



COULD THE U.S. BE A
NET
OIL
EXPORTER
IF IT WANTED TO?

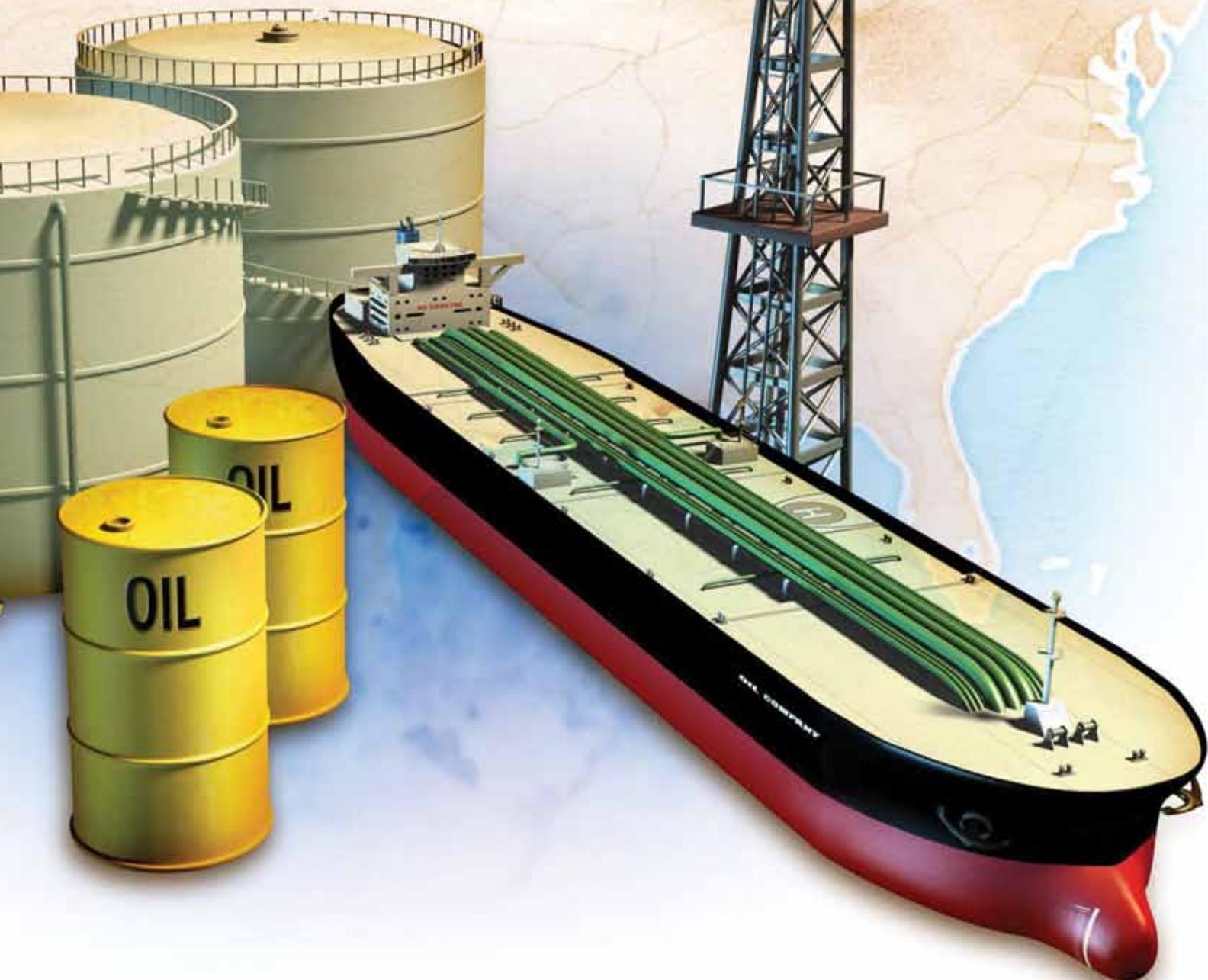
By Troy Anderson

In recent years, experts have predicted the coming of “peak oil.”

The International Energy Agency announced not long ago that global oil production had likely reached its peak in 2006 at about 70 million barrels a day.

But far from peaking, the world’s estimated base of recoverable oil and gas is continually rising, Chevron Corporation chairman and chief executive officer John S. Watson told the Greater Houston Partnership recently.

Over the past three decades, as the peak-oil theory has gained traction in some quarters, the world’s known reserves of oil and natural gas have increased by 130 percent to 2.5 trillion barrels, Watson told the audience. →





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**15.4 TO 26.6 MILLION
BARRELS A DAY.**

“I don’t think we can overestimate the size of that opportunity,” Watson said. “In fact, I believe we’re within reach of an energy renaissance in the United States—a chance to harness this country’s resources, shake off years of stagnation, and prosper and lead as we’ve done before. We could accomplish great things if America had a rational, robust and comprehensive energy policy.”

