



Northwest Energy Efficiency Alliance
Claire Fulenwider, Executive Director
NEET Executive Committee
October 13, 2009

Introduction

For more than twelve years Northwest Energy Efficiency Alliance (NEEA) has been dedicated to *servicing* the region's needs around energy efficiency, to provide critical guidance and take action from a regional perspective, and finally to demonstrate leadership in the region's quest to capture cost-effective energy efficiency through market transformation. We are committed to our mission of mobilizing the Northwest to become increasingly energy efficient for a sustainable future, and supporting the draft 6th Power Plan is part of how we anticipate doing that.

As you know, I am relatively new to NEEA and to the Northwest, but I am certainly not new to this industry or to its challenges, opportunities, and adventures. I am proud to be a part of NEEA and to help NEEA help each of you in fulfilling a bold vision for the Northwest.

NEEA's Unique Value and Approach

I want to open by clearly articulating NEEA's unique value and our approach:

1. NEEA harnesses and leverages the strength and power of four strong and diverse states, more than 130 utilities - both publics and privates, BPA, ETO, and others -- to influence and move the market.
2. NEEA helps each of you to mitigate and share risks and resources across the region. This provides critical value to you by deepening and broadening the results we achieve together.
3. NEEA works upstream in the market representing the region as a unified, powerful voice – with manufacturers and distributors – to help remove key barriers to getting better, smarter, more efficient products and technologies accelerated into the market
4. NEEA functions to leverage your funding so that working together you each receive greater benefits than you could singly.

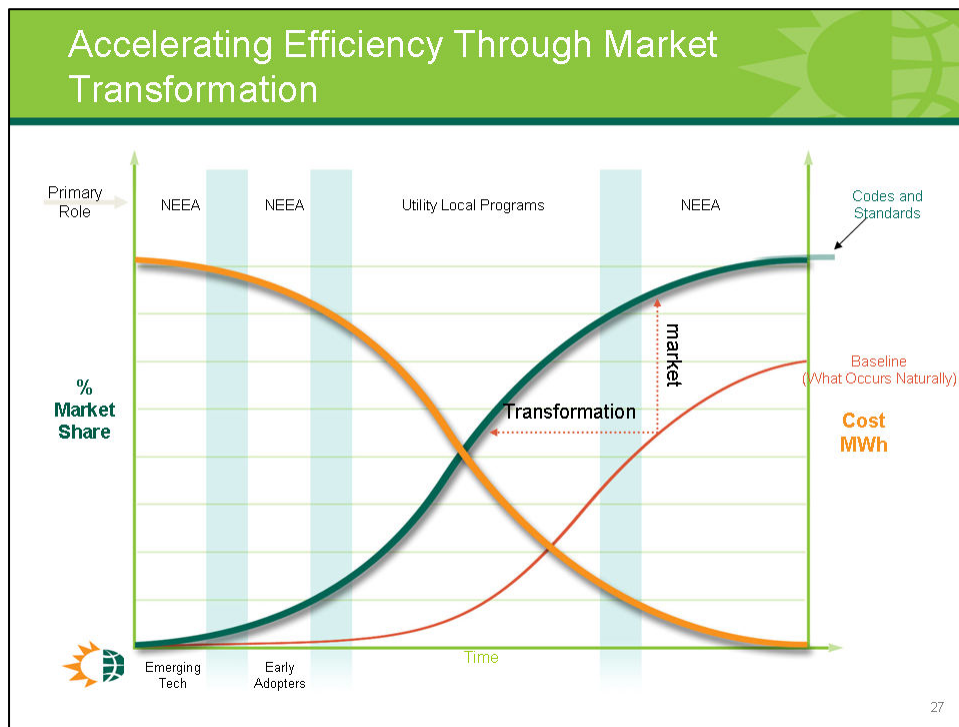
Take-Aways:

- 1) NEEA – meaning all of us together -- is a critical part of the energy efficiency solution and community but not the entire solution. We together *are* the community. NEEA's staff are 120% committed to continuing to deliver to you market results and energy savings that last beyond the current business plan, for the benefit of the entire region.
- 2) We are here to complement, not to compete, with you. We are committed to collaboration and regional equity. We are diverse as a group, yes, but we share the common interest of increasing the cost-effective energy efficiency resources available to the region. That is what brought us here together today.

- 3) NEEA is simultaneously challenged to *serve* and to *lead* the region in its desire for lasting energy efficiency. We are committed to doing both. We need to work with you and listen and understand your needs to do that successfully.

