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Rebooting Your Energy Code

Sep 27th, 2023

Ensuring states and cities update their energy codes is a priority for the U.S. Department of Energy (DOE), given that energy use in buildings contributes ~27% of global CO2 emissions. The DOE has provided technical support for states and cities interested in updating the energy codes for decades. Through the Infrastructure Investment and Jobs Act and Inflation Reduction Act, these efforts are going through a massive expansion—for the first time the DOE has $1.25 billion specifically earmarked in grants for specialized Technical Assistance organizations, and states and cities directly.

This session, hosted on September 27th, 2023, brought together representatives from the U.S. Department of Energy's IRA Codes Program as well as the City of Fort Collins, CO, a recipient of the DOE's Resilient and Efficient Building Code (RECI) grant, to explore how cities can seize this historic opportunity to update state and city buildings codes to meet modern energy efficiency standards.

Speakers

Erin Beddingfield, State and Local Engagement Lead, IRA Codes Program, U.S. Department of Energy

Brad Smith, Project Manager, Building Energy Codes, City of Fort Collins

Key insights from the conversation

- **When it comes to code updates and enforcement, it is on cities to lead.** Even in areas of the country where code is set by the state, Erin pointed out that *"most of the time the enforcement falls to the locality...that's where the permitting offices are. That's where the building compliance offices are."* It is a particularly opportune moment for cities to approach state leaders who may be hesitant about passing a code update, to underscore that funding and resources are available to defray the cost. Fort Collins is a strong example of how a "first mover" city can have impact across a state. In Fort Collins, over 60% of emissions are derived from building energy usage—so when the City of Fort Collins was setting its climate action plan, it decided to commit to net-zero emissions from the built environment by 2030. That catapulted Fort Collins ahead of the State, and Fort Collins has since played an active role in working with the Colorado Energy Office to set state level policy.

- **But building energy code reform involves multiple levels of government working together.** In the United States, model energy codes are issued by standards bodies–specifically ASHRAE (commercial buildings) and the IECC (residential buildings)—which release code updates every three years. The DOE then works with the National Labs to issue recommendations on which model code provisions state and local governments should adopt, and track adoption patterns on EnergyCodes.Gov. In some parts of the country, energy code adoption is a state-level decision. In others, it is a city-level decision. Many geographies have a hybrid approach, with the state setting energy code minimums, and cities choosing to impose their own "reach" codes that aim to achieve a more advanced level of energy efficiency.

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- **Cities should collaborate with technical assistance organizations and their state to access federal funding for building energy code updates.** Two buckets of funding are already available. The RECI program is funded by IIJA, and disbursed $225 million dollars in its first year to Technical Assistance organizations to help states and cities on their code journey. The DOE has made an initial $400M in funding available to states, spread across two categories: $240M to adopt the latest energy code and $160 million to adopt "reach" zero-energy provisions. Cities should contact RECI recipients for technical assistance, and to their state to coordinate on accessing IRA funding.

- **The first step to updating your energy code is benchmarking.** According to Erin, by checking EnergyCodes.gov, cities can *"see where your [state's] codes are, where your compliance and enforcement processes are, and see where there's an opportunity to update those to either the latest model codes or to go beyond [to zero code provisions]."* Once you have a sense of the letter of the law, it is also helpful to understand the actual compliance rate. Fort Collins has used funding from the DOE to develop a rigorous methodology and dashboard for monitoring compliance activity. According to Brad, *"we started out at an initial compliance rate of about 73%, which is better than the national average...even though we all strive to be 100% compliant, I think that's really, really, really difficult to achieve. And right now, we're probably in the mid to high 80%."* This real-time monitoring is key to ensuring code updates have their intended impact, and Fort Collins is now working with other cities in Colorado to assist them in their own compliance activities.

Links from the Conversation

RECI Grants Recipients - Technical Assistance organizations that offer support

IRA Formula Funding - Available to states to implement code updates

EnergyCodes.gov - Check out the code status of your state!

About the Tech and Innovation Center Series (T&IC)

The T&IC series is dedicated to helping local leaders navigate and understand the large quantities of information from the federal government on the nearly 400 funding opportunities available through the Bipartisan Infrastructure Law. The series is focused on how cities can leverage technology to improve their federal infrastructure funding proposals over the next 18 months. Programs will focus on helping cities improve their proposals in response to Notices of Funding Opportunities (NOFO's) by adopting state-of-art technologies, expanding their technology capacity, and integrating aspirational technology "moonshots" for their cities.

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