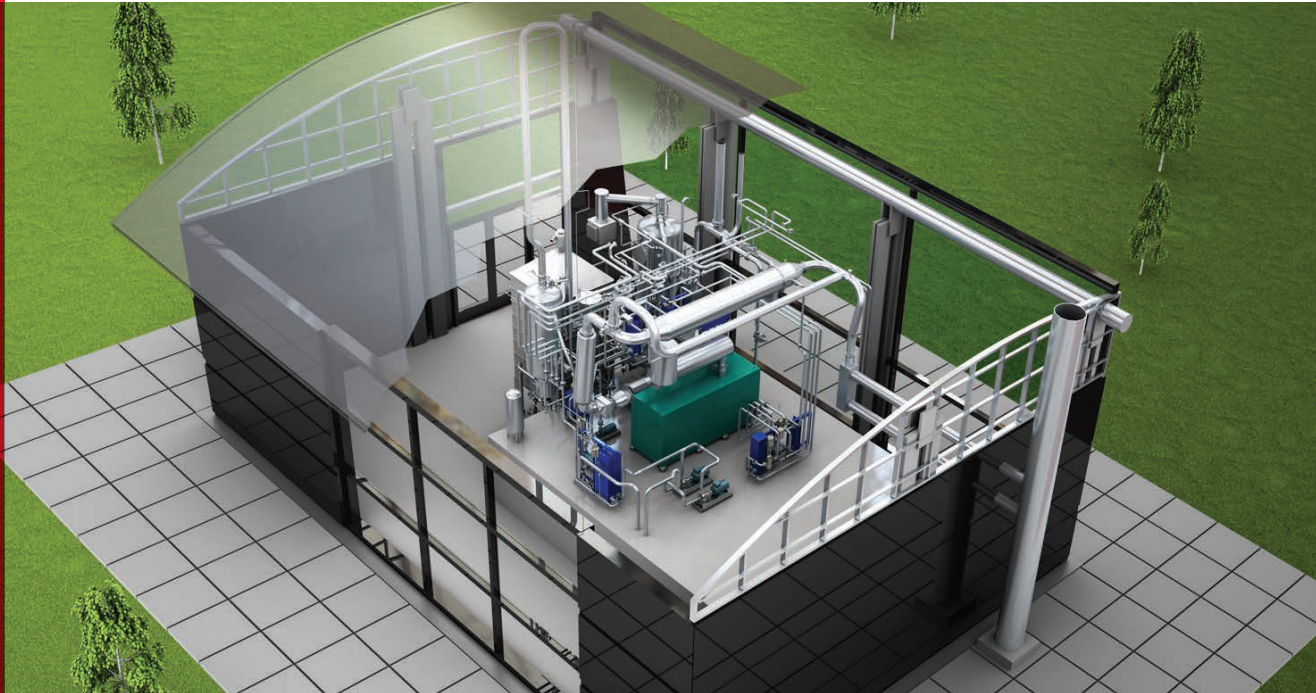


Our energy working for you.™



# Alternative Fuels

## Case History

MEVA Energy

### Where:

Piteå, Sweden

### Supply:

QSV91, N5C1750 LBTU gas fueled generator set with remote monitoring and GCPII control, two supply dump radiators, gas train, exhaust silencers

### Application:

Provide community heat and power from biogas in an environmentally friendly, CO<sub>2</sub> neutral process

## Cummins Energy Solutions Business helps Meva Energy build commercial biofueled CHP plant

Meva Energy AB of Gothenburg has built an innovative plant in Lapland, in the far north of Sweden, that is commercializing cyclone gasifier technology developed by Luleå Technical University. Meva Energy has added its own gas cleaning system so that a generator set can be fed with gas that is clean enough to keep maintenance costs to a minimum. By combining the robustness and efficiencies of cyclone gasification with gas fueled generator set technology, Meva Energy has built a stable platform suitable for all kinds of biofuel.

For a turnkey generator set solution, Meva Energy called on Cummins Power Generation Energy Solutions Business (ESB). Cummins gas generator sets are robust and cost-effective power generation systems designed from the ground up to meet the world's fast-evolving emissions standards.



The plant provides all-year-round power for the Hortlax community in northern Sweden



Meva Energy's platform combines cyclone gasification with gas fueled generator set technology

Cummins ESB made the ideal partner because of its established track record of providing solutions that are built around reliable, economical and low emission lean-burn gas fueled generator sets.

Cummins ESB worked closely with Meva Energy as it set up a 500 kW pilot plant at the ETC facility near the coastal town of Piteå. Following the success of the pilot, the first full-scale commercial plant has been commissioned and is operational in the nearby community of Hortlax. The Hortlax plant, operated by Meva Energy and owned by energy company Piteå Energi AB, is now providing 2.4 MW (th) of district heating to the Hortlax community, as well as selling 1.3 MW of electricity to the grid.

Cummins ESB worked alongside main contractor Meva Energy to design a compact installation, 10 m tall with a 17m x 6m footprint. The generator set is a Cummins QSV91, N5C1750 LBTU, equipped with remote monitoring and GCPII control, and installed with two supply dump radiators, gas train and exhaust silencers. The generator set is fully integrated with a Siemens S5-PLC control system. The plant was commissioned in October 2012 and meets a total power requirement including grid of 1.3 MW.



*Cummins ESB worked closely with Meva Energy as it set up a 500 kW pilot plant at the Energy Technology Centre*

The plant can operate 4,200 hours per year, serving the heat demand of the Hortlax community without restrictions, and operation is automatic.

Cummins ESB was chosen for the work in recognition of its organizational strength and proven product technology. Meva Energy has found the experience of working with Cummins ESB to be extremely positive, and now that the solution has been tested in a commercial plant, Meva Energy is looking to market its technology worldwide. Meva Energy has successfully tested a variety of biofuels in its pilot plant at the Energy Technology Centre, ranging from wood fuel through to peat, straw grass, bark and rice husk. The results indicate the technology can be adapted to almost all of the world's available biofuels, providing CO<sub>2</sub> neutral heat and power to meet industrial and residential needs.

For more information about Alternative Fuels or other energy solutions, contact your local Cummins Power Generation distributor or visit:

[www.cumminspower.com/energysolutions](http://www.cumminspower.com/energysolutions).



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