

MEDIA RELEASE

North America's First Closed-Loop Waste Management System opens in Surrey

For immediate release: March 9, 2018

Surrey's Biofuel Facility officially opened today in the Port Kells industrial area. The \$68 million facility is the first fully integrated closed-loop organic waste management system in North America. The facility will convert curbside organic waste into renewable biofuel to fuel the City's fleet of natural gas powered waste collection and service vehicles. Under this closed loop system, waste collection trucks will literally be collecting their fuel source at curbside. Excess fuel will go to the new district energy system that heats and cools Surrey's City Centre.

"Surrey has established a new sustainability benchmark in Canada with a state of the art facility that converts organic waste into renewable energy," said Mayor Linda Hepner. "The Biofuel Facility will be instrumental in reducing community-wide greenhouse gas (GHG) emissions by approximately 49,000 tonnes per year, which is the equivalent of taking over 10,000 cars off the road annually. This reduction in greenhouse gas emissions will also completely eliminate the City of Surrey's corporate carbon footprint of 17,000 tonnes per year."

The City owned Surrey Biofuel facility was established via a Public-Private Partnership (P3). 25% of the cost of the facility was funded by the Government of Canada and the remaining 75% was funded by Renewi plc. Based in the UK, Renewi is responsible for the design and build of the facility and will operate and maintain the facility on behalf of the City for a 25 year period.

The Biofuel Facility will divert 115,000 tonnes of organic waste from the landfill, produce approximately 120,000 Gigajoules of renewable natural gas and produce approximately 45,000 tonnes of nutrient-rich compost annually.

The Biofuel Facility was designed to meet future demand. Currently, the City of Surrey collects 65,000 tonnes of organic waste per year. The processing capacity of the facility can meet a demand of 115,000 tonnes per year which the City fully expects to utilize by 2043. In the interim, the balance of organic waste will come from the commercial sector and other municipalities.

Organic waste delivered to the Biofuel Facility will be treated exclusively "in-vessel" meaning that 100% of the organic waste will be contained and processed inside the facility. Integrated within the Biofuel Facility is a state-of-the-art odour mitigation technology that treats the waste odours. The end result is that odours are entirely contained within the facility.

The facility also includes an Education Centre and an outdoor interpretive compost garden that will be used for conducting school and group tours. The City of Surrey and Renewi are committed to using the facility to increase awareness of responsible waste management and the science behind composting, anaerobic digestion and the generation of biofuel.

The Biofuel Facility creates more than 15 new, full-time, long-term, and family supporting jobs right here in Surrey. More information can be found [here](#).

Quotes

Federal Government

“Investing in innovative projects like the Surrey Biofuel Facility is vital to reducing our carbon footprint and establishing cleaner, more sustainable communities. The Government of Canada is proud to have helped make this leading-edge project a reality, reducing harmful emissions while increasing the City’s waste management capacity and promoting a greener way of life for residents of Surrey.”

Ken Hardie, Member of Parliament for Fleetwood–Port Kells, on behalf of the Honourable Amarjeet Sohi, Minister of Infrastructure and Communities

Renewi plc

“This state-of-the art facility shows exactly how we’ve been able to use our international experience and innovation to create something unique. The facility brings our ‘waste no more’ vision to life and helps us to play a connecting role in the circular economy. It is this waste-to-product approach which we are very passionate about and I’m delighted to see it coming to life here, at this flagship facility in Surrey.

James Priestly, Managing Director, Municipal Division, Renewi plc

FortisBC

“As part of our commitment to innovation and supporting local and sustainable energy, FortisBC is pleased to work with the City of Surrey in bringing their new biofuel facility online. The facility adds tremendous value to the community and expands the market for Renewable Natural Gas. This benefits our customers, by providing them with a solution to be more environmentally conscious, as well as all British Columbians through lower greenhouse gas emissions.”

Roger Dall’Antonia, president and CEO, FortisBC

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Surrey Biofuel Facility – Fact Sheet

The closed loop system

Surrey Biofuel Facility is the largest facility of its kind in Canada. It is also the first fully-integrated closed loop organic waste management system in North America. The facility will convert curbside organic waste into renewable biofuel that will be used to feed the City's district energy system and fuel the City's fleet of waste collection and service vehicles. Under this closed loop system, waste collection trucks will literally be collecting their fuel source at curbside.

How much renewable energy will be produced at the facility?

The facility will produce approximately 120,000 Gigajoules of renewable natural gas annually. The 40 compressed natural gas (CNG) waste collection vehicles that operate in the City will collectively consume approximately 65,000 Gigajoules of the RNG annually. The remaining RNG will be used to fuel our growing number of CNG municipal fleet vehicles servicing our City as well as a number of municipal buildings including our district energy system.

What are the environmental benefits associated with the facility?

The environmental benefits associated with the facility include a reduction in corporate and community-wide greenhouse gas (GHG) emissions by approximately 49,000 tonnes per year, which is the equivalent of taking over 10,000 cars off the road annually. This reduction in greenhouse emissions will completely eliminate the City of Surrey corporate carbon foot print of 17,000 tonnes per year.

What technology is used at the facility?

The biofuel facility will use a non-thermal anaerobic technology (AD) to process organic waste. The biogas that is naturally generated from this process is captured and upgraded onsite to create renewable natural gas (RNG), which is then injected directly into the local gas grid. The remaining organic matter is placed inside composting tunnels where nutrient-rich compost is produced. A portion of the compost produced will be used within the City's parks and boulevards.

What waste is processed at the facility?

The facility will process 100% of the City's curbside organic waste and is able to accommodate additional organic waste from other municipalities as well as the commercial sector.

Other Facility Facts

- The facility will process up to 115,000 tonnes of organic waste annually.
- The facility will produce approximately 45,000 tonnes of compost annually.
- The City owned Surrey Biofuel facility was established via a Public Private Partnership (P3). Our UK based partner, Renewi PLC, was responsible to design, build, finance the facility and will operate and maintain the facility on behalf of the City for a 25-year period.
- The facility cost is approximately \$68 million. The Federal Government will be contributing up to \$16.9 million of the capital cost of the facility (25%).
- This facility is being delivered without having to increase municipal taxes: The 2017 solid waste levy was \$287 per household and remains at \$287 in 2018.