Chapter 19 U.S. Energy Policy: Oil Wars and Drill-Baby-Drill to Keep Autos Running?

Peak oil has been politicized. People who warn about it have been marginalized, denigrated as doomsters, called Chicken Little. At the time this book is being written, gasoline is cheaper than it has been in a decade. But the concept of peak oil really is just simple common sense: Sooner or later, the amount of oil coming out of the ground will begin to decline. You can argue about when, but not whether. When the time comes that world oil production begins its inexorable decline, the world will have reached peak oil.

U.S. energy security policy the past 30 years has consisted of increasing and diversifying sources of oil, creating the strategic petroleum reserve, relying on Saudi Arabia to balance oil markets and moderate prices, and a battery of conservation and efficiency measures. War, one after another, keeps the oil flowing, too. Domestic energy security is sought drilling in the deep waters of the Gulf, fracked tight oil, and in the future, drilling the Arctic.

Meanwhile, in 2008 the Great Recession hit, and to this day, most of the world economy remains slowed. This lowered pressure on oil supplies and led to lower oil prices (see Murphy and Hall 2011 for a model predicting this).

In 2005, the issue of peak oil became more widely known when Representative Roscoe Bartlett formed the House peak oil caucus to educate other representatives, and in 2005 Robert Hirsch wrote a peak oil mitigation plan for the Department of Energy.

In 2006, Frank Verrastro, now with the Center for Strategic and International Studies, warned at a U.S. Senate hearing, "We cannot ignore preparations for transitioning to the inevitable post-oil world. To do so requires a political will on the part of both the U.S. consumer and the government. To date, despite higher energy prices, real and threatened interruptions in supply, environmental damage, hurricanes and blackouts, that critical ingredient remains lacking. This means that the U.S. energy future likely will be shaped, at least in part, by events outside of our control and beyond our influence. Calls for energy independence, absent major technological breakthroughs and a national commitment, ring hollow, and in the near term are both unrealistic and unachievable" (Senate 109-412 2006).

In 2007, the Government Accountability Office recommended the Secretary of Energy take the lead in coordinating federal agencies to launch a peak oil strategy, including a good estimate of the timing of peak oil production and advice to Congress about measures to mitigate the consequences of a peak.

In 2009, then Senator John Kerry of Massachusetts summed up U.S. energy policy: "Ever since President Nixon set a goal of energy independence by 1980, price spikes and moments of crisis have inspired grand plans and Manhattan projects for energy independence, but the political will to take decisive action dissipated after each crisis passed. That is how steps forward have been reversed and efforts have stood still even as the problem has gotten worse. In 1979, President Carter asked 'Why have we not been able to get together as a nation and resolve our serious energy problem?' And regrettably, despite the strong efforts and courage of President Carter to tell the truth to Americans about energy and set America on the right path in the 1970s, we are still struggling to meet the same challenge" (Senate 111-78 2009).

Former President Carter also spoke at this same 2009 hearing, describing how, when he came to office in 1977, the average car got 12 miles per gallon (mpg), and was mandated to be 27.5 mpg within eight years. "But President Reagan and others didn't think that was important," said Carter. "We have gone back to gas guzzlers, which may be the main reason Ford, Chrysler, and General Motors are in so much trouble. Instead of making efficient automobiles, they made the ones which made more profit. Of course, the oil and automobile companies have always been in partnership, because the oil companies want to sell as much oil as possible, and the automobile companies make more profit on gas guzzlers. So, there was kind of a subterranean agreement there."

Carter said the president has a responsibility to educate the American public about energy, like he did over his four years in office. Memorably, one of his speeches began: "Tonight I want to have an unpleasant talk with you about a problem unprecedented in our history. With the exception of preventing war, this is the greatest challenge our country will face during our lifetimes. The energy crisis has not yet overwhelmed us, but it will if we do not act quickly. It is a problem we will not solve in the next few years, and it is likely to get progressively worse through the rest of this century. We must not be selfish or timid if we hope to have a decent world for our children and grandchildren. We simply must balance our demand for energy with our rapidly shrinking resources. By acting now, we can control our future instead of letting the future control us" (Carter 1977).

This was unpleasant dinner conversation. President Carter was not invited back to serve a second term.

For a number of reasons, national elected officials are not likely to educate the public about the coming energy crisis. Some even fear it would cause a stock market crash. A candidate bearing bad news and prescribing solutions that require sacrifice will lose the next election to anyone offering easy to swallow bromides and promising a happy, renewable future (Friedemann 2011). Remember Jimmy Carter.

