

# HEBRON PROJECT

Canada—Newfoundland and Labrador Benefits Plan

April 2011



# EXECUTIVE SUMMARY

This Hebron Project Canada-Newfoundland and Labrador Benefits Plan (the "Plan") has been prepared in response to the requirements of the Canada-Newfoundland Atlantic Accord Implementation Act and the Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act. The Plan also addresses the requirements of the Benefits Agreement reached between ExxonMobil Canada Properties (EMCP), the Hebron co-venturers and the Government of Newfoundland and Labrador. While the above regulatory and contractual requirements have shaped the Benefits Plan, its content is also driven by ExxonMobil's conviction that making the most of energy resources goes beyond their production. It is an ExxonMobil objective to develop industry and labour capacity, and create and deliver sustainable benefits to host jurisdictions down to the community level. Participation in the further development of diverse supply, service, labour, education, training and research and development (R&D) capacity and capabilities in the Province of Newfoundland and Labrador ("Province"), close to Hebron and other ExxonMobil assets in Eastern Canada, facilitates local operations. EMCP and its employees also have a vested interest in the development of the communities where they live and work.

The Benefits Plan covers the construction and operations phases of the Project, which is currently estimated to have a total duration of over 30 years. Accordingly, the Plan is a high-level document, addressing the above-noted requirements over the entire life of Hebron by describing approaches and mechanisms that have the flexibility to respond to change. However, the Plan also includes information on current industrial and labour requirement estimates for the Project, for both its construction and operations phases. The Plan also includes information on the current industrial and labour capacity, and near-term examples of initiatives to demonstrate commitment and translate high-level strategy into action.

Industrial benefits considerations have been important in Newfoundland and Labrador since the late 1970s. Since that time, the petroleum industry has built on its early exploration, moving on to development and production activity. This has been accompanied by the development of a provincial offshore petroleum industry, with growth in the scale and scope of activity, its importance to the provincial economy and treasury, and industry-relevant infrastructure and education, training and R&D facilities and capabilities. This has also seen growth in the local labour force and supply community, and their participation in the global oil industry.

This Benefits Plan builds on, and has been developed with the goal of further advancing, the development of the industry in the Province, so that Hebron delivers long-term value to shareholders and to Newfoundlanders, Labradorians and other Canadians. This includes contributing to the Province's reputation as being a source of supply, service, construction, fabrication, labour, education,

training and R&D capabilities and expertise that are globally competitive in terms of safety performance, price, quality and delivery.

## Approach to Benefits

EMCP has established the following Benefits Principles which underlie this Plan and will govern all of its benefits-related activities:

- Meeting local benefits commitments while maintaining the highest levels of safety, environmental performance, efficiency and integrity of our operations;
- Selecting contractors and suppliers that will work diligently with us to deliver benefits to the people of the Province;
- Promoting the development of local skills and industry capability that leaves a lasting legacy for the communities in which we operate and for the Province;
- Delivering execution certainty so that Hebron delivers best-in-class return on investment to stakeholders, including the Province of Newfoundland and Labrador; and
- Working collaboratively with industry, government, academic and training institutions, community and other stakeholder groups for the effective delivery of benefits.

EMCP will seek to implement these Principles through its Hebron construction and operations phase activities. In doing so, it will draw on and further develop a benefits culture within its organization and Hebron contracting companies. As with the development of a safety culture, this will see benefits considerations being inherent to business processes and practices, rather than a separate consideration.

In seeking to leave a lasting legacy, the focus will be on delivering sustainable industrial benefits that can be leveraged for local, national and export purposes. This includes providing training and employment experience that will deliver value for Hebron and are also transferable to other industries, projects and markets.

Such benefits are sustainable because they not only deliver value for Hebron but also help the Province be seen as a source of supply, service, construction, fabrication, labour, education, training and R&D capabilities and expertise that are globally competitive in terms of safety performance, price, quality and delivery. This also requires that Hebron maintain the highest levels of safety, efficiency (including through synergies with other projects and operators) and integrity and deliver execution certainty. This will assist the Province in attracting investment in future local projects and in competing for work on projects elsewhere in Canada and internationally.

EMCP will endeavour to be innovative in identifying sustainable benefits initiatives. Examples of initiatives under current consideration include:

- Further developing local expertise and practice in relation to the delivery of sustainable employment, business and other economic development; and
- Providing information and access to opportunities for workers and companies throughout Newfoundland and Labrador.

## Policies, Guidelines and Procedures

EMCP's Hebron benefits policies, guidelines and procedures are discussed under the following headings: Project Management, Supplier Development, Procurement and Contracting, Education and Training, Research and Development, and Diversity. A summary of initiatives is included at the end of each section and in Appendix D.

## Project Management

EMCP will use the same project management approach for Hebron as ExxonMobil uses on all its projects. This approach is driven by a concern for:

- Safety, health and environmental performance;
- Disciplined project management systems;
- The application of innovative technology;
- The promotion of local content and capabilities;
- Community support and involvement; and
- Meeting our regulatory, contractual and other commitments.

Hebron project management will be driven by a highly capable and motivated team, supported by ExxonMobil's world-class management systems. The management team will both exemplify and promote a benefits culture, and exhibit relentless discipline in implementing the Project, the Benefits Plan and its Benefits Principles, and ensuring it meets all regulatory and contractual requirements.

A Project office was opened in St. John's in 2009 and has the appropriate levels of decision-making to manage Hebron. Having decision-making and key management personnel in St. John's will assist in focusing on benefits matters and creating an in-depth understanding of local capabilities. A Hebron Benefits Team will be responsible for overall management of benefits, with an emphasis on the coordination of benefits between EMCP and its contractors and suppliers.

Project benefits goals will be achieved through the successful development, selection and monitoring of Hebron contractors and suppliers, which will have a similar level of obligation to the benefits commitments as does EMCP. Success in working with contractors and suppliers will be facilitated by the commercial terms of key contracts, allowing EMCP to influence strategy.

#### Supplier Development

Supplier development will be facilitated by EMCP's benefits culture and by cooperation and collaboration with the Province's oil and gas industry supply community, particularly through NOIA. Consistent with the Benefits Plan principle of collaboration, EMCP is committed to establishing an open dialogue with the supply community, using such initiatives as:

- A Project website that provides timely communication of Project opportunities;
- Supplier information sessions and workshops, and participation in industry conferences and workshops;
- Site visits to assess local infrastructure and to review prospective contractors and suppliers' operating procedures and capabilities;
- Co-locating key contractor procurement personnel in St. John's to facilitate opportunities for Newfoundland and Labrador companies to participate in bidding for sub-contracts, material and equipment purchasing;
- Managing and coordinating all procurement from the St. John's FEED/EPC offices, including procurement executed in FEED/EPC offices outside of Newfoundland and Labrador; and
- Facilitating the participation of companies owned and operated by members of designated groups.

## Procurement and Contracting

EMCP will seek to ensure that companies in the Province and other parts of Canada have a full and fair opportunity to compete for Hebron work, and that first consideration is given to goods manufactured in, and services provided from within, the Province where they are competitive in terms of fair market price, quality and delivery.

EMCP views the procurement process and associated responsibilities as extending from the development of the procurement strategy, through the sourcing process, contract initiation and implementation and performance management, to contract close-out or renewal. Benefits, including diversity, will be an important consideration at each stage. EMCP will maintain a regular liaison with the C-NLOPB, and fulfill all reporting requirements, in order to make sure that its procurement activities address the requirements of the regulations.

## Employment and Training

EMCP will employ a long term, comprehensive human resources planning process in addressing its employment and training requirements. This will include the following considerations:

• Supply and Demand Analysis;

- Communication and Consultation;
- Skills Development;
- Recruitment and Selection Processes; and
- Career Development and Competency Assessment.

The above are designed to provide Newfoundlanders and Labradorians with first consideration for employment opportunities available with the Hebron Project.

#### Research and Development

In order to pursue the identification, implementation and completion of successful and effective R&D, including education and training, initiatives, EMCP will establish:

- A process for identifying and raising awareness of potential R&D projects, and give priority to undertaking R&D in the Province, where effective and competitive;
- A process for the submission and review of R&D proposals; and
- Priority areas supporting its overall R&D strategy.

#### Diversity

Valuing diversity is a business imperative for ExxonMobil and provides an opportunity to access an expanded labour force and supplier pool. The Hebron Diversity Plan describes how EMCP will encourage women, Aboriginal peoples, visible minorities, and persons with disabilities to participate in the Hebron Project.

#### Capacity Assessment

This section describes Hebron procurement and labour requirements and provides a capacity assessment for the construction and operations phases.

## Consultation, Monitoring and Reporting

Benefits Plan consultation focused on Newfoundland and Labrador, and more specifically on those regions most likely to have involvement with Hebron. However, EMCP engaged with groups representing other parts of Canada. EMCP sees continued stakeholder consultation and collaboration as key to delivering benefits over the life of the Project.

The consultation involved a mixture of topic-specific and multi-topic events. In addition, EMCP representatives participated in a wide range of conferences, seminars, luncheons and other public events, and various formal and informal meetings, with benefits being a common topic or consideration.

The main benefits messages heard were very positive. Participant groups indicated that they represent a strong and experienced base of benefits and economic development-related expertise and capacity, and are willing and able to collaborate with EMCP in the delivery of Hebron benefits. It was generally recognized that sustainable economic development will only result if the Project, and the companies and individuals working on it, are competitive. Stakeholders also made clear that the interest in 'local' benefits operates at a range of different geographic scales, including the communities hosting or adjacent to Project activities.

Monitoring is a key element in EMCP's management process, providing information that is used to further refine and develop Project benefits processes, policies, guidelines and initiatives so as to ensure they are appropriate and effective throughout the life of the Project. Monitoring and reporting of procurement decisions, employment levels and expenditures are also required to demonstrate to the C-NLOPB that the principles of the Benefits Plan are being followed and its commitments are being met. This includes the monitoring of activities by both EMCP and its contractors and suppliers.

EMCP's approach to monitoring and reporting is based on the Benefits Plan Guidelines, taking into account the Hebron Benefits Agreement requirements, the current practices of the operators of existing projects in the Newfoundland and Labrador offshore, the current benefits context and priorities in the Province, and ExxonMobil practice and experience in other jurisdictions.

# **Table of Contents**

EXECUTI	VE SUMMAR	Υ		i
1.0	INTRODUCTION			
1.1	Benefits Pla	n Scope an	d Drivers	1-1
1.2	Benefits Co	ntext		1-2
1.3	The Hebron Project1-3			
	1.3.1	Project Des	cription	1-3
	1.3.2	Preliminary	Project Schedule	1-4
1.4	Methodolog	y		1-5
1.5	Benefits Pla	Benefits Plan Structure1-6		
2.0	STATUTORY AND CONTRACTUAL REQUIREMENTS			
2.1	Introduction2-1			
2.2	Atlantic Accord			2-1
2.3	Hebron Ben	efits Aareer	nent	
3.0	BENEFITS APPROACH, PRINCIPLES, POLICIES, GUIDELINES AND			
	PROCEDURES			3-1
3.1	Introduction	۱		3-1
3.2	Approach a	broach and Principles		
3.3	Policies, Guidelines and Procedures3			3-4
	3.3.1	Project Mar	nagement	3-4
		3.3.1.1	Approach	3-4
		3.3.1.2	Project Office	3-6
		3.3.1.3	Engineering Procurement and Construction	3-7
		3.3.1.4	Managing Team Continuity and Transition	3-8
		3.3.1.5	Operations Organization Planning	3-8
		3.3.1.6	Benefits Management	3-9
		3.3.1.7	Management Systems and Procedures	3-11
	3.3.2	Supplier De	velopment	3-11
		3.3.2.1	Communication with Supply Community	3-12
		3.3.2.2	Identification of Supply Gaps and New Opportunities	3-14
		3.3.2.3	Technology Transfer	3-16
	3.3.3	Procuremen	nt and Contracting	3-18
		3.3.3.1	Procurement Process	3-20
	3.3.4	Employmen	t and Training	3-23
		3.3.4.1	Early Identification of Staffing Demands and Supply	
		3.3.4.2	Communication and Consultation	
		3.3.4.3	Skills Development through Community Investments	3-25
		3.3.4.4	Recruitment and Selection of Qualified Candidates	3-27
		3.3.4.5	Career Development and Competency Assessments	3-28
		3.3.4.6	Trans-boundary Crewing	

	3.3.5	Research	and Development	3-29
	3.3.6	Diversity		3-31
4.0	CAPACIT	Y ASSESSN	IENT	4-1
4.1	Introduct	ion		4-1
4.2	Construc	Construction Phase		
	4.2.1	Goods ar	nd Services Requirements	4-1
		4.2.1.1	GBS Concrete Structure	4-2
		4.2.1.2	Topsides	4-3
		4.2.1.3	Offshore Loading System	4-4
	4.2.2	Goods ar	nd Services Capacity	4-4
		4.2.2.1	Assessment	4-7
	4.2.3	Construc	tion and Fabrication Requirements	4-8
	4.2.4	Construc	tion and Fabrication Capacity	4-8
		4.2.4.1	Newfoundland and Labrador Major Fabrication Sites	4-9
		4.2.4.2	Newfoundland and Labrador Mid-Size Yards	4-10
		4.2.4.3	Other Newfoundland and Labrador Yards, Docks, Laydown Areas, and Fabrication Contractors	
		4.2.4.4	Other Large East Coast Fabrication Sites	4-15
		4.2.4.5	Assessment	4-17
	4.2.5	Labour R	equirements	4-18
	4.2.6	Labour C	apacity	4-20
		4.2.6.1	Assessment	4-20
4.3	Operatior	ns Phase		4-23
	4.3.1	Goods ar	nd Services Requirements	4-23
		4.3.1.1	Development Drilling	4-23
		4.3.1.2	Offshore Operations and Production	4-24
		4.3.1.3	Logistics	4-25
	4.3.2	Goods ar	nd Services Capacity	4-25
		4.3.2.1	Assessment	4-25
	4.3.3	Labour R	equirements	
	4.3.4	Labour C	apacity	4-26
		4.3.4.1	Assessment	
4.4	Content E	Estimate		4-27
4.5	Subsea P	roduction a	nd Injection Systems	4-27
	4.5.1	Overview		4-27
	4.5.2	Capacity	Capacity Assessment	
		4.5.2.1	Pipelines, Umbilical & Subsea Equipment Installation	4-28
		4.5.2.2	Subsea Equipment Fabrication and Commissioning	4-28
		4.5.2.3	Excavated Drill Centre Dredging	4-28
		4.5.2.4	Drilling Services	4-29
5.0	CONSUL	TATION, MO	NITORING AND REPORTING	5-1
5.1	Stakehold	der Consulta	ition	5-1
5.2	Monitorin	Monitoring and Reporting5-4		

	5.2.1	Pre-development Monitoring and Reporting	. 5-5
	5.2.2	Project Monitoring and Reporting	. 5-5
	5.2.3	Cascading Obligations to Contractors, Sub-Contractors and Suppliers	. 5-6
	5.2.4	Facilitating the C-NLOPB Contract Review Process	. 5-6
6.0	REFERENC	ES	. 6-1
6.1	Literature		. 6-1
6.2	Internet Site	9S	. 6-1
7.0	LIST OF AC	RONYMS	.7-1

# List of Figures

Figure 1.3.1-1: Hebron Project Location	1-3
Figure 1.3.1-2: Hebron Platform Schematic	1-4
Figure 1.3.2-1: Hebron Project Development Schedule	1-5
Figure 1.3.2-2: Hebron Project Timeline	1-5
Figure 3.3.1-1: Hebron Department Organization	3-6
Figure 3.3.1-2: Local Project Team	3-7
Figure 3.3.1-3: Departmental Benefits Interactions	3-10
Figure 4.2.1-1: Hebron Topsides Layout	4-4

## List of Tables

Table 3.3.1-1: Project Management Initiatives	3-11
Table 3.3.2-1: Supplier Development Initiatives	3-17
Table 3.3.3-1: Procurement and Contracting Initiatives	3-22
Table 3.3.4-1: Staffing Demands and Supply Initiatives	3-25
Table 3.3.4-2: Skills Development Initiatives	3-27
Table 3.3.4-3: Recruitment Initiatives	3-28
Table 3.3.4-4: Career Development Initiatives	3-29
Table 3.3.5-1: Research and Development Initiatives	3-31
Table 4.2.1-1: GBS Notional Design Metrics	4-3
Table 4.2.5-1: Estimated Hours (000's) in Newfoundland and Labrador by Trade Designation	4-19
Table 4.2.6-1: Hebron Labour Capacity Analysis	4-22
Table 5.2.4-1: Monitoring and Reporting Initiatives	5-7

## List of Appendices

APPENDIX A	Preferred and Alternative Production and Export Systems
APPENDIX B	Diversity Plan
APPENDIX C	Estimated Person-Hours by Detailed Trades Designation
APPENDIX D	Consolidated Benefits Initiatives List

# 1.0 INTRODUCTION

## 1.1 Benefits Plan Scope and Drivers

This Canada-Newfoundland and Labrador Benefits Plan ("Plan") for the Hebron Project has been prepared in response to the requirements of section 45 of the *Canada-Newfoundland Atlantic Accord Implementation Act* and the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act.* In preparing the Plan, ExxonMobil Canada Properties (EMCP) was also guided by the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) Benefits Plan Guidelines. The Plan also addresses the appropriate requirements of the Benefits Agreement reached between EMCP, the Hebron co-venturers and the Government of Newfoundland and Labrador.

While the above regulatory and contractual requirements and Guidelines have shaped this Benefits Plan, its content is also driven by ExxonMobil's conviction that making the most of energy resources goes beyond their production. It is an ExxonMobil objective to develop industry and labour capacity, and create and deliver sustainable strategic benefits to host jurisdictions down to the community level.

In the case of Hebron, participation in the further development of diverse supply, service, labour, education, training and research and development (R&D) capacity and capabilities in the Province of Newfoundland and Labrador ("Province"), in close proximity to Hebron and other EMCP East Coast assets, facilitates local operations. The contribution of Project-related sustainable provincial economic development is also consistent with both EMCP interest in being a good corporate citizen and the personal interests of the Hebron team members.

The Benefits Plan covers the construction and operations phases of the Project, which is currently estimated to have a total duration of over 30 years. It is certain that, over this time span, there will be industry-wide developments in such areas as technologies, business practices and regulations, and in the Canadian and Newfoundland and Labrador economies, industrial capacities, labour markets and public policy drivers. Accordingly, the Plan is a high-level document, designed to address the above-noted requirements over the entire life of the Project by describing benefits approaches and mechanisms (including mechanisms whereby more detailed benefits initiatives will be identified, approved and implemented) that have the flexibility to respond to change.

However, as required by the Benefits Plan Guidelines, the Plan also includes detailed information on current Project industrial and labour requirement estimates and the current industrial and labour capacity. It also provides examples illustrative of the types of benefits initiatives that will be undertaken.

This introductory section describes the benefits context within which the Project will be developed, and outlines the current development concept and a preliminary Project schedule. These are followed by a short description of the

stakeholder consultation process, which played an important role in shaping this Plan, and an overview of the structure of the rest of the Plan.

#### **1.2 Benefits Context**

Provincial and national industrial benefits considerations have been important in Newfoundland and Labrador since the late 1970s. Early provincial and federal benefits interests and requirements respecting offshore petroleum activity were reconciled and consolidated with the Atlantic Accord and the establishment of the C-NLOPB in the mid-1980s. Since that time, the petroleum industry has built on its early exploration in Newfoundland and Labrador, moving on to development and, since 1997, production activity.

The result has been the progressive development of a Newfoundland and Labrador offshore petroleum industry, with three producing oilfields. This has seen a growth in:

- The scale and scope of offshore petroleum-related activity, the number of oil companies involved, and the importance of the industry to the provincial economy and treasury;
- The infrastructure required to support the industry in both its construction and operation activity;
- Industry-relevant education, training and R&D facilities and capabilities;
- The pool of Newfoundland and Labrador residents with oil industry relevant skills and experience;
- The number of Newfoundlanders and Labradorians working in oil companies, including in increasingly senior technical and management positions;
- The size and sophistication of the supply community, as reflected in the membership of the Newfoundland and Labrador Oil and Gas Industries Association (NOIA), including the development of world class technical and business capabilities; and
- The participation of Newfoundland and Labrador residents and companies in the global oil industry.

There has also been a steady refinement of the benefits approaches, systems and processes being used, including in the area of regulation. This has been accompanied by the evolution of a benefits culture and an industrial benefits 'community of practice' in Newfoundland and Labrador. As with the development of a safety culture, a benefits culture sees benefits considerations being inherent to business processes and practices, rather than a separate consideration. In respect to benefits practice, other jurisdictions now often draw on experience, expertise and examples from the Province when investigating how best they can benefit from petroleum and other resource development activity.

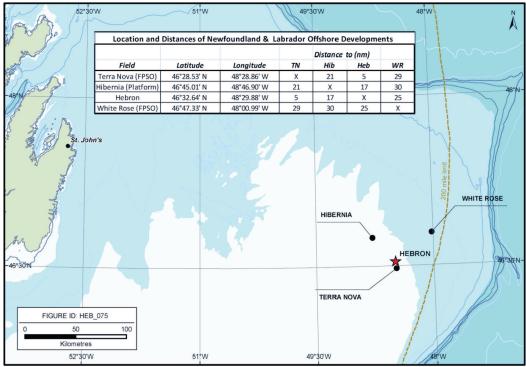
This Hebron Benefits Plan builds on, and has been developed with the goal of further advancing, the development of the industry in the Province, so that the

Project delivers long-term value to shareholders and to Newfoundlanders, Labradorians and Canadians. This includes contributing to the Province's reputation as being a source of supply, service, construction, fabrication, labour, education, training and R&D capabilities and expertise that are globally competitive in terms of safety performance, price, quality and delivery.

#### 1.3 The Hebron Project

#### 1.3.1 Project Description

Hebron consists of multiple oil reservoirs with an estimated 600-1100 million barrels of recoverable resources. The resources were first discovered in 1981, and are located in the Jeanne d'Arc Basin 350 kilometres southeast of St. John's, Newfoundland and Labrador (Figure 1.3.1-1). It is approximately 9 kilometres north of the Terra Nova project, 32 kilometres southeast of the Hibernia project, and 46 kilometres from the White Rose project. The water depth at Hebron is approximately 92 metres.



Note: The distances in the inset table above are in nautical miles (1 nm = 1.85 km)

Figure 1.3.1-1: Hebron Project Location

EMCP became the operator of the Project in 2008. The Hebron co-venturers are: ExxonMobil Canada Properties, Chevron Canada Resources, Petro-Canada Hebron Partnership through its managing partner Suncor Energy Inc., Statoil Canada Ltd. and Nalcor Energy - Oil and Gas Inc.

The Hebron Project includes a combination of works and activities, onshore and offshore, necessary for the construction and operation of an offshore oil production system and associated facilities to allow the exploitation of the hydrocarbon resource accumulation. The primary drilling and production facilities

will sit on top of a stand-alone concrete gravity base structure (GBS) (Figure 1.3.1-2). The GBS is a reinforced concrete structure designed to withstand sea ice, icebergs, and meteorological and oceanographic conditions at the offshore Hebron Project Area. It will be designed to store approximately 190,000 m3 (1.2 Mbbl) of crude oil and be outfitted for tie-ins from subsea wells that will tap the areas beyond the reach of the platform drilling rig.

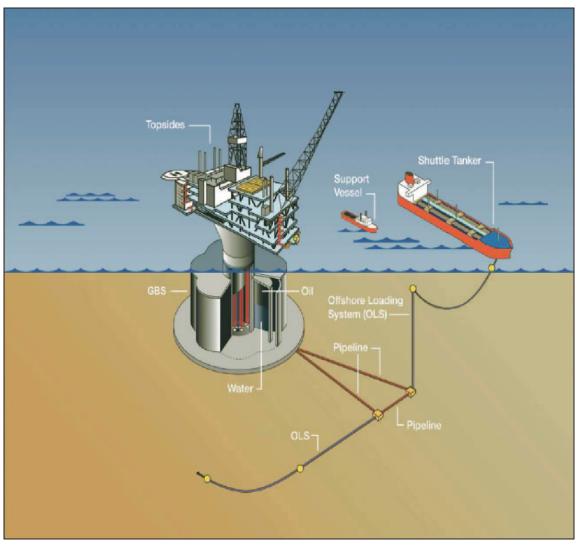


Figure 1.3.1-2: Hebron Platform Schematic

A full description of the Project is provided in the Hebron Development Plan. A review of the preferred and alternative production and export systems is provided in Appendix A.

## 1.3.2 Preliminary Project Schedule

The preliminary timeline with major milestones for the construction and installation of the Hebron Platform is provided in Figure 1.3.2-1. A notional schedule for a subsea tie-back development is also described in the Hebron Development Plan.

#### Introduction

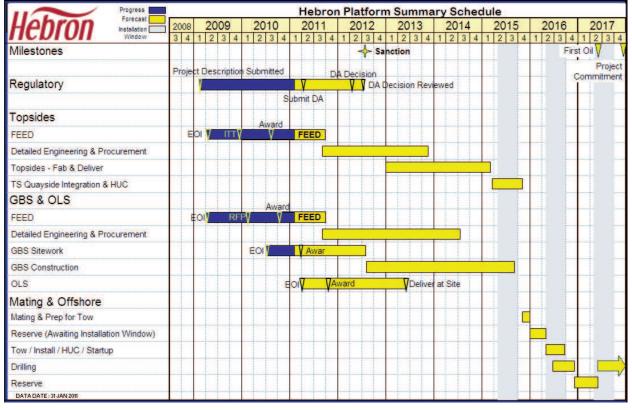


Figure 1.3.2-1: Hebron Platform Development Schedule

However, as was noted above (Section 1.1), the Project is currently expected to have a total duration of over 30 years (Figure 1.3.2-2) and this Benefits Plan covers the entire period.



Figure 1.3.2-2: Hebron Project Timeline

#### 1.4 Methodology

The Plan was developed based on the regulatory and contractual requirements, the C-NLOPB Benefits Plan Guidelines, past offshore development project benefits plans, and a review of the literature on the Newfoundland and Labrador economy and economic and industrial development, including studies undertaken as input to the Capacity Assessment (Section 4.0). EMCP also

undertook research into industry and government initiatives in other jurisdictions, as part of its exploration of ways to increase opportunities for companies located in rural areas of the Province so as to increase the capacity of Newfoundland and Labrador.

The Plan was also developed with input from within ExxonMobil and from the Hebron co-venturers and other operators. A comprehensive external consultation provided important input and feedback, and involved meetings with: the C-NLOPB; governments of Newfoundland and Labrador, and Canada; NOIA; other industry, business and R&D groups; training and education institutions; municipal governments; economic development and planning groups; and special interest groups and community groups (see Section 5.1).

This consultation focused on Newfoundland and Labrador, and especially those regions most likely to have direct involvements with the Project, although groups in other regions and provinces were consulted. Consultations were held early and frequently during Project planning, allowing the Project team to gather ideas and quantitative and qualitative information that has been of great value for preparing this Plan. Consistent with the Hebron Benefits Principles (see Section 3.2), such ongoing consultation and related collaboration are seen as key to the delivery of Canada and Newfoundland and Labrador benefits over the life of the Project.

The main benefits messages heard during these external consultations were very positive. Participant groups indicated that they represent a strong and experienced base of benefits and economic development-related expertise and capacity, and are willing and able to collaborate with EMCP in the delivery of Hebron benefits. It was generally recognized that sustainable economic development will only result if the Project, and the companies and individuals working on it, are competitive. Stakeholders also made clear that the interest in 'local' benefits operates at a range of different geographic scales, including the communities hosting or adjacent to Project activities.

The Capacity Assessment was undertaken based on:

- Assessments of the Canadian, and in particular Newfoundland and Labrador, industrial and labour capacity, including site visits, reviews of websites, and analyses of labour market information, and takes into account the requirements of other projects; and
- Preliminary Project design parameters and requirements estimates. These will change as the design evolves.

## 1.5 Benefits Plan Structure

Consistent with the C-NLOPB Benefits Guidelines, the rest of the Hebron Benefits Plan is organized as follows:

- Statutory and Contractual Requirements: This section provides background to the requirements for a Canada-Newfoundland and Labrador Benefits Plan. It references the Benefits Agreement that EMCP and the coventurers have entered into with the Government of Newfoundland and Labrador regarding the Project.
- ♦ 3.0 Benefits Approaches, Principles, Policies, Guidelines and Procedures: The section describes the approaches and principles pertaining to local benefits that underlie the Plan, and the policies, guidelines and procedures through which EMCP will implement these principles.
- 4.0 Capacity Assessment: This section assesses the potential for Canadian workers, facilities and companies, and in particular Newfoundland and Labrador workers, facilities and companies, to participate in Project activities.
- 5.0 Consultation, Monitoring and Reporting: This section details the consultation initiatives undertaken in preparing this Plan, and EMCP's approach to and procedures respecting benefits consultation, monitoring and reporting over the life of the Project.

In addition, the Project Diversity Plan and other materials are provided in appendices.

# 2.0 STATUTORY AND CONTRACTUAL REQUIREMENTS

#### 2.1 Introduction

This section describes the statutory requirement for a Canada-Newfoundland and Labrador Benefits Plan. It also references the Benefits Agreement that EMCP and the Hebron co-venturers have entered into with the Government of Newfoundland and Labrador.

## 2.2 Atlantic Accord

The C-NLOPB is responsible for management of the petroleum resources in the Newfoundland and Labrador offshore area, pursuant to the *Canada-Newfoundland Atlantic Accord Implementation Act* and the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act* ("the Acts"). The Acts establish the requirements that proponents of offshore development projects must fulfill in order to obtain approval of a Development Application. The Development Application is to be comprised of a Canada-Newfoundland and Labrador Benefits Plan, and a Development Plan with ancillary documents.

