



CANADA-NOVA SCOTIA BENEFITS

DEEP PANUKE 2018 ANNUAL REPORT

DMEN-RP-CO-0029.011

Encana Corporation
Halifax, Nova Scotia

March 29, 2019

TABLE OF CONTENTS

	Page
I. Executive Summary	3
II. Local Office	3
III. Business Opportunities & Supplier Development	3
III.I Communication of Business Opportunities	
III.II Stakeholder Communications	
IV. Business Expenditures and Employment	4
IV.I Business Expenditures	
IV.II 2018 Person Hours	
V. Disadvantaged Groups	4
VI Education & Training / Research & Development	5
VII Activity Forecast for 2019	6

I. Executive Summary

This report is submitted in compliance with Condition 10 (Monitoring, Reporting and Auditing) of the Canada-Nova Scotia Benefits Plan Decision Report (“the Decision Report”) for the Deep Panuke Offshore Gas Development as issued by the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB). This report covers the period from January 1, 2018 to December 31, 2018.

Highlights of the report include:

- Total spending by Encana on Deep Panuke was \$98 million Canadian dollars.
- 442,022 person hours of work by Nova Scotians.
- 66,081 person hours of work by Canadians from other provinces.
- 497,526 person hours of work carried out within Nova Scotia.

Person Hours (January-December 2018) & Cumulative Hours

	2018	CUMULATIVE
CATEGORY BY RESIDENCE	PERSON HOURS	PERSON HOURS
Nova Scotia Residents	442,022	7,517,365
Canadian Residents from other provinces	66,081	1,291,204

Note: Table above includes all Nova Scotian and all Canadian Person Hours for Deep Panuke.

II. Local Office

Encana’s local office for Deep Panuke is located at Founders Square at 1701 Hollis Street in Halifax. Resident in the office is the Asset Manager/Project Director, Decommissioning Project Manager, and an interdisciplinary management team supported by employees and contract staff. Encana’s Halifax based employees who were previously working on production operations have transitioned into roles supporting decommissioning and abandonment. The Deep Panuke project team includes personnel responsible for project management, engineering, procurement, commercial arrangements, accounting, regulatory, stakeholder engagement, and environment, health, safety and quality.

SBM Nova Scotia Contractors (SBM), as operator of the Production Field Centre (PFC), maintain an office in Dartmouth led by a Nova Scotian unit manager, with local staffing in procurement, logistics, engineering, human resources, accounting, health, safety, security and environment, and project management.

At December 31, 2018, the total complement of fulltime Encana employees and contract staff supporting Deep Panuke was 28. In 2018, Encana personnel worked at the Encana office, at Deep Panuke pipeline landfall in Goldboro, the offshore supply base or offshore at the PFC.

III. Business Opportunities & Supplier Development

III.I Communication of Business Opportunities

In 2018, Encana and SBM continued to share business opportunities for Deep Panuke with the local supply community. Information is posted to the Business Opportunities section of the Deep Panuke pages on the Encana website (www.encana.com/deeppanuke), shared with the electronic bulletin board BIDS, distributed via an email distribution list to disadvantaged group

representatives. Business opportunities are also reported through third party organizations such as the Maritimes Energy Association.

III.II Stakeholder Communications

Encana is committed to relationships with stakeholders to inform and involve them in Deep Panuke. Stakeholder liaison in 2018 included meetings, presentations and/or participation at conferences and workshops, phone calls, email notices, print material distribution, media relations, participation and/or support of community events and ongoing website updates to Encana's Atlantic Canada webpage www.encana.com/deeppanuke.

Encana has also issued three (3) information updates on decommissioning and abandonment plans since March 2018 and will continue to publish updates regularly throughout the decommissioning program. Updates are posted on www.encana.com/deeppanuke as well as emailed directly to interested parties.

Through 2018, there were 4,289 unique visitors and 6,485 visits (includes repeat visitors) to Deep Panuke web pages on the Encana website.

IV. Business Expenditures and Employment

IV.I Business Expenditures

The total expenditure for Deep Panuke during the period of January 1-December 31, 2018 was \$98 million Canadian.

IV.II 2018 Person Hours

Total Nova Scotia Person Hours for Deep Panuke from January 1 to December 31, 2018 were 442,022 and Other Canadian hours were 66,081, with 497,526 hours of work performed within the Province of Nova Scotia during the period.

Nova Scotia person hours focused on support for ongoing operations. Cumulative Nova Scotia Person Hours to date are recorded as 7,517,365. Total cumulative hours of work performed within the Province of Nova Scotia was 9,462,679.

