STATE ENERGY ADVISORY BOARD
MEETING MINUTES: MARCH 9 – 11, 2010
WASHINGTON, DC

MEETING ATTENDEES

Designated Federal Officer (DFO):

- Gary Burch, STEAB DFO, Senior Management Technical Advisor, Intergovernmental Projects, Golden Field Office, Denver, Colorado

STEAB ATTENDANCE		
BOARD MEMBERS	Present	Absent
Susan S. Brown, Deputy Administrator, Wisconsin Division of Energy	✓	
John Butler, Energy Commission Supervisor II, California Energy Commission	✓	
Dan Carol, Strategic Advisor/Organizational Consultant	✓	
William Vaughn Clark, Director, Office of Community Development, Oklahoma Department of Commerce	✓	
John H. Davies, Director, Division of Renewable Energy and Energy Efficiency, Kentucky Office of Energy Policy	✓	
Philip Giudice, Commissioner, Massachusetts Department of Energy Resources	✓	
Ryan Gooch, Energy Policy Director, Tennessee Economic and Community Development	✓	
Paul Gutierrez, Vice Provost for Outreach Services, Associate Dean and Director, Cooperative Extension Service, College of Agriculture and Home Economics, New Mexico State University	✓	
Duane Hauck, Director, Extension Services, North Dakota State University	✓	
Cecelia Johnson-Powell, Community Development Manager, Indiana Housing and Community Development Authority	✓	
Peter Johnston, Project Manager, Clean Energy Technologies, Burns & McDonnell	✓	
Neil Moseman, Director, Nebraska Department of Energy		✓
James Nolan, Weatherization Director, Department of Public, Health and Human Services	✓	
Tom Plant, Director, Colorado Governor's Energy Office	✓	
Larry Shirley, State Energy Office Director, North Carolina Department of Administration	✓	
Janet Streff, Manager, State Energy Office, Minnesota Department of Commerce	✓	
David Terry, Executive Director, ASERTTI	✓	
Steve Vincent, Regional Business Manager, Avista Utilities	✓	

Contractor Support:

- Emily Lindenberg, SENTECH, Inc.
- Leonore Jordan, SENTECH, Inc.

Public:

- No public representatives participated in this meeting.

WELCOME & INTRODUCTION

The March STEAB meeting commenced at 9:00 a.m. EST on Tuesday, March 9, 2010. Janet Streff (JS), Board Chair, welcomed all members to the meeting and thanked them for traveling to Washington, DC, for the second meeting of the STEAB during fiscal year 2010. Due to the recent addition of several new members, the Board took a moment to introduce themselves, and the organizations they represent, to all members of the STEAB.

SPEAKERS

No formal presentations were made during this meeting; however, speakers from the Department of Energy (DOE) and other organizations were invited to provide insight on specific areas of interest the Board.

- **"Welcoming Remarks"**
  Kathleen Hogan, Deputy Assistant Secretary for Energy Efficiency, Office of Energy Efficiency and Renewable Energy (EERE), DOE.
- **"Update on the Office of Weatherization and Intergovernmental Programs (OWIP) and State Issues"**
  Claire Johnson, Program Manager, OWIP, DOE.
- **"Update on Commercialization and Tax Credits"**
  Wendolyn Holland, Senior Advisor, Commercialization, DOE.
- **"Energy Empowers and other EERE Success Stories"**
  David Katz, EERE Special Advisor, DOE.
- **"Understanding Integrated Deployment"**
  Steve Lindenberg, Senior Advisor, Renewable Energy, DOE.
- **"DOE Ethics Briefing"**
  David Krentel, Attorney Advisor for the STEAB, DOE.
- **"Proposal for EECBG Sub-Committee"**
  Mark Johnson, EECBG HQ Lead
- **"Clean Energy Road Show Update"**
  Gil Sperling, Senior Advisor, EERE, DOE.
- **"Recovery Act Dialogue With a Focus on State Energy Programs (SEP), Weatherization Assistance Programs (WAP) and EECBG"**
  Mark Bailey, Team Leader, State Energy Program, OWIP, DOE.
  Robert Adams, Supervisory General Engineer, OWIP, DOE.
- **"Retrofit Ramp-up and PACE"**
  Janet Streff, STEAB Board Chair.
- **"General Information Update on the E-RIC Initiative"**
  JoAnn Milliken, Senior Advisor, EERE, DOE.
- **"Discussion on NGA Testimony"**
  Michele Nellenbach, National Governor's Association.
- **"Review of Transmission Access for Renewables"**
  Larry Mansueti, Director, State and Regional Assistance, Office of Electricity, DOE.

WELCOMING REMARKS

- Ms. Kathleen Hogan thanked the Board for inviting her to the March meeting and spoke generally about the challenges EERE is facing with bringing new technologies out into the marketplace effectively. There is a strong commitment at DOE to bring energy efficiency and renewable energy to scale; and the administration is working on this by addressing technology issues, policy issues, and

workforce issues which all affect the entry of these types of energy into the marketplace. Ms. Hogan outlined that the top priorities for EERE are:

1. Spending American Recovery and Reinvestment Act (ARRA) funds quickly but effectively;
2. Setting and maintaining appliance standards;
3. Maintaining and improving building codes by providing technical assistance for training and enforcement; and
4. Focusing on the Federal Energy Management Program (FEMP) and how best to use the rules governing energy efficiency regulations in government buildings while working on residential retrofits.

- Ms. Hogan engaged with the Board for a brief discussion regarding how EERE is progressing with residential retrofits, how EERE works to avoid challenges and accelerate progress, and how she is investigating an investment in regional offices to assist with meeting the above mentioned priorities. John Davies (JD) and JS reminded Ms. Hogan that the Board had submitted Resolutions 09-04 which spoke to using a regional presence to facilitate communication and provide technical assistance to States and local government and perhaps this is the way "regional offices" could play a role for EERE.

UPDATE ON THE OFFICE OF WEATHERIZATION AND INTERGOVERNMENTAL PROGRAMS (OWIP) AND STATE ISSUES

- Ms. Claire Johnson, Program Manager of OWIP, provided updates to the Board on the progress and challenges facing WAP, SEP and EECBG programs[1]. Monthly reporting for these programs would begin on March 30th and there is now better coordination for reporting because many programs that previously reported to the National Energy Technology Laboratory now report directly to OWIP. For the WAP she noted that the administration had increased the target number of homes to be weatherized per month and that it was causing some frustration at the State level. Both Jim Nolan (JN) and Vaughn Clark (VN) added that without increased monetary resources or personnel, States would be unable to meet the new goals. Ms. Johnson replied by saying Assistant Secretary Zoi was currently corresponding with Governors of at least 20 States to understand what the States needed in order to meet these higher weatherization goals.
- Moving on to a review of SEP's, Ms. Johnson noted that the National Environmental Policy Act (NEPA) was in need of additional information from the States in order to make determinations regarding projects which was why the NEPA process was moving so slowly in the eyes of the States. Aside from those determinations, the other main issue facing SEP's right now is that ARRA funding allocated to SEP's is not being moved quickly and effectively enough. Another challenge for OWIP is trying to collect jobs data from SEP projects which received ARRA funding. Philip Giudice (PGD) reminded Ms. Johnson that States are reluctant to pay for work before the job and contracts are signed and completed, which is why there is the perceived "lag" in spending by DOE with respect to SEP. He added that this is also the reason job numbers have been difficult to account for; States are hesitant to project created jobs before those jobs are actually created and money is spent to create them.
- Concluding her presentation, Ms. Johnson spoke briefly about the EECBG program, noting the program suffered from the same issues as SEP's with regard to moving ARRA funds from obligated to spent. Another issue is that the technical review process is both daunting and complicated and is taking longer than anticipated to complete. Additionally, there are 227 late EECBG applications and OWIP is struggling to understand why these are late.
- Opening up the floor to discussion, JS asked if the Board had comments or questions regarding this update from Ms. Johnson. John Butler (JB) asked if the Board could get a list of areas which have yet to submit their EECBG grant applications, because the Board could act as a liaison between these

[1] Ms. Johnson's presentation can be found immediately following the minutes as Appendix A.

applicants and OWIP to help the office understand why these 227 applications are late. Ms. Johnson followed up on this offer by asking if the Board would be able to assist with information gathering on EECBG obligated funds to grantees that are not yet showing as "spent" or "contracted" by DOE. PGD offered Board assistance to OWIP by aiding with jobs reporting for WAP and SEP's, noting that the Board represented 20 different States alone and could at least begin providing information from those particular States. JN raised the issue of pressure coming from DOE to States on reporting jobs created and money spent. Ms. Johnson acknowledged that this was a big challenge for OWIP and DOE and could use the Board's help and influence to compel States to accurately gather and report on not only job's data, but also with gathering data showing what WAP and SEP money has been spent or will be spent once contracts are signed and work is completed. Accurate reporting of ARRA money is of paramount importance to the administration and remains a major challenge of OWIP and other programs which received funding from the Recovery Act.

- JS closed the floor to discussion, thanked Ms. Johnson for her time and willingness to participate in such a frank discussion, and charged the Board to assist OWIP with meeting the challenges laid out during the presentation and ensuing discussion.

UPDATE ON COMMERCIALIZATION AND TAX CREDITS

- Wendolyn Holland was the next presenter who spoke to the Board about three important programs which fall under the auspices of the Commercialization Team, and are either currently underway or were recently completed. She provided updates on the 48(c) Tax Credit program, provided an update on the State Energy Efficiency Appliance Rebate Program, and gave insight into the new solicitation which went out in October for the Loan Guarantee Program under Title 17.
- According to Ms. Holland, the 48(c) program was allocated $2.3 billion in tax credits to award to qualifying advanced energy project equipment and manufacturing facilities for energy efficiency and renewable energy technologies[2]. This program was run by DOE in conjunction with the Department of the Treasury, and to their surprise the program received a higher response than anticipated. There were over 500 applications which were received, and 183 companies received awards. An important component of this tax credit was that each applicant show how many jobs would be created, and distinguish between construction vs. operating jobs. Ryan Gooch (RG) asked if there was data indicating exactly how many and what types of jobs had been created because this would be a wonderful story for EERE to share. PGD asked about next steps of this program and Ms. Holland mentioned the US Territories were interested in a program similar to this and the administration was also considering implementing clean energy grants, or other types of programs offering tax credits for renewable and energy efficiency technology. She mentioned many innovation clusters invested in advancing renewable energy and energy efficiency who were asking the Federal government for money such as the Great Lakes Alliance for Sustainable Energy Research (GLASER), and that public/private partnerships are assisting with funding as much as they can. On of her goals is to try to get the different innovative clusters talking to each other in order to facilitate innovation and encourage investment.
- Moving onto the second discussion point, Ms. Holland reminded the Board that the State Energy Appliance Rebate divided $300 million nation-wide by population; and at this point, several States have ended their programs because all the funds have been dispersed in rebates.[3] Other States have yet to kick-off their programs, but so far the program has widely been considered a success. Finally, the solicitation for Loan Guarantees went out in October; and as of the meeting, 27 States had responded to the RFI. JS thanked Ms. Holland for her update and for taking the time to update the Board on these important programs.

[2] Ms. Holland's presentation on 48(c) can be found in Appendix B.
[3] State Rebate Program information from various States can be found as Appendix C.

ENERGY EMPOWERS AND EERE SUCCESS STORIES

- JS next introduced David Katz who is the lead on the Energy Empowers website highlighting clean energy news and marketing. Mr. Katz spoke to the Board about the need to communicate and engage the American public in the technology and research being conducted at the DOE. Currently the website has a team of five writers gathering stories from across the country specifically with regard to the "energy economy." Every week there are 30 news and two multi-media stories published which cover all 50 States. Mr. Katz relayed to the Board that the website was set up as both a media tool, and as a tool for others to refer to when writing or speaking about energy efficiency and renewable energy programs and projects[4].
- One of his goals is to link civic leaders, community organizations, and green energy news services to Energy Empowers in an effort to market the website and have other online news agencies pick-up and re-publish the stories on their own sites. He called on the Board to help with this task and asked that all members please provide him with the contact information for the communications directors in each members' State.

UNDERSTANDING INTEGRATED DEPLOYMENT

- The next presentation came from Steve Lindenberg, Senior Advisor for Renewable Energy[5]. His focus is on integrated deployment, which is a comprehensive approach to clean energy utilizing a variety of renewable technologies in a way that creates transformational change. A large part of this is to also use this process to create a model which can be replicated in other areas and States. He noted that some of the issues he faces surround the technology already in place in areas looking to utilize this integrated deployment model, and how can that existing infrastructure be used to support this multi-dimensional model. Policy and economics, he said, are the biggest hurdles he faces when trying to sell this program to various areas across the country. The question faced everyday is: "What is the draw for investors and policy-makers and how does the DOE make the marketplace attractive?" How does DOE effectively bring technical, policy and marketplace stakeholders into a successful partnership?
- Mr. Lindenberg elaborated by detailing for the Board the implementation approach of this effort as outlined by NREL back in 2008 when this process began. This approach tries to answer all of the questions facing DOE with regard to deployment and tries at first to build stakeholder partnerships, and then establish frameworks to operate within. It then addresses the policy issues and the technical and economic viability of the project with the final step being to ensure early successes of the deployed technology.
- Many success stories of this type of deployment were mentioned, including projects in Hawaii, Alaska, New Orleans and Greensburg, KS. The key to success of these programs is that there is "buy-in" at all levels of the process and that the process itself is managed effectively through strategy, leadership and thoughtful planning. The ultimate goal of this entire program is to create a basic structure and "model" that can be applied to communities across the United States.
- JS then opened the floor to questions and GB asked Mr. Lindenberg how the Board could help him in reaching the goals for this program. Mr. Lindenberg asked the Board to think of this whole process as a model and a road-map; one that could be rolled-out to all communities while understanding that each community faces different energy needs and has different energy resources from which to draw. The biggest help would be to think of ways this model could resonate with the Board's own communities in their States, and how to apply this thinking to future energy strategies. Paul Gutierrez (PG) asked if community colleges, universities and other educational centers were part of this program as stake-

[4] Mr. Katz's presentation can be found directly following these minutes as Appendix D.
[5] Mr. Lindenberg's presentation can be found directly following these minutes as Appendix E.

holders; and Mr. Lindenberg confirmed that universities were indeed part of this process and provided technical and other support, especially in the case of Hawaii.

DOE ETHICS BRIEFING

- The next guest was Mr. David Krentel, Attorney Advisor for the STEAB, who delivered the annual address to the Board on ethics rules and regulations. Highlighted in his discussion were reminders to the Board regarding matters which may result in financial gain for members or their families, how to recues oneself if there is a conflict where impartiality is questioned, and to remind the Board they are an advisory committee and not a lobbyist for EERE.

PROPOSAL FOR EECBG SUB-COMMITTEE

- Mark Johnson, the EECBG HQ Lead, was the next speaker, but was unable to attend the meeting. In his place, GB spoke to the Board about a proposal to create a sub-committee to the STEAB which would focus solely on issues and progress surrounding the Energy Efficiency and Conservation Block Grant Program (EECBG). GB provided a handout[6] to the Board outlining the objectives, proposed membership structure, and additional details about this sub-committee. JS asked the Board to discuss this proposal before moving to a vote.
- PGD and JD both asked if there were appropriations in place for this sub-committee or if funding would be an issue. GB noted that there are funds available via EECBG funding to keep this sub-committee intact for up to, but no longer than, three years. Cecelia Johnson-Powell (CJP) was concerned with the responsibility of the sub-committee as it comes to accountability for reporting results or issues. GB assured the Board that the main objective of this potential sub-committee is to report findings to the Secretary of Energy, not to be accountable for ensuring results. Additionally, the sub-committee would also report its finding to the STEAB. RG told the Board he felt the make-up of this committee should include Mayors from across the country as their cities are receiving the majority of funding. Susan Brown (SB) added that perhaps it is the Mayors who could provide names for nomination, if they could not participate themselves.
- PG motioned that this proposal go to a vote, and Larry Shirley (LS) seconded the motion. JS asked if there was additional discussion. Tom Plant (TP) proposed at least one sitting member of the STEAB participate in this sub-committee, and the Board agreed with this decision. JS, seeing as there was not additional discussion, called for a vote. This proposal for an EECBG sub-committee was unanimously adopted by the STEAB on March 8, 2010.

