

# Lights Out

America faces a new energy crisis.

By Robertson Morrow

AMERICA IN THE MID-1950S produced and consumed about half the energy in the world. Foreign trade in energy was small: America exported about a sixth of its coal production and had to import an eighth of its oil consumption. There was a trivial deficit: energy consumption outstripped production by less than 1 percent.

In 1956, in the midst of this energy contentment, a Shell Oil geophysicist named M. King Hubbert made one of the more famous and hotly disputed predictions in the history of science: oil production in the United States would peak around 1970, and an oil crisis would follow.

Led by natural gas, overall energy production had grown by almost half, but consumption had grown faster. By 1970, American energy consumption had climbed to a level 10 percent greater than production. The big deficit was oil: imports were 25 percent of consumption. The next year, just as Hubbert had predicted, U.S. oil production peaked. Then, in late 1973, came the oil crisis.

Yet by 1985, this energy crisis was over. Its end was not due to domestic supply: America's energy production increased only 7 percent between 1970 and 1985. Rather, two other factors were responsible. First, industrial conservation efforts, combined with a series of economic recessions, limited the increase in overall American energy consumption by about 10 percent. Therefore, by 1985, American consumption was scarcely worse than 1970. Sec-

ond, foreign production of energy, especially non-OPEC oil, increased markedly in response to high energy prices. In 1986, prices collapsed as this increased supply met steady demand.

By 2000, unfortunately, the groundwork had been laid for another energy crisis. The production of energy continued to grow slowly, but consumption grew by 30 percent. American energy consumption was thus more than a third higher than production, and we imported almost 60 percent of our oil.

Two factors caused this consumption binge: immigration-driven population growth and growing per-capita energy use. Population grew by 15 percent from 1985 to 2000, driven by the mass immigration that followed the Immigration Act of 1965.

Per-capita energy consumption also rose more than 10 percent. The conservation programs of the '70s and '80s rightly targeted the most egregious wastes of energy in industry. But, starting in the '90s, there were no easy improvements left to make. There was no political will to tackle consumer over-consumption of energy, exemplified by such things as the urban sprawl mandated by government zoning regulations. And employment continued to grow faster than population, due in part to women having to work.

Since 1985, low foreign energy prices have also masked the consequences of America's growing energy shortage. Foreign supply continued to grow as discoveries made in the '80s came on line.

The collapse of communism in Russia, where oil consumption declined by more than half from Soviet levels, muted foreign demand. And the strong dollar let Americans buy foreign goods cheap.

According to the Energy Department's large-scale forecast, *Annual Energy Outlook 2003*, by 2015 American energy consumption will be about 50 percent greater than production. Oil imports will be 70 percent, natural gas imports 30 percent. And the *Outlook* optimistically assumes that energy consumption can be kept almost constant, while GDP grows by a third and real energy prices decline. This is doubtful. As Americans get richer, they will buy bigger SUVs, drive and fly more, and build bigger houses.

On the production side, the Energy Department forecasts 14 percent growth by 2015. This will certainly not happen without the oil and gas from the Alaskan National Wildlife Refuge (ANWR), now closed by Congress to drilling. Outside of ANWR, natural gas production growth is stalling. A more realistic projection of production growth from 2000 to 2015 would be 7 percent, the same proportion by which American energy production grew in the 15 years prior to 2000 and the 15 years prior to that.

But the major flaw in the Energy Department's *Outlook* is its forecast of a gently lower price for oil. This is unlikely because all three of the favorable trends are going to reverse. Foreign oil production growth is slowing. Foreign

consumption of oil is increasing. And the dollar is declining because America produces relatively less of the goods and services the world wants. These trends will combine in the years and decades ahead to create a new energy crisis.

The biggest fact about oil is that there is only so much of it and no more. This key allowed Hubbert to predict the peak in U.S. oil production.

THE DISCOVERY OF **NEW OIL FIELDS PEAKED IN 1930**. OIL PRODUCTION REACHED ITS **HIGHEST LEVEL IN 1971**, WITH **ONSHORE PRODUCTION DECLINING** BY MORE THAN HALF SINCE THEN.

For any set of conventional oil fields, Hubbert hypothesized that production would follow a bell curve with peak production occurring when just over half of the total recoverable oil was produced. This would happen because there tends to be a wave of discovery of the biggest and best fields early on, allowing production to ramp up in these fields over time. But all conventional oil fields deplete. As the best early fields tap out, production must be replaced with more marginal fields. At some point, many decades after the best discoveries, actual production of oil maxes out. This is known as Hubbert's Peak.

The discovery of new oil fields in the U.S. peaked in 1930. Oil production in reached its highest level in 1971, with onshore production declining by more than half since then.

Many other countries have passed, or are nearing, their Hubbert's Peaks. Indonesia's oil fields, for example, were once so important that Japan was willing to go to war to seize them. Indonesian production peaked in 1977, and the country will be a net oil importer before this decade is out. Libya, Iran, and Romania peaked in the 1970s. Britain

peaked in 1999. In the next two decades, many other countries will do the same. Some time in this century, we will encounter the global Hubbert's Peak. World oil production will then start to decline.

