

The Carbon CO₂alition Newsletter



Blue sky and forest at the Horatio Colony Nature Preserve, Photo by Paul Bocko.

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"The Carbon Coalition works to educate New Hampshire citizens about the local and global impacts of global warming."

Meet the Carbon Coalition

The Carbon Coalition is a non-partisan grassroots network of citizens, businesses, students, communities, and organizations who've come together to advocate for a national energy policy that protects our communities and environment from the ravages of global warming caused by carbon pollution.

What do we do?

The Carbon Coalition works to educate New Hampshire citizens about the local and global impacts of global warming through various programs such as the Carbon Coalition speaker's bureau. It also promotes national and local action on climate change solutions through the Town Meeting Campaign and the 2007 Climate Change Conference.

Coalition Structure and Supporters

Ted Leach of Hancock and Joseph F. Keefe of Manchester serve as the Carbon Coalition's two co-chairs. The Coalition has a 22 member steering committee. (See our web site for more details: www.carboncoalition.org.)

The following list of organizations and individuals are charter members of the coalition...

- ❖ The New Hampshire Sierra Club;
- ❖ Trout Unlimited (New Hampshire);
- ❖ The National Wildlife Federation;
- ❖ The Defenders of Wildlife;
- ❖ The American Snowmobilers Assoc.;
- ❖ The Conservation Law Foundation;
- ❖ The Society for the Protection of

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164 Granite State Towns Adopt Resolution: Communities Vote in Favor of Climate Change

This past spring, attendees at 164 New Hampshire town meetings voted to support the Climate Change Resolution. The resolution is a non-binding agreement that encourages the President and Congress to address the issue of climate change, while also encouraging supporting towns to cut

carbon emissions in their communities. 182 communities voted on the ballot measure. 13 communities did not pass the measure and 5 communities tabled the measure. 32 different organizations have officially endorsed the resolution. To read the resolution see our web site at : www.carboncoalition.org.



A Monadnock Region Heron Rookery, Photo by Eric Aldrich.

Did You Know?

✓ New Hampshire is one of the five fastest growing CO² emitters in the United States.¹

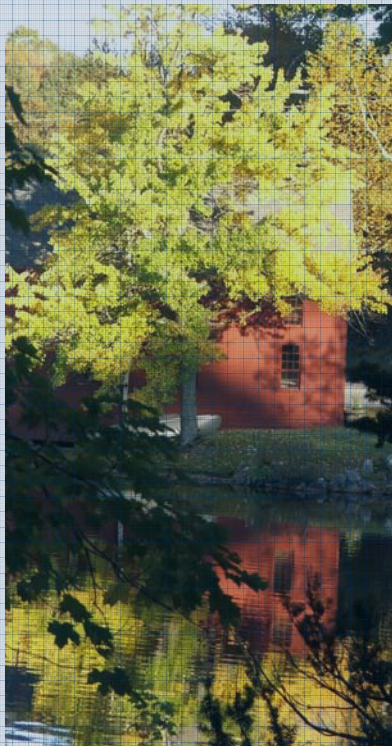
✓ New Hampshire's release of greenhouse gases, which contribute to global warming, went up 50% between 1990 and 2004.²

✓ Today's atmosphere contains 32% more CO² than at the industrial era in the mid-19th century.³

1. *The Carbon Boom*, Environment California Research and Policy Center.

2. *Achieving Greenhouse Gas Reductions Through Community Mobilization in NH*, Clean-Air-Cool Planet

3. *Epping Proposes to Go Green*, Amy Quinton, NH Public Radio, 3/12/07



Harrisville, NH. Photo by Jack Calhoun, Antioch New England Institute.

Epping adopts energy efficiency performance guidelines

Other NH communities move to reduce green house gases

Several towns in New Hampshire have already begun programs to reduce their carbon emissions and increase their energy efficiency and sustainability. Epping recently became the first New Hampshire community to require that commercial buildings meet energy efficiency performance guidelines.

The Epping ordinance requires that commercial-building applicants must achieve a set number of 'points' under a system that assigns point values for different energy efficiency options. Builders don't have to adopt all of the energy efficiency options, but they do need to achieve a certain point total for a building to be approved. The system requires more points for larger buildings and builders can use materials produced in New Hampshire or from construction waste to achieve points toward Zoning Board approval.

Epping's town ordinance is not as strict as the LEED (Leadership in Energy and Environmental Design) certification and other nationwide green building standards, but it does encourage local builders and businesses to improve energy efficiency and decrease carbon emissions.

What's happening in other communities:

In addition to forming committees and passing ordinances to improve energy efficiency in their respective towns, many towns across New Hampshire are incorporating energy efficiency and green building technologies into their town's infrastructure. Here are examples.

