

Renewable Energy Vermont's Summary Response to the Vermont Department of Public Services' Report to the Legislature on the Vermont Clean Energy Development Fund

Renewable Energy Vermont (REV) appreciates the work the Department of Public Service (DPS) has done in preparing its report. REV looks forward to working with the DPS on the details of the Clean Energy Development Fund (CEDF) and in engaging the public on the DPS' plan for the CEDF.

Our comments are structured as follows:

- We begin with a refined set of guiding principles that REV thinks can be used to help structure the discussion of the CEDF development.
- We then identify seven areas of comment that are broad in nature, and finally
- We provide specific comments on the draft text.

Principles and Guidelines:

The business and individual members of REV believe the following guidelines and principles will help stakeholders design and implement a Clean Energy Development Fund that meets the legislative intent, is efficient, and maximizes societal benefits from the expenditure of these funds. These points represent a slight expansion and revisions to the initial comments we shared with the Department in January, 2006.

- The overarching objective should be to catalyze greater and more rapid development of clean energy resources.
- Renewable energy must provide a very significant majority of these resources.
- A diversified portfolio of clean energy development - between resources, technologies, size, and market actors – is preferred.
- There should also be a balance between short-term resource acquisition, and longer

term market development.

- Activities should be reasonably expected to reduce and/or remove specific market barriers.
- Activities should be reasonably expected to lead to permanent changes in the market, so that over time the same types or levels of market interventions are not required to meet clean energy development goals.
- Activities should result in sustained, orderly development of markets. This requires a striking a balance between flexibility to adapt to emerging market conditions, and predictability to foster investment and business decision-making.
- Administrative and initiative delivery mechanisms, such as competitive market based initiatives and solicitations, should reward innovation and performance.

General Comments:

The REV Board and membership have identified five general areas of comment on the initial Clean Energy Development Fund proposal.

Planning: REV sees a real need to create a multi-year strategic plan as well as an operational plan to guide the CEDF investments. The strategic plan would identify the barriers to clean energy development in Vermont and lay out a course of action to eliminate or reduce those barriers. The operational plan would specifically direct the CEDF resources towards the identified barriers in order to create real market opportunities for clean energy development.

Advisory Board Establishment and Composition: REV sees a strong need for an Advisory Board to be established as soon as possible so that clean energy stakeholders can assist the DPS in creating the best strategic/final plan and program designs for the CDEF. Short of establishing the final Advisory Board REV recommends that an advisory committee be established that consists of Vermonters knowledgeable on renewable energy technologies, businesses, policies and programs.

REV is concerned about the proposed composition of the Advisory board. As proposed, the advisory board would not have the depth of knowledge on renewable energy markets, technologies, and market development initiatives that we think will be necessary. For the Advisory Board to be able to successfully assist the Fund Administrator as listed in the draft plan the Board will need experts in the different renewable energy technologies the CDEF was set up to promote.

We think it is essential that the Board have a representative from the three principle renewable energy technologies (solar, wind, and biomass). We think one representative from the E-23 utility group can adequately cover the utility issues involved in the CDEF. Thus, we recommend that the Advisory Board consist of: The DPS Director of EE; a solar energy representative; a wind energy representative; a biomass energy representative; a electrical utility representative; the State Treasurer or his/her designee; a representative of VEDA.. REV would also support consideration of including additional members on the advisory board with expertise in combined heat and power technologies, market development, and/or another utility representative from a different type of utility.

Thermal Renewable Energy: REV's interpretation of the legislative intent for Act 74 is that CEDF should support the market development of renewable electric and thermal technologies. Recognizing the focus of the fund will be on electricity and CHP, given the source and history of the fund's creation, REV maintains that initiatives to support the

solar, geothermal, and biomass thermal markets should be part of the CEDF mandate. This would include: district, institutional, and commercial biomass heating; commercial and residential scale solar hot water; transpired solar air collectors for ventilation air pre-heating; and geothermal heat pumps for heating and cooling

Ongoing public/stakeholder involvement: REV is pleased to be working with the Department and other stakeholders to help initiate the CEDF. The initial proposal highlights the important public input process, as the structure and administration of the CEDF are determined. A critical success factor will be for the CEDF to maintain high levels of clear and timely communication on market activity and initiative status, and to provide ongoing opportunities for public and stakeholder involvement.

