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PRESIDENTS MESSAGE BY KEVIN GALLEN, PE, LEED AP

The attendance at the November was a bit of a disappointment, but the presentations by Shillpa Singh of YRG, and Hugh Henderson of CDH Energy and the Q&A afterwards were enthusiastic and well received. The Energy Code Training held on December 2 was very well attended, and the feedback was very encouraging. For those of you who missed out on this, there will be another series in early January - stay tuned for details!

Another reminder - there is no December chapter meeting, and the January chapter meeting will be on the 19th of the month, just before the Winter Meeting and AHR Expo in Orlando. To register for the events in Orlando, please visit <http://www.ashrae.org/events/page/2478>.

Have safe and happy holidays, and I hope to see more of you in 2010!

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ASHRAE EDUCATION

ASHRAE Handbook Becomes More Accessible in Online Format

ATLANTA—What was once the turn of a page will now be the click of a mouse. The *ASHRAE Handbook* is now available online to allow for quick and easy access to a vast amount of HVAC&R information. “The advantages of the ASHRAE Handbook Online are numerous,” Dennis O’Neal, 2009-10 chair of the ASHRAE Handbook Committee, said. “For one, the text is fully searchable and includes live links to figures, tables, footnotes, equations and other Web references. Going online also allows for fast navigation among all four current Handbook volumes, with live cross-reference links.”

Unlike the ASHRAE HandbookCD+ 2006-2009, an ASHRAE Handbook Online subscription provides immediate access to Handbook content, in contrast to the two weeks required for the shipping of the CD; requires no software installation; eliminates dependency on one computer by allowing for quick and easy access from any computer with an Internet connection; and costs considerably less than the price of purchasing each volume separately, offering a \$331 savings for non-members.

The benefits of the ASHRAE Handbook Online don’t stop there. Taking the Handbook online will provide an opportunity for the Society to fulfill its mission of advancing the HVAC&R industry through publishing by making the Handbook more accessible.

“This helps ASHRAE position its publishing program for customer expectations in the digital age,” O’Neal said. “Additionally, having the Handbook online opens it to members globally and makes ASHRAE information more readily available.” The *ASHRAE Handbook* is the most widely cited reference source for HVAC&R technology in the world. The hardback version of the Handbook is published in a series of four volumes, one of which is revised each year, ensuring that no volume is older than four years. The ASHRAE Handbook Online, however, allows access to all of the four most recent volumes at once. To subscribe to the ASHRAE Handbook Online, visit <https://handbook.ashrae.org> for immediate access to vast and valuable HVAC&R technology and resources. Additional information may be found at www.ashrae.org/handbookonline.

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ASHRAE Government Affairs Update, 11/20/09

Welcome to ASHRAE's Government Affairs Update. Along with the Government Affairs webpage, these periodic e-mail updates feature information on government affairs related activities of interest to ASHRAE members and others interested in the built environment. Archives of previous updates are available from the government affairs webpage (<http://www.ashrae.org/advocacy>).

Please pass this information on to interested colleagues who also may subscribe from the ASHRAE Government Affairs webpage. Should you wish to unsubscribe, information appears at the end of this e-mail.

If you have any recommendations regarding content, or have questions about or would like to participate in Washington Office activities, please contact ASHRAE Government Affairs staff at (202) 833-1830 or washdc@ashrae.org.

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[ACEEE: California Leads the Country in Energy Efficiency Policies](#)

California topped the 2009 State Energy Efficiency Scorecard, recently released by American Council for an Energy-Efficient Economy (ACEEE). The third annual edition of the report from the nonprofit ranks states in six energy efficiency categories: utility-sector and public benefits programs and policies; transportation polices; building energy codes; combined heat and power; state government initiatives; and appliance efficiency standards. In the new scorecard, Massachusetts and Connecticut land in second and third place, respectively, while the states at the bottom of the list include Mississippi, North Dakota, and Wyoming.

The report lauds the states of Colorado, Delaware, Maine, South Dakota, and Tennessee for greatly improving their ranking in 2009. According to the ACEEE, a variety of efforts boosted the rankings of those states, including the adoption of new building energy codes and the setting of new energy savings targets. For instance, Maine moved up 9 spots to number 10 through the increased efforts of Efficiency Maine (the agency that delivers the state's energy efficiency programs), the adoption of building energy codes, land-use planning management, and other activities. The report also notes a growing trend toward Energy Efficiency Resource Standards (EERS), which set binding energy savings goals for utilities. In late 2008 and in the first half of 2009, Delaware, Michigan, Ohio, and Pennsylvania passed laws establishing EERS targets. See the 2009 State Energy Efficiency Scorecard (<http://www.aceee.org/pubs/e097.htm>).