BOARD DISCUSSION: REVIEW OF TOPICS FROM THE DAY

- JS began the Board discussion portion of the meeting by asking for volunteers or nominations of members to serve as the Board secretary. LS nominated JD, and TP seconded the nomination. JD accepted the nomination and PG moved that nominations cease, and JB seconded. JS called for a vote and JD was unanimously approved as the Board Secretary on March 8, 2010.
- JS then turned discussion to a review of the presentations and asked if there were follow-up questions, concerns or comments. She encouraged the Board to think of how they can use the information presented that morning to focus the Board's strategic goals in the coming years.
- General Board discussion ensued on ways the Board can rise to meet the challenges DOE is facing with regard to the programs discussed in the morning session. DC mentioned it is critical to engage all EERE programs and States in order to facilitate change. He noted, along with others, that a bottom-up approach is the most effective way to bring about change. SB felt that the focus of this administration has shifted in ways that encourage the STEAB to focus more on the programs and their needs, rather

[6] The "Request for the establishment of the "Energy Efficiency and Conservation Block Grant (EECBG) Sub-committee" can be found as Appendix F.

than on technology transfer; the main goal of the previous administration. PG feels the Board should meet with all programs in order to understand their needs since each one has dramatically more funding than previous years, due to ARRA. TP and CJP agreed with PG and noted perhaps the Board can use information from meetings with programs to demonstrate to the Assistant Secretary certain trends or common problems which may assist future policy making.

- JS summarized that many comments from this discussion surrounded changing the Board's "agenda" or direction to focus more on the needs of this administration and the goals it is trying to achieve. Is this something the Board wants to focus on? PJ responded by reminding the Board that the old Strategic Direction documents grew out of the needs of the Karsner (ASEE) administration in EERE, and they may no longer apply to the environment in which EERE is currently operating. Board discussion turned to reviewing the old Strategic Direction, commenting on what was no longer applicable, noting what areas needed updating, and offering opinions about what should be added, or if the entire document needed to be revised.
- A facilitated discussion ensued where the Board reviewed the current focus areas and expanded, edited and commented on whether these were still applicable. Together the Board discussed the merits of each area and their applicability to the current administration. Using these current areas as a jumping-off point, the Board created a new list which they deemed "Priorities." In lieu of focus areas, which they felt were too limiting, the Board created a general list of topics and issues they felt needed to be addressed. These priorities grew out of the presentations heard earlier in the day where frustrations or problems were mentioned, while also using Assistant Secretary Zoi's four focus areas for EERE. Though most of the priorities revolve around ARRA, many of the priorities are long-term concepts for the Board to continue working on once ARRA funding runs out[7]. Since these priorities align with the current administration, the Board felt it was appropriate to label these "Priorities through 2012" due to the fact that they grew out of the needs of the current administration. JS promised a return to this discussion the following day in order to expand and evolve these topics, as needed.

CLEAN ENERGY ROAD SHOW UPDATE

- JS opened the meeting on Wednesday, March 10th, by introducing Gil Sperling, Senior Advisor for EERE. Mr. Sperling spoke to the Board about the Clean Energy Road Show initiative, which works to bring renewable energy and retro-fit information to the public and policy makers around the county. The goal is to build on existing discussions surrounding renewable energy and clean energy, and to begin collaboration at the local level to bring these initiatives forward. Creating and maintaining a dialogue at the local level with policy makers is a main component of these shows.
- PJ asked about the format of the Road Shows and Mr. Sperling noted that they take on a conference-style format with State Energy Office employees, union workers, and policy makers meeting on the first day, and then hosting several events on the second day. Vaughn Clark (VC) asked Mr. Sperling to bring the Road Show to Oklahoma because they needed to help educate builders and consumers about building energy codes and the benefits of clean energy. Mr. Sperling used Indiana as an example of how the Road Show was able to educate consumers and change existing perceptions of clean energy by showing consumers they don't have to worry about increases in energy costs if they choose to invest in energy efficient building materials, electronics and home appliances because these items more efficiently use the electricity, so ultimately cost less to run. By showing consumers the "true cost" of energy in an efficient appliance, they demonstrated the overall savings and alleviated concerns about rising energy prices.
- JD thanked Mr. Sperling for the presentation and noted that he is happy to hear regional engagement is the focus of this initiative. Mr. Sperling noted that this kind of work cannot be done from Washington only, and it is imperative to have local partners who help to bring consumers and policy makers to

[7] A copy of the Board's initial "Priorities through 2012" can be found as Appendix G.

these shows. GB mentioned that the Board has previously written Resolutions which speak to the importance of regional engagement to change consumer behavior, and this is something the Board continues to recommend to the Assistant Secretary. Mr. Sperling agreed with GB and noted that having a regional presence is critical to transformative thinking about clean energy.

RECOVERY ACT DIALOGUE WITH A FOCUS ON STATE ENERGY PROGRAMS (SEP), WEATHERIZATION ASSISTANCE PROGRAMS (WAP) AND EECBG

- JS then introduced Mark Bailey who spoke to the Board about SEP, WAP and EECBG progress and updates. Mr. Bailey stated that OWIP would like to have 80% of SEP ARRA money awarded by June 2010, and the goal is to have $2.5 billion of State contracts signed. The office also wants 20% of that money focused on long-term projects which will carry on after ARRA money is gone. The goal OWIP is hoping to achieve is to have programs begun under ARRA continue after the funding is gone. That way these programs continue to bring job creation and retro-fits into the market. OWIP is pushing States to spend quickly while making sure the investments are strategic and self-sustaining. Mr. Bailey commented that he knows States are facing challenges with trying to spend as quickly as DOE would like, but that DOE is aware of the concerns and are making calls to each State in an effort to alleviate the fears and frustrations. He also noted that NEPA is working to accelerate its awards, but is still waiting on information from States before it can make its final determinations, in many cases[8].
- David Terry (DT), TP and others had general questions about finance guidance surrounding credit enhancements, a letter from the Golden Field Office (GFO) regarding State rebate program funds, and also Davis-Bacon. Mr. Bailey noted that many of these questions are with General Counsel for answers; and as soon as they are available, he will provide them to the Board and to the States. Mr. Bailey closed his presentation with a comment about a new announcement for Block Grants which will be out in the Spring of 2010.
- JS then introduced Robert Adams who is the Director of Weatherization Programs for DOE. Mr. Adams began his presentation by letting the Board know that DOE is one year into a three-year program funded at $1.6 billion, with a goal to weatherize 593,00 homes across the country. Currently he has spent $600 million of that; and Delaware was the first State to reach the bench-mark goal of 33%, with Idaho close behind at 32%. DOE receives monthly reporting from all States about their progress, and he is aware that some States are concerned about the goal of weatherizing 25,000 homes a month. He noted that WAP needs to work more diligently to expand local agencies to help with this task, but also felt many States are not reaching this goal because they are not up to full capacity yet, and that is a challenge each State needs to overcome.
- The other main focus of WAP is increasing monitoring quality control in an effort to ensure ARRA money is being spent effectively. He also spoke about the 30/50 rule where DOE puts a hold on 50% of the funding until the State can show they have met 30% of the production requirement. There are a few States who have reached or are near to reaching this goal. VC, DC, JS and SB all commented to Mr. Adams that their main frustration is the reporting standards of this program. If DOE is going to hold back on funding until reporting comes in about production, the catch-22 is that many States cannot begin production until they are able to get their hands on more money, which they cannot do until they submit the production reports. VC also expressed frustration about communication from DOE to the States regarding these more aggressive targets of 25,000 homes per month. He has heard that number referred to as the minimum number States have to meet, but also heard that number referred to as a bench-mark and a goal. VC asked that Mr. Adams work to clarify what numbers DOE and WAP actually need with regards to reporting so there is no confusion and no perception that certain States are not meeting requirements. Mr. Adams assured VC that he would make sure to put in

[8] A handout provided by Mark Bailey during his presentation can be found as Appendix H.

writing for the States what the actual numbers need to be versus the bench-mark in order to remedy this confusion.

- JS thanked Mr. Bailey and Mr. Adams for coming and sharing their updates with the Board and opened the floor to general discussion on SEP, WAP and EECBG programs. SB and PGD both commented that it was refreshing to hear Mr. Sperling reiterate the point that having local buy-in and engagement really is the catalyst to transformative thinking about clean energy. DC began asking the Board if they want to draft a Resolution speaking to this bottom-up/regional approach that seems to be the underlying theme of all the presentations given to the Board over the last two days. DC reminded the Board that not only did OWIP staff speak to this, but so did Mr. Lindenberg, and Mr. Sperling. He felt that this could be an opportunity for the STEAB to create a working document that serves as a model of how a bottom-up approach to energy education, retro-fits, WAP, or other programs could operate in any locality. A part of this could also include a model for how to convene a regional community meeting to address energy issues. GB thougt this sounded like a good concept for a resolution, as did LS and SB. SV added that utility companies could become a part of this model if the Board chooses to move forward with this idea.
- LS communicated that in order for this type of model being discussed to actually succeed, there needs to be a paradigm shift in the utility and regulatory structure. DOE should be the initial convener of meetings with regulators so a discussion can begin about how to restructure existing regulations in a way that would facilitate change from a bottom-up approach. An example of where States are struggling with this is in North Carolina, where old regulations are stifling progress and change. Until this paradigm shift can occur, any Resolution to this affect would most likely meet the same challenges North Carolina is facing. DH, CJP and JD all agreed with this comment, and DC volunteered to start drafting a Resolution which speaks to a paradigm shift and a need for a more focused bottom-up approach to change.

RETROFIT RAMP-UP AND PROPERTY ASSESSMENT FOR CLEAN ENERGY (PACE)

- JS and TP were the next presenters and shared information on the Climate Smart Loan Program which helps property owners borrow money from a district in order to finance renewable energy retro-fits. The borrowed money is then paid back in annual property tax. TP noted that Boulder, CO, was the first city to enact this program in 2008, and since then three other communities have added this initiative to their ballots. Boulder is currently focused on commercial and residential sectors with this program with a goal of helping these areas reduce their energy costs and usage. TP concluded by noting the lessons learned are that these projects can be overly staff intensive, that it is necessary to integrate the program with proper support, and that through these programs, the economy of the community can be significantly impacted[9].
- JS added that there are currently 16 States which have passed legislation enabling this program to move forward. This is based on the Berkley model of special assessment districts, and there is more information available on the Pacenow.org website.

GENERAL INFORMATION REGARDING THE E-RIC INITIATIVE

- The next speaker was JoAnn Milliken, who is a Senior Advisor to Henry Kelly, and spoke to the Board very broadly about the new Energy Efficiency Building Systems Regional Innovation Cluster (E-RIC) initiative. The objective is to leverage federal resources by promoting this multi-agency effort with goals to improve energy efficient building systems design; enhance economic, technical and commercial competitiveness; create and retain jobs; increase regional GDP; and promote the advancement of science and technology. There are seven agencies involved including DOE, the Department of Commerce, the Small Business Administration, the Department of Education,

[9] The slides from Tom Plant's presentation can be found directly following these minutes as Appendix I.

Department of Labor, and the national Science Foundation. Ideally, each cluster will regionally lead, but can include team members from outside the region due to harnessing the best science and technology partners. DOE will be reviewing proposals and there will ultimately be a merit review process to decide which clusters will be funded. For more information, Board members were encouraged to review the EDA website.

- JS thanked Ms. Milliken for her time and asked if there were Board questions. SV asked about who would review the business and market development side of the applications, PG asked about what defines a region, and LS asked about contact information for this program. Ms. Milliken asked that the Board please refer to the online Q&A section on the E-RIC initiative website and to email any questions directly to e-ric@eda.doc.gov.

DISCUSSION ON NGA TESTIMONY

- Michele Nellenbach, an employee of the National Governor's Association (NGA), spoke to the Board about her testimony on the Hill regarding the new DOE reporting requirements and other topics discussed during her March 4, 2010, testimony[10]. Ms. Nellenbach highlighted for the Board the reasons for said testimony, noting it dealt with why DOE had established new reporting requirements and metrics in letters sent to each State, and why the States had not been allowed to weigh-in and open a dialogue about the changes. The biggest issue noted in her testimony surrounded what the States will need to do if every agency wants to implement monthly reporting and the burden placed on States as it is to provide this information to DOE. Another issue revolved around complaints by States about the weekly phone calls from DOE and the time required to put data together in order to provide the information desired by DOE on these calls.
- SB asked about the obligations of loan money and how there is an implied threat that money will be taken from States if it is not spent in a timely fashion. Ms. Nellenbach agreed that this threat is out there and noted NGA is working with DOE to determine a definition of what obligated funding actually means so there can be a measurable time-frame for moving funds around if that is indeed what DOE is going to do with un-obligated funds. VC again noted his frustration with DOE asking for increased WAP numbers at 25,000 homes per moth, but without providing information if this number is a goal or the actual number of weatherized homes required to be met each moth. He asked Ms. Nellenbach if she had clarification on this topic, and if not, could NGA assist with getting a clearer explanation from DOE about what this actual requirement means for States. JS asked if NGA was in a position to help States receive more education and guidance about building codes from DOE and PNNL, and Ms. Nellenbach said she would look into that and provide answers to all of the Board's questions. JS thanked her for her time and willingness to discuss these difficult topics and mentioned that the Board looks forward to hearing more from her in the future.

BOARD DISCUSSION

- JS opened the floor to general Board discussion about topics discussed the previous day as well as earlier this morning. GB asked the Board about their thoughts on the FY 2009 Annual Report Draft, and RG moved that the Annual Report be adopted as is and TP seconded. The Board unanimously adopted the FY 2009 Annual Report entitled "A New Direction: Providing Insight into Programs and Opportunities Created by the Recovery Act" on March 10, 2010. All members of the STEAB asked that copies be sent to all SEO and WAP Directors as well as members at NASEO and NASCAP.
- JS asked the Board to review the plaque proofs included in the meeting binder, noting these, if adopted, would go to the retired members of the Board. DH moved to recognize retired members with these awards, and CJP seconded. The STEAB unanimously approved sending plaques to Chris Benson, Patricia Sobrero, Elliott Jacobson, Roger Duncan and Daniel Zaweski on March 10, 2010.

[10] The testimony give by Michele Nellenbach can be found as Appendix J.

- JS then turned the discussion to the Priority areas discussed on Tuesday and the areas identified by the Board as internal challenges. Discussion ensued and areas of focus through 2012 were suggested; these included a greater focus on technology transfer, green job creation, and bringing RE and EE to scale. Members felt that bringing RE and EE to scale were of the greatest importance since that is the goal of EERE. Members thought perhaps consumer education should be a priority since Resolution 10-02 spoke to transformative change at the local level through increased education. JD reiterated the importance of keeping the creation of green jobs as a priority since that aligned perfectly with the goals of the Obama administration, as well as EERE.
- During the discussion of these new focused priorities for the Board, many challenges also arose. The Board kept a list of challenges they must overcome in order to more effectively serve EERE and the Secretary of Energy. One of the biggest challenges identified was keeping a good balance between the successes of short-term funded ARRA projects while trying to maintain long-term stability of existing programs. Paralleling one of their Priorities, the Board noted that modifying consumer behavior is a big challenge facing the Board and EERE with regards to trying to bring RE and EE to scale in the United States.
- JS closed the meeting for the day but asked the Board to please continue ruminating on these issues and to also be prepared to discuss a potential Resolution which was currently being drafted by DC for consideration and comments by the Board.

