







BC SMART Consortium/IEA Bioenergy Task 39 Panel Discussion:

"Decarbonizing the trucking sector using low carbon intensive fuels"

Monday, 22nd November 2021, 8:30-10:00 PST (17:30-19:00 CET)

The Canadian transport sector emitted 186 Mt CO₂ eq (25% of total emissions) in 2019, which closely followed the oil and gas sector which was the primary contributor of Canada's GHG emissions. In 2019 there were approximately 25.4 million registered road motor vehicles in Canada, accounting for nearly 80% of all transportation emissions. Light duty vehicles accounted for 92% of all vehicles on the road, while medium and heavy-duty vehicles (MHDVs) represented 4.5%. However, the MHDV sector emitted approximately the same level of GHG emissions as all of the light duty vehicles combined, even though there are far fewer of them on the road. Between 1990 and 2019, the GHG emissions from Canada' transport sector grew by 54% with the growth in emissions mostly due to the trucking sector. Emissions from light and medium duty trucks more than doubled and emissions from freight trucks more than tripled. Thus, greatly enhancing the decarbonisation of road transport, particularly the MHDV sector, will be needed if we are to achieve national and international climate change commitments.

Over the last decade, the sale of electric passenger vehicles in Canada has increased to over 2.5% of all light-duty vehicle sales by the end of 2019. However, for the MHDV sector, there are still several obstacles that need to be resolved as electrification of this sector is still evolving. As indicated by Automotive Industry projections, such as the Advanced Propulsion Centre's HGV roadmap, it is likely that mass adoption of zero tailpipe emission technologies will not materialize until after 2040 for long-haul MHDVs. Consequently, a portfolio of vehicle propulsion technologies and sustainable low carbon fuels will be needed by the MHDV sector if they are to achieve net zero by 2050. It should be noted that progress is being made with bioderived fuels such as biodiesel and renewable diesel proving to be central components in strategies used to decarbonize the hard-to-electrify MHDVs sector.

The BC-SMART Low Carbon Fuels Consortium and IEA Bioenergy Task 39 have helped facilitate the "coalition-of-the-willing" of industry, government and academic stakeholders who are collectively committed to decarbonising transport. The long-distance transport sector in particular. The invited panel members (see below) represent key groups that will be needed to decarbonize the long-distance trucking sector. They will share their insights and experience in the production and use of the low carbon intensive fuels that will be needed to decarbonize the worlds trucking sector.

To register for the free webinar, please click here









Moderator:



David Schick, Vice President of the Canadian Fuels Association

Dave's role at the Canadian Fuels Association includes Western Canada, Innovation and Regulatory Affairs. He works on the development of policy and regulation at the federal, provincial and local levels. Dave has worked in the downstream energy business for over 30 years. Prior to joining the CFA, he worked at Parkland and Chevron in a wide variety of roles, including managing Policy, Government and Public Affairs for the Burnaby Refinery, marketing, systems development, planning and finance roles.

List of Panelists:



Pierpaolo Cazzola

Advisor– Energy, technology and environmental sustainability, International Transport Forum (ITF) Pierpaolo advises the ITF on issues related with energy, technology and environmental sustainability. His work focuses in particular on ITF's Decarbonizing Transport Initiative. Prior to this, he spent almost 20 years working at the intersection of transport, energy and environmental sustainability for IEA, the Clean Energy Ministerial, the World Forum for the Harmonization of Vehicle Regulations of the United Nations, the Institute of Prospective Technological Studies of the Joint Research Centre of the European Commission and the Environment Directorate of the Organisation for Economic Cooperation and Development.



Evan Dacey Fleet Strategy and Asset Management, the City of Vancouver

Evan is the manager of Fleet Strategy and Asset Management at the City of Vancouver. His team is responsible for long range fleet planning, strategic fleet projects, and the procurement of \$25 million a year in vehicles and equipment for the City. Additionally, he manages the City's Green Fleet Plan which has a goal of a 60% emissions reduction below 2007 levels by 2030."



Neville Fernandes Vice President, Corporate Affairs and Development for Renewable Energy Group, Inc.

Neville has more 25+ years of experience in the renewable fuels, petroleum and chemical industries in a variety of roles including business development, sales, marketing, EHS and process engineering. In his current position at REG, he provides strategic thought leadership regarding public policy and leads early stages of strategic business development opportunities while working closely with the business development and strategy teams within the organization. Prior to REG, Neville held various managerial roles at Neste, including General Manager and President of Neste US, Inc., where he led the business development and sales and marketing teams.



Don V. O'Connor President, (S&T)² Consultants Inc.

Don is a mechanical engineer with a broad background in energy and environmental consulting and in industry. Hid background includes over 40 years of consulting, manufacturing, and marketing experience, mostly related to transportation fuels. He is the developer of the GHGenius LCA model for transportation fuels. The model is widely used in Canada, the United States and other parts of the world. He has seven patents related to biofuels and food ingredients and has been an author of seven peer reviewed papers.









About the organizers:

The BC SMART Low Carbon Fuels Consortium (i.e. BC SMART) was established in 2019 with the overall goal of facilitating the decarbonization of the long-distance transport sector in BC. It achieves this by encouraging the production and use of low carbon intensive transport fuels, primarily drop-in biofuels. A key component has been the formation and facilitation of a "coalition-of-the-willing" which includes key-stakeholders from industry, government and university. The BC SMART Low Carbon Fuels Consortium will help deliver the CleanBC plan, to meet its transportation related greenhouse gas (GHG) emissions reductions by 2030.

The <u>BC Bioenergy Network</u> (BCBN) is an industry-led initiative that helps deploy near-term bioenergy technologies and supports research towards building a world-class bioenergy capability in BC. BCBN invests in capital and technology development/demonstration, targeted capacity building, as well as education and advocacy. These efforts promote the utilization of BC's biomass resources towards alternative energy – specifically using waste streams in the agriculture, forest and municipal sectors to produce value-added products and energy. To date, BC Bioenergy Network has invested \$15 million in 17 capital projects; \$1.4 million into 12 capacity-building projects; and more than \$375,000 into conferences, workshops and other educational initiatives.

<u>IEA Bioenergy Task 39</u> is a group of international experts who collaborate in trying to commercialize sustainable and low carbon intensive transportation biofuels. Through a coordinated focus on technology, commercialization, sustainability, policy, markets and implementation, Task 39 assists its member countries and other transport biofuels stakeholders in their efforts to develop and deploy sustainable, low carbon intensity transport biofuels. Particularly the long-distance transport sector (i.e., marine, aviation, rail and trucking). Task 39 is part of <u>IEA Bioenergy</u>, an organisation established in 1978 by the <u>International Energy Agency</u> (IEA) with the aim of improving cooperation and information exchange between countries that have national programmes in bioenergy research, development and deployment.