

Book Blowout in the Gulf

The BP Oil Spill Disaster and the Future of Energy in America

William R. Freudenburg and Robert Gramling MIT Press, 2010 Listen now

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Recommendation

Authors William R. Freudenburg and Robert Gramling are college teachers, and if you have a chance to take their classes, enroll right away. Professors of environmental studies and sociology, respectively, they are very informative, and they base their conclusions on well-reported facts. Their book links US energy policy to oil politics, corporate performance, risk management, and the technological and geological problems that led to the US's largest peacetime offshore oil spill. The professors cover the oil industry's history and the energy debate in a single, tightly packed volume, including significant accidents, their causes and the paltry penalties companies – especially British Petroleum – paid. The book contends that oil companies wield too much power over prices, policy and the environment. *BooksInShort* considers this vivid story about these tremendously powerful, hugely profitable companies to be essential reading.

Take-Aways

- In April 2010, British Petroleum's Deepwater Horizon oil platform in the Gulf of Mexico exploded, killing 11 men and injuring 17.
- The blast released 200 million gallons of oil history's largest peacetime offshore spill.
- Human negligence, poor safety and misplaced cost cutting led to the disaster.
- The US Occupational Safety and Health Administration (OSHA) called BP a "Renegade Refiner."
- The oil industry's political dominance and environmental wastefulness go back to 1882, when the Standard Oil Trust became the US's first national monopoly.
- International oil firms created the world's first oil cartel in 1927 followed by the Organization of Petroleum Exporting Countries in 1960.
- By 2000, the US held only 2% of world oil reserves, but it remained the biggest oil user.
- The oil and gas industry spent \$340 million on lobbyists from 2008 to 2010. They fought repeal of six oil and gas tax programs that could save the US \$30 billion in a decade.
- To avoid future disasters, policy makers should exclude "bad actor" companies.
- They should name independent regulators and let OSHA inspect drilling platforms.

Summary

Destroying Oil

Contemporary oil drilling began in the United States in 1859 and the nation provided more than half of the world's oil supply until 1953 when legislation first permitted ocean drilling. Over time, finding and retrieving oil became increasingly challenging. Offshore platforms must drill for oil very precisely, sometimes going miles below the ocean's surface before penetrating the seabed itself. Oil companies go to extraordinary lengths to meet the insatiable demand for oil. But by the 21st century, the US –

which holds only 2% of proven oil reserves – was consuming oil faster than any other nation, though it has only 5% of the globe's population. Oil companies perpetuated the myth that they could find more crude oil and kept exploring increasingly remote, inhospitable places, including building the Alaska oil pipeline and expanding offshore exploration into deeper waters. Across the globe, engineers are pushing the boundaries of safety and technology to seek more oil.

"The logical place to start...is by asking why the crew of the Deepwater Horizon would have been working in such a dangerous spot in the first place."

Politicians in the US continue to call mistakenly for "energy independence," an impossible goal. Even though the US must rely on oil reserves from other nations, every president since Richard Nixon in 1974 has repeated the drumbeat for more domestic drilling. But as these leaders knew when they spoke, the US has no more readily accessible domestic crude, which is why it spends \$1 billion a day on imported oil. The quest for oil also explains why British Petroleum (BP) built the *Deepwater Horizon* drilling platform in the Gulf of Mexico. To get to oil, its crew had to maneuver piping through a mile of water and then 2.5 miles into the seabed. The huge platform had a deck as big as two football fields, and it housed 130 people.

"BP and its partners made a series of fateful decisions, each of which increased risk, and almost all of which appear to have been designed to save time and money."

On April 20, 2010, the *Deepwater Horizon* exploded, killing 11 men and injuring 17. Onlookers 35 miles away could see the flames. After the fire raged for 36 hours, the platform collapsed and sank. As oil spread in the Gulf and thousands of fish, birds and sea animals died, President Barack Obama and other leaders called it America's "worst environmental disaster." However, BP's CEO Tony Hayward said the environmental damage was "very, very modest." By June, the US Geological Survey estimated that 35,000 to 60,000 barrels of oil (42 gallons per barrel) were leaking daily from the uncapped well; BP estimated the spill at just 2% of that tally. Experts later said the well leaked 200 million gallons of crude – history's largest offshore peacetime oil spill.

"Energy policy experts in the United States have spent decades in continuing to do the same thing, and we, the people, have done next to nothing to reverse the pattern."

Investigators traced the final cause of the explosion to human error involving BP, its contractors and partners, and US regulators. The mechanical linchpin was the failure of the mechanism that was in place to make such a disaster impossible: the supposedly "fail-safe" blowout preventer, a valve designed to shut off oil flows automatically in an emergency. More surprisingly, the drilling platform had passed a safety inspection a few days before the accident.

