

encana™



CANADA-NOVA SCOTIA BENEFITS

2011 SEMI-ANNUAL REPORT

Encana Corporation
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I. Executive Summary

In the first six months of 2011, significant milestones were achieved in preparation for first gas from Deep Panuke including:

- The arrival in Nova Scotia of the production field centre (PFC);
- Quarrying of rock at Porcupine Mountain for the rock placement program at Deep Panuke and preparations for the start of the program in July 2011;
- Preparations for the subsea program, including completion of the protection structure for the subsea isolation valve and spool pieces to connect flowlines and the gas export pipeline to the PFC; and
- Onshore activities at Goldboro, NS to prepare the gas export pipeline to accept natural gas from the project.

The following report provides an overview of Encana's activities in Nova Scotia from January 1, 2011 until June 30, 2011.

Highlights of the report include:

- Total spending by Encana on Deep Panuke was \$54 million Canadian dollars.
- 252,184 person hours of work by Nova Scotians.
- 34,974 person hours of work by Canadians from other provinces.
- 289,751 person hours of work carried out within Nova Scotia.

Person Hours (January-June 2011) & Cumulative Hours

CATEGORY BY RESIDENCE	2011	CUMULATIVE
	PERSON HOURS	PERSON HOURS
Nova Scotia Residents	252,184	2,362,304
Canadian Residents from other provinces	34,974	364,223

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 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.

This report covers the period from January 1, 2011 to June 30, 2011.

Encana's Deep Panuke contracting opportunities are comprised of six key elements:

- Element 0 - project management;
- Element 1 - drilling and completions;
- Element 2 - subsea;
- Element 3 - export pipeline;
- Element 4 - production field centre and
- Element 5 - ready for operations and operations.

Reference is made in this report to the various project elements.

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 is the project general manager and an interdisciplinary project management team, supported by teams of staff and contractors. At June 30, 2011, the total complement of Encana employees and contract staff supporting the Deep Panuke project was 73 personnel.

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

Work continued at the offshore supply base in Dartmouth, NS until the end of February 2011 to close out the Deep Panuke drilling and completions program. Effective March 1, 2011, Blue Water Agencies began operating the offshore supply base at the site on behalf of Encana and ExxonMobil.

In April 2011, Encana contractor Single Buoy Moorings established a new office in Dartmouth, NS that will serve as a base for long term operations.

In June 2011, SBM established a site office at Mulgrave, NS. The office serves as a base for SBM and its subcontractors as well as Encana and its contractors to carry out the final preparations for the PFC prior to the tow to the field. Deep Panuke contractors Tideway and Subsea 7 have also established temporary offices at Mulgrave to support their 2011 work programs.

III. Business Opportunities & Supplier Development

III.I Communication of Business Opportunities

In the first six months of 2011, Encana shared its business opportunities at Deep Panuke with the local supply community utilizing recognized channels of distribution. Information regarding Expressions of Interest (EOI), Bidders' Lists and Contract Awards were included in postings to the Business Opportunities section of the Deep Panuke pages on the Encana website (www.encana.com/deeppanuke/business), postings to the electronic bulletin board BIDS Nova Scotia, an email distribution list comprised of disadvantaged group representatives and newsletter distribution.

To augment the ongoing channels of distribution of information regarding these business opportunities, in the first six months of 2011 Encana used Twitter to notify followers of Expressions of Interest and Bidders' Lists at Deep Panuke.

Encana's Deep Panuke business opportunities are also frequently reported through third party organizations. For example, information on Encana EOIs, Requests for Proposal (Bidders' Lists) and Contract Awards typically are posted the day of issue in the Maritimes Energy Association (formerly OTANS) Daily Bulletin to members. Media in Nova Scotia 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 2011 newsletter. The March newsletter also included procurement opportunity information for SBM. Approximately 5,500 hard copies of each edition of the newsletter are circulated as well as being posted to the Deep Panuke pages on the Encana website at www.encana.com/deeppanuke. By June 30, 2011, there were 528 individuals registered to receive an e-copy of the newsletter.

In parallel to Encana's activities, contractors to Deep Panuke such as SBM and Subsea 7 have continued to release business operations to the local supply community via the BIDS Nova Scotia. Distribution of opportunities via BIDS is often supplemented by listing of the opportunities in the Daily Bulletin circulated to Maritimes Energy Association members and media coverage.

III.II Stakeholder Communications

One of the key Project Management Principles contained in The Benefits Plan (Volume 3, Deep Panuke Development Plan Application) described Encana's commitment to developing relationships with stakeholders to fully inform and involve them in the Deep Panuke project.

