



'Wood Energy Centre'	
Analysis	
Background	<p>Since the German Renewable Energy Resources Act (EEG) came into force in 2000 and guaranteed higher prices for electricity from renewable sources, energy-generating uses of renewable fuels have grown rapidly.</p> <p>In the Hannover Region, biomass offers the best potential for renewable energy use. For heating, wood fuels are becoming increasingly interesting in the light of rising energy prices.</p> <p>About 200 hectares of woodland are managed by the forestry section of Stadtwerke Hannover AG, the local energy utility. The possibility of tapping into the value added chain by marketing the wood led in 2005 to considerations of establishing the utility's own wood fuel sales depot. EU support through the Concerto project enabled the idea to assume tangible form.</p>
Project Description	
Aims	<p>Construction of a Wood Energy Centre to produce and distribute wood fuels 'from the region for the region' and thus:</p> <ul style="list-style-type: none">• exploit renewable energy resources in the region, promote more efficient energy provision and stimulate an energy market for renewable biomass and interest in further projects by private sector operators.• Reduce CO₂ emissions by up to 80,000 t/a by using 130 GWh of thermal energy from wood, thus reducing the use of coal at the 'GKH Stöcken' CHP plant, and delivering 130 GWh of wood fuels. GKH will be able to produce about 40 GWh of CO₂-neutral electricity along with thermal energy for district heating from 30,000 t/a of woodchips.• Create new jobs and secure existing jobs in agriculture, forestry and sawmills in the region.
Key points	<p>On 27 November 2007 the 'enercity HolzenergieCenter' was inaugurated by the Executive Director of Stadtwerke Hannover AG and the Deputy Mayor of the City of Hannover.</p> <p>On the site of the Hannover-Stöcken power station a modern split logs production plant is working that – uniquely in Germany - uses direct surplus heat from the power station to dry the wood.</p> <p>At the Wood Energy Centre the local ESCO Stadtwerke Hannover (enercity) sells wood products for various types of wood burners: pellets, chips, split logs and wood briquettes. Additional equipment for running these burners is also</p>






	<p>available. In the shop different types of wood burners are displayed, and the trained staff advise customers.</p>
Monitoring and evaluation	<p>Monitoring started in December 2007. In the first two months after the opening of the Wood Energy Centre the number of interested visitors and customers was very high compared to the following months; this might have been due to public curiosity. Evaluation through to the end of June 2008 showed that mainly split logs were sold; from April to June there was a significant increase in sales of wood chips. Demand for wood pellets was not very high.</p> <p>In total, in the first six months of 2008 wood products with an energy content of nearly 1,000 MWh were sold. Although this was not as good as expected, the latter months showed a remarkable increase in demand and at the moment products must be ordered in advance.</p> <p>More data will be available with the act2 final report in spring 2011.</p>
Costs & Benefits	
Costs & funding	<p>Data are not yet complete.</p>
Benefits	<p>The long-term annual sales target for the Centre is approx. 3,000 tonnes of split logs and 17,000 tonnes of wood chips, mainly from woodland in Fuhrberger Feld to the north of Hannover. Around a fifth of the 8,000 m³ of timber felled there each year can be used as sustainable, environmentally friendly firewood.</p> <p>Additionally, 10,000 tonnes of wood pellets should be sold through the Wood Energy Centre, bought in from sawmills in the Hannover Region. In total, around 30,000 tonnes of wood fuel will be sold to private customers, averting up to 80,000 tonnes of CO₂ emissions per year.</p> <p>Customers can collect small quantities direct from the information centre or have larger quantities delivered. The information centre also offers advice on wood-burning stoves and on grants towards the purchase of wood-fuelled heating plant.</p>
Partnership details	
Partners	<ul style="list-style-type: none">• Stadtwerke Hannover AG Planning, management and operation• Contracted companies:<ul style="list-style-type: none">○ Veolia: Wood transport (logs)○ RWG Leese: pellets distribution and supply for private companies



	<ul style="list-style-type: none"> ○ Holz Reimann: distribution and supply of wood chips
Recommendations	
<p>Barriers to overcome</p>	<p>In the Hannover Region more and more householders, but also public bodies and private sector businesses, are converting their heating plants to wood fuel. For many years demand exceeded supply; there were only a few suppliers of wood chips and the price was correspondingly high.</p> <p>Internally at the Stadtwerke energy utility as a network energy supplier, there were strong reservations about entering the biomass market. Protagonists of the 'shareholder value' attitude saw no potential for expanding business. The prospect of subsidies and an enhanced public image along with pressure from city politicians finally persuaded the utility to build the Wood Energy Centre.</p> <p>At the end of 2008 the number of wood chip and pellet suppliers had grown so much that fuel prices declined.</p>
<p>Lessons Learned</p>	<p>Because of increasing construction costs, a planned large wood storage hall has not been built. A small storage hall (1,000 m³) was built and finished in November 2008 in the grounds of the Stöcken CHP plant (see separate project description).</p> <p>Stadtwerke Hannover AG, which has promoted itself for years as an energy services enterprise and not only an energy supplier, has extended its portfolio to include biomass with its new wood marketing activities and thus enhanced its public image. On the other hand it has become plain that the Wood Energy Centre will not be economically viable for years.</p> <p>Thanks to good public relations work when the Centre started operations there was a strong demand for information immediately after the opening which, however, slackened after a few weeks. It became plain that continual advertising (e.g. in daily papers) was necessary to sustain public interest. In the meantime, more and more businesses are becoming interested in the potential of wood as a fuel.</p>



Pictures	
	 
To know more	
Organisation name	Stadtwerke Hannover AG
Contact person	Frank Dollmann, Ulrich Kohlstrung
Phone	+49-511-430-3095
Email	Frank.dollmann@enercity.de
Website	www.enercity.de www.enercity.de/pk/enercity_produkte/gas_waerme/holzenergie/HolzenergieCenter.html
Arrangements to visit	www.enercity.de/pk/enercity_service/wissen/fuehrungen/besucher_service.jsp