Before the C-NLOPB may approve a Development Application, it must first approve a Canada-Newfoundland and Labrador Benefits Plan. As outlined in section 45 of the Accord Acts, specific provisions of the Benefits Plan must include plans for:

- The employment of Canadians and, in particular, members of the labour force of the Province of Newfoundland and Labrador;
- Providing manufacturers, consultants, contractors and suppliers and service companies in the Province, and other parts of Canada, with full and fair opportunity to participate on a competitive basis in the supply of goods and services used in any proposed work or activity referenced in the Benefits Plan;
- The establishment of an office in the Province where appropriate levels of decision-making are to take place;
- Expenditures for R&D, including education and training, to be carried out in the Province;
- Consistent with the Canadian Charter of Rights and Freedoms, providing individuals resident in the Province with first consideration for training and employment in the work program for which the Benefits Plan was submitted; and
- Providing first consideration to services provided from within the Province and to goods manufactured in the Province, where those services and goods are competitive in terms of fair market price, quality and delivery.

#### Statutory and Contractual Requirements

Section 45 also indicates that the Plan may include plans for ensuring that designated individuals or groups have access to training, employment and business opportunities.

In order to assist proponents in complying with the requirements for a Benefits Plan for a development, the Board has prepared its 2006 Benefits Plan Guidelines.

EMCP has prepared this Plan in accordance with the requirements of section 45 of the Acts and the Benefits Plan Guidelines, as well as consultation with the C-NLOPB.

## 2.3 Hebron Benefits Agreement

The Benefits Plan also takes into account the Hebron Benefits Agreement (see <u>http://hebronproject.com/media/219/finalexecutedbenefits.pdf</u>) signed between the Project co-venturers and the Government of Newfoundland and Labrador in August 2008. The Agreement requires that certain expenditures and activities occur in the Province, and specifies plans, processes and mechanisms for delivering these benefits. This Plan will ensure that the Project meets the commitments in the Agreement.

# 3.0 BENEFITS APPROACH, PRINCIPLES, POLICIES, GUIDELINES AND PROCEDURES

## 3.1 Introduction

This section describes EMCP's approach and principles respecting Canada-Newfoundland and Labrador benefits, and the policies, guidelines and procedures through which it will implement these principles. In those sections where EMCP's approach and principles translate into specific initiatives, a summary table is provided. These tables are presented in consolidated form in Appendix D.

## 3.2 Approach and Principles

As was noted in Section 1.1, EMCP's approach to Canada-Newfoundland and Labrador benefits is driven by ExxonMobil's corporate commitment to developing industrial and human capacity, and creating and delivering sustainable strategic benefits to host nations down to the community level.

Based on this commitment, and the local benefits context (Section 1.2) and input from the stakeholder consultation (Section 5.1), EMCP has established the following Benefits Principles which underlie this Plan and will govern all of its benefits-related activities:

Meeting local benefits commitments while maintaining the highest levels of safety, environmental performance, efficiency and integrity of our operations;

Selecting contractors and suppliers that will work diligently with us to deliver benefits to the people of the Province;

Promoting the development of local skills and industry capability that leaves a lasting legacy for the communities in which we operate and for the Province;

Delivering execution certainty so that the Project delivers best-in-class return on investment for stakeholders, including the Province of Newfoundland and Labrador; and

Working collaboratively with industry, government, academic and training institutions, community and other stakeholder groups for the effective delivery of benefits.

EMCP will seek to have these Benefits Principles implemented through its Hebron construction and operations phase activities. In doing so, it will draw on and further develop a benefits culture within its organization, and within all Hebron contracting companies. A benefits culture is the product of individual and group values, attitudes, perceptions, competencies and patterns of behaviour that determine an organization's commitment to, and the style and proficiency in, delivering industrial benefits.

Using approaches similar to those used in developing a safety culture, this will be driven by senior management within the EMCP team and main contracting

companies, and see benefits considerations, including diversity considerations, being inherent to business processes and practices, rather than a separate consideration. Specifically:

- Senior management stresses the importance of Benefits Principles, commitments and considerations in internal meetings and external presentations;
- Discussion of the Plan is included in employee induction and orientation processes where applicable to the role;
- Benefits is a consideration in contractor performance management;
- Benefits is a standard item in internal stewardship activities such as reports and meetings; and
- The importance of benefits commitments is stressed in meetings with contractors and suppliers.

The focus will be on delivering sustainable benefits that can be leveraged for local, national and export purposes. This includes:

- Providing training and employment experience that are of benefit to Hebron and subsequently transferable to other projects and industries;
- Developing business, education, training and R&D capabilities and experience which will subsequently be applicable on other projects and in other industries and markets; and
- Building Project-related infrastructure that can be maintained and utilized beyond the end of Project-related use.

EMCP's approach will include endeavouring to be innovative in identifying existing and emerging benefits opportunities. Some of these opportunities will be generated by EMCP and its contractors and suppliers, and others will emerge from stakeholder consultation. Examples of such innovation under current consideration include seeking to deliver sustainable benefits through:

- Promoting access to Hebron benefits opportunities in rural Newfoundland and Labrador;
- Industrial tourism initiatives, to both educate about the Project and the Province's offshore petroleum industry, and contribute to local tourism; and
- Further developing provincial capabilities related to the assessment, monitoring and management of the effects of oil and gas and other resource development activity on people and communities in rural, peripheral and Arctic areas;
- Bringing together industrial benefits practitioners in industry, government and academe as a "community of practice" to discuss topics of mutual interest and identify and promote good practice, effectiveness and efficiency.

Benefits Approach, Principles, Policies, Guidelines and Procedures

In November 2009 Hebron convened a workshop to discuss the motivations of Newfoundland and Labrador workers who commute to Alberta. The participants included representatives of the proponents of offshore oil and other major construction projects, contracting companies, government departments, training institutions and academe.

This approach will assist economic sustainability by having Project activities and initiatives contribute to the Province being seen as a source of supply, service, construction, fabrication, labour, education, training and R&D capabilities and expertise that are globally competitive in terms of safety performance, price, quality and delivery. This requires that the Project fully satisfy the Benefits Principles relating to maintaining the highest levels of safety, efficiency (including through synergies with other projects and operators) and integrity and delivering execution certainty, and working collaboratively with industry, government, academic and training institutions, community and other stakeholder groups to benefit from their expertise and capabilities. This will lead to the effective delivery of benefits and assist the Province in both attracting investment in future projects in Newfoundland and Labrador and competing for work on projects elsewhere in Canada and internationally.

The above approach and principles have guided the development of the specific Canada-Newfoundland and Labrador benefits policies, guidelines and procedures described in the rest of this section.



Let me finish by reiterating our priorities. First, to achieve the highest levels of safety, security, health and environmental performance, without which nothing else will be very meaningful. Second, to meet our Benefits Agreement commitments to the people of Newfoundland and Labrador, not just because we inked an agreement that says we will, but also because it is the right thing to do for our community. Third, to enhance Newfoundland and Labrador's fabrication capability to provide capital efficiency and deliver execution certainty. Finally, to build sustainable relationships with the community that we are a part of and where we live and work... We are not here to build a project over the next six years and leave; we are also here for the thirty or more years, so this is our province and our community and this is our own backyard.

> Hareesh Pillai, NOIA Annual Conference, June 2010 Photo Credit: Paul Daly

#### Benefits Approach, Principles, Policies, Guidelines and Procedures

#### 3.3 **Policies, Guidelines and Procedures**

This section outlines the policies, guidelines and procedures EMCP will use to meet the Project benefits commitments. The policies, guidelines and procedures are discussed under the following headings:

- Project Management;
- Supplier Development;
- Procurement and Contracting;
- Employment and Training;
- Research and Development; and
- Diversity.

A more detailed description of policies, guidelines and procedures is provided in the Project Benefits Management Systems manual.

#### 3.3.1 **Project Management**

#### 3.3.1.1 Approach

EMCP's Hebron project management team will be staffed by highly capable and motivated people, supported by ExxonMobil's global organization. The team will promote a benefits culture and exhibit relentless discipline in executing the Project, the Plan and its Benefits Principles, and ensure EMCP meets all regulatory requirements.

Delivering Project benefits will be facilitated through the successful development, selection and involvement of Project contractors and suppliers, which will be expected to have a similarly heightened level of commitment to Project benefits. It is for this reason that EMCP has established as one of the Benefits Principles that underlie this Plan and govern all of its benefits-related activities:

#### Selecting contractors and suppliers that will work diligently with us to deliver benefits to the people of the Province.

Success in working with the Project contractors and suppliers will also be facilitated by the reimbursable commercial terms of key contracts, providing EMCP greater flexibility to influence strategy, drive implementation, and adjust as issues emerge.

Success in delivering benefits will require leveraging of existing business and technical capabilities in the Province through the use of ExxonMobil's global approaches, processes and resources. It is anticipated that this will result in a transfer of understanding and expertise to the provincial project management and contractor community, thereby further building local capabilities.

EMCP will apply ExxonMobil's global project management practices in executing Hebron, driven by a concern for:

- Safety, health and environmental performance. The first priority of ExxonMobil is always safety, followed closely by operating in a manner that protects the environment and public health.
- Disciplined project management systems. ExxonMobil implements disciplined project management systems so that projects advance in a systematic way that delivers efficiencies and progress in a timely and predictable manner. Such execution certainty is critical to success.
- The application of technology. The disciplined application of innovative technology is another key component of success in ExxonMobil projects around the world.
- The promotion of local content and capabilities. Placing a strong emphasis on promoting local content and capabilities benefits ExxonMobil projects, strengthening the oil industry and providing benefits to the communities in which ExxonMobil operates.
- Community support and involvement. ExxonMobil believes that it is important to be an active corporate citizen in the areas where it operates. ExxonMobil has a long and distinguished history of enhancing local infrastructure and improving the quality of life in communities in which it operates.
- Meeting regulatory, contractual and other commitments. A primary ExxonMobil objective is to meet the project commitments made to host governments and in operating agreements.

EMCP's highest priority is to achieve a workplace environment where 'Nobody Gets Hurt' - aspiring for no injury of any kind. ExxonMobil is an industry leader in safety performance and knows that this is challenging but possible. Key to achieving 'Nobody Gets Hurt' is heightened attention to intervention by every person at a work site – approaching each other in a caring manner to prevent an injury or eliminate a hazard. EMCP senior management will back this up with personal leadership, supported by resources and tools, and work with industry, the labour unions and other stakeholders to seek to create a lasting legacy of a culture of safe work practices.

We cannot afford a slow learning curve... where people get hurt along the way. We want nobody getting hurt right from day one. These are not mere words on a page: we... my project team and I... will back this up with personal leadership supported by resources and tools and work with industry, the labour unions and other stakeholders, to create a lasting legacy of a culture of safe work practices.

Hareesh Pillai, NOIA Annual Conference, June 2010

## 3.3.1.2 Project Office

EMCP formally opened a business office for the Project in St. John's in April 2009. This office has the appropriate levels of decision-making to manage the Project. The functions represented in the office expanded rapidly after it opened and include:

- Project Management;
- Business Services, including Contracting, Procurement and Project Controls;
- GBS Management;
- Technical Management, including Benefits;
- Operations;
- Drilling and Completions;
- Safety, Security, Health and Environment and Regulatory Affairs;
- Controllers;
- Quality Assurance/Quality Control;
- Public Affairs; and
- Human Resources.

The Senior Project Manager has overall responsibility for the Project, leads the Project management team, and chairs a Management Committee comprised of EMCP and co-venturer representatives. The Hebron departmental organization at the time of writing, including the reporting relationship for benefits, is shown in Figure 3.3.1-1.

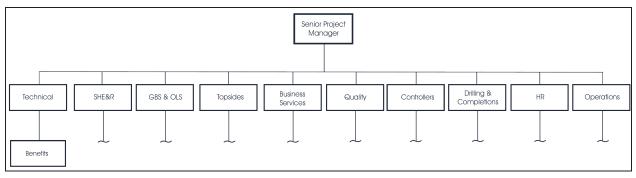


Figure 3.3.1-1: Hebron Department Organization

The Project will be managed by a strong multi-functional team, many of whom are Newfoundlanders and Labradorians with East Coast major project experience.

#### Benefits Approach, Principles, Policies, Guidelines and Procedures



Figure 3.3.1-2: Local Project Team

It takes talented people to make any project happen, and ours is no different. Many of those are increasingly situated here in St John's and more importantly, they are Newfoundlanders. I'm particularly proud to say that... half of my direct management are Newfoundlanders.... In addition, our... Diversity, Regulatory, Environmental, Benefits, Procurement, Labour Relations and Public Affairs Leads are all Newfoundlanders.

Hareesh Pillai, NOIA Annual Conference, June 2010

EMCP and its main Project engineering, procurement and construction contractors and suppliers will establish a construction phase contracts and procurement office in St. John's, as part of the co-location of Project Management and FEED/EPC contractor personnel, to coordinate and manage their activities. This office will be staffed by professionals knowledgeable of the Province's supply community. Having such decision-making and key management personnel in the Province will assist in focusing on the delivery of benefits commitments and facilitate a full understanding of local capabilities.

#### 3.3.1.3 Engineering Procurement and Construction

As is usual with large offshore oil and gas projects, contractors and suppliers will be relied upon for major components of the work, including FEED, detailed engineering, and the construction of the GBS and topsides. EMCP will oversee the contractors and suppliers and manage the interfaces among them to promote success in meeting Project requirements and full adherence to regulatory standards.

Hebron awarded its main FEED/EPC contracts in 2010, to Kiewit-Aker Contractors and WorleyParsons. Both have established St. John's offices and dedicated benefits teams, and they are completing Hebron Benefits Subplans containing specific, detailed and contractually-enforced commitments that build on this Hebron Benefits Plan and its principles.

A key Project consideration will be cascading all EMCP principles and commitments down the supply chain. To assist in this, the FEED/EPC contractors have identified a management contact accountable for benefits and other benefits staff. In this and other regards, scalability (i.e. providing a scale of effort or attention that is proportional to the size of the contract, activity or organization concerned) will be an important consideration in the processes used, with the levels of EMCP supervision and monitoring of benefits generally being correlated to the amount of work being undertaken by the contractor.

To assist main contractors in developing their processes, EMCP will:

- Hold initial meetings with representatives of the main contractors to introduce them to the Benefits Plan, its requirements and implementation;
- Provide guidance to main contractors so that their plans are developed and implemented in accordance with contract expectations; and
- Monitor and assess main contractors' progress in achieving their contract expectations, providing the opportunity for feedback and additional assistance and guidance as required.

## 3.3.1.4 Managing Team Continuity and Transition

Team continuity is an important element needed for execution certainty. A disciplined process will be followed to manage the transition of key personnel over the life of the Project. As with all projects of this nature, the Project organization structure will change over the life of the Project. Plans will be developed and implemented to manage the organizational aspects of key transitions into subsequent phases.

#### 3.3.1.5 Operations Organization Planning

Operations personnel are already working as a part of the Hebron team to develop operating philosophies and provide input on the design basis to deliver operations integrity of the Project.

The Project team will hand over the Project to the EMCP operations organization, based in the Province, for the operations phase. The operations organization will be designed, staffed and developed by the ExxonMobil Building the Production Organization group. The organization will be in place well in advance of the start of operations.

The organization, at that time, will include all the functions necessary for operations, including Drilling, Sub-Surface, Offshore Operations, Maintenance Support, Construction, Supply Chain, Safety Security Health and Environment, Logistics, Human Resources and Administration.

In developing its operations organization plan, EMCP will:

- Develop recruitment, and training and development plans;
- Include within the organization expertise in offshore heavy oil production;
- Review and assess existing global and Newfoundland and Labrador offshore operator organizations as potential models;
- Take into account lessons learned and best practices from global and East Coast offshore petroleum projects; and
- Explore synergies with the operators of other East Coast projects.

#### 3.3.1.6 Benefits Management

A Hebron Benefits Team will be responsible for overall management of benefits, with an emphasis on the coordination of benefits between EMCP and its contractors and suppliers. The Team will initially be comprised of the EMCP Benefits Manager who, as shown in Figure 3.3.1-1, reports to the Technical Manager and is supported by a Benefits Lead, Diversity Coordinator and benefits staff. The main Project contractors will have similar teams. The team will closely interface with other Project staff, for example in Procurement, Controllers, Public Affairs, Law, Human Resources (including on matters related to employment, training and diversity), and Technical and Operations teams (including on matters related to R&D, and engineering, construction and operations planning and execution).

The Benefits Team will be responsible for:

- Promulgating and promoting the Plan and a benefits culture within the Project organization;
- Developing and implementing internal communications and information procedures and compliance monitoring, auditing and reporting standards;
- Liaising on benefits matters with external stakeholders, including the C-NLOPB, government departments and agencies, co-venturers and other operators, NOIA, contractors and suppliers, academic and training institutions, interest and advocacy groups, and the general public; and
- Developing and implementing the information systems that support benefits activities.

#### Benefits Approach, Principles, Policies, Guidelines and Procedures

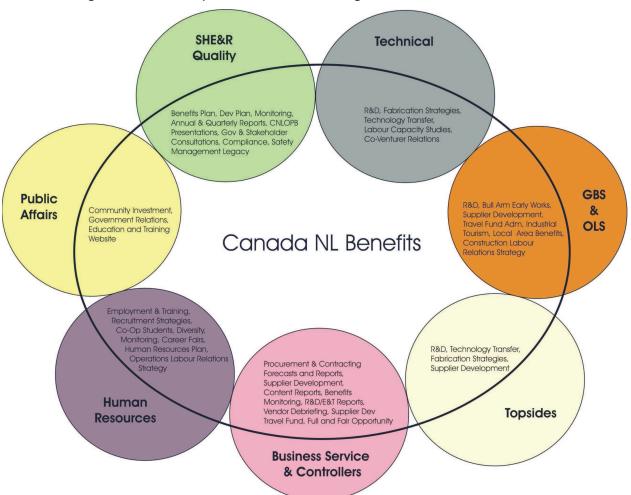


Figure 3.3.1-3 is an illustration of benefits activities and interactions at the time of writing and is not a representation of the organizational or functional structure.

Figure 3.3.1-3: Departmental Benefits Interactions

It is anticipated that the work of the Benefits Team will be facilitated by two Project initiatives that will help develop a benefits culture and appropriate benefits initiatives:

- Benefits Advisory Committee: Chaired by the Benefits Manager and comprised of a small number of local, national and international experts in economic development and benefits planning, this committee will review developments in their areas of expertise and discuss the implications for non-proprietary components of Project benefits planning.
- Benefits Community of Practice Initiative: This will see EMCP and especially its Benefits Team work with others to develop, implement and maintain a local group dedicated to building and promoting the local benefits 'community of practice.' This group will bring together benefits practitioners

Benefits Approach, Principles, Policies, Guidelines and Procedures

to discuss topics of mutual interest and identify and promote good practice, effectiveness and efficiency.

While Benefits Management is the responsibility of the Benefits Team, ultimate accountability lies with the Hebron Management Team.

#### 3.3.1.7 Management Systems and Procedures

A Benefits Management System will coordinate, and deliver adherence to, benefits commitments among the Project team and all contractor groups involved in the Project. It includes the processes, policies, guidelines, procedures and supporting systems that will be used to deliver this Plan. A management systems and procedures manual to ensure the coordination of, and adherence to, Canada-Newfoundland and Labrador benefits commitments among all clients and contractor groups involved in the project has been submitted to the C-NLOPB in conjunction with this Plan.

#### Table 3.3.1-1: Project Management Initiatives

Select contractors and suppliers that work diligently to deliver benefits to the people of the Province Staff Project office by professionals knowledgeable of the Province's supply community

Stan Project onice by professionals knowledgeable of the Province's supply community

Require FEED/EPC contractors to identify a management contact accountable for benefits, diversity, and other benefits staff

Develop and implement plans to manage the organizational aspects of key transitions into subsequent phases

Establish a Benefits Advisory Committee

Establish a Benefits Community of Practice

Prepare a Benefits Management System manual

#### 3.3.2 Supplier Development

Supplier development involves the investment of time, people and resources to develop companies such that they provide a competitive local industrial base. The past 30 years has seen great success in developing such a base in Newfoundland and Labrador (see Section 1.2), and this Plan will build on this, drawing on the Benefits Plan Guidelines, standard local practice and ExxonMobil corporate experience and guidance. It is also consistent with the principles that underlie this Plan and govern all of its benefits-related activities, specifically that of:

Promoting the development of local skills and industry capability that leaves a lasting legacy for the communities in which we operate and for the Province.

#### Benefits Approach, Principles, Policies, Guidelines and Procedures

Supplier development will be facilitated by EMCP's benefits culture and by cooperation and collaboration with the Province's oil and gas industry supply community, particularly through NOIA. EMCP has assigned a dedicated Supplier Development Coordinator for the Project.

The local supply community has considerable experience with industry requirements and with organizing and participating in the types of supplier development initiatives described below. During the construction phase, a dedicated Supplier Development Coordinator, reporting to the Business Services Manager, will be responsible for this task.

## 3.3.2.1 Communication with Supply Community

Consistent with the Benefits Plan principle of collaboration, EMCP is committed to an open dialogue with the supply community. This has been led, and will continue to be led, by the Project leadership team throughout the Project life, using such initiatives as:

- Participating in industry conferences and workshops, such as are organized regularly by NOIA and other industry associations;
- Establishing and maintaining a ٠ Project website (www.hebronproject.com) that provides timely communication of Project opportunities to the public and point of contact information for local procurement personnel. The continue site will to be promoted through print media and relevant industry associations and government departments;



- Providing early and detailed notification of Project requirements through the Project website, the NOIA Bulletin, BIDS (<u>www.bids.ca</u>) and other mechanisms;
- Holding a reverse trade show focused on EPC work;
- Co-locating the majority of EMCP and FEED/EPC contractor procurement personnel in St. John's, which will facilitate opportunities for Newfoundland and Labrador companies to participate in bidding for sub-contracts, and material and equipment purchasing;
- Offering EMCP and main contractor site visits to assess the condition and suitability of local infrastructure and to review prospective contractors and suppliers' operating procedures and workforce capabilities;

- Managing and coordinating procurement in the St. John's FEED/EPC offices. This includes procurement executed in FEED/EPC offices outside of Newfoundland and Labrador;
- Investigating the use of distance technologies to facilitate contact between Newfoundland and Labrador contractors and suppliers, and the main FEED/ EPC companies located outside the Province;
- Disseminating point of contact information for Project procurement personnel as soon as it becomes available;
- Providing debriefings for unsuccessful bidders, when so requested;
- Establishing and promoting a Project vendor registration database that will be used by EMCP and its contractors and suppliers. Where feasible, other local databases (such as the Eastern Supplier Development Alliance database) will be integrated into the Project database; and

At the time of writing, the Hebron vendor registration database includes information on over 300 companies.

- Establishing a fund for travel by contractors and suppliers headquartered in the Province to visit engineering offices located outside the Province, where such offices have been employed to conduct Project FEED and when necessary to support business relationships.
- Conducting supplier information sessions and workshops, such as have been held annually since 2009, including the Hebron Contractor Safety Forum and workshops with main contractors' procurement personnel to advise of Project requirements. These events will also explain EMCP's contracting strategy, size of work packages, EOIs and pre-qualification processes, and how the major work packages will be bid and evaluated;

The Newfoundland and Labrador Oil and Gas Industries Association says more than 350 people attended the Hebron Workshop in St. John's on Tuesday. "It's very important that people understand what's happening to position themselves and their businesses to take advantage of the opportunities," said Bob Cadigan, President and CEO of NOIA "…it's an important time for people to get in on the ground and understand what's happening." Information sessions will also be held in Clarenville, Marystown and Corner Brook.

The Telegram, April 8, 2009

In order to promote an awareness of opportunities among companies that are located in rural Newfoundland and Labrador and those owned or operated by members of designated groups, EMCP will investigate:

• The use of distance technologies to facilitate the access of rural businesses to Project and industry procurement-related events in St. John's; and

• Encouraging and facilitating collaboration between NOIA and other industry associations and rural and diverse business and supplier groups, such as the Eastern Suppliers Development Association and the Newfoundland and Labrador Organization of Women Entrepreneurs.

These initiatives have been identified through, and in response to, the Benefits Plan stakeholder consultation.

## 3.3.2.2 Identification of Supply Gaps and New Opportunities

EMCP has reviewed recent studies that have evaluated the Province's oil and gas fabrication, supply and service facilities and capabilities and attempted to identify gaps and opportunities. In addition, a 2005 study focused on the Project (Kellogg, Brown, Root and Strategic Concepts, Inc., 2005), and EMCP has undertaken subsequent research to document the extent to which Newfoundland and Labrador and other parts of Canada have the required labour and industrial capacity to participate in the Project. The results of this analysis are detailed in Section 4.0.

EMCP is committed to helping identify commercially sound opportunities for suppliers. EMCP will provide opportunities to local suppliers, help them understand what is required to be competitive (i.e. meeting safety requirements, cost, and quality) and assist them, as appropriate, to develop the required processes, particularly regarding safety.

EMCP sees the open dialogue with the supply community described above as an important means of identifying supply gaps and new opportunities. In addition, EMCP will engage with NOIA and other relevant industry stakeholders to identify barriers to local suppliers and to:

- Provide a detailed presentation on analyses of service and supply capability and capacity;
- Review the findings of the various supplier development initiatives, including those identified by the Industrial Opportunities section of the Atlantic Energy Roundtable; and
- Assist them in identifying opportunities presented by the Project.

There are opportunities for small and medium-sized companies to participate and that's probably the biggest focus that we have. The big companies know... how to get involved, so most of our focus is on the smaller companies.

Hareesh Pillai, speaking in Marystown; The Telegram, April 15, 2009

The stakeholder consultation undertaken to date has identified a number of examples of new potential opportunities for rural communities in the vicinity of Hebron construction activity, including:

- Industrial tourism. While the Hibernia project did provide some opportunities to tour the Bull Arm construction site, these were limited in scope and associated business and employment benefits when compared with some other projects. EMCP is investigating industrial tourism options respecting Bull Arm and other activity centres, including the viability of extending industrial tourism opportunities beyond the end of the construction stage.
- Camp services. The Bull Arm construction site accommodations facility will have as many residents as a small town. EMCP will work with its FEED/EPC contractors to study the full range of catering, retail, personal services, recreation, entertainment, daycare and other requirements of these workers and how best they may be met by businesses in the local area.

EMCP recognizes that this process of identifying supply gaps and new opportunities is iterative, and that there may be significant overlaps between these activities, technology transfer activities, R&D projects and education and training programs. For the Project to have a demonstrable impact on local capacity and content, it is important for all of these activities to be coordinated and linked. This will be the responsibility of the Project Benefits Team.

EMCP requests benefits-related information in its Benefits Plan questionnaire, which must be completed by companies responding to Requests for Proposals for Project-related work, for contracts valued greater than \$250,000. This information includes the bidder's planned policies, guidelines, procedures and initiatives to provide qualified manufacturers, consultants, contractors, suppliers and service companies in Newfoundland and Labrador and other parts of Canada with a full and fair opportunity to participate on a competitive basis in the supply of goods and services for the Project. Potential bidders are also asked to document their willingness and capability to utilize electronic bulletin boards to communicate procurement requirements and contract awards. Potential bidders are asked to detail any activities undertaken and/or in progress as well as future plans to develop Canadian and Newfoundland and Labrador suppliers.

- encourage the formation of relationships, licensing arrangements, education and training and R&D activities in support of identified opportunities;
- publish select bidders lists, allowing local companies to identify potential partners;
- encourage and support main contractors and their key procurement personnel in identifying technology transfer opportunities;
- continue to request in its Benefits Plan questionnaire details on policies, guidelines, procedures and initiatives to promote technology transfer; and
- engage and support local companies in the performance of Project-related R&D.

Hebron's main FEED/EPC contractors have developed transition plans that see Newfoundland and Labrador personnel participating in FEED activity in offices in Oslo and Houston. This will facilitate both the development of specialized local technical capabilities and the subsequent transfer of Project engineering activities to the Province. The joint venture between WorleyParsons and the local office of PSN is another example of a Project-driven technology transfer mechanism.

Benefits Plan

# 3.3.2.3 Technology Transfer

EMCP's principal role in the technology transfer process is to stimulate the activity that will result in opportunities being identified and acted upon; technology transfer will be an outcome of qualified suppliers gaining capabilities and being awarded work. Specifically, EMCP will:

3-16

Benefits Approach, Principles, Policies, Guidelines and Procedures

#### Benefits Approach, Principles, Policies, Guidelines and Procedures

Table 3.3.2-1:	Supplier	Development	Initiatives
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Review the findings of the various supplier development initiatives, including those
identified by the Industrial Opportunities section of the Atlantic Energy Roundtable
Assist local suppliers in identifying opportunities presented by the Project
vestigate industrial tourism options respecting Bull Arm and other activity centres,
cluding the viability of extending industrial tourism opportunities beyond the end of
e construction stage
ork with FEED/EPC contractors to study the full range of catering, retail, personal
ervices, recreation, entertainment, daycare and other requirements of camp workers
nd how best they may be met by businesses in the local area
sk potential bidders to document their willingness and capability to utilize electronic
Illetin boards to communicate procurement requirements and contract awards
eward activities of EMCP contractors and suppliers undertaken to develop Canadian
nd NL suppliers
ncourage the formation of joint ventures, licensing arrangements, education and
aining and R&D activities in support of identified opportunities
ublish bidders lists, allowing local companies to identify potential partners
ncourage and support main contractors and their key procurement personnel in
entifying technology transfer opportunities
ngage and support local companies in the performance of Project-related R&D

#### Benefits Approach, Principles, Policies, Guidelines and Procedures

#### 3.3.3 Procurement and Contracting

ExxonMobil's commitment to delivering sustainable strategic benefits to host jurisdictions down to the community level (see Section 1.1) requires that ExxonMobil seeks to ensure that the procurement opportunities and synergies generated by its projects and operations contribute towards greater economic development within the region, while at the same time managing expectations.

