

THE 2022 IRA: A Reference Summary for Clean Air Agencies

www.4cleanair.org | August 15, 2022

The 2022 IRA: A Reference Summary for Clean Air Agencies

August 15, 2022

The U.S. House of Representatives and U. S. Senate have passed the "Inflation Reduction Act of 2022" ("The IRA"), (H.R. 5376). The U.S. Senate passed the IRA on August 7, 2022 and the U.S. House passed the bill on August 12, 2022 using the budget reconciliation process, and it now awaits signature by President Biden. In total it includes \$450 billion in spending investments and tax expenditures to tackle climate change, promote domestic energy production, and reduce the price of health care. It contains \$369 billion in climate and clean energy investments.

The IRA includes tax credits and funding for systems that will reduce greenhouse gas emissions from power plants and other industrial sources, as well as tens of billions of dollars to help state and local governments reduce greenhouse gas emissions, purchase low emission or zero-emission equipment, and improve their compliance with federal emission standards. It mandates a fee paid by the oil and gas industry on excess releases of methane. It provides a variety of energy efficiency, electrification, carbon capture, and clean energy tax credits and funding. It greatly expands existing tax incentives for the U.S. manufacture and sale of zero-emission electric vehicles, and tax incentives to increase the U.S. supply chain for other clean energy technologies. Finally, it provides tax credits and funding for projects in disadvantaged communities to address disproportionate environmental and public health harms caused by pollution and climate change.

This brief provides a summary of provisions that are of highest interest to state, city and county clean air agencies. It then includes a by-page list of funding and programs that affect air pollution and climate change that are included in the bill, first those that will be administered through the U.S. Environmental Protection agency (EPA); and then those administered though other federal agencies including the Department of Transportation, (DOT), Department of Agriculture (USDA), Department of Energy (DOE), and others.

A pre-signature copy of the bill can be located at <u>https://www.congress.gov/bill/117th-congress/house-bill/5376</u>

For more information contact Miles Keogh, Executive Director of NACAA, mkeogh@4cleanair.org.

Summary of Key Clean Air and Climate Provisions

The law provides funding for state and local governments under Clean Air Act (CAA) §103, §105, and a new §137, to reduce greenhouse gas emissions, purchase low-emission or zero-emission equipment, and improve their compliance with federal emission standards. Among the provisions, it creates a new §137 of the CAA and appropriates \$5 billion to EPA for grants to state, tribal, and municipal governments and air pollution control agencies to develop and implement greenhouse gas reduction plans in all 50 states. Of the total, \$250 million is for planning grants that can be spent over 5 years by state and local air pollution control agencies. The bill also offers \$25 million for grants to support and implement clean air agency programs, and \$5 million for grants to help states adopt greenhouse gas and zero-emission standards for vehicles under §177 of the CAA.

Note on the law's Sec. 60114. "Climate Pollution Reduction Grants" (Pages 687-690). This section of the law creates a new "Sec. 137. Greenhouse Gas Air Pollution Plans And Implementation Grants" in the CAA, and may be useful for this and future funding to go to eligible entities to engage in GHG planning and implementation efforts. It appropriates "in addition to amounts otherwise available" \$250 million available until September 30, 2031 for state, local and tribal agencies to develop greenhouse gas emission reduction plans, and creates a \$4.75 billion pool of funds for implementation of those plans by those agencies, to be competitively awarded.

In addition, the Inflation Reduction Act provides a separate \$27.0 billion for a new EPA "Greenhouse Gas Reduction Fund" to help communities rapidly acquire and deploy low- and zero-emission products, technologies and services including \$20.0 billion for competitive grants to nonprofit organizations and for projects in low income and disadvantaged areas. The remaining \$7 billion is for competitive grants to states, municipal governments, Tribes, and nonprofits to provide financial aid and technical assistance to help low-income and disadvantaged communities deploy or benefit from zero-emission technologies.

