that could provide benefits across the economy. Pardon the pun, but that is our charge.

DOE must prioritize basic research over grants for technology that is ready for commercial deployment. When the government steps in to push today's technology in the energy market, it competes, Mr. Speaker, against private investors and uses limited taxpayer resources to do so. But when the government supports basic research and development, everyone has the opportunity to access that fundamental knowledge that can lead to the development of future energy technologies.

Mr. Speaker, I want to thank Chairman SMITH for introducing this important legislation to prioritize fundamental science research. I urge my colleagues to support this innovative, fiscally responsible legislation. You know I am right.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I have no further requests for time.

Mr. Speaker, I yield back the balance of my time.

Mr. SMITH of Texas. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, H.R. 5640 authorizes innovative basic research that will lead to the next generation of electricity storage technology. By harnessing the expertise of our Nation's national labs and universities, we can lay the fundamental scientific groundwork for the private sector's development of new, transformative advanced batteries in the future.

I especially want to thank my colleagues on the Science, Space, and Technology Committee who have cosponsored H.R. 5640. They include DAN LIPINSKI, STEVE KNIGHT, RANDY NEUGEBAUER, BILL POSEY, RANDY HULTGREN, RANDY WEBER, JOHN MOOLENAAR, and BRIAN BABIN.

I also want to thank the dozens of researchers and stakeholders who provided feedback as we developed this legislation.

I want to reiterate that H.R. 5640 authorizes no new Federal spending.

Mr. Speaker, I urge the adoption of this commonsense, bipartisan legislation, which is part of Majority Leader MCCARTHY's Innovation Initiative.

Finally, Mr. Speaker, tonight we are considering four Science, Space, and Technology Committee bills, and I want to thank the staff members involved. They include, Chris Wydler, Molly Fromm, John Horton, Cliff Shannon, Sarah Jorgenson, Aaron Weston, Emily Domenech, and Ashley Smith, whose birthday is today.

Mr. Speaker, I yield back the balance of my time.

Ms. JACKSON LEE. Mr. Speaker, I rise in strong support of H.R. 5640, the ''Electricity Storage Innovation Act,'' which is designed to expand knowledge to control, store, and convert electrical energy into chemical energy.

Energy is crucial to innovation and economic competitiveness in the global economy.

As a former long-time member of the House Science Committee, I am well-aware of the challenges posed by electricity generation and storage.

At present, there is no ability to store electricity generated by our nation's power grid.

H.R. 5640 requires that the Electricity Storage Basic Research Initiative include research specific to multivalent ion materials in electric energy storage systems and electrochemistry modeling.

My preference for research legislation is to allow the science to lead and not place legislative mandates on what to research.

The legislation encourages multilateral and multidisciplinary research efforts between National Laboratories, universities, and the private sector to achieve milestones in advancing and modernizing electricity storage innovation.

H.R. 5640 specifically designates two subsections for innovation: (1) Electrochemistry Modeling and Simulation, and (2) Mesoscale Electrochemistry.

I strongly support the $150 million in funding to expand theoretical and fundamental knowledge to control, store, and convert electrical energy into chemical energy.

Through this funding, innovation and scientific milestones can be made to bring America to the cutting edge of technological advancement.

H.R. 5640 is an important step in developing the technology needed to remain competitive in the global market of alternative energy.

I urge my colleagues to join me in supporting H.R. 5640.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Texas (Mr. SMITH) that the House suspend the rules and pass the bill, H.R. 5640, as amended.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the bill, as amended, was passed.

A motion to reconsider was laid on the table.

SOLAR FUELS INNOVATION ACT

Mr. KNIGHT. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 5638) to provide for the establishment at the Department of Energy of a Solar Fuels Basic Research Initiative, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 5638

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Solar Fuels Innovation Act''.

SEC. 2. SOLAR FUELS BASIC RESEARCH INITIATIVE.

(a) AMENDMENT.—Section 973 of the Energy Policy Act of 2005 (42 U.S.C. 16313) is amended to read as follows:

''SEC. 973. SOLAR FUELS BASIC RESEARCH INITIATIVE.

