



KERR WOOD LEIDAL  
consulting engineers

## District Energy Team Planning, Design, and Construction

### Key Contacts

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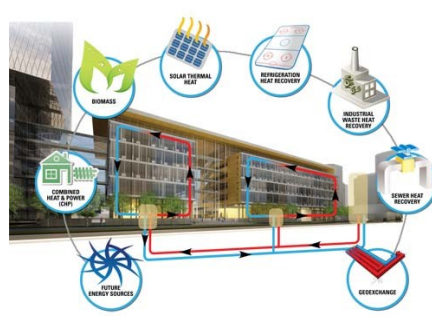
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KWL provides a strong blend of strategic planning and technical analysis, and is a recognized leader in district energy system (DES) analysis, design and construction, as well as community renewable energy resource mapping.

KWL has won many engineering awards for a diverse range of projects including DES, stormwater management projects, pump stations, water treatment plants, and creek mitigation works, demonstrating talents in planning, analysis and design. The firm also received the prestigious Schreyer Award, Canada's highest honour for consulting engineering achievement, for the Metlakatla Water Treatment Plant. KWL's District Energy team members cover a range of civil and mechanical expertise from GIS to wastewater system modelling and planning to process engineering and service excellence, as detailed below.



City of Richmond Alexandra DEU



City of Surrey DES Concept



Southeast False Creek Energy Centre

**| Abby Dacho, P.Eng. — Project Engineer**

Abby is a professional engineer with five years of experience working on district energy systems. She has been involved in all aspects of project implementation from feasibility studies and rate design through design and construction. Abby is currently acting as the design engineer for an extension to the City of Vancouver's Neighbourhood Energy Utility and for containerized boiler plants for River District DES and Creative Energy's downtown network. Abby has presented at the IDEA conference on DE compatibility for buildings and at the QUEST conference on marketing DES.

**| John Delver, B.A.Sc., P.Eng. — Project Manager**

John has been with KWL since 1995 and his work incorporates all stages of capital project engineering from planning to detailed design and construction. His experience is well suited to projects specializing in the management of multi-disciplined engineering projects. John was project manager for the design and construction of the Alexandra DEU for the City of Richmond. The project at full build-out is designed to provide 6 MW of cooling energy and 13 MW of heating energy to service 3,100 dwellings utilizing geexchange fields, condensing boilers, and evaporative coolers. John was project manager for Creative Energy's Pendrell Street Central Energy Plant, which is designed to provide low carbon energy to several new developments in Vancouver's downtown West End.

**| Robert Dolesky, M.A.Sc, P.Eng. — Senior Project Engineer**

Robert Dolesky has over 30 years of experience in engineering management and project execution. Most of his experience is in the conceptual and detailed design of power generation and utilities of plants in the oil and gas, mining, and pulp and paper industries, as well as in stand-alone combined cycle power stations. Robert has managed detail design of 50 MWe to 250 MWe thermal power-generating facilities and also large mineral processing facilities (copper, nickel, and gold) throughout Canada and the United States with some of the projects executed under lump sum contracts. He is a dynamic problem solver always looking at more effective methods of project execution.

**| Ayman Fahmy, P.Eng., PMP® — Team Lead, District Energy**

Ayman Fahmy is a licensed professional engineer with 15 years of experience in the district energy field. He has been actively involved in the design, construction and commissioning of various district energy projects in Canada and the middle east. He holds a B.Sc. in Mechanical Engineering from the American University in Cairo and has worked in different multinational engineering firms and a major EPC contractor. Ayman was recently responsible for the detailed design and construction support of the steam to hot water conversion of the University of British Columbia's district energy system (Phases 1 through 9) and City of Surrey DES Phases 1 & 2. He was actively involved in the value engineering, design and construction of many district cooling/co-generation plants for a major district cooling provider in the Middle East, covering over 10 district cooling plants with a combined design capacity over 800 MW thermal out of 450 MW thermal already in operation.

