

The Truth About Crude Oil Production in the Arctic National Wildlife Refuge

The recent run-up in the price of crude oil has prompted new calls for the Federal government to increase its petroleum production by allowing exploration and drilling in the Arctic National Wildlife Refuge (ANWR) along the northern coast of Alaska. While there is a strong incentive to provide much needed relief to American families who are currently struggling with high gasoline prices, analysis of ANWR's projected contribution to crude oil markets suggests that relief will be neither substantial nor timely in its effect. Based on Energy Information Administration (EIA) projections of the effect of ANWR on crude oil prices, we estimate that opening up ANWR will reduce gasoline prices by just one cent, starting in 2018.

ANWR Oil Production Would Take Ten Years to Come Online

Ten years ago, the United States Geological Survey (USGS) estimated that ANWR contains between 5.7 and 16.0 billion barrels of crude oil that can be recovered using current technology, which could boost the U.S. share of world reserves to just under three percent.¹ A recent analysis by the EIA concluded that effective production from ANWR would not commence until 2018 if Congressional approval were secured this year. The ten-year time horizon reflects a number of intensive exploration, drilling, and infrastructure-building processes as well as operating complications that come from the harsh environment and remoteness of the region. Moreover, this projection does not include delays as a result of any legal challenges from environmental protection groups.

ANWR Oil Production Would Have Negligible Impact on High Gas Prices

According to the EIA, "ANWR oil production is not projected to have a large impact on world oil prices." The additional crude oil produced in ANWR will have an effect on prices only insofar as it affects the global market for crude oil. According to EIA's forecast, ANWR production will comprise a relatively small share of world oil consumption – between 0.4 and 1.2 percent (see chart). They estimate that the additional crude oil supply from ANWR could decrease the relevant price of crude oil by between \$0.41 (0.6 percent) and \$1.44 (2.2 percent) per barrel in the years when it would have its largest effect. The effect on gasoline prices is smaller. Because crude oil makes up approximately two-thirds of the price of gasoline, pump prices will fall anywhere from 0.4 percent to 1.5 percent or between \$0.01 and \$0.04 per gallon.² Furthermore, as EIA assumes, "[if] world oil markets continue to work as they do today, the Organization of Petroleum Exporting Countries (OPEC) could neutralize any potential price impact of ANWR oil production by reducing its oil exports by an equal amount."



ANWR Oil Production Would Have Minimal Impact on U.S. Dependence on Foreign Oil

At its highest point, ANWR could produce anywhere from 510,000 barrels per day to 1,450,000 barrels per day, a boost of 9 to 25 percent in total U.S. crude production. That said, this additional production would lessen U.S. dependence on petroleum imports by only 2 to 6 percent, with that share diminishing over time. Even in the best case scenario, crude oil imports would still make up 46 percent of primary supply in 2025, with a significant share of those imports likely emanating from OPEC nations. Likewise, net expenditures on those imports would be reduced anywhere from \$12 billion to \$40 billion per year assuming an oil price between \$60 and \$70 per barrel. Lastly, this "savings" is not passed on as lower pump prices, but instead constitutes a transfer from foreign oil companies to domestic oil companies.

¹ Based on <u>Oil & Gas Journal data</u>.

² All Prices and Expenditures in constant 2006 Dollars. Source: Energy Information Administration, "Analysis of Crude Oil Production in the Arctic National Wildlife Refuge," May 2008, available at www.eia.doe.gov