Further to the Project benefits principles, EMCP has established a number of initiatives to provide manufacturers, consultants, contractors and service companies in the Province and other parts of Canada with a full and fair opportunity to compete for Project work. First consideration will be given to goods manufactured and services provided from within the Province, where they are competitive in terms of fair market price, quality and delivery.

By 2009, [our local] spending had grown... with almost half... going to local contracts for the new offices at Atlantic Place... studies related to ice loading... the development of our environmental and socio-economic impact statements, pre-FEED engineering studies [and] lab work, with the balance being for the growing Project Team. In 2010, we expect to spend about \$70 million locally. Most of that money will go to fund a doubling of the local Project Team and for contracts for... employment agencies, office build-out and lease, and additional regulatory studies.

Hareesh Pillai, NOIA Annual Conference, June 2010

For example, EMCP and its FEED/EPC contractors have established a construction phase contracts and procurement office in St. John's, as part of the co-location of Project Management and FEED/EPC contractor personnel, to coordinate and manage their activities. It is staffed by professionals knowledgeable of the Province's supply community, and available for "sales calls" and networking at industry events.

In addition:

- EMCP and its FEED/EPC contractors have made, and anticipate ongoing, site visits to local suppliers and fabricators to assess their capabilities and capacities;
- EMCP and its main contractors will hold overview workshops at which they will provide forecasts of activities and opportunities;
- EMCP and its main contractors will publicize Project information, including procurement activities (forecasts, Expressions of Interest (EOIs), Requests for Proposals (RFPs), awards, etc.) and opportunities, through such means as the Project website and the NOIA and BIDS websites;
- EMCP and its main contractors will use requests for EOIs to solicit local supply interest;

- EMCP has established and is promoting a Project vendor registration database that will be used by it and its contractors and suppliers. Where feasible, other local databases (such as the Eastern Supplier Development Alliance database) will be integrated into the Project database;
- EMCP has established a Benefits Agreement travel fund for travel by contractors and suppliers headquartered in the Province to visit engineering offices located outside the Province, where such offices have been employed to conduct Project FEED and when necessary to support business relationships;
- Consistent with the Project Diversity Plan (see Section 3.3.6), EMCP and its main contractors will facilitate access to Project opportunities by companies owned or operated by members of the designated groups;
- Project RFPs and bid packages will require that bidders use standards that meet the requirements of Canadian Government Authorities and use Canadian standards where appropriate;
- Project procurement processes will be scalable and may include applicable benefits team, management and/or C-NLOPB reviews; and
- Success in providing 'full and fair opportunity' and 'first consideration' will be reported to the C-NLOPB.

Benefits, including diversity, will be a consideration in:

- EOIs and Pre-qualification. Requests for EOIs will contain discussion of the EMCP commitment to benefits, the Benefits Plan, and the requirement for contractor alignment in delivering benefits. Potential contractors and suppliers will be required to provide an acknowledgement of their understanding of the importance of benefits, together with information about their benefits-related experience and capabilities. The Benefits Team will take these into account in the evaluation of submissions and development of bidder lists.
- Award. Benefits requirements will be scalable, with specific obligations specified in Invitations to Tender (ITTs), RFPs and Requests for Quotations (RFQs) according to the contract size and other criteria, with bidders being required to complete a benefits questionnaire. The information in these questionnaires will be an important consideration in the contract award decision.

To assist main contractors in developing their processes, EMCP will:

- Hold initial meetings with representatives of the main contractors to introduce them to the Benefits Plan, its requirements and implementation; and
- Provide guidance to main contractors so that their plans are developed and implemented in accordance with contract expectations.

In performing their obligations under their contract, contractors and suppliers will be required to establish and maintain appropriate business standards, procedures, and controls. Full contractor compliance will be facilitated by the terms of the contracts. Procedures will be put into place to deliver and effectively monitor compliance with the standards. Failure to satisfactorily meet the benefits commitments or report will constitute an instance of non-conformance with the contract terms and conditions and, as such, could result in sanctions including termination of the contract. This approach not only satisfies the requirements of the regulatory and corporate drivers, but will also benefit the Province in the long term by helping further build capabilities of its existing businesses.

#### 3.3.3.1 Procurement Process

EMCP views the procurement process and associated responsibilities as extending from the development of the procurement strategy, through the sourcing process (including bidding and negotiations), contract initiation and implementation and performance management, to contract close-out or renewal. Benefits, including diversity, will be an important consideration at each stage.

For example, the reimbursable commercial terms of our main FEED/EPC contracts have been designed with a view to effective and efficient compliance with Project benefits principles and commitments.

Similarly, in order to maintain communication with the supply community in the sourcing of work, EMCP will make the following information available regarding Project contracting activity, and the main contractors will be expected to follow the same, or a similar, protocol:

- Expressions of Interest: EOIs will be published on the Project website and BIDS, and NOIA and other industry organizations will be notified about them.
- Bidders Lists: These lists will be published when certain criteria, such as value and competitiveness, are met.
- Contracts: For the main contracts, the list will show the contractor name and contact details, and provide a summary of the scope of work.
- Contracting Update: Issue updates on contracting status and forecast the main contracting activities.
- Supplier Workshops: Workshops will be held in conjunction with key contracting milestones, e.g. after the award of major FEED/EPC contracts. Procurement personnel will also develop programs to proactively engage smaller suppliers.

Structure of Bid Packages: To the extent reasonably practicable, EMCP will structure bids and encourage relationships between local and other suppliers to facilitate local participation. Where contractors and suppliers are selected from outside the Province, EMCP is committed to promoting local suppliers' ability to

have full and fair opportunity to compete for sub-contracts. The award of all major procurement package sub-contracts will be subject to EMCP's prior approval.

Pre-Qualification: At this stage, potential bidders will be asked to describe their experience with benefits monitoring and reporting regimes in the Province, or elsewhere in Canada or internationally, and indicate their commitment to the monitoring and reporting requirements. EMCP will advise them that it will report regularly to the C-NLOPB on its efforts, and those of its contractors, sub-contractors and suppliers, in achieving benefits for Canada in general, and for Newfoundland and Labrador in particular. In this context, EMCP will advise potential bidders that it will require the following reports from its contractors and suppliers on a regular basis:

- Procurement forecasts;
- Reports on contracts at the pre-qualification, bidders list and award stages;
- Reports on expenditures, employment and training, R&D and diversity; and
- Other reports determined to be necessary, including those required to demonstrate that Benefits Plan obligations are being met.

Potential bidders will be informed that the specific content, format and frequency of benefits reporting requirements shall be determined by EMCP and shall be agreed between EMCP and a successful bidder during the contract award process.

Potential bidders are also advised that EMCP and its contractors, subcontractors and suppliers may be subject to periodic industrial benefits audits undertaken by the C-NLOPB or its designated agents. These audits would verify that the benefits-related procedures that have been established are being followed and that appropriate information is being collected and analyzed.

Requests for Proposals: Bidders will be required to complete a Benefits Commitments and Questionnaire form at the RFP stage for contracts greater than \$250,000. They will be advised that their commitment to benefits, as determined by the information provided, will be one of the considerations used in the overall bid evaluation.

Potential bidders will also be advised that the content, degree, frequency and format of benefits reporting requirements shall be determined by EMCP, and agreed between EMCP and a successful bidder as part of any contract award. Bidders must state in their proposals that they will comply with these reporting requirements, and the successful bidder will be required to monitor the actual benefits delivered compared to the estimates provided as part of its bid.

At the RFP stage, potential bidders will also be provided with "Canada-Newfoundland and Labrador Benefits Content Questionnaire". This document outlines the full range of benefits-related obligations and requirements a successful bidder must comply with.

#### Benefits Approach, Principles, Policies, Guidelines and Procedures

Contract Award: The contract between EMCP with a successful bidder will detail the specific reporting requirements and obligations (including audit provisions) that contractors and suppliers must accept as part of the contract award. The contract will also stipulate that contractors and suppliers must impose similar requirements on sub-contractors and suppliers.

C-NLOPB Liaison and Review: EMCP will maintain a regular liaison with the C-NLOPB, to fulfill all monitoring and reporting requirements.

Maintain a construction phase contracts and procurement office in St. John's
Conduct ongoing site visits to local suppliers and fabricators to assess their capabilities
and capacities
Hold overview workshops at which EMCP and main contractors provide forecasts of
activities and opportunities
Publicize Project information, including procurement activities and opportunities on the
Project website and the NOIA and BIDS websites
Use requests for EOIs to solicit local supply interest
Facilitate access to Project opportunities by companies owned and operated by
members of designated groups
Require that, for Project RFPs and bid packages, bidders use standards that meet the
requirements of Canadian Government Authorities and use Canadian standards where
appropriate
Report success in providing 'full and fair opportunity' and 'first consideration' to the C-
NLOPB
Ensure that requests for EOIs contain discussion of the EMCP commitment to benefits,
the Benefits Plan, and the requirement for contractor alignment in delivering benefits,
including diversity
Ensure that benefits, including diversity, requirements will be scalable
Hold initial meetings with representatives of the main contractors to introduce them to
the Benefits Plan, its requirements and implementation
Provide guidance to main contractors so that their plans are developed and
implemented in accordance with contract expectations
Require contractors and suppliers to establish and maintain appropriate business
standards, procedures and controls
Publish EOIs on the Project website and notify BIDS, NOIA and other industry
organizations
Publish bidders lists when appropriate
Hold procurement and contracting workshops in conjunction with key contracting
milestones
To the extent reasonably practicable, structure bids and encourage relationships
between local and other suppliers to facilitate local participation
Detail the specific reporting requirements and obligations that contractors and suppliers
must accept as part of the contract award
Ensure that contracts stipulate that contractors and suppliers must impose similar
requirements on sub-contractors and suppliers
Maintain a regular liaison with the C-NLOPB, to fulfill all monitoring and reporting
requirements

#### Benefits Approach, Principles, Policies, Guidelines and Procedures

# 3.3.4 Employment and Training

ExxonMobil's commitment to developing the industrial and labour capacity, and delivering benefits to host jurisdictions down to the community level (see Section 1.1), also requires that ExxonMobil be committed to hiring and developing employees from the communities in which it operates, when such need arises and where long term employment is envisioned.

This ExxonMobil commitment is reflected in this Benefits Plan and consistent with its principles, which include:

Promoting the development of local skills and industry capability that leaves a lasting legacy for the communities in which we operate and for the Province.

The application of this commitment and principle, through this Benefits Plan will address the 'first consideration' principle in the legislation, so that Newfoundland and Labrador residents, including members of the designated groups (women, Aboriginal peoples, visible minorities, and persons with disabilities), receive full opportunity for employment. The provision of such opportunities was viewed as a very important topic by the participants in the Benefits Plan stakeholder consultations.

For the purpose of this Benefits Plan, a Newfoundland and Labrador resident is a Canadian or landed immigrant who meets the residency requirements of the Province as defined by the Elections Act, SNL 1992, CE-3.1.

Employment and training initiatives will be guided by the ExxonMobil Equal Employment Opportunity Policy:

It is the policy of ExxonMobil to provide equal employment opportunity, in conformance with all applicable laws and regulations, to individuals who are qualified to perform job requirements. ExxonMobil administers its personnel policies, guidelines, programs and practices in a non-discriminatory manner in all aspects of the employment relationship, including recruitment, hiring, work assignment, promotion, transfer, termination, wage and salary administration, and selection for training.

Further to the Equal Employment Opportunity Policy, EMCP recognizes that the key to the growing use of local labour is to have a long-term view of future requirements and implement timely training programs. This is reflected in the human resources planning process described below.

Human resources planning for the Project will continue to be developed and refined over the life of the Project, currently estimated to be more than 30 years. Given this long duration, and the fact that the Project is in the early stages of development, this Plan does not provide a description of all of the human resources initiatives that will be used. However, where available, it will provide examples illustrative of the types of benefits initiative that will be undertaken.

Consistent with the requirements outlined in the Guidelines, the capacity assessment (Section 4.0) of this Benefits Plan provides a summary of the human resource requirements anticipated for the design, construction, and operations phases. As required, EMCP will provide updates to the C-NLOPB as resource requirements are further defined and if projections significantly change. Where appropriate, main contractors will be required to prepare and submit plans to EMCP that identify projected staffing requirements. EMCP will monitor main contractors' employment, training and diversity initiatives; this monitoring will be done in consideration of the requirements identified in the Acts and commitments outlined in this Benefits Plan. EMCP will compile information for the construction phase, including person-hours of employment, staffing requirements and applicable succession plans for positions currently filled by non-Canadian resources, and provide it to the C-NLOPB in accordance with reporting systems established for the Project. EMCP will develop and submit to the C-NLOPB a detailed operations phase human resources plan one year preceding first production.

Employment and training initiatives will also be guided by EMCP's contractor relations guidelines which include a requirement for EMCP to maintain an arm's-length relationship with independent contracting companies and their employees. This includes influencing independent contracting companies in their recruitment, training and diversity efforts. Contractors and suppliers' compliance will be facilitated through the terms of their contracts with EMCP. Procedures will be put into place to deliver and effectively monitor compliance with the standards. Failure to satisfactorily meet the benefits commitments or reporting would constitute an instance of non-conformance with the contract terms and conditions.

#### 3.3.4.1 Early Identification of Staffing Demands and Supply

Best practices and long-term strategic planning processes will be used so that the right people are in place at the right time, working in an environment that supports high performance. Building the required labour force composition, capabilities and work environment requires lead-time and disciplined planning. Early definition of labour demand will enable EMCP to compete for skills and talent in the local labour market and ensure EMCP is positioned as an "employer of choice" in attracting, recruiting and retaining the highest quality of people.

Human resources requirements for the Project will be communicated in advance, where necessary, to enable individuals to train for opportunities. Initial human resources estimates are being refined and they have been, and will continue to be, disseminated to stakeholder groups.

A labour capacity study was initiated in 2005 by Chevron (Kellogg, Brown, Root and Strategic Concepts, Inc., 2005), which also commissioned an update study in 2008 (Strategic Concepts, Inc., 2008) to support the contractor planning efforts during the construction phase. EMCP subsequently undertook the 2010 labour

gap analysis (Strategic Concepts, Inc., 2010) that forms the basis of the capacity assessment in Section 4.0 of this Plan.

#### Table 3.3.4-1: Staffing Demands and Supply Initiatives

EMCP and its main contractors will develop and submit to the C-NLOPB, a detailed operations phase human resources plan one year preceding first production
Human resources requirements for the Project will be communicated in advance, where necessary, to enable individuals to train for opportunities
Where appropriate, main contractors will be required to prepare and submit plans to EMCP that identify projected staffing requirements

#### 3.3.4.2 Communication and Consultation

Consultation meetings with a range of education and training resources, including the Provincial Skills Task Force, the Women's Policy Office, the Petroleum Industry Human Resources Committee, and Memorial University and the College of the North Atlantic, have provided valuable input in human resources planning considerations, particularly in the areas of employment and training. Continued collaboration between EMCP, Project contractors and such groups will be important to the success of the human resource planning process in future years and decades.

In particular, the provision of Project labour requirements information will help training and educational institutions in designing and delivering training that will prepare Newfoundlanders and Labradorians, including members of the designated groups, for employment on the Project.

#### 3.3.4.3 Skills Development through Community Investments

EMCP has a history of supporting and improving local community organizations and educational programs so as to promote the development of skills and experience to fulfill future human resource needs. EMCP supports a wide variety of educational programs that encourage students, and particularly members of the designated groups, to pursue mathematics and science-related education. For example, EMCP currently supports initiatives such as the Techsploration program, which targets young women in school and encourages consideration of technical fields of study and work. EMCP also provides funds and volunteers for Junior Achievement's *Economics of Staying in School* program, which communicates the value of staying in school to grade nine students.

Benefits Approach, Principles, Policies, Guidelines and Procedures

Examples of initiatives that will be considered, as appropriate, to address skill development for Hebron are as follows:

Promote careers in the oil and gas industry to students at junior high and high school levels to encourage them to stay in school and consider further education to meet skill demand. Highlight education required, and provide real life examples of what it is like to work in the industry;

Since 2009, members of the Project team have visited high schools, College of the North Atlantic campuses, and participated in Oil and Gas Week career fairs, in order to assist students in understanding the Project.

- Communicate projected human resource requirements to post-secondary institutions, education groups and other interested parties in a timely manner to encourage further dissemination of skills demand information and to increase awareness of opportunities;
- Attend career fairs to promote careers in technical, engineering and trade/operational roles;
- Provide support and contributions to post-secondary institutions that will enhance EMCP's ability to recruit qualified candidates into targeted programs;
- Participate on educational institutions' advisory boards and/or to share specific knowledge with students in key programs;
- Establish scholarship and support programs to encourage members of the designated groups, particularly women, to complete training programs that will allow them to meet skills demand; and
- Employ co-operative (co-op) education students from technical, trades and business disciplines.





EMCP and its contractors and suppliers will undertake further similar initiatives in the future. These will be described in the human resources plan and include coop and other education and training programs as part of the Hebron R&D program (see Section 3.3.5).

Where specific skill development is required to meet Project staffing needs, as identified in the labour capacity study or through other projections, EMCP will work in conjunction with educational institutions, industry and other stakeholders to facilitate the delivery of training to Newfoundlanders and Labradorians, including members of the designated groups. This will include regulatory/safety, technical, competency, and leadership training and will be delivered through various means, including on-the-job training and apprenticeships. Main contractors will be encouraged to incorporate co-op and apprenticeship training positions into their staffing plans for the construction phase.

#### Table 3.3.4-2: Skills Development Initiatives

Promote careers in the oil and gas industry to students at junior high and high school levels to encourage them to stay in school and consider further education to meet skill demand
Communicate projected human resource requirements to post-secondary institutions, education groups and other interested parties in a timely manner to encourage further dissemination of skills demand information and to increase awareness of opportunities
Attend career fairs to promote careers in technical, engineering and trade/operational roles
Provide support and contributions to post-secondary institutions that will enhance EMCP's ability to recruit qualified candidates into targeted programs
Employ co-operative education students from technical, trades and business disciplines
Encourage main contractors to incorporate co-op and apprenticeship training positions into their staffing plans for the construction phase
Where specific skill development is required to meet Project staffing needs, as identified in the labour capacity study or through other projections, EMCP will work in conjunction with educational institutions, industry and other stakeholders to facilitate the delivery of training to Newfoundlanders and Labradorians, including members of the designated groups

#### 3.3.4.4 Recruitment and Selection of Qualified Candidates

In addition to the complexities faced during the development of the Hibernia field, the Hebron Project faces additional challenges associated with the recovery of heavy oil. To address such challenges, EMCP looks for people with exceptional talent and drive. EMCP is confident that it will be able to effectively recruit in Newfoundland and Labrador through a recruitment strategy that will provide Newfoundlanders and Labradorians with first consideration for employment.

Leveraging on the anticipated increased pool of candidates that will exist as a result of the focus on Skills Development through Community Investments, EMCP will seek to recruit and select qualified candidates. EMCP will use a recruitment and selection process that emphasizes equitable treatment and equal opportunity to all qualified individuals. The Project will adopt this process and modify, as necessary, for legislative or regulatory requirements. This process includes participation in career fairs and information sessions, standardized job specific screening criteria, and utilizing trained interviewers. The effectiveness of the process will be monitored and reviewed over the life of the Project, and

EMCP will continue to work with key stakeholders to identify initiatives that may contribute to success in the recruitment and selection of qualified candidates.

To ensure that, consistent with the Canadian Charter of Rights and Freedoms, residents of Newfoundland and Labrador are given first consideration for employment opportunities on the Hebron Project, EMCP employee positions will be advertised externally through methods such as local print media, regional websites and on the ExxonMobil Canada website. Further, for student or new graduate positions, local universities and colleges will be notified of opportunities. Associations and/or organizations that represent members of the designated groups will receive notification of new positions to ensure outreach to diverse groups.

A recruitment strategy that has proven effective is the utilization of co-op students, internships, apprenticeships and summer employment assignments for professional, technical and trades positions. Where interest and opportunity exist, high-performing students may have the option of continuing career employment with EMCP upon graduation. EMCP employs co-op and summer students from Memorial University each year.

Contractors and suppliers will be required to have processes for recruitment and selection of candidates that align with the principles of equitable employment and provide first consideration to residents of Newfoundland and Labrador for employment. Their effectiveness in recruiting and selecting qualified candidates will be stewarded per the terms of their contract.

#### Table 3.3.4-3: Recruitment Initiatives

Include participation in career fairs and information sessions, standardized job specific screening criteria, and use of trained interviewers in EMCP's recruitment and selection process

The effectiveness of the recruitment and selection process will be monitored and reviewed over the life of the Project, and EMCP will continue to work with key stakeholders to identify initiatives that may contribute to success in the recruitment and selection of qualified candidates

EMCP employee positions will be advertised externally through methods such as local print media, regional websites and on the ExxonMobil Canada website. For student or new graduate positions, local universities and colleges will be notified of opportunities. Associations and/or organizations that represent members of the designated groups will receive notification of new positions

Contractors and suppliers will be required to have processes for recruitment and selection of candidates that align with the principles of equitable employment and provide first consideration to residents of Newfoundland and Labrador for employment

#### 3.3.4.5 Career Development and Competency Assessments

EMCP will use structured and disciplined processes so that all personnel have the knowledge and skills required to design, build, operate and maintain the facilities in a safe, effective and efficient manner. Training plans will be defined for key positions including skills training, SHE and regulatory training, vendor

#### Benefits Approach, Principles, Policies, Guidelines and Procedures

training, initial work assignments, on-the-job training and facility specific training. These capability development and competency processes will be on-going.

Contractors and suppliers will be expected to provide personnel that possess the necessary skills and training to perform the contracted services. Where training is required, it is the responsibility of independent contracting companies to provide it. Competency training (regulatory, safety) compliance will be monitored in accordance with the contract terms.

Advancement in all occupational categories is supported by EMCP's focus on recruitment of individuals interested in a career with the company, and its practice of developing and promoting people from within. Throughout the life of the Project there will be positions that are temporary in nature or require specialized expertise; these may be filled by personnel from other ExxonMobil activities around the world. Long-term succession plans are developed for key positions to deliver operational excellence, business continuity and individual career development. Local employees will receive training and development to fill long-term positions and succeed non-local personnel, if competent and qualified.

#### Table 3.3.4-4: Career Development Initiatives

Define training plans for key positions including skills training, SHE and regulatory training, vendor training, initial work assignments, on-the-job training and facility specific training

Develop long-term succession plans for key positions to deliver operational excellence, business continuity and individual career development. Local employees will receive training and development to fill long-term positions and succeed non-local personnel if competent and qualified

#### 3.3.4.6 Trans-boundary Crewing

EMCP will fully comply with trans-boundary crewing requirements related to activity in the Province.

#### 3.3.5 Research and Development

EMCP recognizes the important contribution that Project R&D, including education and training (E&T), can make to sustainable economic development in Newfoundland and Labrador, and to the advancement of its oil and gas industry. This has been reflected in its participation in industry initiatives to establish the local R&D strengths and capacity and to identify potential focus areas. For example, EMCP participated in a 2009 Petroleum Research Atlantic Canada study of provincial R&D capabilities (PRAC, 2009), leading to EMCP developing a strategy, consistent with that of the corporate Upstream Research Company, to capitalize on those capabilities.

To further pursue the identification, implementation and completion of successful and effective R&D initiatives, EMCP has established an R&D Strategy which includes:

• Assigning a dedicated R&D coordinator for the Project;

#### Benefits Approach, Principles, Policies, Guidelines and Procedures

- A process for identifying and raising awareness of potential R&D projects, and give priority to undertaking R&D in the Province, where effective and competitive. This will include identifying projects internally, from co-venturers, from Project contractors and suppliers, and from the provincial R&D community. In respect to contractors and suppliers, a benefits questionnaire attached to RFPs requests that bidders provide information about the R&D in Newfoundland and Labrador they have conducted or supported, and their plans for R&D in the Province;
- Focuses for R&D activity, which will change over time. For example, EMCP has established as priority areas subsurface, heavy oil and harsh environment challenges. The last area includes socio-economic research and E&T related to the community and regional effects of resource development activity on peripheral, sparsely-populated, rural and Arctic areas, including the assessment, management and monitoring of these effects. Such foci will not be allocated specific support or priority, but serve to channel thinking about R&D opportunities in directions that are consistent with the Benefits Plan principles and EMCP interests;
- A process for the submission and review of R&D proposals, based on the use of the C-NLOPB R&D Work Expenditure Application Form; and
- Participation in Joint Industry Projects to advance common interests in technologies with local application.

Hebron is currently participating in a Joint Industry Project to develop a proven trenching system for burying pipelines, flowlines and umbilicals to protect them from ice scouring. This has direct benefits for safely and economically designing, installing and operating them offshore Newfoundland and Labrador. Similarly, Hebron is participating in a Joint Industry Project to further develop ice management understanding and capabilities.

In evaluating potential R&D initiatives, EMCP will give priority to those meeting the following criteria:

- Business or operational efficiencies, or the generation of commerciallyvaluable intellectual property;
- Financial effectiveness by delivering a substantial financial return relative to the scale of the R&D investment; and
- Financial efficiency for the Project, including having the potential to leverage funds from other sources. In the latter case, the Project may use this well-established practice to increase the total size of the R&D investment, by having work of general interest jointly funded by federal and other programs, where intellectual property considerations permit.

Consultation will also be important in shaping Hebron R&D expenditure decisions. EMCP anticipates consulting with the Governments of Newfoundland and Labrador and Canada, and with local stakeholders including, but not limited to, the Newfoundland and Labrador Research and Development Corporation, NOIA, Memorial University, and College of the North Atlantic.

EMCP will satisfy all regulatory and contractual obligations with respect to R&D. This includes the periodic provision of R&D workplans to the C-NLOPB.

#### Table 3.3.5-1: Research and Development Initiatives

Develop a process for identifying and raising awareness of potential R&D projects, and give priority to undertaking R&D in the Province, where effective and competitive

Identify and promote R&D initiatives undertaken by EMCP contractors and suppliers

Periodically review priority areas for R&D activity

Participate in Joint Industry Projects

#### 3.3.6 Diversity

Valuing diversity is a business imperative for ExxonMobil, both internally and in its dealings with others. Diversity fosters access to an expanded labour and supplier pool and as such, it is an integral part of this Benefits Plan.

The Hebron Diversity Plan (Appendix B), developed in response to the C-NLOPB Benefits Plan Guidelines and the Benefits Agreement gender equity and diversity program requirements, provides a stand-alone description of how EMCP will encourage members of the designated groups (women, visible minorities, Aboriginal peoples, and persons with disabilities) to participate in the Project.

The Diversity Plan was developed based on ExxonMobil's diversity statement and Equal Employment Opportunity and Harassment in the Workplace policies and consultation with government agencies and community groups with a mandate or interest in diversity, as well as input from other consultations. Open communication with stakeholders will continue throughout the Project in order to facilitate achievement of the Plan's goals.

Hebron was a platinum sponsor of 'Fueling the Future: Women in Oil & Gas', an international conference held in St. John's in March 2011. The conference themes included women's employment trends in the petroleum industry, the business case for gender equity, and best practices for fostering the greater participation of women.

The Plan outlines the diversity context in the Province, the regulatory and contractual diversity requirements and EMCP's commitment to diversity in employment and business access. The Plan also describes the components under which diversity initiatives will be developed. These components are:

 Skills Development through Community Investments supporting and improving education programs with a focus on science and mathematics and involvement with community organizations to develop skills and provide experience to fill human resources needs.

Hebron has created a \$1,500,000 joint diversity scholarship endowment fund with Memorial University and the College of the North Atlantic, supporting educational opportunities for diverse populations now and in the future.

- Recruitment and Selection of Qualified Candidates implementing a recruitment strategy to provide sustainable employment to members of the designated groups, with a focus on providing timely communication regarding job availability and requirements to candidates.
- Establishment and Development of a Supportive Work Environment fostering a work environment that supports diversity and enables employees to work to their greatest potential.
- Monitoring, Reporting and Stewardship creating a process to monitor and report progress through the use of both leading and lagging indicators, and using this information to further refine diversity processes, policies, guidelines and initiatives.
- Business Access implementing initiatives to facilitate the participation of companies owned and operated by members of designated groups.

The Diversity Plan describes the mechanisms and processes through which initiatives in these areas will be identified, implemented, monitored and reported by EMCP during both construction and operations. The means by which the Diversity Plan will apply to Hebron contractors and suppliers is also outlined.



Since 2009, Hebron has provided mentoring and financial support to the Women in Resource Development Corporation's Techsploration program.

# 4.0 CAPACITY ASSESSMENT

# 4.1 Introduction

This section provides a capacity assessment for the construction and then operations phases. In the former case, there is a discussion of the goods and services, construction and fabrication, and labour requirements and capacity, with the assessment examining the adequacy of the available resources. In the case of the operations phase, there is a similar review and assessment of goods and services and labour requirements and capacity.

The analysis is based on a number of data sources. In 2005, a comprehensive industrial and labour capacity study (Kellogg Brown and Root and Strategic Concepts Inc., 2005) was completed to:

- Identify and quantify the industrial capacity of businesses in Newfoundland and Labrador to provide goods and services during the engineering and construction phases of the Project;
- Provide a qualitative assessment of the industrial capacity of other Canadian businesses to supply goods and services during the Project;
- Identify the employment demand-side requirements by trade/discipline for each phase of the Project's life-cycle;
- Profile the supply-side of labour in Newfoundland and Labrador by demographics, occupations and industrial classifications using Canadian census data;
- Assess the availability of labour in Newfoundland and Labrador to work on the Project; and
- Identify and categorize gaps affecting the supply and demand for labour.

