# **New England and Eastern Canada**

# CLIMATE CHANGE ACTION Report Card 2007

4th Assessment of the Region's Progress Towards GHG Emission Reduction Targets

November 2007

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#### November 2007

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# **Executive Summary**

# INTRODUCTION

In 2001 the New England Governors and Eastern Canadian Premiers (NEG/ECP) agreed to a comprehensive *Climate Change Action Plan* with the long-term goal of reducing greenhouse gas emissions in the region by 75-85%. As that plan accurately pointed out, "global warming, given its harmful consequences to the environment and the economy, is a joint concern for which a regional approach to strategic action is required." The Plan set the following goals:

- Reduce regional greenhouse gas (GHG) emissions to 1990 levels by 2010.
- Reduce regional GHG emissions by at least 10% below 1990 levels by 2020.
- Reduce regional GHG emissions by 75-85% in the long-term.

Achieving each reduction benchmark of the *Climate Change Action Plan* is vital and thus the Plan includes eight "Action Items" to guide the actions and policies of the states and provinces in meeting those objectives. Since this voluntary agreement was made emissions have risen. While emissions in some states and provinces have leveled off, none are on track to meet the emission reduction goals.

As in prior years, the 2007 Report Card evaluates and grades the progress the states and provinces have made towards achieving the eight Action Items ("policy grades"). We are now less than three years away from the first reduction benchmark, reducing greenhouse gas emissions to 1990 levels by 2010. As NASA scientist James Hansen stated in 2006, "We have a very brief window of opportunity to deal with climate change... no longer than a decade, at the most."

Global warming pollution- mainly carbon dioxide, comes from three major sectors: electric, transportation, and buildings. Policies and real actions that address emissions from these sectors are what the New England Governors and the Eastern Canadian Premieres and their respective legislating bodies need to reduce emissions.

# **HIGHLIGHTS**

There is a large variation of policies and programs being implemented throughout the region to combat global warming. Certain states and provinces have made significant progress to reduce emissions within three major sectors:

- I. Electric Sector
- **II.** Transportation Sector
- **III.** Building Sector

Policies and programs highlighted are those making the largest strides in reducing greenhouse gas emissions from the major contributing sectors. These are model policies and programs that should be implemented throughout the entire region.

While progress has been made throughout the region in a number of the categories, none have made enough progress. None are on track. However, a legally binding economy-wide commitment to meet the levels of emissions reductions outlined in the *Climate Plan* could reverse this trend. California, New Jersey and Hawaii have already committed to mandatory caps for their states. Also, there must be specific mandatory policies to supplement the cap, such as programs like the Regional Greenhouse Gas Initiative.

<sup>&</sup>lt;sup>1</sup> New England Governors / Eastern Canadian Premiers Climate Change Action Plan 2001. August 2001, page 1.

## I. Electric Sector

Growing energy demand in the region has resulted in our continued reliance on older, dirtier fossil fuel power plants. Old and inefficient homes and businesses are using far too much electricity, which is both economically and environmentally costly.

Policies and legislation that curb electricity use and promote energy efficiency, and develop more clean distributed generation and renewable energy must be required. Here are examples of effective policies that are being implemented in the region to curb global warming pollution:

#### Regional Greenhouse Gas Initiative

# It is the first regional agreement to reduce GHG emissions from the electric sector.

As of 2007, all six of the New England states signed onto the regional greenhouse gas initiative (RGGI). RGGI sets an overall cap on carbon dioxide ( $\rm CO_2$ ) emissions from electricity power plants. The cap should hold  $\rm CO_2$  emissions from power plants constant at approximately 2002-2004 levels from 2009-2014, and then reduce emissions to 10% below those levels by 2018.

Each state has the opportunity to determine whether they will issue allowances or auction off pollution permits equal to the cap amount. Auctioning all emission permits to power generators will yield revenue to reinvest in programs that will help residences and businesses become more energy efficient, promote clean energy, and reduce rate-payer costs. Connecticut, Rhode Island, Massachusetts, Vermont and Maine are moving towards auctioning all or nearly all of the pollution permits.

This initiative in New England is a good start in reducing emissions from the electric sector. While the regulatory framework is a step forward, the modest reductions in the near-term are only a beginning to achieving the science-based long-term reductions. Canada must follow suit with a similar, but stronger initiative, and the RGGI cap must continue to decline over time and mandatory caps must be applied to additional sectors.

#### **Energy Efficiency**

Efficiency Vermont is the first and most effective statewide energy efficiency utility in the country.

Any household, community, state, or province seeking to reduce greenhouse gas pollution while saving money must consider energy efficiency as the resource of first resort as it is reliable, measurable, clean, and cost-effective.

The Vermont efficiency utility works with businesses and residential consumers to identify opportunities for them to install more efficient lighting, refrigeration systems, manufacturing processes, etc. Through technical expertise, training, financial incentives and creative financing, Efficiency Vermont has helped Vermonters save \$200 million over the past six years<sup>2</sup>.

In Vermont studies have shown that investments in energy efficiency can provide over 20 percent of our future electric energy requirements over the next 10 years with a net savings. In fact, investing in efficiency is currently cheaper than purchasing electricity from any other source. For every dollar invested in energy efficiency, the consumer saves three.<sup>3</sup> During its first six years of operation (2000-2005), Efficiency Vermont cut Vermont's average rate of growth in electricity requirements by over 50 percent. The investment made by the efficiency utility ranged from \$25 to \$31 per MWh, less than half the price that Vermont utilities would have had to

<sup>&</sup>lt;sup>2</sup> Efficiency Vermont. 2005 Results Summary

<sup>&</sup>lt;sup>3</sup> Optimal energy, Inc. for Northeast Energy Efficiency Partnerships, Economically Achievable Energy Efficiency in New England, May, 2005

pay for electricity supply had this energy not been saved. 4

In 2005, the Vermont legislature lifted the funding cap that had been placed on the efficiency utility and required that the utility be funded to capture all cost-effective efficiency potential. In the subsequent proceedings, the energy efficiency budget was expanded by nearly 100%. Vermont, with a statewide population of less than 650,000 people, will be investing \$31 million dollars a year in energy efficiency by 2009.

Efficiency Vermont's Despite tremendous success, there are still some areas that require improving. For example, it has not played as full a role in electric planning at the state level as it should, nor has its rolling three year contract creative financing to capitalize efficiency projects that might have a longer timeline. Both the Vermont legislature and the Governor's Department of Public Service have expressed a desire to further strengthen the utility and deal with these and other shortcomings that are artificially limit the utility's ability to deliver savings to Vermonters.

Efficiency Vermont needs to be expanded to include home heating programs. The utility is currently funded through a charge on electric bills, not heating bills. Approaching energy consumption from a whole building approach will yield higher levels of efficiency and savings. A 2006 study done by the Department of Public Service determined that there is nearly \$500 million worth of potential savings to be captured over the next decade, at a 3:1 payback, for building efficiency investments. Efficiency Vermont's mandate should be expanded and funded to reduce heating fuel needs.

Least Cost Energy Planning

Least cost energy planning in Connecticut and Rhode Island puts efficiency first.

While distinct from the Vermont approach, recent legislation in Rhode Island and Connecticut also puts them on track to achieve all cost-effective efficiency. In 2006, Rhode Island's P.O.W.E.R coalition, an alliance of business, consumer, and environmental interests passed legislation creating a comprehensive electricity state planning process and mandated that investments in cost-effective efficiency be made before ratepayer money is spent on additional supply.

