

**SESSION TITLE:**

Cities of Tomorrow: How do you incorporate energy efficiency into urban planning?

SPEAKER SUMMARIES:

Anthony Eggert, Executive Director, The Policy Institute for Energy, Environment and the Economy, UC Davis

- Using California as an example, Mr. Eggert explained that many of the State's innovative energy and environmental policies were derived from best practices and policies first implemented by cities and local governments.

Richard Kidd, Deputy Assistant Secretary of the Army (Energy & Sustainability, US Army)

- Representing one of the largest consumers of energy in the federal government, Mr. Kidd presented an overview of the US Army's operations and steps taken to reduce the organization's energy and water consumption.

Christopher B. Leinberger, President, LOCUS

- Based on his expertise in real estate and urban development, Mr. Leinberger provided a private sector perspective on the built environment and emphasized the value of investing in high-density, walkable, and transit-oriented places.

Michael Melaniphy, President and CEO, American Public Transportation Association

- Having worked in the public transportation sector for most of his career, Mr. Melaniphy addressed the connection between transportation and energy consumption, highlighting significant potential savings that can occur as a result of public transportation.

Trisha Miller, Senior Advisor, Office of Sustainable Housing and Communities, U.S. Department of Housing and Urban Development

- Focusing on leveraging private and public investment in green affordable housing development, Ms. Miller discussed successful projects funded by the Recovery Act and implemented by HUD to advance green building standards and create resilient communities.

SESSION WRAP-UP

Speakers in this session provided valuable insight regarding the benefits of incorporating energy efficiency with the built environment. The expert panelists shared numerous case studies on city-, regional-, and government-level efforts to reduce energy consumption and promote sustainable development across the country.

Panelists agreed that embracing energy efficiency and sustainable planning would lead to greater energy security for the nation. Kidd emphasized that our country's dependence on fossil fuels creates a "strategic and tactical vulnerability". Considering the US Army operates in 155 towns across the states and owns one of the largest non-tactical vehicle fleet, the organization has made energy security and sustainability goals part of its top ten priorities. The organization's driving forces include installation and urban design, which resulted in the reduction of petroleum consumption by 28 percent and energy consumption by 14 percent. Kidd stated that it was essential to conduct an assessment and establish a baseline in energy and water usage to identify target areas for improvement that would generate the greatest potential savings.



Panelists pointed out that the Millennial Generation has been the primary driving force behind the significant trends in urban development, real estate investment, and use of public transportation. Leinberger states that the growth in gross domestic product (GDP) and vehicle miles traveled (VMT) had a one-to-one ratio until the mid 90's, when it began to level off. As the Millennials peaked in 2001, VMT began to drop. Individuals ages 16 to 34 were no longer relying heavily on the automobile as a form of mobility as they moved into walkable and transit-oriented neighborhoods.

Using local examples, Leinberger explained that due to the demand in walkable urban places, price premiums in Downtown DC have increased, while prices in Tyson's Corner, Virginia have decreased. "Research has shown that moving from driveable suburban to walkable urban reduced the amount of energy consumption and greenhouse gas emissions by 50 to 80 percent", Leinberger notes. Therefore, people living or working in walkable urban places used less energy on a day-to-day basis.

The session also focused on the development and use of public transportation in the urban infrastructure and its environmental and economic benefits including potential for significant energy savings. "Public transportation has net savings of 4.2 billion dollars in petroleum each year", Melaniphy stated. Speakers acknowledged that there is a great need to mobilize people efficiently by providing them with accessible and efficient public transportation. Melaniphy highlighted that much of the business in cities are domestic, but internationally owned, and many would establish locations in competitive cities with reliable public transportation for their employees.

Speakers encouraged using a holistic approach and collaborating with a variety of stakeholders such as local residents, local authorities, and private partners to successfully build resilient communities. Ms. Miller noted that regional plans should connect low-income and mix-income housing and promote community engagement.

Another approach mentioned was to raise the bar on energy performance, especially for vulnerable communities, by leveraging public and private investments. Ms. Miller indicated that these investments could save money for residents, tax payers, and the government. She also explained how HUD focused on opportunities through market transformation by launching financial products such as loan programs to finance small energy efficiency retrofits for single- and multi-family homes. HUD also provided grants such as the Community Challenge Planning Grant to promote sustainable development.

In summary, experts highlighted the importance in making strategic investments in energy efficiency and sustainable planning in order to strengthen neighborhoods that are isolated from essential urban elements that contribute to a healthy liveable environment and economic growth.