Economic Report Overview

Potential National-Level Benefits of Oil and Gas Development in the Beaufort Sea and Chukchi Sea

Northern Economics

A new study on potential national-level benefits of Alaska Arctic OCS development, by Northern Economics and the University of Alaska Anchorage's Institute of Social and Economic Research, builds on a previous study of potential state-level benefits using the same methodology and assumptions. Both reports are available for download from www.northerneconomics.com.

Creates Significant Economic Effects

Development of new oil and gas fields in the Beaufort and Chukchi Seas resulting in production of nearly 10 billion barrels of oil and 15 trillion cubic feet of natural gas over the next 50 years could create significant economic effects nationwide.

54,700 New Jobs

An estimated annual average of 54,700 new jobs that would be created by OCS-related development are sustained for 50 years. The total ramps up to 68,600 during production and 91,500 at peak employment. These direct and indirect jobs would be created both in Alaska and the rest of the United States.

$145 Billion Payroll

An estimated $63 billion in payroll would be paid to employees in Alaska as a result of OCS oil and gas development and another $82 billion in payroll would be paid to employees in the rest of the United States. The sustained job creation increases income and further stimulates domestic economic activity.

$193 Billion Government Revenue

Federal, state, and local governments would all realize substantial revenue from OCS oil and gas development, with the base case totaling $193 billion:

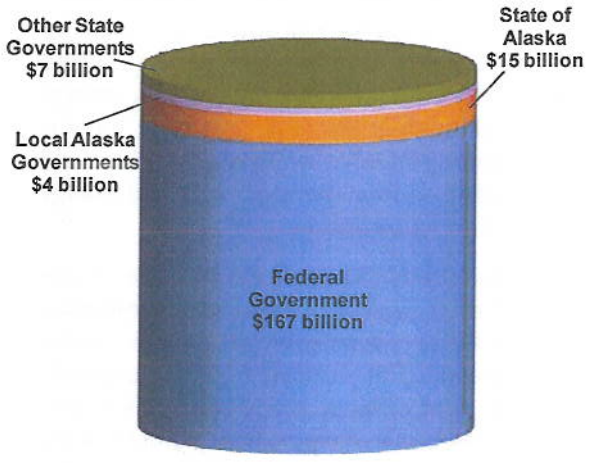
- $167 billion to the federal government
- $15 billion to the State of Alaska
- $4 billion to local Alaska governments
- $7 billion to other state governments

Sensitivity Cases Are All Higher

The study's base case assumed long-term average prices through the year 2030 of $65 per barrel (bbl) for oil and $6.40 per million Btu (mmBtu) for natural gas. The estimated total government revenue increases if energy prices remain higher in the future.

	Total Government Revenue
Base Case ($65/bbl, $6.40/mmBtu)	$193 billion
Case 1 ($80/bbl, $7.80/mmBtu)	$214 billion
Case 2 ($100/bbl, $9.80/mmBtu)	$263 billion
Case 3 ($120/bbl, $11.80/mmBtu)	$312 billion

Figure 1. Base Case Total Revenues



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Implications of the Study

Critical Infrastructure Protection

The Trans-Alaska Pipeline System (TAPS) delivers approximately 14% of domestic oil production to refineries on the West Coast and has been identified as critical infrastructure for national security. Built at a cost of $8 billion in 1977, TAPS throughput has fallen from 2.1 million barrels per day in 1988 to less than 650,000 barrels per day as North Slope oil fields age. Without additional oil development, the TAPS is anticipated to encounter operating difficulty below about 500,000 barrels per day and shut down when it reaches 200,000 barrels per day. Alaska OCS development can help extend the operating life of this critical infrastructure.

Moreover, Arctic OCS development maximizes the value of Alaska's and the Nation's oil and gas resources. Much of the expected incremental revenue from OCS development for the State of Alaska (55%) comes from enhancement of existing onshore North Slope production, in both volume and value. This results from reduced transportation costs (from infrastructure operating at capacity), and from expanded infrastructure enabling development of small satellite fields. OCS development will also enhance the probability of an Alaska gas pipeline due to increased certainty in the available gas resource base.

U.S. Energy Production and National Security

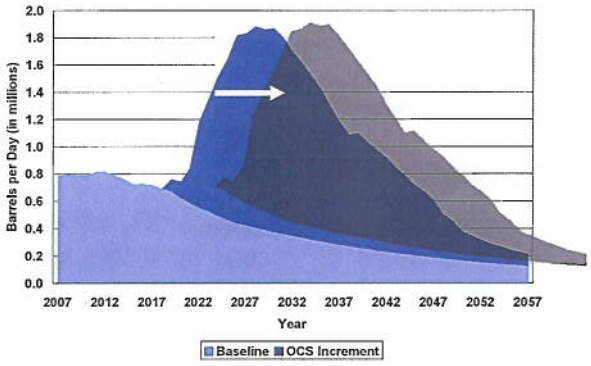
Domestic energy production is important for the security and prosperity of the United States. The money spent on domestic energy cycles through in the U.S. economy, thereby increasing domestic economic activity and jobs; while money spent on imported energy leaves the U.S. economy.

The majority (77%) of world oil reserves are owned or controlled by national governments; only 23% are accessible for private sector investment. The United States currently imports over 60% of the crude oil we use. Arctic offshore development could cut this by about 9% for a period of 35 years. Increasing domestic energy production would improve the nation's trade balance.

Potential Benefits Delayed

When the first study of state-level economic impacts was written in 2009, first oil was anticipated in 2019 and first gas in 2029 for the Beaufort Sea (2022, 2036 for the Chukchi Sea). This timeline assumed "no major regulatory impediments or delays." However, exploration has been slowed, thus delaying the potential benefits of OCS oil and gas development.

Figure 2. Benefits Delayed



Sources

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