



Statement of the U.S. Chamber of Commerce

**“Reducing Emissions while Driving Economic Growth: Industry-
led Initiatives”**

**Marty Durbin
President
Global Energy Institute**

Senate Subcommittee on Clean Air and Nuclear Safety

October 17, 2019

My name is Marty Durbin and I am the President of the Global Energy Institute, an affiliate of the U.S. Chamber of Commerce (“Chamber”). Thank you for the opportunity to testify today on industry-led initiatives to reduce emissions while driving economic growth.

Introduction

The climate is changing and humans are contributing to these changes. Inaction on climate is not an option. We believe there is much common ground on which all sides of this discussion should come together to address climate change with policies that are practical, flexible, predictable, and durable. We also believe in a policy approach that considers costs, benefits, and the competitiveness of the U.S. economy.

It will be largely up to the business community to develop, finance, build, and operate the solutions needed to power economic growth worldwide, mitigate greenhouse gas emissions, and build resilient, lower-carbon infrastructure. Thousands of businesses already are taking action in their own operations and along their value chains by investing in technology solutions and enhancing their efficiency.

Advanced technologies and innovation offer the best solution for managing climate risks and reducing greenhouse gas (GHG) emissions. Breakthroughs in commercially-viable technologies are necessary to enable significant cuts in GHG emissions while maintaining economic growth. The U.S. should maintain a leadership role in technologies, such as advanced nuclear, energy efficient systems and building materials, large-scale renewables, energy storage, high-efficiency low-emission power plants, and carbon capture and storage/utilization by supporting a broad-based public- and private-sector technology portfolio.

Business is Taking Action to Address Climate Change

The American business community is developing technologies to address the challenge of climate change. They are doing so to meet the expectations of their customers and value chains, shareholders and the public. They are also doing so because they care about the environment and the communities in which they live and operate, and to compete and lead in evolving and emerging markets. We believe that our free enterprise system is best equipped to address this challenge because it drives ingenuity and investment. The public agrees. In fact, a poll conducted by the Global Energy Institute earlier this year found that 79% of voters believe that investments in innovation and technology are the best way to address climate change.¹

Thousands of companies have already taken voluntary steps to reduce emissions and have pledged further reductions. Sustainability plans are now the norm for major corporations. For example:

- DuPont is making contributions to a low carbon economy by: reducing energy intensity in the transportation sector by providing materials that enable automotive light weighting and electrification and enabling more energy efficient building through sustainable

¹ Available at: <https://www.globalenergyinstitute.org/global-energy-institute-unveils-american-energy-cleaner-stronger-agenda>.

insulation and building systems, and other measures.

- Salesforce delivers a Carbon Neutral Cloud to all its customers and is more than halfway to the company's goal of reaching 100% renewable energy by 2022. Last month they announced Salesforce Sustainability Cloud, a carbon accounting product designed to help customers easily generate trusted investor-grade environmental data to inform their climate action programs.
- UPS' alternative fuel and advanced technology vehicles now exceed 10,000 vehicles globally. Using renewable fuels, UPS trucks are achieving up to a 90 percent reduction in lifecycle greenhouse gas emissions when compared to conventional diesel trucks. In May 2019, UPS announced the largest purchase of renewable natural gas in history.

In addition, last year the Global Energy Institute launched our "*EnergyInnovates*" initiative to showcase the innovators, projects and technologies that are shaping America's future energy landscape. These include:

- North America's largest lithium ion battery storage facility in Escondido, CA, built and operated by San Diego Gas and Electric, a Sempra Energy utility. Battery storage is a key grid resource that will maximize the potential and availability of intermittent renewable resources
- Small modular nuclear reactors by NuScale, whose simplified design allows for safe, scalable, cost-efficient emissions-free applications around the globe.
- A revolutionary zero-emissions power plant developed by NetPower, which will capture carbon dioxide emissions before compressing and recirculating gas into its system—creating value for CO2 and incentive for ensuring that it isn't released into the atmosphere.
- A "smart neighborhood" developed by Alabama Power which features high-performance, energy efficient construction and systems and a dedicated micro-grid featuring solar, battery storage and natural gas power. This project is a prime example of public-private partnership, in this case between Southern Company, DOE's Oak Ridge National Laboratory, Signature Homes, and others.

