American Energy Innovation Act

Modern Policy for Modern Energy

S. 2657, the **American Energy Innovation Act** (AEIA), is a compilation of more than 50 energy-related measures considered and individually reported by the Senate Energy and Natural Resources Committee (ENR) last year. Developed under the leadership of Chairman Lisa Murkowski (R-Alaska) and Ranking Member Joe Manchin (D-West Virginia), AEIA will strengthen our domestic economy, national security, and international competitiveness while facilitating cleaner energy that protects human health and the global environment.

Policy Highlights

Keeping Energy Affordable – Our economy grows, and American families and businesses benefit, when energy prices are reasonable. While current market conditions have ushered in historically low prices for many resources, technological innovation made that possible and 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 AEIA recognizes that both government and industry have important roles to play.

Making Energy Cleaner – AEIA will help keep energy affordable and simultaneously deliver what Americans want – cleaner energy that is better for human health and the environment. Instead of costly mandates or tax increases, AEIA takes a technology-oriented but technology-neutral approach 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.

Strengthening Our Security – Innovation helped America overcome its foreign oil dependence but our mineral, cyber, and grid security all remain critical threats. AEIA recognizes that a supply chain disruption or a cyberattack, particularly on the electric grid, could have devastating consequences and takes meaningful steps to protect Americans against them.

Increasing Our Competitiveness – The strength of our economy is determined by our ability to compete with nations around the world. While often taken for granted, a steady supply of energy and raw materials is fundamental to our ability to grow and prosper. AEIA will help ensure that American manufacturers can utilize domestic energy and materials for their products – and it will help ensure those resources are produced safely and responsibly by a well-trained and highly-skilled workforce.

Consensus Legislation

Chairman Murkowski and Ranking Member Manchin will introduce AEIA as a substitute amendment to S. 2657, a shell vehicle. As introduced, AEIA contains measures sponsored or cosponsored by more than 60 Senators that are arranged into two titles. The first focuses on American leadership in the research and development of innovative energy technologies. The second aims to improve our national security in key areas and facilitate workforce development.

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Summary of Provisions

TITLE I | INNOVATION

Efficiency **–** Often called the "first fuel," energy efficiency provides significant benefits for consumers, businesses, and the environment – yet the International Energy Agency has found that the pace of efficiency improvements is slowing. AEIA will improve the efficiency of everything from schools to data centers while promoting weatherization and smart buildings.

Renewables **–** Once fully commercialized, renewable resources will offer an unlimited supply of clean, low-cost, domestic energy. AEIA supports wind and solar technologies, extends hydropower incentives, modernizes marine energy research, and advances geothermal energy.

Energy Storage **–** Energy storage is key to overcoming the variability of many renewable resources and will help stabilize the electric grid. AEIA promotes promising storage technologies and facilitates pumped storage from clean hydropower.

Carbon Capture, Utilization, and Storage **–** CCUS promises to dramatically reduce greenhouse gas emissions from both coal and natural gas plants. AEIA will modernize federal CCUS R&D efforts and promote direct carbon removal to establish U.S. primacy in these key fields.

Advanced Nuclear **–** New nuclear technologies are smaller, scalable, and will offer clean, affordable baseload energy to communities, military installations, and other facilities. The U.S. developed nuclear energy and can regain its global leadership by pioneering advanced reactors.

Industrial and Vehicle Technologies **–** The industrial and transportation sectors are major sources of greenhouse gas emissions. AEIA supports technological innovation in both sectors and encourages smart manufacturing that will bring good jobs back to America's heartland.

Department of Energy **–** DOE is at the heart of innovation in the energy sector. AEIA brings the Department's authorities into the 21st century, renews essential programs like ARPA-E, and provides strategic direction in groundbreaking areas like high-performance computing.

TITLE II | SECURITY AND WORKFORCE

Mineral Security **–** The U.S. imports at least 50 percent of 46 minerals, including 100 percent of 17 of them. This is our Achilles' heel and an insidious threat to both our national security and international competitiveness. AEIA complements the administration's actions and will help rebuild a strong domestic minerals supply chain for the American military and manufacturers.

Cybersecurity and Grid Modernization **–** America's critical infrastructure – including the electric grid – faces millions of ever-evolving cyberattacks each day. A successful attack could have devastating consequences, so AEIA provides new mechanisms and incentives to protect our cybersecurity and modernize the domestic grid.

Workforce Development **–** A well-educated workforce to fill jobs in key sectors is crucial for affordable energy and America's status as an energy super power. AEIA addresses pressing needs for both energy-related companies and National Laboratories to ensure the U.S. has the best and most highly skilled workers in the world.