Statement of Alex Laskey

President and Founder of Opower

On behalf of the Alliance to Save Energy before
Senate Energy and Natural Resources Committee, Subcommittee on Energy

"Pending Energy Efficiency Legislation"

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INTRODUCTION

As President and Founder of Opower, I am pleased to appear before this Subcommittee as the designee of the Alliance to Save Energy and a Commissioner on the Alliance's Commission on National Energy Efficiency Policy. Thank you Chairman Franken, Ranking Member Risch, and the other esteemed members of the Subcommittee for the opportunity to testify.

Opower is the world's leading provider of energy efficiency software and customer engagement solutions to the utility industry. My friend Daniel Yates and I founded Opower six years ago because we believed that if we provided families better information about their energy use, they could save money and help the environment all at the same time.

Based in Arlington, Virginia with offices now in San Francisco, London, and Singapore, our company has grown to more than 400 employees and works with 91 utilities to serve 18 million households in 30 states and 7 countries. To date, we have helped families save more than $300 million on utility bills. Last year alone, we saved Ohioans $7 million, Minnesotans $6 million, Arizonans and Michiganders $3 million, and Coloradans more than $2 million on their electricity bills.

And, we're just getting started. Over the next twelve months we'll generate another 2 Terrawatt hours in energy savings. That is more than enough energy to power every home in Cincinnati and St. Paul combined, or to take all of the homes in Las Vegas off the grid for the whole year. It's enough energy to power every home in Portland (OR), Nashville, Albuquerque, or Tucson for a year. 2 Terrawatt hours is roughly half of what the entire US Solar industry produced last year, and it's equivalent to the annual production from the Hoover Dam.

Utilities partner with Opower to provide families both the motivation and information to save energy. Smart people understandably struggle to decipher typical energy bills with esoteric terms such as Kilowatt Hours. We firmly believe everyone has a right to personally relevant energy usage information. To that end, we show families how their energy use compares to similarly sized homes coupled with personalized tips for saving. Importantly, our approach delivers consistent savings regardless of one's age, income, education, or access to technology

Broad-based engagement on energy efficiency is a prerequisite for reducing energy waste at scale.

To that end, Opower is helping make every household and every person a part of the solution to energy waste. For instance, as part of our partnership with National Grid Rhode Island, we will soon be delivering energy usage information to all 425,000 households in that state.

