This year, our committee has discussed ways to reduce emissions in the transportation sector, the power sector, and the industrial sector. Today, we’re looking at the buildings sector.

Whether it’s houses, apartment complexes, or office buildings, the places where we live and work use a lot of energy. And they’re responsible for a significant share of carbon pollution. In fact, just last year, residential and commercial buildings were the source of more than one-fourth of all carbon dioxide emissions in the United States.

When Americans think of pollution, they usually think of smokestacks. But the reality is more complicated. About three-fourths of the electricity sold in the United States is used in buildings. And natural gas, oil, and propane are used to heat up showers, or to keep homes and offices warm. Even the manufacturing, transportation and construction of building materials are contributing to carbon pollution.

The climate crisis also leaves us with a resiliency problem. Many existing homes, businesses, and hospitals were not built to withstand the sorts of extreme events made worse by climate change, including extreme heat, flooding, storms, and wildfires. Over the last decade, extreme weather events have caused more than $750 billion in damage, with much of those losses occurring to buildings.

We have a big challenge before us. In the United States, most of the homes and commercial buildings that will be standing in 2050 have already been built. By that year, scientists say we need to have hit zero net emissions to avert the worst impacts of the climate crisis.

We need nothing short of an ambitious national plan to make sure new buildings are net zero energy—that is, that they produce as much energy as they use. We also need to help property owners and business owners make existing buildings more energy-efficient, helping them rely more and more on clean electricity, rather than fossil fuels.

Of course, we must also work to make sure our homes and buildings don’t end up as storm debris. And that starts by making them resilient to the physical impacts of climate change. In Florida, we saw the importance of building design, codes, and standards in the devastating aftermath of Category 5 Hurricane Michael. The storm leveled many homes, but some were able to withstand the strong winds and the flooding because of more resilient construction techniques.
There’s also an economic incentive to act. More resilient and efficient buildings not only pollute less—they also cost less to operate and to insure. That’s more money in the pockets of homeowners and business owners. And when we talk about constructing new buildings and retrofitting old ones, that means construction jobs. Lots of well-paying, often-unionized jobs. Many innovations already have been developed by businesses – large and small – entrepreneurs, our academic research centers, and more. We just need to scale them up.

Buildings are the foundation of our communities, so it’s not surprising that state and local governments have taken the lead in developing climate-smart building policy. In May, New York City set carbon emissions caps for energy use in buildings over 25,000 square feet. Last year, California created a program to incentivize the use of low-carbon technologies in new building construction. And we’ve seen how cities facing an existential threat from climate change - like Boston, Miami, and Norfolk - are at the forefront of developing resilience strategies to protect vulnerable communities.

Now we must step up to help them. An ambitious national plan for cleaner, stronger buildings requires national leadership. And Congress needs to offer smart incentives, to set a direction for the numerous federal, state, and local officials involved in the buildings sector. We also have the responsibility to ensure communities on the frontlines of climate change—including low-income communities and communities of color—are front-of-mind when we craft policy.

I look forward to learning from our witnesses today, and hearing their ideas for ambitious, equitable building policy.