TRANSMISSION ACCESS FOR RENEWABLES

- The final presentation to the Board was given by Larry Mansueti, Director of State and Regional Assistance in the Office of Electricity (OE). He began by telling the Board that his job is to work with transmission system requirements for many different types of renewable technologies. Despite the variety of technologies available, the largest barriers to building transmission lines are planning, siting and cost allocations. Questions like how would a potential line affect reliability and cost, is there a value added to society with this proposed line, and how do we finance this line are all questions he faces on a daily basis. EERE is also working on many different studies on how to best integrate wind and solar into transmission lines.
- Recently there was the Eastern Wind Integration and Transmission Study, which showed there would need to be 23,000 miles of new line at a cost of $93 billion in order to support new renewable energy transmission. He continued that ARRA has given $6 billion for loan guarantees for renewable technology and transmission technology, and $80 million for facilitating the development of regional transmission plans. Mr. Mansueti noted that there is a lot of technology available which may mean that there is not as much transmission needed to get the energy to communities. The question is how do communities know that building these new technologies are the cheaper option for energy vs. transmission from a plant further away? It is these types of questions he faces each day and these are the studies currently underway with use of ARRA money.
- JS thanked Mr. Mansueti for his presentation and for taking the time to come and speak to the Board about this important issue facing renewable and energy efficient technologies.
- JS opened the floor to discussion by looking forward to the next STEAB meeting, JS and GB suggested a date in June and another in October. The Board voted to meet June 8 – 10, 2010, at the Sheraton Denver West, in Denver, CO, in order to meet with NREL and receive an update on existing and new technology being developed by the Lab. JS asked the Board if the current conference call timing would continue to be amenable to all. All members of the Board agreed the current timing worked well with all schedules, and JS resolved that the monthly teleconferences would continue to be held on the third Thursday of every moth, at 1 PM eastern time.

- JS then asked DC to share his draft of Resolution 10-02 with the Board for discussion[11]. The Board reviewed the document and provided feedback with regards to minor edits to language and semantics. LS reiterated the importance to include a reference to a paradigm shift in the Resolution itself since that is the essence of what is trying to be captured by the Resolution. CJP thought the language and message was good, and DH thought this may work in conjunction with Resolution 10-01, which was already with the Assistant Secretary for review. Many Board members debated the benefits of adding a "next steps" section, while others thought perhaps it was best to leave that out of the actual Resolution and proceed without having the next steps laid out in the actual document. Board discussion continued until GB and JS believed there were edits and considerations yet to be made and perhaps the Board should table a vote on this Resolution until the April teleconference call. The Board agreed and decided to continue discussion via emails and phone calls, and revisit the Resolution at the April teleconference call. The hope was also that by that time, the Assistant Secretary will have reviewed and provided feedback on Resolution 10-01.
- Discussion turned to the Priorities document created and revised in small groups the day before. The small group in charge of Priorities shared their thoughts and identified that these not only aligned with EERE priorities, but also were reflective of goals the Board felt were of utmost important not only to the administration but to the States as well. Members again provided feedback and edits which were captured by GB and JS for consideration. GB suggested that he make these edits after the meeting and bring this document up at the April teleconference call for official adoption by the Board. All members agreed to continue to provide feedback and edits to the existing document in order to build from this framework and create a working list of goals for the Board through 2012.
- The meeting arrived at the public comments portion of the meeting. GB noted that he had not been contacted by any members of the public who wished to provide comments at the meeting. Seeing as there were no members of the public present at the meeting, JS then closed the meeting for public comment.
- JS asked if there were additional concerns or issues which the Board wished to address. Seeing as there were no additional comments up for discussion, JS thanked all members of the STEAB for their time and for traveling to Washington, DC, in order to attend the live Board meeting. She reminded everyone that the next meeting would take place in Denver, CO, the week of June 7, 2010, and officially adjourned the meeting.

[11] A draft copy of Resolution 10-02 by Dan Carol can be found as Appendix K.

ACTION ITEMS arising from the March 2010 STEAB meeting are highlighted below:

In the coming weeks/months, the Board has several action items on the agenda with associated timeframes to ensure their effectiveness. The Board is currently planning a face–to-face meeting in Denver, CO, during the week of June 7th, 2010. In addition, the Board is considering several potential actions based on topics discussed during this meeting, with the intention of re-visiting them for further discussion during the April and May teleconference calls, as well as during the upcoming June live meeting.

ACTIONS	RESPONSIBLE PARTY	DUE DATE	STATUS
Scribe and upload meeting minutes & handouts to STEAB website.	• SENTECH, Inc. (scribe) • DFO/Board Chair (approval)	• Submit draft minutes to DFO for editing by May 1, 2010. • Post Minutes to site after approval.	• Submitted draft minutes to DFO for review.
Next Meeting: • Sheraton Denver West, Lakewood, CO	• SENTECH, Inc. • DFO	• Week of June 7th, 2010.	• Stacey Young (SENTECH, Inc.) is currently coordinating logistics with the hotel. • DFO is in talks with NREL regarding a Lab tour.
Resolution 10-01	• Board Chair, Janet Streff. • DFO	• Adopted January 21, 2010. • Given to Assistant Secretary Zoi in early Feb. 2010.	• Resolution is with the Assistant Secretary. • Board is awaiting an official written response.
Resolution 10-02	• Dan Carol, author of Resolution 10-02	• Board to review, edit, and vote on Resolution on the April or May teleconference calls.	• Resolution 10-02 was adopted by the STEAB on April 20, 2010.
STEAB Priorities	• DFO	• Unanimously adopted on April 15, 2010.	• Posted to STEAB website.
STEAB Challenges	• Board • DFO	• TBD based on edits received from Board.	• Board currently reviewing and editing Challenges document.
Nomination Packet (to replace 3 retirees)	• SENTECH, Inc. • DFO	• Submitted February 19, 2010. • Re-submitted with edits on April 22, 2010.	• In chain of concurrence at HQ.
Charter Renewal	• SENTECH, Inc. • DFO	• Submitted March 26, 2010.	• In chain of concurrence at HQ.

APPENDIX A

Weatherization Assistance Program

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

WAP targets

Current WAP performance

- $599M (12.7%) drawn down as of March 8th
- 15-17k estimated units weatherized in January 2010
- 75% of total Recovery Act production occurred in Q4 of CY09

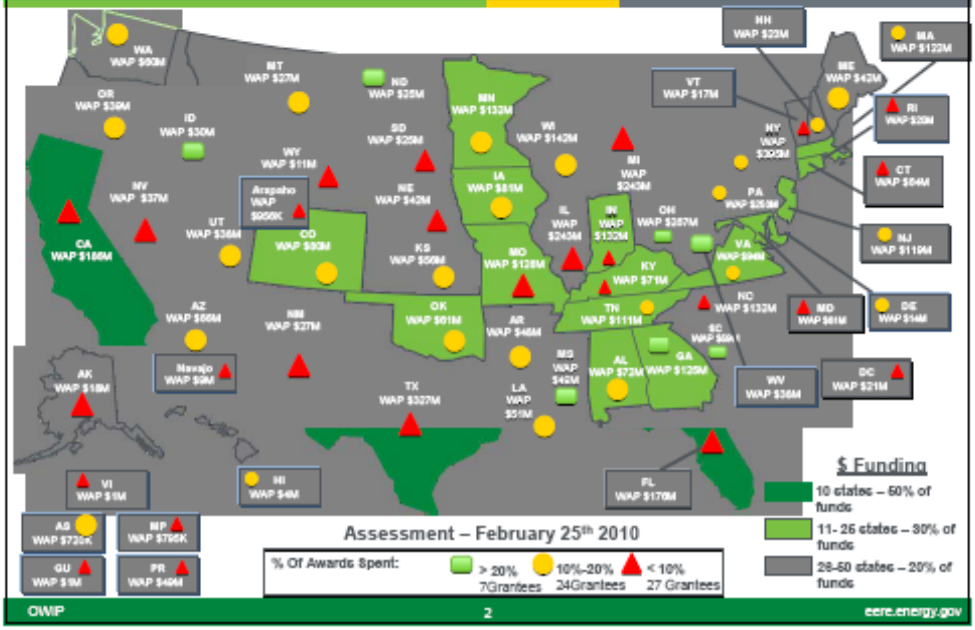
Driving WAP performance

- Monthly reporting begins March 30th for February 2010 performance
  - Total outlays
  - Total units weatherized/re-weatherized (by Grantee)
  - Total units weatherized (by subgrantee)
- Operation Greenlight Phase II
  - Scenario outlined to drive WAP network peak production to 30K units
  - Conducting calls with State WAP agencies to outline the pro-rata contribution of each state to reach the target
- New monitoring manual published last week

OWIP 1 eere.energy.gov

WAP: Spending Indicates WAP Ramping Up Across the Country

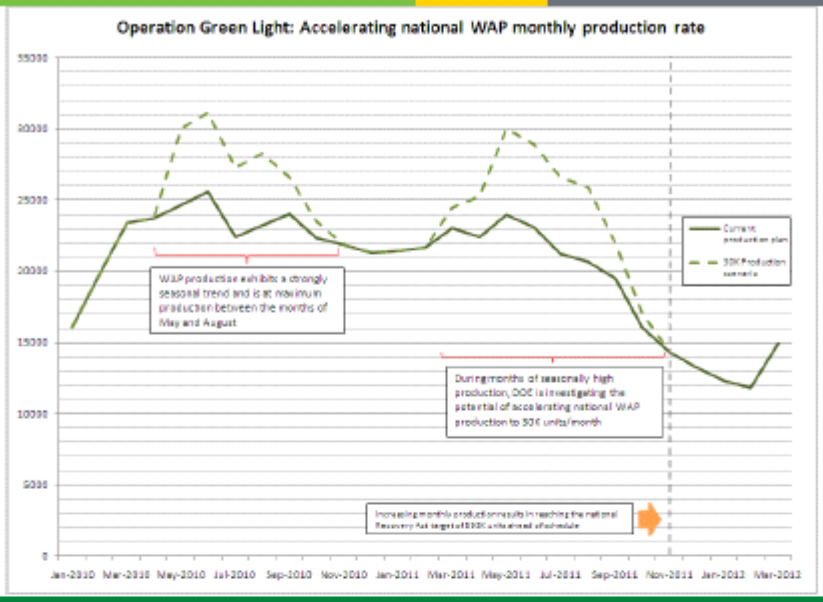
U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy



OWIP 2 eere.energy.gov

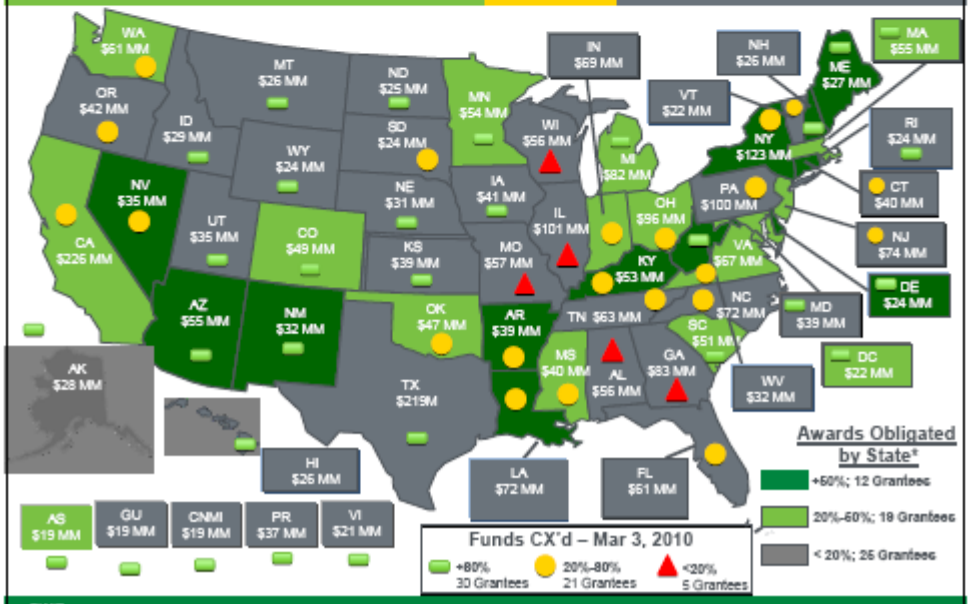
WAP Green light Phase II: Accelerating peak production to 30k units/month

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy



SEP: Increased Attention to Amount of Awards Obligated by States to Track Progress

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy



State Energy Program

Energy Efficiency & Renewable Energy

SEP targets

Current SEP performance

- $1.8B (61%) NEPA CX'd
- $848M (28%) obligated by states
- $89M (2.9%) drawn down by states
- $59M (1.9%) costed by states

Driving SEP performance

- Monthly reporting begins March 30th for February 2010 performance
  - Outlays (Recovery Act funds)
  - Obligations (Recovery Act funds)
  - Building retrofits (number and sqft)
  - Renewable energy (number and kW)
  - Loans and grants (number and value)
- Operation Quickdraw
- NEPA swat teams at GFO and NETL
- New monitoring manual published last week

Energy Efficiency and Conservation Block Grant Program

Energy Efficiency & Renewable Energy

EECBG targets

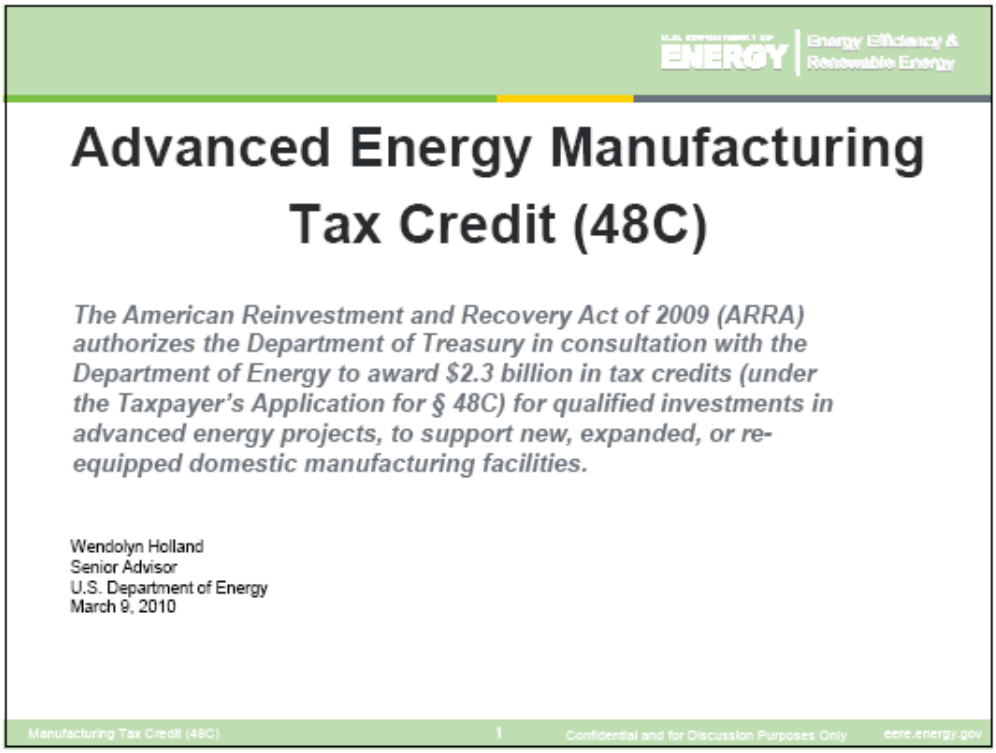
Current EECBG performance

- $1.65B (61.2%) NEPA CX'd
- $82.7M (3.6%) drawn down by recipients

Driving EECBG performance

- Monthly reporting begins March 30th for February 2010 performance
  - Outlays (Recovery Act funds)
  - Obligations (Recovery Act funds)
  - Building retrofits (number and sqft)
  - Renewable energy (number and kW)
  - Loans and grants (number and value)
- NEPA swat teams at GFO
- New monitoring manual published last week