COMMISSION ON NATIONAL ENERGY EFFICIENCY POLICY

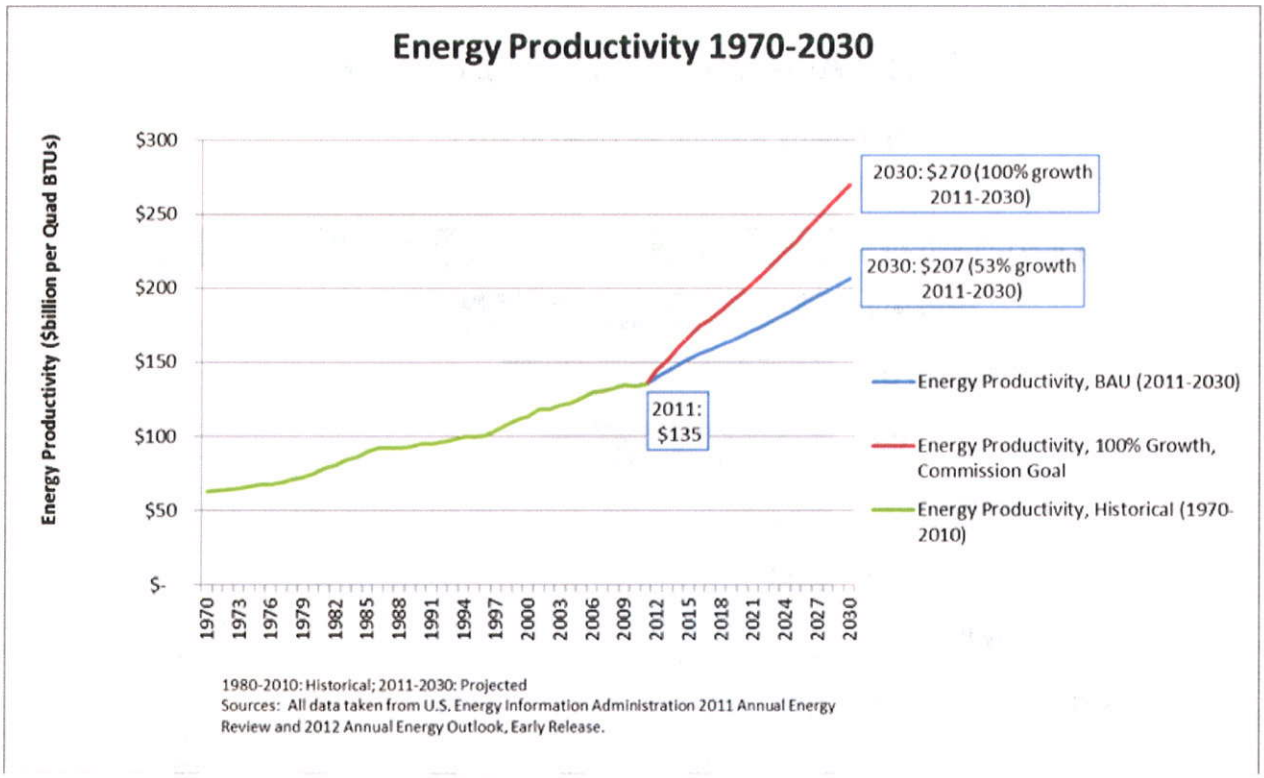
For the past year and a half, I have served on the the Alliance to Save Energy's Commission on National Energy Efficiency Policy's (see attached list of Commission members and their biographies). The Alliance is a non-partisan group of business leaders, policymakers, and utility executives, representing stakeholders ranging from leading utilities such as Southern Company, Exelon, and the Edison Electric Institute to leading non-governmental organizations including the Natural Resources Defense Council and the Environmental Defense Fund.

Our Commission, co-chaired by Senator Mark Warner and National Grid USA President Tom King, released a report earlier this year calling for a bold national strategy to double our energy productivity by 2030 (i.e., in 2030, every unit of energy consumed will correspond to twice the amount of GDP as compared to 2011). We issued a list of policy recommendations (*Energy 2030*) designed to help America meet this goal. Meeting this goal would deliver exceptional benefits to the United States, including enhanced economic competitiveness and technological innovation, greater energy reliability and security, and strengthened stewardship of our environment and natural resources.

Created in 2012 to identify solutions for increasing U.S. energy productivity and jumpstarting the economy, the Commission built its recommendations upon a large body of research that examines the issues of investment, technology, human behavior, and government in relation to growing energy productivity in the United States across an array of economic sectors, including residential, commercial, industrial, and transportation.

An independent analysis by the Rhodium Group for the Commission found that doubling energy productivity would require investment of $166 billion each year through 2030, but would avoid $327 billion a year above those costs, save the average household $1000 a year, add over a million jobs, and reduce both carbon dioxide emissions and oil imports by a third.

Moreover, the enclosed figure demonstrates how the Commission's energy productivity target compares with the reference (i.e., current course of activity) case projection of the U.S. Energy Information Administration (EIA) 2012 Annual Energy Outlook.

