

## ICE Network CoLab Summary:

### Feedstock Supply Chains for BioEnergy Project Planning & Operations

Event date: Wednesday, June 24<sup>th</sup> at 15:00 ET

#### CoLab Resources

- CoLab Host: Mike Tilson, General Manager of Chu Cho Environmental LLP., 2018 Catalyst
- Resources:
  - Bruce Dudley, Senior Vice President of Innovation and Strategy, The Delphi Group and Globe Series
  - Blair Hogan, CEO, Gunta Business Consulting, Mentor, 20/20 Catalysts Program

#### Background and Context

In February 2020, the ICE Network CoLab team presented a CoLab focused on the concept of Active Forestry Management as a major opportunity for Indigenous communities to benefit through BioEnergy projects and the associated economic opportunities which can unfold in a community as it becomes involved in BioEnergy, such as forest management, lumber, sawmills, etc.

This ICE CoLab takes a more detailed look at two detailed areas of the bioeconomy: BioEnergy and Active Forest Management for rural and remote communities, and business planning for BioEnergy projects in Indigenous communities.

#### Opportunities for Rural & Remote Communities

By looking at the opportunities which exist in Canada's forestry sector for Indigenous participation and, further, the clean energy opportunities for communities to develop bioenergy projects like combined heat and power units, a new concept was developed. The Rural & Remote Indigenous Bio-Energy Strategy was conceived as an idea for how those communities could participate in the sector and see substantial benefits based on some common goals:

- » Support economic recovery and diversification for rural and remote communities in Canada;
- » Enhance job creation and retention through integrated value-add resource strategies;
- » Minimize risks by building workforce capacity in communities to support long-term resiliency, ensuring workers have the skills and technologies to succeed; and
- » Create a strategy that allows communities to maximize the value of the forest through active forest management and biomass-based district energy projects.

As in every kind of opportunity, there will be costs and benefits, but in the case of bioenergy opportunities for Indigenous communities, specifically for remote, there are several community benefits:

- » Ability to significantly reduce or eliminate diesel (power) and heating oil (space heat and domestic hot water) –reduced risk of environmental damages from spills and air pollution;
- » Government assistance to purchase the biomass-based district energy system (combined heat and power or heating);
- » Skills training for active forest management and district energy (5-6 times employment potential versus other renewable energy opportunities); and
- » Future opportunities to participate in the evolving bio-economy

## Business Case Planning for BioEnergy Projects

Once the idea for a bioenergy project has received support in a community and a FEED study has demonstrated feasibility for the idea, it's time to develop a business plan which will illustrate the financial feasibility of the project and act as a key tool for future funding and permitting applications. It is important to start out business planning early in the project development process to help work through the thinking of the full project life cycle and to flush out all the opportunities throughout the supply/value chain.

In his presentation, Blair covered not only the kinds of obvious revenue opportunities, but also some of the less obvious revenue potentials, such as third-party heating agreements, green financing, and carbon pricing. In addition to the overview of tools and considerations for project costing, attendees were given an opportunity to hear learnings from years of experience. Some of the key points for take-away are:

- » Start your business planning early and reach out to funders so that they can be involved in the process from early days to get buy-in and be well-informed on the project before they ever see an application for funds;
- » Look to other communities and projects like yours to understand what models they used, best practices they employ, and examples of their work to learn from.
- » The ownership, operations and supply model is the most critical aspect of biomass projects, because it illustrates:
  - Aligned & integrated interests along value chain
  - Feedstock dependability & quality
  - Local opportunities and impacts

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## CoLab Attendees (84)

Daniel Adamson, Mouloud Amazouz, Meaghan Bennett, Brittany Berry, Chad Bonnetrouge, Kimberley Brown, Dietrich Bödecker, Justin Campbell, Freddie Campbell, Doreen Churchill, James Colthart, David Crombie, Darby Desrosiers, Andree Doucet, David Dubois, Eryn Fitzgerald, Roberta Flett, Bruno Gagnon, Meagan Grabowski, Todd Harris, Chris Henderson, Andy Hira, Ed Hogan, Richard Hopp, Tim Hoy, Rosemary Hughes, Jon Liv Jaque, John Kenney, David King, Connor King, Jeff Knapp, Vincent Kuzdak, Jeremy Landon, Jessica Leis, Maria MacKenzie, Alexandra Mallett, Abdullah Al Mamun, Larry McClung, Steven McCoy, Andrew McFarlan, Carlyn McGeean, Ayshaliisa McNally, Scot Merriam, Dallas Moffat, Sultana Molla, Michelle Myers, Ladan Naimi, Kimberly Nash-McKinley, Richard Nerysoo, BERNA O'DONOVAN, Anitra Paris, Etienne Patenaude, Stephanie Penikett, Vernon Penner-Acoose, Julianna Peter-Paul, Jasmine Recollet, Reg Renner, Bryana Rousselle, Jimmy Royer, Terrence Sauv , Alyssa Schatz, Christoph Schilling, Ian Scholten, Minoo Shariat-zadeh, Michelle Shephard, Peter Sigurdson, Bruce Simms, Wayne Skinner, Clementina Sosa, Garry Spence, Jim Stauffer, Jessie Stephen, Aude Tousignant, Marianna Trujillo, Sydney Vandale, Stephanie Zimmerling, Roland Kemuksigak, Nicolas Mansuy, Ronnie Sadorra, Jean Schiettekatte, Maureen Scott, Carolyn Smyth, Tim Tutcho