

Written Testimony of Jason Hartke
President, The Alliance to Save Energy

U.S. House of Representatives
Committee on Transportation and Infrastructure
“The Cost of Doing Nothing: Why Investing in Our Nation’s Infrastructure Cannot Wait”
February 7, 2019

Thank you for the opportunity to submit a written statement regarding the Committee’s hearing titled, “The Cost of Doing Nothing: Why Investing in Our Nation’s Infrastructure Cannot Wait.”

We look forward to working with you in the 116th Congress to develop bipartisan policies for rebuilding American infrastructure, and we submit this statement to highlight the role that energy efficiency can play in sharply reducing both the costs and carbon footprint of infrastructure projects.

Infrastructure, of course, is more than roads and bridges. It’s the foundation that determines where and how we fuel our vehicles, deliver electricity and natural gas, and treat and distribute water. It’s our airports, seaports, transit hubs and other critical public buildings. These facilities have an enormous impact on U.S. energy consumption, and a nationwide infrastructure initiative presents an opportunity to “get it right” and save consumers and taxpayers decades of wasted energy costs.

Transportation is now the greatest source of greenhouse gas emissions in the United States and the second highest expense for households. Exciting breakthroughs in electrified transit, efficient alternative fuel vehicles, ridesharing, and other tools have the potential to enhance travel experiences while reducing energy waste, congestion and emissions.

Similar energy-saving opportunities exist across other infrastructure sectors. Water treatment and distribution facilities, for example, are typically the largest energy users in their local communities, often accounting for [a third or more](#) of a municipality’s total energy consumption. Cutting their energy use by a modest 10 percent could save [\\$400 million a year](#), according to the EPA. And, there are enormous opportunities for savings in modernizing public buildings. The federal government alone [spends \\$6 billion annually](#) on energy for its buildings.

We must avoid the temptation to look only at short-term costs and build a truly modern infrastructure network that locks in savings over decades and lays the foundation for a more competitive and productive economy. In some cases, infrastructure projects can pay for themselves through public-private partnerships and innovative financing around energy savings investments. Incorporating energy efficiency can also provide a host of additional benefits, such as reducing harmful emissions and improving power grid reliability and resilience – all while creating good-paying jobs.

Already, energy efficiency supports [more than 2.2 million U.S. jobs](#), with an employment growth rate double the national average. Seven in 10 of energy efficiency jobs are in construction and manufacturing.

We encourage you to incorporate energy efficiency in any infrastructure proposals from the start to make the best, most-efficient use of taxpayer investments. The Alliance to Save Energy's infrastructure priorities include:

- **Laying the foundation for an efficient transportation sector.** The transportation sector is undergoing rapid transformation due to innovation in new technologies, business models and connectivity. These new tools could enable a more efficient, effective, clean, and affordable transportation system, but their success depends heavily on effective infrastructure development. For example, for emerging alternative vehicle markets, especially electric vehicles, hydrogen fuel cell and renewable natural gas vehicles, the lack of such infrastructure presents a market barrier to deployment for highly-efficient vehicles that have great potential to reduce energy waste and climate emissions in light-, medium- and heavy-duty sectors. Stronger transit systems have an outsized positive impact on the lives of low-income, elderly, and disabled communities, which rely on these services for mobility. Smarter traffic systems and system optimization at ports and distribution centers can enhance the longevity of infrastructure by controlling traffic congestion and optimizing the vehicles used, reducing maintenance costs while enhancing safety. And autonomous vehicles and ridesharing could change the shape of urban mobility. Congress should pursue opportunities to support these emerging trends to ensure that the infrastructure built today will be ready for tomorrow's needs.
- **Promoting adoption of updated building energy codes, high-performance buildings, and high-efficiency equipment.** Buildings account for roughly 40% of U.S. primary energy use and 76% of the electricity we use, and recent climate assessments and reports consistently point to reducing building energy consumption as a top solution to reduce greenhouse gas emissions. As we invest in building and rebuilding the very places where people and commerce meet, we should ensure these structures meet the highest standards for efficiency. The latest model building energy codes deliver 30 percent more efficiency than codes of just a decade ago, which will result in more than \$5 billion in annual savings for U.S. homes and businesses from, for example, improved thermal envelopes and high-efficiency heating and cooling equipment and lighting fixtures. Just as important, the experiences of states and communities demonstrate that more efficient buildings are key to enhancing energy system resilience in the face of extreme weather events. Congress should ensure that any infrastructure proposals encourage states and local governments to adopt and enforce updated building energy codes and promote energy efficiency retrofits of existing buildings that will deliver long-term savings to homeowners, renters, and commercial building owners and tenants and improve the health and resilience of communities. Energy efficiency delivers savings to all households and consumers, including those with limited incomes, and would ensure that the benefits of an infrastructure package will help the nation as a whole.
- **Expanding opportunities for public-private partnerships to finance projects.** The burden of paying for infrastructure does not need to fall solely upon the shoulders of

