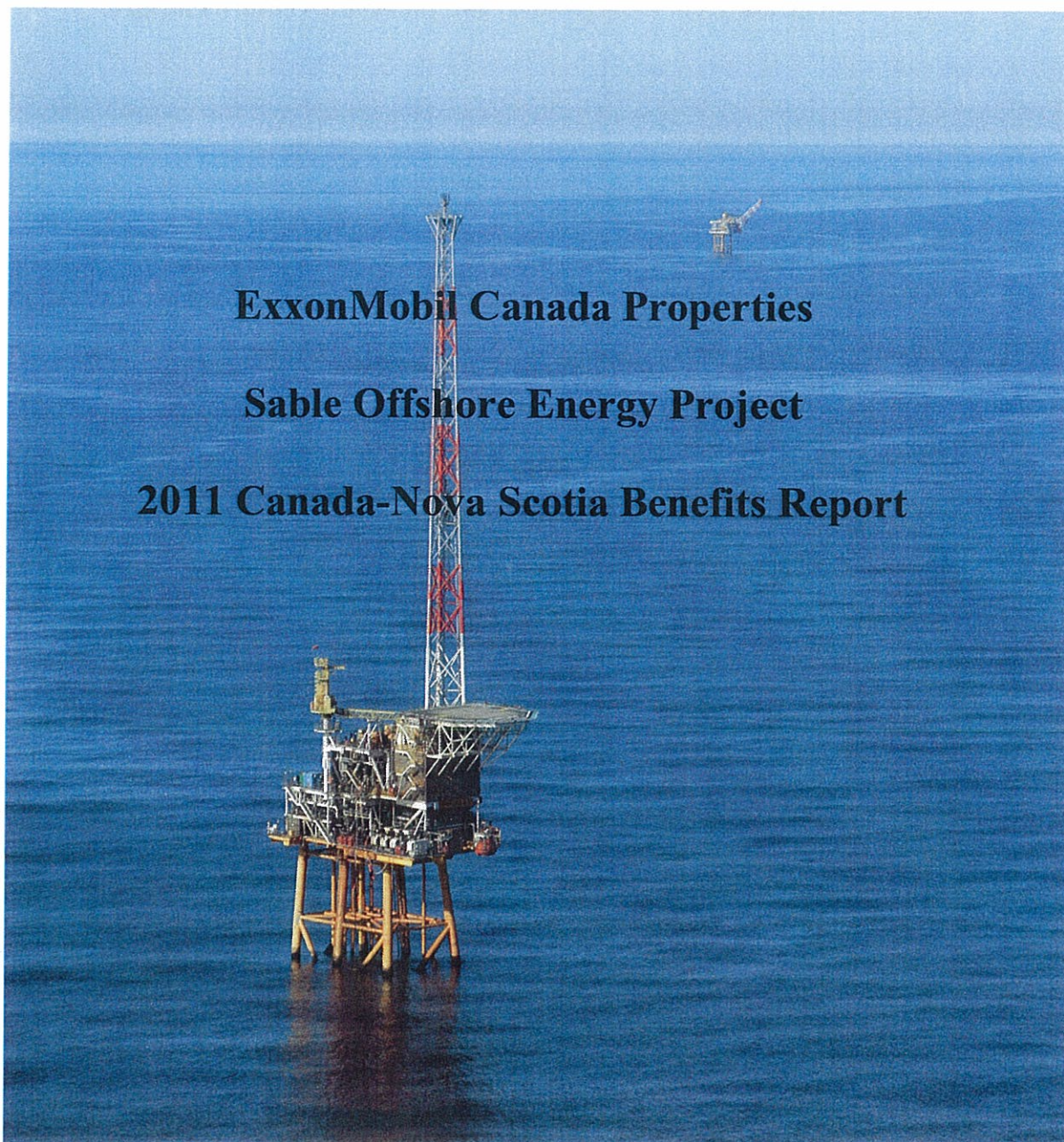




ExxonMobil Canada Properties
Sable Offshore Energy Project
2011 Canada-Nova Scotia Benefits Report

Submitted to the
Canada-Nova Scotia Offshore Petroleum Board

March 30, 2012

Cover Photo
The Venture Platform (Foreground) and the South Venture Platform

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Executive Summary

The 2011 Canada - Nova Scotia Benefits Report for the Sable Offshore Energy Project (SOEP) is submitted to the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) by ExxonMobil Canada Properties (EMCP) as the operator. The report is submitted in accordance with the requirements under Section 2.6 and Condition # 9 of the Sable Offshore Energy Project Canada-Nova Scotia Offshore Petroleum Board Benefits Plan Decision Report and addresses Sable Project benefits activities for the period January 1, 2011 to December 31, 2011.

Expenditures in Nova Scotia during 2011 totaled \$74.8 million or 52.2% of the total project expenditures for the year. EMCP and the Sable Project owners continued to support initiatives aimed at developing and sustaining the natural gas industry in Nova Scotia.

The cumulative SOEP expenditures in Nova Scotia dating back to 1998 now total \$2,416.4 million or 38.4% of total project expenditures. The cumulative expenditures within Canada during this period total \$3,498.2 million or 55.5% of the total project expenditures.

Expenditures and initiatives were carried out in areas of community support, education and training, research and development, technology transfer and support of diversity and inclusion programs.

