

# Climate Change in Your Pocket

*Scudder Parker and Frances Huessy, Vermont Energy Investment Corporation*

## ABSTRACT

Several energy efficiency design and regulatory experts recently concluded that advancing deep energy efficiency in homes to a level necessary to meet greenhouse gas targets will require increasing political support and funding (Neme et al., 2011). Clearly, this is true for commercial and industrial businesses, too. How can current service delivery models and practice inform grassroots support for deep—and then deeper—energy efficiency?

Although of critical importance, the monopoly / regulatory justification for energy efficiency investment is insufficient by itself to attain the full potential for energy efficiency acquisition. Winning customer hearts and minds must also become an implementation priority. This paper updates the experience and learning of Vermont’s utility scale energy efficiency implementer that has also begun to implement energy efficiency services in Ohio and in Washington, DC. The paper demonstrates that a deep commitment to providing sustained, effective customer benefits is essential to building institutional strength and consumer support—and their corollaries: political support, appropriate funding, and community “ownership” of energy efficiency.

Drawing on the implementer’s new regulatory structure and its customer-focused approach, the paper addresses critical issues in delivering a new generation of combined energy efficiency service that:

- Moves participation to “critical mass” so that energy efficiency is broadly recognized by *customers* as a valued benefit
- Uses the customer value proposition as the basis for marketing efficiency services
- Builds partnerships with trade allies, key customers, communities, and customer groups, recognizing the customer and economic benefits of energy efficiency
- Delivers increasingly coordinated and lasting “sustainability” services to customers

## Learning from Our Efficiency Work

The concept of “demand-side management” (DSM)—energy efficiency—emerged at a time when regulated energy utilities assumed it was appropriate and beneficial to customers and the economy to maximize development, commercialization, and use of energy resources. For years, increasing the supply side—energy production, generation, and transmission—was the “proven” way to drive down the unit costs of energy. The underlying economic calculations did not consider externalities or the full lifecycle costs of all energy options. For the past 35 years, efforts to place energy efficiency on a level playing field with energy generation have made slow but significant progress in changing the way the United States meets its energy needs. But it is only through the *implementation and measured performance* of deep levels of energy efficiency in the last decade that we have begun to understand how different the pursuit of efficiency is from an economic model that seeks the lowest first cost and values continuous growth in consumption. The sustained pursuit of energy efficiency can move the United States to a new

model for how energy resources are used. It demonstrates the power of innovation and new solutions. It also begins to reveal what an economy might look like that gives priority to sustainability, while recognizing lifecycle costs and externalities. Federal strategies to address one of the more urgent reasons for advancing efficiency—climate change—are stalled, and despite a tidal wave of Recovery Act funding, the underlying structure of federal energy policy has changed little. The national debates over natural gas “fracking” and the Keystone Pipeline reveal that discussion of externalities and lifetime costs are still at the margins of major energy discussions. So it is increasingly up to states and other local jurisdictions to build the institutional capacity to provide aggressive levels of efficiency and renewable energy.

A dozen years of implementation experience in Vermont have made it clear: What started as a utility-focused consideration for regulators is also: (1) a stimulus for technological and behavioral innovation; (2) an opportunity for customers to save money and improve productivity; (3) a way for customers to be more comfortable in their own homes and make their businesses run better; (4) an economic development strategy; (5) a way to lower risk and energy vulnerability and (6) a low-cost method for reducing greenhouse gas emissions. Implementation has taught us that the “market” for efficiency services is not so much a market as an emerging system of recurring and shifting opportunities to create a sustainable economy, a healthful environment, and stronger communities. Energy efficiency can contribute significantly to *all* of these indicators and more. Sustained efficiency programs have begun to use many of these positive attributes of efficiency to “sell” it to customers (Pielli et al, 2011).<sup>1</sup>

What the efficiency community has not done in any coherent manner is recognize and articulate that energy efficiency—and the approach it embodies—has enormous potential to empower customers and communities. It provides them with new tools to address the economic challenges they face, and helps change their relationship to the energy they use. Recognizing this dimension of energy efficiency implementation benefits is an important step in understanding how to build the kind of public support required to continue and expand the effort.

