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April 22, 2013

Senator John Cleveland, Chair
Representative Barry Hobbins, Chair
Joint Standing Committee on Energy, Utilities and Technology
100 State House Station
Augusta, ME 04333

Dear Senator Cleveland, Representative Hobbins, and members of the Committee:

In 2011, Public Law Chapter 400, 125th Legislature (LD 553) became law. *"An Act to Improve Maine's Energy Security"* requires the Governor's Energy Office (GEO) to develop a plan to reduce the use of oil in all sectors of the economy in Maine.

According to the statute the plan is to include, relying on existing state data and studies, the following:

1) Reduce the State's consumption of oil by at least 30 percent from 2007 levels by 2030 and by at least 50 percent from 2007 levels by 2050;

2) Focus on near-term policies and infrastructure changes that set the state on a reasonable trajectory to meet both the 2030 and 2050 targets; and

3) Prioritize the improvement of energy efficiency and the transition to the use of alternative energy sources for heating and transportation.

First, based on the analysis and research of LaCapra Associates, who conducted a baseline analysis of the State of Maine's oil consumption and trends, Maine is expected to achieve the 30 percent target oil consumption reduction from 2007 under current policies and market conditions. This is a function of existing market forces compelling Maine households and businesses to reduce consumption of oil and expand use of alternative energy sources.

However, while the State has made progress in reducing oil consumption, the bottom-line is that our oil costs have increased. Specifically, since 2007 Maine residents have decreased their oil use by 26 percent; the commercial sector by 20 percent; and the industrial sector by a significant 40 percent. Across all sectors, from 2007-2010, total oil consumption in Maine decreased by 14 percent, or 5.5 million barrels per year. It is critical that the state move forward with a concise plan to lower energy costs for Maine families and businesses.

The primary objective of state policy must be to reduce our household and business energy costs. While Maine has made progress in reducing our oil consumption, we continue to consume oil at the highest per capita level in New England. More critically, our energy expenditures have increased despite the fact of this reduction in oil consumption.

State Energy Plan

1) ***Residential Sector*** – *Invest in All Affordable Heating Solutions*

Mainers spend too much to heat their homes in the winter. The average Maine household spends well over $3,000 on residential heating, and this is simply unaffordable to thousands of households. Accordingly, the Governor's Energy Office recommends a prioritization of existing funds to target heating costs, expand the market understanding of energy efficiency, and to utilize the use of wood harvesting on state lands for energy investments.

A) **Prioritize Affordable Heating Options.** This office recommends statutory changes that would reallocate existing sources of funding, from the Regional Greenhouse Gas Initiative to the System Benefit Charge, toward increasing the use of affordable heating options from natural gas, wood pellets, propane, advanced heating oil systems, heat pumps, as well as investments in energy efficiency. The goal should be to transition 10,000 households annually to more affordable heating options.

B) **Expand Understanding of Energy Efficiency.** The statutory requirement of weatherizing 100 percent of homes by 2030 must be more defined and near-term goals established. In addition, it should be the priority of the state to facilitate the private market to invest in energy efficiency upgrades. Relying on state and federal funding to meet this ambitious goal is insufficient –attracting private sector financing is critical.

C) **Utilize Maine's Biomass to Benefit Mainers.** Maine possesses one of the best biomass resources in the world. However, our state land has been historically under-harvested, which provides an opportunity to utilize the sale of timber harvest to invest in affordable heating options. In addition, Maine should continue to expand the use of local resources to provide heating options to Mainers.

2) ***Industrial and Commercial Sector*** – *Expand the Use of Natural Gas*

The oil shock has forced industrial customers, in particular, to achieve significant progress in reducing oil use through a combination of utilizing energy efficiency as well as investing in natural gas and biomass. Commercial customers have reduced their use as well, although not as rapidly, due to their lower economies of scale than industrial customers. There are currently significant investments proposed to continue this trend both through an expansion of pipeline and through the use of compressed natural gas, and it is essential that these plans are implemented safely and expeditiously while also focusing on rural regions of the state. The two major challenges for the State's business sector to continue to utilize this resource include the regional volatility of natural gas pricing as well as access to capital for investments into natural gas systems.

A) Reduce Volatility of Natural Gas. Working with the Legislature and industrial sector, the State should lead a regional partnership to increase capacity of natural gas into the region.

B) Expand Financing for Natural Gas Systems. The prospect of financing a complete replacement of the primary heating system at an industrial or commercial business can be challenging. The state should work with the private sector to lower the cost of capital investments for advanced heating systems.

3) ***Transportation Sector*** – *Expand Mass Transportation Options and Alternative Fueling*

The current estimates of reductions in the transportation sector, over and above efficiencies realized by increased federal fuel efficiency standards, will be necessary to reach the 2050 target, yet reductions in this sector are the most challenging to achieve. Possible strategies discussed in this report include increasing the use of more efficient and/or alternatively fueled light duty vehicles (LDVs) and commercial vehicles; public transportation, reductions in vehicle miles traveled (VMT); strategies to increase efficiency (idling programs); and alternative fuel use in long haul trucking. Aside from increasing the use of more efficient light duty vehicles and trucking idling programs, the strategies discussed require a much higher upfront cost for the vehicles, development of an alternative fueling station infrastructure, and adoption of a similar infrastructure in other states. High-level cost estimates of such conversions are significant.

Therefore, given the significant uncertainties of cost estimates, the Governor's Energy Office recommends further study of the transportation sector in Maine, which would include data collection on vehicle miles traveled, modal choices, current technological status of alternatively fueled vehicles and refueling stations, and refueling infrastructure costs. Specific study should be given to expanding mass transportation between cities, and working with the Northeast to expand the use of alternative fueling stations.

Maine has a significant potential to reduce our exposure to oil prices through implementing a comprehensive plan to utilize affordable heating options. This Office looks forward to working with the Legislature in executing a robust plan to move our State forward with an energy policy that assists in delivering affordable energy options to Maine families and businesses.

Thank you for your consideration of this report and recommendations.

Sincerely,

Patrick Woodcock
Director