1.0 Introduction

EMCP is the operator of the SOEP and is pleased to submit this 2011 Canada-Nova Scotia Benefits Report to the CNSOPB as required by Condition 9 of the Sable Offshore Energy Project Benefits Plan Decision Report issued in 1997. The report includes economic impact data arising from producing operations conducted in 2011 as well as cumulative data incorporating project development and producing activities from previous years.

The following facilities were operated by EMCP in 2011 as part of the SOEP and are included in the scope of this report:

Offshore Facilities

- Thebaud Central Processing Platform
- Venture Platform
- North Triumph Platform
- Alma Platform
- South Venture
- Export and Inter-field Pipelines

Onshore Facilities

- Goldboro Gas Plant
- Point Tupper Fractionation Plant
- Interconnecting NGL Pipeline

2.0 Project Update

Safe and reliable performance

The Sable Offshore Energy Project continues to achieve favourable results in the areas of safety and reliability. During 2011, Sable's onshore plants at Goldboro and Point Tupper passed an important safety milestone, recording more than 10 years without a lost time incident. At Sable's offshore facilities, the workforce extended its record to eight years without a lost time injury. In addition to strong safety performance, Sable operations have been achieving best-ever reliability levels. During 2011, the Sable Project recorded reliability levels of approximately 97 percent. This means that outside of planned maintenance work, the project's complex of wells, compression and processing equipment produced natural gas and liquids almost continuously throughout the year.

The Operations Integrity Management System (OIMS) is fundamental to the safe and reliable performance and this system has been successfully implemented through the active support and participation of the EMCP employees and contractors here in Nova Scotia. The structured safety management systems and programs have been instrumental in sustaining a well-established safety culture.

Contractor safety initiatives that included well attended workshops structured to communicate expectations and share lessons learned from events locally and globally continued to be a cornerstone of safety management program.

Vendor support services

In 2011, Nova Scotia contractors and service providers continued to play an important role in sustaining the success of the SOEP. The local industry provided critical support services utilized by our offshore and onshore operations in areas such as:

- aviation services
- business support services
- catering personnel
- communications services
- courier services
- customs clearance/brokerage
- diving and ROV personnel
- engineering and technical support
- environmental monitoring and testing services
- equipment inspection services
- fabrication services
- inland transportation services
- insulation and painting
- skilled trades personnel (welding, mechanical, electrical, instrumentation, etc.)
- logistics/stevedoring
- maintenance materials and consumables
- marine crews and supply vessels
- medical personnel
- medical services
- safety advisory services
- safety equipment
- safety training services
- scaffolding services
- staffing services
- survey services
- tools and equipment rentals
- valve services
- warehousing
- weather forecasting

Sable Island National Park Reserve Designation

In October 2011, the governments of Canada and Nova Scotia agreed to safeguard Sable Island by designating it as a Natural Park Reserve. This is a step toward full status as a national park pending ongoing discussions with stakeholders.

EMCP supported this initiative and has worked collaboratively with all parties who are striving to set up a practical system to protect this unique piece of the Nova Scotia Environment while recognizing the importance of petroleum activities in the area. EMCP

aided the park designation process by working with industry players and the regulator to create a one-nautical mile buffer around the island within which drilling for oil or natural gas will be prohibited.

Along with Sable Project co-ventures, EMCP has been proud to support a variety of Sable Island stewardship initiatives over the years, including beach clean ups, research on the island's horse and bird populations as well as its vegetation. EMCP and the Sable owners have also supported terrain and dune restoration projects on the island and provided funding to help sustain a human presence on the island. A Code of Practice relating to the Sable project's interaction with the island has been in place since 1998.



Sable Island expert and resident Zoe Lucas, centre, recently hosted a tour of the island attended by Meg O'Neill, President of ExxonMobil Canada Ltd. and Mike Honderich, Sable Project Operations Superintendent

Working closely with local responders

Safety is paramount at the Sable Project, and fundamental to our comprehensive approach to safety is preparing for emergencies in the unlikely event of an incident. EMCP works closely with first responders in the area near our facilities to ensure that there are emergency response plans in place in tested should they be required.

In June 2011, EMCP carried out a drill that simulated a leak on the natural gas liquids pipeline that runs between the Goldboro Gas Plant and Point Tupper. The simulation took place south of Mulgrave, Nova Scotia. Participants in the drill included Seven Communities Fire Department, Mulgrave Fire Department, Point Tupper RCMP, local EHS, expert observers as well as the EMCP emergency response team.



Participants in a June 2011 emergency response drill south of Mulgrave, Guysborough County

3.0 Economic Impacts

Data on the economic impact of the Sable Project for 2011 as well as the cumulative data since 1998 is included Section 3.0. The expenditures have been categorized as 'Nova Scotia', 'Other Canadian' or 'Foreign' based on the *Canadian General Standards Board Method*, which has been adopted by the CNSOPB for local benefits reporting purposes.

In addition to expenditures, three other indicators of economic impact (person hours, headcount and new hires) are also reported.

In preparing the 2011 report EMCP reviewed information provided by SOEP vendors, the scope of work for the vendor and the guidance available from the Canadian General Standards Board (CGSB) reporting guidelines. Data quality assurance methods used in the preparation of previous Benefits Reports were applied in the preparation of the 2011 report.

