



MAKING ENERGY CLEANER,

KEEPING ENERGY AFFORDABLE

& PROMOTING INNOVATION

MODERNIZING AMERICA'S ENERGY POLICY

The Energy Act of 2020 – the first comprehensive update to our nation's energy policies in 13 years – became law in December 2020 as Division Z of the Consolidated Appropriations Act, 2021. In the 116th Congress, Chairman Lisa Murkowski (R-Alaska) and Ranking Member Joe Manchin (D-West Virginia) of the Senate Energy and Natural Resources Committee led the development of this bipartisan package with their colleagues on the House Committees on Energy and Commerce; Natural Resources; and Science, Space, and Technology. The Energy Act features provisions drawn from the Senate's American Energy Innovation Act (S. 2657) and the House's Clean Economy Jobs and Innovation Act (H.R. 4447). The Energy Act built upon the strong framework that Chairman Murkowski and Ranking Member Maria Cantwell (D-Washington) provided through the Energy Policy Modernization Act and the Energy and Natural Resources Act in the 114th and 115th Congresses, respectively.

The Energy Act supports an all-of-the-above approach to energy and prioritizes research, development, and demonstration of next-generation technologies to reduce greenhouse gas emissions from the power sector, industry, and buildings while keeping American energy affordable and globally competitive.

The new law focuses on energy storage; advanced nuclear; carbon capture, utilization, and storage; carbon removal; renewable energy; critical minerals; 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



PROMOTING INNOVATION – 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 MORE CLEAN – The Energy Act recognizes that an all-of-the-above approach to energy is essential to having secure and reliable power. Consequently, it invests in the technologies like carbon, capture utilization, and sequestration which will deliver energy that is better for human health and the environment. The Energy Act also takes a technology-oriented but technology-neutral approach to boost energy efficiency and lead to the development of a wide range of low and zero-emissions energy options. This will lead to more clean air and 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. 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.



STRENGTHENING AMERICA’S MINERAL SECURITY – The Energy Act recognizes that the United States’ dependence on foreign sources for critical minerals is a strategic threat to our economic and national security. It includes the bipartisan American Mineral Security Act to identify domestic deposits of critical minerals, strengthen the mineral security workforce, and makes substantial investments in R&D to promote more efficient mining, processing, and recycling.

NOTABLE INCLUSIONS

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

Priorities include:

- ⚙️ New authorities to accelerate the development of improved, clean, and scalable advanced nuclear reactors, including the fuel needed for initial advanced reactors.
- ⚙️ Investment in all types of renewable energy resources – including geothermal, hydropower, marine hydrokinetic, wind, and solar – and improved permitting for renewable projects on federal land.
- ⚙️ 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 power generation and industrial facilities.
- ⚙️ An expanded focus on energy storage, which is key to advancing generation from renewable resources, can increase grid resiliency, and reduce the need for additional transmission.
- ⚙️ Research and development on natural and technological carbon dioxide removal, which has significant potential to help reduce net emissions levels.
- ⚙️ Authorization of a modern fusion energy program, including programs to aid private sector fusion development.
- ⚙️ New and renewed energy efficiency programs, including for schools, federal buildings, and industry.
- ⚙️ Reauthorization of programs like ARPA-E and Weatherization Assistance, and the formal authorization of the Federal Energy Management Program.
- ⚙️ 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.
- ⚙️ Research, development, demonstration, and technical assistance for industrial energy and a plan to develop and deploy smart manufacturing technologies.
- ⚙️ Reforms to improve transparency and oversight of the Department of Energy’s Title 17 Loan Guarantee Program, while making it easier for applicants to navigate the process.
- ⚙️ Provisions to guide and accelerate the modernization of the electric grid.
- ⚙️ 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.
- ⚙️ Authority for the Federal Energy Regulatory Commission to modify compensation to attract and retain individuals with highly specialized skillsets.
- ⚙️ Expansion and extension of limitations on Russian uranium imports.