

ENERGY EFFICIENCY: MEETING TODAY'S CHALLENGES WITH ECONOMIC GROWTH AND SUSTAINABILITY

The U.S. faces unprecedented challenges in responding to the COVID-19 pandemic while building a secure and affordable energy future to overcome the climate crisis. Perhaps more than any other energy resource, energy efficiency holds tremendous potential to address these challenges by creating jobs and economic activity while sharply reducing greenhouse gas (GHG) emissions and slashing energy costs for households and businesses. This document outlines the Alliance to Save Energy's immediate policy priorities for stimulating investment and activity in the efficiency sector that President-elect Joe Biden's administration and the 117th Congress should address in the early months of 2021. In addition to the specific proposals outlined in this agenda, we look forward to working with lawmakers in a bipartisan way to develop economy-wide policies that ensure markets are appropriately valuing the benefits of energy efficiency as an economic, environmental justice, and climate solution.

CLEAN ENERGY WORKHORSE

Energy efficiency is the workhorse of the clean energy economy. It is by far the largest clean energy workforce, employing 2.38 million people in early 2020 – nearly seven times that of the wind and solar industries combined and 12 times the size of the entire coal industry. It also is the single most effective solution to climate change, with the International Energy Agency estimating that efficiency alone can account for more than 40% of the emissions cuts needed to reach Paris Climate Agreement goals. The beauty of efficiency is that it accomplishes these goals while reducing costs. Energy efficiency improvements since 1980 are saving Americans roughly \$2,500 per person annually. These savings are particularly important for lower-income households who spend a disproportionate amount of their income on basic energy services.



2.38 MILLION The number of ar The number of energy efficiency employees in early 2020.

ENERGY EFFICIENCY ACCOUNTS FOR 70% OF CLEAN ENERGY JOBS AND HAS AN EMPLOYMENT GROWTH RATE DOUBLE THE NATIONAL AVERAGE

PANDEMIC IMPACT

Energy efficiency is among the energy sectors hardest hit by the pandemic, with nearly 320,000 jobs lost since the pandemic shutdowns began in March. For perspective, that is almost twice the size of the entire U.S. coal industry workforce and nearly equivalent to the combined wind and solar workforces. Most of those laid off are construction workers and contractors who have seen home or building efficiency projects canceled. These jobs are poised for a fast rebound under targeted stimulus. For example, a recent report from the American Council for an Energy-Efficient Economy found that modernizing and expanding energy efficiency tax incentives for homes and buildings could create nearly 600,000 jobs.



"In a contentious time, the Alliance to Save Energy's work to advance bipartisan solutions is more important than ever. I'm confident the Alliance will play a central role in uniting people behind ideas that tackle the climate challenge while strengthening our economy." U.S. Sen. Chris Coons (D-Del.)

FIRST 100 DAYS

While many policies for driving energy efficiency gains require legislation, the Biden administration has a number of tools available to deliver results immediately through administrative actions and regulation, while using the budget process to promote increased funding and resources for key agencies.. The Alliance urges the administration to take the following actions related to energy efficiency:

1. Paris Climate Agreement. The Biden team can immediately signal a shift toward a clean energy economy by rejoining the Paris Agreement and outlining meaningful steps for meeting national goals for carbon reduction.

Recommendation: Rejoin the Paris Agreement and develop strong energy efficiency measures to be included in the U.S. Nationally Determined Contribution.

2. Reinstate Corporate Average Fuel Economy Standards. These standards <u>save more energy</u> than any other single efficiency initiative in the U.S., with the power to save hundreds of billions of dollars in future fuel costs while helping drive the market toward electrification.

Recommendation: Reinstate Corporate Average Fuel Economy Standards negotiated under the Obama administration with the support of automakers and other stakeholders but repealed by the Trump administration, which required fleets to average about 54 miles per gallon by 2025. More information is <u>here</u>. Additionally, establish a vision to continue strengthening standards and/or transition the vehicle stock to electric vehicles in the coming decade.

3. Get Appliance & Equipment Standards Back on Track. <u>Second only to fuel economy standards</u> in saving energy, these standards cover more than 60 categories of common household products, protecting consumers from higher energy costs and sharply reducing GHG emissions.