Project Expenditures

The economic impact of expenditures for the Sable Project is identified in the following tables:

Table 1 – 2011 Expenditures (\$ millions)

	Nova Scotia	Other Canadian	Foreign	Total
Total Expenditures	\$74.8	\$33.4	\$35.1	\$143.3
% Content	52.2%	23.3%	24.5%	100%

Table 2 – Expenditures - Cumulative (\$millions)

	Nova Scotia	Other Canadian	Foreign	Total
Cumulative to December 31, 2005	1,677.0	788.2	2230.9	4696.2
Percent of Total	35.7%	16.8%	47.5%	100.0%
Cumulative to December 31, 2006	1,853.9	859.5	2,445.7	5159.2
Percent of Total	35.9%	16.7%	47.4%	100.0%
Cumulative to December 31, 2007	1,960.6	900.6	2,539.0	5,401.3
Percent of Total	36.3%	16.7%	47.0%	100.0%
Cumulative to December 31, 2008	2,066.6	944.2	2,586.5	5,598.3
Percent of Total	36.9%	16.9%	46.2%	100%

Cumulative to December 31, 2009	2,235.0	1,011.2	2,733.4	5,979.6
Percent of Total	37.4%	16.9%	45.7%	100%

Cumulative to December 31, 2010	2,341.6	1,048.5	2,765.5	6,155.6
Percent of Total	38.1%	17.0%	44.9%	100.0%

Cumulative to December 31, 2011	2,416.4	1081.9	2,800.6	6,298.9
Percent of Total	38.4%	17.2%	44.4%	100%

Project Employment

Person Hours

The number of person hours of employment is a measure of economic benefit arising from the Sable Project. In 2011 there were 573,950 hours of work conducted by the employees and major contractors. The Nova Scotia component of this total was 542,969 or 94.6%. This equates to 271 full-time equivalent positions in Nova Scotia in 2011.

As with expenditures, person hours are categorized as 'Nova Scotia', 'Other Canadian' or 'Foreign' based on the location of the work. Information on the person hours in each of these categories for 2011 and cumulatively for the project is provided in the tables below. Data on person hours by major vendor is included in Appendix 1.

Table 3 – 2011 Person Hours
(Thousands of Person Hours)

	Nova Scotia	Other Canadian	Foreign	Total
Person Hours of Employment	542.97	27.80	3.18	573.95
Percent of Total	94.6%	4.84%	0.55%	100.0%

Table 4 – Person Hours - Cumulative
(Millions of Person Hours)

Year Cumulative as of December 31	Nova Scotia	Other Canadian	Foreign	Totals
1998	2.70	1.00	2.91	6.61
% of Total	40.85	15.13	44.02	100
1999	5.93	1.48	5.25	12.66
% of Total	46.84	11.69	41.47	100
2000	8.39	1.74	5.36	15.49
% of Total	54.16	11.23	34.6	100
2001	9.75	1.90	5.49	17.14
% of Total	56.88	11.09	32.03	100
2002	10.73	2.19	6.04	18.96
% of Total	56.59	11.55	31.86	100

2003	12.67	2.50	6.83	22.00
% of Total	57.59	11.36	31.05	100
2004	14.30	2.71	7.46	24.47
% of Total	58.44	11.07	30.49	100
2005	15.33	2.82	8.57	26.72
% of Total	57.37	10.55	32.07	100
2006	16.70	3.00	9.18	28.88
% of Total	57.83	10.39	31.79	100
2007	17.77	3.10	9.23	30.10
% of Total	59.0	10.3	30.7	100
2008	18.63	3.18	9.23	31.04
% of Total	60.1	10.2	29.7	100
2009	19.92	3.30	9.29	32.51
% of Total	61.27	10.16	28.57	100
2010	20.69	3.37	9.29	33.35
% of Total	62.03	10.10	27.87	100
2011	21.23	3.40	9.29	33.92
% of Total	62.59	10.02	27.39	100

Year End Headcount

The year-end head count is also a measure of economic impact of the Sable project. It refers to people on shift and scheduled to work on the project on December 31. It differs from the full-time equivalent data reported under the person hours measure because it represents a point in time as opposed to all employment activity over the full year. The data is sourced from the EMCP work sites and reports provided by the project's major contractors. The Project year end headcount was 218 on December 31, 2011.

Table 5 – Year End Headcount

Year End	Activity in Nova Scotia	Activity in the Rest of Canada	Total Project Activity
2001	953	16	1,041
2002	900	38	1,150
2003	974	42	1,206
2004	1,082	40	1,413
2005	733	32	1,407
2006	697	33	893
2007	411	27	438
2008	336	22	363
2009	320	11	342
2010	218	0	225
2011	212	1	218

Residency of New Hires

The total number of new hires reported for the Sable Project and its major contractors during 2011 was 39. The table below shows the historic distribution of the Residency of New Hires for the Sable Project.

Table 6 – Residency of New Hires

Year	Nova Scotia	Other Canadian	Foreign	Total
2001	400	105	115	620
2002	324	83	684	1091
2003	826	83	204	1113
2004	565	41	198	804
2005	268	28	330	626
2006	577	100	326	1003
2007	99	17	54	170
2008	89	8	0	97
2009	392	30	4	426
2010	29	3	0	32
2011	39	0	0	39

Co-op Student Employment

Co-op and work placement programs have been supported by EMCP and our contractors since the inception of the Sable Project. The programs have provided individuals with meaningful assignments that enhance their education and provide benefits to the business activities.

