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Testimony

of Ross Eisenberg

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Energy and Resources Policy

National Association of Manufacturers

before the House Committee on Energy and Commerce
Subcommittee on Environment and Climate Change

on “Building a 100 Percent Clean Economy:
Pathways to Net Zero Industrial Emissions”

September 18, 2019



SUMMARY OF TESTIMONY

In the eyes of America's manufacturers, it's time to act on climate—and the real question for policymakers now should not be *whether* to act on climate but *how* to do so effectively. We are already doing our part to reduce greenhouse gas emissions, and we will continue to do so. Over the past decade, manufacturers have reduced the carbon footprint of our products by 21 percent while increasing our value to the economy by 18 percent. Overall, the U.S. manufacturing sector has one of the world's lowest carbon intensities per dollar of GDP, a fraction of the carbon intensities of other major manufacturing economies like China and India.

The type of deep decarbonization needed to reach the targets sought by the Committee will require a dramatic set of technological and lifestyle changes across the economy. It is not, however, impossible. We need policies that unleash innovation because the manufacturing sector is different from other sectors, and the technologies that may work in other sectors may not work in ours.

The federal government also has a clear role in setting climate policy. This begins by reengaging on the international stage to achieve a binding, fair global climate treaty. The NAM also recommends Congress enact a single, unified climate policy that meets specific targets, ensures a level playing field, avoids carbon leakage and preserves consumer choice and manufacturing competitiveness.

Finally, there are many near-term actions that Congress and the Administration could take to accelerate manufacturers' progress toward deep GHG emissions reductions. The NAM recommends:

- Enact the Clean Industrial Technology Act (H.R. 3978/S. 2300);
- Pass legislation and take regulatory action to improve New Source Review;
- Ratify the Kigali Amendment and/or enact legislation to phase out hydrofluorocarbons;
- Commercialize and deploy carbon capture, utilization and storage technology;
- Permanently authorize the provisions of Title 41 of the FAST Act;
- Scale up investment in public- and private-sector energy and water efficiency;
- Fund and expand climate and clean energy R&D federal programs at the Department of Energy and elsewhere; and
- Pave the way for a smart grid.

TESTIMONY OF ROSS EISENBERG
BEFORE THE HOUSE COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON ENVIRONMENT AND CLIMATE CHANGE

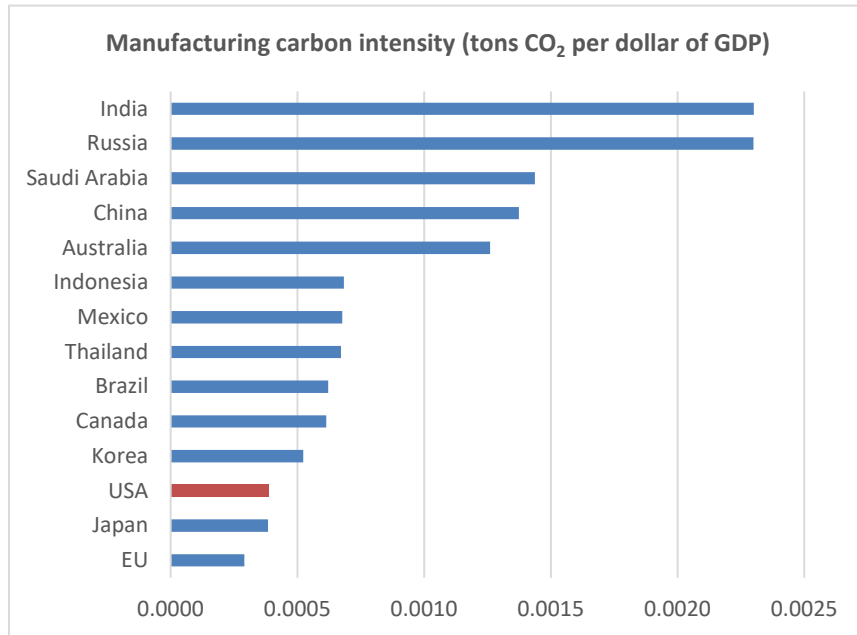
Hearing on:
“Building a 100 Percent Clean Economy: Pathways to Net Zero Industrial Emissions”

SEPTEMBER 18, 2019

Good morning, Chairman Tonko, Ranking Member Shimkus and members of the Subcommittee on Environment and Climate Change. My name is Ross Eisenberg, and I am vice president of energy and resources policy at the National Association of Manufacturers. The NAM is the nation’s largest industrial trade association, representing 14,000 small, medium and large manufacturers in every industrial sector and in all 50 states. I am pleased to represent the NAM and its members and provide testimony on manufacturers’ commitment to addressing climate change.

