



Federal Representative Remarks



Jim Powell, SSEB Federal Representative





Duties of the Federal Representative

- Provides an annual report to the President on SSEB programs and activities.
- Serves as the official liaison between SSEB and all federal agencies.
- Presents SSEB's perspective to the Congress and Congressional staff.
- Assists SSEB and its staff in development of federal programs of interest.
- Serves as a member of the Carbon Dioxide Capture, Utilization, and Sequestration Federal Lands and Outer Continental Shelf Task Force.
- Represents the Biden Administration on the Tennessee Valley Authority Integrated Resource Plan Working Group.



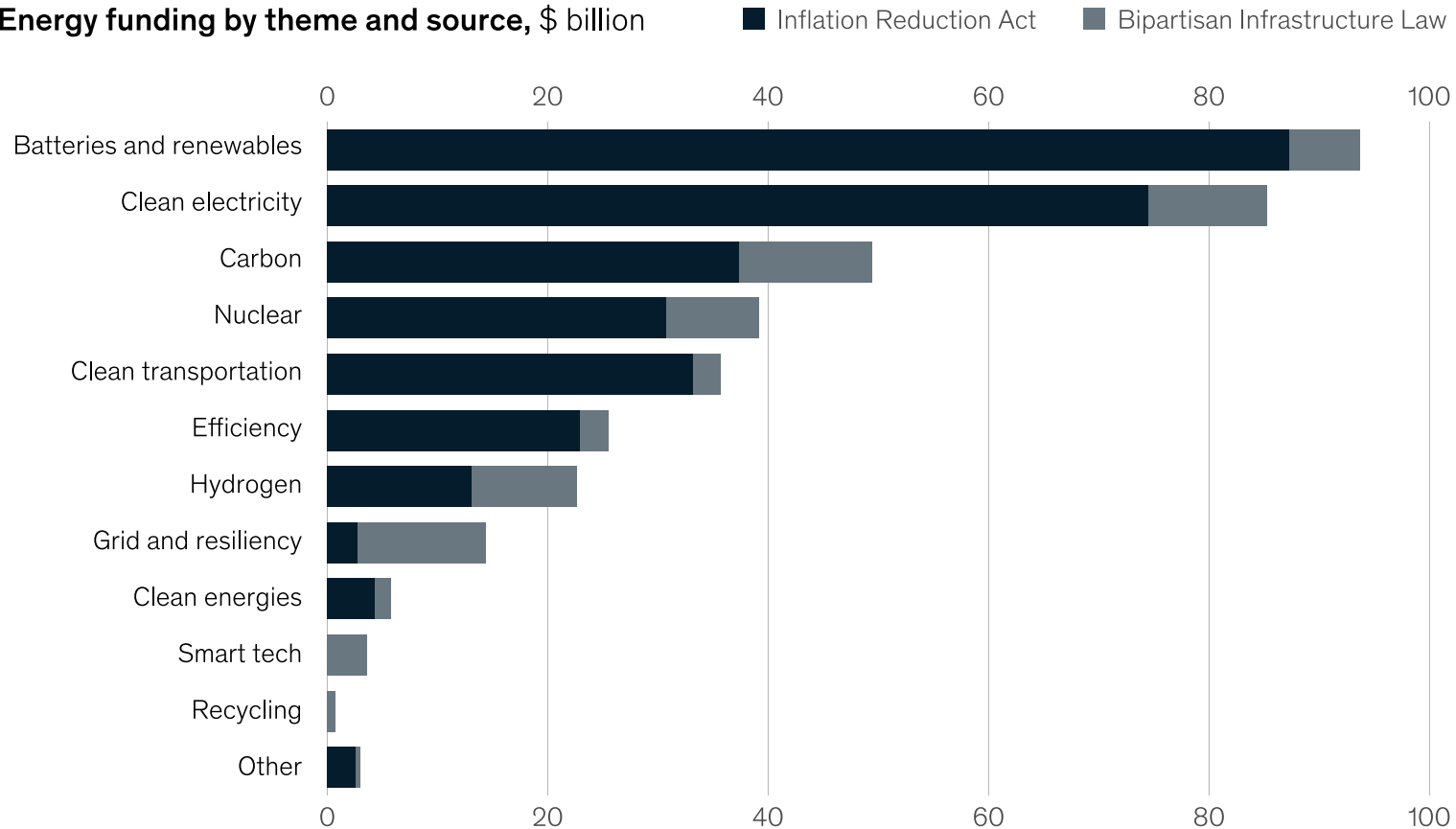
BIL, IRA, and CHIPS

- Since late 2021, President Biden has signed three pieces of legislation with some shared priorities to improve economic competitiveness, innovation, and industrial productivity.
 - Bipartisan Infrastructure Law (BIL)
 - Inflation Reduction Act (IRA)
 - CHIPS & Science Act
- Combined, they introduce \$2 trillion in new federal spending over the next ten years.



Energy funding from the Bipartisan Infrastructure Law and the Inflation Reduction Act spans major funding themes, totaling \$370 billion.

