



MEETING REPORT

Exploratory Meeting for an **ANSI Energy Efficiency Standards Panel**

Prepared by the
American National Standards Institute

MAY 2012

1.0 Executive Summary

On April 25, 2012, the American National Standards Institute (ANSI) hosted an exploratory meeting to examine the need for a potential ANSI Energy Efficiency Standards Panel, and to hear directly from stakeholders what shape such an activity should take. The purpose of the meeting was to gather input from stakeholders as to areas where an ANSI standards panel would be most beneficial in coordinating a U.S. approach to energy efficiency standardization activities. This report takes into consideration input shared by both the in-person and webinar attendees.

Unlocking Energy Efficiency

According to the 2009 McKinsey report, *Unlocking Energy Efficiency in the U.S. Economy*, energy efficiency offers a vast, low-cost energy resource for the U.S. economy – but only if the nation can craft a comprehensive and innovative approach to unlock it. Significant and persistent barriers will need to be addressed at multiple levels to stimulate demand for energy efficiency and manage its delivery across more than 100 million buildings and literally billions of devices.

The meeting's presentations and open discussions drew attention to a range of important energy efficiency standardization initiatives currently underway. During the interactive discussion periods, a common theme that emerged was the call for greater coordination, participation, and harmonization of standardization efforts in the energy efficiency space. Participants suggested that the panel should seek to produce a roadmap to help advance energy efficiency in the United States.

Throughout the day-long event, attendees shared perspectives on how a standards coordinating initiative could best help to advance the nation's clean energy agenda, and identified several potential areas of focus for panel activity. Based on input received at the meeting, ANSI will develop a proposed framework for the panel's path forward with regard to scope, mission, and structure. This framework will be shared with meeting participants and other interested stakeholders in the coming weeks.

2.0 Overview

Chaired by James T. Pauley, senior vice president of external affairs and government relations at Schneider Electric and chairman of the ANSI Board of Directors, the exploratory meeting brought together roughly 120 in-person attendees with another 120 joining via webinar.

The day-long meeting opened with a panel discussion, *Federal Agency Perspectives on the Energy Efficiency Imperative*, featuring presentations from the U.S. Department of Energy (DOE), the U.S. Environmental Protection Agency (EPA), and the U.S. Department of Defense (DOD).

The second panel of the day, *The Energy Efficiency Landscape*, highlighted several key initiatives underway in the energy efficiency field. Presenters represented the American Council for an Energy Efficient Economy (ACEEE), the U.S. Council for Energy-Efficient Manufacturing (U.S. CEEM), the National

Association of State Energy Officials (NASEO), the New York State Energy Research and Development Authority (NYSERDA), and the Institute for Market Transformation (IMT).

The afternoon session took the shape of a moderated, open discussion among participants to identify potential areas where standardization activities could help to advance a coordinated approach to energy efficiency initiatives.

3.0 Opening Remarks

3.1 Welcome Remarks

A Cross-Cutting Issue

Opening the day's session, ANSI president and CEO Joe Bhatia encouraged broad participation among attendees, emphasizing that the purpose of the meeting was to hear directly from stakeholders how an ANSI standards panel would be most beneficial in coordinating energy efficiency standardization initiatives in the United States, and in helping to ensure appropriate coordination with international initiatives:

“Those of us in the standards and conformity assessment community know that this is a complex, cross-cutting issue. It applies to all industry sectors, impacts multiple government agencies, and hits every stage in the life cycle of a product, system, or service . . . and of course, every built structure, residential or commercial.

“Would we – as a nation – benefit from having a focal point where organizations involved in energy efficiency activities can share what they are doing, and in the process achieve a greater level of coordination, collaboration, and effective results?”

Neutrality Is Key

Mr. Bhatia explained that ANSI standards panels bring diverse stakeholders together, from both the public and private sectors, in a neutral forum to identify consensus-based solutions for national and global priorities. This neutrality is especially key, he emphasized, where significant cross-sectoral collaboration is required.

An Opportunity for Raised Awareness

From electric vehicles and healthcare information technology to homeland security and identity theft protection, ANSI has a long history in coordinating standards panels. As an example of one such recent activity, he highlighted the work of the **ANSI Electric Vehicles Standards Panel**, which recently released a **standardization roadmap**¹ assessing the standards, codes, and regulations, as well as conformance and training programs, needed to facilitate the safe, mass deployment of electric vehicles and charging infrastructure in the United States.

1 For more information: http://publicaa.ansi.org/sites/apdl/evsp/ANSI_EVSP_Roadmap_April_2012.pdf

3.2 Introductory Remarks

In his opening remarks, Mr. Pauley emphasized that energy efficiency is a critical issue that sits at the intersection of public and private policy. And while there is no doubt that a range of standardization activities are taking place across the energy efficiency spectrum, the question at hand is whether or not stakeholders have a clear understanding of what these standardization activities are and where to find them. Standards and conformance solutions may be underutilized, Mr. Pauley warned, because stakeholders are not aware that they exist.

According to Mr. Pauley, an ANSI energy efficiency standards panel could help bring clarity to stakeholders on what standards and conformance solutions are available, what are in development, and what barriers are keeping energy efficiency from moving forward. The purpose of a standards panel would not be to develop standards, he stressed, but to create an opportunity for raised awareness and effective deployment of the standardization solutions in the energy efficiency space.