In the first six months of 2011, Encana continued to liaise with stakeholders to share information on Deep Panuke. Methods of liaison included face to face meetings, presentations and/or participation at conferences and workshops, open houses in Mulgrave and Goldboro, NS, phone calls, email notices, information mailings, print material distribution, media relations, participation and/or support of community events and website updates to www.encana.com/deeppanuke (Deep Panuke pages).

During the first six months of 2011, two project newsletters (March and June 2011) 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 website 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 supported by Encana.

The Deep Panuke web pages include information on project procurement activities, community information and links to relevant web sites. For Deep Panuke, revised Codes of Practice for Sable Island, Country Island and the Gully Marine Protected Area were posted to the Encana website in January 2011. Through the first six months of 2011, there were 8332 unique visits to Deep Panuke web pages on the Encana website. The web pages recording frequent visits during the period were those for the most current project newsletter, the Business Opportunity page, the Community Information page and the Filings and Applications page. The Business Opportunity page is where Expressions of Interest, Bidders' Lists and Contracts Awarded are posted.

The general project information email box (dpinfo@encana.com) is monitored on a daily basis. In the first six months of 2011, queries were received in the mailbox from the general public, from contractors seeking business opportunities, from individuals seeking employment opportunities at Deep Panuke and from individuals or organizations requesting community sponsorships. In addition, members of the Deep Panuke team regularly respond to unsolicited inquiries about employment and business opportunities with the project.

IV. Business Expenditures and Project Employment

IV.1 Business Expenditures

The total expenditure for Deep Panuke during the period of January 1- June 30, 2011 was \$54 million Canadian.

IV.ii 2011 Person Hours

Total Nova Scotia Person Hours from January 1 to June 30, 2011 for Deep Panuke were 252,184 and Other Canadian hours were 34,974 with 289,751 hours of work performed within the Province of Nova Scotia during the period.

The cumulative Nova Scotia Person Hours from June 2006 to June 2011 are 2,362,304. Total cumulative hours of work performed within the Province of Nova Scotia was 3,162,396.

V Disadvantaged Groups

V.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 people
- Members of visible minorities
- Persons with disabilities
- Women

Regular contact is maintained with groups and organizations representing the business, employment and educational/training interests of these groups including the Black Business Initiative, the Encana Native Council Opportunities Fund, Entrepreneurs with Disabilities Network, the Centre for Women in Business at Mount Saint Vincent University, Nova Scotia Advisory Council on the Status of Women, the Mi'kmaq Rights Initiative and Immigrant Settlement and Integration Services or ISIS.

During the first six months of 2011, to directly share information on Deep Panuke contracting opportunities with disadvantaged groups, 22 opportunities were emailed by Encana via a distribution list to immediately alert key representatives of these groups to the issuing of an EOI, RFP or Contract Award by Encana or major project contractors such as SBM, Tideway and Subsea 7.

The established process continued in the first six months of 2011 to share employment opportunities at Deep Panuke with representatives of disadvantaged groups via fax and email distribution lists. During the period, Encana shared information on six Encana employment opportunities as well as employment opportunities on behalf of SBM and Reliance Offshore for Entier under SBM.

To supplement direct notifications of business and employment opportunities, in 2011, Encana placed advertising in local publications focusing on disadvantaged groups: the Black to Business magazine, Entrepreneurs with Disabilities newsletter, Centre for Women in Business Biz Beat Online newsletter, Mi'kmaq Maliseet Nations News and Taliaq, the newsletter of the Native Council of Nova Scotia. The advertising directed readers to where the Deep Panuke business and employment opportunities are posted on the Encana website.

Per past practice, in the first six months of 2011 Encana continued to support the four designated disadvantaged groups and their delivery of core programs and services to members by purchasing tickets for or donating items to be auctioned at fundraising events and activities, or donating goods or services to be used by the organization. Among the groups receiving support in the first six months of 2011 were:

- Black Business Initiative
- Easter Seals
- Canadian National Institute for the Blind
- Dress for Success
- Bridgeway Academy
- Heart and Stroke Foundation
- Entrepreneurs with Disabilities Network
- Encana Native Council Opportunities Fund
- Canadian Paraplegic Association

- Immigrant Settlement and Integration Services
- The Arthritis Society of Nova Scotia
- Atlantic Provinces Special Education Authority
- Micmac Benevolent Society

V.II Aboriginal Liaison

Encana liaises regularly with representatives of the Mi'kmaq Rights Initiative and the Encana Native Council Opportunities Fund to facilitate the communication of business and employment opportunities at Deep Panuke.

