



THE INFLATION REDUCTION ACT OF 2022

Following Vice President Harris casting her vote to break its [50-50](#) passage in the Senate and [220-207](#) passage in the House of Representatives, President Biden signed the Inflation Reduction Act (IRA) of 2022 ([H.R.5376](#)) into law on August 16, 2022.

Given the scope of the legislation, the amounts invested, especially towards clean energy provisions, Elevate Government Affairs has produced this summary to provide in-depth information on the investments in energy and climate change, taxation and healthcare. We also have provided information on how certain investments and tax credits can be taken advantage of. Should you have any specific questions, please reach out to a member of our team.

Revenue Measures: The IRA raises \$737 billion in revenue through a 15% corporate minimum tax, prescription drug price reform, Internal Revenue Service (IRS) Tax Enforcement, 1% stock buybacks fee, and a loss limitation extension.

Investments: The IRA invests \$437 billion to address energy security and climate change and western drought resiliency and extends the Affordable Care Act. Furthermore, the IRA is expected to reduce the deficit by potentially more than \$300 billion according to the [Congressional Budget Committee](#).

The IRA is defined by two separate categories of activities: tax and policy, particularly as it relates to the energy and climate measures. For instance, the tax credits – which address electrical vehicles (EVs), renewable fuels, and clean energy production – will be beneficial for consumers, manufacturers and transportation companies, with several of the credits already being in effect. Included in the IRA are both extensions and expansions of existing credits, as well as newly created tax provisions. This summary specifically identifies those tax provisions that are new. Separate from these tax credits is the authorization for Congress to appropriate funds for agencies such as the Departments of Transportation (DOT) and Energy (DOE), and the Environmental Protection Agency (EPA), which will be delivered to municipalities and entities through grant programs.

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Clean Energy Tax Credits

The IRA creates and expands a number of tax credits related to the production of clean energy, capture of carbon emissions, purchase of clean vehicles, and clean energy manufacturing. Summaries of the tax credits along with their requirements are below.

Important Concepts:

Direct Pay:

- In certain limited circumstances a taxpayer can elect for direct payment of the tax credit. Under direct pay, a taxpayer can treat tax credits as an overpayment of taxes, resulting in a direct cash payment from the U.S. Treasury instead of having to monetize the tax credits through other means.
- Importantly, direct payment is only available for an "applicable entity" which includes tax-exempt entities, a state or political subdivision, the Tennessee Valley Authority, an Indian Tribal Government or any Alaska Native Corporation.
- In certain cases, direct pay is phased out if domestic content requirements are not ascertained.
- The limited direct pay option is available for tax credits found in Sections 30C, 45(a), 45Q, 45U, 45V, 45W, 45X, 45Y, 45Z, 48, 48C and 48E.
- The limited ability to elect direct pay by only those applicable entities is broadened under certain provisions (specifically Section 45Q, Section 45X, and 45V) for the first five years, opening the option to elect direct pay to a broader array of taxpayers.

Transferability:

- In certain circumstances, a taxpayer can elect to transfer all or any part of a tax credit to an unrelated taxpayer in exchange for cash.
- The ability to transfer is available for tax credits found in Sections 30C, 45(a), 45Q, 45U, 45V, 45X, 45Y, 45Z, 48, 48C and 48E.

Special Requirements for Certain Energy Production and Manufacturing Tax Credits

- **Prevailing Wage-** Under the prevailing wage requirements, a taxpayer must ensure that any laborers and mechanics are paid prevailing wages during the construction of a project and, during the relevant credit period, for the alteration and repair of such project. The IRA provides correction procedures and directs the Secretary of the Treasury to provide further guidance.
- **Apprenticeship-** Under the apprenticeship requirements, a taxpayer must ensure that no less than the applicable percentage of total labor hours for the construction of the project are performed by qualified apprentices. The IRA provides correction procedures and directs the Secretary of the Treasury to provide further guidance.
- **Domestic Content-** The taxpayer must certify that any steel, iron or manufactured product which is part of a facility was produced in the United States. For this purpose, manufactured products will be considered manufactured in the United States if the "adjusted percentage" of the total cost of the components of such product are mined, produced or manufactured in the United States.
- **Energy Community (Environmental Justice)-** Energy communities are defined to include:
 1. Brownfield sites;

2. A metropolitan or non-metropolitan area which (a) has direct employment or local tax revenues over an established percentage related to the extraction, processing, transport or storage of coal, oil or natural gas (b) has an unemployment rate at or above the national average; or

3. A census tract or any adjoining tract in which a coal mine closed after Dec. 31, 1999, or a coal fired electric power plant was retired after Dec. 31, 2009.