The IRA appropriates \$206 million for EPA monitoring programs, including \$117.5 million under §103 and §105 of the CAA to deploy and maintain fenceline air monitoring, screening air monitoring, national air toxics trend stations, and other air toxics community monitoring. That total includes \$50 million for multipollutant monitoring stations and to replace, repair, operate and maintain existing monitors; \$20 million for state and local agencies to monitor for methane emissions; \$15 million to address emissions from wood heaters; and \$3 million to deploy, integrate and operate air quality sensors in low-income and disadvantaged communities. It provides \$18 million to update EPA's Integrated Compliance Information System (ICIS) and an additional \$3 million to help states, localities, and Tribes improve their ICIS submissions. It also provides \$40 million for EPA to improve its permitting and approval review process.

It provides EPA with \$3.0 billion aid to help port authorities install zero-emission port equipment, conduct planning and permitting activities, and to develop and implement climate action plans. Of the total, \$750 million is allocated for grants and rebates in non-attainment areas.

The IRA provides \$60 million for grants, rebates and loans under the Diesel Emissions Reduction Act (DERA) program and appropriates \$1.0 billion for EPA grants and rebates to help state and local governments replace heavy-duty commercial vehicles (such as transit buses, school buses, garbage

trucks and street sweepers) with zero-emission vehicles. Of the total, \$400 million must be used for grants and rebates in non-attainment areas.

It provides \$37.5 million for grants to help reduce air pollution and greenhouse gas emissions at schools in low-income and disadvantaged communities, and \$12.5 million for technical assistance to help low-income and disadvantaged school districts address air pollution and develop school environmental quality plans. It also provides \$87 million for EPA education and outreach to consumers and industry about reductions in greenhouse gas emissions related to domestic electricity generation and use, including \$68 million for technical assistance to industry and state and local governments and to educate consumers.

The IRA provides \$3.0 billion for EPA environmental and climate justice block grants to nonprofit organizations in disadvantaged communities for pollution monitoring, prevention and remediation, as well as investments in low- and zero-emissions technologies and infrastructure; mitigating climate and health risks from urban heat islands, extreme heat, wood heater emissions and wildfires; reducing indoor toxins and indoor air pollution; facilitating engagement of disadvantaged communities; and other activities and projects to promote climate resilience.

The law extends and expands the tax credit for carbon capture systems at power plants and other industrial facilities (the current tax credit expires at the end of 2025), as well as credits and incentives for direct air capture facilities. The bill gives \$5.8 billion to the U.S. Department of Energy to subsidize industrial investments in emission reduction technologies and processes.

The IRA imposes a new federal fee on excess methane emissions from onshore and offshore oil and natural gas production, natural gas processing and storage facilities, pipelines, and liquefied natural gas export terminals. The fee would start in 2024 at \$900 for every ton of methane in excess of certain thresholds, increasing to \$1,200 a ton in 2025 and then \$1,500 a ton in 2026 and subsequent years. The bill also appropriates \$1.6 billion for EPA grants for emissions monitoring, reporting and methane-reduction projects at oil and gas facilities.

Numerous other agencies and programs would be funded, including to engage in long-term climate modeling, agricultural and forest conservation programs, and tax and spending provisions to promote the development and use of clean fuels for industrial and transportation uses.

For further information: https://www.congress.gov/bill/117th-congress/house-bill/5376

IRA Provisions Providing Funding or Programs the Environmental Protection Agency (EPA)

