International Code Council
500 New Jersey Avenue, NW
Sixth Floor
Washington, DC 20001
t: 888.ICC.SAFE (422.7233)
t: 202.370.1800
f: 202.783.2348
www.iccsafe.org

February 2, 2021

The Honorable Frank Pallone, Jr.
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Bobby L. Rush
Chairman
Subcommittee on Energy
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Diana DeGette
Chairwoman
Subcommittee on Oversight and Investigations
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

Via email

Dear Chairs Pallone, Rush, and DeGette:

Thank you for your interest in the International Code Council ("ICC" or the "Code Council") and the International Energy Conservation Code ("IECC"). We appreciate this opportunity to respond to your January 19, 2021 letter.

The Code Council's model code development process is open and transparent. The Code Council has numerous partners in various sectors of the building safety industry and publicly discloses the membership of its Code Development Committees. While home builders are among those partners, they do not have disproportionate control of the Code Council's model code development process. On the contrary, volunteer government officials with experience and expertise exercise by far the most control in the process. Volunteer government officials have the final vote on any proposed code change, and the Code Council's Board of volunteer government officials determines the final outcome of any appeals. Furthermore, model codes are just models unless they are adopted by government officials, who may pick and choose from model code language and amend it as they see fit. The Code Council is proud of its development processes, which welcome and encourage broad public participation and have resulted in the most comprehensive and widely adopted set of model codes in the country. Moreover, the Code Council is proud that its model codes not only have made significant advancements in safety, but also have greatly improved energy efficiency standards. The result is that our codes provide for resilient and sustainable construction. The Code Council looks forward to continuing its public-private partnerships to further this important progress.

The Code Council's Consensus-Based Code and Standard Development Processes

The Code Council is a not-for-profit organization dedicated to helping communities and the building industry provide safe, resilient, and sustainable construction through the development of model codes ("I-Codes") and standards used in design, construction, and compliance processes. The Code Council develops codes and standards through a public-private partnership driven by the engagement of its more than 64,000 members from the building construction, design, and safety communities. The Code Council is the only organization dedicated to supporting governmental code officials,[1] who are charged with implementing adopted codes, including building energy codes, in the U.S. and abroad. More than 9,000 departments, agencies, and jurisdictions are Code Council members.

The I-Codes are the most widely accepted, comprehensive set of model codes used in the United States. All fifty states, the District of Columbia, and many other countries have adopted the I-Codes at the state or local jurisdictional level to regulate construction and major renovations, plumbing and sanitation, fire prevention, and energy conservation in the built environment.

The I-Codes are revised on a 3-year update cycle through a transparent and inclusive consensus-based process detailed in Council Policy 28-05. Although the Code Council provides the forum for code development, it does not vote on the outcome.

Federal agencies—including the Department of Energy (DOE), Federal Emergency Management Agency (FEMA), National Institute of Standards and Technology (NIST), and the Environmental Protection Agency (EPA)—communities, structural engineers and architects, energy offices and advocates, members of the construction industry, and the fire service are active participants in the code development process, ensuring the final consensus result balances cost, safety, and other public interest considerations.

Anyone can submit code change proposals via the Code Council's cloud-based program, cdpACCESS. The Code Council built cdpACCESS to make participation in the code development process easier and more convenient and to encourage widespread participation.

Code Council staff reviews each proposal and assigns them to the applicable Code Development Committee. The Code Development Committees[2] then hold Committee Action Hearings, where they hear testimony, ask questions, and, subsequently, either approve, approve with modifications, or disapprove each code change proposal. Anyone can submit public comments via cdpACCESS on the results of the Committee Action Hearing.

The Code Council then holds Public Comment Hearings on submitted comments, where eligible voters discuss and vote to set the agenda for the final step in the process – the Online Government Consensus Vote. "Eligible voters" are made of up of individuals who work for government agencies protecting the

[1] The Code Council supports governmental members through membership councils, chapter development and leadership tools, networking opportunities and job listings, discussion forums, best practices resources, free code opinions, discounted training, certifications, and publications, and advocacy at all levels of government on everything from vaccine distribution for code officials to CARES Act funding to address departments' virtual capability needs.

[2] The Code Council's procedures regarding appointments to these committees are discussed in response to Question 3 of your January 19, 2021 letter below.

public's health and safety and who have no financial stake in the outcome of the model code revision. Following the Public Comment Hearing, eligible voters vote online in the Online Governmental Consensus Vote. The Code Council's Validation Committee reviews the results from a third-party auditor and the Code Council Board of Directors confirms the final results.

The Code Council encourages all interested parties in the private and public sectors to get involved. The code development process for the 2024 I-Codes is already underway, with Committee Action Hearings on several 2024 I-Codes to take place virtually April 11 – May 5, 2021.

The Code Council also develops and maintains standards. Standards Development Committees are composed of stakeholders, including governmental members.

The Code Council's standards process is governed by Council Policy 12-03. Standards committees are balanced in accordance with the Code Council's Consensus Procedures, which comply with the American National Standards Institute's (ANSI) Essential Requirements. Standards committee members are appointed in the same manner as Code Development Committee members. As with our code development process, anyone can submit recommended changes to Code Council standards and participate in committee meetings, and the Code Council provides for public review and comment on proposed changes. Committees review and adjudicate comments, consistent with the Code Council's Consensus Procedures. Standards committees conduct lengthy biweekly or monthly meetings to review public input and to establish project team and work group meetings as necessary to work through disagreements. The Code Council actively produces 15 standards currently and the I-Codes reference over 1,500 standards. A leading example of our standards activity is the ANSI/ICC A117.1: Standard for Accessible and Usable Buildings and Facilities, which is the national compliance tool for the Fair Housing Act's accessibility requirements for the design and construction of buildings.

