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Local Success Stories	
Country	**Finland**

#	Name of Example	Location
	Jätkäsaari, Helsinki	Helsinki

The Initiative

A new suburb called Jätkäsaari is being built in Helsinki with the intention of making it a prime example of sustainable urban environment. It is located on former industrial land, only few kilometres away from the city centre. As part of the development of the new district, the Finnish Innovation Fund (Sitra) and the city of Helsinki arranged a "Sustainable Development Design Competition". The aim of the "Low2No" competition is to design a building complex for a very prominent spot in the district and to seek comprehensive low/no carbon and energy efficient building solutions. Therefore sustainability in all aspects set the bar for design of the complex and if a proposed plan is does not fulfil the set standards it will be discarded/altered. The winner of the design competition was selected in fall 2009, and the winning plan includes DH as one method of heating. Another aim of the competition is to act as an example for the rest of the development and emanate new innovative solutions for sustainable building throughout the district.

In a nutshell, a design competition with sustainability as the main criteria can work as a catalyst for increased penetration of DHC solutions.

Nature of the impact

A local CHP-plant with efficiency rate around 88% will provide heating and cooling for the area. The expenses compared to other efficient and sustainable heating systems were significantly lower. The main reason for this discrepancy is the fact that the new development is located next to the existing DHC-network. This starting point makes the project technically and economically much more feasible.
In addition, the laying down of the DHC-network can be conducted simultaneously with other construction work (e.g. street work) and thus the synergy can be utilised, which further reduces the costs.

When completed the area should have around 16 000 residents and 6000 work places. The construction work begun in 2008 and the development should be finished by 2025. According to Helsinki Energy, DHC was found to be the most feasible option. The initiative thus was to set a very high standard in the selection process of the heating system for the area.

While the environmental impacts of the designed eco-complex have been quantified, the benefits of the heating system have not been separated according to Helsinki energy.

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Main Barriers

No significant barriers were identified.

Illustration of the planned suburb

IV. Implementation of EC Directive	
Country	Finland

#	Name of Example	Location
	City of Lahti and Lahti Energia	Lahti

The Initiative

The national parliament set a law that came into force on the 1st of January 2009 under which new planned areas may be obliged to join the district heating network. The obligation does not apply to planned passive energy buildings or dwellings with heating systems based on renewable energy. The aim of the initiative is to increase energy efficiency and the use of renewable energy. Not all new planned areas are required to join and this is left to the discretion of the municipalities. The local authorities should duly consult the local power company about the technical and economical feasibility of the proposed integration plans.

The city of Lahti has had a similar municipal decree in place for several years and exercise with positive experiences.

Nature of the impact

The greatest benefit of the development has been the synergy between city planning and building and the expansion of the DH network. Due to the certainty that a new area will be connected to the DH network it enables the power company to carry out the deployment of the infrastructure at the optimal phase in parallel with other work (i.e. streets do not have to be opened up afterwards for laying down the pipes). This development has lowered the overall expenses of the DH system according to Lahti Energy.

In addition, this development has ensured that most new developments will either use renewable or highly efficient means of heating instead of oil boilers or electricity. While Lahti Energy does not have quantified statistics about the impacts of the policy as such, they are confident that it had increased the utilisation of DH. Currently 90% of residents in the city of Lahti belong to the DH network.

