

Hot Waste Water For District Heating

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A recovery of surplus heating from waste water is the focus in a new research project – the results can lead to energy savings, which both benefit economy and environment.

Today the heating from the food production's waste water vanishes, not being utilized, which a new project is now trying to solve.

[Elforsk](#) has donated the funding, where VIA University in collaboration with case companies, Danpo and Essentia, and specialists from Verdo, Aqua-Service, [DHI](#) and VIA Engineering, will conduct analyzes of two industrial treatment plants.

The analyzes are going to uncover the potential for energy savings by utilising the surplus heating from the plants' waste water.

Waste can be money

At the food producing companies, the water is typically used to clean the processing machines and demands a certain temperature due to hygiene. The heated water has a huge potential, which can result decreasing costs of district heating.

– In the project we investigate how we with the help of heat pumps can recover the heat from the waste water, before the actual cleaning process. This heat can then be used in the district heating grid, says Jesper Veilstrup, Energy Consultant at Verdo

Results from the project will in the future also be useful for other energy consultants and could function as a guide when working with optimisation of treatment plants.

Cold and satisfied water streams

If the projects succeeds in finding a way to recover the surplus heat, there are not only economic gains to be seen, but also gains in terms of environmental protection.

-The water streams are sensitive to temperature variations, and the sensitive ecosystems in smaller streams and watercourses are therefore affected by the heated waste water from the treatments plants. It is especially in the winter period and early spring, that the affects from the heat discharge are most damaging, says Jesper Veilstrup.

The research project may also help the residents in streams and creeks to not experience critical temperature variations in the cold months.