## **Re-defining Our Work**

In 2008 the Vermont Energy Investment Corporation (VEIC) presented ACEEE Summer Study Paper 335, “What Does it Take to Turn Load Growth Negative?” and Paper 351 on “Taking the Efficiency Utility Model to the Next Level.” These papers summarized VEIC’s learning about what it takes to implement sustained deep efficiency services, and suggested a new level of institutionalization for the efficiency utility model. The Efficiency Utility model was in the process of being formally created under a franchise framework in Vermont that year, as part of the State’s regulatory structure. Since 2008, when the multiyear transition to a full Order of Appointment for Vermont’s Energy Efficiency Utility (EEU) began, Efficiency Vermont continued to realize high levels of savings, averaging 2% of annual sales; and Vermont formally converted what was a three-year performance contract into a chartered EEU with an Order of Appointment that extends through December 31, 2021.

The Order of Appointment for the EEU, although still issued within the public utility regulatory process, mandates activity that goes far beyond the original basic charge to conduct electric energy efficiency programs, including a mandate to support efficiency in unregulated

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<sup>1</sup> Of course, Amory Lovins has been telling us this for decades.

heating and process fuels (HPF), which constitutes a majority of Vermont's building-related non-electric energy use:

VEIC shall design and implement demand-side services and initiatives to comprehensively address cost-effective opportunities associated with electric and Heating-and-Process-Fuels energy efficiency. VEIC shall, in regards to the provision of these services:

- A. Increase the efficiency of buildings, equipment, products, and other end uses;
- B. Reduce absolute energy use through controls, sizing, operation and maintenance practices and other consumer actions;
- C. Maximize the acquisition of Net Benefits for all customers;
- D. Prioritize lost opportunity markets;
- E. Pursue market transformation strategies;
- F. Coordinate with and leverage regional and national efficiency efforts;
- G. Provide all Vermont consumers that are eligible to be served by VEIC under this appointment with the opportunity to participate in EEU services and initiatives;
- H. Strive to provide comprehensive services to all customers;
- I. Provide information, technical assistance and/or financial incentives for cost-effective demand-side resources to help overcome market barriers to their implementation;
- J. Seek to maximize and facilitate customer contributions;
- K. Pursue innovative approaches to the cost-effective acquisition of energy efficiency resources;
- L. Make continuous and proportional progress toward attaining the overall state building efficiency goals established by 10 V.S.A. § 581, by promoting all forms of energy end-use efficiency and comprehensive sustainable building design;
- M. Design and implement programs that are extendable and scalable in future years to achieve § 581 goals;
- N. Coordinate the services and initiatives established under this Appointment with those of similar programs so as to maximize administrative efficiency and the benefits provided to Vermonters; and
- O. Provide information and education that will empower consumers to manage their energy use. (Order of Appointment, 2010)