NEEA's central strategy is market transformation. We mobilize the markets to adopt energy savings that will last, and to do so faster than they would without our intervention. From energy-efficient refrigerators, windows, CFLs and clothes washers to our new focuses today on Continuous Energy Improvement, consumer electronics, and ductless heat pumps, we mobilize and enable the market through voluntary efforts that lock in savings for years to come, often resulting in changed codes and standards.

The picture below attempts to illustrate how through working together we make a bigger impact quicker.



As we have seen and heard today, energy efficiency is a major regional and national priority. It has proven to be the least cost resource option available, both in this region and nationally. Our meeting today is a testament to that and to our need to work together to leverage and to promote efficiency.

The 2010-2014 Business Plan

This past spring NEEA's Board of Directors approved a new Strategic and Business Plan for the 2010-2014 funding period. Our funders have now signed letters of commitment and five have already completed funding agreements. We anticipate \$192 MM for that five-year

period. This plan has a goal of achieving **200 aMW of total regional savings, of which 100 aMW** are net market effects, in that time frame. The Plan is based on extensive regional outreach. It continues to focus on initiatives that align with NEEA's value proposition and core strengths – such as long-term market transformation. But you also asked us to invest in some fundamentals that facilitate regional market transformation.

Initiatives and Focus

1. ***Partner Services*** -- You told us that NEEA could help you meet your energy efficiency goals by facilitating improved information-sharing, coordination and collaboration among members of the Northwest energy efficiency community. NEEA will do this by working in partnership with funders and stakeholders to create an online information services web site, and by providing online information sharing and collaboration tools. NEEA will also coordinate regional events (conferences, workshops, webinars)—that provide opportunities for greater information sharing and interaction—on topics of interest to you. These services will support your efforts, and they will expedite our collective market transformation efforts

2. ***Core Market Initiatives***
 - a. ***Residential Sector***
 - i. *Homes*. NEEA is reducing the extent of its new construction infrastructure and will be deploying ENERGY STAR homes through existing green building initiatives in the Northwest.
 - ii. *Consumer Electronics*. The initiative promotes an increase in the sale of high efficiency electronic products in selected product categories – high-definition televisions, computers and monitors –compared to present levels. Incentives are being provided to participating retailers for increasing the market share of qualifying products and reducing the sale of lower efficiency units. To qualify, products must meet or exceed rigorous efficiency levels based on ENERGY STAR or other specifications. NEEA recently finalized a new very rigorous ENERGY STAR 4.0 and 5.0 spec for televisions, a result of very active involvement with both CEE and EPA. We are collaborating with PG&E and SMUD to design a single joint 2010 Program, leveraging California work to benefit the Northwest. To date, contracts have been completed with Sears, Wal-Mart, Best Buy, Costco and others to advance this effort.
 - iii. *Ductless Heat Pumps (DHP)*. NEEA's pilot is approaching its 2009 goal of 2500 DHP installations to set a 2010 baseline for this technology, and begin development of this market for the region. Building manufacturer support, solidifying a trained contractor base and ensuring product variety, quality and availability will accelerate adoption of this technology in models appropriate for the region. Market response is highly positive and energy data are being collected. Potential for savings is very strong in electric resistance heated single-family homes across the region. The initiative target is 15% market

share of DHPs in electrically heated homes. Utility, retailer, manufacturer and contractor collaboration have been critical to success.

- iv. *TopTen USA*. A new national effort to “brand” the top ten efficient products in select home products and coordinate this with Energy Star branding is underway. The Europe TopTen initiative has been highly successful in shaping demand for highest efficiency units abroad. Leveraging this effort we hope to add momentum in the Northwest for similar consumer focus on high efficiency home electronics.

b. Commercial Sector

- i. *Strategic Energy Management (SEM)*. Commercial buildings consume roughly 40% of U.S. electricity. Finding ways to change how these buildings are operated is critical to acquiring energy savings in the sector. NEEA’s BetterBricks works with large commercial building management to change business practices in ways that secure these savings.
- ii. *Healthcare*. Hospitals and medical centers/clinics are targeted to spread SEM through this commercial sector to reduce energy use 10-30%. New construction is targeted to advance high-performance design. Improved business operation practices can result in additional savings.
- iii. *Office Real Estate*. The second targeted sector under BetterBricks pursues similar objectives to those of healthcare.
- iv. *Business Electronics*. NEEA will build on the success of an office computer initiative (80 PLUS) to continue to drive the efficiency of office equipment. The market has dropped 18% from the economy and the dramatic shift of consumers preferring laptops over desktops. Coordination with utilities and utility incentive structures will be critical to the success of this initiative.
- v. *Education and Training*. These are critical to the development of the market. Practitioners need confidence in their ability to design, select, install and operate high efficiency technology and practice behaviors that maximize the value of those assets. Working with existing local trainers, NEEA helps build curriculum and sponsor events which build this expertise. In 2009 we directly or indirectly trained more than 5000 individuals in energy- efficient practice and technology throughout the region.
- vi. *Integrated Design Labs*. NEEA supports five integrated design labs in the four-state region. They are the hub for advancing energy-efficient, high-performance building practices. Design standards are focused on achieving net zero energy buildings (the 2030 Challenge) by 2030 and to meet LEED standards. 50% of architectural and design engineering and 30% of design/build firms within targeted markets are expected to achieve these standards.

