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**Hydrogen: Ontario can make it or break it**

New report shows how a low-carbon hydrogen future in Ontario depends on local production

**[Toronto, Ontario]**: H2GO Canada today releases a new report, *Forecasting Low-Carbon Hydrogen Market Characteristics in Ontario to 2050*. This report introduces a new hydrogen ecosystem model that simulates the dynamics of future hydrogen market scenarios, generating estimates of job growth, greenhouse gas emissions, capital and operating expenditures, and total cost of hydrogen delivered to end-users. This model can be used by stakeholders from all sectors of society as a tool to plan investments in low-carbon hydrogen facilities and infrastructure.

“A key finding from the model is that Ontario needs to build its own hydrogen production capacity to meet forecasted demand within the province,” says Dan Brock, Chair of H2GO Canada. “Relying too much on hydrogen imports from neighbouring jurisdictions will drive up costs to a point that could stall the growth of new markets, putting Ontario’s low-carbon hydrogen strategy at risk.”

“To grow Ontario’s hydrogen production potential, more low-carbon energy sources must be harnessed, such as renewable and nuclear power, and breakthrough innovations in hydrogen production should be prioritized for support,” says Ry Smith of Change Energy Services and the lead architect of the hydrogen ecosystem model commissioned by H2GO Canada for its report. “By making the right investments at the right time, hydrogen can become a highly cost-effective pathway to reach the province’s decarbonization goals.”

“We know that there’s an opportunity for Ontario’s world class clean electricity system to be leveraged to support increased hydrogen production.” said Todd Smith, Ontario’s Minister of Energy. “Our Low-Carbon Hydrogen Strategy is driving investment in innovative projects and pilots that are creating more low-carbon generating capacity, powering the growing hydrogen economy in our province.”

The new report, *Forecasting Low-Carbon Hydrogen Market Characteristics in Ontario to 2050*, describes the use of the Hydrogen Growth in Ontario Techno-Economic Assessment (H2GrO-TEA) Model to evaluate the outcomes of a wide range of hydrogen market growth and evolution scenarios and to determine the conditions required to achieve defined goals. The report identifies key market characteristics around which the future of hydrogen in Ontario will pivot. These include:

* When low-carbon hydrogen production keeps pace with demand, the benefits to Ontario’s economy are maximized
* The lowest-cost hydrogen production pathways in Ontario rely on electricity today and an increasing supply of low-carbon electricity into the future
* Ontario’s natural gas distribution system supports low-carbon hydrogen production, and plays a major role if supported by new systems of carbon capture, utilization and storage (CCUS)
* Some uses of hydrogen can support rapid scale-up with relatively low capital costs, better supporting market development.

The report is publicly available for download at the H2GO Canada website: <https://hydrogenvillage.ca/h2go>

**H2GO Canada** is a Not-for-Profit organization established in 2018 to advance a vision of hydrogen becoming a fully developed, low-carbon energy pathway for heat, power and mobility in Canada, as well as for decarbonizing industrial production, supported by commercially vibrant supply chains. Its mission is to help make hydrogen systems a practical option for organizations in Canada that are seeking to reduce greenhouse gas emissions within their operations. Accordingly, the work of the organization focuses on cultivating conditions for hydrogen markets to develop, grow and thrive.

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