The Comprehensive Energy Conservation, Efficiency and Affordability Act of 2006 established a "least cost procurement" mandate in Rhode Island to ensure that new energy procurements beginning in 2009 include the purchase of all cost-effective energy efficiency, distributed generation, renewables, combined heat and power, and demand response.

The Public Utilities Commission (PUC) will develop standards to regulate least-cost procurement, with input from the Office of Energy resources and a newly formed council representing ratepayers and environmental interests. Once the ground rules are established by the PUC, distribution companies must submit procurement plans to the PUC by September 1, 2008, and then every three years. Plans will need to be approved within 60 days.

In 2007 the Connecticut General Assembly passed energy legislation similar to the Rhode Island model mandating that "resource needs shall first be met through all available energy efficiency and demand reduction resources that are cost-effective, reliable and feasible."

The law created a new energy planning board, which represents consumers, business, environmental groups, and state agencies that are responsible for modifying and approving the

<sup>&</sup>lt;sup>4</sup> Efficiency Vermont. 2005 Preliminary Annual Report

resource and procurement plans. Connecticut's legislation also required the Department of Public Utility Control to "decouple" the profits of electric and gas utilities from their sales to eliminate current utility incentives to increase consumption and oppose conservation.

The Energy Conservation Management Board which oversees the current Connecticut electricity and gas programs estimated that cost-effective efficiency can eliminate all growth in peak electricity demand and is working to provide an analysis of the extent to which the existing programs need to be expanded to meet the new requirement to invest in all "cost-effective efficiency."

### **Utility Scale Renewable Energy**

Energy from wind and biomass makes up 15% of Prince Edward Island's power mix.

In 2004, the Prince Edward Island Department of Environment and Energy released a provincial Energy Framework and Renewable Energy Strategy wherein a Renewable Portfolio Standard (RPS) for electricity generation was proposed. The document committed to an RPS for electricity of at least 15% by 2010 and proposed to evaluate the potential for having 100% of the Island's electrical capacity come from renewable energy sources by 2015.

In 2006, the *Renewable Energy Act* was proclaimed with the exception of a section requiring utilities to have the capacity to obtain the equivalent of 100% of electrical energy from renewable energy sources by 2015. The current *Renewable Energy Act* does however contain an RPS for electricity of at least 15% renewable sources by 2010. The Act also includes Minimum Purchase Price regulations, Designated Area regulations and Net-Metering regulations.

In 2007, Prince Edward Island achieved the RPS for electricity – three years ahead of schedule -- acquiring 15% of the province's electricity from

wind and biomass. The current installed wind capacity on PEI is approximately 73 MW, which is owned both publicly through the provincial government and by private firms.

**Next Steps:** To mitigate global warming pollution from the electricity sector, all the New England states and Eastern Canadian provinces must ramp up their energy efficiency and renewable energy programs. States and provinces with significant wind potential must remove siting barriers that prevent the construction of utility scale renewable projects. In addition to Renewable Portfolio Standards, long-term contracts are needed to provide a guaranteed funding source for new renewables.

# II. Transportation Sector

Greenhouse gas emissions from transportation are both the largest and fastest rising. The increased consumption of gasoline and diesel fuel from motor vehicles-mainly cars, light trucks, and SUVs- from increasing miles traveled is the major cause.

The region urgently requires policies that encourage low-carbon fuels and driving efficiency, reduce sprawl, and promote clean public transit.

## **Carbon Tax**

Québec's carbon tax is the first in North America and expands funding for transit.

In June 2006, the Québec government released its 2006-2012 Plan to reduce its greenhouse gas emissions to 6% below 1990 levels by 2012. The 24 measures included in the Plan are funded with a new carbon tax of \$200 million annually for a total amount of \$1-2 billion over the six year Plan.

This is the first carbon tax in North America and is aimed at big distributors of oil and gas, including some of the largest emitters in the province who consume more than 25 million

litters per year. Impact on consumers is very low, but the impact on greenhouse gas emissions will be significant.

Transportation is the major contributor to greenhouse gas emissions in Québec; therefore \$120 million of the \$200 million annually will be invested in a public transit initiative. This amount supplements their normal investment in public transit.

## Sales Tax

# Connecticut exempts efficient vehicles from sales tax.

In 2007 Connecticut exempted all fuel-efficient passenger vehicles that achieve 40 miles per gallon or greater (city or highway) from the 6% state sales tax. The sales tax exemption is applied at the dealership (or other retail point of sale). Connecticut previously had a sales tax exemption which only applied to hybrids achieving 40MPG or greater. The Honda Civic Hybrid, Honda Insight and Toyota Prius qualified under the previous law.

Connecticut law now also allows municipalities the option of exempting 40MPG or greater vehicles from part or all of local vehicle property taxes.

**Next Steps**: Throughout the region, there are some effective policies in place to reduce greenhouse gas emissions from transportation, but **no state or province is doing enough.** Greenhouse gas emissions from transportation continue to rise year after year in each state and province and more must be done.

Emissions from motor vehicles are a product of two factors:

- How much carbon dioxide is released per mile traveled
- How many miles are traveled

Policies need to address both of these factors to reduce greenhouse gas emissions from this sector. Fuel efficiency standards must be increased and there must be more incentives for consumers to purchase fuel-efficient vehicles. Policies should also encourage the purchase of vehicles that use alternatives to gasoline that have lower life-cycle carbon emissions. New types of insurance policies that reward drivers who drive less must be encouraged.

Vehicle miles traveled (VMT) must be decreased. No state or province has significantly addressed VMT. Policies must be implemented that encourage smart growth that connects housing, jobs and transit, thereby reducing sprawl. Transit systems throughout the region need to be modernized, better funded and expanded to enable seamless use by more commuters.

Policies to reduce emissions from the transportation sector need to be significantly ramped up in every state and province. To meet our emission reduction targets, each state and province needs to coordinate its economic development strategy and its transit strategy with its conservation strategy.

## **III. Building Sector**

Buildings are massive energy consumers and therefore are large greenhouse gas emitters. The potential energy savings from transitioning from traditional to energy efficient green buildings is enormous. Technology is readily available to make buildings, residential and commercial, old and new, more energy efficient, which will in turn minimize waste, conserve water, and reduce greenhouse gas emissions.

Policies must set minimal levels of energy efficiency for buildings with methods for inspector training and increased enforcement, increase state and province green building incentives, and expand efficiency programs for existing buildings.

## **Building Codes**

The International Energy Conservation Code (IECC) should set the minimum level of energy efficiency for building codes.

Both Connecticut and Rhode Island have up to date building codes. They are equivalent to the 2003-2006 IECC codes - meaning that there is a minimal level of energy efficiency for new residential construction; it is updated every three years. Standards for the building envelopewalls, ceilings, windows, floors, and foundations, duct sealing, and insulation are included in the provisions.<sup>5</sup>

While Connecticut and Rhode Island have the strongest building codes in New England, they are not stringent enough or as well enforced as they could be. Each state and province must ensure all new construction is energy efficient. Mandates should require that all new homes and businesses use 20% less energy by 2015, 50% less energy by 2020, and 80% less energy by 2030. States and provinces must also address energy inefficiencies in existing buildings and implement policies that leverage private and public capital to renovate existing homes and businesses.

