



# Global Catastrophes and Trends: The Next Fifty Years

*Vaclav Smil*

[Download now](#)

[Read Online](#) ➔

# Global Catastrophes and Trends: The Next Fifty Years

*Vaclav Smil*

## Global Catastrophes and Trends: The Next Fifty Years Vaclav Smil

Fundamental change occurs most often in one of two ways: as a "fatal discontinuity," a sudden catastrophic event that is potentially world changing, or as a persistent, gradual trend. Global catastrophes include volcanic eruptions, viral pandemics, wars, and large-scale terrorist attacks; trends are demographic, environmental, economic, and political shifts that unfold over time. In this provocative book, scientist Vaclav Smil takes a wide-ranging, interdisciplinary look at the catastrophes and trends the next fifty years may bring. This is not a book of forecasts or scenarios but one that reminds us to pay attention to, and plan for, the consequences of apparently unpredictable events and the ultimate direction of long-term trends.

Smil first looks at rare but cataclysmic events, both natural and human-produced, then at trends of global importance: the transition from fossil fuels to other energy sources; demographic and political shifts in Europe, Japan, Russia, China, the United States, and Islamic nations; the battle for global primacy; and growing economic and social inequality. He also considers environmental change—in some ways an amalgam of sudden discontinuities and gradual change—and assesses the often misunderstood complexities of global warming.

*Global Catastrophes and Trends* does not come down on the side of either doom-and-gloom scenarios or techno-euphoria. Instead, relying on long-term historical perspectives and a distaste for the rigid compartmentalization of knowledge, Smil argues that understanding change will help us reverse negative trends and minimize the risk of catastrophe.

## Global Catastrophes and Trends: The Next Fifty Years Details

Date : Published August 22nd 2008 by MIT Press (first published July 11th 2008)

ISBN : 9780262195867

Author : Vaclav Smil

Format : Hardcover 320 pages

Genre : Science, Nonfiction, Environment

 [Download Global Catastrophes and Trends: The Next Fifty Years ...pdf](#)

 [Read Online Global Catastrophes and Trends: The Next Fifty Years ...pdf](#)

---

**Download and Read Free Online Global Catastrophes and Trends: The Next Fifty Years Vaclav Smil**

---

## From Reader Review Global Catastrophes and Trends: The Next Fifty Years for online ebook

### E says

Fascinating analysis of trends

Predicting the future is still impossible, but science has gotten much better at forecasting it, at least to the extent that it is informed by statistics and probabilities. Vaclav Smil speaks the truth as he sees it, according to mathematical information and indications. For instance, he refutes the “peak oil” scenario, but asserts that society’s transition to an economy that is less reliant on fossil fuel is long overdue, environmentally and politically. Smil predicted the financial meltdown and the flu pandemic, so clearly he’s on to something. He delves into a variety of issues in this analysis of trends and calamities, from the economic decline of the U.S. to conflicts in Muslim countries, the aging of many national populations and the depletion of essential ecosystems. getAbstract recommends this fascinating account of the future as seen through the cold eye of a statistician.

---

### Fabien says

An interesting read, Smil does a good job in explaining the effects and comparative probability of various natural catastrophes and environmental changes.

Unfortunately the chapters on upcoming geopolitical trends are not as good, they seemed to me partial and much too short for the task intended. Anyway this section will probably be outdated an order of magnitude faster than the rest of the book.

---

### Chris Kramolis says

Very interesting. Smil is careful not to predict but only observe trends and possible outcomes. Looking forward to reading more by the author.

---

### Bryce says

Lesson: expect a big flu pandemic in the next five years. Gratuitous use of scientific nomenclature.

---

### Ryan says

Smil is an intellectual with extensive knowledge in many fields, as apparent in this book. A specialist in energy by origin, his comprehensive study of all aspects of the energy systems utilized by mankind has led him to many other related areas like the study of our biosphere and climate. Global catastrophes goes even further by examining all kinds of potential big risks that could have large effects on civilization, ranging

from natural disaster like asteroids, volcanoes and tsunamis to human induced calamities like nuclear war, pandemics and terrorism. He also ventures into political and economic analysis on a global scale, trying to weigh the prospects of major political blocs like USA, China, Europe in the next 50 years.