These projects represent just a fraction of the innovation that is happening across America every day. Such technologies are being developed and deployed first in the United States, but ultimately are an opportunity for the U.S. to become the world's leading exporter of clean energy technology. This will not only be a business opportunity and an economic boon, but also a way for the U.S. to take a leadership role in reducing global emissions and to improve the quality of life in developing countries that lack access to basics like electricity and refrigeration.

The importance of fostering U.S. leadership to address climate change through commercialization and global deployment of clean energy technologies cannot be overstated. Recently released projections by the Energy Information Administration forecast that, while emissions from developed nations are expected to begin declining, developing countries'

emissions will increase by more than 8.4 billion metric tons of carbon dioxide (CO₂),—from 22.8 billion metric tons in 2018 to 31.2 billion metric tons in 2050, a 37 percent increase.² (For perspective, total U.S. economy-wide CO₂ emissions were 5.2 billion metric tons in 2018.)

These global realities illustrate the paramount importance of technological breakthroughs that will enable financially constrained developing countries to adopt alternate technologies necessary to slow, and ultimately reverse, emissions growth. The good news is that numerous technologies hold great promise to do just that, and that is why the Chamber has made the development and acceleration of these alternatives a top priority.

Federal R&D Investment is Critical Component of Energy Innovation

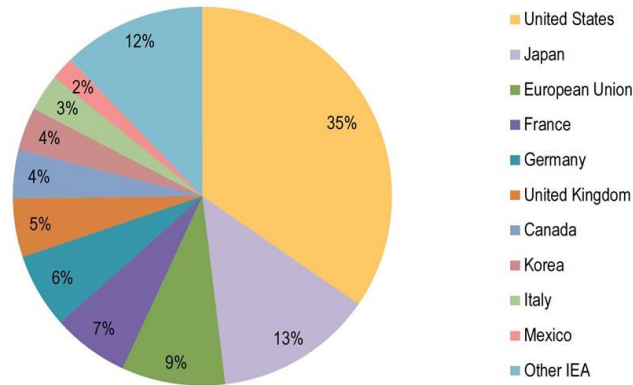
For the innovation agenda to succeed, business and government must work together. The American business community leads the world in investment in emerging energy technologies. Based on data from the National Science Foundation (NSF), we estimate that the private sector was responsible for about \$45 billion in direct investment for energy related R&D in 2017. A recent report from NSF's National Science Board found roughly 19% of the world's total R&D funding is performed by U.S. businesses. This type of investment has and will result in breakthroughs that are needed to develop technologies that can be deployed worldwide.

Significant federal government resources have been invested to develop carbon reduction technologies. The Department of Energy national laboratory system is a unique asset capable of developing pre-commercialization technologies that can then pair with the private sector to be brought to market. The Chamber is a strong supporter of government research and development including programs such as ARPA-E, and has regularly called for increased funding for this and other programs.

Data from the International Energy Agency suggest that while the United States government spends far more on energy R&D than any other Organization for Economic Co-operation and Development (OECD) country (Figure 1), its spending as a share of GDP is only about average.

