

# **THE AMERICAN ENERGY INNOVATION ACT**

The American Energy Innovation Act (AEIA) is an all-of-the-above approach to our energy future that brings together innovative solutions that will keep our energy affordable and reliable and protect our grid while reducing emissions across the economy and strengthening our position as a global leader.

## **Boosting Energy Innovation**

- In 2017, the vast majority of carbon emissions came from just four sectors of the economy – electric generation (27.5% of emissions), transportation (29%), industry (22%), and commercial and residential buildings (11.5%).
- The AEIA addresses each of these key sectors, and invests in strategies and advanced technologies like energy storage, nuclear and vehicles innovation to reduce their emissions while creating jobs and stimulating the economy.

## **Advancing Energy Efficiency Investment**

- The AEIA includes policies that would promote energy efficiency in homes, federal buildings, and schools, and provides funding for awards and grants that result in millions of dollars in upgrades for West Virginia every year.
- In particular, the AEIA reauthorizes the Weatherization Assistance Program (WAP), which provides over \$3 million for weatherization work in West Virginia homes every year, and the State Energy Program which has provided the state over \$3 million for efficiency and renewable energy projects since 2014.

## **Driving Cutting-Edge Research and Development for CCUS and Coal-Derived Carbon Products**

- The AEIA heavily invests in research and development for carbon capture, utilization and storage (CCUS) technologies and will support the work being done at the National Energy Technology (NETL) laboratory to help reduce emissions from coal- and gas-fired power plants and advance innovative ways of using captured CO<sub>2</sub> as a valuable product.
- The bill also provides funding for and establishes two demonstration programs to accelerate the commercial deployment of coal-derived carbon products in the two major coal producing regions.
- It also invests in R&D for deriving rare earth elements from coal and acid mine drainage – a waste product that is prevalent in West Virginia and the greater-Appalachian region – which could be used to help break the Chinese monopoly on the rare earth market.

## **Supporting Economic Growth and Developing our Energy Workforce**

- The AEIA incorporates Senator Manchin's Appalachian Energy for National Security Act, which would direct the Department of Energy to study the economic and national security benefits of a natural gas liquids storage facility in Appalachia.
- The AEIA ensures we leave no one behind as markets and other forces continue to transition our economy and energy mix by making workforce development a priority of within the Department of Energy.
- The bill prioritizes assisting Veterans, minorities, and displaced energy workers in receiving job training and create opportunities to build apprenticeship and pre-apprenticeship programs with the National Labs to ensure places like NETL have the skilled workforce they need as their current employees near retirement.
- The AEIA also assists in narrowing the skills gap of future energy workers by providing funding for job training opportunities in the growing field of clean energy.

## **Encouraging Development of Renewables and Energy Storage Technologies**

- The AEIA promotes research and development for advanced wind and solar technologies and incentivizes hydropower – including to power dams that do not currently generate electricity like several of those in the Mountain State.
- The bill also takes advantage of currently untapped geothermal resources, particularly in West Virginia and the eastern U.S., by requiring that one geothermal demonstration project be constructed in those areas of the country.
- Increased use of renewable energy also requires better technologies to be able to store energy. The AEIA invests in developing energy storage technologies that are able to provide long-term storage for periods when energy production decreases to prevent disruptions in power on our electric grid.

