# MAINE STATE LEGISLATURE

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## Energy Resources Council 2007 Work Plan and Report to the Legislature

### Prepared by:

The Office of Energy Independence & Security State Planning Office

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#### I. OVERVIEW

This work plan and report to the Legislature has been prepared pursuant to 5 M.R.S.A. § 3327. It summarizes the Energy Resources Council's accomplishments during 2006 and outlines the Council's priorities for 2007. The Energy Resources Council was formed by legislation enacted in 2001 and was designed to be a Cabinet-level coordinating council to facilitate interagency cooperation and to provide advice on energy policy issues of statewide significance.

The genesis of the Council was the recognition by the Legislature and the public that, since the abolition of Maine's Energy Office in the late 1980's, energy planning and program functions were spread throughout State Government and lacked effective interagency coordination. In addition, there was no one entity within State Government responsible for energy policy development. In July, 2003 Governor Baldacci created the Office of Energy Independence and Security (OEIS), and the Director of that Office became the chair of the Council. The role and functions of the Council have changed somewhat since creation of the OEIS, with the Office taking lead responsibility for energy policy and program development, the advancement of energy legislation, and government lead by example efforts.

The ERC continues to meet regularly to ensure effective coordination among state agencies on energy issues. Council members include the Chair of the Public Utilities Commission (PUC), the Public Advocate (OPA), Commissioners from the Departments of Administration and Financial Services (DAFS), Conservation (DOC), Economic and Community Development (DECD), Environmental Protection (DEP) and Transportation (DOT), and the Directors of the MaineHousing invited to join ERC meetings as well. The Council is directed to meet at least quarterly, but in 2006 actually met at least 7 times. Council meetings are attended by anywhere from a few to a dozen members of the public.

Council priorities continue to include State leadership by example with respect to energy purchases and use, energy information for consumers, energy assistance to Maine businesses, efficient and effective State energy programs and regulatory processes, energy related economic development opportunities, alternative energy and energy security. These priorities are reflected in a variety of interagency cooperative projects and policy development activities. The OEIS and the Council also serve in an advisory capacity to the Governor on statewide energy planning and policy matters, including proposed energy legislation, development of state energy programs, and comment on specific proposed energy related projects.

In 2003 the Council completed a substantial review of State energy policy and its implementation. Maine Energy Policy: Overview and Opportunities for Improvement, December 3, 2003. Energy Advisors LLC, the Council's consultant on the study, identified many opportunities for action, many of which the Baldacci Administration has pursued over the past four years. These opportunities include increased priority of government leadership by example with energy efficiency and renewable energy use, more comprehensive and

updated energy standards for residential construction, minimum energy efficiency standards for selected appliances, promotion of Maine renewable energy, attention to the energy impacts of sprawl and increased attention to transportation energy efficiency and alternative transportation. This study continues to serve as a valuable resource for the OEIS and ERC.

In 2004 the Department of Environmental Protection completed a yearlong stakeholder process to draft a Climate Action Plan for Maine that meets the goals set forth in a 2003 law to reduce greenhouse gas emissions in Maine to 1990 levels by 2010, to 10% below those levels by 2020, and ultimately by a sufficient amount to avert the threat of global warming over the longer term. The Department's Plan contains 54 measures to meet these goals. Many of the measures identified involve energy use, and this Plan is therefore also used to help the ERC and OEIS set their priorities.

#### II. COUNCIL ENERGY PRINCIPLES

In November 2003, the Council adopted a revised statement of shared principles 1:

- 1. Competitively-priced energy is vital to the state's economy and the well-being of its citizens. Maine should strive to provide energy to all its citizens at the lowest possible cost to promote economic development and retain jobs;
- 2. Maine should increase its energy, security, service quality and reliability through greater reliance on cost-effective energy efficiency, conservation, demand management and distributed resources in all energy-using sectors;
- 3. Maine's energy policy ultimately relies on the health of competitive markets;
- 4. When barriers prevent the effective operation of energy markets or when these markets do not take the long-term societal and environmental impacts of energy decisions into account, the State should look to other tools to achieve its goals, including: regulation, education, taxation policies, subsidies and leadership by example;
- 5. An adequate and reliable energy delivery infrastructure is critical to economic growth and to continued expansion of competitive energy markets;
- 6. Maine should continue to support indigenous renewable energy resources in all energy using sectors to ensure that Maine participates in an effective manner in national and international efforts to promote energy independence, diversity and long-term sustainability;
- 7. State policies should seek to minimize the unnecessary environmental and public health impacts of energy production, distribution and use;

<sup>1</sup> These priorities were a product of Council discussions related to the Energy Advisors study and differ from those included in the Council's 2003 Work Plan and Report to the Legislature in that they include increased priority on indigenous rather than regional energy resources and suggest when government intervention in energy markets may be pursued.