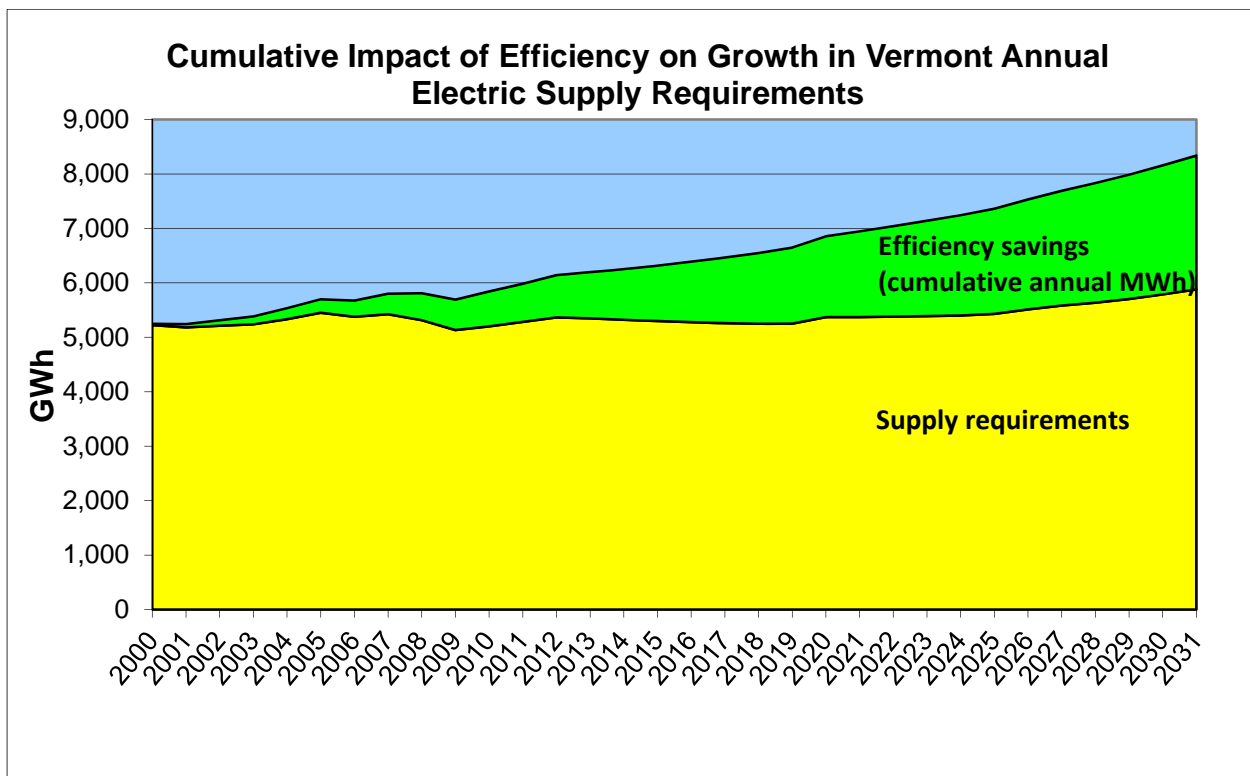
In addition to this remarkably broad mandate, the Order of Appointment authorized and provided a budget for the EEU to carry out the following:

- Non-resource acquisition activities that do not immediately yield recognized savings (code support, for example)
- Applied R&D (including new technologies, and Smart Grid innovation, which could include electric vehicle impacts)
- Participation in demand response activities with utilities
- Planning and reporting (systems planning, demand resource planning integrated with distribution utility integrated resource planning)
- Evaluation (including evaluation of Forward Capacity Market participation)
- Engagement in policy development, regulatory activity, and public affairs
- Support for combined heat and power applications that meet certain system efficiency criteria
- Participation in Transmission and Distribution non-wires alternatives planning

The significance of this new structure is that in Vermont the principles of least-cost procurement and the commitment to deep levels of efficiency investment are now institutionalized, on a nearly level playing field with other energy-providing systems. This evolution of the Efficiency Utility concept reflects years of increasingly effective energy efficiency implementation in Vermont.

