

Book Hot, Flat, and Crowded

Why We Need a Green Revolution - and How It Can Renew America

Thomas L. Friedman FSG, 2008

Recommendation

On the whole, this book resembles a televangelist's Sunday morning sermon. It is full of passion, action and emotion. The "preacher," *The New York Times* columnist Thomas L. Friedman, exhorts a congregation of true believers with a rousing endorsement of their shared faith, hitting all the familiar themes, stories and touchstones, plus a heartfelt environmental alert. Even for nonbelievers, the spectacle is impressive. Friedman is a skilled coiner of phrases and he sure can work a crowd. To judge by the many interviews and conversations referenced in this book, he has gone to great effort to assemble a corpus of evidence in support of his argument. Baldly put, his message is that conventional wisdom about global warming is true: Because of irresponsible consumption, the world faces an environmental catastrophe of unprecedented magnitude. He explains that George W. Bush's administration was unconscionably negligent in this crisis, that most honest scientists agree something must be done, and that climate change deniers are mostly hirelings in the service of the oil industry or ideological conservatives unwilling to face facts. For any reader reasonably acquainted with the news media, much of what Friedman says, though urgent, will be somewhat familiar. However, *BooksInShort* notes, he always has a strikingly entertaining and persuasive way of saying it.

Take-Aways

- Much of the world's population aspires to the American lifestyle.
- The world simply doesn't have enough resources to allow everyone to live the American dream, including Americans.
- Americans' addiction to oil harms the environment and props up oil-selling regimes.
- Global warming and environmental degradation threaten biodiversity and the quality of life.
- "Energy poverty" leaves 1.6 billion people without access to electricity.
- The environment is a national security issue.
- The countries that lead in developing green industries will be at the forefront of economic growth in the new "Energy-Climate Era."
- Governments can accelerate necessary change by establishing the right regulatory environments and price signals.
- Even the Chinese Communist Party has adopted a green agenda.
- America is at its best when it cooperates in solving global problems.

Summary

Too Much Security

In Istanbul, walls, guard booths, security barriers, and bulletproof doors and windows surround the American Consulate, located roughly 12 miles from downtown. A captured terrorist involved in an attack on the city's British Consulate told police that his group had scouted the US Consulate but gave up hope of attacking it. "It was so well guarded they don't even let birds fly there," he said.

"The convergence of hot, flat and crowded has created a challenge so daunting that it is impossible to imagine a meaningful solution without America really stepping up."

America has walled itself off from the rest of the world. It has also walled itself off from rational thinking about such important challenges as global warming. Oil and car

companies have had too great a voice in impeding laws and policies that could have made the world a better, cleaner place. Now the US must help the world solve one of history's gravest crises.

The "Energy-Climate Era"

The world is entering the energy-climate era. Greater global demand is focused on dwindling supplies of resources. Easy oil money is keeping repugnant regimes in power. The climate change, "energy poverty" and species extinctions that threaten biodiversity all require innovative ideas, action and infrastructures. The countries that invent the tools and industries that address these problems will lead the era.

"Later is over."

The energy-climate era sneaked up on developed nations when they were busy with other things. Their post-World War II policy priority was to prevent World War III. Their goals were to develop their economies, secure human rights and keep the peace. Environmental treaties were something of an afterthought. Now, however, if society does not address the challenges of environmental degradation and global warming, achieving those other goals will be impossible.

The American Lifestyle Gone Global

Demographers estimate that the world's population may be nine billion people by the middle of this century. Most of this population growth will occur in unstable nations. An impossibly large number of people in these growing populations are drawn to the "American dream" of consumption and convenience, but their growing energy demands and the proliferation of power plants to serve them are accelerating global warming.

"The effects of our way of life on the earth's climate and biodiversity can no longer be "externalized" or ignored or confined."

The US lifestyle of private cars and growing consumption has a certain appeal. However, this resource-intensive way of life is unsustainable and physically impossible for everyone on the planet to achieve. The globe simply does not have enough resources to go around. In the 1950s, when President Richard Nixon used kitchen appliances to convince Soviet Premier Nikita Khrushchev that democracy was better than communism, America wanted the rest of the world to adopt its dream. Now, clearly, that would cause global environmental catastrophe. Americans, too, must learn hard restraint.