Incentives must increase for green buildings in each state and province. Some policies are in place but they need to be expanded to cover a greater spectrum. Heating, cooling, and lighting our buildings consumes a third of our energy and there is a tremendous opportunity to save money and reduce pollution.

Policies that create tax benefits or faster approval for green building construction would provide builders with greater incentive to build more efficiently thus saving tenants money and reducing greenhouse gas emissions. Programs should also be available to help existing homes and businesses upgrade to significantly cut heating fuel and electricity consumption. Consumers need both education and financial assistance to overcome barriers to efficiency.

# CONCLUSION

Six years after the signing of the 2001 *Climate Change Action Plan*, the states and provinces are not on track to meet the 2010 pollution reduction target. The necessary policies are not in place, and global warming emissions are far from under control. To get back on track, it is going to take real leadership and mandatory policies.

While there are some innovative and effective policies in place, no one state or province is a climate leader, and no state or province has passed a mandatory economy-wide carbon cap. More must be done within all three sectors throughout the region to reducing greenhouse gas emissions to the science-based levels that all of the New England Governors and Eastern Canadian Premiers recommitted to in June.

With aggressive re-engagement from the Governors and Premiers to prioritize energy efficiency and renewable energy, and clean transportation policies, the states and provinces can get back on track to meeting the agreed upon goals. And with the top executive officials as the driving force behind climate policy in the region, New England and Eastern Canada can once again be driving forces for climate policy in their respective nations.

<sup>&</sup>lt;sup>5</sup> "The State Energy Efficiency Scorecard 2006," American Council for an Energy Efficient Economy

# Climate Change Action Plan Summary

#### **Background**

In July of 2000, the Conference of New England Governors and Eastern Canadian Premiers (NEG/ECP) adopted Resolution 25-9 on global warming and its impacts on the environment. The NEG/ECP recognized that "global warming, given its harmful consequences to the environment and the economy, is a joint concern for which a regional approach to strategic action is required." To that end, in August of 2001 the NEG/ECP adopted a Climate Change Action Plan that set regional greenhouse gas emission reduction goals and identified nine action steps that must be taken to achieve them. In June of this year, each of the current New England Governors and Eastern Canadian Premiers confirmed their commitment to these goals at their annual conference.

#### **Regional Goals**

Short-Term: Reduce regional greenhouse gas (GHG) emissions to 1990 levels by 2010.

Mid-Term: Reduce regional GHG emissions by at least 10% below 1990 levels by 2020, and establish

an interactive five-year process, commencing in 2005, to adjust the goals if necessary and

set future reduction goals.

Long-term: Reduce regional GHG emissions sufficiently to eliminate any dangerous threat to the

climate; current science suggests this will require reductions of 75-85% below current

levels.

#### **Action Steps Called for in the Climate Change Action Plan**

- 1. Establish a Regional Standardized GHG Emissions Inventory
- 2. Establish a Plan for Reducing GHG Emissions and Conserving Energy
- 3. Promotion of Public Awareness
- 4. State and Provincial Governments Lead by Example
- 5. Reduce GHG Emissions from the Electricity Sector
- 6. Reduce Total Energy Demand Through Conservation
- 7. Reduce and/or Adapt to Negative Social, Economic and Environmental Impacts of Climate Change
- 8. Decrease the Transportation Sector's Growth in GHG Emissions

<sup>\*</sup>To view the complete Plan visit: <a href="http://www.negc.org/documents/NEG-ECP%20CCAP.PDF">http://www.negc.org/documents/NEG-ECP%20CCAP.PDF</a>

## **Pollution Reduction Grades**

The Climate Change Action Plan set goals of reducing the region's emissions of greenhouse gases to 1990 levels by 2010, 10% below 1990 levels by 2020, and 75-85% in the long-term. For this grading section, each state and province has been graded on its progress in making pollution reductions to meet its first pollution reduction target in 2010. The grades are as follows:

State / Province	2007 Grade
Connecticut	D
Maine	F
Massachusetts	С
New Hampshire	F
Rhode Island	F
Vermont	F
New Brunswick	F
Newfoundland and Labrador	D
Nova Scotia	F
Prince Edward Island	D
Quebec	D

#### **Greenhouse Gas Emissions Profiles**

(Million Metric Tons Carbon Equivalent)

State	1990 Emissions	2002 Emissions	2004 Emissions	% Change from 1990*
Connecticut	41	40	45	0-9%
Maine	19	23	23	20-22%
Massachusetts	84	83	83	0%
New Hampshire	15	18	22	19-49%
Rhode Island	9	12	11	23-32%
Vermont	5	6	7	16-28%

<sup>\*</sup> Due to the large yearly variability in the inventory data, percent change is based on emissions data from 2002 and 2004 respectively. 1990 is the baseline. Data recorded in 2002 and 2004 is the most up to date and serves as the best indicator of emission trends for the states.

Province	1990 Emissions	2000 Emissions	2005 Emissions	% Change from 1990
New Brunswick	16.2	20.4	21.3	31.3%
Newfoundland and Labrador	9.87	9.07	10.5	6.5%
Nova Scotia	19.5	21.4	22.7	16.2%
Prince Edward Island	2.07	2.29	2.28	10.2%
Quebec	85.3	85.7	89.4	4.8%

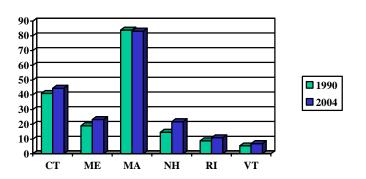
**Sources:** For the state data, graders referenced EPA's State Energy Consumption, Price, and Expenditure Estimates (SEDS) released June 1, 2007. The state data is from fossil fuel combustion only and therefore does not include all global warming gases or sources. State emissions' reporting is not comprehensive and is a rough estimate at best; it is also several years behind. For the provincial data, graders referenced The National Inventory Report: Greenhouse Gas Sources and Sinks in Canada 1990–2004. The Canadian Government's Submission to the UN Framework Convention on Climate Change, April 2007.

# **Overview of Regional Greenhouse Gas Emissions**

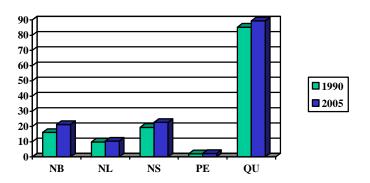
#### **Greenhouse Gas Emissions**

(Source: U.S. EPA and Environment Canada, MMT of CO2 equivalent)

#### **New England States**

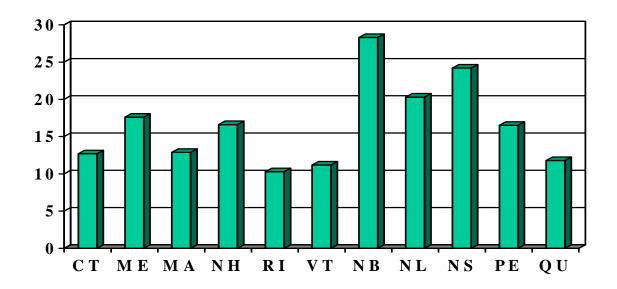


#### **Eastern Canadian Provinces**



## **Per Capita Greenhouse Gas Emissions**

(Source: U.S. EPA, 2004 and Environment Canada, 2005, MMT of CO2 equivalent per person)



# **Regional Summary of Policy Grades**

In August 2001, the six New England Governors and five eastern Canadian Premiers committed the region to a Climate Change Action Plan with the eventual goal of reducing the region's emissions of greenhouse gases by 75-85%. Since the voluntary 2001 agreement emissions have risen and most states and provinces are not on track to meet the global warming goals. This scorecard grades each state and province on their progress towards achieving eight of the "Action Item" categories agreed to in 2001. The overall grades are as follows:

State / Province	2007 Grade	2006 Grade	2005 Grade
Connecticut	B-	C+	В
Maine	B-	В	B-
Massachusetts	B-	C-	C+
New Hampshire	C-	D+	C-
Rhode Island	C+	C+	B-
Vermont	С	C-	С
New Brunswick	В	C-	C+
Newfoundland and Labrador	C+	B-	В
Nova Scotia	С	С	C-
Prince Edward Island	B-	B-	B+
Quebec	B+	B+	B-

In the following pages, each state and province is given the above, overall grade as well as grades for their performance on the eight "Action Items." The grades are followed by highlights of areas where the state or province has performed well and those areas that need improvement.

