

## CLIMATE CHANGE INNOVATION AND TECHNOLOGY FRAMEWORK

### Awardee Summary

<b>CCITF PROGRAM</b>	Clean Technology Networks Program
<b>PROJECT TITLE</b>	Biomass Energy Network (BEN)
<b>ORGANIZATION</b>	University of Alberta – Dr. David Bressler
<b>SECTOR</b>	Cleaner Oil and Gas
<b>PROJECT LEAD</b>	Rollie Dykstra
<b>GRANT AMOUNT</b>	\$600,000 (\$200,000 per year over 3 years)
<b>START DATE</b>	
<b>END DATE</b>	

#### PROJECT OBJECTIVE:

Alberta is already an established global leader in the oil and gas industry, and thus there is tremendous opportunity in the Province to attract investment and implement clean biofuel technology platforms that can help reduce the environmental impact of the petrochemical industry. The primary objective of the Biomass Energy Network (BEN) will be to help facilitate these efforts by bringing together and leveraging Alberta’s biomass-to-biofuels community, providing profile and linkage to national and international partners.

#### PROJECT PROFILE:

Since the 9-point energy plan in the late 90s, Alberta has pursued biofuels and bioenergy from biomass as individualized programs with individualized approaches to companies and research/development initiatives. While this works on one-off case examples, and biofuels provide a key demonstrated pathway to carbon emission reduction, it does not create sustained leveraged value, nor an Alberta presence on the international stage. Through past investments, Alberta Innovates has funded organizations such as the Biorefining Conversions Network (BCN), led by the applicant, which created an Alberta-based community of stakeholders in biomass transformation and leveraged over \$15 million in activity. Expanding on the legacy of the BCN, which ceased operations in 2016, the main objective of the Biomass Energy Network (BEN) is to bring together and leverage Alberta’s biomass-to-biofuels community, providing profile and linkage to national and international partners.

#### The Network:

Though alignment and leveraging with Future Energy Systems (Canada First Research Excellence Fund), BEN will host workshops and scientific exchanges for the biofuels research community in Alberta, including Universities, polytechniques, and colleges. BEN will engage biofuels entities and industry organizations to promote investment and collaborative partnerships, including the YEG Airport Authority. This will position Alberta as a recognized contributor in the multinational Mission Innovation program and will support Alberta entries in the Biojet Challenge. Internationally, BEN will expedite collaboration and exchange

between its members and various international partners such as the Commercial Aviation Alternative Fuels Initiative and the International Energy Agency. Initially, there will be a focus on two key provincial strategic opportunities: Mexico and Australia.

**Schedule:**

By leveraging existing experience and relationships acquired through the BCN, BEN will be well positioned to deliver outcomes in a timely manner. In Year 1, the BEN team will be established and will immediately begin planning of two large workshops and/or meetings (minimum) each year to promote collaboration in the biofuels space. A website and newsletter will be established within the first 6 months of the project, with legacy programming expected to continue after project close.

**Budget:**

A Network Operations Director and a Communications and Event Planning Officer will be hired to deliver the outcomes of the BEN (55% of budget). The remainder of the budget will be allocated for operating supplies and materials (20%) and costs associated with hosting events (25%), including venue rental, IT services, and catering.

**Desired Outcomes:**

Facilitated by the resources outlined in the budget, BEN will work to establish and foster collaboration in the biofuels sector. This will enhance the rate of development and commercialization of disruptive technologies, leading to the establishment of an energy-focused low-carbon industry in Alberta. This will increase market uptake of biofuels and substantially reduce GHG emissions through displacement of petroleum-based fuels.

## **GHG EMISSION REDUCTION SUMMARY:**

**TBD - methodology in development**