Bill Gates noted in a blog post a few weeks ago that, when somebody talks about reducing greenhouse gas emissions, he always asks them: “what’s your plan for steel?”

A good question. Gates point is that any serious attempt to reduce greenhouse emissions economy-wide must grapple with the energy and process emissions from the industrial sector. And that means the core ingredients and building blocks of our modern society.

This includes iron and steel, basic chemicals and petrochemicals, cement, fertilizer, plastics, glass, aluminum, paper products, etc. This is what makes up our roads, bridges, buildings, our cars and transportation systems, our computing systems, our factories; it is behind the food we eat and the power we generate, the goods we make and use.

The industrial sector is the largest global user of energy, according to J.P. Morgan’s Annual Energy Outlook. Demand for industrial output is expected to grow dramatically in coming decades. The world’s building stock alone is anticipated to double by 2060, which Gates has noted, is equivalent to a New York City built every month for the next forty years. That is a lot of steel. And that is a lot of energy and process emissions.
I’ve noted in previous hearings that we should keep appropriate perspective on the scale and source of the problem we are trying to address. And this is especially important when it comes to reducing emissions in the industrial sector.

If we impose overly restrictive rules and regulations domestically, we raise the costs of energy and feedstock, we lose control over essential parts of critical supply chains, we increase reliance on foreign industries and manufacturing, and simply displace industrial emissions from the United States to other nations, along with our manufacturing jobs.

For emissions reductions in this sector to make an impact on global greenhouse gas budgets, the reductions should occur where industrial output will be growing the most. That will most likely be in China, India and the developing world.

The trick for the United States industry will be to develop the cleaner technologies and practices to export to developing nations, while avoiding costs and regulatory burdens that will make essential goods more expensive and drive our industries overseas.

We do not want to put the United States at a competitive disadvantage to other nations or deprive our nation important opportunities to innovate and develop the new industrial technologies that promise cleaner future energy systems.

Today’s testimony will note that reducing emissions across this sector is not easy, or even possible in some cases, based on brute facts of physics, chemistry and economics.
Even in cases where it is feasible to substitute electricity for direct fossil energy use to provide the heat and pressure for industrial processes, the costs can be prohibitive. As the JP Morgan report noted, the cost of electricity is 3 to 5 times higher per unit of output than natural gas in states that are the largest industrial users of energy, so fuel switching and upgrades would require large electricity capacity investments that may not make economic sense.

But there are practical policies to pursue that can make a difference domestically and can help to set up U.S. industry to advance cleaner technologies and processes in the future.

Testimony from the National Association of Manufacturers and on behalf of the Portland Cement Association provide examples of some of the policies that we may pursue in the short term on a bi-partisan basis to foster American innovation and technological advancement.

Some of these measures would reduce the regulatory burdens we have today. These include reforming federal and state permitting regulations to enable more energy efficient upgrades to facilities. They include taking steps to help speed up the permitting process for the infrastructure needed for reducing industrial emissions. And they include appropriate policies that make way for the demonstration and deployment of new technologies to prove they can work commercially, economically.

Chairman Tonko, there are bi-partisan legislative solutions we can sign into law this Congress that will remove some of the barriers to innovation in the industrial sector. If you want to start making progress on industrial emissions, let’s start with
what we know we can do today to make a difference in the innovation landscape, while protecting our national interests, and the interest of our workers and consumers.