



AQUALIBRIUM LEISURE CENTRE - WASTEWATER HEAT RECOVERY SYSTEM

Overview

Campbeltown's Aqualibrium Leisure Centre will be heated by the use of heat-from-wastewater technology.

The centre and swimming pool is operated by Argyll & Bute Council. The £1 million project will meet 95 percent of the facility's heating needs and use just 25 percent of the energy it currently takes to heat the facility with gas.

The state of the art installation, owned by Scottish Water, will intercept wastewater from their adjacent pumping station. The technology will extract the naturally occurring residual heat, amplify it, and transfer it to the clean water network to provide heating to the leisure centre. The new heat recovery system will be integrated into the building's existing heating infrastructure.

The wastewater heat recovery system will heat the leisure centre's facilities, including a 25-metre swimming pool, steam room, sauna, and fitness centre. Using wastewater heat recovery will drastically reduce the carbon footprint of the centre's operations.



An aerial view of the new Energy Centre, WHR buffer tank, and valve chamber



The Recirc Solution

Recirc team played key roles in the design and installation of the Aqualibrium project. As the UK's third wastewater heat recovery system (WHR), this innovative project directly supports Argyll & Bute Council's carbon reduction aims.

Recirc staff led on the following:

- Site assessment, including use of telemetry data to assess the heating potential of the adjacent pumping station.
- Analysis and correlation of heat demand against the available wastewater resource.
- Feasibility report writing, including a full business case - Planning approval
- Scottish Government grant funding application
- Full process design and technology selection
- Civil, Mechanical, Electrical and Building Services design packages
- Procurement support, including contractor selection
- Project Management

Our Technical Director, Dr. Joe Short, led the commissioning of the wastewater pre-treatment, comprising the system's macerator and SHARC filters, and and heat exchange technology.

Recirc offers full, turn-key wastewater heat recovery solutions, from desktop feasibility through design, installation, commissioning, and ongoing operations and maintenance support.

Contact us to learn how wastewater heat recovery can help you meet your net-zero goals.