

# DAY 1 – TUESDAY JANUARY 14TH

Pinnacle Hotel Harbourfront, Vancouver, B.C.

#### **Achieving Canada's Biogas/RNG Potential**

With the 2018/2019 announcement of B.C.'s CleanBC Plan, release of Canada's first National Bioeconomy Strategy, and continued work on the federal Clean Fuel Standard and B.C. Low Carbon Fuel Standard, government recognition of biogas/RNG has never been greater. However, setting targets and achieving them are two very different things.

Join us for this half-day Workshop to learn more about the roles different government organizations play in the shift from fossil fuels to biogas/RNG, and have your say as to what should be done to facilitate the transition in both B.C. and across Canada.

#### 7:00 am – 8:00 am: Registration and Breakfast

Registration opens at 7:00 am. Breakfast and coffee served until 8:00 am.

## 8:00 am - 8:40 am: Setting the Stage - Policies in Canada

Arguably, Canada's most impactful biogas/RNG policies/strategies are the Bioeconomy Strategy and Federal Clean Fuel Standard. This session will provide an overview of these strategies/policies, and insight into how they are anticipated to impact biogas/RNG production and utilization:

- Introduction to Canada's Bioeconomy Strategy & BioDesign **Dr. Murray McLaughlin**, *McLaughlin Consultants*; and,
- Introduction to the Federal Clean Fuel Standard **Jennifer Green**, *Canadian Biogas Association*.

## 8:40 am - 9:30 am: Round Table Discussion

Your thoughts and input on biogas/RNG are important. This session is a chance to discuss current policies related to biogas/RNG at the federal level.

#### 9:30 am - 10:10 am: Networking and Refreshments

#### 10:10 am - 10:40 am: Setting the Stage - Policies in B.C.

The CleanBC Plan has set a commitment of 15% renewable gas for residential and industrial use by 2030. Under the B.C. Low Carbon Fuel Standard, fuel suppliers must decrease average carbon intensity by 20% in 2030. This session will provide an overview of these strategies/policies, and insight into how they are anticipated to impact biogas/RNG production and utilization:

- Introduction to the CleanBC Plan **Guy Gensey**, *B.C. Ministry of Energy, Mines and Petroleum Resources*; and
- Introduction to the B.C. Low Carbon Fuel Standard Michael Rensing, B.C. Ministry of Energy, Mines and Petroleum Resources.



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#### 10:40 am - 11:30 am: Round Table Discussion

Your thoughts and input on biogas/RNG are important. This session is a chance to discuss current policies related to biogas/RNG at the provincial level.

11:30 am - 12:30 pm: Lunch and Networking

#### 12:30 pm - 5:30 pm: Biogas/RNG Tour

**Lush:** As a consumer of 100% RNG, Lush is leading the charge towards sustainability. Now, Lush has gone one step further by installing CleanO2's CARBINX micro-carbon capture technology. This technology captures carbon emissions from their bath bomb process and turns it into sodium carbonate (soda ash).

**Village Farms:** For years Village Farms has used landfill gas in their co-gen engines to produce renewable electricity for sale to B.C. Hydro, and heat for their greenhouses. Quadrogen Power Systems has installed a hex-generation demonstration system at Village Farms for converting landfill gas into six renewable products. In the first stage, RNG will be produced and compressed into CNG. Later, biodiesel, electricity, heat, hydrogen, and carbon dioxide will be produced.

Note: All attendees <u>MUST wear closed toes shoes</u> (steel toed shoes preferable).

Absolutely no heels allowed.

## 5:30 pm - 7:30 pm: Networking Reception

All attendees are invited to the 2020 Value of Biogas West Networking Drinks Reception. Network with intelligent, likeminded individuals while enjoying a few snacks and drinks from the cash bar.





# DAY 2 - WEDNESDAY JANUARY 15<sup>TH</sup>

Pinnacle Hotel Harbourfront, Vancouver, B.C.