- 1. EPA: Clean Heavy-Duty Vehicles pp. 650 653
 - \$600M FY22 through Sep. 30, 2031
 - \$400M FY22 through Sep. 30, 2031 FOR NONATTAINMENT AREAS
 - BEGINNING NO LATER THAN 180 DAYS AFTER ENACTMENT
 - Grants and rebates for up to 100% of costs:
 - Incremental costs of replacing an eligible vehicle that is not a zero-emission vehicle with a zero-emission vehicle, based on the market value of the vehicles
 - Purchasing, installing, operating, and maintaining infrastructure needed to charge, fuel, or maintain zero-emission vehicles
 - Workforce development and training to support maintenance, charging, fueling, and operation of zero-emission vehicles
 - Planning and technical activities to support the adoption and deployment of zeroemission vehicles
 - Eligible Contractor: has the capacity to sell, lease, license, or contract for service zeroemission vehicles, or charging or other equipment; able to arrange for financing a sale, lease, or contract for service
 - Eligible recipient: State, municipality, Indian tribe, a nonprofit school transportation authority
- 2. EPA: Grants to Reduce Air Pollution at Ports pp. 653 657
 - \$2.25B FY22 through Sep. 30, 2027
 - Rebates and grants on a competitive basis to purchase or install zero-emission port equipment or technology; conduct relevant planning or permitting in connection with installation of zero-emission equipment or technology; develop qualified climate action plans
 - \$750M FY22 through Sep. 30, 2027
 - FOR NONATTIANMENT AREAS: Rebates and grants to purchase or install zeroemission port equipment or technology; conduct relevant planning or permitting in connection with installation of zero-emission equipment or technology; develop qualified climate action plans
 - Eligible recipients: port authority; State, regional, local, or Tribal agency that has jurisdiction over a port authority or a port; <u>an air pollution control agency</u>; a <u>private entity that applies</u> <u>in partnership with one of the prior entities</u> and owns, operates, or uses facilities, cargo-handling equipment, transportation equipment, or related technology of a port
 - Qualified Climate Action Plan: establishes goals, implementation strategies, and accounting and inventory practices to reduce emissions of GHGs, criteria air pollutants; HAPs; includes strategies to collaborate and communicate with, and address potential effects on stakeholders impacted by implementation of the plan, including low-income and disadvantaged communities

- 3. EPA: GHG Reduction Fund pp. 658 663
- \$7B FY22 through Sep. 30, 2024
 - Grants beginning NO LATER 180 DAYS OF ENACTMENT
 - Competitive grants to States, municipalities, Tribal governments, and eligible recipients
 - To provide grants, loans, and other forms of financial assistance, including technical assistance to enable low-income and disadvantaged communities to deploy or benefit from zero-emission technologies, including distributed technologies on residential roof-tops, and to carry out other GHG emission reduction activities
- \$11.97B FY22 through Sep. 30, 2024
 - Grants beginning NO LATER 180 DAYS OF ENACTMENT
 - Competitive grants for financial and technical assistance for direct investment and indirect investments
- \$8B FY22 through Sep. 30, 2024
 - Grants beginning NO LATER 180 DAYS OF ENACTMENT
 - Competitive grants to provide financial and technical assistance in low-income and disadvantaged communities
- \$30M FY22 through Sep. 30, 2031
 - Administrative costs to carry out section
- Direct Investments: the recipient shall provide financial assistance to qualified projects at national, regional, State and local levels; <u>prioritize investments that would difficulty receiving</u> <u>other funding</u>; retain, manage, recycle, and monetize all repayments and other revenue to ensure continued operability
- Indirect Investments: providing funding and technical assistance to establish new or support
 existing public, quasi-public, non-for-profit, or nonprofit entities that provide financial assistance
 to qualified projects at the state, local, territorial, or Tribal level, <u>including community- and lowincome focused lenders and capital providers</u>
- Eligible entity: in addition to states, municipalities, and Tribal governments; nonprofit org that is designed to provide capital, leverage private capital, other forms of financial assistance for the rapid deployment of low- and zero-emission products, technologies and services; does not take deposits other than deposits for repayments and other revenue from financial assistance provided by these grants; is funded by public or charitable contributions
- 4. EPA: Diesel Emission Reductions p. 663
- \$60M FY22 through Sep. 30, 2031
- Identify and reduce diesel emissions resulting from goods movement facilities, and vehicles servicing goods movement facilities, in low-income and disadvantaged communities to address the health impacts of such emissions and such communities
- 5. EPA: Funding to Address Air Pollution pp. 663 667
 - \$117.5M FY22 through Sep. 30, 2031
 - Grants under §§103 & 105 to deploy, integrate, support, and maintain fence line air monitoring, screening air monitoring, national air toxics trends stations, and other air toxics and community monitoring
 - \$50M FY22 through Sep. 30, 2031