Energy funding by theme and source, \$ billion



Note: This exhibit reflects analysis of the appropriation figures contained in the Inflation Reduction Act, as well as those reported by the Congressional Budget Office and Joint Committee on Taxation. This analysis may differ from other analyses due to differences in methodology.
 Source: Inflation Reduction Act of 2022, H.R. 5376, 117th Cong. (2021–22); Infrastructure Investment and Jobs Act, H.R. 3684, 117th Cong. (2021–22)

Bipartisan Infrastructure Bill - BIL

- Authorizes \$1.2 trillion for transportation and infrastructure spending with \$550 billion of that figure going toward new investments and programs. These new investments include...
 - **Transportation:** \$284 billion (U.S. Department of Transportation)
 - **Water:** \$55 billion (U.S. Environmental Protection Agency)
 - **Broadband:** \$65 billion (U.S. Department of Commerce)
 - **Energy & Power:** \$73 billion (U.S. Department of Energy)
 - **Environmental remediation:** \$21 billion (U.S. Environmental Protection Agency)
 - **Western water infrastructure:** \$8.3 billion (U.S. Department of the Interior; U.S. Department of Agriculture - U.S. Forest Service)
 - **Resiliency:** \$46 billion (U.S. Department of Homeland Security)



Bipartisan Infrastructure Law Programs at DOE

- The Bipartisan Infrastructure Law provided the Department of Energy with **\$62 billion** to stand up **60 new programs**, including 16 demonstration and 32 deployment programs, and expands funding for 12 existing Research, Development, Demonstration, and Deployment (RDD&D) programs.



Overview from the Department of Energy

Highlights of Bipartisan Infrastructure Law	
Clean Energy Demonstrations and Research Hubs	\$21.5B
Demonstration Projects in Rural Areas	\$1B
Demonstration Projects in Economically Hard-Hit Communities	\$500 million
Carbon Capture, Direct Air Capture, and Industrial Emission Reduction	\$10B
Clean Hydrogen	\$8B
Nuclear - Prevention of Premature Retirements and Advanced Technology	\$8.5B
Hydropower Facilities	\$700 million
Battery Supply Chain	\$7B
Weatherization Assistance Program	\$3.5B
Energy Efficiency and Conservation Block Grant Program	\$550 million
State Energy Program	\$500 million
Clean School Program	\$500 million
Environmental and Energy Justice	Integrated throughout