During 2011 there were seven placements at EMCP and our contractors that provided work opportunities for students of varied disciplines. Students pursuing engineering and accounting degrees worked with mentors and gained hands on experience with day-to-day operational and business challenges.

The students learned about EMCP's and our contractors' business and engineering practices, PC computer applications and accounting systems with a focus on supporting on-going operations, reporting and analysis activities.

As part of the co-op program educational requirements, students are required to submit a technical report on their work term experience. Students also complete a presentation to their respective management team at the end of their term.

The work activities provide relevant experience for those students planning to pursue engineering or CMA or CGA accounting designations upon graduation.

Information on the co-op program expenditures is provided in the table below.

Table 7 – Co-Op Work Placements

Year	Number of Placements	Cumulative Placements	Investment	Cumulative Investment
1998	36	36	\$250,000	\$250,000
1999	61	97	\$325,263	\$575,263
2000	58	155	\$334,133	\$909,396
2001	71	226	\$608,394	\$1,517,790
2002	73	299	\$572,932	\$2,090,722
2003	90	389	\$706,539	\$2,797,261
2004	64	453	\$646,345	\$3,443,606
2005	11	464	\$592,985	\$4,036,590
2006	47	511	\$444,120	\$4,480,710
2007	20	531	\$286,387	\$4,767,097
2008	18	549	\$310,240	\$5,077,337
2009	21	570	\$252,400	\$5,329,737
2010	7	577	\$100,360	\$5,430,097
2011	7	584	\$93,694	\$5,523,791

4.0 Diversity and Inclusion

EMCP continued previously initiated efforts to encourage representation of traditionally under-represented groups. Data on the four designated groups identified in employment equity legislation is included in the table below. Those groups are:

- Aboriginal Peoples
- Visible minorities
- Women
- Persons with disabilities

Information regarding gender representation is gathered from existing Human Resources records. Representation of other designated groups is based on voluntary self-identification via a confidential survey. The information is collected and recorded on employee files in the company's human resources database, accessible only by select designated HR staff.

The following table provides a historical tally of individuals who identified themselves as members of one or more designated groups since 2001. The table includes data from EMCP and our contractors. Those categories in which the representation is five or less are identified by an asterisk to protect the privacy of individual respondents.

Table 8 – Traditionally Under-represented Groups

Year	Aboriginal Peoples	Visible Minorities	Women	Persons with disabilities
2001	32	46	405	14
2002	81	145	370	14
2003	23	77	390	24
2004	7	80	412	14
2005	8	49	332	6
2006	9	36	235	*
2007	*	13	83	*
2008	*	9	61	*
2009	6	11	60	*
2010	7	7	55	*
2011	*	8	45	*

The 2010 Canada-Nova Scotia Benefits Report included information on an innovative national community leadership program for Canadian Indigenous women with The Coady International Institute of Antigonish. Through a five-year, \$4 million investment from the ExxonMobil Foundation and the Imperial Oil Foundation, the Indigenous Women in Community Leadership (IWCL) program provides First Nation, Métis and Inuit leaders the opportunity to develop their leadership skills and experience so they can promote community development from within.

Over the course of the IWCL program, the women attend the Coady Institute for approximately three weeks, during which time they follow curriculum developed in close consultation with Aboriginal women and established leaders. They then embark on three-month placements in communities across the country, where they learn to put their classroom studies to work in the real world. During the summer of 2011, the IWCL's first class of one Inuk and 11 First Nations women graduated. Members of this graduating class are pictured below.



The first graduating class from the Indigenous Women in Community Leadership program at the Coady International Institute.

5.0 Capacity Development

Training and capacity development continued to be a focus area during 2010. These initiatives are divided into four core areas:

- Training and Education
- Technology Transfer
- Supplier Development
- Research and Development

Please note: Items in this Section may also be reported by ExxonMobil and affiliates in other reports.

Training and Education

Training and education expenditures for 2011 are included in the table below. These expenditures were aimed at developing or maintaining relevant skill development in Nova Scotia related to the oil and gas industry and include expenditures by EMCP and our contractors.

Table 9 – Training and Education Expenditures

(Including Co-op/Work Placement Programs, Community Training and Education Investments)	
Description of Training	2011 Total
Internal Training	\$119,029
Major Contractor Training	\$474,680
Co-op Programs	\$93,694
2011 Totals	\$687,403

The cumulative project expenditures on Training and Education, including 2011 data, are approaching \$48 million. The cumulative data is presented in the table below.

Table 10 – Training and Education Expenditures - Cumulative

(Including Co-op/Work Placement Programs, Community Training and Education Investments)		
Year	Investment	Cumulative
1998	\$7,027,316	\$7,027,316
1999	\$5,635,294	\$12,662,610
2000	\$3,296,130	\$15,958,740
2001	\$5,440,177	\$21,398,917
2002	\$4,071,942	\$25,470,859
2003	\$3,881,650	\$29,352,509
2004	\$3,260,635	\$32,613,144
2005	\$3,047,550	\$35,660,694
2006	\$3,836,040	\$39,496,734
2007	\$1,405,177	\$40,901,911
2008	\$1,515,871	\$42,417,782
2009	\$3,393,881	\$45,811,663
2010	\$1,234,541	\$47,046,204
2011	\$687,403	\$47,733,607

In addition to direct training and education activities undertaken by EMCP and our major contractors, EMCP and the Sable owners supported a number of other initiatives that assist and/or recognize the existing education and training infrastructure in Nova Scotia.