- Grants under §§103 & 105 to expand NAAQS network with new multipollutant monitoring stations; replace, repair, <u>operate</u>, and <u>maintain existing monitors</u>
- \$3M FY22 through Sep. 30, 2031
 - Grants under §§103 & 105 to deploy, integrate, and operate air quality sensors in low-income and disadvantaged communities
- \$15M FY22 through Sep. 30, 2031
 - Grants under §§103 & 105 for testing and other EPA activities to address emissions from wood heaters
- \$20M FY22 through Sep. 30, 2031
 - Grants under §§103 & 105 for monitoring of methane emissions
- \$25M FY22 through Sep. 30, 2031
 - Grants under §§103 & 105
- \$45M FY22 through Sep. 30, 2031
 - Grants to carry out GHG emissions work under §§111, 115, 165, 177, 202, 211, 213, 231, & 612
- \$5M FY22 through Sep. 30, 2031
 - Grants to States to adopt and implement GHG and zero-emissions standards for mobile sources pursuant to §177
- 6. EPA: Funding to Address Air Pollution at Schools pp. 667 668
 - \$37.5M FY22 through Sep. 30, 2031
 - Grants and activities to monitor and reduce air pollution and GHG emissions at schools in low-income and disadvantaged communities
 - \$12.5M FY22 through Sep. 30, 2031
 - Providing technical assistance to schools in low-income and disadvantaged communities to address environmental issues, develop school environmental quality plans that include standards for school building, design, construction, and renovation; identify and mitigate ongoing air pollution hazards
- 7. EPA: Low Emissions Electricity Program pp. 668 670
 - \$17M FY22 through Sep. 30, 2031 consumer-related education with respect to reductions in GHG emissions from domestic electricity generation and use
 - \$17M FY22 through Sep. 30, 2031 education, technical assistance, and partnerships with low-income and disadvantaged communities with respect to reductions in GHGs emissions that results from domestic electricity generation and use
 - \$17M FY22 through Sep. 30, 2031 industry-related outreach and technical assistance with respect to reductions in GHG emissions that result from domestic electricity generation and use
 - \$17M FY22 through Sep. 30, 2031 outreach and technical assistance to State, Tribal, and local governments (including partnerships) with respect to reductions in GHG emissions that result from domestic electricity generation and use
 - \$1M FY22 through FY23 to estimate the amount of GHG reductions on an annual basis that result from domestic electricity generation and use through FY2031
 - \$18M FY22 through Sep. 30, 2031 to ensure that reductions in GHGs from domestic energy generation and use are achieved using the authorities of the Act

- 8. EPA: Funding for Section 211(O) of Clean Air Act (emissions and fuel testing) pp. 670 672
 - \$5M FY22 through Sep. 30, 2031
 - Development and establishment of tests and protocols regarding environmental and public health effects of a fuel or fuel additives
 - Data collection and analyses to regularly update regulations, guidance, and procedures for determining lifecycle GHG emissions of a fuel
 - Review, analyze, and evaluate impacts of all transportation fuels, including fuel lifecycle implications on the general public and low-income and disadvantaged communities
- 9. EPA: Funding Implementation of the American Innovation and Manufacturing (AIM) Act pp. 672 673
 - \$20M FY22 through Sep. 30, 2026
 - EPA to develop new implementation and compliance tools to carry out AIM
 - \$15M FY22 through Sep. 30, 2026
 - Competitive grants for reclaim and innovation destruction technologies
- 10. EPA: Environmental Product Declaration Assistance pp. 676 678
 - \$250M FY22 through Sep. 30, 2031
 - Support development and enhanced standardization and transparency of environmental product declarations for construction materials and products
 - Grants to businesses that manufacture construction materials and products for developing and verifying environmental product declarations
 - Grants to States, Indian Tribes, and nonprofit orgs to support such businesses
 - Grants to businesses to provide technical assistance to develop and verify environmental product declarations
 - Grants to States, Indian Tribes, and nonprofit orgs to support such businesses
 - Activities to assist in measuring, reporting, and steadily reducing the embodied carbon of construction materials and products
- 11. EPA: Methane emissions reduction program pp. 678 687
 - \$850M FY22 through Sep 30, 2028, Clean Air Act after §136
 - Grants, contracts, loans from EPA to owners and operators of facilities for financial and technical assistance to report methane emissions to EPA
 - Grants, rebates, contracts, loans, under Section 103 of CAA for methane emissions monitoring
 - Grants, rebates, contracts, loans from EPA to improve climate resiliency of communities and petroleum and natural gas systems
 - Improving deployment of methane and other GHGs and waste
 - Supporting innovation in reducing methane and other GHGs
 - Mitigating health effects of methane and other GHGs and legacy air pollution from petroleum and NG systems in low-income and disadvantaged communities

