in certainly a very trying moment for decarbonization. We see hydrogen really coming into play with heavy-duty transportation and maritime port equipment.

I invite everyone to take a peek at what is happening in Michigan because it is really quite phenomenal with these supply chain corridors and manufacturers and how they are adopting hydrogen. I will keep my finger on the pulse of their work for many years to come

Here we stand now with this demonstration activity. We are going to push for transparency. We have this great group, the chairman of the Science Committee and the ranking member of the Science Committee, that have come together to support this legislation. We want Congress to have a hand in it because we know when we pass these big bills, a lot of times we just go forward and then we are hungry to implement and hungry to keep a finger on the pulse and maybe we can have a couple of hearings, but H.R. 1069 gives us a runway. It is really quite essential, and it also helps the Department of Energy, particularly President Biden's Department of Energy, continue to do what it is doing really well.

Let us all see this phenomenal bill get passed. I join the chairman of the Science Committee calling on my colleagues on both sides of the aisle to continue to push forward in a bipartisan fashion the passage of H.R. 1069.

Mr. Speaker, I reserve the balance of my time.

□ 1645

Mr. LUCAS. Mr. Speaker, I yield such time as he may consume to the gentleman from Ohio (Mr. CAREY).

Mr. CAREY. Mr. Speaker, I rise today in support of a bill that will lead America toward an all-of-the-above energy future, H.R. 1069, the Clean Energy Demonstration Transparency Act.

First, I thank Chairman Lucas, Ranking Member Lofgren, and Energy Subcommittee Chairman WILLIAMS for their work on bringing this bill to the floor. I also thank the Science, Space, and Technology Committee staff for their bipartisan efforts in moving this legislation forward.

Strengthening the energy category of domestic energy production, including renewables, oil, gas, coal, and nuclear, will safeguard our supply chains, defend our national security, and, in fact, boost our economy.

H.R. 1069 is a commonsense bill that will increase transparency and oversight of the investments in homegrown, clean energy, including the billions of taxpayer dollars entrusted to the newly established Office of Clean Energy Demonstrations.

Specifically, the bill requires the Office of Clean Energy Demonstrations to submit semiannual reports to Congress regarding the budget, schedule, and participating entities of their demonstration projects.

Mr. Speaker, I encourage my colleagues to vote "yes" on this bill, which will give Americans confidence that their taxpayer dollars are being used wisely in our pursuit of energy independence.

Mr. LUCAS. Mr. Speaker, I have no further requests for time, and I am prepared to close once the gentlewoman from Michigan does.

Ms. STEVENS. Mr. Speaker, in closing, again, I feel passionate about this legislation. I thank Mr. CAREY for his remarks and for joining us on the House floor. I look forward to seeing this bill become law.

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

Mr. LUCAS. Mr. Speaker, I yield myself the balance of my time to close.

Mr. Speaker, one of our most important responsibilities in Congress is to serve as the steward of taxpayers' dollars. I take that job very seriously.

I want to see DOE and all of our Federal research agencies succeed in developing next-generation technologies. At the same time, we need to be conscious of the body and keep a watchful eye on the progress of these projects well before their costs balloon into multibilions of dollars.

H.R. 1069 allows us to do exactly that. It increases transparency between DOE and Congress, enabling both sides to have beneficial information and insight into the successes of Federal demonstration projects.

Once again, I thank Mr. CAREY for leading this bill along with his co-sponsors, Representatives WILLIAMS, DAVIDS, and DONALDS.

Mr. Speaker, I urge my colleagues to support this bill, and I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Oklahoma (Mr. Lucas) that the House suspend the rules and pass the bill, H.R. 1069, as amended.

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

A motion to reconsider was laid on the table.

PRIVACY ENHANCING TECHNOLOGY RESEARCH ACT

Mr. LUCAS. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 4755) to support research on privacy enhancing technologies and promote responsible data use, and for other purposes, as amended.

The Clerk read the title of the bill. The text of the bill is as follows:

H.R. 4755

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 "Privacy Enhancing Technology Research Act".

