

CANADA-NOVA SCOTIA BENEFITS

2009 SEMI-ANNUAL REPORT

EnCana Corporation Halifax, Nova Scotia

July 27, 2009

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I. Executive Summary

In the first six months of 2009, activity on EnCana's Deep Panuke offshore natural gas project focused on core activities taking place during the year such as:

- the start of construction of the Production Field Centre (PFC) by Single Buoy Moorings Inc (SBM);
- the fabrication of the wellhead protection structures;
- preparations for the drilling program;
- preparations for the installation of the offshore export pipeline, including ongoing trenching in the nearshore area at Goldboro, NS to prepare for pipeline pull-in in mid-2009.

The following report provides an overview of EnCana's activities in Nova Scotia from January 1, 2009 until June 30, 2009.

Highlights of the report include:

- Total spending by EnCana in the first six months of 2009 on Deep Panuke was \$75 million Canadian dollars.
- 149,445 person hours of work by Nova Scotians.
- 17,348 person hours of work by Canadians from other provinces.
- 176,351 person hours of work carried out within Nova Scotia.

Person Hours (January-June 2009) & Cumulative Hours

	2009	CUMULATIVE
CATEGORY BY RESIDENCE	PERSON HOURS	PERSON HOURS
Nova Scotia Residents	149,445	582,562
Canadian Residents from other provinces	17,348	61,153

Note: Table above includes all Nova Scotian and all Canadian Person Hours for all elements of the project.

II. Introduction

The following report is filed in compliance with Condition 10 (Monitoring, Reporting and Auditing) of the Decision Report for Deep Panuke as issued by the Canada-Nova Scotia Offshore Petroleum Board, hereafter the Decision Report.



This report covers the period from January 1, 2009 to June 30, 2009.

II.I Local Office

EnCana's local office for the Deep Panuke project is located in Founders Square at 1701 Hollis Street in Halifax. Resident in the office are the project general manager and an interdisciplinary project management team, supported by teams of staff and contractors for a total complement of 97 individuals at June 30, 2009.

Appropriate levels of decision-making are directed from or take place in the office including project management, engineering, procurement, commercial arrangements, accounting, human resources, regulatory, community relations, drilling and completions and environment, health, safety and quality.

In addition to the Halifax office, in the first half of 2009 EnCana maintained its site office at Goldboro, NS to oversee pipeline landfall preparation in the nearshore area and civil work below Highway 316 to prepare for pipeline pull-in. The field representatives based at this office provide liaison between the nearby work site and the Deep Panuke project office at Founders Square. The work in Goldboro is being undertaken by McNally-Tideway Joint Venture, contracted to Allseas Canada. Through the first six months of 2009, Allseas Canada and McNally-Tideway maintained their local offices at Isaacs Harbour, Guysborough County.

In addition to the Halifax office and the Goldboro site office, EnCana opened a site office in Abu Dhabi in 2009 to oversee the construction of the PFC by SBM. Two Nova Scotians are working as EnCana representatives at the construction yard in Abu Dhabi, including a junior construction engineer hired as part of the Developing Skills Initiative who joined the three person site team in May 2009.

In the first six months of 2009, EnCana PFC contractor SBM maintained its office in Founders Square, and also opened a project office in Pictou, NS in mid-February 2009 at the AECON Fabco facility where the fabrication of the Deep Panuke flare tower is currently taking place.

In Q2 2009, pipe coating contractor Shaw & Shaw began ramping up operations at the North Atlantic Marine Terminal to prepare for pipe load-out from Sheet Harbour, NS in the third quarter for installation of the pipeline in the field.

III. Business Opportunities and Supplier Development

III.I Update on Activities

In the first six months of 2009, EnCana utilized recognized channels of distribution to share business opportunities at Deep Panuke with the local supply community. Such channels include the electronic bulletin board BIDS Nova Scotia, postings to the



Business Opportunities section of the Deep Panuke pages on the EnCana web site (www.encana.com/deeppanuke/business), sponsoring supplier workshops, an email distribution list comprised of disadvantaged group representatives and report/newsletter distribution.

As well, EnCana's Deep Panuke business opportunities are frequently reported through third party organizations. For example, information on EnCana's Expressions of Interest (EOI), Requests for Proposal (RFP) and Contract Awards typically are posted the day of issue in the Offshore/Onshore Technologies Association of Nova Scotia (OTANS) Daily Bulletin to members. Media in Nova Scotia often report on EnCana business opportunities as well.

To help alert suppliers to business opportunities at Deep Panuke, EnCana inserted a Procurement Update in the March 2009 and June 2009 editions of the project newsletter. Approximately 4,000 hard copies of the newsletter are circulated as well as being posted to the Deep Panuke pages on the EnCana web site at www.encana.com/deeppanuke. By the end of June 2009, 160 individuals had registered to receive an e-copy of the newsletter.

EnCana sponsored an OTANS breakfast presentation by Acergy in April 2009 attended by approximately 150 offshore suppliers. At the breakfast, Acergy provided an overview of its scope of work on the Deep Panuke project, and reviewed the Acergy business opportunities related to Deep Panuke. Acergy is the lead contractor for the engineering, procurement, installation and commissioning of the in-field flowlines and umbilicals at Deep Panuke. Following the Acergy presentation, representatives of Acergy met with local suppliers in one-on-one briefings.