taxpayers through direct appropriations. The federal government should show leadership by addressing critical buildings and energy infrastructure upgrades through public-private partnerships that leverage private funds to implement resilience-enhancing energy- and water-conservation measures. To address the backlog of \$165 billion in deferred maintenance projects in federal facilities, any infrastructure package should encourage performance contracting and other financing mechanisms at all levels of government to install high-efficiency equipment and systems in individual buildings and across campuses with little to zero upfront cost to taxpayers and tremendous resilience benefits for mission-critical public facilities.

- **Applying life-cycle cost-effectiveness analysis to all appropriate projects.** To deliver the best long-term return-on-investment to taxpayers, Congress should avoid short-sighted decisions based on incremental first-costs and instead take into account costs and benefits over the expected lifetime of physical infrastructure. This focus on lower up-front costs rather than lower operations and maintenance costs tends to encourage an under-investment in energy- and water-saving technologies that then saddle unsuspecting homeowners, consumers, and businesses with an unpredictable burden of higher utility bills. A missed opportunity now means future generations of taxpayers will be paying for our mistake for decades to come.

We are eager to work with you and your colleagues to identify specific programs, activities, and projects that can help achieve our mutual goals and build a smarter, less expensive and more sustainable infrastructure system. Please also find attached a letter from the Alliance and 30 other companies and organizations urging Congress to embed energy efficiency into infrastructure legislation.

About the Alliance to Save Energy

Founded in 1977, the Alliance to Save Energy is a nonprofit, bipartisan alliance of business, government, environmental and consumer leaders working to expand the economy while using less energy. Our mission is to promote energy productivity worldwide – including through energy efficiency – to achieve a stronger economy, a cleaner environment and greater energy security, affordability and reliability.

Sincerely,

Jason Hartke

President
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January 15, 2019

The Honorable Nancy Pelosi
Speaker
U.S. House of Representatives

The Honorable Kevin McCarthy
Republican Leader
U.S. House of Representatives

The Honorable Mitch McConnell
Majority Leader
U.S. Senate

The Honorable Charles E. Schumer
Democratic Leader
U.S. Senate

Re: Benefits of Embedding Energy Efficiency in Infrastructure Investments

Dear Speaker Pelosi, Leader McConnell, Senator Schumer, and Leader McCarthy:

We the undersigned, on behalf of a coalition of energy businesses, trade associations, researchers, energy officials, and advocacy organizations, respectfully urge you to ensure that any infrastructure proposals considered by the 116th Congress include energy efficiency provisions that will maximize the investments made by taxpayers, reduce long-term operations and maintenance costs, and improve overall U.S. energy productivity.

Energy efficiency is our nation's most abundant energy resource. Without the gains in energy efficiency made since 1973, the U.S. economy would today require at least 70% more energy than we currently consume. Between then and today, U.S. gross domestic product has tripled while energy consumption has only risen by about 30%. Improving energy efficiency is one of the most effective policy strategies for addressing the threat of climate change—both in terms of reducing emissions and enhancing the resilience of buildings, the industrial sector, transportation, and energy systems—while also representing an extraordinary bipartisan opportunity to boost economic growth, add to the 2.25 million jobs in the energy efficiency sector, and improve U.S. energy security and global competitiveness. These benefits would align with many of your stated goals for an infrastructure package in the 116th Congress.

The American Society of Civil Engineers gave our nation's aged and increasingly failing infrastructure a grade of D+ in its most recent *Infrastructure Report Card* and identified a funding shortfall of more than \$1.4 trillion by 2025. Energy efficiency would improve the cost-effectiveness and sustainability of any investments in infrastructure, including critical improvements across the entire buildings sector, water and wastewater treatment facilities and distribution systems, the power grid, and our increasingly-connected transportation systems. We therefore encourage you to incorporate energy efficiency in any infrastructure proposals from the start. Otherwise, Congress runs the risk of locking in decades of high costs and unnecessary energy waste for the duration of the physical infrastructure our economy needs to remain prosperous in the 21st Century.