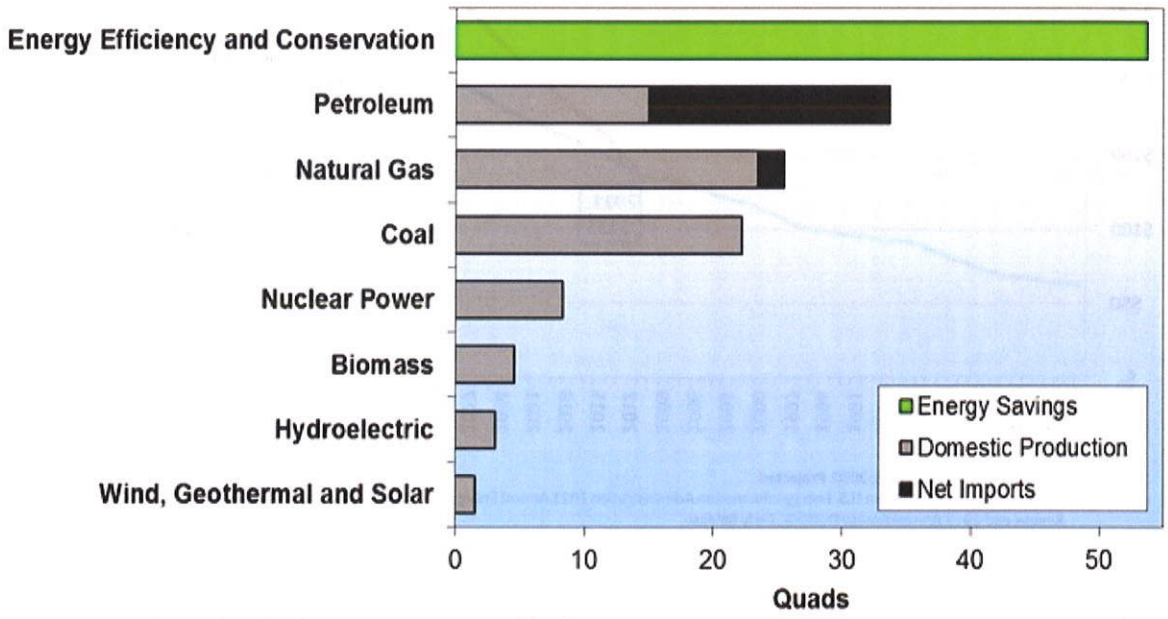


Over the last 40 years, the United States has made significant gains in energy productivity. In 1970, about $63 billion of GDP in year 2005 dollars were produced per quadrillion Btu (quad) of energy used domestically according to the U.S. Energy Information Administration. In 2011, the figure was about $135 billion per quad. The Commission's goal is for the U.S. economy to achieve $270 billion (in 2005 dollars) of GDP for each quadrillion Btu consumed in 2030.

If not for energy productivity gains since the early 1970s, the United States would need about 50% more energy – with concomitant impacts on energy bills, oil imports, energy reliability and security, and environmental quality – to deliver today's GDP. The following Alliance to Save Energy figure graphically illustrates the point.

Energy Efficiency: America's Greatest Energy Resource

U.S. Energy Resources Used in 2011



While the United States has made significant energy productivity progress over the last several decades, the nation cannot afford to rest on its laurels. Indeed, heightened international economic competition; stresses on American energy, transportation, and other physical infrastructure; continued economic and geopolitical vulnerabilities to energy price shocks (despite increased North American oil and natural gas production); and multiple environmental challenges associated with energy all underscore the need to strengthen U.S. efforts to enhance energy productivity.

In addition to the Commission's work, three other reports have been issued recently that call for energy efficiency as a central pillar of sound U.S. energy policy. These include the National Association of Manufacturers' Energy Efficiency Task Force on the building sector; the Business Roundtable's Taking Action on Energy: A CEO Vision for America's Energy Future; and the Bipartisan Policy Center's America's Energy Resurgence: Sustaining Success, Confronting Challenges. The Commission intends to work collaboratively with these organizations and their associates to implement our common and important agendas on energy efficiency.

The Alliance Commission on National Energy Efficiency Policy urges policy makers and the private sector to take immediate and concerted action to grow our economy and create jobs while using less energy and reducing associated costs, environmental harm and security impacts.

