1. Overview

ExxonMobil Canada Properties (EMCP) is in the process of pre-qualifying companies who are interested in bidding on **Engineering, Procurement, Construction and Installation (EPCI) of the Hebron OLS** in support of the Hebron Project, offshore Newfoundland and Labrador (NL), Canada.

2. Project Description

The Hebron Offshore Project Area is located in the Jeanne d’Arc Basin 340 kilometres (km) offshore of St. John’s, Newfoundland and Labrador, approximately 9 km north of the Terra Nova Field and 32 km southeast of the Hibernia development. The water depth ranges from 88 to 102 metres (m).

The Hebron Field will be developed using a stand-alone concrete Gravity-Based Structure (GBS) production platform. The processed crude will be pumped from GBS storage to dedicated shuttle tankers via the OLS. A graphic representation of the field development is shown in Figure 2-1.

![Figure 2-1: GBS and OLS - Preliminary Development Layout](image-url)
The overall OLS system includes two major components:

2.1. Pipelines:

- Two (2) 2 km-pipeline segments routed from the GBS and joined by a 1.85 km interconnecting pipeline segment. The segments will be linked to the GBS and subsea loading systems using expansion spools to form a piggable 24-inch pipeline loop of approximately 5.85 km of offshore pipeline.

- The pipeline segments will be made of API X60 grade pipe with a 24-inch (610mm) outside diameter and 0.5-inch (12.7mm) wall thickness, coated with fusion bonded epoxy (FBE) and 60mm of concrete. The pipeline will not be trenched but shall have sufficient bottom stability for a maximum wave of 28m.

- Each segment will be fit with flanges at each end, hydrotested to demonstrate line/weld integrity and then preserved.

2.2. Offshore Subsea Loading Systems:

- Two (2) identical offshore subsea loading systems located 2 km from the GBS at the end of the pipeline segments. The main components of each are:
  - Piled base,
  - Swivel,
  - Flexible flowline using bonded or unbonded technologies, and
  - Hose end valve (HEV) for connection of the flowline to a dynamically positioned (DP) offloading tanker similar to the tankers used to offload Hibernia.

- The subsea offloading system design will allow a DP tanker to rotate about the base in either direction, without limit, in seastates up to a significant wave height (Hs) of 5.5 m. The flexible flowlines shall allow for a ‘green zone’ operating circle of approximately 110 m from the subsea loading system base.

- The flexible flowline pickup line will be designed such that an offloading tanker can retrieve and attach the HEV in seastates with a significant wave (Hs) of up to 4.5 m.

- When idle and resting on the sea floor, the flexible flowline system will have sufficient on-bottom stability to minimize motions due to bottom current and wave interactions.

- The subsea offloading system will be designed to allow for routine maintenance by ROV, e.g., charging of accumulators or replacement of batteries.

- The flexible flowline will be attached to the subsea swivel using a diverless connector that enables the flexible flowline to be removed and reinstalled using an ROV.

3. Scope of Work Summary

Contractor may express interest in A, B, C, or any combinations including all OLS workscope.

Contractor will be required to demonstrate experience performing work similar to that required for the Hebron OLS, in terms of water depth, geotechnical and meteorological conditions.
The Scope of Work & Supply includes but is not limited to:

**Scope A** - Engineering, Procurement, Construction, and Installation (EPCI) of three (3) sections of pipeline totalling 5.85 km as described in Section 2.1. Scope of work includes, but is not limited to:

- Pipeline design, engineering and installation analysis.
- Procurement, logistics and transport of linepipe and material.
- Execution of pipeline installation by S-lay vessel in May-Sept 2015.
- Provision of temporary pig launchers, receivers and necessary equipment on each pipeline segment to allow for the flooding, cleaning, gauging and hydrotesting after installation.
- Pre-construction and As-Built route surveys for the three pipeline sections.
- Preservation with an environmentally friendly biocide and corrosion inhibitor that protects the lines for at least two (2) years.

