

Alliance to Save Energy U.S. Senate Committee on Finance Cost Recovery Task Force

Re: Section 179D, Commercial Buildings Energy Efficiency Tax Deduction

June 6, 2019

The Alliance to Save Energy is a non-profit, bipartisan coalition of business, government, environmental, and consumer-interest leaders that advocates for enhanced U.S. energy productivity to achieve economic growth; a cleaner environment; and greater energy security, affordability, and reliability. The Alliance is a coalition of nearly 130 businesses and organizations that collectively represent at least \$615 billion in market capital. The Alliance was founded in 1977 by Sens. Charles Percy (R-III.) and Hubert Humphrey (D-Minn.), and today has 14 members of Congress serving on an Honorary Board of Advisers.

Energy efficiency represents an extraordinary opportunity to simultaneously boost economic growth and competitiveness while significantly reducing carbon emissions. Without the gains in energy efficiency made since 1973, the U.S economy today would require about 60 percent more energy than we currently use, and consumers and businesses would be spending \$800 billion more per year on energy, stifling investment and economic growth.

Despite these gains, the opportunities ahead are even greater as technology advancements in areas such as artificial intelligence, materials science and advanced building systems create vast new potential for improving efficiency across the economy.

Energy efficiency is one of the largest employers in the energy sector and by far the largest in the clean energy field. According to the U.S. Energy Employment Report, energy efficiency supports more than 2.3 million U.S. jobs. Roughly 70 percent of those jobs are in construction and manufacturing – retrofitting homes and buildings and manufacturing high-efficiency building components and equipment. Tax incentives for efficiency improvements will directly stimulate economic activity and job growth in these fields.



Efficiency also is the single most impactful solution we have for addressing climate change. According to the International Energy Agency (IEA), energy efficiency can account for more than <u>40 percent of the emissions</u> reductions needed to meet the goals of the Paris climate accord – more than any other mitigation strategy. Put another way, it is virtually impossible to achieve even modest carbon reduction goals without robust gains in energy efficiency.

Recent reports on rising energy consumption and carbon emissions underscore the imperative of acting quickly. Increased global demand drove a <u>2.3 percent increase</u> in energy consumption last year, according to IEA, resulting in a 3.4 percent increase in carbon emissions in the United States. The demand for all sources of generation increased, yet energy efficiency gains saw only modest improvement. The Business Council on Sustainable Energy's <u>2019 Sustainable Energy in American Factbook</u> also showed that U.S. energy productivity – a measure of economic output per unit of energy consumed – ticked down by 0.4 percent as energy consumption outpaced GDP growth.

Well-designed tax incentives for efficiency improvements are among the best policy options we have for tackling carbon emissions while at the same time delivering economic growth and a more productive and competitive U.S. economy.

Energy Efficiency Tax Incentives

The Dec. 31, 2017, expiration of three efficiency incentives – 25C for existing home improvements, 45L for new home construction, and 179D for commercial buildings – left the U.S. tax code without any direct incentives for energy efficiency. The three expired incentives are particularly important because homes and buildings account for almost 40 percent of our energy use and are likely to be in use for 50 to 100 years. By failing to incentivize energy efficiency improvements, we are locking in decades of energy waste, productivity losses and unnecessary emissions.

To make meaningful progress in managing energy consumption and reducing carbon emissions, we must have meaningful tax incentives – in the same way that we have incentives for numerous forms of energy generation. Of particular relevance to the Cost Recovery Task Force is Section 179D, the Energy Efficient Commercial Buildings Deduction. First enacted under the Energy Policy Act of 2005, Section 179D plays an important role in reducing the energy consumption of an energy-hungry sector – commercial buildings – while stimulating economic growth and job creation. We support permanent or long-term extension of Section 179D that includes appropriate requirements for periodically updating the efficiency performance in out years. We also support updates to strengthen and modernize the incentive, including by updating the ASHRAE code reference to a more recent version of the code – it currently requires efficiency of 50 percent better than the 2007 code – to ensure more meaningful efficiency gains. There is precedent for such updates. For example, Congress in 2015 updated the ASHRAE code reference from the 2001 code to the 2007 code to ensure that the policy was keeping pace with efficiency improvements since the incentive was originally created in 2005. Other proposals, such as the "Commercial Building Modernization Act" led by Sen. Cardin sought to expand the impact of 179D by better encouraging building retrofits and increasing its use beyond public-sector buildings.

