Eno Energy Cooperative, district heating from local sustainable forest resources



Eno Energy Cooperative is a community-based enterprise located in Eno (North Karelia, Finland), it was established in 1999 by 12 local forest owners.

Local forest owners (55 members) own the cooperative and the aims are to produce inexpensive district heat for the local community with locally

sourced energy wood. Members provide about 20-30% of energy wood and the other 70-80% is acquired from different providers. The raw materials used are small trees by manual felling (15%), by multi-tree processing (70%) and logging residues (15%).

Local advantages are central in the activities of cooperative, not only in terms of its members but also in terms of energy wood procurement and other related services, a win-win approach for everyone.

There are many local benefits such as inexpensive heat for customers (customers had saved without taxes about 4.1 million € during 15 years compared to light fuel oil). Local forest owners receive income from selling energy wood and energy wood harvesting companies receive orders from forest owners to manage the growth of too dense small-diameter young forests. Heating centers replace about 2 million liters oil every year and net carbon dioxide emissions were reduced by near 5 million kilos annually. In addition, all employment effects are between 7-10 man-years.

Currently the co-operative owns three heating plants: Alakylä (bio boilers 2 MW_{th}), Yläkylä (0.8 MW_{th}) and Uimaharju (2 MW_{th}), and about 11 km long heating pipe network in the local community. They have also a 21 kW solar panels system to cover part of electricity demand of the heating plant of Alakylä.