SEC. 2. PRIVACY ENHANCING TECHNOLOGY.

(a) NATIONAL SCIENCE FOUNDATION SUPPORT OF RESEARCH ON PRIVACY ENHANCING TECH-

NOLOGY.—The Director of the National Science Foundation, in consultation with the heads of other relevant Federal agencies (as determined by the Director), shall support merit-reviewed and competitively awarded research on privacy enhancing technologies, which may include the following:

(1) Fundamental research on technologies for de-identification, pseudonymization, anonymization, or obfuscation to mitigate individuals' privacy risks in data sets while maintaining fairness, accuracy, and efficiency.

(2) Fundamental research on algorithms and other similar mathematical tools used to protect individual privacy when collecting, storing, sharing, analyzing, or aggregating data.

(3) Fundamental research on technologies that promote data minimization in data collection, sharing, and analytics that takes into account the trade-offs between the data minimization goals and the informational goals of data collection.

(4) Research awards on privacy enhancing technologies coordinated with other relevant Federal agencies and programs.

(5) Supporting education and workforce training research and development activities, including re-training and upskilling of the existing workforce, to increase the number of privacy enhancing technology researchers and practitioners.

(6) Multidisciplinary socio-technical research that fosters broader understanding of privacy preferences, requirements, and human behavior to inform the design and adoption of effective privacy solutions.

(7) Development of freely available privacy enhancing technology software libraries, platforms, and applications.

(8) Fundamental research on techniques that may undermine the protections provided by privacy enhancing technologies, the limitations of such protections, and the trade-offs between privacy and utility required for the deployment of such technologies.

(9) Fundamental research on technologies and techniques to preserve the privacy and confidentiality of individuals from unconsented, unwanted, or unauthorized location tracking, including through GPS.

(b) INTEGRATION INTO THE COMPUTER AND NETWORK SECURITY PROGRAM.—Subparagraph (D) of section 4(a)(1) of the Cyber Security Research and Development Act (15 U.S.C. 7403(a)(1)(D)) is amended by inserting ", including privacy enhancing technologies" before the semicolon

fore the semicolon.

(c) COORDINATION WITH THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY AND OTHER STAKEHOLDERS.—

(1) IN GENERAL.—The Director of the Office of Science and Technology Policy, acting through the Networking and Information Technology Research and Development Program, shall coordinate with the Director of the National Science Foundation, the Director of the National Institute of Standards and Technology, the Federal Trade Commission, and the heads of other Federal agencies, as appropriate, to accelerate the development, deployment, and adoption of privacy enhancing technologies.

(2) OUTREACH.—The Director of the National Institute of Standards and Technology shall conduct outreach to—

(A) receive input from private, public, and academic stakeholders on the development of privacy enhancing technologies; and

(B) facilitate and support ongoing public and private sector engagement to inform the development and dissemination of voluntary, consensus-based technical standards, guidelines, methodologies, procedures, and processes to cost-effectively increase the integration of privacy enhancing technologies in data collection, sharing, and analytics performed by the public and private sectors.

