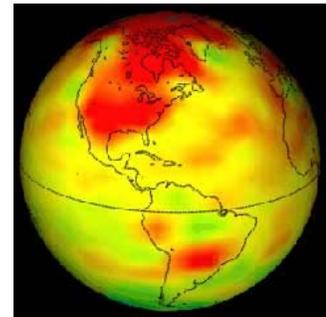


# CLIMATE CHANGE, CLEAN ENERGY, AND THE WAR AGAINST ACTION

As the threat of global warming becomes increasingly dire, the coal and oil industries have ramped up their campaign to influence politicians, spread disinformation, kill federal legislation, gut the Clean Air Act, attack clean energy sources, and unravel climate action at the state level. These huge corporations don't want Congress, EPA, or the states to address global warming. They are spending hundreds of millions of dollars and pulling out all the stops to block America's transition away from fossil fuels and toward a clean energy economy. If they are successful, then Maine's economy and environment lose, we don't improve our energy security and we forgo clean energy jobs.

**Global Temperatures are Increasing:** The past decade was the warmest ever, according to the latest report by the National Oceanic and Atmospheric Administration.<sup>i</sup> With input from 300 researchers in 48 countries, evaluating data from more than 7,000 weather stations, the report concludes that global warming is "undeniable." Each of the past three decades has been warmer than the previous one. The planet's temperature is steadily rising as global warming pollution increases.



**The Earth's Vital Signs Confirm Global Warming:** Measurements by scientists around the world are demonstrating that global warming is underway, largely as a result of the thickening blanket of pollution in the atmosphere caused by the combustion of fossil fuels. Sea surface temperatures, land surface temperatures, and ocean heat are increasing; sea levels and ocean acidity are rising; humidity is increasing; and snow cover, sea ice and glaciers are shrinking.<sup>ii</sup> The four greatest sea ice melts in the Arctic Ocean since satellite measurements began in the late 1970s have occurred in the past four years.<sup>iii</sup>



Photo Credit: Times Record

**Global Warming Impacts are Serious:** Our planet is heading toward severe heat waves, extreme weather, and major changes in the planet's ecosystems, which will have widespread impacts. Scientists predict that up to one million species could become extinct by 2050 if action isn't taken to drastically reduce climate-changing pollution from fossil fuels.<sup>iv</sup> The three billion people who live in poverty around the world will be hardest hit by global warming. A three-foot rise in sea level in Maine, as predicted, would submerge 20,000 acres of coastal land. Climate change would also alter Maine's forests, acidify our oceans and bring warmer sea temperatures that threaten our marine industries.

**Scientists Urge Immediate Action:** The National Academy of Sciences (NAS) recently concluded that global warming "poses serious, wide-ranging threats to human societies and natural ecosystems around the world."<sup>v</sup> The NAS recommends a 50-80% reduction in greenhouse gas emissions for the period 2012-2050, which it describes as "technically possible but very difficult." The report concludes that "national-scale response efforts are urgently needed." Essentially all available options (e.g. energy efficiency, clean energy, cleaner fuels) will be needed at levels near the maximum extent of what the NAS estimates is technically possible. Maine must do our part. We are overly dependent on coal, oil, and gas, and climate change poses a major threat to Maine's environment, economy, and quality of life.

# THE COAL & OIL LOBBY ARE WAGING WAR

**Fossil Fuel Industry Blocked Federal Climate Bill:** The nation's largest coal, oil, and gas companies succeeded last summer in blocking U.S. Senate passage of comprehensive climate and clean energy legislation. These companies spent a record \$175 million in 2009 to defeat a climate bill, more than eight times as much as environmental and clean energy groups.<sup>vi</sup> This money kept almost every Republican Member of the House and Senate—and 14 coal-state Senate Democrats—opposed to climate legislation, effectively killing our best prospect for a national breakthrough on clean energy. Although Senators Snowe and Collins appeared supportive of climate action, their efforts were insufficient in the face of this lobby.

**Disinformation Campaign and Fake Grassroots:** Two new books, *Climate War* and *Merchants of Doubt*, reveal an enormous disinformation campaign financed by the fossil fuel industry to create doubt in the mind of Americans about the climate crisis. The industry has created and funded dozens of organizations to attack climate policies, publicize pseudo-science, run massive public relations campaigns, and create fake “grassroots” events. The oil billionaire Koch Brothers have been linked with many of these efforts,<sup>vii</sup> including through their libertarian group Americans for Prosperity. Koch Industries is one of America's biggest polluters, and has outspent even Exxon Mobil on climate and energy disinformation. The American Petroleum Institute and major coal companies have bankrolled rallies across the nation to protest against climate legislation and invested huge sums in fear-mongering TV ads designed to scare Americans away from clean energy.<sup>viii</sup>



**Massive Funding to Defeat State Action:** In addition to blocking federal action, the fossil fuel industry is waging war against climate action by states. A major battle is underway in California, where a ballot measure written by Texas oil companies threatens to repeal the state's Global Warming Solutions Act. Koch Industries and oil companies Valero and Tesoro have spent more than \$6.5 million in their campaign to block clean energy. Koch-financed Americans for Prosperity also has held rallies in New England attacking the Regional Greenhouse Gas Initiative (RGGI) – the most successful regional agreement to reduce climate changing pollution in the country. RGGI has already generated \$20 million for energy efficiency grants in Maine.