- 12. GHG Air Pollution Plans & Implementation Grants pp. 687 690
 - \$250M for at least one eligible entity in each state to develop a plan for FY22 Sep 20, 2026; Clean Air Act §137
 - Cover costs of developing a plan for the reduction of GHG to be submitted with application for the implementation funds
 - \$4.75B for GHG implementation grants, FY22 available through Sep. 30 2026
 - Predicted amount of GHG reductions, including with respect to low-income and disadvantaged communities
 - Quantifiable, specific, additional, permanent reductions of GHGs
 - Eligible entities: a State, an air pollution control agency, a municipality, an Indian Tribe, or a group of these entities
- 13. EPA: Efficient, Accurate, and Timely Reviews p. 691
 - \$40B FY22 through Sep 30, 2026
 - Provide for development of efficient, accurate and timely reviews for permitting and approval processes through the <u>hiring and training of personnel</u>, documents and guidance, scientific information, environmental data or information systems, <u>stakeholder and</u> <u>community engagement</u>, new equipment for environmental analysis, development of GIS
- 14. EPA: Low-embodied carbon labeling for construction materials pp. 691 693
 - \$100M FY22 through Sep. 30, 2026
 - In consultation with FHWA for construction materials used in transportation, and GSA for construction materials used for federal buildings
 - Identify and label low-embodied carbon construction materials and products
- 15. EPA: Environmental and Climate Justice Block Grants pp. 694 696
 - \$2.8B for grants through Sep. 30, 2026
 - \$200M for technical assistance through Sep. 30, 2026
 - Community-led air and other pollution monitoring, prevention, and remediation, and investments in low- and zero-emission and resilient technologies and related infrastructure and workforce development
 - Mitigating climate and health risks from urban heat islands, extreme heat, wood heater emissions, and wildfire events
 - Climate resiliency and adaptation
 - Reducing indoor toxics and indoor air pollution
 - Facilitating engagement of disadvantaged communities in state and federal public processes
 - Eligible entities: partnerships of Indian tribes, local governments, higher ed institutions, community-based nonprofit orgs

IRA Provisions Addressing Non-EPA Federal Funds and Programs

- 16. IRS: Clean Vehicle Credit pp. 366 392
 - Runs through Dec. 31, 2032
 - New Clean Vehicle Rebate: 2 rebates of \$3750 each, based on 1) content of critical materials in the battery (seeking to increase content recycled in the US); and 2) the content of battery that was manufactured in the US (seeking to increase the amount of the battery manufactured or assembled in the US); limitations based adjusted gross income
 - Manufacturer limits on rebates repealed
 - Used Clean Vehicle Rebate: \$4k or 30% of purchase prices; limitations on adjusted gross income to receive the credit; can't have received a credit under the section 3 years prior;

17. USDA: Commodity Credit Corporation: pp 527-537

Environmental quality incentives program:

- \$250M FY23; \$1.75B FY24; \$3.0B FY25; \$3.45B FY26
- Ag conservation practices that improve soil carbon, reduce N losses or GHG emissions, or capture or sequester GHG assoc. with Ag production
- Prioritize projects and activities that address climate through ag management production, including by GHG reductions or GHG emission avoidances
- Includes prioritization of diet and feed management to reduce enteric methane emissions from ruminants (\$50B?)

Conservation stewardship program:

- \$250M FY23; \$500M FY24; \$1.0B FY25; \$1.5B FY26
- Ag conservation practices that improve soil carbon, reduce N losses or GHG emissions, or capture or sequester GHG assoc. with Ag production
- State or region specific bundles of ag conservation practices for cropland, pastureland, rangeland, nonindustrial private forest land, and transitions to organic or perennial production
- Prioritize projects and activities that address climate through ag management production, including by GHG reductions or GHG emission avoidances

Ag conservation easement program

- \$100M FY23; \$200M FY24; \$500M FY25; \$600M FY26
- Prioritize projects and activities that address climate through ag management production, including by GHG reductions or GHG emission avoidances

