

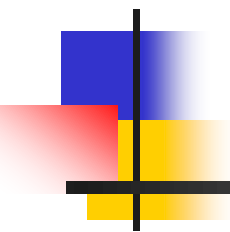
# Climate Change, Sustainability and Massachusetts

*EPP Vendor Fair*

*October 26, 2004*

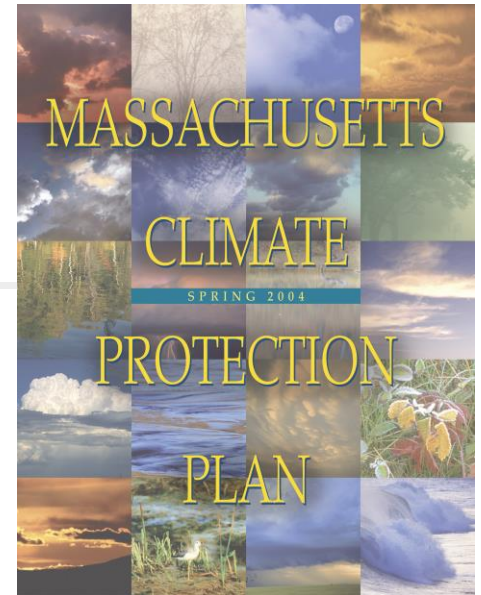
*Worcester, MA*

*Eric Friedman, EOE*

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- ☐ MA Climate Protection Plan
  - ☐ State Government Sustainability Guide
  - ☐ Agency Planning
  - ☐ Waste/Climate Case Study

# MA Climate Protection Plan

- Released May 6<sup>th</sup> by Governor Romney
- Sets long-range targets and includes 72 measures
  - “These are actions we can and must take now; if we are to have “no regrets” when we transfer our temporary stewardship of this earth to the next generation.” Gov. Romney





# The Rationale Behind the Plan

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## Most Scientists Agree:

- **Glacial melting, forest fires, more severe storm** patterns and heavy rainfall events, and then periods of drought will result from global warming
- **Global temperatures are up 0.7 - 1.4 degrees F**, New England coastal areas are showing an average increase of 1.9 degrees
- The **5 warmest years on record** are, starting with the hottest, 1998, 2002, 2003, 2001, and 1997 (the 10 hottest years ever recorded all occurred since 1990).



# Our Own Impacts

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- MA state-wide emissions are comparable to the total **emissions of whole countries** (i.e. Portugal, Egypt, Austria, or Greece).
- If the New England/ Eastern Canadian Region was classified as a country, it would be the **12<sup>th</sup> largest emitter of GHG in the world**.
- Add NY and NJ = 5<sup>th</sup> largest.
- MA emits **1.9% of the total U.S. inventory** with 2.4% of the population
- 19.2 tons per person in MA compared to 26.3 tons per capita in the US and **3.3 tons globally**



# Plan Priority Areas

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1. Inventory and Registry of GHG emissions
2. Modernize Energy and Transmission Systems
3. Promote Energy Efficiency and Renewables
4. Promote Efficient Transportation Technology, and Better Planning for Communities and Transportation Systems
5. Lead by example in State Government
6. Natural Resources: Adaptation and Impacts
7. Public Outreach and Education



# Plan's 10 Chapters

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1. Tough but Realistic Targets
2. Assessing & Communicating Emissions Trends
3. State Sustainability - Leadership by Example
4. Cities and Towns and Climate Protection Partners
5. Business, Industry, and Institutions as Climate Protection Partners
6. Clean and Reliable Energy

6. More Efficient Buildings: Reducing Pollution through Sustainable Design & Construction
7. Transportation & Sustainable Development: Increasing Choices, Reducing Emissions
8. Vehicles: Supporting Clean, Efficient New Technologies
9. Natural Resource Protection as a Climate Strategy



# 1. Tough but Realistic Targets

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## Short-Term

- Reduce GHG emissions to 1990 levels by 2010

## Medium-Term

- Reduce GHG emissions 10% below 1990 levels by 2020

## Long-Term

- Reduce GHG emissions to eliminate threat - 75-85% below current levels



## 2. Assess and Communicate Trends

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- Develop statewide GHG inventory
- Enhance tracking of CO<sub>2</sub> sources
- Require CO<sub>2</sub> impacts in MEPA projects
- Education public about impacts of electricity generation





## 3. State Sustainability

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- Promote GHG reductions across state government - 25% reduction by 2012
- Establish GHG inventory and track progress
- Promote sustainable design for state buildings
- Purchase more fuel efficient cars
- Promote recycling and water conservation
- Stimulate markets for EPPs
- Purchase renewable electricity for state gov't.



## 4. Cities and Towns

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- Create climate change roundtable
- Encourage purchase of renewable energy
- Promote recycling and energy efficiency
- Target tree planting and efficient traffic and street lighting



## 5. Partnering with Business, Industry and Institutions

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- Create a CO2 registry with other states
- Create an emissions and trading program
- Facilitate business leaders roundtable
- Initiate a Governors Climate Change Challenge
- Provide T/A and promote distributed generation at businesses



## 6. Clean and Reliable Energy

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- Provide incentives for renewable energy and support meeting the RPS (4% renewables by 2009)
- Support the Regional Greenhouse Gas Initiative (RGGI)
- Encourage regulations that promote small-scale distributed generation
- Implement new appliance energy-efficiency standards
- Reduce barriers to renewable energy
- Target increase in efficiency of residential oil systems use through incentives



## 7. More Efficient Buildings

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- Continue work on Sustainable Design efforts for state buildings
- Initiate a SD roundtable and promote SD among design professionals
- Incorporate SD approaches into MEPA projects
- Support existing green schools program



## 8. Transportation and Sustainable Development

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- Favor transit oriented development
- Include GHG emissions as criteria in transportation decisions
- Increase parking at train stations
- Reduce emissions at Logan Airport
- Develop new pedestrian and bicycle policies, programs and facilities



## 9. Support Clean, Efficient Vehicle Technologies

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- Provide consumer incentives to purchase fuel-efficient vehicles
- Promote cleaner vehicles and fuels in public transit fleets
- Use cleaner train engine technology to reduce soot
- Adopt GHG emissions standards for new light-duty vehicles
- Eliminate unnecessary idling of buses
- Support HOV lane access for clean/efficient vehicles



## 10. Natural Resources

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- Promote strategies that preserve trees
- Develop comprehensive biomass policy
- Make farms part of protection and mitigation strategies
- Integrate carbon resource management with other natural resource goals
- Continue aggressive open space and wetlands protection





# Plan Implementation

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- Executive committee coordinated by Office of Commonwealth Development (Doug Foy)
- Implementation partners include EOEA, DEP, DOER, DTE, MassHighway, MBTA, OSD, DCAM, etc.
- 7 implementation committees established to develop action plans for dozens of items



# Resources

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- OCD & Climate Plan: [www.mass.gov/oed](http://www.mass.gov/oed)
- State Sustainability:  
[www.mass.gov/envir/Sustainable](http://www.mass.gov/envir/Sustainable)
- DOER efficiency and renewables info:  
[www.mass.gov/doer](http://www.mass.gov/doer)
- Mass Technology Collaborative: [www.mtpc.org](http://www.mtpc.org)

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