In parallel to EnCana's activities, major contractors to Deep Panuke such as SBM, Acergy and Allseas released 33 Deep Panuke business opportunities to the local supply community through the first six months of 2009 via the BIDS Nova Scotia portal. Distribution of opportunities via BIDS is often supplemented by listing of the opportunities in the OTANS Daily Bulletin circulated to OTANS members.

In January 2009, SBM announced that it had awarded the contract for the fabrication of the flare tower at Deep Panuke to AECON Fabco, with fabrication to take place at the AECON Fabco facility in Pictou, NS.

EnCana awarded 28 contracts for Deep Panuke in the first six months of 2009, including contracts for a new platform supply vessel, shorebase services for the upcoming drilling program at Deep Panuke, supply boats for the drilling program, metocean services and fishery observer coverage. Among the contracts awarded in the first six months of 2009 were:

- Supplied Air System & Services Sabre Safety Canada Ltd
- Well Testing EXPRO Group Canada Inc.
- Rig Positioning Fugro Jacques Geosurveys Inc.



- ROV Services Oceaneering Canada Limited
- Mud Logging Weatherford Canada
- Directional Drilling/LWD/MWD Schlumberger Canada Limited
- Open Hole Wireline/Slickline Schlumberger Canada Limited
- Tubular Running & Bucking Tools Fl Canada
- Downhole Drilling Tools Weatherford Canada
- Onshore Pipeline Valves EMCO Corporation Offshore
- Supply/Standby Vessels, Vessel A Atlantic Towing Limited
- Supply/Standby Vessels, Vessel C(a) Maersk Supply Services Canada Limited, c/o Seabase Limited
- Supply/Standby Vessels, Vessel C(b) Secunda Marine Services Limited
- Shorebase Facilities (Drilling & Completions Program) Offshore Logistics
- Metocean Services AMEC Earth & Environmental
- Fisheries Oil & Gas Observers Program Canada Limited
- Freight Forwarding PF Collins
- Medical Services PRAXES Emergency Specialists Inc.

To date in 2009, EnCana has submitted two quarterly procurement forecasts to the CNSOPB.

III.II Business Expenditures

The total expenditure for Deep Panuke during the period of January 1-June 30, 2009 was \$75 million Canadian.

IV. Project Employment

IV.I Update on Activities

EnCana is fully committed to employing a competitive, open and fair recruitment process for Deep Panuke, with full and fair opportunity for Nova Scotians and all Canadians, and with first consideration to qualified Nova Scotians. Foreign workers will be hired when specialized knowledge or experience is required and when qualified Canadian workers are not available.

The EnCana team based in the Halifax office grew to 97 individuals at the end of June 2009, from 78 at the end of December 2008.

In the first six months of 2009, EnCana advertised for 12 additional contract positions to support engineering, project controls, operations and drilling and completions. In Nova Scotia, the positions were advertised at www.CareerBeacon.com, a well recognized web site for local opportunities in the offshore oil and gas industry. As well, notices for the positions appeared on the EnCana web site at www.encana.com. Three of the 12 positions were new and were advertised in the Chronicle Herald (nine of the positions were re-postings).



In June 2009, the final position was filled in EnCana's Developing Skills Initiative. The Initiative is aimed at growing Nova Scotian talent in the offshore oil and gas industry by offering two-year contract opportunities to Nova Scotians early in their careers to work in the Deep Panuke project office or the offices of major Deep Panuke contractors here and abroad. Those hired for the 10 available positions have training in engineering, commerce and skilled technician roles.

In 2009, pipelay contractor Allseas Canada via subcontractor Reliance Offshore advertised for positions available to support the pipelay program via advertisements in the Chronicle Herald (February and May 2009) and in June 2009 on local radio stations in Nova Scotia including stations based in Halifax, Sydney, New Glasgow and Yarmouth. To support the recruitment effort by Allseas/Reliance, EnCana included a link to the online application process from June 12-22, 2009 on the Deep Panuke pages of the EnCana web site to coincide with the radio campaign. The link received 109 views during that 10 day period, with an average visit of 1 minute 44 seconds.

The formalized Deep Panuke co-op student program for Nova Scotia university students began in January 2008. Since then, 17 students have joined the Deep Panuke team, generally on a four-month basis, with six of the 17 students participating to date in 2009. To date, students in the program are enrolled at Acadia, Dalhousie and Mount Saint Vincent universities in engineering, commerce and public relations fields of study.

IV.II 2009 Person Hours

Total Nova Scotia person hours from January 1 to June 30, 2009 for Deep Panuke were 149,445 and Other Canadian hours were 17,348 with 176,351 hours of work performed within the Province of Nova Scotia in the first half of 2009.

V. Community Liaison

V.I Update on Activities

In 2009, EnCana continued to liaise with key stakeholders to share information on Deep Panuke. Methods of liaison in 2009 to date have included face to face meetings, presentations and/or participation at conferences and workshops, an open house in Guysborough County, phone calls, information mailings, print material distribution, media relations, tours, participation and/or sponsorship of community events and regular web site updates to www.encana.com/deeppanuke (Deep Panuke pages).

