

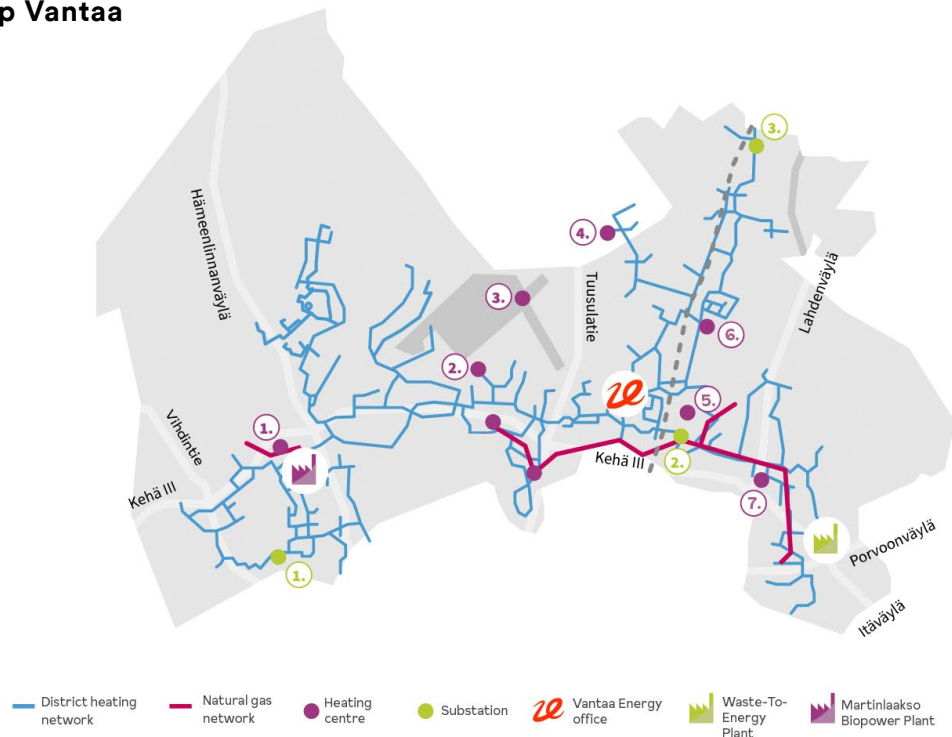
# CASE STUDY

Vantaa Energy keeps ahead with its Netcon 3000 SCADA for district heating

The company's long-term cooperation with Netcontrol helps keep Vantaa residents warm

- 1. Varisto
- 2. Lentokenttä
- 3. Helsinki-Vantaan lentoasema
- 4. Jussla
- 5. Maarinkunnas
- 6. Koivukylä
- 7. Hakunila

- 1. Connection to Helsinki network
- 2. Connection to Helsinki network
- 3. Connection to Kerava network



## THE VANTAA ENERGY SYSTEM

Vantaa Energy is one of Finland's largest urban energy companies. With an aim to be a carbon-negative circular-economy energy company by 2030, it keeps innovating to produce affordable, reliable, climate-friendly energy and energy-efficiency services for Vantaa homes and businesses to enable their smooth everyday life.

Vantaa Energy's main sites for energy production are the Waste-to-Energy Plant, its expansion and the Martinlaakso Biopower Plant. The Waste-to-Energy Plant produces heat using nonrecyclable energy waste from households. Its expansion uses nonrecyclable energy waste from commerce and industry. The Martinlaakso Biopower Plant burns biofuel. Five additional heating plants secure the distribution of heat throughout the Vantaa Energy district heating network.

With about 600 km of pipeline covering the Vantaa region, the network brings energy to the daily lives of residents in the form of hot showers and warm homes. About 90% of Vantaa residents (approximately 218,000) live in homes connected to the network.

## COOPERATION BETWEEN NETCONTROL AND VANTAA ENERGY

Vantaa Energy first chose Netcontrol's local-control units in 1992. It enlarged the system with control centers in Fazer, Koivukylä, Hakunila and Tikkurila in 1994. The first Netcon 3000 SCADA system was commissioned and started operation in 2001. Since then, there have been several system upgrades. The system has been continuously renewed and modernized in a project that still goes on.

Netcontrol and Vantaa Energy have a close



relationship, and communication between the two companies takes place weekly.

“Netcontrol’s project personnel are really technical and very skilled, and when you have an issue, you will get it fixed really rapidly”, says SCADA key user Mr. Nykänen. He adds that cooperation with Netcontrol’s sales and other departments feels natural and efficient.

## **HOW THE SCADA HELPS VANTAA ENERGY CUSTOMERS**

Netcontrol’s Netcon 3000 SCADA enables the Vantaa Energy control room operators to supervise and control the entire district heating network and to start additional heating plants whenever needed. If there is an issue with the district heating system, they can easily find the problem using the SCADA and then take action to get everything back on track. This makes their end customers’ life easier, keeping any interruptions in heating and hot water supply short.

The main measurements followed through the SCADA are the district heating capacity, flow, pressure differentials and temperatures. Control actions can be initiated either by the SCADA operators or automatically by higher levels, such as Vantaa Energy’s district heating optimization system.

## **NETCON 3000 SCADA BENEFITS**

- Centralized supervision and control
- Interfaces to third-party systems
  - Digitwin simulation
  - District heating optimization
  - Business intelligence reporting
- Master database for all real-time data storage

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### **VANTAAN ENERGIA**

Peltolantie 27  
01300 Vantaa  
Finland

### **NETCONTROL**

Karvaamokuja 3  
00380 Helsinki  
Finland