Encana continued to monitor the progress with the Encana Native Council Opportunities Fund (ENCOF), a fund established to help off-reserve Aboriginal people in Nova Scotia engage in employment and business opportunities related to the offshore oil and gas industry. Under the ENCOF in the first six months of 2011, there were 16 individuals undertaking post-secondary training (including University, Nova Scotia Community College and the Atlantic Petroleum College) in fields related to the offshore oil and gas industry such as Roughneck/Floorhand, Bachelor of Engineering, Process Operations and Power Engineering. Building on established communications channels, in 2011 ENCOF representatives began a process of direct contact to potential students through guidance counsellors and Aboriginal support workers at high schools in Nova Scotia serving large communities of off reserve Aboriginal persons. As well, information sessions on ENCOF were held with members of the Native Council across Nova Scotia. ENCOF representatives also continued to meet with training schools and labour organizations of relevance to the offshore oil and gas industry to develop potential partnerships. Encana participated in two ENCOF-organized career fairs held in Truro and Dartmouth, NS in March 2011, with two additional career fairs taking place in Sydney (February 2011) and Bridgewater (March 2011). As well, the Native Council continued to profile the work of ENCOF, and included information on the application process for educational grants from the Fund, in the January and June 2011 editions of the newsletter Taliaq.

Encana maintains regular contact with the Mi'kmaq Energy Advisor working with the Kwilmu'kw Maw-klusaqn Negotiation Office (KMKNO) on behalf of the Assembly of Mi'kmaq Chiefs, and continues to engage with this individual regarding Deep Panuke opportunities for the benefit of Mi'kmaq companies and individuals.

In late 2010, Encana and the Assembly of Mi'kmaq Chiefs entered into a five-year agreement regarding education and training and related opportunities from the Deep Panuke project. The agreement has four main components: a Mi'kmaq Business Growth Initiative; a Mi'kmaq Developing Skills Initiative; a Mi'kmaq Research and Development Initiative; and, a Mi'kmaq Science, Culture and Technology Initiative. In 2011, an impact benefits officer was hired by KMKNO to begin advancing the four components of the agreement. The individual is expected to be in place by mid-August 2011. To date, no funds have been expended by KMKNO on the agreement.

In addition, to support Mi'kmaq and Aboriginal community development, Encana sponsored National Aboriginal Day at the Glooscap Heritage Centre in Truro, NS on June 21, 2011.

V.III Persons with Disabilities

During the first six months of 2011, Encana continued to work closely with the Entrepreneurs with Disabilities Network (EDN). EDN promotes and facilitates entrepreneurship among people with disabilities and has approximately 500 members across Nova Scotia. Encana's support in 2011 was directed to an emerging entrepreneur award initiated by EDN.

Encana also liaised with representatives of the Canadian National Institute for the Blind (CNIB), Easter Seals and the Canadian Paraplegic Association, providing support for annual fundraising activities for these organizations and sharing information on the development of the Deep Panuke project.

In May 2011, Encana provided funding such that 10 student delegates from Mount Saint Vincent University (MSVU) could attend the Atlantic Conference on Learning Disabilities held at MSVU.

In 2011, Encana continued to utilize the services of New Leaf Enterprises, a division of Easter Seals Nova Scotia, to coordinate the mail-out of the two quarterly Deep Panuke project newsletters distributed between January and June. As well beginning in early May, New Leaf was contracted to recycle coffee pods from the Deep Panuke office in Halifax.

V.IV Members of Visible Minorities

In 2011 to date, Encana engaged with representatives of the Black Business Initiative (BBI), Immigrant Settlement and Integration Services (ISIS) and Imhotep Legacy Academy to support their programming and to share information on Deep Panuke.

A representative of Encana attended the annual meeting for the BBI and provided funding such that youth involved in the BBI's Business is Jammin' program (supporting young business entrepreneurs) could attend annual meeting activities.

Encana worked with ISIS to identify opportunities for networking and dialogue with companies providing supplies and services to the offshore oil and gas industry. That work is expected to continue through 2011.

A major initiative supported by Encana in 2011 was the expansion of the Imhotep Legacy Academy to Antigonish, NS. The program encourages youth of African Nova Scotian heritage to pursue careers in sciences, technology, engineering and mathematics, fields that are key to careers in the offshore petroleum industry in Nova Scotia and areas of study in which African Nova Scotian youth are under represented. Hosted at Saint Andrew Junior School, the Imhotep program ran from January to May 2011.

As well, Encana's support for the SuperNOVA program at Dalhousie University in 2011 led to the development of summer science camps for students of African Nova Scotian heritage in four Nova Scotian communities.

V.V Women

In the first six months of 2011, Encana continued to work with the Centre for Women in Business (CWB) at Mount Saint Vincent University (MSVU) to assist in developing awareness of opportunities in the offshore oil and gas industry among the female entrepreneurs associated with the Centre. Encana's support included a presentation on procurement at Deep Panuke and for the Nova Scotia offshore during the Supplier Diversity Conference held at MSVU in February 2011. An article summarizing the presentation was later included in a CWB newsletter to members.

