

INVESTING IN AMERICA'S ENERGY INFRASTRUCTURE:
IMPROVING ENERGY EFFICIENCY AND
CREATING A DIVERSE WORKFORCE

HEARING
BEFORE THE
SUBCOMMITTEE ON ENERGY
OF THE
COMMITTEE ON ENERGY AND
COMMERCE
HOUSE OF REPRESENTATIVES
ONE HUNDRED SIXTEENTH CONGRESS

FIRST SESSION

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C O N T E N T S

	Page
Hon. Bobby L. Rush, a Representative in Congress from the State of Illinois, opening statement	1
Prepared statement	2
Hon. Fred Upton, a Representative in Congress from the State of Michigan, opening statement	3
Prepared statement	4
Hon. Frank Pallone, Jr., a Representative in Congress from the State of New Jersey, opening statement	5
Prepared statement	7
Hon. Greg Walden, a Representative in Congress from the State of Oregon, opening statement ¹	8
Prepared statement	9

WITNESSES

Daniel R. Simmons, Assistance Secretary, Office of Energy Efficiency and Renewable Energy, Department of Energy	11
Prepared statement	13
Answers to submitted questions	93
James E. Campos, Director, Office of Economic Impact and Diversity, Depart- ment of Energy	23
Prepared statement	25
Answers to submitted questions	103

SUBMITTED MATERIAL

H.R. 1315, the Blue Collar to Green Collar Jobs Development Act of 2019, submitted by Mr. Rush ²	
H.R. 2019, the Smart Energy and Water Efficiency Act of 2019, submitted by Mr. Rush ²	
H.R. 2041, the Weatherization Enhancement and Local Energy Efficiency Investment and Accountability Act, submitted by Mr. Rush ²	
H.R. 2043, the Home Owner Managing Energy Savings Act of 2019, sub- mitted by Mr. Rush ²	
H.R. 2044, the Smart Building Acceleration Act, submitted by Mr. Rush ²	
H.R. 2088, A Bill to amend the Energy Independence and Security Act of 2007 to reauthorize the Energy Efficiency and Conservation Block Grant Program, and for other purposes, submitted by Mr. Rush ²	
H.R. 2114, the Enhancing State Energy Security Planning and Emergency Preparedness Act of 2019, submitted by Mr. Rush ²	
H.R. 2119, A Bill to amend the Energy Policy Act of 2005 to reauthorize grants for improving the energy efficiency of public buildings, and for other purposes, submitted by Mr. Rush ²	
Letter of April 9, 2019, from David Bradley, Executive Director, National Community Action Foundation, to Mr. Rush and Mr. Upton, submitted by Mr. Rush	46

¹ Mr. Flores presented Mr. Walden's statement orally.

² The legislation has been retained in committee files and also is available at <https://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=109300>.

VI

	Page
Letter of April 10, 2019, from Paula R. Glover, President and Chief Executive Officer, American Association of Blacks in Energy, to Mr. Rush and Mr. Upton, submitted by Mr. Rush	50
Letter of April 8, 2019, from George H. Lowe, Vice President, Governmental Affairs and Public Policy, American Gas Association, to Mr. Rush, et al., submitted by Mr. Rush	51
Report of the Government Accountability Office, “Recovery Act: Energy Efficiency and Conservation Block Grant Recipients Face Challenges Meeting Legislative and Program Goals and Requirements,” April 2011, submitted by Mr. Rush ³	
Technical comments on H.R. _____, Department of Energy, submitted by Mr. Rush	53
Letter of April 10, 2019, from Bryan Howard, Legislative Director, U.S. Green Building Council, to Mr. Rush and Mr. Upton, submitted by Mr. Rush	72
Letter of February 26, 2019, from Abigail Ross Harper, President and Chief Executive Officer, Solar Energy Industry Association, to Mr. Pallone, et al., submitted by Mr. Rush	77
Letter of February 26, 2019, from Joni Davis and Stan Sherrill, Vice Presidents, Duke Energy, to Mr. Rush, submitted by Mr. Rush	79
Letter of February 27, 2019, from Jason Hartke, President, Alliance to Save Energy, to Mr. Rush, submitted by Mr. Rush	80
Letter of April 9, 2019, from Randy Bennett, IL Weatherization, et al., to Mr. Pallone and Mr. Walden, submitted by Mr. Rush	81
Article of July 10, 2018, “Pa. Auditor General: State failed to spend federal energy assistance funds meant to aid poor,” by Kate Giammarise, Pittsburgh Post-Gazette, submitted by Mr. Rush	89

³The report has been retained in committee files and also is available at <https://docs.house.gov/meetings/IF/IF03/20190410/109300/HHRG-116-IF03-20190410-SD989.pdf>.

INVESTING IN AMERICA'S ENERGY INFRA- STRUCTURE: IMPROVING ENERGY EFFI- CIENCY AND CREATING A DIVERSE WORK- FORCE

WEDNESDAY, APRIL 10, 2019

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:03 a.m., in the John D. Dingell Room 2123, Rayburn House Office Building, Hon. Bobby L. Rush (chairman of the subcommittee) presiding.

Members present: Representatives Rush, Peters, Sarbanes, McNerney, Tonko, Loeb sack, Schrader, Kennedy, Veasey, Kuster, Kelly, Barragán, O'Halleran, Blunt Rochester, Pallone (ex officio), Upton (subcommittee ranking member), Latta, Rodgers, McKinley, Griffith, Johnson, Bucshon, Flores, Hudson, Walberg, and Duncan.

Staff present: Adam Fischer, Policy Analyst; Rick Kessler, Senior Advisor and Staff Director, Energy and Environment; Brendan Larkin, Policy Coordinator; John Marshall, Policy Coordinator; Elisabeth Olson, FERC Detailee; Tuley Wright, Energy and Environment Policy Advisor; Mary Martin, Minority Chief Counsel, Energy and Environment; Brandon Mooney, Minority Deputy Chief Counsel, Energy; Brannon Rains, Minority Staff Assistant; and Peter Spencer, Minority Senior Professional Staff Member, Energy and Environment.

Mr. RUSH. The committee hearing is called to order. And I recognize myself for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. BOBBY L. RUSH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

I want to welcome everyone to today's hearing entitled "Investing in America's Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce."

This hearing will focus on a series of bills designed to make Americans' homes, businesses, and energy infrastructure more efficient and cost-effective, while also investing in a diverse workforce to build, operate, and manage this infrastructure.

Unfortunately, our colleagues, our colleague Mr. Welch had to return to his home State of Vermont and will miss today's hearing. But as we all know, he has been a strong supporter of the HOMES Act and Smart Building Acceleration Act, and he sends his regrets in not being able to speak today on those two important measures.

Most of today's bills enjoy bipartisan support. And I would like to thank Ranking Member Upton for working with my office in co-sponsoring H.R. 2114, the Enhancing State Energy Security Planning and Emergency Preparedness Act. This bill would provide much-needed assistance to State Energy Offices to plan for and respond to energy disruptions from both physical and cyber threats. And I look forward to moving it forward.

While I support each of the bills before us, I want to concentrate my remarks on H.R. 1315, the Blue to Green Collar Jobs Act, which continues to be one of my top priorities.

H.R. 1315 is in essence a jobs bill designed to train underserved groups, including women, minorities, veterans, unemployed energy workers, and returning citizens, among others, for the energy jobs and energy careers in the present and the future.

Today marks the second hearing on this important bill, providing an opportunity to hear directly from DOE, as my Republican colleagues have repeatedly requested. It is my hope that following this hearing the minority side will finally accept my repeated offer to work with my office on this bill as we move it through this legislative process.

Despite their refusal to work with me following the first hearing on this bill, my office has made several changes to the bill to strengthen it and to make it much more inclusive.

In addition to opening up the grant program for training in nuclear energy and carbon testing and storage, we have also clarified that grants and assistance would be made available to labor unions and qualified youth and conservation corps.

We strengthened the reporting requirements and accountability measures for evaluating performance and impact, while also streamlining the definition for underrepresented groups through the bill, and adding language to prevent the duplication of programs at DOE.

Relying on the technical assistance comments that we received from DOE from both the current and previous administrations, I am confident that the program established in H.R. 1315 will go a long way in producing actual results, in the form of jobs filled, rather than the ceaseless and nonsensical talk and planning that has too often been the norm.

It is my hope that following today's hearing my Republican colleagues will finally agree to discuss actual substance with my office so we can move this much-needed bill forward.

I look forward to hearing from today's panel of DOE officials on all of the bills before us here today. And I would like to call now on my good friend and colleague from my neighboring State of Michigan, Ranking Member Upton, for his opening statement.

[The prepared statement of Mr. Rush follows:]

PREPARED STATEMENT OF HON. BOBBY L. RUSH

I would like to welcome everyone to today's hearing entitled "Investing in America's Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce."

This hearing will focus on a series of bills designed to make Americans' homes, buildings and energy infrastructure more efficient and cost-effective, while also investing in a diverse workforce to build, operate, and manage this infrastructure.

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It is my hope that following today's hearing my Republican colleagues will finally agree to discuss actual substance with my office so we can move this much-needed bill forward with bipartisan support.

As we have heard time and time again in numerous hearings on this topic, there are tens of thousands of jobs available right now, today, and employers are begging for trained, qualified candidates to fill those openings.

My office remains ready and willing to work with any Member to address any legitimate concerns that will ultimately help to put thousands of hardworking yet overlooked and underserved Americans back to work.

I look forward to hearing from today's panel of DOE officials on all of the bills here before us, and now I would like to call on my friend and colleague, Ranking Member Upton for his opening statement.

OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Well, thank you, my friend and chairman, for holding this hearing on eight Department of Energy workforce and efficiency bills. I am pleased to see that our bill from the last Congress is included, H.R. 2144, the Enhancing State Energy Security Planning and Emergency Preparedness Act.

You and I worked together on that bill. And it passed the House by a voice vote. Somehow we have to get it through the Senate. I look forward to seeing this bill get across the finish line in this Congress.

As you know from our oversight work, our energy infrastructure is comprised of a vast network of energy and electricity delivery systems. These intricate and highly interdependent systems enable

almost every aspect of our daily life. The Nation's economy, security, and the health and safety of its citizens depends upon the reliable and uninterrupted delivery of fuels and electricity, which is why it is so important to stay on top of maintenance and modernization.

And at the same time, we have to also remain vigilant when it comes to energy security planning and emergency preparedness.

Since the inception of the Department of Energy's State Energy Program in 1975, the manner in which energy and power is generated, transmitted and delivered continues to rapidly change and evolve. Recent hurricanes, fires, and cyber-related events have raised real concerns about the security and resiliency of the Nation's energy and electricity systems. And States have emphasized the need to prioritize energy security, energy planning, and energy infrastructure protection.

H.R. 2144 will indeed modernize and reauthorize DOE's State Energy Program through 2025. It is a good bill that will help States with the tools to plan and prepare for energy security emergencies. I would encourage all of my colleagues to support it.

We also have a couple over bipartisan bills from the last Congress: H.R. 2019, the Smart Energy and Water Efficiency Act; H.R. 2044, the Smart Building Acceleration Act. These bills will help save energy in public buildings and encourage the adoption of innovative technologies to conserve water in communities across the country. These are good bipartisan bills. I look forward to receiving input from DOE to further perfect them.

Unfortunately, we have not had enough time to review some of the other bills before us today because they were introduced just this week, and we haven't had the opportunity for background hearings for understanding them. I am also troubled by the fact that the majority has not seemed to take an interest in our offer to make good the Workforce Bill bipartisan. As we have said, we should return to the original version that was agreed upon. I believe that we can improve the bill and it can pass again with unanimous consent if it were simply "all of the above" and inclusive of every underrepresented group, including women and veterans.

Mr. Chairman, I know that we can return to regular order so that Members have the opportunity to make informed judgments about the need for legislation and the effect of these bills.

I want to thank our two witnesses, Assistant Secretary Simmons and Dr. Campos, for appearing before us today so that we can learn about DOE's efforts on efficiency and workforce development, and determine whether additional legislative authorities are necessary. Given the price tag of these new bills and the tens of billions of dollars, we owe it to the taxpayers and the consumers to take our time to determine whether the spending is justified.

I promise to keep an open mind. And as I have said before, we are ready to get to work if all of us are serious about the effort. I yield back.

[The prepared statement of Mr. Upton follows:]

PREPARED STATEMENT OF HON. FRED UPTON

Thank you, Mr. Chairman for holding this hearing on eight Department of Energy workforce and efficiency bills. I am pleased to see that our bill from last Congress

was included, H.R. 2144, the Enhancing State Energy Security Planning and Emergency Preparedness Act. You and I worked together on that bill, and it passed the House by voice vote. I look forward to seeing this bill get across the finish line this Congress.

As we know from our oversight work, our energy infrastructure is comprised of a vast network of energy and electricity delivery systems. These intricate and highly interdependent systems enable almost every aspect of our daily lives. The Nation's economy, security, and the health and safety of its citizens depend upon the reliable and uninterrupted delivery of fuels and electricity, which is why it is so important to stay on top of maintenance and modernization. At the same time, we must also remain vigilant when it comes to energy security planning and emergency preparedness.

Since the inception of the Department of Energy's State Energy Program in 1975, the manner in which energy and power is generated, transmitted, and delivered continues to rapidly change and evolve. Recent hurricanes, fires, and cyber-related events have raised concerns about the security and resiliency of the Nation's energy and electricity systems, and States have emphasized the need to prioritize energy security, emergency planning, and energy infrastructure protection.

H.R. 2144 will modernize and reauthorize DOE's State Energy Program through 2025. It's a good bill that will help States with tools to plan and prepare for energy security emergencies. I encourage my colleagues to support.

We also have a couple other bipartisan bills from last Congress, H.R. 2019, the Smart Energy and Water Efficiency Act; and, H.R. 2044, the Smart Building Acceleration Act. These bills will help save energy in public buildings and encourage the adoption of innovative technologies to conserve water in communities across the country. These are also good, bipartisan bills, and I look forward to receiving input from DOE to further perfect them.

Unfortunately, we haven't had enough time to review some of the other bills before us today, because they were just introduced on Monday and we haven't had the opportunity for background hearings.

I am also troubled by the fact that the Majority has not seemed to take interest in our offer to make the workforce bill bipartisan. As we have said, we should return to the original version that was agreed upon. I believe we could improve the bill and it could pass again with unanimous consent if it were simply "all of the above" and inclusive of all underrepresented groups, including women and veterans.

Mr. Chairman, I hope we can return to regular order so that Members have the opportunity to make informed judgements about the need for legislation and the effect of these bills.

I would like to thank our DOE witnesses, Assistant Secretary Daniel Simmons and Mr. James Campos, for appearing before us today so that we can learn about DOE's efforts on efficiency and workforce development and determine whether additional legislative authorities are necessary. Given the price tag of these new bills is in the tens of billions of dollars, we owe it to our taxpayers and to consumers to take our time and determine whether the spending is justified.

I'll keep an open mind, and as I've said before, we are ready to get to work if the Democrats are serious about this effort. It is disappointing that we're starting this way with some of these bills, but I hope things will improve if we can get a commitment to return to regular order.

Thank you, Mr. Chairman. I yield back.

Mr. RUSH. The gentleman yields back.

The Chair now recognizes Mr. Pallone, the chairman of the full committee, for 5 minutes for his opening statement.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you, Mr. Chairman.

Today we are here to discuss legislation that invests in making our Nation's infrastructure more energy efficient. This important investment will create good-paying jobs, save consumers money, and help us combat climate change by reducing carbon pollution.

Countries across the globe are investing in energy efficiency, and it is making a difference. According to the International Energy

Agency, the world would have used 12 percent more energy in 2016 had it not been for efficiency gains achieved since 2000. And that is comparable to adding another European Union to the global energy market.

A critical piece of infrastructure includes making homes, buildings, cities, and manufacturing facilities more energy efficient. Efficiency work supports thousands of good-paying jobs at small businesses in every State. And weatherizing homes or retrofitting public buildings saves money and supports our efforts to address climate change.

The eight bills before us will increase energy efficiency, develop a modern energy workforce, and strengthen energy security.

H.R. 2043, the Home Owner Managing Energy Savings, or HOMES Act, introduced by Representatives Welch and McKinley, provides cash rebates of up to \$5,000 to homeowners for performing retrofits that achieve home energy savings.

H.R. 2041, introduced by Representative Tonko, Chairman Rush, and Representative Kaptur, would also help homeowners save money and create jobs. This bill increased funding for the Department of Energy's Weatherization Assistance Program to \$350 million annually and modernizes the program.

This technology can also be a driver for increased energy efficiency. And Representatives McNerney, Welch, and Kinzinger have introduced bills that analyze and support new technologies in smart buildings and water systems.

The subcommittee will also review two bills that reauthorize grant programs to assist States and local governments in making public infrastructure more energy efficient. Representatives Stanton and Veasey introduced H.R. 2088, which increases funding for the Energy Efficiency and Conservation Block Grant Program. This program provides grants to States and local communities to assist their efforts to reduce fossil fuel emissions and conserve energy. And this is something that has been a priority for mayors and local elected officials around the country, in large part because it funds infrastructure that will save those communities money.

Similarly, H.R. 2119, introduced by Representative Kelly, increases funding for DOE grants to improve the efficiency of public buildings. Both programs provide critical support to local communities that often lack the resources to take on large scale public efficiency-related projects.

We should also look at investing in the skilled workers who manufacture equipment and build and operate plants. Chairman Rush's Blue Collar to Green Collar Jobs Development Act established a comprehensive, nationwide program at DOE to improve education and training for jobs in energy-related industries.

And, finally, we have H.R. 2114, the Enhancing State Energy Security Planning and Emergency Preparedness Act, introduced by Chairman Rush and Ranking Member Upton. Obviously, this bill is bipartisan and reauthorizes the State Energy Program at \$90 million per year and allows States to use the funds to implement a State Energy Security Plan. The bill passed the House by a voice vote during the last Congress, and I am hopeful that we can get it to the President's desk before the end of this Congress.

So, again, this is a legislative hearing on these bills. We would like to move these bills. I want to commend the sponsors for their work on these important issues, and thank Mr. Simmons for appearing before the committee for the second time this year.

And I yield back.

[The prepared statement of Mr. Pallone follows:]

PREPARED STATEMENT OF HON. FRANK PALLONE, JR.

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I commend the bill sponsors for their work on these important issues and thank Mr. Simmons for appearing before the committee for the second time this year. I yield back the balance of my time.

Mr. SARBANES. Will the gentleman yield the balance?

Mr. PALLONE. Oh, I'm sorry. I yield to the gentleman from Maryland.

Mr. SARBANES. Yes. I appreciate that. I just wanted to echo your comments and say that we have a lot of very strong proposals here in terms of energy efficiency.

I want to thank Congressman Rush in particular for the Blue Collar to Green Collar Jobs Employment Act. In Baltimore, Baltimore City and a number of partners, including originally the Department of Energy here under the Obama administration, but also foundations, and businesses, and workforce development groups have put forth an initiative called Baltimore Shines, which is to install solar panels on the homes of low-income and moderate-income residents in Baltimore City so there is a positive impact on the bottom line in terms of their utility costs, reducing their utility costs. Also, obviously, helping reduce the carbon footprint when it comes to the environment and making sure we are doing the right thing.

But, also, a pipeline, as was alluded to, generally a pipeline for the workforce to move to green-collar jobs, which can really establish somebody and put them on a path to sufficiency. So, I thank you for those bills. And thank you, Congressman Rush, for your proposal.

I yield back to Congressman Pallone.

Mr. PALLONE. I thank the gentleman. I yield back, Mr. Chairman.

Mr. RUSH. The Chair also thanks the gentleman for his kind remarks.

The Chair now recognizes Mr. Flores, who is speaking for the ranking member, Mr. Walden, who is not present. The Chair recognizes Mr. Flores to read Mr. Walden's statement for 5 minutes.

[Whereupon Mr. Flores read from Mr. Walden's statement.]

OPENING STATEMENT OF HON. GREG WALDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. FLORES. Thank you, Mr. Chairman, for holding this hearing to continue our oversight of the Department of Energy's Energy Efficiency and Workforce Development Programs.

I would also like to thank our DOE witnesses, Assistant Secretary Daniel Simmons and Mr. James Campos, for appearing before us today. Daniel actually testified at our last subcommittee hearing, so we welcome you back for another round of questioning. I hope you feel the same.

Before I get into the substance of the eight bills before us today I need to make a point about the regular order and process. As yet another week goes by without a single substantive legislative accomplishments, the Democrats are still struggling with the basic principle of regular order. We are familiar with three of the bills before us today from last Congress, and they are bipartisan. And that is we are appreciative of that.

The rest of these bills, unfortunately, have just been jammed through without regular order. In fact, some of them were just introduced on Monday so that they could be squeezed into this hearing. There were no background hearings held to establish the nature of the legislation. There was no technical assistance sought from the Department of Energy. There were no Republicans included in the drafting process at all. This is not regular order, and it is certainly not a process that the Democrats should be proud of.

The estimated price tag for all eight bills is a staggering \$26 billion. This includes more than a half-billion dollars for a green-collar jobs program; \$15 million for a new energy and water efficiency pilot program; another half-billion dollars for energy-efficient public buildings; \$1.8 billion for weatherization assistance; \$1.3 billion for a new home energy savings retrofit rebate program; and last but not least, an astounding \$21 billion for energy efficiency block grants.

Mr. Chairman, we owe it to our constituents and to consumers across the country to give this a much more serious effort. Rather than rushing to authorize tens of billions of dollars of additional spending, we should have real oversight hearings to better understand the needs and to discover that there are gaps that require Congress to provide DOE with additional statutory authorities. With all of these new grant programs for efficiency, we have no idea if they are actually necessary, or if they are duplicative, or if they are in conflict with other existing programs.

Since several of these bills do provide grants to State and local governments, members of this subcommittee should hear from those State and local governments directly to identify gaps and see how the Federal Government can better support their efforts on energy efficiency and workforce development.

Also, since several of these bills revive expired programs, we should get our lessons learned from past experiences before determining whether programs should be reauthorized and, if so, how much we should spend. Unfortunately, at the rate we are going we are not going to get the opportunity to explore these issues more deeply. As a result, we are going to have partisan bills that pick winners and losers and reward special interests over consumers and over taxpayers.