As described below in its specific responses, the Code Council takes care to ensure a diverse and balanced representation on its Codes Development Committees and Standards Development Committees, the make-up of which is and long has been public.

Sustainable Development

As your January 19, 2021 letter recognizes, the "IECC is an important element of national energy policy and a major tool in our efforts to address climate change." The Code Council and its legacy organizations have been leaders in developing energy codes for over four decades. The IECC was introduced in 1998 and addresses the design of energy-efficient buildings and the installation of energy efficient mechanical, lighting, and power systems. Code officials recognize the need for a modern, up-to-date energy conservation code.

The Code Council's IECC has achieved significant energy efficiency improvements over the past 15 years. Based on data from DOE and the Pacific Northwest National Laboratory (PNNL), the Energy-Efficient Codes Coalition affirms that the 2021 IECC is expected to be 8-14% more efficient for residential buildings and 11% more efficient for commercial buildings than the 2018 IECC and 43-47% more efficient for residential buildings and 39% more efficient for commercial buildings than then 2006 IECC. That's due in part to the adoption in the 2021 IECC of dozens of code change proposals proposed by leading energy efficiency advocacy organizations. The Code Council understands that energy efficiency is central to the battle against climate change and is proud that the IECC furthers that goal.

The Code Council is committed to providing code officials, policymakers, and the construction community with the tools necessary to meet their energy objectives. That includes providing tools for communities seeking to achieve net zero construction by 2030 (as supported by President Biden for commercial buildings) or 2050 (as the U.S. Conference of Mayors has proposed for residential buildings using the IECC) and communities seeking to incorporate renewable energy, electric vehicle charging, energy storage, electrification, and/or embodied carbon considerations in their construction standards.

The 2021 IECC contains optional appendices, which provide compliance pathways for communities to require or incentivize zero energy buildings. The residential zero energy appendix was proposed by the New Buildings Institute and the Natural Resources Defense Council. Using the IECC's energy rating index (ERI) scores, the baseline energy use within the 2021 IECC is expected to exceed the energy use levels in the zero energy appendix by 10% or less in climate zones 2-8, which account for roughly 99% of residential energy use, and 12% in zones 0-1. Were the IECC to continue to achieve efficiency improvements consistent with its historical average—roughly 8% per code cycle from 2006 to 2021—it could approach President Biden's goal of net-zero buildings by 2030.

Model Code Adoption

To achieve the energy efficiency goals furthered by the IECC, the model code must be adopted and effectively implemented. Code adoptions require support from diverse stakeholders, including: decision makers in the executive branch, governors, and mayors; policy experts, like state and local energy and sustainability officials; code officials, who are both charged with enforcing the proposed policy and who are frequently charged with adopting and enforcing it through building standards and code commissions; construction and design professionals charged with adhering to the proposed policy; and other nongovernmental stakeholders who can inform determinations through policy and implementation expertise. When these diverse interests reach consensus and align, everyone benefits. Consensus promotes code adoption and effective implementation, which is critical to ensuring the benefits the adopted code provides are carried through in the field.

The Code Council has included an appendix with this submission, detailing several interrelated federal policy recommendations which would collectively increase the adoption and successful implementation of strong energy codes in the U.S. and abroad. These proposals note the roughly 45% improvement states saw with adequate training on their adopted energy codes and the fact that roughly a third of states remain on the 2009 IECC or have adopted subsequent editions with amendments that affect efficiency outcomes.

The Code Council looks forward to continued partnership with federal, state, and local governments, and respectfully submits the following responses to your January 19, 2021 letter.

1. *Why was the decision made to guarantee seats to NAHB representatives on Code Council committees? Your response should include an explanation and timeline of the process by which this decision was made and a description of roles and responsibilities of any Code Council and NAHB employees, members, or representatives in reaching this decision.*

The International Code Council was established in 1994, with the goal of developing a single set of national model construction codes. The Code Council's establishment brought together three different organizations that had developed three separate sets of model codes: the Building Officials and Code Administrators International, Inc. (BOCA), International Conference of Building Officials (ICBO), and

Southern Building Code Congress International, Inc. (SBCCI). The Code Council published the first set of unified national model codes, the I-Codes, in 2000.

The Code Council and the National Association of Home Builders ("NAHB") entered into an agreement on February 9, 2002. The 2002 agreement was executed by William J. Tangye, PE the Code Council's then Chief Executive Officer, and Gerald M. Howard, the then Executive Vice President and Chief Executive Officer of NAHB. The agreement was updated on September 28, 2005. The 2005 agreement was executed by then Code Council President Frank P. Hodge, Jr., CBO and David L. Pressly, Jr., then President-Elect of NAHB.

The Code Council-NAHB agreement is enclosed. As reflected in the preamble to the agreement, the Code Council and NAHB entered this agreement when regional building codes predominated, and no national model building codes existed. NAHB shared the Code Council's interest in a coordinated set of national model building codes. NAHB recognized the need for a simple, user-friendly, and stand-alone residential building code that included housing affordability as a major determinant in its development. The Code Council valued the active participation of the home building industry in the drafting and code development process, particularly given their position in the industry as a primary code user. The agreement describes Code Council and NAHB support for continued participation by NAHB in the I-Code development process and efforts to support I-Code adoption. The International Residential Code (IRC) is now adopted or in use in 49 states. Last year FEMA reported that Florida, a leader in the adoption and effective implementation of building codes, including the IRC (as adopted through the Florida Building Code), benefits from the flood and hurricane mitigation measures therein to the tune of $680 million in average annual losses avoided.