Regional conservation partnership program

- \$250M FY23; \$1.2B FY24; \$2.25B FY25; \$3.05B FY26
- Prioritize projects and activities that address climate through ag management production, including by GHG reductions or GHG emission avoidances

NRCS technical assistance

- FY22 funding available through Sep. 30, 2031
- \$1B to NRCS for technical assistance;
- \$300M for carbon sequestration, GHG emissions quantification, including field-based data for C sequestration and GHG emissions reductions
- Use the data to track GHG emissions and C sequestration through the GHG Inventory & Assessment Program at USDA

18. USDA: Farm Security & Rural Investment Act pp. 538-539

- Additional Funding for Electric Loans for Renewable Energy
- \$1.0B from FY22 and available until Sep. 30, 2031
- Loans under Rural Electrification Act
- Includes loans for electricity storage
- Loan forgiveness available, up to 50%
- 19. USDA: Rural Energy for America Program pp. 539-540
 - \$820,250,000 for FY22, available until Sep 31, 2031
 - \$180,276,500 each year for FY23-FY27, available until Sep 31, 2031
 - Includes provisions for underutilized renewable energy technologies
 - Provide technical assistance for applying to the program
 - 50% fed share
- 20. USDA: Biofuel Infrastructure pp. 541-542
 - \$500M from FY22, available through Sep 30, 2031
 - 75% fed share
 - Increase sale and use of ag commodity-based fuels through infrastructure improvements for blending, storing, supplying, or distributing biofuels
 - Installing, retrofitting, upgrading fuel dispensers or pumps and related equipment, storage tank system components to increase sales of high levels of commodity-based ethanol and biodiesel
 - Building and retrofitting home heating oil distribution centers for ethanol and biodiesel blends
- 21. USDA: Assistance for Rural Electrification Coops pp. 543-545
 - \$9.7B FY22, available through Sep. 30, 2031
 - Long-term resiliency, reliability, and affordability of rural electric systems
 - Financial assistance, including loans and costs of loans, to purchase renewable energy systems, zero-emission systems, and carbon-capture systems (including deployment), and make energy efficiency improvements to generation and transmission systems
 - Goal of achieving the greatest reduction of GHGs associated with rural electric systems

- 25% fed contribution limit to grants
- 22. USDA/USFS: Competitive Grants for Non-Federal Forest Landowners pp. 552-555

Cooperative Forestry Assistance Act:

- \$150M FY22, available through Sep 30, 2031
- Carry out climate mitigation and forest resilience practices of <u>underserved forest landowners</u>
- \$150M FY22, available through Sep 30, 2031
- Support participation of <u>underserved forest landowners</u> in emerging private <u>markets for</u> <u>climate mitigation</u> or forest resiliency
- \$100M FY22, available through Sep 30, 2031
- Support participation of forest landowners who own less than 2,500 acres in emerging private markets for climate mitigation or forest resiliency
- \$50M FY22, available through Sep. 30, 2031
- Competitive grant to states and other entities
- Provide payments to private forest land owners for implementation forestry practices on private forest lands that provide measurable increases in carbon sequestration and storage beyond customary practices

Non-Federal cost-share of no less than 20% is required, but also waivable

23. USDA/USFS: State and Private Forestry Conservation Programs pp. 555-557

Forest Legacy Program

- \$700M FY22, available through Sep. 30, 2031
- Competitive grants to states to acquire land and interests in land
- Priority given to applications that offer significant natural carbon sequestration benefits

Urban and Community Forestry Assistance program

- \$1.5B FY22, available through Sep. 30, 2031
- Competitive grants to State agency, local government, Indian Tribe, or non-profit org
- Tree planting and related activities
- Priority for benefits to <u>underserved populations and areas</u>
- Non-federal cost-share requirement may be waived