Recognizing that attracting more women to careers in sciences, trades and technology will help to increase their participation in the offshore oil and gas industry, Encana continued to fund in 2011 the Bread and Roses bursary fund at the Nova Scotia Community College (NSCC) aimed at supporting female students interested in trades and technology careers. Students receiving the bursary have pursued studies in fields such as welding, power engineering, marine geomatics and geographic sciences. The fund supports students at College campuses across the province.

In the first six months of 2011, progress continued on the Women in Action web video series under the Techsploration program. Techsploration encourages girls in Nova Scotia to consider educational paths in sciences, trades and technology that could lead to a career in the offshore oil and gas industry. The videos profile women in sciences, trades and technology careers, utilizing a medium preferred by youth to convey career and educational information. From January 1 - June 30, 2011, five new videos were posted to YouTube, including a profile of a female Encana drilling engineer.

In the first six months of 2011, Encana also liaised with the Nova Scotia Advisory Council on the Status of Women. These discussions led to Encana's support for Women Unlimited (<http://weesociety.ca/index.php/site/womenunlimited/>), an organization supporting women pursuing trades and technology careers, to participate in an offshore oil and gas industry networking event.

V.VI Diversity Training and Reporting

In the first six months of 2011, new hires to Deep Panuke were required to participate in on-line Aboriginal Awareness Training offered by Encana.

VI. OSEA

VI.I Update on Activities

During the first six months of 2011, further progress was made on the Offshore Strategic Energy Agreement (OSEA) commitments with the Province of Nova Scotia.

From January 1 to June 30, 118,054 hours of work were conducted in Nova Scotia, on activities identified in the OSEA, with 113,487 of these hours being Nova Scotia Person Hours. From the commencement of the OSEA, 1,802,391 hours of work have been

conducted in Nova Scotia with 1,621,088 of these hours being Nova Scotia Person Hours.

In addition to the OSEA hours, additional Nova Scotia hours were recorded in the first six months of 2011 for work activities supporting the development of Deep Panuke. During this period, 171,698 hours of work were conducted in Nova Scotia with 134,315 of these hours being Nova Scotia Person Hours.

Activities on the following OSEA commitments have been completed, thus updates on these activities are not provided: subsea protection structures, export pipeline coating and the flare tower.

- 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.

- Offshore Supply Vessel

The Atlantic Condor platform supply vessel was built by Irving Shipbuilding in Halifax for Atlantic Towing. The vessel came under hire to Encana in February 2011. In the first six months of 2011, the vessel completed a subsea asset survey for Encana at Deep Panuke in advance of the 2011 construction programs offshore. Atlantic Towing will operate the new vessel on long term contract with Encana during the operations phase of Deep Panuke.

- 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.

To June 30, 2011, Encana has provided approximately \$4.3 million in funding to support the Onshore Drilling Rig Program, including the manufacture of components for drilling rigs and two complete rigs for Nabors. One rig fabricated in Nova Scotia began drilling operations in North Dakota in the first six months of 2011. Fabrication of the second rig was nearing completion at the end of June 2011. In addition, a drafting project for the rigs – including comprehensive drawings and 3D models – was under development in 2011.

The Onshore Drilling Rig Program has fostered the transfer of skills and technologies to Nova Scotia related to the fabrication of the rigs and rig components.

- Developing Skills Initiative

Of the 11 individuals who participated in the Developing Skills Initiative, by June 30, 2011, five had assumed new roles in the oil and gas industry, building on the skills and expertise from their work on the Deep Panuke project.

VII. Education & Training / Research & Development

In the first six months of 2011, 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.

VII.I Petroleum Research Atlantic Canada (PRAC)

PRAC was a regional industry-funded, not-for-profit R&D management organization. Prior to closing its Nova Scotia office in April 2011, PRAC managed the first two Deep Panuke Calls for Proposals under Deep Panuke Education & Training and Research & Development Fund (the Fund). PRAC managed the second call under the theme of offshore safety and risk that was launched in late 2010 until the closing of the Nova Scotia office. Encana is in the process of completing the call and awarding grants to selected projects. Encana is determining the process for future Calls for Proposals from the Fund.

VII.II Deep Panuke Education & Training and Research & Development Fund

Encana confirms spending of approximately \$3.7 million to date on education & training and research & development projects under the Fund.

VII.III Deep Panuke Education & Training and Research & Development Fund – R&D Calls for Proposals

The second Call for Proposals under the Deep Panuke R&D E&T Fund, on the theme of offshore safety and risk, was launched in late 2010. A total of 15 Letters of Intent (LOIs) were received from university and private sector researchers in Nova Scotia. In early 2011, full proposals were requested from nine of the proponents based on the LOIs submitted. Of the nine full proposals, six were recommended for funding. To the end of June 2011, Encana was preparing draft grant agreements for the six successful projects.