The labour force study was updated in 2008 and again in 2010 (Strategic Concepts, Inc., 2008 and 2010) to account for any changes. In addition, this assessment is based on stakeholder consultations, examination of membership and vendor lists, site visits to construction and fabrication facilities and companies, and current Project information.

#### 4.2 Construction Phase

#### 4.2.1 Goods and Services Requirements

This section provides a description of procurement-related requirements for the GBS concrete structure, topside components, offshore loading system and hookup and commissioning. The FEED for the Project, including the estimated materials, bulks and equipment requirements, had not been completed at the time of writing. However, as is stated in Section 5.1, Project consultation initiatives will include the provision of Project-related information to business groups, economic development groups, diversity groups, educators and others in

a timely manner, so as to help them plan and implement initiatives to deliver Project-related benefits.

#### 4.2.1.1 GBS Concrete Structure

The GBS for the Project will be a post-tensioned reinforced concrete structure designed to withstand impacts from sea ice and icebergs, and the meteorological and oceanographic conditions at the Hebron field. It will accommodate up to 52 well slots with J-tubes and/or risers for potential future expansion. The GBS will be designed to store approximately 190,000 m<sup>3</sup> of crude oil in multiple separate storage compartments. It will have a single main shaft supporting the topsides and will encompass all wells to be drilled from the platform. The GBS will be designed for an in-service life of 50 or more years. A number of temporary and permanent mechanical systems will be installed in the concrete structure, including:

- Drilling conductor guides;
- Hydrocarbon systems;
- Seawater systems (ballast water, cooling and firewater);
- J-tubes and risers;
- Other utility systems;
- Fire protection system;
- Instrumentation; and
- Temporary systems.

The main criteria upon which the GBS detailed design is based are provided in Table 4.2.1-1.

### **Capacity Assessment**

Project Component	Attribute
Concrete GBS Structure	Reinforced concrete with post tensioning
Overall Height (seabed to top of central shaft)	Approximately 120 – 130 m (394 - 427 ft)
Foundation Diameter	122 to 133 m (400 to 436 ft)
Caisson Diameter	100 to 110 m (328 to 361 ft)
Shaft internal diameter	Approximately 33 m (108 ft)
GBS Dry Weight	300,000 to 340,000 tonnes
Solid Ballasting	50,000 to 100,000 tonnes
Concrete Volume	115,000 to 126,000 m <sup>3</sup> (150,300 to 164,700 cubic yards)
Reinforcing Steel	33,000 to 50,000 tonnes
Post Tensioning Steel	3,700 to 5,000 tonnes
Topsides Support during tow-out	Up to 44,500 tonnes
Base Storage	7 storage cells Approximately 190,000 m <sup>3</sup> (1.2 M bbl)
Life Expectancy of GBS	Approximately 50 years
Potential Field Expansion	J-tubes, risers, and unused well slots Future options may include use of additional platform drilling slots, reclamation of previously-utilized slots, and/or subsea wells connected via tie-back to the GBS

#### Table 4.2.1-1: GBS Notional Design Metrics

#### 4.2.1.2 Topsides

The topsides include all equipment required for the drilling, processing, and power generation for the Hebron development. The topsides layout is illustrated in Figure 4.2.1-1.

The Topsides Facilities consist of the following modules, varying in size:

- Integrated Utilities and Processing Module (UPM) Area 20
- Derrick Equipment Set (DES) and Drilling Support Module (DSM) Areas 11 & 15
- Living Quarters w/ Control Room (LQ), Helideck, Lifeboat Stations Areas 30, 37 & 38
- Flare Boom Area 34

#### **Capacity Assessment**

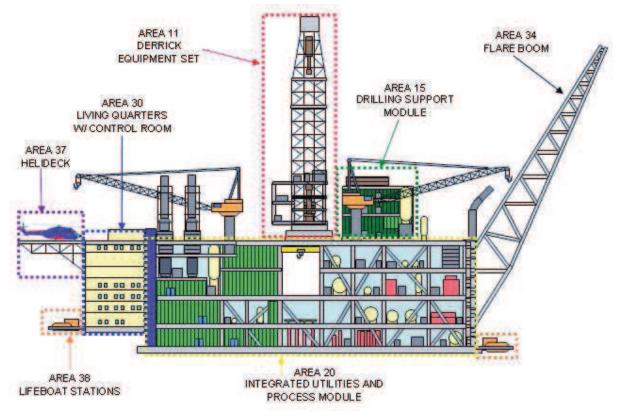


Figure 4.2.1-1: Hebron Topsides Layout

#### 4.2.1.3 Offshore Loading System

The crude oil loading facilities are expected to be similar in design to those being developed by the Hibernia Offshore Loading System (OLS) replacement project. The OLS will consist of a closed-loop carbon steel pipeline arrangement with two OLS bases and a riser assembly installed on each of them. The closed-loop pipeline arrangement will consist of two main pipelines, each running approximately two kilometres from the platform to an OLS base and secured to the ocean floor with concrete bases.

#### 4.2.2 Goods and Services Capacity

As has been described in Section 1.2, the last twenty years have seen a great increase in capacity and capability of Newfoundland and Labrador companies to undertake offshore petroleum work, including the construction and fabrication of platform components. The depth of experience and expertise is reflected in the success of these companies in working on the most recent oilfield development projects, White Rose and North Amethyst, and in the range and capabilities of companies belonging to NOIA.

Key to this is engineering capabilities. Over 300 firms are registered with the Association of Professional Engineers and Geoscientists of Newfoundland and Labrador. These range from offices of large international engineering firms, to joint ventures involving Newfoundland and Labrador firms, international

contractors with significant engineering activities, and small one-person consultancies.

Many Newfoundland and Labrador firms have gained offshore development experience working in the three previous projects; however, much of the work has been undertaken by large international firms which have established offices in the Province. In some cases they have entered into joint ventures or partnerships with local engineering firms and in others they have registered in the Province but not yet established personnel. Some of the larger international contractors have committed to having a full-time engineering presence in Newfoundland and Labrador and using the Province as a base for accessing global opportunities.

The rest of this section provides a brief description of some of the larger Newfoundland and Labrador-based firms that provided services to the offshore oil industry at the time of writing.

**ACCENT Engineering Consultants Inc.** - Combines the expertise of two Atlantic Canadian consulting engineering firms, CBCL and Stantec, offering a full range of multi-disciplinary engineering, environmental and project management services. This resource pool of more than 600 people provides services to meet the major project needs of the oil and gas industry in Atlantic Canada. Current projects include engineering services and environmental monitoring contracts for ExxonMobil on Sable and Hibernia, and we have personnel as part of the Owner's engineering team for the EnCana Deep Panuke Project.

**Subsea 7** – Subsea 7 is a seabed-to-surface engineering and construction contractor for the offshore oil and gas industry worldwide. It plans, designs and delivers complex, integrated projects in harsh and challenging environments. It divides its business into principal areas of operation: Subsea Umbilical, Risers and Flowlines, Inspection, Maintenance & Repair (IMR) and conventional Field Development. It supports these operations with an adaptable fleet of ships and a range of additional services.

**AKCS Offshore Partner** - AKCS Offshore Partner is a partnership of three engineering, procurement and construction companies. Aker Solutions, G.J. Cahill and Company Limited and SNC-Lavalin Inc. They offer project management, design, construction, maintenance and operational experience supporting offshore/onshore oil and gas production facilities. AKCS Offshore Partner has been specifically formed to pursue all work associated with offshore/onshore engineering, procurement and construction and maintenance/modifications and operations services in Atlantic Canada.

**AMEC Americas** - AMEC provides engineering and project management services for major industrial, energy and resource development projects in Canada and internationally. It provides services in three key areas:

Power: power generation, both hydroelectric and thermal, and power distribution;

- Process: oil and gas developments, including offshore and industrial installations comprising both the process and associated industrial buildings; and
- Infrastructure: energy management, commercial, institutional, and other nonindustrial buildings, together with highways, bridges, municipal infrastructure, and ports and harbours.

AMEC's experience in the Newfoundland and Labrador offshore oil and gas industry includes the provision of project management, engineering, and procurement services for specialized offshore production facilities.

**Hatch Inc.** - Hatch Inc. provides engineering design, planning and project management services to the major market sectors in the region. Representative oil and gas related experience includes design of topsides facilities for the White Rose Project, ongoing engineering support to the Hibernia and Terra Nova developments, and design and management services for the Whiffen Head transshipment terminal.

**IMV Projects Atlantic** - IMV Projects Atlantic (IMVPA), a member of the Wood Group, is a Project Management, Engineering, Procurement and Construction Management company specializing in oil and gas facilities and pipelines, including offshore and onshore pipelines, Arctic pipelines, subsea systems, risers and moorings, offshore platforms/structures, mechanical and piping engineering, stress analysis, civil/structural engineering, advanced/numerical analysis and design and drafting. IMVPA is a multi-discipline company offering engineering services and support to a range of domestic and international clients.

**Oceaneering Canada Limited** - Oceaneering is an advanced applied technology company that provides engineering services and hardware to customers operating in marine, space, and other harsh environments. Its services and products are marketed worldwide to oil and gas companies, government agencies, and firms in the telecommunications, aerospace, and marine engineering and construction industries. Oceaneering primarily provides marine engineering, subsea and remote operated vehicle services to the oil and gas sector.

**Production Services Network Canada Inc.** - Production Services Network (PSN) has experience and expertise in brownfield operations including: engineering, procurement and construction, maintenance management and execution, hookup, commissioning, and start-up, asset management and optimization.

**SNC Lavalin / BAE Newplan** - SNC Lavalin/BAE Newplan - BAE-Newplan Group Limited has an average permanent professional and technical staff of 90, including architects, professional engineers and scientists, design and engineering technicians, draftspersons, and inspectors. Through its founding firms, it has had a long involvement with the Newfoundland and Labrador consulting industry. It is part of SNC-Lavalin, Canada's largest publicly-owned engineering, procurement and construction management company.

**Technip Canada (TCL)** -the Canadian subsidiary of Technip, is a subsea solution provider in Canada. TCL provides a comprehensive range of engineering, technologies, products and services to support Canada's oil and gas industry. Since 1997, TCL has maintained its Eastern Canada base in St. John's, Newfoundland and Labrador, and has utilized the services of its local staff as well as its internal network of expertise to service most of the major Canadian oilfield development projects. TCL provides all or part of the services for basic, front-end and detail engineering, procurement, construction and project management. In the offshore segment, TCL can provide the largest possible range of services to a single contractor able to manage all aspects of major field developments. Backed by more than 50 years experience and a workforce of over 23,000, Technip is one of the world's top five oil and petrochemical engineering, construction and services companies.

#### 4.2.2.1 Assessment

Given the capabilities available from the above companies and the range of other firms in the Province, certain Project goods and services will be available from within Newfoundland and Labrador. However, it should be noted that certain of the requirements will be manufactured and sourced from outside Canada. This includes power generation, utility, process and drilling equipment, and bulk materials. Newfoundland and Labrador and other Canadian companies represent some of these manufacturers, hence providing the opportunity for supply of the goods during the construction phase as well as providing after sales service and repair. The opportunities available to local industry include pressure vessel fabrication, small skid fabrication, design and fabrication of integrated control systems, design and fabrication of HVAC equipment, design and assembly of telecom equipment and design and assembly of electrical switchgear.

Bulk materials are those goods that are required in large quantities such as electrical, instrumentation, pipe, fittings and flanges, and steel. Certain bulk materials are not manufactured in Canada, and hence will likely be supplied by foreign manufacturers, subject to competitive bidding processes. There are suppliers based in Newfoundland and Labrador and other parts of Canada that act as agents/distributors or stockists for the manufacturers, and these suppliers could be involved in the supply during the construction phase. If they are successful in supplying these materials during that phase, they will be well positioned to also provide them during operations. In many of these cases, local businesses add value through the provision of transportation, logistics, warehousing, assembly or batching services. Where these types of services or modifications are required, contractors and suppliers may choose to establish administrative and engineering offices in the Province. The actual level of local procurement for the required goods and services will depend on the bidding competitiveness of the local industry. EMCP policies, guidelines and procedures to assist them and further expand the supplier base have been described in detail in Section 3.3.

#### 4.2.3 Construction and Fabrication Requirements

The construction and fabrication requirements for the main Hebron components are as described in Section 4.2.1, related to the:

- GBS Concrete Structure;
- Utility and Process Module (Area 20);
- Drilling Support Module (Area 15);
- Drilling Equipment Set (Area 11);
- Accommodations Module (Area 30);
- Helideck (Area 37);
- Flare Boom (Area 34); and
- Lifeboat Structures (Area 38).

#### 4.2.4 Construction and Fabrication Capacity

Newfoundland and Labrador has a range of facilities available for major construction and fabrication work. Construction sites and fabrication yards range from greenfield sites to abandoned military bases, and world-class fabrication and assembly facilities built specifically for the development of offshore petroleum projects. Some have deepwater access, thousands of square metres of lay down and covered work areas. Some sites and yards have owner contractors while others provide easy access to outside contractors. Generally speaking, the capacity, capability, quality, experience and qualifications of facilities and contractors in Newfoundland and Labrador have increased tremendously over the past twenty years, largely as a consequence of the Hibernia, Terra Nova and White Rose projects.

Examples of the major construction sites and fabrication yards in Newfoundland and Labrador that could be used in support of the Project are briefly described below. They have been classified as follows:

- Major fabrication sites;
- Mid-size yards; and
- Other yards, undeveloped docks, and laydown areas, and contractors

These profiles are based on site visits, a questionnaire survey of mid-sized fabricators, and a review of secondary materials. In addition, profiles are provided of other East Coast facilities that could be used if capacity constraints require that work be undertaken outside of Newfoundland and Labrador. Lastly, there is a short discussion of the ability of these facilities to meet Hebron requirements.

### 4.2.4.1 Newfoundland and Labrador Major Fabrication Sites

Nalcor Energy and Kiewit Offshore Services own and manage the major fabrication sites in Newfoundland and Labrador. A description of these companies and their fabrication sites is presented below.

# Nalcor Energy

Nalcor Energy has five lines of business: Newfoundland and Labrador Hydro, Churchill Falls, Lower Churchill Project, Oil and Gas and the Bull Arm Fabrication Facility. The last was constructed by the Hibernia Management and Development Company (HMDC) in 1990 for the Hibernia project. In 1998, HMDC transferred ownership of the site to the Province. Since that time, fabrication and other work associated with the Terra Nova FPSO, White Rose project, Voisey's Bay nickel mine and mill project, and maintenance and modifications to Henry Goodrich and Grand Banks drill rigs have been completed there.

The facility covers a 25.6 million square metre area and includes multiple fabrication sites allowing for simultaneous operation: topsides fabrication and assembly; drydock fabrication and construction; and deepwater site (Nalcor Energy Website, 2009).

• Topsides Fabrication and Assembly Site

The topsides fabrication and assembly site covers a 120,000 square metre area. It supports the fabrication, assembly and load-out of topsides components, and includes: an administration building, a 1,200 square metre pipe shop, a 1,650 square metre cutting shop, a 2,940 square metre assembly hall, a 2,600 square metre blast/paint shop, a 2,000 square metre heated warehouse and 5,300 square metre fully-equipped module fabrication hall.

The module hall has two 75 tonne overhead cranes with a clearance of 42 metres under the hooks, as well as a 39 x 39 metre vertical lift door. The receiving quay is 200 metres long with 10 metres of water depth at the face. The 140 metre long assembly pier is capable of supporting a 40,000 tonne topsides structure (Nalcor Energy Website, 2009).

Drydock Fabrication and Construction

This site encompasses approximately 140,000 square metres. Major facilities of this site include: 9,000 square metre pipeshop/rebar building with 10 overhead cranes, carpentry/warehouse building, and marine facilities including the former drydock and seven quays located inside and outside the drydock area. The oval drydock, currently flooded, is approximately 40,000 square metres, 200 metres in diameter and 16.5 metres below low-tide level and has a 172 metre FPSO hook-up quay (Nalcor Energy Website, 2009).

Deepwater Site

The deepwater site includes significant onshore, laydown and docking facilities to support deepwater construction operations. This site has a water depth of 150 to 180 metres and a six point anchor mooring (Nalcor Energy Website, 2009).

# Kiewit Offshore Services

Kiewit Offshore Services (KOS) is located near Marystown and provides a broad spectrum of engineering, procurement, construction and commissioning services. It has extensive experience in shipbuilding, ship repair, offshore fabrication, and heavy industrial fabrication. In 2002, Peter Kiewit Sons' Co. Ltd. purchased and reorganized the Marystown Shipyard and the Cow Head fabrication facility. Since then, KOS has upgraded facilities and expanded their acreage (Kiewit Website, 2009). The yard fabricated the majority of the topsides modules for Husky Energy's White Rose FPSO, installed the modules on the FPSO, and carried out the hook-up and commissioning.

Cowhead Fabrication Yard

The Cow Head facilities were used by contractors involved in the Hibernia Project and more recently in the Noble Drilling rig conversion. The Cow Head yard covers 150,000 square metres including a 14,000 square metre fabrication space. The assembly/erection bay is 3,360 square metres. There is a finger pier, with a 15 metre water depth, that is able to accommodate structures such as offshore vessels and semi-submersible rigs (Kiewit Website, 2009).

#### Marystown Fabrication Yard

The yard covers a total area of 60,000 square metres and has a total covered fabrication space of 9,400 square metres. There is a 3,595 square metre assembly/erection bay and 330 metres of water frontage. The shipyard is outfitted with a syncrolift / side transfer system combination, including a 3,000 tonne platform measuring 76 x 19 metres (Kiewit Website, 2009).

#### 4.2.4.2 Newfoundland and Labrador Mid-Size Yards

Examples of mid-size yards in Newfoundland and Labrador are described below.

#### NEWDOCK

St. John's Dockyard Ltd. (NEWDOCK) is located in St. John's on 72,800 square metres of readily accessible waterfront property. There are 4,050 square metres of lay-down area on-site.

NEWDOCK acquired offshore experience with the fabrication and assembly of Subsea HOST Systems, including work completed for the Terra Nova project and various international offshore projects. It has the capability to fabricate and assemble subsea template and manifold systems.

The ship repair/refit facility has an enclosed manufacturing area of 6,550 square metres and a machine, cutting, shaping, and welding shop with five 80 tonne overhead cranes. It also has a 4,000 tonne marine elevator that services three 100 metre berths and a separate 174 metre graving dock. Four piers further complement these dry docking capabilities. This combination of infrastructure allows six or more vessels out of the water at any given time (NEWDOCK Website, 2009).

# M&M Offshore Ltd./Pennecon Energy

Together, M&M Offshore Ltd and Pennecon Energy offer a wide range of services, including industrial mechanical construction, structural and miscellaneous steel fabrication, storage tank fabrication and erection, pressure vessel fabrication, pipe spooling, and specialized welding services. They have experience in the offshore oil industry with work such as the fabrication of mechanical skids, piping and pipe supports, platforms, remotely operated vehicle equipment and life boat structures. They also have considerable experience in the fabrication of subsea structures and subsea piping systems and are able to perform System Integration Testing (SIT) outside their facility.

In 1990, M&M purchased an existing plant located in St. John's. It includes 61,500 square metres of land and 4,150 square metres of building area. The fabrication, service and warehouse area covers 3,700 square metres and the two-floor office area covers 660 square metres. A temperature and humidity controlled paint shop is also part of the facilities. The plant is serviced throughout with eight 10 tonne overhead cranes, two exterior crane runways at one end and one exterior crane runway at the other (MMEW, 2009).

Located in Bay Bulls, Pennecon Energy Marine Base manages and operates a marine terminal facility. As the closest ice-free deepwater port to the Grand Banks oil fields, the facility consists of almost 60,000 square metres of waterfront property. There is direct access by sea and highway linkage with St. John's and surrounding industrial parks.

In addition to 800 square metres of on-site warehouse space, the Marine Base includes on-site office space and fabrication facilities. There are approximately 60,000 square metres of quayside lay-down space, as well as two berths. Berth No. 1 is a 110 metre concrete quay structure with 11 metre draft (low tide), while Berth No. 2 is 90 metre sheet piled quay with 8 metre draft (low tide). Dedicated stevedoring and cargo handling is also available.

# Metal World Inc.

Metal World Inc. offers a range of custom metal fabrication services such as structural steel, piping and process systems, tanks, pressure vessels, offshore containers, and on-site welding services. It operates from three locations: Torbay, Argentia and Stephenville. The company owns and operates a total of 16,700 square metres of fully-equipped fabrication space, including 1,300 square metres of waterfront space, in these locations. The company fabricated the heat recovery system and water utility skid for the White Rose FPSO, the fire suppression system for Hibernia, the equipment rooms for the White Rose FPSO, and the manifold for the North Amethyst extension and Terra Nova FPSO.

## DFB Group

The DFB Group manufactures, fabricates, services and repairs a wide variety of products, machinery and equipment in the marine, shipbuilding, offshore and industrial sectors. It has several large facilities consisting of more than 9,000 square metres of fabrication and manufacturing space, including fully-equipped machine, welding and mechanical shops, complete with an extensive array of portable equipment. The DFB Group is comprised of five business units:

• D. F. Barnes Ltd.

D.F. Barnes operates industrial facilities that feature state-of-the-art equipment, including fully-equipped machine and welding shops, overhead crane systems, forklifts, and more than 2,500 square metres of lay-down space.

• Orphan Industries Ltd.

Orphan Industries Limited, the DFB Group's contract manufacturing entity operates a 2,700 square metre facility in St. John's, including a machine shop and custom fabrication and production area for carbon and specialty steel products. In addition, the facility has over 20,000 square metres of secure, fenced lay-down space.

Newtech Coatings

The DFB Group operates a sandblast and paint facility located near Orphan Industries Limited called NewTech Coatings. NewTech provides sandblasting, coating, painting and baking services. It also has an industrial load test facility that is capable of performing uplift load tests of 50 tonnes and line pull tests of 45 tonnes. The sandblast and paint facility has an area of 650 square metres with an additional 1,600 square metres of secure and paved lay-down space. It also has access to up to 40,000 square metres of land in the adjacent DFB Group park.

• Extreme East Rigging Services Ltd.

The DFB Group's rigging and lifting facility, operated by Extreme East Rigging Services Limited, consists of 950 square metres of manufacturing and warehouse space and is fully equipped with state-of-the-art manufacturing and testing equipment. In addition, Extreme East maintains a complete pull and load test facility that provides certifications for all products, including a 40-foot test apparatus with a maximum pull capacity of 200,000 lbs.

• DFB Driver Inc.

DFB Driver Inc. is a full-range, multi-disciplinary provider of construction, project management and site services for energy extraction and resource development on Canada's East Coast. DFB Driver is a joint venture of the DFB Group and the JV Driver Group, of Edmonton, Alberta. Key capabilities include project management and site construction.

# GJ Cahill/North Eastern Constructors Limited (NECL)

Established in 1953 as an electrical contracting company, GJ Cahill has evolved into one of the largest multi-disciplinary construction organizations in Atlantic Canada. NECL is a supplier of fabrication and assembly services and is the heavy industrial and offshore fabrication arm of the Cahill Group. Using the Bull Arm fabrication facility, NECL has undertaken module fabrication and assembly for the Sea Rose FPSO, Terra Nova FPSO and Voisey's Bay project. Their experience on these projects has enabled NECL to develop and maintain stateof-the-art project management systems and procedures for offshore and heavy industrial fabrication services contracts. NECL is CWB and ISO 9001-2000 certified.

# Atlantic Hydraulic and Machine Ltd.

Located in Corner Brook (6000 sq.ft.building), Atlantic Hydraulic and Machine has 6 lathes, 3 milling machines, line boring equipment, radial arm drills, etc. The company specializes in hydraulic design and repair, machine work, welding and manufacture of marine and mechanical equipment. Atlantic Hydraulic has other divisions AHM Fabricators & A.H. Mechanical Contractors in another building located dock side in the port of Corner Brook. This division is designed with a large capacity for extra work as well as a large outside lay down area dockside with a 50 tonne ship to shore crane located near by. A.H Mechanical contractors is a union affiliated division that supplies mechanical contracting services for other companies using unionized skilled labour.

# Port of Corner Brook

The Port of Corner Brook is a sheltered, deep water port located on Newfoundland's west coast, 35km inland from the Gulf of St. Lawrence. Features include a 362m berth, a 1530m turning basin and minimum dockside depth of 10m. The Port has very little tidal fluctuation and its sheltered location results in very few wind and wave issues. Other facilities and equipment include a 28,000 square metre storage yard, two top lifts, a high bay maintenance garage and a 53 tonne capacity fixed pedestal crane. The Corner Brook Port Corporation also owns real estate and additional waterfront land which is available for development.

# 4.2.4.3 Other Newfoundland and Labrador Yards, Docks, Laydown Areas, and Fabrication Contractors

Examples of other Newfoundland and Labrador yards, docks and lay-down areas and fabrication contractors are outlined below.

# Allstar Rebar

Allstar Rebar specializes in rebar fabrication and the manufacture of welded wire mesh reinforcement. It owns a shop and office building in St. John's that has the potential to provide rebar fabrication services for GBS construction (Pennecon Website, 2009).

# Ameil Constructors Limited

Ameil Constructors is an industrial, multi-trade construction and fabrication company, established since January 2006 and located in Come by Chance. Ameil operates from a 1,500 square metre fabrication facility with up-to-date welding technology. Ameil also has a fleet of mobile cranes, boom trucks and other construction equipment. The company operates an ISO 9001:2000 registered Quality Management System and a COR-PRIME registered Occupational Health and Safety Program (Ameil Constructors Limited Website, No Date).

# ASIL Construction Facility

The ASIL facility in Port aux Basques includes a 4,645 square metre building, originally constructed to construct J-tubes for Hibernia. The 68,800 square metre site includes 1500 feet of undeveloped waterfront access, however there is no dockside currently present. The facility is currently for sale and is not in use.

## Argentia Management Authority

The Argentia Management Authority manages the former US Naval facility at Argentia, which has been redeveloped into an industrial site (AMAW, 2010). Argentia is a brownfield site with a land area of 37 million square metres, including 4.5 million square metres of developed land adjacent to a deep-water port. In June of 2004, Metal World Inc. opened a 2,000 square metre fabrication shop adjacent to the dock. Sufficient space also exists for open fabrication and construction (AMAW, 2010). The Argentia site has had limited involvement in hosting contractors involved in the offshore oil industry.

# AMEC Black & McDonald

AMEC Black & McDonald provides full life of asset support services to onshore and offshore Atlantic Canadian oil and gas facilities. AMEC Black and McDonald combines engineering and project management with construction and maintenance services to provide a one-stop shop in support of operating oil and gas facilities from commissioning and startup, through their operating life to decommissioning. The company can provide comprehensive operators and maintenance services including integrity management solutions, shut down and maintenance strategies and resource support capability.

# Bowringer Limited

Bowringer Limited offers a range of services in the mechanical/electrical/ fabrication disciplines to the oil and gas, mining, pulp and paper, chemical, utility and power generation industries. The company has gained experience in the mechanical outfitting disciplines through working on complex construction, maintenance and modernization projects in Newfoundland and Labrador.

#### C&W Offshore

C&W Offshore has a history of involvement in the Newfoundland and Labrador offshore, including work on the Terra Nova FPSO and Henry Goodrich drilling rig.

C&W has three facilities, with the main one in Mount Pearl providing 950 square metres of production space and 3,000 square metres of lay-down space. The second plant is in Bay Bulls with 2,000 square metres of production space and 4,500 square metres of lay-down space. The third facility is in Southern Harbour with a 400 square metre building and almost 10,000 square metres of laydown space. All three locations have additional lay-down area available. C&W's equipment includes a 10 tonne overhead crane, pipe bending and cutting equipment, lathes, specialty pipe coping and welding machines. The company has access to a computer controlled laser cutting machine and plasma cutting machine. C&W offers on-site fabrication, installation and engineering services.

# Harris Rebar

Harris Rebar specializes in the fabrication and placing of concrete reinforcing steel, used in the construction of concrete structures involving housing, institutional, industrial, commercial and heavy engineering. Services provided include the production of epoxy coated reinforcing steel, design and installation of concrete post-tensioning systems, and the supply and installation of wire mesh and concrete accessories.

# Metal Manu-Works

Grand Banks-based Metal Manu-Works has 20 years experience of steelworking, welding and fabrication. This has included work for the offshore oil industry, shipyards, construction companies, and fish processors. The company has a 400 square metre shop and a large yard.

# Talon Energy Services

Talon provides energy services and solutions to the oil and gas, resource, and heavy industrial sectors. Talon provides a single point of contact for personnel, engineering, fabrication, fabric maintenance, construction, commissioning, and maintenance services. The individual companies now under the "umbrella" of Talon Energy Services include Acquaint Personnel Services, Maderra Engineering, Keltic Steelworks, Karrigan Process Solutions, Blackhawk Industrial Services, and Ravencor Projects

#### 4.2.4.4 Other Large East Coast Fabrication Sites

Two companies own other major East Coast fabrication facilities and yards that are potentially capable to construct components of the Project.

# Irving Shipbuilding Inc.

Irving Shipbuilding Inc. (ISI) owns and operates four fabrication and shipbuilding facilities in Nova Scotia and Prince Edward Island. They are suited for modules up to 3,500 tonnes such as were completed for the White Rose and Sable South Venture projects (ISIW, 2009). The facilities are described below:

#### **Capacity Assessment**

### Halifax Shipyard

Halifax Shipyard is the largest ISI facility and serves as the head office for the company. Located on the south side of Halifax Harbour, it occupies 182,000 square metres of land. There is an outdoor assembly area of 10,200 square metres, and additional storage and laydown of 28,000 square metres. The shipyard includes a deepwater port, two drydocks, a steelyard, warehouses, administration offices and various fabrication shops (ISIW, 2009).