Worse yet, we are going to repeat the mistakes of the past by doubling down on failed efforts from President Obama's Green Jobs Program. Republicans are focused on real solutions to encourage energy efficiency and workforce development. We should not be wasting our time reviving old, expired efficiency programs, some of which have not received funding in years.

We are ready to work when Democrats are willing to reach across the aisle and to make a serious effort. I am disappointed that we are starting off this way, but I continue to remain hopeful that we can get back on track.

With that, thank you for holding this hearing, and I yield back the balance of my time.

PREPARED STATEMENT OF HON. GREG WALDEN

Thank you, Mr. Chairman for holding this hearing to continue our oversight of the Department of Energy's energy efficiency and workforce development programs.

I would also like to thank our DOE witnesses, Assistant Secretary Daniel Simmons and Mr. James Campos, for appearing before us today. Daniel actually testified at our last subcommittee hearing, so we welcome him back for another round of questioning.

Before I get into the substance of the eight bills before us today, I need to make a point about regular order and process. As yet another week goes by without a single substantive legislative accomplishment, the Democrats are still struggling with the basic principle of regular order.

We are familiar with three of the bills before us today from last Congress, and they are bipartisan. The rest of these bills have been jammed through without reg-

ular order. In fact, some of them were just introduced on Monday so they could be squeezed into this hearing.

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Mr. Chairman, we owe it to our constituents and to consumers across the country to give this a more serious effort. Rather than rushing to authorize tens of billions of dollars in additional spending, we should have real oversight hearings to better understand the needs, and to discover if there are gaps that require Congress to provide DOE with additional statutory authorities. With all of these new grant programs for efficiency, we have no idea if they are actually necessary or even if they are duplicative of other existing programs.

Since several of these bills provide grants to State and local governments, members of the subcommittee should hear from them directly to identify gaps and see how the Federal Government can better support their efforts on energy efficiency and workforce development. And since several of these bills revive expired programs, we should gather lessons learned from past experiences, before determining whether the programs should be reauthorized, and if so, how much we should spend.

Unfortunately, at the rate we are going, we are not going to get the opportunity to explore these issues more deeply. As a result, we are going to have partisan bills that pick winners and losers and reward special interests over consumers. Worse yet, we are going to repeat the mistakes of the past by doubling down on failed efforts from President Obama's Green Jobs program.

Republicans are focused on solutions to encourage energy efficiency and workforce development. We should not be wasting our time reviving old, expired efficiency programs—some of which have not received funding in years.

We are ready to get to work when the Democrats are willing to reach across the aisle and make a serious effort. I am disappointed that we're starting off this way, but I continue to remain hopeful that we can get back on track.

With that, thank you for holding this hearing, and I yield back the balance of my time.

Mr. RUSH. The gentleman yields back.

I want to respond, but the chairman of the full committee has prevailed upon me to just ignore the comments and continue with the hearing. So wisdom has prevailed, and I am not going to respond to the other side's comments.

So, now we will recognize our witnesses. Our first witness today before us is the Honorable Daniel Simmons. He is the Assistant Secretary of the Office of Energy Efficiency and Renewable Energy at the Department of Energy. And the Honorable Mr. James Campos, the Director of the Office of Economic Impact and Diversity at the Department of Energy.

And we want to welcome Assistant Secretary Simmons back to the committee, and thank both he and Director Campos for joining us today. And we look forward to your testimony.

Now, the chairman will now recognize each witness for 5 minutes to provide their opening statement. Before we begin, I would like to explain the lighting system to our witnesses.

In front of you, if you are not aware of this, there is a series of lights. The light will initially be green at the start of your opening statement. The light will turn yellow when you have 1 minute remaining on your opening statement. Please at that time begin to wrap up your testimony. The light will turn red when your time expires.

Secretary Simmons, right now you are recognized for 5 minutes.

STATEMENTS OF DANIEL R. SIMMONS, ASSISTANT SECRETARY, OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY, DEPARTMENT OF ENERGY; AND JAMES E. CAMPOS, DIRECTOR, OFFICE OF ECONOMIC IMPACT AND DIVERSITY, DEPARTMENT OF ENERGY

STATEMENT OF DANIEL R. SIMMONS

Mr. SIMMONS. Thank you, Chairman Rush, Chairman Pallone, Ranking Member Upton, and members of the subcommittee. Thank you for the opportunity to testify on behalf of the Department of Energy regarding a number of bills addressing energy efficiency issues that are being considered by this committee.

One of my top priorities in the Office of Energy Efficiency and Renewable Energy is energy affordability, and cost-effective energy efficiency is an important aspect of overall energy affordability. The United States' approximately 125 million homes and commercial buildings are the single largest energy consuming sector in the United States, consuming 74 percent of the Nation's energy use, and over 80 percent at periods of peak demand. There are obviously opportunities for cost-effective energy efficiency improvements in this sector.

Today I would like to share some of the relevant work my office has done and is doing on the areas that these bills address.

The HOMES Act would create a program through the Department of Energy to provide rebates to homeowners for achieving home energy savings. Residential buildings use an estimated 21 percent of all energy used in the United States. And 55 percent of the Nation's 118 million homes were built before 1980, meaning that there is a lot of opportunity for energy-efficient retrofits.

In EERE we are initiating research to develop better solutions for achieving cost-effective energy efficiency savings through advancements in building construction technologies, less intrusive installation methods, and more effective integrated envelope and heating/cooling technologies. To me this is somewhat personal in that, as someone who lives in a home built in 1948, it is something I think about a lot, especially when staff comes and talks about building technologies.

So there are definitely opportunities in terms of energy-efficient retrofits.

We also implement a variety of programs that promote residential energy efficiency, including the Home Performance with Energy Star Program, which works with EPA and local sponsors. So far, the Home Performance with Energy Star Program partners have reported completing improvements to nearly 700,000 homes.

Additionally, EERE's Weatherization Assistance Program developed and maintains foundational workforce training and certification programs to ensure the work is performed in residential weatherization retrofits for low-income homes.

The Smart Building Acceleration Act would take a number of actions related to evaluating and advancing the current state of "smart buildings" in the private and Federal sectors. Because buildings consume 74 percent of electricity generation, the Building

Technology Office is working with National Labs, private sector partners, and others to examine grid flexibility to greater and better building control and communication technology.

We believe there is an opportunity through smart building technology to improve energy integration and storage options for both building owners and grid operators. We also recognize the importance of cyber security being built in from the very beginning of these projects.

Also, I should note that EERE's Federal Energy Management Program works closely with other Federal agencies to improve the energy efficiency and smartness of Federal buildings.

The Weatherization Enhancement and Local Energy Efficiency Investment and Accountability Act would reauthorize the Weatherization Assistance Program through 2024. The President's budget requests no funding for the weatherization, for WAP and the State Energy Program. DOE understands the congressional interest in these programs and will continue to manage them consistent with statute.

The Energy Efficiency and Conservation Block Grant Bill expands the purpose of the Energy Efficiency and Conservation Block Grant Program to include diversifying energy supplies, including facilitating and promoting the use of alternative fuels, and reauthorizes the program at \$3.5 billion annually from 2020 through 2025.

The Improving Energy Efficiency in Public Buildings Bill would authorize grants for improving energy efficiency in public buildings at \$100 million annually from 2021 to 2025.

The Smart Energy and Water Efficiency Act would award grants to eligible entities to demonstrate advanced and innovative technology-based solutions to improve the energy efficiency of water, wastewater, and water reuse systems.

DOE is implementing a number of initiatives to promote affordable, efficient, and secure water supplies. One effort is the Water Security Grand Challenge focusing on improving desalination; produced water from oil and gas as well as some nuclear mining; resource recovery from wastewater; the use of cooling-reducing the use of cooling water at thermoelectric plants; and improving small modular energy systems, energy-water systems for urban, rural, Tribal, national security, and disaster response settings.

The Advanced Manufacturing Office works with water utilities and other industrial partners to improve their energy and water efficiency through efforts such as the voluntary recognition program Better Plants—or Better Buildings, Better Plants.

Also, EERE's Weatherization Intergovernmental Program Office provides technical assistance that focuses specifically on the efficiency of wastewater treatment facilities, including WIP's Sustainable Wastewater Infrastructure of the Future Accelerator.

Mr. RUSH. Mr. Secretary, will you bring your remarks to the end.

Mr. SIMMONS. This is it. This is the last line.

Thank you for the opportunity to appear before the subcommittee and discuss these important energy efficiency issues. I look forward to your questions.

[The prepared statement of Mr. Simmons follows:]

Statement for the Record

**The Honorable Daniel R Simmons
Assistant Secretary
Energy Efficiency and Renewable Energy (EERE)**

FOR A HEARING ON

ENERGY EFFICIENCY LEGISLATION

**BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE,
SUBCOMMITTEE ON ENERGY**

April 10, 2019

Washington, D.C.

Chairman Rush, Ranking Member Upton, and Members of the Subcommittee, thank you for the opportunity to testify on behalf of the Department of Energy (DOE) regarding a number of bills addressing energy efficiency issues that are being considered by this Committee.

One of my top priorities for Energy Efficiency and Renewable Energy (EERE) is energy affordability. Affordable, reliable energy is critical to human well-being. The use of energy helps keep us safe, saves us time, amplifies our work efforts, and reduces the effects of distance, among other benefits. When energy is more affordable, it frees up more of our budget and time so we can spend these precious resources on the things we care about most.

Cost-effective energy efficiency improves the energy affordability of U.S. homes, buildings, and manufacturing sectors. Since 2005, U.S. electricity demand has stayed relatively flat¹ while U.S. gross domestic product (GDP) has steadily increased,² in part due to cost-effective improvements in energy efficiency.³ However, in the Energy Information Administration's (EIA) 2019 Annual Energy Outlook, the reference case projects that growth in demand will outpace energy efficiency improvements during the 2018-2050 projection period.⁴ Thus, there is a potential opportunity for further energy efficiency improvements, with an emphasis on solutions that do not sacrifice the comfort of building occupants or the performance of labor-saving products, devices, and equipment.

¹ U.S. Energy Information Administration. Table 7.6 Electricity End Use; Dec 2005-Dec 2018. Accessed April 2, 2019. https://www.eia.gov/totalenergy/data/browser/?tbl=T07_06#/?f=M&start=200512&end=201812&charted=5-6-7.

² The World Bank. GDP (current US\$); United States. Accessed March 29, 2019. <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?end=2017&locations=US&start=2005>.

³ U.S. Energy Information Administration. "Total electricity sales fell in 2015 for 5th time in past 8 years." March 14, 2016. <https://www.eia.gov/todayinenergy/detail.php?id=25352&src=email>

⁴ U.S. Energy Information Administration. Annual Energy Outlook 2019 with projections to 2050. Washington, DC: U.S. Department of Energy, January 2019. <https://www.eia.gov/outlooks/aeo/pdf/aeo2019.pdf>

The United States' (U.S.) approximately 125 million homes and commercial buildings are the single largest energy-consuming sector in the U.S. economy, representing approximately 75 percent of the Nation's electricity use,⁵ 40 percent of its total energy demand,⁶ and significantly contributes to peak power demand. As a result, Americans spend nearly \$400 billion each year to power their homes, offices, schools, hospitals, and other commercial and residential buildings.⁷

As the EERE Assistant Secretary, I am responsible for overseeing a broad portfolio of energy efficiency and renewable energy programs. The technologies in my portfolio advance America's economic growth and energy security while enhancing the reliability and resilience of the U.S. energy system. Today, I would like to share what relevant work my office has done and is doing in the areas that these bills address.

Home Owner Managing Energy Savings (HOMES) Act

The HOMES Act would create a program through the Department of Energy to provide rebates to homeowners for achieving home energy savings, as well as to develop quality assurance programs to oversee the delivery of home efficiency retrofit programs.

Residential buildings use an estimated 21% of all energy used in the U.S. EIA's 2019 Energy Outlook projects a slight decline in energy consumption for this sector through 2050⁸.

⁵ U.S. Energy Information Administration. Table 7.6 Electricity End Use; Dec 2005-Dec 2018. Accessed April 2, 2019.

<https://www.eia.gov/totalenergy/data/browser/?tbl=T07.06#/f=M&start=200512&end=201812&charted=5-6-7>.

⁶ U.S. Energy Information Administration. Table 2.1 Energy Consumption by Sector. 2014-2018. Accessed April 2, 2019. <https://www.eia.gov/totalenergy/data/browser/?tbl=T02.01#/f=A&start=2014&end=2018&charted=3-6-9-12>.

⁷ Spending derived from the U.S. Energy Information 2012 Commercial Building Energy Consumption Survey (CBECS) and 2009 Residential Energy Consumption Survey (RECS) from "Total Building Site Energy Expenditures".

⁸ U.S. Energy Information Administration. Annual Energy Outlook 2019 with projections to 2050. Washington, DC: U.S. Department of Energy, January 2019. <https://www.eia.gov/outlooks/aeo/pdf/aeo2019.pdf>

However, there is still an opportunity for energy savings given that 55% of the Nation's more than 118 million homes⁹ were built before 1980—prior to the existence of today's more efficient products and building construction practices.

Home energy retrofits represent a potentially substantial opportunity for energy savings that do not negatively impact comfort or performance. EERE is initiating research to develop better solutions for achieving cost-effective energy savings (50% to 75% reduction in energy use intensity) through advancements in building construction technologies, less intrusive installation methods, and more effective integrated envelope and heating/cooling technologies.

In addition to research and development, EERE implements a variety of programs that promote residential energy efficiency. EERE's Building Technologies Office (BTO) administers the Home Performance with ENERGY STAR (HPwES) program in partnership with the U.S. Environmental Protection Agency and local sponsors, such as utilities, state and local governments, and non-profits that primarily administer utility-funded energy efficiency programs. These HPwES sponsors, along with 1,400 participating contractors, provide energy improvement services to homeowners across the U.S. In fact, since 2002, HPwES partners have reported completing improvements to more than 700,000 homes¹⁰.

In addition to HPwES, BTO and the DOE National Laboratories have developed the Home Energy Score to provide homeowners, buyers, and renters directly comparable and credible information about a home's expected energy use. Like a miles-per-gallon rating for a car, the Home Energy Score is based on a standard assessment of energy-related assets to easily compare the energy performance of different homes. Utilities, contractors, and software tool providers access the DOE scoring tool at no charge to generate reliable energy estimates and the

⁹ EIA, Residential Energy Consumption Survey 2015 (RECS)

¹⁰ 2017 Home Performance with ENERGY STAR Annual Report

Home Energy Score, which they can provide to their customers. Some HPwES sponsors have incorporated the Home Energy Score tool into their programs and appreciate the fact that it provides an easy to use framework for analyzing data and tracking their program's efforts. Approximately 115,000 homes have been scored to date.

Another resource available to homebuyers is the Residential Energy Services Network (RESNET), a nonprofit organization with a national network of home energy professionals recognized by DOE and EPA to "help homeowners reduce their utility bills by making their home more energy efficient." To date, RESNET reports having rated over 2 million homes using the Home Energy Rating System (HERS) Index.

Additionally, EERE's Weatherization Assistance Program (WAP) developed and maintains a foundational workforce training and certification program to ensure quality work is performed in WAP residential weatherization retrofits for low-income homes. WAP invested in enhanced training capacity throughout the country and developed the Guidelines for Home Energy Professionals (GHEP) as the foundation for training and certification of the local agencies' staff and contractors. Utility programs across the country have recognized and adopted the Home Energy Professional Certification program. GHEP resources include a complete set of Standard Work Specifications in the Guidelines for each energy conservation measure installed in the home as well as professional certification requirements for installers, crew chiefs, energy auditors, and quality control inspectors.

Smart Building Acceleration Act

The Smart Building Acceleration Act would take a number of actions related to evaluating and advancing the current state of "smart buildings" in the private and federal sectors.

As stated earlier, buildings consume about 75% of U.S. electricity demand and 40% of total energy demand. These large energy loads mean that buildings can potentially provide cost-effective demand flexibility for the grid. At EERE, our research on grid-interactive building technologies is led by BTO, in coordination with the National Labs and private sector partners, including the National Association of State Energy Officials (NASEO) and the National Association of Regulatory Utility Commissioners (NARUC). This research initiative is focused on increasing energy affordability for families and businesses while providing grid flexibility, with an emphasis on solutions that do not negatively impact comfort or productivity. BTO works closely with several National Labs, as well as across DOE through the Grid Modernization Initiative, on R&D focused on driving down the cost of smart building technologies.

Another critical area of research for DOE is ensuring that cybersecurity is built in to the initial design, production, and deployment of new technologies. This includes ensuring cyber resilience for every part of the manufacturing supply chain. In the buildings sector, EERE is focused on ensuring that smart building technologies are cyber-secure for both the building owner's privacy and the grid's resiliency.

We see an opportunity for smart building technology to improve energy integration and storage options for both building owners and grid operators. With smart communications and controls, buildings can better manage building functions, including traditional demand assets like lighting and air conditioning along with on-site photovoltaics, electric vehicle charging, and battery storage, in a continuous and integrated way.

Beyond research and development, EERE's work in smart and connected buildings includes federal buildings. The federal government is America's largest single energy consumer. Federal buildings present another opportunity for early commercial deployment of emerging

grid-interactive, energy-efficient technologies, while also improving the energy performance of federal buildings.

EERE's Federal Energy Management Program works closely with other federal agencies in this regard, providing assistance and technical support so that the federal government can better incorporate the strategic integration of advanced and smart technologies to promote affordable and resilient facilities.

Weatherization Assistance Program

The Weatherization Assistance and State Energy Programs bill would reauthorize these two programs through 2022.

The President's Budget requests no funding for the WAP and the State Energy Program to reduce federal intervention in state-level energy policy and implementation.

The Administration's focus for the Office of Energy Efficiency and Renewable Energy is on early-stage applied research and development. DOE is focused on higher risk activities that are more appropriately performed by the federal government, versus those that are more appropriately left to the private sector, states, and local governments.

DOE also understands congressional interest in these programs, and continues to manage them consistent with statute.

Energy Efficiency and Conservation Block Grant Program

Improving Energy Efficiency of Public Buildings

The bill would expand the purpose of the Energy Efficiency and Conservation Block Grant Program (EECBG) to include diversifying energy supplies, including facilitating and promoting the use of alternative fuels, and reauthorize the Program at \$3.5 billion annually from FY20-25, with a focus on "deployment of energy distribution technologies that significantly

increase energy efficiency or expand access to alternative fuels.” The bill also expands the prioritization that the Secretary must consider for competitive EECBG grants to include projects to expand the use of alternative fuels.

The second bill would reauthorize grants for improving the energy efficiency of public buildings at \$100 million annually from FY21-25.

The Administration’s focus for the Office of Energy Efficiency and Renewable Energy is on early-stage applied research and development. DOE is focused on higher risk activities that are more appropriately performed by the federal government, versus those that are more appropriately left to the private sector, states, and local governments.

Smart Energy and Water Efficiency Act

The Smart Energy and Water Efficiency Act would award grants to eligible entities to demonstrate advanced and innovative technology-based solutions to improve the energy efficiency of water, wastewater, and water reuse systems.

DOE is implementing several initiatives to promote affordable, efficient, and secure water supplies. In October 2018, U.S. Energy Secretary Rick Perry launched the Water Security Grand Challenge, a White House-initiated and Energy Department-led initiative to meet the global need for safe, secure, and affordable water. The five specific 2030 goals under the Water Security Grand Challenge are to:

- Launch desalination technologies that deliver cost-competitive clean water;
- Transform water, produced from the energy sector, from a waste to a resource;
- Achieve near-zero water impact for new thermoelectric power plants, and significantly lower freshwater use intensity within the existing fleet;
- Double resource recovery from municipal wastewater; and

- Develop small modular energy-water systems for urban, rural, tribal, national security, and disaster response settings.

The Department of Energy is deploying a portfolio of programs to address the goals of the Water Security Grand Challenge, including prize competitions, research and development, and public-private partnerships. While DOE is leading this effort, the Department is working closely with important partners throughout the federal government, including the U.S. Environmental Protection Agency, U.S. Department of Interior, and U.S. Department of Agriculture, as well as with the private sector, to address these goals.

AMO also works with water utilities and other industrial partners to improve their energy and water efficiency through efforts like Better Buildings, Better Plants, which is a voluntary recognition program to support a 25% improvement in energy intensity over 10 years. Partners receive technical support from DOE and share best practices and replicable models with their peers.

EERE's Weatherization and Intergovernmental Programs Office (WIP) also provides technical assistance that focuses specifically on the efficiency of wastewater treatment facilities. WIP's Sustainable Wastewater Infrastructure of the Future (SWIFt) Accelerator works with partners to develop and validate innovative approaches and tools that help them integrate energy efficiency into their infrastructure and operations. SWIFt began in October 2016 and will run through October 2019, involving close to 100 partners at the state, regional, local, and plant levels across the country. In addition to the individual partners' goal achievements and plans, WIP will be compiling a toolkit comprising the 28 wastewater-specific tools and resources developed during the Accelerator to be made available to all wastewater facilities.

Thank you for the opportunity to appear before the Subcommittee to discuss these important energy efficiency issues, and I look forward to your questions.

Mr. RUSH. Good timing.

The Chair now recognizes Mr. Campos for 5 minutes for his opening, of an opening statement.

STATEMENT OF JAMES E. CAMPOS

Mr. CAMPOS. Thank you. Chairman Rush, Ranking Member Upton, and members of the subcommittee, it is a privilege and honor to serve at the Department of Energy, an agency tasked with, among other important responsibilities, managing the Department's 17 National Laboratories, supporting early-stage energy R&D across a wide range of science and engineering disciplines, managing the Nation's nuclear weapons, and working effectively with States on our Nation's energy challenges.

Thank you for the opportunity to testify today on behalf of the Department regarding legislation pertinent to the DOE.

ED's mission is broad and diverse, with a number of programs and initiatives that focus on meeting its statutory obligations and enhancing the value of DOE's mission. ED's programs and initiatives are focused on businesses and education to establish critical linkages among minority-serving institutions, minority businesses, and Federal agencies to address economic development in underserved communities, and to support energy workforce development.