2. *Please provide a copy of any written materials, including but not limited to any written agreement or memorandum of understanding between Code Council and NAHB, including but not limited to any materials that discuss seating commitments on any Code Council committees.*

As said, the 2002 Code Council-NAHB agreement and 2005 amendment are enclosed.

The Code Council and NAHB also have an agreement regarding the rights and obligations in connection with the publication, sale, and distribution of the Code Council 700-2020 National Green Building Standard. More than 250,000 dwelling units have been built to this standard. The agreement between the Code Council and NAHB regarding the publication, sale, and distribution of the National Green Building Standard constitutes confidential, proprietary information. It is not relevant to the development of the IECC and not responsive to Question 3 of your January 19, 2021 letter.

3. *Please explain any privileges or authorities currently granted to any organizations or stakeholders with respect to Code Council committee membership. Your response should address whether those entities are authorized to appoint or remove members to Code Council committees, the process for doing so, and how many appointments or removals are authorized.*

The Code Council interprets this question as pertaining to Code Council Code Development Committees, which serve as the conduit through which code changes are considered, pursuant to the Code Council's Code Council Policy 28-05, and Standards Development Committees, which serve as the conduit through which standards are developed and amended pursuant to the Code Council's Consensus Procedures. The Code Council relies on volunteers with experience and expertise to vet code change proposals. For example, in addition to representatives from the home building industry, the IECC Code Development

Committee for residential structures that oversaw development of the 2021 IECC included a representative from the Southwest Energy Efficiency Project, New York City's Chief Sustainability Officer, an architect, and governmental code and energy officials.

To participate on a Code Development Committee, applicants must apply to our Codes and Standards Council, and be qualified under the provisions of Code Council Policy 7-04 (which sets forth general guidelines for the establishment and operations of Code Development Committees).[3] Anyone can apply to serve on these committees. The Codes and Standards Council's recommendations are sent to the Code Council Board of Directors. Under the Code Council's bylaws, our Board is composed of 18 volunteer government officials who have been elected by their peers. Members of each Code Development Committee fall into one of three interest categories:

- General: government regulatory agencies;
- User: building owners, designers, insurance companies, private inspection agencies, academics; and
- Producer: builders, contractors, manufacturers, distributors, and labor.

The Code Council Board makes the final determination regarding committee appointments. Appointees, and anyone else participating in Code Council activities, are subject to the Code Council's Code of Ethics.

The members of each Code Development Committee are disclosed in a public facing roster, available here. The roster reflects when a committee member is a representative of a particular organization or trade group.

The Code Council has agreements with several organizations whose participation, expertise, and support for the final, consensus-based product is important to ensuring that the I-Codes and Code Council standards are accepted by their respective fields and adopted by government code bodies across the country and abroad.

- The enclosed agreement with NAHB provides that one-third of voting members of the International Residential Code (IRC) Code Development Committees (building, energy, mechanical, plumbing)[4] consist of representatives from the home building industry, nominated by NAHB, that one representative from the home building industry, nominated by NAHB, shall participate on the International Building Code (IBC) Development Committees (fire safety, structural, means of egress, and general), and that one representative from the home building industry, nominated by NAHB, shall participate on standards committees that develop construction requirements intended for residential and light commercial construction. The IBC establishes minimum requirements for building systems using prescriptive and performance-related provisions. It applies to all buildings

[3] The NAHB-Code Council agreement produced under Question #2 discusses the establishment of a conduit, through Code Council Policy 7-04, under which Code Council partners could submit Committee applicants. Code Council Policy 7-04 addresses this as follows: "To provide the broadest possible opportunity for individuals to participate on Code Council committees, the Code Council shall make a public announcement for applicants to fill vacant positions on committees. This announcement shall include: 1. A notice posted on the Code Council lead in web page 2. A notice in all applicable Code Council ePublications 3. A specific notice to the IAC [Industry Advisory Council] 4. A formal request for qualified nominations from Code Council's strategic partners who have demonstrated a commitment to the organizations public safety mission, the Governmental Consensus Process, and represent a broad cross section of users and producers."

[4] Based on governmental membership approval of a code change within the 2009/2010 cycle, which coordinated the residential energy provisions of the IRC with the IECC, in a May 2011 open session, the Code Council Board determined to apply the terms of the NAHB agreement to the IECC.

(including multifamily) except detached one- and two-family dwellings and townhouses up to three stories. The IRC comprises all requirements, including building, energy, mechanical, fuel gas, plumbing, and electrical requirements, for one- and two-family dwellings and townhouses up to three stories.

Respectfully, NAHB does not exercise "disproportionate control over the code development process," with respect to the IECC or otherwise. Jan. 19, 2021 Letter at 1. Like all long-time code development stakeholders, the home building industry has at times been supportive of our process and its outcomes and at times been less so.[5] As noted above, NAHB's nominees, like all nominees, must be reviewed by the Codes and Standards Council and approved by the Code Council Board of government officials.

- The Code Council has an agreement with the International Association of Fire Chiefs (IAFC), which provides that two members of the International Fire Code (IFC)/International Wildland-Urban Interface Code (IWUIC) Development Committee and one member of the International Building Code-Fire Safety (IBC-FS) Code Development Committee consists of representatives from the IAFC, nominated by the IAFC, reviewed by the Codes and Standards Council, and approved by the Code Council Board. The IFC establishes minimum requirements for fire prevention and fire protection systems using prescriptive and performance-related provisions. The IWUIC establishes minimum requirements for land use and the built environment in designated wildland-urban interface areas.

