

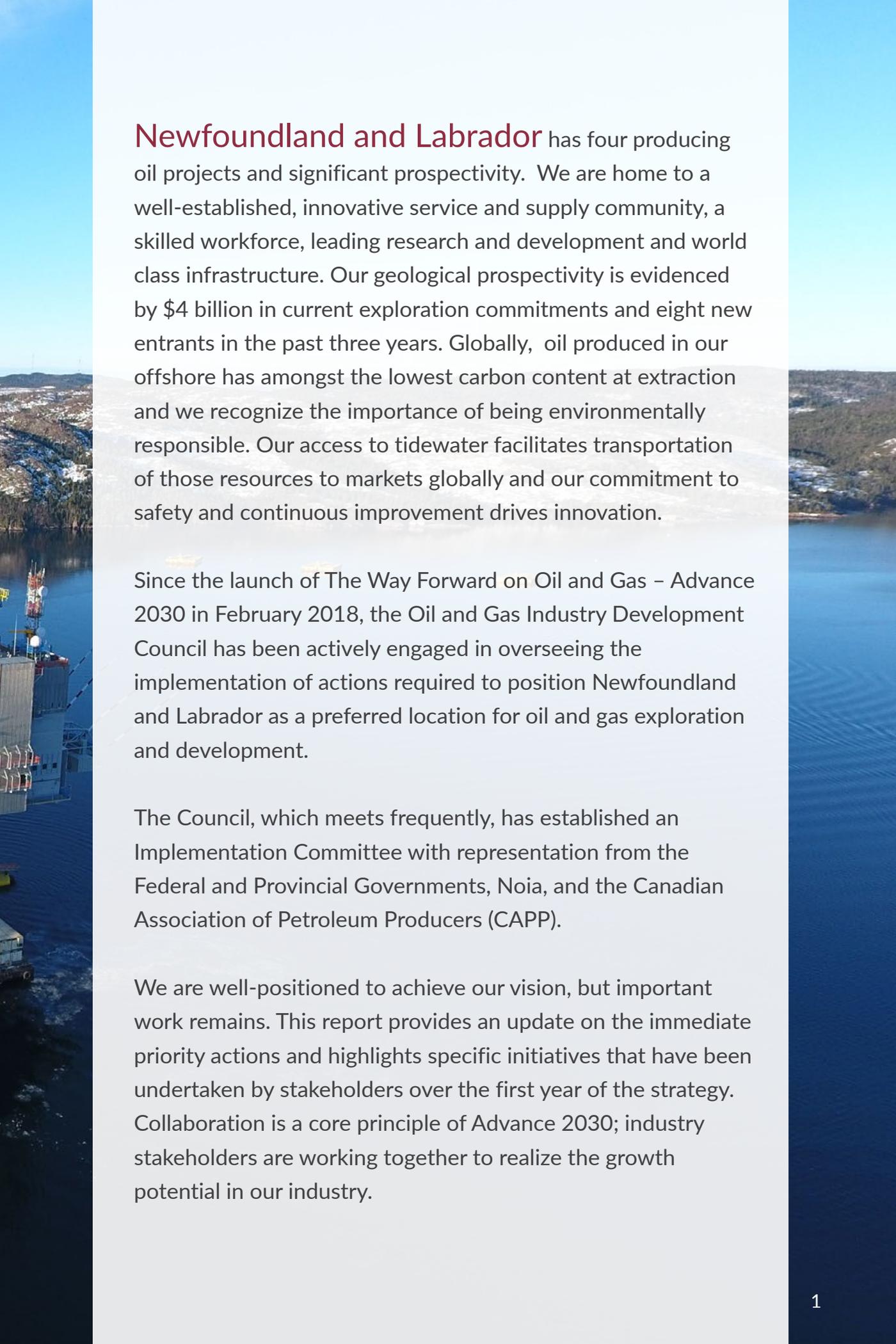
ADVANCE 2030

A Plan for Growth in the
Newfoundland and Labrador
Oil and Gas Industry

**2018-19
Implementation Report**







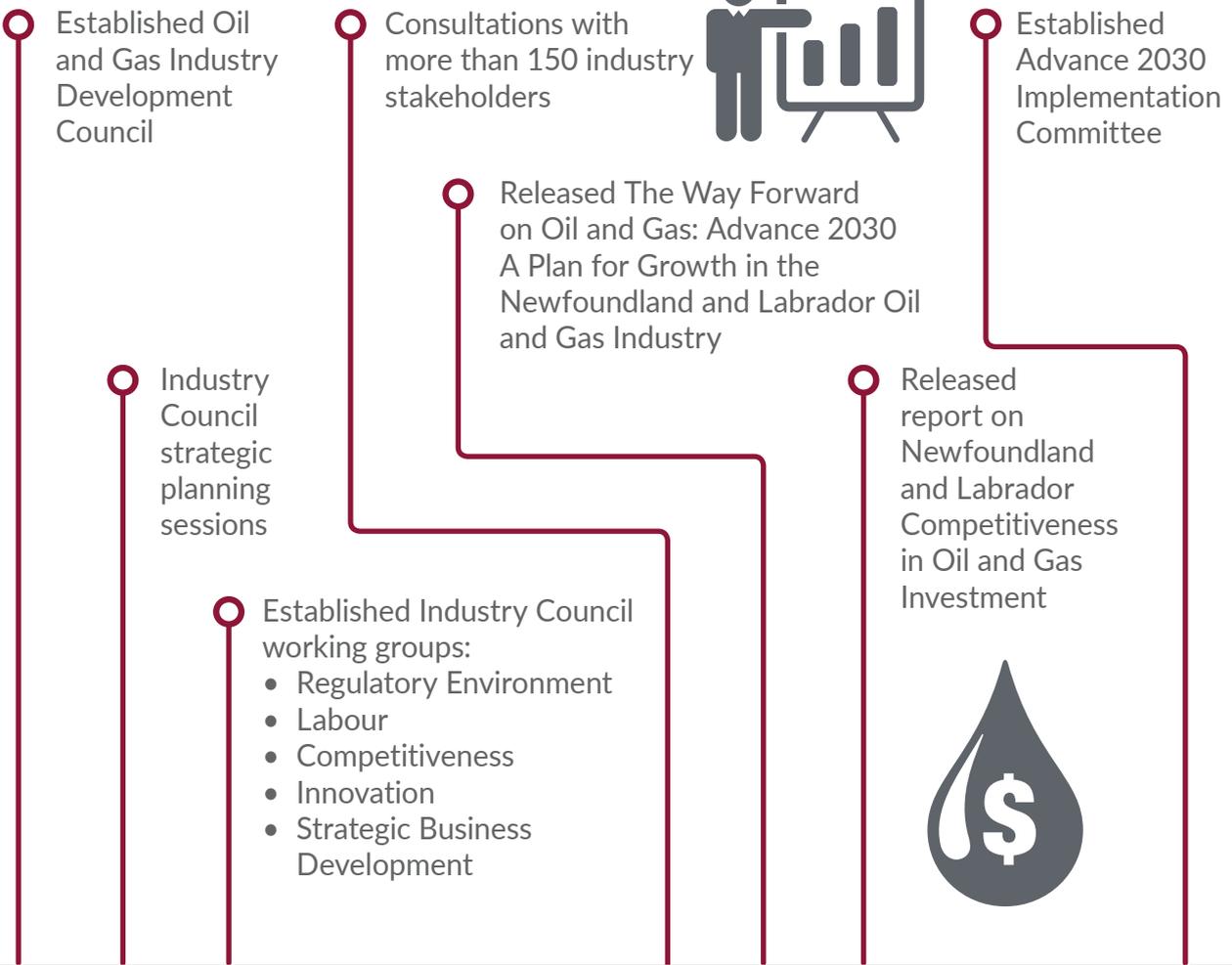
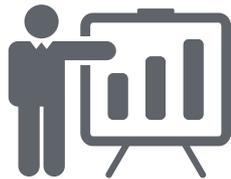
Newfoundland and Labrador has four producing oil projects and significant prospectivity. We are home to a well-established, innovative service and supply community, a skilled workforce, leading research and development and world class infrastructure. Our geological prospectivity is evidenced by \$4 billion in current exploration commitments and eight new entrants in the past three years. Globally, oil produced in our offshore has amongst the lowest carbon content at extraction and we recognize the importance of being environmentally responsible. Our access to tidewater facilitates transportation of those resources to markets globally and our commitment to safety and continuous improvement drives innovation.

