

# EMPOWERING MUNICIPAL RNG MARKET PARTICIPATION

## Municipal Profile – City of Stratford, Ontario

In 2017, the City of Stratford, in partnership with the Ontario Clean Water Agency (OCWA) and Suez Water Technologies & Solutions, began planning an operation to co-digest 26,000 tonnes/year of food waste with wastewater solids at the City's Water Pollution Control Plant (WPCP). The project supports the province's *Made-in-Ontario Environment Plan*, organic diversion requirements and is a blueprint for many more municipalities to implement across Canada and around the world.

## Stratford Co-Digestion Project

In 2017, City councilors gave the City of Stratford the green light to enter into a partnership with OCWA and Suez Water Technologies (formerly General Electric Water and Process Technologies) to implement a project at its WPCP that would produce renewable natural gas (RNG). The project, which is partially funded through the Ontario Centres of Excellence Target GHG Program, uses

**GHG emissions reductions are projected to be 49,000 tonnes CO<sub>2</sub>e/yr.**

innovative biological hydrolysis technology to optimize anaerobic digestion, which will increase the City's existing digester capacity and allow for the co-processing of source separated organics. The resulting methane gas will then be conditioned and upgraded to produce RNG – a clean, carbon-neutral energy source – that will be fed back into the existing natural gas network for use by consumers across the province. The project is expected to be commissioned in 2020.



## Environmental Benefits

Co-digestion can be a valuable means to realize the full potential of existing AD assets at municipal wastewater treatment plants and can result in substantial environmental benefits, such as GHG emissions reductions. For the City of Stratford, these benefits include:

At full capacity, the facility will result in:

- Estimated GHG emission reductions of 48,951 TCO<sub>2</sub>e/yr from a combination of landfill diversion and natural gas displacement by RNG; these GHG emission savings are expected to grow to 979,020 TCO<sub>2</sub>e/yr by 2050.
- 40% waste diversion
- Extended landfill life
- Nutrients to agriculture reducing the import of synthetic fertilizers