APPENDIX B



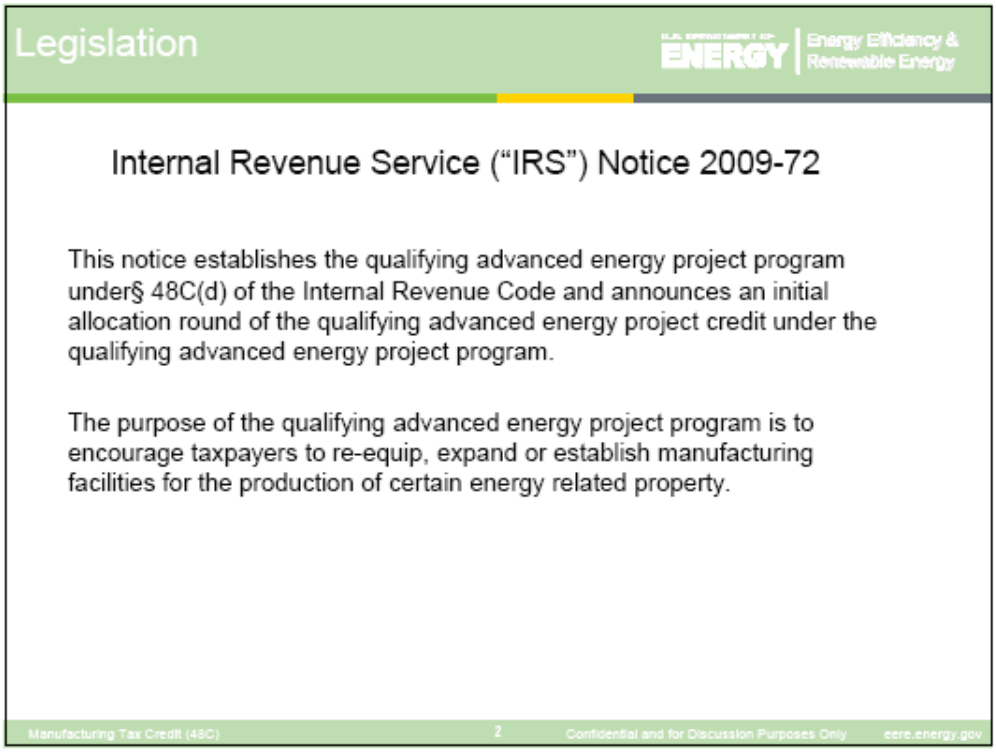
Energy Efficiency & Renewable Energy

Advanced Energy Manufacturing Tax Credit (48C)

The American Reinvestment and Recovery Act of 2009 (ARRA) authorizes the Department of Treasury in consultation with the Department of Energy to award $2.3 billion in tax credits (under the Taxpayer's Application for § 48C) for qualified investments in advanced energy projects, to support new, expanded, or re-equipped domestic manufacturing facilities.

Wendolyn Holland
Senior Advisor
U.S. Department of Energy
March 9, 2010

Manufacturing Tax Credit (48C) 1 Confidential and for Discussion Purposes Only eere.energy.gov



Legislation

Energy Efficiency & Renewable Energy

Internal Revenue Service ("IRS") Notice 2009-72

This notice establishes the qualifying advanced energy project program under§ 48C(d) of the Internal Revenue Code and announces an initial allocation round of the qualifying advanced energy project credit under the qualifying advanced energy project program.

The purpose of the qualifying advanced energy project program is to encourage taxpayers to re-equip, expand or establish manufacturing facilities for the production of certain energy related property.

Manufacturing Tax Credit (48C) 2 Confidential and for Discussion Purposes Only eere.energy.gov

Covered Technologies

Expansive definition of "Qualifying advanced energy project", equipment manufacturing facility for these technologies

Solar	Wind	Geothermal
Renewable fuels	Fuel Cells	Other renewables
Microturbines	Carbon capture & sequestration	Energy Conservation
Electric grids to support transmission of intermittent sources of renewable energy, including storage of such energy		
Electric vehicle energy storage system (batteries)		
Plug-in electric drive motor vehicles or components		

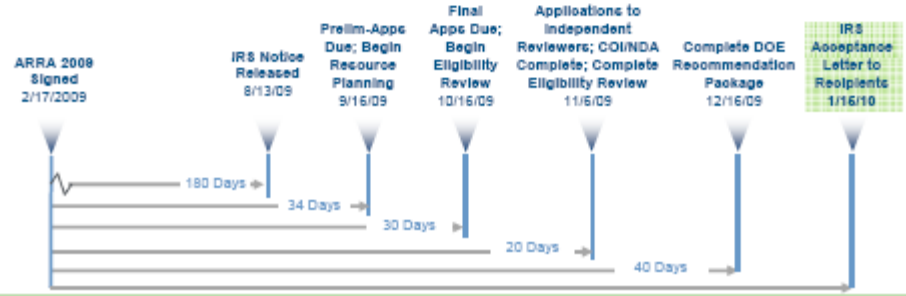
Plus: Other advanced energy property designed to reduce GHG emissions as may be determined by the Secretary (Treasury)

High Demand for §48C

Higher than expected response indicates that stimulus has provided confidence for American manufacturers to plan capital expenditures in FY10 and to anticipate a tax liability.~500 applications received; ~3x oversubscribed.

Tax credit details
- Goal is to grow domestic manufacturing of renewable and efficiency technologies
- $2.3b for 30% tax credits of capital costs
- IRS as lead; DOE as subcontractor

Selection Criteria
- Reasonable expectation of commercial viability
- Domestic job creation
- Potential for technological innovation and commercial deployment; lowest levelized cost
- Net impact avoiding or reducing GHG emission or air pollution



Application Selection Process

Energy Efficiency & Renewable Energy

Review Criteria

- Domestic job creation
- Net impact in avoiding or reducing air pollutants or emissions of GHG gases, evidenced in part by Levelized Cost of Energy
- Greatest potential for technological innovation and commercial deployment
- Project time from certification to completion

Independent Merit Scoring

- Projects initially grouped by technology type (Biomass, Building, CCS, Fuel Cell, Geothermal, Hydro, Smart Grid, Industrial, Solar, Vehicles, Wind)
- Individual and group consensus scores identified the strongest applications within a given technology type.
- Pass/Fail guidance was provided to reviewers based on how overcommitted (beyond $2.3Bn) the applicant pool is, only scores above 600/1000.

Consensus Scoring and Harmonizing

- Consensus panels conducted by technology type (or for large technology categories by sub-categories like thin film, concentrated solar, PV)
- Measures to create consistency among scores for all technologies include: training and effective mediation by Golden, sharing full range of data for all applications with all independent reviewers, using cross-cutting metrics such as jobs/$ tax credit, schedule, CO_2/Tax Credit .

Policy Factors

- Geographic Diversity
- Technology Diversity
- Project Size Diversity
- Regional Economic Development

Application Selection Criteria

Energy Efficiency & Renewable Energy

Selection Criteria

Provides the greatest domestic job creation; (Weight: 25%)

- Total jobs created and jobs per tax credit requested.
- Quality and Sustainability of operating jobs creation
- Reasonableness of number of jobs forecast

Provides the greatest net impact on greenhouse gases; (Weight: 25%)

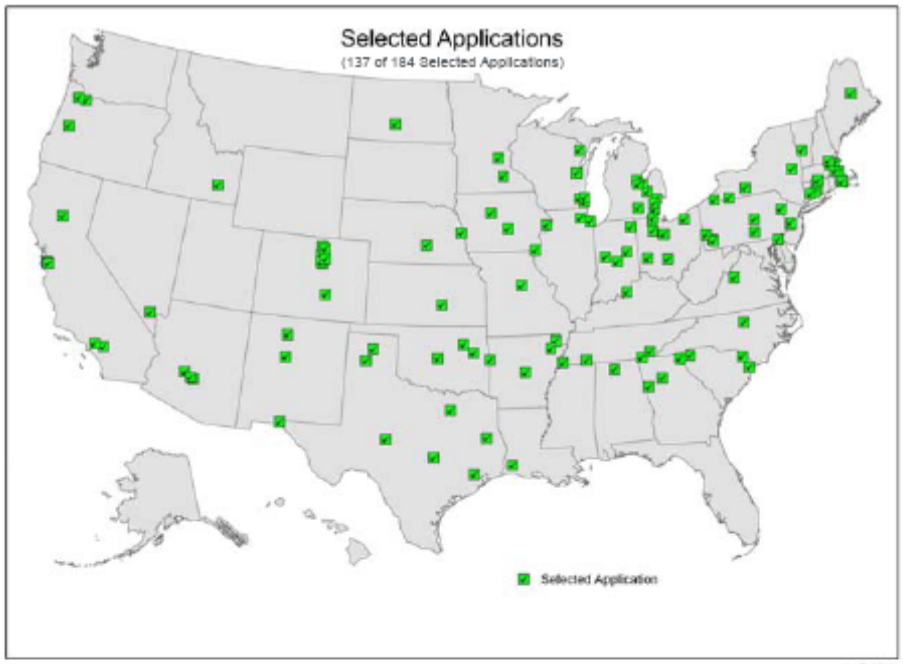
- Calculated total of net reduction or avoidance of anthropogenic emissions of greenhouse gases
- Avoided or emitted pollutants (e.g. NOx, SOx, toxics)
- Reasonableness of analysis assumptions used to forecast emission reductions or avoidance (based upon AAMC assumptions)
- Extent to which the manufacturing facility itself reduces or avoids GHG or air pollution emissions.

Has the greatest potential for technological innovation and commercial deployment, as indicated by; (Weight: 25%)

- The production of new or significantly improved technologies
- Improvements in levelized costs and performance
- Manufacturing significance and value

Has shortest project time from certification to completion; (Weight: 25%)

- Number of months to project completion.
- Readiness to proceed with project as evidenced by firmness of site selection, progress of permitting process, written commitments from actual project partners.
- Reasonableness of schedule forecasted.



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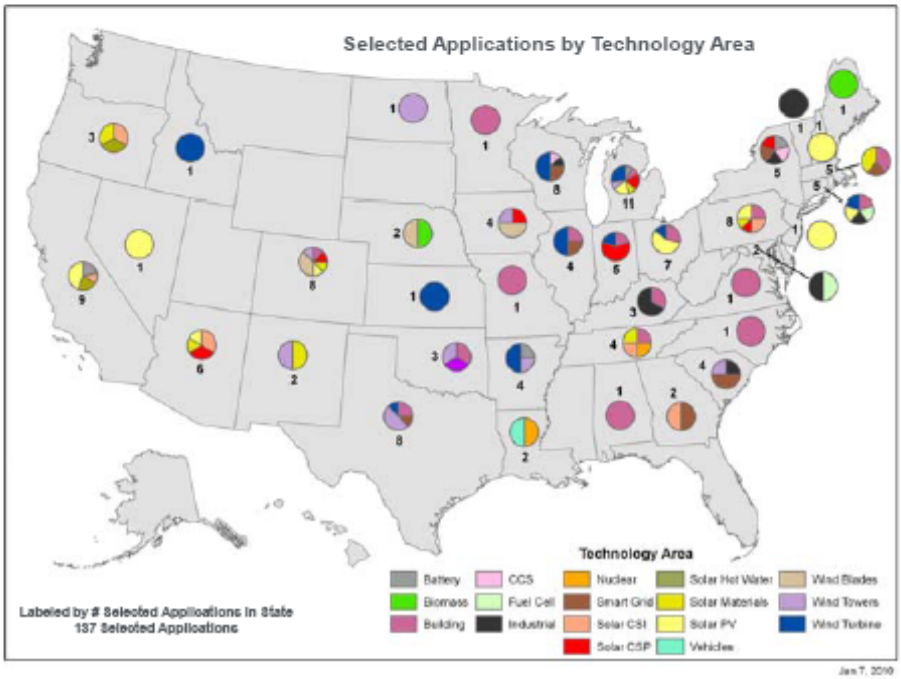

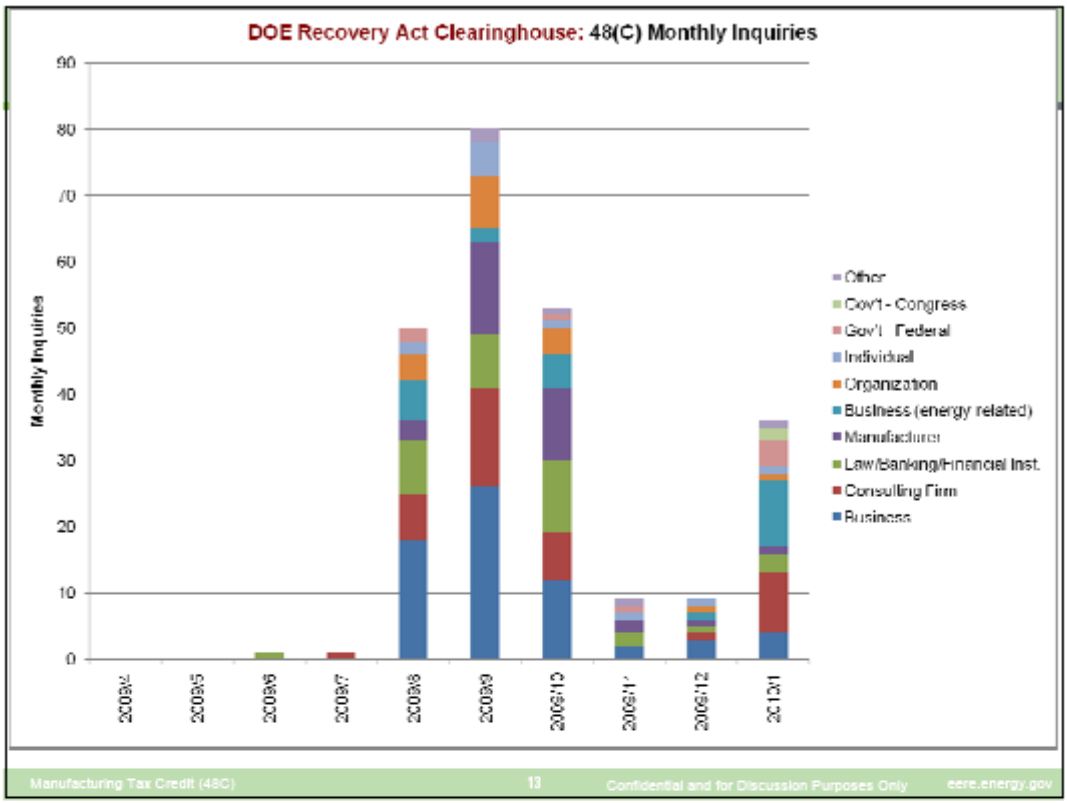
DOE Recovery Act Clearinghouse: 48(C) Monthly Inquiries
Monthly Inquiries
90
80
70
60
50
40
30
20
10
0
Other
Gov't - Congress
Gov't - Federal
Individual
Organization
Business (energy related)
Manufacturer
Law/Banking/Financial Inst.
Consulting Firm
Business
2009/4
2009/5
2009/6
2009/7
2009/8
2009/9
2009/10
2009/11
2009/12
2010/1
Manufacturing Tax Credit (48C)
13
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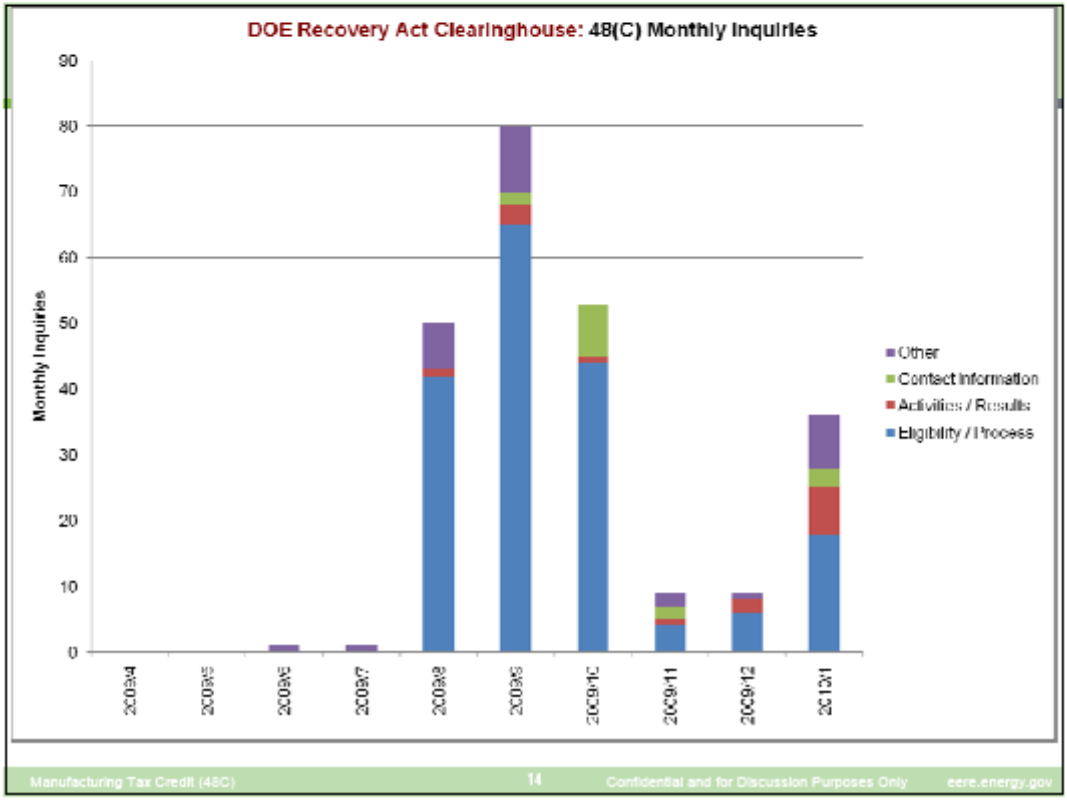
DOE Recovery Act Clearinghouse: 48(C) Monthly Inquiries
Monthly Inquiries
90
80
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60
50
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20
10
0
Other
Contact Information
Activities / Results
Eligibility / Process
2009/4
2009/5
2009/6
2009/7
2009/8
2009/9
2009/10
2009/11
2009/12
2010/1
Manufacturing Tax Credit (48C)
14
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APPENDIX C