- (d) REPORT ON PRIVACY ENHANCING TECH-NOLOGY RESEARCH.—Not later than three years after the date of the enactment of this Act, the Director of the Office of Science and Technology Policy, acting through the Networking and Information Technology Research and Development Program, shall, in coordination with the Director of the National Science Foundation, the Director of the National Institute of Standards and Technology, and the heads of other Federal agencies, as appropriate, submit to the Committee on Commerce, Science, and Transportation of the Senate, the Subcommittee on Commerce, Justice, Science, and Related Agencies of the Committee on Appropriations of the Senate, the Committee on Science, Space, and Technology of the House of Representatives, and the Subcommittee on Commerce, Justice, Science, and Related Agencies of the Committee on Appropriations of the House of Representatives, a report containing information relating to the following:
- (1) The progress of research on privacy enhancing technologies.
- (2) The progress of the development of voluntary resources described under subsection (c)(2)(B).
- (3) Any policy recommendations that could facilitate and improve communication and coordination between the private sector and relevant Federal agencies for the implementation and adoption of privacy enhancing technologies.
- (e) PROTECTING PERSONAL IDENTIFYING INFORMATION.—Any personal identifying information collected or stored through the activities authorized under this section shall be done in accordance with part 690 of title 45, Code of Federal Regulations (relating to the protection of human subjects), or any successor regulation.
- (f) DEFINITION.—In this section, the term "privacy enhancing technology"—
- (1) means any software or hardware solution, technical process, or other technological means of mitigating individuals' privacy risks arising from data processing by enhancing predictability, manageability, disassociability, and confidentiality; and
 - (2) may include—
- (A) cryptographic techniques for facilitating computation or analysis on data while mitigating privacy risks;
- (B) techniques for—
- (i) publicly sharing data without enabling inferences to be made about specific individuals:
- (ii) giving individuals' control over the dissemination, sharing, and use of their data; and
 - (iii) generating synthetic data; and
- (C) any other technology or approach that reduces the risk of re-identification, including when combined with other information.

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Oklahoma (Mr. Lucas) and the gentlewoman from Michigan (Ms. STEVENS) each will control 20 minutes.

The Chair recognizes the gentleman from Oklahoma.

GENERAL LEAVE

Mr. LUCAS. Mr. Speaker, I ask unanimous consent that all Members have 5 legislative days to revise and extend their remarks and include extraneous material on H.R. 4755, the bill now under consideration.

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

There was no objection.

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

Mr. Speaker, I rise in support of H.R. 4755, the Privacy Enhancing Technology Research Act, offered by the gentlewoman from Michigan (Ms. STEVENS) and the gentleman from New Jersey (Mr. KEAN). The bill supports research activities to advance innovative technologies to safeguard individuals' privacy.

As Americans have moved more and more of their lives online, it has resulted in a greater amount of digital consumer data and personal information being generated than ever before. This personal information has long been a target of cybercriminals, and the threat has only worsened over time. In 2023, the Federal Trade Commission received more than 1 million reports of identity theft. This problem is exacerbated by the failure of some companies to properly safeguard consumer data.

This data is a valuable asset. When safely utilized, it can do a great deal to spur our economy and support innovations like artificial intelligence and quantum computing. Our task is to ensure this resource doesn't fall into the hands of bad actors, putting Americans' private information at risk.

Privacy enhancing technologies, PETs, may be part of the solution. PETs utilize cryptography and statistics to minimize the amount of personally identifiable information while ensuring the datasets are still usable. However, more research is needed to understand PETs' applicability and to encourage further development and adoption.

This bill requires the National Science Foundation to support fundamental research into PETs, the mathematics that underlie them, and the additional technologies that promote data minimization standards.

The legislation also directs NIST to work with stakeholders to develop voluntary consensus standards for incorporating these technologies into Federal and commercial applications. Similar legislation passed the House last Congress, which is a testament to the value of this bill.

Mr. Speaker, again, I thank Representatives STEVENS and KEAN for their leadership on this issue. I encourage my colleagues to support the bill, and I reserve the balance of my time.

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

Mr. Speaker, H.R. 4755, the Privacy Enhancing Technology Research Act, is another very important bipartisan piece of legislation that we bring to the House floor this evening on the heels of the pronouncement of the Speaker and minority leader to form an AI task force that is led by Mr. OBERNOLTE of California on the Republican side and Mr. Lieu, also of California, on the Democratic side.

What the Privacy Enhancing Technology Research Act gets us is an op-

portunity to further strengthen and utilize Federal agencies to regulate our artificial intelligence.

This legislation has been met with the endorsement of the Federation of American Scientists, the Carnegie Mellon University, the University of California system, the U.S. Chamber of Commerce, and the Future of Privacy Forum.

I thank my colleague, Congressman Kean, for joining me in this legislation. I also recognize Senator Catherine Cortez Masto of Nevada and Senator Deb Fischer of Nebraska for working in the other Chamber and for their contributions to the legislation.