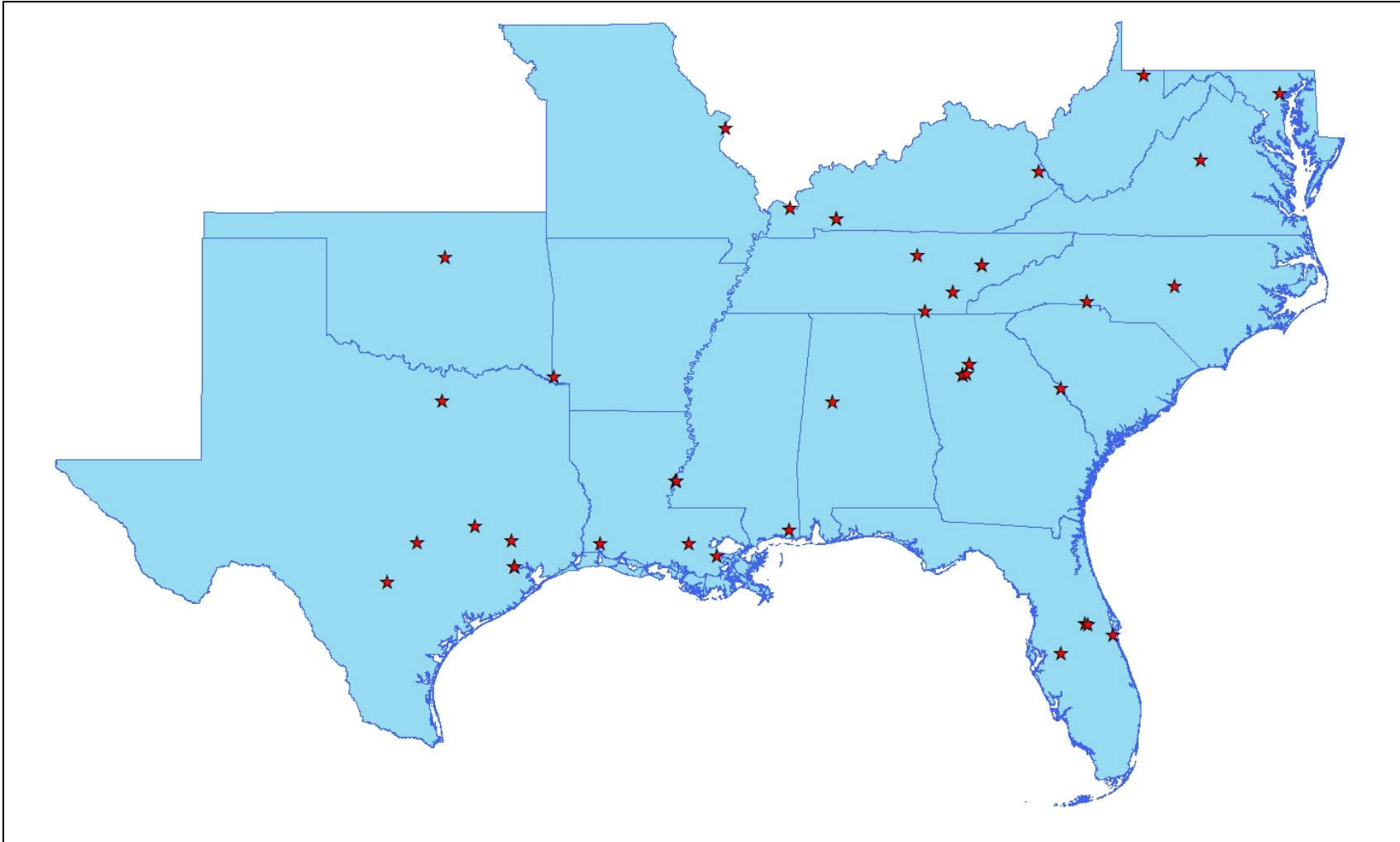


BIL – SSEB Award Announcements

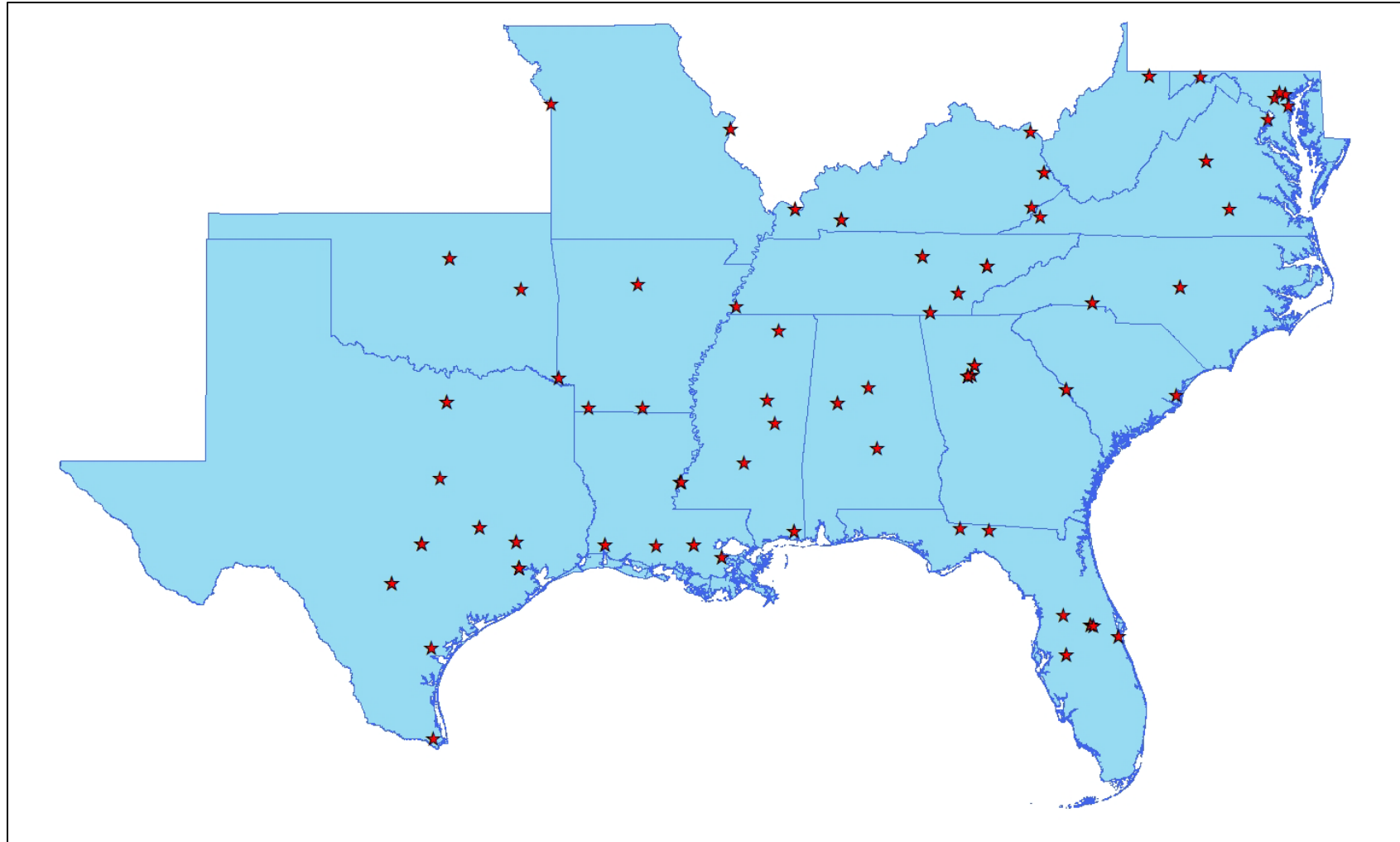
- **\$18 million** to establish site characterization and permitting efforts to develop a storage hub near Bucks, Alabama, for CO2 sourced from a variety of industries including electric generation and steel manufacturing.
- **\$3 million** to study a potential regional-scale CO2 transport system in the Houston-Galveston area to move at least 8 million metric tons of CO2/year.
- **\$15.2 million** to integrate CO2 capture and storage associated with cement manufacturing at the Ash Grove Foreman Cement Plant in Foreman, Arkansas
 - *includes Air Liquide's Cryocap™ technology as the basis for post-combustion and/or process system CO2 capture, and pipeline and storage field development in the Jurassic Smackover Formation.*
- **\$20.2 million** to establish a direct air capture (DAC) hub in Mobile County, AL.