Energy and Dictatorship

Oil money flows to countries that have oil. This is bad for those countries and for the world. Oil money keeps dictatorial regimes in place, because they don't need to empower their people. Oil wealth gives them a free pass. Why educate people, encourage entrepreneurship, stimulate innovation and take the risk of the citizenry demanding a voice in the country's affairs? Consider Russia. President Vladimir Putin turned off the gas tap to Europe to remind Europeans that they are dependent on him. Russia is not powerful because it has industries, skills, knowledge or leadership. It is powerful because Europeans are addicted to its resources.

"We have been living for far too long on borrowed time and borrowed dimes."

Petrodollars also help fund terrorism. Saudi Arabia's Wahhabi Islam is spreading through the Middle East. But, in the same cultural atmosphere, Bahrain has made striking progress toward democracy and women's rights. Why? Because the decline in its oil supply at the end of 1990s created a "burning platform" for change, though Bahrain was actually the first Gulf state to find and exploit oil. Falling oil prices can help bring similar change to other oil-producing countries. But while demand for oil stays high, so will prices.

The Problem of Poverty

According to World Bank estimates, 1.6 billion people have no access to electricity. That is energy poverty. Lacking electricity, millions cook their food over smoky indoor fires and die from respiratory diseases as a result. Energy poverty is involved in every problem facing the developing world and climate change exacerbates the suffering.

"We wanted everyone to be converted to the American way of life, although we never really thought about the implications. Well, now we know."

Rising energy prices are crippling infrastructure in struggling countries, such as Rwanda. In Bangladesh, the World Bank found that having electricity boosted a family's income 20% and gave children 35% more study time. The problem of education is about a teacher shortage – and an energy shortage.

Strange Weather

Odd things have been happening as a result of changing weather. Montana's elk descend from the hills much later in the year. The western North American mountains' snowpacks are declining. Maryland's daffodils bloom in January. Drought forced both former Australian Prime Minister John Howard and Georgia Governor Sonny Perdue to call on their populations to pray for rain. Warm days come in midwinter. Melting tundra threatens to release billions of tons of carbon, amplifying the greenhouse effect caused by burning fossil fuels. Biodiversity – crucial to human life – is at risk. The biosphere depends on its splendid balance, but species are going extinct before science can even catalogue them, or learn what they are and what they do. There is no time to waste.

The Role of IT

Information technology (IT) can help create an "Energy Internet." Indeed, tinkerers and garage entrepreneurs are already working on prototypes. Shrewd use of IT could be part of transforming the US's electrical grid, which dates back to Thomas Edison. It was built to meet the demand for power, but it began fragmented – with authority divided among state regulators – and is still fragmented.

"Wherever governments can raise most of their revenues by simply drilling a hole – rather than tapping their people's energy, creativity and entrepreneurship, freedom tends to be curtailed, education underfunded and human development retarded."

The US has more than 3,000 electric utility companies. No wonder there is so little integration. IT could make the grid more intelligent, perhaps by allowing those with solar panels or electric cars to sell surplus electricity back to the grid. According to the McKinsey Global Institute, merely by using more energy-efficient appliances, installing fluorescent light bulbs and insulating their homes, US homeowners could cut the nation's electricity consumption by a third.

Energy Opportunities

Green living has become fashionable in America, Europe and Israel. Even some Osama bin Laden supporters have lifted their voices to advocate environmentalism. However, support is only easy to find for simple measures. In fact, going green will be a hard road of sacrifices and trade-offs. This means it will require tough political choices. Substantive change is never widely fashionable. It is too controversial and draws too many opponents.

"A strategy that depends on outmining, outdrilling, outconsuming, out exploiting your own resources or a global commons – is not going to offer a sustainable competitive advantage any longer."

Energy problems are energy opportunities. The green agenda is a red, white and blue agenda. The greening of America can make it stronger. By developing tools and solutions to grapple with the world's global warming problems, America can position itself in the vanguard of economic leadership in the energy-climate era. By weaning itself from dependence on Gulf oil imports, the US reduces the threat of terrorism. By cooperating with others in pursuit of a better world, America is doing what it does best.