Techsploration

Techsploration provides young women from grades nine through twelve with opportunities to explore science, trades, technical and technology-related occupations, while creating awareness about the critical role of work in their lives. It also helps them understand the significance of high school math and science for their future careers.

Techsploration, a not-for-profit organization, is a joint initiative of:

- Nova Scotia Community College (NSCC)
- Women in Trades and Technology (WITT-NS)
- Nova Scotia Department of Labour and Advanced Education, Apprenticeship Training Division

It has been supported by EMCP, the Sable Projects owners and some of the Sable project contractor / suppliers since 1998. The support has been in the form monetary contributions as well as mentors.

The goal of Techsploration is to increase the number of women working in science, trades, technical and technology related occupations by assisting young women from diverse backgrounds to explore a wide range of career options in these fields.

In participating schools, small groups of girls are assigned careers to research and role models to assist in their efforts. These Techsplorers have an opportunity to visit work sites and eventually to present their findings to the rest of the student body, boys and girls alike, in service of a broader goal to educate and break stereotypes.

As part of the 2011 activities an EMCP Onshore Production Supervisor from the Goldboro Gas Plant and Point Tupper Fractionation Plant was the mentor for a group of students from Waycobah First Nation Secondary School. The students visited the Point Tupper Fractionation Plant and learned about the day-to-day job responsibilities of process operators. This was followed by the Techsplorers Event which brought together all the participants of Techsploration, including role models, girls on school teams, Techsplorer alumnae, teachers, sponsors and invited guests to share experiences from their 2011 activities.

Technology Transfer and Local Supplier Capacity

Transfer of technology to the local supply community has continued to evolve. Local engineering, consulting and construction related firms have been the principle beneficiaries of this transfer as these local firms have enhanced their in-house expertise and knowledge and in turn enhanced their businesses.

Local firms continue to benefit from the knowledge collected and are actively seeking opportunities to apply these skills at the local, regional and national level. The estimated value of the technology transfer exceeds \$31 million.

Technology and knowledge transfer have helped with the establishment of safety cultures that extends beyond the Sable project work to other aspects of the vendors work. Sable project vendors have applied the "nobody gets hurt" philosophy to their work throughout the region. The Sable safety culture and lessons learned from contractor safety workshops has helped the vendors reduce accident rates, improve their overall business performance and improve their competitiveness as they seek to obtain work in the oil and gas sector and other business sectors.

Beginning in 2010, EM&I Stantec, the Sable Project inspection contractor, worked to find a more efficient and cost effective method for future inspection programs. Two new techniques - Digital Radiography (Digi-Rad) and Backscatter Computed Tomography (BCT) were identified.

One of these techniques has been successfully implemented in the field and has assisted with the ongoing facility inspection work. Applications for the second technique were further assessed during 2011 and opportunities to deploy this technique in the field are presently being evaluated.

Application of these technologies may reduce operating costs and identify opportunities for use beyond the offshore oil and gas sector.

6.0 Research and Development Initiatives

A research and development (R&D) plan has been approved by the CNSOPB as per Condition 4 of the Benefits Plan Decision Report. Under this plan EMCP and the Sable owners have committed to expenditures in Nova Scotia of at least \$300,000 per year and an aggregate of \$3,000,000 over the five-year period of 2008 - 2012 inclusive.

In 2011, the Sable Project owners either individually or collectively supported R&D initiatives in Nova Scotia. In addition to the initiatives considered to be R&D under the terms of the five-year plan, the Sable owners and the contracting community have historically supported broader R&D activities in Nova Scotia.

The 2011 R&D activities amounted to \$613.6 thousand. Since 1998 the cumulative R&D expenditures by the owners and contractors exceed \$27.9 million since 1998.

Please see the table below for historic research and development initiatives reported.

Table 11 – Research and Development Initiatives
Historical

Year	Investment	Cumulative
1995	\$121,500	\$121,500
1996	\$146,000	\$267,500
1997	\$3,888,373	\$4,155,873
1998	\$5,758,207	\$9,914,080
1999	\$2,813,428	\$12,727,508
2000	\$4,690,139	\$17,417,647
2001	\$2,564,786	\$19,982,433
2002	\$2,068,169	\$22,050,602
2003	\$666,385	\$22,716,987
2004	\$277,000	\$22,993,987
2005	\$628,127	\$23,622,114
2006	\$458,113	\$24,080,227
2007	\$782,333	\$24,862,560
2008	\$925,881	\$25,788,441
2009	\$931,600	\$26,720,041
2010	\$627,600	\$27,347,641
2011	\$613,600	\$27,961,241

Examples of Supported R&D Initiatives

Petroleum Research Atlantic Canada

In 2011 EMCP supported the R&D initiatives of Petroleum Research Atlantic Canada (PRAC). PRAC has issued calls for proposals in focused areas and has provided research funding to successful applicants. PRAC also provided Transfer-to-Usability (TTU) grants to help bridge the gap between applied research and commercialization, and facilitate multi-partner Joint Industry Projects (JIPs) to address specific member needs. PRAC has undertaken a broad range of communications activities to assist with research identification, planning and dissemination of research project results.