c. Industrial and Agriculture Sectors

- i. *Collaborative Energy Strategies (CES)*. Convenes executive decision makers in industry, government, and utilities around common energy reduction goals to diffuse risk and maximize energy efficiency investment across

entire industry groups. The initiative works with industry groups to support them in setting energy-intensity reduction goals and developing the plans and national, regional, and local partnerships required to achieve those goals.

- ii. *Strategic Energy Management (SEM)*. Provides a standardized framework for developing and deploying energy management systems that embed energy as a controllable expense within industrial facility operations. The initiative includes two key programs: 1) the Northwest Superior Energy Performance demonstration project in conjunction with US DOE is significant in moving Northwest industry toward adoption of the ISO 50001 energy management system standard, scheduled for 2011; and 2) NEEA's Continuous Energy Improvement (CEI) energy management system, an energy management program currently deployed in conjunction with Northwest utilities in the food processing and pulp and paper markets.
- iii. *Regional Technical Solutions (RTS)*. Works with utilities and industry to remove barriers to market-ready products, services and technologies that can complement utilities' industrial efficiency programs. This initiative includes Regional Industrial Training and such programs as the Green Motors Practices Group that NEEA supported prior to its market-place adoption.
- iv. *Agriculture*. Exploring with our funders agricultural energy needs that should be addressed and developing a plan to meet select efficiency needs. This could also be tied into our rural services offerings.

d. Codes and Standards. NEEA plays a key role in contributing to new energy code development and federal standards that lock in the energy savings achieved by utility and NEEA efficiency efforts. We provide education, training and technical support to hundreds of local jurisdictions once codes or standards have been adopted. The technical support we provide is based on market data and experience and has allowed the Northwest to have a significant influence on federal standards and strengthened NEEA's and our stakeholders influence in local state code processes.

3. ***Emerging Technologies*** – You asked us to focus on the long term more effectively and keep the “pipeline” full of new opportunities for resource capture. We have begun to grow our team, are collaborating with BPA and others on regionally relevant emerging technologies, and consciously mapping this work against that which is identified in the draft 6th Power Plan. We will manage a portfolio designed to capture 300 aMW for the region over 20 years. Demonstrations and pilots will provide information to the region that identify barriers and enable penetration into the broader market, generally through utility programs. The Ductless Heat Pump Pilot is one such initiative. Heat pump hot water heaters are targeted as another.

Regional collaboration is underway with the Northwest's key players in emerging technology, particularly Bonneville Power Administration, but also with the Energy

Trust of Oregon, Puget Sound Energy, and Seattle City Light. Groundwork is being laid for additional collaboration with EPRI, PNNL, DOE, and many others. The initiative will:

- Establish a regional Emerging Technology advisory and coordination group
- Develop and implement an Emerging Technology Portfolio process
- Revise and renew NEEA's unsolicited proposal process

This is a long-term play and is not expected to capture short-term savings. A portfolio of demonstration projects will target energy solutions (technologies plus combination actions) with a long range potential for regional energy savings of 300 aMW by 2030. NEEA adds value apart from energy savings by minimizing risks to individual funders and increasing potential benefits to participants through economies of scale.

Draft 6th Power Plan Power Plan Alignment

The recent release of the draft 6th Power Plan has presented the region with a challenging goal of more than 5,800 aMW of energy efficiency potential over the next 20 years; 1200 aMW over the next five. NEEA's Strategic Goal 2, helping the region achieve its energy efficiency goals, means that we are committed to helping the region achieve these very significant targets.