While his wide ranging topical coverage would interest many as it pertains to nothing less than humanity's collective medium term future, it lacks strong and captivating arguments for any particular scenario or outcome. Instead, we learn many bits of interesting information about many topics, but there is no big picture. For example, he would list the reasons why China could be the next superpower, and immediately come up with many disclaimers and obstacles that hinder that possibility. This is repeated for all the major regions of the world. In effect, no firm stance of any kind is taken, and the book would at most serve as a point of discussion, rather than one where deep insights can be found.

---

### **unperspicacious says**

Interesting survey of political risks, but again relatively little on the possible consequences of transitions to lower energy density infrastructures.

---

### **Garret Seinen says**

A book I had a hard time finishing as I have some difficulty even considering major catastrophes.

---

### **Hotrats says**

Too scary. Better than Stephen King for keeping you up at night.

---

### **Tyler says**

goes over catastrophes (meteors, volcanoes, world wars) and trends (climate change in particular) that could have very meaningful consequences. The guy is super smart and approaches issues from a multidisciplinary viewpoint that is second to none. Most interesting idea from the book - the inherent predictability of war (or at least the outbreak of war), i.e. they're going to happen on average so often over a certain time period - causes can always be found later.

---

### **??? says**

Section on environment was new material for me.

---

### **Tirath says**

Its a properly brilliant book.

What makes this book great is: the quantitative approach, the scientific approach and the author's reluctance to arriving at a conclusion.

And even then, it's amusing to read certain bits on geopolitics 8 years after the book was published - so much changed that even Smil could not have seen.

The book covers:

Climate, biosphere, geopolitics, religious issues and histories, 'natural' causes of great misery to dominant species, water, nitrogen cycles, fossil fuels, and phytomass, irrationalities...

It's a thorough book and very enlightening.

One of the best books I have read.

---

### **Steve says**

Vaclav Smil is a very intelligent man. This book is food for thought for any person who thinks about the future. All scenarios are examined and the probabilities weighed. Geophysical, geopolitical. So what should we be worried about? Global warming? Asteroid collision? Islamic fundamentalists? Perhaps none of them, because the author shows how similar predictions and fears have been very wrong. In the 1970s, the fear was global cooling!

But he does point out some possibilities that are grossly overlooked today. Such as: pandemics, caused by unknown pathogens or the resistance to antibiotics by bacteria. Nitrogen release due to fertilizer (ab)use, releasing NO<sub>2</sub>, which is more potent a greenhouse gas than CO<sub>2</sub>.

Asian countries completely ignoring the fact that the water tables are falling to a degree where the population is in grave danger. Soil erosion. Deforestation. Degradation of the biosphere and the loss of biodiversity. The acidification of the oceans and the subsequent breakdown of the total oceanic ecosystem. Bees - their demise and the symbiosis with humanity.

China and India he does not see as becoming huge superpowers, but the decline of the USA is problematic.

Global warming? Perhaps, but we as humans do adapt. There is no alternative (so far) to using fossil fuels for electricity production. Renewable energy simply cannot be built on such a scale.

No great predictions - only evidence. Things will change: Eurabia? a nuclear weapons "accident", or a war transformational war between India and Pakistan?

I learnt some history too: The Taiping uprising in 1859 caused 50 million deaths and took China out of the game for 150 years. That was world-changing and I had never heard of it. Had you?

---

### **Vlad says**

This is the best non-forecasting book about the future I have read. Smil insists on not making predictions but the plethora of data is enough to paint a clear probabilistic picture of the next 50 years. Very well documented: 36 (!) pages of references. The future ain't what it used to be.

## Graham Clark says

reassuringly rigorous / stockpile flu vaccine

---