In 2011 PRAC continued their funding of a project entitled "In-line Continuous Produced Water Analyzers - Testing & Evaluation" that was initially selected from the Offshore Environmental Technologies call for proposals. EMCP provided the project team with technical support and access to produced water samples. This project is intended to continue into 2012 and EMCP plans to continue with the technical support.

Two other examples of projects funded by PRAC in 2011 include:

- **Advanced Ceramic-Metal Composites for Demanding Corrosion-Wear Environments**

This project was initially funded in 2009 and was expected to be complete in early 2012. The primary objective of the research program is to develop a new family of titanium carbonitride (Ti(C,N)) -based Ceramic Metal composites (Cermets) to assess their mechanical, wear and corrosion behaviour for broader applications in the oil and gas sector.

Ceramic metal composites (Cermets) currently have applications in the chemical, aerospace, automotive and oil and gas sectors given their unique combination of high wear resistance, high hardness, and good strength characteristics, as well as excellent aqueous corrosion resistance.

The project is investigating the development and characterization of a new generation of advanced wear and corrosion resistant Cermet composites to improve upon current performance standards. Advancements in Cermets performance holds promise in petroleum sector applications such as coatings for erosion/corrosion protection, cutting bits, pump seals, etc. Further, these materials could possibly be viewed as high performance wear resistant friction surfaces for walkways and stairs on structures. The three year research program will further an understanding of the performance benefits of Cermets and their broader application potential in the petroleum sector.

- **Non- Destructive Vibration based Damage Detection Technique for Monitoring and Inspecting Subsea Pipelines**

This project was also initially funded in 2009 and was expected to be complete in early 2012. The primary objective of the project is to enhance the development of a robust and effective non-destructive vibration based (sensor free for onshore applications and piezoelectric assisted for offshore applications) damage detection technique to monitor and inspect onshore and offshore infrastructures with a particular emphasis on pipe joints subject to corrosion, fatigue and other sources of potential failure.

The research team plans to use relatively inexpensive sensors to collect the vibration signature of the system, along with a simple and proven signal processing method. For offshore applications, the vibration data would be collected with a single inexpensive piezoelectric sensor mounted onto a joint.

The work builds on a previously completed Atlantic Innovation Fund project that developed the methodology and proven its robustness under computational and theoretical assessments, principally for onshore use. For this project, to test validation for (subsea) offshore applications, one of the critical next steps is to investigate and test the technology on pipes underwater, both in the lab and field.

The novelty of the proposed technique is its energy based 'Damage Index' by which the level of damage is determined. The technique will be low cost, require little skill to operate, and will detect damage on structural joints, with special emphasis on welded pipe joints.

Pengrowth Nova Scotia Energy Scholarship Programs

The Pengrowth Nova Scotia Energy Scholarship Programs provides financial support through the Energy Scholarship, Innovation Grant Program and the Professorship in Petroleum Financial Management. These programs provide resources to ensure the success of future oil and gas industry leaders.

Established in March 2005, the \$3 million program is a partnership between Pengrowth Corporation, one of the Sable Project owners and the Province of Nova Scotia, through contributions of \$2 million and \$1 million respectively. Since its inception, the scholarship has provided more than \$1million to over 130 students in the form of university and trade scholarships, innovation grants and funding of the Professorship in Petroleum Financial Management at Saint Mary's University. The program consists of the following components:

- **Pengrowth - Nova Scotia Petroleum Innovation Grant Program**

Up to four Pengrowth-Nova Scotia Petroleum Innovation Grants can be awarded each year. The research grants, valued at \$15,000 over two years, are awarded to Nova Scotia students pursuing energy-related studies at the masters degree level.

- **Pengrowth - Nova Scotia Energy Scholarship Program**

At least 10 scholarships, valued at \$10,000 each (\$2,500 renewable over four years), are awarded annually to students pursuing energy related studies at a university. One additional university scholarship is designated each year for a member of a First Nation or visible minority. The program also offers at least four non-renewable \$2,500 scholarships for first-year students pursuing energy related trades and technology programs at the Nova Scotia Community College.

- **Pengrowth - Nova Scotia Professorship in Petroleum Financial Management**

A total of \$600,000 over four years beginning in 2008 was provided to establish the Pengrowth Nova Scotia Professors in Petroleum Financial Management at the Sobey School of Business at Saint Mary's University.

There were 19 students were chosen to receive Pengrowth-Nova Scotia Energy Scholarships in 2011. In addition, a Dalhousie University master's student received an innovation grant for work focused on new technologies to find oil and gas off the coast of Nova Scotia. Darragh O'Connor is a 2011 recipient for research examining elements of specific sediments that make up the Mesozoic basins off Nova Scotia. This research will allow past reservoirs to be re-examined and help judge the potential of current ones.

Imperial Oil Foundation - St. Francis Xavier University and Dalhousie University

The Imperial Oil Foundation invested \$200,000 over a four-year period starting in 2008 at St. Francis Xavier University (St. F.X.). The funding supports the science outreach program on campus and in schools throughout northeastern Nova Scotia. The program includes the use of science education kits in Nova Scotia elementary schools, as well as in-school presentations of science fundamentals by St. F. X. faculty and senior students. On-campus outreach consists of continuing and expanding St. F. X.'s existing X-Chem Outreach program of summer science camps for children, and the offering of upgrading and training for science teachers.