We have a path not only to see this pass here in the House but to see it pass in the Senate and become Federal law.

We are living, as we all know, in the time of the modern digital economy, probably a hyper-digital economy, that is fueled by an astronomical amount of personal data compounded over decades at this point in time. In this AI-powered world, personal data protection is absolutely imperative. There is certainly a struggle with the processes that can protect and enable the protection of the productive use of personal data and secure the confidentiality of information it includes.

In 2023, a survey by the Pew Research Center found that 81 percent of American adults are concerned about how companies use their personal data.

We are liking, clicking, purchasing, and browsing. What is going on with all of that?

It is certainly in conversations regarding AI in Congress, with friends of mine, and with my constituents back home in Oakland County, Michigan.

There remain lots of opportunities to capture the benefits of data, including for safer roads, improved public health, better educational outcomes, and tackling inequities and other disparities. However, in any use of personal data, we must ensure privacy and confidentiality. A critical way to achieve that is through the development of privacy enhancing technologies, or PETs.

PETs are a broad range of technologies that allow organizations to collect, share, and use data while mitigating the privacy risks that arise from those activities.

The goal is to make systems that use personal information private by default, opening up those data to a wide range of researchers who would otherwise not have access. These technologies even have the potential to enable broader use of Federal datasets, as privacy risks are often the greatest barrier to open government data efforts. Unfortunately, the technology itself is still really immature, and it is not ready for widespread use.

What we are looking to do with H.R. 4755 is to support the research, workforce development, standard setting, and government coordination for PETs. We are going to direct the National Science Foundation to conduct fundamental privacy research that can improve these technologies, assess their

limitations, and broaden their applicability.

The National Science Foundation will also support workforce development activities in order to help address some of the exacerbating shortage of privacy professionals across the United States and also springboard from cybersecurity workforce developments that have taken place from years prior.

H.R. 4755 also supports activities at the National Institute of Standards and Technology to facilitate the development of those standards and best practices for integration of PETs in public and private sectors.

Mr. Speaker, these two groups, the public sector and private sector, are encouraging of this legislation. They are asking for us to act in this way.

Finally, H.R. 4755 directs the White House Office of Science and Technology Policy to coordinate Federal activities to accelerate the development of PETs across government.

Congress, we all know, has been debating proposals on privacy legislation for a long time. Sometimes we are even wondering if we have legislation, but we have H.R. 4755, which takes an amazing and necessary step for ownership of this new technology that we want to own and manage here in this country.

So, yes, let us be encouraged by bipartisan activity. Let us continue to come together and ensure that we have the necessary tools to fully implement privacy legislation without stifling innovation.

Mr. Speaker, I thank, again, my colleague, Congressman KEAN of New Jersey, for his bipartisan efforts.

Mr. Speaker, I reserve the balance of my time.

□ 1700

Mr. LUCAS. Mr. Speaker, I yield such time as he may consume to the gentleman from New Jersey (Mr. Kean).

Mr. KEAN of New Jersey. Mr. Speaker, I am proud to be the co-lead on H.R. 4755, the Privacy Enhancing Technology Research Act of 2023, with my colleague, Congresswoman STEVENS.

Mr. Speaker, I have had many conversations about data privacy concerns with parents and constituents in the Seventh District in New Jersey. Ensuring their specific needs and concerns are met for safeguarding their privacy rights online is a top priority. I am pleased that the House is considering this critical piece of legislation to improve personal data protections for all Americans and to commit to enhancing individuals' privacy and security online.

In an increasingly interconnected world where digital technologies touch every aspect of our lives, safeguarding personal privacy has become a critical concern for all Americans, especially during a time when vast amounts of personal data is collected online.

As we navigate through a landscape of evolving cyber threats, data

breaches, and the development of artificial intelligence, the need for cuttingedge, privacy enhancing technologies has never been more pressing.

Recognizing the significance of these challenges and the threats we face online, this legislation directs the National Science Foundation to support competitive, fundamental research on privacy enhancing technologies. Our goal is to enhance user safety and provide safety measures for how our data is collected and used.

