Energy Act of 2020
Division Z of the Consolidated Appropriations Act, 2021

Senator Joe Manchin's Energy Act of 2020 is a bipartisan energy package that features consensus provisions drawn from his American Energy Innovation Act and the House's Clean Economy Jobs and Innovation Act.

Senator Manchin, Ranking Member of the Senate Energy and Natural Resources Committee, led the development of this bipartisan package with Senator Lisa Murkowski (R-AK) and their colleagues on the House Committee on Energy and Commerce and the House Committee on Space, Science, and Technology.

The Energy Act, the first comprehensive, all-of-the-above update to our nation's energy policies in 13 years, prioritizes research, development, and demonstration of next-generation technologies that will reduce greenhouse gas emissions from the power sector, industry, and buildings while keeping American energy affordable and globally competitive.

The Energy Act focuses on innovation, rather than elimination, and advances energy storage; advanced nuclear; carbon capture, utilization, and storage; carbon removal; renewable energy; critical minerals and materials; fusion; industrial technologies; smart manufacturing; and grid modernization, among other areas. It reauthorizes popular, proven-effective programs like ARPA-E. The Energy Act also includes a range of measures that will improve energy efficiency and brings administrative reforms to improve the Department of Energy.

Nearly 70 senators sponsored or cosponsored provisions included in the Energy Act. All or part of 37 Senate bills are included, including 29 bipartisan bills.

Policy Highlights

Focusing on Technology – According to the American Energy Innovation Council, innovation is a "driver of long-term economic growth and stability" that accounts for "at least 50 percent of U.S. annual GDP growth" over the long-term. The Energy Act recognizes the importance of innovation and technological development and modernizes the Department of Energy's authorities to bring them up to speed to meet today's challenges and opportunities.

Making Energy Cleaner – The Energy Act invests in technologies that will be necessary to deliver cleaner energy that is better for human health and the environment. The Energy Act takes a technology-oriented approach without eliminating fuel types that will boost energy efficiency and lead to the development of a wide range of low and zero-emissions energy options. This will lead to cleaner air, cleaner water, and help reduce the impacts of climate change.

Keeping Energy Affordable – Our economy grows, and American families and businesses benefit, when energy prices are reasonable. While the pandemic has wrought low prices for many resources, it is critical to plan for the future. With the world projected to use nearly 50 percent more energy by 2050, continued innovation is key to keeping energy affordable, and the Energy Act recognizes that both government and the private sector have important roles to play.

Notable Inclusions

The Energy Act advances innovation and technological development in critical areas through basic and applied research programs and technology demonstrations. Priorities include:

- Modernization of the functions and structure of the Department of Energy's program for carbon capture, utilization, and storage, to help make these technologies commercially viable for coal and natural gas generation and industrial facilities.
- Reauthorization of the Weatherization Assistance Program. West Virginia has received over $30 million since 2010 through this program for weatherization work in over 8,000 West Virginian homes.
- Codification of a NETL-led program to develop advanced separation technologies for extraction and recovery of rare earth elements from coal byproducts. West Virginia University has been a lead recipient and research partner in this work.
- A robust effort to rebuild domestic supply chains through a multi-Department emphasis on locating, responsibly producing, increasing the efficient use of, recycling, and developing alternatives for critical minerals.
- Investment in all types of renewable energy resources – including wind, solar, hydropower, marine, and geothermal – including a focus on applying geothermal technologies to deeper or more challenging resources such as West Virginia's geologic formations.
- An expanded focus on energy storage, including technical and planning assistance grants to help smaller utilities and electric cooperatives, like West Virginia's Harrison Rural Electrification Association, deploy energy storage.
- New and renewed energy efficiency programs, including for schools, federal buildings, and industry.
- Extending authority to NETL to conduct a Laboratory Directed Research and Development Program to capitalize on the best ideas of NETL's scientists and engineers.
- Research, development, demonstration, and technical assistance for industrial energy and a plan to develop and deploy smart manufacturing technologies.
- Research and development on natural and technological carbon dioxide removal, which has significant potential to help reduce net emissions levels.
- Reforms to improve transparency and oversight of the Department of Energy's Title 17 Loan Program, while making it easier for applicants to navigate the process.
- Provisions to guide and accelerate modernization of the electric grid.
- New authorities to accelerate the development of improved, clean, and scalable advanced nuclear reactors, including the fuel needed for initial advanced reactors.
- Technology transfer programs to aid private sector access to the Department of Energy and its National Laboratories, and ensure that promising ideas can make it from the lab bench to commercial reality.