

Sustainable Energy

Fjernvarme Fyn (District Heating Plant in Fyn, DK) utilizes the excess heat from META's data center

As Denmark's 3rd largest district heating company, Fjernvarme Fyn is undoubtedly a frontrunner in terms of Green Transition. Their climate goals speak for themselves. They aim to be carbon-neutral by 2030, and they are well on their way already.

In Tietgenbyen, Odense, DK, one of the large pumping stations is located, where many of DESMI's centrifugal pumps are installed. The pumping station is situated directly across from META's data center.

The data center generates a significant amount of excess heat, which is transported to the pumping station. Thus, it is distributed further to the many residences in - in and around the city of Odense

The pumping station in Tietgenbyen alone covers 11,000 homes, it is precisely these homes that receive the excess heat from the data center.



Fjernvarme Fyn - District Heating Plant in Odense, across the Datacenter

CASE STORY



Project Manager Kenneth Jensen from Fjernvarme Fyn reveals that the vision at Fjernvarme Fyn is to create the future's climate-neutral, robust, and competitive district heating. The heat pumps are powered by electricity from wind turbines, and heat production is based on a wide range of energy sources, including wood chips, waste, straw, olive pellets, and coal. All energy sources are upgraded for district heating. Coal is expected to be phased out in the near future, reducing CO₂ emissions into the atmosphere.

Moving around the engine room at the pumping station is impressive, not just because of the many DESMI pumps but also due to the design and planning. Pumps and pipes are all color-coded, making it easy to see the flow of cold and hot water, etc.

The collaboration with DESMI has proceeded without issues, and Kenneth Jensen nods approvingly when confirming his satisfaction with DESMI, the pumps, and the service provided.

"We are very satisfied. The pumps were chosen based on the parameters of price and quality, and our choice naturally fell on DESMI. In our view, the pumps are very 'simple.' They perform their functions, are easy to install, easy to commission, easy to maintain - and the compact design, including the setup on concrete blocks, fits perfectly into our pumping station," says Kenneth Jensen.



Kenneth Jensen, Project Manager at Fjernvarme Fyn

PROVEN TECHNOLOGY

DESMI

MARINE & OFFSHORE

INDUSTRY

ENVIRO-CLEAN

DEFENCE & FUEL

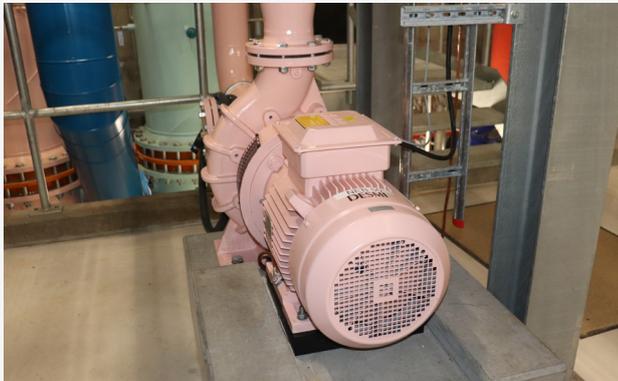
UTILITY

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In addition to the physical delivery of pumps, DESMI and Fjernvarme Fyn have been in close dialogue throughout the entire process to ensure the optimal solution. "It's great to have a sparring partner along the way in the project," says Kenneth. "As a customer, I feel we have received the most optimal solution. The advice has been excellent, and the pumps are running as they should, allowing us to maintain operations at the most optimal level."

Next to the pumping station, Fjernvarme Fyn has a huge cold water tank, enabling the redirection of cooling water to the data center, which returns excess heat. Everything is maximally utilized in the process to ensure there is no waste, especially in terms of waste heat. They are confident in achieving the goal of being carbon-neutral by 2030.



For both pumping cold and hot water, several DESMI pumps are used.

Red pumps = DESMI NSLH hot water pumps, capacity: 350 m³/h (75°C hot water)

Light green pumps = DESMI NSLH circulation pumps, capacity: 750 m³/h (40°C hot water)

Pink pumps = DESMI ESLH partial flow filter pump for cleaning cold water, capacity: 130 m³/h (27°C cold water)

Blue pumps = DESMI NSLH district heating pumps, capacity: 288 m³/h (75°C hot water)

Additionally, frequency converters have been provided for all pumps, contributing to better operation and control of the pumps.