Of the recommendations, three overarching strategies were established to meet this energy productivity goal:

- **UNLEASH INVESTMENT** in energy productivity throughout the economy;
- **MODERNIZE REGULATIONS** and Infrastructure to improve energy productivity; and

- EDUCATE and ENGAGE consumers, workers, business executives, and government leaders on ways to drive energy productivity gains.

LEGISLATIVE INITIATIVES

State Energy Race to the Top (S. 1209):
The education "Race to the Top" initiative spawned significant education reforms and has received broad, bipartisan support. Similarly, an energy productivity competition that provides federal resources and rewards states for progress toward becoming more energy productive could spur significant advances in efficiency throughout the nation.

To that end, Opower applauds Alliance to Save Energy Honorary Chair Senator Mark Warner (D-Va.) and Senator Joe Manchin (D-W.Va.) for introducing the **State Energy Race to the Top proposal (S. 1209)** that would create, fund, and implement a voluntary energy productivity competition for states. This concept was a key pillar of the Alliance Commission's consensus-based *Energy 2030* recommendations to double U.S. energy productivity.

This Race to the Top-style competition – which was embraced by the President in his State of the Union and Fiscal Year (FY) 2014 budget – aims to promote innovation and adoption of best practices in energy efficiency at the state and local levels of government. By providing states with incentives to enact policy and regulatory reforms that will stimulate new investment in energy efficiency and demand response, this legislation would help keep more money in local communities, save taxpayer dollars, reduce families' energy bills, and increase American competitiveness.

More specifically, S. 1209 would empower the federal government to challenge states and local governments to design effective policies to boost energy productivity, using a $200 million incentive fund. The legislation builds upon existing public/private networks and encourages states, businesses, and utilities to modernize. Key aspects of the legislation include;

- Up to 25 states would compete for a combined $60 million to develop innovative energy productivity programs and policies.
- States must demonstrate how the money would be spent, how the savings and increased energy productivity will be measured, and how the public dollars can be leveraged through cooperative efforts with utilities.
- Eighteen months after the initial allocation to 25 states, an additional $105 million would be divided among no more than six additional states to continue implementation of energy productivity efforts, including adoption of "best practices" spearheaded by the initial group of 25 states.
- $25 million would be set-aside for innovative energy productivity programs proposed by public power utilities, rural electric cooperatives and utilities serving recognized Native American reservations.
- The National Research Council would be required to produce an independent evaluation of the program's performance.

Proposals Related to the Building Sector:
Buildings account for approximately 40% of all U.S. energy use. Efficiency in the domestic building sector represents an investment opportunity in the hundreds of billions of dollars, with potential savings estimated as high as $1 trillion over the next 10 years – 30% of what we now spend annually

on electricity. New and existing building stock can become more efficient and productive through adoption and enforcement of codes and standards, investment in efficiency retrofits, improvement in technologies, and greater education of users, among other means.

The Alliance's Commission on National Energy Efficiency Policy also assesses the state of building energy efficiency to inform the development of policy recommendations for expanding energy productivity in residential and commercial buildings. It examines the unique financing challenges in the buildings sector, an array of available energy productivity technologies, new developments in providing building efficiency information, and recent policy innovations.

Building owners and builders themselves decide on components that affect energy use; building operators affect energy use through operations and maintenance; and occupants exert control over many types of energy-using equipment. Importantly, energy management can be improved through building energy use feedback and benchmarking systems, building staff training and occupant education, social norms and marketing, and financial incentives. Behavior-based energy efficiency approaches, such as energy feedback systems, can empower building operators and individual households to better manage their energy use and costs. An Environmental Defense Fund study estimated a $3 billion potential annual savings if simple monthly comparative energy-use reports were sent to residential customers nationally.

