



October 23, 2009

Adam Lee, Chair
Naomi Mermin, Vice Chair
Efficiency Maine Trust Board
19 State House Station
Augusta, ME 04330

**Comments of Dylan Voorhees, Natural Resources Council of Maine
Re: Cost-effectiveness, as discussed at the October 15, 2009 board meeting**

Chairman Lee,

As suggested by Ms. Mermin at the October 15 board meeting, I would like to submit some public comments in writing since there was not time to hear from everyone on the important subject of the board's discussion, cost-effectiveness. I applaud the board for initiating this discussion and inviting Optimal Energy to make a presentation on an incredibly important topic. I look forward to such presentations and learning opportunities in the future.

Mr. Belliveau's presentation went straight at a detailed, analytical look at what cost-effectiveness means to energy efficiency program administrators (here in Maine and elsewhere). For me there were a couple of take-away lessons from that presentation:

- **Cost-effectiveness is incredibly important:** If you fund programs, projects or measures that are not cost-effective, you risk actually leaving energy consumers (and society) *less well off than they were before*. Nobody wants that. And it goes against one of the principle motivations for energy efficiency in Maine and elsewhere—saving money. There may be circumstances when policymakers decide that a cost-effectiveness test will rule out smart, worthy investments that they decide are in our long-term interest. That is acceptable as long as it is an explicit, deliberate decision, not a lack of attention to cost-effectiveness. (In general, that is a decision that legislative policymakers will make rather than the Trust—your statutory mandate is clearly cost-effectiveness, but exceptions may be implied in some programs directly mandated in statute, like the solar power incentives, or in mandates such as the minimum spending on low-income programs.)
- **Rigorously measuring cost-effectiveness doesn't mean not valuing other objectives:** Cost-effective energy efficiency programs create many valuable outcomes. They reduce energy costs, they reduce emissions, they stimulate the economy by freeing up money that gets spent in Maine's economy, and they create jobs for efficiency companies of all kinds. Cost-effectiveness is an information tool—it can be used to prioritize programs or measures, or it can simply be a threshold test to make sure something is economically

beneficial. No efficiency program administrator I'm aware of designs programs *exclusively* to maximize cost-effectiveness (they consider market issues strategically, for example), but they *all* measure it carefully.

- **Cost-effectiveness can be complex, but we have tried and true ways of measuring it:** The math Mr. Belliveau presented may have daunted some of us, but it is the bread and butter of the managers and experts who develop and evaluate efficiency programs every day. The Public Utilities Commissions Chapter 380 rules are a well-developed set of principles that allow for a societal benefit test to be conducted consistently across programs, giving policymakers reliable “apples-to-apples” information about net economic benefits. The Trust can ensure that the careful analysis Mr. Belliveau outlined is conducted simply by adhering to Chapter 380. I do not believe it would be difficult to make simple modifications to Chapter 380 to make apply it to unregulated fossil fuels—it's simply a matter of including different assumptions about the avoided energy costs.

There was also some discussion by the Board, particularly by Mr. Rohman, about the cost-effectiveness tests in use for Maine's current and emerging efficiency programs. I think a complete list of programs would fall in four basic categories:

- 1) Core Efficiency Maine programs making excellent use of the Chapter 380, societal benefits cost-effectiveness test. The Residential Lighting program or the Business program are examples. This is over 50% of all current Maine efficiency spending (not including low-income weatherization.)
- 2) Exceptional, smaller programs run by Efficiency Maine that are not using the Chapter 380 test either due to lack of measurable data or policy decisions that trump cost-effectiveness. The wind and solar rebate program and the Renewable Resources Fund are examples. This is roughly 10% of all current efficiency programs.
- 3) RGGI funds use a different but analogous test. All funding must still meet a basic societal benefits test, though funding priorities are based on a slightly different test that measures benefits per dollar of Trust spending. Current RGGI allocations are roughly 35-40% of the total.

You can see that for current programs, **90% of the funds** are spent only after passing specific cost-effectiveness tests that are modifications to the basic societal benefits test. That's excellent, and Efficiency Maine/PUC, the RGGI Trust, and policymakers should be commended for that. (Although I've set low-income weatherization aside it would be useful at some point to compare how cost-effectiveness is measured at MSHA.)

- 4) The fourth category includes new, stimulus funded efficiency programs that are currently emerging from Efficiency Maine. Setting low-income weatherization aside again, these funds are roughly **1.5 times** the existing annual efficiency budgets. So these programs are major budget items. However the cost-effectiveness test(s) for these new programs are unclear. To my knowledge none of the RPFs or RFAs reference the Chapter 380 rules.

Given these facts, I would make the following recommendations to the Board at this time:

- A) **Stick with, and use, the Modified Societal Benefits Test codified in Chapter 380 until or unless there is a compelling reason to change it.** It is substantially the same test as all the other public efficiency programs in the northeast apply, so re-examining this successful test in detail need not be a top priority for the Trust at this time, although making any necessary changes to help apply it to fossil fuel programs is in the best interest of the Trust and the PUC and should be done.
- B) **Ask Efficiency Maine (and RGGI) to provide basic information about the cost-effectiveness measures associated with each of its current and emerging programs.** I believe the Board already requested a simple list of all programs—to be most useful, this request could be amended to include the program budget, the test used (if any), and a simple number (if available) showing the program's cost-effectiveness. This would allow you to check my conclusions for yourselves.
- C) **Ask the PUC, as it develops the stimulus programs, to use Chapter 380 cost-effectiveness rules, modified as necessary, unless there are explicit reasons not to.** As has been pointed out, these programs will operate for longer under *your* watch than under the PUC, which is part of the reason why your governing statute calls for consultation between Trust and PUC on new programs (PL 2009, Ch 372, Section C-12, 12). We must all acknowledge the pressure on the PUC to deploy stimulus funds quickly—we all share an interest in advancing energy efficiency programs right away—and that several RFP's are already out (at least one has already been awarded). I do not believe any of that would prevent them from doing, in implementation, what they have done well in the past: applying their own cost-effectiveness rules as best they can.

I am always happy to answer any questions. Again, I commend you for starting with such an important issue.

Sincerely,

Dylan Voorhees