V. Disadvantaged Groups

As in previous years, Encana continued to share information on opportunities from Deep Panuke through contact with groups and organizations representing the business, employment and educational/training interests of disadvantaged groups identified in the Decision Report, including indigenous groups, persons with disabilities, members of visible minorities, and women.

Encana supported the delivery of core programs and services to members of these groups by funding events or donating fundraising items. Among the groups receiving such support in 2018 were Atlantic Policy Congress of First Nations Chiefs Secretariat, FEED Nova Scotia, Mi'kmaq Safety Culture Seminar Series, Mental Health Foundation of NS, Ronald McDonald House and Special Olympics of NS.

In 2018, Encana continued its liaison with representatives of indigenous groups in Nova Scotia on fisheries and environmental issues. As in previous years, any new hires to Deep Panuke participate in on-line Aboriginal Awareness Training offered by Encana.

Encana worked with the Entrepreneurs with Disabilities Network (EDN), a provincial organization facilitating entrepreneurship among persons with disabilities, by supporting its Mental Health Hero Luncheon, organized by EDN members in the Festival of Trees project of the Mental Health Foundation of Nova Scotia.

In 2018, an Encana engineer participated as a role model, through the Techsploration program, to encourage young women to consider STEM (science, technology, engineering and mathematics) careers related to the offshore oil and gas industry. This included hosting a group of eight (8) students at Encana offices in March, speaking at Hants Rural High School in April, as well as attending a conference in Halifax in May. For more information, visit www.techsploration.ca

Data from voluntary responses to Encana’s annual diversity survey of staff and data received from Encana contractors supporting Deep Panuke is reported as follows:

Group	Responses Received
Aboriginal Peoples	1
Women	37
Members of Visible Minorities	1
Persons with Disabilities	0
	Note: Individual survey forms may include responses to more than one group.

VI. Education & Training/ Research & Development

Encana invests in research and development, education and training initiatives in Nova Scotia with a focus on advancing the development of the offshore oil and gas industry. To December 31, 2018, Encana has spent approximately \$8.8 million on education & training and research & development initiatives under the Deep Panuke Education & Training and R&D Fund (the Fund).

In 2018, Encana provided sponsorship to the Core Energy Conference organized by Maritimes Energy Association, and Skills Canada-Nova Scotia by donating fundraising items. Skills Canada – Nova Scotia (SCNS) is a not-for-profit organization that provides Nova Scotian youth with opportunities to explore skilled trades and technologies through a range of programming.

Encana donated 56 computers to the Department of Education’s “Computers for Schools Program” sponsored by the Nova Scotia School Board Association” for use in schools to supplement equipment acquired through other sources.

In 2018, Encana funded training totaling approximately \$15,000 for its own staff working on Deep Panuke, with cumulative training totaling \$613,825. In 2018, contractors and service providers working on Deep Panuke reported 498 placements for training totaling approximately \$158,000.

The remaining project (Modeling Gas Dispersion and Dissolution during undersea Gas Blowouts using Multiphase Computational Fluid Dynamics by Dr. Jan Haelssig of Dalhousie University and Stantec Consulting Limited in Halifax, NS) funded under the Deep Panuke Research and

Development Calls for Proposals - *Environment* was completed and the final report submitted to the Board.

VII. Activity Forecast for 2019

The Encana team in Halifax will continue to manage operations for marine, helicopters, logistics and other support activities until the completion of decommissioning and abandonment activities. SBM is responsible for the ongoing operations of the PFC and will maintain responsibility for offshore labour, equipment maintenance, inspection, medical services, catering and housekeeping services.

Decommissioning activities will continue through 2019 and 2020. A tentative schedule with estimated durations by program activity is provided in the table below.

Activity	Estimated Timing	Estimated Duration
Production Field Centre (PFC)		
PFC de-install preparatory work	2019	4-6 months
PFC de-install	Jul-Aug 2020	1 week
Gas Export Pipeline (GEP) and Onshore Facilities		
GEP flushing and pigging	Mid Jun-Mid Aug 2019	2 weeks
Onshore facilities removal & restoration	2020	1 month
Subsea		
Flowline flushing and cleaning	Q3 2019	3 weeks
Subsea disconnects	2020	1-2 weeks
Subsea structures removal	2020	1-2 weeks
Well Plugging and Abandonment		
Offshore execution	Beginning late 2019 – early 2020	4-5 months