ED is committed to increasing efforts for supporting greater inclusion of underserved minority populations—African American, Hispanic, Native American, Asian American and Pacific Islander, Puerto Rican, and Alaska Native—including women, veterans, and formerly incarcerated persons, into science, technology, engineering, mathematic fields, and energy-related industries.

As Deputy Secretary Brouillette assured the chairman during his hearing before this committee in January of 2018, ED has recently reinvigorated the Minorities in Energy Initiative, now being called Equity in Energy. The program is twofold, with external and internal engagements.

For external engagement, ED is conducting listening sessions across the country with underrepresented groups to share insights and ideas to increase minority representation in the energy sector. And share ideas to increase minority representation, sorry, in the energy sector. For internal engagement, ED is working with all of the Department's program offices and the National Laboratories to bring awareness to these issues and address potential solutions. The Equity in Energy initiative focuses on STEM aptitude, supplier diversity, technical assistance, and workforce development.

ED also administers the Minority Educational Institution Student Partnership Program, MEISPP, which provides students with summer internships at the DC headquarters and the 17 National Labs. Since 2005, over 650 interns from minority-serving educational institutions have participated in the program.

DOE has provided over \$700 million to support Historically Black Colleges and Universities, HBCUs, and other minority-serving institutions through research and development programs. In fact, my office was able to partner with and provide financial assistance to several HBCUs and MSIs this year to promote STEM and energy-related fields. To further these efforts, ED is working to release a Funding Opportunity Announcement this fiscal year.

Additionally, I am the Department's White House Initiative designee to Promote Excellence and Innovation at HBCUs. In this role, I lead the Economic Development and Competitiveness cluster, and collaborate with the Departments of Treasury, Housing and Urban Development, Education, Commerce, Agriculture, as well as the Small Business Administration. The cluster aims to engage the Nation's HBCUs to develop workforce and community investments partnerships.

With respect to this proposed legislation, please note that the Department has provided the committee with technical assistance in reviewing the bill, and will continue to work with the committee as the legislation being discussed today is advanced.

Thank you again for this opportunity to be here today. It is an honor and privilege to serve in this capacity. The Department appreciates the ongoing bipartisan efforts, bipartisan efforts to address our Nation's energy challenges. And I look forward to addressing any questions.

[The prepared statement of Mr. Campos follows:]

**Testimony of Director of the Office of Economic Impact and Diversity
U.S. Department of Energy
Before the
Committee on Energy and Commerce
Subcommittee on Energy
U.S. House of Representatives
April 10, 2019**

Chairman Rush, Ranking Member Upton, and Members of the Subcommittee, it is a privilege and an honor to serve at the Department of Energy (the “Department” or “DOE”), an agency tasked with, among other important responsibilities, managing the Department’s 17 National Laboratories, supporting early-stage energy R&D across a wide range of science and engineering disciplines, managing the nation’s nuclear weapons and working effectively with states on our Nation’s energy challenges. Thank you for the opportunity to testify today on behalf of the Department regarding legislation pertinent to DOE that is now pending in the House.

As the Administration continues to review these bills, I appreciate the ongoing bipartisan efforts to address our Nation’s energy challenges and I look forward to working with the Committee.

The Office of Economic Impact and Diversity (ED) includes the Office of Minority Economic Impact which was established by statute in 1979 to increase minority participation in energy sector programs.

ED’s mission is broad and diverse, with a number of programs and initiatives that focus on meeting its statutory obligations and enhancing the value of DOE’s mission. ED’s programs and initiatives are focused on business and education to establish critical linkages among minority serving institutions, minority businesses, and Federal agencies to address economic development in underserved communities and support energy workforce development.

ED is committed to increasing efforts for supporting greater inclusion of underserved minority populations—African American, Hispanic, Native American, Asian American & Pacific Islander, Puerto Rican, and Alaska Native—including women, veterans, and formerly incarcerated persons, into science, technology, engineering, and mathematics (STEM) fields and energy related industries.

As Deputy Secretary Brouillette assured the Chairman during his hearing before this Committee in January 2018, ED has recently reinvigorated the Minorities in Energy Initiative – now being called Equity in Energy. The program is twofold with external and internal engagement. For external engagement, ED is conducting listening sessions across the country with underrepresented groups to share insights and ideas to increase minority representation in the energy sector. For internal engagement, ED is working with all of the Department’s program offices and the National Laboratories to bring awareness to these issues and address potential solutions. The Equity in Energy initiative focuses on STEM aptitude, supplier diversity, technical assistance, and workforce development.

ED also encompasses the Minority Educational Institution Student Partnership Program (MEISPP), which provides students with summer internships at the DC headquarters and the 17 National Labs. Since 2005, over 650 interns from minority serving educational institutions have participated in the program.

DOE has provided over \$700 million to support Historically Black Colleges and Universities (HBCUs) and other minority serving institutions (MSIs), through research and development programs. In fact, my office was able to partner with and provide financial assistance to several HBCUs and MSIs this past year to promote STEM and energy related fields. To further these efforts, ED is working to release a Funding Opportunity Announcement (FOA) this fiscal year.

Additionally, I am the Department's White House Initiative designee to Promote Excellence and Innovation at HBCUs. In this role, I lead the Economic Development and Competitiveness cluster and collaborate with the Departments of Treasury, Housing and Urban Development, Education, Commerce, Agriculture, as well as the Small Business Administration. The cluster aims to engage the Nation's HBCUs to develop workforce and community investments partnerships.

With respect to the proposed legislation, please note that the Department has provided the Committee with technical assistance in reviewing the bill, and will continue to work with the committee as the legislation being discussed today is advanced.

Thank you again for the opportunity to be here today. The Department appreciates the ongoing bipartisan efforts to address our Nation's energy challenges, and I look forward to addressing any questions.

Mr. RUSH. I want to thank the gentleman. Want to thank all of our witnesses.

Members, we have a vote on the floor. It has been called. And it is my intention to recess the subcommittee until immediately after the vote.

So, at this point in time I am going to ask our witnesses if they would remain with us. We should be about 25 minutes to an hour. So, we will reconvene immediately after the last vote.

Thank you. And the subcommittee stands recessed.

[Recess.]

Mr. RUSH. We have concluded with the opening statements, and now we will move to Members' questioning. Each Member will have 5 minutes to ask questions of the witnesses. And I will start by recognizing myself for 5 minutes.

Director Campos, as you know, the issue of increasing opportunities for minorities and other underserved groups is very important to me. It is an issue that I have devoted my entire career in public service to, and it is one that I continue to hold on as a top priority as chairman of this subcommittee. That's the reason why I worked so closely with Secretary Moniz in the previous administration on increasing the Minorities in Energy Initiative and why I reintroduced my workforce bill.

And I understand that every President has the prerogative to focus on their own priorities. And we all certainly understand that the current President feels a certain way about minorities and about diversity. It is his prerogative to feel no matter which he feels. However, the point of both the Minorities in Energy Initiative as well as my workforce bill is that it really shouldn't matter who is in the White House, that the agency, DOE, has the affirmative responsibility to work on increasing opportunities for all.

DOE is one of the largest agencies in the Federal Government. And it receives more taxpayer funding, \$30 billion of taxpayers' money, than any department outside of the Pentagon. It should be the agency that is the forefront of all the agencies to create opportunity and to use its resources to benefit all Americans, not simply the ones who are already a part of the GOB, the Good Ol' Boys network, but all Americans. DOE controls billions of taxpayer dollars in contracts, loan guarantees, and funding to schools.

Yet, in each and every meeting I have held with agency officials, whether discussing overall contracting dollars or funding through the minority service institutions, or minority contracting as part of the Federal Energy Management Program, FEMP, or lending opportunities with the 17 National Laboratories of our Nation, it is really disheartening to me to hear the same exact excuse: "Chairman Rush, Ranking Member Rush, the numbers"—I am quoting them now—"the numbers are not as good as they should be. We need to do more." End of quote.

Director Campos, while I appreciate your traveling around on, quote, "listening tours," end of quote, my objective is to get beyond the talking and the planning stages and to offer concrete and practical policy and procedures that will help benefit all segments of our population. Previously under Department of Energy regulations, the d-e-a-r, DEAR, there were diversity calls that govern all contracting, including management and operating, or M&O, con-

tracting. This would require a diversity plan that includes educational outreach, community outreach, and economic development opportunity through technology transfer with the Labs. The purpose of the diversity plan was to encourage and foster relationships with minority-serving institutions, and to develop continued partnerships with professional and scientific organizations to promote careers in STEM education.

The objective of these plans was to create minority participation in contracting and subcontracting opportunities, research and development partnerships, and regular protégé responsive relationships, all of which are essential to the objectives of H.R. 1315.

Director Campos, I am not going to ask you if your office is working on any type of plan like this because we both already know the answer. But I will be submitting some questions for the record to your Department. And I will also be bringing up this issue when Secretary Perry comes before this subcommittee next month to discuss DOE's budget. Let's get to work, Director Campos, on these issues so that we can start enacting serious proposals such as my workforce bill in order to address some of the disparities in how the agency does that business.

With that, I yield back. And now I recognize my good friend, the ranking member of the subcommittee, Mr. Upton, for 5 minutes for the purpose of asking questions of our witnesses.

Mr. UPTON. Thank you, my friend. And, Chairman, as I said in my opening statement, we do have a number of concerns, particularly as we look at the total price tag of nearly \$26 billion. That ought to get everybody's attention. And as I said, a couple of the bills were introduced just in the last couple days, as recently as Monday.

I have just a couple of questions. And would just note that we just finished votes on the House floor. We have another subcommittee that is working. We have Members on both. And we, because of the Democratic retreat, we have no more votes the balance of the week, so folks are off to the races in a variety of ways.

Has the Department been asked for their input, and have you supplied any technical assistance, TA, for any of these bills?

Mr. SIMMONS. We have been asked for, for technical assistance on Representative Tonko's bill. I don't know if we have the—we have not given that assistance back. I believe there was a new version of that bill earlier this week.

Mr. UPTON. In the case of the workforce bill, which I understand you also submitted technical assistance, has there been any response back to concerns that you might have raised to comments?

Mr. SIMMONS. I am not sure.

Mr. UPTON. That you are aware of?

Mr. SIMMONS. Not that I am aware of. But I am not sure where we are in that process.

Mr. UPTON. Will you commit to working with us to provide a full audit of the workforce activities before the, hopefully, before the bill moves forward?

Mr. SIMMONS. Sure thing.

Mr. UPTON. And in the case of the reauthorization of expired programs, can you commit to providing any and all reports and mate-

rials related to those programs before these bills hopefully move forward as well?

Mr. SIMMONS. Yes.

Mr. UPTON. I would also note that I understand DOE's position on the State Energy Program. The administration budget request I think was zero for the funds or for the program. Despite the expired program, I know that we in the Congress, and the President signed \$55 million for fiscal year 2019 for the State Energy Programs, in large part because the States do ask for it.

Do you have any sense in terms of where, can you help us? If Congress provides the money again are you going to be able to help us?

Mr. SIMMONS. Without a doubt. We will execute on those monies as quickly as we can.

Mr. UPTON. And I guess the last question that I have is DOE does have an important role to provide technical systems in coordination to support the States in their efforts to plan and respond to emergencies, especially if there are impacts to energy supplies. We have this terrible storm hitting the Midwest right now and coming this way. Hurricane season, you know, never goes away. What can we do to strengthen DOE's ability to protect the Nation's energy supplies during these emergencies?

This morning on some of the national news they talked about perhaps widespread power outages that are going to impact the Plains and some of the Midwest with the storm that is coming through. What more can we do as we try to work in a bipartisan basis to help strengthen the States' roles to prepare for these emergencies?

Mr. SIMMONS. I don't have a, I don't have some great answers for that. However, the two offices that are really focused on those activities is the Office of Electricity, as well as the Office of Cyber Security, Energy Security, and Emergency Response.

Assistant Secretary Walker and Evans are very much focused on those activities and making sure that the grid is more, can become more resilient. And especially focusing on kind of some of the knock-on effects once there is one problem, understanding the entire system so that we can have an energy system that is, that is more resilient and that is hardened from what it is today.

So, we are, especially in QFRs, but I know that those offices would be happy to talk with the committee at any time to provide comments.

Mr. UPTON. Maybe one last question. As you look at the 50 States and the territories, is there any State that really stands above others, and is there any State or territory that really needs some help?

Mr. SIMMONS. I don't have a good comment on that. But I will take that back and find out and find some good examples.

Mr. UPTON. I would just note that we have Members from, you know, a lot of States here on this committee I know that we would like to help, particularly as it impacts those constituents wherever they may be. And I would again commend Chairman Rush and others, a couple years ago a number of us went down to Puerto Rico and the Virgin Islands to see what happened because of the terrible hurricane there.

So, with that, I yield back. Thank you.

Mr. RUSH. I thank the gentleman.

Now the Chair recognizes Mr. O'Halleran from Arizona for 5 minutes.

Mr. O'HALLERAN. Thank you, Mr. Chairman and Ranking Member Upton, for convening today's important legislative hearing on energy efficiency legislation. It could not be more timely.

Deploying energy efficiency technologies and supporting such programs is critical to conserving our precious energy resources, and essential to bringing real cost savings to Arizonans and Americans throughout my district.

As Arizona continues to find ways to integrate wind, hydro, and solar energy into our grid, I look forward to introducing legislation in this Congress to help our electrical grid make more resilient and efficient. For a recent southwest energy efficiency project study, Arizona has an energy savings of 21 percent, and potential water savings of 4.1 billion gallons per year if certain efficiency programs are in place.

Mr. Campos, in your testimony you highlighted the Equity in Energy initiative you run within the DOE to promote ethnic representations in the workforce. Could you provide a quick update on the listening sessions your office has had with Tribal communities?

Mr. CAMPOS. Sure, Congressman. Thank you.

We have just started this initiative about 3 months ago. And one of our first active listening sessions we did a conference called RES which deals with most of the Native American Tribes across the Nation. It was a productive session. And we, we sat there and listening on areas of STEM aptitude and supplier diversity. And it went well.

What we are doing now is compiling all the information, visiting other States, also doing events in Tulsa with Native Americans, and figuring out what is their exact part within this process and how we can progress forward in a both efficient and sustainable manner.

Mr. O'HALLERAN. I would suggest that you come to Arizona. We have a large number of Tribes there. The Navajo Nation is the largest Tribal Nation in this country and within my district, and we do have some unique problems there. So, thank you for your answer.

As we discussed back in February, I believe the Blue Collar and Green Jobs Act has the potential to help increase and diversify our energy workforce by providing funding for transmitting energy workers—transitioning energy workers to learn new energy-efficient trades. How would H.R. 1315 help Native Americans increase their representation in the energy efficiency workforce? Mr. Campos?

Mr. CAMPOS. Thank you, Congressman. Any assistance within the workforce development range helps out all the minority sectors across the country, be it Native Americans, African Americans, Hispanics, Asian Americans. So, the resources will be put forth equally and distributed in a manner in which is appropriate.

Mr. O'HALLERAN. As you know, my district is home to coal generation power plants, including the Navajo Generation Station. Recognizing the many challenges coal-fired power plants are facing

across the country and remaining open, I have a keen interest in the economic and societal impacts coal plant closures have on local communities.

Mr. Campos, does DOE use Section 201 of H.R. 1315 in its ability to help displaced coal workers transition to new energy efficiency jobs with good living wages?

Mr. CAMPOS. Congressman, that is probably a question I will have to get back to you on to make sure that I am giving the right information.

Mr. O'HALLERAN. Mr. Simmons, I would like to ask you about H.R. 2114, the Enhancing State Energy Security Planning and Energy Preparedness Act of 2019. In the last month there have been some documented fuel shortages in Central Arizona causing a 30 cent per gallon increase at the pump. Would this legislation help States develop State Energy Security Plans to prevent future lapses in fuel such as this?

Mr. SIMMONS. Well, it would all come down to how good the State Energy Security Plan is. But if there are certain, hopefully, I think that that is—that that would be the goal, to be able to look at some of those challenges, especially foreseeable challenges that may happen in situations like that.

Mr. O'HALLERAN. Mr. Chairman, I applaud the committee's work to discuss these issues in a bipartisan fashion on this and other issues as this Congress moves forward. And I yield back.

Mr. RUSH. I thank the gentleman for yielding back.

The Chair now recognizes the gentleman from Ohio, Mr. Latta for 5 minutes.

Mr. LATTA. Thank you very much, Mr. Chairman. And thanks for today's hearing. And thanks for our witnesses for being with us today.

Mr. Assistant Secretary, when reading your testimony you have an area you were talking about the cyber security that you're building, you want to see built into the design, production, and planning of new technologies. I know my friend from California Mr. McNerney and I have worked together on issues on cyber security and also on cyber sense and also the grid and the resiliency there.

I'm just kind of interested. And when you are looking at what you want to do and on cyber resilience for all the manufacturing supply chains, could you go into that, what you are looking at?

Mr. SIMMONS. Sure. Well, there is a, there is a number of things. First of all, we recently announced a cyber security in energy efficient manufacturing, which is a new \$70 million effort to look at the future of manufacturing in the United States. And the future of manufacturing is likely to be much more automated than it is today. And as we are thinking about new automation, that new automation will increase energy efficiency hopefully.

However, new automation creates new, new areas for attack. And so we want to make sure is that as we are from the very beginning looking at any opportunities to make, to make new automation more cyber secure, automation and controls so that they are more cyber secure from the very beginning.

The Department of Defense also has a program in energy efficiency of manufacturing. They are focused on existing manufacturing. And as the cyber security and energy efficiency manufac-

turing program that we recently put out, we will work very closely with DoD to make sure that their comments and insights are considered as we move forward.

Mr. LATTA. Well, let me follow up then, because when you talk, like, in my district I have 60,000 manufacturing jobs. And when I have been out in my district extensively and, you know, with the automation that is going on, and also Mr. Welch and I who in this committee we did the internet of things working group two Congresses ago. And what we are seeing out there with all of the different technologies going on, how do you work with the companies out there or the manufacturers or the innovators to make sure that they are building this in? And also, at the same time, making sure that what they are putting into the product is secure to begin with, that they are not getting it from an insecure source that might have, you know, something in there that you could have a cyber attack?

Mr. SIMMONS. So, the — I am not, I don't have a great answer for you. The cyber security and energy efficiency in manufacturing is a new effort so I don't have any stories to tell about that. However, both the Office of Electricity when dealing with the bulk power grid is very much focused on the issue in terms of cyber security of the systems that control the bulk power grid. And, also, the Cyber Security, Energy Security, and Emergency Response Office in DOE is focused on those issues. And I can get you some comments about, about their work and how, how we are working to improve that cyber security.

Also, a real asset for the country is the work that happens in the National Labs in terms of cyber security, at places such as Sandia National Lab, Idaho National Lab, Pacific Northwest National Lab, and looking at ways to improve cyber security. And they reach out to the private sector to make sure that they are, that they are coordinating and making sure that best practices are followed, as well as trying to understand where—what cyber security issues we are seeing today so that we can make improvements.

Mr. LATTA. Thank you.

Mr. Campos, in my remaining minute, how much does the Department of Energy spend on the annual basis, on an annual basis on the Workforce Development Initiatives?

Mr. CAMPOS. Thank you, Senator. Our budget within my office, in particular, economic development, diversity, we have a \$10 million budget. And a fraction, fractions of it go across the spectrum. And what I mean by that is workforce development is woven in throughout my budget. About 6 point—5.8 million of it is for the actual labor, staffing. And then the rest is divided amongst all the initiatives. So, but workforce development is woven in within the whole, within the remaining budget.

Mr. SIMMONS. And if I may, there are other, there are some things that my office does in terms of workforce development, both the Advanced Manufacturing Office, weatherization, the Weatherization Assistance Program works on workforce development through improving training. There is a number of opportunities, there is a number of things that we are currently doing. We would have to get you a holistic DOE number from across the entire enterprise.

Mr. LATTA. Thank you.

Mr. Chairman, my time has expired, and I yield back.

Mr. RUSH. I thank the gentleman. The Chair now recognizes the gentleman from New York, Mr. Tonko, for 5 minutes.

Mr. TONKO. Thank you, Mr. Chairman. And thank you, gentlemen, for your testimony.

Secretary Simmons, I agree that energy affordability should be a top priority. Low-income households pay on average 7.2 percent of household income on utilities—I have seen even higher numbers than that—more than three times the amount that higher-income households pay. And according to the Energy Information Administration, 1 in 3 U.S. households faces challenges, or faced challenges in paying energy bills in 2015.

Last week when we debated H.R. 9, a number of Members raised concerns about the costs of energy. And I believe they are sincere about wanting to keep expenses down. So, today I want to offer at least a partial solution on how to help lower utility bills for low-income families.

Mr. Secretary, why do you think low-income households pay a disproportionate amount in their utility bills?

Mr. SIMMONS. A disproportionate amount of their income in utility bills? Yes, they do.

Mr. TONKO. But why do you think that is the case?

Mr. SIMMONS. Because energy is a, energy is a necessity.

Mr. TONKO. But in terms of relative scale to more affluent households, why would their wedge of the pie for energy be disproportionately larger?

Mr. SIMMONS. Well, for one, they have less discretionary income. And so, when you are looking at the most important bills that you pay you have to pay to keep your house warm or cool, you have to pay to keep the lights on, you have to pay to get from point A to point B. Like, there is no way around those things, so.

Mr. TONKO. I would suggest, also, that they live in inefficient homes with poor insulation, and perhaps old windows, et cetera. Unfortunately, many of these households cannot afford the up front costs of a retrofit, even when it is for cost-effective efficiency improvements.

Luckily, DOE's Weatherization Assistance Program has more than a 40-year track record of making homes safer, healthier, and more energy efficient. The program has provided assistance to more than 7.4 million low-income households since that beginning date of 1976.

Now, Mr. Secretary, do you think weatherization assistance provides a positive service to many of America's most vulnerable households, struggling families, seniors on fixed incomes, and the disabled for instance?

Mr. SIMMONS. Yes.

Mr. TONKO. Despite the program's success, I believe aspects of the program could be modernized and improved. A lot has changed in 40 years. There are new and emerging technologies and techniques to deliver even more effective services. So, Mr. Secretary, do you believe weatherization assistance should be able to include the latest, cost-effective technologies and services to achieve the program's goals?

Mr. SIMMONS. Yes.