4.0 Panel One: Federal Agency Perspectives on the Energy Efficiency Imperative

In the first panel of the day, federal agency representatives shared perspectives on energy efficiency priorities for the nation. Panelists included:

- **U.S. Department of Energy (DOE)**
Benjamin Goldstein, Energy Efficiency Workforce Development Coordinator
Office of Energy Efficiency and Renewable Energy (EERE)
- **U.S. Environmental Protection Agency (EPA)**
Walt Tunnessen, National Program Manager, ENERGY STAR
- **U.S. Department of Defense (DOD)**
Gregory E. Saunders, Director, Defense Standardization Program

James M. Short, Ph.D., Senior Science and Technology Advisor to the Assistant Secretary of Defense for Operational Energy Plans and Programs

Good for Business, Good for Job Creation, and Good for Government

Opening the first panel of the day, Benjamin Goldstein stressed the importance of energy efficiency to the U.S. Department of Energy (DOE), emphasizing that standardization in the energy efficiency space is “good for business, good for job creation, and good for government.” He also stated that DOE’s Office of Energy Efficiency and Renewable Energy (EERE) believes ANSI plays a critical role in coordinating and collaborating standardization matters among the public and private sectors, and thanked the Institute for organizing this timely discussion.

Mr. Goldstein presented an overview of DOE’s current activities related to energy efficiency standards and provided an initial summary of areas that could benefit from additional coordination:

Overlaps in Residential Single-Family and Multi-Family Energy Efficiency

According to DOE, there are overlaps between several different standards development organizations (SDOs) and the areas they address relevant to residential single-family and multi-family energy efficiency. Overlapping and sometimes conflicting standards encompass design and process standards for energy auditing, evaluating building performance, and diagnostic test procedures, which can be confusing to those trying to use these standards. Furthermore, standards gaps need to be filled in a coordinated way.

Skill Standards

There are divergent “skills standards” for residential and commercial energy efficiency professionals. There are currently multiple different credentials for the same job based on different skill standards, with very different levels of quality for the credentialing program. DOE sees a need for increased adoption of standards and accreditations for the quality of different credentialing programs.

Future of the Department of Energy Guidelines for Home Energy Professionals

The DOE Guidelines for Home Energy Professionals project is producing a robust set of quality work specifications for energy upgrades of single-family, multi-family, and manufactured housing. These specifications could be used as the foundation for a future American National Standard.

International Coordination

DOE also identified the need for coordination of domestic energy measurement standardization efforts with the work being carried out by International Organization for Standardization (ISO) Technical Committee (TC) 242, *Energy Management*, and TC 257, *General technical rules for determination of energy savings in renovation projects, industrial enterprises and regions*. Coordination activities could address: measurement and verification (M&V) standards, energy performance indicator and baselining standards, and energy auditing standards. According to Mr. Goldstein, it is important to be able to communicate across standards in an international capacity; it would be counterproductive to have ISO standards going in one direction and national standards going in another.

➤ **[View DOE's presentation](#)**

Taking Action: Energy Efficiency Is Possible

According to Walt Tunnessen of the U.S. Environmental Agency (EPA), energy efficiency is something we can take action on – energy efficiency is possible.

Mr. Tunnessen discussed the well-recognized ENERGY STAR program, which seeks to promote energy efficiency in consumer products, homes, commercial buildings, and industrial sectors. Now in its 20th year, ENERGY STAR has helped Americans save nearly \$230 billion on utility bills and prevented more than 1.7 billion metric tons of greenhouse gas emissions.

While the ENERGY STAR program does not develop standards, Mr. Tunnessen explained, ENERGY STAR references or incorporates standards when possible, and a number of recommended guidelines mirror current standards. According to Mr. Tunnessen, ENERGY STAR consulted ANSI to establish a process for third-party certification for ENERGY STAR qualified products. ENERGY STAR also participates on the ANSI-accredited U.S. Technical Advisory Group (TAG) for ISO TC 242, *Energy Management*.

Among the EPA’s ENERGY STAR priorities for the future are making saving energy an automatic feature of rapidly evolving new technologies and building systems, preserving high-quality performance to benefit consumers and the environment, exploring international coordination in new areas, supporting state and local policies and programs, and empowering people to make informed choices that protect the environment.

➤ [View EPA’s presentation](#)

Saving Energy = Saving Lives

According to Greg Saunders and Dr. James Short, for the U.S. Department of Defense (DOD), energy efficiency is not about saving money or making an eco-friendly choice, it is about saving lives.

As the single biggest user of energy in the United States, DOD accounts for 1% of the nation’s total energy use and 80% of that used by the U.S. government. When troops are deployed, a tremendous amount of fuel is needed to get them into the field and keep them operational, and U.S. troops are never more vulnerable than when they are transporting fuel in a convoy. Better energy efficiency equates to lower demand and lower loss of life.



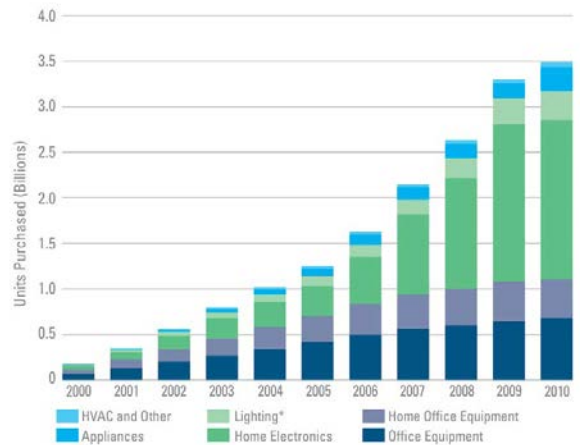
of fuel is needed to get them into the field and keep them operational, and U.S. troops are never more vulnerable than when they are transporting fuel in a convoy. Better energy efficiency equates to lower demand and lower loss of life.

More Fight with Less Fuel

Improving operational energy for training, moving, and sustaining military forces and weapons platforms for military operations is a key need for DOD. This includes energy used by tactical power systems and generators and weapons platforms. For DOD, improved energy efficiency is fundamental to increasing military effectiveness and creating “more fight with less fuel.”