# Connecticut

In August 2001, the six New England Governors and five eastern Canadian Premiers committed the region to a Climate Change Action Plan with the eventual goal of reducing the region's emissions of greenhouse gases by 75-85%. Since the voluntary 2001 agreement, Connecticut's emissions have continued to increase and are not on track to meet the global warming goals. This scorecard grades Connecticut on its progress towards achieving eight of the "Action Item" categories agreed to in 2001.

Climate Change Action Item	Grade
1. Establish a Greenhouse Gas (GHG) Emissions Inventory	В
2. Establish and Release a Plan for Reducing GHG Emissions and Conserving Energy	В
3. Promote Public Awareness	B-
4. Government Leads by Example	В
5. Reduce GHG from the Electricity Sector	B+
6. Reduce Total Energy Demand Through Conservation	В
7. Reduce / Adapt to Impacts of Climate Change	D
8. Reduce GHG from the Transportation Sector	D+
Overall Grade	B-

#### **Progress Made**

In 2007, the energy bill PA 07-242 required Connecticut to participate in the Regional Greenhouse Gas Initiative, and directed the state to auction almost 100% of the pollution permits and use the resulting revenue to benefit consumers through energy efficiency and Class I renewable energy projects. The 2007 energy bill also mandated that the electric utilities invest in all cost-effective energy efficiency before spending money on new generation or transmission projects. This should have the effect of removing the monetary cap from the CT Energy Efficiency Fund as current demand for programs exceeds funding. The energy bill also increased Connecticut's renewable energy standard from 7% Class I clean electricity coming by the year 2010 to 20% by 2020. The energy bill also added schools to the types of state construction and renovation projects which must be built to the "LEED Silver" green building standard and be 20% more energy efficient than the building code requires.

CT issued and approved the Clean Cars regulations and is currently awaiting an EPA waiver.

#### **Improvements Needed**

Connecticut is lagging on the implementation of the climate plan and not on track to reach the 2010 goals. Connecticut should ensure that the necessary pollution reductions are made by adopting a mandatory global warming cap.

Connecticut should ensure that power plant emissions do not increase by adopting strict global warming emissions performance standards for new power plants. Connecticut should also undo the change allowing the burning of construction waste to receive subsidy as a "Class I" renewable electricity source and crowd out truly clean sources. Increased reliance on diesel emergency generation to meet power needs is a step backwards.

Connecticut's building heating efficiency programs for heating oil and natural gas customers lack reliable and robust funding and are not adequate to meet consumer demand or the climate plan goals.

The state should align transportation and planning policy with its global warming goals; DOT should calculate and minimize global warming impacts for all transportation projects; Connecticut should adopt a low-carbon fuels standard; Governor Rell should issue an executive order to reduce black carbon soot from diesel equipment used on state construction projects.

**Grader:** Clean Water Fund (860.232.6232).

# Maine

In August 2001, the six New England Governors and five eastern Canadian Premiers committed the region to a Climate Change Action Plan with the eventual goal of reducing the region's emissions of greenhouse gases by 75-85% below 2001 levels. Since the voluntary 2001 agreement, Maine's emissions have continued to increase and are not on track to meet the global warming goals. This scorecard grades Maine on its progress towards achieving eight of the "Action Item" categories agreed to in 2001.

Climate Change Action Item	Grade
1. Establish a Greenhouse Gas (GHG) Emissions Inventory	В
2. Establish and Release a Plan for Reducing GHG Emissions and Conserving Energy	В
3. Promote Public Awareness	C+
4. Government Leads by Example	B+
5. Reduce GHG from the Electricity Sector	B+
6. Reduce Total Energy Demand Through Conservation	B-
7. Reduce / Adapt to Impacts of Climate Change	D
8. Reduce GHG from the Transportation Sector	C-
Overall Grade	B-

#### **Progress Made**

Passed legislation authorizing the Regional Greenhouse Gas Initiative, using the public auction of most allowances, and majority of the revenue for energy efficiency. Legislation also lifted the budget cap on efficiency programs at the Public Utilities Commission (*Efficiency Maine*).

Adopted significant improvements to the Renewable Portfolio Standard, calling for 10% of electricity to come from *new* renewables by 2017. First large wind farm in New England began operating in Mars Hill in 2007. Another 250 MW of wind farms have applied for permits. Governor Baldacci established a Wind Power Task Force to identify and recommend improvements to wind power policies (including siting and permitting issues).

The Public Utilities Commission launched its "10,000 Carbon Free Homes" initiative to increase awareness of efficiency and clean energy options for the residential sector. Maine's *Home Performance with Energy Star* program is now operational statewide, and has a basic marketing campaign to increase public awareness.

#### **Improvements Needed**

Establish and fully fund efficiency programs for electricity and fossil fuels. *Efficiency Maine* programs should be fully funded in accordance with the new statute; the *Home Performance* program needs sufficient, stable funding. Maine needs stronger policies to increase oil and gas efficiency in buildings and industry, including a mandatory building code for new homes.

Increase renewable power development, large and small. Maine needs to approve permits for appropriately sited large wind farms, and needs to reduce barriers and increase incentives for wind and solar in homes and businesses. Recommendations from the Wind Power Task Force may need to be implemented.

Maine needs a strong, comprehensive strategy for transportation emissions. The state should fund a continuation and expansion of the Downeaster train service, establish incentives for high-efficiency vehicles, and develop a clear strategy to promote smart growth and reduce vehicle-miles-traveled.

Maine should update its climate action plan and actively engage citizens and institutions in reducing emissions.

Grader: Natural Resources Council of Maine (207.622.3101), Environment Maine Research & Policy Center (207.253.1965)

# **Massachusetts**

In August 2001, the six New England Governors and five eastern Canadian Premiers committed the region to a Climate Change Action Plan with the eventual goal of reducing the region's emissions of greenhouse gases by 75-85%. Since the voluntary 2001 agreement, Massachusetts' emissions have stopped increasing but are still not on track to meet the global warming goals. This scorecard grades Massachusetts on its progress towards achieving eight of the "Action Item" categories agreed to in 2001.

Climate Change Action Item	Grade
1. Establish a Greenhouse Gas (GHG) Emissions Inventory	В
2. Establish and Release a Plan for Reducing GHG Emissions and Conserving Energy	D+
3. Promote Public Awareness	B-
4. Government Leads by Example	B+
5. Reduce GHG from the Electricity Sector	B+
6. Reduce Total Energy Demand Through Conservation	C+
7. Reduce / Adapt to Impacts of Climate Change	D+
8. Reduce GHG from the Transportation Sector	C-
Overall Grade	B-

#### **Progress Made**

Governor Patrick signed Massachusetts on to RGGI within his first 100 days of office. Since then, Massachusetts was the first state to announce that 100% of its RGGI pollution permits would be auctioned off in a "polluter pays" type program. The administration also made a public commitment to meet all new electricity needs, load growth, with efficiency within the next three years.