For these reasons, the Alliance to Save Energy supports **Chairman Al Franken's (D-Minn.) legislation (S. 1206)** that would extend the existing federally owned building benchmarking requirement to federally leased buildings; require an agency study on benchmarking methodologies for commercial and multifamily buildings; and authorize a competitive grant program for interested utilities and regulators to ensure availability of building energy use data. Similarly, the Alliance also commends Senators Michael Bennet (D-Colo.) and Kelly Ayotte (R-N.H.) for introducing the **Better Buildings Act (S. 1191)**, which would advance a voluntary, market-driven approach by creating a Tenant Star program within ENERGY STAR to promote efficiency in tenant-occupied commercial spaces. Both of these measures are in keeping with the policy recommendation in the Education *Energy 2030* category, which calls for effective building energy ratings, benchmarks, and disclosure methods to reduce energy waste.

Equally important is the leadership role that all levels of government can play. The federal government is the largest single energy user in the United States, responsible for just over 1% of total energy use. State and local governments combined own one fifth of commercial building space, with much larger energy use. But beyond their own energy use, governments can serve as highly visible test beds and early adopters of innovative technologies and practices. They also can influence their large base of contractors and suppliers to increase their energy productivity.

Furthermore, Federal agencies should adopt the Investment category *Energy 2030* policy recommendation that focuses on applying innovative best practices to government buildings, including setting targets for efficiency improvements; implementing energy management systems (under ISO 50001 standard); benchmarking, rating, and disclosing of building energy use and efficiency; and conducting recommissioning.

As such, the Alliance to Save Energy has publicly endorsed the **All-Of-The-Above Federal Building Energy Conservation Act (S. 1199)**. Authored by Senators John Hoeven (R-N.D.) and Joe Manchin (D-W.Va.), this bipartisan legislation would strengthen several energy efficiency targets

and requirements for federal buildings by extending the current efficiency targets to require each agency to reduce energy intensity of its buildings (energy use per square foot) by 3% each year, ending in a 45% reduction by 2020. It would also modify a current directive to conduct energy and water audits, and adjust efficiency standards that apply to new federal buildings.

Although the proposal is much different in scope, the **Streamlining Energy Efficiency for Schools Act (S. 1084)** falls under the same *Energy 2030* policy recommendation, and is backed by the Alliance as well. Introduced by its Honorary Vice-Chairs Senator Mark Udall (D-Colo.) and Senator Susan Collins (R-Maine), this bill would simplify the scope of existing federal energy efficiency programs available to schools and provide clearer guidance on financing options to help make certain that they are able to take advantage of energy savings opportunities.

Uncertainties and risks, capital constraints, corporate strategy, and public policy affect decisions to invest in energy productivity in the building sector as significantly as they do other investment decisions. Businesses and households can be dissuaded from making energy or other upgrades by high first-costs. Both often demand very rapid payback on investments.

Energy productivity investments may be undertaken primarily to achieve energy benefits, but often energy productivity gains are a co-benefit of investments made for other purposes. A broader modernization of manufacturing, renovation of building stock, replacement of vehicles, and upgrade of infrastructure can yield energy productivity gains while simultaneously improving economic productivity and business competitiveness, quality of products and services, and energy and environmental performance.

Promising opportunities for such investments include the **Weatherization Enhancement and Local Energy Efficiency Investment and Accountability Act (S. 1213)**. This bipartisan measure, which was sponsored by the Alliance to Save Energy's Honorary Vice-Chairs Senators Chris Coons (D-Del.) and Susan Collins (R-Maine), would reauthorize and improve the Weatherization and State Energy Programs, which have been responsible for efficient upgrades in more than 7.4 million homes. This important bill would maintain the national profile of the programs, allowing millions of low-income Americans to reduce their energy consumption and save money, and also introduce a complementary innovation initiative to leverage private funding for weatherization projects.

