ENERGY CODES BOOTCAMP & TOUR Tuesday, May 2	
1:00 – 4:00p	Tour – Kinexx Modular Construction Manufacturing Plant *(must sign up in advance)*
1:00 – 5:00p	Energy Codes 101 RES*check* Basics COM*check* Basics
5:30 – 6:30p	Welcoming Reception

Day 01 Wednesday, May 3			
8:00 – 9:00a	Registration & Breakfast		
9:00 – 9:30a	Welcome & Opening Remarks xxxxx, DOE Building Energy Codes Program xxxxx, DOE Building Technologies Office		
9:30 – 10:00a	Keynote		
10:00-10:30a	Break		
10:30 – 11:30	Bipartisan Infrastructure Law and Inflation Reduction Act		
11:30 – 1:00p	Networking Lunch and Awards		
1:00 – 2:30p	Decarbonizing Energy Codes: Weighing Effectiveness, Adoptability, and Enforceability	Navigating DOE Energy Code Funding: Past, Present, and Future Opportunities	(Discussion) BPS and Codes: Making Sure the Left Hand Knows What the Right Hand is Doing
2:30 – 3:00p	Break		
3:00 – 3:30p	Lightning Round – How Do We Get Energy Codes to Where They Need to Go in the Next 10 Years?		
3:30 – 5:00p	What's the Latest in the IECC and 90.1 Model Code Development Cycles?	What States and Cities Ought to Know About Macro Trends Impacting Multifamily Properties	(Discussion) Building Up the Workforce: Strategies to Reach Students and Working Professionals

Day 02 Thursday, May 4			
7:30 – 8:30a	Registration & Breakfast		
8:30 – 9:30a	Keynote		
9:30 – 10:00a	Break		
10:00 – 11:30	Building Performance Standards: Adoption, Implementation, and Lessons Learned	The Suite Life: Benefits of Adopting all Codes	(Discussion) Leveraging Relationships to Encourage Program Buy-In and Improve Code Compliance
11:30 – 12:30p	Networking Lunch		
12:30 – 2:00p	How Valuing Resilience Demonstrates Energy Codes Benefits for Grid Stability and Life Safety	Saving Water and Saving Energy in Growing Communities	(Discussion) Lessons Learned with Electrification Stretch Codes
2:00 – 2:30p	Break		
2:30 – 4:00p	Embodied Carbon: Taking a Lifecycle Approach to Codes	Performance Based Compliance: From Modeling to Quality Assurance	

Session Descriptions

Wednesday, May 3

Decarbonizing Energy Codes: Weighing Effectiveness, Adoptability, and Enforceability: ASHRAE has committed to a net zero carbon 90.1 by 2031, ICC has an Energy and Carbon Advisory Council charting its course, states and jurisdictions across the country are working to decarbonize their energy codes, and Inflation Reduction Act funding for "zero energy codes" is coming this year. With the vast majority of states and jurisdictions relying on the national model energy codes, how will we ensure the push to decarbonize codes is effective for local, state and national actors? How are individual states and jurisdictions looking at the path to decarbonizing their energy codes while working to effectively

implement those they already have on the books? This session will look at these questions from different perspectives and start the conversation about where we all go from here.

Navigating DOE Energy Code Funding: Past, Present, and Future Opportunities: With the passage of the Bipartisan Infrastructure Law and Inflation Reduction Act, DOE has unprecedented levels of funding to support energy code implementation and technical assistance. Historically, the Building Energy Codes Program has advanced energy code implementation efforts by funding activities such as market research, emerging energy code topics, and innovative training programs through Funding Opportunity Announcements (FOAs). In this session, we will explore some examples of current projects and highlight how stakeholders can navigate future funding and be part of the energy code technical assistance solution.

BPS and Codes: Making Sure the Left Hand Knows What the Right Hand is Doing: Building Energy Codes and Building Performance Standards (BPS) may seem distinct at first glance. But beneath the surface, there are important overlaps between BPS and energy codes, and coordinating the two policies should be a key priority for jurisdictions. As jurisdictions increasingly design, adopt, and implement BPS, policymakers and implementing entities are beginning to develop best practices and learn from early adopters about how to align and coordinate their BPS and building energy codes. Session attendees will hear from experts and practitioners in this space, as well as participate in discussion around this nascent policy coordination effort.

What's the Latest in the IECC and 90.1 Model Code Development Cycles?: The model energy codes are important tools to help achieve national, state, and local energy and emission reduction goals. DOE analysis shows national model building energy codes are projected to save $138 billion in energy cost savings, 900 MMT of avoided CO2 emissions, and 13.5 quads of primary energy from 2010 through 2040. Join this session to learn about the latest in the world of model code development. ASHRAE 90.1 recently released its 2022 standard and is now looking ahead to 2025. IECC is well into its 2024 development cycle for the first time using a new standards-based process. This session aims to give attendees an overview of what to expect in the latest versions of the codes and a glimpse of what is likely on the horizon.

