

Green Power Coming to Port's Pier 10 – District Energy System is a model for a smart, sustainable Port.

Hamilton Port Authority (HPA) and Hamilton Utilities Corporation (HUC), through its subsidiary HCE Energy Inc., are partnering to implement an Industrial District Energy System (IDES) on Pier 10 at the Port of Hamilton. The system will include an energy centre consisting of a 2 megawatt (MW) natural gas engine that will provide electrical power to the grid, while at the same time 'cogenerating' hot water and steam to supply port tenant buildings and operations on the Industrial District Energy loop. The energy centre is designed to deliver clean, efficient energy to port tenants on Pier 10 in a cost competitive manner. District Energy systems provide energy in the form of steam, hot water, or chilled water from energy centres that are connected through infrastructure or from a central plant. The connections are made through insulated pipes which transport energy in the form of heat or chilled water to multiple end users in an efficient manner while reducing overall emissions, energy and maintenance costs.

The Pier 10 Energy Centre will be located on a small footprint in a HPA-owned parking lot adjacent to the Arts & Science brewery on Burlington St. E, in Hamilton Ontario. This IDES system is envisioned to be the first of many opportunities the partnership will develop on HPA lands in order to enhance the benefits to tenants, the community and various stakeholders.

"This District Energy initiative is part of the Hamilton Port Authority's drive to transition the Port of Hamilton into a smart, sustainable transportation and industrial hub," explains Ian Hamilton, incoming President & CEO of the Hamilton Port Authority. "A port is a network of industries with similar needs; one of them is cost-effective energy. By embracing innovations, we can create a more environmentally sustainable port that benefits both our customers and our community."

"Businesses in Hamilton and across Ontario are worried that the high price of electricity is undermining their ability to grow and hire new workers, or even to survive. As an organization dedicated to helping businesses thrive and our community prosper, this is deeply concerning. That's why we think it is so important to innovate, and to work together as partners to tackle this challenge," said HPA's Ian Hamilton.

The project will be carried out by HCE Energy Inc. (formerly Hamilton Community Energy). A similar facility has been operating at the corner of York Blvd. and Bay St. in Hamilton since 2002. The new Pier 10 facility will be constructed, commissioned and placed into operation in a staged approach to meet immediate customer requirements, with the final build being operational by the second quarter of 2018.

"The Pier 10 project is an exciting project for HUC and aligns with HUC's mission," outlines Dean Comand, President and Chief Executive Officer of HUC. "The project is a very good example of how HUC partners with various stakeholders to provide their energy, telecommunications and operational needs in an innovative and sustainable manner. Initiatives such as the Pier 10 project will provide end users with the competitive advantage of lower costs, which will result in attracting new businesses to our service areas."

HPA's Energy Strategy Aims to Reduce Energy Consumption Throughout Port

Today's announcement is part of a larger sustainability vision by HPA, with HUC as a key partner. The two organizations have formalized a development agreement for the purpose of identifying and developing other opportunities for energy and telecommunication projects on the Port lands, including solar applications, green energy initiatives, data centres and industrial water. Through this strategy, HPA will competitively service its property, while reducing overall energy consumption on port lands, improve air quality and minimize the port's overall carbon footprint - all of which will provide a competitive advantage for businesses that locate to Hamilton's port district.

BACKGROUND

Is this facility based on proven technology?

The type of equipment used in this installation is proven technology with thousands of similar installations worldwide, including an existing 3.5 MW facility located at York Blvd. and Bay St. operated by HCE Energy in downtown Hamilton, in operation since 2002.

How is it more efficient?

Using the energy from combustion of natural gas for both electricity and heat is what makes cogeneration highly efficient compared to conventional separate generation of thermal or electrical energy. In addition, the District Energy concept of energy sharing on a loop allows for reduced overall emissions produced from equivalent numbers of conventional natural gas-fuelled boilers.

Will there be neighbourhood impacts?

An acoustic analysis has been completed, and a specialized acoustic enclosure will ensure that noise levels will be below the existing baseline, resulting in no additional noise in the area. With regard to air quality, the engine exhaust will be cleaned using selective catalytic reduction technology which will meet and/or exceed standards set by the Ontario Ministry of Environment and Climate Change.

Located within the HPA-owned Arts & Science brewery parking lot, the facility will be clad in the same facade as the adjacent brewery, allowing it to blend into its surroundings.

About HCE

HCE Energy Inc. is a wholly-owned subsidiary of Hamilton Utilities Corporation, providing clean, safe and affordable District Energy solutions to the City of Hamilton and private institutions.

About the Port of Hamilton

The Port of Hamilton is the largest port in Ontario; a multimodal hub comprising 630 acres on Hamilton's working waterfront, and home to 130 tenant companies, together employing more than 2,100 people.