- The Code Council has an agreement with the National Association of State Fire Marshals (NASFM), which provides that two members of the IFC/IWUIC Code Development Committee and one member of the IBC-FS, International Existing Building Code (IEBC), and IBC-Means of Egress Code Development Committees consists of NASFM members nominated by NASFM, reviewed by the Codes and Standards Council, and approved by the Code Council Board. The IEBC covers repair, alteration, addition, and change of occupancy for existing buildings and historic buildings, while achieving appropriate levels of safety without requiring full compliance with the new construction requirements contained in the other I-Codes.

- The Code Council has an agreement with the Association of Pool and Spa Professionals (APSP), now called the Pool and Hot Tub Alliance (PHTA), which provides that one-third of the members of the International Swimming Pool and Spa Code (ISPSC) Development Committee consists of members nominated by PHTA, reviewed by the Codes and Standards Council, and approved by the Code Council Board. The ISPSC was developed with ASPS/PHTA to establish minimum regulations for design and construction of public and residential pools, spas, and hot tubs using prescriptive and performance-related provisions. It integrates with the family of I-Codes and contains requirements that meet or exceed the Virginia Graeme Baker Act.

[5] *See, e.g.*, *Hearing on Solving the Climate Crisis: Clean, Stronger Buildings Before the U.S. House Select Committee on the Climate Crisis* (Oct. 17, 2019) (statement of Jimmy Rutland President, Lowder New Homes, on behalf of the National Association of Home Builders) ("Use of the Latest Published Codes Problematic"); *NAHB Makes a Case to Streamline Code Development*, NAHBNow (Oct. 19, 2016) ("ICC must put the brakes on the complicated code development process so that builders, code officials and other home building professionals can take a step back to study the state of building science and advances in technology and make cost-effective recommendations for change, rather than constantly wade through thousands of code proposals from hundreds of interest groups in the hopes of coming to a consensus").

- The Code Council has an agreement with the American Gas Association (AGA), which provides that the Code Council and AGA each propose appointees for 50% of the International Fuel Gas Code (IFGC) Development Committee, with the Chair agreed to by both parties. The IFGC is written in mandatory, enforceable code language and contains requirements that are either not addressed in or are more rigorous than the AGA and NFPA ANSI Z223 standard for the installation and operation of gas piping and gas equipment on consumers' premises, which the IFGC integrates. The purpose of the IFGC is to regulate installations to protect life and property from the potential dangers associated with the storage, distribution, and usage of fuel gases and the byproducts of combustion of such fuels. The IFGC does not address energy utilization.

- The Code Council has an agreement with the Canadian Standards Association (CSA), which provides that the CSA and Code Council each propose appointees for 50% of the Joint Technical Committee responsible for developing and maintaining the technical content of the CSA B805-18/ICC Rainwater harvesting systems standard. The rainwater harvesting systems standard applies to the design, materials, installation, and operation of rainwater harvesting systems for potable and non-potable applications.

- The Code Council has an agreement with the Residential Energy Services Network (RESNET), which provides that RESNET proposes appointees for one-third, the Code Council for one-third, and RESNET and the Code Council jointly for one-third, of a joint committee that develops and maintains the ANSI/RESNET/ICC 850 Standard Calculation and Labeling of the Water Use Performance of One- and Two-Family Dwellings.

4. *Has Code Council entered into an agreement with any other organization which guarantees committee representation or otherwise affects the IECC development process? If yes, please provide a list of stakeholders and a copy of any agreement.*

The Code Council has identified its agreements with other organizations relevant to its code and standard development processes in response to Question 3.

5. *Has Code Council conducted any analysis of how changes to committee composition – including, but not limited to, increasing or decreasing industry representation or participation – may impact the development of building codes designed to maximize energy efficiency and achieve significant emissions reductions? If yes, please describe these efforts and provide any materials prepared as part of such an evaluation.*

The Code Council has developed its consensus model for code development over decades, building on the experience of its predecessor organizations. While the Code Council has not conducted a specific analysis regarding the impact of changes to committee composition on the development of the IECC, in the Code Council's experience, an open and transparent process drawing on expertise across stakeholders and relying in significant part on guidance from government officials results in strong consensus and code adoption.

6. *The IECC has proposed changes to the code development and voting process which would remove the need for government consensus during future code adoption cycles. Please explain the rationale for this proposal, including whether the IECC has performed any analysis of potential impacts and a description of any stakeholder engagement and input. Please also explain the extent to which any*

agreements described in questions 1-4 would apply to a revised code development and voting process.

As publicly announced, and subject to public comment, the Code Council is considering whether to move from a code development process to a standard development process for the IECC. Respectfully, if Code Council moves to a standard development process, the Code Council would not "remove the need for government consensus" or remove governmental members from the development process for the IECC. If the IECC is developed as a standard, the IECC would be updated using the Code Council's Consensus Procedures, which comply with ANSI's Essential Requirements. Those Procedures promote equivalence in voices for standard development, with specific provisions to prevent dominance by any interest category.

In September 2020, following feedback from many different stakeholders in conjunction with four appeals submitted in accordance with Council Policy 28-05 to the results of the energy code changes in the 2019 cycle, the Code Council Appeals Board recommended that the Code Council Board of Directors consider developing a Code Council energy standard to replace the IECC and Chapter 11 of the IRC. Because energy efficiency is highly technical and evolving, the Appeals Board concluded that revisions to the IECC would benefit from the additional time for debate and continual updating that is afforded by a standard development process.

In October 2020, the Code Council Board asked the Board Committee on the Long-Term Code Development Process ("Blue Ribbon Committee") to consider the potential change in the IECC's development in more depth and to come back to the Board with a recommendation. The Code Council Board established the Blue Ribbon Committee in 2018, which serves as a formal venue for stakeholders to provide feedback on the code development process itself, and to suggest changes. The Committee draws expertise from a diverse set of sectors, including government, construction, engineering, energy conservation, product, insurance, and standards development.