Since the launch of The Way Forward on Oil and Gas – Advance 2030 in February 2018, the Oil and Gas Industry Development Council has been actively engaged in overseeing the implementation of actions required to position Newfoundland and Labrador as a preferred location for oil and gas exploration and development.

The Council, which meets frequently, has established an Implementation Committee with representation from the Federal and Provincial Governments, Noia, and the Canadian Association of Petroleum Producers (CAPP).

We are well-positioned to achieve our vision, but important work remains. This report provides an update on the immediate priority actions and highlights specific initiatives that have been undertaken by stakeholders over the first year of the strategy. Collaboration is a core principle of Advance 2030; industry stakeholders are working together to realize the growth potential in our industry.

ADVANCE 2030 Development and Timeline



Established Oil and Gas Industry Development Council

Consultations with more than 150 industry stakeholders

Established Advance 2030 Implementation Committee

Industry Council strategic planning sessions

Released The Way Forward on Oil and Gas: Advance 2030 A Plan for Growth in the Newfoundland and Labrador Oil and Gas Industry

Released report on Newfoundland and Labrador Competitiveness in Oil and Gas Investment

- Established Industry Council working groups:
- Regulatory Environment
 - Labour
 - Competitiveness
 - Innovation
 - Strategic Business Development



2016	2017	2017		2018	2018	2018		2018
DEC	FEB	MAY		JAN	FEB	APR		JUN



- Provincial Government and Equinor sign framework agreement for Bay du Nord Project development – first deepwater project in the Flemish Pass
- Announced Independent 2018 Resource Assessment
- Launched Regional Environmental Assessment for exploration drilling
- Launched \$60 million Innovation and Business Development Fund (IBDF)
- Atlantic Offshore Competitiveness Roundtable meeting
- Signed MOU between Governments of Newfoundland and Labrador and Guyana
- Noia trade mission to Guyana
- Natural Resources launched Virtual Data Room
- 2018 C-NLOPB call for bids results issued – highest single bid ever received
- Natural Resources launched Mapping App
- First IBDF projects funded
- Initiated jurisdictional scans to support development of:
 - Natural gas fiscal framework
 - Exploration incentive
- Legislation to establish new Oil and Gas Corporation



