



House Subcommittee on Energy

Hearing on Building Energy Efficiency

September 20, 2019

Testimony of the American Institute of Architects (AIA)

Good morning, Chairman Rush, Ranking Member Upton and Members of the Subcommittee. My name is Carl Elefante, the immediate past President of the American Institute of Architects (AIA). Thank you for the opportunity to share what the AIA and its more than 94,000 members are doing to make the nation's buildings more energy efficient.

For more than 160 years, AIA's mission has remained constant: To advance our nation's quality of life and protect the public's health, safety, and welfare. The architects of that generation helped lead the fight for the then novel concept of mandatory "fire codes."

Today, it is unimaginable that any building would be constructed without them. Right now, we are at a similar inflection point when it comes to the built world, specifically the necessary role of buildings to fight climate change.

Buildings, account for 75 percent of electricity use in the United States and 28 percent of natural gas use. Overall, buildings represent 39 percent of the nation's primary energy use and greenhouse gas emissions.

To reduce the impact of buildings on our environment, AIA supports your goal of net-zero emissions from buildings by 2050.

To achieve that goal, we are focused on four components:

1. Zero-net carbon building design;
2. Zero-net carbon renovation or retrofit;
3. Zero-net carbon construction and materials; and
4. Renewable energy use in buildings.

Success on these initiatives will require a holistic approach and long-term commitment from every aspect of our society to incorporate these principles into the design, construction, operation, and maintenance of the nation's buildings. Ultimately, in the decades ahead, we want them to be as fundamental to the construction of buildings as fire and public safety codes are today.

Why? Because the threat posed by climate change to our homes, cities, nation, and the planet require that we fundamentally reexamine how we develop and adapt the built world. To cite one example, and one that receives little consideration today, is the importance of rapidly accelerating the retrofitting of existing buildings.

Consider that, in order to meet 2050 emissions targets, 75 percent of the *existing* commercial and institutional building stock – 54 billion square feet – needs to be renovated and retrofitted. That’s, on average, nearly 2 billion square feet per year. For context, that is about four times the current rate, which, by the way, is at an all-time high.

That’s a prime example that highlights the magnitude of the challenge, but as architects, facing big challenges is our “day job.” We know that new standards of design and construction can be utilized to combat climate change. We also know that partnership with business, civic and elected leaders is the surest path to lasting success.

The nation’s architects, engineers, developers, building product manufacturers, and others have the technical expertise needed to help lead the fight against climate change. However, we could do more in partnership with you

and your colleagues at the federal, state, and local levels who share our vision and our passion to transform the built environment.

Together, we can make a difference. Together we can ensure that buildings help us to achieve dramatic reductions in energy use and greenhouse gas emissions to fight climate change.

AIA looks forward to working with members of this Subcommittee, Congress, and state and local leaders to make our nation's buildings part of the solution to climate change through the power of design.

Again, I thank the Subcommittee members for this opportunity to testify before you today, I look forward to our discussion, and welcome your questions.