Recommendation: Rebuild the Department of Energy's standards program by acting quickly to begin reversing recent Trump administration actions, including replacing damaging rules on lightbulbs, showerheads, dishwashers, and other products. Additionally, get the standards program back on track by expediting more than 40 standards that will be due for updates in President-elect Biden's term in office, including 28 that are already past due. More information is <u>here</u>. **4. Strengthen Federal Energy Performance.** The federal government is the largest energy user in the U.S., <u>spending \$6 billion annually</u> on building energy costs alone. The federal government can lead by example with high-efficiency buildings, deep energy retrofits, and net-zero energy new construction while cutting federal spending on energy bills and GHG emissions.

Recommendation: Issue a new executive order governing energy performance for federal facilities and fleets, pushing the federal government to lead by example in improving energy efficiency. This executive order should include enforceable targets for energy and water intensity reduction and improved transparency around each agency's performance. Additionally, the Office of Management and Budget (OMB) can issue quidance to agencies regarding implementation of executive orders, including best practices on goalsetting and achieving targets for energy and water savings: set goals to retrofit federal facilities, set targets for federal energy savings performance contracts (ESPCs) to perform deep energy retrofits, set fleet requirements, and direct agencies to reinstate the Social Cost of Carbon into metrics to internalize the cost of pollution in energy costs. More information is here.

5. Double ENERGY STAR. At a cost of less than \$40 million, <u>ENERGY STAR</u> has brand recognition above 90% nationally and saves consumers and businesses more than \$35 billion annually in avoided energy costs, while sharply reducing U.S. GHG emissions. In fact, the 330 million metric tons of avoided GHGs that ENERGY STAR delivered in 2018 represents about 5% of total U.S. GHG emissions annually.



ENERGY STAR SAVES AMERICANS **\$35** BILLION IN ENERGY COSTS ANNUALLY AND PREVENTS **330 MILLION METRIC** TONS OF CARBON EMISSIONS, **Recommendation:** Use existing authorizations to immediately expand the ENERGY STAR program, including expansion of the Portfolio Manager commercial buildings program and establishment of a new voluntary labeling program for residential retrofits. Propose to roughly double annual program funding to \$80 million in the administration's FY2022 budget while also pursuing opportunities for program improvement and streamlining. More information is <u>here</u>.

6. Encourage Active Efficiency in Buildings. The utility sector is rapidly evolving as a digitally driven enterprise using decentralized energy resources, grid connectivity, and sophisticated demand flexibility technologies to manage and meet demand. The Alliance refers to this wider suite of increasingly interconnected energy optimization strategies as <u>Active Efficiency</u>. Further investment is needed to drive these technologies into the market and establish the U.S. as a global leader in the field.

Recommendation: Establish a grant program and a President's Award providing grants and competitive prizes for implementation of cutting-edge demandmanagement technologies and building-to-grid integration. Expand funding for these and other demand flexibility programs such as <u>Grid-Interactive Efficient</u> <u>Buildings</u>.

7. Bolster Building Energy Code Implementation and Adoption. Homes and buildings account for nearly 40% of U.S. energy consumption and nearly the same share of GHGs. Further, homes and buildings built today will likely be in use for 50 to 100 years, locking in decades of wasted energy and unnecessary emissions if they are not built to be efficient. **Recommendation:** Use existing authority to expand operations at the Building Energy Codes Program to support the development and implementation of the latest building energy codes, including providing technical assistance and other resources to support state and local governments interested in improved code adoption. Propose additional funding for the program in the administration's FY2022 budget. More information is here.

8. Ensure New Federally Assisted Housing is

Efficient. At least 15% of the new homes built in the U.S. each year have federally backed mortgages or other federal assistance through the Federal Housing Administration, U.S. Department of Agriculture, and Department of Veterans Affairs, with additional new home loans backed by Fannie Mae and Freddie Mac. Many of these loans go to low- to middle-income homebuyers who can least afford high energy bills. Yet these loans have either woefully outdated energy efficiency criteria or no efficiency criteria. Updating efficiency requirements for these loans is an opportunity to not only save homeowners and renters money but to drive energy efficiency in the housing stock at a national scale and significantly reduce emissions.

Recommendation: Update energy efficiency criteria for these loan programs where it exists and implement new efficiency criteria for loan programs where it does not, with new criteria based on the 2021 International Energy Conservation Code (IECC). Ensure that federallyinsured mortgages account for the estimated energy operational costs of the prospective homes.