An August 2011 study of 16 sites in Afghanistan revealed that 40% of fuel used comes from electric power generation. HVAC units consume power inefficiently because many units are improperly sized and poorly

Almost 3.5 Billion ENERGY STAR Qualified Products Purchased Since 2000



*Lighting category does not include purchases of compact fluorescent bulbs.

controlled. While spot electrical generation is used sub-optimally, centralized power plants have been reliable in improving fuel use efficiency.

The Department of Defense does not currently have a measureable energy baseline or performance metrics. According to Dr. Short's presentation, equipment where standards could help the nation's warfighters carry out their military functions more effectively include:

- Insulation of tents at forward operating bases
- Warfighter systems using mobile solar panels
- Systems using generators
- Generators working together in microgrids
- Batteries

➤ [View DOD's presentation](#)

Finding Standardization Solutions in the Energy Efficiency Space

During the open session following the first panel, speakers offered up several resources in response to a question about where they look today for standardization solutions in the energy efficiency space. It was noted that there is currently no one single reference point for information, and while some mechanisms are in place, information on what is available can vary greatly depending on market segments. Furthermore, identifying legitimate technologies and solutions can be an issue and is a potential gap.

Mr. Pauley noted that standards needs are not always communicated to those who can fill that need, and this could be an opportunity where a standards panel could help open up communication and identify solutions.

5.0 Panel Two: The Energy Efficiency Landscape

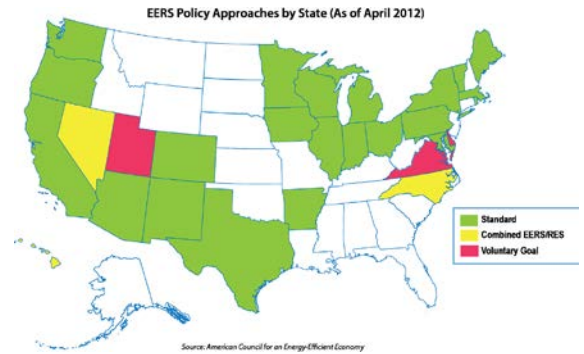
The second panel explored initiatives currently underway in the area of energy efficiency. Panelists included:

- **American Council for an Energy Efficient Economy (ACEEE)**
Sara Hayes, Senior Researcher
- **U.S. Council for Energy-Efficient Manufacturing (U.S. CEEM)**
Fred Fendt, Energy Efficiency and Conservation Global Manager, Advanced Materials Division, Dow Chemical Company
- **National Association of State Energy Officials (NASEO)**
David Terry, Executive Director
- **New York State Energy Research and Development Authority (NYSERDA)**
Ruth Horton, Senior Advisor for Strategic Initiatives
- **Institute for Market Transformation**
Cliff Majersik, Executive Director

The Energy Challenge

Why is energy efficiency the right response to the energy challenge? According to Sara Hayes of the American Council for an Energy Efficient Economy (ACEEE), the answer is threefold:

1. There's lots of it.
2. It can be deployed quickly.
3. It's low cost.



Ms. Hayes predicted that in the next decade the nation will see a significant shift and substantial investment in the electric utility industry. Energy efficiency investments in existing technologies have the potential to save U.S. consumers **\$11.6 trillion on energy** and reduce energy use by **42% by 2050**. There is a lot of momentum and opportunity in this area; 25 states now have energy efficiency resource standards (EERS) in place. Nationally, opportunities include a national EERS, a clean energy standard (CES), the Implementation of the National Consensus Appliance Agreements Act (INCAAA), and tax reform.

Energy efficiency is a plentiful, readily deployable, low-cost resource that can ensure we meet our energy and environmental goals. So what's needed to get us there? ACEEE has identified the following needs:

- Improved information about opportunities
- Improved dialogue and communication among state energy offices, air regulators, and utility regulators
- Overcoming upfront costs
- Aligning financial incentives
- Technical assistance to states to include energy efficiency in air quality plans
- Standard measurement and verification that works for PUCs and air regulators
- Tools that allow aggregation of savings from energy efficiency across programs

➤ [View ACEEE's presentation](#)

Positioning the U.S. as a Global Leader in Energy Efficiency

Fred Fendt of the U.S. Council for Energy-Efficient Manufacturing (U.S. CEEM) discussed the work of the U.S. CEEM in positioning U.S. industry as a global leader in energy efficiency while maintaining



competitiveness and reducing greenhouse gas emissions. According to Mr. Fendt, increasing effectiveness of energy efficiency programs and working to identify gaps are two key aspects to reaching this goal.

Mr. Fendt also highlighted U.S. CEEM's role in guiding the Superior Energy Performance (SEP) program, a market-based, ANSI/ANAB-accredited certification program that will launch in 2012. SEP provides industrial and commercial facilities with a roadmap for achieving continual improvement in

energy efficiency while boosting competitiveness. Using ISO 50001 as a foundational tool, SEP establishes a tiered program that provides an entry point for all companies, including SMEs, at all levels of experience with energy management.

➤ [View U.S. CEEM's presentation](#)

Improving Energy Efficiency of State Energy Programs and Policies

David Terry of the National Association of State Energy Officials (NASEO) provided a presentation on NASEO's efforts to improve the effectiveness and quality of energy programs and policies among the 56 governor-designated state and territory energy offices nationwide. Financing programs and how we measure performance are ultimately two key considerations for energy efficiency.

According to Mr. Terry, code provisions in the *American Recovery and Reinvestment Act* made significant progress in leveling the playing field, and states have committed to 90% compliance by 2017. However, constraints on public budgets for code officials in implementation and compliance remain a challenge.