As some of you may know, NEEA's 2010-2014 Strategic and Business Plans were developed and adopted by the Board prior to the release of the draft 6th Power Plan. Nevertheless, we have been actively participating in discussion prior to release of the draft 6th Power Plan. We have been checking the alignment between NEEA's 2010-2014 Business Plan and the 6th Power Plan as it has evolved. NEEA's 2010-2014 Business Plan represents a commitment to helping the region secure 200 aMW of the 1200 aMW five-year target in the draft 6th Power Plan. However, NEEA's activities over this five-year period will help enable markets representing 580 aMW or roughly half of the 1200 aMW of potential in the draft 6th Power Plan. Our experience tells us that we are more likely to succeed in achieving the full potential of those 580 aMW goals through careful "cradle to grave" planning and coordinated regional implementation with roles for both regional organizations like NEEA and BPA as well as local utility programs.

NEEA stands ready to help the region secure these additional savings but it will take a collaborative effort from all of us. NEEA can assist significantly but it is not clear at this time that we are being asked to take such a role. If the region desires that, we can figure out with you how to conduct such planning and voluntarily assume appropriate roles in its execution to come closer to reaching these targets.

New Approaches

Almost by definition, NEEA and our regional partners are constantly seeking new and smarter approaches. How can we do more with less? What are other potential unique values we can bring to the table?

Key to such an approach going forward is new methods and practices of collaboration, coordination, and communication. Working more with national groups, closer alignment with utilities on pilots and demonstrations that enable deemed savings, and pragmatic sharing of best practices in the region are examples of such practices. NEEA's Partner Services Unit, new in 2010, is focused on implementing such new approaches.

During the course of both the Northwest Energy Efficiency Task force and NEEA business planning discussion, stakeholders consistently expressed the desire for easily accessible energy efficiency information resources and greater communication/interaction/collaboration with other energy efficiency organizations. Individually and collectively you felt strongly that such services would expedite the delivery and adoption of energy efficiency. Partner Services, therefore, is responsible for delivering a variety of services that provide support to funders and other regional stakeholders' energy efficiency efforts. This is a new approach and reflects an expanded view of market transformation that recognizes efforts that increase the effectiveness of utilities and other energy efficiency organizations at achieving their goals will accelerate market transformation in the region.

New Approaches

- Behavior Change (Strategic Energy Management/Continuous Energy Improvement)
- Goal Setting via Industrial Associations (ie. NWFPA)
- Consumer Electronics
- Partner Services
- Throughout our business

Challenges and Opportunities

Like everyone in this room, NEEA, too, faces challenges and opportunities in the next few years. Some are similar to those of the utilities but others are distinct.

Challenges

1. **Ensuring flexibility to respond to new market opportunities.** NEEA's 5-year funding is a blessing in providing continuity and stability. We are honored by this level of commitment and funding from the region and unique among regional organizations in this respect. We have strived to build a plan that is long-term, transformative, and results-oriented, but at the same time allows for flexibility and nimbleness as market conditions shift. This is a major challenge, particularly when

there are unplanned opportunities or new market solutions that present themselves. The downturn in the economy resulted in the need for NEEA to “ramp” its funding so that 2010 represents an increase of roughly 24% over 2009 funding support. In developing long-range market transformation initiatives that captured appropriate levels of savings some sector approaches required long-term commitments that offer little flexible for new opportunity capture. We do not have a reserve fund that allows for unplanned initiatives. We have focused on delivering critical activities requested of us. New approaches for “supplemental project funds” or “subscription options” may be needed to respond to regional requests for more or new services over the next 5 years. NEEA’s “all-in” approach to funding maximizes stakeholder value in some ways and limits supplemental funding opportunity. Discussions around a funder-supported flexible spending option for the region, for opportunities that are not region-wide or where a business case has not been made adequately for all funders may prove valuable and enable us to be more responsive when and if the need and opportunity arises.

2. **Transformation “maintenance.”** Another challenge is maintaining the ramp of savings that we have today for initiatives no longer funded after they have met criteria of market transformation. A current example of this is CFLs, which has been a case study of both challenges and successes for the region and for NEEA. For all practical purposes, we have ‘exited’ out of the CFL market to find new areas, since growth was anticipated to continue occurring in this market for some time. However, recent data is showing what very few anticipated: CFL sales are dropping in this region. We expected to see 25% growth in Q1 and Q2 of 2009 and what we have seen is a 25% decline. We are investigating this and plan to communicate with our region and our advisory group, but this is a challenge and one we take very seriously in the immediate future.
3. **Rising cost of energy efficiency.** In prior years, with lighting, clothes washers, and refrigerators, we were able to effectively influence manufacturers quickly, partly because the cost of upstream funding was relatively low and attractive. A challenging example today – and a trend we foresee through our work in consumer electronics (the big beautiful flat-screen televisions numbering two, three, or more in many households) is that the cost of achieving energy efficiency with these technologies is markedly higher per unit than the cost of achieving efficiency improvements in the earlier examples. The cost of flat-screen televisions can be several thousand dollars. Large 40-inch-and-greater sets which use liquid crystal or plasma technology use up to three times as much energy as a bulky, old-fashioned cathode-ray-tube TV. The cost to capture efficiency with these TVs has risen markedly compared to clothes washers. If we attempt to work upstream with electric vehicle manufacturers a few years into the future, costs are expected to be multiple times greater. More expensive products require higher incentives. As we all know, fruit in the Northwest is neither lying on the ground nor even hanging low anymore. We need to reach higher and thus is more expensive to harvest what we need. We need to develop