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

ENERGY STAR® STATE APPLIANCE REBATE PROGRAM

As part of the American Recovery and Reinvestment Act of 2009, the U.S. Department of Energy is providing funding to states and territories to support consumer rebate programs for ENERGY STAR qualified appliances. Under these programs, consumers can receive rebates to purchase energy-efficient appliances when they replace used appliances. Eligibility guidelines, covered products, and rebate amounts differ by state, so consumers should review program requirements carefully.

INDIANA

Indiana Office of Energy Development

REBATES AVAILABLE

Rebates began on February 1, 2010. Rebates may be offered for a limited time only. The rebate program will end when funds run out. Before making a purchase, confirm funding and requirements at www.inenergyefficiency.com.

PRODUCT		REQUIREMENTS	AMOUNT
Air Conditioners (Central)		Has a Seasonal Energy Efficiency Ratio (SEER) of at least 14.5.*	$150
Boilers (Gas)		ENERGY STAR qualified. The Annual Fuel Utilization Efficiency (AFUE) must be at least 85%.	$500
Furnaces (Gas)		Has an Annual Fuel Utilization Efficiency (AFUE) of at least 92%.*	$300
HEAT PUMPS	Air-Source	ENERGY STAR qualified.	$500
	Ground-Source	ENERGY STAR qualified.	$1,000

*Exceeds current ENERGY STAR criteria.

HOW TO APPLY

Consumers must apply for rebates within 30 days of purchase. Application must include proof of purchase of an eligible product. Incomplete applications will not be processed. Rebates will be issued to consumers four weeks after receipt of a complete application. Rebates will be paid on a first-come, first-served basis.

For more information: www.inenergyefficiency.com

ELIGIBILITY

Applicants must be legal resident of the State of Indiana. Qualifying products must be purchased new, must be installed at a legal residence, and must replace an existing HVAC unit. Limit one rebate per qualifying technology. New construction and commercial or industrial properties are not eligible.

continued >

• Last Updated: March 2, 2010 •

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

ENERGY STAR® STATE APPLIANCE REBATE PROGRAM

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MINNESOTA

Minnesota Department of Commerce, Office of Energy Security

REBATES AVAILABLE - PROGRAM CLOSED

Reservations began March 1, 2010 and ended on March 2, 2010 when funding ran out.

PRODUCT	REQUIREMENTS	AMOUNT
Clothes Washers	ENERGY STAR qualified.	$200
Dishwashers	ENERGY STAR qualified.	$150
Freezers	ENERGY STAR qualified.	$100*
		$50
Refrigerators	ENERGY STAR qualified. Must be at least 7.75 cubic ft and priced over $300.	$200*
		$100

*Full rebate given only to consumers who submit an appropriately signed "proof of demanufacturing" for their old replaced appliance.

HOW TO APPLY

Rebates require a valid rebate reservation. Applications must include a legible sales receipt and "proof of demanufacturing" to receive the full rebate amount on refrigerators and freezers. Rebate applications must be postmarked within 30 days of purchase. Purchases must be made within the promotion period. Rebates are issued on a first-come, first-served basis.

For more information: www.mnappliancerebate.com

ELIGIBILITY

Only Minnesota residential consumers supplying a home address are eligible. Purchases must be made at a retailer located in Minnesota. Purchased appliances must replace existing similar appliances in working condition. Pick-up of old appliance and installation of new appliance must occur within the same residence applying for the rebate. Consumers who provide "proof of demanufacturing" on their old refrigerator or freezer will receive the full rebate amount on theses two appliances. This proof is embedded on the rebate submission form and can be signed by a retailer, their delivery representative, a County Solid Waste site or by the recycler picking up the used appliance as part of a utility bounty program. Limit one appliance rebate per residence – maximum of $200.

continued >

RESOURCES

DOE Energy Savers
www.energysavers.gov

ENERGY STAR Rebate Finder
www.energystar.gov/rebatefinder

U.S. DEPARTMENT OF
ENERGY
Energy Efficiency &
Renewable Energy

DOE Recovery Act Hotline
1-888-DOE-RCVY (1-888-363-7289)
www.energysavers.gov/rebates

• Last Updated: March 2, 2010 •

U.S. Department of Energy - Energy Efficiency and Renewable Energy

Energy Savers

Arizona Appliance Rebates

The State of Arizona will implement a mail-in rebate program to help residents replace older, inefficient appliances with ENERGY STAR® qualified appliances. The program is scheduled to begin on April 12, 2010 and will last until funds are depleted.

Eligible products include

- Clothes washers
- Dishwashers
- Gas storage water heaters
- Gas tankless water heaters
- Electric heat pump water heaters

Rebates vary based on the appliances' efficiency levels. Rebate claims must be made within 14 days of purchase. Arizona encourages residents to recycle the old appliances.

Contact: Arizona Department of Commerce Energy Office

Total Funding: $6,237,000

Program information subject to change. Rebates may be offered for a limited time only. Before purchasing a product, check with your program sponsor to ensure rebates are available, and to confirm product eligibility and program requirements. Products purchased must meet efficiency criteria as established by the state.

U.S. Department of Energy - Energy Efficiency and Renewable Energy

Energy Savers

Colorado Appliance Rebates

The State of Colorado will implement a mail-in rebate program to help residents replace older, inefficient appliances with ENERGY STAR® qualified appliances. The program is tentatively scheduled to begin in March 2010 and will continue until funds are exhausted.

Eligible products include

- Refrigerators
- Clothes washers
- Dishwashers
- Gas storage water heaters
- Gas tankless water heaters
- Gas furnaces
- Gas boilers

Colorado will offer a higher refrigerator rebate to consumers who provide proof of recycling for the old unit. The state also encourages residents to recycle their other old appliances. Check with state officials for information on proper disposal of appliances.

Contact: Colorado Governor's Energy Office

Total Funding: $4,739,000

Program information subject to change. Rebates may be offered for a limited time only. Before purchasing a product, check with your program sponsor to ensure rebates are available, and to confirm product eligibility and program requirements. Products purchased must meet efficiency criteria as established by the state.

U.S. Department of Energy - Energy Efficiency and Renewable Energy

Energy Savers

Kentucky Appliance Rebates

The State of Kentucky will implement a mail-in rebate program to help residents replace older, inefficient appliances with new, ENERGY STAR® qualified appliances. Rebates are tentatively scheduled to be available starting April 2010, until funding runs out.

Eligible products include

- Refrigerators
- Freezers
- Clothes washers
- Dishwashers
- Room air conditioners
- Gas condensing water heaters
- Gas storage water heaters
- Gas tankless water heaters
- Electric heat pump water heaters
- Solar water heaters (electric and gas back-up)
- Gas Furnaces
- Gas Boilers
- Central air conditioners
- Air source heat pumps
- Geothermal heat pumps

Consumers are required to "self-certify" replacement of appliances and Kentucky encourages consumers to recycle their old appliances.

Contact: Kentucky Department for Energy Development and Independence

Total Funding: $4,096,000

Program information subject to change. Rebates may be offered for a limited time only. Before purchasing a product, check with your program sponsor to ensure rebates are available, and to confirm product eligibility and program requirements. Products purchased must meet efficiency criteria as established by the state.

U.S. Department of Energy - Energy Efficiency and Renewable Energy

Energy Savers

Texas Appliance Rebates

The State of Texas will implement a mail-in rebate program to help residents replace older, inefficient appliances with new, ENERGY STAR® qualified and ultra-efficient appliances. The program is tentatively scheduled to begin in April 2010 to coincide with Earth Day activities, and will continue until funds are expended.

Eligible products include

- Refrigerators
- Freezers
- Clothes washers
- Dishwashers
- Room air conditioners
- Gas condensing water heaters
- Gas storage water heaters
- Gas tankless water heaters
- Electric heat pump water heaters
- Solar water heaters
- Central air conditioners
- Air source heat pumps

Customers may reserve their rebates online before the program begins, and are required to provide proof of haul-away of replaced appliances. Consumers can also obtain a bonus rebate by providing proof that their old appliances were recycled through a State Energy Conservation Office partner retailer or recycling center.

Contact: Texas State Energy Conservation Office

Total Funding: $23,341,000

Program information subject to change. Rebates may be offered for a limited time only. Before purchasing a product, check with your program sponsor to ensure rebates are available, and to confirm product eligibility and program requirements. Products purchased must meet efficiency criteria as established by the state.

APPENDIX D

Energy Empowers Overview

- Clean energy news service
- 30 new written stories/week; two new multi-media stories/month
- Five full-time writers in "newsroom"

http://www.eere.energy.gov/energyempowers/

Energy Empowers Marketing and Lead Generation

Target Market: General Public

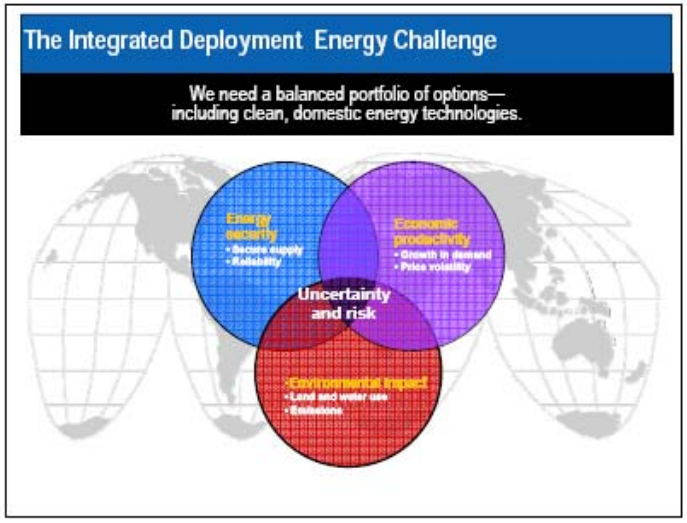
Story Leads:

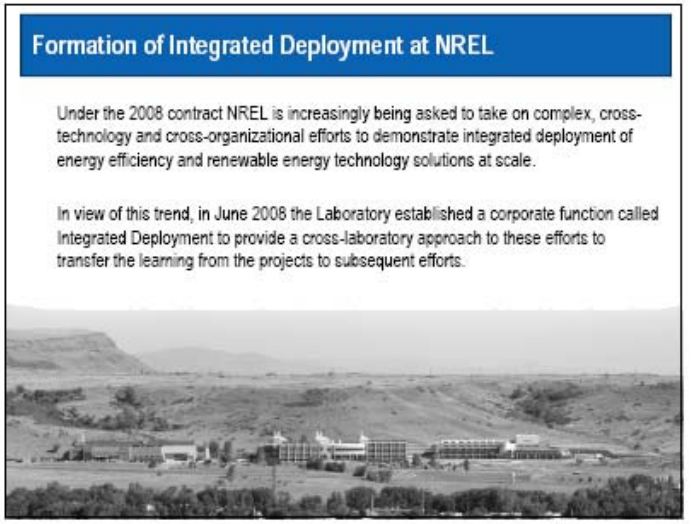
1. Human Interest, Business and Technology leads
2. Please submit two to three sentence leads – our team of writers will follow up
3. Please submit leads to:

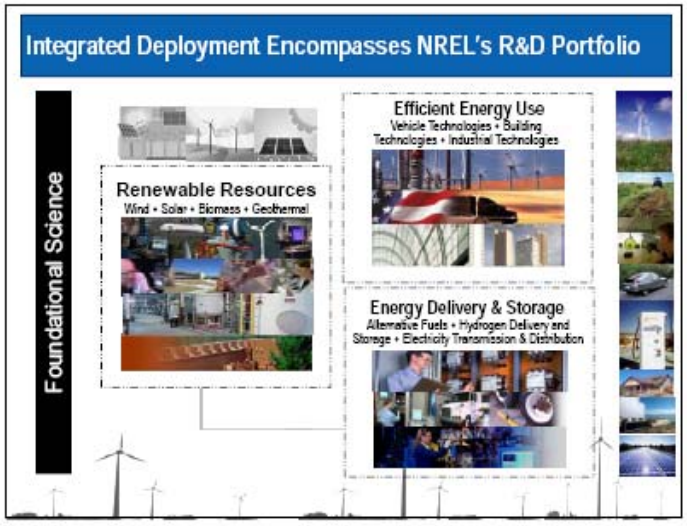
   https://www1.eere.energy.gov/pnp/stories/stories.aspx or click on "Share your stories" on http://www.eere.energy.gov/energyempowers/

http://www.eere.energy.gov/energyempowers/

APPENDIX E


The Integrated Deployment Energy Challenge
We need a balanced portfolio of options—
including clean, domestic energy technologies.
Energy security
• Secure supply
• Reliability
Economic productivity
• Growth in demand
• Price volatility
Uncertainty and risk
Environmental impact
• Land and water use
• Emissions


Formation of Integrated Deployment at NREL
Under the 2008 contract NREL is increasingly being asked to take on complex, cross-technology and cross-organizational efforts to demonstrate integrated deployment of energy efficiency and renewable energy technology solutions at scale.
In view of this trend, in June 2008 the Laboratory established a corporate function called Integrated Deployment to provide a cross-laboratory approach to these efforts to transfer the learning from the projects to subsequent efforts.