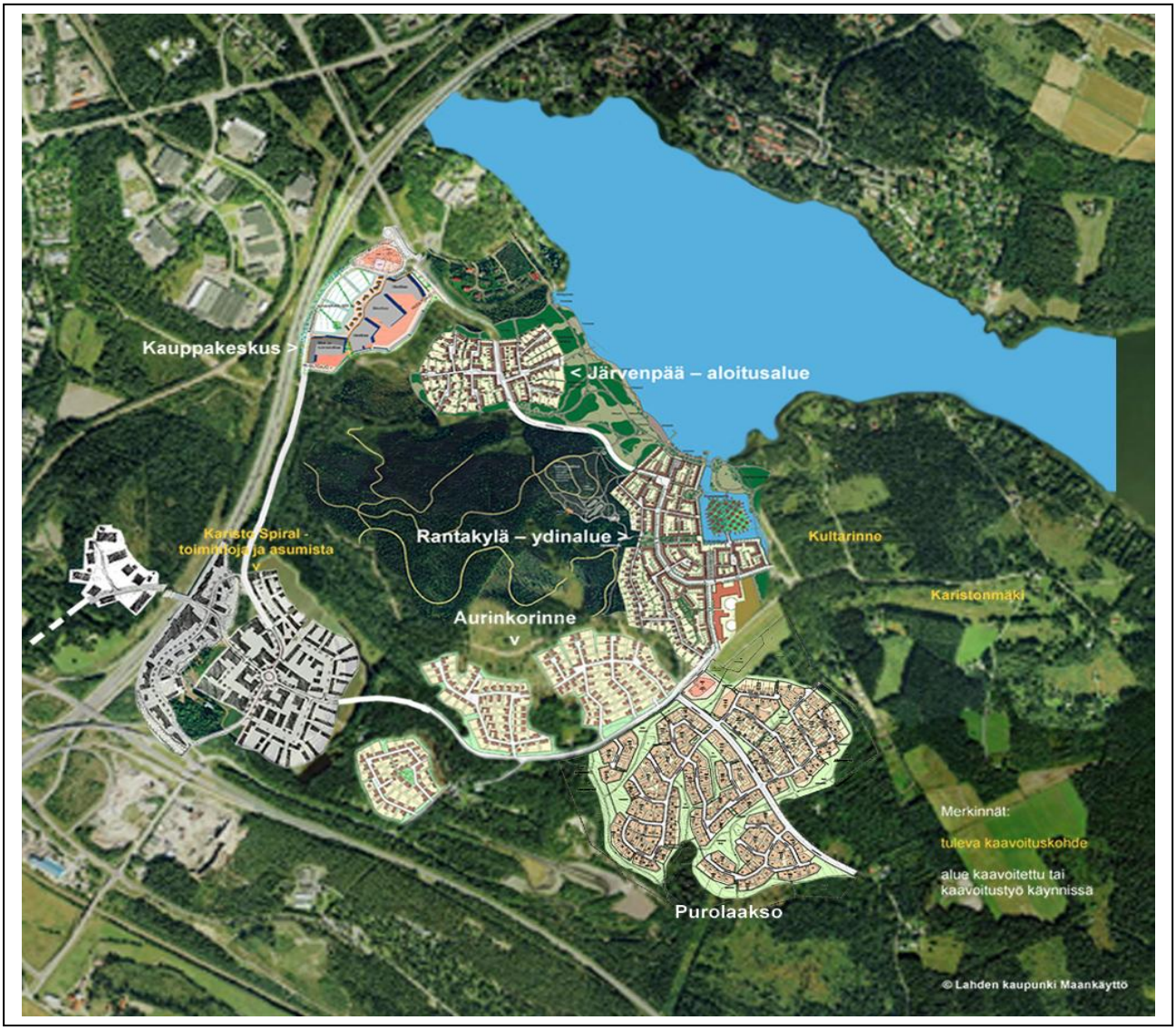
According to Lahti Energy, the residents have generally been happy with the legislation and Lahti Energy has received hardly any negative feedback. People prefer the DH option due to its efficiency and competitiveness.

This measure was invoked in the planning of a new suburb in Lahti called Karisto. An ongoing development which has about 250 houses (c. 1000 residents) at the moment and is expected to grow at least three fold from the current size. 99% of the dwellings are connected to the DH network.

Main Barriers

In the case of city of Lahti, few barriers were identified. Firstly, the planning-decree was perceived to be 'anti-competitive' and the city of Lahti was sued by Finnish Competition Authority for 'prohibiting competition' in 2004. In the end the charges were dropped as the decree did not conflict with the law. Therefore it is important to have sufficient legislation in parallel that supports such policy measures.

Other possible barrier for the successful implementation of the policy would be insufficient communication between the local authorities and the power company.



Plan of the new Karisto area.

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