Introduction

Our focus should be here

Ontario generated 12 million tonnes of waste in 2014

Our current focus is here

Least favoured option

FIGURE 4.1. The environmental impacts of landfilling waste

Source: Created by the ECO.
New Regulations
RNG Potential

- Wastewater treatment plants: 68.1 million m³/year
- Municipal waste: 45.4 million m³/year
- Landfills: 684.0 million m³/year
- Agricultural feedstock: 575.0 million m³/year

Ontario Natural Gas Use (2010 Distribution Volume): 24,240 million m³/year

Renewable Natural Gas Potential (Anaerobic Digestion): 1,372.5 million m³/year
Introduction
Stakeholders

- SSO Contract
- MOECC (Approvals)
- City of Stratford (Emitter)
- OCE (Funding Agency)
- OCWA (Operator/Lead)
- GE (Technology Provider)
- Union Gas (RNG Offtake)
Project Overview

Reducing GHG Emissions by 48,951 TCO₂eq/yr
Increasing Biogas Production by 4 Times
Energy Consumers to Energy Producers

- **Conventional WWTP**
- **Biological Hydrolysis Sludge Only**
- **Biological Hydrolysis + Co-Digestion Organic Waste**

[Video](https://youtu.be/2awlM4KbC_w)
Value Chain in a Circular Economy/ Co-benefits

- **Landfill Diversion**
  - 40% Waste Diversion/ extended life for landfill
- **Return Nutrients to Agriculture**
  - Reduce the need for the import of synthetic fertilizers
- **Maximize Existing Assets**
  - Equipment Sale for GE/Suez
- **GHG Reductions**
  - Reach 3.5 Million Households with RNG
- **Establish GHG measurement and validation methodology in W &WW**
Blueprint for the Future

- 48,951 TCO₂eq/yr
- 869,790 TCO₂eq/yr
- 1,586,090 TCO₂eq/yr
- 2.6 Million + TCO₂eq/yr

Repeatable Model for 68+ WWTPs across Ontario

Supporting the Province’s Climate Change Action Plan & Upcoming Regulations