

Bay du Nord Framework Agreement

Technical Briefing

Department of Natural Resources

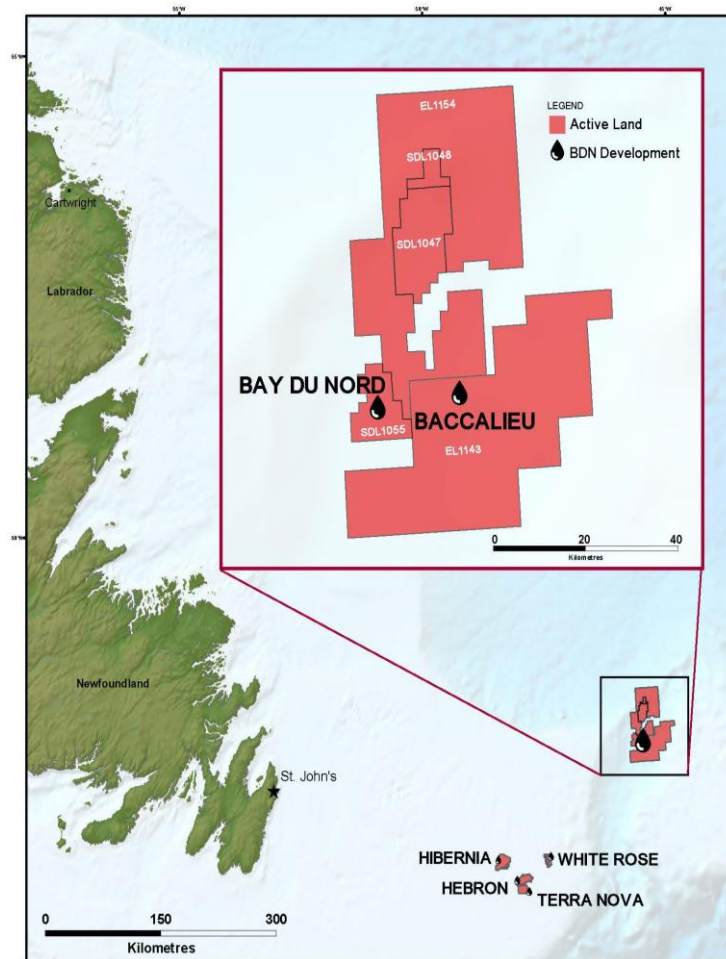
July 2018

Outline

- **Project Overview**
- **Fiscal and Equity Terms**
- **NL Benefits**
- **Next Steps**

Project Overview

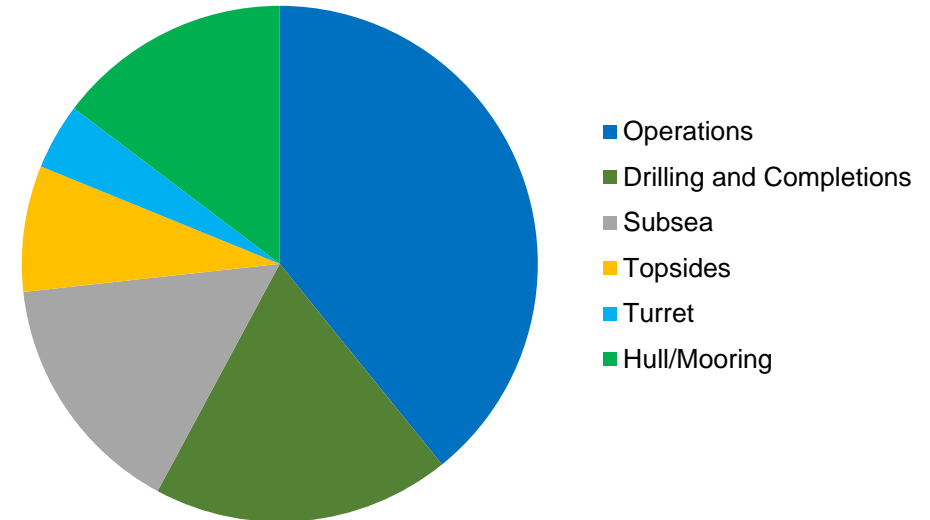
- Location
 - Flemish Pass basin
 - 500 km from shore
 - Approx. 1200 metres water depth



Project Overview

- Highlights
 - Deepwater FPSO development
 - Owners: 65% Equinor / 35% Husky
 - Nalcor O&G to acquire 10%
 - Estimated \$10.9 billion in capital and operating costs over the next 20 years
 - 300 MMbbls reserves
 - Bay du Nord SDL 1055
 - Baccalieu SDD
 - Project sanction anticipated in 2020
 - First oil expected in 2025

Life-of-Field Project Costs



Project Overview

- 'Fit-for-field' solution
 - Lower tonnage FPSO based on existing design
 - Lean subsea layout
 - Higher cost operating environment (far offshore, deepwater)
 - NL must compete for E&P investment with other jurisdictions
 - Fiscal certainty
 - Competitive bid environment
 - Minimize execution risk (cost and schedule)