Mr. Terry also reported on the findings of the Zero Energy Commercial Buildings Consortium (CBC), a public-private consortium of commercial building stakeholders working with the U.S. Department of Energy to achieve sector-wide market transformation. According to Mr. Terry, a recent report from the CBC identified standards needed for:

- Protocols to improve systems integration, network communication, and use of sensors and controls
- Adequate light levels in net-zero-energy or high-performing buildings
- Performance and electrical compatibility of solid state lighting
- National interoperability standards for grid-building communication
- Process standard for integrated design

➤ [View NASEO's presentation](#)

New York State: Working to Achieve 45 x 15 Policy

Helping New York State to achieve 45% of its electricity needs through improved energy efficiency and clean renewable energy by 2015 (45 x 15 Policy) is a key objective of the New York State Energy Research and Development Authority (NYSERDA).

According to NYSEDA's Ruth Horton, system planners need certainty of savings for decision making. At the same time, service providers and national companies seek common offerings and rules. From the customer's perspective, cost savings, persistence, and quality are absolutely key. Market transformation, Ms. Horton emphasized, requires flexibility and nimbleness.

Among her recommendations to the group, Ms. Horton advised participants to focus on areas where

standardization has worked, to continue to raise the bar on efficiency levels, and to consider standard approaches to energy savings methodologies and cost effectiveness screening, while making sure that innovation and regional differences are supported.

➤ [View NYSERDA's presentation](#)

Creating a Cycle of Improvement

Cliff Majersik of the Institute for Market Transformation (IMT) provided a presentation on existing building energy rating systems, market acceptance, and laws mandating reporting of building ratings, as well as existing credentials for energy efficiency professionals. According to Mr. Majersik, buildings account for almost 50% of energy consumption in the United States; in individual cities that number can be even higher. Whereas there are many different rating and disclosure systems, they are not all compatible. While we are moving to some standardization in the United States, there are currently a number of non-standardized methods of assessing energy efficiency.

Rating and disclosure is the practice of evaluating the relative energy efficiency of a home or building and making this information known to consumers. This practice creates a cycle of improvement, Mr. Majersik stated. When performance is measured, performance improves. But when performance is measured and reported back, the rate of improvement accelerates.



➤ [View IMT's presentation](#)

Key Areas of Need

During the open Q&A discussion following the second panel, several themes surfaced as panelists and participants discussed areas of need:

Measurement and Verification (M&V): the process of using measurement to reliably determine actual savings created within an individual facility by an energy management, energy conservation, or energy efficiency project or program. Standardization for M&V could help provide consistent comparison among energy projects.

Financing: leveraging private investment into energy efficiency projects. Banks often feel they cannot evaluate the risks because they are not standardized.

Workforce Development: personnel credentialing to support the clean energy economy is another area that needs attention.

National Energy Efficiency Resource Standard (EERS): a national EERS could set a goal for energy savings

that would be implemented over a specific period of time.

Emissions Reductions on Utility Side: the area of environmental regulations and air regulations, pollutants, etc., is an area in need. There is still no agreement for air regulations among states in terms of implementation.

6.0 Discussion: Planning a Path Forward

During the afternoon's open dialogue period, participants discussed how a standards coordinating initiative could best assist industry and government to advance the nation's energy efficiency agenda. Participants shared perspectives on and identified areas where standardization activities could help to advance a coordinated approach to energy efficiency initiatives in the United States.

Bird's-Eye View

Among the many perspectives voiced, a common theme was the benefit that could be achieved by having a single focal point of information on the range of activities currently operating in the energy efficiency space. If scoped correctly, a standardization roadmap could provide a bird's-eye view of these diverse activities while raising awareness and visibility of each activity among public and private sector stakeholders. According to attendees, a panel could also be useful in facilitating an information exchange on energy efficiency standards and how they can be better utilized. A panel could also consolidate information on what gaps need to be considered, and how to best coordinate with international initiatives.

Value: Spreading the Word to States and Federal Government and Assisting in Implementation

Some participants noted that, particularly in the buildings community, there are a number of standardization activities already in hand or under development. The problem is not the lack of energy efficiency standards, but rather the lack of adoption and enforcement of existing standards. The real value of a roadmap would be in helping to spread the word of these activities to states and the federal government, and in helping to facilitate implementation of these codes and standards.

Mr. Pauley noted that a primary objective of the roadmap would be to raise awareness among public and private stakeholders, and an implementation plan to achieve this could be carried out by a communications working group.

Encourage Existing Buildings to Be Upgraded

It was also suggested that the biggest problem is not with the 1% of new buildings, but with the 99% of older, existing buildings. A national buildings energy efficiency program to encourage upgrades could be beneficial.

U.S. Focal Point in the International Arena

A number of participants also voiced what they saw as the advantage of having a U.S. focal point for

energy efficiency activities in the international arena to avoid any duplication of effort. As appropriate, the panel should help to facilitate harmonization of energy efficiency initiatives at the regional and international levels. ANSI, as the U.S. member body to the International Organization for Standardization (ISO), and via the U.S. National Committee to the International Electrotechnical Commission (IEC), as well as through its work with the Pan American Standards Commission (COPANT), the Pacific Area Standards Congress (PASC), and European Standardization Organizations, could facilitate this effectively.

It was also suggested that one use for the panel's deliverable could be as a guiding document for using standards in U.S. trade agreements. There can be a lack of understanding and awareness outside the U.S. about our processes, a participant noted, and this could be a potential tool for the federal government in trade agreements.

No Duplication

In response to a question of whether or not the panel would replace activities that were already underway, Mr. Pauley emphasized that the panel would not displace any work being done, but rather augment individual activities with the objective of moving energy efficiency forward.