• Woodside Industries

Woodside Industries, located in Halifax, supplements the capability of Halifax Shipyard for the offshore industry. It has mainly been used for the fabrication of offshore topsides and rig upgrades. It has a total undercover fabrication and storage area of 18,000 square metres, an assembly and load area of more than 15,000 square metres, and a load out wharf of 229 metres (ISIW, 2009).

• Shelburne Ship Repair

Shelburne Ship Repair is located on the south-western coast of Nova Scotia and is equipped to serve small and medium-sized vessels. The yard has a marine railway capable of lifting up to 3,500 tonnes, a 752 metre wharf, and fabrication shops and offices that cover a total area of 3,000 square metres (ISIW, 2009).

• East Isle Shipyard

East Isle Shipyard is located near Georgetown, Prince Edward Island. The small ship production facility has 3,300 square metres of fabrication shops, a marine railway, a warehouse, an office and various fabrication shops. (ISIW, 2009).

#### Aecon Fabco

Aecon Fabco offers sub-sea structure services and has fabricated pipe rack assemblies for oil and gas compression platforms (Aecon Fabco Website, 2009). It owns and operates three facilities in Nova Scotia:

Woodside Facility

Located in Dartmouth, this facility is comprised of approximately 4,400 square metres on 13,000 square metres of land. It specializes in the fabrication of tanks, structural and plate products for onshore and offshore installations. There are three shops and a 20,200 square metres of laydown area (Aecon Fabco Website, 2009).

• Pictou Pipe Fabrication and Module Assembly Facility

The Pictou Facility is located on the North East coast of Nova Scotia. It is equipped for the fabrication of large steel structures such as accommodation blocks, pipe racks and equipment modules. A 92 metre wharf, with an 8 metre apron and water depths of 8 metres allow marine access. Several fabrication shops, offices and a 72,800 square metre laydown area are situated on site (Aecon Fabco Website, 2009).

# Capacity Assessment

# Eastern Passage

Eastern Passage is located eight kilometers from the Woodside facility in Dartmouth. It specializes in the production of stainless steel spools for general electric steam and gas turbine installation. Pipe diameters range from ½ inch up to 5 inches (Aecon Fabco Website, 2009).

#### 4.2.4.5 Assessment

The Bull Arm facility, supported by other construction and fabrication yards elsewhere in Newfoundland and Labrador, has undertaken the majority of such work on previous offshore oil projects in the Province. This and work for other industries has seen an expansion in their capacity and capabilities.

GBS construction activities will take place at facilities at Bull Arm or elsewhere in Newfoundland and Labrador. No new onshore facilities are planned, although some existing facilities at the Bull Arm or other sites may need to be refurbished or expanded. Furthermore, as described in Section 3.3, EMCP has sought to both identify under-utilized facilities in Newfoundland and Labrador with the potential to undertake Hebron work, and educate their operators to Hebron requirements.

A specific assessment of the ability of provincial facilities to undertake work with respect to each of the main Hebron components, and for hook-up and commissioning and mating, including offshore installation, is provided below:

#### GBS Concrete Structure

The GBS concrete structure will be constructed at Bull Arm. Bull Arm may also be used for the fabrication of selected topsides modules (see below), and will be used for the integration of all topsides modules, mating of integrated topsides with the GBS and hook-up and commissioning of the mated platform. Site preparation activities at Bull Arm will be required in order to ready the site for GBS construction and topsides fabrication and integration. These early works activities will likely commence in early 2011, with construction and fabrication likely beginning in 2012.

#### Utility and Process Module

The location for fabrication of the UPM will be determined through an international competitive bidding process.

#### Drilling Support Module, Derrick Equipment Set, Living Quarters Module

Subject to certain considerations, the drilling support modules, derrick and living quarters will be constructed in Newfoundland and Labrador. All modules will be assembled and integrated on the topsides assembly pier at Bull Arm.

#### Helideck, Flare Boom and Lifeboat Structures

The helideck, flare boom, and lifeboat stations, will be constructed in Newfoundland and Labrador.

### Offshore Loading System

It is anticipated that the major components for the OLS will be procured from suppliers located outside of the Province, because it is a proprietary specialized system which most likely will be designed and built by a specialist contractor. While opportunities for local suppliers to provide OLS components may be limited, the fabrication of the structural steel riser components and assembly of the OLS will occur in the Province.

# Hook-up and Commissioning/Mating/Offshore Installation

Hook-up and commissioning and mating, including offshore installation, involves connecting the topsides modules to the GBS structure and ensuring that they are in operable condition. The hook-up and commissioning of the platform also includes its installation at the field. This activity requires a wide variety of specialized skills and trades over a short period, resulting in high peak labour demands. It also requires a coordinated effort by marine load-out specialists, the hook-up team, module fabricators and equipment vendors and suppliers. Tow out of the completed production facility to the field location is a key marine operation. Six to eight ocean-going tugs would be typically used to tow out such a structure. Remotely operated vehicles may also be required for inspection purposes, and survey vessels will also be used.

#### 4.2.5 Labour Requirements

The FEED for the Project, including the estimated labour requirements, had not been completed at the time of writing. The Project labour requirements will change as the design evolves. As is stated in Section 5.1, Project consultation initiatives will include the provision of Project-related information to business groups, economic development groups, diversity groups, educators and others in a timely manner, so as to help them plan and implement initiatives to deliver Project-related benefits.

Pre-FEED estimates indicate that Hebron construction will require a total of approximately 20 million person-hours of project management, engineering and trades labour. As is shown in Table 4.2.5-1, approximately 11 million person-hours will occur in the Province.

**Capacity Assessment** 

	NOC	2011	2012	2013	2014	2015	2016	Total
Construction	A112,						_	
Inspectors	C161		56	65	79	75	4	279
-	C164							
<b>Flastrisians</b>	H211-		17	145	100	170	c	500
Electricians	H213, H433		17	145	169	172	6	509
	H121,							
	H132,							
	H326,							
GBS Concrete	H523,			203	1,313	1,421	174	3,111
	H611,				,	,		- ,
	H711,							
	H821							
	C132,							
HVAC	H016,		9	55	68	53	4	189
	H413							
Instrumentation	C143		2	32	132	155	3	324
Trades			2	02	102	100	5	024
Mechanical	H322,							
Trades	H411,		52	118	385	440	32	1,027
	H 416							
	H111,		110	101		0.07	10	004
Piping Trades	H112,		112	164	299	307	19	901
Project and	H113							
Construction	A121, C131	57	386	321	268	228	23	1,283
Mgmt	0131	57	300	521	200	220	23	1,203
Wgm	H321,							
Structural	H323,						-	
Trades	H324,		619	188	293	306	9	1,415
	H326							
Surface	H144,		474	00	474	474	7	000
Protection	J226		174	83	171	174	7	609
Civil and	C031,							
Structural	C131,	32	115	164	219	171	28	729
Engineering	C153							
Electrical	C033,							
Engineering	C141,	29	43	23	0	0	0	95
0 0	C153							
Materials	C042	4	7	3	0	0	0	14
Engineers	00000			-	-	-	-	
Mechanical	C032,	10	70	100	100	70	10	200
Engineering	C132,	16	70	102	123	73	13	399
	C153							
Piping	C032, C132,	30	45	24	0	0	0	99
Engineering	C132, C153	30	40	24	U	U	U	99
Process	C133							
Engineering	0004	8	12	6	0	0	0	26
Total	<u> </u>	176	1,719	1,696	3,519	3,575	322	11,004
TUIAI		170	1,/13	1,090	3,313	3,373	JZZ	11,004

Table 4.2.5-1: Estimated Hours (000's) in Newfoundland and Labrador by Trad	e
Designation	

A more detailed description of the estimated trades labour requirements, as required by the C-NLOPB, is presented in Appendix C.

#### 4.2.6 Labour Capacity

Strategic Concepts Inc. (2010) provides a comprehensive labour capacity assessment for the Hebron Project. To provide context for the assessment of the labour capacity for the occupations Hebron requires, this includes discussion of:

- The Newfoundland and Labrador labour market, by occupation, including growth prospects;
- Educational programs at Memorial University and the College of the North Atlantic, and union-sponsored training programs;
- Construction industry labour market issues, including national and international shortages of skilled trade labour, aging workforce, the need for continuity between major provincial projects, and out-of-Province recruitment;
- Labour demand from other projects in the Province and elsewhere in Canada; and
- Wage rate differentials.

As of 2010, Newfoundland and Labrador's labour force had approximately 240,000 people, of whom approximately 220,000 were employed. Historically, the Province's labour market has been characterized by seasonal work concentrated in primary industries. This trend has been changing gradually over the past decade with a move towards a service-based economy. The labour force has a higher than average proportion of its workforce in trades and primary processing. It is also characterized by a high level of labour mobility, particularly amongst trade workers who move from project to project.

Newfoundland and Labrador also has an aging work force and a declining birth rate. In spite of some success in attracting and increasing entrants into the skilled trades labour force, outmigration, particularly among young workers, has essentially negated these gains.

The Alberta economy has generated major demands for skilled tradespersons, resulting in an escalation in labour costs across the country. This is expected to continue for at least the medium term despite current economic conditions worldwide.

A major factor in estimating the potential labour supply is the existence of other construction projects, within the Province and elsewhere in Canada, which will occur at the same time as the Hebron construction phase. This contributes to a high level of uncertainty as to the availability of skilled trades personnel for Hebron in Newfoundland and Labrador.

#### 4.2.6.1 Assessment

In the above context, the Strategic Concepts Inc. report (2010) assesses the adequacy of the effective labour capacity, which is a determining factor in the ability of workers in the Province to meet Project demand. This was determined

based on a methodology that involves using published statistical sources of data (i.e. the theoretical supply of labour) and adjusting these figures to take into account a number of factors (e.g. age, mobility, new graduates, lack of experience and outmigration). For each of the key trades and engineering disciplines required for Hebron, the resultant net effective labour capacity in the Province was compared with the probabilistic peak demand, which includes the estimated Project peak requirement for work expected to be performed in Newfoundland and Labrador, plus the probable requirements of other projects that may be under construction at the same time as Hebron.

Based on this analysis of demand versus capacity, the relevant engineering and trade categories and gaps are outlined in the Table 4.2.6-1. These are not intended to be absolute measures of supply and capacity, but provide approximate values that can be used as a guide to support decision-making prior to the start of construction and to provide an understanding of the risks associated with labour supply issues.

Where specific skill development is required to meet Project staffing needs, as identified in the labour capacity study or through other projections, EMCP and its contractors and suppliers will work in conjunction with educational institutions, industry and other stakeholders to facilitate the delivery of training to Newfoundlanders and Labradorians including members of the designated groups. This will include regulatory/safety, technical, competency and leadership training and will be delivered through various means, including on the job training and apprenticeships.

Hebron has initiated meetings and workshops on labour market and human resources issues. Participants have included representatives of Memorial University, the College of the North Atlantic, and other education and other training institutions throughout the Province, the provincial Skilled Trades Task Force, the Petroleum Industry Human Resources Committee, labour associations, and groups promoting the employment of women and other designated groups. These served to inform participants about the Project and collect information about labour market developments and initiatives. Hebron Project

**Benefits Plan** 

Category	Theoretical Supply	Net Effective Capacity	Hebron Peak Demand	Probabilisti c Peak Demand	Result
Trades					
Mechanical Trades	1,732	245	300	600	
Construction Inspectors	512	19	58	89	
Electricians	2,172	686	147	316	0
HVAC	371	51	50	189	
Instrument/Telecom	209	6	124	313	
Piping Trades	1,230	808	222	946	0
Surface Protection	684	381	162	254	0
Structural Trades	2,797	1,399	565	914	0
GBS Concrete	9,583	4,742	866	1,693	0
Engineering					
Piping Engineering	272	8	30	130	
Electrical Engineering	1,031	34	29	129	0
Civil and Structural Engineering	1,174	38	133	342	
Mechanical Engineering	437	13	76	176	
Materials Engineering	20	1	4	85	
Process Engineering	99	3	8	128	
Project & Construction Mgmt- Owners Costs	543	15	259	314	

## Table 4.2.6-1: Hebron Labour Capacity Analysis

Key:

Shortage of labour with peak demand from Hebron being greater than the net effective supply.

Possible shortage of labour with peak demand from multiple projects being greater than the net effective supply.

No shortage in labour expected

## 4.3 Operations Phase

The Hebron operations phase is expected to last for approximately 30 years. During this period Hebron will require labour, goods and services, and equipment to support the production and drilling operations. Such requirements will evolve over this period. The operations phase represents the most significant opportunity for suppliers from Newfoundland and Labrador given the continuity and duration of demand, the existence of three other producing fields and the geographical advantage afforded provincial suppliers.

Specifically, the operations phase will involve the following categories of activities and expenditures:

- Development drilling;
- Offshore operations / production;
- Onshore support operations; and
- Logistics.

Each of these categories is described separately below, in terms of a description of the activity and the estimated goods and services and labour requirements and capacity.

The FEED for the Project, including the estimated goods and services, and labour requirements, had not been completed at the time of writing. These requirements will change as the design evolves. As is stated in Section 5.1, Project consultation initiatives will include the provision of Project-related information to business groups, economic development groups, diversity groups, educators and others in a timely manner, so as to help them plan and implement initiatives to deliver Project-related benefits.

### 4.3.1 Goods and Services Requirements

This section presents the procurement requirements for the main activities that will occur during the operation phase. These activities include development drilling, offshore operations and production and logistics.

### 4.3.1.1 Development Drilling

The development drilling plan for the Project currently calls for the drilling of 41 production and injection wells from the GBS structure. The development and production drilling requirements for goods and services include the following:

- Chemicals;
- Cementing services;
- Drilling fluids;
- Coring services;
- Drilling services (MWD, LWD, etc);

#### **Capacity Assessment**

- Diving services;
- Drilling contractors;
- Tubulars (casing and tubing);
- Tubular inspection;
- Casing handling services;
- Drill bits;
- Fishing tools;
- Completion fluids; and
- Completion tools.

#### 4.3.1.2 Offshore Operations and Production

The goods and services required to support the production activities on the platform include the following:

- Catering services and supplies;
- Environmental services;
- Waste disposal services;
- Welding services;
- Freight forwarding;
- Instrumentation equipment inspection and repair;
- Containers (various types);
- Tote tanks;
- Waste oil tanks;
- Insulation and fireproofing;
- Machinery and equipment repair;
- Marine transportation services;
- Medical services;
- Non-destructive testing;
- Oil spill and pollution control;
- Weather forecasting;
- Scaffolding; and
- Painting.

## 4.3.1.3 Logistics

The key areas of logistical support required during the operation phase are personnel movements and vessel support.

- Personnel Movements: Helicopters will be the principal method for transferring personnel between St. John's and the field facilities, 350 km offshore. EMCP will discuss shared services with other Grand Banks operators with a view to optimizing the fleet configurations and providing the safest and most effective service; and
- Supply/Standby Vessel Support: Supply vessel support will be required to service the operational needs of the platform. EMCP will discuss synergies with other Grand Banks operators on the use of supply and standby vessels.

The operation of the Hebron Project will also require the following additional logistical support:

- Onshore warehousing;
- Onshore supply base;
- Procurement, movement and storage of materials and consumables; and
- Diving and inspection services.

It is anticipated that onshore support for docking, warehouse space, helicopter operations and product transshipment can be carried out at existing sites, but other sites will be considered.

### 4.3.2 Goods and Services Capacity

As has been described in Sections 1.2 and 4.1.2, the last twenty years has seen a great increase in capacity and capability of Newfoundland and Labrador companies to undertake offshore oil work, including operations activities as the three current fields have come into production since 1997. Furthermore, many of the materials and equipment required in the Hebron operations phase are the same as required in the construction phase of the Project.

### 4.3.2.1 Assessment

The operations phase represents a very important opportunity for Newfoundland and Labrador suppliers given the continuity and duration of demand, the existence of the other producing fields, and the geographical advantage afforded Newfoundland and Labrador suppliers. The great majority of such work in the Province's offshore is undertaken by such companies, and this will continue to be the case with Hebron. The actual level of local procurement for the required goods and services will depend on the bidding competitiveness of local companies. EMCP policies, guidelines and procedures to assist them have been described in detail in Section 3.3.

### 4.3.3 Labour Requirements

The operations phase will require workers on the platform, on tankers, and engaged in onshore and support activities. At the time of writing it is estimated that there will be approximately 230 offshore operations positions, requiring approximately 460 personnel based on the offshore rotation. They will be employed in the following categories:

- Drilling;
- Operations and Management;
- Services and Deck Crew;
- Critical Services;
- Interventions;
- Catering; and
- Construction.

The Project requirement for tanker crew and onshore workers has not yet been finalized. However, as of March 2010, the three existing provincial offshore oil projects directly employed between 72 and 150 tanker crew and between 479 and 531 onshore and support personnel (C-NLOPB, 2010).

The number of operations positions is therefore much smaller than is required by the construction phase. However, these positions are also of a much greater duration and thereby represent career, rather than employment, opportunities.

#### 4.3.4 Labour Capacity

The number of operations positions is much smaller than is required during construction. There is also a greater lead time before these employees will be required, facilitating the identification and addressing of any labour shortages that are identified.

As was discussed in Section 1.2, Newfoundland and Labrador now has over 30 years experience with offshore oil and gas activity. This, building on the Province's long maritime history, has resulted in the development of a substantial labour force with seafaring, offshore petroleum, and onshore support capabilities and experience. There are also relevant training and education programs in place at the Marine Institute, College of the North Atlantic and other institutions.

EMCP policies, guidelines and procedures to attract and retain Newfoundlanders and Labradorians to Hebron operations activity have been described in Section 3.3.4. In addition, approaches to increasing the numbers of designated group members engaged in such work are summarized in Section 3.3.6 and presented in the Hebron Diversity Plan (Appendix B).

### 4.3.4.1 Assessment

It is anticipated that the great majority of operations phase labour requirements for the Project will be met using Newfoundland and Labrador residents.

#### 4.4 Content Estimate

A preliminary calculation of the expenditure and employment content for the construction phase of Hebron has been prepared based on the latest budgetary estimates as of the time of writing, which are expected to be accurate to plus/minus 25 percent. Of the total Project cost, it is estimated that 35 to 55 percent will occur in Newfoundland and Labrador, 15 to 30 percent will occur elsewhere in Canada, and 25 to 40 percent will occur outside of Canada. Of the total Project employment, it is estimated that 30 to 50 percent will occur in Newfoundland and Labrador, 15 to 25 percent will occur elsewhere in Canada, and 30 to 50 percent will occur outside of Canada.

These numbers have been prepared from preliminary, high-level projections and will change over the course of the FEED and detailed design engineering processes. This estimate is indicative only but reflects EMCP's plans to meet its benefits commitments. The final outcomes will be dependent on the success of EMCP, its main contractors and other stakeholders in their respective roles in delivering benefits, and on the results of competitive bidding processes.

As stated previously, operations phase requirements have yet to be identified, but are expected to be in line with the three existing provincial offshore oil projects.

#### 4.5 Subsea Production and Injection Systems

#### 4.5.1 Overview

A full development option for Hebron Pool 3 is a subsea tie-back to the Hebron GBS. A conceptual design for the subsea production and injection system has been developed and consists of the following elements:

- One or more subsea excavated drilling centres with production, water injection, and gas injection manifolds and trees, umbilical termination assemblies, subsea distribution units, control pods, jumpers and flying leads;
- Production, water injection, gas injection, gas lift, and well stimulation pipelines and/or flowlines, and control umbilicals between the GBS and the subsea drilling centers;
- Pipeline risers and/or J-tubes pre-installed in the GBS; and
- Additional Topsides equipment necessary to support subsea development.

Subsea facilities will include all equipment necessary for the safe, efficient operation and control of subsea wells, and transportation of production and injection fluids between the subsea wells, subsea manifolds, and GBS facilities. Specifics of the conceptual design may change as designs are finalized.

#### 4.5.2 Capacity Assessment

#### 4.5.2.1 Pipelines, Umbilical and Subsea Equipment Installation

Scope Summary:

- Design and fabricate umbilicals, flexible pipelines (production flow lines, water injection, gas injection, etc.) and pipeline end terminations (PLETs);
- Install umbilicals, pipelines, PLETs, and jumpers;
- Install necessary drilling templates/manifolds;
- Pull-in umbilical and pipelines through existing J-tubes or connect to risers on the Hebron platform; and
- Provide support services such as diving operations and rock dumping as required.

#### Assessment:

This work scope is highly specialized with capability limited to a relatively small number of experienced international contractors. A number of these contractors have established significant capabilities in the Province through participation on previous projects in the region. Subcontracting capability exists within the Province to support the offshore installation portion of the work program.

#### 4.5.2.2 Subsea Equipment Fabrication and Commissioning

Scope Summary:

- Fabricate subsea manifolds, templates, control system, subsea trees, umbilical termination assembly, and topsides-located subsea control equipment; and
- Commission the entire subsea system.

#### Assessment:

This work scope is highly specialized and expertise is limited to a relatively small number of suppliers, some of whom have established a presence in the Province. There is subcontracting capability within the Province to fabricate components and to assist in system integration testing.

#### 4.5.2.3 Excavated Drill Centre Dredging

Scope Summary:

• Design and dredge one or more excavated drill centres.

Assessment:

There is limited number of international specialist contractors capable of undertaking the work scope. Services to support this type of offshore work program are available within the Province.

## 4.5.2.4 Drilling Services

#### Scope Summary:

A Hebron subsea development would require the use of a mobile offshore drilling unit and require goods and services as have been described in Section 4.3.1.1.

Assessment:

As noted in Section 4.3.2, the last twenty years has seen a great increase in capacity and capability of Newfoundland and Labrador companies to undertake offshore oil work, including drilling activities. The great majority of such work in the Province's offshore is undertaken by local companies, and this would continue to be the case with Hebron.

# 5.0 CONSULTATION, MONITORING AND REPORTING

## 5.1 Stakeholder Consultation

Benefits Plan consultation occurred early and frequently during the Project planning phase. This helped the Project team establish a full understanding of the local benefits context, and allowed it to gather quantitative and qualitative information that was of great value for preparing this Benefits Plan, including an identification of benefits opportunities and constraints. This consultation also developed corporate and personal relationships with stakeholders, forming the basis for the collaborative approach that has been identified as essential in the efficient and effective delivery of Project benefits.



Whether it's 30 people or 400 people, the community is important to us.

Hareesh Pillai, The Telegram, April 15, 2009

The stakeholder consultation focused on Newfoundland and Labrador, and more specifically on those regions of the Province most likely to have involvements with the Project. However, the legislative requirement respecting benefits pertains to both Canada and Newfoundland and Labrador benefits, and EMCP engaged with groups representing other parts of Canada.

The initial stakeholder benefits consultation was undertaken by Chevron Canada Resources during the 2005 to 2007 period. This saw numerous presentations to business, technical and training conferences, and meetings with community leaders and representatives of training institutions, public interest groups, regulators and other stakeholder groups.

A Benefits Plan stakeholder database was prepared to identify significant stakeholders and monitor contact with them during the consultation process. The following types of group, with example groups identified, are included in the database, and have participated in the benefits consultation process:

- EMCP's co-venturers and other operators;
- Industry associations (NOIA);
- Business and employer groups (St. John's Board of Trade and Newfoundland and Labrador Employers' Council);
- Professional groups and unions (Association of Professional Engineers and Geoscientists of Newfoundland and Labrador, and Canadian Auto Workers / Marine Workers Federation);

- Training and educational institutions (Memorial University and the College of the North Atlantic);
- Economic development and planning groups (Regional Economic Development Boards and Atlantic Planners Institute);
- Federal, provincial and municipal governments;
- R&D organizations (Newfoundland and Labrador Research and Development Corporation) and companies;
- Special interest groups representing women, Aboriginal peoples, visible minorities, and persons with disabilities; and
- Other public interest and community groups.

The consultation involved a mixture of topic-specific and multi-topic events. The former involved organizations, agencies and key informants with special experience and expertise respecting such topics as:

- Supplier development, procurement and contracting;
- Employment, education and training;
- ♦ R&D;
- Diversity; and
- Community, regional and provincial economic development.

In addition, multi-topic benefits consultation events were held in St. John's, Clarenville, Marystown and Corner Brook. These focused on benefits opportunities and challenges in regions and communities that are either likely to host or be adjacent to Hebron-related activities or have a strong potential for developing their supplier and contracting capacity for use on the Project. These regional events drew representatives of groups with a wide range of benefitsrelated interests.

In addition to the above benefits-specific consultation, a Province-wide consultation program was undertaken for the Project as a whole. This addressed a number of topics associated with the Project, such as its potential environmental and social effects. The presentations and consultation materials used at these events also included a discussion of benefits, and many benefits and benefits-related considerations and opportunities were discussed. Indeed, benefits were the largest single topic of discussion at Project open houses and socio-economic workshops.

Lastly, EMCP representatives participated in a wide range of conferences, seminars, luncheons and other public events, and various formal and informal meetings, with benefits being a common topic or consideration.

#### Consultation, Monitoring and Reporting

The time has come for businesses looking for a slice of the megadollar pie the Hebron oil project will generate to step up to the plate... that was a major theme during a session hosted by the Eastern Suppliers Development Alliance (ESDA) in Marystown. [ESDA consultant Bob] Kennedy acknowledged there's a "serious will" to involve Newfoundland companies in the Hebron project... "No question they want to do this. Our job is to help facilitate it."

Southern Gazette, July 19, 2010

The main benefits messages heard were very positive. Participant groups indicated that they represent a strong and experienced base of benefits and economic development-related expertise and capacity, and are willing and able to collaborate with EMCP in the delivery of Hebron benefits. It was generally recognized that sustainable economic development will only result if the Project, and the companies and individuals working on it, are competitive. Stakeholders also made clear that the interest in 'local' benefits operates at a range of different geographic scales, including the communities hosting, or adjacent to, Project activities.

Other benefits-related comments, by topic, included:

#### Employment

- Deliver local employment, training and technology transfer;
- Communicate employment-related information to education and training institutions, labour market researchers and unions on a timely basis;
- Communicate with communities to help ensure that local skill sets are adequate for the Project;
- Assist in increasing youth retention throughout the Province; and
- Monitor employment-related commitments.

### Procurement, Contracting and Supplier Development

- Provide business opportunities to local businesses, facilities and suppliers;
- Provide information concerning contracting needs and processes to the business community, education and training institutions, and economic development organizations on a timely basis; and
- Monitor procurement-related commitments.

### Education and Training

- Communicate Project requirements to education and training institutions in a timely manner to help ensure the adequate and appropriate provision of training; and
- Seek to address the shortage of apprenticeship opportunities.

#### Research and Development

- Make R&D investments in different institutions and businesses across the Province;
- Leverage other funding sources so as to increase the effects of R&D investments;
- Invest in applied research, and in education and training; and
- Increase investment in the social sciences.

#### Diversity

- Ensure diversity commitments are communicated to all contractors and suppliers; and
- Monitor diversity-related commitments, using quantifiable goals and objectives.

Other

 Further develop benefits-related expertise and the local benefits community of practice.

The benefits topics that arose at consultation events were recorded and compiled, and appropriate follow up was provided. Input from the consultations have been taken into consideration, and incorporated into, Project planning and this Benefits Plan.

Consistent with the Hebron Benefits Principles (see Section 3.2), ongoing stakeholder consultation and related collaboration are seen as key to the delivery of benefits over the life of the Project. A consultation database will be maintained as a basis for these further consultations.

Consultation will include EMCP and contractor-organized meetings and events, and EMCP and contractor participation, as opportunities arise, in meetings and events organized by others. This will include the provision of Project-related information to business groups, economic development groups, diversity groups, educators and others in a timely manner, so as to help them plan and implement initiatives to deliver Project-related benefits.

Information from ongoing consultation will provide important input to the periodic review of benefits approaches, principles, policies, guidelines and procedures, and to revising and developing tactical plans and specific initiatives. The goals for the consultation will also include contributing to, and benefitting from, the further development of an industrial benefits 'community of practice' in Newfoundland and Labrador.

### 5.2 Monitoring and Reporting

Monitoring is a key element in EMCP's management process, by providing information that is used to further refine and develop Project benefits processes, policies, guidelines and initiatives so as to ensure they are appropriate and effective throughout the life of the Project. EMCP also recognizes that the

monitoring and reporting of procurement decisions, employment levels and expenditures, R&D and diversity are required so as to inform the C-NLOPB concerning the principles of the Benefits Plan. This includes the monitoring of the activities of both EMCP and its contractors and suppliers.

EMCP's approach to monitoring and reporting is based on the Benefits Plan Guidelines, taking into account the Project Benefits Agreement requirements, the current practices of the operators of existing projects in the Newfoundland and Labrador offshore, the current benefits context and priorities in the Province, and ExxonMobil practice and experience in other jurisdictions. EMCP has recognized that the C-NLOPB and others involved in the Atlantic Energy Round Table process have expressed a desire to implement changes that will increase the efficiency of monitoring and reporting processes. EMCP and the C-NLOPB have initiated discussions to develop a more efficient monitoring and reporting process which EMCP will strive to complete by the end of the FEED phase of the Project.

This section describes EMCP's current plans for monitoring and reporting on the efforts of both itself and its contractors and suppliers in achieving benefits to Canada in general, and to Newfoundland and Labrador in particular. Further details on monitoring and reporting policies, guidelines and procedures are provided in Section 3.3.3 and in the Hebron Benefits Management Systems manual.

#### 5.2.1 Pre-development Monitoring and Reporting

All pre-development Project activity by EMCP or its contractors and suppliers will be subject to the C-NLOPB Exploration Benefits Plan Guidance, which makes provision for the monitoring and reporting of pre-development activities conducted prior to the approval of a Benefits Plan. All applicable predevelopment procurement and contracting activity, undertaken in support of preparing the Hebron Development Application, will be monitored and reported in accordance with C-NLOPB requirements.

EMCP will ensure pre-development activity is conducted in accordance with the C-NLOPB Benefits Plan Guidelines and consultations with the Board.

