

## Emissions down with District Cooling - Ilmarinen



Fighting emissions with district cooling - Ilmarinen, WWF's Green Office case example

Ilmarinen has reduced the carbon footprint of its real estate by introducing district cooling in several of its properties. The conversion to district cooling aims at energy efficiency and environmental friendliness. Ilmarinen is one of Helsinki's largest users of district cooling for its real estate. Our intention is to connect all of our properties that are situated within the district cooling network area to the network.

Our entire Green Office-certified Ruoholahti office building is cooled using district cooling, which works similarly to traditional district heating: the building's heating and cooling is taken care of using cold and warm water that flows through pipes. Ilmarinen's headquarters

are conveniently located near the energy company Helsingin Energia, so the cold and hot water arrives from right next door.

In district cooling, the cooling energy is produced centrally in the same way as district heating and distributed to buildings through the district cooling network. District cooling is five times more energy efficient than building-specific cooling systems, and the carbon dioxide emissions are only a fraction of those of alternative cooling solutions.

District cooling is an efficient way to decrease carbon dioxide emissions as well as the volume of nitrogen oxides, sulphur dioxide and particle emissions. District cooling does not utilise coolants that are harmful to the environment, i.e. freons. As both a certified Green Office and a major real estate investor, Ilmarinen has the possibility to decrease its carbon footprint, and this is naturally an opportunity that we wish to take advantage of.

The cooling needs of Ilmarinen's own premises have been cut by more than 30 per cent from their 2006 level. Savings have been achieved through various measures, such as changing the cooling operating times and making adjustments to the system.

By using district cooling Ilmarinen has reduced its yearly primary energy consumption by over 900 MWh and its carbon dioxide emissions by over 226,000 kg.

- Heikki Niemi / Premises Manager, Green Office team member