117TH CONGRESS

The following legislative priorities were developed to quickly stimulate jobs and economic activity in response to massive energy efficiency job losses resulting from the pandemic, particularly in the construction sector, which is home to 60% of U.S. energy efficiency jobs. These proposals have broad backing from both the business community and environmental advocates.

- Launch a national campaign to modernize critical public facilities at the local, state, and federal levels
 to better prepare for future disasters, including through performance contracts that leverage cost savings from
 energy efficiency to draw private investment. This campaign introduced in the 116th Congress as the Open Back
 Better Act could leverage \$20 billion in public funding to draw \$80 billion in private investment for renovations to
 schools, hospitals, community centers, airports, federal facilities, and other buildings to improve safety, efficiency,
 resilience, and flexibility in responding to disasters and public health crises. More information is here.
- Modernize and expand tax incentives and/or rebates encouraging efficiency improvements in homes and buildings, with significantly increased incentive levels to encourage more private investment in heating and air conditioning equipment, insulation, lighting systems, windows, etc. The existing incentives are outdated and inadequate for significantly influencing the market. A recent analysis found that modernizing and expanding efficiency incentives could create nearly 600,000 jobs while saving consumers and businesses some \$53 billion. More information is <u>here</u>.



• **Establish a matching grant program for small business energy efficiency improvements** leveraging existing utility demand side management programs. This proposal calls for \$6 billion in funding over three years to be made available as matching funds, enabling zero cost upgrades to the small business customer. The federal funding, administered by the Department of Energy, would be delivered to small businesses through the utility programs, utilizing their existing efficiency performance criteria and workforce infrastructure. More information is <u>here</u>.



"The Alliance has proven, time and again, to be a valuable presence in the nation's energy debates and a major contributor to our understanding of how we can use energy more efficiently and effectively. We can, and we should, debate questions of energy generation, but the Alliance always reminds us that there is at least as much value in finding ways to waste less of what we produce in the first place." U.S. Rep. Paul Tonko (D-N.Y.)

- **Pass comprehensive transportation infrastructure legislation** focused on building a modern transportation system that is more efficient, sustainable, cost-effective, and equitable for all Americans, including by:
 - Building out electrification infrastructure.
 - Increasing funding for public transit programs.
 - Increasing investment in port and airport efficiency and modernization.
 - Increasing R&D funding for advanced technologies with the potential to drive greater efficiency and decarbonization.

More information is <u>here</u>.

- Expand key programs at DOE's Office of Energy Efficiency and Renewable Energy, particularly the Weatherization Assistance Program, which continues to see demand outstrip supply nationwide, to help lowincome households permanently reduce energy bills. Gradually phase in increased weatherization funding over four years to ensure effective implementation. Ensure that those who can least afford high energy bills receive services by expanding flexibility for states to use a larger portion of funding on non-energy-related repairs that often stand in the way of weatherization for the most vulnerable households, while maintaining cost-effective weatherization as the core funding purpose. Better coordinate repair and weatherization work between the Office of Housing and Urban Development and the Department of Energy's weatherization office. Other EERE priorities included the Building Technologies Office, State Energy Program, Advanced Manufacturing Office and Federal Energy Management Program. More information is here.
- **Establish robust workforce training programs** aimed at ensuring low-income households, people of color, and other underrepresented groups participate in the expanding clean energy economy. Energy efficiency in recent years has been among the fastest-growing employment sectors in the energy economy. <u>Nearly 80%</u> of energy efficiency companies are small businesses employing fewer than 20 people, and employers <u>consistently cite</u> a lack of trained workers as a primary obstacle to growth. The <u>Blue Collar to Green Collar Jobs Development Act</u> offers a strong model for a national training program that would provide grants to businesses to pay a living wage as workers train for jobs in energy efficiency, grid modernization, and renewable energy sectors. Additionally, it provides funding to educational institutions such as community colleges and workforce development organizations to expand hiring opportunities.

THE ECONOMIC COMPETITIVENESS & ACTIVITY INNOVATION & TECHNOLOGY LEADERSHIP BENEFFITS RESILIENCE & GRID RELIABILITY CARBON REDUCTION OF ENERGY ENERGY SECURITY JOB CREATION EFFICIENCY



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