In order to facilitate supplier development and full and fair opportunity, Hebron has been providing the C-NLOPB with Project procurement forecasts, listing anticipated goods and services requirements, since 2009.

## 5.2.2 Project Monitoring and Reporting

This section describes EMCP's plans for monitoring and reporting on the efforts of both itself and its contractors and suppliers in achieving benefits to Canada in general, and to Newfoundland and Labrador in particular. This includes providing the C-NLOPB with:

 Information about procurement and contracting decisions that have significant national or provincial implications;

- Project expenditure and employment reports on a regular basis;
- A description of the work commitments for the Province and Canada for each major work or activity to be executed in the Province, in the offshore area or in another part of Canada, upon award of contract; and
- Benefits reports on a quarterly and annual basis, in a format satisfactory to the Board, for its use and for public distribution. The annual reports will include an assessment with respect to success in meeting commitments made in this Plan.

Six months before the expiry of an operator's Operations Authorization, EMCP will provide an assessment of the results of the application of the approved Benefits Plan during the term of the authorization and the potential for realizing further improvements.

## 5.2.3 Cascading Obligations to Contractors, Sub-Contractors and Suppliers

As was described in Section 3.3.3, benefits considerations, including monitoring and reporting requirements, will be integrated into all phases of the contracting process. EMCP will articulate its reporting requirements in its contracts. EMCP will require a full understanding of, and adherence to, the monitoring and reporting obligations and cascade them to its contractors, sub-contractors and suppliers. The main contractors will be responsible for collecting, compiling and reporting to EMCP data on their own activities and those of their sub-contractors and suppliers. EMCP will meet with its main contractors early in the Project, reviewing their processes and systems, and emphasizing monitoring and reporting obligations.

### 5.2.4 Facilitating the C-NLOPB Contract Review Process

The C-NLOPB has indicated that it intends to review designated contracts, subcontracts and purchase orders associated with construction phase procurement for the Project, including contracting and procurement by all contractors and suppliers and sub-contractors. The C-NLOPB Guidelines indicate that the number of contracts, sub-contracts and purchase orders designated for review will not exceed 20 percent of all contracts, sub-contracts and purchase orders greater than or equal to \$250,000. At the time of writing, EMCP is in discussions with the C-NLOPB with respect to streamlining the contract review process. Any contracts, sub-contracts or purchase orders that in the Board's opinion may be sensitive will also be subject to review.

The C-NLOPB Benefits Plan Guidelines outline the proposed procedures it will follow in reviewing contracts, sub-contracts and purchase orders designated by it for review at the pre-qualification, bidders list and contract award stages. EMCP is committed to cooperating fully with the C-NLOPB in this review process, and will provide the required information at the various stages in the contracting process to facilitate an efficient review. EMCP proposes the following approach to facilitate the C-NLOPB's intended contract review process:

- 30 days prior to the beginning of each quarter, EMCP will provide the C-NLOPB with a procurement forecast that will list all contracts, sub-contracts and purchase orders that will commence the contracting process in the upcoming quarter and are anticipated to exceed an agreed threshold value. Furthermore, EMCP will inform the C-NLOPB of any significant changes or additions to the forecast as soon as possible.
- The C-NLOPB has indicated that it will advise EMCP, by the first day of each quarter, which contracts, sub-contracts and purchase orders have been requested for review.
- EMCP will also submit to the C-NLOPB, within 30 days of the end of each quarter, a procurement report which will list all contracts, sub-contracts and purchase orders that exceed an agreed threshold value that were awarded in the previous quarter. For each contract, the report will note the estimated value of the contract or purchase order, the name of the successful contractor/vendor, the primary location of work, the estimates of Newfoundland and Labrador and Canadian content, and the commencement and completion dates.
- For any major contract awarded outside Newfoundland and Labrador, EMCP will provide the C-NLOPB with the rationale for that decision, particularly if a local shortage in capability or capacity has been identified.

As was noted above, the C-NLOPB and others involved in the Atlantic Energy Roundtable process expressed a willingness to implement changes that will increase the efficiency of monitoring and reporting processes. EMCP will assist in the identification and implementation of any applicable changes.

#### Table 5.2.4-1: Monitoring and Reporting Initiatives

Require a full understanding of, and adherence to, the monitoring and reporting obligations and cascade them to contractors, sub-contractors and suppliers

Meet with main contractors early in the Project, reviewing their processes and systems, and emphasizing monitoring and reporting obligations

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# 7.0 LIST OF ACRONYMS

AMKC	Aker Maritime Kiewit Contractors
ASIL	Atlantic Seaboard Industries Ltd.
CAD	Computer-aided design
C-NLOPB	Canada-Newfoundland and Labrador Offshore Petroleum Board
CNA	College of the North Atlantic
DA	Development Application
E&T	Education and training
EIS	Environmental Impact Statement
EMCP	ExxonMobil Canada Properties
EOI	Expressions of interest
EPC	Engineering, procurement and construction
FEED	Front-End Engineering and Design
FPSO	Floating production storage and offloading – floating vessel used by the offshore industry for the processing and storage of oil and gas
GBS	Gravity base structure – the base of an offshore drilling and production platform, usually made of concrete, that is held securely on the ocean bottom without the need for piling or anchors
HMDC	Hibernia Management and Development Company
HPU	Hydraulic power units
HVAC	Heating, ventilating, and air conditioning
ISI	Irving Shipbuilding Inc.
KBR	Kellogg, Brown and Root
KOS	Kiewit Offshore Services
MUN	Memorial University
NDT	Non-Destructive Testing
NOIA	Newfoundland and Labrador Oil and Gas Industries Association
OLS	Offshore loading system – crude oil loading facilities
PLET	Pipeline End Termination
PRAC	Petroleum Research Atlantic Canada

Hebron Project	Section 7
Benefits Plan	List of Acronyms
POB	Personnel on board
QC/QA	Quality control and quality assurance
R&D	Research and development
RFP	Request for proposal
RFQ	Requests for Quotations
SCI	Strategic Concepts Inc.
SEIS	Socio-economic Impact Statement
SHE	Safety, Health and Environment
UPM	Utility and process module – structure located on the topsides of an offshore platform, containing the well bay process and utility systems

# 8.0 GLOSSARY

Acts	When capitalized in this document, refers to the Canada- Newfoundland Atlantic Accord Implementation Act and the Canada- Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act
Atlantic Energy Roundtable	A meeting that brings together cabinet ministers, industry members, regulators and labour leaders from the Atlantic provinces to discuss and plan for the future of Atlantic Canada's offshore oil industry
Ballast	(a) A relatively heavy material such as lead, iron or water, placed in a ship to ensure stability or maintain the proper draft or trim;
	(b) To pump seawater into empty fuel tanks of a ship to ensure its stability or suitable draft and trim for seaworthiness
Benefits Agreement	The Agreement reached between EMCP, the Project co-venturers and the Province which requires that certain expenditures and activities associated with the Project occur in the Province, and specifies plans, processes and mechanisms for delivering these benefits. Available at: <u>www.http://hebronproject.com/media/</u> <u>219/finalexecutedbenefits.pdf</u>
Benefits Community of Practice	A group of benefits practitioners brought together to discuss topics of mutual interest and identify and promote good practice, effectiveness and efficiency.
Benefits Culture	A benefits culture is the product of individual and group values, attitudes, perceptions, competencies and patterns of behaviour that determine an organization's commitment to, and the style and proficiency in, delivering industrial benefits.
Benefits Principles	Principles that underlie the Benefits Plan and will govern all of its benefits-related activities
BIDS	An electronic publisher that distributes tenders and tender information to subscribers on behalf of public and corporate buyers
Board	When capitalized in this document, refers to the C-NLOPB
Capacity Assessment	An assessment of the potential for Canadian workers and companies, and in particular Newfoundland and Labrador workers, facilities and companies, to participate in Project activities
Compliance	Observance of official requirements
Co-venturers	Hebron asset owners that are sharing in the predevelopment costs and that have authorized EMCP to prepare a Development Application in its capacity as Operator
Demographics	The characteristics of human populations, such as size, growth,

Hebron Project	Section 8
Benefits Plan	Glossary
	density, distribution, and vital statistics.
Diversity Plan	Plan to deliver increased employment and business opportunities to women, visible minorities, Aboriginal peoples, and persons with disabilities and companies they own or operate.
Dry-dock	A dock that can be kept dry for use during construction or repair of ships.
Expenditures	Money paid out; an amount spent.
Industrial Tourism	Involves visits by tourists to operational industrial sites where the core activity of the site is non-tourism oriented
Joint Industry Projects	Joint Industry Projects are used when a number of oil companies share an interest in having an R&D issue addressed, and agree to fund the work jointly.
Hebron Peak Demand	This figure estimates the peak demand for workers in the specified category, based on SCI's estimates and profile of demand.
Net Effective Capacity	This refers to the number of workers within the category who are potentially available for project work, at the point at which Hebron peak demand occurs. This figure includes only those who have the appropriate levels of skills and experience. Note that this pool is shared with other active industrial projects, and may be impacted significantly.
Operator	When capitalized in this document, refers to ExxonMobil Canada Properties
Probabilistic Peak Demand	This figure refers to estimated peak demand, based on other potential projects.
Procurement	The purchasing of something usually for a company, government or other organization
Project	When capitalized in this document, refers to Hebron Offshore Oilfield Project
Province	When capitalized in this document, refers to Newfoundland and Labrador
Stakeholder	A party that affects or can be affected by the Hebron Project
Supply Gaps	Gaps that exist between the Province's oil and gas fabrication, supply and service facilities and capabilities and what is required for the Project
Sustainable	Capable of being continued with minimal long-term effect on the environment.
Theoretical Supply	This refers to the estimated maximum potential supply of workers in the specified category at the point at which Hebron peak demand

Hebron Project	Section 8
Benefits Plan	Glossary
	occurs. This would relate to the total number of workers, employed and unemployed, who are classified in any of the trades or designations within the category.
Topsides	The oil and gas producing and support equipment located on top of an offshore structure.

# **APPENDIX A**

PREFERRED AND ALTERNATIVE PRODUCTION AND EXPORT SYSTEMS

# 1.0 ALTERNATIVES TO THE PROPOSED PROJECT

#### 1.1 Project Alternatives Evaluation and Screening Criteria

An extensive process was undertaken to review the alternative development concepts for the Hebron Project.

Economic analysis considering ranges for variety of input parameters including, but not limited to, facility costs, production profiles, and oil prices was used to assist the concept selection process.

Assessments were made regarding the robustness of various concepts under a particular scenario. In each case, the ability to mitigate a downside risk or take advantage of an upside opportunity was considered. Among the scenarios considered were:

- Downside reservoir performance
- Operability challenges
- Cost and schedule challenges
- Upside reservoir performance

A number of other decision criteria were considered for the Hebron Project, including:

- Safety and environmental performance
- Regulatory compliance
- Benefits to Canada / Newfoundland and Labrador
- Economic metrics (e.g., net present value, rate of return, profit to investment ratio)
- Mitigation of downside reservoir risk (including the use of phasing)
- Operability risk (e.g., wet vs. dry wellheads, artificial lift options, sand control vs. stand alone screens)
- Cost and schedule risk
- Technology application risk for the environment (e.g., disconnectable turret)
- Ability to capture upside potential
- Operating costs
- Capital exposure

The Hebron Project Team screened each development concept using criteria listed in Table 1-1 to narrow the options to four project alternatives, each of which is discussed in detail below.

	Criteria	Level 1	Level 2	Level 3
	Technically feasible / practical	Comparative		
	Compliance with applicable regulatory requirements and Proponent's safety, health and environmental standards		Comparative	Comparative – some quantitative analysis
	Value creation (net present value, rate of return)		Deterministic	Fully risked
Evaluation Criteria	Option value (opportunity for reservoir risk mitigation and upside value capture)		Comparative	Quantitative
Evaluatio	Canada-Newfoundland and Labrador Benefits	Comparative	Comparative	Quantitative
	Project schedule to first oil	Comparative	Comparative	Quantitative
w	Concept technology maturity and risk	Comparative	Comparative	Quantitative
Risks	Reservoir uncertainity	Comparative	Comparative	Quantitative
Ľ.	Capital exposure		Comparative	Quantitative
Inputs	Capex and Opex estimates		Class 1 (±50%)	Class 2 (±30%)
	System availability (uptime)	Comparative	Comparative	Quantitative
	Production profiles		Deterministic	Case specific
	Fiscal parameters		Deterministic	Quantitative

Table 1-1:	Selection Criteria for Alternatives Screening
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#### **1.2** Alternative Means of Offshore Development

The selection of the preferred concept for development of the Hebron Project included consideration of environmental effects, safety, capital and operating cost, reliability, energy efficiency, constructability and schedule for construction. Four potential concepts were considered in detail:

- Subsea wells tied back to Hibernia Platform
- Floating Production, Storage and Offloading (FPSO) facility in combination with subsea wellheads (wet tree), manifolds, pipelines and risers
- FPSO in combination with wellhead gravity base structure (WHGBS)
- GBS (with or without pre-drill alternative)

#### 1.2.1 Tie-back to Hibernia

In this concept (Figure 1-1), subsea wells would be drilled by a MODU over the life of the Hebron Project. Subsea equipment, including metering facilities, would be installed in two excavated drill centres, one for the Ben

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Nevis horizon wells and another for the Hibernia and Jeanne d'Arc wells. The produced fluids would be delivered to the Hibernia Platform (31.5 km to the north) from the excavated drill centres by two insulated, subsea, multi-phase, production lines using multiphase pumps (MPPs).

The production lines would have round-trip pigging capability. The power for the MPPs would be supplied by two independent power cables from the Hibernia Platform. Two umbilicals would control the subsea wells and isolation valves. Gas lift would be delivered from the Hibernia Platform to the subsea wells. Injection water would be supplied from the Hibernia Platform via a water injection line. All the flow lines, power cables and umbilicals would be installed in trenches to protect them from iceberg scour. Modifications to the separation, compression, power generation and water injection systems on the Hibernia Platform would be required.

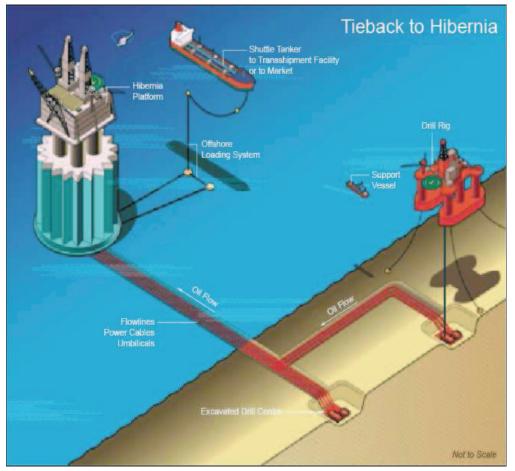


Figure 1-1: Tieback to Hibernia

#### 1.2.2 FPSO with Subsea Wellheads

A FPSO with subsea satellite wells concept would entail subsea wells being drilled using a MODU (Figure 1-2). Subsea wells would be located in excavated drill centres to protect them from iceberg scour. Production fluids would be transferred to a FPSO via flowlines and flexible risers. The FPSO would be double-hulled and double-bottomed, with appropriate storage capacity for crude oil, thrusters (for heading control), and would house the oil treatment, gas compression, gas lift, water injection and utility equipment, including power generation. It would also include quarters to house operations and maintenance personnel. The FPSO would stay on station by means of an internal, disconnectable turret anchored to the sea floor. In the event of an encroaching iceberg or dense pack ice, the FPSO would be able to disconnect and depart from the field. Stabilized crude oil would be stored in the FPSO prior to tandem loading onto tankers for shipment to market or to the Newfoundland Transshipment Terminal.

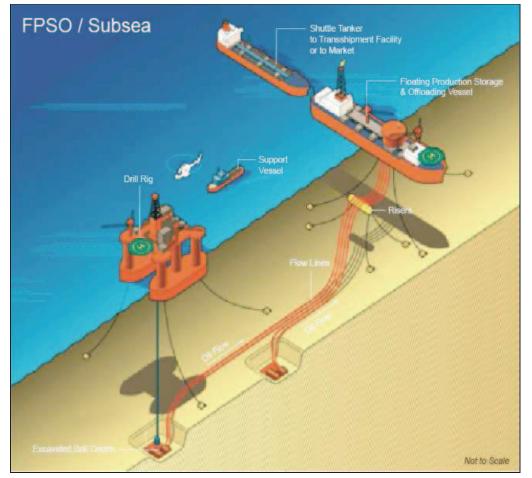


Figure 1-2: Floating Production, Storage and Offloading Facility and Subsea Infrastructure

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#### 1.2.3 FPSO with WHGBS

This concept requires wells to be drilled from a concrete mono-tower WHGBS using a MODU in a tender assist mode (Figure 1-3). All wells (producers and injectors) would be drilled from the WHGBS. The WHGBS would be constructed and installed approximately two years prior to FPSO completion to enable pre-drilling and, hence, improved production ramp-up.

The WHGBS would be configured with minimal topsides processing functionality to reduce the numbers of personnel on the structure. WHGBS process equipment would be limited to manifolding and well testing via multiphase meters. Utility systems, notably those involving rotating equipment, would be limited. Trenched pipelines, with riser base manifolding, would be used to tie the WHGBS to the FPSO. Injection water, gas lift and power to the WHGBS would be supplied by the FPSO. Oil export would be undertaken with tankers loading in tandem off the stern of the FPSO.



Figure 1-3: Floating Production, Storage and Offloading Facility with Wellhead Gravity Base Structure

#### 1.2.4 Gravity Base Structure

The stand-alone GBS production facilities concept is similar to Hibernia and includes a concrete GBS with associated topsides (Figure 1-4). The GBS and topsides would be constructed separately and then mated at an inshore site prior to towing and installing the platform at the Hebron site.

All wells (producers and injectors) would be drilled by the platform rig. Treated oil would be stored in the platform prior to custody transfer metering and subsequent shipment. An OLS, complete with a looped pipeline and two separate loading points, would be installed to offload the oil onto tankers for transport.

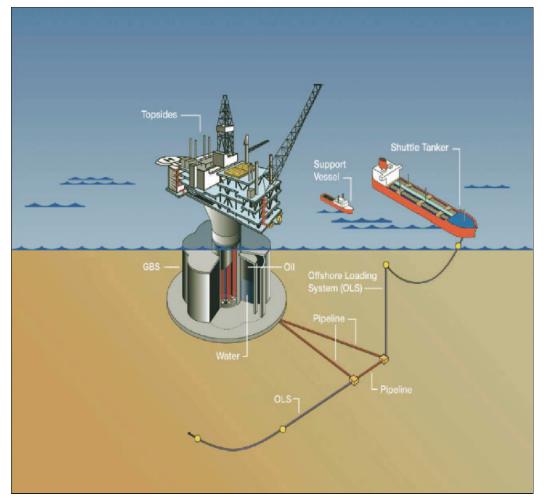


Figure 1-4: Stand-alone Gravity Base Structure Preliminary Development Layout

#### 1.2.4.1 Pre-Drill Alternative

Within the stand-alone GBS option, consideration has been given to a pre-drill alternative, where some wells would be drilled prior to the arrival of the platform, through a pre-drill template.

With the pre-drill alternative, a MODU would be used to drill and partially complete the pre-start-up wells prior to the installation of the platform. However, an excavated drill centre would not be constructed for the pre-drill option; the platform cannot be installed over an excavated drill centre. Rather, the well heads would remain, unprotected, above the sea floor until the platform was installed over the wellhead. Drill cuttings, both water-based and non-aqueous fluid (NAF) based, would be processed and discharged overboard in accordance with the C-NLOPB guidelines.

Once the pre-drill has been completed, the platform is installed by floating the platform structure over the template, and lowering the platform to the seafloor. The pre-drilled wells would be connected to the platform topsides and then completed from the platform. The remaining wells would then be drilled by the platform rig in parallel with operations.

#### **1.3 Preferred Concept: Hebron Project**

The Project Proponents evaluated the alternative modes of development, including development drilling options, and determined that the preferred concept is to develop the Hebron Asset using a stand-alone concrete GBS (no pre-drill option) and topsides, and an OLS. It provides greater technical and economic certainty and there is greater environmental benefit than with the other options. A few of the key decision criteria are discussed in the following paragraphs.

Most of the crude oil in the Hebron Asset horizons is "heavy" and may therefore pose flow assurance challenges. To mitigate these flow assurance issues and enable easier wellbore access for remedial work the use of abovewater wellheads (dry trees) is preferred for the Hebron development. A dry tree design would be used in this context for any concept where the valves at the top of the well (tree) are located above sea level, as is the case for the GBS concept. Conversely, wet trees refer to designs where the valves are located below sea level, as is the case with the FPSO / Subsea option. Dry tree technology can reduce well drilling and maintenance costs, and hence, improve the lifecycle economics of a heavy oil project such as Hebron.

Dry trees also provide an environmental benefit during drilling over wet trees. The GBS concepts include an injection well for the disposal of cuttings and NAF-based mud. Water-based mud will be discharged within GBS shaft, or overboard in accordance with applicable guidelines. In the other concepts with wet trees or pre-drilling, disposal of cuttings is either overboard into the sea or back to a landfill onshore.

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The GBS no pre-drilling alternative was chosen relative to the pre-drill option based on:

- Concept refinement work has concluded that the pre-drilling plan is not viable for technical, operational and economic reasons
- The resultant concept has the highest execution confidence and the least economic and operational risk; this may enhance opportunities for an early start-up benefiting all stakeholders

The items listed above far outweigh the potential oil production acceleration benefit that pre-drilling can offer. From technical, execution, economic and environmental perspectives, the no pre-drill alternative provides significant advantages over the pre-drill concept.

The evaluation of the Hebron Project development options considered is summarized in Table 1-2.

# Table 1-2: Summary of Analysis of Alternate Means of Carrying Out the Project Showing Determination of Risk

Alternative Considered	Technical Feasibility	Economic Feasibility	Environmental Effects
Tie-back to Hibernia			
FPSO			
FPSO with WHGBS			
Stand-alone GBS (with pre-drill)			
Stand-alone GBS (no pre-drill)			
<i>Note:</i> High-red; Medium-yellow; Low-green			

Neither FEED nor detailed design for the Topsides and GBS have been completed. However, the main criteria upon which the detailed design will be based are provided in Section 1.9 of the Development Plan.

# **APPENDIX B** DIVERSITY PLAN

**Diversity Plan** 

Benefits Plan

# **Table of Contents**

1	INTRODUCTION
1.1	Diversity and the Hebron Project2
1.2	Plan Structure
2	REGULATORY AND CONTRACTUAL REQUIREMENTS4
2.1	C-NLOPB Requirements 4
2.2	Hebron Benefits Agreement 4
2.3	Plan Development
3	LOCAL CONTEXT
3.1	Diversity in the Newfoundland and Labrador Offshore7
3.2	Stakeholder Perspectives 8
4	CORPORATE BACKGROUND AND DIVERSITY POSITIONS
4.1	Valuing Diversity Statement9
4.2	Equal Employment Opportunity Policy10
4.3	Harassment Policy 11
5	PLAN OBJECTIVES AND COMPONENTS 12
5.1	Plan Objectives 12
5.2	Plan Components 12
	5.2.1 Pillars
	5.2.2 Business Access
6	PLAN IMPLEMENTATION
6.1	Operator Diversity Planning
6.2	Contractors
6.3	Stakeholder Consultation
7	CONCLUSION

# List of Tables

Table 5.2-1 - Initiatives to Address Skills Development	13
Table 5.2-2 - Initiatives to Support Recruitment and Selection	15
Table 5.2-3 - Initiatives to Foster a Supportive Work Environment	16
Table 5.2-4 - Initiatives to Support Business Access	20

# 1 INTRODUCTION

## **1.1** Diversity and the Hebron Project

ExxonMobil Canada Properties (EMCP) is the operator of the Hebron project (the Project) on behalf of its coventurers: ExxonMobil Canada Properties, Chevron Canada Limited (Chevron), Petro-Canada Hebron Partnership through its managing partner Suncor Energy Inc. (Suncor), Statoil Canada Ltd. (Statoil), and Nalcor Energy Oil and Gas Inc. (Nalcor). As part of its operations EMCP receives services from its affiliates, including ExxonMobil Canada Ltd. and Imperial Oil Limited. EMCP also applies various policies of its affiliates. For ease of reference EMCP will be referred to throughout this document even in cases where actual services may be performed by affiliates and this document will reference applicable affiliate policies as EMCP's own.

It is the responsibility of EMCP to develop and oversee the implementation and ongoing execution of a Diversity Plan to meet the regulatory and contractual requirements of the Project (see Section 2.0). While the above regulatory and contractual requirements and supporting guidelines have shaped this Benefits Plan, its content is also driven by ExxonMobil's conviction that making the most of energy resources goes beyond their production. It is a long term commitment to developing industry and labour capacity, and creating and delivering sustainable strategic benefits to host jurisdictions down to the community level. EMCP recognizes that the development of industrial and human capacity, and the generation of sustainable benefits at a community level, are vital components of all operations. EMCP and its employees also have a vested interest in the growth and development of the communities where they live and work. As such, valuing diversity is a business imperative for EMCP, both within its organization and in its dealings with others.

Experience has demonstrated that supporting diversity has many economic and social benefits, such as creating a stable and prosperous operating environment. Further, the regulatory and contractual diversity requirements applicable to Hebron complement EMCP's philosophy and approach to diversity (see Section 4.0) which positions EMCP well in its commitment to diversity as a business priority.

Project planning has been in progress for many years. Plans and processes will continue to be developed and refined over the life of the Project, which is currently estimated to be more than 30 years. Given this long duration, and the fact that the Project is in the early stages of development, this Plan focuses on a strategic approach, and outlines initiatives that have been identified based on current requirements. As the Project and its workforce develop, these initiatives will evolve to address new challenges and opportunities.

# 1.2 Plan Structure

This document describes the approach EMCP will take to integrate its diversity philosophy and approach into initiatives for the Hebron Project during both the construction and operations phases. The following items have been included to frame the discussion:

- The regulatory and contractual requirements for Hebron's Diversity Plan (Section 2.0);
- Diversity context for the local oil and gas industry (Section 3.0);
- A corporate overview and diversity positions (Section 4.0);
- The objectives and components of the Hebron Diversity Plan (Section 5.0); and
- The approach to implementing the Diversity Plan (Section 6.0).

# 2 **REGULATORY AND CONTRACTUAL REQUIREMENTS**

This Diversity Plan has been developed in response to the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) requirements under the Canada-Newfoundland Atlantic Accord Implementation Act, and the Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act (the Acts). Further, the plan addresses the requirements under the Hebron Benefits Agreement between Her Majesty the Queen in Right of the Province of Newfoundland and Labrador and the Hebron Project coventurers (Hebron Benefits Agreement, 2008: 5.12). These regulatory and Hebron Benefits Agreement requirements are summarized below.

# 2.1 C-NLOPB Requirements

Under the Acts, which provide the regulatory framework for petroleum activity in Newfoundland and Labrador waters, EMCP is required to submit a Canada-Newfoundland and Labrador Benefits Plan. The C-NLOPB, which regulates all offshore activity, has provided guidance related to designated<sup>1</sup> groups in its Benefits Plan Guidelines. This guidance specifies that designated groups include women, visible minorities, Aboriginal peoples, and persons with disabilities (C-NLOPB, 2006: 4.6). The C-NLOPB expects the Operator to "address the participation of these [designated]... groups for employment and for corporations or cooperatives owned by them to supply goods and services for the project" (C-NLOPB, 2006: 4.6). The Acts (Paragraph 45(3)(b)) specify that a union agreement may not frustrate access to training and employment for members of the designated groups.

# 2.2 Hebron Benefits Agreement

Under the terms of the Hebron Benefits Agreement, EMCP is required to develop and implement a Gender Equity and Diversity Program. The Program calls for EMCP to address employment and business access for the four designated groups (women, visible minorities, Aboriginal peoples, and persons with disabilities) and details the required provisions through the use of two components: a Women's Employment Plan (WEP), which addresses diversity provisions for women, and a Diversity Plan which addresses diversity provisions for the other three designated groups.

Specifically, "the Diversity Plan will institute ongoing programs and processes to facilitate employment and participation for Disadvantaged groups in all phases of the Hebron Project, and at all facilities, sites and offices in the Province where work

<sup>&</sup>lt;sup>7</sup> Terminology utilized in the Benefits Plan Guidelines as well as the Benefits Agreement refers to disadvantaged individuals in reference to women, visible minorities, Aboriginal peoples and persons with disabilities. The current terminology used in Canadian employment equity legislation refers to these groups as "designated groups". As a result, designated will be used through the entire document.

performed by the Operator and main contractors relating to the Hebron project is taking place" (Hebron Benefits Agreement, 2008: 5.11 (C-2)).

A similar requirement is specified for the Women's Employment Plan, emphasizing the importance that the Province has placed on addressing employment and business access for women, in particular (Hebron Benefits Agreement, 2008: 5.11 (C-1)).

The Program should be consistent with the Operator's corporate diversity policies (Hebron Benefits Agreement, 2008: 5.11 (B)).

The Operator is also required to "establish quantifiable objectives and goals" in the Diversity Plan (Hebron Benefits Agreement, 2008: 5.11 (C-2)).

Section 5.11 (D,E) of the Hebron Benefits Agreement requires that the Operator:

- put in place the necessary organizational resources for developing and implementing a Gender Equity and Diversity Program, and for consulting with community groups;
- create training and recruitment programs for women and designated groups in consultation with training and educational institutions in the Province;
- provide facilities for the Hebron Project that are accommodative of women in terms of living accommodations and a safe and respectful working environment;
- set longer-term qualitative goals to employ more women in occupational areas where women are historically under-represented;
- develop an implementation schedule for the Program and monitor and report progress to the Board;
- consult on development and progress of the Program in an annual consultation with the Province and other stakeholders, including community groups, the C-NLOPB and government agencies; and
- require that each of the main contractors to the Hebron Project in the Province provide them with a plan for compliance of the aforementioned requirements and acknowledgement of the existence and importance of the Plan from successful bidders.