Commercial Buildings and Energy Efficiency

Commercial buildings account for a significant share of total energy consumption in the U.S. According to the Department of Energy's Energy Information Administration (EIA), the residential and commercial building sectors combine to represent almost <u>40 percent</u> of the total energy consumed in the U.S., with energy consumption split nearly evenly between the two sectors. Because of this footprint, commercial buildings present an extraordinary opportunity to advance energy efficiency. For example, since 2003, the number of

commercial buildings has increased by 14 percent and total floorspace has increased by 22 percent, yet energy consumption grew only by 7 percent – a small increase compared to building growth, attributable to improved technology and higher efficiency standards. Additionally, the EIA's <u>Commercial Buildings Energy Consumption</u> <u>Survey</u> (CBECS) found that energy used for lighting has decreased 46 percent from 2003 to 2012. Even with these gains, the U.S. Department of Energy (DOE) has found that building owners and tenants still spend an estimated \$38 billion per year on lighting alone.

With approximately half of the residential and commercial buildings in the U.S. built before 1980, thereby predating higher efficiency standards, tax incentives encouraging energy efficiency improvements represent a targeted, high-impact policy solution that would deliver long term savings for commercial building owners and tenants.

Economy-wide Benefits of Energy Efficiency

The energy efficiency sector presents an enormous opportunity to grow our workforce and create good-paying American jobs that cannot be outsourced. According to the <u>2019 U.S. Energy and Employment Report</u> (USEER), energy efficiency jobs showed the highest rate of growth across the entire energy sector, adding 76,000 new positions in 2018 alone. The energy efficiency sector, including those who design, install, and manufacture energy efficiency products and services, accounts for one-third of all energy sector jobs and over two-thirds of all clean energy jobs, employing over 2.3 million people in 2018. In fact, energy efficiency jobs outnumber electric power generation jobs in 48 states, and in 15 states, efficiency jobs exceed fuel, energy power generation, transmission, distribution, and storage jobs combined. Many of these jobs, almost 1.3 million, are in construction, which is also projected to experience a significant 8.8 percent growth rate.

To further illustrate the impact of energy efficiency on U.S. employment, members of the Cost Recovery Task Force represent over 208,000 Americans employed in whole or in part in the energy efficiency sector (see Table 1)¹:

Member	Jobs	Member	Jobs
Sen. Mike Crapo (R-Idaho) <i>Co-Lead</i>	8,747	Sen. Benjamin Cardin (D-Md.) <i>Co-Lead</i>	70,530
Sen. Chuck Grassley (R-Iowa) ex officio	20,587	Sen. Ron Wyden (D-Ore.) <i>ex officio</i>	42,547
Sen. Todd Young (R-Ind.)	55,090	Sen. Catherine Cortez Masto (D-Nev.)	11,155
Total Energy Efficiency Sector Jobs: 208,656			

Table 1. Energy Efficiency Sector Jobs in States Represented by Cost Recovery Task Force Members

Strengthening and modernizing Section 179D would promote significant additional job growth in the energy efficiency sector, creating opportunities in design, engineering, and construction, to name a few. A Regional Economic Models, Inc. (REMI) <u>study</u> done in May 2017 found that strengthening and modernizing Section 179D would support almost 77,000 jobs annually. Even a straight extension of current law, while less preferable, would support almost 41,000 jobs. The REMI report also found that modernizing and strengthening 179D would contribute almost \$7.4 billion annually to the GDP and over \$5.7 billion toward national personal income, while a straight extension of current law would contribute about half as much to the GDP, at just over \$3.8 billion and increase national personal income by \$3.1 billion.

¹ National Association of State Energy Officials (NASEO) and Energy Futures Initiative (EFI), "The 2019 U.S. Energy & Employment Report." April 2019. https://www.usenergyjobs.org/. Last accessed June 4, 2019.

Related Expired Energy Efficiency Measures

The 179D incentive is part of a suite of three incentives aimed at improving the efficiency of the built environment. The related energy efficiency tax incentives – also in need of modernization and extension – are as follows:

<u>Section 25C Homeowner Efficiency Credit</u> – This provision provides a 10 percent tax credit for homeowner energy efficiency improvements, including envelope improvements, such as insulation or windows, and heating and cooling upgrades. The incentive has a lifetime cap of \$500, with additional caps for individual product categories, such as \$300 for air conditioning equipment.

<u>Section 45L Energy Efficient New Home Credit</u> – The 45L incentive provides a credit of \$2,000 for builders of homes that use 50 percent less energy for space heating and cooling and a \$1,000 tax credit to the builder of a new manufactured home achieving 30 percent energy savings for heating and cooling or a manufactured home meeting the ENERGY STAR requirements.

Conclusion

Energy efficiency is our greatest energy resource, and the absence of meaningful energy efficiency incentives is a glaring omission in the tax code and a lost opportunity to strengthen U.S. economic growth, sustainability and competitiveness. There is strong evidence that longer-term, higher-value incentives are effective in pushing markets toward efficiency. Strengthening and extending these incentives presents a bipartisan, forward-thinking opportunity, providing stability and certainty for the future while creating jobs, promoting economic growth, and mitigating the effects of climate change. We look forward to continuing to work with the task force to advance bipartisan efficiency policy in the tax code.