The Role of Economic Policy

Economic policy could also help solve the problems of a hot, flat and crowded world by sending the right price signals, and providing economic incentives for environmentally sound behavior. This tactic has worked in health care and it can work in energy. When going green is cheaper, better and faster, people will buy green. This doesn't require a massive, bureaucratic government program; it simply calls for economic incentives that give entrepreneurs a reason to be green. Quite possibly, the best thing would be a green technology bubble. Investors in bubbles may go broke, but they leave useful things behind, such as the railroads, the telegraph and the Internet.

"The Energy Internet [could] give us more growth with – better energy efficiency – by smoothing out the peaks and valleys in energy demand."

The government's role is to establish the price signals and the economic playing field – not to carry the ball. In terms of regulation and governmental decision making, the crucial details are boring. However, as environmentists say, "If it isn't boring, it isn't green." Government leaders must understand how to use regulations to promote necessary changes. Regulation can give companies incentives to innovate and compete. For example, regulations establishing emission caps led General Electric Transportation to manufacture energy-efficient, low-emission locomotives, which it now exports worldwide. GE rose to the regulatory challenge. Pollution, after all, is unproductive and wasteful. Companies that reduce waste improve their economic performance.

Winning Wars Greenly

Energy independence is a national security issue and a battlefield security issue. In 2006, a US general in Iraq pointed out that using diesel generators for battlefield power was getting soldiers killed because roadside bombers were targeting the Marines who were transporting the fuel. That spurred the armed forces to work on alternative power. One creative solution was to insulate tents with energy-efficient foam to reduce the electricity needed for air conditioning.

"Congress and the Bush administration count pennies when it comes to building new industries, as if the money for wind, solar and biomass were coming out of their own children?s piggy banks.?

The armed forces' green initiative reduced casualties, cut costs and improved its ability to innovate. Corporate green-innovation initiatives also can generate new products for export and attract valuable talent.

The National Ethic of Environmentalism

Nations must preserve their natural resources. Pollution in China and Indonesia is killing forests and oceans, as overfishing is wiping out food stocks. More than a third of Indonesia's catch is baby fish; in 2000, baby fish were only 8%. Reversing such trends requires commitments from the public as well as from leaders. People must recognize the personal economic value of preservation. However, this means governments must expand today's limited efforts to make sure that preservation is in their citizens' economic interests.

"As an Egyptian cabinet minister remarked...It is like the developed world ate all the hors d'oeuvres, all the entrées and all the desserts and then invited the developing world for a little coffee – and asked us to split the whole bill?."

Under environmental duress, China is moving toward green awareness. In the 1970s and 1980s, the Chinese Communist Party replaced Maoism with a focus on GDP growth. In the 1990s, it began to turn toward greener practices in the face of tremendous problems.

In fact, China may have no alternative to going green. People are choking on Beijing's air. Pollution is poisoning the nation's dwindling water supply. Droughts and development are depleting northwestern aquifers. Moreover, green technology exports are making Chinese entrepreneurs rich. Chinese solar power entrepreneur Shi Zhengrong is one of the country's wealthiest men, according to *Forbes*.

"Yet they throw money out the window...[on] the old, established, well-capitalized oil, coal and gas industries."

America could learn from China, but American democracy is a messy process. Chinese leaders can promulgate policies and put them in effect by fiat. Of course, enforcement may be spotty. But wouldn't it be wonderful if the US could use democracy and consensus to sweep away vested interests in dirty fuel, land-destroying agriculture and industrial pollution? Why should cars, oil and big agriculture reap billions in subsidies while innovative green technology starves for funds?

"Global warming, global flattening and global crowding [are] driving...energy supply and demand, petrodictatorships, climate change, energy poverty and biodiversity loss...well past their tipping points."

If America starts now and commits, it can make the necessary changes. The green revolution needs the same level of national commitment as the civil rights movement. The government can launch the ship. The same corporations that now obstruct the solutions to environmental problems will get on board when the right regulations and price signals make it in their interest to do so. The country is on another *Mayflower*, sailing to an undiscovered continent. It's time to do new things.

About the Author

Three-time Pulitzer Prize-winner **Thomas L. Friedman** is a foreign affairs columnist for *The New York Times*, a winner of the National Book Award, and the two-time winner of the Overseas Press Club Award. His books include the bestseller *The World Is Flat*.