''(a) INITIATIVE.—

''(1) IN GENERAL.—The Secretary shall carry out a research initiative, to be known as the Solar Fuels Basic Research Initiative, to expand theoretical and fundamental knowledge of photochemistry, electrochemistry, biochemistry, and materials science useful for the practical development of experimental systems to convert solar energy to chemical energy.

''(2) LEVERAGING.—The Secretary shall leverage expertise and resources from the Basic Energy Sciences Program and Biological and Environmental Research Program within the Office of Science, and the Office of Energy Efficiency and Renewable Energy, as provided under subsections (b) and (c).

''(3) TEAMS.—The Secretary shall organize activities under the Solar Fuels Basic Research Initiative to include multidisciplinary teams leveraging expertise from the National Laboratories, universities, and the private sector to the extent practicable. These multidisciplinary teams shall pursue aggressive, milestone-driven basic research goals. The Secretary shall provide sufficient resources for those teams to achieve those goals over a period of time to be determined by the Secretary.

''(4) ADDITIONAL ACTIVITIES.—The Secretary is authorized to organize additional activities under this subsection through Energy Frontier Research Centers, Energy Innovation Hubs, or other organizational structures.

''(b) ARTIFICIAL PHOTOSYNTHESIS.—

''(1) IN GENERAL.—The Secretary shall, as part of the Solar Fuels Basic Research Initiative, carry out a program to support research needed to bridge scientific barriers and discover knowledge relevant to artificial photosynthetic systems. In carrying out activities under this subsection, the Director of the Office of Basic Energy Sciences shall support basic research to pursue distinct lines of scientific inquiry, including photoinduced production of hydrogen and oxygen from water, and the sustainable photoinduced reduction of carbon dioxide to fuel products including hydrocarbons, alcohols, carbon monoxide, and natural gas. The Assistant Secretary for Energy Efficiency and Renewable Energy shall support translational research, development, and validation of physical concepts developed under this subsection.

''(2) STANDARD OF REVIEW.—The Secretary shall review the program activities under this subsection to determine the achievement of technical milestones.

''(3) AUTHORIZATION OF APPROPRIATIONS.—

''(A) AUTHORIZATION.—Subject to subsection (d), there are authorized for carrying out activities under this subsection for each of fiscal years 2017 through 2020—

''(i) $50,000,000 from funds within the Basic Energy Sciences Program account; and

''(ii) $25,000,000 from funds within the Energy Efficiency and Renewable Energy account.

''(B) PROHIBITION.—No funds authorized under this subsection may be obligated or expended for commercial application of energy technology.

''(c) BIOCHEMISTRY, REPLICATION OF NATURAL PHOTOSYNTHESIS, AND RELATED PROCESSES.—

''(1) IN GENERAL.—The Secretary shall, as part of the Solar Fuels Basic Research Initiative, carry out a program to support research needed to replicate natural photosynthetic processes by use of artificial photosynthetic components and materials. In carrying out activities under this subsection, the Director of the Office of Basic Energy Sciences shall support basic research to expand fundamental knowledge to replicate natural synthesis processes, including the photoinduced reduction of dinitrogen to ammonia, absorption of carbon dioxide from ambient air, molecular-based charge separation and storage, photoinitiated electron transfer, and catalysis in biological or biomimetic systems. The Associate Director of Biological and Environmental Research shall

support systems biology and genomics approaches to understand genetic and physiological pathways connected to photosynthetic mechanisms. The Assistant Secretary for Energy Efficiency and Renewable Energy shall support translational research, development, and validation of physical concepts developed under this subsection.

''(2) STANDARD OF REVIEW.—The Secretary shall review the program activities under this subsection to determine the achievement of technical milestones.

''(3) AUTHORIZATION OF APPROPRIATIONS.—

''(A) AUTHORIZATION.—Subject to subsection (d), there are authorized for carrying out activities under this subsection for each of fiscal years 2017 through 2020—

''(i) $50,000,000 from funds within the Basic Energy Sciences Program and Biological and Environmental Research Program accounts; and

''(ii) $25,000,000 from funds within the Energy Efficiency and Renewable Energy account.

''(B) PROHIBITION.—No funds authorized under this subsection may be obligated or expended for commercial application of energy technology.