Integrated Deployment Encompasses NREL's R&D Portfolio
Foundational Science
Renewable Resources
Wind • Solar • Biomass • Geothermal
Efficient Energy Use
Vehicle Technologies • Building Technologies • Industrial Technologies
Energy Delivery & Storage
Alternative Fuels • Hydrogen Delivery and Storage • Electricity Transmission & Distribution


Comprehensive Energy Solutions
Reduce Energy Demand of Buildings, Vehicles, and Industry
• Coordinated implementation of model building codes
• Enable market valuation of efficiency
• Reduce cost of energy efficient technologies
• Provide real-time energy information to the consumer
Implement Renewables at the Gigawatts Scale
• Reduce cost of renewable electricity technologies
• Increase performance and reliability
• Enhance grid infrastructure capacity and robustness
• Enable dispatch of renewables (storage, controls, forecasting)
Displace Petroleum-Based Fuels
• Develop a long-term mobility strategy and roadmap
• Advance cost-competitive biofuels options and address sustainability
• Advance battery technology
• Develop delivery and refueling infrastructure, including codes/standards

The Opportunity

An Integrated Deployment project is:

- A comprehensive, multi-technology way to address clean energy
- Multi-dimensional (electricity, fuels, buildings, vehicles, etc.)
- Establishes a precedent & creates a replicable model
- Takes advantage of a unique opportunity or problem in an aggressive way
- A multi-year effort that focuses on transformational, systemic change

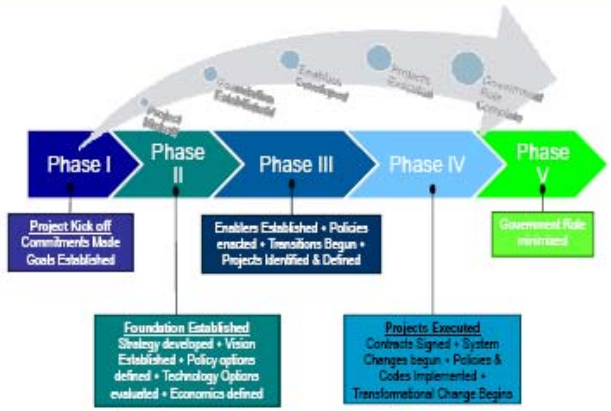
Integrated Deployment Combines Technology Solutions with Deployment Strategies To Achieve A Comprehensive Outcome

Technologies	Deployment
Efficiency ▪ Residential ▪ Commercial ▪ Industrial	Situational Assessment ▪ Analysis ▪ Resource Assessment ▪ Policies & Barriers
Renewable Generation ▪ Solar ▪ Wind ▪ Geothermal ▪ Hydro / Wave / OTEC	Address Policy Opportunities ▪ Codes and Standards ▪ Utility Programs ▪ Legislation ▪ Utility Regulations
Renewable Fuels & Transportation ▪ Advanced Vehicles ▪ Biofuels	Economic Evaluations ▪ Financing Options ▪ Economic Development ▪ Business Case Development

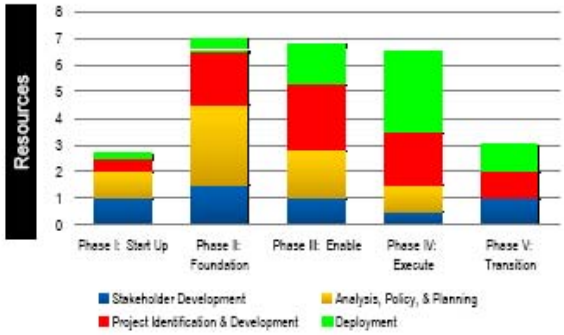
Public – Private Partnerships are Essential

Implementation Approach

Project Timeline



Project Cycle



NREL's Integrated Deployment Framework

Integrated national expertise helping solve local energy challenges.

Stakeholder Interactions

Build Stakeholder Partnerships

- Establish working groups across all industry and government areas
- Provide technical expertise to each working group
- focus on industry needs, gaps, and potential
- Gain buy-in from key partners
- Support establishment of further industry
- Provide credible and factual information to all partners

Project Goals and Foundation

Establish the Analytical Foundation

- energy baseline and load profile
- renewable resource assessment
- characterization of current generation
- grid reliability constraints and storage

Macro Analysis & Policy
"Thinking about the big picture"
- Macro studies - Modeling - Position Papers
- Legislative & Regulatory Analysis
- Scenario Analysis

Develop comprehensive energy policy

- establish regulatory framework that enables utilities to increase renewables and efficiency without a negative bottom line impact
- establish legislative recommendations that enable businesses and homeowners to build and buy more energy efficiently

Project Definition & Initiation

Apply the Business Perspective

- Establish a profitable business case for the stakeholders
- Take steps to minimize risk
- Find or establish possible financing tools
- Assess the technology and site details to determine feasibility

Project Initiation
"Assessing the good ideas"
- Technology Assessments - Modeling
- Business Case Development
- Risk Assessment
- Partner Development

Project Deployment & Demonstration

Wind Farm at Upolu Point, Island of Hawaii

Project Deployment/Demonstration
"Putting hardware on the ground"
- Partner Coordination - Risk Mitigation
- Negotiation Agent - Financing Support
- Transaction Process Support

Support Early Successes

- Early adopters need to be identified and incentivized to get early successes and validate performance of the technology approach
- Document successes to educate and inform decision makers
- Seeing is believing. There is no more powerful way to achieve wide-scale adoption

Project Management

Project Management
"Herding the cats"
- Strategy - Leadership
- Resourcing - Planning

Project Oversight & Direction

- Provide leadership to set the project strategy and direction
- Identify best resource options for project efforts
- Coordinate DOE work with other partner efforts to try to reduce redundancy or duplication
- Develop annual and multi-year plans
- Manage project budget and schedule

An Aggressive Energy Approach Can be Taken at any Level


Community/City

NREL is leading DOE support in rebuilding New Orleans and Greensburg, KS in the most energy efficient and renewable way possible


Federal

NREL is leading DOE support to the Department of Defense and National Science Foundation to pursue aggressive and comprehensive solutions to energy independence on military installations and reduced emissions in our polar regions.


State

NREL is leading DOE efforts in Hawaii and Alaska in their pursuit for efficient and renewable solutions to their dependence on fossil fuel


Nation

NREL is leading DOE efforts in support of the international partnership for Energy Development in Island Nations, providing comprehensive energy solutions to island nations throughout the world.

Project Locations

Resources & Management Strategy

- Use subcontractors when appropriate
- Strategically select for key positions
  - Project Leads
  - On-location staff
- Use existing unique capabilities across multiple National Labs
- Manage travel through use of local staff and local subcontractors
- Use proven project management principles for tracking costs, deliverables, and resource planning
- Establish standard approach for work breakdown structure, planning, tracking, and reporting

Hawaii Results

- NREL's efforts in Hawaii have significantly contributed to the Hawaii Clean Energy Initiative goal of 70% clean energy by 2030.
- We provided onsite support with a team of NREL staff and contractor support;
- Developed a Technical Review Committee to assess the grid integration issues of renewable energy on Oahu and an undersea cable connecting Oahu and neighboring islands to allow up to 800 MW of wind generation;
- Supported legislative action through policy analysis and recommendations on generation, biofuels, advanced vehicles, and building energy efficiency;
- Supported regulatory actions to analyze research on decoupling, wheeling, and feed-in tariffs;
- Began development of a Master Plan to establish milestones and a plan to meet the 2030 goals.

Alaska Results

- NREL established a dedicated, in-state resource to provide energy efficiency and renewable energy deployment support in the state.
- NREL has worked closely with the Tribal Energy Programs to provide technical assistance to remote Alaska indigenous communities for EERE deployment;
- Worked closely with University of Alaska and private industry on identifying biomass CHP opportunities and biomass heating for diesel displacement, leading to widespread commercialization if successful;
- Helped establish the Emerging Energy Technologies Grant Fund that awarded $4 million to private industry and communities on selected technologies with particular application to Alaska needs and opportunities;
- Assisted the Alaska Energy Authority and Alaska Housing Finance Corporation on development of EECBG and SEP initiatives to advance EERE goals in Alaska.

New Orleans Results

- Rebuilding schools: NREL provided energy modeling, consultation, training, and guidance on energy efficient designs for 3 schools resulting in 25-35% more energy efficient than the standard.
- Additionally, we developed a supplement to the ASHRAE Advanced Energy Design Guide for the New Orleans School districts to help them achieve the 30% energy savings using local practices and local conditions.
- Rebuilding homes: NREL supported Project Home Again building designs to achieve greater than 30% energy savings over local codes. In Spring 2009, the 20 homes built so far were tested and certified as DOE Builder's Challenge homes (greater than 30% more efficient than code), the first in Louisiana.
- Project Home Again plans to continue to use their existing designs to build hundreds of more homes in the New Orleans area. Likewise, NREL is working with the Salvation Army to build 125 energy efficient, LEED rated affordable homes over the next three years.

Greensburg Results

- NREL's work has produced significant results including helping the city establish a Greensburg GreenHome Program, a voluntary building standard that exceeds current building standards by approx. 30% more energy efficiency
- Launched the Greensburg Sustainable Building Database, a portal offering detailed information on 23 different building projects in Greensburg, most pursuing LEED rating (certification up to Platinum);
- Completed wind data collection that confirmed class 5 (excellent) wind resource at the wind farm site location, providing the confidence and confirmation that wind is economically viable to move forward with a 12.5 MW wind farm being built in FY10.
- Achieved documented excellence in energy efficiency in new homes with rated homes (95 out of 180) achieving an average energy savings of more than 40% above code, achieving better than DOE's Builder's Challenge level which requires 30% above code ratings.
- Prairie Pointe Townhomes (32-unit low-income complex) was awarded the first residential LEED (Leadership in Energy and Environmental Design) Platinum rating in Kansas.
- Mennonite Housing Rehabilitations Services built 20 affordable energy-efficient homes and plans to build 30 more using an NREL design.
- Per capita, Greensburg has the highest concentration of LEED Gold and Platinum buildings in the United States; the Arts Center in Greensburg is the first LEED Platinum building in Kansas.

EDIN Results Summary

EDIN
Energy Development in Island Nations

The US Virgin Islands (USVI) was announced as the US pilot project under EDIN in April. The EDIN USVI team is working closely with the Governor's office to implement a 60% clean energy goal by 2025 based on 30% renewable generation (currently at 0%) and 30% energy efficiency. NREL is working closely with the Energy Office, the Governor's office, and the local utility to develop short-term and long-term strategies to address the energy and water issues on the islands.

NSF Polar Results

An MOU was signed between the National Science Foundation Office of Polar Programs and the DOE EERE Office to provide support in reducing the fossil-based energy use in the Polar regions. Work is progressing on several fronts including advanced vehicle testing in extreme climates, installation of wind turbines for a joint New Zealand/US energy agreement, and design of high efficiency facilities for use at the South Pole.

DOD Net Zero Energy Military Installation Results

NREL provided support to create a plan for the first ever DOD Net Zero Energy Military Installation. The work included establishing Net Zero Energy Objectives (to include tenant energy use and transportation), establish energy and greenhouse gas baselines, assess technical potential for energy efficiency and renewable energy; perform electrical grid analysis including evaluating microgrid and smart grid options; generate a phased implementation plan; complete a final report on the pilot site at MCAS Miramar; and develop a template for use at future DOD sites.

APPENDIX F

TO: Gary Burch

FROM: Mark Johnson / EECBG HQ Lead

DATE: February 28, 2010

RE: Request for the establishment of the "Energy Efficiency and Conservation Block Grant (EECBG) Sub-committee", to operate under the oversight of STEAB, please:

Request: Please consider our request for the establishment of an "Energy Efficiency and Conservation Block Grant (EECBG) Sub-committee", to operate under the oversight of STEAB. This will enable EECBG to fulfill its regulatory requirement of 42 USC 17153(f) which directs the Department of Energy to establish a State and local advisory committee to advise the Secretary regarding administration, implementation, and evaluation of the EECBG program for the duration of the EECBG program.

Objectives: The "Energy Efficiency and Conservation Block Grant (EECBG) Sub-committee" objectives will be to make recommendations to the Assistant Secretary for Energy Efficiency and Renewable Energy on the goals and objectives of the EECBG program; make administrative and policy recommendations to improve the EECBG program; serve as a liaison between the EECBG recipient Cities, Counties, Tribes and States and the Department of Energy on the EECBG program; encourage transfer of the results of the EECBG activities carried out by the Federal Government; and report on the activities carried out by the "Energy Efficiency and Conservation Block Grant (EECBG) Sub-committee" Board in the previous fiscal year.

Proposed Membership: "Energy Efficiency and Conservation Block Grant (EECBG) Sub-committee" will consist of a minimum of 6 members plus me, Mark Johnson, as the Chairperson. Members will be geographically diverse with not more than one person from the same state, along with gender and ethnic diversity.

Proposed Meetings: "Energy Efficiency and Conservation Block Grant (EECBG) Sub-committee" proposes to meet in-person twice per year, with conference calls as necessary. Given that the group is a sub-committee to STEAB, the "Energy Efficiency and Conservation Block Grant (EECBG) Sub-committee" is able meet without any public notice.

Thank you very much for your approval.

Best regards,

1

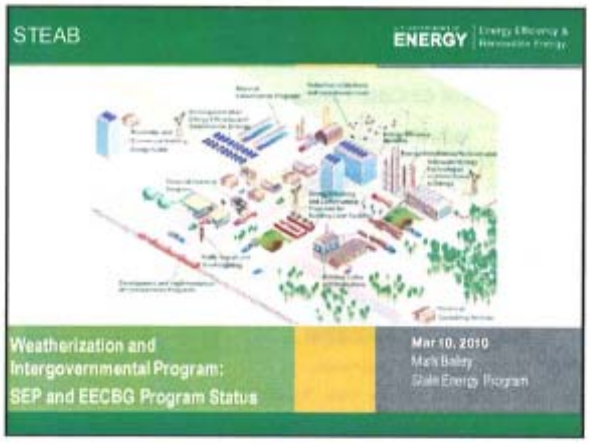
APPENDIX G

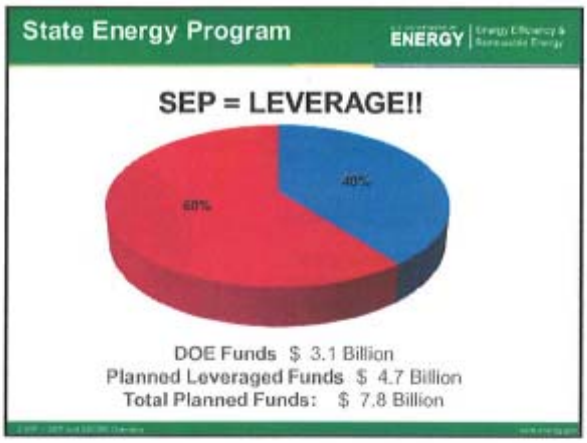
Priorities Through 2012

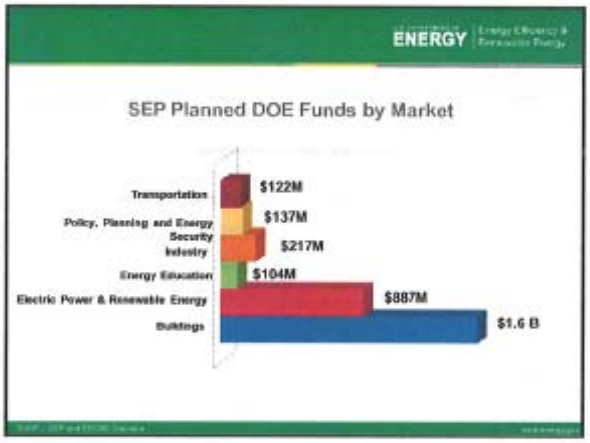
To bring EERE to scale throughout the United States:

