

Heat energy from wastewater into the district heating network to cover the annual consumption of 2,000 detached houses – Caverion implements a heat recovery system for Seinäjoen Voima in Finland

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During this year city of Seinäjoki, Finland will build a heat recovery system designed and implemented by Caverion, which utilises wastewater to provide the district heating network with heat energy equivalent to the annual consumption of about 2,000 detached houses. The system is one of Finland's first heat recovery solutions using ammonia as a refrigerant, utilising wastewater.

"One third of wastewater generated by households is domestic hot water, which means energy flowing into sewers. Therefore, we take advantage of purified wastewater, and this is a safe and environmentally friendly way to produce thermal energy for the district heating network. In Europe, very good experience has been gained with the method utilising ammonia as a refrigerant over the last ten years, and it is great that now with Caverion we get this solution in Seinäjoki," says **Pasi Salo**, CEO, Seinäjoen Voima.

Caverion will implement a heat recovery system in connection with the wastewater treatment plant. A one-thousand-cubic basin will be built for the purified water. Heat pumps will utilise ammonia as a refrigerant, which is a natural, energy-efficient and environmentally friendly refrigerant. Heat pumps will produce about 4.9MW of 90-degree water for the district heating network.

"We bring the best technology on the market and Finnish industrial refrigeration expertise to this project, which strongly supports the achievement of local environmental goals. Seinäjoki is an example for other cities and regions in Finland when it comes to circular economy. We are happy partner up with Seinäjoen Voima in this project and hope to get new, energy-saving collaborations also in the future," comments **Sami Hatakka**, Head of Sales, Energy solutions and Industrial Refrigeration, Caverion Finland.

Seinäjoen Voima in brief

Seinäjoen Voima is responsible for the entire production of district heat in the Seinäjoki region in Finland, with production facilities located around Seinäjoki. The combined heat and power (CHP) plant is located on the shore of Lake Kyrkösjärvi and there are other heating plants in the areas of Kapernaum, Hanneksenrinne and Puhdistamokatu.

For more information, please contact:

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