Fortunately, the global Hubbert's Peak is a few decades away. For political reasons, Russia, Iraq, and Saudi Arabia will not strictly follow Hubbert's

model: respectively, the collapse of communism, 13 years of sanctions against Saddam Hussein, and the swing-producer strategy whereby Saudi Arabia restrains production except during severe oil-price spikes.

For technical reasons, the production of certain types of unconventional oil does not resemble a bell curve. Heavy oil shows step-function increases followed by decades of flat production, not the rise and fall of Hubbert's curves. And natural-gas liquids will grow with natural-gas production long after the production of cheap oil peaks.

Yet long before that, perhaps as early as 2015, two things will happen. First, the growth in world oil production from all sources will slow considerably, and production of conventional oil may well top out. Second, fewer countries will export much oil. Those that do will become more concentrated in the Middle East.

At the same time, world demand for oil and other forms of energy will continue to rise vigorously. Each year, demand for oil in China grows by almost 300,000 barrels a day. (China has the exports to pay for this oil.) Demand for

oil in India and across the world is also rising rapidly. People around the globe want the lifestyle that oil and energy provide.

South Korea is an example of just how much demand for oil can increase as a country develops. In 1970, South Korea consumed about 200,000 barrels of oil a day. In 2000, South Korea consumed about 2 million barrels of oil a day, 10 times as much. If China and India were to consume just *half* as much oil per-capita as South Korea does today, world demand for oil would be 50 percent higher.

If supply is constrained, but demand continues to rise, the price of oil is likely to go up. Indeed, its cost to Americans will rise as long as we fail to export enough goods and services to pay for all the oil, cars, clothes, and other things we want to buy, because the dollar will decline as long as we do so.

What is the answer to America's energy shortage?

The environmentalist Left talks about renewable energy such as biomass, wind, municipal-waste generation, solar, and geothermal. The Energy Department already forecasts that non-hydroelectric energy will double by 2015. (Hydro-electric will not grow because we have built almost all the big power dams we can.) But non-hydroelectric renewables will provide only 4 percent of America's energy then—helpful but not significant.

And there are reasons for doubting that we can even achieve that goal. What renewable energy we have today is due mainly to two factors: dam building by long-dead, white male water reclamation engineers and Bob Dole's crusade for ethanol. New sources of renewable energy must be built before they will provide power. For all its talk about exotic energy sources, the environmentalist Left often opposes projects that we can actually build.

Consider municipal-waste generation in New York, staunchly opposed by New York environmentalists. New York City creates more than its fair share of garbage and spends over \$1 billion a year to truck, rail, and barge it away to distant landfills. Burning half of that garbage would produce as much electricity as a nuclear power plant.

Or consider wind power off the East Coast. Long Island Power, for example, wants to build a giant wind farm south of Long Island that will supply half of the island's electricity. With exceptions, powerful environmentalists have not supported this project.

If the environmentalist Left is not credible on energy, what passes for conservatism is not much better. Very few conservative writers and think tanks focus on America's energy shortage. Much of what they write is vague and uninformed.

In October, Lewis Lehrman wrote a long, informed piece in the *Weekly Standard*. Lehrman acknowledged that we have a major energy problem, one likely to get worse if we do nothing.

Lehrman proposed three main solutions. First, "government intervention to double the share of nuclear power." Second, "a vast expansion of legal permissions for drilling crude oil and natural gas on public and private lands." Third, browbeating the oil sheikhs—"whose political existence depends to a large extent on U.S. military power"—into lowering oil prices.

Aside from their overwhelming emphasis on new and greater government power, the problem with Lehrman's ideas is that they just won't work.

Nuclear power? Neither utility executives nor state politicians want to build more nuclear plants. It is a non-starter. Moreover, there is no place to store the radioactive waste. A large government repository is planned for Yucca Mountain, north of Las Vegas. Yucca Mountain is the foundation for any revival of

nuclear power. Not talking about it, but actually building it soundly and moving there safely the 150 million pounds of nuclear waste now stored at existing plants will take two decades and will consume all the political will and government competence that can be spared for nuclear power.

Oil and gas? Aside from ANWR and the coast of California, Hubbert teaches us that there is not much left. Moreover, Hubbert also says that we will need the Alaskan oil much more in future decades than we need it now. Any increase in oil production today will simply make America's energy shortage worse two decades from now.

Hubbert's rule also explains why Lehrman's critique of Saudi oil policy makes no sense. Crude oil prices have been low for more than a decade—about \$20 a barrel or \$0.50 a gallon. Even today, they are only \$0.75 a gallon. (The rest is refining, retail, and taxes.) Perhaps prices might have been lower without Saudi production restraints. But

THE ANSWERS ARE **COAL AND CONSERVATION**, WITH CONSERVATION BEING LED BY AN **END TO MASS IMMIGRATION**.