- **Low-Income-** Applicable for solar and wind facilities, low-income communities are defined by 26 U.S.C. § 45D(e) or on Indian land. Low-income residential building projects are those projects participating in certain federal housing assistance programs, while low-income economic benefit projects are those where at least 50 percent of the financial benefits of the electricity produced must be provided to households with income either (a) less than 200 percent of the poverty line, or (b) less than 80 percent of area median gross income.

Renewable Energy Generation

The IRA creates and extends tax credits to produce clean energy and investment in clean energy facilities. By design, these tax credits provide two credit values: a lower base credit and a bonus rate. The bonus rate is equal to five times the base amount and is available only when requirements related to prevailing wage and apprenticeship are met. Under certain provisions, the IRA also further incentivizes the use of domestic content and placement in low-income communities.

- **Production Tax Credit Extension (Section 45a)**
 - The IRA extends the renewable energy PTC until the end of 2024, after which the PTC will transition to a technology neutral credit as further explained below in the new sections 45Y and 48E.
 - Eligible forms of energy include the production of energy from solar, wind, geothermal, biomass, hydropower and other eligible projects.
 - In a change to current law, the IRA allows the solar industry to choose between the ITC and the PTC for its own projects, starting in 2023.
 - The base credit will be 0.3 cents per kWh, with a bonus credit of 1.5 cents per kWh if prevailing wage and apprenticeship requirements are met.
 - Eligible for a bonus 10 percent PTC if certain domestic content requirements are met (adjusted percentage of generally 40 percent for most projects and 20 percent for offshore wind), or if the project advances environmental justice aspects.
 - Effective date: August 16, 2022
 - Sunset date: Dec. 31, 2024
- **Investment Tax Credit Extension (Section 48a)**
 - The IRA extends the ITC for solar energy property and most other ITC-eligible property until the end of 2024. (Geothermal credit will be extended until 2035.)
 - The IRA will expand what is eligible for the ITC, including energy storage technology.
 - The base credit will be 6 percent with a 30 percent bonus credit if prevailing wage and apprenticeship requirements are met.
 - There will be a potential 10 percent bonus credit for environmental justice aspects and when domestic content requirements are met.

- The list of qualifying property would be expanded to include energy storage technology (including thermal energy storage property), qualified biogas property, electrochromic glass, and microgrid controllers. The credit would also be available for interconnection property. The ITC for battery storage is exempt from public utility normalization requirements.
 - Energy property placed in service beginning in 2023 that satisfies the domestic content requirements is eligible for a 10 percentage point bonus credit, meaning the credit increases from 30% of cost basis to 40% of cost basis.
 - Energy property placed in service within an energy community may also be eligible for a 10 percentage point bonus credit.
 - Solar and wind facilities (and connected batteries) less than five MWac placed in service in 2023 and 2024 may qualify for an additional 10 percentage point bonus credit if located in a low-income neighborhood or on Tribal lands. The bonus credit is subject to an annual capacity limitation of 1.8 gigawatts.
 - Effective date: August 16, 2022
 - Sunset date: Dec. 31, 2024
- **Technology-Neutral PTC (Section 45Y) *NEW CREDIT***
 - Beginning in 2025, the traditional PTC will generally no longer apply. The credit will be replaced by a new technology-neutral credit.
 - Eligibility for the credit generally requires that the facility's greenhouse gas (GHG) emissions are no greater than zero.
 - The base credit value is 0.3 cents per kWh with a 1.5 cent bonus credit if prevailing wage and apprenticeship requirements are met.
 - There will be a potential 10 percent bonus credit for environmental justice aspects and when domestic content requirements are met.
 - The applicable percentages to meet the domestic content requirements increase over time:
 - Generally, the adjusted percentage is 40 percent until 2025, 45 percent in 2025, 50 percent in 2026, and 55 percent after 2026.
 - The adjusted percentage for offshore wind facilities is 20 percent until 2025, 27.5 percent in 2025, 35 percent in 2026, 45 percent in 2027, and 55 percent after 2027.
 - Effective date: Jan. 1, 2025
 - Sunset: the credit phases out in 2032, or when the Secretary of the Treasury determines that the annual GHG emissions are equal to or less than 25 percent of the emissions produced in 2022, whichever is earlier.
- **Technology-Neutral ITC (Section 48E) *NEW CREDIT***
 - Beginning in 2025, the traditional ITC will generally no longer apply. The credit will be replaced by a new technology-neutral credit.
 - Eligibility for the credit generally requires that the facility's greenhouse gas (GHG) emissions are no greater than zero.
 - The applicable percentages to meet the domestic content requirements increase over time:

- Generally, the adjusted percentage is 40 percent until 2025, 45 percent in 2025, 50 percent in 2026, and 55 percent after 2026.
 - The adjusted percentage for offshore wind facilities is 20 percent until 2025, 27.5 percent in 2025, 35 percent in 2026, 45 percent in 2027, and 55 percent after 2027.
 - Effective date: Jan. 1, 2025
 - Sunset: the credit phases out in 2032, or when the Secretary of the Treasury determines that the annual GHG emissions are equal to or less than 25 percent of the emissions produced in 2022, whichever is earlier.
- **Zero-Emission Nuclear Power PTC (Section 45U) *NEW CREDIT***
 - The IRA creates a PTC for the production of electricity from a nuclear facility beginning in 2024.
 - The base credit will be 0.3 cents per kWh, with a bonus credit of 1.5 cents per kWh if the project meets prevailing and apprenticeship requirements.
 - The credit is subject to reduction based on gross receipts of any electricity sold.
 - Effective date: Jan. 1, 2024
 - Sunset date: Dec. 31, 2032

Clean Energy Manufacturing

- **Advanced Energy Project Credit (Section 48C)**
 - The IRA revises and extends the advanced energy project credit.
 - The advanced energy project credit will be an allocated tax credit, meaning that there will be a maximum amount that will be allocated competitively.
 - Specifically, the IRA will allocate \$10 billion; of which at least \$4 billion must be allocated to environmental justice.
 - New eligible list of qualifying property will include:
 - Energy storage systems and components, grid modernization equipment and components
 - Property designed to “capture, remove, use, or sequester carbon oxide emissions,”
 - Equipment designed to “refine, electrolyze, or blend any fuel, chemical, or product which is renewable or low-carbon and low emission,” products designed to produce energy conservation technologies, and technology, components, and
 - Materials for electric or fuel cell vehicles and their associated charging or refueling infrastructure, and hybrid vehicles (those with a weight rating of less than 14,000 pounds).
 - Base credit will be 6 percent, with a 30 percent bonus credit available if prevailing wage and apprenticeship requirements are met.
 - Effective date: Jan. 1, 2023
 - Sunset date: Dec. 31, 2032, except for certain critical minerals.
- **Advanced Manufacturing Production Credit (Section 45X) *NEW CREDIT***

- The IRA creates a new production credit through for production of components related to clean energy such as solar photovoltaic (PV) cells, wind energy components and battery cells.
- This credit will be available for direct pay for the first five years under broad conditions and the credits are transferable.
- The credits will generally be subject to phase out beginning in 2029.
- The table below shows the credit value to corresponding technologies.
- Effective date: Jan. 1, 2023
- Sunset date: Dec. 31, 2032, except for certain critical minerals.

Component	Credit amount
Solar grade polysilicon	\$3/kilogram
Applicable critical mineral	10 percent cost of production
Battery module	With limitations, \$10 (\$45 if module does not use battery cells)/kWh
Battery cell	\$35/kWh
Electrode active materials	10 percent cost of production
Inverter	Applicable amount (e.g., \$0.25 for central inverter)/watt
Structural fastener	\$2.28/kilogram
Torque tube	\$0.87/kilogram
Wind energy component	Offshore wind vessel – 10 percent of vessel sales price All other – applicable amount
Polymeric backsheets	\$0.40/square meter
Solar grade polysilicon	\$3/kilogram
PV wafer	\$12/square meter
Crystalline PV cell	\$0.04/watt
Thin film PV cell	\$0.04/watt

Carbon Reduction

The IRA extends an existing carbon sequestration credit to enhance credits for certain facilities and lower thresholds needed to access the credit.

