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## **About the Project**

The Sable Offshore Energy Project was Canada's first offshore natural gas project. The Sable Project provided a new source of clean energy to Nova Scotia, New Brunswick, and new supply to the northeastern United States.

Exploration programs for offshore natural gas and oil begin in Nova Scotia with the issuing of offshore leases.

Late 1959

A series of discoveries were made including:

1972 - The Thebaud field 1979 - The Venture field 1983 - The South Venture field 1984 - The Alma field 1986 -The North Triumph field

1970's -1980's

The initial regulatory process culminated with the approval of the Sable Project Development Plan.

Construction of the Maritimes & Northeast Pipeline began, which would carry Sable natural gas to markets in Nova Scotia, New Brunswick and the U.S. Northeast.

1997-1998

After more than 20 years since development began, December 31, 2018 marked the end of natural gas production from the Sable project.

2018

#### 1960's

The first exploration well was drilled by Mobil.

#### Mid -1990's

The joint venture that would develop the Sable Project was formed

# PONT TUPPER FRACTIONATION PLANT THEBAUD THEBAUD SABAN MANP GOLDBORD GAS PLANT NORTH TEILIMPH

#### 1999

The project was built in phases with first gas production achieved on December 31, 1999, and ongoing production of natural gas and natural gas liquids since that time.

The Sable Project was comprised of seven offshore platforms in five different fields with 22 wells and 340 kilometres of subsea pipeline. The fields included Thebaud, North Triumph, Venture, Alma and South Venture. The development was spread over 200 square kilometres near Sable Island in the North Atlantic Ocean. The seven platforms were located in shallow water with depths between 22 and 76 metres.

Interfield pipelines connected satellite fields to the central Thebaud complex, which included a processing facility and accommodations unit, a wellhead platform and a compression deck.

The Thebaud complex was connected by a 200 kilometre subsea pipeline to a gas plant located at Goldboro, Guysborough County. There, liquids were removed and sent by pipeline to the Point Tupper Fractionation Plant for additional processing and with its end products such as propane and butane delivered to market by truck, rail and ship. Market-ready gas was then transported from Goldboro to customers via the Maritimes & Northeast Pipeline.

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## **Decommissioning**

As a responsible owner and operator, ExxonMobil Canada ensured decommissioning activities were planned and executed to mitigate any associated risks to safety or environment. The starting point for such planning included the commitments made in the original Development Plan which was approved prior to construction. ExxonMobil Canada worked in close collaboration with regulators to meet these obligations.

Well plug and abandonment completed

2019

#### Well Plug and Abandonment

The first major scope of decommissioning work was to plug and abandon Sable's wells, also referred to as "well P&A". Sable had 22 wells drilled in water depths that ranged from 22 to 76 metres that were plugged and abandoned.

Each well had its own characteristics and penetrated various zones along depths up to five kilometres below the seafloor. The work of permanently sealing a well is a specialized scope of work, and the precise parameters depend on the characteristics of each well. Generally, plugging and abandoning a well involves setting mechanical barriers at multiple locations down the wellbore, and filling certain sections of the well between these barriers with cement. Ultimately, a permanent seal is put in place that will prevent hydrocarbons from being released into the environment in the future.

The most efficient way to support the work of plugging and abandoning the wells is by utilizing a jack-up drilling rig. In late 2017, the Noble Regina Allen jack-up drilling rig arrived in Nova Scotia and began this activity. This work was completed in 2019.

#### **Offshore and Onshore Pipelines**

#### Offshore

The pipelines have been flushed to remove hydrocarbons and filled with water. Consistent with the approved Sable Development Plan and with industry practices, pipelines were left in place, as this method has been demonstrated to cause less environmental impact and disruption to established sealife. However, portions of the pipelines that would present a hazard to fisheries or other users of the sea have been mitigated or removed.

#### Onshore

The pipelines were flushed to remove hydrocarbons. Following this, grout (a low strength concrete slurry) was pumped into the sections of the pipelines to isolate water crossings and reinforce areas of the pipeline below roadways.

Consistent with the approved Sable Development Plan and with industry practices, pipelines were left in place. The above-ground structures were removed and the areas have been returned to their natural state.





## **Decommissioning**

As a responsible owner and operator, ExxonMobil Canada ensured decommissioning activities were planned and managed to mitigate any associated risks to safety or environment. The starting point for such planning included the commitments made in the original Development Plan which was approved prior to construction. ExxonMobil Canada worked in close collaboration with regulators to meet these obligations.