Mr. TONKO. OK. And, Mr. Secretary, many of my colleagues have talked about needing to put innovation at the forefront of our energy policy. Today, weatherization funding is provided to States based on a formula. H.R. 2041 would create a small competitive grant program as a set-aside to that funding to support innovative weatherization practices.

Mr. Secretary, do you support fostering more innovation in traditional weatherization services?

Mr. SIMMONS. We, we very much foster, we very much support innovation because at the end of the day what matters is reducing people's energy bills and with the Weatherization Program.

Mr. TONKO. Thank you very much.

The most recent authorization of the program expired in 2012. That authorization was for \$1.4 billion, a level we have never reached in a sustained way. This bill includes a reauthorization at \$350 million.

Secretary Simmons, does the administration generally like to see programs reauthorized at levels better aligned with actual funding?

Mr. SIMMONS. I'm sorry, I missed part of that question.

Mr. TONKO. Sure. Does the administration generally like to see programs reauthorized at levels better aligned with actual funding?

Mr. SIMMONS. I don't think the administration has taken a position on that question.

Mr. TONKO. OK. Well, Mr. Chair, this committee's responsibility should be to reauthorize effective programs. I think it is clear that the Weatherization Assistance Program, with its record of supporting efficiency for low-income households deserves to be reauthorized and modernized.

Mr. Chairman, thank you again for holding this hearing. I would also voice my support for EECBG reauthorization, which the Environment Subcommittee heard from a bipartisan group of mayors provides the flexible resources to advance local energy agendas.

And with that, I will yield back.

Mr. RUSH. I thank the gentleman for yielding.

The Chair now recognizes my friend from West Virginia, Mr. McKinley, for 5 minutes.

Mr. MCKINLEY. Thank you, Mr. Chairman.

I guess what I am going to need from you all is some dates. And I don't think you are going to be able to answer initially where they are, so you will have to get back to me on it. But I would like to have with the Weatherization Program, and I thank the chairman for sponsoring this. I am one of the authors or sponsors of the Home Program, so it is something very sensitive and why we need to be moving on it.

And I appreciate this, the questions that were asked about why they, the poor, are disproportionately affected. So I want to go to a line of re-questioning, especially as it relates to articles about Pennsylvania not being able—not spending the money that was authorized for them. And it was something like \$5.4 million Pennsylvania had—we had provided Pennsylvania to help out the poor. And they didn't do it. The money had to be returned.

So, my question is three parts. One is, do you have, can you get me or our office a list of all the States when they established a program to do weatherization? Is there support for that, to get that?

Mr. SIMMONS. Absolutely.

Mr. MCKINLEY. Secondly, I would like to know when each of those 50 States, and perhaps territories that would come into play, when did they cut their first check?

Mr. SIMMONS. OK.

Mr. MCKINLEY. To see that they are complying with what we are trying to reach out and help people. Maybe it is the bureaucracy or something that is holding it back and they are not helping out what we are trying to do to help out on that.

Mr. SIMMONS. OK.

Mr. MCKINLEY. And thirdly, I would like to know the expiration date. How much money is being returned to the Federal Government that the States are not—

Mr. SIMMONS. OK.

Mr. MCKINLEY [continuing]. Dispensing?

And with it, so with that because I am hearing stories, because we talked a lot about this in West Virginia, I am trying to help out folks, that sometimes in other States they get the money, the work is done, but it may be 6 months to a year before the contractor is reimbursed. That is maybe the fourth aspect of it is, is there any justification way that people can, contractors should be put in that position? I don't, I wouldn't think that you would agree that they should be, it should be a year before they are paid, do you?

Mr. SIMMONS. No. No.

Mr. MCKINLEY. So, it looked like you want to say a little bit more on that.

Mr. SIMMONS. I was just going to say that, you know, we, the—we work very hard. The—we work very hard to make sure that the money they get appropriated under that program go out to the States in a timely fashion. And we would hope that that money gets then spent by the States in a timely fashion as well.

Mr. MCKINLEY. That you're aware. It is not so much wrong with Washington. We have enough problems here. But it looks like the States are not pushing it down to where it needs to be, particularly to help the poor in getting their homes, their efficiency.

This, this article about Pennsylvania is very disturbing that was put out. And I, I hope that we can kind of put that to rest.

So, if you would get back to us in a timely fashion with the three aspects: When were the States established; when did they cut the first check; and how much money did they return to the Federal Government that wasn't allocated to help out?

Mr. SIMMONS. OK. We will do that.

Mr. MCKINLEY. And with that, Mr. Chairman, I yield back.

Mr. RUSH. The Chair thanks the gentleman for yielding back.

The Chair now recognizes my friend from the great State of Illinois, Ms. Kelly, for 5 minutes.

Ms. KELLY. Thank you, Mr. Chair. And also was wondering, the report that Mr. McKinley asked for, can the committee have that report of the States?

Mr. RUSH. Mr. McKinley, will you share that, your report that you mentioned with the Chair, and even send it to the rest of the committee?

Mr. MCKINLEY. Yes.

Mr. RUSH. All right. So ordered. Right.

Ms. KELLY. Thank you, Chairman Rush.

Today's hearing is an important opportunity for the committee to review several pieces of legislation that increase energy efficiency and build a new energy workforce. Thanks for being here. I have introduced H.R. 2119, which amends the Energy Policy Act of 2005 to increase the authorization for a grant program that was set up to provide grants for States to improve the energy efficiency of public buildings and facilities.

States and local communities often lack the financial resources to undertake large-scale efficiency retrofits for public buildings. This grant program makes it easier for States to make these investments, which in turn lowers the utility bills for the community operating the building.

Assistant Secretary Simmons, in your testimony you discuss the fact that homes and commercial buildings are the largest energy-consuming sector in the U.S. What more can DOE's Building Technologies Office be doing to support State and local communities who may lack the resources to retrofit public buildings?

Mr. SIMMONS. One of the first things that we can be doing is providing technical assistance. And some of that technical—currently we provide technical assistance to the Federal Government through the Federal Energy Management Program. And there could be opportunities there to provide that type of assistance at the local level.

And as well as some of the work that we are doing in the Building Technology Office is expanding the state of the art about retrofits, since there are a lot of public buildings, and wanting to make sure that there are more cost-effective, easier-to-do retrofit options to reduce the energy footprint of government at all levels, from the Federal down to the local level.

Ms. KELLY. You also indicated that DOE shouldn't focus on grant programs like this that could be more appropriately left to the private sector. In what scenario would the private sector step in to fund efficiency upgrades that publicly operated buildings?

Mr. SIMMONS. So, one way that that, that that occurs currently is through energy savings performance contracting where that happens at the Federal level but also at the State and local level. And I believe that is an area that some people in that community, some companies in that community see as a real opportunity for the future to work with schools, hospitals, and other public buildings to do one way of improving the energy efficiency of those buildings.

Ms. KELLY. I won't ask you to do it now, but can you send me some examples of—

Mr. SIMMONS. Sure. Sure.

Ms. KELLY [continuing]. Where that has happened?

A characteristic of public sector, local, State, and Federal is its limited resources compared to the private sector. This means a project upgrading public sector buildings may not be as profitable as a private construction project, and without incentives such as

Federal grants driving investment in public sector buildings, our municipal buildings will only decline further in quality and efficiency, resulting in lower quality services and quality of life for our constituents. And I know in parts of my district and in some parts—I represent the south suburbs, south side of Chicago, south suburbs—and I know particularly in some of the south suburban towns they just simply cannot afford it. They just can't.

As such, I am not as confident, I guess, as you are in the ability of private sector alone to drive the market for green construction. So, making the public buildings in our community more energy efficient has numerous benefits, as you know. It makes our buildings healthier and safer places to work by eliminating drafts and improving indoor air quality. Energy efficiency work creates good-paying jobs for local workers which I know is very important to our chairman, workforce development, and to me. It is a win/win for communities across the country. And the Federal Government should be providing more support to bolster these efforts.

And with that, I yield back.

Mr. RUSH. I want to thank the gentlelady for yielding back.

The Chair recognizes now Mr. Hudson from North Carolina for 5 minutes.

Mr. HUDSON. Thank the chairman. And thank you to both the witnesses for being here. I know it is a long day for you, but it is very informative for us.

Mr. Campos, thank you in particular for being here today. I want to focus on H.R. 1315, the Blue Collar to Green Collar Jobs Development Act, and the workforce development programs within the Department of Energy. Workforce development should be a truly non-partisan issue. As you may know, I have been a sponsor of similar legislation which passed with unanimous consent in prior Congresses. However, I have serious concerns with this new draft.

You know, as a previous sponsor I was cut out of the drafting of this process. And because new language has been added, I feel we will unfairly pick winners and losers at the expense of consumers and workforce trainees.

Mr. Campos, what is the Department of Energy's vision for energy workforce development? And do you agree that it would be shortsighted to limit workforce development and training opportunities to so-called green-collar jobs only?

Mr. CAMPOS. Thank you, Mr. Congressman.

I think that the DOE at large has interwoven workforce development within its many different elements. And within my office it is an important aspect for the growth of our country and our national security. So, I am an advocate on doing whatever is necessary to promote that and to work within the confines of whatever ends up happening with this bill, and so forth.

Mr. SIMMONS. And if I may, the Department as a whole is very supportive of workforce development. There are obviously some areas where there needs to—that it is more of a critical issue, for example around nuclear energy, for example, where you have the nuclear fleet is declining in size over time. And if you do not have people that can—

Mr. HUDSON. Well, I understand that. But, I mean, my question is if we are only looking at green-collar jobs are we leaving out a lot of other jobs in the future that we ought to be training for?

Mr. SIMMONS. That is, that is certainly possible because of jobs in the, you know, the oil and gas sector in particular.

Mr. HUDSON. I appreciate that.

Mr. Campos, I understand that the majority requested technical assistance from the Department, and that DOE expressed several concerns. However, it does not appear that any of the suggested improvements have been made.

Mr. Chairman, I would like to ask unanimous consent that the Department of Energy's technical assistance document be included in the hearing record.

Mr. RUSH. Without objection, so ordered.

[The information appears at the conclusion of the hearing.]

Mr. HUDSON. Thank you, Mr. Chairman.

Mr. Campos, I am concerned about the price tag also of H.R. 1315. The bill amends the Department of Energy Organization Act to create a new program office with an authorized authorization of \$500 million. It authorizes a new \$100 million training program and it creates a new \$350 million Energy Workforce Grant Program limited to energy efficiency and renewable energy. It sounds a lot like President Obama's Green Jobs Program.

Does the Department of Energy need additional legislative authority or money for green-collar job grants?

Mr. CAMPOS. Mr. Congressman, I will have to work with my staff and get back to you on that.

Mr. SIMMONS. One, we are, we are spending money in certain ways that on things that you could call green collar. For example, the Solar Office recently put out a \$13 million funding opportunity announcement specifically on solar workforce. And there's a number of other opportunities and efforts going on besides that currently.

Mr. HUDSON. Great.

For either witness, is there a risk that this new bill adds new layers of duplicative programs? If you are already able to focus on green-collar jobs, are we duplicating efforts here? I would ask either witness.

Mr. SIMMONS. I would have to get back to you on that one. I am not familiar enough with, with all the language to make a good answer.

Mr. HUDSON. Mr. Campos?

Mr. CAMPOS. My office will also get back to you, sir.

Mr. HUDSON. I appreciate that.

You know, Mr. Chairman, you and I are friends. I trust you, respect you, and we have worked together in the past. And I would love to find a way to work together going forward. I just have a lot of concerns about this draft and this legislation. And I appreciate you giving me a chance to talk about some of this.

Mr. RUSH. The Chair is eager to work with you. You have been my friend and we have worked together in the past. And I look forward to working together with you again in the future. And we will clear up any uncertainties and contingencies that exist regarding the bill. I think there is a misunderstanding of what the Chair

means by blue to green collar. It is not excluding any particular characterization of jobs that are available in the energy sector.

But, and so I look forward to working with you.

The Chair now recognizes the gentleman from Massachusetts, Mr. Kennedy, for 5 minutes.

Mr. KENNEDY. Thank you, Mr. Chairman. I want to thank you, and the committee, and our witnesses from the Department of Energy. Thank you for your service, thank you for being here today.

As you have seen so far, expanding energy efficiency is an incredibly important piece of the fight to lessen our dependence on fossil fuels and reduce emissions. I am proud to offer a bill along with my colleague Greg Stanton of Arizona, to help municipalities achieve their goals of lessening a carbon footprint.

The Energy Efficiency and Conservation Block Grants Program was authorized as part of the Energy Independence and Security Act of 2007, and later funded as part of the stimulus in 2008.

Oh, I am in the wrong seat. Forgive me.

The energy efficiency and clean energy technologies are critically important to ensure a livable future. In addition to the environmental, civil, and economic benefits, they have the potential to be some of the fastest growing job opportunities, particularly in my district in Southeastern Massachusetts.

Last month we heard from a panel of industry experts and business owners that they can't find enough workers with the right skill sets to fill the jobs that they need in a clean energy economy. I specifically asked about offshore wind. And our witnesses agreed offshore wind is coming and we don't have a trained workforce ready. That is not just about jobs working directly in the industry, but also about the supply chain aspects that are on the cusp of providing an economic boom in the United States.

We have heard from many groups eager to provide the training and education necessary for this generation of workers. For example, at Bristol Community College, Mass. Maritime, and UMAS Dartmouth, they all recently signed a memorandum of understanding last June to help develop curriculum. Similarly, European-based wind companies have set up a American headquarters in Boston over the course of the past 6 months. And recently, Tufts University announced the creation of the first graduate program for offshore wind in the U.S., focused on structural and geotechnical engineering.

We have enormous opportunities sitting right in front of us to create a new energy—a new American industry to become world leaders in offshore wind.

With that framework in mind, I would like to discuss how the Department of Energy and the Congress can work together to establish the building blocks necessary for this program to succeed.

I am here today to support Chairman Rush's bill, H.R. 1315, Blue Collar to Green Collar Jobs Development Act of 2019. This legislation would ensure that we are training our workforce for new jobs in clean energy, as well as connecting trained people to employment opportunities, especially for underrepresented and underserved populations at the heart of this bill.

So, Mr. Campos, to begin with, as I have mentioned, offshore wind is coming to Massachusetts. And this provides an exciting

new set of job opportunities. How can we make sure that Massachusetts and the surrounding area is ready for those jobs?

Mr. CAMPOS. Thank you, Congressman Kennedy. That is vitally important in all sectors of the U.S., including the sector that you reside in, are important. What we are doing as an office is increasing an initiative we have called Equity in Energy. And I spoke to that a little earlier in my opening statement.

And we are engaging with various universities, community colleges, groups, associations to engage in those conversations and increase participation within those stakeholders, including industry, including areas of workforce development, and also including prison reentry. So, we are working with all these groups to come to a better utilization and for a better edification within my office and the Department in addressing those concerns in renewable energy.

Mr. KENNEDY. So, I appreciate that. I would just note that I went to the web page for the Office of Economic Impact and Diversity to look at the Equity in Energy program that you talked about in your opening statement. The web page says, "site under construction." So I just hope that you are able to put some more information there soon as we try to make some investments to try to guide some of that, the potential there going forward.

Mr. CAMPOS. Absolutely, Congressman Kennedy. We actually have just started this new initiative about 3 months ago. And so it is under construction but we are actually working towards this. Again, I will get your office the information as soon as it comes out.

Mr. KENNEDY. Thank you.

Mr. Rush's bill allows for DOE to provide direct assistance to apprenticeship pro—or, excuse me, apprenticeship programs, labor organizations, State and local workforce development boards. Do you think that it would be a helpful way to train and prepare our workforce for jobs in the future as they materialize across the country, like offshore wind?

Mr. SIMMONS. Through apprenticeship programs?

Mr. KENNEDY. Yes. I mean, the basic idea of trying to take some of those Federal programs to work locally where we have enormous opportunity, particularly in Southeastern New England, with some economically challenged communities to try to put this on the forefront of an emerging industry. So, want to figure out how you all are viewing that as a potential area of cooperation.

Mr. SIMMONS. Unless I am mistaken, I don't think we have, the administration has a position on that specific aspect. One of the, one of the things with offshore wind is that, that my office is working on, is working on driving down the costs so we can be able to, you know, realize the potential that there is by having lower cost devices. But it is not enough to just have the devices. You also need to have people that understand how to install them.

And so it sounds like that there is a lot of good opportunity, there is a lot of good activities going on with some of the things that you mentioned to make sure that there is a trained workforce that can actually install these machines offshore.

Mr. KENNEDY. I am over time. So I just want to—we have a tremendous opportunity to actually incubate and grow an industry that does not exist. It is going to need cooperation between Federal, State, and local governments. And Texas I think has, and the sec-

retary has a record of showing, or growing a wind industry in Texas that I think some lessons there could be applied valuably to a new industry as well.

So, look forward to working with you guys as we go forward. Yield back.

Mr. RUSH. The chairman now recognizes the gentleman from Michigan, Mr. Walberg, for 5 minutes.

Mr. WALBERG. Thank you, Mr. Chairman. And thanks to the panel for being here.

Mr. Simmons, DOE's Weatherization Assistance Program provides money to States to distribute the funds to support low-income residents by conducting energy efficiency audits and weatherizing homes. Over the years, concerns have been missed—raised about the administration of the program and its influence on State energy policy.

The program has continued to receive funding, but Congress has not reauthorized it since it expired in 2012, as you know. In your testimony, while discussing the Weatherization Assistance Program you mentioned that, and I quote, "Utility programs across the country have recognized and adopted the Home Energy Professional Certification Program." You noted that the administration is not seeking any funding for the Weatherization Assistance Program. But the bill before us contemplates reauthorizing a significant grant program with additional funding.

And so, has DOE asked for this funding? And can you please talk about how your office and the Federal Government works with States on implementing the program?

Mr. SIMMONS. So, the first part of the question, we have not asked for funding. We work, we have the Weatherization, the Weatherization Assistance Program Office that focuses on both the State Energy Program and the Weatherization Program, and making sure that the money goes out the—the money goes out the door, the money that is appropriated by Congress. And especially on weatherization, that those funds are—we fund training to make sure that the funds are spent in ways that make sense, that we have quality installers, quality installation, so that the low-income families are really receiving the benefit of these Federal dollars.

Those are, those are a couple of the ways that, you know, we have oversight of the money. But it is also important to make sure that the money goes out to the various States.

Mr. WALBERG. Along those lines, what do you see as the role here for EERE with regard to what the States are doing?

Mr. SIMMONS. There is a, I think that there is an important oversight role that we need to play to make sure that the money gets spent in ways that are consistent with Federal law.

Mr. WALBERG. Appropriate, efficient?

Mr. SIMMONS. Appropriate, efficient, and that the money gets—and the money is really going to the people specified by Congress and is producing quality benefits for them.

Mr. WALBERG. Does the Department view that the Weatherization Program is really needed?

Mr. SIMMONS. Well, we, the administration doesn't have a, doesn't take a position on that. The budget request is zero for the office.

We also understand where Congress is. And we, so money, a substantial amount of money is appropriated every year. And so we work very diligently to meet our statutory obligations and to carry out the program.

Mr. WALBERG. I guess with that in mind, would you commit here to providing technical drafting assistance—

Mr. SIMMONS. Yes, sir.

Mr. WALBERG [continuing]. For this bill?

Mr. SIMMONS. Yes, sir.

Mr. WALBERG. So it does meet any concerns about making sure the program is viable, the program is necessary, the program functions well and we are not wasting dollars.

Mr. SIMMONS. Yes, sir.

Mr. WALBERG. Mr. Simmons, as you know, the subcommittee recently examined EERE's proposed process rule. At the hearing, you committed to following the statutory process to clear the backlog, which I applaud. But I was also struck by the logic of the proposed rule which sought to prioritize those rules that might return the most bang for the buck in energy savings, more specifically half a quad.

With regard to the legislation before us today, would you like to see the similar logic included in the Weatherization Assistance Program or other proposed grant programs providing support for energy efficiency retrofit should the legislation move forward?

Mr. SIMMONS. We don't have a position on that. That said, it would—metrics are helpful.

Mr. WALBERG. Would it provide EERE more flexibility?

Mr. SIMMONS. I would have to hear from the experts in the program office on that if it would provide us with more flexibility.

Mr. WALBERG. Mr. Chairman, I thank you, and I yield back.

Mr. RUSH. The gentleman yields.

The Chair now recognizes the gentleman from the great State of California, Mr. McNerney.

Mr. MCNERNEY. I thank the chairman.

All of our States are great, aren't they, Mr. Chairman.

Mr. RUSH. All of them.

Mr. MCNERNEY. OK. I might be the last person asking questions this morning.

Mr. RUSH. And you are the greatest.

Mr. MCNERNEY. I appreciate the bipartisan nature of the hearing this morning. All the bills we are looking at are bipartisan, and that is a good sign.

Energy efficiency is a fast-growing field, and it is creating good jobs. In particular, the Smart Energy and Water Efficiency Act of 2019 that I introduced with my colleague Mr. Kinzinger is on the agenda today. It establishes a pilot program for grants to demonstrate advanced energy innovation, technology-based solutions for water, and energy efficiency, including improved energy efficiency, water, wastewater and water reuse systems, supporting the installation of advanced automation systems and improved conservation quality, and predictive maintenance through inter-connected technologies.

Mr. Simmons, thank you for speaking out on energy efficiency and renewable energy program. I appreciate what you said about

the Water Security Grant Challenge. Are there any resources being devoted to prizes, R&D, and public/private partnerships for that program?

Mr. SIMMONS. There will be, yes.

Mr. MCNERNEY. Do you have some idea what they might look like?

Mr. SIMMONS. They are, they are currently in development, so we don't have, we don't have what they are currently. But there is definitely the issue of water. Both water reuse in terms of produced waters from oil and gas development, for example, but also for resource recovery from wastewater. Those are two of the important topics that we are, that we are looking at. So, you can make wastewater more valuable than just—

Mr. MCNERNEY. Sure. Any idea when you will have those to announce?

Mr. SIMMONS. I don't. Hopefully we will have something in the next few months.

Mr. MCNERNEY. You mentioned that water produced from the energy sector is being transformed from waste into a resource. One of the challenges are the chemicals that are introduced in this process. Is EERE committed to reducing the freshwater requirements using fracking, and cleaning up wastewater that is produced by fracking for safer use?