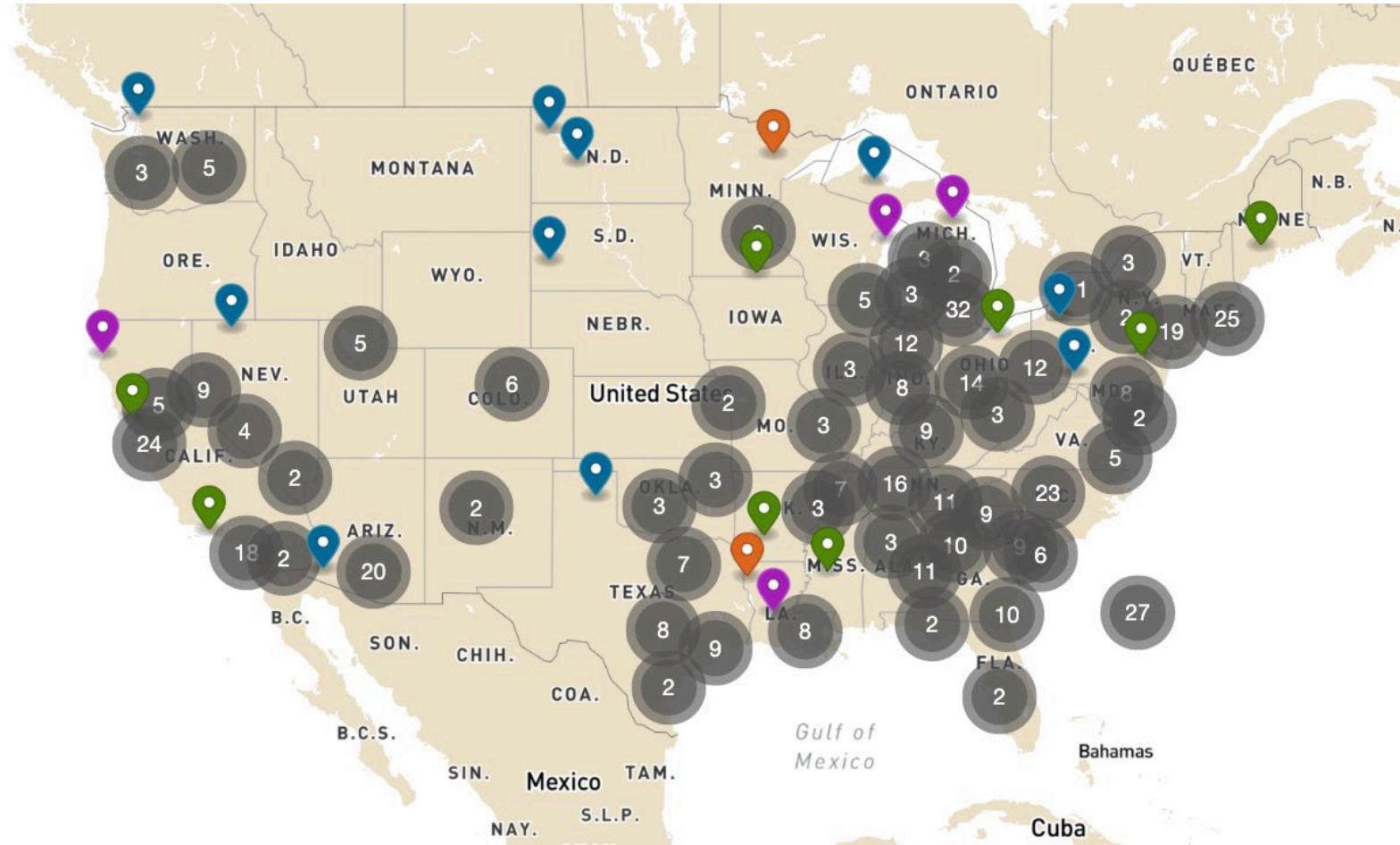
Bipartisan Infrastructure Law – Announced Projects by DOE July