The Panel Will Not Choose Winners or Losers

Mr. Pauley affirmed that the purpose of a standardization roadmap is to identify standardization activities that exist as well as potential gaps. He emphasized that this exercise is in no way competitive, and that the panel will not choose "winners or losers" among standardization initiatives.

Information Sharing for Those "Down in the Technical Weeds"

Another participant noted that while a number of standardization activities today fall under a common umbrella, for those operating "in the technical weeds," it is not always apparent what is going on in other areas. A panel activity could help speed up this effort.

Representation among Labor and End Users Is Important

Given the importance of workforce credentialing in this area, it was suggested that representation from labor would be advisable on the panel.

Additionally, the need for more end users to be engaged in the process was also voiced.

Don't Forget the Water Sector

The need to look at the water and wastewater utility sector was also voiced, as this accounts for 4% of all energy used in the U.S.

The Wild West

Another participant whose organization represents the home performance workforce noted that when it comes to standards, it can feel like the "Wild West" out there. Since they are not standard experts themselves, an activity such as an energy efficiency standards panel would give them safe harbor, as the industry cannot scale up unless there are standards in place in all areas.

Bringing Diverse Stakeholders Together

Others noted that that this kind of activity brings together diverse populations that otherwise would not be in the same room. From the morning’s presentations alone, they had learned of activities of which they had not previously been aware. This type of information exchange would be a tangible benefit of a panel.

7.0 Discussion: Defining Mission, Deliverables, and Scope

During this open session, participants voiced their perspectives on what ANSI should consider with regard to the mission, deliverables, and scope of the energy efficiency standards panel. This section provides a distillation of these perspectives:

Mission Recommendations

An ANSI energy efficiency standards panel could benefit the energy efficiency landscape by serving as a single focal point for information on the diverse activities underway. The purpose should be to advance energy efficiency, not create a barrier.

Deliverables Recommendations

The panel’s activities should not duplicate but rather augment and raise awareness of the standardization activities underway among stakeholders in the public and private sectors, note gaps, and where possible, help identify a path forward. Efforts should be made to support the adoption and implementation of standards, codes, and conformance activities, as appropriate.

A potential roadmap could encompass:

- A mapping exercise of the standardization landscape
- Identification of any gap areas
- Recommended next steps
- Implementation plans

Scope Recommendations

The panel’s scope should be neither too granular nor too far-reaching. The broader issue of sustainability should not be included. Both webinar and in-person attendees suggested that the scope should encompass the built environment, personnel certification, and workforce development issues. Residential and commercial buildings, industrial facilities, and data centers could be considered as part of the built environment.

The panel should look to harmonize with international activities where appropriate.

What Does a Roadmap Do?

Typically, a standardization roadmap captures information about the various standards initiatives and related conformance activities that are in place, identifies where there are gaps, and helps to determine priority areas for action.

A roadmap brings clarity to the overall standardization landscape, identifying in a single place the range of activities that exist and where additional needs for standardization solutions may exist.

8.0 Next Steps

ANSI is developing a proposed framework for the panel's path forward based on input received at the April 25 meeting. Outlining the panel's scope, mission, structure, and deliverables, this framework will be shared with meeting participants and other interested stakeholders in the coming weeks.

9.0 Special Acknowledgements

Recognition and sincere appreciation are due to the following:

- **Jim Pauley**, for serving as meeting chair and moderator of the day's panels and discussions
- **Joe Bhatia**, for his introductory remarks
- **The esteemed panelists** for sharing their time, expertise, and introducing key ideas for discussion during the open sessions
- **All in-person and webinar participants**, for their active contributions and participation in the day's discussions



Exploratory Meeting: ANSI Energy Efficiency Standards Panel
April 25, 2012
 9:00 am – 3:00 pm

FHI 360 Conference Center
 1825 Connecticut Avenue, NW
 8th Floor, Academy Hall
 Washington, DC 20009-5721

Time	Discussion Topic	Speaker
8:00 am	Registration Opens – Networking Breakfast	
9:00 – 9:10 am	Welcome	S. Joe Bhatia President and CEO, American National Standards Institute (ANSI)
9:10 – 9:25 am	Opening Remarks	Meeting Chair: Jim Pauley Senior Vice President, External Affairs and Government Relations, Schneider Electric USA; Chairman, ANSI Board of Directors
9:25 – 10:10 am	<p>Panel 1: Federal Agency Perspectives on the Energy Efficiency Imperative</p> <p>Benjamin Goldstein will present an overview of DOE’s current activities related to energy efficiency standards, and provide an initial summary of areas it has identified that could benefit from additional coordination.</p> <p>Walt Tunnessen will highlight ENERGY STAR program work to promote energy efficiency in consumer products, homes, commercial buildings, and industrial sectors, and highlight priority areas for the future.</p> <p>This presentation from Greg Saunders and James Short will address operational energy needs in the U.S. Department of Defense.</p>	<p>Moderator: Jim Pauley</p> <p>Panelists</p> <p>U.S. Department of Energy (DOE) Benjamin Goldstein Energy Efficiency Workforce Development Coordinator, Office of Energy Efficiency and Renewable Energy</p> <p>U.S. Environmental Protection Agency (EPA) Walt Tunnessen National Program Manager, ENERGY STAR</p> <p>U.S. Department of Defense (DOD) Gregory E. Saunders Director, Defense Standardization Program</p> <p>James M. Short, Ph.D. Senior Science and Technology Advisor to the Assistant Secretary of Defense for Operational Energy Plans and Programs</p>