Encana was the sponsor of an OTANS breakfast for the offshore supplier community in April 2011 where it was announced that geosciences would be the theme for the third Call for Proposals, building on recommendations from the Province of Nova Scotia's Play Fairway Analysis on offshore geology. The third call is expected to launch in the fall of 2011.

Information on the R&D Calls for Proposals is posted on the Encana website at <http://www.encana.com/operations/canada/deeppanuke/community/training-research-fund.html>

VII.IV Education & Training Funded Projects

The following updates are provided for selected education & training initiatives approved by the CNSOPB under the Fund:

- Techsploration

Encana continued to provide core funding support for the Techsploration program that encourages young girls in Nova Scotia to consider careers in sciences, trades and technology – skills that are key to a career in the offshore oil and gas industry. Because of support from Encana, in 2011 Techsploration was in the third and final year of an expansion of its learning materials via the development of 32 web videos featuring women in non-traditional careers. The videos form a readily accessible library of up-close, personal interviews with women who are working in science, trade or technology fields. By June 30, 2011, 19 videos were posted in the series including a profile of a female Encana drilling engineer who also participated in 2011 as a Techsploration team role model mentoring students from Middleton Regional High School. The video project was profiled at major Techsploration conferences in the spring of 2011 and other external events/conferences to ensure that students, teachers, parents, potential employers and stakeholders are aware of this valuable resource. To date, the videos have received nearly 12,000 hits. To view the videos, please visit the website at www.techsploration.ca and click on the link for the Women in Action Web Video series.

- Imhotep Legacy Academy

With support from Encana, this science and mathematics enrichment program for students of African Nova Scotian heritage expanded to Antigonish, NS in the first six months of 2011. Participating students attended Saint Andrew Junior School at the junior high school level. Feedback on the first year has been positive, with all participating students indicating that they are interested in continuing with the program in the fall of 2011. Imhotep encourages participants to consider careers in science, technology, engineering and mathematics fields, core fields for a career in the offshore oil and gas industry in Nova Scotia.

- Regional Science Fairs

In 2011, Encana provided support to the provincial gathering of regional science fair winners and to regional fairs in Halifax and the Strait area. The provincial gathering, called the Nova Scotia Science Fair Showcase, took place in May 2011 at Saint Mary's University. The showcase displays winning science fair projects from across Nova Scotia prior to the students competing at the Canada-Wide Science Fair. Encana awarded three Youth Science Awards at the showcase, an annual award to student(s) selected by his or her peers at the showcase. Encana supports science fairs as a means to encourage science, technology and engineering-minded students in Nova Scotia to continue their studies at the post-secondary level. Studies in these areas are among those that are key to career opportunities in the offshore oil and gas industry.

- Skills InDemand

Encana supported Skills InDemand projects at the Nova Scotia Community College to encourage youth to consider a skilled trades career, a key educational path for work in the offshore oil and gas industry. Each project is a full day of interactivity, applied learning and work with a mentor from a skilled trade. At three TechShop events supported by Encana from January 1 through to June 30, 2011, held at the Nova Scotia Community College's Lunenburg, Akerley and Truro campuses, a total of 141 students from Grades 10 to 12 participated. Encana's support also was directed in March 2011 to a Young Women's Conference at the NSCC Burrigge campus in Yarmouth, NS, where 44 Grade 9 girls from the TriCounty School Board were exposed to non-traditional career paths such as welding during a day of hands-on trade and technology workshops, and an African Nova Scotia Youth Conference in February 2011 at the NSCC Kingstec campus in Kentville, NS where 33 students from Grades 9 to 12 explored career options in skilled trades. In a survey conducted prior to attending a Skills InDemand event in the 2010-2011 school year, 62 per cent of students were interested in a skilled trades and technologies career, while 33 per cent of students were not interested. Following participation in one of the events, a survey showed 77 per cent of students were interested in a skilled trades and technologies career, while only 17 per cent were not interested.

- Encana High School Scholarship

All eight public school boards in Nova Scotia have participated in the program in 2011, with each board selecting one graduating student to receive the \$2,500 annual scholarship renewable for up to four years. Of the eight students selected by the school boards for 2011, seven are pursuing university level studies in engineering and one is pursuing engineering technology studies.

- SuperNOVA

In 2011, SuperNOVA at Dalhousie University moved forward with a program to work with predominantly African Nova Scotian communities to provide youth with meaningful interactions in science, engineering and technology. Encana's support for the SuperNOVA outreach program in 2011 has assisted directly in the development and delivery of four, week-long science day camps in the summer of 2011 for African Nova Scotian youth in Antigonish, Whitney Pier, Halifax and East Preston, NS. In addition to providing hands-on engineering and science activities, SuperNOVA hired three mentors of African descent to help plan and run the camps, which are delivered in partnership with established youth organizations in the communities such as the Preston Area Boys and Girls Club, Imhotep Legacy Academy and St. George's YouthNET.