The Imperial Oil Foundation has also invested \$200,000 over four years with Dalhousie University to support the expansion of the Math Circles initiative. The purpose of the Math Circles program is to foster interest in mathematics among high school students and expose them to mathematics beyond the high school curriculum. Math Circles began as an initiative of graduate students in the Department of Mathematics and Statistics. The idea is open Dalhousie's doors to HRM high school math students several times a year, at no cost to them, and have professors and graduate students lead them through interactive activities that demonstrate the real-world application of advanced math concepts, from game theory to cryptology.

Helicopter Passenger Transportation Suit Standard

Two of the Sable owners (EMCP and Mosbacher Operating Ltd) funded research that supported the development of new standards for helicopter transportation suits. The work was initiated in 2010 and carried forward into 2011. The work was used to advance the scientific knowledge regarding these suits and the testing methodologies and protocols that are used in establishing design standards. In addition, technical support for the work was funded by the Sable Owners.

Sable Island Research Projects

During 2011 EMCP and the Sable owners funded four research projects that were carried out on Sable Island. The project and the specific goals are described below:

Biodiversity study on Sable Island Invertebrates with the following goals:

- Archiving and documentation of existing specimens

- Collection of additional specimens to complete the archive of known invertebrates from Sable Island.
- Preparation of species inventory for the island and publication of report of selected taxa.
- Consolidation of invertebrate specimens at the Nova Scotia Museum of Natural History to establish a permanent research collection.

Biodiversity study – Sable Island Cetacean Strandings with the following goals:

- Consolidation of cetacean collection (skulls and DNA) at the Nova Scotia Museum of Natural History to establish a permanent research collection.
- Preparation of species and specimens inventory for the island and publication of report. This would be a follow-up to an earlier study - Lucas & Hooker, 2000 “Cetacean strandings on Sable Island, Nova Scotia, 1970-1998”, published in the Canadian Field-Naturalist.

Biodiversity (historical) study – Sable Island Walrus with the following goals.

- Genetic analysis of bone specimens to determine the relationship between the extinct walrus population from Sable Island and existing northern populations (approximately 80 samples for DNA have been collected).
- Consolidation of walrus collection (bones and DNA) at the Nova Scotia Museum of Natural History to establish a permanent collection for future research.

Sable Island Seal Wound Lab Analysis with the following goals:

- Description of distinguishing characteristics of a tear through tissue versus a cut made with a sharp edged man-made instrument (e.g. knife, propeller) or a biological surface (e.g. teeth of a predator).
- Explanation of tissue structure responsible for skin tearing at a 45° angle to the body axis.

7.0 Community Education and Participation

EMCP and its employees have a history of community involvement. Wherever we operate, we try to strengthen local communities by donating time, talent or money to many organizations that provide much-needed services or that contribute to the cultural fabric of our communities. Some of the highlights from our 2011 activities are noted below.

President's Safety Award

The President's Safety Award was established in 2008 as a way to recognize and celebrate employees who exercise safety leadership in the workplace. The award recognizes up to two individuals or work groups, employees or contractors per month who have exceeded expectations in the areas of safety, health, environment and security and consists of a gift of \$1,000 to a qualifying local not-for-profit educational or health care institution chosen by the award winners.

The qualifying 2011 recipients of the award as chosen by the award winners included:

- Guysborough Memorial Hospital
- Canadian National Institute of the Blind
- Roseway Hospital Auxiliary
- MS Society of Canada - Cape Breton Chapter
- Phoenix House
- IWK Hospital
- Whitney Pier Boys and Girls Club
- Children's Wish Foundation

United Way

In 2011 EMCP and Imperial Oil employees continued their strong record as a leader in community giving through the active support for the United Way campaign. Employees from the onshore and offshore operating facilities as well as the Halifax office support the campaign through direct giving, payroll deduction and volunteering their time to the many charitable organizations that function under the United Way umbrella. Overall participation and giving increased in 2011 compared to the previous year.

Volunteer Involvement Program (VIP)

EMCP also encourages employees to contribute to their communities through the Volunteer Involvement Program (VIP). Through this program, employees may be able to avail of funding for an eligible organization with which they have volunteered at least 20 hours.

Volunteer service, activities and projects should be consistent with the company's pledge to be a good corporate citizen and support important societal goals including education, health and human services, and the environment.

Nature Conservancy of Canada

The Nature Conservancy of Canada (NCC) protects areas of natural diversity for their intrinsic value and for the benefit of our children and those after them. EMCP supported the work of the NCC in Nova Scotia during 2011 which included activities along the South Shore of Nova Scotia.

Coastal Nova Scotia is highly sought after real estate, and is being purchased and developed both for summer and retirement homes. While small scale development of properties along the coastlines may have minimal impact, together they will have a cumulative effect. NCC's goal is to secure and steward these coastal and freshwater systems which are essential to preserving Nova Scotia's natural heritage.

NCC recently completed the acquisition of 3,900 acres of Atlantic Coastal Plain habitat, 838 acres at Deep Cove, 480 acres at Round Bay and 723 acres at Port Joli.

Round Bay is 20km south-west of Shelburne. Together with 723 acres of already protected land, the Hagar 2 property will enable NCC to preserve coastal forests and wetlands surrounding the Round Bay Estuary.

The Round Bay Beach and surrounding Estuary are nesting and foraging habitats for the Piping Plover, Willet, Least Sandpiper and American Black Duck. The focal area's fen-bog complex may represent potential habitat for Atlantic Coastal Plain Flora (ACPF) as well as for the mainland population of the Eastern Moose, an endangered species in Nova Scotia.