''(d) FUNDING.—No additional funds are authorized to be appropriated under this section. This section shall be carried out using funds otherwise authorized by law.''.

(b) TABLE OF CONTENTS AMENDMENT.—The item relating to section 973 in the table of contents of such Act is amended to read as follows:

''Sec. 973. Solar Fuels Basic Research Initiative.''.

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from California (Mr. KNIGHT) and the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON) each will control 20 minutes.

The Chair recognizes the gentleman from California.

GENERAL LEAVE

Mr. KNIGHT. Mr. Speaker, I ask unanimous consent that all Members have 5 legislative days to revise and extend their remarks and to include extraneous material on H.R. 5638, the bill now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from California?

There was no objection.

Mr. KNIGHT. Mr. Speaker, I yield myself such time as I may consume.

Today it is my honor and privilege to bring H.R. 5638, the Solar Fuels Innovation Act, to the House of Representatives with several of my colleagues.

This bill, the first solar R&D bill to be considered on the House floor this Congress, will advance the policies of the America COMPETES Act that passed the House last year and establish a basic research initiative and groundbreaking solar fuels.

The solar fuel process, also known as artificial photosynthesis, harnesses energy from sunlight to create a range of chemical fuels. Basic research in artificial photosynthesis and related research could lead to a solar fuels system that consolidates solar power and energy storage into a cohesive process and fundamentally change the way we extract energy from our natural resources. This would be a game changer for our country.

Scientists up and down the coast of California are undertaking this research, from universities in southern California to Lawrence Berkeley National Laboratory in the bay area. Research authorized in this legislation could solve this key scientific challenge and open the door for American entrepreneurs to develop the next generation of solar technology.

The Solar Fuels Innovation Act will also enable universities and the DOE labs to train the next generation of scientists through a multidisciplinary approach, bringing together students in chemistry, physics, and materials science.

This legislation provides a framework for more coordination between basic research and early-stage translational research in solar fuels.

□ 2015

H.R. 5638 refocuses the Office of Energy Efficiency and Renewable Energy on the early-stage research where the Federal Government can have the most significant impact.

H.R. 5638 reaffirms the Federal Government's key role in research and development.

This legislation is also fiscally responsible. By directing DOE to conduct this research using existing funds in the Office of Science and EERE, this legislation ensures the responsible use of limited tax dollars for the kind of research only the Federal Government has the tools to undertake.

Today, we hear a lot of enthusiasm for solar power. But far too often, we focus on today's technology, not the fundamentally new approach to renewable energy that is possible with this early-stage research.

In Congress, it is our responsibility to take the long-term view and be patient, making smart investments in research that can lead to the next big discovery.

DOE must focus on the kind of groundbreaking R&D that can lead to disruptive technology. Solar fuels could someday change the way we think about solar power.

I would like to thank my colleagues who joined me in introducing this bill and the many research institutions that offered letters of support.

I reserve the balance of my time.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I yield myself such time as I may consume.

I support doing all we can to advance research in solar fuels. These technologies aim to produce fuels like hydrogen and hydrocarbons from a combination of sunlight, water, and carbon dioxide, and do this far more efficiently than nature's photosynthetic process. If we can figure out a way to make these technologies cost competitive, solar fuels have the potential to make a major contribution to reducing our dependence on oil and other traditional fossil fuels.

But as with the Electricity Storage Innovation Act, I believe we could have taken a little more time to do this in the right way. Last week, the Department of Energy raised many of the same concerns with this bill that it had with the last one, including its attempt to arbitrarily legislate a bright line between ''basic'' and ''applied'' research when this is neither realistic nor helpful.

Further, I would note that there is absolutely nothing wrong with Federal support for so-called applied research. Indeed, my colleagues on the other side of the aisle have had no issue with supporting what would typically be called applied research and development when it dealt with nuclear technologies, oil and gas drilling technologies, or other fossil fuel technologies. Clean power technologies should be treated no differently.

That said, I do not oppose the passage of this bill today in the hope that we can turn it into something we can all support in partnership with our friends in the Senate.

I reserve the balance of my time.