Time	Discussion Topic	Speaker
10:10 – 10:35 pm	Panel 1: Q&A Session	All
10:35 – 10:50 am	Networking Break	
10:50 – 11:35 am	<p>Panel 2: The Energy Efficiency Landscape</p> <p><i>This panel will take a look at several key initiatives currently underway in the area of energy efficiency:</i></p> <p>According to a recent report from the American Council for an Energy Efficient Economy (ACEEE), the current economic recovery and our future economic prosperity will rely more heavily on energy-efficient behaviors and investments than we have seen in the last 40 years. ACEEE’s Sara Hayes will cover ACEEE’s perspectives on America’s long-term energy efficiency outlook.</p> <p>Dow Chemical Company’s Fred Fendt will discuss the work of the U.S. Council for Energy Efficient Manufacturing (U.S. CEEM) in positioning U.S. industry as a global leader in energy efficiency and greenhouse gas emissions reduction. The presentation will also highlight the U.S. CEEM’s role in guiding the Superior Energy Performance (SEP) program.</p> <p>David Terry of the National Association of State Energy Officials (NASEO) will deliver a presentation on efforts underway at NASEO to improve the effectiveness and quality of state energy programs and policies.</p> <p>NYSERDA’s Ruth Horton will discuss NYSERDA’s work in support of the clean energy agenda, and the role that NYSERDA sees for standardization in helping to drive energy efficiency initiatives.</p> <p>Cliff Majersik of the Institute for Market Transformation (IMT) will deliver a presentation on existing building energy rating systems, market acceptance, and laws mandating reporting of building ratings, as well as existing credentials for energy efficiency professionals. The presentation will focus on commercial and multi-family buildings.</p>	<p>Sara Hayes Senior Researcher, American Council for an Energy Efficient Economy (ACEEE)</p> <p>Fred Fendt Energy Efficiency and Conservation Global Manager, Advanced Materials Division, Dow Chemical Company; Member, U.S. Council for Energy-Efficient Manufacturing (U.S. CEEM)</p> <p>David Terry Executive Director, National Association of State Energy Officials (NASEO)</p> <p>Ruth Horton Senior Advisor for Strategic Initiatives, New York State Energy Research and Development Authority (NYSERDA)</p> <p>Cliff Majersik Executive Director, Institute for Market Transformation (IMT)</p>

Time	Discussion Topic	Speaker
11:35 – 12:00 pm	Panel 2: Q&A Session	All
12:00 – 1:00 pm	Networking Lunch	
1:00 – 1:45 pm	<p>Discussion: Planning a Road Forward</p> <p>During this moderated, open discussion period, participants will discuss how a standards-coordinating initiative led by the private sector could best assist industry and government to advance the nation’s energy efficiency agenda. Participants will share perspectives on and identify areas where standardization activities can help to advance a coordinated approach to energy efficiency initiatives in the United States.</p> <p><i>Active participation is encouraged.</i></p>	<p>Moderator: Jim Pauley</p> <p>All</p>
1:45 – 2:30 pm	<p>Discussion: Defining Mission, Deliverables, and Scope of Potential Energy Efficiency Standards Panel</p> <p><i>Active participation is encouraged.</i></p>	<p>Moderator: Jim Pauley</p> <p>All</p>
2:30 – 2:45 pm	Next Steps	Jim Pauley
3:00 pm	Adjournment	

Meeting Roster
ANSI Exploratory Meeting for an ANSI Energy Efficiency Standards Panel

Last Name	First Name	Organization	Participation
Adams	Charles	A.O. Smith Corporation	In-person
Agasian	Armand	Consolidated Edison Company of NY	In-person
Allocca	Clare	NIST - U.S. Department of Commerce	In-person
Arneson	Ashley	Specialty Graphic Imaging Association	In-person
Baden	Steve	Residential Energy Services Network, Inc.	In-person
Belt	Bill	Consumer Electronics Association	In-person
Bishop	Tom	Electrical Apparatus Service Association	In-person
Bocchiaro	Joseph	InfoComm International	In-person
Boesenberg	Alex	National Electrical Manufacturers Association	In-person
Bradley	Janice	Waste Equipment Technology Association	In-person
Brown	Anthony	Crane Institute Certification	In-person
Broz	Joseph	NORC At the University of Chicago	In-person
Buoniconti	Ralph	SABIC Innovative Plastics	In-person
Carroll	Ryan	Hearth, Patio and Barbecue Association	In-person
Colgan	Rob	National Electrical Contractors Association	In-person
Colker	Ryan	National Institute of Building Science	In-person
Congdon	Herb	Telecommunications Industry Association	In-person
Cook	Keith	Philips Electronics	In-person
Crane	Ryan	American Society of Mechanical Engineers	In-person
DeMarco	Pete	International Association of Plumbing & Mechanical Officials	In-person
Dreyfus	Gabrielle	U.S. Department of Energy	In-person
Eltzroth	Carter	Helikon.net	In-person
Emard	Jean-Paul	Alliance for Telecommunications Industry Solutions	In-person
Fendt	Fred	The Dow Chemical Company	In-person
Goldstein	Benjamin	U.S. Department of Energy	In-person
Greenauer	Derek	Underwriters Laboratories Inc.	In-person
Guttman	Maureen	Alliance To Save Energy	In-person
Harper	Steve	Intel	In-person
Hayes	Sara	American Council for An Energy Efficient Economy	In-person
Horton	Ruth	NYSERDA	In-person
Imohiosen	Charles	U.S. Environmental Protection Agency	In-person
Ivanovich	Michael	Air Movement & Control Association International	In-person
Johnson	Lacey	E&E Publishing	In-person
Jones	John	Building Performance Institute	In-person
Jones	Allen	Schneider Electric	In-person
Kaufman	Phil	Rockwell Automation	In-person
Kean	Owen	American Chemistry Council	In-person

