

March 17, 2020

Chairwoman Marcy Kaptur
Energy and Water Development Subcommittee
House Committee on Appropriations
2186 Rayburn House Office Building
Washington, D.C. 20515

Ranking Member Mike Simpson
Energy and Water Development Subcommittee
House Committee on Appropriations
2084 Rayburn House Office Building
Washington, D.C. 20515

Chairman Lamar Alexander
Energy and Water Development Subcommittee
Senate Committee on Appropriations
455 Dirksen Senate Office Building
Washington, D.C. 20510

Ranking Member Dianne Feinstein
Energy and Water Development Subcommittee
Senate Committee on Appropriations
331 Hart Senate Office Building
Washington, D.C. 20510

Dear Chairman Alexander, Ranking Member Feinstein, Chairwoman Kaptur, and Ranking Member Simpson:

America's leadership in energy innovation has advanced a number of national priorities over the past several decades. Federal investments have helped spawn new and lucrative domestic industries, created millions of well-paying U.S. jobs, increased energy security, enhanced the nation's global influence, and reduced emissions. While these are impressive returns on investment, there is still enormous untapped potential to create new economic opportunities, strengthen American leadership and curb carbon emissions to the level needed to mitigate the worst impacts of climate change. An increase of targeted federal funding can create additional opportunities to develop, advance, and commercialize critical energy technologies and unlock the many rewards that come with them. We ask that Congress continue pushing for the resources needed for vital research, development, demonstration, and commercial deployment activities across all areas of the Department of Energy (DOE), prioritizing increases where they will have the biggest climate impact.

Public and private spending on energy related research and development increased globally in 2017 and 2018. In the United States alone, investment in the Department of Energy innovation system has increased 50 percent relative to 2014 levels due to your outstanding leadership. However, the U.S. has continued to fall behind in terms of public energy R&D spending relative to national GDP as compared to other developed economies, as highlighted in a recent report by the American Energy Innovation Council.¹ This means that the U.S. is spending a smaller share of research budgets on energy at a time when other countries are racing ahead to capture their share of what is a \$40 trillion opportunity for global energy technology markets over the next 20 years.² Congress has shown great foresight and wisdom in bolstering RD&D activities at DOE in recent years, but America cannot rest on previous successes while the rest of the world continues to surge ahead. Without continuing to expand federally supported RD&D we further imperil our prospects to lead the global energy transition.

With sufficient federal support for a balanced portfolio of research across the innovation ecosystem – from use-inspired basic research to applied research and experimental development to field validation and commercial-scale first-of-a-kind technology demonstrations – we can reverse this trend, positioning U.S. researchers, industries, and workers to develop and benefit from markets for emerging clean energy technologies.

Federal investments in energy RD&D stretch well beyond the Beltway. DOE's budget funds activities in every state, drawing upon the unparalleled skills, expertise, and resources at America's national laboratories, universities, and private research facilities across the country. It also supports partnerships with innovators in the private sector to test

and demonstrate new technologies. This network ensures that every part of the country has an opportunity to contribute to and benefit from the breakthroughs in energy technology supported by federal investments.

We appreciate your leadership in securing robust funding for energy innovation during the FY20 appropriations process. As you and your colleagues negotiate FY21 appropriations for Energy and Water Development, we appreciate your continued support for the critical work being done across the full DOE portfolio, and respectfully request continued expansion of funding over the next five years to ensure ongoing American leadership in energy innovation. Understanding the challenge of balancing a number of worthy requests for federal funding, we hope that the demonstrated benefits and potential of energy innovation investments allow this to rise to the level of national priority that it deserves. Again, we are grateful for your ongoing support for and attention to these vital issues.

Sincerely,

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| Third Way | Environmental and Energy Study Institute |
| ClearPath Action | Gas Turbine Association |
| Environmental Defense Fund | Geothermal Resources Council |
| Advanced Biofuels Business Council | Great Plains Institute |
| Advanced Energy Economy | Heat is Power Association |
| Alliance to Save Energy | Information Technology and Innovation Foundation |
| Alternative Fuels and Chemicals Coalition | Materials Research Society |
| American Chemical Society | Midwest Cogeneration Association |
| American Council for Capital Formation | Midwest Energy Efficiency Alliance |
| American Council of Engineering Companies | National Association of Energy Service Companies |
| American Crystallographic Association | National Audubon Society |
| American Gas Association | National Hydropower Association |
| American Nuclear Society | National Rural Electric Cooperative Association |
| American Wind Energy Association | National Wildlife Federation |
| BPC Action | Natural Resources Defense Council |
| Breakthrough Institute | Nuclear Energy Institute |
| Business Council for Sustainable Energy | Nuclear Matters |
| Carbon Utilization Research Council | Portland Cement Association |
| Carbon180 | Solar Energy Industries Association |
| Center for Climate and Energy Solutions (C2ES) | SSTI |
| Citizens for Responsible Energy Solutions | Summit Ridge Energy |
| Clean Air Task Force | The Nature Conservancy |
| Clean Energy Business Network | The Science Coalition |
| Combined Heat and Power Alliance | Union of Concerned Scientists |
| Council of Scientific Society Presidents | United Steelworkers |
| Digital Climate Alliance | U.S. Chamber of Commerce |
| Edison Electric Institute | U.S. Nuclear Industry Council |
| Enel North America, Inc. | Utah Clean Energy |
| Energy Storage Association | |

1 American Energy Innovation Council “Energy Innovation: Supporting the Full Innovation Lifecycle” February 2020
<http://americanenergyinnovation.org/wp-content/uploads/2020/02/Energy-Innovation-Supporting-the-Full-Innovation-Lifecycle.pdf>

2 International Energy Agency “World Energy Outlook 2018” 2018
<https://webstore.iea.org/download/summary/190?fileName=English-WEO-2018-ES.pdf>