

# Peak oil production

How declining oil supplies affect the world we live in **Interviewed by Dale W. Hlaves**

In 1956, Shell Oil geologist and mathematical pioneer M. King Hubbert noticed that oil fields experienced peaks and declines. Applying that same analysis to total U. S. production, he accurately predicted that the production of oil in this country would peak in 1970.

Hubbert was ridiculed for his observations, both inside and outside the oil industry. He was also right. A recent depletion analysis predicts that world production will peak between 2003 and 2008. Retired Princeton professor Kenneth Deffeyes, using production data collected in 2005, concluded that the all-time peak of world production was reached on Dec. 16, 2005.

"That time frame has not yet been validated," says John Barnes, chairman and CEO of B&R Energy in Dallas. "However, production from fields in Russia, the North Sea and half of the OPEC nations has already peaked and, it seems, more and more analysts are accepting that fact."

*Smart Business* spoke with Barnes about how the peak in oil production will affect everyone in the world and what is being done about it.

## Who will be impacted most by the decline in oil production?

The decline in production will have a huge impact on every company in the world that uses energy.

Transportation companies will feel it the most, as will those in the construction industry — especially ones that build shopping centers or have to ship products a long way. Heating and cooling costs will skyrocket, and it won't be an anomaly.

Any company that has to transport goods or people 45 minutes to an hour will feel it at the gas pump. The decline will have an impact on everything, but especially transportation costs.

## How fast will production at the fields decline?

According to the Association for the Study of Peak Oil & Gas-USA, production at the Cantarell oil field in Mexico City, the second-largest in the world, may deplete



**John Barnes**  
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faster than expected, from its current 2 million barrels a day to 1.43 million barrels a day by 2008, and possibly to as little as 550,000.

*Petroleum Intelligence Weekly* reported that Kuwaiti oil reserves are really at 24 billion barrels as opposed to the previously reported 99 billion barrels.

Samotlor, the largest Russia oil field, has declined from a peak of close to 2 million barrels per day to less than 500,000.

Indonesia, a member of OPEC, is now an oil importer.

It has been more than 10 years since the world found as much oil per year as it consumed. As a result, oil prices have gone through the roof. By 2030, demand is expected to be at 120 million barrels a day, while production of conventional oil is expected to drop to 60 million barrels a day.

That shortfall is going to have an impact on everyone. A lot of industries face some serious challenges to how they do business. How it will all play out, no one knows.

## Who uses the most energy?

The United States, with 7 percent of the world's population, consumes nearly

25 percent of the world's oil and gas. At the same time, the U.S. also provides one-third of the world's gross national product. While we consume oil disproportionately to our population, we use it more efficiently per dollar of GDP than the rest of the world. Every dollar of GDP requires an input of energy. More advanced economies require less energy per dollar of GDP than less advanced economies.

Energy is required to maintain a more advanced society, and we don't want to reduce the country's economy or standard of living. Yet, at the same time, there is a limit on how much oil and gas we can consume.

## What are some alternative sources of energy?

Alternative sources have limitations.

The trucking industry is looking at ethanol and bio diesel. But availability, economics and production costs exceed the energy it produces or replaces. We cannot continue to deploy a negative energy resource.

Other alternatives may include nuclear power, solar and wind generation, gasification of and gasoline from coal, LNG (liquefied natural gas), Canadian oil sands, hydrogen and ethanol. But these, at best — other than nuclear — are able to supply only a small percent of the world's total energy requirements.

The current situation requires some careful soul searching and prompt action.

We need to find and produce more conventional domestic oil with newer technologies and enhanced recovery methods.

We need to exploit all the opportunities we can control: Gulf Coast, West Coast and ANWR (Arctic National Wildlife Refuge) field prospects and unconventional sources.

We need to continue to develop alternative solutions.

And we need to focus on critical world issues such as refining capacity, increased world demand, overstated worldwide reserves and peak oil realities.

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