During 2009 to date, two project newsletters were distributed to provide stakeholders with updated information on Deep Panuke.

Each edition of the newsletter is:

 posted to the Deep Panuke pages on the EnCana web site at www.encana.com/deeppanuke;



- inserted in the weekly *Guysborough Journal* to help ensure circulation in Guysborough County;
- dropped by Canada Post to mailboxes in Guysborough County;
- distributed to representatives of local, provincial and federal government, fisheries organizations, environmental groups, suppliers and other diverse stakeholders on a large mailing list; and,
- distributed directly to participants at meetings, conferences and other business and/or community events attended by representatives of EnCana or sponsored by EnCana.

The Deep Panuke web pages include information on project procurement activities, EnCana conference presentations, recent speeches and other relevant materials. Through the first six months of 2009, there were more than 8,000 unique visits to Deep Panuke web pages.

The general project information email box (dpinfo@encana.com) is monitored on a daily basis. In the first six months of 2009, thirty queries were received in the mailbox from the general public, from contractors seeking business opportunities and from individuals or organizations requesting community sponsorships.

In Q2 2009, a second construction supplement was produced for Deep Panuke describing several major local project activities anticipated in 2009: the fabrication and installation of the wellhead protection structures for the four production wells and the disposal well, the pipelay program for the Deep Panuke export pipeline from the PFC to landfall and the drilling program. The supplement has been:

- posted to the Deep Panuke pages on the EnCana web site at www.encana.com/deeppanuke;
- distributed at the Deep Panuke open house in Goldboro in April 2009;
- inserted in the June 2009 edition of the Deep Panuke newsletter to broaden distribution; and
- regularly distributed at meetings, conferences and public events.

Among the key stakeholders contacted by EnCana in the first six months of 2009 were:

- Municipal government staff and elected officials in Guysborough County
- Residents of Guysborough County near pipeline landfall
- Inshore lobster fishers at Stormont Bay, Guysborough County
- Sea cucumber fishers
- Snow crab fishers
- Members of CNSOPB Fisheries Advisory Committee
- Mi'kmag Rights Initiative
- Native Council of Nova Scotia



VI Disadvantaged Groups

VI.I Sharing Business and Employment Opportunities

As directed by the CNSOPB in the Decision Report, the four disadvantaged groups engaged for the Deep Panuke project are:

- Aboriginal peoples
- Members of visible minorities
- Persons with disabilities
- Women

During the first six months of 2009, the individual holding the position of Aboriginal and Community Liaison in-house at the Deep Panuke project office had more than 178 direct business related contacts. Of that number, more than 88 were Aboriginal contacts, more than 45 were with other identified disadvantaged groups/individuals, more than 18 contacts were made with federal and provincial government departments and agencies, 13 contacts were made with education/training institutes and more than a dozen private sector contacts were made. Regular contact is maintained now with more than 55 community groups/agencies representing the identified disadvantaged groups.

To encourage the participation by the four identified disadvantaged groups in the business opportunities available with the Deep Panuke project, EnCana hosted a debriefing session on February 24, 2009 to review the project's contracting process. Approximately 65 representatives of the groups were invited to attend, with representatives from each of the four group's attending the event. For those who could not attend, information on the event was sent to each individual, including direction on how to access the slide show used that day from the community information section of the Deep Panuke pages on the EnCana web site;

http://www.encana.com/operations/offshore/deeppanuke/communityinformation/P12011 06922053.html .

and click on the presentation for February 24.

To directly share information on Deep Panuke contracting opportunities with disadvantaged groups, opportunities were emailed via a growing distribution list to immediately alert 24 key representatives of these groups to the issuing of an EOI, RFP or Contract Award by EnCana.

As well, the established process continued to regularly share employment opportunities at Deep Panuke with 54 representatives of disadvantaged groups via email and fax distribution lists.

To supplement these direct notifications of business and employment opportunities, in 2009 EnCana placed advertising in *Black to Business*, the *Mi'kmaq Maliseet Nations News*, the newsletter for the Entrepreneurs with Disabilities organization and the



newsletter for the Native Council of Nova Scotia. The advertising explained where the Deep Panuke opportunities are posted on the EnCana web site.

EnCana also is in the process of distributing to major Deep Panuke contractors copies of the *Aboriginal Business & Communities Directory – Atlantic Region*, produced by Indiana Marketing. This publication supplements database links to companies owned or operated by disadvantaged groups that are available to the contractors at www.encana.com/deeppanuke/diversity

Per past practice, in the first six months of 2009 EnCana continued to support disadvantaged groups and their delivery of programs and services to members by purchasing tickets or donating items to be auctioned at fundraising events and activities. Among the groups receiving support were:

- Canadian Paraplegic Association (Nova Scotia)
- Canadian National Institute for the Blind (CNIB)
- Entrepreneurs with Disabilities Network
- Black Business Initiative
- Learning Disabilities Association of Nova Scotia
- Special Olympics
- Progress Centre for Early Intervention & Kings Meadow Home
- Home Bridge Youth Society, Tawaak Housing and Elizabeth Fry Society
- Nova Scotia Chapter, Canadian Cystic Fibrosis Foundation
- Canadian Down Syndrome Society
- LakeCity Woodworkers
- Children's Wish Foundation

VI.II Aboriginal and Community Liaison

In the first six months of 2009, EnCana participated in four regional Career Fairs organized by the Native Council of Nova Scotia under the EnCana Native Council Opportunities Fund. The Deep Panuke project was discussed and opportunities relating to the offshore oil and gas industry were explained to those who attended. The career fairs were held in Dartmouth, Truro, Bridgewater and Sydney.