Large-scale renewable energy projects, especially that of Cape Wind, are now publicly supported by Governor Patrick. With the administration's support, Cape Wind could soon become the largest source of clean, renewable energy in all of New England. Governor Patrick has also committed to increasing Massachusetts solar power to 250 megawatts over the next 10 years.

The Government's Lead by Example program has continued to improve. Massachusetts is the first state in the nation to explicitly include GHG emissions in the environmental review process.

#### **Improvements Needed**

While steps have been taken to reduce GHG emissions, there is no comprehensive, state-wide policy that caps emissions and sets science-based reduction targets. An economy-wide cap with short, medium, and long term emission reduction targets is vital to avoiding the worst impacts of global warming. There is also no longer a publicly available Climate Action Plan. Removing the Plan from public access, instead of strengthening it, is a serious step backward.

Massachusetts' energy efficiency programs need to be expanded to capture all cost-effective efficiency. Mandatory efficiency programs for home heating fuels- oil and natural gas- need to be created. Decoupling, whether instituted through legislation or regulation, should be undertaken to remove disincentives to utility efficiency measures and current incentives for utilities to invest in efficiency should be strengthened. Green building incentives should also be adopted in order to substantially reduce GHG emissions from buildings.

Funding for improvements and expansion of the MBTA has not grown to meet growing demand and emissions from transportation continue to increase. More must be done to increase mass transit and reduce urban sprawl.

**Graders:** Clean Water Fund (617.338.8131, x211), Conservation Law Foundation (617.850.1721), Environment Massachusetts Research and Policy Center (617.747.4400).

# **New Hampshire**

In August 2001, the six New England Governors and five eastern Canadian Premiers committed the region to a Climate Change Action Plan with the eventual goal of reducing the region's emissions of greenhouse gases by 75-85%. Since the voluntary 2001 agreement, New Hampshire's emissions have continued to increase and are not on track to meet the global warming goals. This scorecard grades New Hampshire on its progress towards achieving eight of the "Action Item" categories agreed to in 2001.

Climate Change Action Item	Grade
1. Establish a Greenhouse Gas (GHG) Emissions Inventory	В
2. Establish and Release a Plan for Reducing GHG Emissions and Conserving Energy	D+
3. Promote Public Awareness	C-
4. Government Leads by Example	В
5. Reduce GHG from the Electricity Sector	C-
6. Reduce Total Energy Demand Through Conservation	С
7. Reduce / Adapt to Impacts of Climate Change	D+
8. Reduce GHG from the Transportation Sector	D-
Overall Grade	C-

#### **Progress Made**

A Renewable Portfolio Standard was signed into law this year, calling for 24% total renewables by 2025. Also, Governor Lynch issued an executive order to initiate development of a Climate Action Plan, to set up a task force to set goals and take public input, and to empower the Dept. of Environmental Services to draft the plan. In anticipation of the plan, New Hampshire revised its greenhouse gas emissions inventory.

RGGI implementation legislation has been drafted for action next year along with a favorable state-specific economic analysis.

A detailed study of the local impacts of climate change on state resources was completed with input from various stakeholders and scientists.

Building codes are now on par with the international standards. Energy saving programs have been maintained including those to retrofit state buildings and energy efficiency incentives to utility customers. (Continued funding of these programs may be in jeopardy.)

#### **Improvements Needed**

The state still has no comprehensive plan that identifies the necessary timelines and emission reductions needed to avoid the worst impacts of global warming.

Greenhouse gas pollution from transportation continues to grow in NH, yet the state has yet to adopt a clean cars standard or make significant investments in alternative transportation.

Strong RGGI legislation to address power plant CO<sub>2</sub> reduction needs to be passed next year.

The state needs to establish a set of minimum efficiency standards for key appliances sold in the state. Stable and enhanced funding for state government efficiency and demand-side conservation measures is also needed.

Graders: Clean Water Fund (603.430.9565); Environment New Hampshire Research and Policy Center (603.229.3222)

## **Rhode Island**

In August 2001, the six New England Governors and five eastern Canadian Premiers committed the region to a Climate Change Action Plan with the eventual goal of reducing the region's emissions of greenhouse gases by 75-85%. Since the voluntary 2001 agreement, Rhode Island's emissions have continued to increase and are not on track to meet the global warming goals. This scorecard grades Rhode Island on its progress towards achieving eight of the "Action Item" categories agreed to in 2001.

Climate Change Action Item	Grade
1. Establish a Greenhouse Gas (GHG) Emissions Inventory	B-
2. Establish and Release a Plan for Reducing GHG Emissions and Conserving Energy	В
3. Promote Public Awareness	С
4. Government Leads by Example	C+
5. Reduce GHG from the Electricity Sector	В
6. Reduce Total Energy Demand Through Conservation	B-
7. Reduce / Adapt to Impacts of Climate Change	C-
8. Reduce GHG from the Transportation Sector	D
Overall Grade	C+

#### **Progress Made**

Rhode Island is quickly becoming a regional leader within the energy sector, and the legislature has passed several measures promoting solutions to global warming. In 2007 Governor Carcieri signed on to the Regional Greenhouse Gas Initiative (RGGI). The Rhode Island General Assembly passed strong legislation to govern RGGI implementation and the state's first utility led natural gas efficiency program began.

In addition, Governor Carcieri set a goal of producing 20% of Rhode Island's energy from native resources by 2010 –including 15% from wind-- and also conducted a survey of potential sites for wind farms in the state. Implementation of the state's new "least-cost procurement" mandate began and the Rhode Island Senate confirmed the first members of the Energy Efficiency and Resource Management Council to oversee implementation, including a representative of the environmental community.

#### **Improvements Needed**

Scientists agree that in order to address the problem of climate change we need at least 80% reductions in global warming pollution by the year 2050. Rhode Island has yet to legislate a state cap for emissions levels that includes the short and long term reduction targets in various sectors to help us get there.

Rhode Island has not done enough to reduce greenhouse gasses from the transportation sector, which is the largest contributor to global warming pollution. Although the state has adopted the clean car standards to reduce pollution from cars and trucks, it has done very little to reduce how much those cars and trucks are driven.

The state needs clean, affordable transportation alternatives to help cut our emission levels. Investment in more frequent and reliable public transportation services is necessary. Bicycles lanes for commuting, and sidewalks for walkability and better access to public transit also need to be a priority.

**Graders:** Clean Water Fund (401.331.6972), Conservation Law Foundation (401.351.1102) Environment Rhode Island Research and Policy Center (401.421.6578)

## Vermont

In August 2001, the six New England Governors and five eastern Canadian Premiers committed the region to a Climate Change Action Plan with the eventual goal of reducing the region's emissions of greenhouse gases by 75-85%. Since the voluntary 2001 agreement, Vermont's emissions have continued to increase and are not on track to meet the global warming goals. This scorecard grades Vermont on its progress towards achieving eight of the "Action Item" categories agreed to in 2001.