Mr. SIMMONS. So, you know, in that grant challenge we are working across the Department of Energy. So that, in terms of fracking, that is really the Office of Fossil Energy. But as I, so as I understand their, what, you know, their goal is definitely to use less fresh water, to be able to do fracking in a more water-efficient manner. And then to be able to, so that when the produced water comes out for that water to have much more wider uses, for example, maybe agriculture,—

Mr. MCNERNEY. Right.

Mr. SIMMONS [continuing]. Rather than just having to dispose of it in deep injection wells.

Mr. MCNERNEY. Well, good. I am glad to hear that.

Is your office employing or intending to employ any artificial intelligence technology to improve water energy efficiency and predictive maintenance?

Mr. SIMMONS. I would, I would say that that rings a bell. But I would have to look into that.

Mr. MCNERNEY. OK. It seems to me there is a lot of opportunity there.

Mr. SIMMONS. There is. There are a lot of opportunities around the managing of complex systems such as wastewater treatment plant and AI. The Department of Energy is home to the fastest computers in the world. And, obviously, we have a lot of experts who look at that. And so any time that we can use various parts of the administration, or various parts of DOE can work together on an issue here, we very much try to do that.

Mr. MCNERNEY. Mr. Campos, I apologize, I missed your opening statement and the questions that may have come to you. But I am very concerned about the sort of retirement of folks that are qualified to work in energy systems and in water systems both.

Do you have any trend lines of the number of people that expect to retire in the next decade and the number of people that are coming into the system to replace those people?

Mr. CAMPOS. Mr. Congressman, overall I don't have those numbers, but I share your concern. There is an aging population in all energy sectors across the board. And we are addressing those within our scope of work. But there is a, there is a point of concern there for sure. And I share that.

Mr. MCNERNEY. And you are, I mean, you are reaching out or you are giving guidelines to reach, for these agencies to reach out to communities across the spectrum to get people. I mean, there are pretty good paying jobs that we are talking about; right? And they are good careers. They should be attractive to folks.

Mr. CAMPOS. Yes, that is one of my, my priorities it to get out there within different areas of the United States and to reach and to provide that information. Because you are absolutely right, these are good paying jobs. And there is a lack of information and awareness towards this. And that is one of my priorities.

Mr. MCNERNEY. Are we requiring college educations for most of these positions in your opinion?

Mr. CAMPOS. This is a mix. That is why in my Equity in Energy we are doing STEM aptitude, which doesn't necessarily need college degrees. So, it is a variety. And we are seeing more and more that it is certificate-based, not so much a 4-year or 2-year degree needed in many of these areas.

Mr. MCNERNEY. Thank you, Mr. Chairman. I yield back.

Mr. RUSH. The Chair thanks the gentleman for yielding back.

This concludes the questioning and answering segment of the hearing. And so, I do want to thank the witnesses for your appearance today before the subcommittee. And I look forward to having you once again to appear before this subcommittee in the near future. So, thank you for your time.

The Chair now entertains a unanimous consent request to enter into the record various letters and documents, including a letter from the National Community Action Foundation; a letter of support for and from the American Association of Blacks in Energy in relation to H.R. 1315; a letter of support from the American Gas Association in support of the HOMES Act; an April 21, 2011, GAO report on the Energy Efficiency and Conservation Block Grant Program; a DOE technical assistance comments on H.R. 1315; a letter from the U.S. Green Building Council; a letter of support for H.R. 1315 from the Solar Energy Industry Association; a letter of support of H.R. 1315 from Duke Energy; a letter of support from the Alliance to Save Energy in support of H.R. 1315; a letter of support for H.R. 1315 from the Building Performance Industry; and an article from the Pittsburgh Post-Gazette.

Seeing no objection, the unanimous consent request is approved. [The information appears at the conclusion of the hearing.]¹

Mr. RUSH. And seeing that there are no more witnesses and no more Members to ask questions, the Chair will now adjourn this subcommittee. And thank you once again for your appearance.

¹The GAO report has been retained in committee files and also is available at <https://docs.house.gov/meetings/IF/IF03/20190410/109300/HHRG-116-IF03-20190410-SD989.pdf>.

I remind Members that, pursuant to committee rules, they have 10 business days to submit additional questions for the record to be answered by the witnesses for whatever period. I ask each witness to respond promptly to any such questions that you may receive.

And at this time the subcommittee stands adjourned.

[Whereupon, at 12:54 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]



National Community Action Foundation
Connecting Communities to Washington Since 1981

Committee on Energy and Commerce
Subcommittee on Energy
2125 Rayburn House Office Building
Washington, DC 20515

April 9, 2019

Dear Chairman Rush and Ranking Member Upton,

I am the co-founder and Executive Director of the National Community Action Foundation (NCAF) which represents Community Action Agencies (CAAs or CAPs). CAAs are the local organizations that use the federal Community Services Block Grant to design and run programs that coordinate public and private resources to fight the cause of poverty in 99 percent of the counties in the nation.

Our members deliver 80 percent of the Weatherization Assistance investment in eligible homes and maintain close ties to the other non-profit organizations participating in delivering the program. Collectively, CAAs have leveraged nearly \$400 million in non-federal, predominantly regulated utility funds for low-income home weatherization. Regulators and state policymakers choose Weatherization Assistance organizations to deliver their investments because of the DOE program framework and its investment discipline, transparent finances and high work quality requirements. They have learned an additional benefit of using local WAP organizations to implement their own efforts is that our trusted, community-based organizations have no trouble being accepted into homes and outreach costs are virtually nothing. This is a sharp contrast to the barriers the energy industry has encountered in these same communities that they have called “hard-to-reach.”

We support HR 2041 because it takes important steps toward our goal of turning the venerable Weatherization Assistance Program into a 21st century tool for giving lower-income

National Community Action Foundation
400 N. Capitol Street 780 Washington, D.C. 20001
Phone: (202) 842-2092 Fax: (202) 842-2095 Email: info@ncaf.org



National Community Action Foundation
Connecting Communities to Washington Since 1981

communities and families access to the best efficiency and clean energy technology and techniques. In a multi-year consultation process with our members, we identified modernization provisions we believe to be “musts” for this reauthorization, and most are addressed in this Bill. All but one, the authorization, are no-cost.

1. The authorization at \$350 million for four more years, is the exactly the affirmation of the program’s value for which we hoped.
2. The inclusion of renewable and advanced energy technology on the definition of weatherization materials is an important update. We believe additional technical amendments may be needed to fully apply this important change.
3. Just as important, we applaud the provision that authorizes DOE to revise the formula that determines the investment in each home by including some of the evidence-based value of achieving all three of the program’s statutory goals on “benefit” side of the benefit-to-investment ratio.
4. The program is complex at the local delivery level and technically challenging at both state and local levels; the welcome, but modest, increase in administrative funding will help cover more of the true cost of running intense Quality Assurance over a technical workforce and maintaining sophisticated cost allocation systems to account for the many types of funding CAAs blend to deliver one-stop-shop service. The utility industry overhead costs for delivering their residential programs are typically considerably higher.
5. The clarification of current law prohibiting re-weatherizing a home to allow our teams to work with the residents to educate them on the feedback from their meters or other utility sources and on how to manage their systems to save money are essential. 21st century efficiency technology is as much information-based energy services and controls as it is



National Community Action Foundation
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equipment replacement and upgrades. The new policy will significantly improve the persistence of savings over the life of the building as the inhabitants remain current on the knowledge needed to operate equipment at times or in ways that reduce costs and take advantage of utility incentives.

6. Section 3 of the bill addresses the concern our member organizations share regarding the complexity or, in some cases, the impossibility, of combining utility or other state or private funds in a DOE job. We believe DOE should be authorized to waive some of the WAP regulations and in some cases, federal cost allocation rules when a coordinated project would have greater benefits than under conventional, siloed requirements. We look forward to working with Members on the provision.
7. Innovation. The program needs funding for testing innovations that will improve its already positive outcomes. For example, the ORNL evaluations of the program identified areas of weakness; the Department moved quickly to upgrade management and work quality weaknesses, but some of those that require more complex solutions are;
 - o different approaches to mobile home retrofits,
 - o better pre-treatment data on homes from utilities and other sources and
 - a. more effective client energy education approaches.

NCAF believes the financial assistance laid out in Sec.2 (e) could serve the purpose if thoughtfully implemented by DOE. We look forward to working with the Committee as these measures are further refined.

One of NCAF's priorities not addressed in the bill is ensuring appropriated funds flow from DOE to grantees in a timely manner and that grantees reimburse the delivery agencies promptly to keep the contractors paid and purchase materials to install. We would support adding the provisions of Sen. Shaheen's Bill S.185 to this measure and applying the same provisions to grantees [states and territories] as it applies to DOE.



National Community Action Foundation
Connecting Communities to Washington Since 1981

Finally, although our organizations did not originally have this idea on our “essential changes” list, we believe the provisions regarding contractor “optimization” are good public policy. While they reflect the practices already in effect in most of the WAP programs today, they will assist in aligning and strengthening nationwide practice.

We look forward to providing experts, resources and any kind of assistance the Committee would require as it moves forward considering this legislation.

Sincerely,

David Bradley
Executive Director
NCAF

AMERICAN ASSOCIATION OF
BLACKS IN ENERGY®



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Web site: www.aaabe.org

Paula R. Glover
President & CEO

April 10, 2019

The Honorable Bobby L. Rush
Chairman
Subcommittee on Energy
Committee on Energy and Commerce
U. S. House of Representatives
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Fred Upton
Ranking Member
Subcommittee on Energy
Committee on Energy and Commerce
U. S. House of Representatives
2322 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Rush and Ranking Member Upton:

The American Association of Blacks in Energy (AABE or Association) is writing in support of H.R. 1315, the "Blue Collar to Green Collar Jobs Development Act of 2019." AABE is the premiere energy professional association representing the interests of African American leaders and employees in the energy industry, and the communities of color they serve. The Association consists of over 2000 members nation-wide, including 40 chapters covering 28 states and the District of Columbia. Our mission is to provide direct input into the deliberations and developments of energy policies, regulations, emerging technologies, and environmental issues, particularly as these issues impact African American and underserved communities.

H.R. 1315 is pivotal and foundational. The legislation achieves the necessary result of: (1) identifying representative participation of diversity in the energy industry; (2) developing mechanisms and best practices to support successful education and training; (3) authorizing funding to support education and training; and (4) laying the groundwork for diversity in the future of energy.

Today's energy landscape and the infrastructure supporting it are experiencing significant, rapid, and dynamic change. Innovation is occurring at a rate and speed limited only by technology. Notwithstanding existing industry efforts to create a more diverse workforce, H.R. 1315 provides industry the essential tools needed to successfully implement diversity strategies, hire a diverse workforce, and through training and education ensure diversity retention. The bill correctly focuses on where the industry is today, and where the industry is going—with a particular focus on grid and distribution modernization, renewables, and energy efficiency.

Thank you Chairman Rush for your leadership in introducing the "Blue Collar to Green Collar Jobs Development Act of 2019," and for being the champion of diverse participation in the energy industry. We also thank the Subcommittee for its consideration, and urge passage of H.R. 1315. We look forward to working with you in the future on this important legislation.

Sincerely,

Paula R. Glover
President & CEO

April 8, 2019

The Honorable Bobby Rush
United States House of Representatives
2188 Rayburn House Office Building
Washington, DC 20515

The Honorable Peter Welch
United States House of Representatives
2187 Rayburn House Office Building
Washington, DC 20515

The Honorable Fred Upton
United States House of Representatives
2183 Rayburn House Office Building
Washington, DC 20515

The Honorable David McKinley
United States House of Representatives
2239 Rayburn House Office Building
Washington, DC 20515

Re: House Energy & Commerce Committee Subcommittee on Energy, hearing entitled *Investing in America's Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce*.

Dear Chairman Rush and Ranking Member Upton:

The American Gas Association (AGA) appreciates the opportunity to submit comments on the measures to be considered during the upcoming legislative hearing titled *Investing in America's Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce*. Specifically, this letter addresses the Home Owner Managing Energy Savings (HOMES) Act (H.R. 2043),¹ introduced by Representatives Welch (D-VT) and McKinley (R-WV) and scheduled to be discussed at the aforementioned hearing.

AGA, founded in 1918, represents more than 200 local energy companies that deliver clean natural gas throughout the United States. There are more than 74 million residential, commercial and industrial natural gas customers in the U.S., of which 95 percent—more than 71 million customers—receive their gas from AGA members. Today, natural gas meets more than one-fourth of the nation's energy needs.

AGA recognizes and appreciates the bill's goal of improving the energy efficiency of Americans' homes and businesses. America's natural gas utilities share this focus on energy efficiency², which is why utility-funded gas efficiency programs have helped customers reduce their annual natural gas usage by 18 percent, and save an average of \$141 in annual energy costs. Utilities also helped customers save 239 trillion Btus of energy and offset 12.5 million metric tons of CO2 emissions in 2016.

However, it is important to note that energy efficiency can, and is often, measured using two different methods: (1) site energy evaluation, and (2) source energy evaluation. These methods can yield drastically different results, and without proper context, can obfuscate the true energy, consumption and emissions savings associated with an energy appliance.

¹ The Home Owner Managing Energy Savings (HOMES) Act, H.R. 2043, available at https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/H.R.2043_Welch_intro%20in%20H_2019.04.03_1.pdf (last visited April 5, 2019).

² AGA, *Natural Gas: The Facts* (2016) ("The average American home consumes 40 percent less natural gas than it did 40 years ago").

Site energy measures the amount of electricity, natural gas, propane and/or fuel oil that is consumed by an appliance at the site where it is being operated. Source energy measures the fuel expended in the energy supply chain; therefore, it includes site energy and it accounts for transmission, delivery, and production losses. For natural gas, propane or oil appliances, this includes energy expended in the transportation and distribution process. For electric appliances, source energy includes the energy expended in the generation, transmission, and distribution process. Source energy provides a more complete assessment of the energy efficiency of an appliance, building or household, because it accounts for all energy use and it provides a complete assessment of energy efficiency.

For this reason, the Environmental Protection Agency (EPA) recommends using source energy, and considers it the “*most equitable unit of evaluation*.”³ The HOMES Act would require the use of RESNET,⁴ a third-party modeling tool to determine energy efficiency of residential homes. However, it is not clear if the RESNET modeling tool would use a source energy methodology to determine the home energy savings retrofit rebate. Not using a source energy measurement approach to determine the energy efficiency targets laid out in the HOMES Act would undermine the bill’s true intent: to reduce overall energy consumption. Worse, as written the HOMES Act could incentivize fuel switching, or the swapping out of natural gas appliances in favor of electric appliances that have a low site energy consumption but a much higher source energy consumption. DOE’s Home Energy Score⁵ is an energy efficiency scoring tool that is based on the asset source energy used by the home which represents a viable alternative to address this potential issue.

AGA supports the commitment to energy efficiency demonstrated by Representatives Welch and McKinley, and AGA encourages further examination of the impacts of a site versus source energy measurement, particularly the unintended consequences of policy that relies upon site based energy measurements.

The American Gas Association stands ready to work with you and your staff to continue advocating for energy efficiency and developing policy based upon sound science and comprehensive methodology. AGA welcomes the opportunity to share more information about the important work natural gas utilities do to help customers better understand energy usage and reduce their consumption.

Sincerely,



George H. Lowe
Vice President, Governmental Affairs and Public Policy
American Gas Association

³ Energy Star, *The Difference Between Source and Site Energy*, available at <https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager/understand-metrics/difference> (last visited April 5, 2019)

⁴ <http://www.resnet.us/library/what-is-an-energy-audit/>

⁵ <https://betterbuildingssolutioncenter.energy.gov/home-energy-score/home-energy-score-about-score>

(Original Signature of Member)

H.R. ■ ■

IN THE HOUSE OF REPRESENTATIVES

A BILL

3 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

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February 19, 2019 (6:33 p.m.)

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2

1 (b) TABLE OF CONTENTS.—The table of contents for
 2 this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—OFFICE OF ECONOMIC IMPACT, DIVERSITY, AND
 EMPLOYMENT

Sec. 101. Name of office.

Sec. 102. Energy workforce development programs.

Sec. 103. Authorization.

TITLE II—ENERGY WORKFORCE DEVELOPMENT

Sec. 201. Energy workforce development.

Sec. 202. Energy workforce grant program.

Sec. 203. Definitions.

3 **TITLE I—OFFICE OF ECONOMIC**
 4 **IMPACT, DIVERSITY, AND EM-**
 5 **PLOYMENT**

6 **SEC. 101. NAME OF OFFICE.**

7 (a) IN GENERAL.—Section 211 of the Department of
 8 Energy Organization Act (42 U.S.C. 7141) is amended—

9 (1) in the section heading, by striking “MINOR-
 10 ITY ECONOMIC IMPACT” and inserting “ECONOMIC
 11 IMPACT, DIVERSITY, AND EMPLOYMENT”; and

12 (2) in subsection (a), by striking “Office of Mi-
 13 nority Economic Impact” and inserting “Office of
 14 Economic Impact, Diversity, and Employment”.

15 (b) CONFORMING AMENDMENT.—The table of con-
 16 tents for the Department of Energy Organization Act is
 17 amended by amending the item relating to section 211 to
 18 read as follows:

“Sec. 211. Office of Economic Impact, Diversity, and Employment.”.

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3

1 SEC. 102. ENERGY WORKFORCE DEVELOPMENT PRO-
2 GRAMS.

3 Section 211 of the Department of Energy Organiza-
4 tion Act (42 U.S.C. 7141) is amended—

5 (1) by redesignating subsections (f) and (g) as
6 subsections (g) and (h), respectively; and

7 (2) by inserting after subsection (e) the fol-
8 lowing:

9 “(f) The Secretary, acting through the Director, shall
10 establish and carry out the programs described in sections
11 201 and 202 of the Blue Collar to Green Collar Jobs De-
12 velopment Act of 2019.”.

13 SEC. 103. AUTHORIZATION.

14 Subsection (h) of section 211 of the Department of
15 Energy Organization Act (42 U.S.C. 7141), as redesi-
16 gnated by section 102 of this Act, is amended by striking
17 “not to exceed \$3,000,000 for fiscal year 1979, not to ex-
18 ceed \$5,000,000 for fiscal year 1980, and not to exceed
19 \$6,000,000 for fiscal year 1981. Of the amounts so appro-
20 priated each fiscal year, not less than 50 percent shall be
21 available for purposes of financial assistance under sub-
22 section (e).” and inserting “\$100,000,000 for each offis-
23 cal years 2020 through 2024.”.

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4

1 TITLE II—ENERGY WORKFORCE
2 DEVELOPMENT

3 SEC. 201. ENERGY WORKFORCE DEVELOPMENT.

4 (a) IN GENERAL.—Subject to the availability of ap-
5 propriations, the Secretary, acting through the Director
6 of the Office of Economic Impact, Diversity, and Employ-
7 ment, shall establish and carry out a comprehensive, na-
8 tionwide program to improve education and training for
9 jobs in energy-related industries, including manufacturing,
10 engineering, construction, and retrofitting jobs in such en-
11 ergy-related industries, in order to increase the number
12 of skilled workers trained to work in such energy-related
13 industries, including by—

14 (1) encouraging underrepresented groups, in-
15 cluding religious and ethnic minorities, women, vet-
16 erans, individuals with disabilities, unemployed en-
17 ergy workers, and socioeconomically disadvantaged
18 individuals to enter into the science, technology, en-
19 gineering, and mathematics (in this section referred
20 to as “STEM”) fields;

21 (2) encouraging the Nation’s educational insti-
22 tutions to equip students with the skills,
23 mentorships, training, and technical expertise nec-
24 essary to fill the employment opportunities vital to

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1 managing and operating the Nation's energy-related
2 industries;

3 (3) providing students and other candidates for
4 employment with the necessary skills and certi-
5 fications for skilled, semiskilled, and highly skilled
6 jobs in such energy-related industries;

7 (4) strengthening and more fully engaging De-
8 partment of Energy programs and laboratories in
9 carrying out the Department's Minorities in Energy
10 Initiative; and

11 (5) to the greatest extent possible, collaborating
12 with and supporting existing State workforce devel-
13 opment programs to maximize program efficiency.

14 (b) PRIORITY.—In carrying out the program estab-
15 lished under subsection (a), the Secretary shall prioritize
16 the education and training of underrepresented groups for
17 jobs in energy-related industries.

18 (c) DIRECT ASSISTANCE.—In carrying out the pro-
19 gram established under subsection (a), the Secretary shall
20 provide direct assistance (including financial assistance
21 awards, technical expertise, and internships) to edu-
22 cational institutions, local workforce development boards,
23 State workforce development boards, nonprofit organiza-
24 tions, labor organizations, and apprenticeship programs.
25 The Secretary shall distribute such direct assistance in a

Commented [A1]: State Workforce Development Boards are mentioned, but consider also including Federal-State Regional Commissions, like the Appalachia Regional Commission, Delta Regional Authority, Denali Commission, Northern Border Regional Commission, Northern Great Plains Regional Commission, and the Southeast Crescent Regional Commission.

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1 manner proportional to the needs of, and demand for jobs
2 in, energy-related industries, consistent with information
3 obtained under subsections (e)(3) and (i).

4 (d) CLEARINGHOUSE.—In carrying out the program
5 established under subsection (a), the Secretary shall estab-
6 lish a clearinghouse to—

7 (1) maintain and update information and re-
8 sources on training programs for jobs in energy-re-
9 lated industries, including manufacturing, engineer-
10 ing, construction, and retrofitting jobs in such en-
11 ergy-related industries; and

12 (2) act as a resource for educational institu-
13 tions, local workforce development boards, State
14 workforce development boards, nonprofit organiza-
15 tions, labor organizations, and apprenticeship pro-
16 grams that would like to develop and implement
17 training programs for such jobs.

