



MUNICIPAL FACTSHEET

CEDAR ROAD PROJECT



Project Proponent:
Cedar Road LFG Inc.

Project Description:
To enable Cedar Road to complete and optimize the performance of a 1.3 MW Phase One landfill-gas-to-electricity utilization facility located within the Regional District of Nanaimo (RDN) solid waste facility on Vancouver Island.

- Project Benefits:**
- Deployment of gas utilization technology at a small – medium sized landfill
 - Greenhouse gas reduction and contribution to BC’s Climate Action Goals
 - Provision of firm, reliable, renewable power to BC’s electricity grid
 - 2 new jobs

BCBN Funding:
\$400,000 loan funding

Total Project Costs:
\$3.6 million

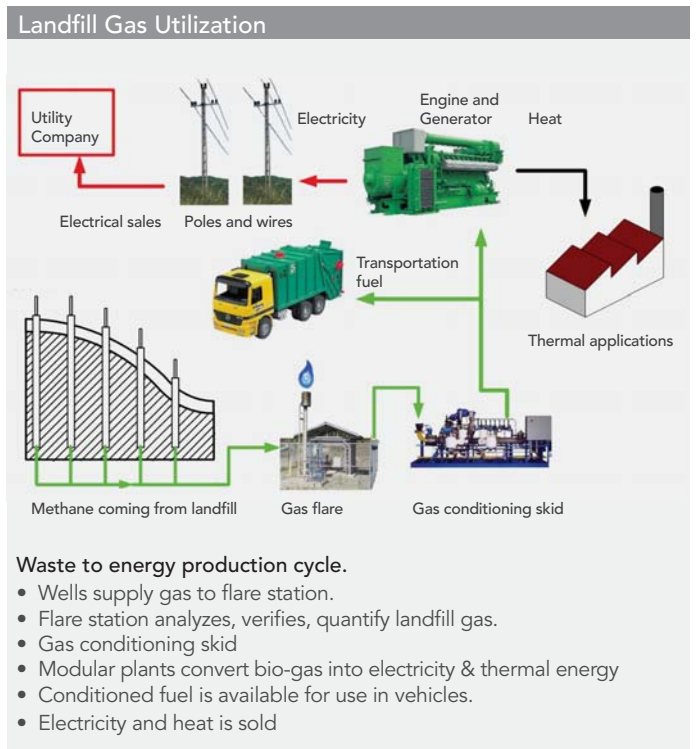
- Partners:**
- BCBN
 - RDN
 - Cedar Road
 - BC Bioenergy Municipal Collaborative

Bioenergy Value Stream:
Municipal Landfill Waste

Bioenergy Feedstock:
Landfill gas (methane)

Bioenergy Application:
Landfill- gas-to-electricity conversion

Bioenergy End Product:
Electricity to the BC Hydro grid under the BC Hydro Standing Offer Program for Green, Clean, and Co-generation under 10 MW



Cedar Road LFG System

The \$3.6 million, 1.3 megawatt power plant is the first of its kind in Canada to utilize methane from a small-medium sized landfill for sale to the electricity grid and potentially for thermal heating or transportation fuel. The Cedar Road facility utilizes existing commercially available Jenbacher generators from world renowned General Electric in an innovative modular concept that allows for phased expansion of the 633 kilowatt modules as needed. The generators can be moved relatively easily to other sites, depending on the gas reserves, project needs, and utility requirements.

Methane emissions are 21 times more harmful than CO2 emissions. Most small – medium sized landfills in Canada are only beginning to collect their methane gas. The BC Ministry of the Environment’s Landfill Gas Management Regulation became effective as of January 1, 2009 and established province-wide criteria for landfill gas capture from municipal solid waste landfills. While Landfill Gas Management Regulation does not require beneficial use of captured gas, the Ministry does encourage beneficial use to further efforts to reduce GHG emissions and offset fossil fuels.

Many municipalities and regional districts in BC see gas utilization as an opportunity to meet their Climate Action

Accord commitments while generating revenue from a waste stream. The Regional District of Nanaimo has been an early adopter and is a leader in small-medium sized municipal landfill gas practices. While their existing gas collection and flaring system reduced the high levels of greenhouse gas, they recognized early on that significant economic benefits can be generated by further utilizing this renewable gas.

BC Bioenergy Municipal Collaborative

BCBN, Cedar Road, and the RDN agree that it is beneficial to create a Nanaimo Bioenergy Centre, a Collaborative Development and Demonstration Centre (CDDC) to help disseminate best practices to other small-to medium-sized landfills. The original CDDC parties have now expanded to include the Union of British Columbia Municipalities and a northern municipality, the Regional District of Fraser Fort George.

The objectives of the BC Bioenergy Municipal Collaborative are to:

- Identify and demonstrate best practices at small and medium sized municipal waste landfills across BC; and
- To effectively and efficiently share information to interested stakeholders in BC principally, and thereafter in Canada, and beyond.



Regional District of Nanaimo Gas Collection



Cedar Road LFG Gas Utilisation Facility

About the BC Bioenergy Network

Established in April 2008 with a \$25 million grant from the BC government, the BC Bioenergy Network is an industry-led association that acts as a catalyst for deploying near-term bioenergy technologies and organizing mission-driven research for the development and demonstration of sustainable technologies to build a world class bioenergy capability in BC. For more information about the BCBN, visit www.bcbioenergy.ca

Major Value-Streams for Collaboration and Development

FOREST	Solid Wood Residues
	Pulp and Paper Residues
	Harvesting and Pelleting (Local Use or Export)
MUNICIPAL	Small and Large Community Heating Systems
	Municipal Wastewater
	Municipal Existing Landfill Waste
	Municipal Solid Waste
AGRICULTURE	Agriculture Residues (Crop Residues and Animal Waste)

About the Partners

The Regional District of Nanaimo consists of four municipalities and seven rural Electoral Areas located on mid-Vancouver Island. The RDN’s 17-member Board of Directors works to ensure that services are delivered on a cooperative, region-wide basis, or within selected local areas. These services include solid waste management, sewage treatment, growth management, public transit, fire protection, recreation and parks, water supply, building inspection and bylaw enforcement, general administration and emergency planning.

For more information please contact: Carey Mclver Solid Waste Manager, T. 250.390.6539, clmciver@rdn.bc.ca, www.rdn.bc.ca

Cedar Road LFG Inc. is a member of the Suncurrent Group of Companies. The Nanaimo facility is a commercial landfill biogas-to-electricity Independent Power Producer, with a mandate to advance and lead demonstration and development in the bioenergy sector. Cedar Road is a leader for new utilization technologies and processes used for clean energy alternatives in domestic and export markets.

For more information please contact: Paul Liddy Managing Director, T. 250.816.2250, pliddy@suncurrent.ca, www.suncurrent.ca



For further information, contact:
BC Bioenergy Network
www.bcbioenergy.ca