Climate Change Action Item	Grade
1. Establish a Greenhouse Gas (GHG) Emissions Inventory	В
2. Establish and Release a Plan for Reducing GHG Emissions and Conserving Energy	B+
3. Promote Public Awareness	D
4. Government Leads by Example	В
5. Reduce GHG from the Electricity Sector	C-
6. Reduce Total Energy Demand Through Conservation	В
7. Reduce / Adapt to Impacts of Climate Change	D
8. Reduce GHG from the Transportation Sector	D+
Overall Grade	С

#### **Progress Made:**

In 2005 Vermont joined the Regional Greenhouse Gas Initiative the state led the region by requiring that 100% of the revenue generated through the initiative benefits consumers with an emphasis on investing in energy efficiency and renewable energy. Despite the Governor's opposition, the Vermont Public Service Board approved the state's second commercial wind farm and has adopted slightly improved net metering rules. The most significant progress in 2007 was Vermont's success in protecting its clean car standards, in Federal district court, from a legal challenge by the automobile industry.

#### **Improvements Needed:**

2007 was a year in which Vermont had the potential to take a leadership role in the region through strong support of renewable energy and an "all-fuels" approach to energy efficiency. Unfortunately, Governor Jim Douglas vetoed the comprehensive energy legislation that would have moved Vermont forward in these areas.

For Vermont to get on track to reduce its global warming pollution in line what the scientific community says is necessary to avoid the worst impacts of global warming, Vermont must adopt an economy wide cap on global warming pollution that is in line with what eminent scientists have indicated is necessary to stabilize the climate.

A comprehensive energy efficiency effort needs to be funded to help Vermonters reduce their winter heating bills as well as rising summer cooling bills. Vermont's renewable energy standard needs to be strengthened to realize the state's potential to produce 50% of it electricity with Vermont based renewable energy by 2020.

Compact transit oriented development must be supported along with the implementation of a strict fix-it-first policy to ensure that transportation dollars are going to existing infrastructure, not new road projects. A Green Jobs Corps needs to be created to train our workforce to develop and implement our clean energy economy.

**Grader:** Vermont Public Interest Research and Education Fund (802.223.5221)

## **New Brunswick**

In August 2001, the six New England Governors and five eastern Canadian Premiers committed the region to a Climate Change Action Plan with the eventual goal of reducing the region's emissions of greenhouse gases by 75-85%. Since the voluntary 2001 agreement, New Brunswick's emissions have stopped increasing but are still not on track to meet the global warming goals. This scorecard grades New Brunswick on its progress towards achieving eight of the "Action Item" categories agreed to in 2001.

Climate Change Action Item	Grade
1. Establish a Greenhouse Gas (GHG) Emissions Inventory	Α
2. Establish and Release a Plan for Reducing GHG Emissions and Conserving Energy	Α
3. Promote Public Awareness	С
4. Government Leads by Example	В
5. Reduce GHG from the Electricity Sector	С
6. Reduce Total Energy Demand Through Conservation	В
7. Reduce / Adapt to Impacts of Climate Change	С
8. Reduce GHG from the Transportation Sector	D
Overall Grade	В

#### **Progress Made:**

Premier Shawn Graham launched New Brunswick's first Climate Action Plan designed to cut greenhouse gas emissions to 1990 levels by 2012 and lay the groundwork for a 10% reduction below that by 2020. This will require New Brunswick to cut its 2012 emissions by 7.1 million tons, a reduction of 30.6%.

The publicly owned agency Efficiency New Brunswick saw its budget rise to \$26 million so it can provide energy efficiency incentives to all sectors across all fuels. The timeline for the Renewable Portfolio Standard target to provide 10% of New Brunswick's energy need from low impact renewable sources was moved up from 2016 to 2012.

For the first time, New Brunswick will develop and implement a public transportation policy to help bring about emission reductions from the transportation sector. It will also require that all solid waste commissions to capture their landfill methane and establish centralized composting with curbside pick-up for organic wastes.

#### **Improvements Needed:**

New Brunswick has no plans to set regulatory limits on industrial greenhouse gas emissions, the lion's share of which are caused by NB Power and Irving Oil. Instead, the provincial government is an active supporter of increased production of electricity and refined petroleum products to supply the market in southern New England. It has given its approval for NB Power to burn petroleum coke to reduce their cost of production, which increases the carbon intensity of that electricity by 25%.

Premier Shawn Graham and his Energy Minister Jack Keir are also enthusiastic boosters of Irving Oil's plan to construct a 300,000-barrel/day refinery dedicated to supplying the US market. There is a pressing need for New Brunswick's economic growth strategy to be integrated with its climate action plan.

**Grader:** Conservation Council of New Brunswick (506.458.8747)

# **Newfoundland & Labrador**

In August 2001, the six New England Governors and five eastern Canadian Premiers committed the region to a Climate Change Action Plan with the eventual goal of reducing the region's emissions of greenhouse gases by 75-85%. Since the voluntary 2001 agreement, Newfoundland & Labrador's emissions have continued to increase and are not on track to meet the global warming goals. This scorecard grades Newfoundland & Labrador on its progress towards achieving eight of the "Action Item" categories agreed to in 2001.

Climate Change Action Item	Grade
1. Establish a Greenhouse Gas (GHG) Emissions Inventory	Α
2. Establish and Release a Plan for Reducing GHG Emissions and Conserving Energy	B-
3. Promote Public Awareness	B-
4. Government Leads by Example	C+
5. Reduce GHG from the Electricity Sector	C+
6. Reduce Total Energy Demand Through Conservation	C-
7. Reduce / Adapt to Impacts of Climate Change	B-
8. Reduce GHG from the Transportation Sector	D
Overall Grade	C+

#### **Progress Made**

The approval of second wind power project (25MW) and advanced research on wind-hydrogen-diesel generation pilot for remote communities continues. The Sustainable Development Act passed and government is moving forward to establish a Round Table on Sustainable Development

In September a Provincial Energy Plan, called "Focusing Our Energy" was released; it outlines policy actions intending to update the climate change action plan, support mechanisms for investment in renewable energy projects, develop a five- year Conservation and Efficiency Plan by 2008 and commits monies to fund a low income energy efficiency and conservation program,. It goes further by committing to adopt policy calling for 25% of new vehicles (2008-2011) to be energy efficient, provide grants for home pre and post home energy audits, and creates a policy to ensure all new provincial buildings exceed the current model National Energy Code by 25% and LEED Silver standard where possible.

#### **Improvements Needed**

Newfoundland and Labrador's Climate Change Action Plan currently has no targets or timelines to ensure that its actions link to clear, performance based benchmarks that will help achieve the plan's goals. GHG emissions have risen 6.5% since 1990. With new large scale developments in the oil, gas, and mining sectors being considered, it is imperative that the government follow through on a comprehensive GHG reduction strategy with multiple stakeholders, that outlines strategies to regulate large industry and meets and exceeds the NEG/ECP targets and timelines.

The Energy Plan houses encouraging policy actions, however the province must ensure it implements these actions and prioritize investment in all cost effective energy efficiency for all fuel types, adopt California Vehicle Emission Standards, adopt a provincial government green procurement policy, introduce a minimum energy standard for new buildings and appliances, and implement a provincial retrofit program for all existing buildings. NL also lacks an energy efficiency and conservation agency to develop programming to educate and deliver efficiency programs.

Increased reduction strategies for transportation are also needed. Incentives and programs to reduce person vehicle use, to improve commercial fuel efficiency, and to increase the purchase of fuel-efficient vehicles are needed. The development of a comprehensive land use management policy needs to be fast tracked to promote proper planning, sustainable development and adaptation to the impacts of climate change.