- Math-On Olympiad

The provincial Olympiad is a math competition aimed at encouraging the exploration of mathematics by students at the junior high school level in Nova Scotia. Across Nova Scotia, 41 schools and more than 500 students competed in March 2011 to attend the Olympiad. Eighty-four students from schools in Halifax, Dartmouth, Bridgewater and Cape Breton then advanced to the competition held May 7 at Dalhousie University. Also included in the program that day was a top individual team challenge. Mathematical aptitude is a core skill for work in the offshore oil and gas industry.

- Energy for Students (EFS)

Energy for Students is an educational program that shares energy-related information, particularly information about the offshore oil and gas industry, to educators and students in Nova Scotia. The goal is to inform program participants of careers in the industry, and the educational pathways required for those careers. In the first half of 2011, the EFS program was presented to 57 teachers and approximately 450 students at Sir John A Macdonald High School in Upper Tantallon, West Kings in Auburn and Citadel High School in Halifax. As well, representatives of EFS attended a skills and career event at the Nova Scotia Community College, Kentville campus. Encana's support for the EFS program includes the distribution of a monthly newsletter about energy-related topics, featuring news from the offshore oil and gas industry in Nova Scotia. To date, six monthly newsletters were distributed to 824 recipients. Encana also supports the EFS website, particularly the oil and gas subsection, as well as the energy map. In January 2011, former Nova Scotia Energy Minister Bill Estabrooks officially launched the map during an EFS program for 200 students and teachers at Sir John A Macdonald High School. The map, designed for educators and students, depicts major aspects of energy infrastructure including Nova Scotia's offshore oil and gas industry. The EFS website has had 10,607 visitors to date in 2011.

- The Discovery Centre – Science on the Road Program

The Science on the Road (SOTR) program is a science-oriented outreach program aimed at enriching science education for elementary school students across Nova Scotia through in-school demonstrations and hands-on workshops. SOTR is tied to science curriculum for the Province of Nova Scotia, and is offered in both French and English. From January to June 2011, SOTR reached 13,761 educational contacts in Nova Scotia at 51 schools across seven public school boards.

- Scientists and Innovators in Schools (SITS)

SITS is a science promotion program administered by the Atlantic Science Links Association, a not-for-profit organization dedicated to nurturing relationships between educators and scientists, technology, engineering and mathematics communities in Nova Scotia. SITS seeks to inspire Nova Scotia students when they are developing key attitudes towards science and technology, and are beginning to think about careers in these fields. From January through June 2011, with Encana's support, SITS volunteers delivered 55 presentations in classrooms across the province. They also judged fifteen science fairs, mentored students, and shared their scientific expertise with teachers. More than 1800 students were provided with the opportunity to make connections between what they learn in the classroom and the work and research being done by scientists in Nova Scotia. SITS maintains a database of 150 science volunteers - among them scientists, engineers, IT specialists, mathematicians and others from the public and private sectors, universities and not-for-profit organizations. SITS reports that teacher feedback has been positive regarding the program. In the 2010-2011 school year, teachers with participating classes who completed and returned evaluation/feedback forms rated the program an average of 4.8 out of 5.

- Ducks Unlimited – Project Webfoot

In recognition of the impacts to wetlands in Guysborough County from the construction of the onshore pipeline for the Deep Panuke project, Encana has been a Nova Scotia supporter since 2007 of the Project Webfoot program delivered by Ducks Unlimited Canada. Project Webfoot is a science educational program that aims to communicate the value of wetlands to elementary school-aged children. In the 2010/2011 school year (September 2010-June 2011), Encana funding helped to support programming and field trips for 16 classes representing 374 students at 10 schools in Guysborough, Antigonish and Halifax counties. In June 2011, with Encana's support, a new field trip location opened at the Dagger Woods Marsh near Antigonish, NS for schools in Northeastern Nova Scotia. The establishment of the field trip site will allow participating classes to benefit from the complete Project Webfoot program, which includes class and field components. In June 2011, eight classes from six schools attended a field trip to Dagger Woods. As well in June 2011, 17 students from Imhotep's Legacy Academy in Antigonish, a program to encourage students of African Nova Scotian heritage to consider careers in science, technology, engineering and mathematics, attended a field trip to the Dagger Woods.