Bipartisan Infrastructure Law – Announced Projects by DOE September



DOE Interactive Map



DOE - BIL Opportunities and Deadlines – Sept 2023

- [September 8 – Applications close for DOE’s Advanced Battery R&D Consortium opportunity](#)
- [September 11 – Applications due for DOE’s Front-End Engineering and Design Studies for Production of Critical Minerals and Materials from Coal-Based Resources Funding Opportunity](#)
- [September 13 – Concept papers for DOE’s Materials, Operation, and Recycling of Photovoltaics \(MORE PV\) program](#)
- [September 15 – Applications close for DOE’s Underserved and Indigenous Community Microgrids program](#)
- [September 26 – Applications close for DOE’s Direct Air Capture Pre-Commercial Technology Prize](#)
- [September 27 – Concept papers for DOE’s Silicon Solar Manufacturing and Dual-use Photovoltaics Incubator Program](#)
- [September 29 – Applications close for DOE’s Wind Turbine Materials Recycling Prize \(phase 1\)](#)
- [September 30 – Applications due for DOE’s Energy Future Grants Creating a Community-Led Energy Future Program](#)



BIL Opportunities and Deadlines – Oct/Nov 2023

- [October 4 – Applications due for round 2 of DOE’s Community Power Accelerator Prize for solar projects](#)
- [October 6 – Full applications due for DOE’s Maintaining and Enhancing Hydroelectricity Incentives Program](#)
- [October 12 – Full applications due for DOE’s Energy Improvement in Rural or Remote Areas \(ERA\) Fixed Award Grant Program](#)
- [October 20 – Applications are due for DOE’s Advanced Processing of Critical Minerals and Materials for Industrial and Manufacturing Applications program](#)
- [November 3 – Applications expected to close for DOE’s Renewable Energy Siting through Technical Engagement and Planning \(R-STEP\) program](#)
- [November 11 – Full Applications due for DOE’s Consumer Electronics Battery Recycling, Reprocessing and Battery Collection program](#)
- [November 14 – Submission Deadline for Full Applications for DOE’s Silicon Solar Manufacturing and Dual-use Photovoltaics Incubator](#)
- [November 15 – Applications due for DOE’s Electric Drive Vehicle Battery Recycling, Transport, and Design Program](#)



BIL Opportunities and Deadline - Additional

- [December 6 – Applications due for DOI’s USGS National Geological and Geophysical Data Preservation Program](#)
- [December 31 – Applications due for Phase 1 Formula grants for DOI’s Orphaned Wells Program](#)
- [December 31 – Applications due for DOE’s Distribution Transfer Rebate Program](#)
- [January 5, 2024 – Applications due for DOE’s Weatherization Program Assistance \(WAP\) Enhancement & Innovation Program](#)
- [January 31, 2024 – Local and Tribal Government Applications due for DOE’s Energy Efficiency and Conservation Block Grant \(EECBG\) Program](#)
- [April 30, 2024 – Applications due for DOE’s Carbon Utilization Procurement Grants Section 40302](#)

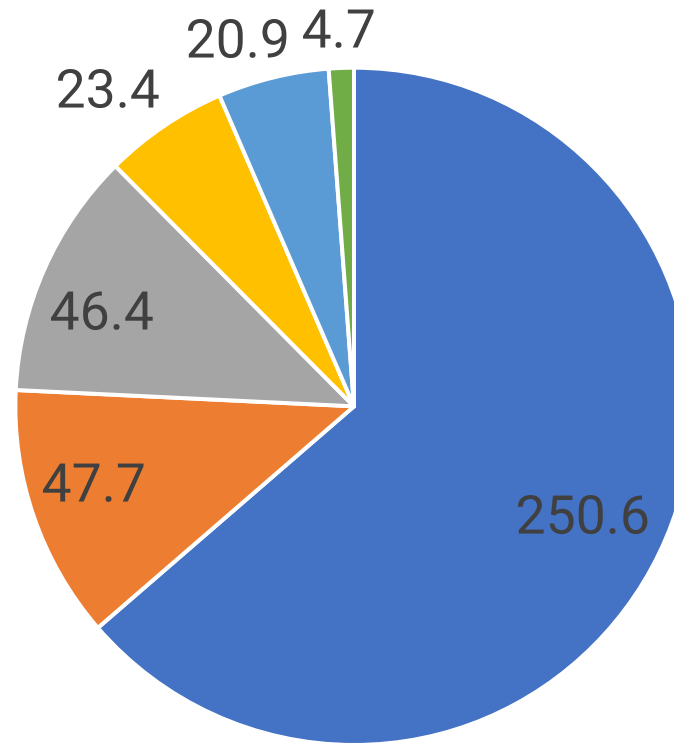


Inflation Reduction Act - IRA

- Along with tax reforms and investments in healthcare, the law provides \$369 billion to confront the climate crisis by expanding tax credits for clean energy and electric vehicles, boosting energy efficiency, establishing a national climate bank, supporting climate-smart agriculture, bolstering production of sustainable aviation fuel, and reducing air pollution at ports.
- DOE estimates that combined with BIL, IRA will cut U.S. greenhouse gas emissions by up to 41 percent below 2005 levels by 2030.



