
CORIX®

PROJECT PROFILE

UniverCity

Delivering district energy services to a sustainable community.

THE CLIENT

Situated on Burnaby Mountain in Vancouver, British Columbia, and adjacent to Simon Fraser University, UniverCity is an award-winning residential community that promotes a balanced, sustainable lifestyle. It offers residents and visitors a host of shops, services and amenities, including an elementary school, a childcare centre and a library.

THE CHALLENGE

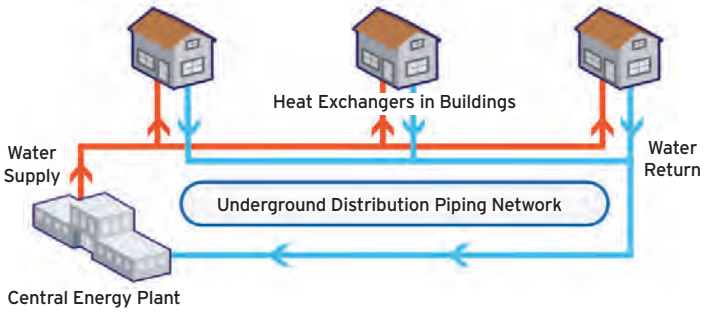
As a model for practical and affordable sustainability, UniverCity required a cost-effective, long-term and environmentally responsible alternative energy system that could provide heat and hot water to the community's new housing projects.

THE SOLUTION

After a comprehensive technical and financial evaluation of various alternative energy sources, CORIX and SFU Community Trust (which governs the development of UniverCity) selected a biomass-based district energy system as the best option. The high-efficiency heating plant will use recycled urban and construction wood waste as its primary fuel and provide an estimated 1,750 tonnes of greenhouse gas emissions savings annually when complete.

CORIX will design, build and operate the district energy system, which will be regulated by the BC Utilities Commission and developed in tandem with the UniverCity building phases. For the short-term, the community's energy needs are being met by a small heating plant, installed in early 2012, that uses high-efficiency condensing natural gas boilers.

UniverCity Buildings Receiving Space Heating and Hot Water



District energy systems use a central energy plant to produce hot water, which is then distributed through an underground piping network to heat exchangers located in each building. The heat exchangers, in turn, provide space heating and domestic hot water for residents.

The Burnaby Mountain district energy system will provide numerous benefits to the community and its residents, including:

Reliability
Exposure to weather-related power outages will be reduced in comparison to traditional electricity-based systems.

Comfort
Residents will enjoy comfortable space heating provided by radiant sources, rather than traditional perimeter electric baseboard heaters.

Energy efficiency
The centralized production of thermal energy results in highly efficient delivery and eliminates the need for each building to have its own boilers, hot water storage tanks and other associated equipment.

Risk reduction
As the system uses alternative fuel sources, residents' exposure to fluctuating gas and electricity prices is reduced. A new, shared system also cuts the risks to individual buildings associated with equipment failures and update/replacement requirements.

THE BOTTOM LINE

With more than 70 years experience and a strong track record of creating safe, custom-tailored utility infrastructure, CORIX is helping UniverCity become one of Canada's most sustainable and progressive communities.

DELIVERING THE CORIX ADVANTAGE

CORIX is a fully integrated provider of essential utility infrastructure products, services and systems for water, wastewater and sustainable energy. Committed, flexible and extremely innovative, we bring more than 70 years utility infrastructure experience to every project.

Safety, longevity and ease-of-use are always emphasized, to maximize social, economic and environmental returns. We're also backed by British Columbia Investment Management Corporation, a large, stable and well-respected investment firm that manages a globally diversified investment portfolio of nearly $100 billion. That gives us the financial strength to become a fully invested, long-term partner.