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Kelley	Lawrence	Independent Energy Consultant	In-person
Lacey	Eric	Brickfield, Burchette, Ritts & Stone, P.C.	In-person
LeBaron	Robin	National Home Performance Council	In-person
Lien	Mark	Hubbell Lighting	In-person
Lin	Diana	National Association of State Energy Officials	In-person
Ling	Hung	Alcatel-Lucent USA	In-person
Loggia	Sam	CSA Group	In-person
Lung	Bruce	Alliance To Save Energy	In-person
Majersik	Cliff	The Institute for Market Transformation	In-person
Manole	Dan	Rockwell Automation	In-person
Mazer	Jeff	NIST - U.S. Department of Commerce	In-person
McCrudden	Charlie	Air Conditioning Contractors of America	In-person
McGeehan	Shazia	Consumer Electronics Association	In-person
McGowan	Ray	National Fenestration Rating Council	In-person
Meincke	Brian	ASTM International	In-person
Menzer	Mark	Intertek	In-person
Miller	William	Lawrence Berkeley National Laboratory	In-person
Murdoch	Jay	Efficiency First	In-person
Nieh	World	U.S. Department of Agriculture Forest Service	In-person
Niero	Christine	Professional Testing Inc.	In-person
Owens	Brendan	U.S. Green Building Council	In-person
Pantano	Stephen	CLASP	In-person
Pauley	James	Schneider Electric	In-person
Paulsen	Shawn	CSA International	In-person
Persily	Andrew	NIST - U.S. Department of Commerce	In-person
Piqueira	Philip	GE Industrial Solutions	In-person
Pursell	Shelley	Air-Conditioning, Heating and Refrigeration Institute	In-person
Ramspeck	Claire	ASHRAE	In-person
Ritterpusch	John	National Association of Home Builders	In-person
Runkles	Ronald	National Electrical Manufacturers Association	In-person
Saunders	Gregory	U.S. Department of Defense	In-person
Schwartz	Jerry	American Forest & Paper Association	In-person
Scolnik	Alvin	National Electrical Manufacturers Association	In-person
Sharp	Mark	Panasonic Corporation of North America	In-person
Short	James	Department of Defense	In-person
Silverman	Linda	U.S. Department of Energy	In-person
Sims	Dominic	International Code Council	In-person
Stefl	Barbara	ITW Air Management	In-person
Stroud	Thomas	Hearth, Patio, and Barbecue Association	In-person
Surrena	Don	National Association of Home Builders	In-person

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Szoke	Stephen	Portland Cement Association	In-person
Taylor	Jay	Schneider Electric	In-person
Teichman	Kevin	U.S. Environmental Protection Agency	In-person
Terry	David	National Association of State Energy Officials	In-person
Tuccillo	John	Schneider Electric	In-person
Tunnessen	Walt	U.S. Environmental Protection Agency	In-person
Unger	Peter	A2LA	In-person
Wagner	Chris	National Association of State Energy Officials	In-person
Werner	Jack	Institute for Sustainable Power, Inc.	In-person
Wiant	Ben	GE Energy	In-person
Wicks	Roger	E.I. DuPont De Nemours Co	In-person
Williams	Matthew	Association of Home Appliance Manufacturers	In-person
Winkler	Eric	ISO New England	In-person
Winn	Kay	CSA Group	In-person
Yerkes	Sara	International Code Council	In-person
Abbate	Danny	AHRI	Webinar
Abma	Sid	Sidel Systems USA Inc.	Webinar
Allen	Neal	Southern Company Services	Webinar
Alonso	Abel	FPL	Webinar
Bernier	Cliff	AAMI	Webinar
Cain	Joe	SolarCity	Webinar
Calhoon	John	Microsoft Corp	Webinar
Carbone	Cheryl	JELD-WEN, Inc.	Webinar
Cedarquist	Scott	ASABE	Webinar
Chan	Erin	AIChE	Webinar
Clark	Charles	TUV SUD America	Webinar
DeMaine	Bruce	Building Performance Institute	Webinar
Desai	Deann	Georgia Institute of Technology	Webinar
Dolan	Linda	GE-Hitachi Nuclear Energy	Webinar
Dolin	Jennifer	OSRAM SYLVANIA	Webinar
Emblem	Erik	Joint Committee on Energy and Environmental Policy	Webinar
Erdheim	Ric	Philips Electronics	Webinar
Fargano	Michael	CenturyLink	Webinar
Feng	Shaw	NIST	Webinar
Ferland	Kathey	University of Texas	Webinar
Ferris	Jessica	Assoc. of Millwork Distributors	Webinar
Fitzmaurice	J. Michael	AHRQ	Webinar
Forselius	Richard	United Technologies Corporation	Webinar
Fraser	Allan	NFPA	Webinar
Gardner	Richard	GE Healthcare	Webinar