**Scope B** - Engineering, Procurement, and Construction (EPC) of two (2) identical subsea offshore loading systems as described in Section 2.2. The scope of work includes but not limited to:

- Conduct or subcontract all analysis and engineering necessary to meet industry and EMCP design requirements for the required subsea offshore loading systems.
- Procure all materials and fabricate all components of the designed system.
- Manage the work of all subcontractors and suppliers to ensure the work is properly controlled and that all deliverables meet Project quality standards.
- Perform component and system testing according to appropriate acceptance criteria.
- Deliver system components to suitable NL shore base.
- Support installation and start-up activities.

**Scope C** - Engineering, Procurement, Construction and Installation Expansion Spools and Installation of the two (2) subsea loading systems. Scope of Work includes but is not limited to that described below:

**Expansion Spools**

- Conduct or subcontract the analysis and engineering required to design spools in six (6) locations that connect the 24-inch pipeline segments and allow for thermal expansion of the resulting pipeline loop.
- Procure and/or fabricate the six (6) expansion spools.
- Transport spools and other materials to suitable NL shore base for storage; transport to offshore installation location.
- Install spools connecting the pipeline to the GBS and to the offshore loading systems.
- Pig and hydrotest the connected pipeline system.

**Subsea Loading Systems**

- Lower and drive anchor piles at the seafloor.
- Lower and attach the subsea loading system bases/swivels to the pile frames.
- Connect the flexible flowlines to the base swivels via diverless connectors. The flexible flowlines will terminate at the HEVs.
4. Project Milestones

- Contract execution Q1 2013 for all three parts.
- Delivery of all hardware to the designated Shore Base in NL – Q1 2015.
- Pipeline installation – summer of 2015.
- Subsea loading systems installation – summer of 2016. Installation of subsea systems, and associated expansion spools at subsea loading systems, may be considered for earlier installation, post–pipeline installation, depending on vessel availability.
- Once GBS is installed, the final expansion spool pieces will be installed to the GBS 24” oil export risers and the OLS system tested.

The milestones above are notional and are subject to change once detailed plans are developed by the selected contractor(s). At present, all milestones should support the 24” pipeline lay in summer 2015, and the remainder of the installation and completion work performed in mid-2016.

5. Contractor Qualifications, Capabilities, and Expectations

Scope A - (EPCI) 24-inch Pipeline

- Contractor must have proven experience in design, engineering, construction, procurement, and installation of pipelines of similar size, water depth and environment.
- Pipe-lay vessel must be capable of safely working in the Grand Banks and is sized for efficient production of 24-inch line pipe. Notionally, such vessel should be able to lay the 24-inch pipe at a rate between .75 and 1.0 km per day in reasonable seastates.
- Contractor must ensure pipe-lay vessel availability during summer 2015.
- Contractor must provide diver support as required for pipeline installation.
- Contractor must be experienced in pipeline pigging, pressure testing, and preservation.
- Contractor to develop interfaces with any other contractors as necessary.
- Contractor must be able to locate, operate and manage a suitable local Shore Base in NL for in-province workscope.

Scope B - (EPC) Subsea Loading Systems

- Contractor must have proven experience in design, engineering, procurement, fabrication, construction, mechanical completion, and testing of similar loading systems, in water depth and environment.
- Contractor is requested to provide specific examples citing the use of bonded or unbonded flexible flowline technologies in similar subsea offloading applications.
- Contractor must interface with any other contractors as needed.

Scope C - (EPCI) Expansion Spools and (I) Subsea Loading System

- Contractor must have experience in the safe installation of similar systems at the required water depths and environmental conditions.
- Contractor must have proven experience in design, engineering, construction, procurement, and safe installation expansion spool pieces of similar size, water depth and working environment.
- Contractor must provide ExxonMobil-certified diver support capabilities required for installing final expansion tie-in spools.
- Contractor must interface with other contractors as necessary
- Contractor must be able to locate, operate and manage a suitable local Shore Base in NL for in-province workscope.

