## **Canada** Update

39<sup>th</sup> IPHE Steering Committee Meeting 25 - 27 April 2023 Pretoria, South Africa



## **Announcements / New Initiatives Canada**



#### **Policy & Funding Developments**

- Investment Tax Credits
  - Clean Hydrogen—15% to 40% depending on lifecycle carbon intensity and meeting certain labour requirements
    - Status: Applications to open later this year
  - Carbon capture, use and sequestration
  - Clean Electricity and Clean Technology—separate tax credits to support development of renewables
  - Clean Technology Manufacturing—applies to equipment used to produce hydrogen from electrolysis
- Canada Growth Fund—\$15B to incentivize private sector investments (consulting on contracts for difference)
- Canada Infrastructure Bank—\$10B for Green Infrastructure, which includes hydrogen, and \$10B for Clean Power
- Regional Energy Resource Tables Advancing opportunities for low-carbon future across Canada's region through federal and provincial/territorial collaboration
- Upcoming: Biennial Report on the Hydrogen Strategy for Canada





### **Project Development Canada**



#### **Evolving Project Landscape**

New projects being announced and at various **stages of development**—domestic use projects and more than 10 large-scale projects with potential for export

#### Strong interest in hydrogen economy—

Newfoundland received 19 bids for companies interested in pursuing wind-to-hydrogen projects

Clean Fuels Projects projects—up to \$800M for approximately 60 projects, including several hydrogen production projects and FEED/feasibility studies

*Initiative*—Streamlining regulatory assessment processes

#### **Electrolysis Project Updates**

*Air Liquide*—20MW electrolyzer now operating in Quebec

**EverWind**—Provincial EA approval granted for 300MW in Nova Scotia; plans for expansion

**BearHead**—Provincial EA approval granted for 500MW in Nova Scotia; expansion to 2GW

#### **Natural Gas Reforming Project Updates**

**Heartland Ammonia Project**—MOU signed to explore ammonia production in Alberta

*Hazer/Fortis/Suncor*—pilot using methane pyrolysis technology in British Columbia

*Air Products*—developing Net-Zero energy hydrogen production facility using CCUS in Alberta











## Canada – Profile April 2023



#### **Status of Deployments**



250 FCEVs



7 operating & 14 announced hydrogen refuelling stations



Several blending pilots and studies underway



7 hubs formed/forming



At least 2 electricity generation projects

#### **Provincial Strategies**

- British Columbia
- Ontario

Alberta

**Under Development:** 

Quebec

New Brunswick

#### **Provincial Developments**

- Nova Scotia—Legislative changes for hydrogen & offshore wind target
- Newfoundland—Fiscal framework & onshore wind Crown land bids
- British Columbia—Hydrogen Office
- Alberta—Hydrogen Centre of Excellence & Innovation Accelerator

#### **Key Bilateral Collaborations**

- Canada-Germany Alliance
- EU High-Level Energy Dialogue
- Canada-US MOU on Clean Energy
- Canada-Japan Economic and Policy Dialogue
- Canada-Taiwan Economic Consultations
- Hydrogen Cooperation MOU with the Netherlands



# Thank you



International Partnership for Hydrogen and Fuel Cells in the Economy