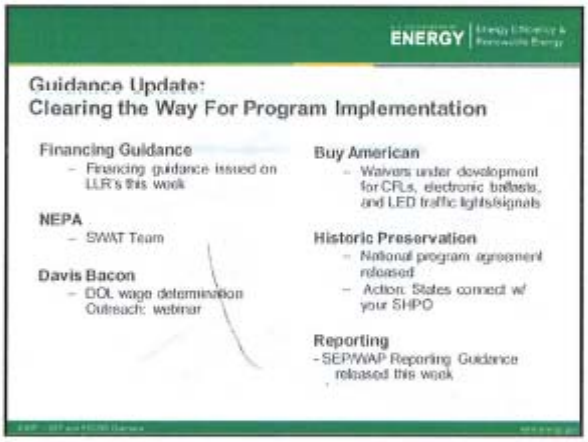
- Build State/Regional EERE Capacity (intellectual and manufacturing)
- Reshape the State/local partnerships with DOE recognizing the varied resources throughout the country
- Partner with other Federal government agencies
- Monitor successful implementation and deployment of ARRA funds
- Promote consumer education efforts
- Harness momentum created by ARRA $$
- Accelerate development of green jobs

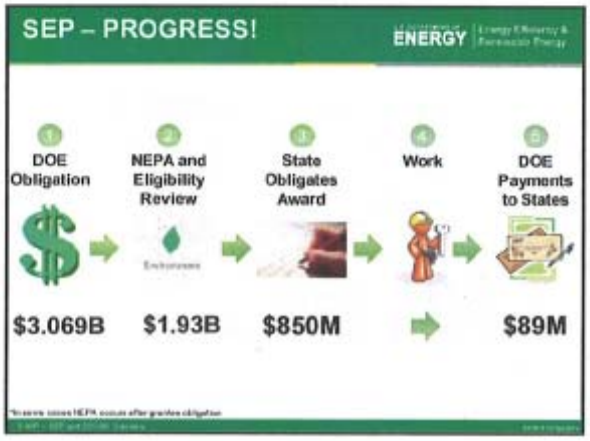
APPENDIX H

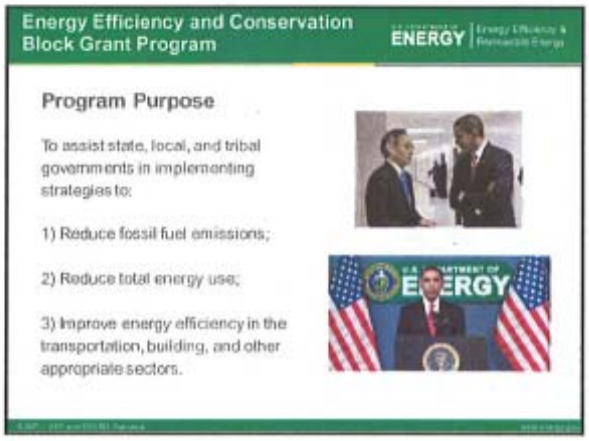

STEAB
ENERGY
Weatherization and Intergovernmental Program:
SEP and EECBG Program Status
Mar 10, 2010
Mark Bailey
State Energy Program


State Energy Program
ENERGY
SEP = LEVERAGE!!
40%
60%
DOE Funds $ 3.1 Billion
Planned Leveraged Funds $ 4.7 Billion
Total Planned Funds: $ 7.8 Billion


ENERGY
SEP Planned DOE Funds by Market
Transportation
$122M
Policy, Planning and Energy Security
$137M
Industry
$217M
Energy Education
$104M
Electric Power & Renewable Energy
$887M
Buildings
$1.6 B


ENERGY
Guidance Update:
Clearing the Way For Program Implementation
Financing Guidance
– Financing guidance issued on LLR's this week
NEPA
– SWAT Team
Davis Bacon
– DOL wage determination Outreach: webinar
Buy American
– Waivers under development for CRs, electronic ballasts, and LED traffic lights/signals
Historic Preservation
– National program agreement released
– Action: States connect w/ your SHPO
Reporting
- SEP/WAP Reporting Guidance released this week


SEP – PROGRESS!
ENERGY
DOE Obligation
NEPA and Eligibility Review
State Obligates Award
Work
DOE Payments to States
$3.069B
$1.93B
$850M
$89M


Energy Efficiency and Conservation Block Grant Program
ENERGY
Program Purpose
To assist state, local, and tribal governments in implementing strategies to:
1) Reduce fossil fuel emissions;
2) Reduce total energy use;
3) Improve energy efficiency in the transportation, building, and other appropriate sectors.

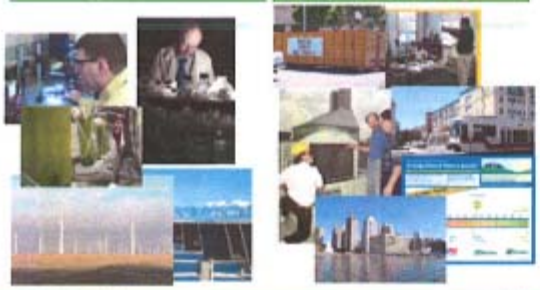
DOE's Largest Local Program: EECBG

- New program bringing together DOE and over 2,300 local communities for the first time
- EECBG funds $3.2B for 14 activity types
  - $2.3/$2.7B of formula grants awarded (2179/2359 grantees)
  - $390 MM Retrofit Ramp-up Program for innovative models of whole-neighborhood retrofits
  - $64 MM additional competitive awards for non-formula entities

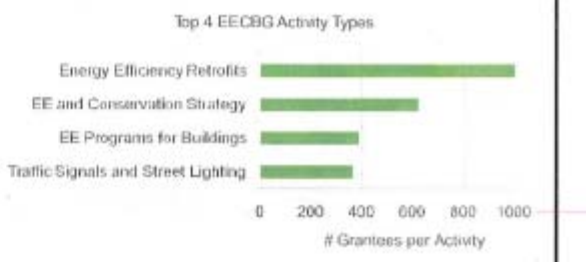
Allocation of EECBG Funds

DOE Traditionally Invests in Technology Innovation R&D

Local Govs Deliver Innovation Through Policy and Programs



Grantees Have Developed a Diverse Set of Proposals



Energy Efficiency Retrofits

Colonie, NY
- More efficient heating & cooling at town's most used buildings
- Leveraging other funds with EECBG
- Financial and energy savings

Traffic Signals & Street Lighting

Elyria, Ohio
- Replacing 288 yellow LED traffic lights
- Savings: $9,400 annually
- Savings: 194 mmbtu
- Cost: $19,000

Strategies

Lynchburg City, VA
- Hiring energy professional to implement energy saving strategies
- Results in long-term energy and financial savings

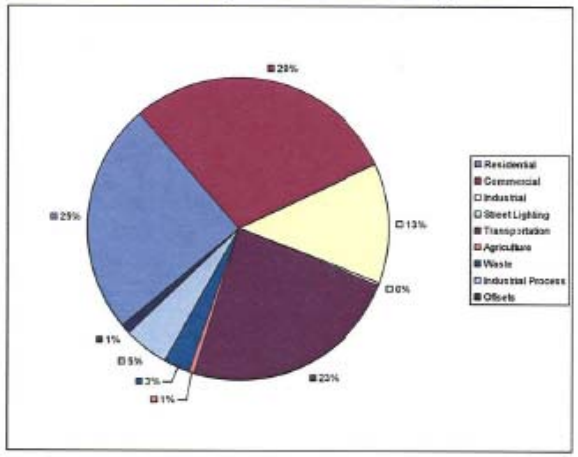
Energy Empowers Website – Success Stories

APPENDIX I

ClimateSmart™
LOAN PROGRAM

STEAB Meeting
March 10, 2010

Boulder County's Emissions by Sector



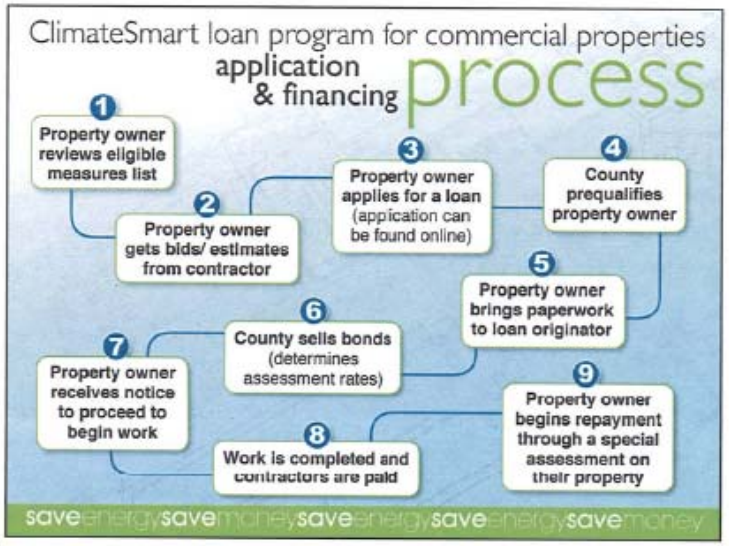
Program Purpose

- To help residential and commercial property owners reduce their environmental impact and likely save money by providing full financing for energy efficiency improvements and installation of renewable energy technologies.
- Key strategy in Sustainable Energy Plan
- Authority: HB 08-1350 and County Ballot Measure 1A

Program Basics

Program Basics

- Energy efficiency and renewable energy (RE/EE) measures
- All properties within Boulder County can participate
- Countywide pool of funds obtained through sale of bonds
- Up to the full upfront cost of improvements is loaned
- Property owners opt in (minimal general fund allocation)
- Special assessment placed on property
- Complements rebate and incentive programs
- Lender consent required (commercial)



Eligible Measures

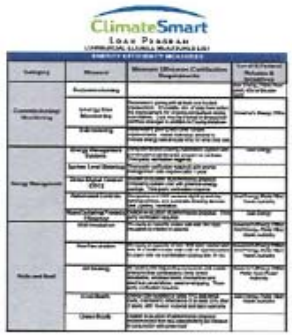
- Fixtures to property
- Numerous measures allowed to meet different needs and desires (40+ in residential and 70+ in commercial)
- Useful life must average length of loan or longer under normal conditions (by tranche, not property)
- Minimum standards (on eligible measures list)
  - Attic example: upgrade to R-38 is the minimum value we will cover--R-50 is ok as well, but R-24 is not
  - Some items must be part of a package or may only be replacements
  - Non-conforming projects in commercial program

Eligible Measures: Residential Energy Efficiency

- Air Sealing and Ventilation
- Insulation
- Space Heating and Cooling
- Water Heating
- Lighting
- Daylighting
- Windows, Doors, and Skylights
- Reflective Roof
- Pool equipment and landscaping (open only)

Eligible Commercial Efficiency Measures

- Commissioning/Monitoring
- Energy Management
- Wall & Roof Insulation
- Windows & Doors
- Combined HVAC
- Cooling, Heat Pumps &Ventilation
- Boiler & Furnace
- Energy Recovery
- Water Heaters
- Lighting



Eligible Measures: Renewable Energy

- Residential:
  - Solar Hot Water
  - Solar PV
  - Small Wind
  - Wood or Pellet Stoves
- Commercial:
  - Solar Hot Water
  - Solar PV
  - Small Wind
  - Biomass
  - Geothermal

Residential Loan Size & Terms

- 15 year loans
- Minimum: $3,000 per home
- Maximum:
  - Open Loans (funded by taxable bonds): 20% of statutory actual value of property or $50,000, whichever is less—6.68%, 6.8%
  - Income Qualified Loans (funded by tax-exempt bonds, 115% AMI): $15,000, as per federal law—5.2%, 5.8%
  - Income Qualified Loans may be combined with Open Loans up to the Open Loan maximum

Commercial Loan Size & Terms

- Loan size
  - $3,000 minimum per property
  - $210,000 or 20% of statutory actual value (whichever is less) maximum
- Rates estimated at 5-6.5% based on category
- Properties currently exempt from payment of property taxes must certify that the loan is no more than 20% of property value
- 5 or 10 year loan terms

Taxable and Tax Exempt Bonds (Commercial)

- **Taxable bonds**:
  - Commercial/institutional properties, including apartment buildings
- **Tax Exempt bonds**:
  - Multi-family and/or elderly rental housing for low income residents (MFH)
  - Small manufacturing facilities

If property is tax-exempt and becomes delinquent on a payment, your property may lose tax exempt status.

* We will have separate information available for businesses who wish to know if they qualify for tax-exempt bond status.

Estimated Assessment Rates (Commercial)

Term	Taxable	Tax-exempt
5 year	5.5%	5%
10 year	6.5%	6%

Bond market interest rates change daily

- **These rates are estimates only**
- **Actual assessment rates could be higher or lower depending on market conditions at the time of the bond sale**

Rebates and Incentives

- Lists available at multiple locations
- The County will not deduct the ITC (Federal) amounts from loans (property owners can if they wish – consult your tax advisor)
- Solar * Rewards (Xcel) payments shall be deducted from amount requested
- Otherwise, rebates/incentives may be deducted from requested amount at property owners' discretion

Required Permits/Inspections

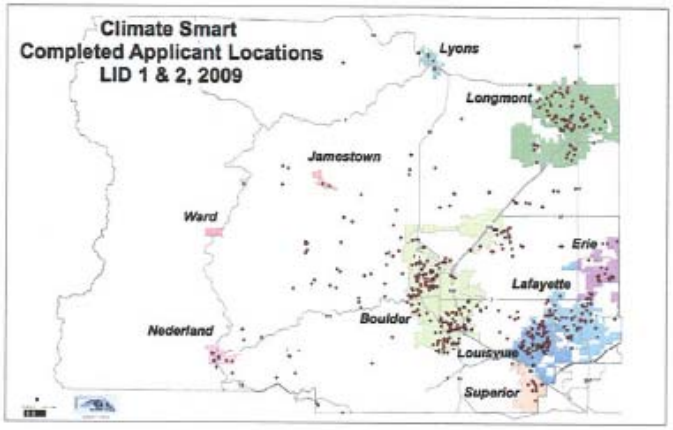
- You must provide copies of all permits and/or inspections required by the jurisdiction where your property is located
- Please check our permit/inspection form online to see whether your project needs a permit

Payments to Contractors

- Boulder County will pay contractors directly
- Final payment only for residential—up to two progress payments and final payment for commercial
- In order for contractor(s) to be paid, Boulder County must receive:
  - Official invoice(s) from the contractor(s);
  - Copies of inspections and permits if required by the jurisdiction where the work occurred;
  - A Boulder County Property Owner Acknowledgement Form.

Monitoring and Research

- Participants are be required to sign a utility bill release (during loan origination) so we can monitor the impact of the program
- We also monitor the distribution of loans throughout the county
- NREL is studying full economic impacts



Program Capacity

- $40 million already approved by voters through Ballot Measure 1A--$25 million available
- The County has apportioned $28 million for residential properties and $12 million for commercial properties

Status

- Rounds one and two for residential
  - $10 million in projects
  - Vendors indicate significant impact/multiplier
- Commercial program is open for applications now (closes late summer)
- Residential round three this spring—workshops begin March 15

Lessons Learned

- Lack of ability to guarantee a rate (or exact amount of fees) in advance makes borrowers uneasy
- New types of programs require significant amount of contact with participants and staff time
- Program integration and education are important
- Can impact local companies between program announcement and loan approval
- Can generate interest in EE measures, harder to manage than RE (priority point)
- Local economic stimulus--creates a ripple effect
- Need to keep working at the state and federal levels

Climate Smart Contact Information

www.climatesmartloanprogram.org

Ann Livingston, J.D.
Boulder County Sustainability Coordinator

Alivingston@bouldercounty.org

303.441.3517

APPENDIX J

"Stimulus Spending by DOE"

Testimony by Michele Nellenbach
on behalf of the National Governors Association

Committee on Energy and Natural Resources
U.S. Senate

March 4, 2010

Chairman Bingaman, Senator Murkowski and Committee Members, on behalf of the National Governors Association, thank you for the opportunity to testify on implementation of the American Recovery and Reinvestment Act's (ARRA) energy-related provisions.

