

Less DH when EU's three 20% goals are applied

NEP model results show a strong competition for biofuels from waste incineration and heat pumps and a stagnating district heating use in Sweden

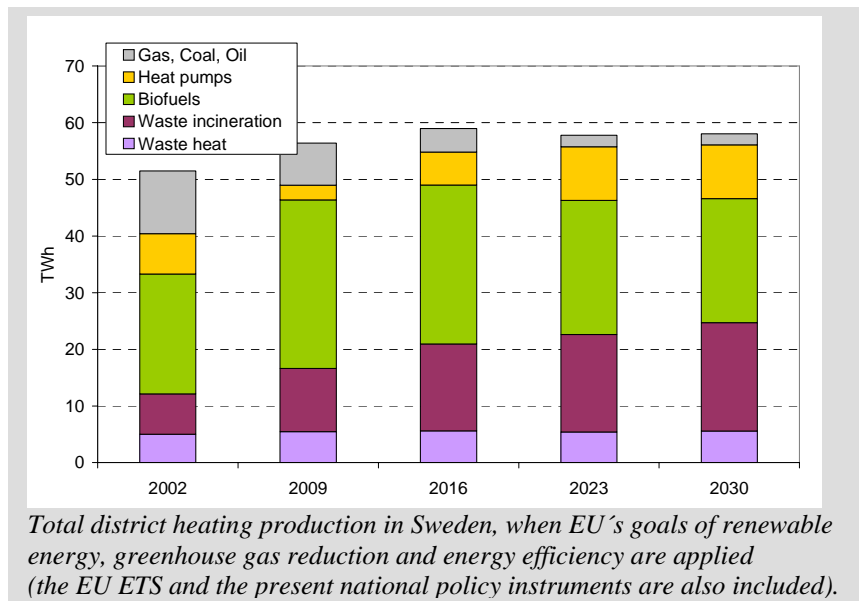
Calculations where only the present policy instruments are applied show an increasing use of district heating in Sweden with biofuels as the dominating source for heat production. When EU's 20 % goals regarding increased use of renewable energy, reduced use of energy and reduced emissions of greenhouse gases are added, the use of district heating stagnates and the use of biofuels may start to decrease after an initial expansion.

EU's three goals of 20 % renewables in the energy mix, reduction of the use of primary energy by 20 % through efficiency measures and reduction of greenhouse gas emissions by 20 % to the year 2020 will obviously have a large impact on the development of the energy systems in the Nordic countries. The energy efficiency goal leads to decreasing heating demands. This can

"Less biomass and more heat pumps"

also be seen for district heating in Sweden, where the use stagnates or even decreases slightly after the year 2016.

At the same time the three goals make heat production based on fossil energy less competitive. Waste incineration is still competitive, largely due to conditions within the waste treatment sector. The definition of the goals also makes heat pumps increasingly attractive. This leads to a situation where the use of biofuels, after a period of rapid growth, could decrease significantly.



A significant change

When only the present policy instruments are applied the use of district heating continues to grow. The production mix shows increases for waste incineration and biofuels, while the use of fossil fuels and heat pumps decreases somewhat. This changes significantly when the three EU goals are applied.

District heating is an important energy carrier in the Nordic countries and it is therefore interesting to study how district heating production will be affected. This has been analysed through model calculations within the NEP project, initially with focus on the Swedish district heating sector. Two model calculations have been made. The first case shows the development when only the present policy instruments are applied (left figure). The second calculation (above figure) shows how the district heating production develops when all three EU goals are applied simultaneously.