- 24. HUD: Improving Energy Efficiency or Water Efficiency or Climate Resilience of Affordable Housing pp. 557-561
 - \$837.5M FY22, available through Sep. 30, 2028
 - Direct loans and grants
 - Projects the improve energy or water efficiency, indoor air quality or sustainability, implement low-emissions technologies, materials, or processes, including zero-emission electricity generation, energy storage, or building electrification, or address climate resilience
 - \$60M FY22, available through Sep. 30, 2029
 - Carry out property climate risk, energy, or water assessments, due diligence, and underwriting functions
 - \$42.5M FY22, available through Sep. 30, 20328
 - Energy and water benchmarking of properties eligible to receive grants or loans
 - Associated data analysis and evaluation at the property and portfolio level and IT systems necessary for the collection, evaluation, and analysis of such data
- 25. NOAA: Investing in Coastal Communities Climate Resilience pp. 561-562
 - \$2.6B FY22, available through Sep. 30, 2026
 - Direct expenditures, contracts, grant, cooperative agreements, technical assistance to coastal state through Coastal Zone Management Act
 - States, Tribal Governments, nonprofit organizations, local governments, higher ed institutions
 - Conservation, restoration, protection of coastal and marine habitats and resources, fisheries, and enable coastal communities to prepare for extreme storms and other changing climate conditions
- 26. NOAA: Research and Forecasting for Weather and Climate p. 546
 - \$150M FY22, available through Sep. 30, 2026
 - Accelerate advances and improvements in research, observation systems, modeling, forecasting, assessments, and dissemination of information
 - Focus on ocean and atmospheric processes related to weather, coasts, oceans, and climate
- 27. NOAA: Computing Capacity and Research for Weather, Oceans, and Climate p. 565
 - \$190M FY22, available through Sep. 30, 2026
 - Procurement of additional high-performance computing, data processing capacity, data management, and storage assets
- 28. NOAA: Alternative Fuel and Low-Emission Aviation Technology Program pp. 556-572

- Funds for FY22, available through Sep. 30, 2026
- \$244,530,000 for projects related to production, transportation, blending, or storage of sustainable aviation fuel (SAF)
- \$46,530,000 for projects related to low-emissions aviation technologies
- \$5,940,000 for grant awards in this area
- Includes assessment of lifecycle analysis of sustainable and low-emission aviation fuel, including feedstock and fuel production and potential direct and indirect GHG emissions from land use changes
- Study of use of waste carbon oxides and direct air capture
- At least 1 methodology for testing the lifecycle GHG emissions for sustainable aviation fuel must be adopted within 2 years
- Eligible entities: states, local governments, an air carrier, an airport sponsor, higher ed institution, entity engaged in the production, transportation, blending, or storage of SAF, entity engaged in development, demonstration, or application of low emission aviation technologies, nonprofit organizations with experience in SAF, low-emission aviation technologies, or other clean transportation research programs
- Defines SAF as a fuel that achieves at least a 50% lifecycle GHG emission reduction compared to petroleum-based jet fuel
- 75% federal share for projects
- 90% federal share for projects available for projects at small hub airports and nonhub airports
- 29. DOE: Home Energy Performance-based, Whole-house Rebates pp. 573
 - \$4.3B FY22, available through Sep. 30, 2031
 - Grants to state energy offices to develop a HOMES rebate program
- 30. DOE: High-efficiency Electric Home Rebate Program pp 583 595
 - \$4.275B FY22, available through Sep. 30, 2031 for State energy offices
 - \$225M FY22, available through Sep. 30, 2031 for Indian Tribes
 - Funds to develop and implement a high-efficiency electric home rebate program
 - State funds based on allocation formula for State Energy Programs in effect on Jan. 1, 2022
 - Indian Tribes must apply for funding
 - Provides for redistribution of unspent funds after 2 years to state operating a high-efficiency electric home rebate program
 - Rebates allowed for heat pump water heater; heat pump space heating or cooling; electric stove, cooktop, or oven; electric heat pump clothes dryer
 - Uses area median income for income-based grant allowances
 - State energy office or Indian Tribe may use up to 20% of a grant for administrative purposes
- 31. DOE: State-based Home Energy Efficiency Contractor Training Grant pp. 595 -
 - \$200M FY22, available through Sep. 30, 2031
 - Provide training and education to contractors involved in installation of home energy efficiency and electrification improvements, including eligible rebates under a HOMES rebate program