**Grader:** Sierra Club of Canada – Atlantic Canada Chapter (709.753.7848)

# **Nova Scotia**

In August 2001, the six New England Governors and five eastern Canadian Premiers committed the region to a Climate Change Action Plan with the eventual goal of reducing the region's emissions of greenhouse gases by 75-85%. Since the voluntary 2001 agreement, Nova Scotia's emissions have continued to increase and are not on track to meet the global warming goals. This scorecard grades Nova Scotia on its progress towards achieving eight of the "Action Item" categories agreed to in 2001.

Climate Change Action Item	Grade
1. Establish a Greenhouse Gas (GHG) Emissions Inventory	Α
2. Establish and Release a Plan for Reducing GHG Emissions and Conserving Energy	C-
3. Promote Public Awareness	B-
4. Government Leads by Example	C+
5. Reduce GHG from the Electricity Sector	C-
6. Reduce Total Energy Demand Through Conservation	C-
7. Reduce / Adapt to Impacts of Climate Change	D+
8. Reduce GHG from the Transportation Sector	C-
Overall Grade	C

#### **Progress Made**

GHG emissions in Nova Scotia are up 16% between 1990 and 2005. Emissions reduced slightly between 2004-2005. Nova Scotia is the 2<sup>nd</sup> highest per capita polluter amongst the region's provinces.

The government adopted the *Environmental Goals and Sustainable Prosperity Act*, which legislates a 10% GHG reduction below 1990 levels by the year 2020. This framework *Act* is propelling a strategic planning process that is expected to deliver significant action in areas such as government procurement, vehicle emission standards, energy efficiency, renewable energy and GHG reductions.

The government introduced a mandatory renewable energy standard for NS to produce 10% of its electricity from new renewable energy resources. *Conserve Nova Scotia* has also continued to develop some best-practice energy efficiency programs with the same amount of funding allocated to efficiency before the agency's inception. Public awareness has been promoted through a province-wide buy local campaign, support for the Climate Change Centre, and making Al Gore's *An Inconvenient Truth* available to all school boards and libraries in Nova Scotia.

#### **Improvements Needed**

The goals outlined by the government need to be fully implemented. This includes implementation of California vehicle emission standards, a government sustainable procurement policy, and a detailed action plan to reduce GHGs. Nova Scotia must recognize that even the modest 10% GHG reduction goal cannot be achieved without sector regulations that mandate GHG reductions.

The province must prioritize the implementation of a comprehensive *Energy Efficiency Act*, which orders investment in all cost-effectively achievable efficiency improvements for all fuel types and includes building, equipment and appliance standards; public accountability; and a combined heat and power action plan.

NS must increase per capita sustainable transportation infrastructure investments to the Canadian average. We must also minimize vulnerability to climate change impacts and prevent adaptation costs from skyrocketing by implementing a provincial coastal policy.

**Grader:** Ecology Action Centre (902.442.0199)

# **Prince Edward Island**

In August 2001, the six New England Governors and five eastern Canadian Premiers committed the region to a Climate Change Action Plan with the eventual goal of reducing the region's emissions of greenhouse gases by 75-85%. Since the voluntary 2001 agreement, PEI's emissions have continued to increase and are not on track to meet the global warming goals. This scorecard grades PEI on its progress towards achieving eight of the "Action Item" categories agreed to in 2001.

Climate Change Action Item	Grade
1. Establish a Greenhouse Gas (GHG) Emissions Inventory	Α
2. Establish and Release a Plan for Reducing GHG Emissions and Conserving Energy	C-
3. Promote Public Awareness	С
4. Government Leads by Example	C+
5. Reduce GHG from the Electricity Sector	Α
6. Reduce Total Energy Demand Through Conservation	C-
7. Reduce / Adapt to Impacts of Climate Change	В
8. Reduce GHG from the Transportation Sector	C-
Overall Grade	B-

#### **Progress Made**

As of 2007, PEI has met its Renewable Portfolio Standard (RPS) for electricity, three years ahead of schedule. The 15% RPS for electricity has been fulfilled using a combination of privately- and publicly-owned wind installations.

The Department of Environment, Energy and Forestry engaged the Vermont Energy Investment Corporation to conduct an energy efficiency potential study and recommend cost-effective, all-fuel energy efficiency programs. In July 2007 the provincial government announced the establishment of an Office of Energy Efficiency (OEE) for PEI. Operational procedures, programs and a funding mechanism for the OEE, a division of the Department of Environment, Energy and Forestry, have yet to be announced.

At the 2007 Conference of New England Governors and Eastern Canadian Premiers (NEG-ECP) all parties unanimously passed Resolution 31-1, which incorporates key recommendations developed at the Ministerial Forum on Energy and the Environment. Furthermore, at the 2007 Council of the Federation meeting, PEI, along with 11 additional provinces and territories, agreed to adopt California Vehicle Emission Standards.

#### **Improvements Needed**

PEI has not yet released a climate change action plan. As one of the regions most vulnerable to the impacts of climate change, PEI requires a comprehensive strategy with concrete actions to reduce greenhouse gas (GHG) emissions by at least 10% below 1990 by 2020. Currently, PEI's GHG emissions are approximately 10% above 1990 levels.

To promote energy efficiency, the province should commit to investing in all energy efficiency improvements that can be cost-effectively achieved, for all fuel types. Since there is no provincial building or energy code on PEI, the province should adopt, Island-wide, a minimum energy standard for new buildings as well as establish programs to retrofit the existing building stock.

PEI lacks a comprehensive policy on land-use planning to control for sprawl, to mitigate and adapt to the impacts of climate change, and to promote smart growth. Appropriate land-use planning can also mitigate the negative environmental impacts from the agricultural sector. The province should invest additional resources into alternatives to passenger vehicle transportation.

**Grader:** Environmental Coalition of Prince Edward Island (902.566.4696)

# Québec

In August 2001, the six New England Governors and five eastern Canadian Premiers committed the region to a Climate Change Action Plan with the eventual goal of reducing the region's emissions of greenhouse gases by 75-85%. Since the voluntary 2001 agreement, Quebec's emissions have continued to increase and are not on track to meet the global warming goals. This scorecard grades Quebec on its progress towards achieving eight of the "Action Item" categories agreed to in 2001.

Climate Change Action Item	Grade
1. Establish a Greenhouse Gas (GHG) Emissions Inventory	Α
2. Establish and Release a Plan for Reducing GHG Emissions and Conserving Energy	Α
3. Promote Public Awareness	C-
4. Government Leads by Example	C+
5. Reduce GHG from the Electricity Sector	Α
6. Reduce Total Energy Demand Through Conservation	B+
7. Reduce / Adapt to Impacts of Climate Change	В
8. Reduce GHG from the Transportation Sector	C+
Overall Grade	B+

#### **Progress Made**

It has been a year since the release of the Québec GHG reduction plan. Published in 2006, the Plan (2006-2012) aims to reduce Québec's emission to 1,5% below 1990 levels by 2012. In 2007, the federal government announced 358M\$ to finance additional measures (4Mt) that, if implemented correctly, will allow Québec to reduce its emissions by 6% below 1990 levels by 2012. The Plan announced last year included a new carbon tax (200M\$ per year, 1,2G\$ over the duration of the plan) that will come into effect by October 2007, the adoption of the California standards for car emissions, the improvement of the existing building code, and the capture of methane from landfills. This plan is coupled with an energy strategy (2006) and a public transit policy (2006) that also call for new energy efficiency and renewable objectives and new public investment to increase public transit. In June 2007, the Québec environment minister proceeded at the first year progress report on the implementation of the Plan. While, many delays in the implementation of the plan were underlined by the minister's report, she announced that the implementation will be closely monitored and annual report progress will be made. The minister was also very receptive to hear about new measures to be adding to the plan.