[Nearly \\$40 Million for Energy Efficiency and Conservation Projects in Florida and Maine](#)

Energy Secretary Steven Chu announced that the U.S. Department of Energy (DOE) is awarding nearly \$40 million in funding from the American Recovery and Reinvestment Act to Florida and Maine to support clean energy projects. Under DOE's Energy Efficiency and Conservation Block Grant (EECBG) program, these states will implement programs that lower energy use, reduce carbon pollution, and create green jobs locally.

The awards to the State Energy Offices will be used to support state-level energy efficiency priorities, along with funding local conservation projects in smaller cities and counties. At least 60% of each state's award will be passed through to local cities and counties not eligible for direct EECBG awards from the Department of Energy. The EECBG Program was funded for the first time by the Recovery Act and provides formula grants to states, cities, counties, territories and federally-recognized Indian tribes nationwide to implement energy efficiency projects locally.

Projects eligible for support include the development of an energy efficiency and conservation strategy, energy efficiency audits and retrofits, transportation programs, the creation of financial incentive programs for energy efficiency improvements, the development and implementation of advanced building codes and inspections, and the installation of renewable energy technologies on municipal buildings.

For a full list of awards to date, visit the Energy Efficiency and Conservation Block Grant Program Web site (<http://www.eecbg.energy.gov/>).

[More Than \\$104 Million for National Laboratory Facilities](#)

Deputy Secretary of Energy Daniel Poneman announced \$104.7 million in funding from the American Recovery and Reinvestment Act for eight new projects to establish critical research and testing facilities at seven U.S. Department of Energy (DOE) national laboratories. The projects will support the development and improvement of clean energy and efficiency technologies of strategic national interest. Specifically, the funding will go toward reducing the production cost of carbon fiber manufacturing, to help in reducing the weight of vehicles; improved efficiency and lower costs for car batteries; and net-zero energy building technologies. This

effort will leverage the combined intellectual and technical resources of DOE national laboratories to support technologies that will help transform the economy and create jobs, while decreasing carbon emissions.

United States and China to Cooperate on Clean Energy

President Barack Obama and China's President Hu Jintao announced on November 17 a far-reaching package of measures to strengthen cooperation between the United States and China on clean and renewable energy. The presidents began by establishing a U.S.-China Clean Energy Research Center to facilitate joint research and development of clean energy technologies by scientists from both countries. The center will be supported by \$150 million in public and private funds over the next five years, split evenly between the partners. Initial research priorities will be building energy efficiency, clean vehicles, and carbon capture and storage. Also, building on the first-ever U.S.-China Electric Vehicle Forum in September 2009, the two leaders unveiled a U.S.-China Electric Vehicles Initiative, which will include developing joint standards, building demonstration projects in more than a dozen cities, creating technical roadmaps, and carrying out public education projects. Both nations said they share an interest in accelerating the deployment of electric vehicles in order to reduce oil dependence, cut greenhouse gas emissions, and promote economic growth. The countries will also leverage private sector resources to develop clean energy projects in China through the U.S.-China Energy Cooperation Program (ECP). More than 22 companies are founding members of the program. The ECP will include collaborative projects involving renewable energy, smart grids, clean transportation, green buildings, combined heat and power, energy efficiency, and clean coal.

As part of their joint efforts, the two powers will hold an ongoing series of forums. For example, a new U.S.-China Energy Efficiency Forum will be held annually, rotating between the two countries. This will be part of the new U.S.-China Energy Efficiency Action Plan, launched by President Obama and President Hu Jintao. The action plan commits the two countries to work together and with the private sector to improve the energy efficiency of buildings, industrial facilities, and consumer appliances. Similarly, the new U.S.-China Renewable Energy Partnership will feature an annual rotating forum. Under the partnership, the two countries will develop roadmaps for widespread renewable energy deployment in both countries. In addition, the countries will encourage state-to-state and region-to-region partnerships in order to share experiences and best practices. Also included in this undertaking will be a new Advanced Grid Working Group, which will bring together U.S. and Chinese policymakers, regulators, industry leaders, and civil society to develop strategies for grid modernization in both countries. See the DOE fact sheets on the Clean Energy Research Center (http://www.energy.gov/news2009/documents2009/U.S.-China_Fact_Sheet_CERC.pdf), Energy Efficiency Plan (http://www.energy.gov/news2009/documents2009/US-China_Fact_Sheet_Efficiency_Action_Plan.pdf), and Renewable Energy Partnership (http://www.energy.gov/news2009/documents2009/US-China_Fact_Sheet_Renewable_Energy.pdf).