Other potential initiatives that aim to address investments include the **Non-Profit Energy Efficiency Act (S. 717)**, which would create a Federal pilot program to provide grants of up to $200,000 (with a 50 percent match) to schools, youth centers, houses of worship, hospitals and other nonprofit facilities to undertake energy efficiency improvements. Chairman Franken's **Local Energy Supply and Resiliency Act (S. 1205)** also offers promise by offering financing for public and private entities the ability to assess and implement energy systems that recover and use waste heat and local renewable energy resources.

CONCLUSION

While the United States has made significant energy productivity progress over the last several decades, the nation cannot afford to withhold support for policies or investments in energy efficiency. Heightened international economic competition; stresses on American energy, transportation, and other physical infrastructure; continued economic and geopolitical vulnerabilities to energy price shocks (despite increased North American oil and natural gas

production); and multiple environmental challenges associated with energy all indicate a necessity to strengthen U.S. efforts to enhance energy productivity.

Opower recognizes that today's economic and political challenges make it increasingly difficult to address national energy policies. Advancement of the State Energy Race to the Top initiative and other efficiency proposals, however, would help address high energy costs, create jobs, improve our national energy security and reduce the harmful environmental impacts associated with the production and use of energy.

In many places, utility regulation has not changed much since the days of Thomas Edison. Utilities make more money when their customers waste energy. They ought to be rewarded for helping their customers save it. While Thomas Edison may not have envisioned a world in which we incentivize utilities to help customers use less power, it is common sense. Reducing demand and increasing energy productivity is cheaper and cleaner than building new power plants and transmission lines.

Thank you for your time and attention, and I would be glad to respond to any questions that you may have.

Commission Member Biographies

Chairmen

Sen. Mark Warner (D-Va.), elected to Congress in 2008, has reached across the aisle to revive the economy, support small business, reduce the deficit and champion energy efficiency. As governor of Virginia from 2002 to 2006, Sen. Warner revived the state's economy by bringing 135,000 new jobs into Virginia, supporting public education and turning a record budget deficit into a surplus.

Tom King was named National Grid USA President in 2007. This year King touted the 20th anniversary of National Grid's EE program which collectively cut customers' electricity bills by more than $2.5 billion. King's long history in the energy industry includes service as president of Pacific Gas & Electric Corporation, president and CEO of Pacific Gas and Electric Company and senior posts with Kinder Morgan Energy Partners and several Enron affiliates.

Members

Dr. Dan Arvizu is the Director of the National Renewable Energy Laboratory, the U.S. Department of Energy's primary laboratory for energy efficiency and renewable energy research and development. He was a chief technology officer with CH2M HILL Companies, Ltd., an executive with Sandia National Laboratories, and started his career at the AT&T Bell Telephone Laboratories. In 2004, Dr. Arvizu was appointed by the President for a six-year term on the National Science Board, the governing board of the National Science Foundation and the national science policy advisory body to the President and the Congress.

Frances Beinecke is currently the President of the Natural Resources Defense Council (NRDC). Under Frances's leadership, the organization sharply focuses on curbing global warming, developing a clean energy future, and many other important environmental issues. Frances has worked with NRDC for more than 30 years. Prior to becoming the president in 2006, she served as the organization's executive director for eight years, during which time NRDC's membership doubled and the staff grew to more than 300. In addition to her work at NRDC, Frances has played a leadership role in several other environmental organizations. She currently serves on the boards of the World Resources Institute, the Energy Future Coalition and Conservation International's Center for Environmental Leadership in Business.