As you know, ARRA outlined three basic goals: spend the money quickly, create jobs, and maintain full transparency and accountability in spending taxpayer dollars. Governors have worked diligently since passage of the Act on February 17, 2009 to efficiently and transparently manage and spend over $240 billion in ARRA funds flowing to or through states. While there have been delays at the federal and state levels in fully implementing some of ARRA's energy-related programs, those delays are mostly behind us and states are focused on meeting the Act's September 30, 2010 deadline to obligate and expend all funds by the Department of Energy's (DOE) deadline of spring 2012.

Background

On October 27, 2008, the National Governors Association (NGA) joined with five other associations that represent state and local elected officials to urge congressional leaders to provide countercyclical assistance to state and local governments to help offset declining tax revenues and growing safety net expenditures. NGA asked that Congress provide a two-year increase in the Federal Medical Assistance Percentages, a Medicaid component that would provide immediate fiscal relief to states. NGA also asked that the stimulus package include funding for infrastructure, including funds for airports, highways, transit, clean water, drinking water and schools. While NGA did not take a position on the inclusion of state energy and weatherization programs in the stimulus bill, governors are committed to efficiently using these funds to create jobs, reduce energy costs including for low-income citizens and small businesses and promote renewable energy.

State Energy Program; Weatherization Assistance Program; Energy Efficiency and Conservation Block Grant

ARRA provided significant increases for three energy programs administered by state and local governments: the State Energy Program (SEP) received $3.1 billion; the Weatherization Assistance Program (WAP) received $5 billion and the newly-created Energy Efficiency and Conservation Block Grant (EECBG) received $3.2 billion. In the cases of SEP and WAP, these amounts represented

significant increases above the programs' annual appropriations of $50 million in fiscal year 2009 and $200 million respectively. EECBG, as a new program, had never received an appropriation nor had any existing infrastructure or regulations to guide its implementation.

ARRA also continued several existing program requirements and imposed new restrictions on the programs. For example, ARRA continued requirements that the programs comply with the National Environmental Policy Act (NEPA) and the National Historic Preservation Acts (NHPA); laws requiring sometimes lengthy processes to ensure the projects have a minimal environmental impact and protect historic buildings. In addition, although SEP and WAP had always been exempt from Davis Bacon prevailing wage requirements and Buy American procurement provisions, ARRA required recipients of SEP, WAP and EECBG funds to comply with both provisions. These new and existing requirements, especially when combined with unprecedented levels of funding and ARRA's objectives of accountability and transparency, required the Department of Energy (DOE) to establish new program guidelines before states could fully implement the programs.

Federal Delays

In December 2009, NGA sent Secretary Chu a letter along with its colleagues in the other "Big 7" associations (the National Conference of State Legislatures, the National League of Cities, the U.S. Conference of Mayors, the National Association of Counties, the Council of State Government and the International City Managers Association) articulating frustration with the slowness in which federal guidance was issued. This frustration was subsequently underscored by both the Government Accountability Office and DOE's own Inspector General (OIG) in reports detailing some of the obstacles the Department encountered in 2009. The OIG summed up the situation by stating "...as straight forward as [the Weatherization Assistance Program] may have seemed and despite the best efforts of the Department, any program with so many moving parts was extraordinarily difficult to synchronize."

The following paragraphs outline federal obstacles identified by states and articulated by GAO and OIG as having slowed spending for the SEP, WAP and EECBG programs.

NEPA/Historic Preservation: Despite having experience with NEPA and the NHPA, ARRA's significant increase in funding for SEP and WAP generated

significantly more projects subject to NEPA and NHPA review. In hindsight, increasing the capacity of the NEPA and historic preservation processes would have helped avoid delays caused by the sheer volume of projects subject to review. We very much appreciate that DOE has developed a model programmatic agreement for states to use that will speed historic preservation reviews, but note that the model was just released in February of this year. In contrast, NEPA reviews continue to be a problem. For instance, DOE is still conducting its NEPA review for one state's EECBG plan that was approved in September 2009. Until the NEPA review is completed, the state cannot use its EECBG funds.

Davis Bacon: While the Secretaries of Energy and Labor issued a joint memorandum in July 2009 encouraging recipients to spend the money while the Department of Labor conducted the wage survey necessary to determine the prevailing wage for weatherization projects, many states did not proceed with awarding grants out of fear of future liability. States were concerned they would have to later divert funds from one project to retroactively pay workers on another project that were unintentionally paid less than the prevailing wage or would have to take money away from workers who were paid more than the contractually-mandated prevailing wage.

While the new wage determination is now in place for the WAP, DOE just received final word from the Department of Labor stating that this same wage rate cannot be used for residential projects funded through EECBG and SEP. This delay, through no fault of DOE, tied up millions of dollars from these programs.

Inconsistent messages: DOE encouraged states to establish loan loss reserves, a credit enhancement mechanism through SEP and EECBG. However, it has recently come to light that such credit enhancements may be disallowed under an OMB circular. Several states are holding funding until this issue is resolved.

Reporting

Since December, communication between DOE, NGA and the other Big 7 organizations has improved. Representatives of the seven associations now have weekly calls with the department to review issues and receive updates. However, there is one remaining issue over which the Governors are at odds with the department: DOE's new monthly reporting requirements.

While states share the DOE's interest in tracking spending and job creation, the additional reporting sought by the department will do nothing to speed the

expenditure of funds or hasten the creation of jobs through these programs. States have made it clear that from a capacity standpoint, their personnel are already fully dedicated to implementing ARRA programs and meeting quarterly reporting requirements. Any additional requirements or responsibilities will diminish the amount of time state officials can spend implementing the programs and meeting existing requirements.

States were particularly dismayed that OMB gave DOE emergency information collection authority for the SEP and WAP programs and required that DOE seek public comment only on how to implement the reporting authority and whether to proceed with monthly reporting for the EECBG program. I have attached the comments submitted by the NGA, the Council of State Governments and the National Conference of State Legislators expressing our concerns with the monthly reporting requirements, and ask that the letter be included in the hearing record.

NGA maintains that the quarterly reports DOE already receives and the OMB jobs reporting guidance issued on December 18, 2009 are sufficient to meet federal data collection needs, and that DOE's additional job counting requirements are inconsistent with existing job calculations. While OMB requires all recipients report on full time equivalent (FTE) jobs created by ARRA funding, DOE will also now require the collection of non-federally funded FTEs. NGA believes this invites criticism that recipients are using subjective calculations to 'inflate the numbers' to make ARRA look better. One of OMB's goals with its new guidance was to move away from subjective criteria to improve the job calculation. As noted by OMB in its guidance, "Previous guidance required recipients to make a subjective judgment on whether a given job would have existed were it not for the Recovery Act. The updated guidance eliminates this subjective assessment and defines jobs created or retained as those funded in the quarter by the Recovery Act."

Further, DOE has added to its requirement that states report quarterly on more than 100 SEP metrics, a requirement that states report monthly on over 40 metrics. States are awaiting a final determination as to whether similar reporting requirements will be placed on EECBG.

Even if there is some value in having the information the Department is seeking on a monthly basis, NGA disagrees that the value of that information exceeds the level of burden it places on state and local recipients. States have designed new computer programs and systems to automate the unprecedented reporting requirements of ARRA. If DOE proceeds with its proposals for new data points

on a monthly timeframe, state systems will have to be reprogrammed or changed increasing the initial burden of the requirements beyond what DOE has projected.

More importantly, DOE's proposed requirements must be viewed as part of the comprehensive reporting process required by ARRA. Over half of the states are central reporting states for Section 1512 reporting purposes, meaning that reports flow through a central system with its own level of verification and validation. Adding reporting requirements on recipients therefore translates into additional hours at each level of government responsible for collecting information. These additional reporting requirements were not included in the states' original estimates of personnel costs which will now have to be recalculated potentially affecting overall grant amounts.

Governors are very concerned that other departments will follow DOE's lead and institute their own monthly reporting requirements. For states charged with administering more than $240 billion worth of recovery funding on thousands of projects, any further reporting requirements threaten to quickly overwhelm recipients and slow implementation.

Fiscal Condition of the States

A final critical factor in the expediency with which funds are being spent is capacity and the financial crisis affecting nearly all state and local governments. According to a fiscal survey conducted by NGA with the National Association of State Budget Officers in February, states experienced historic drops in revenues in fiscal years 2009 and 2010, which resulted in a 3.4 percent decline in general fund spending for fiscal 2009 and a 5.4 percent decline in fiscal 2010. Moreover, between now and the end of fiscal 1012, state balanced budget requirements will force states to close budget gaps in excess of $136 billion. These gaps translate into spending cuts, hiring freezes and furloughs that hinder the ability of states to implement new programs or administer the explosive growth in programs like SEP and WAP. As the OIG noted:

> "Ironically, given the anticipated stimulus effect of the program, economic problems in many states adversely impacted their ability to ensure that weatherization activities were performed. State hiring freezes, problems with resolving significant local budget shortfalls, and state-wide planned furloughs delayed various aspects of the program and contributed to problems with meeting spending and home weatherization targets."

While the OIG was speaking of the WAP program, its comments could just as easily be applied to the SEP and to a lesser extent, the EECBG, which had to be created from the ground-up. ARRA itself did not provide administrative funding for the states. The Weatherization program does authorize states to use 5% for administrative expenses and EECBG and SEP authorize the use of 10%, but most state hiring-freezes apply across the board, making it extremely difficult for states and local governments to rapidly increase capacity to the level proportionate with the amount of funding provided.

State Implementation

Despite federal delays and state and local fiscal constraints, states are focused on using ARRA money to create jobs and promote energy conservation. Governors believe that most of the obstacles to implementation are now behind us and are confident states can fully and efficiently spend SEP, WAP and EECBG funds. Here are just a few examples of the successes Governors are having throughout the country with their energy programs:

1 The State of Minnesota typically provides about 4,000 Minnesota households per year with weatherization services, but with ARRA the state expects to weatherize 17,000 homes by March 2012. Minnesota estimates that the enhanced weatherization program has created over 340 new jobs through December 31, 2009.

2 OH was one of the few states that proceeded with weatherization projects without having the final wage determination from DOL and as a result, has weatherized 7,289 homes and created job activity equivalent to 2,485 FTE jobs. DOE estimates that for every $1 invested in OH's weatherization program returns $2.73 to the household and society. Further, since January 2009, OH has trained over 350 weatherization workers, 100 inspectors, 130 existing heating contractors and completed 40 inspector and 10 heat tech re-certifications.

3 California has obligated $195.4 million of its $226 million SEP grant, including $25 million for a low interest loan program that is currently oversubscribed and $20 million for green jobs workforce training through the state. The state expects to begin in April or May of this year a clean energy business loan program that would use up the remainder of its grant.

4 Pennsylvania also saw the infusion of ARRA money as a prime

opportunity to update and reform its program establishing new standards and monitoring requirements for weatherization work. The state also hired eight new program monitors to ensure the quality of weatherization activities. While much of the work in Pennsylvania was delayed by protracted budget negotiations, weatherization efforts took off in November and December. The state has already met its goal of weatherizing 1,500 homes per month.

5 Michigan's State Energy Program's funding opportunities are oversubscribed by a range from 2:1 to 10:1. Among the projects Michigan has funded is $15.5 million in grants to support Clean Energy Advanced Manufacturing of renewable energy systems and components in Michigan and the installation of anemometers to assist in the collection of data to support wind development in the state. Michigan plans to use $10 million for its revolving loan program but is awaiting final DOE determination regarding the loan loss reserve issue.

6 Michigan expects to have 100% of its EECBG funds under contract within the next few weeks. Projects funded through EECBG will include a mobile recycle center program and tire and electronic recycling collections in Montcalm County; conducting building audits and retrofits and developing energy conservation strategies for several towns.

7 North Carolina used some of its ARRA SEP money to provide technical assistance to applicants prior to the issuance of its EECBG RFP. The Energy Office provided nearly 300 local governments and education units with strategic energy plans. The state will soon issue an RFP for the SEP program, following on one already done for the EECBG program, providing funds to its Main Street Programs which fund preliminary and detailed energy surveys of private businesses. Grants are provided on a dollar-for-dollar match.

8 North Carolina, like several other states, also saw the infusion of ARRA money as an opportunity to update its weatherization program to ensure timely and efficient expenditure of federal funds. In particular, NC, through its community colleges, redesigned its training programs for both local nonprofits and vendors.

9 The State of Kentucky has established the Green Bank of Kentucky Revolving Loan Program to promote energy efficiency in state buildings with its first loan going to the Kentucky Department of Education (KDE).

KDE will use the loan to make improvements and implement Energy Conservation Measures (ECM) for a total savings of $2.15 million over the life of the project.

10 Beginning in June, Kentucky will begin its Kentucky Home Performance program leveraging ARRA funds at a 3:1 ratio with private capital to make loans for home energy retrofits. The state hopes to make available $20 million in loans.

11 The State of Mississippi has weatherized over 1,500 homes using ARRA funding and anticipates weatherizing 5,468 homes by March 2012.

12 The State of Nevada will use $7.9 million of its SEP grant for energy efficiency and renewable energy projects in state buildings and $10 million of its grant to provide energy efficient lighting in each of Nevada's 17 school districts.

13 In Oklahoma, the Governor has committed $11million from the state's SEP funding for compressed natural gas vehicle and infrastructure development.

14 Pennsylvania has allocated $10 million from its SEP grant for the deployment of innovative alternative and renewable energy generation, efficiency and demand side reduction projects. Another $12 million of its SEP grant will fund a competitive grant program for combine heat and power projects.

Conclusion

Thank you again for the opportunity to talk with the Committee regarding state implementation of DOE's ARRA-funded energy programs. Governors are committed to the successful implementation of these programs over the next two years and are optimistic about their potential to create jobs and energy savings.

APPENDIX K

United States Department of Energy
State Energy Advisory Board (STEAB)
Resolution 10-02
Draft

Subject: Strategic Focus on the Need for a New EERE-Wide Implementation Paradigm Through Partnerships and Collaboration

Background: With the passage of the Recovery Act, the Department of Energy has undertaken enormous new management challenges as it implements both new and rapidly expanding energy programs designed to enhance US economic competitiveness, job creation and national energy security. Innovation and management experts agree that implementing these programs to scale will require (1) public-private-community collaboration at unprecedented levels; (2) flexible funding and program implementation models reflective of different capacities in states and regions (eg, policy, technical, renewable resources); and (3) new forms of bottom-up implementation, front-line technical assistance and creative consumer marketing that can accelerate program adoption and learning.

Given the interconnectedness of DOE programming to a wide range of other federal, state, local and private efforts to promote sustainable infrastructure, economic development and agriculture, implementation experts agree that new forms of accelerated collaboration, rather than "one-size fits all" approaches, will be key to speed, scale and success for EERE and DOE.

Recommendations: The State Energy Advisory Board recommends that that the EERE should support and foster the creation of local-state-regional and inter-agency mechanisms and meaningful collaborative partnerships to drive more of these bottom-up outcomes, including innovation, job creation and stakeholder engagement. We support, for example, the appropriate expansion of current DOE pilots in stakeholder "road show" engagement, integrated deployment and the planned E-RIC. We strongly encourage program design, not just implementation, to be bottom-up in character, from onset to announcement. We believe that this extra effort will be critical to building deeper stakeholder engagement and net program benefit.

In addition, we also wish to reiterate the need to revisit, consider, expand and act upon past STEAB resolutions urging interagency implementation partnerships, including but not limited to our resolution to partner with the Cooperative Extension Service (Resolution XX) and to establish a regional staffing and technical assistance model in close coordination with local-state and regional stakeholders and implementing agencies (Resolution XX)

We also strongly recommend that the agency engage with the STEAB and other entities in strategic, pro-active discussions around overall program modernization, finance and budget planning for post-ARRA environment and the develop of national energy structures and objectives that can support the President's energy and job creation agenda.