AIA Report Notes Surge in Green Building Programs

The number of U.S. cities with green building programs has increased 50% in two years, according to a survey by the American Institute of Architects (AIA). Green buildings generally include energy-efficient designs and other sustainable features. Among the findings from AIA, 138 cities have green building programs, compared with 92 cities in 2007, and 24 of the 25 most populated metropolitan regions are built around cities with a green building policy. The new report, "Green Building Policy in a Changing Economic Environment," is an inventory of policies and best practices intended to help policymakers advance a more sustainable legislative agenda for growth and development. The report also notes that DOE's Energy Efficiency and Conservation Block Grant program, funded by the American Recovery and Reinvestment Act, is providing "an unprecedented opportunity for the advancement of green building and sustainability efforts in our nation's cities." See the report (<http://www.aia.org/advocacy/local/AIAB081637?dvid=&recspec=AIAB081637>).

DOE and NREL Announce Open PV Mapping Project

The National Renewable Energy Laboratory (NREL) and the U.S. Department of Energy (DOE) announced the beta release of the Open PV Mapping Project. The Open PV Mapping Project is a collaborative effort between government, industry, and the public that will develop a comprehensive database of photovoltaic (PV) installation data for the United States. The project is the largest installation database with over 50,000 entries. The project will provide a Web-based resource for users to easily understand the current status and past

progress of the PV industry from the data that show current and recent trends of the PV market. Additionally, users may add their own PV installation data, browse PV data entered by others, and view statistics. Moving forward, NREL will add additional data and use this information to drive further analysis of market growth. The project will also help gauge the progress toward DOE's goal of reaching PV grid parity by 2015. To access the Open PV Mapping Project, please visit the project's Web site (<http://openpv.nrel.gov/>).

President Obama Announces \$3.4 Billion to Spur Smart Electric Grids

President Obama announced the largest single electric grid modernization investment in U.S. history on October 27, with DOE tapping \$3.4 billion in American Reinvestment and Recovery Act funds for 100 projects. The funds will be matched by \$4.7 billion in private investments. According to the president, the smart grid projects will help build a "clean energy superhighway," with a goal of increasing energy efficiency and helping to spur the growth of renewable energy resources such as wind and solar power. The grants range from \$400,000 to \$200 million, and will reach every state except Alaska.

The smart grid grants will pay for installing more than 2.5 million smart meters. The grants will also support the installation of other smart grid components, including more than 1 million in-home energy displays, 170,000 smart thermostats, and 175,000 other load control devices to enable consumers to reduce their energy use. The funding will help expand the market for smart washers, dryers, and dishwashers, so that U.S. residents can further control their energy use and lower their electricity bills. Such smart grid technologies can also better accommodate the use of plug-in electric vehicles and the production of renewable energy from customer-owned systems, such as solar power systems or wind turbines.

Much of the funding will support upgrades to the utility power grids, including the installation of more than 200,000 smart transformers, which will make it possible for power companies to replace units before they fail. Utilities will also install more than 850 sensors that will cover the entire electric grid in the contiguous United States, making it possible for grid operators to better monitor grid conditions and allowing them to take advantage of intermittent renewable energy, such as wind and solar power. Finally, utilities will install nearly 700 automated substations, which will make it possible for power companies to respond faster and more effectively to restore service when bad weather knocks down power lines or causes electricity disruptions. See the DOE press release (<http://www.energy.gov/news2009/8216.htm>), the awards by category (http://www.energy.gov/recovery/smartgrid_maps/SGIGSelections_Category.pdf) or by state (http://www.energy.gov/recovery/smartgrid_maps/SGIGSelections_State.pdf), and a map of the smart grid projects (http://www.energy.gov/recovery/smartgrid_maps/SmartGridGrantLocations.pdf).

