

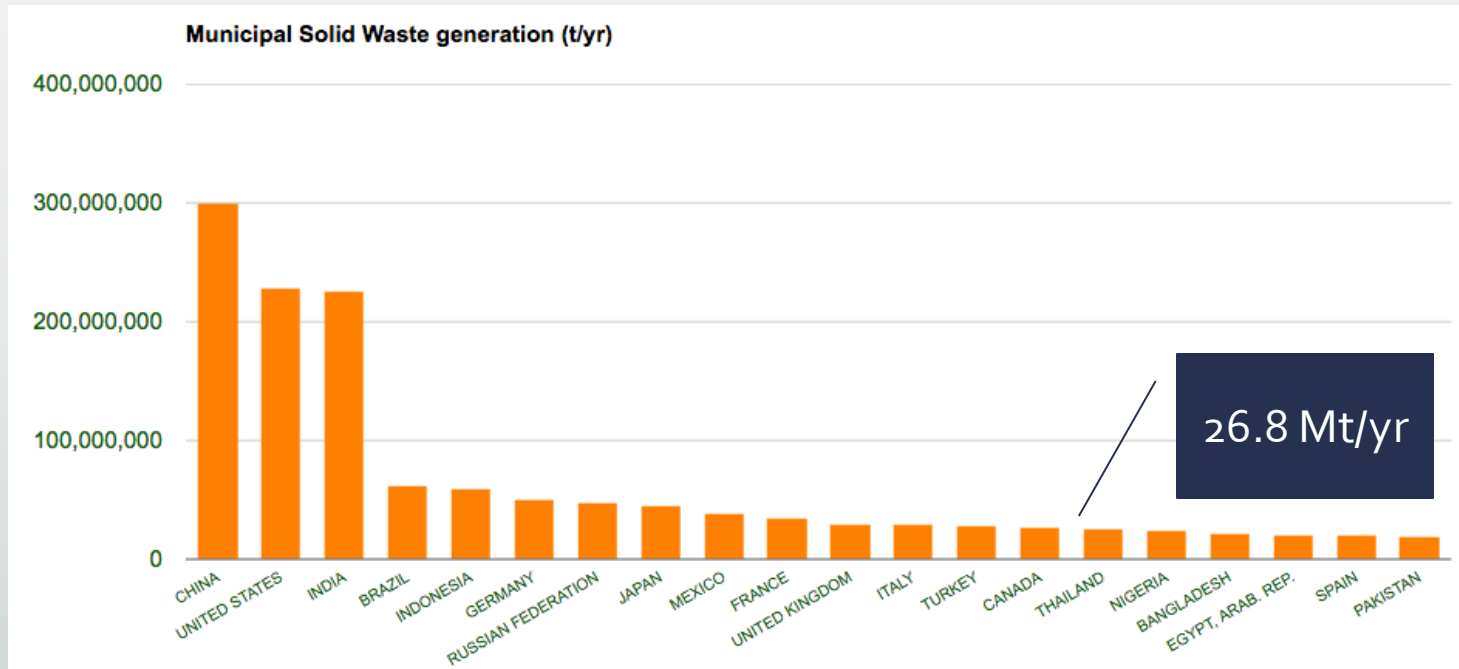


Caroline Waste to Energy (W2E) Project

Rocky Mountain House
July 2, 2019 Presentation
Mayor John Rimmer, Village of Caroline

