



## Award of Merit

### Fort St. John Micro Hydro Facility



#### Consultant

Urban Systems Ltd.

#### Owner/Client

City of Fort St. John

#### Category

Energy & Industry

The City of Fort St. John is committed to leadership and innovation in the field of community energy – both within their own community, and as a provider for others – and Urban Systems was engaged to help identify opportunities for alternative energy production. The option to construct a micro-hydropower station on existing effluent streams was identified, and Urban followed with a feasibility study examining potential sites and project plans. Later, Urban provided engineering and project management services on construction and installation of the station and infrastructure upgrades.

The south lagoon at the City's wastewater treatment facility was identified as having sufficient and consistent flow rates, in addition to sufficient elevation change to generate a profitable level of energy. Urban worked with the City to source funding in order to offset the initial investment and produce the financial plan in order to ensure the project reaches profitability. With upgrades to the penstock for pressure rating allowances and construction of a power station to house a turbine generator, the project now produces enough energy to offset the consumption of 90 homes annually. The electrical output is sold to BC Hydro and represents a source of profit for the City.

This project is the first of its kind in British Columbia and representative of an innovative approach to sustainable energy.

For more information, please contact:

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