Onshore plant dismantlement

2020

Offshore platform removals

2020

#### **Onshore Plants Dismantlement**

The final scope of Sable decommissioning is the preparation and dismantlement of onshore plants at Goldboro and Point Tupper.

The preparation started with deinventorying and isolation of equipment. Following these activities, the facilities were dismantled. Dismantlement typically involves cutting the facilities with heavy machinery, such as large shears. ExxonMobil takes a "Machine before Human" type approach to complete the work in a safe manner. The cut-up steel and waste was sorted and ultimately removed from the onshore plant sites. It was then transported to appropriate waste management and recycling facilities.

The goal is to complete the work at the onshore plants in a safe and timely manner, while ensuring regulatory compliance and minimizing disruption to the local community.

#### Offshore Platform Removals

The final major scope of work pertaining to the offshore facilities involved engineering, preparation, removal and disposal (EPRD) of the offshore platforms. This work was completed by Heerema Marine Contractors. Heerema removed the offshore platforms utilizing a heavy lift vessel that is one of only a handful of vessels in the world capable of lifting the topside and jacket components in single lifts.

A specialized heavy lift vessel equipped with two large cranes was complemented by a fleet of barges. Heerema used the support of marine suppliers to carry out their work. The topsides and jackets were transported to an international demolition yard in the UK. In order to prepare for that transport, the facilities were brought into sheltered water, where the process of "sea fastening" occurred. This involved securing the pieces onto barges for the ocean voyage. Offshore platform removal was concluded in 2020.

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## **Project Benefits**

The Sable Offshore Energy Project delivered significant economic and strategic benefits to the province of Nova Scotia. The Sable Project was a multi-billion dollar development of new energy infrastructure made possible by serving an established market for natural gas in the northeastern United States.

At the same time, project development and infrastructure provided a new source of clean energy to Nova Scotia and New Brunswick, and enabled the build-out of natural gas distribution in both provinces. Meanwhile, the pipeline infrastructure built to serve the Sable Project connects Nova Scotia and New Brunswick to the North American natural gas market and its supply basins.

The same infrastructure enabled development of other natural gas projects in the Nova Scotia offshore and onshore New Brunswick infrastructure, and it is also important for proponents of future natural gas projects in the region.

Beyond jobs and economic activity, Sable has been a catalyst for \$3.7 billion in direct payments to the province related to Nova Scotia's offshore. Made up of royalties, Crown share and exploration payments, this is money that has helped build better schools, hospitals and roads over the past twenty years.

For additional project information, including annual project benefits reports, click here.



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## Safety and Environment

ExxonMobil Canada conducts its business in a responsible and ethical manner that protects the safety and health of employees, others involved in its operations, its customers and the public. Furthermore, it is committed to conducting business in a manner that is compatible with the balanced environmental and economic needs of the communities in which it operates. This commitment requires compliance with all applicable laws and regulations, facilities that are designed and operated to a high standard and the systematic identification and management of safety, security, health, and environmental risks.

ExxonMobil Canada's commitments are documented in its safety, health, environmental, and security policies. These policies are put into practice through a disciplined management framework called Operations Integrity Management System (OIMS). The OIMS framework establishes common worldwide expectations for controlling Operations Integrity risks inherent in its businesses.

The decommissioning of the Sable Offshore Energy Project included mitigation of potential snagging hazards that abandoned pipeline facilities might have presented to fishers. Following decommissioning, ExxonMobil Canada, as operator and on behalf of Sable Project co-venturers, maintains responsibility for abandoned pipeline facilities. In this regard, ExxonMobil Canada has an ongoing process to address claims by fishery interests in the event that Project facilities may have caused loss or damage to fishing gear or vessels. The program, including related contact information, is outlined here.

#### Safety & Environment Highlights

- Sable set a new standard for safety in Nova Scotia, Canada completing its final 19 years without a single lost-time incident.
   Many suppliers to the offshore realized the benefit and follow Sable's lead, instilling a culture of safety in their own workplace.
- Sable committed to high standard of environmental stewardship and delivered on its promise. For over two decades, Sable safely co-existed with the environment, fisheries and other industries.
- Over a two year period beginning in late 2017 each of Sable's 22 wells was plugged and abandoned. Hydrocarbons were removed from all facilities and pipelines. Plug and abandonment was completed in accordance with regulatory requirements.



# **Contact**

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