innovative and flexible approaches to new markets to capture available energy savings at cost-effective levels.

4. **6th Power Plan Implementation.** As we have all heard today, each of us has a part to play in the implementation of the 6th Power Plan. The Council has set a goal and made recommendations on approaches. Nearly every utility in the region is driving and expanding their local programs. We have no clear process, however, for regional coordination and implementation. We, NEEA, are not clear how much you need or want us to do. As a region we can do this, **if** we work together. If we work separately, we will be challenged.
5. **Serving and leading.** NEEA is basically tasked with somewhat conflicting objectives. You have asked us and we choose to serve you in reaching the energy goals set for this region. Concurrently, you are expecting us to provide leadership or guidance in ways to do that. We need to push and we need to pull. We need to lead in the sense of making the road clearer for you to travel and we need to assist as that enhances your effectiveness. We are learning, we hope, how to do both better.

Opportunities

1. **Expanded Funding Support.** ARRA funds may be available for select NEEA initiatives. Natural gas utilities are potential partners as are select foundations, organizations like EPRI, utilities like BC Hydro, U.S. DOE and others.
2. **Issue Convergence.** As climate change becomes a priority, added impetus is given to energy efficiency. NEEA and the region can contribute significantly to climate mitigation goals through our capture of energy efficiency. Federal funds are having a profound influence on energy projects in the region. The current is flowing in our direction. It is up to us to monitor the changes and take advantage the opportunities presented.
3. **Heightened Demand for Energy Efficiency.** The region and the nation have raised the bar on the need and economic desirability of energy efficiency. A recognition exists that technology alone will not lead to a capture of sufficient cost-effective resource and that market transformation initiatives such as business practice change must play a critical role. NEEA's leadership in such efforts is increasingly recognized. That recognition affords us opportunities for leverage, for collaboration, for innovation and demonstration. The door is open for us to "prove concepts."
4. **A Track Record of Collaboration.** We have proven as a region that we can work together. We have exceeded goals. We have sometimes exceeded our own expectations. We can build on this and achieve more together.
5. **Increasing Expertise.** More players have deeper expertise and competence in energy efficiency than has been true in the past. NEEA's future success is dependent upon leveraging expertise in entities such as BPA, Energy Trust of Oregon, our utility funders, the national labs (NREL, PNNL, LBNL), CEE, EPRI, TopTen, our contractors, consultants and others. Appropriate levels of participation

and support with these organizations can leverage energy efficiency success for the Northwest.

Summary

The region and NEEA are at a juncture of demand and opportunity for energy efficiency. We are challenged by heightened expectations and rising costs. We need new market approaches to overcome barriers in the adoption of new technologies. Energy efficiency does not own the “sexy” mind share of the public. We need to work smarter, faster and more collaboratively. We need more innovation than ever.

And we are a learning body. That is true of NEEA. And of this region. And of those of us in this room. We are learning one another’s competencies and how to work with our different needs and requirements. We all value the economic benefit of low-cost energy resources. We want to maintain the quality of life of the Northwest, to make it an increasingly sustainable place to live, to work and to thrive. We value harmonious relations where we each bring our competencies and strengths to the table and know they are respected. We practice mutual respect. We strive to fulfill the missions of our various organizations with integrity and effectiveness. I have never been a part of an association of professionals that share so many core values and bring such a high level of competency to the table.

I am fully confident that this group can lead this region to reach its shared goals. NEEA needs further guidance to clarify the role you wish us to play in meeting the challenges of the draft 6th Power Plan. But as I told a national audience in Chicago last week, “When it comes to energy efficiency, the Northwest gets it.” We will do what we need to do, all of us. So let’s get on with it.

NEEA is proud to be a part of this good work.