**Attacks on Clean Energy and Clean Air Act:** The oil and coal lobbies also are funding attacks on wind power, with William Koch being one of the top funders of opposition to the Cape Wind project in Massachusetts. The Independent Petroleum Association of the Mountain States financed a completely inaccurate report claiming that wind power has not reduced carbon pollution in Colorado. Now the entire fossil fuel lobby has targeted the Clean Air Act, working with coal state U.S. Senators to block the Environmental

Protection Agency's ability to reduce climate changing pollution. The industry is working to block the transition to clean energy at every level, leaving the U.S. addicted to coal, oil, and natural gas while China and other nations race ahead in developing clean energy technologies for the energy economy of the future.

**Tell Senators Snowe and Collins to stand up to polluters and vote AGAINST efforts to undermine the Clean Air Act and the EPA.**

<sup>i</sup> [http://www.noaanews.noaa.gov/stories2010/20100728\\_stateoftheclimate.html](http://www.noaanews.noaa.gov/stories2010/20100728_stateoftheclimate.html)

<sup>ii</sup> [http://www.noaanews.noaa.gov/stories2010/20100728\\_stateoftheclimate.html](http://www.noaanews.noaa.gov/stories2010/20100728_stateoftheclimate.html)

<sup>iii</sup> <http://www.vancouver.sun.com/technology/Another+Arctic+thaw+experts/3496268/story.html>

<sup>iv</sup> <http://news.bbc.co.uk/2/hi/science/nature/3375447.stm>

<sup>v</sup> [http://dels.nas.edu/resources/static-assets/materials-based-on-reports/reports-in-brief/Limiting\\_Report\\_Brief\\_final.pdf](http://dels.nas.edu/resources/static-assets/materials-based-on-reports/reports-in-brief/Limiting_Report_Brief_final.pdf)

<sup>vi</sup> <http://www.opensecrets.org/news/2010/08/pro-environment-groups-were-outmatc.html>

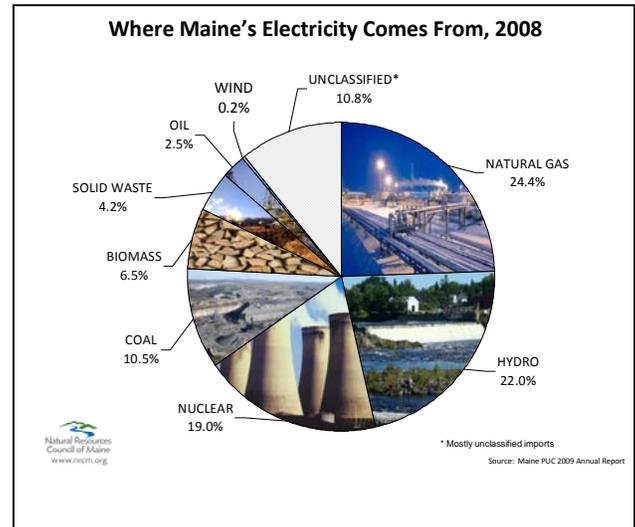
<sup>vii</sup> [http://www.newyorker.com/reporting/2010/08/30/100830fa\\_fact\\_mayer](http://www.newyorker.com/reporting/2010/08/30/100830fa_fact_mayer)

<sup>viii</sup> <http://itsgettinghotinhere.org/2010/08/17/american-petroleum-institute-launches-bogus-citizen-rallies-to-fight-regulation/>

# ENERGY SOLUTIONS FOR MAINE

**The energy system for America, New England, and Maine is dangerous, costly, and unsustainable.** Maine faces a particular energy challenge because of our heavy dependence on fossil fuels. Maine people and businesses spend more than \$5 billion every year on fossil fuels to provide heat, power, and transportation. Eighty percent of Maine homes are heated by oil – the highest level in the nation. The status quo, with too much oil, coal and gas, is resulting in air pollution that threatens public health, mercury contamination that threatens wildlife, landscape destruction, and pollution that increases the threat of catastrophic climate change. **We must change course to cut pollution, save money, create jobs and become more energy independent**

**Where Maine's Electricity Comes From:** Although Maine generates more electricity on an annual basis than it uses, we are constantly importing and exporting electricity – just like any other commodity. Maine Public Utilities Commission reports that Maine receives about 47% of our electricity from natural gas, coal, oil, and unclassified fuels; 22% from hydro; 19% from New England's five nuclear power plants; and 11% from biomass and solid waste. The nine coal-fired power plants that provide Maine with 11% of its electricity get their coal from huge open pit mines, and from mountaintop removal coal operations in Appalachia. These plants burn five million tons of coal annually. While cleaner than coal, New England's natural gas power plants annually produce the same total amount of global warming pollution as do our coal plants—and oil and gas drilling are dangerous and destructive.