#### Improvements Needed

A year after the announcement of the action plan, very few measures have been implemented. The well-received plan in 2006 is now facing a crucial test: words have to be translated into actions. While Québec decided to move forward with its carbon tax, the government did it with more than 6 months behind schedule. The good news is that by October this year, the money from the carbon tax will fill the Green Found that finances the rest of the measures included in the plan. On the other hand, while Québec has a good plan to reduce its emissions, it still invests enormously in the development of new roads, bridge and highways in urban areas and does not have a systematic approach in sprawl-reduction initiatives. Moreover, Québec has to implement rapidly all of the measures announced in its plan. It also has to package additional measures in order to meet the 4Mt reduction that allows the province to closely respect Kyoto. The government of Quebec is also developing its proper GHG inventory but the last dates from 2003, there is a need to produce new updated inventories. Finally, the province has to work to develop a post-2012 plan and quickly cap its heavy industries and create a carbon market with other Canadian provinces.

**Grader:** Équiterre, (418.522.0006, poste 2261)

# Methodology

Individual state and provincial governments have been graded against the commitments made in the New England Governors / Eastern Canadian Premiers (NEG/ECP) Climate Change Action Plan of 2001 (to view the complete NEG/ECP Plan, please visit: <a href="http://www.negc.org/documents/NEG-ECP%20CCAP.PDF">http://www.negc.org/documents/NEG-ECP%20CCAP.PDF</a>) that in June was recommitted to by all current administrations. There are two overall grading categories, one measuring how well the states and provinces are implementing the recommended policies in the Plan ("policy grades") and one measuring whether they are on track to meet the 2010 emissions reduction target ("pollution reduction grades"). The NEG/ECP Plan provided us with a framework for analysis that could be relatively objective and applicable to each state and province in the region.

For the policy grades, governments were evaluated against a "best case scenario" of where the governments should reasonably be at this point in the regional Plan's implementation – keeping in mind both what is reasonable to expect and the efforts that will be necessary to turn the tide of rising GHG emissions and meet the emissions reduction targets.

Each state and province was given a grade in eight different sections, which coincide with the first eight "Action Items" from the NEG/ECP climate plan. To achieve an "A" grade for a particular section, states and provinces would not necessarily need to have fully met the section goal enunciated in the regional Plan, but simply to have done the best that is reasonably achievable at this juncture. To arrive at the section grades for the Action Items, a series of "sub-questions" was developed, based largely upon specific steps that were recommended in the NEG/ECP Plan as one that should be taken to achieve the goals of the eight Action Items. A number score from 0 to 4 was then assigned to each of these "sub-questions," with the scores then used to determine the grade for that section.

The eight section grades were then averaged to arrive at the overall state or provincial grade. (Note: no grades were given for state and provincial progress towards *Action Item 9: The Creation of a Regional Emissions Registry*, as it was deemed too difficult to gauge individual state and provincial contribution to this cooperative goal.) Each *Action Item* from the NEG/ECP Plan was given equal weight in the grading process.

To obtain the information necessary to accurately score each section for the policy grades, the groups and individuals who conducted the scoring worked with a variety of entities in their respective states and provinces. Although this work varied between the different jurisdictions, most of the grading was done with the help of executive branch staff, state and provincial environmental regulators, agency staff from the various energy, transportation, development and environmental agencies and other key individuals as appropriate. Every effort was made to gather the most thorough and current information regarding state and provincial efforts to reduce greenhouse gas emissions.

For the pollution reduction grades, the graders evaluated whether the states and provinces were on track to hit the 2010 pollution reduction target. Graders used the most current emissions inventories to establish trends. The Canadian federal government currently publishes a comprehensive GHG inventory for the provinces through 2005. For the U.S. states there is a 3-4 year lag for having their GHG inventories updated because of delays in receiving certain federal government energy data. To determine trends for the New England states, graders used EIA data from the EPA. It is only a rough estimate for actual emissions and does not include emissions from all sources.

To obtain more detailed information on how the grading was conducted for a specific state or province, please contact the "graders" listed on the bottom of that state or provincial summary page, or contact:

United States: Katy Krottinger, Clean Water Fund, Massachusetts, 617-338-8131, x211

Canada: David Coon, Conservation Council of New Brunswick, 506-458-8747

#### The following are examples of the criteria we used to grade the states and provinces:

1. Establishment of a Greenhouse Gas Emissions Inventory

Is there an inventory going back to 1990 for all sectors? Is it updated every three years?

2. Establishment of a plan for reducing GHG emissions and conserving energy

Is there a comprehensive climate plan? Was it created with public input which has clear targets and timetables? Is it comprehensive? Is there a regular progress review and is the plan updated accordingly?

#### 3. Promotion of Public Awareness

Are there programs to promote dialogue on climate change among groups like conservationists, land managers, energy users, businesses, non-profits, the general public, students, etc.? Is the effectiveness of this outreach measured?

#### 4. Government Leads by Example

Is there a comprehensive public sector energy reduction program with goals and a baseline?

Is there a policy to encourage purchase of fuel efficient vehicles?

Are government staff, including facilities managers, municipal officials, university and other employees educated and trained on how to reduce greenhouse gas emissions within departments?

Does the state invest in efficiency upgrades if payback is less than 10 yrs?

Is there a good policy that addresses province/state construction and sustainable building design?

Are there requirements for the use of "environmentally preferable" products?

#### 5. Reduce Greenhouse Gases in the electricity sector

Is there a Renewable Portfolio Standard or similar program that mandates increased renewable energy?

Are there additional prov/state programs to promote new renewable energy, cogeneration, and distributed generation and are the programs working?

Has the province or state joined regional/national efforts to reduce carbon intensity of power plants such as the Regional Greenhouse Gas Initiative?

#### 6. Reduce total energy demand through conservation

Are there efficiency programs in place to address all major types of fuel and do they address all sectors - residential, commercial, industrial? Are they securely and appropriately funded?

Doest the government promote EnergyStar or EnerGuide programs?

Is there a program promoting green buildings across all sectors?

Are there stringent commercial and residential energy efficient building codes and are they enforced?

7. Reduce and/or Adapt to Negative Social, Economic and Environmental Impacts of Climate Change Does the prov/state fund research on impacts and adaptation?

Does the prov/state identify areas susceptible to catastrophic events and document changes?

Are the emergency management agencies involved?

8. Decrease greenhouse gas emissions from the transportation sector

Has the prov/state adopted the California clean cars standard or an equivalent?

Is there a program to create financial incentives for use/purchase of low-emitting vehicles or equivalent?

Is mass transit ridership stable at a high level and funded appropriately?

Is the GHG impact for new public transportation projects calculated and used for planning?

Has there been investment in ports and rail systems to encourage non-car/truck use?

Is there a prov/state strategy for reducing sprawl?

Prov/state works actively and effectively with regional/local planning entities to promote smart growth?

Do zoning laws encourage compact, mixed-use development?