"What we have been doing...has been to find the fossil deposits left behind during the eras of the dinosaurs and to burn them up as fast as we could."

While the *Deepwater Horizon* collapse teaches many lessons, the hardest may be that the US lacks the technology to repair the damage that technology creates. Injured parties across the Gulf Coast filed thousands of lawsuits against BP and its contractors, but the litigation will unfold for years. Some victims of 1989's *Exxon Valdez* spill waited 20 years for their settlement checks. In fact, 20% of those granted compensation died before they received funds. The *Exxon Valdez* disaster resulted from "the atrophy of vigilance," a slackness that sets in over time as people become less diligent and safety conscious. In 2005, a Texas BP oil refinery exploded, killing 15 and injuring 170. In 2006, a "corroded" BP oil pipeline ruptured in Alaska, spilling 200,000 gallons of oil. In another incident, BP burned 500,000 pounds of poisonous chemicals, releasing 17,000 pounds of carcinogenic benzene, but BP didn't inform nearby residents until a week later. BP had a long record of safety shortcuts, from bypassed valves to numerous regulatory violations.

"Despite the habit of referring to oil 'production', the reality is that the 20th century was an unprecedented exercise in oil 'destruction'."

Between mid-2007 and early 2010, BP accounted for about half of all US Occupational Safety and Health Administration (OSHA) safety violations in the entire refining industry. In fact, OSHA has called BP a "Renegade Refiner." The firm's actions have included "corner-cutting patterns" in relation to many safety procedures, including sloppy maintenance and negligent accident-prevention processes, from failing to maintain and deploy cut-off valves, like the blow-out preventer, to displacing and sealing wells with the wrong materials. Other drilling contractors, including Halliburton and Transocean – which leased the *Deepwater Horizon* to BP – also had safety violations. The industry's enforcement "system is flawed." Regulators go in and out of an industry-job revolving door, and oversight agencies use biased oil company accounts about their own safety checks (i.e., the US Minerals Management Service (MMS) relied on BP's reports).

"The world now uses up about a 1,000 barrels of its finite oil reserves every second."

When Tony Hayward became BP's CEO, he dropped 7,500 jobs and cut \$4 billion in expenses, which may have endangered his employees and increased their accident risk. Yet, after the Gulf calamity, when BP transferred him internally (offering him a position in Russia), Hayward received \$1.5 million in salary, plus a pension worth more than \$17 million.

The First Cartel

Prospectors drilled the first contemporary-type oil well in Asia in 1848, near Baku [in modern-day Azerbaijan], and the US oil boom began in 1857 with the drilling of "several crude oil seeps" in Pennsylvania. Industrialist John D. Rockefeller launched his oil kingdom with a refinery in Cleveland, Ohio, just after the US Civil War. Having immediately gained 4% of US refining capacity, he gobbled up 22 competitors to control 50% of world capacity within a few years.

"The United States gets a lower share of the income from our nation's offshore oil than almost any other jurisdiction in the world."

By 1880, Rockefeller's Standard Oil Company and its affiliates controlled 90% of US oil refining capacity. In 1882, Rockefeller set up the Standard Oil Trust, the first US national monopoly. In 1888, he created an international firm, Anglo-American Petroleum. After the US's first gusher sent oil 100 feet into the air in Beaumont, Texas, in 1901, oil prices boomed and crashed in the early 1900s. Since then, the oil industry has sought to manipulate refining, pricing and transport.

"Even a frenzied pace of drilling in the US would [not affect] petroleum prices, for a very simple reason: The US now produces less than 7% of the world's oil, and most US deposits have already been exploited."

Local opposition thwarted an effort to drill off California's coast in 1898. That was not the case in Louisana, where local authorities allowed the oil industry to install

large wells close to Caddo Lake in 1905 and granted leases for drilling under the lake starting in 1910. This operation piped underwater oil with such intense gas pressure that engineers developed an early form of the blowout preventer that played a crucial role in the *Deepwater Horizon* debacle. Drillers soon discovered oil in Venezuela's Lake Maracaibo, where they introduced the moveable, steam-powered drilling barge. Local wood-eating worms forced them to replace wood platforms and pilings with concrete pilings and steel decking, which the industry used later in the North Sea and the Atlantic.

Oil in the Middle East

Commercial oil explorations in the Middle East began in 1901, when British entrepreneur William Knox D'Arcy signed a 60-year exclusive agreement with the Shah of Persia to explore in present-day Iran. He struck oil in 1908 and two years later founded the Anglo-Persian Oil Company, the first seed of BP. Explorers discovered oil in Iraq in 1927, in Bahrain in 1931, and soon thereafter in Saudi Arabia and Kuwait. By the mid-1920s, Anglo (now Anglo-Dutch Shell Oil Company) was the world's largest oil producer, outpacing Rockefeller's empire. By the end of that decade, oil prices fell due to overproduction and intense competition. To stabilize prices, executives from the biggest oil companies met at a castle in Scotland in 1927 and created the first international oil cartel. They set production quotas, allocated markets to the nearest oil companies and based prices on the cost of Texas oil. The Federal Trade Commission discovered this cartel in 1952, but it stayed in effect until the Arab oil embargo of 1973 and 1974.