Inflation Reduction Act Investments by Sector, \$ Billion



■ Energy

■ Environment

■ Agriculture

■ Manufacturing

■ Transportation and Electric Vehicles

■ Water

Note: This exhibit reflects analysis of the appropriation figures contained in the Inflation Reduction Act, as well as those reported by the Congressional Budget Office and Joint Committee on Taxation. This analysis may differ from other analyses due to differences in methodology.
Source: Inflation Reduction Act of 2022, H.R. 5376, 117th Cong. (2021–22); McKinsey analysis



Impact of IRA on Utility-Scale Clean Energy

- The most recent update from the American Clean Power Association shows that, since the passage of the IRA, the U.S. utility-scale clean energy industry has announced...
 - **\$242 billion** of investment
 - **25,180** new jobs
 - and more than **163,750 MW** of new projects
- The total investment announced during this time period is equivalent to the past **seven years' worth of American clean energy investment.**



Inflation Reduction Act - DOE

- DOE is responsible for administering IRA loan authorities to provide direct loans and loan guarantees across three key programs:
 - *Energy Infrastructure Reinvestment*
 - *Innovative Clean Energy*
 - *Advanced Technology Vehicle Manufacturing*
- In total, DOE's Loan Program Office will administer \$367 billion in loan authorities.
- DOE is also committed to accelerating the buildout of long-distance transmission through \$2 billion in support for transmission facility financing and \$760 million in grants to support the siting of interstate transmission projects.



DOE - IRA Opportunities and Deadlines

- [Ongoing – Applications for DOE’s Home Energy Rebates program for states and territories](#)
- [Ongoing – DOE’s Loan Program Office’s Advanced Technology Vehicles Manufacturing Loan Program](#)
- [September 30 – Applications due for DOE’s Mitigating Emissions from Marginal Conventional Wells Program](#)
- [September 30 – Applications close in response to DOE’s State-Based Home Energy Efficiency Contractor Training Grant Program](#)
- [October 2 – Submission Deadline for Concept Papers for DOE’s Domestic Manufacturing Conversion Grants Program](#)
- [October 2 – Comments due in response to DOE’s Notice of Proposed Rule Making on the Coordinated Interagency Transmission Authorizations and Permits \(CITAP\) Program](#)
- [October 31 – Concept Papers due for DOE’s Transmission Siting and Economic Development Program](#)
- [December 7 – Full Applications due for DOE’s Domestic Manufacturing Conversion Grants Program](#)
- [April 5, 2024 – Applications due for DOE’s Transmission Siting and Economic Development Program](#)



Inflation Reduction Act - \$43 Billion for USDA

- Major programs include investments in affordable and clean energy for rural communities, investments in biofuels, and investments in nature-based solutions and climate smart agriculture through the Environmental Quality Incentives Program (EQIP).
 - **New ERA Program**
 - \$9.7 Billion to eligible rural electric cooperatives to deploy renewable energy systems, zero-emission and carbon capture systems
 - **PACE Program**
 - \$1 Billion in partially forgivable loans to renewable-energy developers and electric service providers, including municipals, cooperative, and investor-owned and Tribal utilities to help finance large-scale solar, wind geothermal, biomass, hydropower projects and energy storage



USDA – IRA Opportunities and Deadlines

- Ongoing (varies by state) – Applications due for the Agricultural Conservation Easement Program (ACEP) for state and local governments, tribes and non-governmental organizations that have farmland, rangeland or grassland protection programs
- Ongoing – Applications accepted year-round for the Rural Energy for America Program (REAP) – Underutilized Renewable Technologies and Renewable Energy Systems and Energy Efficiency Improvement Programs
- **September 15, 2023 – Letters of Intent due for USDA’s Empowering Rural America (New ERA) Program**
- **September 29, 2023 – Letters of Interest due for the Powering Affordable Clean Energy Program (PACE)**



CHIPS and Science Act

- Directs \$280 billion in spending over the next ten years of which \$200 billion is for scientific R&D and commercialization.
 - \$53 billion is for semiconductor manufacturing, R&D, and workforce development
 - \$24 billion worth of tax credits for chip production
 - \$3 billion slated for programs aimed at leading-edge technology and wireless supply chains



CHIPS Act

Department of Energy

- \$67 billion including \$50 billion authorization for DOE's Office of Science to enable cutting-edge research and development in clean energy and advanced computing and manufacturing

Department of Commerce

- \$50 billion over 5 years
 - \$39 billion for a semiconductor manufacturing incentives program
 - \$11 billion for R&D and workforce measures.
 - **\$11 billion over 6 years for the Economic Development Administration**
 - *\$10 billion to create 20 geographically distributed "regional technology and innovation hubs" in areas that are not leading technology centers*
 - *\$1 billion as part of establishing the "Recompete Pilot Program" to support persistently distressed communities.*



CHIPS Act – Opportunities and Deadlines

- February 28, 2023 and onwards – Statements of Interest from potential applicants will be accepted on a rolling basis for the CHIPS Incentive Program – Commercial Fabrication Facilities
- August 15, 2023 – Deadline for Phase 1 applications for EDA’s FY2023 Regional Technology and Innovation Hub Program
- October 5, 2023 – Application Deadline for U.S. Economic Development Administration’s Recompete Pilot Program Phase 1 Applications
- October 23 – The CHIPS Program Office will begin accepting full applications for large supply chain projects (\$300 million and above).