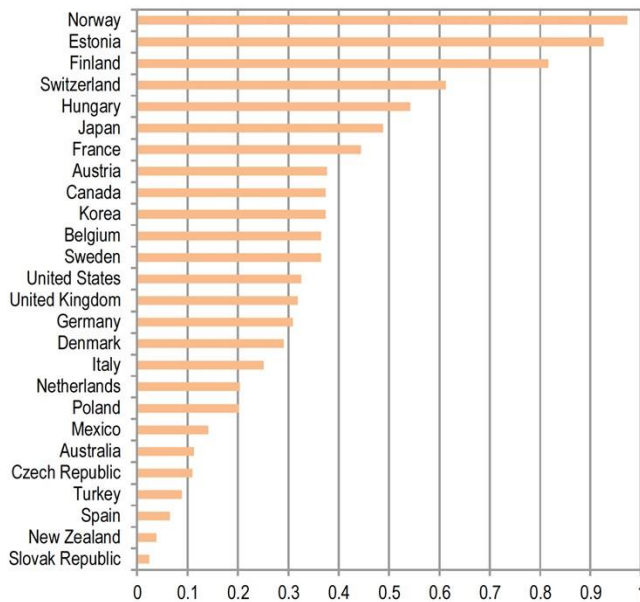
² U.S. Energy Information Administration, *International Energy Outlook*, September 2019. Available at <https://www.eia.gov/outlooks/ieo>

Figure 1. Public energy RD&D budgets by country for IEA members and the European Union



Source: International Energy Agency, *Energy Technology RD&D Budgets, 2019*.

Figure 2: Total public energy RD&D budgets per thousand units of GDP by country for 2017



Source: International Energy Agency, *Energy Technology RD&D Budgets, 2019*.

The Chamber has long supported increasing federal R&D budgets. In addition to improving energy security, advanced new technologies can reduce the costs of meeting environmental requirements and thus expand the range of economically and politically acceptable policy options. Innovation is not a luxury; it is a fundamental need. The U.S. should maintain its leadership role in advanced energy technologies.

An Energy Innovation Agenda

We recognize that more must be done to meet the challenge of climate change. Policymakers will continue to play a critical role. The Chamber has established a Task Force on Climate Actions, which will help us gain a better understanding of the range of mechanisms, innovations, and internal processes that our members are employing to address climate change. This task

force will give us a dedicated venue to engage with our broad membership, and make us smarter about the impact of both existing policies and future proposals. What we learn will help inform our approach to legislation and other policy proposals to address this important issue for our members, the nation, and the world.

That said, we believe that there are concrete actions that Congress can take now which would make significant strides toward addressing this challenge. We recently led an effort with 27 organizations from across the political spectrum calling on Senate leadership to schedule floor time for a series of legislative proposals which would reduce emissions. These include:

- **S. 383, the Utilizing Significant Emissions with Innovative Technologies (USE IT) Act**, which would advance CO2 utilization and direct air capture research, permitting and development.
- **S. 903, the Nuclear Energy Leadership Act (NELA)**, which would bolster America's leadership in nuclear energy by facilitating the development of next-generation nuclear energy resources.
- **S. 1201, the Enhancing Fossil Fuel Energy Carbon Technology (EFFECT) Act of 2019**, which would authorize DOE to support the development of technologies that improve the efficiency, effectiveness, costs, and environmental performance of coal and natural gas use.
- **S. 1602, the Better Energy Storage Technology (BEST) Act**, which would increase R&D in battery storage technologies to strengthen the electric grid amid the integration of renewables.
- **S. 1685, the Launching Energy Advancement and Development through Innovations for Natural Gas (LEADING) Act of 2019**, which would accelerate DOE's research and development of commercially-viable carbon capture technologies for natural gas-fired electric generation facilities.
- **S. 2137, the Energy Savings and Industrial Competitiveness Act**, which would improve the energy efficiency of buildings, industries and manufacturers, and the federal government, delivering energy security and environmental benefits.
- **S. 2300, the Clean Industrial Technology Act**, which would establish an emissions-reduction technology program to reduce industrial sector greenhouse gas emissions.

Each of these bills enjoys bipartisan support, including from many members of this Subcommittee. The Chamber is working to ensure adoption of these bills and to build support inside and outside the Beltway for these efforts.

American businesses have a long history of rising to the world's challenges. Companies and entrepreneurs will bring innovation, technology and ingenuity to the climate change challenge. We believe that combatting climate change and continuing economic growth can and should go hand in hand, and our members are already hard at work in bringing solutions to the table.