

CLEANTECH/RENEWABLES NEWSLETTER

GLOBAL OPPORTUNITIES FOR ALBERTA COMPANIES

Greetings,

Please find below an overview of events and market intelligence, including opportunities and webinars related to the cleantech and renewables sector.

EVENTS AND MISSIONS

China International Environmental Protection Exhibition & Conference (CIEPEC 2021)

July 13-15, 2021

CIEPEC is one of the largest environmental shows in China with a focus on wastewater treatment, soil remediation and air pollution technologies. The Canadian Embassy in China will be coordinating an in-person Canadian Pavilion with an extensive B2B program being organized during the event with support from the China Association of Environmental Protection Industry. Please visit the CIEPEC site for more information : <http://www.ciepec.org/en/index.php>

Hydrogen Infrastructure Europe Virtual Conference

July 15, 2021

Exploring Europe's ambition for a Hydrogen Economy

Introducing S&P Global Platts Hydrogen Infrastructure Europe. Hear from senior decision-makers right across the hydrogen value chain to better understand the road map and what needs to happen to ensure Europe's future Hydrogen Ecosystem. Hydrogen is the most abundant element in the known universe and readily is used in industrial processes across the world, largely for oil refining and ammonia production. However, hydrogen is increasingly attracting interest from investors, policymakers and energy market participants as a low carbon substitute heating, industrial production, material production, power generation, and transport, however in order to develop further, infrastructure is needed. Ambitious plans to create a dedicated hydrogen transport infrastructure in Europe have recently been expanded. This plan proposes to build a 39,700km hydrogen network that connects 21 European countries by 2040. Join fellow colleagues, to hear from senior decision-makers right across the hydrogen value chain to better understand the road map and what needs to happen to ensure Europe's future Hydrogen Ecosystem

For additional information: https://plattsinfo.spglobal.com/2021-Events_Hydrogen-Infrastructure_EMEA_00---LP---Register---Virtual-Conference.html

Solar Alberta Webinar: How Solar Can Participate in Alberta's Carbon Market -

August 12, 2021

Alberta's Technology Innovation Emissions Reduction Regulation and how it relates to Solar

Are you considering developing or investing in solar in Alberta and want to learn about how your project can generate revenue through Alberta's Carbon Market? Panelists will provide an overview of the relevant parts of the regulation that enable emission offsets & credits; discuss the opportunities for renewable energy under the regulation (opt-in); discuss the opportunities for emission offsets & credits from solar; provide direction to relevant protocols and guidance documents; and provide an overview of the sets to initiate and implement an emission offset project. Register for this webinar at: https://zoom.us/webinar/register/WN_QbkjvtCOSZOZ_gjVHUxTbg

Gastech / Gastech Hydrogen 2021

**Dubai, United Arab Emirates | September 21-23, 2021
(new location and dates)**

Gastech 2021 will be the first in-person major gas, LNG, hydrogen and energy event in the post COVID-19 landscape and brings together the entire value chain for progressive discussions, business transactions and cross sector collaboration. The exhibition and conference presents a unique opportunity to build long-term sustainable business relationships required to address the decarbonisation of energy.

Gastech Hydrogen (co-located with Gastech) will address the latest shifts and trends impacting the hydrogen value chain, including scaling up technologies and bringing down production costs, as well as the new regulatory frameworks and infrastructure development necessary to allow hydrogen to become more widely used in transport, buildings and power generation. <https://www.gastechevent.com/>

For more information, please contact song.wang@gov.ab.ca or julia.mah@gov.ab.ca.

2021 Geothermal Rising Conference

San Diego, USA | October 3-6, 2021

The Geothermal Rising Conference (GRC) is the geothermal industry's flagship annual conference, bringing together people in industry, academia, government and the general public. The event offers technical, policy and market conference sessions, educational workshops, tours of geothermal and renewable energy projects and networking opportunities. For more information, please visit: <https://geothermal.org/events/2021-geothermal-rising-conference>

SAVE THE DATE

Canadian Cleantech & Green Building Mission (Eco Expo Asia 2021)

Hong Kong | October 27-30, 2021

The Canadian Consulate in Hong Kong will be organizing the Canadian Cleantech & Green Building Mission to Hong Kong in conjunction with the Eco Expo Asia 2021. Details of the physical mission with an online option will be released shortly. <https://event.hktdc.com/fair/ecoexpoasia-en/Eco-Expo-Asia-International-Trade-Fair-on-Environmental-Protection/>