2018 JUL
2018 SEP
2018 OCT

2018 NOV
2018 DEC
2019 FEB
2019 MAR

ADVANCE 2030

2018-19 Implementation Key Initiatives



2019 Atlantic Accord Agreement

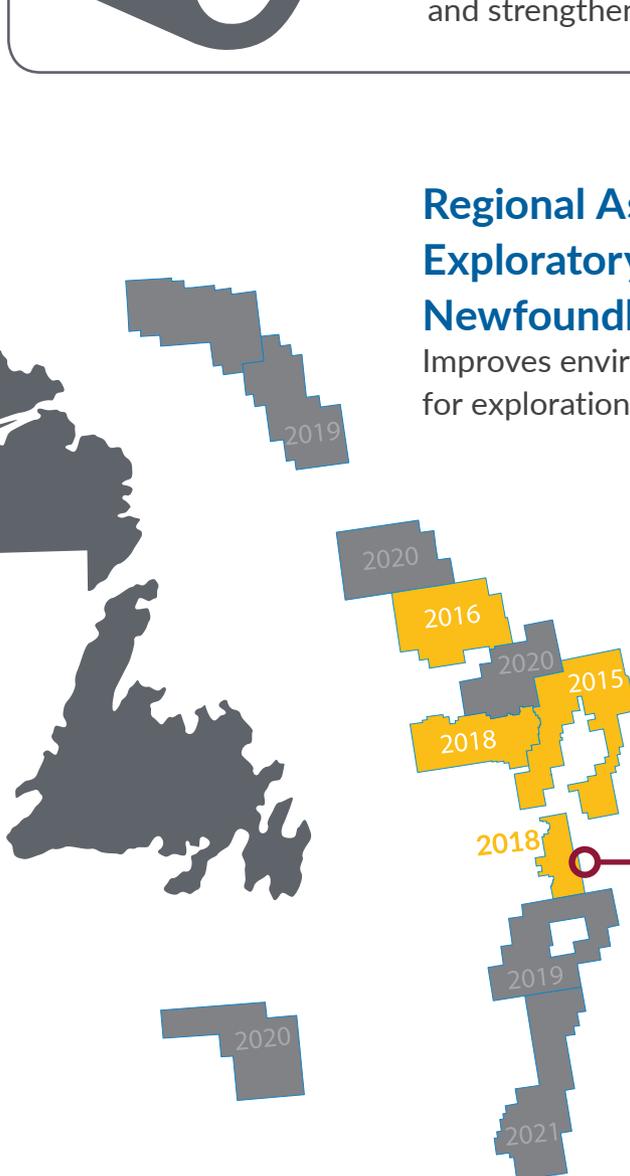
Ensures Newfoundland and Labrador is principal beneficiary of offshore resources and strengthens joint management

Regional Assessment of Offshore Exploratory Drilling East of Newfoundland and Labrador

Improves environmental assessment efficiency for exploration drilling

2018 C-NLOPB Call for Bids

- \$1.38 billion in bids received
- Record single bid \$621 million from BHP Billiton



Innovation and Business Development Fund
\$60 million over 10 years
to support innovation and business development



**Bull Arm Fabrication
Inc. site lease**

Short-term lease to DFB Driver Seadrill
Warm Stack and Thruster Change out
(West Aquarius)

**PIHRC Human
Resources Skills
Gap Analysis**

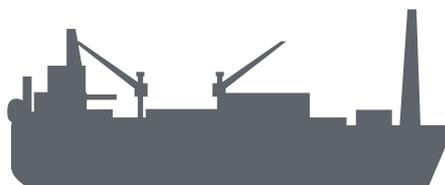
Promote and provide
industry career information



Bay du Nord Framework Agreement

\$10.9 billion

agreement with Equinor and Husky -
first oil anticipated in 2025



2018-19 Update on Immediate Priority Actions

Drive Exploration

To grow the oil and gas industry in Newfoundland and Labrador, increased exploration drilling is an immediate priority.

- Legislation established a new oil and gas Crown corporation that will support offshore exploration attraction; 2D and 3D seismic programs continued in 2018 and 2019
- Fuels used to undertake offshore petroleum exploration will be exempt from the carbon tax, as part of the Provincial Carbon Pricing Plan released in October 2018
- Released Beicip-Franlab 2018 Resource Assessment of parcels in the Orphan Basin (NL18-CFB01) and the East Jeanne d'Arc Basin (NL18-CFB01), in advance of the 2018 Eastern Newfoundland Call for Bids, identifying a resource potential of 11.7 billion barrels of oil and 60.2 trillion cubic feet of gas
- In November 2018, the C-NLOPB announced a record \$1.38 billion in exploration license bids, including a record single bid of \$621 million from BHP Billiton
- Natural Resources engaged Wood Mackenzie to review exploration incentives in other jurisdictions
- Resource assessments for 2019 licence round ongoing; will be released before bid closing

Modernize Governance Structures

A new approach is required that extends beyond the current focus on offshore regulatory requirements.

- C-NLOPB Chair and CEO positions separated to enhance corporate governance, aligning with global best practice
- 2019 Atlantic Accord Agreement strengthens the joint management of Newfoundland and Labrador's offshore development in areas such as land tenure, worker safety, regulatory efficiency and regulator modernization

- Rig Intake Working Group established to investigate opportunities to standardize rig intake requirements and reduce costs
- Modernization of the regulatory regime, including performance-based Frontier and Offshore Regulatory Renewal Initiative Framework Regulations and new Occupational Health and Safety Regulations, expected to be completed in 2020

Ensure Global Competitiveness

The cost and timeline from exploration to production is a major consideration for companies when making global investments decisions.