- 8. State Government should lead by example and action in its energy usage practices and policies;
- 9. Maine people should have access to adequate information on the costs, environmental, and other impacts of their own energy choices to ensure that they can make informed decisions; and
- 10. Active interagency coordination on state, regional and federal energy policy offers many opportunities to make more efficient and effective use of State resources.

Maine's energy choices are integrally linked to the health of Maine's economy and environment. The State must carefully and deliberately balance oftentimes competing interests when crafting State energy policies, programs and activities. While striking the appropriate balance may be a difficult exercise in specific situations, the Council will use the above principles to guide its work.

#### III. 2006 ACTIVITIES

The Office of Energy Independence & Security, in conjunction with members of the Energy Resources Council, and the Council collectively, undertook a number of activities in 2006.

- 1. State Government "lead by example." The state continues to pursue actions to reduce its energy consumption through conservation and efficiency measures, and to reduce greenhouse gas emissions through reduced energy usage and a switch to renewable fuels.
  - **Bio-diesel.** The State continues to use a **bio-diesel blend** to heat the capitol complex this year. The State now uses a 5% bio-diesel blend due to some issues that arose during the 2004-05 winter season. The State is committed to continuing and expanding its bio-diesel program with due consideration given to economic and technical factors.
  - State Vehicle Fleet. The State has taken significant steps to reduce fuel usage and improve the energy efficiency of the state vehicle fleet. In August, 2006 DAFS has completed a report on fuel savings from efficiency gains in the state vehicle fleet. Estimated fuel consumption declined by around 5 percent in FY 2006 as compared to the prior year, and has declined by over 600,000 gallons, or about 9 percent, as compared to FY 03.
  - Renewable Energy. Maine State Government in 2006-2007 will purchase 100% of its electricity from renewable sources through renewable energy credits for the 2007 fiscal year. The standard electricity mix in Maine includes 30% renewable power. State government's electricity contract will be 100% from renewable sources. The change is comparable with displacing about 20,000 tons of carbon dioxide annually from the atmosphere or removing from the road about 2,400 mid-size cars each driving 15,000 miles per year.

- **Hybrid Vehicles.** In 2000, the state had only one hybrid vehicle in its fleet. In 2003 it had only 18. Today the State has 65.
- MaineHousing met the Governor's Carbon Challenge by reducing greenhouse gas emissions by 10 percent through a series of initiatives, including installation of a solar roof panel, instituting flextime to reduce commuting days (saving 180,000 commuting miles annually), installing motion sensing lights, full recycling, using post consumer waste paper, installing energy-savings settings on computers, and other measures.
- MaineHousing has instituted Green Building Standards for all new multifamily housing that it finances. The energy conservation measures incorporated in these standards are estimated to make the housing 30 percent more energy efficient than conventionally built housing. The standards also apply to new single-family homes that MaineHousing helps finance through its new Affordable Subdivision Program.
- MaineHousing's Mainestream Green Home Design contest encouraged architects, builders, and others to submit designs for green, energy efficient, affordable homes. The winning designs are being shown in venues throughout the state to encourage more people to build energy efficient homes.
- MaineHousing provided grants for solar roof systems in community buildings in two separate rental housing developments that it funded. The systems are expected to generate enough power to supply the energy needs of the community buildings, which include the laundry facilities for these two developments that include more than 20 units each. MaineHousing will monitor the systems closely to see if they are cost effective.
- MaineHousing initiated the Home Energy Loan Program (HELP) in 2006, which provides loans of up to \$15,000 to moderate-income homeowners for a variety of energy saving improvements, from new heating systems to new windows and appliances. Loans carry an interest rate of 1% if the borrower uses and follows recommendations from an energy auditor. The loans have a 3% interest rate if no energy auditor is used.

#### IV. 2007 Initiatives

The OEIS and the Council plan to continue work on many of the above issues and activities during 2007, as well as focus on additional activities. The following list is a sampling of these activities, but is not intended to be an exhaustive list of all of the OEIS's or Council's activities.