EnCana maintains regular contact with the EnCana Mi'kmaq Liaison Advisor working with the Mi'kmaq Rights Initiative. To facilitate business and employment opportunities for Mi'kmaq companies and individuals, in the first six months of 2009, EnCana, working with this advisor, helped to coordinate liaison for the Mi'kmaq with:

- potential Mi'kmaq contractors for onshore land clearing related to the threekilometre section of pipeline to connect the subsea Deep Panuke export line with Maritimes & Northeast Pipeline facilities;
- Atlantic Towing, the company awarded the contract for the platform supply vessel to be used during operations at Deep Panuke;



- potential Mi'kmaq fabricators/sawmills for wooden structures required for the load-out of Deep Panuke pipe from Sheet Harbour, NS;
- Mi'kmaq applicants to Allseas Canada for advertised positions related to the installation in 2009 of the offshore pipeline at Deep Panuke.

EnCana continues to regularly engage the EnCana Mi'kmaq Liaison Advisor regarding these and other opportunities. Additionally, through the first six months of 2009, an Aboriginal Monitor from the Mi'kmaq Rights Initiative continued to be on call during onshore construction for the Deep Panuke pipeline landfall at Goldboro, NS and was present at the site from January to June 2009 during key onshore excavation activities.

In February 2009, the in-house EnCana Aboriginal and Community Liaison Advisor participated in a workshop at the NSCC Truro campus entitled Bridging the Aboriginal Community to Careers and Employers.

On March 20, 2009, a presentation was also given by the in-house EnCana Aboriginal and Community Liaison Advisor to the Unama'ki Economic Benefits Office on Deep Panuke opportunities with more than 10 Cape Breton band officials including Economic Development Officers attending.

In June 2009, preparations were under way with the EnCana Mi'kmaq Liaison Advisor employed by the Mi'kmaq Rights Initiative to develop meetings bringing together representatives of major Deep Panuke contractors with representatives of key Mi'kmaq business and employment organizations in Nova Scotia.

To support Aboriginal community development, in the first six months of 2009 EnCana sponsored National Aboriginal Day at the Glooscap Heritage Centre in Truro, NS and a collaborative project of Mi'kmaq artists to create an original work of art for display at the Aboriginal pavilion during the 2010 Olympic games in Vancouver.

VI.III Persons with Disabilities

A presentation was provided on January 21 to the Executive Committee of the Canadian Paraplegic Association (Nova Scotia Chapter) regarding Deep Panuke opportunities.

The Aboriginal and Community Liaison Advisor met on March 6 with a representative of Team Work Cooperative, which offers employment-related services for persons with disabilities, to discuss opportunities at Deep Panuke.

In June 2009, EnCana was briefed by representatives of Our Town Earth, a Nova Scotia-based web portal for persons with disabilities. Moving forward, EnCana expects to include advertising via Our Town Earth as part of the regular process to share business and employment opportunities at Deep Panuke with disadvantaged groups.



VI.IV Members of Visible Minorities

In February 2009, the Aboriginal and Community Liaison Advisor attended a meeting of the African Nova Scotian Employment Partnership Committee and provided a presentation on opportunities with Deep Panuke.

Later that month, an EnCana information table was set up at a job and career fair for African Nova Scotians organized by the Watershed Association Development Enterprises Limited (WADE) offices covering North Preston, East Preston, Cherry Brook, Lake Loon and Dartmouth, NS. The Aboriginal and Community Liaison representative attended the fair, speaking with those interested in learning more about working in the offshore oil and gas industry.

Also, a power point presentation on Deep Panuke Opportunity was presented to the Board of Directors of the Antigonish-Guysborough Black Development Association on April 23, 2009.

EnCana is providing copies of the 3rd edition of *Everything Ventured Something Gained*, a publication of the Metropolitan Immigrant Settlement Association (MISA), to Deep Panuke major contractors. The publication profiles immigrant entrepreneurs in Nova Scotia, and is a quick reference for business contacts from this community.

VI.V Women

EnCana sponsored a networking session hosted by the Centre for Women in Business at Mount Saint Vincent University in June 2009.

Also in June, the Aboriginal and Community Liaison Advisor met with Women Unlimited, HYPATIA Association and WEE Society to provide a Deep Panuke project update and to discuss project employment, project contracting and linkages with the Deep Panuke information on the EnCana web site. The groups work to encourage young women to train in non-traditional fields by partnering with the Nova Scotia Community College at college sites in Lunenburg and Halifax. See http://weesociety.ca/index.php/site/womenunlimited/

A representative of the groups has recently joined the Advancement Committee for Techsploration, the program supported by EnCana that targets girls in grades 9-12 to consider non-traditional career paths in science, trades and technology.