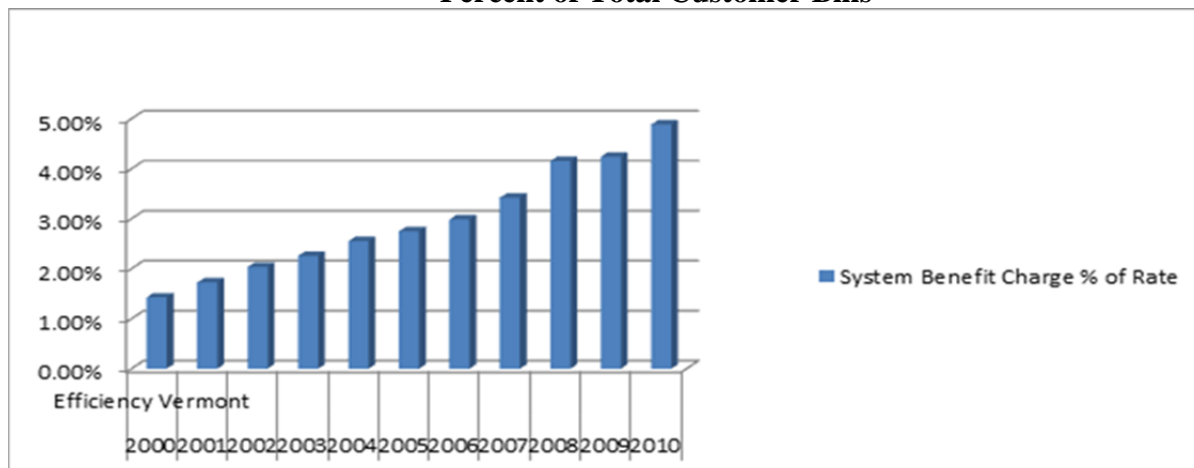
The EEU 20-year forecast for energy efficiency investment reflects this institutionalization. **Figure 1** shows a projection of the effects of planned investment in electric energy efficiency, assuming an underlying annual load growth of 1.42%. The chart also reflects “decay” of savings as the various ends of energy efficiency measure lives are reached.

**Figure 1. Vermont’s Projected Electric Supply Requirements with Sustained Energy Efficiency Investment**



The funding for these services is primarily derived from a System Benefits Charge on electric sales. The low level of investment in HPF reflects the absence of funding from a comparable revenue stream from that energy sector. Instead, revenues from the ISO New England Forward Capacity Market (FCM) and the Regional Greenhouse Gas Initiative (RGGI) fund these efforts. As **Figure 2** shows, Vermont now spends close to 5% of total electric revenues on its energy efficiency investments. This is the highest percentage in the United States.

**Figure 2. Vermont's System Benefits Charge as a Percent of Total Customer Bills**



Consistent with Vermont's commitment to securing resources based on lowest lifetime cost, the Vermont Public Service Board recently took three actions that reflect increased recognition of the value of the EEU. It lowered the discount rate used in calculating the lifetime benefits of energy efficiency to 3%, increased the environmental adder from approximately 1 cent to four cents a kWh, and provided a 15% non-energy benefit for all efficiency services. It also provided an additional 15% non-energy benefit to be used in calculating the cost-effectiveness of low-income energy efficiency services.

It is also remarkable that the last 12 years of EEU implementation investment in Vermont have led to stronger positive relationships with regulated electric utilities, rather than increased tension and controversy. These results are likely due, in part, to the positive relationships VEIC has with customers and to the recognition by electric utilities that customers and the system receive real benefits from the EEU.<sup>2</sup> Anecdotal evidence suggests that Vermont's supply-side energy utilities are viewed more positively because of the EEU's work with their customers. This shift in relationship has also created a context in which continued financial support for the EEU's work is more widely accepted.

The creation of the EEU is in significant measure a *reflection* of a deep level of support that comes when the efficiency administrator and other demand-side leaders and participants commit to a long-term, well thought-out, customer-focused approach. The hope is that the new institutional form of the EEU will enable more such benefits to the customer, and thus lead to even stronger customer support over time.

## The Theoretical Basis for the Approach

In both its aggressive implementation of energy efficiency and its larger presence in Vermont, the EEU has focused on learning from and about its customers. Its experience affirms the early thought leadership of Golove and Eto in 1996:

<sup>2</sup> This relationship has also been supported by revenue decoupling mechanisms authorized by the Vermont Legislature and approved by Vermont regulators.

