



Global Warming and MAINE

Mainers take great pride in the beauty of the state's rock-bound coast, the majesty of Mount Katahdin and the bounty found within Maine's boreal and mixed hardwood forests. But global warming is changing the character of the state's natural resources. Maple sap is running a week earlier than it did just 50 years ago. The ice on Moosehead Lake has been breaking up an average of six days earlier than in the 1800s. Maine's average temperature has risen by more than 3 degrees Fahrenheit over the last century. The Environmental Protection Agency estimates the state's average temperature could increase another 4 degrees Fahrenheit by 2100, likely bringing more intense storms and more extreme summer heat.

We can solve global warming and revitalize our economy by rebuilding America with clean energy.



aine is home to an incredible diversity of native wildlife species, including 293 birds, 73 mammals, 54 fish, 21 reptiles and 17 amphibians. Rising temperatures and sea level in the state will likely change the makeup of entire ecosystems, forcing wildlife to shift their ranges or adapt.

• The breeding range of many species of songbirds may be pushed out of Maine, including several different flycatchers, swallows and warblers. Some of these birds are important to the state not only for their beautiful sounds, but for their appetite for gypsy moths, tent caterpillars and other invasive pests that harm vegetation.



- Spruce and fir trees that provide habitat to many songbirds could decline by up to 50 percent. Some forest species, such as sugar maple are projected to disappear from Maine entirely over the next century.
- Cold-water fish such as trout could lose habitat in Maine if temperatures continue to rise.

Global Warming Pollution

Burning coal, gas and oil produces carbon dioxide, which is a greenhouse gas that warms the planet as it builds up in the atmosphere. Some of the carbon dioxide released today remains in the atmosphere after even 100 years, trapping more and more heat.

Since the mid-1800s, emissions of carbon dioxide have skyrocketed, causing global temperatures to rise by about 1° Fahrenheit in the last century. Earth has not experienced such a rapid change in temperature in thousands of years.

A Global Solution

The U.S. must lead the world by passing global warming legislation at home and working with other nations at the Copenhagen climate summit at the end of 2009 to sign a new climate treaty

that keeps further warming below 2° Fahrenheit. With a global solution, we can avoid the worst impacts of global warming.



What's at stake for Mainers?

From fishing for trout to skiing in the mountains, Mainers depend on a cold climate to supply much-needed snow in winter and cold, clean stream flow in spring and summer. Analysis of sites across New England from 1949-2000 shows that the region has been experiencing less snow annually, a trend very likely to continue. It is just one of the ways global warming could affect the people of Maine.

- Maine's lobster fishery could collapse if warmer water makes the lobsters more susceptible to disease. Scientists studying lobsters from Long Island to Maine have found a correlation between warming surface ocean temperatures and a decline in healthy lobster populations.
- The EPA estimates that warmer weather could mean as much as 35-60 percent of the hardwood forests in Maine could be replaced by warmer-climate forests. Maine's maple syrup industry could disappear if, as scientists predict, the southern

"Global warming poses an overriding challenge to our responsibility to protect wildlife for our children's future. We must advance balanced solutions that work for people, wildlife and the economy to overcome this challenge."—

Larry Schweiger
President, CEO
National Wildlife Federation

range of sugar maples moves north into Canada.

Loss of wildlife and habitat could mean a loss of tourism dollars. In 2006, more than 1.3 million people spent more than \$1.3 billion on hunting, fishing and wildlife viewing in Maine.
 The industry in turn supported 22,524 jobs in the state.* (Jobs are an average of 2001 and 2006 data.)

GLOBAL WARMING NATIONAL POLICY SOLUTION:

A federal legislative solution can drive American ingenuity, create millions of green jobs, and restore America's global leadership on global warming. Legislation should:

- * Include ambitious targets to reduce America's global warming pollution as swiftly and deeply as possible. Scientists say that developed countries as a whole need to reduce their global warming pollution by at least 80% from 1990 levels by 2050 to avoid the worst impacts of global warming.
- * Move America toward a 100% clean electricity future by maximizing energy efficiency, modernizing the electric power grid, expanding power generation from renewable energy resources, and investing in clean transportation infrastructure.
- * Invest in natural resources. Forests, coasts, wetlands, clean air and clean water are already being impacted by global warming. Funding is needed to safeguard the natural resources that are critical to wildlife populations and human health
- * Lead a worldwide effort to finance clean energy technology, forest conservation, and adaptation to unavoidable impacts of global warming.

For more information, visit: www.nwf.org/globalwarming.



Maine's solutions to global warming

Maine has been a leader in developing solutions to global warming. The state signed a 2001 compact between New England governors and neighboring Canadian provincial leaders requiring a collective reduction of global warming pollution in the region. The Maine legislature was the first in the nation to set global warming goals.

- Maine passed a Cleaner Car Sales Goal law that requires carmakers to supply more cleaner cars to Maine dealers, including hybrid cars and trucks.
- The state requires 30 percent of the electricity generated within its borders to come from renewable sources.
- Maine has the potential to produce about 98 percent of its electricity from renewable sources such as wind and biomass, organic matter such as plant fibers and animal waste which can be converted into electricity and fuel.

Following some simple guidelines, you can cut your global warming pollution, become more energy efficient and give something back to nature.

- Plant shade trees: The Department of Energy says planting three trees strategically around your home to block the sun in summer and wind in winter will reduce your annual heating and cooling costs by an average of 40 percent.
- Convert to compact fluorescent bulbs: If every household in America replaced its next burned out light bulb with a compact fluorescent, we would prevent more than 13 billion pounds of carbon dioxide from being emitted. That's the same as taking 1.2 million cars off the road for an entire year.

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