



Ministry Ministry of Finance

Attending Honourable Michael de Jong  
Minister of Finance

From City of North Vancouver

Attending Darrell Mussatto, Mayor  
Ben Themens, Executive Director, Lonsdale Energy Corporation

**Subject The Impact of the PST on District Energy (DE) Systems**

Location Boardroom 3, Premier's Vancouver Office  
Site 740, 999 Canada Place, Vancouver  
World Trade Centre

Date/Time Wednesday, September 18, 2013  
1:20 pm – 1:35 pm

**RECOMMENDATION:**

That the Provincial Sales Tax (PST) be amended in a way that will ensure that all energy providers are treated equitably so that they may compete on the basis of their respective system efficiencies, technical merit and carbon emissions.

That this goal be achieved by including provisions in the PST that will:

- 1) Provide for the exemption or the reimbursement of PST charges on energy (gas, electricity) purchased for the purpose of generating energy for resale; and
- 2) Make available the exemption on Production Machinery and Equipment to heating equipment purchased by municipally-owned district energy systems.

**DISCUSSION:**

It is now widely recognized that District Energy (DE) systems contribute to the economic, social and environmental sustainability of British Columbia. In 2003, the City of North Vancouver created Lonsdale Energy Corporation (LEC) in large part to reduce the City's demand for hydro-electricity as a residential heat energy source. The City's view is that while the Province's hydro-electric resource is of tremendous value, especially in an e-commerce age, it continues to be consumed in very low grade applications such as space heating in our developing and densifying urban centres.

Since then, LEC's mandate has evolved to ensuring that the most appropriate available source of energy is used at all times. While LEC is still primarily using natural gas to generate energy, solar panels are connected to LEC's system and solar energy is used in priority whenever available. LEC has also recently received a Climate and Energy Action Award in the Public Sector Collaboration category for its innovative LEC and School District 44 partnership to provide cooling to the new Education Services Centre/Artists for Kids building. Based on geo-exchange technology, heat is recovered from the cooling system and is distributed through LEC's heating network. When using natural gas, it is important to note that LEC's system of high efficiency interconnected boilers has been estimated to be at least 15% more energy efficient than standard stand-alone boilers installed in each building.

LEC's strategy has been to get the district heating system up and running with available technology, and then bring renewable sources of energy as quickly as possible, so that each building constructed may be immediately supplied by the district energy system. A high-rise building constructed today using electric baseboard heating, will be drawing electricity from the grid for the next 50 years. District heating must be a ready and viable alternative now to avoid that scenario.

It is imperative that British Columbia maintains a sound business environment so that DE systems in BC compete on a level playing field with other energy providers. In addition to enhancing regional economic development and competitiveness, DE systems provide incentives to innovate in the energy sector which in turn is of great importance in making progress on BC's Climate Action Plan. Under the PST, there exists a potential for BC to become less innovative than other Canadian provinces that are taxed on the basis of the Harmonized Sales Tax. It is important that all energy sources and providers be compared on the basis of energy efficiency rather than the incentives or tax treatment that they receive. Failure to do so is seriously detrimental to the long-term viability of DE system operators and other alternative energy providers. In addition, it will frustrate and dilute federal and provincial green house gas reduction objectives, national and provincial energy efficiency objectives, and the development of a community energy industry in the Province of BC.

The recommendation included in this briefing note aims at fostering a business environment that will encourage the development and implementation of various energy generation technologies in British Columbia. More specifically, with regard to DE systems, to place LEC energy consumers on the same cost level as non-LEC consumers of energy, and to ensure that LEC's energy is available to potential new customers on the same terms as other energy providers.

At present, the PST is prejudicial to district energy systems in two ways. This briefing note recommends two specific provisions that would provide a level playing field to all DE providers.

- 1) Provide for the exemption or the reimbursement of PST charges on energy (gas, electricity) purchased for the purpose of generating energy for resale.

Currently, under the PST, LEC must pay PST on its natural gas purchases. When natural gas is directly purchased by a residential customer, no PST is paid. While LEC is using high-efficiency boilers, the PST charge reduces the system competitiveness. This creates an incentive for customers to use stand-alone systems with less efficient technologies. The same incentive exists for commercial users since in their case, LEC pays PST on its natural gas purchases in addition to charging PST on the heat that it delivers, resulting in a double taxation of commercial users. Note that LEC also pays the carbon tax on its gas purchases which is then passed on to all of its customers.

- 2) Make available the exemption on Production Machinery and Equipment to heating equipment purchased by municipally-owned district energy systems.

Under the current PST, BC Hydro, Fortis Gas and several other privately owned companies are provided a PST exemption on the purchase of their production machinery or equipment. As LEC is municipally owned, it is not allowed this exemption. Interestingly, the current production machinery and equipment exemption also provides an exemption to local governments purchasing equipment that produces electricity and heat but denies this exemption for equipment that produces heat only. Local governments are well placed to implement DE systems but such a regulation has a significant impact on their start-up costs.