State Energy Programs

- In August 2022, DOE announced \$425 million in BIL funding for 2023.
 - *This funding announcement will transform SEP by expanding formula grants to nearly 10 times of recent funding levels.*
- In July 2023, DOE announced it is accepting applications for state and territory implementation of the two Home Energy Rebate programs created by IRA.
 - *These programs will provide \$8.5 billion to states and territories to lower energy costs and increase efficiency in American homes.*
- DOE offered technical assistance as well as optional cohort-based assistance.
 - *DOE's technical assistance includes modeling and analytics support, peer discussion groups and networking opportunities.*
 - *DOE's cohort assistance is built around the topics of transmission and distribution planning, grid expansion and clean energy manufacturing planning.*



BIL Funding Versus Annual Funding (FY22)

State Energy Program

BIL funding = \$500 million
FY22 funding = \$63 million

Purposes of BIL Funding for SEP

- Provide funding to states to support electric transmission and distribution planning as well as planning activities and programs that help reduce carbon emissions in all sectors of the economy, including the transportation sector and accelerate the use of alternative transportation fuels and vehicle electrification.



Weatherization Assistance Program

- Grantees may receive formula-based allocations and can perform weatherization retrofits.
- Eligible Uses:
 - Attic insulation, caulking, weather-stripping, furnace efficiency modifications, certain mechanical measures to heating and cooling systems, and replacement furnaces, boilers, and air-conditioners.



BIL Funding Versus Annual Funding (FY22)

Weatherization Assistance Program

BIL funding = \$3.5 billion

FY2022 funding = \$313 million

Purposes of BIL Funding for WAP

- Increase the energy efficiency of dwellings owned or occupied by low-income persons,
- Reduce their total residential energy expenditures, and
- Improve their health and safety, especially low-income persons who are particularly vulnerable such as the elderly, the handicapped, and children.



DOE – SEP and WAP Project Map for SC

- Since 2015, South Carolina has received \$16.8 million from the Weatherization Assistance Program (WAP) and \$5.7 million from the State Energy Program (SEP), resulting in the following benefits.

24,529 People
Impacted by Energy
Efficiency Installations

South Carolina held 339
workshops, webinars
trainings, or outreach
events since 2015*

453 Jobs Created
or Retained

The State Energy
Program creates or
retains one job for every
\$12,500 invested*

2,127 Homes
Weatherized

SC reduced energy
costs and improved
health and safety in
2,127 homes*



DOE – SEP and WAP Project Map for GA

- Since 2015, Georgia has received \$29.2 million from the Weatherization Assistance Program (WAP) and \$8.9 million from the State Energy Program (SEP), resulting in the following benefits.

15,343 People
Impacted by Energy
Efficiency Installations

Georgia held 99
workshops, webinars
trainings, or outreach
events since 2015*

713 Jobs Created
or Retained

The State Energy
Program creates or
retains one job for every
\$12,500 invested*

4,409 Homes
Weatherized

GA reduced energy
costs and improved
health and safety in
4,409 homes*



DOE – SEP and WAP Project Map for TN

- Since 2015, Tennessee has received \$38.8 million from the Weatherization Assistance Program (WAP) and \$8.7 million from the State Energy Program (SEP), resulting in the following benefits.

68,913 People
Impacted by Energy
Efficiency Installations

Tennessee held 4,183
workshops, webinars
trainings, or outreach
events since 2015*

695 Jobs Created
or Retained

The State Energy
Program creates or
retains one job for every
\$12,500 invested*

2,560 Homes
Weatherized

TN reduced energy
costs and improved
health and safety in
2,560 homes*



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BIL Project List for SSEB Map