- Robotics Programming – Acadia University

Robotics Programming is designed to encourage student interest in math, science, engineering and technology. The 2010-2011 season ended with the competitions held at Acadia on January 29 involving more than 300 students from junior and senior high schools across Nova Scotia. Following the competitions, focus shifted to competition analysis, planning and outreach for the 2011-2012 school year. Leveraging the funding from sponsors, Robotics Programming obtained an additional grant to establish a Robot Lending Library. Working with the Nova Scotia Community College, 50 robots were distributed to new teams across Nova Scotia. In addition to school teams, trainers from community youth groups and a museum have received robots and five robots were distributed to Imhotep's Legacy Academy for teaching science to students of African Nova Scotian heritage. As well, one team worked with the Discovery Centre to showcase their research project and their robot programming. For more information on the competitions, visit <http://cs.acadiau.ca/rpc>

VII.V Other Education & Training

In the first six months of 2011, Encana continued its focus on supporting initiatives and programs that encourage Nova Scotia youth to consider careers in science, trades and technology, engineering and mathematics, the educational pathways of particular relevance to the offshore oil and gas industry.

To help educators better understand the offshore oil and gas industry and the careers open to students in the industry, Encana has developed an Energy Information Kit that includes publications from the Petroleum Human Resources Council of Canada, the Atlantic Geoscience Society (AGS), the Canadian Association of Petroleum Producers and the Canadian Centre for Energy. In the first six months of 2011, Encana distributed 13 of the kits to teachers and public libraries in Nova Scotia. Teachers requesting the

kits attended the provincial Science Fair Showcase, supported by Encana, at Saint Mary's University from May 5-7, 2011.

Encana supported disadvantaged students interested in pursuing careers in sciences, trades and technology by providing funding for the Nova Scotia Community College Foundation Fund, Bread and Roses Bursary, for female students.

Students receiving Bread and Roses bursaries have pursued studies in trades and technology fields such as electronic engineering technology, environmental engineering technology (water resources), geographic sciences and welding.

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 2011, contractors reported 19 positions totaling \$17,765 for the following:

- Transportation of Dangerous Goods (air & ground)
- Troubleshooting, repair and maintenance of ROV robotic arm
- Customs Brokers certification course
- Marine security officer training
- High-resolution wave climate monitoring

VII.VI Research & Development Funded Projects

The following section provides an update on selected R&D projects approved under the Fund.

- Produced Water

Examination by researchers at Dalhousie University of chemical-free electro-coagulation (EC) technology with proven success in treating wastewater discharge, and adapting that EC technology to separate and remove dissolved hydrocarbons from produced water streams. The interim report on the research was submitted to PRAC in March 2011. A final report on the research for dissemination is expected by the end of April 2012.

- Salt Chair

At Dalhousie University, the recruitment process to fill the chair continues for the complex salts chair supported by the Fund. The position was advertised beginning in early 2011. By the end of June 2011, potential candidates were identified. Interviews with the candidates were scheduled for the summer of 2011.

- A Functional Test Analysis of Lifeboat/BA (Breathing Apparatus) Integration Skills

Following dissemination of the research findings at conferences and via the Survival Systems website in 2010, the research was submitted to the journal Occupational Ergonomics in January 2011.

- Coastal Island Bird Surveys – Maritime Breeding Bird Atlas

The Atlas has the goal of determining the distribution, abundance and status of all bird species breeding in Nova Scotia, New Brunswick and Prince Edward Island. Information gathered will be compared to that collected during the first Breeding Bird Atlas (1986-1990) to examine changes in species abundance and distribution, and will be used to set conservation priorities and objectives for the next 20 years. As there is very little data for coastal and island-nesting birds, with Encana's support, the survey project focused on coastal islands and inaccessible coastline in Nova Scotia using Breeding Bird Atlas methods. The data collected will facilitate the development of environmental impact assessments by offshore oil and gas industry explorers and operators working offshore Nova Scotia. From January to June 2011, island and coastal data collected in 2010 were added to the database for the Atlas. As well, island and coastal records, including rare and unusual records, were reviewed to ensure they were complete.

- Integrated Bird Management at Offshore Installations

Between January 1 and June 30, 2011, Acadia University, Encana and the Canadian Wildlife Service have worked to finalize the proposal to obtain a Natural Sciences Engineering Research Council (NSERC) grant matching the cash and in-kind funding contributions from Encana. The proposal has been submitted to NSERC, and feedback from NSERC is expected soon. Radio tags have been placed on birds at Country Island and Sable Island, and VHF receivers have been installed in Country Island, Sable Island, and various offshore support/study vessels. A technical proposal has been submitted to SBM for the installation of a bird radar and VHF receiver system onboard the PFC. Installation of this equipment is expected to take place in late fall 2011.

VII.VII Other Research & Development

In the first six months of 2011, Encana 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.