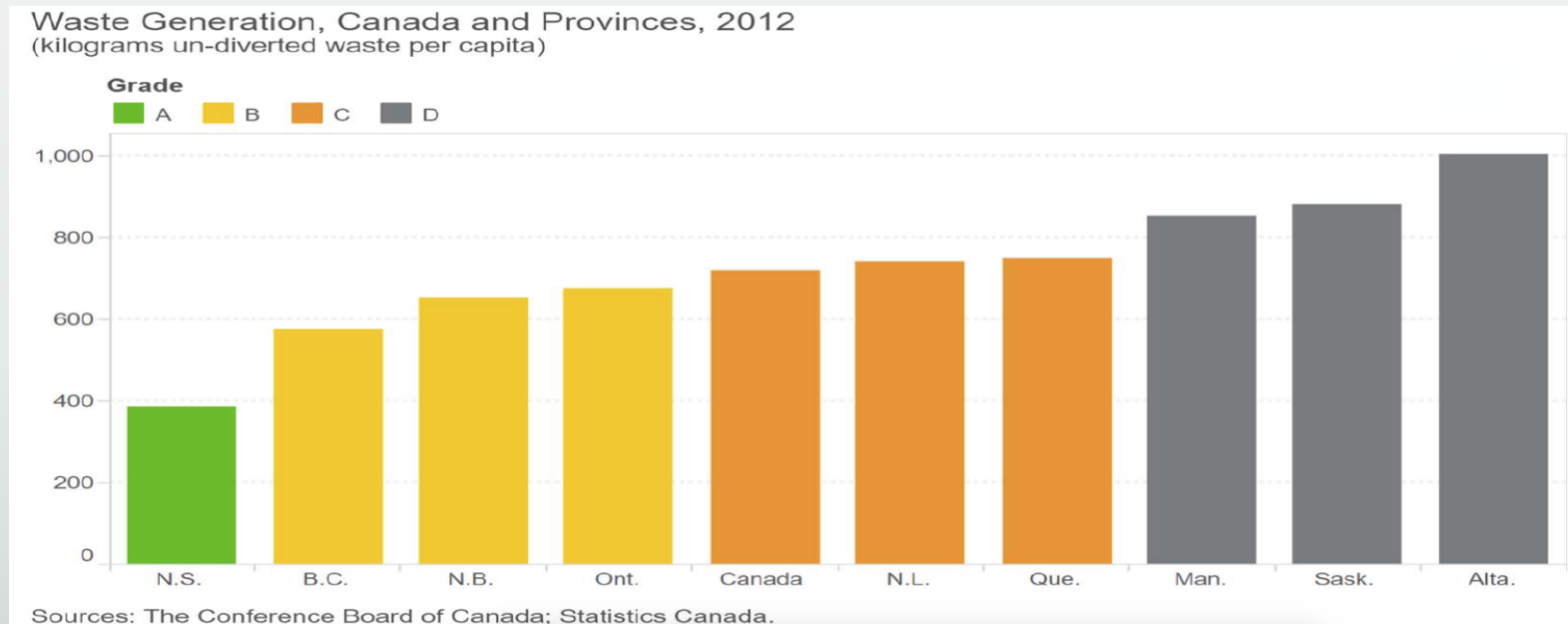
Our Waste Problem

- 35.0M people in Canada, generating 0.85 tons of waste per year each means over 26.8M tons of municipal waste annually, the bulk of which ends up in landfills
- Canadian recycling rates are about 27% so that leaves almost 20M tons of waste going to landfills annually
- 25% of Canada's GHG is emitted by landfills mostly in the form of methane, which is over 20 times more harmful than CO₂ to the atmosphere