- Held Atlantic Offshore Competitiveness Roundtable meetings with Governments of Newfoundland and Labrador and Nova Scotia, Natural Resources Canada (NRCan) and CAPP on closing the competitiveness gap and regulatory issues such as Bill C-69, Regional Assessments and Marine Protected Areas
- Natural Resources released a Wood Mackenzie report in April 2018, entitled International Competitiveness Review of the Newfoundland and Labrador Oil and Gas Industry
- Initiated a Regional Assessment of Offshore Exploratory Drilling East of Newfoundland and Labrador in September 2018 (expected to be completed by fall 2019)

Enhance Local Supply Chain

Collaboration is needed to be cost competitive, enhance local supply chain capabilities, and pursue diversification opportunities.

- Bull Arm Fabrication Inc. awarded a short-term lease for a portion of the Bull Arm site to DFB Driver in December 2018 to execute a contract with Seadrill for the Warm Stack and Thruster Change Out of the West Aquarius
- Guyana-Newfoundland and Labrador Memorandum of Understanding signed October 2018 for cooperation and collaboration
- Noia developed and is implementing a 2-year work plan to identify Newfoundland and Labrador supplier development opportunities in Guyana, supported by Tourism, Culture, Industry and Innovation and ACOA

- Noia, NATI and Memorial University's Genesis Centre collaborated on three Hacking Oil & Gas – A Café on Digitization in May, June and November 2018
- NEIA is pursuing oil and gas business opportunities for clean technology through stakeholder engagement and outreach, with a mission to Norway in March 2019
- Atlantic Trade and Investment Growth Strategy Oil and Gas Services Sector Export Team export plan developed and priorities identified to increase export activity
- Held CanExport Information Session in January 2019 with local supply and service companies to support export marketing
- Noia has engaged a consultant, with funding from IBDF and ACOA, to undertake an analysis of local supply chain capacity and capabilities, including identification of gaps and development of a supply chain program (estimated completion in Q1 2020)

Accelerate Development

Collaboration and innovation play an important role in accelerating the pace of offshore oil and gas development.

- Government of Newfoundland and Labrador signed \$10.9 billion Bay du Nord Agreement with Equinor and Husky Energy in July 2018 with first oil anticipated in 2025
- Petroleum Research led “Enabling Subsea Marginal Field Tieback Developments” project funded by industry, ACOA and IBDF to investigate opportunities and develop a technology roadmap for subsea tiebacks offshore Newfoundland and Labrador
- Natural Resources developed initial prototype of a GIS Tie-back Application Tool; with further work proposed with Petroleum Research and the new Oil and Gas Corporation
- Petroleum Research organized a knowledge sharing mission with the Oil & Gas Technology Centre in the United Kingdom in September 2018
- Natural Resources engaged Ledingham Chalmers to research best practice on third party access to infrastructure
- Natural Resources contracted Rystad Energy to undertake a jurisdictional scan of opportunities to support natural gas framework development

Support Innovation

Investments in innovation are critical to the long-term growth and development of Newfoundland and Labrador's oil and gas industry.

- Innovation and Business Development Fund (IBDF) launched in September 2018; Natural Resources and Tourism, Culture, Industry and Innovation funded \$3 million in projects related to autonomous vehicles, clean technology, supplier development, marginal fields and subsea excavation in harsh environments
- NATI/Noia established an Oil & Gas Digital Transformation Working Group to engage stakeholders and identify digital challenges and needs, with results presented at the 2018 Noia Fall Seminar
- With \$150 million from Innovation, Science and Economic Development Canada (ISED) and leveraged industry funding, Ocean Supercluster has been incorporated and initial investments are anticipated in 2019
- Memorial University of Newfoundland held a Digital Offshore Operations Strategic Planning Workshop supporting digital oilfield education, workforce planning, identifying digitalization challenges and industry needs
- Newfoundland and Labrador Offshore Digitalization Workshop held November 2018; organized by ACOA, Natural Resources, ISED, C-NLOPB, Nalcor Energy – Oil and Gas Inc, ExxonMobil and Equinor
- ACOA organized a mission to Norway and the United Kingdom to investigate initiatives to build on Newfoundland and Labrador subsea technology capabilities
- Natural Resources, Tourism, Culture, Industry and Innovation and ACOA invested \$8.5 million to expand the Holyrood Marine base and accelerate oceans sector growth

Increase Industry Promotion

Our resource potential, expertise, supply and service capabilities, world-class education and training, research and development, and innovation environment are competitive advantages.