# 2.3 Plan Development

This Diversity Plan has been developed to fully meet the above requirements, and also responds to the benefits and diversity drivers outlined in Section 1.0.

The diversity requirements assigned to the Hebron Project by both the C-NLOPB and the Benefits Agreement are aligned in intent. In addition, the Gender Equity and Diversity Program identifies specific requirements for women, as well as requirements for the other designated groups, by detailing a Women's Employment Plan and Diversity Plan, respectively. The provisions under each plan are substantially similar.

#### Diversity Plan

As a result of the high degree of alignment and for both efficiency and effectiveness it is advantageous to address all requirements together in one plan. Emphasis will be given to specific groups in the planning and implementation process as appropriate. In particular, given the Benefits Agreement focus on women, and considering that demographically women form the largest of the four designated groups, additional focus has been placed on evaluating gender-specific considerations, notably in supporting entry into and advancement within occupational categories where women are historically under-represented. Advancement in all occupational categories is supported by the company's focus on recruitment of people interested in a career with the company, and its practice of developing and promoting people from within.

The Diversity Plan is also guided by EMCP's contractor relations guidelines which include a requirement for EMCP to maintain an arm's-length relationship with independent contracting companies and their employees. This includes influencing independent contracting companies in their recruitment, training and diversity efforts. Third party contractors' compliance will be facilitated through the commercial terms of their contracts with EMCP. Procedures will be put into place to deliver and effectively monitor compliance with regulatory and contractual obligations.

# 3 LOCAL CONTEXT

# 3.1 Diversity in the Newfoundland and Labrador Offshore

The recent past has seen a growth of the Province's offshore petroleum industry, with exploration leading to development activity in 1991 and, since 1997, oil production. This period has seen the establishment of new infrastructure, business, labour, research and development, education and training capacity and capabilities, as well as increases in competitiveness and entrepreneurship in the Province. According to the Government of Newfoundland and Labrador Budget 2009, the oil and gas industry has also become the largest single contributor to the provincial exchequer, accounting for almost 24% of the provincial revenue sources and for approximately 36% of the provincial GDP, therefore supporting further business development and the delivery of public infrastructure and services (Budget 2009).

These developments have been accompanied by a related interest in ensuring that economic growth is facilitated for a wide range of associated groups in the Province. There is also recognition that demographic change, reflecting a recent history of out-migration and declining birth rates, requires that all possible labour sources be accessed. The combination of demographic considerations and other drivers has resulted in the development of several initiatives directed towards the federally defined designated groups. These initiatives have included:

- The Women in Resource Development Committee (WRDC), established in 1997. WRDC was established to foster an environment which would increase the participation of women in trades and technology in Newfoundland and Labrador. Its objectives include promoting women's access to public education in the Province, influencing public policy, providing technical support in educational program design, project formulation, group mentoring, and strategic gender-based analysis and planning.
- The establishment of the NSERC/Petro-Canada Chair for Women in Science and Engineering (CWSE) for the Atlantic Region at Memorial University in 1997. This is a senior faculty position with the mandate to support the increased participation of women at all levels in science and engineering in Atlantic Canada.
- The 2006 C-NLOPB Benefits Plan Guidelines, which require the proponents of new offshore developments to be proactive in their inclusion of designated groups and individuals in project employment and business, using models such as the federal Employment Equity Act and Federal Contractors Program.
- The 2007 provincial Energy Plan, which includes commitments to identify and facilitate programs to increase the participation of women in professional and skilled trades in the energy sector. In the Energy Plan, the provincial government also indicates that it will require the operators of all large-scale

projects to submit employment plans for women that include objectives for achieving employment equity for women in all project phases, and eliminating barriers and discriminatory practices.

- The 2009 opening of the provincial government-supported Office to Advance Women Apprentices, and other union initiatives such as the IBEW Local 2330 program to increase the percentage of women registered as construction electricians who successfully complete their apprenticeship training.
- The creation of provincial government offices specifically mandated to support the advancement of designated groups. In particular, the Women's Policy Office (1985), The Department of Labrador and Aboriginal Affairs (2001), the Office of Immigration and Multiculturalism (2008) and, most recently, the Disability Policy Office (2009). The creation of these entities highlights the significance of these groups in the province, and provides an important resource in the development of policy and best practices.

As a result of these and other initiatives, the Province has seen an expanded awareness of diversity concerns and possible responses, and the establishment of new industry, regulatory, and community diversity capabilities and capacity. EMCP will build on past experiences in Newfoundland and Labrador as well as its own foundational policies and best practices to augment development of a strong diversity culture.

# 3.2 Stakeholder Perspectives

In designing the Hebron Diversity Plan, a consultation program was developed and executed that included meetings with representatives from industry, government departments and agencies, educational institutions, interest groups and others with diversity interests and experience. These meetings sought input regarding the company's philosophical and practical approach to diversity and its application in the local context. Focus was also paid to receiving input and suggestions regarding diversity initiatives including ways of increasing representation of members of the designated groups in the labour force. Some of the issues raised with respect to the latter included attracting women to skilled trades, access to apprenticeships, hiring within unions and the need to foster a diversity culture.

In addition to these diversity-specific consultations, diversity was an important topic during the broader Benefits Plan consultations. Including the topic of diversity in broader discussions is consistent with EMCP's overall approach, which promotes diversity by integrating it into existing processes and activities. While this Plan is, as required, a stand-alone document, EMCP considers it a key contributor to the achievement of the Benefits Plan goals by seeking to increase the Province's labour and contracting pools. This increased availability will also serve the Province's petroleum industry well in seeking work in local, Arctic and other global markets.

## 4

# CORPORATE BACKGROUND AND DIVERSITY POSITIONS

In developing and implementing this Diversity Plan, EMCP is building on almost 130 years of affiliated organization experience in Canada, and worldwide experience in working in a variety of countries with diverse nationalities, cultures and workforces. EMCP focuses on job creation and supporting local businesses in the areas where it operates, in conjunction with strategic community investments. In doing so, the company helps to support current economic and social needs while contributing to sustainable development in the long term.

EMCP is dedicated to high ethical standards, implemented through global, national and local policies and practices, in every aspect of its business, at every location where the company operates. Its employees are committed to the pursuit of operational excellence. EMCP delivers safe, reliable operations, improves energy efficiency, and maintains strong business controls. The value of resources is maximized through disciplined investments, breakthrough technologies, improved processes, and integrated operations. This generates the most benefit for resource owners, society, and the shareholders.

EMCP has a number of directives that articulate its position on diversity. The Canadian Equal Employment Opportunity Policy and the Harassment in the Workplace Policy, established in 1990, are among the company's foundation policies. The Valuing Diversity statement, created in 1999, outlines its position on broader aspects of diversity. These directives are described in detail below. They will also be made available to all contractors. In performing their obligations under their contracts, contractors will be required to establish and maintain appropriate business standards, procedures, and controls including those necessary to avoid any real or apparent impropriety.

# 4.1 Valuing Diversity Statement

Valuing diversity is a business imperative for EMCP, both internally and in dealings with others in society. It provides an opportunity to gain a competitive advantage. It helps attract and retain the best people and allows a better use of the capabilities of all employees as we strive to obtain superior business results in Canada's increasingly diverse marketplace.

Diversity is more than differences in race, gender, religion or original nationality. It is broader than the four designated groups identified in Canadian employment equity legislation. Diversity is about all of us and all our differences - all the ways in which we are different from one another in outlook, culture, background, age and experience. It is also about behavior - being aware, understanding and applying judgment.

EMCP has the following diversity expectations of all of its employees:

- Understand diversity and how it is reflected in Canadian society among our employees, customers, suppliers and other external stakeholders. Understand our behaviour as individuals and how it can impact others in business dealings.
- Demonstrate diversity leadership by taking personal responsibility to model appropriate behaviour.
- Foster a supportive environment that respects people's dignity, ideas and beliefs. Understand and support EMCP's guidelines on diversity, harassment in the workplace policy, and policies governing equitable employment.

EMCP has the following additional expectations of its managers:

- Accept accountability for addressing workplace barriers that may exist and that hinder individuals from doing their jobs effectively, for managing EMCP's plans, policies and programs consistently and without bias, for identifying and developing candidates who can effectively compete for professional and leadership positions, regardless of their national origin, race or gender, and for maintaining high standards of individual performance.
- Communicate and educate to foster employee awareness, understanding, skills development and behavior, consistent with company policies and guidelines.
- Implement diversity by integrating it into annual plans, processes and stewardships.

# 4.2 Equal Employment Opportunity Policy

It is the policy of EMCP to provide equal employment opportunity, in conformance with all applicable laws and regulations, to individuals who are qualified to perform job requirements. EMCP administers its personnel policies, programs and practices in a non-discriminatory manner in all aspects of the employment relationship, including recruitment, hiring, work assignment, promotion, transfer, termination, wage and salary administration, and selection for training.

Managers and supervisors are responsible for implementing and administering this policy, for maintaining a work environment free from unlawful discrimination, and for promptly identifying and resolving any problem area regarding equal employment opportunity. Except where it is identified as a bona fide occupational requirement, discrimination is prohibited on grounds of age, sex, race, colour, religion, creed, national origin, citizenship, language, marital status, family status, pregnancy and childbirth, sexual orientation, mental or physical disability and handicap, political belief or any other ground of discrimination prohibited by law.

In addition to providing equal employment opportunity, it is EMCP's policy to undertake special efforts to:

 develop and support educational programs and recruiting sources and practices that facilitate the employment of members of designated groups;

- develop and offer work arrangements that help to meet the needs of the diverse workforce in balancing work and family obligations;
- establish company training and development initiatives, policies and programs that support diversity in the workforce and enhance the representation of designated groups throughout EMCP;
- assure a work environment free from sexual, racial or other harassment;
- make reasonable accommodations that enable qualified disabled individuals to perform the essential functions of their jobs; and
- emphasize management responsibility in these matters at every level of the organization.

# 4.3 Harassment Policy

EMCP believes that its success as a business enterprise is rooted in the quality of its employees. EMCP is committed to providing a positive work environment that values the wide-ranging perspectives inherent in its diverse workforce and that fosters individual growth and the achievement of business goals. EMCP further believes that all individuals should be treated with dignity and respect. For these reasons, it is essential that EMCP's workplaces be free of all forms of harassment.

Harassment, even in its most subtle forms, is in direct conflict with EMCP policy and acceptable standards of workplace behaviour and is not tolerated. The corporate harassment policy prohibits any form of unlawful harassment. In addition, it prohibits workplace behaviour that is not unlawful, but which EMCP considers inappropriate and unacceptable in the workplace.

EMCP specifically prohibits any form of harassment by or toward employees, contractors, suppliers or customers. Harassment is considered to be any inappropriate conduct which has the purpose or effect of:

- creating an intimidating, hostile or offensive work environment;
- unreasonably interfering with an individual's work performance; or
- affecting an individual's employment opportunity.

All employees, including supervisors and managers, are subject to disciplinary action up to and including termination for any act of harassment.

# 5 PLAN OBJECTIVES AND COMPONENTS

# 5.1 Plan Objectives

Gender equity and diversity are key concepts identified in the Project's regulatory and legislative requirements. EMCP will address these requirements by way of the following objectives:

- align with the Project's Development Plan and its timelines, and with the Hebron Benefits Plan approach, principles, and procedures, including employment, training and procurement;
- align with EMCP's Valuing Diversity Statement, Equal Employment Opportunity Policy and Harassment Policy (see Section 4.0);
- build on company practices that have resulted in successful diversity initiatives in other locations;
- focus on the Plan's sustainability following implementation; and
- further develop the labour force of Newfoundland and Labrador.

The remainder of this section describes the approach EMCP will take to meet these objectives.

# 5.2 Plan Components

The Plan is comprised of four diversity pillars, representing the types of initiatives required to support meaningful, long term employment for members of the designated groups. In addition, business access for members of the designated groups is addressed as an important component of diversity.

## 5.2.1 Pillars

EMCP's approach to achieving success in diversity takes a long term view, and focuses on sustainability following implementation. To articulate this approach, a four pillar concept has been developed to describe important elements necessary to create a supportive and diverse work environment. These pillars are:

- Skills Development Through Community Investments
- Recruitment and Selection of Qualified Candidates
- Establishment and Development of a Supportive Work Environment
- Monitoring, Reporting, and Stewardship

## Pillar 1 - Skills Development through Community Investments

One of the ways EMCP measures success is by evaluating how well it contributes to strengthening the communities where its employees live and work. EMCP has a long history of supporting and improving educational programs as an important

business priority. Its strategic focus in education is on mathematics and science, since they are, and will continue to be, critical tools for success in today's high-tech world.

EMCP supports a wide variety of educational programs that encourage students, and particularly members of the designated groups, to pursue mathematics and science-related education. Investing in the education, training, and leadership of designated groups, particularly women, delivers high economic and social development returns. Healthy and educated communities, where all citizens are valued and productive members of society, help provide a stable and prosperous operating environment. Preparing designated groups to compete in the economy allows companies, including EMCP, to have access to the best talent for employee recruitment and supply chain development.

Examples of initiatives that EMCP has identified to address skills development requirements are shown in Table 5.2-1.

Initiative	Description
Communication and Consultation	Promote careers in oil and gas to students at junior high and high school levels to encourage them to stay in school and consider further education to meet skills demand. Highlight education required, and provide real life examples of what it is like to work in the industry
Communication and Consultation	Promote company accommodation practices to ensure individuals with disabilities who are interested in pursuing careers in oil and gas are aware of options available
Communication and Consultation	Promote careers in oil and gas to various interest groups to encourage their members to consider applying for Hebron roles and/or to consider further education to meet skills demand, using best practices to ensure outreach is accessible to a broad base of potential candidates
Communication and Consultation	Communicate projected human resources requirements to post- secondary institutions, education groups and other interested parties in a timely manner to encourage further dissemination of skills demand information and to increase awareness of opportunities
Communication and Consultation	Attend career fairs to promote careers in technical, engineering and trade/operational roles
Partnerships	Partner with organizations or support programs that expose designated groups, particularly women, to math, science, technology or engineering to further support the option of non-traditional career choices
Post-secondary education support	Provide support and contributions to post-secondary institutions that will enhance ability to recruit qualified candidates into targeted programs
Post-secondary education support	Participate on educational institutions' advisory boards and/or to share specific knowledge with students in key programs
Scholarships and student support	Establish scholarship and support programs to encourage members of the designated groups, particularly women, to complete training programs that will allow them to meet skills demand

EMCP invests in, and is involved with, community organizations so as to promote the development of skills and experience to fill human resources needs. EMCP has practices that have been proven effective over time and will seek out appropriate opportunities to apply them to the local setting. For example, EMCP currently supports initiatives such as the *Techsploration* program, which targets young women in school and encourages consideration of technical fields of study and work. EMCP also provides funds and volunteers for Junior Achievement's *Economics of Staying in School* program, which communicates the value of staying in school to grade nine students.

EMCP will evaluate opportunities to incorporate diversity priorities into other commitments. One such example is the Project's Research and Development investments, highlighted in the Benefits Agreement (Hebron Benefits Agreement, 2008: 5.9 (A, B, D)). EMCP will work with the Province and stakeholders to identify opportunities to direct portions of both skills development funding and research investments into projects that provide opportunities for members of designated groups to advance their research capabilities, or into projects that will increase knowledge regarding specific facets of diversity. In this way, EMCP aims to further develop opportunities for members of designated groups, and generate additional expertise in diversity planning.

Consultations with local groups indicate that there are many opportunities in the Province to support skills development through community investments. Further discussion with these and other groups over the life of the Project will identify initiatives that will help achieve Project diversity goals.

As part of their diversity planning, EMCP will require contractors to identify opportunities to work with community networks and post-secondary institutions to promote entry into the oil and gas sector. EMCP will require contractors to use their own experiences and best practices to further diversity goals, while aligning with the commitments and priorities of EMCP.

## Pillar 2 - Recruitment and Selection of Qualified Candidates

EMCP is 'taking on the world's toughest energy challenges'. In addition to the complexities faced during the development of the Hibernia field, the Hebron Project faces additional challenges associated with the recovery of heavy oil. To address such challenges, EMCP looks for people with exceptional talent and drive. EMCP is confident that it will be able to recruit qualified individuals in Newfoundland and Labrador through a recruitment strategy that will include special efforts to provide sustainable employment to members of the designated groups.

EMCP has a recruitment and selection process that emphasizes equity and fairness and that has proven effective over time. The Project will adopt this process and modify, as necessary, for legislative or regulatory requirements. The effectiveness of the process will be monitored and reviewed over the life of the Project, and EMCP will continue to work with key stakeholders to identify measures that may contribute to success in the recruitment and selection of members of the designated groups. Examples of initiatives identified are shown in Table 5.2-2.

**Diversity Plan** 

**Benefits Plan** 

Initiative	Description
Communication and Consultation	Build relationships with educational institutions with key programs that may support recruitment needs
Communication and Consultation	Collaborate with key associations or organizations to attract qualified candidates representing designated groups
Communication and Consultation	Select associations/organizations and special interest groups to be notified directly regarding recruitment advertising to ensure advertising reaches target audiences
Advertising	Have all advertised job postings state the company's commitment to providing equitable treatment and opportunity to all individuals
Self-identification	Avoid any actual or perceived bias in the decision making process by ensuring candidates will not be asked to self-identify designated group status during the recruitment process
Selection process	Select qualified candidates with interviewers trained to ensure bias-free selection processes based on bona fide occupational requirements and consistently applied methodologies
Internships	Provide co-op, internships and summer employment assignments for professional, technical and trades positions, with an early offer process available for successful candidates interested in career employment

Table 5.2-2 - Initiatives to Support Recruitment and	Selection
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For many years, EMCP has supported students from Memorial University of Newfoundland's cooperative education programs. For example, over the past two and a half years EMCP has had women comprise approximately 40% of co-op hires in the Province. Where interest and opportunity exist, high-performing co-op students may have the option of continuing career employment with the company upon graduation.

In addition, in support of recruitment and selection of the designated groups, Imperial Oil Limited, through its Charitable Foundation, has provided funding to support a two-year research initiative to the National Educational Association of Disabled Students to identify barriers for students to study in technical and engineering field of study.

Consultations with local groups indicate that there are many opportunities to explore additional local options and communicate recruitment information to members of designated groups in the Province. EMCP will continue to work with appropriate external organizations in an effort to reach target groups.

Contractors will be required to ensure their processes for recruitment and selection of candidates align with the principles of equitable opportunity and proactive inclusivity. In addition, EMCP and its contractors can increase the effectiveness of each of their processes by learning from each other's best practices and experience.

## Pillar 3 - Establishment and Development of a Supportive Work Environment

Valuing diversity is a business imperative for EMCP and is considered an opportunity to gain a competitive advantage. Diversity goes beyond differences in race, gender, religion or original nationality and includes all the ways we are different from one another. It also includes behavior; being aware, understanding and applying judgment to foster an environment that respects people's dignity, ideas and beliefs, enabling employees to work to their greatest potential.

The work environment must support diversity. Retention and advancement of a diverse workforce, the members of which are enabled to work to their greatest potential, is key to long-term success and sustainability. EMCP will seek to create a workforce, worksites and related infrastructure that support these objectives.

Initiatives that will foster a supportive work environment at Hebron are listed in Table 5.2-3. Of note is that most of these initiatives are already in place and support the company's diversity position as outlined in Section 4.0. Additional and alternate initiatives will be considered as the project advances and opportunities are identified. Main contractors will be encouraged to incorporate co-op and apprenticeship training positions into their staffing plans for the construction phase to promote new entrants, including members of the designated groups, to the workforce.

Initiative	Description
Accountability	Implement a steering committee comprised of key individuals from relevant business units to support effective delivery of diversity initiatives
Accountability	Incorporate diversity considerations into the performance assessment process to ensure that employee relative performance is determined without bias
Training/education	Conduct management diversity training to create awareness of the elements of diversity and its impact on conducting business at EMCP.
Training/education	Conduct annual review to ensure that the Harassment and Equal Employment Opportunity policies are regularly communicated to and understood by all employees
Training/education	Implement diversity awareness training for employees in the construction phase, to instill a foundational understanding of diversity and support the growth of a diversity culture
Training/education	Ensure all employees receive introduction to key policies and their application through an orientation process
Work/personal life balance	Offer a broad range of programs that can provide employees with flexibility to assist in balancing work and personal life including vacation flexibility, paid and unpaid time off, child and elder care information support, and an employee assistance program
Accommodation	Implement job accommodation, upon hire and throughout their career, that enables qualified employees with disabilities to perform

Table 5.2-3 - Initiatives to	Foster a Supportive	Work Environment

Diversity Plan

Initiative	Description		
	the essential functions of their jobs, following the company accommodation processes		
Communication/Consultation	Evaluate exit interviews to identify diversity considerations		
Employee networks	Provide encouragement and support to employee diversity networks		
Facilities	Engage in a process of proactive barrier identification to ensure all facilities take into consideration the needs of a diverse workforce		
Facilities	Design Hebron platform living quarters to provide women a safe, secure, comfortable and respectful residential environment. For example, during front end engineering, particular consideration has been given to the design of a private ward within the sick bay and gender-dedicated locker and sauna facilities as part of the fitness/wellness area. Continue to focus on diversity-sensitive facilities through the detailed design phase		

Globally, ExxonMobil supports 18 diversity networks, including the Women's Interest Network, the Black Employee Success Team, and the Global Organization for the Advancement of Latinos. In Canada, ExxonMobil affiliate Imperial Oil Limited also has a number of networks supporting women in technical, professional and operational careers. For example, management support has been provided to the Women in Wage network since the early 1990s. The network was established to improve the workplace for women in non-traditional roles. Employees participate in global networks and have the opportunity to develop supportive networks locally.

Fostering a work environment that supports diversity also includes keeping opportunities for increased inclusion at the forefront of day to day practices. One of the ways in which local management of EMCP have already demonstrated this commitment is by seeking out opportunities to support community-based businesses that provide skills development and support to diverse populations. For example, the Hungry Heart Café, an affiliate of the Stella Burry Community Services and The Hub, a service centre for the physically disabled, are both regularly sought out to provide services such as catering and printing, respectively.

The Diversity Plans of main contractors are also required to include initiatives aimed at the creation of a diverse work environment. In reviewing contractor plans, EMCP will look for a range of initiatives that will address multiple workplace considerations. Contractors will be expected to review initiatives regularly and adapt their plans as necessary to ensure continuous improvement.

## Pillar 4 - Data Collection, Monitoring and Reporting

Diversity data will be collected, compiled and reported by the Project in a manner that both permits EMCP to assess and manage internal diversity planning and is consistent with legislative and contractual requirements.

EMCP will set quantifiable objectives and goals. From an employment perspective, the Project will seek to employ qualified members of the designated groups to the same extent they are available in the local workforce, with a focus on continuous

improvement and particular attention to areas where women have been historically under-represented. Measurement of this goal will occur by occupational category for each designated group. For example, in the case where x% of the local supply of an occupational category is female, the Project will strive for x% of that category's internal employee population to be female. The local workforce availability data will be based on Statistics Canada data, as required by the Benefits Agreement, which indicates the availability of the designated groups by occupational category in the external, or general, labour force. Additional data, identified by EMCP, may also be referenced when and if it is deemed useful and appropriate. To protect the privacy of individual employees, information will not be disclosed when the number of individuals is less than or equal to five.

To facilitate data collection for monitoring and reporting purposes, the company will create and administer a confidential and voluntary self-identification survey. Each employee will be provided with a questionnaire and designated group membership information will be collected on a voluntary basis. This information will be used for the express purpose of facilitating consolidated reporting requirements. Information regarding gender will be obtained from employee records. EMCP will also maintain a record of each active employee's National Occupational Classification Code. It is important to note that the nature of voluntary self-identification implies that actual statistical gains may not be reflected in the reporting data. While this presents an acknowledged challenge, ExxonMobil remains committed to following recognized best practices in the monitoring and reporting of diversity-related indicators.

In addition to employment-related quantitative objectives and goals the project will assign quantitative values to many of the initiatives that have been detailed in the previous three pillars. As the Project organization develops and diversity focus changes depending on outcomes, so should these values. Examples of measurable initiatives include employment initiatives, internal workplace education, and contracting opportunities. For example, in support of pillar two, EMCP will have campus job postings sent to appropriate diversity-related organizations in alignment with the company's corporate recruitment cycle timing. These objectives and goals will be further measured through a progress review of the implementation schedule found in Appendix A.

The qualitative aspects of monitoring and reporting will also be of key importance to appropriately evaluating the results of the Plan's initiatives. It is important to recognize many diversity initiatives that can be explained qualitatively, but are difficult to quantify, can have significant and lasting impacts on the diversity culture of an organization. As described in previous sections of this Plan, EMCP's approach to diversity has a long term vision and focuses on sustainability after implementation.

All main contractors will be required to implement similar and compatible procedures for monitoring and reporting to EMCP.

The approach to measurement and reporting described above utilizes both leading and lagging indicators which will support early identification of opportunities and success areas. This type of early identification will allow refinement of tactics to better address diversity goals. These indicators will be analyzed and assessed in the monitoring report submitted annually to the C-NLOPB. This report will satisfy legislative and contractual requirements. The report will:

- provide data for both EMCP and the Project overall;
- include quantitative information that specifically addresses quantifiable objectives and goals as well as qualitative information;
- describe progress made in the past year, including comparisons to past performance; and
- describe initiatives planned for the year ahead.

Initiatives outlined in this Plan seek to help develop and then recruit career employees who will be enabled to work to their greatest potential in a work environment where diversity is a business imperative. Thus, measurement of the implementation of initiatives will illustrate that the Project is on course in the execution of its Plan; however the most impactful results will be available for measure in the operations phase when retention data becomes available.

## 5.2.2 Business Access

EMCP has developed several effective approaches to creating an inclusive business environment for local suppliers. Many of these approaches facilitate the inclusion of a more diverse business community. Throughout the Hebron Project, existing best practices for supplier development (Benefits Plan Section 3.3.2) will be matched with diversity expertise to ensure an environment of enhanced business access for designated group members. For example, relevant diversity considerations will be reviewed in the development and execution of procurement processes, and relevant diversity-related information stemming from stakeholder consultations will be shared (Table 5.2-4). Included in all plans and actions is a commitment to continuously review and evaluate strategies to reflect best practices and ensure maximum accessibility.

Initiative	Description	
Communication and Consultation	Conduct consultations with local organizations and business networks to identify businesses owned or led by individuals from designated groups	
Communication and Consultation	Participate in targeted conferences, trade shows, information sessions and business networking events to increase accessibility and provide information related to the Procurement process	
Communication and Consultation	Ensure companies are aware of any specific standards, practices, qualifications or certifications required by EMCP and provide information on how to obtain these requirements	
Communication and Consultation	Ensure that diverse businesses and organizations that support designated groups are aware of how to access public information on supply and service opportunities and how to request additional information.	
Communication and Consultation	When requested, provide feedback on tenders and bids to help identify areas for improvement and encourage capacity development	
Training and Education	Provide companies with business process and supplier development training	
Accessibility	Where appropriate and economically justified, adjust the scope of bid packages to remove barriers that may tend to hinder the participation of diverse businesses	
Partnerships	Support special initiatives of relevant business networks and community organizations to advance diverse business development	
Partnerships	Work with stakeholders to develop a thorough working definition of what constitutes a diverse business, and subsequently establish a best practices model for identifying indicators and preferred methods of reporting, with the objective of establishing meaningful quantitative goals, where those services and goods are competitive in terms of fair market price, quality and delivery	

The business access provisions of the Diversity Plan will be integral to, and applied alongside, plans identified in support of the Supplier Development, Procurement and Contracting, and Research and Development provisions of the C-NLOPB Benefits Plan Guidelines and the requirements of the Hebron Benefits Agreement. As is the case with other Benefits Plan provisions, main contractors will be required to develop business access strategies. EMCP will work with these contractors to make them fully aware of expectations, requirements and contractual obligations, and these initiatives will be reported to EMCP annually (see Section 6.2).

# 6 PLAN IMPLEMENTATION

This section of the Plan describes the process through which diversity initiatives for each of the components described in Section 5.0 will be implemented.

# 6.1 Operator Diversity Planning

Successful creation and implementation of the Diversity Plan requires consistent commitment and direction from senior management of the organization, and committed time and resources from individuals tasked with the day-to-day implementation and oversight. The commitment at senior levels of the organization is evidenced by the longstanding Diversity Statement, Harassment policy and Equal Employment Opportunity policy. Locally, senior level commitment to achieving diversity results is demonstrated regularly, for example by the hire of a local Diversity Coordinator to support implementation of this plan. This commitment will be further demonstrated, and put into practice, through the creation of a Diversity Steering Committee, comprised of key individuals from relevant business units to support effective delivery of diversity initiatives.

The long term nature of the project requires that planning and implementation continue beyond the initial project phase. However, it is important to establish key processes upfront, so as to facilitate positive change and ensure the foundation for further progress is strong. To this end, many of the initiatives laid out in the pillars will require early implementation, coupled with regular review and adaptation. Ongoing consultation will complement information gathered through the monitoring and reporting process, and will be used to evaluate and adapt initiatives. As new information and best practices are identified, EMCP will engage with contractors to share this knowledge with a goal to ensure all aspects of the Project are demonstrating commitment to diversity planning.

A detailed implementation schedule can be found in Appendix A.

# 6.2 Contractors

Successful implementation of the Diversity Plan's components will require a full commitment not only from EMCP but also its main contractors, creating a diversity culture that is cascaded through companies working on the Project. This position is supported by one of the principles that underlie the Benefits Plan and governs its benefits-related activities, including the implementation of the Diversity Plan, which is:

Selecting contractors and suppliers that will work diligently with us to deliver benefits to the people of the Province (Benefits Plan).