VII. OSEA

VII.I Update on Activities

During the first six months of 2009, progress was made on several aspects of the Offshore Strategic Energy Agreement (OSEA) commitments with the Province of Nova



Scotia. During this period, 175,795 hours of work were conducted in Nova Scotia with 149,102 of these hours being Nova Scotia person hours. From the commencement of the OSEA, 688,193 hours of work have been conducted in Nova Scotia with 582,219 of these hours being Nova Scotia person hours.

Engineering, Procurement and Management Activities

EnCana's office in Halifax continues to be the centre of project management activity for Deep Panuke, as well as engineering and procurement management.

Twenty-one engineers currently working as part of the Deep Panuke team are graduates of the engineering school at Dalhousie University, or a predecessor institution (i.e. Technical University of Nova Scotia).

In the first six months of 2009, the project management team in Halifax grew to include Nova Scotians early in their careers under the Developing Skills Initiative. Eight of the 10 positions under the Initiative support project management activities in Halifax in engineering, commercial services and environment, health, safety and quality. The other two positions support the transition to SBM as operator of the Production Field Centre, with the individuals in these roles currently working for SBM on projects in Africa and Brazil.

Export Pipeline - Coating

Contractor Shaw & Shaw ramped up operations at the North Atlantic Marine Terminal in Sheet Harbour, NS in Q2 2009 to prepare for pipe load-out for installation in the field beginning in mid-July 2009.

Approximately 175 kilometres of concrete coated 22-inch diameter pipe was stored at Sheet Harbour through the winter of 2008/09. Beginning in June 2009, protective plastic coating was removed from the pipe and the pipes were cleaned to remove debris to prepare for load-out and installation in the field.

Allseas Canada pipelay vessel Lorelay arrived in Sheet Harbour on July 10, 2009 to load the first sections of pipe in its cargo hold. The remaining pipe will be shuttled from Sheet Harbour to the Lorelay via pipehaul vessels during the summer of 2009 as pipelay continues in the field. Pipelay is expected to take approximately eight weeks to complete, followed by approximately eight weeks of trenching.

Flare Tower

Work on the flare tower progressed in the first six months of 2009 with operations beginning at the AECON Fabco facility in Pictou, NS.



All primary structural steel for the tower has been delivered to Pictou. Temporary support structures for the flare tower fabrication have been completed and are in place. Hiring of skilled welders continues at the site.

AECON hosted an open house for residents of the Town of Pictou on May 29, 2009 where work on the flare tower was highlighted as part of the recent activities at the site.

Welding and outfitting of the tower is expected to begin in Q3. Load-out of the flare tower is anticipated for Q4 2009 from Pictou for integration with the Deep Panuke PFC.

Onshore Drilling Rig Program

As part of EnCana's OSEA commitments, EnCana agreed to facilitate the development of the capability of an onshore drilling rig manufacturing operation in Nova Scotia.

Due to a downturn in drilling activity in Western Canada, in Q1 2009 the fabrication of two onshore rigs was suspended. The rigs were being built by Laurentian Fabricators at Sydport, NS for Nabors Canada.

At the time of suspension, the rigs were approximately 30% complete. The partially built rigs have been stored temporarily at the Laurentian site, pending a decision by Nabors Canada as to continued storage or shipment to Western Canada.

EnCana continues to discuss the onshore drilling rig program with the Province of Nova Scotia.

Offshore Supply Vessel

In Q1 2009, EnCana awarded a contract to Atlantic Towing for the Platform Supply Vessel at Deep Panuke.

The vessel will be built by Irving Shipbuilding in Halifax for Atlantic Towing. Design engineering was under way in Q2 2009.

According to Irving Shipbuilding, the building and commissioning of the new vessel will employ more than 200 shipyard workers at the peak and provide 426,000 person hours of employment. Building the new ship will generate an estimated payroll of \$20 million and will result in about \$14 million in purchases of goods and services from approximately 50 Nova Scotia suppliers.

Atlantic Towing will operate the new vessel on long term contract with EnCana during the operations phase of Deep Panuke. During operations, the vessel will provide approximately 480,000 person hours of work for Atlantic Towing, employing 25 crew members and staff in Nova Scotia.

Wellhead Protection Structures



Fabrication of the wellhead protection structures (described in the OSEA as "subsea trawl over protection structures") took place from January-May 2009 at Cherubini Metal Works Inc. in Dartmouth, NS.

The five 50-tonne structures were shipped from the Cherubini site on the Dartmouth waterfront to Pier 27 in Halifax in May 2009 for load-out to the BOA Deep C offshore construction vessel in early July 2009 for installation in the field later that month.

In 2009, Cherubini also manufactured for Deep Panuke the 20 steel pipe piles – each weighing 13 tonnes and approximately 28 metres in length – used to securely anchor each wellhead protection structure to the seabed.