**Maine's Strategy for Reducing the Harm from Energy:** Maine's Climate Action Plan is a blueprint for action to reduce Maine's global warming pollution 10% by 2020. The Plan recognizes that Maine needs to move ahead on many fronts to do its part to cut global warming pollution, increase energy efficiency, harness clean renewable power sources, limit power plant pollution, enact federal and national policies and more. In 2007 Maine joined with ten other states to form the Regional Greenhouse Gas Initiative (RGGI), a successful "cap-and-trade" program for reduce climate changing pollution from power plants. So far, Maine has received \$20 million, from RGGI's auction of credits, to invest in energy efficiency projects. Maine also has set ambitious goals to weatherize all homes and half of our businesses by 2030, and created the Efficiency Maine Trust to achieve these goals. Investing in energy efficiency must be Maine's top energy priority, because it is the least expensive way to reduce our dependence on fossil fuels. But, unfortunately, even strong, widespread energy efficiency efforts alone will not be sufficient to achieve the deep reductions needed in global warming pollution.



**Wind Power is a Major Emerging Source of Clean Power:** Wind power is the most cost-effective and mature source of clean energy that can displace significant amounts of fossil fuel use. Wind power meets roughly 20% of Denmark's electricity demand, 14% of Spain's and Portugal's, 11% of Ireland's, and 8% of Germany's. China is pursuing several of the largest wind power projects ever, at more than 10,000 MW each. The U.S. has the most total wind power in the world (35,000 MW, in 36 states), followed by China and Germany. Over the last decade Europe has installed 65,000 MW of wind power while decommissioning 12,000 MW of coal and 13,000 MW of oil-fired power plants. For the past five years in a row, the U.S. has added more new wind power generation than new coal generation to meet electrical demand. Wind power in the U.S. now provides roughly 2.5% of the nation's electricity.

**Role of Wind Power in Maine:** Wind power is not a panacea for our energy problems. In reality, there is no silver bullet that can lead to an 80% reduction in fossil fuel use by 2050, as recommended by the world's top scientists. Rather, Maine needs to pursue many approaches, each of which can provide a portion of the change that is needed. The Department of Energy has concluded that the U.S. can satisfy 20% of its electrical needs with wind power by 2030. Doing so would cut climate-changing pollution by 25%, while causing large reductions in the use of coal, oil, and natural gas generation. Here in Maine, the Governor's Wind Power Task Force in 2007 analyzed how much wind power would be needed as part of a comprehensive energy strategy aimed at reducing New England's global warming pollution. The analysis assumed large improvements in energy efficiency across the region, substantial development of other renewable energy sources (e.g. solar, tidal, landfill gas), and significant contributions from transportation and other sources. Based on this modeling, the Task Force concluded that Maine should seek to host 2,000 MW of installed wind power by 2015 and 3,000 by 2020. With further research, offshore wind could contribute large amounts of power by 2030.



**Wind Power Reduces Oil, Coal and Gas Pollution:** Extensive studies demonstrate that wind power reduces global warming pollution as it displaces electrical generation from coal, oil, and natural gas:

- Our electricity system provides precisely the amount of electricity needed to satisfy consumer demand. Each kilowatt of wind power generated forces a decrease in electricity at another power plant. The most expensive fuels are always displaced first, which in New England typically are oil and gas, but in other regions is coal. Because wind power uses no fuel, it gets used first.
- Four of the seven major electricity system operators in the U.S. have studied the impact of adding wind energy to their power grids, and all four have found that adding wind energy drastically reduced emissions of air and global warming pollutants.
- Department of Energy data shows that as wind power increases, fossil fuel combustion decreases. For example, as the share of Colorado's electricity provided by wind power increased 3.6% between 2007 and 2008, the state's climate changing pollution decreased 4.4%.
- Experience across the U.S. and Europe shows that the level of additional reserves needed to accommodate wind energy is inconsequential. Concerns about "backup power" negating the climate benefits of wind power are not factual.

**Careful Siting of Wind Power is Needed:** One of the challenges of wind power is that it must be sited where there is a sufficient wind resource. Maine is ranked among the top 20 windiest states, yet only 6-8% of Maine's total land area has strong enough winds to support an economically viable wind power project. NRCM, Maine Audubon, and the Appalachian Mountain Club worked hard as part of the Governor's Wind Power Task Force to ensure that wind power will not jeopardize Maine's North Woods. As a result of our work, more than two-thirds of Maine's unorganized townships (7 million acres), including almost all of Maine's 50 highest peaks, do not qualify for expedited review (yellow areas on map). Maine is the only state that has a higher permitting standard for one-third of its land – in this case, the core of Maine's North Woods. Within Maine's "expedited" permitting area, each project must be carefully evaluated, and some should not be approved based on site-specific impacts.