**| Mike Homenuke, P.Eng. — Utility Management Sector Leader**

Mike has been with KWL since 2003, after graduating from UBC Civil Engineering. He has focussed on planning municipal utilities and energy infrastructure, and has worked on a wide range of projects including strategic planning, master infrastructure plans, feasibility studies, detailed designs, and construction management. Mike's approach to infrastructure planning involves linking project outcomes to strategic objectives, with a strong focus on data, leading edge technologies such as GIS and computational models, and management of infrastructure over the entire life cycle. His technical focus is in developing asset management programs and long-range infrastructure plans for water, wastewater, district energy, and other municipal infrastructure.

**| David Lumb, P.Eng. — Senior Project & Process Engineer**

David is a senior project manager and process engineer with over 20 years of experience. He specializes in managing multi-disciplinary projects for industrial clients focusing on the design of water, wastewater, stormwater and heat recovery systems. David has assisted numerous clients with projects involving treatment systems, heat recovery systems and unique process control projects. He has been involved with sewer heat recovery projects for Metro Vancouver, Whistler, and Corix Utility Services. David has also assisted numerous industrial clients with wastewater treatment systems, recycled water systems, stormwater treatment systems, and process water supply systems.

**| Ron Monk, M.Eng., P.Eng. — Principal & Energy Sector Leader**

Ron is a Principal of KWL and leads KWL's Energy Sector. Ron has over thirty years of experience in sustainability and environmental leadership, strategic planning, project development, and construction. Ron is leading numerous projects that include renewable power, district energy, and hydroelectricity. He has held senior roles in both consulting engineering and with a major power utility, BC Hydro, including their energy planning, rates and metering strategy, distribution operations, sustainability, research and development, and strategic planning.

**| Karl Mueller, P.Eng. — Design Engineer, Facilities Design**

Karl Mueller has been with KWL since January 2000 and has experience in the planning, design and construction of municipal and industrial facilities. His recent work includes the design and construction of the Richmond Smart Centres and Alexandra DEU district energy systems. For both projects Karl provided technical review of facility layout, pumping systems, hoisting systems and overall piping systems. Karl completed the technical review of the design and construction administration on the Saywell Hall Heating Main Replacement project. This project consisted of 300 m of 250 mm diameter heating mains replaced with Logstor piping complete with system tie-ins. For the City of Surrey, UBC, City of Vancouver DES systems, Karl completed technical review of design drawings and provided advice during construction when unknown utilities were located during construction.



| Aleks Paderewski, M.Eng., P.Eng. — Senior Project Manager

Aleksander has 38 years of project development, construction management, and strategic planning experience. Aleksander joined KWL in November 2019 after retiring from UBC after 22 years of service. He successfully managed UBC Mechanical Utilities through the transition from the steam to hot water district heating conversion of over 100 buildings on UBC Campus, ensuring uninterrupted heating supply to residents. He has experience in developing natural gas and steam distribution models and steam plant efficiency improvement strategies. He played key roles in development of UBC's district energy, natural gas, steam, and water distribution systems.

| Mohammed Sheha, B.Sc., MBA, EIT

Mohammed is a construction engineer involved in project management and planning of district energy projects. Previously he was involved in project management and coordination for the construction of district energy plants with a major EPC contractor in the Middle East. After completing his MBA, he worked on planning real estate development projects and preparing financial feasibility studies for a real estate developer in the Middle East. Mohammed is an effective team player with excellent communication skills, is attentive to details and possesses superior organizational skills.

| Alan van der Holt, P.Eng. — Senior Electrical Engineer

Alan has been working as an electrical engineer since 1991. His experience is broad-based including design and implementation of control systems, facility electrical systems, instrumentation, MCCs, radio based control systems and PLC/HMI programming. He has worked primarily in the municipal sector completing and implementing designs for pump stations, water and wastewater treatment facilities, district energy plants and SCADA systems. Other areas of experience include work in the Oil and Gas, Industrial and Utility sectors.ars of experience working on district energy systems.



River District Energy



UBC Bioenergy Research and Demonstration Facility



City of Vancouver SEFC DES Construction



Alexandra ADEU Piping Installation



City of Surrey DES