- 32. DOE: Assistance for Latest and Zero Building Energy Code Adoption pp. 597 599
 - \$330M FY22, through Sep. 30, 2029
 - Assist states to adopt a building energy code for residential buildings that meets or exceeds the 2021 International Energy Conservation Code, or achieved equivalent or greater energy savings; building energy code(s) for commercial buildings that meet or exceeds ANSI/ASHRAE/IES Standard 90.1-2019, or achieves equivalent or greater energy savings;
 - State match required in Dept of Interior and Related Agencies Appropriation Act of 1985 (Dept of Energy - Energy Conservation item, specifically) DOES NOT APPLY
- 33. DOE: Advanced Technology Vehicle Manufacturing
 - \$3B FY22 through Sep. 30, 2028
 - Direct loans under Energy Independence and Security Act for reequipping, expanding, or establishing a manufacturing facility in the US to produce or for engineering integration performance in the US of advanced technology vehicles that have low- or zero-emissions at the tailpipe for GHGs
- 34. DOE: Domestic Manufacturing Conversion Grants pp. 604 605
 - \$2B FY22 through Sep. 30, 2031
 - Grants for domestic production of efficient hybrid, plug-in electric hybrid, plug-in electric drive, and hydrogen fuel cell electric vehicles
 - COST SHARE: grant recipient must provide for not less than 50% project cost
- 35. DOE: Energy Infrastructure Reinvestment Financing pp. 605 608
 - \$5B FY22 through Sep. 30, 2026
- 36. DOE: Tribal Energy Loan Guarantee Program p. 608
 - \$75B FY22 through Sep. 30, 2028
- 37. DOE: Transmission Facility Financing pp. 609 610
 - \$2B FY22 through Sep. 30, 2030
- 38. DOE: Grants to Facilitate the Siting of Interstate Electricity Transmission Lines pp. 610 615
 - \$760M FY22 through Sep. 30, 2029
- 39. DOE: Interregional and Offshore Wind Electricity Transmission Planning, Modeling, and Analysis pp. 615 617

- \$100M FY22 through Sep. 30, 2031
- 40. DOE: Advanced Industrial Facilities Deployment Program pp. 618 620
 - \$5.812B FY22 through Sep. 30, 2026
 - Provide financial assistance (grant, rebate, direct loan, or cooperative agreement) on a competitive basis to
 - Purchase, install, or implement advanced industrial technology
 - Retrofit, upgrade, or operational improvements to implement advanced industrial technology
 - Engineering studies and other work to prepare an eligible facility
 - Prioritization of funds: expected GHG reductions; projects that would provide the greatest benefit for the greatest number of people where the facility is located; whether the eligible facility would partner with purchasers of the facility's output
 - COST SHARE: a recipient must provide no less than 50% of costs of the project
 - ELIGIBLE ENTITY: owner or operator of an eligible facility
 - Eligible facility: domestic, non-Federal, nonpower industrial or manufacturing facility engaged in energy intensive industrial processes, including production processes for iron, steel, steel mill products, aluminum, cement, concrete, glass, pulp, paper, industrial ceramics, chemicals, other energy intensive industrial processes
- 41. USFWS: Address Climate-induced Weather Events p. 697
 - \$121.250M FY22 through Sep. 30, 2026
 - Direct expenditures, award grants, enter into contracts, and cooperative agreements
 - Address the threat of invasive species
 - Increase resiliency and capacity of habitats and infrastructure to withstand climateinduced weather events
 - Reducing the amount of damage caused by climate-induced weather events
- 42. CEQ: Environmental and Climate Data Collection pp. 698 699
 - \$32.5M FY22 through Sep. 30, 2026
 - Support data collection efforts related to:
 - Disproportionate negative environmental harms and climate impacts
 - Cumulative impacts of pollution and temperature rise
 - Establish, expand, maintain efforts to track disproportionate burdens and cumulative impacts, including academic and workforce support for analytics and informatics infrastructure and data collection systems
 - Ensure any mapping or screening tool is accessible to community-based organizations and community members
- 43. FHWA: Neighborhood Access and Equity Grant Program
 - \$1.893B FY22 through Sep. 30, 2026
 - Competitive grants to

- Improve walkability, safety and affordable transportation access
- Mitigate or remediate negative impacts on the human or natural environment in disadvantaged or unserved communities