- 1) There is no single market for energy services; instead, the “market” consists of hundreds of end uses, thousands of intermediaries, and millions of consumers. As a result, we do not believe the debate about market barriers or the debate about appropriate public policies to overcome market barriers can be settled by ideological fiat; instead, these issues must be addressed in a highly disaggregate fashion, considering the workings of individual markets.
- 2) Markets are not perfect, but neither are the institutions that seek to improve them. When government intervention is appropriate, it is unlikely that there will be a single best policy solution (e.g., government minimum efficiency standards). Instead, we believe multiple, complementary approaches tailored to particular circumstances are more likely to succeed in overcoming market failures or reducing high transaction costs. In addition, they must be based on a pragmatic assessment of the limitations of particular institutions and policies.
- 3) Technological and institutional change is an enduring feature of energy service markets. Public policies must be constantly scrutinized for their continuing appropriateness in view of technological advances and the emergence of new market institutions. Indeed, an important role of government may be to create new market institutions that will be self-sustaining following an initial stimulus from the government.

This article was written four years *before* the creation of Efficiency Vermont. Although it might seem unremarkable to many in today’s energy efficiency implementation effort that these conclusions make sense, each of these points has been put to the test since 1996. Golove’s and Eto’s insights and conclusions have proven to be true *in practice*. In order to learn how it can build the base of support for sustained efficiency, VEIC has had to step back from the daily complexities of its work to gain clarity about what it is actually *doing*.

Early energy efficiency programs were justified on the theory that it was “market barriers” that kept customers from investing in efficiency opportunities that appear to be in their interest to adopt. The Golove and Eto paper was written when the national debate over deregulation of the utility industry offered the attractive but unfounded assumption that creating more open electric energy markets would readily “transform” markets for energy efficiency. Golove and Eto examined that notion and concluded that often it was fundamental “market failures,” based generally on what they referred to as “transactional complexity,” that were behind the identified “market barriers.” These, they concluded, led to pervasive under-adoption of cost-effective measures, and thus warranted market intervention. Their conclusion predicted with amazing foresight the complexity of the challenges that confront a jurisdiction committed to deep and sustained efficiency acquisition.

VEIC has learned through its energy efficiency work that effective implementation takes it beyond the regulated utility context in which Efficiency Vermont (and most other energy efficiency programs) were developed and under which they typically operate. Vermont’s broad, market-focused efficiency effort contains a mix of short-term initiatives and long-term programming. The services it offers respond with agility to customer interests, technology advances, upstream partners’ bottom lines, and the region’s capacity markets—all coordinated in service to making efficiency the “obvious” choice. This business model is well beyond a traditional supply-and-demand model. It is *also* beyond conventional approaches to energy efficiency program design. This approach actually investigates, confronts, and addresses the transactional complexity that customers face. Success comes when implementers make the transactionally complex “simple” and obvious for customers. The Vermont EEU’s success

suggests a new model for helping customers meet their energy (and perhaps other resource) needs.

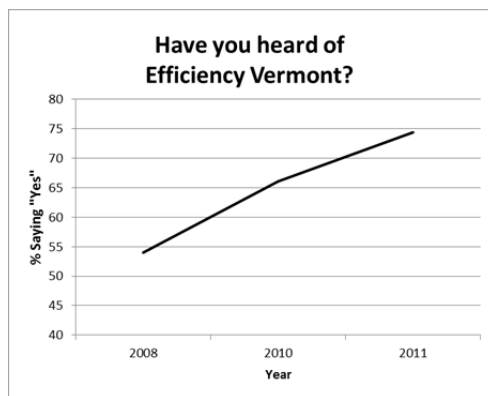
Vermont's EEU is learning how to be the trusted, objective support to customers. It is not in the business of selling specific products, expertise, or technologies, even though it has arguably the region's highest amount of knowledge about energy efficiency products, energy efficiency policy and market trends, and technological effectiveness. Instead, its top priority is a commitment to providing the best value for its customers.