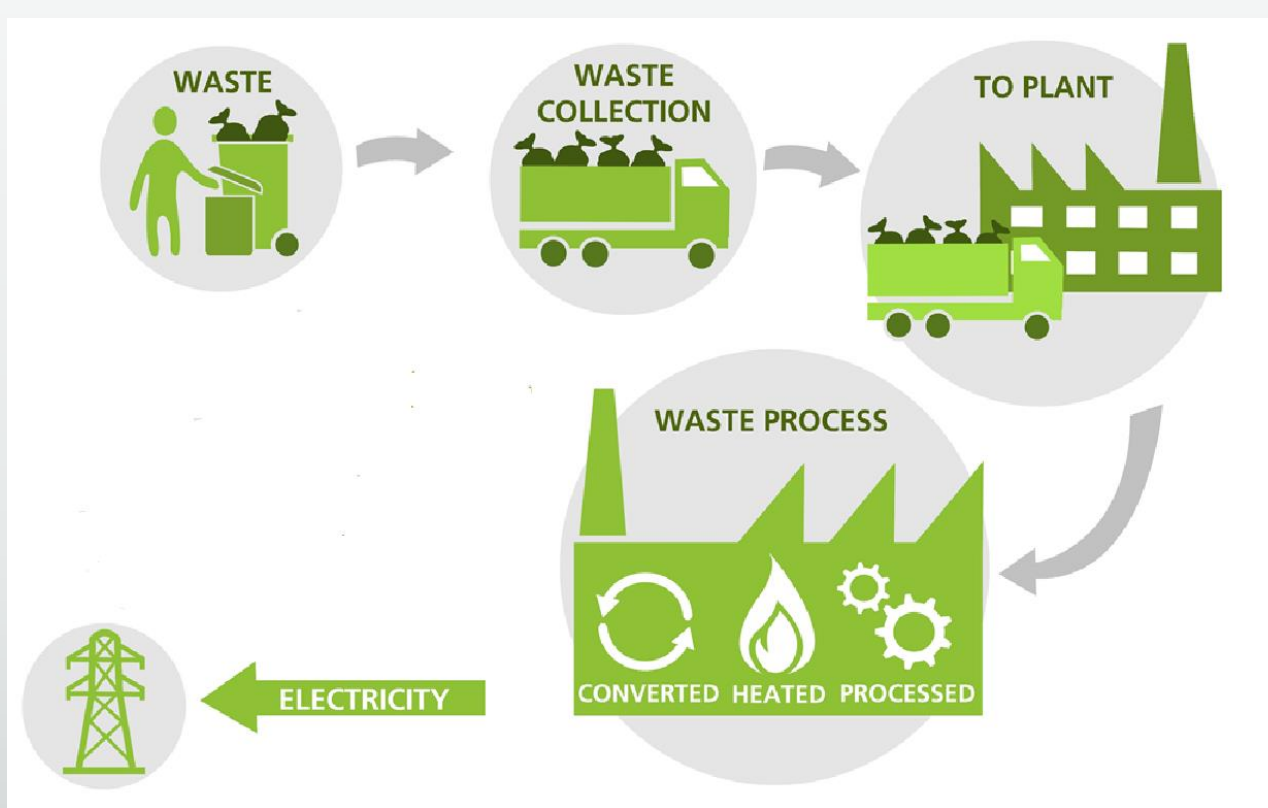
Our Waste Problem

- In Alberta alone, 4.0M people, generating 3.4M tons of waste, at a 27% recycling rate that leaves 2.5M tons of waste going to one of 162 landfills annually
- Although higher environmental standards have been implemented to responsible operations of our landfills, the risk to ground water and fresh water aquifers from contamination increases with time



GOAL

To demonstrate regionally and provincially the elimination of remote or isolated community municipal solid waste with an appropriate Caroline-based W2E facility in a fiscally viable and environmentally responsible manner



Project Scope

Caroline will deploy a Waste to Energy (W2E) technology to eliminate unrecyclable harmful regional waste

There is an opportunity to include surrounding communities in the creation of an appropriate regional solution

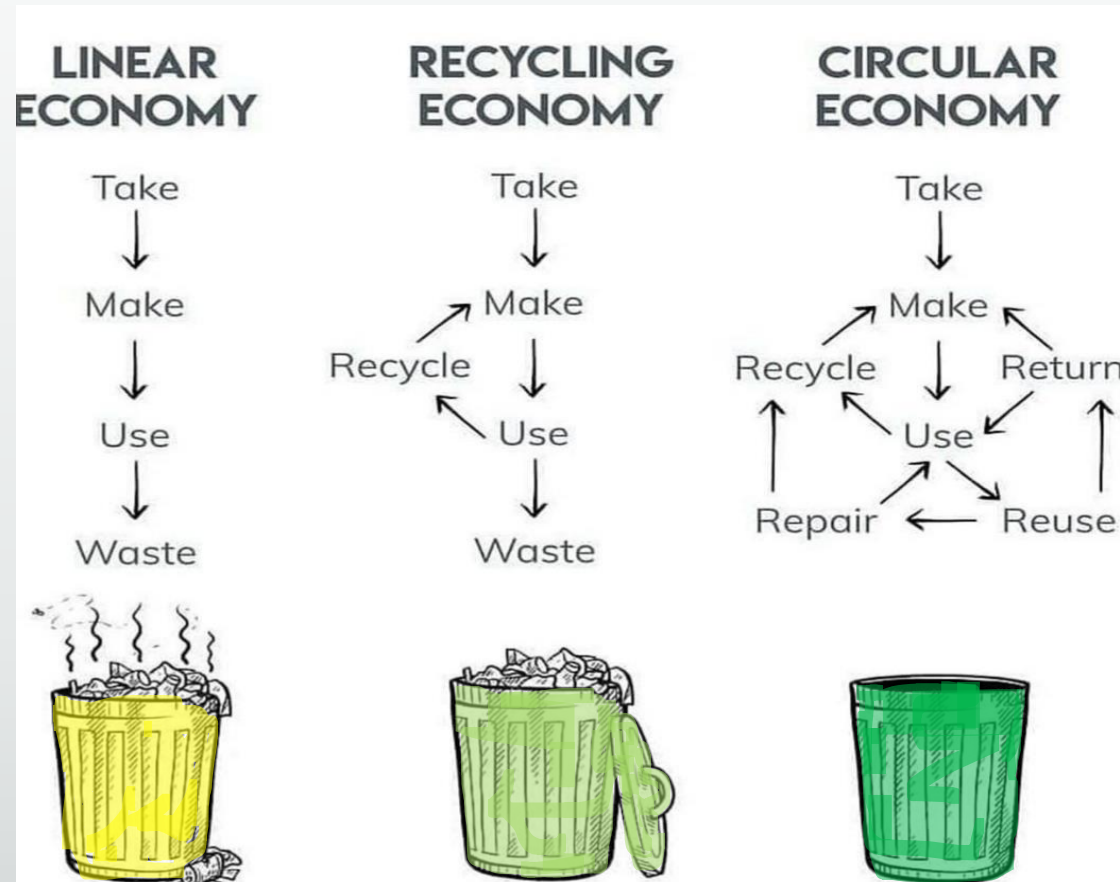
Communities identified as potential beneficiaries/supporters of a Caroline W2E Project:

- *Rocky Mountain House*
- Sundre
- Clearwater County
- Mountain View County
- Red Deer County



A Greener Economy

The proposed W2E solution will transition the region from a linear/recycling economy to a *circular economy*.



Key Objectives

- Demonstrating the benefits regionally of eliminating harmful waste with current proven W2E technology
 - Can a Caroline-led W2E Project resolve current waste management partners / public concerns?
 - What is the composition of waste that could be redirected to a Caroline W2E Facility?
 - What direct and indirect benefits can be realized for our region?
- Determine favourable terms for Collaboration
 - What type of contractual agreement(s) would be most appropriate?
 - Can a Letter of Support for Caroline W2E Project be obtained prior to August 1, 2019?
- Further assess feasibility of preferred technology* and conduct preliminary engineering activities

Project Design



Unsorted MSW



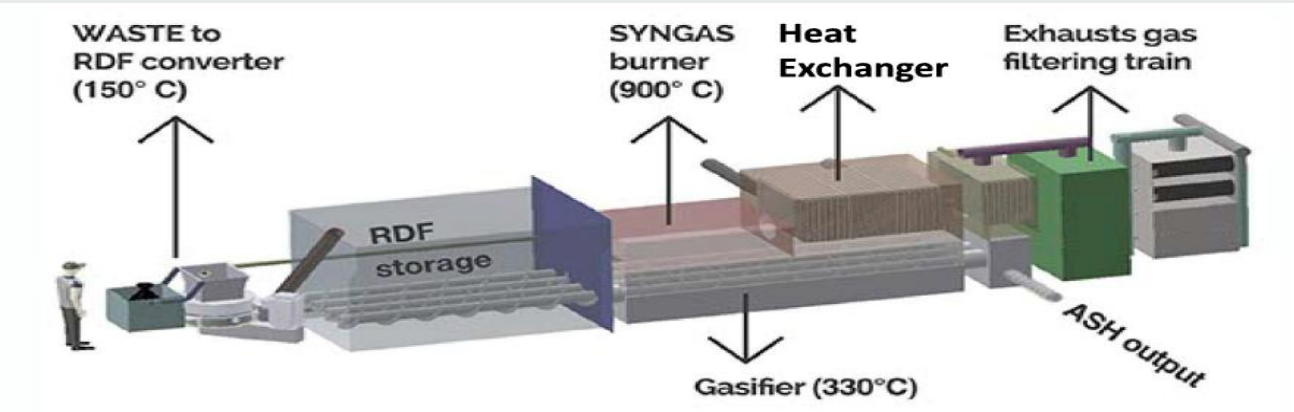
Plastics



Medical Waste



Agriculture Waste



No preparing,
No sorting,
100% enclosed

Project Design

- Preferred technology is from European manufacturer with patented technology for the processing and preparation of Municipal Solid Waste (MSW) as feed stock for the generation of electrical power
- Manufacturer will fabricate and install the system
- The system has no odors, does NOT use incineration, and has almost zero emissions