Portsmouth

Portsmouth has had a Blue Ribbon Committee on Sustainable Practices since 2005. The committee developed a no idling policy for city vehicles, made energy efficiency improvements in city buildings, expanded its public transit system, and constructed a new library that is LEED certified. Last year the committee started looking into ways the city could revise zoning regulations to require private builders to build for energy efficiency.

Nashua

In 2006, Nashua started a survey, assisted by the Cities for Climate Protection, to gather data on the levels of and sources of its carbon dioxide emissions.

According to their findings, the city released 1.2 million tons of carbon dioxide in 2000 with a projected increase to 1.7 million by 2010.¹ As a small step toward reducing carbon emissions, the city tells all potential vendors that Nashua supports "buying recycled goods, biodegradable material and other environmentally sound items."²

Keene

In 1994, Keene developed a methane recovery system that captures more than 98% of the methane released from the town landfill. This methane is used for combustion and energy production and³ eliminates 140 tons of hydrocarbons per year that otherwise would be released into the atmosphere.⁴ Keene's methane recovery project cost approximately \$280,000 and had only a five year payback period with a continued electrical savings of \$55,000.⁵

Lempster

The Lempster Wind Project is a planned 24 MW wind power project that will consist of twelve turbines. When completed, the turbines will have the capacity to provide the annual electricity needs of approximately 10,000 New Hampshire homes.

Somersworth

Energy saving lighting and other improvements in housing authority units save Somersworth \$45,000 per year.

Claremont

Claremont converted 1,016 streetlights to energy efficient models to save \$27,000/year- and saving \$118,000 per year once the improvement loan is repaid. (See the Carbon Coalition web site listing of carbon reduction projects at: www.carboncoalition.org.)

Footnotes

¹ *Nashua Telegraph*, *City Hall Makes Strides Toward Becoming Eco-Friendly*, 1/29/06

² same

³ www.cleanair-coolplanet.org/for_communities/methane.php

⁴ www.ci.keene.nh.us/planning/climate/Keene.htm

⁵ www.cleanair-coolplanet.org

Carbon Coalition Workshops!

Are you a Town Energy Committee member? Do you want to promote energy efficiency or renewables in your community? Is environmental sustainability important to you?

If so, the Carbon Coalition's Town Energy Committee Workshop is for you!

June 12, Greenland: Sandy Point Discovery Center, 6-9 p.m.

June 16, Berlin: NH Community Technical College, 9-12 a.m.

June 20, Nashua: City Hall Auditorium, 6-9 p.m.

June 23, Concord: NH Audubon McLane Center, 9-12 a.m.

June 28, Keene: Heberton Hall at Keene Public Library, 6-9 p.m.

Developed in response to the Climate Change Resolution's great success, the workshops are designed to help citizens and municipal officials start and sustain energy committees or to initiate local energy conservation projects.

The workshops will focus on practical strategies for taking action in your town, and are designed to be replicable and relevant to towns of every size and political flavor. Lively, interactive sessions will include topics such as:

- ❖ How to gain community support
- ❖ Funding sources for committees and projects
- ❖ Energy efficiency in homes and businesses
- ❖ Carbon footprint calculation
- ❖ Renewable energy at the community scale

Registration is \$10 in advance or \$15 at the door. Register online at www.carboncoalition.org, or send a check, your contact information, and your chosen workshop date to the Carbon Coalition, 100 Market Street, Suite 204, Portsmouth, NH 03820. Light refreshments will be served.

For more information, see www.carboncoalition.org or contact Maura Adams at the Jordan Institute, mkadams@thejordaninstitute.org or phone 603-226-1009, extension 204.

Available Town Resources

These resources can help your town start a carbon reduction policy and increase local energy efficiency.

Building Green—Info on environmentally responsible building design and construction. Visit: www.buildinggreen.com.

Biomass Energy Resource Center—Consultants on biomass and cogeneration projects. Contact Tim Maker at 802-223-7700, tmaker@biomasscenter.org.

Clean Air-Cool Planet—Helps towns to make greenhouse gas assessments and organizes training opportunities. This organization provides much on-line info. Visit: www.cleanair-coolplanet.org/for_communities/index.php

International Council for Local Environmental Initiatives (ICLEI)/ Cities for Climate Protection Plan—Offers technical services and consultancy on sustainable development for communities throughout the world. Visit: www.iclei.org/us.