In the eyes of America’s manufacturers, it’s time to act on climate—and the real question for policymakers now should not be *whether* to act on climate but *how* to do so effectively. Manufacturers are doing our part to reduce GHG emissions, and we will continue to do so. Over the past decade, manufacturers in the U.S. have reduced the carbon footprint of our products by 21 percent while increasing our value to the economy by 18 percent. Overall, the U.S. manufacturing sector has one of the world’s lowest carbon intensities per dollar of GDP, a fraction of the carbon intensities of major manufacturing economies like China and India.

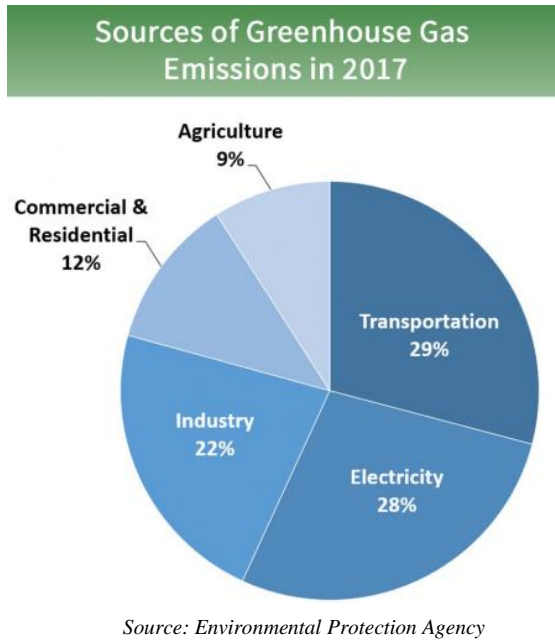
As the Committee considers how to reach its ambitious goals, I must stress that the type of deep decarbonization needed will require a dramatic set of technological and lifestyle changes across the economy. It will be extremely difficult. It will require the collective effort of all sectors and stakeholders, all



producers and end users. It will require global coordination and enforcement. And it will carry a cost.

It is not, however, impossible. Manufacturers appreciate the careful, deliberate approach this Committee has taken to assessing the scope of the problem and the effect policies would have on the many stakeholders involved. Two defining views have emerged from Committee members: whether we should focus on crafting policies that spur innovation, or whether we should craft policies that enable the federal government to take action. I believe we need both.

We need innovation because the manufacturing sector is different from other sectors, and the technologies that may work in other sectors may not work in ours. Manufacturers primarily emit GHGs in two ways: energy-related emissions and process-related emissions. The types of energy and processes used across manufacturing sectors are typically very different. For instance, the manufacturing process to make a brick is markedly different than the process used to make steel. The same goes for other energy-intensive sectors like paper, plastic, rubber, fertilizer and aluminum, not to mention finished goods like cars, trucks, airplanes, computers, food and beverages, and household products. Innovation is and will always be the key to reducing the carbon intensity of these sectors.



Innovation by itself will not be enough, however. The federal government has a clear role in setting climate policy. This begins by reengaging on the international stage to achieve a binding, fair global climate treaty. The goal of such an agreement must be to address the climate threat in a manner that prevents carbon leakage by ensuring that no country gains a competitive advantage by failing to take action to reduce carbon emissions. It must be fair, on target, enforceable, transparent, innovative and pro-trade. It must also protect

intellectual property rights and eliminate all possible tariff and non-tariff barriers to the purchase of environmental goods and technologies.

With the backdrop of an effective international treaty, the NAM also recommends Congress enact a single, unified climate policy that meets specific targets, ensures a level playing field, avoids carbon leakage and preserves consumer choice and manufacturing competitiveness. Any solution must be economy-wide and apply to all sources of emissions. It must work in lockstep with the global framework to avoid carbon leakage—in other words, it shouldn't simply offshore carbon emissions from one country to another, which *won't* help address climate change but *can* hurt our economy. It must be a holistic replacement for the current patchwork of federal, state and local laws and regulations that address climate change, and it must displace current and future climate liability suits (which make a lot of noise but do not actually solve the problem). It should be fuel-neutral and should not require any particular manufactured product to be phased out of the economy. It should provide compliance flexibility for regulated entities and give credit for early action. Finally, it should seek to balance any new costs on manufacturers with relief in other areas, with the goal of keeping manufacturers whole.

This last point—the math—bears more explanation. The average manufacturer pays about \$20,000 per employee, per year to comply with regulations, nearly double the amount of companies in other sectors.¹ Small manufacturers pay even more, incurring regulatory costs of about \$35,000 per

¹ <https://www.nam.org/the-cost-of-federal-regulation/>.

employee, per year.² Any new cost imposed by a climate policy will be added to that already-hefty base of regulatory expenditures. To the extent manufacturers must bear extra costs, Congress should consider reducing regulatory, tax or other economic burdens on manufacturers to make them whole. A particular focus should be placed on regulations of other air pollutants, which may be reduced as a “co-benefit” of reducing GHGs.