The main contractors will be required to develop plans to achieve diversity through employment and training, establishment of a supportive work environment, monitoring and reporting, and facilitating business access. These companies will be required to develop and submit their plans to EMCP. Plans and implementation reports will be reviewed by EMCP who may require plan and report revisions. For the construction phase, Hebron has contractually required two of the Project's largest contractors, undertaking the topsides and gravity based structure (GBS) engineering and procurement, to not only address these requirements, but also designate a Diversity Coordinator to support diversity planning and initiatives, including coordinating the diversity monitoring and reporting.

Full contractor compliance will be facilitated by the commercial terms of the contracts. Failure to submit a satisfactory plan or report would constitute an instance of non-conformance with the contract terms and conditions and, as such, could result in sanctions up to and including termination of the contact. As a regulatory commitment, business imperative and priority of the company, the development and implementation of diversity plans will be held as a priority. Contractors will be encouraged to develop their own expertise and/or draw upon existing expertise in the area of diversity planning, while working with EMCP to ensure compliance.

Other main contractors will be identified, based primarily on scale of employment and procurement in the Province. Each main contractor will be required to provide EMCP with a Diversity Plan. In addition, all contracts related to the execution of the Hebron Project within the Province will include an acknowledgement from successful bidders that they are aware of the existence and importance of the Diversity Plan (Benefits Agreement pp21-22).

To assist main contractors in developing their internal plans and processes, EMCP will:

- hold initial meetings to introduce them to the Plan, its requirements, and implementation;
- facilitate consistency in the use of baseline data and information on diversity in the general labour force;
- provide a template for and instruction regarding completion of annual diversity reporting; and
- provide guidance in the development of their plans by stipulating minimum requirements in EMCP contracts.

This approach not only satisfies the requirements of the Benefits Agreement, Accord Acts and corporate drivers, but also benefits the Province in the longer term by helping further build the diversity capabilities of the Province's existing businesses.

# 6.3 Stakeholder Consultation

EMCP undertook consultation with numerous interest groups and stakeholder organizations to obtain feedback on the strategy and approach outlined in this Plan, and to gain insights into opportunities, areas of interest and concerns. Continued stakeholder consultation will also be critical to the implementation of this

Diversity Plan and ongoing development of effective initiatives. Such consultations will continue over the life of the Project. EMCP will also consult with stakeholders regarding the contents of the annual monitoring report.

This Diversity Plan implementation is independent of the diversity initiatives of other operators in the Newfoundland and Labrador offshore. However EMCP is aware of increasing stakeholder interest in implementing industry-wide diversity processes and initiatives, and will look for opportunities to engage, where appropriate, in collaborative efforts with its industry peers.

# 7 CONCLUSION

EMCP strives to achieve excellence in all aspects of its organization, and the advancement of diversity in its working environment is no exception. The strategies outlined in this document represent a long-term approach to promoting diversity within the company and within Newfoundland and Labrador, and balance specific actions with over-arching policies intended to provide a sustainable approach with regards to the representation of members of the designated groups. One of the strengths of this approach is the emphasis on renewal and evaluation. This ensures the flexibility to adjust initiatives based on outcomes.

The structure of the Plan is intended to provide a clear and concise outline of EMCP's planning process and approach to regulatory and contractual requirements, and corporate drivers. As noted in Section 2.0, there are a number of specific guidelines and obligations that must be met, and it is the goal of the plan to address all of these, while identifying opportunities for continuous improvement.

In addition, it is important to reflect on the specific diversity context for the local oil and gas industry. As highlighted in Section 3.0, the province of Newfoundland and Labrador has had successes in raising the profile of diversity in the workplace. This Plan seeks to build upon past experiences to ensure that best practices are implemented from the outset, and take place throughout the life of the Project. A corporate overview of EMCP's diversity statement and Equal Opportunity and Harassment policies is intended to contextualize the company's experiences and overall approach to diversity (Section 4.0).

The objectives and components of the Hebron Diversity Plan (Section 5.0) have been developed to describe the important elements necessary to create a supportive and diverse work environment. This approach clearly outlines the priorities of EMCP, and will serve to identify important touchstones as the project plans evolve over the life of the development. The four pillars also allow for the clear communication of priorities to contractors and other stakeholders. They ensure that emphasis on tangible progress is always at the forefront. The Business Access component of the plan aims to ensure an environment of enhanced business access for designated group members through local engagement and targeted measures.

The Hebron Project is a unique opportunity to develop a culture of diversity from the outset of a project. EMCP is fully committed to this comprehensive, collaborative and proactive program. It is anticipated that this project will be a milestone in the development and promotion of diversity in the Province's oil and gas industry, and will hopefully contribute to a future where innovative measures, such as those outlined in this plan, are considered mainstream business practices.

Appendices

# **Appendix 1 - Implementation Schedule**

This implementation schedule represents the anticipated timelines for the Operator. Implementation schedules for contractors will not necessarily follow the same timeline, as drivers related to staffing and business access reflecting construction versus operations priorities may vary.

Anticipated Timeline				
Initial Application	Future Application	Component	Initiative	Description
In Process	Ongoing	Skills Development through Community Investments	Communication and Consultation	Promote careers in oil and gas to students at junior high and high school levels to encourage them to stay in school and consider further education to meet skills demand. Highlight education required, and provide real life examples of what it is like to work in the industry
In Process	Ongoing	Skills Development through Community Investments	Communication and Consultation	Attend career fairs to promote careers in technical, engineering and trade/operational roles
In Process	Ongoing	Skills Development through Community Investments	Partnerships	Partner with organizations or support programs that expose women and/or the other designated groups to math, science, technology or engineering to further support the option of non-traditional career choices
In Process	Ongoing	Recruitment and Selection of Qualified Candidates	Communication and Consultation	Build relationships with educational institutions with key programs that may support recruitment needs
In Process	Ongoing	Recruitment and Selection of Qualified Candidates	Communication and Consultation	Collaborate with key associations or organizations to attract qualified candidates representing designated groups
In Process	Ongoing	Recruitment and Selection of Qualified	Advertising	Ensure all advertised job postings state company's commitment to providing

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Appendix B

Anticipated Timeline				
Initial Application	Future Application	Component	Initiative	Description
		Candidates		equitable treatment and opportunity to all individuals
In Process	Ongoing	Recruitment and Selection of Qualified Candidates	Self-identification	Avoid any actual or perceived bias in the decision making process by ensuring candidates will not be asked to self- identify designated group status during the recruitment process
In Process	Ongoing	Recruitment and Selection of Qualified Candidates	Selection Process	Select qualified candidates with interviewers trained to ensure bias-free selection processes based on bona fide occupational requirements and consistently applied methodologies
In Process	Ongoing	Recruitment and Selection of Qualified Candidates	Internships	Provide co-op, internships and summer employment opportunities in professional, technical and trades positions, with an early offer process available for successful candidates
In Process	Annually	Establishment and Development of a Supportive Work Environment	Training and Education	Conduct annual review to ensure that the Harassment and Equal Employment Opportunity policies are regularly communicated to and understood by all employees
In Process	Ongoing	Establishment and Development of a Supportive Work Environment	Training and Education	Provide employees with an introduction to key policies and their application through an orientation process
In Process	Ongoing	Establishment and Development of a Supportive Work Environment	Work/Life Balance	Offer a broad range of programs that can provide employees with flexibility to assist in balancing work and personal life including vacation

Work

Environment

### **Benefits Plan**

Anticipated Timeline				
Initial Application	Future Application	Component	Initiative	Description
				flexibility, paid and unpaid time off, child and elder care information support, and an employee assistance program
In Process	Ongoing	Establishment and Development of a Supportive Work Environment	Accommodation	Implement job accommodation, upon hire and throughout their career, that enables qualified employees with disabilities to perform the essential functions of their jobs, following the company accommodation processes
In Process	Ongoing	Establishment and Development of a Supportive Work Environment	Accountability	Incorporate diversity considerations into the performance assessment process to ensure that employee relative performance is determined without bias
In Process	Ongoing	Establishment and Development of a Supportive Work Environment	Networks	Provide encouragement and support to employee diversity networks
In Process	Ongoing	Establishment and Development of a Supportive Work Environment	Communication/Consultation	Evaluate exit interviews to identify diversity considerations
In Process	Ongoing	Establishment and Development of a Supportive	Facilities	Design Hebron platform living quarters to provide women a safe, secure, comfortable and

respectful residential

example, during front end engineering, particular consideration has been given to the design of a private ward within the sick bay and genderdedicated locker and sauna facilities as part of the fitness/wellness area.

environment. For

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Anticipated Timeline				
Initial Application	Future Application	Component	Initiative	Description
				Continue focus on diversity-sensitive facilities through the detailed design phase
In Process	Ongoing	Business Access	Communication and Consultation	Participate in targeted conferences, trade shows, information sessions and business networking events to increase accessibility and provide information related to the Procurement process
In Process	Ongoing	Business Access	Communication and Consultation	Ensure companies are aware of any specific standards, practices, qualifications or certifications required by EMCP and provide information on how to obtain these requirements
2010	Ongoing	Recruitment and Selection of Qualified Candidates	Communication and Consultation	Select associations/ organizations and special interest groups to be notified directly regarding recruitment advertising to ensure advertising reaches target audiences
2010	Regular scheduled meetings	Establishment and Development of a Supportive Work Environment	Accountability	Implement a steering committee comprised of key individuals from relevant business units to support effective delivery of diversity initiatives
2010	Ongoing	Establishment and Development of a Supportive Work Environment	Training and Education	Conduct management diversity training to create awareness of the elements of diversity and its impact on conducting business at EMCP.
2010	Ongoing	Establishment and Development of a Supportive Work Environment	Facilities	Engage in a process of proactive barrier identification to ensure all facilities take into consideration the needs of a diverse workforce
2010	N/A	Monitoring, Reporting and	Data Collection	Create a confidential and voluntary self-

## Appendix B

Diversity	Plan

Anticipated Timeline				
Initial Application	Future Application	Component	Initiative	Description
		Stewardship		identification survey
2010	Ongoing	Business Access	Accessibility	Adjust the scope of bid packages to remove barriers that may tend to hinder the participation of diverse businesses
2010	Update as determined	Business Access	Communication and Consultation	Ensure that diverse businesses and organizations that support designated groups are aware of how to access public information on supply and service opportunities and how to request additional information
2010	Ongoing	Business Access	Communication and Consultation	Conduct consultations with local organizations and business networks to identify businesses owned or led by individuals from designated groups
2010	Ongoing	Business Access	Communication and Consultation	When requested, provide feedback on tenders and bids to help identify areas for improvement and encourage capacity development
2010	Ongoing as required	Business Access	Training and Education	Provide companies with business process and supplier development training
2010	Ongoing	Business Access	Partnerships	Support special initiatives of relevant business networks and community organizations to advance diverse business development
2010	Update as required	Business Access	Communication and Consultation	Work with stakeholders to develop a thorough working definition of what constitutes a diverse business, and subsequently establish a best practices model for identifying indicators to be used for reporting

Diver	sity	Plan

Anticipated Timeline				
Initial Application	Future Application	Component	Initiative	Description
				purposes
2011	Ongoing	Skills Development through Community Investments	Scholarships and Student Support	Establish scholarship and support programs to encourage members of the designated groups, particularly women to complete training programs that will allow them to meet skills demand
2011	Ongoing	Skills Development through Community Investments	Communication and Consultation	Promote company accommodation practices to ensure individuals with disabilities who are interested in pursuing careers in oil and gas are aware of options available
2011	Ongoing	Skills Development through Community Investments	Communication and Consultation	Promote careers in oil and gas to various interest groups to encourage their members to consider applying for Hebron roles and/or to consider further education to meet skills demand, using best practices to ensure outreach is accessible to a broad base of potential candidates
2011	Update as required	Skills Development through Community Investments	Communication and Consultation	Communicate projected human resources requirements to post- secondary institutions, education groups and other interested parties in a timely manner to encourage further dissemination of skills demand information and to increase awareness of opportunities
2011	Ongoing	Skills Development through Community Investments	Post-Secondary Support	Provide support and contributions to post- secondary institutions that will enhance ability to recruit qualified candidates into targeted programs

Anticipated Timeline				
Initial Application	Future Application	Component	Initiative	Description
2011	Ongoing through Production	Establishment and Development of a Supportive Work Environment	Training and Education	Implement diversity awareness training for employees in the construction phase, to instill a foundational understanding of diversity and support the growth of diversity culture
2012	Ongoing as opportunities are identified	Skills Development through Community Investments	Post-Secondary Support	Participate on educational institutions' advisory boards and/or to share specific knowledge with students in key programs
2012	Annually	Monitoring, Reporting and Stewardship	Reporting	Provide external availability and internal representation data for both the Operator and the Project overall
2012	Annually	Monitoring, Reporting and Stewardship	Reporting	Include both quantitative and qualitative information, including respecting success in meeting quantifiable employment-related objectives and goals
2012	Annually	Monitoring, Reporting and Stewardship	Reporting	Describe progress made in the past year, including comparisons to past performance
2012	Annually	Monitoring, Reporting and Stewardship	Reporting	Describe initiatives planned for the year ahead
2012	Annually	Monitoring, Reporting and Stewardship	Stewardship	Conduct internal analysis of report data and evaluate opportunities for improvements
2012	Annually	Monitoring, Reporting and Stewardship	Monitoring	Collect relevant data from main contractors
2012	Annually	Monitoring, Reporting and Stewardship	Communication and Consultation	Conduct annual stakeholder consultations

# Appendix 2 - Glossary of Terms and Acronyms

Acts	When capitalized in this document, refers to the Canada-Newfoundland Atlantic Accord Implementation Act and the Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act
C-NLOPB	Canada-Newfoundland and Labrador Offshore Petroleum Board
Coventurers	Hebron asset owners who are sharing in the predevelopment costs and who have authorized ExxonMobil Canada Properties to prepare a Development Application in its capacity as Operator
GBS	Gravity base structure – the base of an offshore drilling and production platform, usually made of concrete, that is held securely on the ocean bottom without the need for piling or anchors
Operator	When capitalized in this document, refers to ExxonMobil Canada Properties
Proponent	When capitalized in this document, refers to ExxonMobil Canada Properties
Project	When capitalized in this document, refers to Hebron Offshore Oilfield Project
Province	When capitalized in this document, refers to Newfoundland and Labrador
R&D	Research and development
Stakeholder	A party that affects or can be affected by the Hebron Project
WEP	Women's Employment Plan
WRDC	Women in Resource Development Committee

# **APPENDIX C**

ESTIMATED PERSON-HOURS BY DETAILED TRADES DESIGNATION

Estimated Person-Hours By Detailed Trades Designation

		2011	2012	2013	2014	2015	2016	Total
Constru	ction Inspectors		I				U	
A112	Human resources managers	0	2,685	3,140	3,795	3,605	180	13,405
C161	Non-destructive testers and inspectors	0	20,010	23,375	28,270	26,860	1,330	99,845
C162	Engineering inspectors and regulatory officers	0	6,290	7,345	8,885	8,440	415	31,375
C163	Inspectors in public and environmental health and occupational health and safety	0	4,175	4,875	5,895	5,600	275	20,820
C164	Construction inspectors	0	22,865	26,715	32,310	30,695	1,520	114,105
	Total	0	56,025	65,440	79,155	75,200	3,720	279,550
Electrici	ans		I				U	
H211	Electricians (except industrial and power system)	0	10,300	89,055	104,275	105,705	3,685	313,020
H212	Industrial electricians	0	5,360	46,365	54,295	55,035	1,920	162,975
H213	Power system electricians	0	385	3,310	3,880	3,930	135	11,640
H433	Electrical mechanics	0	680	5,890	6,895	6,990	245	20,700
	Total	0	16,725	144,620	169,345	171,660	5,980	508,335
GBS Co	ncrete		1				L D	
H121	Carpenters	0	0	96,455	623,260	674,370	82,805	1,476,890
H132	Cement finishers	0	0	2,550	16,475	17,830	2,190	39,045
H326	Welders and related machine operators	0	0	5,570	36,000	38,950	4,785	85,305
H523	Other trades and related occupations	0	0	2,330	15,045	16,280	2,000	35,655
H611	Heavy equipment operators (except crane)	0	0	5,590	36,105	39,065	4,795	85,555
H711	Truck drivers	0	0	9,170	59,245	64,105	7,870	140,390

#### ESTIMATED PERSON-HOURS BY DETAILED TRADES DESIGNATION

## Appendix C

**Benefits** Plan

## Estimated Person-Hours By Detailed Trades Designation

		2011	2012	2013	2014	2015	2016	Total
H821	Construction trades helpers and labourers	0	0	81,600	527,265	570,500	70,050	1,249,415
	Total	0	0	203,265	1,313,395	1,421,100	174,495	3,112,255
HVAC		L	I				U	
C132	Mechanical engineering technologists and technicians	0	350	2,095	2,595	2,025	140	7,205
H016	Contractors and supervisors, mechanic trades	0	1,175	7,015	8,685	6,775	475	24,125
H413	Refrigeration and air conditioning mechanics	0	7,665	45,735	56,650	44,190	3,100	157,340
	Total	0	9,190	54,845	67,930	52,990	3,715	188,670
Instrum	entation Trades	I	I				N	
C143	Industrial instrument technicians and mechanics	0	1,685	31,585	131,950	154,910	2,910	323,040
	Total	0	1,685	31,585	131,950	154,910	2,910	323,040
Mechan	ical Trades						II	
H322	Boilermakers	0	6,775	15,495	50,580	57,815	4,160	134,825
H411	Construction millwrights and industrial mechanics (except textile)	0	42,700	97,660	318,805	364,410	26,235	849,810
H416	Machine fitters	0	2,055	4,695	15,325	17,520	1,260	40,855
	Total	0	51,530	117,850	384,710	439,745	31,655	1,025,490
Piping T	i Trades						I	
H111	Plumbers	0	48,475	70,710	129,235	132,655	8,105	389,185
H112	Steamfitters, pipefitters and sprinkler system installers	0	60,880	88,800	162,295	166,590	10,180	488,745
H113	Gas fitters	0	2,820	4,110	7,515	7,710	470	22,625
	Total	0	112,175	163,625	299,045	306,955	18,760	900,555

Benefits Plan

## Appendix C

Estimated Person-Hours By Detailed Trades Designation

		2011	2012	2013	2014	2015	2016	Total
Project	and Construction Mgm	t	·	1			ш	
A121	Engineering, science and architecture managers	33,620	229,565	190,620	159,120	135,510	13,655	762,090
C131	Civil engineering technologists and technicians and construction estimators	22,955	156,735	130,150	108,640	92,520	9,325	520,32
	Total	56,575	386,300	320,770	267,760	228,030	22,980	1,282,41
Structur	al Trades		I	I				
H321	Sheet metal workers	0	71,395	21,730	33,730	35,305	1,020	163,180
H323	Structural metal and platework fabricators and fitters	0	43,565	13,260	20,580	21,540	625	99,570
H324	Ironworkers	0	159,730	48,615	75,465	78,990	2,285	365,085
H326	Welders and related machine operators	0	344,575	104,870	162,795	170,395	4,935	787,570
	Total	0	619,265	188,475	292,570	306,230	8,865	1,415,40
Surface	Protection		I				Ш.	
H144	Painters and decorators	0	145,520	69,695	142,910	145,345	5,630	509,100
J226	Painters and coaters, manufacturing	0	28,585	13,690	28,070	28,550	1,105	100,000
	Total	0	174,105	83,385	170,980	173,895	6,735	609,100
Civil and	d Structural Engineerin	g		1			Ш	
C031	Civil engineers	19,175	68,435	97,570	130,225	101,985	16,660	434,050
C131	Civil engineering technologists and technicians and construction estimators	10,045	35,850	51,110	68,215	53,420	8,725	227,365
C153	Drafting technologists and technicians	2,985	10,645	15,180	20,255	15,865	2,590	67,520
	Total	32,205	114,930	163,860	218,695	171,270	27,975	728,93
Electrica	al Engineering	I		I	I			
C033	Electrical and electronics	10,045	14,970	7,920	0	0	0	32,935

## Appendix C

**Benefits** Plan

## Estimated Person-Hours By Detailed Trades Designation

		2011	2012	2013	2014	2015	2016	Total
	engineers							
C141	Electrical and electronics engineering technologists and technicians	17,650	26,305	13,915	0	0	0	57,870
C153	Drafting technologists and technicians	1,405	2,095	1,110	0	0	0	4,610
	Total	29,100	43,370	22,945	0	0	0	95,415
Material	s Engineers							
C042	Metallurgical and materials engineers	4,410	6,570	3,475	0	0	0	14,555
	Total	4,410	6,570	3,475	0	0	0	14,555
Mechani	ical Engineering							
C032	Mechanical engineers	12,220	53,025	77,390	93,480	55,180	9,610	300,905
C132	Mechanical engineering technologists and technicians	1,385	6,000	8,760	10,580	6,245	1,090	34,060
C153	Drafting technologists and technicians	2,465	10,690	15,605	18,850	11,125	1,940	60,675
	Total	16,070	69,715	101,755	122,910	72,550	12,640	395,640
Piping E	ingineering							
C032	Mechanical engineers	20,425	30,440	16,105	0	0	0	66,970
C132	Mechanical engineering technologists and technicians	3,465	5,165	2,735	0	0	0	11,365
C153	Drafting technologists and technicians	6,180	9,205	4,870	0	0	0	20,255
	Total	30,070	44,810	23,710	0	0	0	98,590
Process	Engineering						<u> </u>	
C034	Chemical engineers	7,935	11,830	6,255	0	0	0	26,020
	Total	7,935	11,830	6,255	0	0	0	26,020
	Total Labour Hours	176,365	1,718,2225	1,695,870	3,518,445	3,574,535	320,435	11,003,870

# **APPENDIX D** CONSOLIDATED BENEFITS INITIATIVES LIST

### Appendix D

### **Consolidated Benefits Initiatives List**

### CONSOLIDATED BENEFITS INITIATIVES LIST

CONSOLIDATED BENEFITS INITIATIVES LIST
Description
Project Management Initiatives
Select contractors and suppliers that work diligently to deliver benefits to the people of the Province
Staff Project office by professionals knowledgeable of the Province's supply community
Require FEED/EPC contractors to identify a management contact accountable for benefits diversity, and other benefits staff
Develop and implement plans to manage the organizational aspects of key transitions into subsequent phases
Establish a Benefits Advisory Committee
Establish a Benefits Community of Practice
Prepare a Benefits Management System manual
Supplier Development Initiatives
Establish and maintain a Project website
Provide early and detailed notification of Project requirements
Offer supplier information sessions and workshops
Hold a reverse trade show focused on EPC work
Participate in industry conferences and workshops, such as are organized regularly by NOIA and other industry associations
Co-locate the majority of EMCP and FEED/EPC contractor procurement personnel in St. John's to facilitate opportunities for Newfoundland and Labrador companies to participate in bidding for sub contracts and, material and equipment purchasing
Offer EMCP and main contractor site visits to prospective contractors and suppliers in order to assess the condition and suitability of local infrastructure and to review prospective contractors and suppliers' operating procedures and workforce capabilities
Investigate the use of distance technologies to facilitate contact between NL contractors and suppliers, and the main FEED/EPC companies located outside the Province
Disseminate point of contact information for Project procurement personnel as soon as i becomes available

Provide debriefings for unsuccessful bidders, when so requested

Promote established vendor registration database that will be used by EMCP and its contractors

Appendix D

Benefits Plan

#### **Consolidated Benefits Initiatives List**

and suppliers

Establish travel fund for travel by contractors and suppliers headquartered in the Province to visit engineering offices located outside the Province, where such offices have been employed to conduct Project FEED and when necessary to support business relationships

Investigate the use of distance technologies to facilitate the access of rural businesses to Project and industry procurement-related events in St. John's

Investigate encouraging and facilitating collaboration between NOIA and other industry associations and rural and diversity business and supplier groups

Help identify commercially sound opportunities for suppliers

Engage NOIA and other relevant industry stakeholders to identify barriers to local suppliers and to:

• Provide a detailed presentation on analysis of service and supply capability

• Review the findings of the various supplier development initiatives, including those identified by the Industrial Opportunities section of the Atlantic Energy Roundtable

Assist local suppliers in identifying opportunities presented by the Project

Investigate industrial tourism options respecting Bull Arm and other activity centres, including the viability of extending industrial tourism opportunities beyond the end of the construction stage

Work with FEED/EPC contractors to study the full range of catering, retail, personal services, recreation, entertainment, daycare and other requirements of camp workers and how best they may be met by businesses in the local area

Ask potential bidders to document their willingness and capability to utilize electronic bulletin boards to communicate procurement requirements and contract awards

Steward activities of EMCP contractors and suppliers undertaken to develop Canadian and NL suppliers

Encourage the formation of joint ventures, licensing arrangements, education and training and R&D activities in support of identified opportunities

Publish bidders lists, allowing local companies to identify potential partners

Encourage and support major contractors and their key procurement personnel in identifying technology transfer opportunities

Engage and support local companies in the performance of Project-related R&D

### Procurement and Contracting Initiatives

Maintain a construction phase contracts and procurement office in St. John's

Conduct ongoing site visits to local suppliers and fabricators to assess their capabilities and capacities

Hold overview workshops at which EMCP and main contractors provide forecasts of activities and

Appendix D

#### Benefits Plan

#### **Consolidated Benefits Initiatives List**

opportunities

Publicize Project information, including procurement activities and opportunities on the Project website and the NOIA and BIDS websites

Use requests for EOIs to solicit local supply interest

Facilitate access to Project opportunities by companies owned and operated by members of designated groups

Require that, for Project RFPs and bid packages, bidders use standards that meet the requirements of Canadian Government Authorities and use Canadian standards where appropriate

Report success in providing 'full and fair opportunity' and 'first consideration' to the C-NLOPB

Ensure that requests for EOIs contain discussion of the EMCP commitment to benefits, the Benefits Plan, and the requirement for contractor alignment in delivering benefits, including diversity

Ensure that benefits, including diversity, requirements will be scalable

Hold initial meetings with representatives of the main contractors to introduce them to the Benefits Plan, its requirements and implementation

Provide guidance to main contractors so that their plans are developed and implemented in accordance with contract expectations

Require contractors and suppliers to establish and maintain appropriate business standards, procedures and controls

Publish EOIs on the Project website and notify BIDS, NOIA and other industry organizations

Publish bidders lists when appropriate

Hold procurement and contracting workshops in conjunction with key contracting milestones

To the extent reasonably practicable, structure bids and encourage relationships between local and other suppliers to facilitate local participation

Detail the specific reporting requirements and obligations that contractors and suppliers must accept as part of the contract award

Ensure that contracts stipulate that contractors and suppliers must impose similar requirements on sub-contractors and suppliers

Maintain a regular liaison with the C-NLOPB, to fulfill all monitoring and reporting requirements

### Staffing Demands and Supply Initiatives

EMCP and its main contractors will develop and submit to the C-NLOPB, a detailed operations phase human resources plan one year preceding first production

#### **Consolidated Benefits Initiatives List**

Human resources requirements for the Project will be communicated in advance, where necessary, to enable individuals to train for opportunities

Where appropriate, main contractors will be required to prepare and submit plans to EMCP that identify projected staffing requirements

Skills Development Initiatives

Promote careers in the oil and gas industry to students at junior high and high school levels to encourage them to stay in school and consider further education to meet skill demand

Communicate projected human resource requirements to post-secondary institutions, education groups and other interested parties in a timely manner to encourage further dissemination of skills demand information and to increase awareness of opportunities

Attend career fairs to promote careers in technical, engineering and trade/operational roles

Provide support and contributions to post-secondary institutions that will enhance EMCP's ability to recruit qualified candidates into targeted programs

Employ co-operative education students from technical, trades and business disciplines

Encourage main contractors to incorporate co-op and apprenticeship training positions into their staffing plans for the construction phase

Where specific skill development is required to meet Project staffing needs, as identified in the labour capacity study or through other projections, EMCP will work in conjunction with educational institutions, industry and other stakeholders to facilitate the delivery of training to Newfoundlanders and Labradorians, including members of the designated groups

### **Recruitment Initiatives**

Include participation in career fairs and information sessions, standardized job specific screening criteria, and use of trained interviewers in EMCP's recruitment and selection process

The effectiveness of the recruitment and selection process will be monitored and reviewed over the life of the Project, and EMCP will continue to work with key stakeholders to identify initiatives that may contribute to success in the recruitment and selection of qualified candidates

EMCP employee positions will be advertised externally through methods such as local print media, regional websites and on the ExxonMobil Canada website. For student or new graduate positions, local universities and colleges will be notified of opportunities. Associations and/or organizations that represent members of the designated groups will receive notification of new positions

Contractors and suppliers will be required to have processes for recruitment and selection of candidates that align with the principles of equitable employment and provide first consideration to residents of Newfoundland and Labrador for employment

Appendix D

Benefits Plan

#### **Consolidated Benefits Initiatives List**

### **Career Development Initiatives**

Define training plans for key positions including skills training, SHE and regulatory training, vendor training, initial work assignments, on-the-job training and facility specific training

Develop long-term succession plans for key positions to deliver operational excellence, business continuity and individual career development. Local employees will receive training and development to fill long-term positions and succeed non-local personnel if competent and qualified

### **Research and Development Initiatives**

Develop a process for identifying and raising awareness of potential R&D projects, and give priority to undertaking R&D in the Province, where effective and competitive

Identify and promote R&D initiatives undertaken by EMCP contractors and suppliers

Periodically review priority areas for R&D activity

Participate in Joint Industry Projects

### Monitoring and Reporting Initiatives

Require a full understanding of, and adherence to, the monitoring and reporting obligations and cascade them to contractors, sub-contractors and suppliers

Meet with main contractors early in the Project, reviewing their processes and systems, and emphasizing monitoring and reporting obligations