DOE Awards \$151 Million in Recovery Act Funding for ARPA-E Projects

DOE awarded \$151 million in American Recovery and Reinvestment Act funds on October 26 for 37 energy research projects under the recently-formed Advanced Research Projects Agency-Energy ("ARPA-E"). ARPA-E's mission is to develop inventive approaches to transform the global energy landscape while advancing U.S. technology leadership by creating jobs and cutting carbon pollution. This first round of grants will go to researchers and inventors in 17 states and will support the research and development of new renewable energy technologies for solar cells, wind turbines, geothermal drilling, biofuels, and biomass energy crops. The grants will also support a variety of energy efficiency technologies, including power electronics and engine-generators for advanced vehicles, devices for waste heat recovery, electrically controlled windows and control systems for smart buildings, light-emitting diodes (LEDs), reverse-osmosis membranes for water desalination, catalysts to split water into hydrogen and oxygen, improved fuel cell membranes, and more energy-dense magnetic materials for a variety of electronic components. Six grants will go to energy storage technologies, including an ultracapacitor, improved lithium-ion batteries, metal-air batteries that use ionic liquids, liquid sodium batteries, and liquid metal batteries.

ARPA-E was inspired by the Defense Advanced Research Projects Agency (DARPA) and aims to support high-risk, high-reward energy research that can provide transformative new solutions for climate change and energy security. More than 3,600 initial ARPA-E concept papers were submitted to a competitive merit review by experts. A second set of ARPA-E funding opportunities will be announced later this fall. See the DOE press

releases on the ARPA-E awards (<http://www.energy.gov/news2009/8207.htm>), the ARPA-E Web site (<http://arpa-e.energy.gov/>), and the list of projects (http://www.energy.gov/news2009/documents2009/ARPA-E_Project_Selections.pdf).

Among those submitted was a proposed project, *Energy Efficiency through Optimized Ventilation Controls*, from Joe Monahan, ASHRAE Associate Member, principal planning engineer, University of Pennsylvania, Philadelphia. Working with Aircuity, the University is seeking to provide verification necessary to prove that a multi-parameter demand control ventilation system is a viable solution in a whole building application across a variety of building technologies. The University hopes to employ these fledging technologies in a variety of campus building types to assess the potential quality of energy savings through ventilation management and energy use diversity.

Report: Addressing Climate Change Yields 4.5 Million Clean Energy Jobs

In the process of addressing climate change, the United States could net 4.5 million jobs in renewable energy and energy efficiency fields by 2030, according to a new study. The report, "Estimating the Jobs Impact of Tackling Climate Change," was prepared for the American Solar Energy Society (ASES) by Management Information Services Inc. The report finds that an estimated 1.2 billion tons of annual carbon emissions could be eliminated by 2030 through renewable energy and energy efficiency alone, if the country makes a serious commitment to reversing climate change.

According to the report, about 57% of the reduction in carbon emissions would be from energy efficiency and 43% would be from renewable energy. Professions that would gain the most jobs include farming, construction, professional services, trucking, and metal fabrication, with job benefits spread across the entire country. The greatest numbers of renewable energy jobs would be in solar power, biomass power, and biofuels. See the ASES press release (http://www.ases.org/index.php?option=com_content&view=article&id=838&Itemid=58) and a summary of the report (http://www.ases.org/pdf/ASES_TCC_Jobs.pdf).

EERE Funding Up 3 Percent to \$2.24 Billion for Fiscal Year 2010

President Obama approved the fiscal year (FY) 2010 appropriations for DOE on October 28, including \$2.24 billion for the DOE Office of Energy Efficiency and Renewable Energy (EERE). The funds represent a modest 3% increase in funding for EERE, which received \$2.18 billion in annual appropriations in FY 2009 (not counting special one-time appropriations under the American Recovery and Reinvestment Act). The funding is about 3% lower than the amount requested by DOE in its annual budget request, and Congress earmarked more than \$292 million in EERE funds for congressionally directed projects, effectively lowering the EERE budget to \$1.95 billion. See the full history, texts, and related documents on the appropriations act, H.R. 3183, at <http://thomas.loc.gov/cgi-bin/bdquery/z?d111:h.r.03183>.