The math also matters for internal decision-making purposes on manufacturing shop floors. A great deal of the potential GHG reductions available to the manufacturing sector will come from the purchase and installation of new, more efficient equipment and the design of new manufacturing processes. Manufacturers budget for discretionary investments and are constantly looking for opportunities, but at the end of the day, the decision whether to spend that money on new equipment must be justified. This involves consideration of a wide range of factors, such as payback time, the risk of stranded investments, operating risks, reliability, environmental permitting and external factors like the future of the plant itself in a highly competitive, constantly evolving global marketplace. Impacting *this* math should be one of the top priorities of anyone seeking to reduce the carbon intensity of the manufacturing sector.

There are many near-term actions that Congress and the Administration could take to accelerate manufacturers’ progress toward deep GHG emissions cuts. The following bipartisan measures would reduce GHG emissions from the manufacturing sector meaningfully and ensure that emissions continue to decline

² *ibid.*

while the larger, more complicated international and federal climate policies are worked out. The NAM recommends the following:

- Enact the Clean Industrial Technology Act (H.R. 3978/S. 2300). CITA would set up a transformational industrial technology program at the Department of Energy and would drive new technologies aimed at increasing the technological and economic competitiveness of manufacturing in the United States. The program would also find pathways to reduce GHG emissions and create a technical assistance program to help local communities and states evaluate and incentivize the adoption of technologies that reduce industrial GHGs.
- Pass legislation and take regulatory action to improve New Source Review, a federal air permitting program that has, at times, stood in the way of efficiency upgrades and environmentally beneficial projects at manufacturing facilities. Simple reforms to NSR could unlock a massive market for the installation of efficient technologies that would drive manufacturers' already-impressive emissions reductions down even further.
- Ratify the Kigali Amendment and/or enact legislation to phase out hydrofluorocarbons (HFCs). The Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer was agreed to in October 2016 by more than 170 countries and entered into force in January 2019. The Kigali Amendment sets a path for phasing out HFCs, GHGs that are used in many manufactured products. HFCs were primarily used to replace ozone-depleting substances, but their high potency as GHGs has led to the development of replacement products with a smaller environmental impact. These products already exist or are close to market. The Kigali Amendment would reduce the global warming equivalent of 4.1 billion tons of CO₂ per year by 2050. It could also create up to 150,000 more U.S. jobs by 2027 if ratified.
- Commercialize and deploy carbon capture, utilization and storage technology. The expanded Section 45Q carbon capture tax credit established by Congress in 2018 was a positive development for CCUS adoption. However, for the 45Q tax credit to achieve its potential, regulators must clarify the rules to access the credit so that project developers have the certainty they need to make investments in CCUS projects. Lawmakers should also develop a clear standard for the handling of long-term liability for CO₂ transfers; resolve pore space ownership issues; correct barriers to CO₂ storage on federal lands; reform the class

VI underground injection program to foster the build-out of underground CO₂ storage projects; increase funding for federal CCUS research, development and demonstration programs and ensure programs are authorized; and reduce permitting barriers that delay construction of CCUS projects.

- Permanently authorize the provisions of Title 41 of the FAST Act. FAST-41 is a voluntary permitting improvement program for infrastructure projects that are likely to require a total investment of more than \$200 million. The bulk of the projects in the program are clean energy or resiliency based, and FAST-41 has improved their permits' cycle time, reduced conflict among agencies and generated more complete environmental permitting than in the past. Significant emissions reductions will require massive deployment of new infrastructure; these projects will need access to FAST-41.
- Scale up investment in public- and private-sector energy and water efficiency. These oft-ignored strategies can generate significant climate savings. The International Energy Agency found that energy efficiency alone could meet up to 40 percent of the Paris Agreement's global GHG reduction goals.³ A recent study by the Natural Resources Defense Council projected that to reach an 80 percent GHG emissions reduction goal, the U.S. could get almost 42 percent of the way by maximizing energy-efficiency investments and strategies.⁴
- Fund and expand climate and clean energy R&D federal programs at the Department of Energy and elsewhere. Federal agencies house a multitude of valuable tools and resources to help reduce emissions, such as the Advanced Research Projects Agency – Energy, the DOE Advanced Manufacturing Office and the Federal Energy Management Program. These programs should be sufficiently funded and expanded.
- Pave the way for a smart grid. Modernization of the electric grid will allow for better integration of advanced technologies, onsite generation and end-use efficiency. It would also reduce GHG emissions. A 2010 DOE study found that smart grid improvements could eliminate 277 million to 359 million tons of CO₂ per year.⁵

³ <https://www.iea.org/newsroom/news/2018/october/energy-efficiency-is-the-answer-for-building-a-secure-and-sustainable-energy-syst.html>.

⁴ <https://www.nrdc.org/sites/default/files/americas-clean-energy-frontier-report.pdf>.

⁵ https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-19112.pdf.

The strength of the manufacturing sector—its diversity—also makes it challenging to approach from a climate policy standpoint. The NAM believes we can be a part of the solution and looks forward to working with this Committee to pass and implement several of our preferred climate policy solutions.