The Blue Ribbon Committee met multiple times to discuss the charge the Code Council Board put to them and collected input from all sides of the debate. At their November 20, 2020 meeting, the Blue Ribbon Committee voted to recommend moving the IECC to a standard development process.

On December 16, 2020, the Code Council Board considered the information from the Blue Ribbon Committee and put forth a framework for the possible change in the IECC's development. The Board called for a public comment period to collect additional feedback from members and stakeholders. The public comment period was announced on December 18, 2020 and closed on January 11, 2021. The Code Council received comments both for and against the proposed change, and those comments are available here. Oral presentations made before the Board January 21st can be viewed here. The Code Council is currently considering these public comments.

Respectfully submitted,

Dominic Sims
Chief Executive Officer
International Code Council

APPENDIX – ACHIEVING POLICY OUTCOMES THROUGH MODEL CODES

In his first days in office, President Biden has made it clear that the new Administration will prioritize tackling the climate crisis, with building energy codes as an important component of that work. In an Executive Order issued on the first day of his presidency, President Biden directed the Department of Energy to review its prior determinations on energy savings associated with ASHRAE Standard 90.1 and the 2018 IECC. The Code Council looks forward to working with the new Administration and Congress to realize the efficiency gains captured in the IECC and to advance measures to help communities realize energy efficiency goals.

Promoting Code Updates and Current Code Adoption

To advance energy efficiency in the U.S., we need both more stringent model energy codes and greater adoption of the existing ones. The Code Council would welcome the Committee's support, not only for the former, but also the latter.

The American Recovery and Reinvestment Act (ARRA) sec. 410 provided $3.1 billion through the State Energy Program to states that adopted and agreed to enforce the then 2009 IECC and ASHRAE 90.1-2007. As of September 2009, only two states met or exceeded the 2009 IECC or ASHRAE's 90.1-2007 efficiency standard. By January of 2011, nearly a third of states had adopted codes that met or exceeded ARRA's energy code incentive. Most states have continued to adopt more current codes. Eight states that leave aspects of code adoption to local governments have adopted energy codes that meet or exceed ARRA's targets and are applicable statewide.

However, 10 states have not updated their codes beyond the standards ARRA supported. Per PNNL, 6 states currently on the 2015 IECC would see efficiency improvements by adopting the 2018 model IECC that more than double the efficiency increase DOE determined between the 2015 and 2018 editions of the IECC model code. States on the 2012 edition would see roughly ten-fold improvements by adopting the model 2018 IECC over the efficiency increase DOE determined between the 2012 and 2018 editions of the IECC model code. Seven states have no statewide energy code. While many jurisdictions in these states have adopted modern codes, many, particularly in growth areas, have not. Per FEMA, 30 percent of new construction has taken place in communities with no codes or codes that have not been updated this century. No states have yet adopted the 2021 IECC, which provides an 8-14% increase in efficiency over the 2018 edition.

Resource challenges at the state and local level have been repeatedly raised by our members as an impediment to up-to-date code adoptions. The Code Council supports $200 million to spur state and local adoptions of more up-to-date model energy codes. A $200 million investment is consistent with the funding level proposed in the Energy Savings and Industrial Competitiveness Act of 2019. The Code Council hopes the Committee will support this proposed investment through future authorizations and appropriations. These direct investments in adoptions could be coupled with further incentives that both encourage adoption of up-to-date energy codes and the construction and retrofit of energy efficient residential and commercial buildings. Together, these measures would help achieve President Biden's goal of reducing the carbon footprint of the building stock 50% by 2035.

We also welcome the opportunity to work with the Committee and others in Congress to encourage countries without codes or with weak codes to adopt U.S.-developed model building and energy codes that reduce greenhouse gas emissions by making buildings more structurally-sound (and therefore long-

lasting), energy efficient, and resilient against natural hazards. Training to ensure the successful implementation and enforcement of adopted codes is also important. This effort would be consistent with President Obama's Executive Order 13677 - Climate-Resilient International Development, which has not been rescinded, and the mitigation planning USAID integrates into its investment strategy.

Greater adoption and effective use of U.S. building codes abroad also strengthens the competitive position of U.S. companies, whose products are designed to cost effectively adhere to the higher standards U.S. building codes require. Adoption of U.S. building codes abroad promotes U.S. exports.

Lower- and middle-income countries previously have leveraged U.S. codes to improve energy conservation (e.g., CARICOM's Regional Energy Efficiency Building Code and Mexico's Energy Conservation Code). Countries in the Arabian Gulf region also have looked to U.S. codes as the basis for their own standards governing safe and sustainable construction. The Code Council is currently working with a South Asian country to develop and successfully implement a building safety infrastructure where previously none existed.

To boost the adoption and effective implementation of U.S.-developed model building and energy codes abroad, the Code Council supports the establishment of a dedicated grant program to spur these activities. Though it might most logically be housed at USAID, the activities would benefit all U.S.-funded international development activities including through the Millennium Challenge Corporation and the Development Finance Corporation, as applicable, and could be coordinated with DOE's Office of International Affairs. We would encourage that such a program be excepted from any co-funding obligations under USAID's traditional nonfederal matching requirements to ensure the effort's widespread use.

Promote Code Official Training to Ensure Effective Implementation

To have consequence, adopted codes must be effectively implemented and enforced in the field. Strong code enforcement includes adequate staffing, personnel certification that demonstrates an understanding of the codes being enforced, and continuing education on code updates, improvements in building sciences, and best practices. Strong code enforcement ensures that the public safety, resilience, energy efficiency, and sustainability benefits furthered by model codes are carried through in the field. Better trained code officials have a more complete understanding of how codes and code provisions interact to effect the intent. This ensures more consistent code application and a complete understanding of all available compliance pathways, both of which are beneficial to industry and the public. These benefits have been quantified in several instances. For example, strong code enforcement can help to reduce losses from catastrophic weather by 15 to 25 percent.