- 1. Maine Home Performance with ENERGY STAR. The OEIS will oversee the implementation of this Program, and will work with Efficiency Maine and MaineHousing to ensure that it is a success.
- 2. Continue to lead by Example in State government: This will involve continuing and, as practicable, expanding the increasing number of existing initiatives, such as renewable electricity purchases, seeking to maintain or increase fuel efficiency in the state fleet, continuing the use of bio-diesel heating fuel, and seeking energy efficiency in facilities owned or leased by state programs. Maintaining the initiatives already begun is key to consolidating and advancing the gains Maine has made.
- 3. Maine Home Performance (Maine HP) with Energy Star (Whole House) Program. The OEIS has been able to launch a residential energy efficiency pilot program for the region from York to Lewiston-Auburn, along the I-95 corridor, based on funding from Efficiency Maine and MaineHousing as well as from the U.S. DOE PVE (oil overcharge) funds, and in-kind support from MODA. A \$500,000 U.S. DOE grant will allow OEIS to leverage additional funds to expand the geographic reach of the program.

CW TV ran a contest and awarded a free home energy makeover to one lucky Windham family. CW then produced a 30 minute show on Maine Home Performance with Energy Star.

The goal of Maine HP is to provide homeowners a one stop shopping experience for energy audits and retrofits in existing homes. The first energy auditor training was held in the fall, eight auditors were the certified by the Building Performance Institute. A second training will be held during January 2007. Maine HP is working with MaineHousing to provide low interest loans for home energy improvements to income eligible homeowners.

#### 4. Regional Greenhouse Gas Initiative.

The Governors of Maine, New Hampshire, Vermont, Connecticut, New Jersey, New York and Delaware signed an agreement to pursue RGGI in December 2005. The state of Maryland subsequently joined the program through legislation, and Massachusetts is also expected to join the program in 2007. The states worked together to develop a model rule and are now proceeding individually to tailor the model to home state needs and priorities. The purpose of RGGI is to reduce regional greenhouse gas emissions (specifically CO<sub>2</sub>) by promoting energy efficiency, promoting low-carbon resources, establishing a "carbon price", and encouraging innovative technologies. It has received national and international attention.

This program is focused on large fossil fuel fired electric power producers of 25 megawatts or greater, which includes 6 facilities here in Maine. The entire participating region has set a regional emissions cap for CO<sub>2</sub>, and each state will be given an allowance of tons of CO<sub>2</sub>, of which all or a portion thereof can be sold or auctioned for public benefits such as energy efficiency, ratepayer rebates, or new clean energy opportunities. Some emissions reductions can also be obtained from new offset

allowances. In 2006, four regional "roundtable" meetings were held across the state to gather stakeholder input into the development of a program that would meet Maine's unique needs.

The DEP will introduce legislation authorizing the implementation of a regional  $CO_2$  cap and trade program. This legislation envisions rulemaking that will be inclusive of a variety of stakeholders and will feature key determinations regarding the auction process and distribution of revenues. Throughout the year, Maine will continue to work closely with our counterparts in other states to continue to develop the regional platform, while developing a state-run program tailored to address the energy and environmental policy needs here in Maine.

The goal of the cap and trade program is to reduce CO<sub>2</sub> emissions by 10 percent from the State cap by the year 2020 which is consistent with the goal established in the *Climate Action Plan for Maine*. This will provide a contribution to reducing the threat of global warming, and will encourage the production of clean and renewable energy sources as well as support conservation and energy efficiency programs.

- **5. LIHEAP.** In response to continued high heating fuel prices, MaineHousing began to explore potential opportunities to stretch its federal heating assistance dollars. After extensive public hearing and comment, MaineHousing adopted a program to set heating oil prices on a "margin over rack" or "discount off retail" basis. This program is modeled on programs that have been adopted in New York State. MaineHousing estimates that this new system will generate an additional 700,000 gallons of heating oil to eligible low-income LIHEAP customers during the 2006-07 heating season.
- 6. Operation Keep ME Warm. For the third year, the Governor launched Operation Keep ME Warm. We modified the intake and delivery process again this year based on input received from the first two years of the program's operation. MaineHousing invited eligible heating assistance recipients to participate. The 2-1-1 system registered households for the program. County coordinators were solicited by the SPO's Commission for Community Service. Outreach to Maine's college and university students was undertaken early in the fall. Funding for Operation Keep ME Warm is derived primarily from MaineHousing and Efficiency Maine. This year weatherization kits costing \$60 were installed in approximately 1,500 homes of low income seniors, people with disabilities, and families with young children. The Maine PUC's energy engineer has estimated the savings of approximately \$160 per household in the first year and \$87/year for up to seven additional years. These saving figures are approximate and will depend on the home and what is needed.
- 7. **Keep ME Warm Fuel Fund.** TD Banknorth and the Community Action Agencies are running the charitable fuel fund this year. It was launched in early December with a \$25,000 contribution from Banknorth. The fund goal is \$500,000, to be raised over the next three years.

