

# News from Canada: how to develop the biogas industry in cooperation with the pulp and paper industry

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# About Bähler Biogas



- Quebec SME with 10 years of experience
- Act as: Project Developer and Design-Build-Operate
- Active sectors: Agriculture, Municipal, Industrial Pulp and Paper/ Waste water (Future)
- Execution: We are in execution of our first Owen project in Develop-Design-Build-Finance & Operate
- Next Goal: Develop and execute 4 more projects D-D-B-F and one project in the pulp and paper segment for 2025



# Fields of operation

- Pre-treatment of organic residues
- Co-digestion of residential, agricultural, commercial and industrial organic residues
- Transformation of biogas into RNG
- Redistribution of RNG
- Valorization of the digestate



# Sites under Construction/ Operation

Zooshare Project



Bretzler Farms



Stanton Farms



# Sites under Construction / Operation

Halifax



Semecs



Federal Research Center



# The Market Place/ Driving factors

## Quebec:

- PTMOBC: Subsidy for avoiding organic waste in Landfills
- Energir: 30% of NG replaced by RNG in 2030, injection contract with 20 years fix contract.
- GHG Act between QC, ON, BC & California
- Spot marked USA for RNG
- Landfills will be closed for Organic waste by 2022

## Ontario:

- FIT Program 20 years contract for power production
- Higher power cost as in Quebec
- Enbridge/ Fortis BC injection contracts for five to 20 years
- Spot marked USA for RNG
- GHG Act between QC, ON, BC & California



# Limiting Factors

## Quebec:

- Electricity is cheap & green
- Small NG grid
- Remote areas/ Accessibility
- Environmental regulations
- Moving speed of governmental institutions & local utilities
- Bad implemented projects
- Low fuel cost

## Ontario:

- Paused Fit Program
- No other Subsidies then Fit
- Moving speed of governmental institutions & local utilities
- Environmental regulations
- Bad implemented projects
- Low fuel cost

# Pulp and Paper in Canada

## Driving Factors

- Objective 30 by 30
- GHG Act
- Remote areas (Grid connection, Trucking distances)
- Geological situation (Land application is just possible for three month)
- Landfills closed for Organic waste by 2022

## Limiting Factors

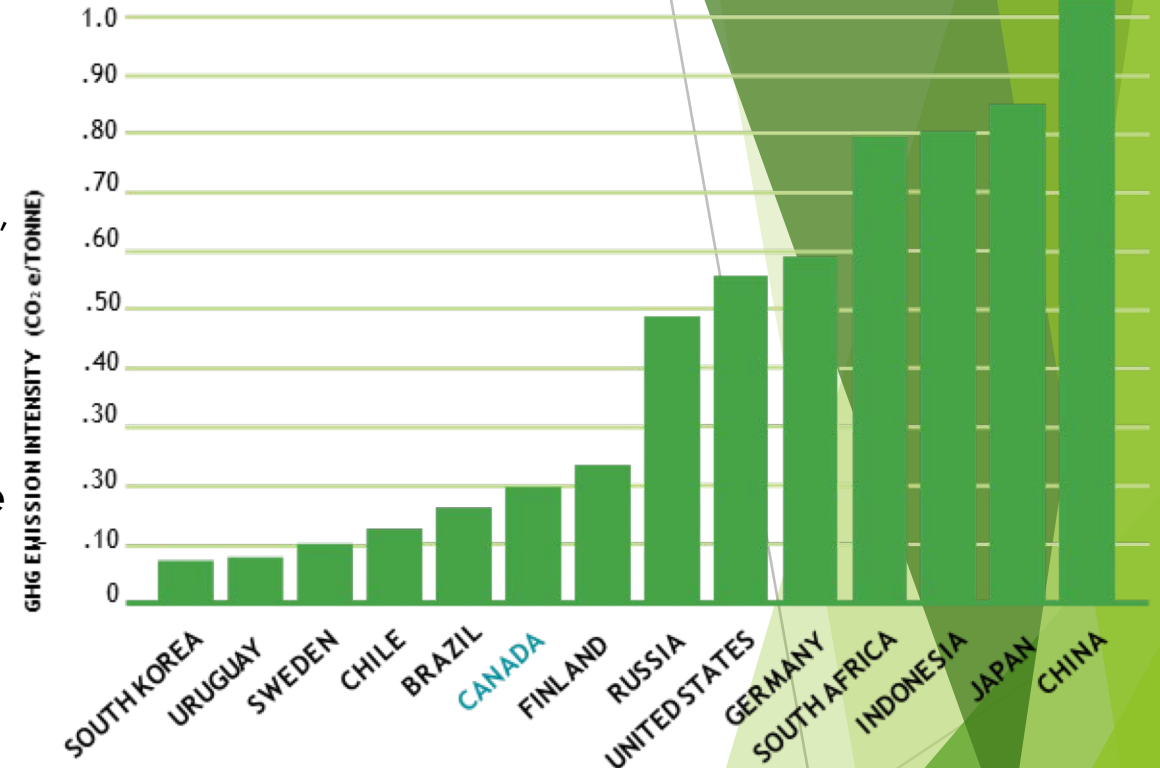
- Branch Plant System
- Slow moving industry
- Organisational structure (local)
- Understanding of technologies and business case
- Remote areas/ Accessibility
- Low fuel cost where grid is available



# Objective 30 by 30 of P&PI

## Key recommendations to reduce emissions by 2030(FPAC.CA)

- Develop technologies that will reduce greenhouse gas emissions from the full value chain of the sector (harvesting, facilities, transportation and electricity generation).
- Continued support from government on the following projects through a tech fund or other funding mechanism will lead to further reductions:
  - Sector transformation technologies such as using methane from secondary treatment as fuel for the mill**
  - Energy-efficiency projects**
  - Boiler upgrades**
  - Co-generation and boiler optimization**
- Review existing regulations and policies that prevent greenhouse gas reduction projects, and discuss solutions, while still protecting health and the environment.



The forest industry is focusing on mitigation efforts on four main areas:

- Large industrial emitters
- Transportation
- Built environment
- Agriculture and forestry

# What's needed then?

- Fonds for project development as development is a long process
- General education of the marked place
- Changes in Rules, regulations and local codes
- Education stuff in P&P plants and the population
- Enforce rules and regulations for a greener future
- New incentives and subsidies

# Biogas Association

## Biogas and RNG in Canada

### Biogas and RNG Energy Capacity

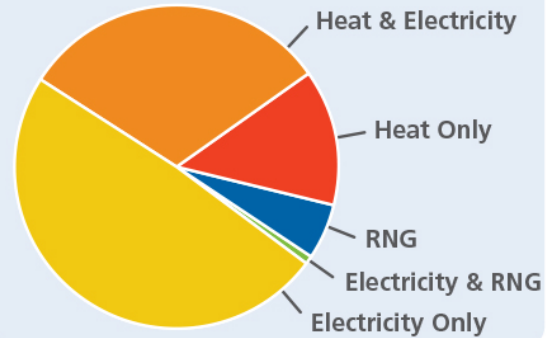
Operational and initiated projects generate:

Greater than

**196 MW**

Greater than  
**& 5,000,000 GJ**  
from RNG

### Biogas Energy Utilization



### Operating Biogas and RNG Projects in Canada

61

Agricultural  
& Food Waste  
Digesters

86

Wastewater  
Treatment  
Facilities

53

Landfill  
Gas  
Projects



# Questions?????



# Thanks for the attention

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