

Economic Impacts of Offshore Oil & Gas Development on Nova Scotia  
2001-2003

A progress report

**Prepared by:**  
**Bob Newcomb**  
**Economist**  
**Department of Energy**  
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## **Purpose and Scope**

In November of 2002, Gardner Pinfold completed a study for the Department of Finance examining the economic impact of offshore oil and gas development on the Nova Scotia economy for the period 1990-2000. This report examines the impact of activity in the offshore for the next three years 2001-2003.

## **Overview**

Nova Scotia's offshore region experienced exploration activity from the late 1960's to the mid 1980's. The outcome of this activity was the realization that the majority of and hydrocarbon deposits off Nova Scotia were likely to be primarily natural gas rather than oil. When the bottom fell out of the natural gas market in the mid 1980's the region was essentially abandoned from an exploration perspective.

In the early 1990's two small but commercially viable oil fields, Cohasset and Panuke were developed and Canada's first offshore oil production began. In the mid 1990's, several players pooled their gas discoveries together to develop the Sable Offshore Energy Project. This was the first gas project on the east coast of Canada and the Northeast United States. The project teamed with the Maritimes Northeast Pipeline Company to build a pipeline into the northeastern states.

Once access to the US Northeast market was established, Exploration and Production companies became interested in exploring our offshore again. Since SOEP received sanction in 1997, there has been a flurry of exploration activity in the area. From 1990 to 1997, the only exploratory wells drilled were to further delineate the oilfields at Cohasset/Panuke. From 1998 to 2000, there were 10 exploration wells drilled. The last three years have seen 15 exploratory wells spudded.

The SOEP project began production on New Year's Eve 1999. Production is expected to last 12 to 15 years. Since production commenced, fuel exports have become Nova Scotia's most valuable export. Work on tier two of the project began in 2002.

## Results

The period 2001-2003 saw a massive increase in exploration activity, SOEP hit full production of natural gas and natural gas liquids, the start of tier II development at SOEP and the commencement of decommissioning of the Cohasset Panuke oil project. **Table 1** shows the aggregate total impact of offshore activity for the three years.

**Table 1: Economic Impacts of Total Offshore Oil & Gas Activity 2001-2003**

	Gardner Pinfold Study 1990-2000		2001-2003	
	Total	Annual Average	Total	Annual Average
<b>Expenditures</b> <i>\$ millions</i>	4139	N/A	2155	718
<b>Nova Scotia Expenditure</b> <i>\$ millions</i>	1323	N/A	556	185
<b>Nova Scotia Content</b> <i>%</i>	32.0%	N/A	42.3%	42.3%
<b>Employment</b> <i>Person-years</i>	24,800	N/A	3900	1300
<b>Household Income</b> <i>\$ millions</i>	1200	N/A	1200	400
<b>Gross Domestic Product</b> <i>\$ millions</i>	2338	N/A	3100	1000

## Exploration

Over the period 2001-2003, there were 65 exploration work authorizations applied for. These included 21 authorities to drill a well and 25 geophysical/geotechnical/geochemical programs. Of these 15 wells were spudded and 21 geophysical programs were conducted.

Total spending over the period totaled approximately \$847 million. the impacts are outlined in **Table 2**

**Table 2 Economic Impacts from Offshore Oil & Gas Exploration**

	Gardner Pinfold Study 1990-2000		2001-2003	
	Total	Annual Average	Total	Annual Average
<b>Expenditures</b> <i>\$ millions</i>	280	N/A	840	280
<b>Nova Scotia Expenditure</b> <i>\$ millions</i>	93	N/A	313	104.3
<b>Nova Scotia Content</b> <i>%</i>	33.2%	N/A	37.3%	37.3%
<b>Employment</b> <i>Person-years</i>	1,300	N/A	1800	600
<b>Household Income</b> <i>\$ millions</i>	N/A	N/A	180	60
<b>Gross Domestic Product</b> <i>\$ millions</i>	81	N/A	270	90

## Sable Offshore Energy Project

Over the three years 2001-2003 the SOEP project spent in excess of \$1.3 billion dollars, \$556 million of Nova Scotia content, generated a total of 3900 person years in Nova Scotia and produced 15.5 billion M<sup>3</sup> of raw gas from which 2.9 million M<sup>3</sup> of natural gas liquids were extracted. The results are listed in **Table 3**.

**Table 3 Economic Impacts from SOEP Project**

	Gardner Pinfold Study 1990-2000		2001-2003	
	Total	Annual Average	Total	Annual Average
<b>Expenditures</b> <i>\$ millions</i>	2415	N/A	1315	438
<b>Nova Scotia Expenditure</b> <i>\$ millions</i>	779	N/A	556	185
<b>Nova Scotia Content</b> <i>%</i>	32.2%	N/A	42.3%	42.3%
<b>Employment</b> <i>Person-years</i>	16,150	N/A	3900	1300
<b>Household Income</b> <i>\$ millions</i>	627	N/A	360	120
<b>Gross Domestic Product</b> <i>\$ millions</i>	1650	N/A	2750	833

## **Other Activity**

During the past three years El Paso and Encana have been active. El Paso has been exploring the feasibility of a subsea pipeline to New England that would have landfall in the Shelburne area. While Encana has begun decommissioning the Cohasset/Panuke project and working on development scenarios for their Deep Panuke Gas field . The impacts of these activities are rolled into the total impact figures but cannot be reported separately due to commercial sensitivities of the projects.

## **Economic Context**

The value added by all industries in the Nova Scotia economy in 2001-2003 was about \$73.6 billion making the oil and gas industry approximately 4.1% or \$3.1 billion of the Nova Scotia economy. By comparison, the GDP contribution of primary agriculture, forestry and logging, fishing, hunting and trapping and support activities for agriculture and forestry combined, amounted to \$2.1 billion or 2.8% of the Nova Scotia economy.