- **8. Gasoline and Oil Price Surveys.** The OEIS issues weekly fuel price surveys during the heating season and periodic gasoline price surveys during the driving season.
- 9. Proposed Renewable Energy Projects. Maine is blessed with a vast renewable energy resource that developers are now beginning to harness. DECD and the OEIS continue to meet with a number of developers of proposed bio-fuel projects, wind and tidal power projects, and other energy proposals.
  - Wind Projects. The 42 megawatt Mars Hill wind project is expected to be completed and operational soon, making it the largest wind farm in the Northeast. The LURC staff recommended approval of the 90 MW Maine Mountain Power Redington Project, although LURC has recently turned down this proposal. Transcanada is poised to file a permit application for a 130 MW wind project near Kibby Mountain. Other wind developments are on the drawing board, including over 100 MWs in Washington County and several hundred megawatts in Aroostook County.

**Hydropower** Because of its importance in the State's energy portfolio, maintaining a healthy existing hydropower system which operates economically and effectively shall continue to be initiated. Active (pending and appealed) FERC hydropower proceedings are monitored and administered by the OEIS. In addition, public notice is provided by OEIS website updates and, when required, by legal newspaper public notices.

- Tidal Power. Since the release of the EPRI study identifying Maine as having an excellent tidal power resource, nine developers have filed for preliminary permits from FERC to study the tidal power potential of sites along the Maine coast. Maine's hydropower working group, which includes members from SPO, DEP, DMR, Conservation, and the AG's Office, has met several times to discuss issues relevant to siting and permitting tidal power projects.
- Bio-fuel Projects. DECD continues to work with a number of developers interested in producing ethanol and bio-diesel from Maine's wood wastes and other organic feedstocks. In June Innovative Natural Resource Solutions LLC produced a report on wood-based bio-fuels and bio-products for the DECD's Office of Innovation. The report, which reviewed emerging technologies, assessed the commercialization challenges associated with each, identified companies active in this sector and recommended State of Maine strategies for promoting bio-product development. This report can be found at <a href="https://www.inrsllc.com">www.inrsllc.com</a>. It identifies the following three challenges: process economics are not yet proven at the commercial scale, high capital costs are associated with achieving commercial scale production and significant demand for the feedstock from existing wood users. The Maine Technology Institute has been actively supporting bio-product development, as it has provided funding for feasibility analysis, one of the report's recommendations.
- **10. LNG.** In response to the three proposed LNG projects in Washington County, last year the Governor formed an LNG Technical Working Group to coordinate state regulatory activities and ensure that the state effectively responds to the FERC permit process for these facilities. Two of these projects Quoddy Bay and Downeast Energy -- have now filed

applications for permits from the FERC. DEP is serving as a cooperating agency with the FERC, but the SPO and other state agencies will file for intervenor status with FERC.

The LNG Technical Working Group is composed of state agencies that include the Bureau of Parks and Lands, Department of Environmental Protection, Maine State Planning Office, State Fire Marshal's Office, Maine Emergency Management Agency, Maine State Police, Department of Marine Resources, Department of Inland Fish and Wildlife, Department of Transportation, and Department of Economic and Community Development. It is chaired by the Director of the Maine State Planning Office, and coordination staff is provided by the OEIS. The Group meets approximately once a month.

11. Biodiesel working group. The OEIS continues to address issues and share information to further the advancement of Biofuel production, distribution, and consumption in Maine. Issues being pursued include supporting the American Biodiesel Board in seeking approval from the Board of the American Society of Testing and Measure to adopt bioheat B5 as a compatible fuel to Number 2 distillate (heating oil).