STATE	CITY	COUNTY	PROGRAM NAME	PROJECT NAME	FUNDING
Arkansas	Foreman		Carbon Capture Demonstration Projects Program Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities	Ash Grove Foreman Cement Plant Carbon Capture and Storage	TBD
Florida	Brevard Public Schools, FL	Brevard		Energy CLASS Prize: Brevard Public Schools, FL	\$100,000
Florida	Mulberry		Carbon Capture Demonstration Projects Program Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities	Polk Power Station Integrated CO2 Capture Project	TBD
Florida	Orange County Public Schools, FL	Orange		Energy CLASS Prize: Orange County Public Schools, FL	\$100,000
Florida	Orlando		Solar Energy Research and Development	Solar Panel Recycling: University of Central Florida	\$1,500,000
Georgia	Atlanta		Industrial Research and Assessment Centers	Georgia Institute of Technology	\$1,400,000
Georgia	Atlanta		Industrial Research and Assessment Centers	Southeastern Center of Excellence at Georgia Tech University	\$3,750,000
Georgia	Atlanta		Solar Energy Research and Development	Solar Panel Recycling: Georgia Institute of Technology	\$1,500,000
Georgia	Augusta		Battery Materials Processing Grants	Solvay Battery-Grade PVDF Manufacturing Facility	\$178,218,568
Georgia	City Schools of Decatur		Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities	Energy CLASS Prize: City Schools of Decatur, GA	\$100,000
Georgia	Peachtree Corners		Carbon Storage Validation and Testing	Southern States Energy Board	\$17,984,523
Georgia	Peachtree Corners		Carbon Dioxide Transportation Infrastructure Finance and Innovation Program	Southern States Energy Board	\$3,000,000
Kentucky	Hopkinsville		Battery Materials Processing Grants	Apex – Integrated Sustainable Battery Precursor	\$316,186,575
Kentucky	Hopkinsville		Battery Materials Processing Grants	Apex – Integrated Sustainable Battery Active Material Production Plant	\$164,395,625
Kentucky	Martin County School District, KY	Martin	Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities	Energy CLASS Prize: Martin County School District, KY	\$100,000
Kentucky	Paducah Public Schools, KY		Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities	Energy CLASS Prize: Paducah Public Schools, KY	\$100,000
Louisiana	Hahnville		Carbon Capture Demonstration Projects Program	Cypress Carbon Capture Project	TBD
Louisiana	St. Gabriel		Battery Materials Processing Grants	LiPF6 Manufacturing Plant in St. Gabriel, Louisiana	\$100,000,000
Louisiana	Vidalia		Battery Materials Processing Grants	Phase 3 Expansion of Syrah’s Commercial-Scale Natural Graphite Active Anode Material Facility in Vidalia, Louisiana	\$219,820,610
Louisiana	Westlake		Carbon Capture Demonstration Projects Program Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities	Lake Charles Power Station Integrated CO2 Capture Project	TBD
Maryland	Baltimore City Public Schools			Energy CLASS Prize: Baltimore City Public Schools, MD	\$100,000



BIL Project List for SSEB Map

STATE	CITY	COUNTY	PROGRAM NAME	PROJECT NAME	FUNDING
Mississippi	Jackson County School District, MS	Jackson	Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities	Energy CLASS Prize: Jackson County School District, MS	\$100,000
Mississippi	Natchez Adams School District, MS		Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities	Energy CLASS Prize: Natchez Adams School District, MS	\$100,000
Missouri	St. Louis		Battery Materials Processing Grants	Commercial Production of Lithium Iron Phosphate Cathode Powder for the Global Lithium Battery Industry	\$197,338,492
North Carolina	Kings Mountain		Battery Materials Processing Grants	Kings Mountain Lithium Materials Processing Plant	\$149,658,312
North Carolina			Battery Materials Processing Grants	Advanced Prelithiation and Lithium Anode Manufacturing Facility	\$100,000,000
Oklahoma	Stillwater		Industrial Research and Assessment Centers	Great Plains Center of Excellence at Oklahoma State University	\$3,750,000
Tennessee	Chattanooga		Battery Materials Processing Grants	Large Scale, Energy Efficient, Domestic Production of High-performance Synthetic Graphite Anode Material for Use in Electric Vehicles and Energy Storage Systems	\$150,000,000
Tennessee	Knoxville		Wind Energy Tech Recycling Research & Development	Small Business Innovative Research Phase III: Carbon Rivers	\$1,100,000
Tennessee	Knoxville		Solar Energy Research and Development	Electric Power Research Institute	\$3,400,000
Tennessee		Mcminn	Battery Materials Processing Grants	Tennessee Lithium	\$141,680,442
Texas	Austin		Solar Energy Research and Development	Solar Panel Recycling: Electroninks Incorporated	\$750,000
Texas	College Station		Industrial Research and Assessment Centers	Gulf Coast Center of Excellence at Texas A&M University	\$3,750,000
Texas	Denton		Industrial Research and Assessment Centers	University of North Texas	\$1,400,000
Texas	Houston		Carbon Storage Validation and Testing	Bluebonnet Sequestration Hub, LLC	\$16,480,117
Texas	Houston		Carbon Storage Validation and Testing	BP Corporation North America Inc.	\$33,411,193
Texas	Houston		Carbon Storage Validation and Testing	Magnolia Sequestration Hub, LLC	\$21,570,784
Texas	Houston		Carbon Storage Validation and Testing	Timberlands Sequestration, LLC	\$23,779,020
Texas	IDEA Public Schools, TX		Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities	Energy CLASS Prize: IDEA Public Schools, TX	\$100,000
Texas	San Antonio		Carbon Dioxide Transportation Infrastructure Finance and Innovation Program	Howard Midstream Energy Partners LLC	\$3,000,000
Texas	San Antonio Independent School District, TX		Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities	Energy CLASS Prize: San Antonio Independent School District, TX	\$100,000
Virginia	Albemarle County Public Schools, VA	Albemarle	Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities	Energy CLASS Prize: Albemarle County Public Schools, VA	\$100,000
West Virginia	Morgantown		Rare Earth Security Activities	Critical Minerals Research: West Virginia University	\$8,000,000