Leading up to the installation of the wellhead protection structures in 2009, Cherubini manufactured in late 2008 a mock-up wellhead protection structure for studies conducted in Aberdeen, Scotland to determine how a Remotely Operated Vehicle (ROV) could access a Deep Panuke subsea tree through the protection structure. The mock-up structure was shipped to Aberdeen in January 2009. Testing is expected to be complete in the summer of 2009.

To prepare for the 2009 installation of the wellhead protection structures, Cherubini also fabricated four conductor protection units that were installed on the top of each wellhead conductor at Deep Panuke during the DOF Subsea program in December 2008. The units create a strong steel "cork" that will protect the conductors from any potential damage during the installation of the wellhead protection structures in July 2009.

VII.II 2009 Person Hours

Hours performed in Nova Scotia from January 1 to June 30, 2009 for OSEA related activities were 175,795, with 149,102 of these hours being Nova Scotia person hours. From the commencement of the OSEA, 688,193 hours of work have been conducted in Nova Scotia with 582,219 of these hours being Nova Scotia person hours.

VIII. Education & Training/ Research and Development

During 2009, EnCana continued to invest 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.

VIII.I Deep Panuke Education & Training and Research & Development Fund

From January to April 2009, EnCana engaged in stakeholder consultations coordinated by Petroleum Research Atlantic Canada (PRAC) to brief potential applicants to the Deep Panuke Education & Training and Research & Development Fund.



Meetings and briefings were held with representatives of universities and colleges, science organizations, business associations, Mi'kmaq groups, government departments and agencies and interested individuals.

By May 1, 2009, EnCana and PRAC had received 84 applications for approximately \$31 million in funding, largely to support research and development. EnCana submitted a report to the CNSOPB on May 21 to summarize the stakeholder consultation process and the applications received. For 2009, the Fund is expected to be approximately \$2.4 million based on the approved formula. EnCana is currently estimating 2010 funding to be approximately \$2.5 million.

Further feedback is anticipated from the CNSOPB on these 84 applications as well as the topic/subject for the annual Call for Proposals to the local research & development community. The call is tentatively scheduled for September 2009.

In late June 2009, EnCana received feedback from the CNSOPB on the 48 submissions made by EnCana to the Fund from October 2008 to February 2009. Submissions totaling approximately \$800,000, largely in the area of education and training, were approved by the CNSOPB, leaving approximately \$1.5 million in outstanding funding available.

VIII.II Petroleum Research Atlantic Canada (PRAC)

PRAC is a core research organization receiving funding from EnCana. PRAC has been selected by EnCana to manage the Deep Panuke annual Call for Proposals and to assist with the management of the Deep Panuke Education & Training and Research & Development Fund.

In 2009, Dave Kopperson, EnCana's Vice President Atlantic Canada, became the Chairman of PRAC for a two-year term.

VIII.III Other Research & Development

In the first half of 2009, EnCana continued to fund activities to support the advancement of education & training and research & development with respect to advancing offshore petroleum activities in Nova Scotia.

EnCana participated in and/or provided funding support during the first six months of 2009 for research studies and technical conferences, including:

- A research & development capacity study being undertaken by local office of Stantec/Jacques Whitford for PRAC on behalf of upstream oil and gas companies in Atlantic Canada, with final report expected in late summer 2009;
- The annual Fishermen and Scientists Research Society conference in February 2009:



• The annual congress of the Canadian Meteorological and Oceanographic Society held in Halifax, NS in June 2009.

In 2009 to date. EnCana has continued to provide funding and/or participation through a number of task forces and committees on safety and environmental issues linked to the offshore, such as the Eastern Scotian Shelf Integrated Management (ESSIM) Initiative. the Sable Island Stakeholder Committee and the Gully Advisory Committee. In addition, EnCana has provided funding in 2009 to Bird Studies Canada to continue monitoring of the endangered Roseate Tern based at Country Island, NS near landfall for the Deep Panuke export pipeline. The 2009 monitoring, building on research conducted by Bird Studies Canada in 2008, will study the terns before, during and after the installation of the Deep Panuke export pipeline. A report on the 2008 research by Bird Studies March 2009 posted to their web site in Canada was eoc.org/download/stormontternsreport.pdf

EnCana continues to provide representation on various committees of the Offshore Energy and Environment Research (OEER), a not-for-profit association dedicated to fostering offshore energy and environmental research and development. As well, EnCana has continued to participate in several technical advisory groups from the Environmental Studies Research Fund and from Petroleum Research Atlantic Canada (PRAC).

EnCana's donation of 3D seismic data from the Torbrook and Barrington blocks contributed to award-winning research by earth science students based at Dalhousie University. The students were recognized in 2009 with Best Student Geological Oral Presentation at the recent 2009 CSPG/CSEG and the Shell Canada Outstanding Student Poster Paper at the 2009 Joint CGU/AGU meeting.

VIII.IV Education & Training

In the first six months of 2009, EnCana continued its focus on supporting the Nova Scotia training of engineers and on supporting initiatives and programs that encourage Nova Scotia youth to consider careers in science, trades and technology, particularly the offshore oil and gas industry.