Project Overview

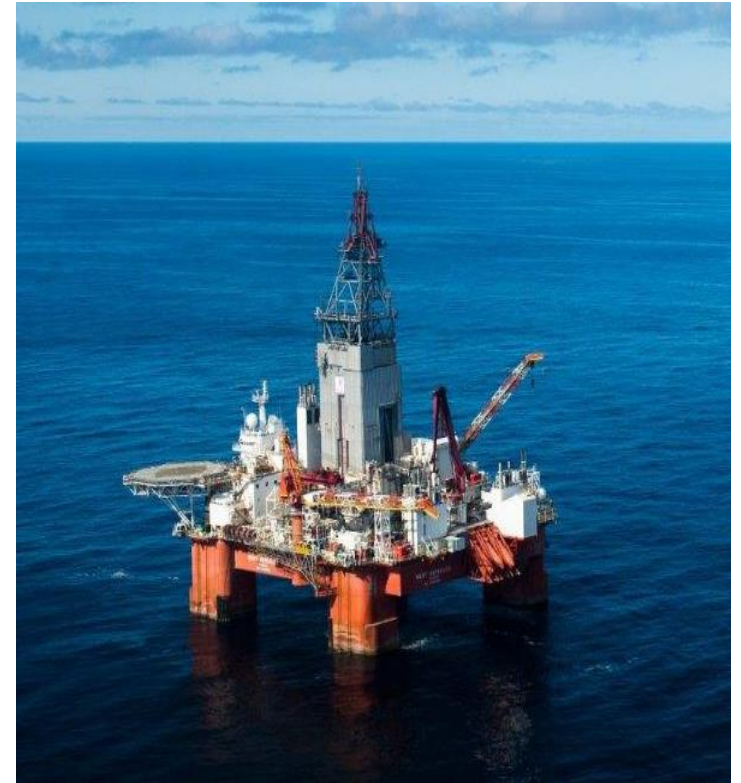
- Why is this project important to NL?
 - Aligns with Advance 2030 – The Way Forward on oil and gas
 - Opens up a new basin in terms of production
 - Demonstrates remote deepwater fields can be developed offshore NL
 - Expected to lead to increased exploration opportunities
 - Significant drilling and completions work prior to first oil
 - New employment opportunities during the engineering, development and operations phases
 - A focus on enhancing subsea engineering and fabrication capabilities
 - Life-of-field commitments to NL benefits and reporting
 - Increased revenues to government(s)
 - Significant upside with higher prices and recoverable reserves (additional subsea tiebacks)

Fiscal and Equity Terms

- First project under Generic Oil Royalty Regulations (GORR)
- 10% equity in Bay Du Nord and Baccalieu
 - \$89.4 million to be paid to the proponents for costs incurred to December 31, 2017
- Estimated \$3.5 B in direct revenues to NL Government
 - Includes royalties, CIT and revenue from equity

NL Benefits

- Expenditures
 - Total life-of-field expenditures are estimated at \$10.9 billion
 - Pre-development and development phase expenditures are estimated at \$6.8 billion, with \$3.4 billion to be spent in the Province
 - Total operations phase expenditures are estimated at \$4.1 billion, substantially all of which to be spent in the Province



NL Benefits

- Employment
 - Estimated in-province employment of 22.3 million person hours life-of-field (11,000 person years/ 84% of total project employment)
 - 4 million person hours in pre-development and development phases, including 1.7 million person hours of engineering, project management and procurement work
 - At least 90% of project management in-province, not less than 320,000 person hours
 - At least 90% of procurement management in-province, not less than 280,000 person hours
 - At least 51% of pre-development and development engineering in-province, not less than 1.1 million person hours, with a focus on subsea engineering
 - 5.2 million person hours for drilling and completions
 - At least 90% of engineering and execution of drilling and completions in-province
 - 1.1 million person hours for Baccalieu subsea tieback
 - 12 million person hours for operations (substantially all onshore and offshore operations phase employment), including engineering, maintenance, logistics, R&D and support functions

NL Benefits

- Fabrication
 - In-province fabrication of 5,000 metric tonnes within a competitive bid framework
 - 4,600 metric tonnes is related to Bay du Nord
 - 400 MT is conditional on Baccalieu subsea tieback
 - Fabrication of the hull, turret, flowlines, umbilicals, and other components will be international
 - New NL fabrication capabilities
 - Multi-million dollar investment in a large-scale steel roller to be used to manufacture suction anchors for moorings
 - Applicable to future subsea tiebacks, global work, etc.



NL Benefits

- Life-of-field 'Gender Equity and Diversity Program'
- Establish an Integrated Operations Centre
 - Up to 50 positions in operations, engineering, maintenance, logistics, HSE, IT and other support personnel
 - High-speed data transmission to shore is expected to create digital innovation opportunities
- Supply and Service Opportunities Forum
 - Dedicated resources to identify business opportunities and foster operator-supplier collaboration and global competitiveness
- Invest a minimum \$75 M over 10 years in R&D and E&T to position NL as a deepwater centre of excellence
 - Focus on subsea technology, digitalization, renewable energy solutions and ocean innovation

Next Steps

- Finalize Acquisition and Benefits Agreements with the Government of NL
- C-NLOPB Development Plan application and approval
- CEAA submission and approval
- Project sanction decision anticipated in 2020