- **Carbon Sequestration Credit (Section 45Q)**
 - The IRA extends the carbon sequestration credit for facilities that begin construction before 2033.
 - The credit provides additional modifications, including an enhanced credit for direct air capture and lowering the carbon capture threshold requirements at facilities.
 - The IRA will lower the annual thresholds of carbon a facility must capture to qualify:
 - 18,750 tons of carbon oxide for power plants
 - 12,500 tons of carbon oxide for industrial facilities, and
 - 1,000 tons of carbon oxide for DAC facilities.
 - The IRA provides a base credit rate of \$17 or a bonus credit rate of \$85 per metric ton of carbon oxide captured for geological storage.

- It also provides a base credit rate of \$12 or a bonus credit rate of \$60 per metric ton of carbon oxide captured and utilized for an allowable use by the taxpayer.
- The IRA provides an enhanced credit for direct air capture facilities at a base rate of \$36 or a bonus rate of \$180 per metric ton of carbon oxide captured for geological storage.
- Finally, the IRA provides a base rate of \$26 or a bonus rate of \$130 per metric ton of carbon captured and utilized for an allowable use by the taxpayer.
- This credit will be available for direct pay for the first five years under broad conditions and the credits are transferable.
- Effective date: Jan 1., 2023
- Sunset date: Facilities that begin construction before Jan 1., 2033

Clean Fuels

The IRA creates and extends tax credits related to the production of clean fuels to spur greening of new technologies.

- **Clean Hydrogen (Section 45V) NEW CREDIT**
 - Introduces a new 10-year production tax credit (PTC) for “clean hydrogen” with a corresponding election to claim the investment tax credit (ITC) in lieu of the PTC.
 - Base credit amount will be 60 cents per kilogram of qualified clean hydrogen, multiplied by an emissions factor depending on the GHG emissions factor provided by the fuel.
 - Hydrogen must be produced through a process resulting in lifetime GHG emissions of no more than 4 kgs of CO₂e per kg of hydrogen.
 - A table of the scaling value of the credit based on the amount of CO₂ produced during hydrogen production is below.
 - In combination with the new hydrogen tax credit, the taxpayers may also claim the PTC for electricity produced from renewable resources if the electricity is used at a qualified clean hydrogen facility to produce qualified clean hydrogen. However, taxpayers could not claim credits for clean hydrogen produced at facilities that have also claimed credits for carbon capture under section 45Q.
 - Effective date: Jan. 1, 2023
 - Sunset: Dec. 31, 2032

Kg of CO ₂ per kg of H ₂	H ₂ Credit Value (\$)
4-2.5 kg CO ₂	\$0.60 / kg of H ₂
2.5-1.5 kg CO ₂	\$0.75 / kg of H ₂
1.5-0.45 kg CO ₂	\$1.00 / kg of H ₂
0.45-0 kg CO ₂	\$3.00 / kg of H ₂

- **Sustainable Aviation Fuel (Section 40B) NEW CREDIT**
 - The IRA adds a new tax credit for the sale or mixture of sustainable aviation fuel (SAF) for a limited time: 2023 and 2024.
 - The base credit will be \$1.25 per gallon, with a supplemental credit amount of 1 cent per gallon for each percentage point by which the lifecycle GHG reduction percentage for the fuel exceeds 50 percent (with a maximum supplemental credit of 50 cents/gallon, totaling \$1.75/gallon).