## Approach to Serving Customers

Building a sustainable future is not simply an attempt to make the current economic and cultural structures run more effectively or efficiently. It requires an awareness that the goal is not just to “do good things” for customers, but to go even further and help change the rules so that better things can happen for them. This insight informs the EEU's planning, service design, and implementation. Increasingly, VEIC recognizes that its work must include a framework with imperatives that enable continual learning about what it takes to go ever deeper in energy efficiency markets. Several overarching, strategic commitments emerge as critical to supporting the specific decision-making in planning and implementation:

Serve every customer. This is a mandated direction for the EEU, although it is not yet fully realized. The operative goal is to provide all Vermont ratepayers and customers with the ability to lower their energy bills. If a customer group is being underserved (or not served at all), that becomes a factor in the strategic planning process. The desired outcome is to have every customer look at the itemized system benefits charge on a utility bill and think: “That is the part of my energy bill that helps me *lower* my bill.” Customers call Efficiency Vermont today and say, “I know I am paying you something every month...so tell me what you can do for me.” This commitment to serve every customer—and then find additional, relevant ways to serve them—creates a new dynamic between the customer and the EEU. Efficiency Vermont is now a recognized identity to three out of every four Vermont ratepayers, as shown in **Figure 3**.

**Figure 3. Name Recognition for the Vermont EEU, 2008 – 2011**



VEIC's purpose is to learn what the customer's goals and interests are. EEU staff are focused on understanding the customer's “value proposition” and on helping to recognize where efficiency fits in. In 2008, VEIC discussed the move from providing “programs” to recognizing that the priority was to provide “services” to customers (Parker et al., 2008). Increasingly, VEIC

invests in relationships that build trust and customer confidence. It has dramatically increased energy savings with large customers through a sophisticated approach to Account Management. Many of these customers now recognize that Efficiency Vermont is a partner helping them succeed in meeting their business goals. This focus on the customer has also led VEIC to continue “disaggregating” the markets for efficiency, to better understand the particular obstacles different groups within the customer markets face. In essence, VEIC looks for the leverage points within and throughout the entire customer system.

Work on many fronts. VEIC has always worked directly with customers and regulators, and built relationships with other market allies. It also works with the dimensions of the systems that affect customers’ opportunities and choices. These include everything from research and development to collaboration among manufacturers, vendors, architects, designers, installers, and financial institutions; with government and community programs; and with low-income programs. VEIC coordinates with lean manufacturing consultants and helps customers solve safety and product quality problems relating to efficiency installations. It helps customers arrive at solutions that do not appear to be otherwise available in the market. VEIC supports legislation and regulation that can help either institutionalize or provide incentives for energy efficiency. It also supports code development and intelligent code enforcement and compliance. It investigates a full array of financial leveraging strategies and is learning that the challenge is often not a lack of available capital but a deep unfamiliarity with efficiency lending, on the part of those who *have* capital. This challenge repeats the theme of transactional complexity identified by Golove and Eto, and requires a new round of institutional creativity to develop innovative mechanisms to overcome lender “barriers” to efficiency investments.

Offer a full range of efficiency-related services. Customers do not respond well to limitations on the energy efficiency services that an EEU is able to offer. Electric energy efficiency is not really different from thermal efficiency in their minds. In building the EEU’s reputation as a trusted, independent resource for energy savings, any perceived arbitrary limitation of those services undermines trust and, by extension, limits value to the customer. It also undermines the programs’ usefulness and fails to eliminate transactional complexity. Increasingly, customers look to the EEU for guidance on other approaches that could make their homes or businesses more efficient, comfortable, and productive. For example, the EEU customer support team and other staff routinely field questions relating to renewable energy, transportation efficiency, and types of fuel to use, because those questions also relate to building efficiency. It is all about energy use. This leads VEIC to pursue strategies that can provide whole-building efficiency. VEIC has always supported deep thermal efficiency in new home and business construction. It coordinates fully with and supports natural gas efficiency efforts (in the limited natural gas service territories in Vermont). It actively supports and partners with Vermont’s Low-Income Weatherization Programs. It pursues grant funding to leverage thermal efficiency (Recovery Act, Community Development Block Grants, and charitable funds). It has sought and acquired funding for thermal efficiency, and is actively exploring financing strategies that will help customers leverage financing for all forms of energy efficiency and renewable energy investment. These include Property Assessed Clean Energy (PACE), innovative commercial financing strategies, and investigation of the concept of a low-return Public-Purpose Energy Services Company.