Workforce, Business and Market Development Activities: The vast majority of CEDF resources should directly support the deployment of commercially available technologies. However, experience from Vermont and other markets suggest that solely focusing the fund resources on individual projects and installations will not provide the maximum long-term market growth and benefits. The CEDF needs to support workforce, business and market development through initiatives addressing training, certification, strengthening upstream supply chain relationships, and general market outreach, consumer education and support.

Research, Development and Demonstration: Given the stated goals and size of the CEDF, REV does not consider research, development and demonstration activities to likely be an effective use of the funds. Generally, as stated above, REV supports a fund that is focused on the market development and deployment of commercially available products, with market based initiatives and solicitations providing the foundation of CEDF activity.

Move Quickly to Build on Current Activity and Past Success: The CEDF provides an important opportunity to initiate a fast-acting, forward-looking model to spur the renewable energy industry in Vermont. REV has some concerns that the initial proposal, in places, is too focused on support of larger individual projects and not focused enough on continuing market growth in areas of past success. Initiatives designed to continue those successes should first be rolled out, and then expanded in additional directions, as funding and staff resources are available.

Specific Comments on CEDF Narrative:

GOALS

As indicated above, REV thinks the CEDF should include thermal renewable energy. The second paragraph and the first bullet item on page 2 should properly quote the language of Act 74, which says that, “the fund shall be managed, **primarily**, to promote: (1) the increased use of renewably produced electrical **and thermal energy** and combined heat and power technologies in the state; ...” (emphasis added). In the first goal (page 3) we think the word “electricity” should be changed to “energy”. We also would like to see deployment and markets highlighted in this goal. Therefore we recommend the following:

“Accelerate Vermont’s investment in, and deployment of, energy resources and market activities that are economically sustainable and environmentally sound.”

It is important to REV that the second goal not settle with “maintaining” Vermont’s current level of renewables in our energy supply.

We recommend expanding the goal to state:

“Invest in the development and deployment of clean energy technologies and market activities to ensure that Vermont increases the amount and diversity of renewable resources in our energy supply.”

For the third goal REV recommends the following modification, to emphasize value (with regard to long term market development), and a sustained benefit to Vermont's economy and environment:

“Ensure maximum value from the CEDF funding, by focusing on initiatives and activities that support the sustained, orderly development of commercial markets for clean energy technologies.”

Guiding Principles: We are in full support of the three guiding principles. We recommend modifying the first principle to say “...identify and remove or reduce market barriers....”.

Advisory Board: As indicated above, REV is concerned about the proposed composition of the Advisory board. REV also recommends that the scope of the Advisory Board be at a higher level, than proposed in the initial draft. The current language states that the Advisory Board will assist the Fund Administrator with items including the review of funding proposals, and determining the viability of specific company, project, products and services. REV suggests this level of review and approval is most efficiently and effectively handled directly by the fund administrator, with external support as required.

REV recommends the Advisory Board functions focus on items such as initiative design, funding allocation between initiatives, and the potential modifications of initiatives in response to evaluation results, and market conditions. These strategic level decisions and

guidance are critical to the CEDF success, and will require the full attention of the Advisory Board without getting them into the detail of individual project and funding proposals.

Allocation of Funds: This section of the narrative can also be interpreted to suggest that the Advisory Board will be directly involved in the review and approval of individual projects. If this is the intent, REV is concerned that this process may become too cumbersome to support the rapid levels of market development and deployment that the CEDF has the potential to generate.

