U.S. Field Production of Crude Oil

peak conventional domestic oil

1970

Source: U.S. Energy Information Administration
fracked oil is two thirds of domestic oil production
fracked wells deplete faster than conventional wells
ALASKA PIPELINE: PEAK & DECLINE

nearing low flow shutdown threshold for Arctic winter operations
extraction is now less in summer to reserve capacity for winter

drilling “ANWR” might retrieve another billion barrels, maybe more,
to offset (temporarily) decline of Prudhoe Bay

2021 per day: 477,798 barrels
2021 total: 174,396,146 barrels

total: 1977 to 2021
18,363,243,072 barrels

1988 peak - per day: 2,032,928
total: 744,107,855 barrels

chart: www.PeakChoice.org/peak-alaska-pipeline.html
data: www.alyeska-pipe.com/historic-throughput/
Nearly all petroleum products used in Oregon and Washington are processed at the five refineries in Puget Sound. If you drive a car, an SUV, ride a bus, train or plane, or shop in a grocery store that uses food delivery trucks, you are dependent on the Alaska pipeline.

Is there a “Plan B” when the pipeline shuts down due to low flow? Are proposals for oil trains from North Dakota to Cascadia’s ports a cover story for using fracked oil and tar sands to prop up our regional economy after Alaska’s energy supplies are done? (Fracking is also a temporary, toxic fix since fracked wells deplete faster than conventional wells.) Oregon and Washington do not have ANY oil supplies since we have the wrong geology to make petroleum traps.
Who has the oil?

The Middle East contains more than 60 percent of the world's remaining oil. The United States consumes more than 20,000,000 barrels of oil every day (but has less than a percent of the world's remaining oil).

Who uses the oil? (thousands of barrels per day)

- 6,000+
- 3,000-5,000
- 2,000-3,000
- 1,000-2,000
- 0-999

World Reserves of Oil

<table>
<thead>
<tr>
<th>Country</th>
<th>Reserves (billion barrels)</th>
<th>Percentage of World Reserves</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>262.73</td>
<td>22.8%</td>
</tr>
<tr>
<td>Iran</td>
<td>132.48</td>
<td>11.2%</td>
</tr>
<tr>
<td>Iraq</td>
<td>115.00</td>
<td>9.7%</td>
</tr>
<tr>
<td>Kuwait</td>
<td>69.00</td>
<td>5.8%</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>87.80</td>
<td>7.3%</td>
</tr>
<tr>
<td>Venezuela</td>
<td>77.23</td>
<td>6.5%</td>
</tr>
<tr>
<td>Russia</td>
<td>72.27</td>
<td>6.1%</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>71.62</td>
<td>5.9%</td>
</tr>
<tr>
<td>China</td>
<td>30.92</td>
<td>2.6%</td>
</tr>
<tr>
<td>Canada</td>
<td>16.80</td>
<td>1.4%</td>
</tr>
<tr>
<td>Qatar</td>
<td>15.06</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

Each country's size is proportional to the amount of oil it contains. Source: BP Statistical Review Year End 2006 & Energy Information Administration.
The Norwegian Petroleum Directorate's role is to ensure that the companies implement necessary measures to utilise all valuable resources in the fields before they shut down.

**Oil production**

Millions Sm³ oil per year
Indonesia: no longer an oil exporter left OPEC because production declined and domestic consumption increased.
This sign showing $6 per gallon after Hurricane Katrina (2005) was at a Georgia gas station.

Peak Oil is not a scam from the oil companies to raise prices, although they are certainly taking advantage of Peak Oil to transfer vast amounts of wealth into their greedy pockets. If the United States became an authentic democracy, we could nationalize the oil companies and use the profits to help the whole society prepare for Peak Oil. Oil profits could be redirected to public transit, insulating homes and renewable energy systems. This would not be "socialism" but changing what is produced, not just who owns the means of production.
Dick Cheney said the American Way of Life (AWOL) is not negotiable.
Saving Oil in a Hurry is from an International Energy Agency conference in 2005. This chart shows a variety of policies that could quickly reduce oil consumption in the event of urgent need. The specific reason was left vague but could include depletion of oil fields, policies to address climate change and of course, war that disrupts production.

Some policies would be more effective in some places than others. Making public transit free would have more impact in Japan, the Republic of Korea and Europe than in the US, Canada, Australia and New Zealand. Conversely, carpooling would help more in the latter countries than in the former.

The late activist Jan Lundberg, who left his family’s oil consultancy to campaign against car culture, said the New York Times once offered to publish an op-ed by him but only if he focused on increasing tire pressure to make cars more efficient. He declined their offer. Among Jan’s projects were the Alliance for a Paving Moratorium, Culture Change and the Sail Transport Network.

About a decade ago I shared this graphic with the Climate and Energy staffperson for the City of Eugene. He was literate about the risks Peak Oil poses to everything and said this graphic was extremely helpful. I asked what he planned to do with it, would he share it with his colleagues planning Eugene’s future? He replied that he would keep it to his files, waiting for a time when sharing it would be better received. Unfortunately, advance planning for crisis works better than waiting for chaos.

**Being in less of a hurry would save oil in a hurry.**
Keystone mainline opened in 2014 with little publicity

Keystone XL may be superfluous

Tar Sands eating the Earth for cars

https://en.wikipedia.org/wiki/File:Canada_Oil_Production.png
Limits to Growth - 1972
Study predicted permanent resource crisis after the turn of the century, with peak pollution coming after peak resource use. Fracking and tar sands confirm this.

1859: first oil well in Pennsylvania - 1.2 billion
1900: 3 billion
1940: 4 billion
1974: 5 billion
1999: 6 billion
2011: 7 billion

data: www.worldometers.info/world-population/world-population-by-year/
chart: PeakChoice.org