Work to provide customers with accurate information in ways that are genuinely useful to them. One remarkable aspect of the EEU’s relationship to electric utility customers it serves is that it has full access to customer usage data. Efficiency Vermont has developed a highly



trained customer service team to help customers understand their energy use and make better energy investment decisions. The EEU has participated aggressively in Smart Grid development by distribution utilities to ensure it is used as an empowerment tool for customers (Parker and Bentley, 2010). It is actively conducting research to determine which feedback systems can provide effective support for customers as they manage energy use and lower their bills. VEIC has also been a leader in characterizing efficiency opportunities and measures and in documenting savings and the effectiveness of efficiency strategies. It is also engaged in research to determine if Smart Grid can actually be used to benefit low-income customers—consistent with the EEU’s approach to pursuing efficiency opportunities in all sectors of the economy.

Mobilize efficiency and renewable energy efforts at the community level. It has historically been difficult to turn the enthusiasm and good will of local energy efficiency and renewable energy activists into cost-effective strategies to save energy. The EEU devotes considerable effort to building these partnerships in a way that uses its resources and service offerings to empower local initiatives and support locally based investment strategies. Increasingly, community partnerships and carefully designed local efficiency and renewable energy strategies such as PACE are a part of the plan to build deeper savings opportunities and deeper support for the efficiency effort. Both local and regional economic development entities increasingly recognize the EEU as a strong partner in their work to retain and attract businesses.

## **A Shift in the Definition of What We Are Doing**

After 12 full years of statewide energy efficiency implementation, VEIC recognizes that the obstacles to greater adoption of efficiency—again, often articulated in terms of “market barriers” and “market failures”—are really not surprising anomalies in the economy. That is, these barriers and failures can be better understood as the predictable complications one might expect in an economic system dedicated to a “cheap energy” policy that maximizes the development, commercialization, and use of natural resources.<sup>3</sup>

Systematically addressing transactional complexity has forced VEIC to understand better the daily dynamics of the current economy. It offers new, strategic insight into what it will take to create a sustainable economy, a healthful environment, and thriving communities. This glimpse of a different economy is one that the next generation of implementers now has an opportunity to put into place.

As VEIC actually tries to figure out how a more sustainable economy can work, it has re-examined the work of the environmental scientist Donella Meadows. She described with remarkable clarity how the basic assumptions of a culture shape the systems it develops (Meadows, 1999). She also recognized that these systems then have immense power to shape the “reality” that communities and individuals experience day to day.

Paradigms are the sources of systems. From them, from shared social agreements about the nature of reality, come system goals and information flows, feedbacks, stocks, flows and everything else about systems. No one has ever said that better than Ralph Waldo Emerson:

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<sup>3</sup> The concepts of “market barrier” and “market failure” do apply, of course, if one considers them from the perspective of the older business model, and from that perspective, they continue to be very useful insights.

*Every nation and every man instantly surround themselves with a material apparatus which exactly corresponds to...their state of thought. Observe how every truth and every error, each a thought of some man's mind, clothes itself with societies, houses, cities, language, ceremonies, newspapers. Observe the ideof the present day...see how timber, brick, lime and stone have flown into convenient shape, obedient to the master idea reigning in the minds of many persons....It follows, of course, that the least engagement of ideas...would cause the most striking changes of external things*

What is remarkable about Meadows' thinking is that her discussion of what needs to be done to change an existing model (or as she puts it, a paradigm) prefigured many of the things VEIC has done in implementing the EEU (Meadows, 1999):

So how do you change paradigms? ...In a nutshell, you keep pointing at the anomalies and the failures in the old paradigm, you keep speaking louder and with assurance from the new one, you insert people with the new paradigm in places of public visibility and power. You don't waste time with reactionaries; rather you work with active change agents and with the vast middle ground of people who are open-minded.