Strong code enforcement also can meaningfully boost energy efficiency in buildings. A significant gap exists between the efficiency levels required in codes and the efficiency levels achieved in the field. This is influenced by the limited number of training requirements for code officials on the energy code. Although about two-thirds of states require code official certifications, only seven states require training on energy code provisions.

DOE residential field studies have demonstrated that adequate training is one of the keys to effective implementation—after training and education in 7 states, annual energy costs due to varying levels of code compliance decreased by an average of about 45 percent. Of the 7 states studied, only Pennsylvania required code official certification to the Commonwealth's energy code. Pennsylvania's

improvement, post training, was among the smallest observed (5.9 percent), which means that, due to its training requirements, the Commonwealth was among the best at capturing the savings provided by the code.

Improved resilience and efficiency outcomes through training requires continuity through a dedicated and diverse workforce. According to a Code Council survey, 55% of code officials are over 55 years old, meaning that much of that workforce will be retiring in the coming years. Per the U.S. Department of Labor (DOL), the local governments that hire the overwhelming majority of code officials nationwide are expected to see hiring needs that exceed the national average by 65%. DOL also reports that code officials' average salary exceeds $60,000, 50% more than the national average. Many of these positions do not require post-secondary education. The certifications they commonly require are typically portable state-to-state and cost a fraction of what must otherwise be invested in obtaining a post-secondary degree.

To address outstanding code official and construction industry training needs, the Code Council supports the $250 million investment proposed within the Energy Savings and Industrial Competitiveness Act of 2019. Within that funding, the Code Council proposes that Congress provide $12 million to encourage current and future state/local code officials to achieve certification on an energy conservation code their department enforces. The Code Council believes these efforts could be further advanced by incentivizing the adoption at the state and local levels of certification requirements for energy codes.

This investment would help address President Biden's goal of reducing the carbon footprint of the building stock 50% by 2035 by ensuring that current and newly adopted energy codes are properly implemented. It's also consistent with President Biden's commitment to provide resources to "train builders and inspectors."

Code Department Modernization

Building departments are instrumental in advancing energy efficiency through permitting, plan review, and inspections. Many departments have seen chronic underfunding, impacting the speed of project approvals. Modernizing code departments to support increased electronic capabilities will enhance their ability to achieve federal level goals including the President's goal to upgrade 4 million commercial buildings and weatherize 2 million homes over 4 years as well as spur the construction of 1.5 million energy efficient, accessible homes.

The pandemic has highlighted the need for modernization by shedding light on departments' ability to operate remotely. Although the U.S. Department of Homeland Security has determined the work of building and fire prevention departments to be essential to the nation's response to the coronavirus pandemic—and no state has made a contrary determination—about half of departments do not have the capability to remotely carry out critical aspects of their work. That's unacceptable given code departments' vital role in communities' pandemic response, resilience, economic recovery, and long-term success.

Investments that establish or improve virtual capabilities, including the deployment of technology that enables remote plan review, permitting and inspections, as well as online access to codes and standards, can also help mitigate permitting challenges for the construction we need now. Further, the use of these technologies can speed the restart of the economy and produce lasting reductions in operational costs and permitting timelines. The Code Council has found a 20 percent increase in code department

productivity by moving from paper to electronic inspection logs. Reduced processing times will lead to savings for both consumers and the construction industry.

Cloud-based, expedited permit processing for common, straight forward installations can save time and promote consistency. The solar industry is currently supporting the Solar Automated Permit Processing platform (SolarAPP), a web portal designed to expedite permitting for certain common types of residential solar installations. They have also supported the American Energy Opportunity Act (H.R. 5335), included as sec. 2302 of the House-passed energy omnibus (H.R. 4447), which would provide $100 million over five years to improve SolarAPP and encourage communities to adopt it. Similar investments ($100 million over five years) should be made to develop expedited permitting for other common types of straightforward installations that promote energy efficiency and/or resilience (e.g., replacement HVAC equipment and water heaters, re-roofing, and replacement windows/safety glazing) and post-disaster reconstruction activities, modeled after the proposed approach for solar.

To ensure code departments are able to process the demands posed by the President's construction and rehabilitation goals over the timeline proposed, the Code Council supports a federal investment of $345 million to help code departments across the country modernize by leveraging e-permitting, e-plan review, remote virtual inspections (RVI), and digital code software. This funding would help address the technology gap in communities without e-permitting, e-plan review, and RVI capabilities, and those currently dependent on an inadequate collection of hardcopy codebooks. More funding would be required to assist communities with partial capabilities (e.g., e-permitting but not RVI), with incomplete capabilities (e.g., e-permitting without a customer portal or payment processing), or with hardware needs (e.g., monitors). Such an initiative will be particularly valuable for rural and small communities who have limited capacity to effectively enforce codes.

More than 50 organizations and businesses previously have urged Congress to provide resources to modernize code departments, representing state and local government, residential and commercial contractor, building owner/manager, manufacturer, insurance, housing, energy efficiency, renewable energy, engineering, design, and resilience interests.