ENERGY RUSH: Getting Our Second Wind

Watson’s remarks come amid what *USA Today* describes as a “national energy rush.”

For the first time since 1949, the U.S. has become a net petroleum-product-exporting country and has edged out Russia as the world’s largest refined petroleum exporter, according to a recent Citi GPS report, “Energy 2020: North America, the New Middle East?”

From 2011 to 2020, North American crude oil and natural gas production is expected to double from 15.4

to 26.6 million barrels a day. At the same time, U.S. demand for petroleum products is likely to drop by 2 million barrels per day.

“North America has been the fastest-growing oil and natural gas producing area of the world for the past half-decade,” wrote Ed Morse, the principal author and head of Global Commodities Research at Citigroup Global Markets, Inc. “With no signs of this growth trend ending over the next decade, the growing continental surplus of hydrocarbons points to North America effectively becoming the new Middle East by the next decade.”

The economic ramifications of this “re-industrialization” of the U.S. economy are potentially extraordinary, Morse wrote. The cumulative impact of new production and lower consumption could increase the Gross Domestic Product by 2 to 3 percent, or \$370 billion to \$624 billion, and create between 2.7 million and 3.6 million new jobs by 2020.

Patrick Jankowski, vice president of research at the Greater Houston Partnership, a 2,100-member business organization that represents the 10-county region surrounding Houston, says the oil and gas industry is the strongest-performing sector in Texas.

“I’d venture to say it’s the strongest-performing sector in the U.S. as a whole,” Jankowski says. “The amount of job creation in the oil and gas sector right now is phenomenal.”

This energy boom comes a decade after Texas wildcatter George Mitchell came up with the idea to combine horizontal drilling and hydraulic fracking—a technique that uses a high-pressure injection of water, sand, and chemicals into underground shale formations—to unleash natural-gas pockets from the Barnett shale field in Texas.

This method was subsequently used throughout the Mountain West, the South, and the Northeast’s Appalachian Basin, including the massive Marcellus Shale formation stretching from New York to Pennsylvania to West Virginia. Experts now estimate that the nation has a 100-year supply of natural gas, up from an estimated seven-year supply before Mitchell commercialized the new gas-drilling technique.

Several years ago, this technology was adapted for oil drilling in previously inaccessible fields of tightly packed rock. The development of these oil shale fields is underway across the U.S., from the Bakken field in North Dakota to the Eagle Ford and the Permian Basin in Texas.

The Bakken field is officially estimated to hold 3.65 billion barrels of technically recoverable oil, although Continental, the largest

acreage holder in the area, has publicly increased its estimates of oil in place to more than 90 billion barrels, implying that technically recoverable reserves could be 36 billion barrels.

"If North Dakota has that much energy, how much do we think we have everywhere else?" former House Speaker and presidential candidate Newt Gingrich asked. "Turns out, we may have more oil in the United States today, given new science and new technology, than we have actually pumped worldwide since 1870. We may, in fact, by one estimate have three times as much oil in the United States as there is in Saudi Arabia."

The Green River Formation in Colorado, Utah, and Wyoming contains up to 3 trillion barrels of oil shale, according to a recent report by the U.S. Government Accountability Office. Oil shale is a sedimentary rock that contains kerogen, which yields oil when heated to extreme temperatures. The Rand Corporation estimates that about half of this oil is recoverable, an amount equal to the entire world's proven oil reserves.

In Texas, the "hot new place" is the Permian Basin, says Raoul LeBlanc, a senior director at PFC Energy, a Houston-based oil and gas industry consulting firm.

"It's been the heart of U.S. oil production for the last one hundred years," LeBlanc says. "People are now rediscovering its riches."

In the last two years, revenues for the three companies with the largest presence in the Houston area—Baker Hughes, Schlumberger, and Halliburton—rose from \$3.9 billion to \$10.4 billion, Jankowski says. During that time, the number of energy-related jobs in the Houston area—jobs that pay an average of \$175,000 a year—rose 25 to 40 percent, Jankowski says.

"Of the 20 largest metro areas in the U.S., Houston was the first one to fully recover from the recession," Jankowski says. "We returned to our previous employment peak sooner than anyone else."

In the Citi GPS report, Morse wrote that the energy boom could shrink the current annual federal deficit by 60 percent by 2020. The energy sector could also cause the dollar to appreciate by between 1.6 and 5.4 percent by 2020, Morse wrote.