The above Scope(s) of Work are only an overview. A detailed Scope of Work will be provided as part of the tender package associated with this Expression of Interest.

The intention is to have this scope of work cover the requirements of the Hebron Project. While not currently planned, it should be noted that the resulting contract may require inclusion of and/or extension to other operators in the area, project co-venturers, contractors and/or affiliated companies.
6. Contracting

The contracting of this Work is likely to be between EMCP and one or more prime contractors, depending on the interest expressed and capabilities demonstrated in the responses to this EOI. Respondents may express interest in one or more work scope packages described above. It is acceptable to join with other respondents to propose a broader scope of the work. In such cases, a single response is requested for the group of respondents, listing all participant companies and entities in full.

Upon receipt of the EOI responses, EMCP will review and follow-up with any clarification questions it may have. Next, EMCP will develop a contracting strategy based on interest of the companies responding to the EOI and other business considerations. EMCP will then invite those respondents who are viewed as candidates for the work to complete a prequalification package for the work scope that EMCP believes best fits the contracting strategy. Upon review of the prequalification packages, tendering lists will be developed for the various scopes of work, and Invitations to Tender will be sent to qualified respondents.

Vendor Qualifications

The selected contractor will be required to meet all technical and Safety, Health, Environmental, and Security (SHE&S) specifications and safe work practices of ExxonMobil and its affiliates and Atlantic Accord Benefits requirements as appropriate.

Canada—Newfoundland and Labrador Benefits

EMCP is committed to providing employment opportunities for Canadians and in particular, members of the Newfoundland and Labrador labour force. EMCP is also committed to providing opportunities for companies in Canada to participate in the supply of goods and services for the Project on a commercially competitive basis; first consideration shall be given to companies from NL where services and goods are competitive in terms of fair market price, quality and delivery. Companies invited to submit a Tender for this package will be required to demonstrate that they support these commitments and will be required to complete a Canada—Newfoundland and Labrador Benefits Questionnaire at the Invitation to Tender (ITT) stage. Hebron has received conditional approval of its Benefits Plan; successful bidders will be required to adhere to conditions set by the Board.

Diversity

Consistent with our commitments as outlined in our Diversity Plan, EMCP encourages the participation of members of designated groups including visible minorities, persons with disabilities and Aboriginal peoples, or companies owned by them to participate in the supply of goods and services. Companies invited to submit a Tender for this package will be required to demonstrate that they support these commitments.

7. Submission Requirements

Vendor submissions in response to this Expression of Interest must include the afore-mentioned reference number as well as the following information:

1. Information demonstrating experience in performing the Scope of Work detailed above.
2. Information demonstrating vendor can meet minimum technical requirements detailed above.

This EOI is not a pre-qualification of vendors for other EMCP or Hebron work; it is limited to the aforementioned scope. Participation in this EOI, including any statements whether oral or written between EMCP and your company shall not create or be deemed to create any binding legal relationship or contract, or be construed to do so between EMCP and your company. All costs associated with the preparation of your response to this EOI shall be at your expense.

Finally, it should be clearly understood that this EOI may or may not result in the issuance of an ITT and may or may not result in the award of a contract. Further, it should be clearly understood that if you respond to this EOI and your company is selected to be on the bidders list that your company name and contact
information may be posted on public websites. Similarly, if you are selected for award, the same information may also be posted indicating that the work has been awarded to your company.

Responses to the EOI must be submitted electronically by the closing date to the following email address:

judy.v.edwards@exxonmobil.com

Subject Line: "Hebron OLS EOI"

Responding vendors, if they have not already done so, must register their companies by contacting BIDS at:

Phone: (709) 738-6500
        1-800-397-0393
Fax:   (709) 738-7015
E-mail: bids@nfld.net