Among the big winners under the new appropriations act is EERE's Building Technologies Program, which garnered \$200 million in FY 2010 funding, a 43% increase above the \$140 million received by the program in FY 2009. The Federal Energy Management Program, a much smaller program aimed at energy use at federal facilities, is receiving \$32 million in funding, a 45% gain over FY 2009. And among renewable energy technologies, wind energy is funded at \$80 million for FY 2010, another 45% gain. The Solar Energy Technologies Program also fared well, with a 29% increase in funding to \$225 million for FY 2010. Most other programs received more modest increases in funding. The appropriations also include \$63 million for facility and infrastructure upgrades at DOE's National Renewable Energy Laboratory. See pages 102-112 and 143 (PDF pages 106-116 and 147) of the final version of the appropriations bill (http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_reports&docid=f:hr278.111.pdf), and for comparison, see the final page of EERE's "Fiscal Year 2010 Budget-in-Brief" (http://www.eere.energy.gov/ba/pba/pdfs/fy10_budget_brief.pdf). In addition to the EERE funding, the appropriation act includes \$125 million for the research and development of technologies for the smart grid, energy storage, and clean energy transmission and reliability. It also provides \$43 million for the Innovative Technology Loan Guarantee Program, an amount expected to be repaid with loan fees, and \$20 million for the Advanced Technology Vehicles Manufacturing Loan Program.

DOE Delivers \$38 Million to Four States for Clean Energy

DOE delivered more than \$38 million in American Recovery and Reinvestment Act funds to four states to support energy efficiency and conservation activities. Under DOE's Energy Efficiency and Conservation Block

Grant (EECBG) program, the recipients will implement programs that lower energy use, reduce carbon pollution, and create green jobs locally. States receiving funding are Alaska, Kansas, Utah, and West Virginia.

The awards to the state energy offices will be used to support their energy efficiency priorities, along with funding local conservation projects in smaller cities and counties. At least 60% of each award will be passed through to local cities and counties not eligible for direct EECBG awards from DOE. The EECBG Program was funded for the first time by the Recovery Act and provides formula grants to states, cities, counties, territories, and federally-recognized Indian tribes nationwide to implement local energy efficiency projects.

Projects eligible for support include the development of an energy efficiency and conservation strategy, energy efficiency audits and retrofits, transportation programs, the creation of financial incentive programs for energy efficiency improvements, the development and implementation of advanced building codes and inspections, and the installation of renewable energy technologies on municipal buildings. For example, Alaska will use a portion of its funding to promote energy efficiency in local communities that are fighting high power costs. The state has more than 180 villages that are only accessible by water or air and have to operate independent, stand-alone electric grids. And Kansas will encourage local communities to install renewable energy generating systems by offering competitive grants for up to 25% of the cost. See the DOE press release

(<http://www.energy.gov/news2009/8257.htm>) and the EECBG Program Web site (<http://www.eecbg.energy.gov/>).

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ASHRAE, IES Seek to Lighten Energy Use through Changes to Standard 90.1

ATLANTA – Requirements to “lighten up” energy use and costs through fenestration, parking lot lighting and other proposed measures are being recommended for Standard 90.1.

ANSI/ASHRAE/IESNA Standard 90.1-2007, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, provides minimum requirements for the energy-efficient design of buildings except low-rise residential buildings. Currently, 15 proposed addenda to the standard are open for public review.

“As the industry continues to call for buildings and systems that use less energy, the Standard 90.1 committee is striving to find ways to reduce energy uses and costs,” Mick Schwedler, chair of the Standard 90.1 committee, said. “The proposed changes not only reduce energy use but move the standard closer to the workplan goal of a 2010 standard with 30 percent energy cost savings compared to the 2004 standards.”

Among the proposed addenda out for public comment is addendum *cd*, which would require active exterior control rather than just require the control capability; add bi-level control for general all-night applications, such as parking lots to reduce lighting when not needed; and add control for façade and landscaping lighting not needed after midnight.

Eric Richman, chair of the standard’s lighting subcommittee, noted that studies from the California Lighting Technology Center at the University of California at Davis found that control strategies reduce lighting energy use by significant amounts during night time hours. A study by Polytechnic State University showed that parking lot lighting operates in a low mode 68 percent of the time.

Additional information from a study by Navigant Consulting shows that parking lots account for 22 Twh out of a total 57 TWh used for outdoor lighting annually nationwide. While this estimate includes all lit parking areas, the potential for energy savings in parking areas that are directly associated with specific building projects are significant and should be supported by the standard.

A second public review of proposed addendum *bn* would reduce solar loads by orienting the fenestration in more appropriate directions. Changed in response to comments during the first public review, this approach gives flexibility to building design teams to work with siting and fenestration and orientation as well as fenestration area to comply with the requirement.