To support the engineering school at Dalhousie University, EnCana provided financial support and judges for the Atlantic Engineering Competition at the Sexton campus in Halifax from February 6-8, 2009. Following on this event, EnCana provided financial support and judges from the Deep Panuke office for the Canadian Engineering Competition held March 5-8, 2009 at the University of New Brunswick.

EnCana continued to provide core funding support to the development of science fairs in Nova Scotia for students from grades 7-12, including support for regional science fairs in Halifax and Port Hawkesbury, NS and for Mi'kmaq students in Nova Scotia. Top projects from the regional fairs participated in the national science fair in Winnipeg,



Manitoba in May 2009 where Nova Scotia students won more than \$33,000 in cash and scholarships.

Among the other science and career-oriented initiatives funded to date in 2009 by EnCana are:

- Distribution of five newsletters for educators by the Energy for Students initiative.
 Approximately 638 newsletters are now distributed to a growing email list. See http://www.energyforstudents.ca/content/EFS_Newsletter;
- Participation by Energy for Students at NSCC career fairs in Kentville, NS on April 16 and at Akerley campus on May 27-28, as well as NSCC-Skills Nova Scotia event at NSCC Akerley campus on April 23. Two presentations were given directly to students at Citadel High in Halifax, NS on May 1 and Northumberland Regional High School in Alma, NS on May 14. At all events, the opportunities in the offshore oil and gas industry were explained as well as the education required for these careers;
- The Math-On Olympiad, targeting junior high students in Halifax and Cape Breton, to encourage interest in mathematics;
- The Discovery Centre (Nova Scotia's hands-on science centre);
- The Canadian Association of Petroleum Producers (CAPP) Energy in Action program for 2009 at Rockingstone Heights School in Spryfield. CAPP works with the Discovery Centre to deliver this educational program aimed at teaching students where different types of energy come from, the impacts of energy production and tips for conserving energy.
- To help educators interested in better understanding the offshore oil and gas industry and the careers open to students in the industry, EnCana has developed packages of information including publications from the Petroleum Human Resource Council, the Atlantic Geoscience Society, CAPP and the Canadian Centre for Energy. In the first six months of 2009, eight of the packages were distributed to teachers in Nova Scotia.

To support students from disadvantaged communities, in 2009 EnCana has funded bursaries for Aboriginal and African Nova Scotia students. Two bursaries were awarded to Nova Scotian Aboriginal students stemming from EnCana's corporate support for the Foundation for the Advancement of Aboriginal Youth (FAAY), a scholarship and bursary program administered by the Canadian Council for Aboriginal Business. See http://www.ccab.com/faay/2008-09/winners.php?sponsor=EnCana The African Nova Scotian student bursary stems from support provided by EnCana to the provincial Black Educators Association.



In addition to the bursary support provided via the Black Educators Association, EnCana has contributed to community development of the African Nova Scotian community in Guysborough County by sponsoring an African Nova Scotian student from Guysborough Academy to attend a leadership program during the summer of 2009 (See http://catapultcamp.com/) and for the purchase of materials by the Guysborough-area branch of the Black Educators Association to assist with local program delivery.

Meanwhile, contractors to EnCana's Deep Panuke project are required to submit on a quarterly basis a report summarizing their investments in education & training and research & development.

In the area of education & training, for the first six months of 2009 contractors:

- Reported investment in technology transfer to share communications system knowledge between offices that involved three participants and funding of approximately \$120,000; and,
- Invested in additional staff in quality control and a co-op student placement, involving two participants and funding of approximately \$5,000.

IX Activity Forecast for July-December 2009

EnCana's core objective for the remainder of 2009 is to continue advancing the various elements of Deep Panuke in parallel to assist in achievement of first gas in late 2010.

EnCana will comply with conditions attached to project sanction of Deep Panuke, and will keep the CNSOPB informed of project activities through documents such as the quarterly procurement forecast, the quarterly stakeholder consultation report and other reports as required.

Project activity at Deep Panuke is organized into functional elements. The following section describes activity anticipated in the remainder of 2009 for each of these elements.

IX.I Project Management Element

For the remainder of 2009, EnCana's Deep Panuke project team in Halifax will continue to manage and monitor progress on all project elements, including the execution of scopes of work being undertaken by major project contractors and subcontractors. In addition, the project team will continue with preparations for the operations phase of the project, working closely with SBM as the prime operations contractor.

Community Liaison

Community consultation will continue with communities at pipeline landfall during the installation of the Deep Panuke export pipeline, including related activities, in Q3 and Q4 2009.



An open house is planned for the Goldboro area in late 2009 or early 2010 to provide information on the planned three-kilometre long onshore connection between the subsea export pipeline and the Maritimes & Northeast Pipeline facilities at Goldboro.

IX.II Element 1 – Drilling and Completions

The Deep Panuke drilling program utilizing the Rowan Gorilla III drilling rig is expected to begin in Q3 2009 and will last for approximately six months.

It is expected that equipment and supplies for the EnCana program will be loaded onto the rig in Halifax Harbour following the rig's work for ExxonMobil at the Sable project.