18 (e) COLLABORATION AND REPORT.—In carrying out
19 the program established under subsection (a), the Sec-
20 retary—

21 (1) shall collaborate with educational institu-
22 tions, local workforce development boards, State
23 workforce development boards, nonprofit organiza-
24 tions, labor organizations, apprenticeship programs,
25 and energy-related industries;

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(2) shall encourage and foster collaboration, mentorships, and partnerships among industry, local workforce development boards, State workforce development boards, nonprofit organizations, labor organizations, and apprenticeship programs that currently provide effective training programs for jobs in energy-related industries and educational institutions that seek to establish these types of programs in order to share best practices and approaches that best suit local, State, and national needs; and

(3) shall collaborate with the Bureau of Labor Statistics, the Department of Commerce, the Bureau of the Census, and energy-related industries to—

(A) develop a comprehensive and detailed understanding of the workforce needs of such energy-related industries, and job opportunities in such energy-related industries, by State and by region; and

(B) publish an annual report on job creation in the energy-related industries described in subsection (i)(2).

(f) GUIDELINES FOR EDUCATIONAL INSTITUTIONS.—

(1) IN GENERAL.—In carrying out the program established under subsection (a), the Secretary, in

Commented [A2]: For this kind of proposed investment, it seems that it would be necessary to have a current baseline of the participation of the "underrepresented groups" in energy related industries. Some sectors (like solar) have associations that produce their own jobs and diversity reports. There is no national, standardized, comprehensive dataset, particularly in regard to the participation of underrepresented populations in the sector. One of the challenges is that the BLS classifications do not correlate to or include the gamut of jobs in the energy sector. Without a baseline, how would progress over time be measured? Without a comprehensive understanding of the current workforce, how would needs be quantified?

Commented [A3]: Suggest expanding this to also include an annual count/census of jobs in addition to annual job creation.

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1 collaboration with the Secretary of Education, the
 2 Secretary of Commerce, the Secretary of Labor, and
 3 the National Science Foundation, shall develop vol-
 4 untary guidelines or best practices for educational
 5 institutions to help provide graduates with the skills
 6 necessary for jobs in energy-related industries, in-
 7 cluding manufacturing, engineering, construction,
 8 and retrofitting jobs in such energy-related indus-
 9 tries.

10 (2) INPUT.—The Secretary shall solicit input
 11 from energy-related industries in developing guide-
 12 lines or best practices under paragraph (1).

13 (3) ENERGY EFFICIENCY AND CONSERVATION
 14 INITIATIVES.—The guidelines or best practices devel-
 15 oped under paragraph (1) shall include grade-spe-
 16 cific guidelines for teaching energy efficiency tech-
 17 nology, manufacturing efficiency technology, commu-
 18 nity energy resiliency, and conservation initiatives to
 19 educate students and families.

20 (4) STEM EDUCATION.—The guidelines or best
 21 practices developed under paragraph (1) shall pro-
 22 mote STEM education in educational institutions as
 23 it relates to job opportunities in energy-related in-
 24 dustries.

Commented [A4]: This list may leave out some
 occupations in the electric power sector like linemen
 and plant operators.

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1 (g) OUTREACH TO MINORITY-SERVING INSTITU-
2 TIONS.—In carrying out the program established under
3 subsection (a), the Secretary shall—

4 (1) give special consideration to increasing out-
5 reach to minority-serving institutions;

6 (2) make resources available to minority-serving
7 institutions with the objective of increasing the num-
8 ber of skilled minorities and women trained for jobs
9 in energy-related industries, including manufac-
10 turing, engineering, construction, and retrofitting
11 jobs in such energy-related industries;

12 (3) encourage energy-related industries to im-
13 prove the opportunities for students of minority-
14 serving institutions to participate in industry intern-
15 ships and cooperative work-study programs; and

16 (4) partner with the Department of Energy lab-
17 oratories to increase underrepresented groups' par-
18 ticipation in internships, fellowships, traineeships,
19 and employment at all Department of Energy lab-
20 oratories.

21 (h) OUTREACH TO DISPLACED AND UNEMPLOYED
22 ENERGY WORKERS.—In carrying out the program estab-
23 lished under subsection (a), the Secretary shall—

24 (1) give special consideration to increasing out-
25 reach to employers and job trainers preparing dis-

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1 placed and unemployed energy workers for emerging
 2 jobs in energy-related industries, including manufac-
 3 turing, engineering, construction, and retrofitting
 4 jobs in such energy-related industries;

5 (2) make resources available to institutions
 6 serving displaced and unemployed energy workers
 7 with the objective of increasing the number of indi-
 8 viduals trained for jobs in energy-related industries,
 9 including manufacturing, engineering, construction,
 10 and retrofitting jobs in such energy-related indus-
 11 tries; and

12 (3) encourage energy-related industries to im-
 13 prove opportunities for displaced and unemployed
 14 energy workers to participate in industry internships
 15 and cooperative work-study programs.

16 (i) GUIDELINES TO DEVELOP SKILLS FOR AN EN-
 17 ERGY INDUSTRY WORKFORCE.—In carrying out the pro-
 18 gram established under subsection (a), the Secretary shall,
 19 in collaboration with energy-related industries—

20 (1) identify the areas of with the greatest de-
 21 mand for workers in each such industry; and

22 (2) develop guidelines for the skills necessary
 23 for work in the following energy-related industries:

24 (A) Energy efficiency industry, including
 25 work in energy efficiency, conservation, weath-

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1 erization, retrofitting, or as inspectors or audi-
2 tors.

3 (B) Renewable energy industry, including
4 work in the development, engineering, manufac-
5 turing, and production of renewable energy
6 from renewable energy sources (such as solar,
7 hydropower, wind, or geothermal energy).

8 (C) Community energy resiliency industry,
9 including work in the installation of rooftop
10 solar, in battery storage, and in microgrid tech-
11 nologies.

12 (D) Fuel cell and hydrogen energy indus-
13 try.

14 (E) Manufacturing industry, including
15 work as operations technicians, in operations
16 and design in additive manufacturing, 3-D
17 printing, and advanced composites and ad-
18 vanced aluminum and other metal alloys, indus-
19 trial energy efficiency management systems, in-
20 cluding power electronics, and other innovative
21 technologies.

22 (F) Chemical manufacturing industry, in-
23 cluding work in construction (such as welders,
24 pipefitters, and tool and die makers) or as in-
25 strument and electrical technicians, machinists,

Commented [A5]: Based on the list of technologies below, it might make sense to call this the "Advanced manufacturing industry", to differentiate it from manufacturing writ large.

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1 chemical process operators, engineers, quality
2 and safety professionals, and reliability engi-
3 neers.

4 (G) Utility industry, including work in the
5 generation, transmission, and distribution of
6 electricity and natural gas, such as utility tech-
7 nicians, operators, lineworkers, engineers, sci-
8 entists, and information technology specialists.

9 (H) Alternative fuels industry, including
10 work in biofuel development and production.

11 (I) Pipeline industry, including work in
12 pipeline construction and maintenance or work
13 as engineers or technical advisors.

14 (J) Nuclear industry, including work as
15 scientists, engineers, technicians, mathemati-
16 cians, or security personnel.

17 (K) Oil and gas industry, including work
18 as scientists, engineers, technicians, mathemati-
19 cians, petrochemical engineers, or geologists.

20 (L) Coal industry, including work as coal
21 miners, engineers, developers and manufactur-
22 ers of state-of-the-art coal facilities, technology
23 vendors, coal transportation workers and opera-
24 tors, or mining equipment vendors.

Commented [A6]: Recommend the addition of
"electricians" and "dispatchers" as examples of utility
workers to ensure these categories of utility workers are
considered when guidelines are developed.

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1 (j) ENROLLMENT IN TRAINING AND APPRENTICE-
 2 SHIP PROGRAMS.—In carrying out the program estab-
 3 lished under subsection (a), the Secretary shall work with
 4 industry, local workforce development boards, State work-
 5 force development boards, nonprofit organizations, labor
 6 organizations, and apprenticeship programs to help iden-
 7 tify students and other candidates, including from under-
 8 represented communities such as minorities, women, and
 9 veterans, to enroll into training and apprenticeship pro-
 10 grams for jobs in energy-related industries.

11 (k) AUTHORIZATION OF APPROPRIATIONS.—There
 12 are authorized to be appropriated to carry out this section
 13 \$20,000,000 for each of fiscal years 2020 through 2024.

14 SEC. 202. ENERGY WORKFORCE GRANT PROGRAM.

15 (a) PROGRAM.—

16 (1) ESTABLISHMENT.—Subject to the avail-
 17 ability of appropriations, the Secretary, acting
 18 through the Director of the Office of Economic Im-
 19 pact, Diversity, and Employment, shall establish and
 20 carry out a program to provide grants to eligible
 21 businesses to pay the wages of new and existing em-
 22 ployees during the time period that such employees
 23 are receiving training to work in the renewable en-
 24 ergy sector, energy efficiency sector, or grid mod-
 25 ernization sector.

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1 (2) GUIDELINES.—Not later than 60 days after
 2 the date of enactment of this Act, the Secretary, in
 3 consultation with stakeholders, contractors, and ~~or~~
 4 ~~ganizations that work to advance existing residential~~
 5 ~~energy efficiency,~~ shall establish guidelines to iden-
 6 tify training that is eligible for purposes of the pro-
 7 gram established pursuant to paragraph (1).

8 (b) ELIGIBILITY.—To be eligible to receive a grant
 9 under the program established under subsection (a) or a
 10 business or labor management organization that is directly
 11 involved with energy efficiency or renewable energy tech-
 12 nology, or working on behalf of any such business, shall
 13 provide services related to—

14 (1) renewable electric energy generation, includ-
 15 ing solar, wind, geothermal, hydropower, and other
 16 renewable electric energy generation technologies;

17 (2) energy efficiency, including energy efficient
 18 lighting, heating, ventilation, and air conditioning,
 19 air source heat pumps, advanced building materials,
 20 insulation and air sealing, and other high efficiency
 21 products and services, including auditing and inspec-
 22 tion;

23 (3) grid modernization or energy storage, in-
 24 cluding smart grid, microgrid and other distributed

Commented [A7]: Given that this program is meant to provide training for efficiency, renewable, and grid modernization sectors, the specific focus on residential retrofits seems too narrow.

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1 energy solutions, demand response management, and
2 home energy management technology; or

3 (4) fuel cell and hybrid fuel cell generation.

4 (c) USE OF GRANTS.—An eligible business with—

5 (1) 20 or fewer employees may use a grant pro-
6 vided under the program established under sub-
7 section (a) to pay up to—

8 (A) 45 percent of an employee's wages for
9 the duration of the training, if the training is
10 provided by the eligible business; and

11 (B) 90 percent of an employee's wages for
12 the duration of the training, if the training is
13 provided by an entity other than the eligible
14 business;

15 (2) 21 to 99 employees may use a grant pro-
16 vided under the program established under sub-
17 section (a) to pay up to—

18 (A) 37.5 percent of an employee's wages
19 for the duration of the training, if the training
20 is provided by the eligible business; and

21 (B) 75 percent of an employee's wages for
22 the duration of the training, if the training is
23 provided by an entity other than the eligible
24 business; and

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- 1 (3) 100 employees or more may use a grant
2 provided under the program established under sub-
3 section (a) to pay up to—
- 4 (A) 25 percent of an employee's wages for
5 the duration of the training, if the training is
6 provided by the eligible business; and
- 7 (B) 50 percent of an employee's wages for
8 the duration of the training, if the training is
9 provided by an entity other than the eligible
10 business.
- 11 (d) PRIORITY FOR TARGETED COMMUNITIES.—In
12 providing grants under the program established under
13 subsection (a), the Secretary shall give priority to eligible
14 businesses that—
- 15 (1) recruit employees—
- 16 (A) from the communities that the busi-
17 nesses serve; and
- 18 (B) that are minorities, women, persons
19 who are or were foster children, persons who
20 are transitioning from fossil energy sector jobs,
21 or veterans; and
- 22 (2) provide trainees with the opportunity to ob-
23 tain real-world experience.

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1 (e) LIMIT.—An eligible business may not receive
 2 more than \$100,000 under the program established under
 3 subsection (a) per fiscal year.

4 (f) AUTHORIZATION OF APPROPRIATIONS.—There
 5 are authorized to be appropriated to carry out this section
 6 \$70,000,000 for each of fiscal years 2020 through 2024.

7 SEC. 203. DEFINITIONS.

8 In this Act:

9 (1) APPRENTICESHIP.—The term “apprentice-
 10 ship” means an apprenticeship registered under the
 11 Act of August 16, 1937 (commonly known as the
 12 “National Apprenticeship Act”; 50 Stat. 664, chap-
 13 ter 663; 29 U.S.C. 50 et seq.).

14 (2) EDUCATIONAL INSTITUTION.—The term
 15 “educational institution” means an elementary
 16 school, secondary school, or institution of higher
 17 education.

18 (3) ELEMENTARY SCHOOL AND SECONDARY
 19 SCHOOL.—The terms “elementary school” and “sec-
 20 ondary school” have the meanings given such terms
 21 in section 8101 of the Elementary and Secondary
 22 Education Act of 1965 (20 U.S.C. 7801).

23 (4) ENERGY-RELATED INDUSTRY.—The term
 24 “energy-related industry” includes, but is not limited
 25 to, each of the en-
 ergy efficiency, renewable energy, chemical manufac-

Commented [A8]: Recommend inserting edit, as the definition of “energy-related” seems limited in scope whereas the list of the “following energy-related industries” on pages 10-12 are more extensive.

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1 turing, utility, alternative fuels, pipeline, nuclear en-
 2 ergy, oil, gas, and coal industries.

3 (5) INSTITUTION OF HIGHER EDUCATION.—The
 4 term “institution of higher education” has the
 5 meaning given such term in section 102 of the High-
 6 er Education Act of 1965 (20 U.S.C. 1002).

7 (6) LABOR ORGANIZATION.—The term “labor
 8 organization” has the meaning given such term in
 9 section 2 of the National Labor Relations Act (29
 10 U.S.C. 152).

11 (7) LOCAL WORKFORCE DEVELOPMENT
 12 BOARD.—The term “local workforce development
 13 board” means a local board, as defined in section 3
 14 of the Workforce Innovation and Opportunity Act
 15 (29 U.S.C. 3102).

16 (8) MINORITY-SERVING INSTITUTION.—The
 17 term “minority-serving institution” means an insti-
 18 tution of higher education that is of one of the fol-
 19 lowing:

20 (A) Hispanic-serving institution (as de-
 21 fined in section 502(a)(5) of the Higher Edu-
 22 cation Act of 1965 (20 U.S.C. 1101a(a)(5))).

23 (B) Tribal College or University (as de-
 24 fined in section 316(b) of the Higher Education
 25 Act of 1965 (20 U.S.C. 1059c(b))).

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1 (C) Alaska Native-serving institution (as
2 defined in section 317(b) of the Higher Edu-
3 cation Act of 1965 (20 U.S.C. 1059d(b))).

4 (D) Native Hawaiian-serving institution
5 (as defined in section 317(b) of the Higher
6 Education Act of 1965 (20 U.S.C. 1059d(b))).

7 (E) Predominantly Black Institution (as
8 defined in section 318(b) of the Higher Edu-
9 cation Act of 1965 (20 U.S.C. 1059e(b))).

10 (F) Native American-serving nontribal in-
11 stitution (as defined in section 319(b) of the
12 Higher Education Act of 1965 (20 U.S.C.
13 1059f(b))).

14 (G) Asian American and Native American
15 Pacific Islander-serving institution (as defined
16 in section 320(b) of the Higher Education Act
17 of 1965 (20 U.S.C. 1059g(b))).

18 (9) SECRETARY.—The term “Secretary” means
19 the Secretary of Energy.

20 (10) STATE WORKFORCE DEVELOPMENT
21 BOARD.—The term “State workforce development
22 board” means a State board, as defined in section
23 3 of the Workforce Innovation and Opportunity Act
24 (29 U.S.C. 3102).



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FOUNDERS
David Gottfried
Michael Italiano
S. Richard Fedrizzi

April 10, 2019

The Honorable Bobby Rush
Chairman
Subcommittee on Energy
Energy and Commerce Committee
2125 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Fred Upton
Ranking Member
Subcommittee on Energy
Energy and Commerce Committee
2322 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Rush and Ranking Member Upton:

On behalf of the U.S. Green Building Council (USGBC), a national nonprofit representing nearly 9,000 member companies and organizations committed to cost-effective and high-performing buildings, I write to provide comments for the hearing “Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce.” We commend the Energy Subcommittee for convening this hearing. We believe that the Committee and Congress should act swiftly to help improve the condition of infrastructure, including buildings and their interaction with the energy grid, across the country.

USGBC is dedicated to transforming the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy, and prosperous world. Best known for the successful Leadership in Energy & Environmental Design (LEED) green building certification system, we leverage our education, credentials, events, communications, and policy advocacy activities to support the public and private sectors in advancing high-performance, cost-effective buildings that save energy, water and money. Reducing the contribution of buildings to greenhouse gas emissions has long been a core area of our work along with a focus on supporting local job creation.

USGBC Supports HR 2041, HR 2044, and relevant sections of HR 2114

Many of the bills under consideration today are aligned with our work in advancing high-performance cost effective building. USGBC supports the following bills:

- H.R. 2041, Weatherization Enhancement and Local Energy Efficiency Investment and Accountability Act; and
- H.R. 2044, Smart Building Acceleration Act; and



- Sections of H.R. 2114, Enhancing State Energy Security Planning and Emergency Preparedness Act of 2019, regarding the reauthorization of State Energy Programs.

We wish to provide comments to enhance the effectiveness or reach of other legislation included in the hearing.

H.R. 2043: Home Owner Managing Energy Savings (HOMES) Act of 2019

USGBC believes that improving the efficiency of existing residences is important to reduce utility bill costs while making homes more comfortable and supporting resident health. The HOMES Act would provide a much-needed incentive to help accelerate this important effort. While we support the HOMES Act we believe that the legislation can be improved in a few ways.

- USGBC supports expanding these rebates to properties including rental properties. Residential management firms of all sizes across the country operate single family properties who could also benefit from this program. Including property managers could have scalable results and would benefit renters (of all income levels) who in most instances have to incur the cost of utility bills.
- USGBC supports adding an additional rebate level at 30%. We believe that an additional incentive level could motivate projects to reach for additional energy savings.
- USGBC encourages a review of the quality assurance provisions in the bill. There may be additional methods and approaches for accountability that should be considered.

H.R. 1315: Blue Collar to Green Collar Jobs Development Act of 2019

USGBC supports the goals of the Blue Collar to Green Collar Act and the prospect of focused investment to ensure that opportunities to train, qualify for, and fill our nation's clean energy jobs is open to all, regardless of socioeconomic condition. We have several suggestions for the committee to consider to improve the existing legislation.

- USGBC supports further clarify "jobs in energy-related industries, including manufacturing, engineering, construction, and retrofitting jobs" to specifically include facility operations and maintenance, as well.



- USGBC believes that as DOE works on collaboration and report activities that there should be an open and robust stakeholder process including private sector employers and others involved in training and credentials, to identify existing credentials, skill gaps, and growth sectors.

H.R. 2119: To amend the Energy Policy Act of 2005 to reauthorize grants for improving the energy efficiency of public buildings, and for other purposes.

USGBC works with state and local governments across the country on improving the operational performance of their facilities. We support the goal of H.R. 2119 but believe that the bill could be enhanced in a number of key ways:

- USGBC supports including water efficiency savings as part of the program. Since the original program authorization the federal, state and local government has made impressive progress in integrating energy and water savings to facility improvements. Water efficiency should be added to maximize utility cost savings (and associated emissions savings) for public facilities.
- USGBC supports including third party validation of energy and water efficiency improvements as a condition of program eligibility. LEED, for example, is a widely used verification tool used by government and private sector building owners that has been a helpful method to ensure that building upgrades are designed and operating appropriately. Investor Ready Energy Efficiency (IREE) is another third party certification focused on verification of specific energy efficiency measures, and is used by utilities such as Pacific Gas and Electric.
- USGBC supports adding benchmarking as a condition of program eligibility. Benchmarking building performance data is a critical step for facilities managers or property owners to improve the performance of a property and maintain investments overtime. Tracking energy and water performance over time can result in low cost reductions in utility consumption and financial benefits. The U.S. Environmental Protection Agency (EPA) reports buildings that use EPA's ENERGY STAR Portfolio Manager achieve an average energy savings of 7% over three years, which estimates results in a significant financial savings of \$120,000 to over \$4 million.¹

¹ U.S. Environmental Protection Agency, ENERGY STAR® Portfolio Manager. Data trends – Benchmarking and energy savings. 2012 Oct available at: https://www.energystar.gov/sites/default/files/buildings/tools/DataTrends_Savings_20121002.pdf



Energy Star Portfolio Manager should be used as a common reporting platform, but the use of other tools to provide additional analytic functions and performance comparisons should also be allowable.

- USGBC supports adding competitive criteria that would leverage Federal investment with private financing. Funding mechanism like performance contracting have been successful financing vehicles to improve energy and water efficiency public facilities with minimal or no direct appropriations.

H.R. 2088, To amend the Energy Independence and Security Act of 2007 to reauthorize the Energy Efficiency and Conservation Block Grant Program, and for other purposes.

The funding of Energy Efficiency and Conservation Block Grant (EECBG) under the Recovery Act served as an incredibly valuable resource for communities across the country to save taxpayer dollars through energy conservation projects, including programs to expand the use of LEED certification. USGBC was proud to support the creation of the EECBG and believe that it can play a continued role in reducing municipal energy consumption. We support the bill but recommend some additional improvements to the legislation.

- USGBC supports the establishment of a minimum energy savings threshold as part of the program. Given the diversity of eligible activities permitted by the act a performance threshold could serve to protect federal investment.
- USGBC supports clarifying that micro-grids as well as energy storage would be eligible for use under the program.

Thank you for the opportunity to provide this information. Please do not hesitate to contact me at (202) 640-2344 if you have any questions or wish to discuss these issues further.



Sincerely,

A handwritten signature in black ink, appearing to read "B. Howard", is written over a horizontal line.