Gregory M. Bridgeford has been a Chief Customer Officer at Lowes Companies Inc. Mr. Bridgeford served as an Executive Vice President of Business Development at Lowes Companies Inc. since February 2, 2004. Mr. Bridgeford, a 22-year Lowe's veteran, oversees all aspects of Lowe's development of new business opportunities, strategic planning, research and business process improvement. Previously, he served as Lowe's Senior Vice President, Business Development since 1999. Mr. Bridgeford was also the Senior Vice President, Marketing from 1998 to 1999 and as Senior Vice President and General Merchandise Manager from 1996 to 1998. Mr. Bridgeford joined Lowe's in 1982 and has served in a variety of increasingly responsible positions, including Vice President of corporate development, Senior Vice President of merchandising/General Merchandising Manager and Senior Vice President of Marketing. He played an important role as a member of the team that wrote a new corporate vision for Lowe's in 1989, ultimately transforming it into one of the nation's leading retailers. Mr. Bridgeford holds a bachelor's degree in psychology from the University of Virginia, and earned an M.B.A. from Wake Forest University.

Jorge Carrasco is the Superintendent of Seattle City Light, the ninth largest public electric utility in the United States. Carrasco was appointed by Mayor Greg Nickels in late 2003 and confirmed by the Seattle City Council in February 2004. Since his appointment, Carrasco has reduced the utility's debt ratio from 85% to approximately 60%. Carrasco has supported and expanded City Light's commitment to environmental stewardship. For the third year in a row, City Light has been zero-net greenhouse gas emissions – the first electric utility in the country to make that claim.

General Wesley Clark is a retired four-star General of the United States Army and served for 38 years. General Clark has won many awards for his service including the Purple Heart and Presidential Medal of Freedom. In his early years the General graduated as valedictorian from West Point in 1966, went on to earn a masters at Oxford University as a Rhodes Scholar. After retiring from the service, General Clark ran for U.S. President in 2004. The General now serves as Chairman and CEO of Wesley K. Clark & Associated, a strategic consulting firm. General Clark has also become a well-known figure in the energy community. He is currently the co-chairman of Growth Energy and chairman of Solar Energy Squared, and he is a member of the Clinton Global Initiative's Energy and Climate Change Advisory Board.

Michael Eckhart is Managing Director and Global Head of Environmental Finance and Sustainability for Citigroup in New York City. In this role he supports Citi's goal to be the leading financial services firm in renewable energy, energy efficiency, clean water and related areas. From 2001 to 2011, he was founding President of the American Council On Renewable Energy (ACORE), a Washington DC- based nonprofit organization with members in all sectors of renewable energy and energy efficiency. He is a 2009 recipient of the Corporate Responsibility Award for Social Entrepreneurship, a 2008 recipient of the prestigious Skoll Award for Social Entrepreneurship, a
2006 recipient of RSF's Good Deal for All Award, and a four-time invited participant in the Clinton
Global
Initiative.

Anthony Eggert is the executive director of the UC Davis Policy Institute for Energy, Environment and the Economy. From 2007 through 2012 Eggert served as an appointee of Governors' Brown and Schwarzenegger in several senior policy positions including Science and Technology Policy Advisor to the Chair of the Air Resources Board, Commissioner for the California Energy Commission, and Deputy Secretary for Energy Policy of the California Environmental Protection Agency overseeing clean energy and environmental policy development for California. Prior positions include advising the University of California on federal energy and climate policy, directing research on low-carbon fuels and vehicles at UC Davis' Institute of Transportation Studies, and as an engineer and then manager for Ford Motor Company. Anthony received a Bachelor of Science degree in mechanical engineering at University of Wisconsin Madison and Masters of Science Degree in Transportation Technology and Policy at U.C. Davis.

Carol Eicher is business group vice president for Dow Building & Construction, a business group within Dow's Advanced Materials Division that includes the following businesses: Dow Building Solutions, Dow Solar and Construction Chemicals. Dow Building & Construction specializes in the development and production of materials and technologies enhancing energy efficient and sustainable building. Before joining Dow (in 2009), Eicher spent 10 years at Rohm and Haas, where she held multiple vice president and director roles. Most recently, she was business director for the Performance Monomers unit which provides essential raw materials to the company's coatings, construction and adhesives markets. Ms. Eicher is also a director of Tennant Company, a
138-year old public company that markets environmentally friendly cleaning systems.