Following the work required in Halifax Harbour, the rig will be towed to location for the drilling of disposal well E-70, followed by the re-completion of four existing exploration wells, currently suspended, to be equipped for subsea production by means of a mudline conversion to subsea wellhead equipment. The work on the four wells is expected to take place in the following order:

- Margaree F-70
- MarCoh D-41
- Panuke M-79A
- Panuke H-08

Leading up to the start of drilling, EnCana will continue to issue packages and award contracts to support drilling and completions activities.

Many of the packages will continue to be bid through global service and supply companies with local offices in Nova Scotia or Atlantic Canada.

IX.III Element 2 - Subsea

The installation of the wellhead protection structures by Aker Marine Contractors was officially underway July 2 with the arrival of the BOA Deep C offshore construction vessel. The five structures were craned on board the BOA Deep C from their temporary location at Pier 27 in Halifax.

The program to install the five structures was completed on July 11, 2009.

Delivery of the subsea trees and wellheads from VetcoGray will commence in the third quarter of 2009 in advance of the drilling and completions program.

Manufacture of production control umbilical components is well advanced with all hoses and electrical cores having passed factory acceptance testing (FAT) prior to lay up of the umbilicals themselves. Linepipe manufacture in Japan is complete and the full consignment is expected to be shipped in July.



Welding trials have commenced in the UK for the double jointing of the 6m lengths of 8' pipe to 12m joints. In the summer 2009, Acergy is expected to award contracts for the fabrication of the SSIV (subsea isolation valve) protection structure and subsea spools.

IX.IV Element 3 – Export Pipeline

Installation of the export pipeline is expected to continue through the summer of 2009 from landfall at Goldboro, NS to the PFC site. Allseas Canada is the lead contractor for the installation. Allseas has mobilized the pipelay vessel Lorelay, survey vessel Manta III and three pipehaul vessels to assist with pipelay activities. Support vessel Calamity Jane complete with pipeline trenching equipment Digging Donald will be mobilized closer to the start of pipeline trenching which is expected to continue into the fall of 2009.

Pipe load out from Sheet Harbour, NS commenced the weekend of July 10 with Deep Panuke pipe loaded directly onto the Lorelay pipelay vessel as well as one of the pipehaul vessels.

On July 16, 2009, the Deep Panuke pipe landed on the beach at Goldboro, NS after being pulled to shore from the Lorelay. Once the pipe was locked in place, Allseas subcontractor McNally-Tideway commenced operations to bury the pipe from landfall to kilometre point 0.9 using the dredging vessel Canadian Argosy. In parallel, the large linear winch that pulled the Deep Panuke pipe to landfall was dismantled and site remediation at landfall was started.

Closer to year end, the pipeline will be flooded, cleaned, gauged and tested.

IX.V Element 4 – Production Field Centre (PFC)

Construction of the Production Field Centre (PFC) in now underway in the Middle East and will continue through all of 2009. The majority of all major equipment and materials have been ordered and will be delivered to site throughout 2009 which will be incorporated into the overall build sequence.

Fabrication in the Middle East will continue on the hull and topsides modules. Fabrication of the spud cans has commenced with the cutting of steel plates. The accommodations unit is also now under construction with structural work ongoing on all decks. The hull is built in five main sections, all of which are now in an advanced state and are getting ready for blasting and painting. These sections will be placed in the dry dock later this year and welded together to complete the hull. All six topside modules are now also under construction and deck stacking and equipment placement has started on the first module.

The completed modules are scheduled to be placed onto the hull in the dry dock later in 2009. Final integration of the hull, topsides, and other assemblies will now be done in the Middle East while the PFC is in the dry dock before it is floated out in 2010.



This approach will simplify the completion process by negating the requirement to ship the PFC to Europe (as was originally planned) as alternatives for completion have now been secured in the Middle East.

Work on the legs and riser caissons is well underway in Europe and these components will be shipped to the Middle East for integration into the PFC in 2010. Similarly, work has started on the flare tower in Pictou, NS and the flare will be completed and shipped in two sections to the Middle East in late 2009.

IX.VI Element 5 – Ready for Operations and Operations

During 2009, EnCana and SBM will continue to develop and implement their long-term strategies for operations, in particular the provision of logistics services which overlap between the development and operations phases at Deep Panuke. These services will include helicopter transport, support vessels, ROV services and supply base.

In Q2 2009, Alistair Redman became the resident manager for SBM Nova Scotia Contractors and to year end 2009, is expected to continue liaising with the local industry to develop SBM Nova Scotia's knowledge of local services available to the future operation, as well as actively participating in EnCana's logistics management for the offshore works in 2009.

After finalizing the platform crewing distribution, SBM will begin the platform operations staff ramp-up. The first of two local recruitment campaigns is expected to take place in the second half of 2009. The first campaign will target more senior positions for individuals who will be utilized during the mechanical completion and precommissioning of the PFC. A second recruitment campaign is planned for late in 2009 or early in 2010 to fill all remaining positions.

During 2009, there will be significant effort in developing the field specific operations management system and associated manuals. During Q4 2009 SBM intends to begin the procurement process to secure sub-contractors for various support services such as waste disposal, chemical supply, inspection, etc. required for the long-term operations phase.

Also in 2009, construction of the platform supply vessel is expected to be underway in Q3/Q4.