Bryan Howard
Legislative Director
U.S. Green Building Council



February 26, 2019

Chairman Frank Pallone
House Committee on Energy and Commerce
 2125 Rayburn House Office Building
 Washington, DC 20515

Chairman Bobby Rush
Subcommittee on Energy
 2125 Rayburn House Office Building
 Washington, DC 20515

Ranking Member Greg Walden
House Committee on Energy and Commerce
 2322 Rayburn House Office Building
 Washington, DC 20515

Ranking Member Fred Upton
Subcommittee on Energy
 2322 Rayburn House Office Building
 Washington, DC 20515

Dear Chairman Pallone, Ranking Member Walden, Subcommittee Chairman Rush, and Subcommittee Ranking Member Upton,

On behalf of the one thousand companies that make up the Solar Energy Industries Association (SEIA), I write today in support of H.R. 1315, The Blue Collar to Green Collar Jobs Development Act, which provides additional support to help companies hire more Americans from diverse communities into the growing renewable energy industry.

Within the next five years, we anticipate the solar energy market in the United States to more than double in size. This important bill represents a serious investment in two of our country's top priorities – our transition to a clean energy economy and the development of our workforce. Within the solar industry, we're ushering in a clean energy revolution that's making our economy and environment stronger every day. Solar embodies American values – it gives us choice and independence, and it democratizes energy.

In order to make sure that clean, low cost solar energy is available for all, we must have a growing and dynamic workforce. SEIA members hire thousands of workers every year and a well-equipped, diverse talent pool is central to their success. Workforce development that reflects the diversity of the communities we aim to serve is one of our member companies' highest priorities. In order to meet the expected demand, the solar workforce will require tens of thousands of new employees over the next several years.

The solar economy continues to be primarily local with jobs paying above the national median average. According to The Solar Foundation's 2018 National Solar Jobs Census, the median wage for mid-level solar installers is \$32/hour for



electricians and \$28/hour for non-electricians, well above the national median of \$18/hr. Solar provides an opportunity for workers from all education levels. In fact, 79% of solar companies do not require a bachelor's degree for new hires. For those who are willing to pursue some training in solar-specific technologies, it's possible to move into sustainable, well-paying careers in as little as 12 months. Solar jobs also offer the promise of advancement. [An in-depth case study](#) by The Solar Foundation looked at several major solar installers and found that entry-level installers were typically promoted within 6 to 12 months of hire, with an average pay increase of 45%.

We must ensure that people of all races, genders, ethnicities, and economic backgrounds have access to both solar *jobs* and solar *energy* itself. Everyone deserves access to the incredible benefits of solar energy — cleaner air, lower energy bills, and well-paying jobs.

We commend the Committee for its work on this legislation and look forward to continuing this important conversation.

Sincerely,

A handwritten signature in black ink, appearing to read "Abigail Ross Hopper".

Abigail Ross Hopper, Esq.
President & CEO



The Honorable Bobby Rush
2188 Rayburn HOB
Washington, DC 20515

Duke Energy
550 South Tryon Street
Charlotte, NC 28202

Mailing Address:
PO Box 1321
Charlotte, NC 28201

Dear Rep. Rush:

On behalf of Duke Energy, we are pleased to support the "Blue Collar to Green Collar Jobs Development Act of 2019" to establish a nationwide program to improve education and training for jobs in energy-related fields. We appreciate your leadership as we continue to think creatively about how to remove barriers for women, minorities and veterans to enter the energy industry.

Duke Energy is one of the largest electric power holding companies in the United States, providing electricity to 7.6 million retail customers across the Southeast and in the Midwest representing a population of approximately 24 million Americans (Florida, Indiana, Kentucky, North Carolina, Ohio, South Carolina). Our company also provides natural gas to 1.6 million customers in five states and operates a growing renewable energy portfolio across the country.

As we transform our customers' experience, modernize our energy grid and generate cleaner energy, we are planning for tomorrow's energy workforce to ensure we can meet these evolving demands. With nearly 40 percent of our workforce eligible to retire within the next three years, we are committed to attracting and retaining employees that reflect the communities we serve and recognize the need for greater alignment between course curriculum and in demand energy jobs. That's why we are building partnerships with community colleges, military bases, underrepresented groups and Historically Black Colleges and Universities (HBCUs) to close the skills gap and accelerate the time in which potential employees can begin a career in energy.

Attracting and retaining lineworkers is an area of focus for us and we offer extensive training for these individuals who maintain and restore equipment essential to providing reliable energy to our customers. By establishing an energy workforce grant program within DOE for utilities like ours, the Blue Collar to Green Collar Jobs Development Act will support our commitment to expand access to energy jobs and meet our customers' demands.

For additional information, please contact Colleen Moss (colleen.moss@duke-energy.com; 202-824-8010). We look forward to working with you to advance this important legislation.

Sincerely,

Joni Davis
VR Chief Diversity & Inclusion Officer, Talent Acquisition & Workforce Development

Stan Sherrill
VP Strategic HR Business Solutions, Employee & Labor Relations



February 27, 2019

The Honorable Bobby Rush
Chairman
Subcommittee on Energy
Committee on Energy and Commerce
U.S. House of Representatives

Re: H.R. 1315, The "Blue Collar to Green Collar Jobs Development Act of 2019"

Dear Chairman Rush:

Thank you for introducing H.R. 1315, the "Blue Collar to Green Collar Jobs Development Act of 2019." The Alliance to Save Energy appreciates your commitment to the critical issue of energy efficiency workforce development.

America is in dire need of an educated and trained energy workforce to meet the challenges of the 21st Century and its evolving energy industry. More than 60% of energy efficiency employers have reported some difficulty in hiring qualified workers due to a lack of experience, training, or technical skills among applicants, according to the U.S. Energy and Employment Report. This skills gap must be addressed to support an industry that created 67,000 jobs in 2017 and includes more than 2.25 million workers.

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 60% 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 40%. Improving energy efficiency is the single most effective policy strategy we have for addressing the threat of climate change, while also representing an extraordinary bipartisan opportunity to boost economic growth.

The Alliance looks forward to working with you this Congress to strengthen this legislation and secure the support it needs to pass the House and Senate on a bipartisan basis. We know that with your leadership, we can achieve the necessary policies to support a growing energy efficiency workforce that will improve the lives and livelihoods of millions of Americans.

Thank you for your consideration.

Sincerely,

Jason Hartke, Ph.D.
President

April 9, 2019

The Honorable Frank Pallone
Chairman
Energy and Commerce Committee
U.S. House of Representatives
Committee on Appropriations
Washington, DC 20515

The Honorable Greg Walden
Ranking Member
Energy and Commerce Committee
U.S. House of Representatives
Committee on Appropriations
Washington, DC 20515

Dear Chairman Pallone and Ranking Member Walden:

We, contractors, small business owners, and other members of the building performance industry, are writing to urge you to support the Blue Collar to Green Collar Jobs Development Act of 2019. This legislation would create a comprehensive, nationwide program to improve education and training for jobs in energy-related industries, including residential energy efficiency and renewable energy retrofits, in order to increase the number of skilled workers qualified to fill these jobs. We urge you to support this legislation to address the need for a robust and qualified workforce in order to fill the employment needs of the growing residential energy efficiency and clean energy industries.

The energy efficiency and clean energy industries represent a fast-growing workforce. The energy efficiency industry employs approximately 2.25 million Americans and is adding more jobs than any other energy sector.¹ Importantly, these jobs are local—nearly all U.S. counties have energy efficiency jobs—and because much of the work is “on the ground” doing installation or maintenance of energy efficiency products and technologies, these are jobs that cannot be outsourced.

Jobs in energy-efficient lighting, HVAC, insulation and air sealing, and energy management technology are available, but trained professionals are often in short supply. There is a real need to ramp up implementation of workforce programs that prepare workers—including women, veterans, and minority groups—for the jobs which need to be filled.

One of the main pillars of the Blue Collar to Green Collar Jobs Development Act of 2019 is an energy workforce grant program, which would provide assistance to businesses in the energy efficiency and renewable energy industries that are seeking to educate and train new hires and existing employees. A large majority of energy efficiency businesses across the country have fewer than 20 employees.² Small businesses like these are the backbone of our country, but they are also the ones that are in need of assistance when it comes to making new hires and investing in the education and training of their existing employees. By covering the wages for these workers during the time they are receiving training, this grant program would significantly help

¹ <https://e4thefuture.org/wp-content/uploads/2018/09/EE-Jobs-in-America-2018.pdf>

² Ibid

small and medium sized businesses invest in their employees, allowing workers to expand their skill set, do better work, and earn higher wages in the long run.

With more resources to provide training for these high-quality jobs, especially for small businesses that cannot afford the training, the energy efficiency and renewable energy industries can continue to grow. This legislation will result in more American workers who are equipped to provide energy efficiency and renewable energy products and services and whose work will reduce energy waste in homes and buildings across the country. Importantly, the legislation would give priority to eligible businesses that recruit employees from local communities, minorities, women, foster children, persons who are transitioning from fossil energy sector jobs, and veterans; and provide trainees with the opportunity to obtain real-world experience.

We urge you to support the Blue Collar to Green Collar Jobs Development Act of 2019, which will help advance workforce development for a new energy economy, economic growth, and energy security in our nation and help to ensure that every community across the country has access to opportunities in the growing energy efficiency and clean energy industries.

Sincerely,

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Pa. Auditor General: State failed to spend federal energy assistance funds meant to aid poor



KATE GIAMMARISE
Pittsburgh Post-Gazette
kgiammarise@post-gazette.com

JUL 10, 2018

3:19 PM

The state failed to spend more than \$5.4 million of federal weatherization funds intended to help low-income households due to the 2015-16 state budget impasse and changes in federal standards, [an audit released Tuesday](#) found.

The unspent funds could have helped more than 500 homes become more energy efficient and reduce their heating bills.

“That’s Pennsylvania dollars that were sent back to the federal government,” Pennsylvania Auditor General Eugene DePasquale said Tuesday at a Harrisburg press conference.



The audit covered the Weatherization Assistance Program, administered by the state's Department of Community and Economic Development and the Low Income Home Energy Assistance Program, known as LIHEAP, which helps families pay their utility bills and is run by the state's Department of Human Services.



Kate Giammarise

Survey: More than 18,000 Pa. households lack heat or use unsafe heating sources

Both programs are federally funded.

Mr. DePasquale said Tuesday his audit showed the LIHEAP program is well-run overall and is helping the people it is intended to serve.

The audit faulted DCED, however, for failing to spend millions in federal funds, as well as for what it called a “flawed” and “poorly administered” process to prioritize weatherization services.

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Weatherization funds can pay for improvements like installation of insulation, replacement of heating systems with more energy-efficient ones, and other home repairs and education measures to help people reduce energy waste. Households must have a total income below 200 percent of the federal poverty income guidelines, or \$40,840 for a family of three, to take part in the program.

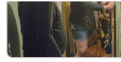
DCED said in a statement it dispensed more than \$30 million that was used to weatherize more than 3,700 homes within the period of the audit, July 1, 2013 through June 30, 2017.

The audit was conducted “at a time when federally mandated changes, including drastically higher work standards,” were being implemented to weatherization programs nationally.

“These changes caused a downward ripple effect that hurt local agencies and caused subcontractors that do weatherization work to no longer participate in the weatherization program,” Michael Gerber, a spokesman for the department, said in a statement. “With fewer subcontractors participating in the program, less actual weatherization work could be done, and the ability for local agencies to work through their waiting lists was diminished. The federal changes forced major challenges on programs in every state, not just Pennsylvania, and the changes were given almost no consideration by this audit.”



MENU



Energy drain. Low-income households typically pay a higher percentage of income for utilities

While the auditor general didn't fault the agency for the lengthy budget standoff in 2015-16 between Democratic Gov. Tom Wolf and the Republican-controlled General Assembly, he said the agency failed to proactively plan during this budget impasse period. When weatherization funds weren't released to local agencies until February 2016, local agencies then had to spend roughly two years' worth of funding in a 17-month period.

"While it is clear those funds cannot legally be spent during a budget impasse, that is not an excuse for poor planning," Mr. DePasquale said in a statement. "DCED should have spent that time preparing to help the largest number of vulnerable residents. Instead, DCED had to give \$5.4 million back to the federal government. That is unacceptable."

The audit also recommended that legislation be enacted "that requires all available federal funding that promotes the safety and welfare of at-risk Pennsylvanians to be released to state agencies as of July 1 of each year" in the event of a future impasse, Mr. DePasquale said.

Problems with the weatherization program have been noted in prior audits.

The auditor said the governor should consider moving the program to the Department of Human Services and out of DCED, which is primarily an economic development agency.

DCED said it "will continue to address deficiencies with all of our programs to improve the services offered to Pennsylvania businesses and residents."

Kate Giammarise: kgiammarise@post-gazette.com or 412-263-3909.

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce”
Assistant Secretary Daniel R. Simmons
Office of Energy Efficiency and Renewable Energy

April 10, 2019

The Honorable Cathy McMorris Rodgers (R-WA)

Q1. Mr. Simmons: I support EERE’s mission to create and sustain American leadership in the transition to a global clean energy economy. I believe we are on the right track, but it will take strong leadership and a commitment to the areas of focus that you laid out in your testimony, especially energy affordability.

Q1a. Mr. Simmons, I would like for you to talk about the importance of energy affordability. Why did you make this one of your top priorities?

A1a. As Assistant Secretary, one of my top priorities for EERE is energy affordability. Affordable, reliable energy is critical to human well-being. The use of energy helps keep us safe, saves us time, amplifies our work efforts, and reduces the effects of distance, among other benefits. When energy is more affordable, it frees up more of our budget and time so we can spend these precious resources on the things we care about most.

While we have made positive progress toward more affordable energy, there is much more work to do. Economic growth has lifted billions of people out of extreme poverty, more than half of the world’s population will be the “middle class” of income by the year 2020.¹ However, nearly half of the world’s population still lives on less than \$5.50 a day.² Energy affordability affects people in the United States. According to the most recent results from the U.S. Energy Information Administration’s Residential Energy Consumption Survey (RECS), “[n]early one-third of U.S. households reported facing a challenge in paying energy bills or sustaining adequate heating and cooling in their homes.”³

When we work towards making energy more affordable, we are helping people who are struggling economically. When we have plentiful and affordable energy in the United

¹ The Washington Post, “Does \$60,000 make you middle-class or wealthy on Planet Earth?” , August 20, 2018 U.S. Energy Information Administration, Department of Energy, “One in three U.S. households faces a challenge in meeting energy needs,” September 19, 2018. <https://www.eia.gov/todayinenergy/detail.php?id=37072>

² The World Bank, “Nearly Half the World Lives on Less than \$5.50 a Day,” Press Release, October 17, 2018. <http://www.worldbank.org/en/news/press-release/2018/10/17/nearly-half-the-world-lives-on-less-than-550-a-day>

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States, it helps businesses grow by reducing a critical cost and it makes the United States more competitive globally.

This challenge of affordable energy is one of the things that makes the EERE portfolio so important. For example, we have seen large improvements in many EERE technologies over the last ten years. Probably the most cited successes are the dramatic reduction in the price of photovoltaic (PV) solar and onshore wind. But there are other important successes, including the reduction in the cost of electric vehicle (EV) battery packs, significant reductions in the cost of light-emitting diode (LED) lightbulbs, and improvements to the energy productivity of our homes, businesses, and industries.

Q2. Mr. Simmons: There are several bills before us today with the espoused goal of improving efficiency. While I support efficiency and conservation, as we consider these bills I think we need to be mindful of the potential unintended effects.

Q2a. Is it possible that efficiency mandates could actually make consumer products more expensive? If so, can you share some examples?

A2a. Yes, there is a real tradeoff between upfront price increases and long-term energy savings inherent in efficiency mandates. For example, in 2017 DOE projected that its standards would increase the purchase price of central air conditioners by between \$126 and \$192, and in 2012 DOE projected that its standards would increase the purchase price of dishwashers by \$44. To address this tradeoff, the Energy Policy and Conservation Act (EPCA) calls for the Department to consider the total consumer expense of the product including the initial purchase price and the operating expense over the lifetime. EPCA requires that any new or amended energy conservation standard be “technologically feasible and economically justified” while taking these factors into account. EERE projects changes in the upfront price of regulated products in each of its respective regulatory analyses for the public to weigh in on.

Subcommittee on Energy
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April 10, 2019

To assess the impacts of its standards, including how past standards have affected the price of consumer products, DOE supports the use of retrospective analyses and, as part of its proposed Process Rule, would commit to conducting these analyses at regular intervals to enhance learning on product prices and other factors relevant to consumers.

Q2b. Is it possible that a grant or rebate program could actually disincentivize innovation and technological development? If so, can you share some examples?

A2b. Incentives, such as grants or rebate programs, are a tool that can alter R&D, production, retail stocking, and purchasing decisions toward energy efficient products. Well-intentioned incentive programs could result in disincentives to innovation through market signals that favor incumbent technologies. More research would be needed to determine the effects of incentive programs on innovation.

Q2c. Mr. Simmons, what factors should Congress consider as we evaluate these bills to set up new programs and encourage efficiency mandates?

A2c. Congress may wish to consider a few questions when determining if the establishment of new programs are warranted:

- Does the proposed program build upon experience and “lessons learned” (both positive and negative) of the many past energy efficiency activities?
- Does the proposed program include the necessary data collection and reporting elements to ensure that performance can be regularly assessed?
- Does the proposed program include consultations with stakeholders so that market barriers can be identified and addressed?

Beyond these questions on program design, several topical areas have the potential for significant impact on our energy economy, including:

- Systems efficiency – solutions that consider the interactions among multiple systems within a given application (e.g., buildings)

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
Assistant Secretary Daniel R. Simmons
Office of Energy Efficiency and Renewable Energy

April 10, 2019

- Energy productivity – programs that enable more economic activity while also reducing the amount of energy consumed
- Technology integration – solutions that integrate multiple technologies across domains or sectors (e.g., programs that include energy efficiency solutions in both stationary and mobile sources)
- Demand flexibility – programs that develop demand side innovations that can help integrate variable renewables (PV and Wind)

Consideration of these topical areas will help Congress authorize programs that help make energy more affordable and enable the Department to focus on integration of new technologies and solutions for the wider energy system.

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
Assistant Secretary Daniel R. Simmons
Office of Energy Efficiency and Renewable Energy

April 10, 2019

The Honorable David McKinley (R-WV)

Q1. Mr. Simmons, in your testimony, you mentioned some of the existing programs EERE has for promoting residential energy efficiency.

Q1a. In what ways will the Homes Act complement or enhance the work EERE is already doing to promote residential energy efficiency?

A1a. DOE administers the Home Performance with ENERGY STAR (HPwES) program in partnership with the U.S. Environmental Protection Agency, local utility companies, and other sponsors that manage utility-funded energy efficiency programs. HPwES Sponsors and 1,400 participating contractors provide energy improvement services to homeowners across the United States that help lower household energy use and bills by 25% or more. Since 2002, HPwES partners have reported completing improvements to more than 700,000 homes.³

In addition to HPwES, the U.S. Department of Energy and its National Laboratories have developed the Home Energy Score to provide homeowners, buyers, and renters directly comparable and credible information about a home’s expected energy use. Like a miles-per-gallon rating for a car, the Home Energy Score is based on a standard assessment of energy-related assets to allow homeowners and homebuyers to easily compare the energy performance of different homes. Utilities, contractors, and software tool providers access the Scoring Tool at no charge to generate reliable energy estimates and the score, which they in turn provide to their customers. Some HPwES sponsors have incorporated the score into their programs and appreciate the fact that the Scoring Tool provides an easy to use framework for analyzing data and tracking their program’s efforts. Approximately 115,000 homes have been scored to date.

³ [2017 Home Performance with ENERGY STAR Annual Report](#)

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
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EERE also sponsors research, development, and field validation aimed at making home energy retrofits more affordable, effective, and easy to implement. EERE is initiating research to develop better solutions for achieving deep energy savings through advancements in building construction technologies, less intrusive installation methods, and more effective integrated envelope and HVAC technologies.

Energy efficiency programs have been in place in the United States for several decades. Many utilities recognize energy efficiency as an energy resource in the resource plans they develop to guide investment decisions and operational plans. Energy efficiency programs in the United States consist of the planning, implementing, and monitoring activities of electric and gas utilities, which are designed to encourage consumers to modify their level and pattern of energy usage and are typically funded by the state public utility regulators.

Home Performance with ENERGY STAR (HPwES) is one example of a residential energy efficiency program. HPwES sponsors reported program spending that totaled \$208 million in 2017. About \$95 million was for customer incentives, \$6 million for midstream incentives, \$57 million for project subsidies, and \$48 million for program administration. DOE does not provide direct funding for sponsors or for customer rebates.

The HOMES Act proposes appropriations of \$250 million annually through 2025 for the rebate program. The HOMES Act would authorize an additional \$100 million the first year for a Pay for a Performance Pilot Program providing grants to not less than five state energy offices to implement.

- Q1b. Can you explain how you would support this program and the time your office would need to develop the criteria and approvals needed to facilitate the program’s execution?

Subcommittee on Energy
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a Diverse Workforce”
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April 10, 2019

- A1b. Should the HOMES Act become law, it would take considerable resources and time to ramp up staff and to award grants and contracts to implement the bill effectively. The bill calls for DOE to develop a network of rebate aggregators or a national rebate aggregator that can facilitate the delivery of rebates to homeowners and contractors. The bill also calls for DOE to establish a Federal Rebate Processing System to serve as a database and information technology system that allows rebate aggregators to submit claims for reimbursement using standard data protocols in 6 months. Federal information systems must meet strict cybersecurity requirements and should be easy for aggregators to use.
- Q1b. Do you have suggestions for how DOE can best support a robust rebate program?
- A1b. DOE is concerned the \$2,500 rebate will likely subsidize current rates of HPwES participation without achieving additional savings. DOE suggests that rather than specifying the rebate structure, the HOMES Act include a provision that would allow DOE to analyze how to best structure rebates so as to incentivize improvements that (1) otherwise would not happen and (2) generate the greatest amount of energy savings per federal dollar invested.

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce”
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April 10, 2019

The Honorable Richard Hudson (R-NC)

Q1. Would you please provide a full audit of all DOE workforce development activities, including a description of the workforce development program or project name, target audience or program focus, funding level, statutory authority, and program status?

A1. Workforce development is a department-wide effort to cultivate a more diverse workforce that is equipped to thrive in the next generation of energy jobs.

