May 04, 2021

The Honorable Nancy Pelosi Speaker of the House of Representatives H-232 Capitol Building Washington, D.C. 20515

The Honorable Charles Schumer Senate Majority Leader S-221 Capitol Building Washington, D.C. 20510

Chairwoman Rosa DeLauro House Committee on Appropriations H-307 Capitol Building Washington, D.C. 20515

Chairman Patrick Leahy Senate Committee on Appropriations S-128 Capitol Building Washington, D.C. 20510 The Honorable Kevin McCarthy House Minority Leader H-204 Capitol Building Washington, D.C. 20515

The Honorable Mitch McConnell Senate Minority Leader S-230 Capitol Building Washington, D.C. 20510

Ranking Member Kay Granger House Committee on Appropriations 1036 Longworth House Office Building Washington, D.C. 20515

Vice Chairman Richard Shelby Senate Committee on Appropriations 304 Dirksen Senate Office Building Washington, D.C. 20510

Dear Speaker Pelosi, House Minority Leader McCarthy, Senate Majority Leader Schumer, Senate Minority Leader McConnell, Chairwoman DeLauro, Ranking Member Granger, Chairman Leahy, and Vice Chairman Shelby:

America's leadership in energy innovation has advanced a number of national priorities over the past several decades. Federal investments have created new industries and countless jobs, reduced emissions, increased energy security, and enhanced the nation's global influence. While this investment has yielded impressive returns, scaling up breakthrough clean energy technology is no small feat. In order to keep our domestic innovators, businesses, and workforce competitive in global energy markets and to stay on track toward our climate goals, Congress will need to immediately make robust, goal-oriented federal investments in priority energy innovation efforts. Accordingly, we ask that you provide an FY22 appropriations allocation to the Energy and Water Development bill that enables a multi-billion dollar increase for vital research, development, demonstration, and commercial deployment activities across all Science and Energy program areas of the Department of Energy (DOE).

Investing in clean energy innovation creates both near-term and long-term jobs and economic growth opportunities. In 2018, federal energy research, development, and demonstration (RD&D) investments provided employment for over 110,000 workers.¹ These are good-paying jobs spread across labs, universities, and businesses in every state, drawing upon the unparalleled expertise of America's scientists, engineers, farmers, and manufacturing workforce. Strategic investments in innovation create even greater rewards,

however, when they are sustained over time. Robust, multi-year efforts by DOE have established U.S. leadership in fields from nuclear to bioenergy, wind, solar, and energy storage to energy efficiency deployment, launching massive domestic industries that have employed millions of workers in the years since.

Congress has wisely provided spending boosts for RD&D activities at DOE in recent years. Even so, the U.S. is not keeping up with the competition and risks missing out on new opportunities as a result. Other nations like Japan, China, and those within the European Union are investing greater shares of their economies in energy R&D.² To continue competing for global market share in a changing energy sector, the U.S. must demonstrate, commercialize and deploy the technologies it develops at scale. Accelerating these later stages of innovation will require a significant increase in federal funding and private sector partnership, and is a vital and unavoidable step toward economic success.

Much of the evolution and resulting opportunities in global energy markets are being driven by demand for affordable low- and zero-carbon technologies to help fight climate change. Doubling-down on our investments in emerging clean energy technologies will help U.S. industries get ahead of this trend and enable the nation to do its part in reducing emissions.³ Achieving these critical outcomes requires significant and sustained annual funding increases on the order of several billion dollars, starting immediately.

As Congress determines spending levels for FY2022, we respectfully request that the Energy and Water Development bill receive an increase in allocation large enough to accommodate a multi-billion dollar boost to innovation funding at DOE. This level of support would ensure America's energy industries and workers have a leg up on the competition, and a chance to bring home the rewards of surging global markets for clean energy technologies. We acknowledge the challenge of balancing a number of worthy demands for federal funding. However, given the urgency of the need and the proven return on investment, we believe significantly increased support for energy innovation is a national priority and hope Congress will treat it as such.

Sincerely,

Third Way ClearPath Action BPC Action Clean Energy Business Network Battelle Information Technology and Innovation Foundation United States Chamber of Commerce Environmental Defense Fund Natural Resources Defense Council Citizens for Responsible Energy Solutions Clean Air Task Force C3 Solutions 2G Energy, Inc. 8 Rivers Capital, LLC

Advanced Engine Systems Institute Airlines for America Alliant Energy Alternative Fuels and Chemicals Coalition Ameren American Association for the Advancement of Science American Chemistry Council American Clean Power Association American Council of Engineering Companies American Electric Power American Nuclear Society American Petroleum Institute American Public Power Association Avangrid Baker Hughes Berkshire Hathaway Energy **Biomass Power Association Biotechnology Innovation Organization** Black Hills Energy C2ES Capstone Green Energy Carbon180 Carbon Capture Coalition Carbon Utilization Research Council **Clean Energy Trust** CMS Energy Combined Heat and Power Alliance **ConservAmerica** Action Consolidated Edison **Copper Development Association** Day One Project **Dominion Energy** DTE Energy Duke Energy Edison Electric Institute **Edison International** El Paso Electric Enel Green Power North America Enel X North America **Energy Storage Association** Entergy Evergy Exelon Framatome Inc.

General Atomics Geothermal Rising Good Energy Collective **Great Plains Institute** Hawaiian Electric Heat is Power Association Malta Inc. Manufacturers of Emission Controls Association Midwest Cogeneration Association Midwest Energy Efficiency Alliance Minnesota Power National Audubon Society National Grid National Lime Association National Ocean Industries Association National Oilseed Processors Association National Rural Electric Cooperative Association National Venture Capital Association National Wildlife Federation NET Power, LLC NorthWestern Energy Nuclear Energy Institute Nuclear Innovation Alliance Otter Tail Power Company Oxy Low Carbon Ventures PG&E Corporation Pinnacle West/Arizona Public Service Portland Cement Association Portland General Electric **PPL** Corporation Prairie State Generating Company Public Service Enterprise Group Puget Sound Energy **Quidnet Energy Rainey Center Freedom Project** Renewable Energy Buyers Alliance **Renewable Thermal Alliance** Reno + Sparks Chamber of Commerce Rye Development Siemens Energy, Inc. Solar Energy Industries Association Southern Company Svante, Inc. TechNet

The Aluminum Association The Breakthrough Institute The Nature Conservancy UNS Energy / Tucson Electric Power Virginia Nuclear Energy Consortium WEC Energy Group Xcel Energy

https://www.energypolicy.columbia.edu/sites/default/files/file-uploads/EnergizingAmerica_FINAL_DIGITAL.pdf

¹ Breakthrough Energy, "Impacts of Federal R&D Investment on the US Economy," September 2020 https://www.breakthroughenergy.org/-/media/files/bev/bepwcreport09162020.pdf.

² International Energy Agency, "Public Energy R&D as a Share of GDP for Selected Countries, 2012-2019," July 2020 https://www.iea.org/data-and-statistics/charts/public-energy-r-and-d-as-a-share-of-gdp-in-selected-countries-2012-2019

³ Columbia Center on Global Energy Policy, "Energizing America," 2020.