ENERGY POLITICS: The Battle for Energy Independence and Economic Renewal

These estimates suggest that the energy sector could drive an extraordinary revitalization of the U.S. economy, creating jobs and bringing prosperity to millions of Americans, Morse wrote.

"The only thing that can stop this is politics—environmentalists getting

the upper hand over supply in the U.S., for instance; or First Nations impeding pipeline expansion in Canada; or Mexican production continuing to trip over the Mexican Constitution," Morse wrote.

Watson says today's national energy policies are paralyzed by a fundamental contradiction. On the one hand, there is wide consensus that America should strive for energy independence.

However, the Obama administration's policies are moving the nation in the opposite direction, Watson says.

For example, conservative estimates put the size of the oil and natural-gas resources in the waters around the United States at 150 billion barrels—the equivalent of more than 40 years of Saudi Arabia's current oil production. But the U.S. government has declared the Outer Continental Shelf on the East and West coasts off-limits to new development. Regulatory agencies have put strong restrictions on the pace of development in the Gulf of Mexico and Alaska too.

Gingrich says the Obama administration is "so anti-oil, so anti-gas, so anti-fossil fuels in general" that it is "prepared to do almost anything to stop" drilling. Under the Obama administration, the nation has experienced a 40 percent reduction in the development of oil offshore and a 40 percent reduction in the development of oil on federal lands, Gingrich says.

THE GREEN RIVER FORMATION IN COLORADO, UTAH, AND WYOMING CONTAINS UP TO 3 TRILLION BARRELS OF OIL SHALE, ACCORDING TO A RECENT REPORT BY THE U.S. GOVERNMENT ACCOUNTABILITY OFFICE.



The Obama administration says its policies have supported more energy development and that oil production is rising, but most of today's production increases relate to projects begun before Obama came into office, as well as what is happening on state and private lands, according to the American Petroleum Institute.

In March, President Obama urged members of the U.S. Senate to repeal five tax incentives for the nation's largest oil and gas companies and instead use the money for alternative-energy tax credits.

The bill, authored by U.S. Senator Robert Menendez (D-NJ), called for ending "taxpayer-funded loopholes to five of the largest, most profitable oil companies in the world."

Over the last decade, the "Big 5"—BP, Exxon, Shell, Chevron, and ConocoPhillips—have enjoyed nearly \$1 trillion in profits and tens of billions of dollars in taxpayer subsidies, Menendez says. The bill failed to get the 60 votes necessary to overcome a Republican-led procedural hurdle.

"Right now, the biggest oil companies are raking in record profits—profits that go up every time folks pull up into a gas station," Obama says. "But on top of these record profits, oil companies are also getting ... billions a year in taxpayer subsidies—a subsidy that they've enjoyed year after year for the last century."

Last year, the three biggest oil companies took home more than \$80 billion in profits, Obama says. Meanwhile, these companies pay a lower tax rate than most other companies on their investments, partly because the government gives them billions of dollars in tax giveaways, Obama says.

In a recent report, the Environmental Law Institute found the federal government provided substantially larger subsidies to fossil fuels than to renewables. Subsidies to fossil fuels totaled \$72 billion from 2002 to 2008. Subsidies to renewable fuels totaled just \$29 billion over the same period.

The American Petroleum Institute described the bill as a "political distraction from high gasoline prices and our nation's failed energy policies."

API Chief Economist John Felmy says eliminating tax breaks for oil and gas companies could increase gas prices.

"A tax increase would also increase our reliance on foreign energy because it would discourage more investment in domestic development," Felmy says. "The number of new projects would decline, and we'd lose jobs to foreign producers while continuing to spend about \$1 billion a day or more on foreign oil."

Eliminating these subsidies and tax breaks would reduce government revenues over the long term, Felmy says. Currently, the oil and gas industry pays about \$30 billion a year in taxes.

“Because more taxes would reduce the number of new projects, there would be less [in] earnings to tax and less production to collect royalties on,” Felmy says. “Total revenue would increase for a few years but would eventually fall billions below where it would have been without the increase.”

Despite the defeat of Menendez’s bill, U.S. Senator Bernie Sanders (I-VT) and U.S. Representative Keith Ellison (D-MN) introduced another bill in May to end billions of dollars in oil, coal, and gas subsidies. The measure would do away with tax breaks, financial assistance, royalty relief, direct federal research, and development, along with “many loopholes that benefit the fossil fuel industry.”

“With the federal government facing a \$1.3 trillion deficit and a \$15 trillion debt, the time to trim the fat is now,” says Ryan Alexander, president of Taxpayers for Common Sense. “The Sanders-Ellison bill helps us get there by eliminating more than \$110 billion in outdated and unnecessary subsidies to the fossil fuel industry.”

