16-27 GWh. The wasted heat from Nordkalk is estimated to provide an annual supply of 22 GWh. This means that the total effect in the district heating system will increase, which will decrease the need for imported fuel. Nordkalk will be responsible for the construction and operation of the boiler and in the future delivery of hot water.

Currently there is no infrastructure to connect Nordkalk to the district heating system of Köping. The municipality of Köping will therefore build and provide an interconnection to Nordkalk. Also an agreement between the two partners will be signed to specify the price on the delivered energy.

## Preliminary time schedule

2011/2012

Idea of the project is under development



2012-2013	Planning of construction of interconnection and development of technical solutions for Nordkalk. The current environmental permit will be updated to current situation (Nordkalk).
2013/2014	Construction and installation of exhaust gas boiler at Nordkalk and construction of connection point between Nordkalk and the district heating system.
2014/2015	Commissioning and delivery.

# We are now looking for partners!

Since the deadline for submission is already the 1<sup>st</sup> of December 2011 we are looking for an already existing consortium for this call.

## Please contact our consultant who is working on this project

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