Proposed addendum *bb* updates building envelope requirements for opaque elements, such as walls and rooms, and fenestration (windows and skylights). A number of changes were made in response to public comments during the first public review.

“I would like to thank all of those who met with the Standard 90.1 committee during our fall interim meetings for their candor, input and willingness to work toward an addendum that can reach consensus and save both energy and energy costs,” Schwedler said.

The proposed addenda to ASHRAE/IESNA Standard 90.1 are available for comment only during their public review period.

NYC Buildings Energy Code Compliance

As you know, the Department of Buildings has increased their submission requirements for the Energy Code in the last two years.

- They have audited applications internally for over a year in order to train some of our plan exam staff to audit for Energy Code compliance
 - In October they began training audits for industry, which they send to applicants, owners and contractors.
 - In the new year they will begin sending out 15-day notices.

Audits have revealed that the message is not getting out, as failure rates are high. Consequently, they are engaged in even broader outreach than they have done over the last two years, and are relying heavily on you to spread the word to your respective associations across the five boroughs.

Part of this outreach is the attached [flier](#). The Department wants to avoid the very serious impact that audit failures will have on permitting and on construction schedules, and we require your assistance in this effort. Energy Code enforcement will only get more stringent over the coming months and years, and the industry must ramp up its compliance quickly.

Advanced Energy Design Guidance Offered for Small Hospitals and Healthcare Facilities

ATLANTA—The newest Advanced Energy Design Guide (AEDG), written by a group of leading building industry organizations, is just what the doctor ordered.

The AEDG for Small Hospitals and Healthcare Facilities is the sixth in the 30 percent AEDG series, designed to provide recommendations for achieving 30 percent energy savings over the minimum code requirements of ANSI/ASHRAE/IESNA Standard 90.1-1999.

“The recommendations in the Small Hospitals and Healthcare Facilities Guide provide good design practices for integrating energy efficiency in a healthcare environment, while maintaining indoor air quality and required airflow and pressurization relationships,” Shanti Pless, chair of committee that wrote the guide, said.

The Guide focuses on small healthcare facilities up to 90,000 square feet in size, including acute care facilities, outpatient surgery centers, critical access hospitals and inpatient community hospitals. These buildings have intensive heating and cooling systems, which the guide covers extensively; additionally, other important energy saving measures such as daylighting are included.

“The energy efficiency recommendations in the Guide were developed based on design experiences from members of a project committee made up of healthcare facilities design professionals, combined with the insight gained from modeling the energy performance of these specific recommendations,” Pless said.

Some tips that the Guide offers include:

Providing an unoccupied air flow and temperature setback for spaces that are not used 24 hours a day, such as surgery suites;

Installing high efficiency condensing boilers with an outdoor air temperature reset schedule for all climate zones to address the high amounts of reheat energy used by such facilities to control humidity;

- Carefully laying out lighting design to meet recommended lighting power density by space type;
- Maximizing the use of daylighting and daylighting-responsive controls through both sidelighting and toplighting strategies in all space types that do not have air change requirements;
- Installing an insulated thermal envelope, with additional recommendations to address air barriers and continuous insulation strategies.

The recommendations allow contractors, consulting engineers, architects and designers to easily achieve advanced levels of energy savings without having to resort to detailed calculations or analyses.

Also, case studies provide excellent examples of advanced hospital and healthcare facility designs that demonstrate the flexibility offered in achieving advanced energy savings such as the 30 percent goal of the Guide.

The Advanced Energy Design Guide series has been developed in collaboration with these partnering organizations: ASHRAE, the American Institute of Architects (AIA), the Illuminating Engineering Society of North America (IES), the U.S. Green Building Council (USGBC) and the U.S. Department of Energy (DOE).

Since the Guides first began to be offered as free downloads at the beginning of 2008, more than 200,000 AEDGs have been downloaded. Other books in the series deal with small office and retail buildings, K-12 school buildings, highway lodging and small warehouse and self storage buildings.

For more information on the entire Advanced Energy Design Guide series, or to download a free copy, please visit www.ashrae.org/freeaedg. A softback copy of the Guide may be purchased for \$62 (\$53, ASHRAE members). To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit www.ashrae.org/bookstore.

Making a Case for Energy Efficiency in Existing Buildings: New Industry Publication

ATLANTA – Improving energy use all comes down to green – the green of energy efficiency and resource sustainability as well as the green of money.

