



**ENSYN**

**tcbiomass 2024**

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# RTP<sup>®</sup> – Scale-up & Commercial Deployment

**ENSYN** - 40+ years in business

## RTP<sup>®</sup>

- ✓ Ensyn's core technology – a platform for multiple products
- ✓ Converts solid biomass to high yields of liquid biomass
- ✓ Fast thermal conversion - no pressure, H<sub>2</sub>, or catalyst
- ✓ Scalable to at least **20M** gpy (80M l/y) – economy of scale

## RTP Production

- ✓ Continuous commercial production since **1989**
- ✓ **10** commercial RTP facilities commissioned
- ✓ **8** currently operating, **2** decommissioned after 20 yr & replaced
- ✓ Oldest of current RTP units operating since **1996**
- ✓ Additional **6** RTP demonstration and pilot units for testing



*Renfrew, Ontario, 3M gpy  
commissioned 2006*



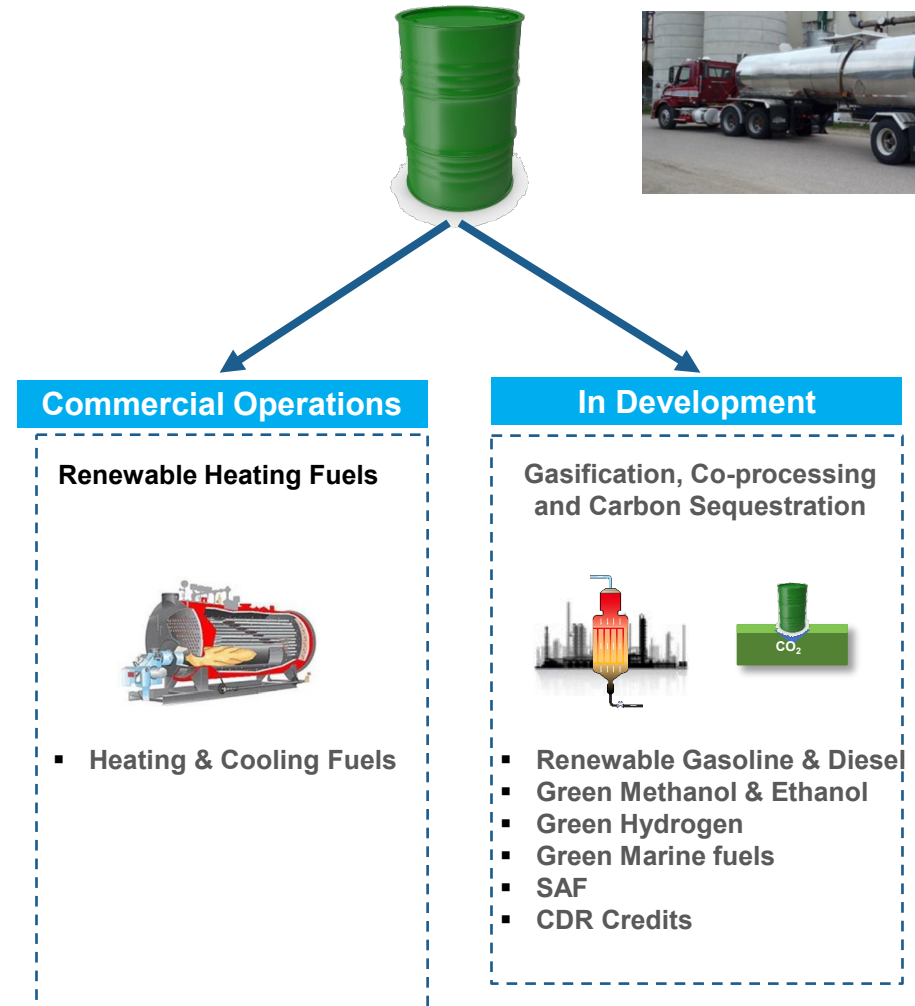
*Cote Nord, Quebec, 10M gpy  
commissioned 2018*

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# Products

- ✓ Initial commercial products
  - Food additives & chemicals
  - Process heat
- ✓ Initial energy product:
  - **Heating fuels**
  - Anchor product for initial projects
  - capacity expansion to seed growth products
- ✓ Growth products – a platform technology
  - Renewable Gasoline & Diesel
  - Green Methanol & Ethanol
  - Green Hydrogen
  - Green Marine fuels
  - SAF
  - Carbon sequestration (CDR Credits)

## Ensyn's FPBO (fast pyrolysis biooil)



## Production Development = Capacity Expansion

- ✓ Immediate projects under active development in:
  - **Maine (20M gpy)** and
  - **Nova Scotia (10M gpy)**
- ✓ Near-term project expansion in MN, WA and WI
- ✓ Initial projects anchored on heating fuels
- ✓ Additional production expansion in Canada and US to leverage production of FPBO for *growth products*
- ✓ Important new alliance with **Castlerock Green Energy** and **Nexus Development Capital** for US development
  - Alliance operating through JV: Castlerock Biofuels LLC
  - Agreements to fund the Maine project to FID
  - John Murphy, Managing Director of Castlerock Biofuels to address tcbiomass tomorrow



★ Immediate projects under active development