

KEY INSIGHTS FROM A SOLUTIONS FORUM ON INNOVATIVE FINANCE AND CLEAN POWER



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A C2ES Solutions Forum held on June 25, 2015, brought together state and business leaders to discuss how financial tools can spur investment in clean energy and efficiency. These leaders provided key insights into how existing financing mechanisms can be scaled up and what barriers remain.

For more information about the C2ES Solutions Forum, see: <http://www.c2es.org/initiatives/solutions-forum>

Key insights and highlights from the C2ES event, Innovative Finance & Clean Power, include:

State and municipal governments have limited financial resources to devote to clean energy, but they can leverage available resources to bring more private capital to the table. Furthermore, the clean energy space has many new companies working in relatively new markets that may be unfamiliar to traditional investors. The public sector can validate business models and require transparency among private sector actors.

Andrea Colnes, who serves on the board of directors for the Coalition for Green Capital, noted that green banks work by “marrying relatively limited amounts of public funding to leverage and draw in the very large amounts of necessary investment and private capital toward a transformative clean energy platform.”

For example, a private sector bank may not find it economical to lend money for an energy efficiency upgrade if the payback period goes beyond a certain length of time. A green bank can be a public or quasi-public institution within a state established to leverage public sector financial resources for even greater private sector capital for clean energy purposes. In this role, a green bank can step in and become a subordinated lender, meaning it will be repaid after other lenders.

States and electricity generators can invest in and stimulate energy conservation and energy efficiency,

and these can be low-cost options that reduce the need to invest in new capacity.

“For any kilowatt or megawatt not generated, you do not have to debate about the source of where it is generated and how clean it is,” said Bob Martineau, commissioner of the Tennessee Department of Environment and Conservation. Recognizing that state agencies were spending hundreds of millions annually on energy costs, the state invested in efficiency measures to reduce energy costs by 20 percent for all state buildings.

New technologies make it possible to reduce total electricity use in buildings and to supply them with low-carbon power. LED lighting, upgraded HVAC units with advanced controls, and distributed renewable generation could cut a building’s peak load by 30 to 60 percent. Given the potential of these technologies to be disruptive to traditional utility models, several panelists noted that states and utilities need to work together to maintain investment in the grid, reform rate-making processes, and enable new business models to make economic and climate objectives possible.

Financial firms and other types of investors with long-term perspectives may be primary candidates for efficiency investments.

In response to the discussion about the nature of energy efficiency investments, Granville Martin,

managing director for sustainable finance at JPMorgan Chase, noted that, “energy infrastructure by its nature is long-lived. You need at the end of the day some investor or lender who is going to take a long-term view.”

Several speakers identified municipalities, universities, schools, and hospitals (the MUSH sector) as some of the best candidates for efficiency investments since they commonly take the long view. With this perspective, they can justify up-front efficiency investments based on long-term energy cost savings.

Community development financial institutions (CDFI) also take the longer view in their lending and investment activities. Amy Brusiloff, a senior vice president with Bank of America, discussed how CDFIs, with their community-focused objectives, can provide capital and technical assistance to underserved low-income communities, and leverage limited public investment for greater private investment. Bank of America has been lending to CDFIs, often with grants and long-term loans with low interest rates, and the resulting energy savings have exceeded expectations, primarily because of communities’ interest in saving money.

Given that low-income communities often have limited access to capital, CDFIs need to benefit from the experience of other CDFIs. Collecting data on energy usage at low-income properties before and after an energy retrofit and clearly defining the scope of work involved are key to substantiating these efforts’ success.

Efficiency investments may not provide the payback necessary for all investors. Inertia and short-term perspectives are often barriers that financing approaches must take into account.

In many parts of the country, energy costs are low. Energy and water bills are often less than cell phone bills. Consumers, whether building managers or households, often need strong enticements to act. Furthermore, in comparison to a university or hospital, the owner of a commercial building may

only intend to keep the building for a few years before selling it. Since the cost savings accrue over time, the return on investing in clean energy may not be realized within the required payback or expected ownership period.

Bill Tyndall, vice president of commercial strategic initiatives at Duke Energy, said his company uses a couple of approaches to overcome this barrier with commercial consumers, including showing them how energy bills would change after clean energy technologies are installed and giving them a no-money-down option to install them. He also said financing these investments can be enabled through innovative partnerships where risks and benefits are shared.

Another option suggested by Andrea Colnes was on-bill financing, where a utility can make a loan to a homeowner or commercial building owner for renewable energy technology or energy efficiency improvements and add a fee to the electricity bill until the loan is paid back. Benefits from this financing option include both a broader potential customer base and reduced risk to the lender, especially since the loan is tied to the building and payment will continue even if the building owner changes.

While energy service providers and performance contracting has been around for years, measurement tools and a registry to verify energy and carbon dioxide reductions will be key to its growth under the Clean Power Plan.

Anna Pavlova, vice president of government relations for Schneider Electric, a leading energy service company (or ESCO), discussed how nationally recognized standards and protocols for measuring the resulting energy savings would increase consumer and regulator confidence that ESCOs deliver on their energy-saving promises. The importance of transparency and confidence were also echoed by Pennsylvania Deputy Treasurer Keith Welks, who said that in the interest of protecting consumers and encouraging best practices in the private sector,



The Center for Climate and Energy Solutions (C2ES) is an independent nonprofit organization working to promote practical, effective policies and actions to address the twin challenges of energy and climate change.