- Effective date: Jan. 1, 2023
- Sunset date: Dec. 31, 2024
- **Biodiesel Renewable Fuels and Alternative Fuels (Various Sections)**
 - The IRA extends the biodiesel, renewable diesel, alternative fuels, alternative fuels mixtures and second-generation fuels tax credits through 2024.
 - Beginning in 2025, the credits will transition to the Clean Fuel Production Credit
 - Effective date: now
 - Sunset date: Dec. 31, 2024
- **Clean Fuel Production Credit (Section 45Z) *NEW CREDIT***
 - After Dec. 31, 2024, existing fuel credits will transition to the Clean Fuel Production Credit. The new Section 45Z clean fuel production credit is for low-emissions transmission fuel (not including facilities for which a Section 45V, 45Q or 48 (related to hydrogen) credit is available) and produced at a qualified facility after December 31, 2025, but before January 1, 2028.
 - The base credit for transportation fuel will be 20 cents per gallon, while the SAF base credit will be 35 cents per gallon.
 - Eligible fuels include: Hydrogen fuel production, Sustainable Aviation Fuel, Biodiesel Fuels.
 - In order to receive the full credit, the fuel must have a life-cycle emission level of less than 50 kilograms of CO₂e per MMBtu.
 - Effective date: Jan 1., 2025
 - Dec. 31, 2027

Clean Vehicles

The IRA creates and extends tax credits for the purchase of clean vehicles and the adoption of clean vehicle charging equipment.

- **Clean Vehicles Credit (Section 30D)**
 - The IRA extends and modifies the existing "New qualified plug-in electric drive motor vehicles" credit (Section 30D) with a Clean Vehicle Credit, which will be worth up to \$7,500.
 - The refundable \$7,500 credit will have two \$3,750 components:
 - 1. A certain percentage of the critical minerals in the battery are extracted or processed in the U.S., a country with a U.S. free trade agreement or recycled in North America.
 - 2. A certain percentage of the battery is manufactured or assembled in North America.
 - Vehicles that meet one component will be limited to a \$3,750 credit.
 - Credits will be disallowed for vehicles with retail prices above certain thresholds, and for taxpayers with modified adjusted gross income of more than \$300,000 for taxpayers married filing jointly, \$225,000 for head of household and \$150,000 single taxpayers.
 - Effective date: vehicles placed in service after Dec. 31, 2022
 - Sunset date: Dec. 31, 2032

- **Previously Owned Clean Vehicles (Section 25E) *NEW CREDIT***
 - The IRA provides a tax credit for previously owned clean vehicles that are at least 2 years old; purchased before Dec. 31, 2032; and equal to the lesser of \$4,000 or 30 percent of the sale price.
 - The vehicle must be propelled to a significant extent by an electric motor that draws electricity from a battery.
 - The credit will be limited to taxpayers earning less than \$150,000 for those married filing jointly; \$112,500 for a head of household and \$75,000 for a single taxpayers.
 - The sale price must not exceed \$25,000
- **Qualified Commercial Clean Vehicles (Section 45W) *NEW CREDIT***
 - The IRA creates a new credit for qualified commercial clean vehicles.
 - The credit is worth up to \$40,000, or the lesser of 30 percent of the sales price (15 percent if powered by gasoline or diesel) or the incremental cost of the vehicle. The incremental cost is defined as the difference between the purchase price of the EV and a comparable internal combustion engine vehicle.
 - The maximum credit will be \$7,500 for vehicles with a gross weight rating of 14,000 pounds and \$40,000 for all others.
 - Effective date: Jan. 1, 2023
 - Sunset date: Dec. 31, 2032
- **Alternative Fuel Refueling Property Credit (Section 30C)**
 - The IRA extends and modifies the tax credit available for alternative refueling property increasing the maximum credit available from \$30,000 to \$100,000 and allowing the credit to be calculated per single unit rather than per location.
 - In addition, under the law, the alternative fuel property is only eligible for the credit if the property is placed in service in a low-income community or rural census tract.
 - If the property is depreciable property, the base credit will be 6 percent; if the prevailing wage and apprenticeship requirements are met, the credit will be 30 percent.
 - Effective date: now
 - Sunset date: Dec. 31, 2032

Energy and Climate Change Investments

Overview:

The Inflation Reduction Act invests a historic \$369 billion in energy security and climate change programs, tax credits, and other investments. These investments both create private sector incentives for the adoption of green technologies to address climate change and provide direct funding for federal government initiatives. Below is a selection of pertinent programmatic funding as well as tax credits related to energy and climate change through the Department of Transportation (DOT) and the Department of Energy (DOE).