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Gerardi	Susan	Building Performance Institute	Webinar
Gonzalez	Elizabeth	American National Standards Institute	Webinar
Grell-Lawe	Holly	GTEEMC	Webinar
Gunderzik	Tami	Xcel Energy	Webinar
Hancher	Renee	U.S. Department of Commerce	Webinar
Harrold	Rita	Illuminating Engineering Society	Webinar
Haworth	Diane	NSF International	Webinar
Hicks	Charlotte	Upper Mohawk, Inc.	Webinar
Higgins	Kathleen	DHS/S&T/FRG	Webinar
Holdredge	Paul	GE	Webinar
Hsu	Steve	Schneider Electric	Webinar
Humble	Jonathan	American Iron and Steel Institute	Webinar
Irfan	Umair	ClimateWire	Webinar
Jara	Rod	International Training Fund	Webinar
Jeong	Stephen	UL LLC	Webinar
Johnson	Jay	Thomas Associates, Inc.	Webinar
Jouaneh	Michael	Lutron	Webinar
Juliano	Tom	UL	Webinar
Kawamoto	Pete	Centurylink	Webinar
Kelley	Lawrence	Mechanical Engineer / Sustainable Energy Designer	Webinar
Kline	Kelley	General Electric, Appliances	Webinar
Knaub	Richard	National Renewable Energy Lab	Webinar
Knopes	Jason	American National Standards Institute	Webinar
Kramarikova	Marianna	TIA	Webinar
Kulick	John	Siemens Corporation	Webinar
La Prad	Jeannine	Corporation for a Skilled Workforce	Webinar
LaBerge	Paul	Apogee	Webinar
Lancaster	Veronica	ATIS	Webinar
LeBrun	Roger	VELUX America Inc.	Webinar
Lee	Stacy	The City of New York	Webinar
Ling	David	HP	Webinar
Lowinski	Jeff	Window & Door Manufacturers Association	Webinar
Macdonald	Don	UL DQS	Webinar
Madan	Jatinder	NIST	Webinar
Manole	Dan	Rockwell Automation	Webinar
Marks	Ted	JVC	Webinar
Mawn	Steve	ASTM International	Webinar
McCrudden	Charlie	Air Conditioning Contractors of America	Webinar
Meyers	Jim	sweep	Webinar
Mlsna	Alex	Kimball Intl	Webinar

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Molitor	Steve	NEMA	Webinar
Molnar-Port	Darren	State of NJ	Webinar
Moore	Gerard	USDA	Webinar
Morales	Zoila	Florida Power & Light	Webinar
Mukerji	Sahely	U.S. Glass magazine	Webinar
Murphy	Patrick	Refrigeration service Engineers Society	Webinar
Neshan	Massoud	Southern Store Fixtures, Inc.	Webinar
Oksala	Stephen	SCTE	Webinar
Ordonez	Luis	Efiterm	Webinar
Parrott	Thad	I-Energy	Webinar
Petosa	Mike	American National Standards Institute	Webinar
Pfeifer	Jordan	SCS	Webinar
Picariello	Pat	ASTM International	Webinar
Polinski	Steve	Miele Inc.	Webinar
Rao	Ganesh	UL DQS	Webinar
Radulovic	Verena	U.S. Environmental Protection Agency	Webinar
Rempe	Ken	Siemens Industry, Inc.	Webinar
Rienhardt	Charles	GSA PBS	Webinar
Roberts	Dave	NREL	Webinar
Rogers	Ellen	Key Communications	Webinar
Rosale	Juan	MABE	Webinar
Rosenberg	Josh	IT Industry Council	Webinar
Russotti	Bob	American National Standards Institute	Webinar
Sadowy	Donna	AMD	Webinar
Salaets	Ken	Information Technology Industry Council	Webinar
Scarpelli	Brian	Telecommunications Industry Association	Webinar
Scheihing	Paul	U.S. Department of Energy	Webinar
Schneider	Susie	Walgreen Co	Webinar
Schuster	Darlene	AIChE	Webinar
Schwartz	Jerry	AF&PA	Webinar
Seidel	Kurt	Management System Certification Institute (Thailand)	Webinar
Self	Stephen Michael	Sustainable Ideas	Webinar
Sharp	Mark	Panasonic	Webinar
Silveira	Jeff	BICSI	Webinar
Singhavong	Diana	American National Standards Institute	Webinar
Smith	Bob	Cooper Lighting	Webinar
Sowell	Urmilla	Glass Association of North America	Webinar
Spillane	Greg	Motorola Solutions, Inc.	Webinar
Stowe	Michael	Advanced Energy	Webinar

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Sutter	Jody	Ingersoll Rand	Webinar
Tanaka	Don	Southern California Pipe Trades DC 16	Webinar
Tetteh	Samuel	MET Labs	Webinar
Thomas	Phillip	A1 Solutions	Webinar
Tillman	Leonard	Balch & Bingham LLP	Webinar
Tipley	Roger	Hewlett-Packard	Webinar
Tom	Cherry	IEEE Standards Association	Webinar
Tsakalakos	Loucas	GE Global Research	Webinar
Tucker	Doug	ASHRAE	Webinar
Updegrove	Andrew	Gesmer Updegrove LLP	Webinar
Vandame	Richard	FEMA/NIC	Webinar
Wang	Xiaopeng	Delta Products Corp.	Webinar
Wei	Grace	Intel	Webinar
Wienold	Matthew	ABYC	Webinar
Williams	David	American National Standards Institute	Webinar
Wilson	Jane	NSF International	Webinar
Wisniewski	Ed	Consortium for Energy Efficiency	Webinar
Woodford	Michael	AHRI	Webinar
Yakin	Zafer	Opaxis	Webinar
Yeggy	Eric	WQA	Webinar
Bhatia	Joe	American National Standards Institute	ANSI staff
Bose	Sue	American National Standards Institute	ANSI staff
Carl	Jessica	American National Standards Institute	ANSI staff
Carroll	Stephanie	American National Standards Institute	ANSI staff
Cooper	Scott	American National Standards Institute	ANSI staff
Figueiredo	Reinaldo	American National Standards Institute	ANSI staff
Hallenbeck	Lane	American National Standards Institute	ANSI staff
Krishna	Vijay	American National Standards Institute	ANSI staff
Kushnier	Gary	American National Standards Institute	ANSI staff
McDermott	Leslie	American National Standards Institute	ANSI staff
Neiman	Elizabeth	American National Standards Institute	ANSI staff
Schrotter	Frances	American National Standards Institute	ANSI staff
Williams	David	American National Standards Institute	ANSI staff
Zabinski	Jana	American National Standards Institute	ANSI staff