## Advanced Biofuels Canada - Members





























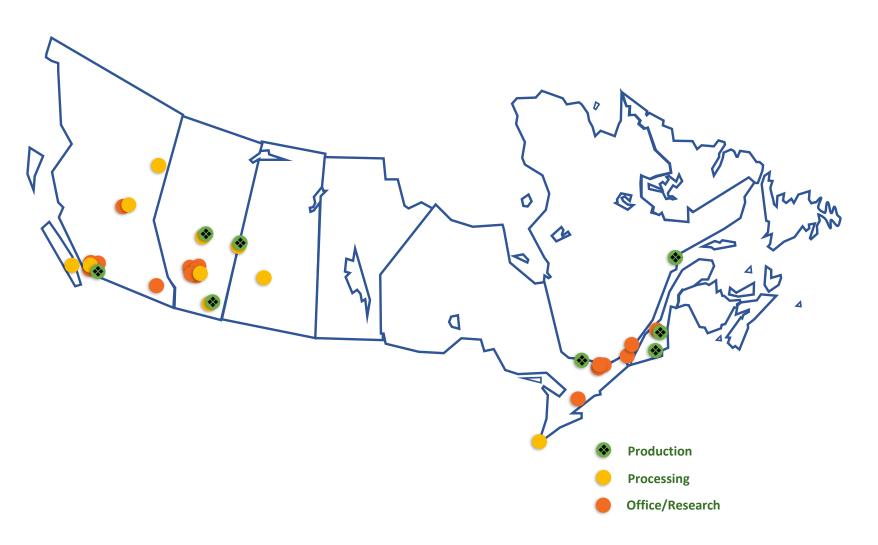
















### Technologies:

#### **Innovation**

- Bio-chemical
- Biomass co-processing
- CAT-HTR™
- Catalytic de-polymerization
- Catalytic upgrading
- Ecofining™
- Ensel™
- Gas fermentation
- Hydrofaction™
- Hydrotreating
- **RTP™**
- Thermo-chemical
- Transesterification

#### **Products:**

#### **Low Carbon Fuels**

- Advanced Ethanol
- Biocrude
- Biodiesel
- Biogas (H<sub>2</sub>, RNG)
- Biojet
- Bio-methanol
- Renewable Fuel Oil
- Renewable Gasoline
- Renewable Hydrocarbon Diesel
- Synthetic Diesel

#### **Co-Products:**

#### **Bio-Products**

- Animal feed & nutritional supplements
- Bio-chemicals
- Fatty acids
- Glycerin
- Green polymers
- Light & heavy fuel 'ends'
- Liquid CO<sub>2</sub>
- Phosphate
- Renewable naphtha
- Renewable Liquid Petroleum Gas (R-LPG)





# Advanced Biofuels - Capital Projects Profile (2018)

\$6.0 B
CAPEX
52
Projects

**Estimated Capital Cost (CAPEX)** \$0-10 M \$10-50 M \$50-100 M > \$100 M

14

9

25

## **Production Capacity**

Million Litres	2020	2025	2030
Renewable Gasoline Products <sup>1</sup>	50	250	620
Renewable Diesel Products <sup>2</sup>	560	2,270	2,580
Biocrude <sup>3</sup>	60	520	1,100

<sup>&</sup>lt;sup>1</sup> Includes ethanol, methanol, renewable gasoline



<sup>&</sup>lt;sup>2</sup> Includes biodiesel, renewable hydrocarbon diesel, biojet, synthetic diesel, renewable fuel oil

<sup>&</sup>lt;sup>3</sup> Processed biomass to biocrude (excludes oilseeds, rendered fats)