REV encourages the CEDF design to make heavy use of market based initiatives and solicitations that will allow for the installation of large number of systems. For example, approval for individual projects under a market based initiative supporting the installation of solar hot water, PV, or CHP systems should involve a quick review to insure compliance with program eligibility requirements and guidelines. This is an administrative level function, and the language in this section should make it clear that the Advisory Board is not expected to be directly engaged at this level.

The Advisory Board should provide essential oversight on the initiative designs and eligibility requirements, and in so doing, will help to ensure that resources are allocated in a fair and cost-effective manner.

Our comments on this point may already be well in mind, but experience from elsewhere warns that some funds have been very slow to generate market activity due to initial plans relying on high level review of each funding request, rather than establishment of market based initiatives and solicitations.

REV supports the criteria as laid out in this section for the DPS and the Advisory Board

to consider (leverage, sustainability, market impact and economic impact) and looks forward to working further with the DPS on defining them more specifically.

Public Input Process: Comments above, REV suggests that final plans clearly define ongoing public and stakeholder communications and input processes.

Funding Mechanisms: We propose that market transformation activities also be included in this section.

Proposals for Initial Consideration

COMBINED HEAT AND POWER (CHP): The purposes of the fund, as laid out in Act 74, clearly favor renewable CHP over fossil CHP – which is also strongly supported by any forward-looking energy policy. We support the CEDF in prioritizing biomass-fired CHP in public sector and institutional settings: campuses, state office complexes, hospitals, prisons, public housing and community district heating.

BIOMASS: REV feels that the design and targeting of the fund should take a broad look at all potential forms of biomass. As written, there is a strong emphasis on farm digester systems for power production. We feel that existing technology biomass heating systems should also be included, to encourage their use in applications, such as affordable housing, where they are now under-utilized.

SOLAR PV: The report notes that solar PV has a "...significant additional commercial application potential..." While REV does not disagree, no mention is made of the very significant residential potential, that has a well developed infrastructure, and a public that is willing to put significant amounts of their own capital into their systems, offering great leveraging of the state's funding (about a 4 to 1 leverage under the last incentive

program, could be larger).

Affordable housing is mentioned and it is a good market. However, standard housing leverages more money and gets more distributed generation into the marketplace. Affordable housing PV will typically cost the state 3 to 4 times as much (minimum) as support for standard housing.

Schools are a good market for PV. This may also leverage other VT state funds into the program, depending upon pending legislation.

REV was surprised to find that solar hot water and solar air heating were not included in this report. These are incredibly efficient and effective technologies. Solar Hot Water has been included in the solar and small wind incentive program. As stated above, thermal energy should be part of the CEDF. However, since a lot of solar hot water projects can offset electric hot water heating, it is especially appropriate for the CEDF.

REV also wants to make sure that the absence of wind energy discussion in the report does not preclude wind energy from consideration once programs are being developed.

PERFORMANCE-BASED CONTRACTING

Performance-based contracting is a method of financing and implementing energy projects, and so is not like the other technologies listed under "Proposals for Initial Consideration." ESCO's can currently perform performance based contracting profitably, as indicated in the Montpelier example. If up front funds for audits are required, that money could be made available through a standard interest rate loan program, repayable out of the first year's savings. Perhaps the state could work with one of the state's leading lenders (like the VT Community Loan Fund) to create such a program. If this is not possible due to state laws (I believe schools are currently able to borrow funds), then the Efficiency

Vermont Fund could supply the short-term loans. These should always be paid back in year one after the ESCO has installed the conservation devices.

However, REV does not believe this should be part of the program at this time. Efficiency Vermont should work on this worthwhile program. If necessary, legislation should be introduced to allow EVT to make this type of loan to schools and towns in Vermont.

Next Steps

REV looks forward to working further with the DPS to create and implement the CEDF. REV is available to meet with DPS staff and is willing to assist in the public engagement process.