"It's high time we expected our political leaders to be more realistic."

During World War II, the US produced eight million of the nine million barrels of oil the Allies used. Postwar, non-US suppliers increased production. By the mid-1950s, the US was no longer the world's leading oil producer, but in 1956 it remained the largest consumer, largely due to higher car sales and the development of suburbia. General Motors (GM) lobbied various cities to remove their trolley, streetcar, and train systems, and replace them with GM buses. In 1955, a US commission headed by GM board member Lucius Clay recommended constructing a national highway system, theoretically to evacuate cities in the event of a Soviet missile attack. In 1956, Congress authorized the system, with the federal government paying 90% of the building costs.

Running on Empty

In 1960, in an effort to control prices as more oil supplies became available, representatives from oil companies in Iraq, Venezuela, Iran, Saudi Arabia, Kuwait and Qatar formed the Organization of Petroleum Exporting Countries (OPEC). When Colonel Moammar Gadhafi came to power in Libya in 1969 and began to nationalize the country's foreign oil companies, he forced them to renegotiate more favorable prices for Libyan oil. After the 1973 Arab-Israeli war, OPEC penalized the US and the Netherlands for supporting Israel by instituting an oil embargo from October 1973 to March 1974, doubling the cost of US gasoline in a year. By this time, most US land-based oil reserves had already been discovered and tapped. This left Alaska, the Gulf of Mexico and California's coastal waters as the last promising sites for US oil exploration.

"Energy use in the United States has gone well past the point where more enthusiastic oil drilling can provide a solution."

The process of awarding oil exploration leases changed under President Ronald Reagan's interior secretary, James Watt, one of the most "intensely controversial and blatantly anti-environmental political appointees" in US history. Watt consolidated administration of offshore drilling leases at the MMS. Instead of maintaining policies that held leaseholders to three-square-mile plots, he awarded leases for huge "area-wide" parcels at "bargain basement prices," earning dramatically less revenue for the nation than under old policies. Under Watt, bid rates fell and ownership concentrated; in time, only 20 companies owned more than half of all federal offshore leases. These policies depleted US oil reserves and diverted capital from alternative-energy development.

"Conservation and improved efficiencies have actually provided more 'new' energy than the entire domestic oil industry."

President George H.W. Bush inherited the oil lease question. He ordered a study and imposed an offshore drilling moratorium that lasted 18 years before President George W. Bush repealed it. In 1994, a Republican Congress passed the Outer Continental Shelf Deep Water Royalty Relief Act, encouraging deep-water drilling and exempting oil companies from paying federal royalties for five years. Given this favorable treatment, 2,840 fossil fuel companies signed leases from 1996 to 1998. While this was good for oil companies, the Government Accountability Office found that US offshore drilling lease receipts were among the world's lowest.

Getting Favorable Treatment

Since the government issues drilling leases, the oil technically belongs to the American people. In fact, US taxpayers receive only 40% of the revenue, while citizens in Norway, Vietnam and Tunisia receive about 75% of the revenues from their nations' deep-water leases. A 2005 Congressional Budget Office study found that the effective US tax rate for oil and natural gas deals was 9.2%, "well below" other industries' average effective marginal tax rate of 26.3%. To maintain its favorable status and preserve its tax benefits until the 2020s, the oil and gas industry spent \$340 million on lobbyists between 2008 and 2010. In the first year of the Obama administration, the Treasury Department's chief economist estimated retracting just six preferential oil and gas industry tax programs would save \$30 billion over 10 years.

Causes of the Disaster

The causes of the *Deepwater Horizon* platform disaster include management lapses and the mistakes of rig personnel, who skipped safety policies to get work done faster. These human errors outweighed the technological failure of the blowout preventer. To prevent further catastrophes, the oil industry and its regulators could follow three approaches: 1. "Exclusion" – This policy would exclude 'bad actors," that is, firms with poor safety records, such as BP, from controlling drilling operations. 2. "Regulation" – Regulatory authorities would include independent citizen oversight groups, including parties with an interest in preventing oil spills, such as those in fishing and tourism businesses, as well as indigenous groups and local communities. 3. "Refocusing" – OSHA should have the authority to inspect offshore drilling platforms, currently classified as "vessels" under the jurisdiction of the Coast Guard, which works with MMS to inspect them. OSHA is better equipped to inspect and enforce the law since it has ongoing refinery regulatory policies it could apply to drilling platforms.

About the Authors

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