Kilowatt Partners—Helps towns implement a seven-step procedure for reducing their energy use and bills. Call 802-985-2285 or visit: www.kilowatt.com

Landfill Methane Outreach Program (LMOP) -- A federal EPA program that offers a wide range of free technical, promotional, and informational tools as well as support services to assist with the development of landfill gas to energy projects. Visit: www.epa.gov/lmop and also visit their LMOP funding guide at www.epa.gov/lmop/res/guide/federal.htm

Municipal Energy Program—Helps towns identify ways municipally owned buildings can reduce energy costs through conservation and efficiency. Conducts energy efficiency evaluations and assists towns in finding contractors to install energy efficiency upgrades and find rebates/financing to pay for the upgrades. Program funded until August 2007 by Rebuild America. Call Alison Hollingsworth at 888-921-5990 ext.1105

New Hampshire Sustainable Energy Association (NHSEA)— Provides an online consumer resource guide, which includes a directory of regional businesses that provide services in renewable energy and green building. To download the guide, visit: www.nhsea.org/download/Consumer_Guide_for_Services.pdf

Sustainable Energy Resource Group—Consults with New Hampshire and Vermont communities on energy organizing, planning, and programs and conducts energy audits. Provides discounts on efficiency and renewable products and services through its Energy Alliance. Call Bob Walker at 802-785-4126, SERG@valley.net, or visit: www.SERG-info.org.

U.S. Green Building Council (USGBC)—Provides educational programs and workshops on green building. Call 202-828-7422 or visit: www.usgbc.org/

"The cheapest and least polluting gallon of oil or ton of coal is the gallon or ton you don't use."

Available Funding Resources

These sources can provide funding for carbon reduction and energy efficiency projects.

Ben and Jerry's Foundation - Offers grants to nonprofit, grassroots organizations that facilitate progressive social change by addressing the underlying conditions of societal and environmental problems and lead to new ways of thinking and acting. Call 802-846-1500 or visit: www.benjerry.com/foundation/ for more info.

Environmental Support Center—Offers small grants to local, state, and regional efforts in the Northeast to promote the quality of the natural environment, human health, and community sustainability. Call 202-331-9700 or visit: www.envsc.org

New England Grassroots Environmental Fund—A small grants program that fosters grassroots environmental initiatives. They provide grants of up to \$2500 toward community directed projects. Grants may be put toward a Community energy Group or Commuter Choices. Call 802-223-4622 or visit: www.grassrootsfund.org. E-mail at: fisher@grassrootsfund.org

New Hampshire Charitable Foundation—A nonprofit charity that funds a variety of community improvement projects. Call at 603-225-6641 or visit: www.nhcf.org/page17081.cfm. E-mail at: info@nhcf.org

USDA rural development: Community Development Program—Makes loans and loan guarantees for renewable and energy efficiency improvements including grants. Visit: [www.rurdev.usda.gov/rbs/farbill/what is.html](http://www.rurdev.usda.gov/rbs/farbill/what%20is.html)

Global Warming and NH: What it means for our Communities

According to the recent New England Regional Assessment (NERA) report on climate change, New Hampshire residents can expect to suffer negative economic and health impacts as a result of the predicted rise in the region's temperatures in coming decades. One climate change model in place, known as the Hadley model, predicts a 6 degree fahrenheit temperature increase and a 30% increase in precipitation in our region as a result of global warming.

Health factors to be considered include the rise in infectious and vector-borne diseases such as Lyme disease, which is carried to humans by deer ticks. Mild winters allow deer ticks to survive and expand their range northward. A warmer climate in New Hampshire, particularly an increase in mild, wet winters, would also stimulate increased breeding and larger numbers of mosquitoes in the late spring and summer months. West Nile Virus and Eastern Equine Encephalitis (EEE) are mosquito borne diseases that have increased in the northeastern United States in the past decade and could increase in New Hampshire as a consequence of warming. Two years ago in 2005, state health officials reported seven cases of EEE across the state by, two of which resulted in death.¹

Other health consequences of global warming could include a rise in 'red tides,' toxic forms of algal blooms along the coast. The more toxic forms of blue-green algae favor hotter summers, and in turn can infest shellfish that are sold for consumption.

Residents can also expect increases in more severe storms and hurricanes over the coming decades. Along with the safety problems presented, severe weather causes economic stress due to the public and private property damage caused by flooding and wind damage. Already, many homeowners in coastal communities along the New Hampshire seacoast face significant insurance premium increases in homeowners insurance, or complete denial of coverage, because of the predicted rise in sea levels that global

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Sketching in the Ashuelot River Park, Keene, NH.
Photo by Polly Chandler.

CO₂ and Grassroots Organizations: What Massachusetts and Vermont are doing.

New Hampshire's Carbon Coalition is a partnership of organizations and individuals working to increase energy efficiency and reduce carbon emissions in the granite state.

Throughout the U.S., individual states and communities, not the Federal Government, lead efforts to educate the public of the benefits of energy efficiency and sustainability. Grassroots groups like the Carbon Coalition play an important role in spreading the word about reducing carbon emissions.