The institutional structure of the EEU, as it is emerging in Vermont, provides an opportunity to develop new types of relationships with customers and market partners unlike any that the current marketplace offers. This development was anticipated by Golove and Eto.

The EEU is becoming an institution capable of providing impartial, trusted information (just as *Consumer Reports* might). At the same time, it is also able to provide direct analysis and site-specific expertise, support for emerging businesses, direct financial assistance, and access to capital markets. It serves as an advocate for customers with agencies of state and local government (for example, economic development authorities). It helps create new business opportunities for a wide range of trade allies. It partners with other customer-focused organizations (e.g., Habitat for Humanity). It also advocates for whole-building approaches to providing energy efficiency and renewable energy, and for distributed resource strategies to support utility reliability goals. As such, the EEU can be a uniquely customer-focused actor in the marketplace. And within many levels of the community it can thus build support for this approach to meeting customers' energy needs. It offers a new vehicle for investment on behalf of consumers that existing markets do not offer and that most not-for-profits are not capable of providing. It offers these services with a performance orientation and a consistency that is not characteristic of most government entities.

## **Conclusions**

Aggressive and increasing levels of efficiency investment can be sustained and even increased if they are providing real, pervasive, and recognized benefits and value to customers. The jurisdiction needs to provide strong structural support, and the implementing entity needs to be empowered to build strong relationships with customers, both individually, and throughout the economy. The number of participants must also steadily increase and the range of services must widen. The goal should be to make everyone aware that the opportunity to benefit from these services exists for all.

The new institutional EEU approach to providing deep energy efficiency savings should be considered a model for providing not just efficiency services for customers, but also

sustainable economic development for communities, states, and countries. It has already been used to some extent in Oregon, and by municipal utilities like the Sacramento Municipal Utility District (SMUD), Burlington Electric Department, and the Austin Municipal Utility. Its ability to achieve high levels of savings, combined with the recognition by customers that it is actively helping them do better in their homes, businesses, and pocketbooks makes it one of the most promising tools for addressing climate change. The shift from “selling efficiency to customers” to “empowering customers” is subtle, but powerful. It is the difference between a transaction and a partnership. It is not essential that all consumers believe it to be a partnership, but it is essential that the efficiency service provider act with that conviction.

By acknowledging that acquiring energy efficiency is good for customers and good for the economy, others can recognize that this practice is not just a charitable activity or a “good thing to do,” but actually a better use of capital and human effort than many of the supply-side alternatives. As EEU-type institutions evolve, so too will the corporate structure that will be required to make a sustainable economy work.

The institutional form of the implementing entity is of critical importance. Although this paper has focused on the Efficiency Vermont EEU, there are other structures that could deliver such services to consumers. The success of the structure relies first on strong policy and institutional support, combined with sustained financing. The actual practice of energy efficiency investment must rely on understanding customers and on a commitment to serving them intelligently. This practice must be informed by a dedication to meeting energy needs in a way that minimizes economic, environmental, and social costs of energy use. These components are essential to building this service at the levels needed to create a sustainable energy future. There is no long-term reason why existing utilities should not be re-purposed to adopt this approach.

It is of critical importance for the foreseeable future that core support be in place for an EEU to be recognized as a direct customer service providing exceptional benefits to ratepayers. But it is also imperative that strong policy and regulatory support for adequate funding of sustained efficiency efforts should expect increased leveraging—in short, getting more energy efficiency done with private dollars. Policy and regulatory leaders need also to recognize and support increased societal benefits, including risk mitigation, environmental improvement, health and safety improvement, market transformation, and other economic benefits.

Further, policy and regulatory approaches need to support increasingly integrated forms of service delivery that can maximize other benefits to customers, such as all-fuels efficiency offerings, distributed renewable energy, transportation efficiency, and water-saving benefits.

We believe that the structural shift the EEU suggests in our (mostly) building-related energy work will be applicable to transportation, water use, food production and use—and ultimately, land use.

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