What States and Cities Ought to Know About Macro Trends Impacting Multifamily Properties: Multifamily buildings comprise between 40 and 50% of new residential construction across the US, and data suggests these high construction trends will persist. This session will highlight multifamily buildings trends – both market rate and affordable housing – that impact new construction and the built environment. The session will examine the landscape for multifamily buildings with common issues like air leakage, ventilation (indoor air quality), as well as new trends such as all electric buildings. Speakers will also discuss new tools that can help support multifamily owners and developers that support construction or upgrades to buildings in municipalities with strong climate policies. This panel will also consider the variety of adoption and compliance issues that impact the multifamily sector and how new codes, and electrification supports the affordable multifamily sector.

Building up the Workforce: Strategies to Reach Students and Working Professionals: A robust and educated workforce is essential to achieving compliance with energy codes and preparing for future

developments in building energy technologies, practices, and requirements. As many knowledgeable building professionals retire, it is increasingly important to invest in the future workforce. This panel will explore diverse techniques to educate professionals and expand the workforce by bringing new workers into the building industry, particularly through engaging high school and college students.

Thursday, May 4

Building Performance Standards: Adoption, Implementation, and Lessons Learned: Building Performance Standards (BPS) are exciting, outcome-based policies moving the needle on energy performance in existing buildings. Every day, new jurisdictions across the United States are exploring and designing BPS to meet the energy and emissions reduction needs of their existing building stock. As with any new policy movement, questions arise around policy design and implementation specifics. Come learn about BPS best practices, available federal resources, and collaboration-based approaches that allow everyone to achieve their energy and emissions goals.

The Suite Life: Benefits of Adopting all Codes: With the launch of the National Initiative to Advance Building Codes, the White House committed funding and direct technical assistance to support state, local, and tribal governments in updating to the latest building codes and standards. Although codes are developed as a suite - offering a comprehensive community building standard to improve energy efficiency and make buildings more resilient to extreme weather events – they are often adopted in an ad hoc fashion, with some codes, such as the energy code, not being adopted at all. This session will highlight the many benefits of adopting the full suite of codes and provide guidance on how communities can craft the right message and leverage federal funding to adopt and maximize the benefits of all codes, including energy.

Leveraging Relationships to Encourage Program Buy-In and Improve Code Compliance: When we work together, we see the best results. Whether in a large community or one-on-one setting, forming relationships and establishing trust are necessary to ensure the success of a program. This panel will discuss examples of how to build and maintain these relationships and explore the myriad ways these partnerships can be leveraged, including through energy codes collaboratives, circuit riders, and utility engagement, and benefits that come from these relationships.

How Valuing Resilience Demonstrates Energy Codes Benefits for Grid Stability and Life Safety: As extreme weather events become more frequent and intense, the necessity for the adoption and implementation of modern energy codes is becoming increasingly apparent. To date, energy codes have primarily focused on reducing energy costs, energy use, and emissions. However, as climate adaptation becomes a priority, energy codes are also being recognized for their contributions to resilience. Through provisions for efficient building design and operations, energy codes can reduce the impacts of such extreme events. This session will explore how energy efficiency provisions outlined in energy codes promote passive survivability for occupants, enhance human health, and support more resilient energy grids.

Saving Water and Saving Energy in Growing Communities: Across the United States, there is increasing focus on the need to use water efficiently, especially in some of the fastest growing regions of the U.S.,

many of which are experiencing long and/or severe droughts. In addition, water heating is one of the largest end uses of energy in residential and multifamily buildings, so efficient use of water has the additional benefit of saving energy. This session will examine how building energy codes and building product manufacturers are responding to these water conservation challenges.

Lessons Learned with Electrification Stretch Codes: One of the ways some cities and states are working on building decarbonization is through the development, adoption, and implementation of all-electric codes. This session will take the audience through the current landscape for all-electric codes. Speakers will discuss how these codes are being developed and promoted, as well as lessons learned from boots on the ground experience adopting and implementing all-electric codes. This session will seek to answer questions such as, “What are best practices when implementing all-electric codes?,” “How are all-electric codes expected to impact the grid?”, “What other codes or programs can help support the transition to these codes?,” and more.

Embodied Carbon: Taking a Lifecycle Approach to Codes: With the increased interest in quantifying the greenhouse gas emissions associated with a building, there is a push to not only consider operational emissions but also emissions from producing building materials, and the construction and decommissioning of each building. This session will provide an overview of some of the ongoing work to try to quantify the full lifecycle of emissions from a building, and discuss how this could be addressed through building codes.

Performance Based Compliance: From Modeling to Quality Assurance: With the increased push toward decarbonizing the building stock, including net-zero new construction and Building Performance Standards for existing buildings, performance-based codes are receiving more attention. This session will provide an overview of performance-based residential and commercial energy codes, discuss the drivers leading to their expanded uptake, the challenges associated with that uptake, and some of the quality assurance processes being put in place to assure the desired outcomes are met.