Encana has continued to participate in several technical advisory groups from the Environmental Studies Research Fund and represents the Canadian Association of Petroleum Producers as part of the Canada-Nova Scotia Offshore Petroleum Board's SARA (Species at Risk) Working Group.

As well, in 2011 Encana has supported:

- 2011 Collaborative Lobster Science Workshop and Fishermen and Scientists Research Society 18th Annual Conference

VIII. Activity Forecast for July to December 2011

In the first six months of 2011, Encana focused on:

- Continuing to monitor progress of the construction of the PFC by SBM as well as preparations for the arrival in Nova Scotia of the PFC;
- Preparations for offshore construction programs in 2011 including rock placement and subsea programs; and
- Preparations for onshore work scope at Goldboro, NS to prepare the Deep Panuke gas export pipeline to accept natural gas from the project.

Project activity at Deep Panuke is organized into functional elements. The following section describes activity anticipated from July 1 to December 31, 2011 for each of these elements.

VIII.I Project Management

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 leading to first gas in the fourth quarter of 2011. In addition, the project team will continue transitioning to the operations phase of the project, working closely with SBM as the PFC operations contractor.

VIII.II Element 1 – Drilling and Completions

With the shift from construction to operations at Deep Panuke, the activities under this element will now be captured under Element 5, Ready for Operations.

VIII.III Element 2 – Subsea

Subsea 7 mobilised its installation vessel and dive support vessel (DSV) in July 2011 to execute the full scope to tie-back the subsea trees to the PFC. The umbilicals will be laid and trenched over a two week period, while the diving scope is expected to last for about 90 days and will comprise the installation and protection of flowline tie-in spools, the connection of the umbilicals and a program to leak test and de-water the flowlines to prepare them for the introduction of hydrocarbons. Early in Q3, Tideway mobilised its rock placement vessel for work on the flowlines where rock is required to inhibit upheaval buckling. Subsea 7 and Tideway anticipate utilizing the port of Mulgrave, NS to support their programs along with rock quarried from Nova Scotia.

Work will continue by Subsea 7's subcontractor Aecon Fabco at its facility in Pictou, NS on the spools that will connect the gas export pipeline, flowlines and acid gas disposal line to the PFC.

VIII.IV Element 3 – Export Pipeline

In the second half of the year, the export pipeline will be made ready for commissioning through the execution of the following scopes:

- Placement of rock in freespan areas of the subsea section of the pipeline, in areas of marginal on-bottom stability and areas with potential for upheaval buckling once the pipeline comes into operation;
- Installation by Subsea 7 of the offshore subsea isolation valve and its tie-in to the PFC riser. Installation of the control umbilical and commissioning of the valve system; and
- A final leak test and de-watering, drying and nitrogen packing of the pipeline, again by Subsea 7, to prepare the pipeline for the introduction of buy-back gas.

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

In the first six months of 2011, the PFC Middle East work scope was concluded. The PFC was loaded out onto the installation barge and towed to deeper water near Abu Dhabi where both the barge and the PFC were loaded onto a heavy lift transport vessel. The transport vessel with its cargo of PFC and the barge then undertook the voyage of some 12,500 nautical miles from Abu Dhabi to Nova Scotia. The voyage took approximately 50 days. The PFC and installation barge were successfully offloaded and it was moored at the quay at Mulgrave, NS.

At Mulgrave, the PFC underwent final preparations in July 2011 to ready it for the tow to the Deep Panuke offshore field centre location where it was installed using the leg jacking system to elevate the platform to its installed height above the water.

Readiness preparations included completion of critical safety systems and equipment, operations readiness, and finalization of all jacking and installation aids as well as mobilizing the installation spread. Activity is now focused offshore at the Deep Panuke field centre to prepare the PFC for first gas in Q4, 2011.

VIII.VI Element 5 – Ready for Operations and Operations

During the second half of 2011, Encana will be continuing with operations support associated with the installation and hook-up work program for the PFC. Particular focus is on assessing SBM operational readiness for first gas as well as managing the provision of logistics services required during the hook-up phase at Deep Panuke.

SBM's activity is now managed out of the SBM Nova Scotia Contractors office located in Dartmouth. As of the end of June 2011, SBM have completed their recruitment drive and all onshore and offshore positions have been filled.

The Atlantic Condor was fitted with the ROV spread during May 2011 and completed the first subsea asset integrity inspection program during June. The vessel will now provide resupply support for the installation and hook-up program.

Cougar Helicopters completed commissioning of their new Halifax hangar during May 2011 and as of the end of June 2011 were fully operational and ready to provide helicopter transport services to the Deep Panuke field. The first flights by Cougar to support offshore construction at Deep Panuke in 2011 took place in early July. Approximately four to five flights per week are anticipated during the summer construction program at Deep Panuke.