Mr. KNIGHT. Mr. Speaker, I yield 3 minutes to the gentleman from Texas (Mr. SMITH), the chairman of the full committee.

Mr. SMITH of Texas. Mr. Speaker, I first want to thank the gentleman from California, Energy Subcommittee Vice Chairman KNIGHT, for yielding me time on H.R. 5638, the Solar Fuels Innovation Act.

This legislation provides necessary statutory authority and direction to the Department of Energy's groundbreaking solar fuels research program. I appreciate Vice Chairman Knight developing and introducing this legislation, which is the product of the Science, Space, and Technology Committee's hearings, oversight, and stakeholder outreach.

Research to create fuels from the Sun, also known as artificial photosynthesis and photosynthesis replication, relies heavily on the study of advanced chemistry and materials science. By prioritizing these areas of fundamental physical science, researchers at our national labs and universities across the country can develop processes that take energy from sunlight and create a range of chemical fuels. This basic research could provide the scientific and technical underpinnings for the private sector to develop solar fuel systems that eliminate the problem of the intermittency of direct solar energy and make it a reliable power source for chemical fuels production.

H.R. 5638 authorizes the Secretary of Energy to carry out a targeted basic research initiative on photochemistry, electrochemistry, biochemistry, and the materials science necessary to develop the complex systems to convert sunlight into usable and storable fuels.

H.R. 5638 focuses the Office of Energy Efficiency and Renewable Energy on early-stage research that will not be undertaken by the private sector. DOE must focus on this kind of groundbreaking R&D while the private sector is responsible for finding ways to deploy innovative technology in the commercial energy market.

The Federal Government does not have unlimited resources to pursue every technology innovation. By directing DOE to conduct this research using only existing funds in the Office of Science and EERE, the legislation redirects currently authorized funds. The Department of Energy has the capability and knowledge to lead on this type of long-term basic research. This groundbreaking science can lead to the development of innovative advanced energy technologies by the private sector.

Again, I want to thank Vice Chairman KNIGHT and both my Republican and Democratic colleagues on the Science, Space, and Technology Committee for supporting this basic research initiative in solar fuels.

As part of Leader MCCARTHY's Innovation Initiative, this legislation deserves the support of our House colleagues.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I reserve the balance of my time.

Mr. KNIGHT. Mr. Speaker, I yield 3 minutes to the gentleman from Texas (Mr. WEBER), the chairman of the Energy Subcommittee.

Mr. WEBER of Texas. Mr. Speaker, I thank the gentleman from California for yielding.

Mr. Speaker, I rise today in support of H.R. 5638, the Solar Fuels Innovation Act.

This legislation directs the Department of Energy to focus on basic research that provides the foundation for our technology breakthroughs. Our aim is to shed a little sunlight on this process. As for the solar fuel process, also known as artificial photosynthesis, new materials and catalysts will be needed to be developed through basic research before the private sector will ever be able to develop a commercial solar fuels system.

If this research yields the right materials, Mr. Speaker, scientists might create a system that could consolidate solar power and energy storage into a cohesive process. This would potentially remove the intermittency of solar energy and make it a reliable power source for chemical fuels production. Folks, this is a game changer.

Last month, we held a hearing in the Energy Subcommittee that I chair in order to examine this critical research. We heard from a panel of experts on America's basic research portfolio, which provides the foundation for development of solar fuels through the study of chemistry and advanced materials.

I want to thank my colleague, Mr. KNIGHT, the vice chairman of the Energy Subcommittee, for introducing this important legislation.

I am also pleased that this legislation directs research within existing funds appropriated by Congress and does not authorize any new spending. Let me repeat: does not authorize any new spending.

Mr. Speaker, we have limited Federal resources for research and development, and it is our responsibility to ensure that those are spent wisely, on basic research that can provide benefits across the entire United States economy.

I urge my colleagues to support this innovative fiscally responsible legislation. You know I am right.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I yield back the balance of my time.

Mr. KNIGHT. Mr. Speaker, I yield myself such time as I may consume.

H.R. 5638 authorizes innovative basic research that will lead to groundbreaking technology in solar fuels.