So, show them the money. Building owners and managers of existing buildings need to understand the economic benefits of improving systems and operations. A new publication from leading industry organizations provides guidance for the business case to achieve energy savings as much as 30 percent.

Energy Efficiency Guide for Existing Commercial Buildings: The Business Case for Building Owners and Managers provides the rationale for making economic decisions related to improving and sustaining energy efficiency in existing buildings. Approximately 86 percent of U.S. annual building construction expenditures relate to renovation of existing buildings vs. new construction.

“Our goal is to enable business owners to break down the ‘mystery’ of energy conservation opportunities into business-based scenarios that are both practical and cost-justifiable,” said George Jackins, who chaired the committee overseeing the book. “To achieve true sustainability in the building industry, we must help owners learn that investing in energy efficiency translates into a high rate of return with a low associated risk. Owners and managers typically view buildings in terms of short-term economics. We must make the transition from best value vs. lowest first cost of buildings.”

Specifically, the guide provides straight-forward applications that could produce energy savings from 10 to 15 percent to a more aggressive approach that could save 30 percent or more.

The book is a collaboration between ASHRAE, the American Institute of Architects, the Building Owners and Managers Association, the Illuminating Engineering Society of North America, the U.S. General Services Administration and the U.S. Green Building Council.

Here are the five important tips that owners and managers need to know to make their buildings energy efficient:

- * Know your current energy utilization index (EUI) (kBtu/SF-year).
- * Establish a target EUI and an initial budget estimate for achieving this goal.
- * Conduct an internal energy study/audit (using ASHRAE's Procedures for Commercial Building Energy Audits as a basis) or have the facility retro-commissioned by a certified retro-commissioning firm. This activity may result in a modification to the original estimated budget amount.
 - * Identify energy efficiency measures with attractive rates of return on energy retrofit or renovation investments.
- * Implement the recommended energy conservation measures that will get the facility to the desired goal with the stipulated budget.
- * Commission the energy conservation measures by a certified commissioning firm. This process should include training of facility personnel on properly operating and maintaining equipment and systems.

The book is the first of three planned guides on energy efficiency. The second will be aimed at providing technical guidance in undertaking existing building renovation programs. The third will provide operation and maintenance guidance to help sustain the energy efficiency.

The cost of Energy Efficiency Guide for Existing Commercial Buildings: The Business Case for Building Owners and Managers is \$69 (\$59, ASHRAE members). To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478

High-Performance Building Standard Provides the Foundation for Green Building Codes

ATLANTA – A proposed high-performance building standard and a stronger version of Standard 90.1, both being released next year, together will provide a total green resource for local and state governments looking to set building code requirements to reduce energy use.

Proposed Standard 189.1, *Standard for the Design of High Performance, Green Buildings Except Low-Rise Residential Buildings*, is being developed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) in conjunction with the Illuminating Engineering Society (IES) and the U.S. Green Building Council (USGBC). The standard is slated to be the first code-intended commercial green building standard in the United States when published early in 2010.

It covers key topic areas typically included in green building rating systems: site sustainability, water use efficiency, energy efficiency, indoor environmental quality, and the building's impact on the atmosphere, materials and resources.

ASHRAE and IES also are working to strengthen the requirements in ANSI/ASHRAE/IESNA Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, which provides minimum requirements for the energy-efficient design of buildings except low-rise residential buildings. It is estimated that the 2010 standard will result in 25 to 30 percent energy savings over the 2004 version. The 2010 standard is expected to be released in mid-2010.

An update on the development of Standard 189.1P will be given this week at the USGBC GreenBuild Expo at a press conference on Thursday.

“Both standards are written in mandatory language to allow for adoption with building codes,” Gordon Holness, ASHRAE president, said. “They are being developed using the widely respected American National Standards Institute consensus procedures. As such, their strength comes from the volunteer committee of experts from all facets of the building industry. In addition, the requirements in the draft standard were strengthened through the public review process with input from a variety of building industry professional.”

Proposed Standard 189.1P has been written by experts representing all areas of the building industry, including engineers, lighting designers, sustainability experts, building owners, designers, architects, code and compliance officials, utilities, materials experts and equipment manufacturers. These volunteer experts have contributed tens of thousands of man hours valued at millions of dollars.

The technical requirements in the standard also are supported by input from the building industry during the public review process. The standard recently completed a fourth public review, in which 109 comments were received. The comments are being reviewed by working groups of the committee developing the standard.