For more information, or to register your expression of interest, please contact julia.mah@gov.ab.ca

The Business Booster – Sustainable Energy Innovation

Berlin, Germany | November 3-4, 2021

The Business Booster is an international networking event and global market place for sustainable energy innovations. This annual event brings together 1,200+ attendees from over 40 countries, consisting of start-ups, energy industry representatives, financial communities, policy makers and regulators. The Business Booster is the world's leading event in sustainable energy innovation. You will hear from expert speakers, witness live panel debates, join in interactive sessions – and discover over 150 cutting edge sustainable energy technologies. The event provides an opportunity to meet some of the most influential people and companies behind the energy transition- such as the first female president of Ireland and UN Special Envoy on Climate Change, a Nobel peace prize winner, CEO of Schneider Electric France, the creators behind the 150+ cutting edge technologies that are driving the energy transition and more.

For detailed information: <https://tbb.innoenergy.com/>

CHALLENGES / COMPETITIONS / ACCELERATORS

BWM 360° Sustainability Challenge – Open to global companies

The German automotive manufacturer BMW has set an ambitious CO² reduction target of 200 million tons by 2030 involving all aspects of the corporation's products and operations. A key factor in achieving this target is the integration of latest technologies and solutions originating from the global start-up community. In order to recruit promising start-ups, BMW recently launched the [BMW 360° Sustainability Challenge](#). BMW's tech scouting platform [BMW Startup Garage](#) <http://www.bmwstartupgarage.com/guidelines/> is managing the sustainability challenge and offers their proven "venture client" model to allow start-ups to participate as a registered supplier in proof-of-concept projects involving remuneration. The application deadline is June 28, 2021. Selected applicants will be invited to pitch their solution to BMW on July 22, 2021 with winning applicants showcased at the IAA Mobility event <https://www.iaa.de/en/mobility> in Munich in September 7-12, 2021.

For this challenge, BMW identified the following areas of key focus:

- **Recyclable materials** - seeking "Out of the box thinking, innovative concepts and solutions we haven't discovered yet."
- **Sustainable Supply Chain** – seeking "Innovative solutions to analyze, optimize and verify our goals and sustainability standards in our supplier network"
- **Energy-efficient production** – seeking "Technologies that reduce energy consumption within the BMW production system, solutions that can scale across all BMW plants worldwide"
- **Mobile Intelligence** – seeking "Technologies that allow for a joyful and environmentally conscious driving experience"
- **Intelligent Building Management** – seeking "Solutions which focus on the whole EV experience of our employees, not only on a single charging use-case"
- **Customer-centric Mobility** – seeking "Solutions to better identify customer preferences and optimize our recommendations to customers"
- **Sustainable Technologies** – seeking "Solutions that enable reusability and circular practices and ways to implement disruptive new technologies throughout the product life cycle"

If your company is interested in more information or would like to apply directly, please go to:

<http://www.bmwstartupgarage.com/guidelines/>

For additional questions, please contact Svenja.chenikel@gov.ab.ca

Application deadline: June 28, 2021

Charge On Innovation Challenge

The Charge On Innovation Challenge is a global competition for technology innovators to create new ways to electrify mine truck fleets, and support the mining industry's decarbonisation efforts, spearheaded by [Rio Tinto](#), [BHP](#) and [Vale](#), and facilitated by [Austmine](#). The scope of the Challenge is focused on scalable, interoperable solutions for delivering electricity to 220-tonne haul trucks, without adding time to the haul cycle. It provides an opportunity to showcase innovation and technology challenge concepts to three of the largest global mining companies and a large segment of the global mining industry; receive funding, in-kind support, equity and purchase commitments from mining companies /consortia; demonstrate technology at an active mining operation; influence the creation of standardized, interoperable approaches for charging mine haul trucks; develop relationships with haul truck OEM via mining companies participating in the challenge.

Inquiries may be forwarded to:

- Mr. [Saibal Ghosh](#), Trade Commissioner-Mining/High Commission of Canada in India (New Delhi)
- Ms. [Grimi Guarico](#), Trade Commissioner-Climate Finance/Embassy of Canada in the Philippines.