By harnessing the expertise of our Nation's national labs and universities, now we can lay the fundamental scientific groundwork for the private sector's development of advanced solar fuels technology in the future. This could fundamentally change the way we extract energy from our natural resources.

I want to thank Chairman SMITH and my other colleagues on the Science, Space, and Technology Committee who have cosponsored H.R. 5638, including DAN LIPINSKI, RANDY NEUGEBAUER, BILL POSEY, RANDY HULTGREN, RANDY WEBER, BRIAN BABIN, and JOHN MOOLENAAR. I also want to thank the dozens of researchers and stakeholders who provided feedback as we developed this legislation.

Finally, I want to reiterate that H.R. 5638 authorizes no new Federal spending. I think we got that from Chairman WEBER. The bill reads: ''No additional funds are authorized to be appropriated under this section. This section shall be carried out using funds otherwise authorized by law.''

I urge the adoption of this commonsense, bipartisan legislation, which is part of Leader MCCARTHY's Innovation Initiative.

I yield back the balance of my time.

Ms. JACKSON LEE. Mr. Speaker, I rise in strong support of H.R. 5638, the "Solar Fuels Innovation Act," bipartisan legislation that establishes the Solar Fuels Basic Research Initiative at the Department of Energy.

As a former long-time member of the House Science Committee, I am well aware of the challenges posed by solar power generation.

In our diversified and globalized economy, it is critical to invest in innovative solar power research to ensure energy independence of the United States.

According to the most recent report by the International Energy Agency in 2014, the United States was fifth in solar power production.

The United States produced 18,317 megawatts of solar power in 2014.

The United States has more land space to harness solar power than some of the countries currently surpassing us, which includes Italy, Japan, and Germany.

H.R. 5638 authorizes the Secretary of Energy to implement the Solar Fuels Basic Research Initiative to expand the scientific knowledge of photochemistry, biochemistry, electrochemistry, and materials science needed to convert solar energy to chemical energy.

The legislation encourages multilateral and multidisciplinary research efforts between National Laboratories, universities, and the private sector to achieve milestones in advancing and modernizing solar power research.

H.R. 5638 specifically designates two subsections for innovation: (1) Artificial Photosynthesis, and (2) Biochemistry, Replication of Natural Photosynthesis and Related Processes.

The bill authorizes $150 million for each subsection of fiscal years 2017 through 2020.

H.R. 5638 also authorizes the same amount and division of funding amount to the "Biochemistry, Replication of Natural Photosynthesis and Related Processes" subcategory.

Mr. Speaker, this innovative legislation will help ensure that America remains a leader on the cutting edge of technological advancement.

I urge my colleagues to join me in supporting H.R. 5638.

The SPEAKER pro tempore (Mr. WEBER of Texas). The question is on the motion offered by the gentleman from California (Mr. KNIGHT) that the House suspend the rules and pass the bill, H.R. 5638, as amended.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the bill, as amended, was passed.

A motion to reconsider was laid on the table.

SEPARATION OF POWERS RESTORATION ACT OF 2016

The SPEAKER pro tempore. Pursuant to House Resolution 796 and rule XVIII, the Chair declares the House in the Committee of the Whole House on the state of the Union for the further consideration of the bill, H.R. 4768.

Will the gentleman from Michigan (Mr. MOOLENAAR) kindly take the chair.

□ 2027

IN THE COMMITTEE OF THE WHOLE

Accordingly, the House resolved itself into the Committee of the Whole House on the state of the Union for the further consideration of the bill (H.R. 4768) to amend title 5, United States Code, with respect to the judicial review of agency interpretations of statutory and regulatory provisions, with Mr. MOOLENAAR (Acting Chair) in the chair.

The Clerk read the title of the bill.

The Acting CHAIR. When the Committee of the Whole rose earlier today, all time for general debate had expired.

Pursuant to the rule, the bill shall be considered for amendment under the 5-minute rule.

It shall be in order to consider as an original bill for the purpose of amendment under the 5-minute rule the amendment in the nature of a substitute recommended by the Committee on the Judiciary, printed in the bill. The committee amendment in the nature of a substitute shall be considered as read.

The text of the committee amendment in the nature of a substitute is as follows: