

A Drop in the Bucket: Oil from Arctic Refuge Won't Yield Much Relief

By: [Andrew Brod](#)

Brod, Andrew (2005). A Drop in the Bucket: Oil from Arctic Refuge Won't Yield Much Relief. Greensboro News & Record, April 24, 2005

Made available courtesy of Dr. Andrew Brod and Greensboro News & Record: <http://www.news-record.com/>

***** Note: Figures may be missing from this format of the document**

Article:

What a difference a year makes! Last April I wrote a column that explained why gasoline prices had been rising for months. The reason was tight refining capacity in the U.S., combined with the complicated array of gasoline blends that refiners are required by law to produce. Industry experts predicted that prices would moderate within a few months, as summer blends gradually replaced winter blends. And that's what happened.

In last April's column, I also discarded a number of factors that were *not* the cause of the price increases. It wasn't gasoline taxes, because even though those taxes were high, they hadn't risen. It also wasn't price-gouging oil companies, because oil profits (as a percentage of sales) were too small to justify a claim of gouging. And it wasn't OPEC and the price of crude oil, because oil was actually cheaper last spring than it had been in months.

But that was then, and this is now. Gasoline taxes and price-gouging still aren't factors, but the price of oil most definitely is. Last April the price of oil on international markets was hovering a little above \$30 per barrel. Now it's a little above \$50, and people are actually relieved because the price was pushing \$60 a few weeks ago. Not surprisingly, this is being reflected at the pump. Last April the average price of regular unleaded gasoline in the U.S. was \$1.79 per gallon. Now it's \$2.29, a full 50 cents more.

What's caused such high oil prices? Will gasoline prices fall again as spring progresses? Or are they with us for the long run? And if they are, will it help to drill for oil in Alaska's Arctic National Wildlife Refuge?

The main difference between April 2004 and April 2005 is that last year's price squeeze was primarily a seasonal phenomenon, whereas this year's high gasoline prices are mostly the result of longer-term factors. Admittedly, there is a small seasonal effect this spring, and experts are once again predicting a drop in gasoline prices as we move into summer. But don't expect to see the end of two-dollar gasoline.

One reason for this is the revival of the American economy, which translates to greater demand for oil. The European economies are growing as well, though a bit more slowly than we are. But the biggest reason, and the big long-term factor in the mix, is the increasing demand for oil in emerging economies, in particular China and India.

Let's consider some simple demographics. There are roughly 6 billion people in the world, with about a billion in the developed economies of North America, Europe, and Japan. Until recently, the oil consumed by those 1 billion people largely drove the world oil market. The 5 billion other people on the planet played a much smaller role.

But now the world's emerging economies, home to about 3 billion people, are purchasing more oil than ever before. This means that international oil demand has changed in a fundamental way. It's being driven by 4 billion people instead of just 1 billion.

China and India account for over 2 billion of those 3 billion people. They've been growing for some time, but they've recently crossed an economic threshold. Their citizens have started buying automobiles in larger numbers. Until fairly recently, visitors to big Chinese cities like Shanghai saw mostly bicycles on the streets. Now they see cars. The rate of car ownership in China is only about eight vehicles per 1000 people, as compared with 780 per 1000 people in the U.S. But because of China's steep growth curve and a population four times the size of ours, the potential for growth in China is huge.

Therefore, the reason the world has moved, perhaps permanently, into an era of \$40 and \$50 oil has little to do with the supply of oil. It's about demand. Some petroleum geologists claim that global oil production is about to peak and start a long and steady decline. Maybe they're right, but these guys have been predicting this for over 50 years, and they've been wrong every time because they fail to take into account the economics of oil supply.

The world's oil reserves are not like a Big Gulp soft drink, from which we draw oil through a straw until the cup's empty. In reality, oil reserves are like an inventory that we draw down and replenish as needed. To be sure, replenishing that inventory comes at a cost. And as time passes, those costs rise because the easy-to-find oil has already been found.

In other words, oil supply is about price and cost, not availability. When oil gets expensive enough, we'll switch to alternative energy sources, and that will happen long before we run out of oil. Already the cost of generating electricity from wind power is as low as doing it from hydrocarbon fuels like oil, gas, and coal. When the costs of storage fall as well, we may find ourselves moving quickly away from our current dependence on hydrocarbons.

So this is our reality: World oil demand has expanded dramatically and left supply in the dust. Prices are at historical highs and showing no signs of falling very far. You'd think that the solution to this problem would be to drill for all the oil we can. And sure enough, the Bush administration pushed for, and got, approval from Congress to start drilling in the Arctic National Wildlife Refuge (ANWR). But it won't help much.

The ANWR is in remote northern Alaska, and most of the debate about drilling there has focused on environmental effects. The oil in the ANWR is located beneath lands inhabited by large caribou herds during various parts of the year. Environmentalists argue that the caribou and their habitat will be harmed by oil exploration and production, while the oil industry claims that improvements in drilling and pumping technologies render these objections obsolete. Unfortunately for the environmentalists, caribou aren't cute. If doe-eyed and white-furred baby harp seals were flopping around in the ANWR, you can be darned sure that no one would risk harming *their* habitat.

Regardless of the environmental issues, the amount of oil in the ANWR will do little to address the larger issues we face in energy policy. A 1998 report by the federal government found that at \$40 per barrel (the most expensive oil it could imagine back then), we can expect a total of 6.8 billion barrels to be recovered from the ANWR, though it could be much higher or much lower than that. If drilling were approved, it'd be about 10 years from now before the oil started to flow. Based on the best guess of 6.8 billion barrels, the annual output would be equivalent to roughly 6 percent of future annual U.S. oil consumption.

Six percent might seem like a lot, but it's a drop in the bucket when it comes to the international market that determines oil prices. It doesn't matter where Alaskan oil will be shipped, whether to Japan or the western U.S. All it will do is increase global oil supply by a little bit, and thereby reduce the global price of oil by a little bit. In a sense, by producing oil from the ANWR we'd do the rest of the world a bigger favor than we'd do for ourselves. We'd risk harming our environment in return for making it a bit cheaper for China to buy oil.

ANWR oil would also be great for the oil barons of OPEC. When faced with competition or changing demand, every cartel or monopoly tries what some economists call "limit pricing." It's a simple idea. Instead of charging the full monopoly price, the cartel decides to moderate its current price in order to maintain its market power

into the future. ANWR oil would do for OPEC what it's trying hard to do itself. (Too bad there isn't a hotel cartel in High Point that could do this to fend off the Las Vegas challenge!)

Alaskan oil isn't much of a concern to OPEC, whose real threats are energy conservation and alternative fuels. As much as OPEC loves \$50 oil right now, it might love \$45 oil even more. It's unlikely that ANWR oil could push world oil prices down by even \$5. But that oil would be a small help to the oil barons as they contemplate a frightening future in which an energy-efficient U.S. releases itself from its dependence on their only important export. The question for us is whether we want to comfort OPEC or scare it.