Cars and Light Trucks Are a Huge Part of the Problem, Using 63 Percent of Transportation Oil

Our descendants will be flabbergasted, or more likely angry, when they learn the Oil Age ended sooner than necessary because billions of barrels of gasoline were wasted on low-mileage 4000 pound cars and light trucks that usually carried just

one passenger, that fuel economy wasn't even considered in most purchase decisions, and that even though efficient cars were available, we didn't buy them. They will remember us as oil gluttons (Turrentine 2005).

As U.S. House Representative Sherwood Boehlert of New York said in 2005, "Our nation is ever more dependent, stunningly dependent on the world's most unstable region for the energy that is the lifeblood of our economy. We cannot reduce our oil consumption meaningfully unless we address transportation. Our nation's fuel economy is worse than it was 15 years ago. That ought to be unacceptable, intolerable. I want everyone to remember the costs of inaction: they can be measured in dollars, particularly in the funds we spend on the military and homeland security, and in lives" (House 109-3 2005).

What happened decades ago, in the 1970s should have been a national wake-up call. Briefly, we did arise from our slumbers. In the late 1970s, the Organization of Petroleum Exporting Countries (OPEC) deployed "the oil weapon," placing an embargo on the export of its oil in retaliation for America's support for Israel. Gas supplies were so tight that President Richard Nixon imposed rationing across the country; vehicles with license plates having an odd number as the last digit could buy gas on odd-numbered days of the month, while others could buy only on even-numbered days. A Republican rationing gasoline! Realizing that cars getting 12 miles per gallon are a recipe for national disaster, in the late 1970s President Jimmy Carter implemented the first nationwide fuel efficiency standards for cars and light trucks. Gas guzzlers were recognized as a national security threat under these new Corporate Average Fuel Economy (CAFE) regulations.

We could have gone a long way with this idea, but we lost our way. In 1986, Ronald Reagan rolled back CAFE standards causing America, in that year, to double oil imports from the Persian Gulf nations and to burn more oil than is in the Arctic National Wildlife Refuge.

Across all classes of vehicles, from cars to large trucks, miles per gallon went from 11.9 mpg in 1973 to 16.9 mpg in 1991 and then barely rose for 22 years to 17.6 mpg in 2013, with light trucks improving the least, from 17 mpg in 1991 to only 17.2 in 2013 (Sivak et al. 2015). Worse yet, light trucks and SUVs were exempted from gas mileage goals, and a tax benefit for drivers who use vehicles for work could write off a 10 mpg, 38 thousand dollar Hummer on their tax returns. In 2003 this benefit was expanded to \$100,000 (Barlett et al. 2003).

From the time of the initial CAFE legislation, 32 years elapsed before we got back on course. In 2007, federal legislation upped the fuel efficiency requirements, and in 2012, President Barak Obama finalized an agreement with 13 large automakers to increase fuel economy to 54.5 miles per gallon for cars and light-duty trucks by model year 2025.

For too long, we've being going in the wrong direction. Every time the price of gasoline goes down, Americans buy more SUVs and trucks than efficient cars. Since September 2014, when gas prices began to fall, the average miles per gallon dropped from 25.8 to 25.4 today, with a record breaking 3.1 trillion miles driven because of the cheaper gas.

If the public knew about the energy crisis, would they stop buying gas hogs? In 2014, Californians knew the state was in the most serious drought in memory (1200 years in fact), but when cutbacks were voluntary, reduction goals were not met. The price of water was raised, and only then was water use cut in California.

The same type of price incentive is probably required for more fuel-efficient cars and light trucks, so the less efficient a car or light-duty truck is, the more it should be taxed. Gas taxes should be significantly increased to induce Americans to purchase fuel-efficient cars. Even when gas prices are low, these higher taxes would be an incentive to drive fuel-efficient vehicles, and to drive less. This tax revenue also could help pay to fix America's roads and bridges. Alas, in that a substantial number of politicians are against taxation, there is little chance of a more fuel-efficient car fleet being in place when energy shortages strike. There's not a lot of courage required for a politician to oppose gas taxes. Their credo: "Ask not what you can do for your country. Ask what your country can do for you!"

Energy Policy: Cars

Cars are the least necessary and the most inefficient mode of transportation other than aircraft.

Yet, it appears that the American Car is Sacrosanct, the very essence of what former President George H.W. Bush meant when, in 1992, he said "the American Way of Life is Not Negotiable."

Not everyone agrees. Senator Richard Lugar of Indiana once asked why, regardless of presidential leadership, the American public continues to buy cars and trucks that use a lot of oil. Lugar said this continued despite the fact that many Americans believed we invaded Iraq so we could continue to run SUVs and have all the pleasures to which we've become accustomed. Why, he wondered, haven't we ever said, "We've had enough, our dependence upon foreign oil has really got to stop" (Senate 111-78 2009).