Round Bay on the Scotian South Shore, Photo by Mike Dembeck

Ducks Unlimited Canada

Ducks Unlimited Canada (DUC) works with government, industry, private landowners and other conservation organizations to ensure wetland habitats remain a part of Nova Scotia's landscape ensuring a healthy future for waterfowl, wildlife and a fresh clean water supply for people.

In 2011 EMCP supported a DUC project in Nova Scotia. Amherst Point Marsh is a large 1,000 acre marsh located on the edge of the Town of Amherst. The Marsh is within a National Wildlife Area that provides a refuge for waterfowl staging in this part of Atlantic Canada. The marsh is an important breeding area for ring-necked ducks, green-winged teal, blue-winged teal and American black ducks.

This area, which was drained for agricultural use, was restored by DUC to waterfowl habitat in the early 1970s through the construction of dykes and water control structures to retain water over this large flat plain.

The project is comprised of eight managed wetland cells, adjacent uplands which provide premium waterfowl nesting habitat and salt marshes where birds forage throughout their life cycle. Similar to other dyke construction in the 1970s, the dykes at Amherst Point Marsh were constructed using local material high in organic matter which has eroded over the past 40 years. These dykes will be repaired using a high quality, shale-clay based soil. Together with the installation of new water control structures, these improvements will add a minimum of 40 more years of waterfowl productivity to this marsh complex.

IWK Child Safety Link

In 2011 EMCP continued its funding to the IWK Children's Hospital Child Safety Link (CSL) program to develop a children's Fall Prevention Strategy. The purpose of the program is to reduce the incidence and severity of injuries to children and youth.

The development of the strategy included a comprehensive review of current strategies used around the world, consultations with stakeholders, and reviews of best practices.

Bursaries

Top students graduating from the seven high schools in Guysborough, Inverness, Antigonish and Richmond counties are awarded bursaries each year from the Sable owners to help them with postsecondary education. A total of 24 bursaries were awarded under this program in 2011.

Nova Scotia Community College – Marconi Campus

The Imperial Oil Foundation provided funding over four years to the Marconi Campus of the Nova Scotia Community College. The funds are being used to acquire training equipment that will be used in programs provided to operators from process industries. The Reactor Trainer will allow students to simulate operating conditions of a process reaction and is part of the 4th Class Power engineers training course

Phoenix Youth Programs

At risk and homeless youth in the Halifax area continue to receive support through Phoenix Youth and the programs it offers. EMCP is pleased to provide support to Phoenix Youth the carry out this important work.

Neptune Theatre

EMCP and the Imperial Oil Foundation continued to support Neptune Theatre and in 2011 was a presenting sponsor and sponsored a pre-concert reception for community stakeholders and theatre representatives.

Granville Green Outdoor Concert

EMCP was pleased to support a series of free, Sunday afternoon concerts held throughout the summer in Port Hawkesbury, NS. These waterfront concerts continue to be a great stage for local musicians and continue to attract both tourists and local fans.

Festival Antigonish

Since the Sable project began, EMCP has been sponsoring Festival Antigonish, which attracts more than 10,000 people each summer. The festival is a must-do event in the area and provides a venue for local performers to showcase their talents and work experience for local support crews.

Mulgrave Road Theatre

The stories of the people of Guysborough and the surrounding area get spread to audiences through the talents of the Mulgrave Road Theatre Group. EMCP has supported this activity for a number of years.

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Appendix 1

Sable Project Person Hours 2011

CONTRACTOR	NS	OC	FOR
ABB	2,293	24	0
Accent	3,120	0	0
AMEC	159,237	1,951	0
Anchor Offshore	0	0	0
Bluewater	0	0	0
CHC	9,906	2,824	0
Cooper Cameron	625	0	0
Cougar Helicopters	10,614	1,121	0
Dominion Diving	3,684	0	0
EM&I	32,036	0	3,122
ExxonMobil	185,880	0	0
Helly Hansen	2,469	0	0
Lloyd's Register	2,362	240	56
Newalta	4,079	0	0
Offshore Logistics	2,529	0	0
Secunda	121,857	21,636	0
SGS	2,280	0	0

Appendix 2

2011 Research and Development Investments

2011 Research and Development Investments (by ExxonMobil and Sable Partners)

Recipient	Program Description	Investor
Petroleum Research Atlantic Canada (PRAC)	Petroleum Research Atlantic Canada (PRAC)	ExxonMobil Canada
Dalhousie University	Imperial Oil Foundation	Imperial Oil Ltd.
The CORD Group, Survival Systems Training Ltd.	Suit standard funded via PRNL into NS work	ExxonMobil Canada, Mosbacher
Nova Scotia Students	The Pengrowth - Nova Scotia Scholarships	Pengrowth
Nova Scotia University Students	The Pengrowth-Nova Scotia Innovation Grant	Pengrowth
Sable Island Greenhorse Society	Various Studies	SOEP Owners
St. Francis Xavier University	Imperial Oil Science Outreach Program	Imperial Oil Ltd.
St. Mary's University	The Pengrowth-Nova Scotia Professorship in Petroleum Financial Management	Pengrowth
Helly Hansen Canada	Helicopter Survival Suit	SOEP Owners
Zoe Lucas	Beached Bird Surveys	SOEP Owners