In order to make the best, most-efficient use of taxpayer investments in infrastructure, we ask that you first consider these tenets:

- **Promote adoption of updated building energy codes, high-performance buildings, and high-efficiency equipment.** Buildings account for roughly 40% of U.S. primary energy use and 76% of the electricity we use, and recent climate assessments and reports consistently point to reducing building energy consumption as a top solution to reduce greenhouse gas emissions. As we invest in building and rebuilding the very places where people and commerce meet, we should ensure these structures meet the highest standards for efficiency. The latest model building energy codes deliver 30 percent more efficiency than codes of just a decade ago, which will result in more than \$5 billion in annual savings for U.S. homes and businesses from, for example, improved thermal envelopes and high-efficiency heating and cooling equipment and lighting fixtures. Just as important, the experiences of states and communities demonstrate that more efficient buildings are key to enhancing energy system resilience in the face of extreme weather events. Congress should ensure that any infrastructure proposals encourage states and local governments to adopt and enforce updated building energy codes and promote energy efficiency retrofits of existing buildings that will deliver long-term savings to homeowners, renters, and commercial building owners and tenants and improve the health and resilience of communities. Energy efficiency delivers savings to all households and consumers, including those with limited incomes, and would ensure that the benefits of an infrastructure package will help the nation as a whole.
- **Expand opportunities for public-private partnerships to finance projects.** The burden of paying for infrastructure does not need to fall solely upon the shoulders of taxpayers through direct appropriations. The federal government should show leadership by addressing critical buildings and energy infrastructure upgrades through public-private partnerships that leverage private funds to implement resilience-enhancing energy- and water-conservation measures. To address the backlog of \$165 billion in deferred maintenance projects in federal facilities, any infrastructure package should encourage performance contracting and other financing mechanisms at all levels of government to install high-efficiency equipment and systems in individual buildings and across campuses with little to zero upfront cost to taxpayers and tremendous resilience benefits for mission-critical public facilities.
- **Apply life-cycle cost-effectiveness analysis to all appropriate projects.** To deliver the best long-term return-on-investment to taxpayers, Congress should avoid short-sighted decisions based on incremental first-costs and instead take into account costs and benefits over the expected lifetime of physical infrastructure. This focus on lower up-front costs rather than lower operations and maintenance costs tends to encourage an under-investment in energy- and water-saving technologies that then saddle unsuspecting homeowners, consumers, and businesses with an unpredictable burden of higher utility bills. A missed opportunity now means future generations of taxpayers will be paying for our mistake for decades to come.

We are prepared to work with you and your colleagues to provide more assistance as requested to identify specific programs, activities, and projects that may warrant specific attention as Congress turns its focus to infrastructure. And we pledge to assist your staff by identifying

existing and developing new energy efficiency proposals that would maximize taxpayer investment in infrastructure that delivers benefits today, lowers costs over time, and provides our children and grandchildren with a more sustainable future.

Thank you for your consideration.

Sincerely,
Advanced Energy Economy
Alliance for Industrial Efficiency
Alliance to Save Energy
American Council for an Energy-Efficient Economy
American Institute of Architects
ASHRAE
Business Council for Sustainable Energy
Chelan County Public Utility District
Copper Development Association, Inc.
Covestro
E4TheFuture
Environmental and Energy Study Institute
Federal Performance Contracting Coalition
Hannon Armstrong
Heat is Power Association
Home Performance Coalition
Ingersoll Rand
Knauf Insulation
National Association for State Community Services Programs
National Association of Energy Service Companies
National Association of State Energy Officials
National Electrical Manufacturers Association
Natural Resources Defense Council
New Dominion Group, LLC
North American Insulation Manufacturers Association
Polyisocyanurate Insulation Manufacturers Association
Sheet Metal and Air Conditioning Contractors National Association
Signify (formerly Philips Lighting)
The Stella Group, Ltd.
U.S. Green Building Council
Vermont Energy Investment Corporation

Cc: Members, U.S. House of Representatives Committee on Energy and Commerce
Members, U.S. House of Representatives Committee on Transportation and Infrastructure
Members, U.S. House of Representatives Committee on Ways and Means
Members, U.S. Senate Committee on Energy and Natural Resources
Members, U.S. Senate Committee on Environment and Public Works
Members, U.S. Senate Committee on Finance