#### 7:30 am - 8:30 am: Registration & Breakfast

Registration opens at 7:30 am. Breakfast and coffee served until 8:30 am.

## 8:30 am - 9:20 am: Biogas/RNG Updates From Around the World

Globally and locally biogas/RNG production is growing. Hear about this growth in Denmark and a little closer to home:

- B.C.'s RNG Target: What We Can Learn from Denmark Will Cleveland and Trent Berry, Reshape Infrastructure Strategies; and,
- Renewable Natural Gas in B.C. Scott Gramm, FortisBC.

## 9:20 am – 9:40 am: The Importance of Safety

Biogas production involves the risk of fire, explosion and intoxication. WorkSafeBC presents an overview of these hazards, and expectations for the implementation of control measures to prevent such consequences in B.C.:

- Risks and Control Requirements in Biogas Production - **David Ogilvie and Andrew McSherry**, *WorkSafe B.C.* 

#### 9:40 am - 10:00 am: Exhibitor Showcase

Hear a guick introductory word from each of our 2020 Value of Biogas West exhibitors.

## 10:00 am - 10:30 am: Networking & Refreshments

#### 10:30 am – 11:40 am: Feedstock Optimization & Opportunities

The importance of feedstock is well known. Learn about potential new sources of feedstock and innovative pre-treatment technologies that could boost biogas production:

- Technologies For Biogas Yield Optimization Christian Eichhorst, Weber Entec GmbH & Co.KG;
- TERAX: How Thermal Deconstruction Will Revolutionize On-Farm Biogas **Chris Bush**, *Catalyst Agri-Innovations Society; and*,
- Tapping Biopolymers for Better Biogas Yield Luc De Baere, OWS Inc.

#### 11:40 am - 12:00 pm: Plant Design & Operation

Understanding both biochemistry and materials handling is vital for a successful biogas plant. Learn about important feedstock traits and how they impact plant design and operation:

Before You Build: Matters Worthy Of Investigation - Earl Jenson, InnoTech Alberta.

12:00 pm - 1:00pm: Lunch and Networking



# DAY 2 - WEDNESDAY JANUARY 15TH

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#### 1:00 pm - 2:30 pm: Biogas/RNG Case Studies

Hear about biogas/RNG projects from around the world, including a large-scale manure only plant, a plant that experienced catastrophic failure and subsequent recovery, plants in Norway and Hawaii, and a landfill gas upgrading project:

- Large Dairy Digester Design & Implementation: A Midwest Case Study **Derek Hundert**, *PlanET Biogas Solutions Inc.*;
- Too Much of a Good Thing: Full-Scale Experience with Digester Failure and Recovery David Ellis, Azura Associates;
- Turning Waste into RNG to Benefit Cities in Norway and Hawaii Graham Hartlett, DMT Clear Gas Solutions; and,
- First of Its Kind Facility, Turnkey 2 Stage PSA System at Wisconsin Landfill **Robert Kinzler**, *BIOFerm Energy Systems*.

## 2:30 pm – 3:00pm: Networking & Refreshments

## 3:00 pm - 4:10 pm: Digestate Management Opportunities

Digestate management is often an overlooked or misunderstood challenge/opportunity for biogas plants. Hear about some different opportunities for managing your digestate:

- Using Diluted Liquid Digestate as a Hydroponic Nutrient Solution **Kealan Gell,** Off-Grid Gas & Fertilizers Ltd;
- Can a High Quality Compost be Made from Mixed Municipal Solid Waste Luc De Baere, OWS nv; and
- Char Technologies: Pyrolysis for Digestate Management Andrew White, Char Technologies.

#### 4:10 pm - 4:30 pm: Wrap-up

Join us for final wrap-up of the day and to learn about the upcoming Value of Biogas East conference in Toronto (March 26<sup>th</sup> and 27<sup>th</sup>).

