

### **The Threat of Carbon Pollution: Vermont**

We have a moral obligation to leave our children a planet that's not polluted or damaged, and by taking an all-of-the-above approach to develop homegrown energy and steady, responsible steps to cut carbon pollution, we can protect our kids' health and begin to slow the effects of climate change so we leave a cleaner, more stable environment for future generations. Climate change impacts including severe weather, asthma attacks, and prolonged allergy seasons are affecting our security, our economy, and our communities. In 2012 alone, the cost of weather disasters exceeded \$110 billion in the United States, and climate change will only increase the frequency and intensity of these events. Today, we already set limits for arsenic, mercury and lead, but we impose no limits on how much carbon pollution our power plants release. Carbon pollution is contributing to a higher risk of asthma attacks and more frequent and severe storms, floods, heat waves, and wildfires, driving up food prices and threatening our communities. The President's plan is a comprehensive approach to cutting the pollution that causes climate change and threatens public health, setting us on a path to make our communities healthier, safer, and more resilient.

#### **THE IMPACTS OF POLLUTION AND EXTREME WEATHER IN VERMONT**

In 2011, power plants and major industrial facilities in Vermont emitted more than 500,000 metric tons of carbon pollution—that's equal to the yearly pollution from more than 104,800 cars.

Recent incidents provide a reminder of the impacts to our public health and costs due to extreme weather in Vermont. Although we cannot say that climate change is responsible for any individual event, climate change is already increasing our risks from these events.

- Trends in freeze dates, length of the growing season, frozen period of small lakes, and onset of spring reflect a consistent pattern of a warming climate in Vermont during the past fifty years.
- In Vermont, over 500 miles of roadways and approximately 200 bridges were damaged during Hurricane Irene, with estimated rebuilding costs of \$175-250 million. Some of the impacts include damage to water and wastewater treatment plants, agricultural losses, and isolation of small towns.
- In Vermont, there were over 300 hospital admissions for asthma in 2011, with an average charge of over \$12,400 for each stay.

#### **ANTICIPATED CLIMATE-RELATED RISKS IN THE NORTHEAST**

Northeast states can expect more climate change related heat waves – with significantly more days above 90oF – and flooding from sea level rise and extreme precipitation events. Even low-end projections anticipate that historical 100-year coastal floods will happen as often as every 22 years by the end of the century. There is \$2.3 trillion of insured coastal property at risk in New York State alone. Northeasterners are already experiencing increased heavy precipitation. Extreme heat and declining air quality are expected to increase risk associated with respiratory problems and heat stress, both of which pose increasing problems for human health, especially in urban areas, and can result in increased hospitalizations and even premature death. Rising temperatures and carbon

dioxide concentration increase pollen production and prolong the pollen season, increasing health risks for people with allergies. Agricultural production, including dairy, fruit, and maple syrup, are likely to be adversely affected as favorable climates shift, while the center of lobster fisheries is projected to continue its northward shift and the cod fishery on Georges Bank is likely to be diminished.

## CUTTING CARBON POLLUTION AND INCREASING RESILIENCE IN VERMONT

Climate change is a long-term problem, but we can make substantial progress through a series of steady and responsible steps. The President's plan builds from progress already underway to work with states, local communities, and the private sector to reduce carbon pollution and to prepare our Nation for the impacts that cannot be avoided. Since 2009, President Obama has taken a number of common sense measures to combat carbon pollution, including:

- ***Investing in Clean Energy:*** During the President's first term, the United States more than doubled its use of renewable energy from wind, solar, and geothermal sources. In Vermont, renewable energy generation from these sources increased nearly 10 percent. Since 2009, the Administration has supported tens of thousands of renewable energy projects throughout the country, including nearly 220 in Vermont, generating enough energy to power nearly 11,000 homes and helping Vermont meet its own goal of generating 20 percent of its electricity from renewable energy sources by 2017.
- ***Improving Efficiency:*** Using less energy to power our homes, businesses and vehicles is critical to building a clean and secure energy future. President Obama has made essential investments in research and development for energy efficiency advances, and set new standards to make the things we use every day – from cars to microwaves – more efficient.
  - President Obama established the toughest fuel economy standards for passenger vehicles in U.S. history. These standards will double the fuel efficiency of our cars and trucks by 2025, saving the average driver more than \$8,000 over the lifetime of a 2025 vehicle and cutting carbon pollution.
  - Since October 2009, the Department of Energy and the Department of Housing and Urban Development have jointly completed energy upgrades in more than one million homes across the country, saving many families more than \$400 on their heating and cooling bills in the first year alone.
- ***Preparing Communities for the Consequences of Climate Change:*** The Obama Administration has worked since its earliest days to strengthen the Nation's resilience to climate change impacts, including investing in critical science and tools, developing the first-ever Federal agency climate adaptation plans, and directly partnering with communities. For example, Centers for Disease Control and Prevention is supporting efforts to bring experts and resources together to better understand potential climate changes in Vermont, predict and monitor health effects, identify the populations most vulnerable to these effects, and develop programs to protect the public's health.