Across the river in Vermont, the Vermont Energy and Climate Action Network (VECAN), is a collaborative, membership-based organization that works to "support local energy and climate-action committees across Vermont."¹ VECAN includes 40 towns among its membership along with the Vermont Natural Resources Council, the Alliance for Climate Action, the New England Grassroots Environment Fund, the Sustainable Energy Resource Group, and the Vermont Energy Investment Corporation.

As a result of VECAN's efforts, several towns in Vermont, including the cities of Burlington and Brattleboro, have expressed interest in forming their own town energy and climate action committees. Currently, over 15 towns have put in place strategies to reduce their carbon emissions.²

VECAN has a core group of members that meet regularly. The group publishes a *Town Energy and Climate Action Guide*, which provides towns with information on how to start up an energy committee and includes a listing of resources and funders that can help support local energy initiatives.

The Vermont Climate Action Network used the Massachusetts Climate Action Network (MCAN) as a model in its initial startup stages. MCAN members come from Massachusetts communities that have joined forces to educate the public and influence local government concerning the importance of developing climate change policy and reducing local greenhouse gas emissions. MCAN is actively helping towns write-up and implement energy action plans.³

These are just two of many nationwide organizations and coalitions that are taking the lead in increasing awareness and doing something about carbon emissions.

Footnotes

¹www.VNRC.org

²www.VRNC.org

³www.massclimateaction.org/whoweare.htm

The Carbon Coalition Charter Signatories

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- New Hampshire Forests;
- ❖ Northland Forest Products;
- ❖ The Appalachian Mountain Club (Walter Graff);
- ❖ The Harris Center for Conservation Education;
- ❖ Interlocken (Richard Herman);
- ❖ Stonyfield Farm Inc. (Gary Hirshberg);
- ❖ The Jordan Institute;
- ❖ The UNH Office of Sustainability Programs:
Climate Education Initiative Working Group;
- ❖ EcoFish, Inc. (Henry Lovejoy);
- ❖ The Seacoast Science Center (Wendy Lull);
- ❖ The Audubon Society of New Hampshire;
- ❖ Robert R. Lucie, Concord, New Hampshire;
- ❖ Charlton McVeagh, Marlborough, New Hampshire;
- ❖ The Northern Forest Center; NH Global Warming and
the New Hampshire Office of the National
Environmental Trust (Jan Pendlebury); and
- ❖ The Peterborough Conservation Commission.



Sullivan County residents work on recycling and green house gas reduction. Photo by Jim Gruber.

Global Warming and NH

Continued from page 4

warming would bring about. Higher sea levels mean increased damage and flooding from storm surges as a result of coastal storms and hurricanes. Current studies estimate a sea level rise of 1-3 feet is by 2100.²

Another potential impact of climate change on the region's economy is through the loss of tourism revenue. With predicted warmer temperatures, frost dates will be pushed back farther into the fall. This could lead to a dampening of New Hampshire famous and spectacular fall foliage, a big tourism draw. Less foliage color could also result due to a change in the tree species composition of New Hampshire's forests. A warmer climate would lead to a decline in the sugar maple.

With an increase in temperatures, some scientists are predicting an eventual transition to an oak-hickory forest in New Hampshire. With a change in the species composition of New Hampshire's forest and the resulting loss of sugar maples, the production of maple syrup would also take a big hit. New Hampshire's maple sugar industry could stand to lose about 1.4 million dollars in revenue over a ten year period with the decline of the sugar

maple.³ As of 2004, New Hampshire's maple syrup production brings about 4 million dollars annually into the New Hampshire economy.⁴

Warmer winters in New Hampshire would also lead to a decrease in snowfall, which along with increased winter rains and thaws, would produce an inadequate winter snow pack for winter recreation, particularly snowmobiling and skiing.

There are still a lot of unknowns about how climate change will ultimately effect New Hampshire's economy, but there is little doubt that it will have negative consequences for many New Hampshire businesses and communities. The sooner we take responsibility for our actions and cut down on carbon emissions, the better off future generations will be. The time to act is now.

¹ Berry, Jake, *Heading Off the Buzz, The Keene Sentinel*, 5/3/07

² FEMA & Federal Insurance Administration, *Impact of Relative Sea Level Rise on the National Flood Insurance Program*, 10/01

³ Quinton, Amy, *Climate Change Impacts NH Forests*, NH Public Radio, 3/01/07

⁴ *Associated Press*, *Warming Trend Blamed for Syrup Season Change*, 3/22/04

Carbon COalition

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100 Market St. Suite 204
Portsmouth, NH 03801
Contact info: 603.422.6464
info@carboncoalition.org

Contributors: Toby Ball; James Gruber (Antioch New England Institute, ANEI);
Editor: Jan Fiderio, ANEI
Lead writer: Matt Maloney, ANEI

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100 Market St. Suite 204
Portsmouth, NH 03801

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