Updating Standards for Federal Programs

As the Committee notes, the IECC is incorporated into many federal policies. The National Technology Transfer and Advancement Act directs federal agencies and departments to adopt voluntary consensus standards wherever possible (avoiding development of unique government standards) and to use such standards to carry out activities and policy objectives. Many of the federal policies the January 19, 2021 Letter references key to outdated editions of the IECC, including baseline federal building efficiency standards (2015 IECC), federal tax incentives (2009 and 2006 IECC), and criteria for federally assisted mortgages and public housing (2009 IECC). The Code Council welcomes the opportunity to work with the Biden Administration and the Committee to update these outdated references. Several organizations, including the American Council for an Energy-Efficient Economy (ACEEE) as well as manufacturers,[6] have made similar recommendations. U.S. development assistance that involves the construction of buildings abroad should also require the use of up-to-date energy conservation standards.

[6] *See, e.g.*, Letter from 14 Ohio manufacturers to U.S. Senator Sherrod Brown (Jan. 28, 2021).

ICC/NAHB AGREEMENT

This Agreement (the "Agreement") is entered into this 9th day of February, 2002, by and between the International Code Council, with its principal place of business at 5203 Leesburg Pike, Suite 600, Falls Church, Virginia 22041 ("ICC") and the National Association of Home Builders, with its principal place of business at 1201 15th Street, N.W. Washington, D.C. 20005 ("NAHB").

Whereas the Building Officials and Code Administrators International, Inc., the International Conference of Building Officials, and the Southern Building Code Congress International, Inc. recognized the need for a single coordinated set of national building model codes and established the ICC in 1994 to undertake that effort; and

Whereas NAHB recognized the need for a simple, user-friendly and stand-alone residential building code that included housing affordability as a major determinant in its development and agreed to collaborate with ICC in the development of the *International Residential Code*® (the "IRC"); and

Whereas ICC recognized and continues to recognize the importance of the active participation and voting representation of the home building industry by representatives offered by NAHB in the drafting and code development process for the IRC; and

Whereas NAHB has sought and ICC has recognized the importance of voting representation of the home building industry by representatives offered by NAHB on the code development committees for the entire family of *International Codes*®; and

Whereas NAHB policy supports the concept of a coordinated set of national model building codes, as currently embodied in the family of *International Codes*®; and

Whereas NAHB members and affiliated home builder associations have actively supported efforts to adopt the IRC and the family of *International Codes*® in their state and local jurisdictions; and

Whereas both ICC and NAHB desire continued participation by NAHB in the code development process for the IRC and the family of *International Codes*® and efforts relative to their adoption;

Now, Therefore, in consideration of the mutual covenants and agreements contained herein, the parties agree as follows:

I. ICC agrees that:

A. It will maintain the IRC as a stand-alone residential building code, and one-third of the voting members of the IRC code development committees shall consist of qualified representatives from the home building industry offered by NAHB.

B. The ICC code development committee members offered by NAHB and appointed by ICC shall be full committee members with all the associated participation and voting rights.

C. ICC shall continue to seek qualified representation from the home building industry in its other code and standards activities.

D. ICC warrants that the code materials developed pursuant to this Agreement do not infringe upon any copyright or violate any property rights. ICC agrees to indemnify, hold harmless and defend NAHB, its officers, directors, members, agents and employees from and against any and all demands, claims, damages to persons or property, losses, liability and alleged liability arising out of the code materials developed pursuant to this Agreement, specifically including, but not limited to, copyright violation.

II. NAHB agrees that:

A. NAHB shall publicly issue a clear and definitive statement of its support for adoption of the IRC and the other *International Codes*® at all levels of government.

B. When requested by its state and local affiliates, NAHB will assist in their efforts to adopt the IRC and other *International Codes*®.

C. To the extent possible NAHB shall cooperate with ICC in providing representation and testimony relating to the adoption and use of the *International Codes*® at every level of government.

III. Term

The initial term of this Agreement shall be five (5) years, and it shall be automatically renewed for additional five (5) year periods thereafter, unless either party requests in writing to renegotiate this agreement not less than sixty (60) days prior to the then-current renewal date.

IV. Independent Contractor Relationship

This Agreement imposes an independent contractor relationship between the parties. It will not be interpreted or construed to create an employer relationship, association, joint venture or partnership between the parties. Neither party shall assume the other's liabilities, duties or obligations.

V. NAHB and ICC Name and Marks

ICC recognizes that NAHB's name, trademarks, service marks and logos represent valuable intellectual property of NAHB, and ICC agrees not to use NAHB's name, trademarks, service marks or logos in any materials without the prior written consent of NAHB. NAHB recognizes that ICC's name, trademarks, service marks and logos represent valuable intellectual property of ICC, and NAHB agrees not to use ICC's name, trademarks, service marks or logos in any materials without the prior written consent of ICC.

VI. Termination

In the event of a breach of any of the terms and conditions of this Agreement, the non-defaulting party may terminate this Agreement by providing the other party with thirty (30) days written notice, provided the party in default shall be given an opportunity to cure the breach prior to the termination of the Agreement. If the default is cured within the thirty (30) days, then the notice of termination shall be of no effect.

VII. Amendments

Modifications to this Agreement may be requested at any time, for example, if needed to gain American National Standards Institute ("ANSI") accreditation of the ICC Code Development Process, however, all changes to this Agreement must be made in writing and signed by both parties.

VIII. Notices

Any notice required or permitted by the terms of this Agreement shall be made in writing. In order to be deemed given, notice must be delivered through one of the following methods: Certified Mail, return receipt requested, Registered Mail, return receipt requested, or National Overnight Delivery Service, with a signature signifying receipt.

IX. Interpretation and Construction

The rule of construction to the effect that any ambiguities are to be resolved against the drafter of a document shall not be employed in any interpretation of this Agreement. This Agreement and all of its terms shall be construed equally as to all persons, parties or entities. Section headings and titles in this Agreement are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

X. Governing Law and Forum

This Agreement shall be governed by, construed and enforced according to the laws of the District of Columbia (excluding the District of Columbia's conflict of laws rules which would refer to and apply the substantive laws of another jurisdiction). The parties hereby agree to submit themselves to the personal jurisdiction of the local or federal courts of the District of Columbia, which shall be the exclusive venue for any disputes relating to this Agreement.