In terms of moving the needle on car gasoline use, the Congress and the U.S. Department of Energy have focused much of their effort on ethanol production. In theory, adding ethanol to gasoline could reduce gasoline use. In fact, as much fossil energy goes into making ethanol as it contains. Corn ethanol farming also accelerates topsoil erosion, underground and irrigation water depletion. As a strategy to cut gasoline use, corn ethanol has backfired on us.

Electric vehicles are a long way from becoming widely adopted, as are natural gas or hydrogen cars. Proposals for flex cars that burn several kinds of fuel didn't go far because auto makers pointed out these vehicles would be very inefficient since a car can't be optimally tuned for all fuels (though there are 12 million cars that can burn gasoline or E85).

So here we are, 42 years after the first U.S. oil crisis of 1973, far more dependent on oil, and with 108.2 million more Americans consuming it, two-thirds of them living in far-flung suburban sprawl and rural areas. More than any other nation, the non-negotiable American way of life has evolved to be dependent on oil and four million miles of roads to get to distant suburbs, jobs, and shopping malls.

Wars Keep the Oil Flowing

In a 1980 "State of the Union" address, President Carter stated that due to "the overwhelming dependence of the Western democracies on oil supplies from the Middle East...[any] attempt by an outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America, and such an assault will be repelled by any means necessary, including military force."

Since then we've invaded, occupied, or bombed Iran (1980, 1987–1988); Libya (1981, 1986, 1989, 2011); Lebanon (1983); Kuwait (1991); Iraq (1991–2011, 2014–present); Somalia (1992–1993, 2007-present); Saudi Arabia (1991, 1996); Afghanistan (1998, 2001–present); Sudan (1998); Yemen (2000; 2002-present); Pakistan (2004-present); and now Syria.

One of America's energy security strategies has been war. But it would be self-defeating to spend the remaining oil fighting wars over oil, especially with the risk of escalation into a nuclear war. This could cause over a billion people across the world to die in the resulting nuclear winter and radiation from ozone loss over the following ten years (Mills 2008).

In 2012 testimony before the U.S. House of Representatives, Mike Breen of the Truman National Security Project described a nation and planet that has become an oil junkie. Said Breen, "Our dependence on oil as a single source of transportation fuel poses a clear national security threat to the nation. As things now stand, our modern military cannot operate without access to vast quantities of oil. Our economy is equally dependent, with over 95 % of our transportation sector reliant on oil. This lack of alternatives means that oil has ceased to be a mere commodity. Oil is a vital strategic commodity, a substance without which our national security and prosperity cannot be sustained. The United States has no choice but to do whatever it takes in order to obtain a sufficient supply of oil. We share that sad and dangerous predicament with virtually every other nation on earth" (House 112-159 2012).

Retired Air Force General Charles Wald testified at a Senate hearing in 2007 that many believed the U.S. military is solely responsible for energy security, what he calls the "Dial 1-800-The-U.S.- Military" syndrome, since people assume the U.S. military is a "toll-free" resource, and that "energy security can be achieved solely by military means-we need to change this paradigm because the U.S. military is not the best instrument for confronting all the strategic dangers meaning from oil dependence". He was dismayed when global oil company executives thanked him for providing worldwide security to ensure the free flow of oil—with no assistance from other nations—because Wald does not believe the U.S. military can or should "be everywhere to protect all the vulnerable components of the global oil infrastructure". Instead he recommends increasing transportation efficiency as the single most important step America could take, and deplores America's light-duty vehicles for having the worst average fuel efficiency in the developed world (Senate 110-6 2007).

What if we can't get our fix of oil? What would happen?

Vice Admiral Dennis McGinn described a scenario of how war might erupt. First, climate change would trigger a long chain of disasters. Across the planet, nations would experience drought, floods, disease, crop failures, sea level rise, ocean acidification, and wildfires. The resulting instability would result in hunger, failed governments, and migrating populations. Turmoil would ensue, which would create fertile breeding ground for organized crime, paramilitaries, extremists, and terrorism. The U.S. military would be called in.

At the same time, resource wars would erupt in the most volatile regions of the world, especially over oil, as continued population growth over the next 20 years widens the gap between oil supply and demand. All the while, U.S. fossil fuel dependence will continue.

Admiral McGinn concluded that in a global outbreak of wars over dwindling oil supplies, our military would be stretched too thin to protect the free flow of oil in hostile regions. The suffering, the turmoil, the lost lives, the cost of war—this presents an unacceptable risk to the nation, said the admiral. (House 111-20 2010)

Welcome to the doomster club, Admiral McGinn. What a bunch of killjoys! They would have you believe that America's longstanding "campaign for energy independence" has a way to go.

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