

Environmental Twists and Turns

1938
Global Warming 'Discovered'
 English engineer Guy Stewart Callendar put the idea of global warming on the scientific map. By evaluating old temperature data and old measurements of atmospheric carbon dioxide concentrations, Callendar concluded that in the previous 100 years, the concentration of CO₂ had increased by about 10%, which could explain the observed warming.

1948
Donora Zinc Works
Donora, Pa., Oct. 30-31
 An atmospheric inversion put the town under a cloud of gas, killing 20 people. Public outcry forced the federal government to begin studying air pollution controls. The incident led to the Air Pollution Control Act of 1955.

1952
London smog disaster
Dec. 1952 to March 1953
 Black soot, sticky particles of tar and gaseous sulphur dioxide killed some 12,000 people. The disaster led to the U.K.'s first clean-air legislation, in 1956.



1969
Cuyahoga River fire
Cleveland, Ohio, June 22
 The fire, which lasted only 30 minutes, focused attention on water pollution across the U.S. and helped lead to the passage of the Clean Water Act in 1972.



1970
U.S. Clean Air Act Extension

First Earth Day
April 22
 Thousands of U.S. communities and 20 million demonstrators rallied for the cause of environmental reform.

1955
U.S. Air Pollution Control Act

1956
U.K. Clean Air Act

1962
"Silent Spring"
 Rachel Carson's book, published by Houghton Mifflin, is credited with launching the modern environmental movement in the Western Hemisphere.

1963
U.S. Clean Air Act

1970
National Environmental Policy Act
 The act created the U.S. Environmental Protection Agency, and required environmental impact studies, now considered critical to intelligent land-use planning, for projects using federal funds.

1972
Federal Water Pollution Control Act amendments
 This law, amended in 1977, became commonly known as the Clean Water Act.

1980
National Academy of Sciences warning
 Report warned that doubling CO₂ content in air might lead to a 3°F to 8°F increase in the average temperature, globally.

1976
Resource Conservation and Recovery Act
 RCRA authorized EPA to regulate hazardous waste.

1974
U.S. Safe Drinking Water Act

1973

Arab oil embargo
Oct. 17
 The oil embargo and consequent energy crisis spurred interest in energy conservation and renewable energy sources, including solar and wind power. It also led to greater pressure to exploit North American oil sources and increased U.S. dependence on coal and nuclear power.

1969
Automobile regulations
 EPA required catalytic converters and unleaded gasoline to cut hydrocarbon and carbon monoxide tailpipe emissions.

1976

1975

1974

Asbestos School Hazard Abatement Reauthorization Act

1975
Corporate Average Fuel Economy Regulations
 Regs for cars and light trucks came about as a result of the Arab oil embargo.

1975
ASHRAE Standard 90
 A prescriptive energy-design standard for U.S. residential and commercial buildings.

1978
Lead paint ban
 U.S. Consumer Product Safety Commission banned lead-based paint for use in residences.

1980
Superfund Act
 Regulates cleanup of most hazardous toxic waste sites and created a trust fund for cleanup of sites where polluters cannot be identified or have gone bankrupt.

1982
Nuclear Waste Policy Act

1982
Times Beach, Mo., evacuation
 Dioxin exposure from contaminated oil used to stop a dust problem on unpaved roads ultimately prompted evacuation of the entire 2,240-person population. Some 265,000 tons of contaminated soil and debris from Times Beach and 28 other sites in eastern Missouri were eventually incinerated, at a cost of \$110 million.



1984
U.S. Dept. of Energy subject to RCRA
 Court ruling allowed citizens' groups and state officials to pierce the wall of secrecy around the 30 nuclear weapons laboratories and production facilities. Cleanups at most sites are ongoing.

1985
Diesel truck emissions regulated in U.S.

1986
U.S. Asbestos Hazard Emergency Response Act
 Requires inspection and appropriate handling of asbestos-containing materials in schools.

1988
Intergovernmental Panel on Climate Change
 Panel to assess the "risk of human-induced climate change" created by the United Nations' World Meteorological Organization and Environment Program.

1989
EPA ban on asbestos

1989
Exxon Valdez oil spill
Prince William Sound, Alaska, March 24
 Tanker ran aground and spilled 10.8 million gallons of oil, affecting 1,900 kilometers of coastline. In the aftermath, Congress passed the Oil Pollution Act of 1990.



1990

1990
British Building Research Establishment Assessment Method BREEAM
 BREEAM was the first voluntary "green" building rating system.

1991
Energy Star labeling
 EPA introduced the voluntary program for manufacturers to label energy consumption of products.

1992
Agenda 21
 179 heads of state adopt an agenda for sustainable development, at the U.N. Earth Summit in Rio.

1989
Off-road diesel engine regulations
 Regs were issued by EPA.

2004

2004
Greening of Chicago
 Chicago became the first city to require that public buildings achieve LEED certification.

2000

2000
LEED launched
 USGBC launched Leadership in Energy and Environmental Design, a voluntary rating system for green buildings, with LEED for new construction.

1999
World Green Building Council formed

1999

1998

1998
'Context-sensitive solutions' coined
 Major federal and state transportation officials first meeting to "think beyond the pavement."

1997

1997
Kyoto Protocol negotiated
 Protocol mandated industrial countries cut greenhouse-gas emissions by 6% to 8% from 1990 levels, by 2012. U.S. agreed to reduce emissions by 7%.

1995
Intergovernmental Panel on Climate Change report
 IPCC report concluded "there is a discernible human influence on climate change."

1995

1993

1993
U.S. Green Building Council formed

2005

2005
Kyoto Protocol in effect

2006

2006
"An Inconvenient Truth" released
 Documentary about global warming, featuring former vice president Al Gore, raised public awareness about human planetary abuse.



2006
Biomimicry Institute formed

2007

2007
IPCC's fourth global warming report
Paris, Feb. 2
 Hundreds of scientists agreed, with more than 90% certainty, that human use of fossil fuels is the main cause of climate change. Worst projections say temperatures could rise by 6.4°C by 2100.

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