



Falmouth 2009 Climate Action Plan

**Report of the
Falmouth Green Ribbon Commission
On Climate Change and Energy Efficiency**

July 13, 2009



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Background

- May 2007: Town Council Signed U.S. Mayors Climate Protection Agreement (USMCPA)
- Pledge to reduce CO2 emissions 7% below 1990 levels by 2012
- Currently 944 cities, including over 20 in Maine, have signed and working to implement USMCPA
- 2008: Council formed Green Ribbon Commission with charge to submit report with recommendations to meet the objectives of the agreement



Guiding Principles

- Focus on areas of agreement
- Reduction potential, cost effectiveness, feasibility, additional benefits, timing
- Mix of low hanging fruit and ambitious, innovative solutions
- Mix of incentives, regulation and education
- Well-informed community is critical



Climate Action Plan Framework

1. **Conduct Emissions Inventory**
2. Set Emissions Reduction Target
3. Complete Local Climate Action Plan
4. Implementation of Plan
5. Monitor Impact



Falmouth Greenhouse Gas Emissions Inventory

	Equiv CO₂ (tons)*	Equiv CO₂ (%)	Energy (MMBtu)*
Residential	67,200	23	776,500
Commercial	24,200	8	252,200
Transportation	198,000	68	2,311,000
Waste	600	0.2	
Total	290,000	100	3,339,700

* Tons CO₂e and MMBtu rounded to nearest hundred.

*2007 Baseline Year



Residential Emissions

	Equiv CO2(tons)	Equiv CO2 (%)
Electricity	15,400	23
Fuel wood (Air Dry)	60	0.1
Light Fuel Oil	50,000	74
Propane	2,000	3
Total	67,460	100



Take Aways:

Our homes are overly dependent on HEATING OIL
(insulation | fuel sources)

AND we are very dependent on OUR CARS
(transportation | land use patterns)

AND we have cleaner electric power than the US as
a whole (south gets much of its electric power from
coal, we get very little)



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Setting EmissionsTarget

- Adopt target of 2% average annual reductions
- Easy to understand and measure
- Provides a realistic long-term planning tool
- Supports state and federal targets



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Recommendation Categories

- Education & Outreach
- Energy Efficiency
- Renewable Power & Fuel Switching
- Transportation & Land Use
- Waste & Recycling



Recommendations: Implementation

- Standing Committee
 - Outreach and Education
 - Town Energy Web Page
 - Energy Use and Data
- Full Time Energy Coordinator



Recommendations: Energy Efficiency

- Residential Energy Audit Program
- EE Rating System for Commercial Buildings
- Smart Metering Test Project
- Reduce Energy Usage in Town Streetlights
- Cold Climate Heat Pump Demo Project



Recommendations: Energy Efficiency (con't)

- Municipal Financing Program
 - Provides upfront financing for interested residents for EE and renewable upgrades
 - Repay cost through tax bill, offset by reduced energy bills
 - Upgrades stay with property
 - Model program in Babylon, NY and other communities



Recommendations: Energy Efficiency (con't)

- EE Building Standards for Public Buildings
- Change How We Heat Water
 - Education on Incentives and Loan Programs
 - On Demand Hot Water (electric/propane)
 - Solar Water Heating System
- Cool Roofs Policy



Recommendations: Renewable Energy & Fuel Switching

- Land-Based Wind Generation Ordinance
- Off Shore Wind Generation Interest
- Municipal Renewable Energy Facilities
- Investigate Opportunity to Tap Existing Gas Pipeline to serve Falmouth and nearby communities
 - Conversion of Cousins Island Plant



Recommendations: Transportation & Land Use

- Retitle Dir of DPW = Dir of Transportation
- Complete Streets Policy and other planning measures to reduce driving and traffic congestion
- Accelerate Bike/Ped Development
- Enact No Idling Ordinance
- Lobby for Higher State Gas Tax to Cover Full Cost of Roads



Recommendations: Transportation & Land Use (con't)

- Town Vehicle Purchase and Use Policy
- Encourage ride sharing and other means to reduce VMT
- Educate public about impact of Large Lawns and Lawn Mowers, Leaf Blowers, Etc.
- Charge to the LPAC |Comp Plan Committee



Recommendations: Waste and Recycling

- Strengthen Town Recycling Efforts
 - Consider weekly curbside recycling pickup
 - Share cost of recycling stations with other EcoMaine communities
- Evaluate options for reducing emissions through solid waste reduction, operations, and EE pump upgrades



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Next Steps

- Council: incorporates “A” and “B” actions on their work plan; creates Standing Committee
- Commission finalizes report
- Return to represent and discuss specific actions in early fall



Thank you for your attention