- Petroleum Research released “Socio-economic Benefits from Petroleum Activity in Newfoundland and Labrador”, 2015-17, highlighting the local benefits of the oil and gas industry

- To increase awareness of exploration and development opportunities, marketing activities and promotional materials developed to support events in 2018 including: NAPE Summit, Houston, TX; APPEX Global, London, UK; Offshore Technology Conference, Houston, TX; Geoconvention, Calgary, AB; AAPG – ACE, Salt Lake City, Utah; EAGE, Copenhagen, Denmark; Atlantic Canada Petroleum Show, St. John’s, NL; Offshore Northern Seas, Stavanger, NO; Atlantic Ireland (PIP), Dublin, Ireland; and PETEX, London, UK.
- Natural Resources Virtual Data Room launched November 1, 2018 to promote exploration opportunities with 10 companies subscribed to date
- Natural Resources Petroleum Development Mapping Application Hub operational November 1, 2018, averaging 300-500 visits per week
- In October 2018, Noia released “Newfoundland and Labrador Offshore Oil and Gas Industry: Economic Impact Report” as part of the “Imagine the Potential” campaign to increase awareness of industry impact and its growth potential

Workforce Of Tomorrow

The jobs of the future will require employers, labour, education and training institutions and government to work collaboratively to develop new skills and competencies.

- Petroleum Industry Human Resources Committee (PIHRC) updated its website, social media and awareness campaign to promote and provide industry career information
- Advanced Education, Skills and Labour approved Labour Market Partnerships funding for PIHRC to complete a Human Resources Skills Gap Analysis, to be released in 2019
- In December 2018, the College of the North Atlantic announced Hebron Project Skilled Trades apprenticeship bursaries to women and Indigenous students enrolled in trades programs
- Memorial University launched new master of applied science programs in safety and risk engineering and energy systems

Oil and Gas Industry Development Council

Siobhan Coady, Natural Resources Minister (Chair)

Mark Collett (Noia Representative)

Robert Crosbie

Gus Doyle

Bill Fanning

Stephanie Hickman

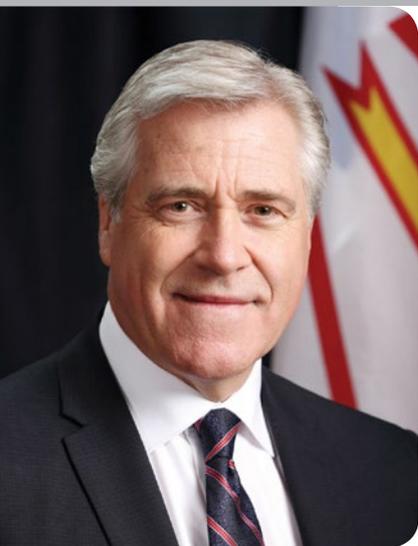
Steve Hogan (CAPP Representative)

Kim Keating

Sean Power







“Our vision for the future of Newfoundland and Labrador is a place where potential is realized and opportunities abound. Through unprecedented partnerships with high potential industries, we are fostering the economic growth, innovation, and job creation needed to support bright futures for the people of our province.”

– Premier Ball



“Work to implement Advance 2030 is well underway with more than 95 per cent of immediate priority actions in progress or complete. This plan will position Newfoundland and Labrador as an internationally preferred location for oil and gas exploration and development driven by an innovative, sustainable, local industry that is globally competitive, environmentally responsible, and maximizes benefits to the people of the province.”

– Minister Siobhan Coady