#### 12. Growth Management

In 2004 the legislature directed the State Planning Office to review the effectiveness of the Growth Management Act. In response, SPO conducted a 9-month study that included a 2-day Summit, Focus Groups, a Survey and numerous meetings with stakeholders. Key findings included that fact that there is solid support for local land use planning, but that planning hasn't directed development into growth areas as originally intended by the Act. Two key recommendations resulted from the study:

- 1. To enhance local planning (to make state policy guidelines clearer and provide towns and regional agencies with better tools, data and support)
- 2. To shift state focus to issues of regional and statewide significance (including better coordination of public investments)

These recommendations reflect the thinking of SPO and the legislature that while local planning is valuable, many important issues such as natural resource protection, affordable housing, economic development and transportation could be more effectively addressed at a regional level. Further, these issues need to be addressed together in a coordinated way, in order to slow sprawl and preserve our natural landscapes.

SPO has taken the first step in implementing the recommendations by drafting a new rule for comprehensive plans. The new rule is designed to reduce the time and headaches of developing plans at the local level and reviewing them at the state level. This will free up state staff to focus on issues of regional and statewide significance in the future.

The new rule also redefines a "growth area" in a way that SPO believes will be more effective in slowing sprawl. In the past, a growth area was defined by residential density. In the new rule a "growth area" is defined as an area where a minimum of 75% of public

investment in infrastructure will be made. The new rule also requires "critical resource areas" to be clearly defined and protected. By more clearly articulating the location of and policies applied to "growth areas" and "critical resource areas", SPO envisions that local plans will be a more effective tool for managing growth. The APA hearing process for the rule will begin in March, 2007. The new rule is expected to take effect in the third quarter of 2007.

12. Legislation. The OEIS and several Council members worked for passage of energy legislation last session. Of primary importance was An Act to Enhance Maine's Energy Independence and Security (Governor's Bill). This bill: 1) reduces the excise tax rate for diesel motor fuel that contains at least 2 percent biodiesel by 7.9 cents/gallon; 2) permits the Maine PUC to incorporate cost-effective demand response and energy efficiency into the standard offer supply; 3) permits the Maine PUC to incorporate long term contracts for energy into the standard offer; 4) gives the Maine PUC the authority to direct large T&D utilities to enter into long-term contracts for capacity and, in some cases, energy resources; 5) establishes a priority order for selection of capacity resources with which to contract; 6) requires the MPUC to establish a capacity resource plan; and, 7) establishes a Maine Energy Council.

In 2007, in support of the Maine Home Performance Program, OEIS is pursuing legislation to create an exemption in the licensing requirements in the enabling statutes of the Oil and Solid Fuel Board and the Propane and Natural Gas Board for individuals who perform combustion testing on oil and gas-fired appliances. Each licensing board will be required to engage in emergency rulemaking to define combustion testing which an unlicensed individual may perform without a license. Each board's emergency rules will be promulgated under the provisions of the Maine APA within 90 days of the effective date of bill passage.

- 13. Energy Savings Tips Contest. For the fourth year the OEIS and Efficiency Maine held an energy savings tips contest for 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> grade students. The contest is comprised of two categories: energy savings tips for the home; and, energy savings tips for the school. The Governor presented the six grade school winners iPod shuffles on January 17<sup>th</sup>. The winning entries include switching to energy saving light bulbs that last longer and save energy, keeping the computer off if no one is using it, and instead of running lights, just open the shades and get natural light.
- **14.** Maine Home Performance with ENERGY STAR. The OEIS will oversee the implementation of this Program, and will work with Efficiency Maine and the Maine Housing to ensure that it is a success ...as it goes statewide.
- **15. Fuels for Schools**. The OEIS with other agencies and organizations such as the Maine Forest Service and the Maine Association of Conservation Districts is exploring the development of a program to promote alternative heating for schools and other public buildings using biomass, corn, or other renewable product.
- 16. Maine Housing has worked with two colleges, the University of Southern Maine and

Unity College, who now will offer a course on energy auditing. MaineHousing is also working with vocational schools to see if they are interested in offering courses in weatherization and/or green building practices.

#### V. 2007 Work Plan

The OEIS and the Council plan to continue work the above issues and activities during 2007, as well as focusing on additional activities. The Council continues to meet on a regular basis to review energy programs, legislation and policy issues. However, a more formal workplan for 2007 has not been prepared in the absence of a Director of the Office of Energy Independence and Security. When that position is filled, we expect the new Director to propose additional priority issues and activities.