In a recent report by Taxpayers for Common Sense—“Subsidy Gusher: Taxpayers Stuck with Massive Subsidies While Oil and Gas Profits Soar”—the authors wrote that oil and gas companies are “highly profitable, heavily subsidized, and well-connected in Washington.”

With high oil prices, the authors wrote, it seems reasonable that these companies shouldn’t be “heavily subsidized.”

Currently, the industry receives a variety of subsidies and tax breaks, including the Volumetric Ethanol Excise Tax Credit, oil and gas royalty relief, expensing for refining equipment, the Geological and Geophysical Costs Tax Credit, natural-gas distribution lines, and ultra-deep-water and unconventional natural-gas and other petroleum resources research and development.

Pete Stark, a senior research director and advisor for IHS, Inc., an Englewood, Colorado based company that provides information and analytics to the energy industry, says, eliminating the subsidies and tax incentives could undermine “a far greater benefit.”

“I think that’s the biggest issue

that has to be evaluated by policy makers,” Stark says. “They must clearly understand that keeping those tax policies in place will have a much bigger payoff in the long term compared to the tax revenues generated from their removal based on a punitive attitude because Big Oil is making too much money.”

Given the high price of oil, LeBlanc says, eliminating the subsidies and

tax incentives won’t bankrupt the energy industry.

“But at the margin you’ll start to reduce activity from the smaller players and marginal wells,” LeBlanc says.

Lawmakers have introduced bills to eliminate these subsidies and tax breaks on a regular basis over the last decade, says Doug Koplow, founder of Earth Track, Inc., a Cambridge, MA-based consulting firm that specializes



SO FAR, TEXAS, WYOMING, COLORADO,
MONTANA, OKLAHOMA, PENNSYLVANIA, AND
ARKANSAS HAVE ENACTED
FRACKING-DISCLOSURE LAWS
REQUIRING COMPANIES TO RELEASE
INFORMATION ABOUT THE CHEMICALS
USED IN FRACKING.

in natural resource industries.

“They tend to be introduced, and they tend to fail,” Koplow says. “There has been a commitment internationally at the G-20 level to phase out inefficient fossil-fuel subsidies, and the Obama administration has listed a number they want to get rid of. But the politics here are fierce.”

FRACKING: “A Game-changing Opportunity”

This battle is the most pitched as it relates to the controversial oil- and gas-drilling practice known as hydraulic fracking. The practice has sparked concerns about fracking fluids leaking into underground drinking-water aquifers and whether wastewater treatment systems can remove the potential toxins.

As the practice spreads around the globe, governments are grappling with how to regulate it. So far, Texas, Wyoming, Colorado, Montana, Oklahoma, Pennsylvania, and Arkansas have enacted fracking-disclosure

laws requiring companies to release information about the chemicals used in fracking. Ohio and California are considering similar legislation.

So far, Stark says, the cases of purported groundwater contamination due to fracking have proven false.

“The fracking fluids are injected underground, usually [at] 4,000 to 8,000 feet—deeper than groundwater reservoirs in most parts of the U.S.,” Stark says. “Every one of those wells is protected by several layers of steel casing and cement, all the way down to where the fracking occurs.”

API President and Chief Executive Officer Jack Gerard says hydraulic fracking is a “game-changing opportunity that can drive the nation’s energy future.”

“The shale energy revolution is doing more than helping workers and the economies of several of our states,” Gerard says. “It’s also contributing to a tilt in the world’s energy axis toward the Western Hemisphere

and toward the United States. This realignment could affect the global energy landscape and economy for the rest of the century.”

Upending predictions that “peak oil” is imminent and the world is about to enter a period of terminal decline, Peter Ferrara, Director of Entitlement and Budget Policy at the Heartland Institute, a free-market public-policy think tank in Chicago, says the amount of newly discovered oil and natural gas offers an “enormous opportunity for the American economy.”

“We have the resources to be the world’s No. 1 oil producer, the world’s No. 1 natural-gas producer, the world’s No. 1 coal producer, and even the world’s No. 1 nuclear energy producer, if we want to,” Ferrara says. “This means the energy industry has the capability to power another huge economic boom in the U.S.”

But this won’t happen, Ferrara says, unless the government dramatically changes its energy policies.

“When [presidential candidate and former Massachusetts governor] Mitt Romney told the American people that they will be surprised at the performance of the American economy if he’s elected, he was exactly right about that,” Ferrara says. “There is another boom in this economy if the government would just get out of the way.” **N**

An award-winning journalist at the Los Angeles Daily News, the Press-Enterprise and other newspapers for 20 years, Troy Anderson writes for Reuters, Newsmax, Christianity Today, Bankrate Insurance and many other magazines and online publications. He lives in southern California. For more information, visit www.troyandersonwriter.com.