Pursuant to Public Law 95-619, the Office of Economic Impact and Diversity (ED) is authorized to implement programs which impact underrepresented minority communities. To this extent, ED’s programs are focused on ensuring that minorities can participate fully in the energy sector. For example, ED recently launched the Equity in Energy Initiative. This initiative seeks to expand the participation of underserved communities such as Native Americans, women, veterans, and formerly incarcerated persons in the energy workforce to ensure America’s energy independence. In recent months ED has also organized separate Equity in Energy Discussions all around the country for Asian American and Pacific Islander, African American, and Hispanic stakeholders. ED’s workforce development activities include the following:

Florida International University (FIU): ED funds the “Mission to Market for Inclusive Economic Development Program” at FIU at a funding level of \$260,000/year. The target audience is undergraduate and graduate students. Program Status: Active.

STEM Scholastic and Research Support for 21st Century Workforce at Morehouse College. Funding Level: \$250,000/year. Target Audience: Undergraduate and graduate students. Status: Active.

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**Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
Assistant Secretary Daniel R. Simmons
Office of Energy Efficiency and Renewable Energy**

April 10, 2019

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Additionally, DOE has supported paid STEM internships for minority and female students through the Office of Fossil Energy, paid internship opportunities for community college students at DOE labs through the Office of Science, an online career map to illustrate potential career pathways to the bioeconomy through the Bioenergy Technology Office, free online accredited training courses through the Federal Energy Management Program, established pipelines between DOE labs and minority-serving institutions in STEM disciplines through the National Nuclear Security Administration’s Minority Serving Institution Partnership Program (MSIPP), solar energy industry relevant training for active duty military through the Solar Energy Technologies Office’s Solar Ready Vets Program, traineeships in advanced manufacturing and composites through our Office of Energy Efficiency and Renewable Energy, the VETS2TECH summit to help veterans fill critical STEM workforce shortages at national labs, and the Wounded Warrior Career Development Program through Sandia National Lab.

DOE seeks not only to diversify and improve the nation’s workforce, but its own workforce as well. DOE’s Chief Human Capital Officer (CHCO) is responsible for strategically aligning the agency's workforce to its missions by recruiting, developing, training, and managing a highly skilled, productive, and diverse workforce. With a dual focus on strengthening technical competence while developing the critical leadership

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
Assistant Secretary Daniel R. Simmons
Office of Energy Efficiency and Renewable Energy

April 10, 2019

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As further evidence of this Department’s commitment to workforce development, an advisor to the Secretary has been hired to work specifically on DOE’s role in workforce development for veterans and transitioning active duty service members. A senior advisor was also hired last year to assess future workforce and skills needs of the DOE enterprise.

Moreover, cybersecurity workforce development is a national priority outlined in the President’s National Cyber Strategy, and further reinforced by Executive Order 13870, “America’s Cybersecurity Workforce.” Through DOE’s State, local, tribal, and territorial workforce development efforts through organizations like the National Association of State Energy Officials (NASEO), DOE is developing a multifaceted approach including online training, playbooks, workshops, and guidance. This builds capacity throughout the sector and guarantees the state energy officials DOE engages with regularly have the necessary and current skills and resources needed to prepare for and respond to energy disruptions of significance, including cyber emergencies.

**Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity**

April 10, 2019

The Honorable Bobby L. Rush (D-IL)

- Q1. Director Campos, in the technical comments from DOE to H.R. 1315 it states that “a ‘Minorities in Energy Initiative’ that was a product of a small number of staff from the prior administration and was never concurred on by the DOE program offices whose resources it committed.” Additionally, in your written testimony before the Energy Subcommittee you stated that the ED office had “recently reinvigorated the Minorities in Energy Initiative – now being called Equity in Energy.”
- Q1a. Does the Minorities in Energy Initiative (MIE) still exist at the department within the ED office?
- A1a. Minorities in Energy (MIE) was falling significantly short of expectations for the past few years and was only piggybacking on ED’s existing work product. It was a duplication without added value. MIE was disbanded and has been replaced by the Equity in Energy Initiative (Initiative or Equity in Energy). Equity in Energy is designed to include and expand the participation of individuals in underserved communities, including minorities as defined in the legislation establishing the Office of Economic Impact and Diversity (P.L. 95-619), as well as women, veterans and formerly incarcerated persons, in all the programs of the Department of Energy. The Initiative also seeks to infuse and expand participation in the private energy sectors in our Nation’s economy to ensure energy independence. It focuses on five primary pillars: Supplier Diversity, Workforce Development, STEM Enhancement, Technical Assistance, Energy Sustainability; and targets innovation and technology, entrepreneurship, and workforce readiness for formerly incarcerated persons. The Initiative places a significant emphasis on engaging external stakeholders from all demographic groups, and forging new and sustainable partnerships with minority businesses, minority serving institutions, women, and veterans.
- Q2. In the line item budget for the ED office the FY 2017 enacted amount included \$2,165,000, of which \$1,009,000 is listed for the Minority Economic Impact including MIE. Additionally, the FY 2018 budget requested \$2,155,000, of which \$1,009,000 was

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

to be earmarked for the continuation of Minority Economic Impact including MIE. The FY 2019 budget also requested \$2,155,000, of which \$1,009,000 was to be earmarked for the continuation of Minority Economic Impact including MIE.

- Q2a. Was this funding used to support the Minorities in Energy Initiative? What specific programs or initiatives did this funding support?
- A2a. The Office of Minority Economic Impact (OMEI) encompasses all of the activities of the former MIE Initiative. In September 2018, OMEI was formed through a consolidation of the Office of Minority Education and Community Development and the Office of Minority Business and Economic Development. Funding for MIE activities are included in the consolidated OMEI budget in FY 2019, totaling \$1,309,000, though there are no specific set asides or earmarks in the budget for the MIE program. In FY 2019, MIE funding was used to support financial assistance to minority serving institutions (MSIs), minority businesses, community development and outreach activities. For example, funding support included, but was not limited to, cooperative agreements with MSIs for research and development; capacity building for MSIs; technical assistance workshops for MSIs and minority businesses; financial support for underrepresented students; and outreach support to underserved communities in the area of workforce development.
- Q2b. How much of this funding was used to support staff dedicated to carrying out the MIE?
- A2b. The salary and benefits for the staff of OMEI are paid out of a different line item in the budget of the Office of Economic Impact and Diversity. All of the staff in the OMEI support various MIE initiatives, but not necessarily on a full time basis. Namely, there are other duties performed by the staff that may not be strictly classified as MIE. Similarly, there are staff in other ED program areas and other DOE program offices that support this initiative at various times throughout the year.
- Q3. Director Campos, in your written testimony submitted to the Energy Subcommittee you stated that DOE has provided over \$700 million to support Historically Black Colleges

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

and Universities (HBCUs) and other minority serving institutions (MSIs), through research and development programs.

- Q3a. How much of that funding was disbursed under the current Administration? What was the percentage of funding distributed to HBCUs and MSI of the overall amount that was disbursed under the current Administration?
- A3a. During this Administration, DOE has disbursed \$104 million to support minority serving institutions. Of this amount, \$4 million (4%) was provided to HBCUs, and \$100 million (96%) to other minority serving institutions. The reporting disparity between HBCUs and other MSIs is a result of a Department of Education designation of certain majority institutions as minority serving institutions owing to the large population of Asian American Pacific Islander students at the majority institutions. The \$104 million does not include funding disbursed this fiscal year, FY19, because that data will not be available until on or after October 1, 2019.
- Q4. I understand the Office of Economic Impact and Diversity is the lead on the effort of enacting programs and initiatives are focused on business and education to establish critical linkages among minority serving institutions, minority businesses, and Federal agencies to address economic development in underserved communities and support energy workforce development.
- Q4a. What is your overall budget, staff, and resources available to make this initiative successful?
- A4a. The Office of Economic Impact and Diversity’s (ED) FY 2019 enacted budget for programs and initiatives focused on business and education to establish critical linkages among minority serving institutions, minority businesses, and Federal agencies to address economic development in underserved communities and support energy workforce development is \$1.3M. ED had 5 Full Time personnel available to assist with those efforts. The Equity in Energy Initiative, which replaces the MIE Initiative, will invigorate this effort and help meet ED’s statutory responsibilities. Three Schedule C political appointees, 3 consultants, 2-3 full time employees and the Director will

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

endeavor to execute the launch of the Equity in Energy Initiative. By carefully conserving funds, ED expects to be able to devote up to \$4 million, through a competitive Funding Opportunity Announcement, to ensure that underrepresented minorities can gain access to energy sector programs. ED does not enact all DOE programs focused on supporting minority serving institutions in research grants and participation in STEM training programs, but remains aware of those activities and works to bring greater awareness of DOE’s programs through its outreach efforts.

- Q5. How is the overall mission of the ED supported by the entire agency? For instance, if minority-serving educational institutions and minority businesses have not been successful in the past in participating in Department programs (R&D awards to higher education institutions, loan guarantees, etc.), what can be done from a policy perspective to change this?
- A5. Many DOE programs actively support the overall mission of ED. ED’s Minority Educational Institution Student Partnership Program (MEISPP) has been supported by numerous organizations since its inception, e.g. the Office of Science, the Office of Energy Efficiency and Renewable Energy, the Office of Hearings and Appeals, the Office of Environmental Management, the Office of Small and Disadvantaged Business Utilization, the Office of Management, the Office of Fossil Energy, the Office of Nuclear Energy, and the Office of Intelligence and Counterintelligence. The Office of Science is instrumental in placing students in DOE’s National Laboratories, many of which have participated over the years.

In addition, the National Nuclear Security Administration significantly supports ED’s MEISPP, and runs its own Minority Serving Institution Partnership Program (MSIPP) designed to build a sustainable pipeline between the DOE’s sites/labs and minority-serving institutions in STEM disciplines, and bring a heightened awareness of NNSA

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

plants and laboratories to institutions with a common interest in STEM research fields. NNSA has spent \$32M over a three-year period on its MSIPP.

Moreover, the Office of Fossil Energy has dedicated funding to support HBCUs and runs the Mickey Leland Energy Fellowship Program for minority students.

ED hosted its first Annual Industry Day in August 2018. More than 100 minority-owned businesses attended a full-day of programming which included targeted sessions for those wishing to work with the DOE, including its large network of national laboratories, and diverse entrepreneurs looking for business development insight, tips, and the latest procurement information. There was also a one-on-one matchmaking where attendees met with business managers from DOE offices and national laboratories. The Office of Economic Impact posted the information on its website to leverage technology and maximize its reach to those unable to attend the event. ED will host a similar event in 2019. ED collaborated with the Office of Science, the Office of Procurement, the Office of Small and Disadvantaged Business Utilization, the Office of General Counsel, and the Office of Inspector General for the FY2018 event.

ED entered into a Memorandum of Agreement with the Office of Policy and the Office of Electricity to collaborate on the Clean Energy Education and Empowerment (C3E) Initiative. This initiative is designed to close the gender gap and increase the participation, leadership, and success of women in clean energy fields.

ED’s new Equity in Energy Initiative is coordinating with program offices throughout Headquarters, DOE Field Sites, and DOE’s National Labs to raise awareness of the needs of the minority community and to enlist their support to ensure that all segments of the minority community are able to participate fully in DOE’s mission. Among the offices assisting ED are: Office of Indian Energy, Office of Energy Efficiency and Renewable Energy, Office of Technology Transitions, Energy Information Administration, Office of

**Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity**

April 10, 2019

Small and Disadvantaged Business Utilization, Office of Fossil Energy, Office of Environmental Management, and the Office of Nuclear Energy.

- Q6. How can minority businesses be more meaningfully engaged in managing and carrying out the missions of DOE labs? How well are the Management and Operations (M&O) Contractors adhering to the Diversity clauses in their contracts? What can be done to improve this?
- A6. The Small Business Administration (SBA), in its efforts to support small business, has developed several contracting assistance programs in which both DOE and its Laboratory contractors actively participate. DOE encourages and requires DOE Laboratory engagement with minority businesses by setting aggressive goals and by supporting policies that incentivize business relationships with small and minority-owned businesses. DOE negotiates annual goals for certain socio-economic small business categories, including minority business goals. The goals are then contractually modified into our DOE Laboratory contracts via subcontracting plans. It should be noted that there is no stated preference for small business socio-economic programs as established by SBA (they are all considered equal).

Our DOE Management and Operating (M&O) laboratory contractors have subcontracting plans in their contracts that support achievement of the DOE socio-economic goals negotiated with SBA. These goals are to increase the representation of firms that are majority owned by one or more individuals who have been determined to be socially and economically disadvantaged (minority-owned). Currently, these goals are:

- Small Disadvantaged Business is 5%
- Service Disabled Veteran Owned Small Business is 3%
- Women Owned Small Business is 5%
- HUBZone Small Business is 3%

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

M&O Contractors (DOE labs) are authorized to award subcontracts on a noncompetitive basis if their value is less than the thresholds (generally \$4.0 million) at FAR 19.805-1(a)(2) to SBA 8(a) certified firms. Contractors may also reserve requirements in excess of those thresholds for competition among 8(a) firms. M&O Contractors are authorized to set aside purchases at any dollar value for award to small businesses and to make purchases valued up to the Simplified Acquisition Threshold (SAT) (currently \$250,000) on a sole source basis to small businesses, including minority-owned (small disadvantaged businesses).

The Department of Energy has established a Mentor-Protégé Program to encourage its prime contractors to assist small businesses, firms certified under section 8(a) of the Small Business Act by SBA, other small disadvantaged businesses, women-owned small businesses, Historically Black Colleges and Universities and Minority Institutions, other minority institutions of higher learning, and small business concerns owned and controlled by service disabled veterans in enhancing their business abilities. All of our M&O contracts (lab contracts) contain a Mentor-Protégé clause promoting the program.

The DOE Laboratory M&O Contractors are addressing the requirements under their Diversity clauses in their M&O contracts. Through Departmental leadership as well as the DOE Program Offices that have Laboratory contract oversight (e.g. Office of Science, Office of Nuclear Energy, etc.), has established high expectations for the DOE laboratories for diversity, equity, and inclusion and the Laboratory M&O Contractors are delivering on those expectations. DOE Program Offices review the DOE laboratories’ efforts annually and provide feedback and recommendations for improvement on those efforts. Over the past several years, DOE laboratories have made substantial improvements to their efforts in outreach, recruiting, and hiring practices to attract and hire more diverse candidates to laboratory employment and STEM training opportunities.

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

Many of the labs have also established internal and external advisory councils and employee resources groups. These councils and groups provide advice on cultivating inclusive research environments to improve staff retention and support individuals in their careers through professional development and mentoring.

The DOE National Laboratory Directors, through the National Laboratory Directors Council (NLDC), are personally and actively engaged in advancing diversity & inclusion (D&I) at DOE labs individually and as a network, including improving processes that foster safe and inclusive research environments at the labs. The NLDC has held annual laboratory diversity and inclusion workshops for the past 4 years where laboratory senior leadership, lab HR managers, and Diversity & Inclusion managers meet to hear from subject matter experts, share best practices, and identify opportunities for improvements.

In 2016, DOE’s Office of Science required that all 10 of its National Laboratories post their workforce demographics on their public websites to provide transparency to their efforts and to illustrate the laboratories’ commitments to diversity and inclusion. Many of the other DOE laboratories have followed suit. In addition, the NLDC posted the aggregated demographics of all 17 DOE national laboratories on its public website. More information about what the DOE national laboratories are doing to advance diversity and inclusion can be found at <https://science.osti.gov/sc-2/Research-and-Conduct-Policies/Diversity-Equity-and-Inclusion/Diversity-Equity-and-Inclusion-at-the-DOE-National-Laboratories>

- Q7. How is the Department being reflective of the ED in its own hiring and promotion of diverse people into leadership positions?
- A7. The Department recognizes the importance of a diverse workforce as a key input to innovation, employee engagement, and organizational performance. Our recruitment practices reflect this understanding and support the Department in attracting and retaining

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

a high quality workforce capable of achieving DOE’s diverse and complex mission. The Department’s diversity profile over the last three fiscal years (FY 2017, FY 2018 and FY 2019) remains relatively unchanged. Leadership positions are slightly less diverse than the DOE population overall.

DOE Workforce Diversity		
Fiscal Year	Leadership Positions	DOE Overall
FY17	18% Minority	25% Minority
FY18	19% Minority	26% Minority
FY19 (as of Q2)	19% Minority	26% Minority

Over the last three fiscal years (FY17, FY18, FY19) diversity has increased among hires made within the Department’s leadership positions.

DOE New Hire Diversity		
Fiscal Year	Leadership Positions	DOE Overall
FY17	17% Minority	59% Minority
FY18	22% Minority	48% Minority
FY19 (as of Q2)	31% Minority	54% Minority

ED is a model of diversity in its leadership ranks. In FY17, 80% of its leadership were minorities; in FY18, 66.67% of its leadership were minorities; and in FY19, 80% of its leadership were minorities.

- Q8. What can be done within the Federal Energy Management Program to assist small and minority-owned businesses to develop opportunities and training to work more with DOE and DOE prime contractors?
- A8. Based on this question, ED will connect with the Federal Energy Management Program to explore how we can leverage their services to assist small and minority-owned businesses to develop opportunities and training to work in the DOE. Regarding our

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

DOE prime contractors, however, DOE cannot impose requirements on them beyond what they are contractually obligated to perform.

**Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity**

April 10, 2019

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Q1. Would you please provide a full audit of all DOE workforce development activities, including a description of the workforce development program or project name, target audience or program focus, funding level, statutory authority, and program status?

A1. Workforce development is a department-wide effort to cultivate a more diverse workforce that is equipped to thrive in the next generation of energy jobs.

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Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

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Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

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As further evidence of this Department’s commitment to workforce development, an advisor to the Secretary has been hired to work specifically on DOE’s role in workforce development for veterans and transitioning active duty service members. A senior advisor was also hired last year to assess future workforce and skills needs of the DOE enterprise.

Moreover, cybersecurity workforce development is a national priority outlined in the President’s National Cyber Strategy, and further reinforced by Executive Order 13870, “America’s Cybersecurity Workforce.” Through DOE’s State, local, tribal, and territorial workforce development efforts through organizations like the National Association of State Energy Officials (NASEO), DOE is developing a multifaceted approach including online training, playbooks, workshops, and guidance. This builds capacity throughout the sector and guarantees the state energy officials DOE engages with regularly have the necessary and current skills and resources needed to prepare for and respond to energy disruptions of significance, including cyber emergencies.

- Q2. Mr. Campos: Thank you for being here today. Today I want to focus on H.R. 1315, the Blue Collar to Green Collar Jobs Development Act and workforce development programs within DOE. Workforce development should be a truly non-partisan issue. As you may know, I have been a sponsor of similar legislation which passed with unanimous consent in prior Congresses. However, I have serious concerns with this new draft because, as a previous sponsor, I was cut out of the process, and because new language has been added I fear will unfairly picks winners and losers at the expense of consumers and workforce

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

trainees.

- Q2a. Mr. Campos, what’s DOE’s vision for energy workforce development, and do you agree that it would be shortsighted to limit workforce development and training opportunities to so-called “green collar” jobs?
- A2a. Secretary Perry has recognized ED’s Equity in Energy initiative as a model to include and expand the participation of underserved communities and the private sector, and is crucial to America reaching its full energy potential. ED supports the nation’s energy goals by fostering entrepreneurship, innovation, and workforce partnerships for diverse communities in high-growth energy sectors, as well as DOE programs and research opportunities. The Equity in Energy initiative is leading the charge in helping to diversify the energy sector by supporting supplier diversity, STEM student and workforce development, technical assistance, innovation & entrepreneurship, and workforce readiness for formerly incarcerated persons. In order to maintain our Nation’s energy independence, DOE must embrace the urgent need to prepare our workforce in the next decade as the demographic trends move forward. Together, we can work toward the five pillars of Equity in Energy, find solutions for today’s challenges, and provide a prosperous and secure future for generations to come.

One of the pillars of Equity in Energy is Workforce Development, an interconnected set of solutions to meet employment needs. Workforce development facilitates changes to peoples’ potential that help to positively influence the future success of businesses, workers, and the nation.

We agree that it would be shortsighted to limit workforce development solely to green collar jobs. In response, Equity in Energy is basing its workforce development plans on the 2019 study of the energy economic sector and jobs published by the National Association of State Energy Officials (NASEO) and The Energy Futures Initiative (EFI). This study lists five energy sectors:

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

- Electric Power Generation
- Fuels
- Transmission, distribution, and storage
- Energy Efficiency
- Motor vehicles

To exclude these energy sectors would diminish the prospect of hundreds of thousands of new jobs in the future, lessening opportunities and shortening horizons. This would especially reduce the jobs for the intended beneficiaries of 42 USC 7141, (f), (1), which reads, in pertinent part:

(f) Definitions As used in this section, the term:

(1) “minority” means any individual who is a citizen of the United States and who is Asian American, Native Hawaiian, a Pacific Islander, African American, Hispanic, Puerto Rican, Native American, or an Alaska Native.

- Q3. Mr. Campos: I am concerned about the price tag on H.R. 1315. The bill amends the Department of Energy Organization Act to create a new program office with an authorization of \$500 million; it authorizes a new \$100 million training program; and, it creates a new \$350 million energy workforce grant program limited to energy efficiency and renewable energy. It sounds a lot like President Obama’s failed Green Jobs Program.
- Q3a. Does the Department of Energy need additional legislative authority or money for “green collar” jobs grants?
- A3a. DOE does not believe it needs additional legislative authority to provide green collar jobs grants. The traditional energy sectors are experiencing robust growth because of innovative technologies like hydraulic fracturing and Liquefied Natural Gas (LNG). The newly producing fields at Eagle Ford, Bakken, Marcellus, and the Permian Basin are creating large demands for skilled employees that need training and certification to meet the workforce demand. DOE’s approach to energy security includes a diverse mix of

Subcommittee on Energy
Hearing on
“Investing in America’s Energy Infrastructure: Improving Energy Efficiency and Creating
a Diverse Workforce”
Director James E. Campos
Office of Economic Impact and Diversity

April 10, 2019

energy resources including fossil, renewables, storage, and nuclear. It is also critical for us to engage more minorities and women in STEM disciplines to replace our aging energy workforce.

Q3b. Is there a risk that this bill adds new layers of duplicative programs?

A3b. The Administration is committed to fiscal conservation and reducing the burden for the American taxpayer. There is always a risk that the bill could add new layers of duplicative programming, but the key is how to manage the risk to prevent duplication and redundancy.

