Renewable energy heats Copenhagen

In many cities around the world, heating houses both contributes to pollution and continual carbon emissions. Copenhagen has achieved something special, in creating a collective central heating net, that supplies 600,000 Copenhageners with green, sustainable heat – also during the cold seasons. Today 99 percent of the buildings in Copenhagen have environmentally friendly district heating.

This autumn using coal as a source of heat generation in the Copenhagen power plants will completely end. From that point on, practically all heat will be generated through the incineration of waste and sustainable biomass.

The core concept behind central heating revolves around using excess heat from the electrical production and redirecting that to heat buildings. In effect, the recycling of heat. And in so doing, heat that would otherwise have evaporated is instead used to heat houses, apartments, business and government buildings. It is a well-tested and extremely effective way of reducing a city’s carbon footprint. It also helps reduce pollution, when compared to other methods of heating.

Today, 99% of all Copenhageners have central heating. This means, that practically every building in Copenhagen is heated via carbon effective central heating.

Cities Must Commit to Change

Getting to that point has required committed political action. It would have been impossible to achieve if past politicians hadn’t had the courage and foresight to impose a transition from oil, gas and coal heating to central heating. Politicians also had to commit to expanding and maintaining the city’s central heating infrastructure, and that commitment has secured that Copenhageners today have a flexible, cheap, and environmentally friendly supply of heating.

The goal is that the central heating supply is 100% carbon neutral in 2025. An ambitious goal to be sure, but also one that is within reach. It requires continued political commitment, a collective, citywide effort to sort plastic out of the citizens’ waste and a willingness to invest in new sustainable forms of energy that can feed the citywide central heating net. Technologies such as heat pumps and geothermal energy. And as they are developed, they can be joined to the adaptive central heating net and provide continually more and better sustainable heat to the citizens.

A Solution That Inspires

The best part is, that Copenhagen’s approach to central heating can be copied and implemented in cities around the world. By sharing knowledge and insight, Copenhagen hopes to inspire cities to adopt this successful, sustainable and green form of heating, so that more citizens around the world can keep the cold at bay without hurting the climate. For the sake of both our cities, our citizens and our climate.

Facts about the Copenhagen energy initiatives

- Copenhagen’s climate plan was adopted in 2012. The initiatives in the climate plan are revised every four years.
- 99% of buildings in Copenhagen sport environmentally friendly district heating, mainly through the capture and reuse of waste heat from electricity production and channeling that into people’s homes.
- The municipality also monitors energy consumption in government properties such as day-cares, cultural centers and government buildings to save energy and reduce carbon emissions.
footprint. In all, these systems help Copenhageners save more than 1.400 Euro annually and saves the city several hundred tons of CO2.

For more information about climate actions in Copenhagen:

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