Saudi restraint now means, by definition, that there is going to be more oil available in future decades when the world needs it even more. This is the rational technocratic long-term goal of Saudi national oil policy. It does not depend on who rules in Riyadh.

In short, neither the environmentalist Left nor the establishment Right has any real answers to America's energy shortage.

The answers are coal and conservation, with conservation being led by an end to mass immigration. All the rest is window dressing.

Coal is the unloved stepchild of American energy policy. It must be strip-mined. It requires enormous coal trains. It emits more than its share of greenhouse gases. Burning it produces mountains of mildly toxic waste.

But coal has one thing going for it: we have an awful lot of it. We have at least a quarter trillion tons of recoverable coal. We can double production and still not run out for well over 100 years. When America's energy shortage begins to bite, hard, into the lives of ordinary Americans, no amount of environmentalist whining is going to stop coal.

Conservation, on the other hand, is beloved by all and implemented by almost none. This is because, with one exception, real conservation requires changes in public policy that are unpopular and hard to implement. The tax code needs to be reformed to tax energy more and tax other things, especially savings, less. Zoning codes need to be reformed to encourage old-fashioned neighborhoods, not sprawl and subdivi-

sions. Infrastructure—such as new bridges and transit lines—needs to be built to reduce traffic jams and to facilitate mass transit.

The one policy that is both popular with the public and easy to implement is an end to mass immigration. Restricting legal immigration is a simple matter of government reducing the number of foreigners issued visas to work and live in America. Ending illegal immigration is more complicated but requires mainly that the government actually deport obvious illegals instead of giving them reasons to stay.

It is largely forgotten today, but the modern immigration-reform movement was founded in the 1970s by leaders of the environmental movement. Mass immigration is critical to conservation because it is the primary cause of American population growth. Mass immigration is going to drive American population from 300 million today to 400 million in 2050.

All else being equal, this means we are going to consume one-third more energy that we otherwise would. This extra 100 million people is equivalent to the existing metropolitan areas of Atlanta, Boston, Chicago, Dallas, El Paso, Fargo, Grand Rapids, Houston, Indianapolis, Jacksonville, Kansas City, Los Angeles, Minneapolis, New York, Omaha, Philadelphia, the Quad Cities, Raleigh, San Antonio, and Tampa, plus the states of Virginia, Wisconsin, and Utah.

No country staring down an energy crisis worse than 1973's can overcome such a power drain. ■

*Robertson Morrow is a financial analyst in San Francisco.*

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# Flower Power

The neocons do an about-face on the Sixties.

**By Paul Gottfried**

WHEN *CHRONICLES* EDITOR Tom Fleming and I were considering for *The Conservative Movement* in 1988 what best defined the neoconservatives, what topped our list was dislike for the sixties. Whether Norman Podhoretz targeting his personal enemies or *Commentary* attacking the countercultural movement, one could always depend on the neocons to rail against the evil decade. James Nuechterlein's review of John Judis's biography of Bill Buckley, published in *Commentary* in 1987, upbraided its subject for not appreciating the fifties enough. Buckley had been so foolish as to "stand athwart" the Eisenhower era, instead of stressing its many virtues.

In the eighties, those chronicling the neoconservatives, for example Alexander Bloom and Peter Steinfels on the Left and George Nash on the Right, were agreed about their attitude toward the sixties. It was then commonly thought that, for the *Commentary* circle, the combination of violent student revolutionaries and anti-Semitism on the Left, particularly among blacks, had tripped certain wires. These ominous patterns reminded them of what they had heard about Nazi and Stalinist anti-Semitism and gave rise to their cultural pessimism.

By the nineties, however, these attitudes had changed. When Pat Buchanan was running for president in 1992, George Will went after him for "glorifying the fifties," a decade that Will considered full of racial injustice. On Dec. 12, 2002, in a syndicated column, Charles Krauthammer savaged Sen. Trent Lott (R-Miss.) for

the senator's comments at Strom Thurmond's 100th birthday party. By making vague but favorable references to the states-rights platform Thurmond had adopted as a Dixiecrat presidential candidate in 1948, Lott "gave evidence of an historical blindness that is utterly disqualifying for national office." The Civil Rights Revolution of the sixties provided, for Krauthammer, the moral high moment in our history, by "validating America's original promise of freedom and equality for all Americans." According to Jamie Glazov, in *FrontPage Magazine*, before the civil rights victories of the sixties, our land labored under "a darkness in which all Americans were submerged because of racism."

Following this division of historical time into prolonged darkness and sudden redemptive light, Linda Chavez scolded the justices who favored race-based selection at the University of Michigan for betraying the sixties. That decade, according to Chavez, "made us a more just society," beginning with Martin Luther King's crusade for a "color-blind society." With this ideal, which the Court now scorned, King had "launched a civil rights revolution that was embraced by the American people and led to the passage of the Civil Rights Act of 1964, the Voting Rights and Immigration Acts of 1965, and the Fair Housing Act of 1968." Never mind the counterfactuals: that affirmative action was introduced as early as 1966 by the Equal Employment Opportunity Commission, which the Civil Rights Act had created, and