This legislation also directs the National Institute of Standards and Technology to facilitate the development of voluntary consensus standards to better integrate privacy enhancing technologies into public and private sectors. This is a key step toward mitigating risks and promoting trustworthiness.

The Privacy Enhancing Technology Research Act represents a promising opportunity to prioritize protecting an individual's data privacy in our evergrowing interconnected world.

Additionally, the bill will not only facilitate crucial research efforts but also contribute to the development of a skilled workforce and foster effective government coordination to ensure an impactful implementation of these technologies.

Advancing our legislation will support the development of robust safeguards for how people interact online and how their data is collected. This legislation seeks to empower individuals with greater control over their personal information, mitigating the risks of unauthorized access and misuse and maintaining trust in our digital ecosystem.

Through cutting-edge research and technologies, we will develop innovative solutions to not only shield sensitive data from malicious actors but also establish robust standards for data collection and sharing practices, fostering a more transparent and secure online environment.

Mr. Speaker, again, I thank Congresswoman STEVENS for her extraordinary leadership in this regard and the chairman and the ranking member for helping advance this legislation. I encourage my colleagues to support this legislation.

Ms. STEVENS. Mr. Speaker, I have no further speakers. I yield myself the balance of my time to close.

Mr. Speaker, I continue to call on my colleagues to join me, Congressman KEAN, the chairman of the Science Committee, and the ranking member of the Science Committee in passing H.R. 4755. This certainly will mark a very important moment in time when the United States chooses to lead on privacy enhancing technologies for the betterment of all.

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

Mr. LUCAS. Mr. Speaker, I yield myself the balance of my time to close.

Mr. Speaker, I congratulate my colleagues from Michigan and New Jersey on an outstanding piece of legislation, and I urge the body to adopt it.

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

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Oklahoma (Mr. Lucas) that the House suspend the rules and pass the bill, H.R. 4755, as amended.

The question was taken.

The SPEAKER pro tempore. In the opinion of the Chair, two-thirds being in the affirmative, the ayes have it.

Mr. LUCAS. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX, further proceedings on this motion will be postponed.

CARBON SEQUESTRATION COLLABORATION ACT

Mr. LUCAS. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 4824) to amend the Energy Policy Act of 2005 to require the Secretary of Energy to carry out terrestrial carbon sequestration research and development activities, and for other purposes, as amended.

The Clerk read the title of the bill. The text of the bill is as follows:

H.R. 4824

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 "Carbon Sequestration Collaboration Act".

SEC. 2. CARBON SEQUESTRATION RESEARCH INITIATIVE.

Section 963 of the Energy Policy Act of 2005 (42 U.S.C. 16293) is amended—

(1) in subsection (a)—

(A) by redesignating paragraphs (1) and (2) as paragraphs (2) and (3), respectively;

(B) by inserting before paragraph (2), as so redesignated, the following new paragraph:

- "(1) CARBON SEQUESTRATION IN GEOLOGIC FORMATIONS.—The term 'carbon sequestration in geologic formations' means carbon sequestration methods or technologies utilizing existing permeable or porous formations in geologic settings, such as basins or aquifers."; and
- (C) by adding at the end the following new paragraph:
- "(4) Terrestrial carbon sequestration.—
 The term 'terrestrial carbon sequestration' means carbon sequestration methods or technologies engineered by humans and targeted at rangelands, agricultural lands, fallow lands, or forest stands to increase soil organic carbon levels or sequester carbon through transport processes via plant and root biomass, including through soil additives, geochemical approaches, and other engineered solutions that can increase the storage of produced carbon in inorganic or mineral forms, such as biochar and carbon mineralization utilizing mine tailings."; and

(2) in subsection (b)—

- (A) in paragraph (1)—
- (i) by striking "shall establish" and inserting ", in coordination with the heads of relevant Federal agencies, carry out"; and
- (ii) by inserting ", including through terrestrial carbon sequestration and carbon sequestration in geologic formations" before the period;