XI. Entire Agreement and Enforcement

This Agreement, including all attached exhibits and any attached Addenda, constitutes the entire agreement as to its subject matter and supersedes all prior and contemporaneous oral and written agreements. All changes to this Agreement must be made in writing and signed by both parties. In any action to enforce this Agreement, the prevailing party shall be entitled to recover its costs and expenses, including reasonable attorney's fees and costs.

XII. Warrant of Authority

The persons signing below warrant that they are authorized to sign contracts that are binding upon their respective organizations.

INTERNATIONAL CODE COUNCIL

By: _____

William J. Tangye, PE
Chief Executive Officer

NATIONAL ASSOCIATION OF HOME BUILDERS

By: _____

Gerald M. Howard
Executive Vice President & Chief Executive Officer

AMENDMENT TO ICC/NAHB AGREEMENT
DATED FEBRUARY 9, 2002

These Amendments (the "Amendments") to the Agreement (the "Agreement") entered into February 9, 2002, by the International Code Council, with its principal place of business at 5203 Leesburg Pike, Suite 600, Falls Church, Virginia 22041 ("ICC") and the National Association of Home Builders, with its principal place of business at 1201 15th Street, N.W. Washington, D.C. 20005 ("NAHB") are agreed to on this 28 day of September, 2005.

Whereas NAHB has publicly stated its support for the *International Codes*® and has supported the ICC in code adoptions throughout the U.S.; and

Whereas NAHB has been recognized by the ICC as a Strategic Partner, as defined by and in accordance with ICC Policy CP 2-05; and

Whereas NAHB and the other ICC Strategic Partners are afforded certain considerations in achieving the vision and mission of the ICC; and

Whereas the ICC and NAHB recognize the need to further foster and delineate this relationship and to set forth certain provisions to achieve goals and objectives mutual to the two organizations;

Now, Therefore, the parties agree to the following Amendments that supersede and replace in their entirety Sections I through III of the Agreement. In all other respects the February 9, 2002 Agreement remains in effect:

I. ICC agrees that:

A. The International Residential Code (IRC) shall be maintained as a stand-alone building code for the residential dwellings and accessory structures that fall under its current scope, and the provisions of any other International Codes shall govern only when specifically referenced by the IRC.

B. Except as precluded by prior agreements with the American Gas Association and the National Fire Protection Association regarding the fuel gas and electrical provisions, the IRC code development committees shall hear all proposed changes to the provisions of the IRC, and no proposed change to the IRC shall be assigned to another code development committee for action.

C. One-third of the voting members of the IRC code development committees shall consist of representatives qualified under the provisions of ICC Policy CP 7-04, from the home building industry offered by NAHB.

D. ICC shall consider appointing to code and standard development committees at least one representative qualified under the provisions of ICC Policy CP 7-04 from the home building industry when such representation is offered by NAHB.

E. The ICC code development committee members offered by NAHB and appointed by ICC shall be full committee members with all the associated participation and voting rights.

F. ICC shall appoint one representative from the home building industry to the International Building Code Council and the Code Technology Committee when such representation is offered by NAHB.

G. ICC shall appoint at least one representative from the home building industry to its ad hoc and standards committees that develop construction requirements intended for residential and light commercial construction when such representation is offered by NAHB.

H. Oversight by the ICC Board of Directors shall be added to the committee appointment process, and ICC Policy CP 7 shall be amended to create a direct and permanent conduit through the ICC Chief Executive Officer for NAHB and other strategic partners to request committee appointments. ICC shall notify NAHB, prior to Board of Directors action, of any plans to modify its policies and procedures in a manner that would impact the terms of this Agreement.

I. ICC warrants that the code materials developed pursuant to this Agreement do not infringe upon any copyright or violate any property rights. ICC agrees to indemnify, hold harmless and defend NAHB, its officers, directors, members, agents and employees from and against any and all demands, claims, damages to persons or property, losses, liability and alleged liability arising out of the code materials developed pursuant to this Agreement, specifically including, but not limited to, copyright violation.

II. NAHB agrees that:

A. NAHB shall continue to publicly support the adoption of the IRC and the other *International Codes*® at all levels of government.

B. When requested by its state and local affiliates, NAHB will assist in their efforts to adopt the IRC and other *International Codes*®.

C. To the extent commercially reasonable NAHB shall cooperate with ICC in providing representation and testimony relating to the adoption and use of the *International Codes*® at every level of government.

D. NAHB shall work cooperatively with ICC, where the mutual interest of NAHB and ICC are compatible, on national policy and Federal legislative/regulatory issues related to codes and standards impacting the built environment.

E. NAHB shall appoint to its Construction, Codes and Standards Committee and associated subcommittees a liaison representing ICC when such representation is offered.

III. Term

The term of this amended Agreement shall be five (5) years from the date of the Amendments, and it shall be automatically renewed for additional five (5) year periods thereafter, unless either party requests in writing to renegotiate this agreement not less than sixty (60) days prior to the then-current renewal date.

Warrant of Authority

The persons signing below warrant that they are authorized to sign contracts that are binding upon their respective organizations.

INTERNATIONAL CODE COUNCIL

By: Frank P. Hodge, Jr.

Frank P. Hodge, Jr.
President

NATIONAL ASSOCIATION OF HOME BUILDERS

By: David L. Pressly, Jr.

David L. Pressly, Jr.
President-Elect