The full committee meets this week in conjunction with the GreenBuild Expo to act on the suggested comments.

The standard has undergone four public reviews, meaning anyone could comment on its proposed requirements. Some 2,500 comments were received during the review periods.

Energy Efficiency Today Ensures Prosperous Economic Future, Declares President Obama

ATLANTA-President Obama has declared October National Energy Awareness Month, claiming that "a more prosperous future for our Nation's economy means making investments in energy efficiency and clean energy today."

In his official proclamation, the President emphasized the importance of focusing on energy efficiency,

promoting sustainable industries and setting effective and achievable standards for the generation and use of clean energy in order to advance energy and climate security.

"The declaration as an opportunity for Americans to become more aware of how their everyday choices and actions impact energy use-particularly in their homes and the buildings where they work and play," Gordon Holness, ASHRAE president, said. "Most Americans do not cite buildings as the sector responsible for the greatest energy use and greenhouse gas emissions. Hopefully by becoming more aware, Americans will demand greater efficiency."

Obama has also issued an executive order focused on Federal leadership in environmental, energy and economic performance.

"As the largest consumer of energy in the U.S. economy, the Federal Government can and should lead by example when it comes to creating innovative ways to reduce greenhouse gas emissions, increase energy efficiency, conserve water, reduce waste and use environmentally-responsible products and technologies," the President said.

ASHRAE responded to the executive order by commending Obama's leadership to establish the Federal Government as a leader in increasing the energy efficiency of buildings, as well as to offer ASHRAE's standards and new labeling program as resources for achieving the President's goal of energy efficiency.

ASHRAE has long been doing its part to promote energy efficiency and sustainability through research, standards writing and education. For example, Standard 189.1P, Standard for the Design of High Performance, Green Buildings Except Low-Rise Residential Buildings-which is currently up for its fourth public review-addresses sustainable sites, water use efficiency, energy efficiency, a building's impact on the atmosphere, materials and resources and indoor environmental quality.

Additionally, ASHRAE's building energy labeling program, the Building Energy Quotient, provides building owners and the public with valuable information on the energy use of buildings by measuring both the energy the building is designed to use and the energy actually being consumed, thereby helping to close the gaps between intention and operation. The label is currently in its pilot stage and will be available in 2010.

New York Chapter Celebrates 98th Anniversary

NEW YORK—With only two years to go until it hits the big 100, the New York Chapter celebrated its 98th anniversary on Oct. 27 with a special history night.

The chapter was organized on Oct. 24, 1911, 17 years after the American Society of Heating and Ventilation Engineers, an ASHRAE predecessor society was established in 1894.

More than 60 members and guests attended the program, including Spencer Morasch, Region I director and regional chair; Hilary Beber, policy analyst, Long-Term Planning and Sustainability, Mayor's Office of Operation; and Lindsay Robbins, assistant project manager, NYSERDA New York City Office.

The speakers addressed the city's sustainability plan and energy code, energy consumption in existing

buildings, Green Workforce development and NYSERDA incentives.

The dinner meeting started with Morasch outlining the Society's progress in energy efficiency and sustainability standards development, energy efficiency in existing buildings, and new Building Energy Quotient program.

The evening included a historical note by Robert Daly, technical director, Boiler Division, New York City Department of Buildings. Daly is the New Jersey Chapter historian and past president and a frequent speaker at the chapter's Student Branch events.

The chapter also looked ahead to its centennial in 2011. In 1912, at the chapter's first anniversary celebration, a special ode to the chapter was performed. The song and music is published in the Society's Centennial history book, Proclaiming the Truth. As part of the preparation for the chapter centennial, a poem has been written and was recited by Christopher Persaud, CCNY Student member.

Other highlights included display of a history poster and a presentation by Sean Patrick Neill, principal of Cycle-7, on Improving Existing Buildings: Good for your Bottom Line.

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ASHRAE MEMBERSHIP

Members can run their own dues renewal with the following steps:

- 1. Go to <http://www.ashrae.org/>
- 2. Login as yourself
- 3. Click **Update Your Bio** the in left-hand column
- 4. Click **Member Dues Renewal** - it will generate a file you can print or save to PDF
- 5. And while here, members can also update their bio to advance to Member grade if interested!

ASHRAE will continue its regular billing of members, but this new addition makes it easier for you to assist members you need something immediately!

For further information, please contact the membership chair.

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