Deadline for submission of Expressions of Interest: June 30, 2021

Mexico-Spain Smart Cities – Canadian Technology Accelerator (CTA) Program**September – December 2021**

Cities in Mexico and Spain are huge buyers of smart technologies and are strategic entry points to Latin American and the European Union. These two markets will need to adapt to new realities and integrate technologies aimed at helping cities and the tourism sector emerge from the pandemic. The Canadian Technology Accelerator (CTA) business development program can give you the knowledge and connections you need to enter and succeed in these markets. Alberta companies with smart cities technology/products in the following sub-sectors are encouraged to apply:

- mobility
- street lighting and other urban equipment
- advanced and sustainable building and infrastructure
- crowd monitoring and prevent
- air pollution monitoring
- security and emergency management
- citizen engagement
- tourism

Successful applicants will benefit from in-depth briefings on doing business in Mexico and Spain to understand the locals markets, regulator and import considerations; B2B meetings; mentorship and tailored advice on engaging with and pitching to key contacts; introductions to potential buyers, investors and strategic partners. For more information, please visit: <https://www.tradecommissioner.gc.ca/cta-atc/smart-cities-mexico-villes-intelligentes.aspx?lang=eng>

Application deadline: July 16, 2021

Southeast Asia Cleantech – Canadian Technology Accelerator (CTA) Program**October 2021-March 2022**

Do you want to scale up your cleantech or smart cities technology in Southeast Asia? The region is looking to maximize resource efficiency, improve access to necessities such as water and energy, incorporate climate change resilience in infrastructure and more. The Canadian Technology Accelerator global business development program can help you access growth opportunities in the Southeast Asian countries of Singapore, Vietnam, Malaysia and the Philippines. Alberta companies with smart cities or cleantech technologies/products in the following areas are encouraged to apply:

- recycling and value/resource recovery from waste streams (plastics; electronic waste; metals; food waste; polymers; packaging waste; hydrocarbon waste; construction waste)
- municipal solid waste management
- data and analytics driven waste management
- landfill avoidance; diversion of ash and residues to conserve landfill space and/or environmental remediation of dumping grounds and landfills
- waste collection, segregation and processing
- waste-to-energy or waste-to-value

Successful Canadian cleantech applicants will benefit from introductions to potential investment, pilot projects, partnerships and long-term sales in Southeast Asia; guidance on entering Southeast Asian markets; gain introductions to potential buyers, strategic partners and investors. For more information, please visit:

<https://www.tradecommissioner.gc.ca/cta-atc/singapore-singapour.aspx?lang=eng>

Application deadline: August 31, 2021

FUNDING

E8 - Looking for an additional source of funding?

E8, an angel investor community committed to cleantech, invites a new round of applications for Decarbon8-US Fund. The Decarbon8 fund and process leverage philanthropic and personal capital to support early-stage companies whose technologies and business models address climate change. Managed by E8 advisors, the fund makes equity and debt investments (not grants) in companies offering market-ready decarbonization solutions for transportation, the leading source of greenhouse gases in the United States.

Criteria are:

- Focused on reducing emissions in the transportation sector (land/sea/air)
- HQed in the U.S. or Canada
- Market-ready solutions that are generating revenue, not exceeding \$1.5M in 2020

Apply to the Decarbon8-US Fund by visiting E8's website. Application will prompt creation of a deal page in ProSeeder, E8's secure deal management platform. <https://www.e8angels.com/apply-for-funding>

For more information, contact the Cleantech Trade Commissioner in Seattle, Julie Bennion (julie.bennion@international.gc.ca).

Deadline to submit applications: July 9, 2021.

EMISSIONS REDUCTION ALBERTA'S ENERGY SAVINGS FOR BUSINESS PROGRAM

ERA's new Energy Savings for Business Program is a funding opportunity to support small- and medium-scale industrial and commercial businesses.

- It is awarding up to **\$55 million** for cost-saving and emissions reducing projects. The program will help Alberta businesses reduce emissions, decrease operating costs, grow their operations, and become more competitive, while creating skilled jobs and boosting economic recovery.
 - Up to \$250,000 is available per project
 - Up to \$500,000 per parent company is available to cover the cost of products and services.

For more details please visit: <https://eralberta.ca/energy-savings-for-business/>

Agricultural Clean Technology Program

The Federal Ministry of Agriculture and Agri-Food has now launched the new \$165.7-million program.

- The [Adoption Stream](#) will support the adoption of clean technologies, with a priority on those that meaningfully reduce GHG emissions. Eligible recipients will have access to non-repayable contributions for projects that are at least \$50,000 in total cost. Agriculture and Agri-Food Canada will contribute up to 50% for projects with for-profit recipients and up to 75% for not-for-profit recipients. This funding stream will extend over five years, from 2021 to 2026, and will allocate \$50 million specifically for the purchase of more efficient grain dryers for farmers across Canada and \$10 million towards powering farms with clean energy and moving off diesel.
- The [Research and Innovation Stream](#) will support pre-market innovation including research, development, demonstration and commercialization of agricultural clean technologies. Eligible recipients will have access to non-repayable and repayable contributions of up to \$2 million for projects, normally cost-shared 50-50 with Agriculture and Agri-Food Canada. This funding stream will extend over seven years, from 2021 to 2028.

Smart Renewables and Electrification Pathways Program

The Government of Canada launched the Smart Renewables and Electrification Pathways Program (SREPs) for smart renewable energy and grid modernization projects. The program will significantly reduce GHG emissions by encouraging the replacement of fossil-fuel generated electricity with renewables that can provide essential grid services while supporting Canada's transition to an electrified economy. SREPs will provide direct finance support to eligible renewable energy and grid modernization projects during the construction phase. Projects must use market ready technologies and apply workplace equity, diversity and inclusion components.

Eligible projects – SREPs can support projects under the following streams:

- established renewables (solar photovoltaic, onshore wind, small hydro)
- emerging technologies (geothermal, energy storage)
- grid modernization (micro-grids, virtual power plants, and hardware/software to enable grid services)

Please visit the site for more details: https://www.nrcan.gc.ca/climate-change/green-infrastructure-programs/smart-renewables-and-electrification-pathways-program/23566?mc_cid=4e88f2730f&mc_eid=5366228bbf

Clean Fuels Fund

Recognizing the essential role of clean fuel to help Canada meet its goal of net-zero emissions by 2050, the Government of Canada established the Clean Fuels Fund, to de-risk the capital investment required to build new or expand existing fuel production facilities (including facility conversion). Beginning June 21, 2021, interested parties can submit their proposals for projects that support the increase of clean fuels production capacity.

Who can apply?

Legal entities validly incorporated or registered in Canada including not-for-profit and for-profit organizations such as:

- electricity or gas utilities
- private sector companies
- industry associations
- research associations
- standards organizations
- Indigenous organization and Indigenous communities
- Canadian academic institutions
- provincial, territorial, regional or municipal governments or their departments or agencies where applicable

What projects are eligible?

1. Capital clean fuel production projects that use fuel production technologies in advanced stages of technological readiness and that are designed for commercial deployment
2. Feasibility studies, basic engineering studies and details front-end engineering studies to assess the new build or expansion of low carbon fuel production facilities. In addition, feasibility studies to assess the techno-economic feasibility of blending hydrogen into natural gas systems.

All projects must be completed and facilities commissioned by March 31, 2026.

Call for project proposals open until September 29, 2021.

For more information, visit: https://www.nrcan.gc.ca/steps-apply-for-funding-support-clean-production-capacity-projects/23733?_ga=2.160453821.163103908.1624504798-1805611224.1624504798

MARKET INTELLIGENCE

Webinar Advancing Women in Cleantech in Europe Slide Deck

If you are an Alberta women-led enterprise with products, technology and solutions for the cleantech sector interested in activities in Europe, but unable to attend this webinar in early May, 2021, please contact us to get a copy of the slide deck and learn about the numerous cleantech sector initiatives for Canadian companies.

Federal Procurement: Office of Small and Medium Enterprises (OSME)

The OSME, Western Region, is host to the **Ask OS'ME' Anything** virtual drop-in series hosted every Friday at noon (MT) and open to all participants. Drop in to connect with specialists at the OSME for information nuggets and discussions related to federal procurement, ask questions on selling goods and services to the Government of Canada, learn about tools, resources, and innovation funding programs, and more!

- the [OSME Service Guide](#) lists the resources and services offered by the OSME and also include self-serve reference sheets and other resources to share with SMEs.
- Click [here](#) to join the Ask OS'ME' Anything series.

For more information, please contact Jenny Yu, Project Lead & Procurement Specialist at: jenny.yu@pwgsc-tpsgc.gc.ca / Tel. 403-909-0630

The Transition Accelerator webinar recording – Towards Canada's New Hydrogen Economy: A Base Case for the Edmonton Hydrogen HUB

The Edmonton Region Hydrogen HUB hosted a webinar on the 'base case' for how best to build out a hydrogen economy in the Edmonton Region. For those who missed the June 15, 2021 webinar, please visit:

<https://transitionaccelerator.ca/webinar-towards-canadas-new-hydrogen-economy-a-base-case-for-the-edmonton-region-hydrogen-hub/>

As always, if you have any questions about the above, we look forward to hearing from you!

Best regards,

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