Department Of Energy

- **Domestic Manufacturing Conversion Grant Program**
 - The IRA will provide \$2 billion for grants for the domestic production of efficient hybrid, plug-in electric hybrid, plug-in electric drive and hydrogen fuel cell electric vehicles.

- Grants will require at least a 50 percent cost-share with DOE.
- **Advanced Industrial Facilities Deployment Program**
 - The IRA will provide \$5.812 billion to create a new program within the Office of Clean Energy Demonstrations (OCED) to invest in projects aimed at reducing emissions from energy intensive industries.
 - The program will provide financial assistance, on a competitive basis, for domestic, non-federal, non-power industrial or manufacturing facility, including producers or iron, steel, steel mill products, aluminum, cement, concrete, glass, pulp, paper, ceramics, chemicals and other energy-intensive processes to:
 - purchase, install or implement advanced industrial technology
 - retrofit, upgrade or operationalize improvements to install or implement advanced industrial technology
 - engineering studies and other work needed to prepare an eligible facility.
 - The IRA will require a 50 percent non-federal cost share.
 - The IRA will direct DOE to prioritize projects with the greatest GHG reduction benefit, and greatest benefit to the largest number of people in the community. Program applicants will be required to include expected GHG emissions reductions associated with the project in their applications.
 - The IRA will provide an additional \$300 million DOE for administrative costs to carry out this new program.
- **Loan Programs Office (LPO) – Title 17 Funding**
 - The IRA will provide \$40 billion in additional commitment authority for eligible projects under Title 17 through Sept. 30, 2026. This new commitment authority will be applied across existing eligible projects and the Infrastructure Investment and Jobs Act (IIJA) expansion of eligibility for Title XVII for projects that increase the domestic supply of critical minerals through production, processing, manufacturing, recycling or fabrication of mineral alternatives.
 - The IRA will provide \$3.6 billion in credit subsidy cost is provided through Sept. 30, 2026. The impact of this provision means that the credit subsidy cost due at close may now be covered by this funding. Three percent of the credit subsidy cost is reserved for administrative costs to help ease the current administrative backlog in the application pipeline.
- **LPO Advanced Technology Vehicle Manufacturing (ATVM)**
 - The IRA will provide \$3 billion in additional credit subsidy cost to ensure applicant loan costs remain low. The IRA will provide an additional \$25 million in administrative costs to ensure proper staffing of the applicant pipeline. Removes \$25 billion in outstanding loans for the program, expanding the amounts available for lending under the program.
- **Energy Infrastructure Reinvestment Financing**
 - The IRA will create a new “Energy Infrastructure Reinvestment Financing” program under the Loan Programs Office and provide \$5 billion through Sept. 30, 2026 to be leveraged for up to \$250 billion in commitment authority for loan guarantees, which include refinancing, of eligible projects.
 - Key provisions include:
 - The loan must not exceed 30 years.

- Eligible projects are projects that: 1) retool, repower, repurpose or replace energy infrastructure that has ceased operations; or 2) enable operating energy infrastructure to avoid, reduce, utilize or sequester air pollutants or anthropogenic emissions of GHG.
 - Energy infrastructure projects that provide environmental damage remediation will qualify and fossil fuel projects financed will be required to have emission control technologies.
 - Application requirements include:
 - 1. Detailed project plans,
 - 2. Community engagement plans, and
 - 3. The financial benefit of the program must be passed on to the customer or associated community if the applicant is an electric utility.
- **Tribal Energy Loan Guarantee Program**
 - The IRA will increase the available commitment authority of the Tribal Energy Loan Guarantee Program from \$2 billion to \$20 billion and increases the percentage of an allowable guarantee from 90 percent to 100 percent.
 - The IRA will provide an additional \$75 million to administer the Tribal Energy Loan Guarantee Program.
- **Electric Transmission Facility Financing**
 - The IRA will provide \$2 billion to DOE to provide direct loans to non-federal borrowers for the purpose of constructing new high-capacity transmission lines and for upgrading interties between the various interconnections.
 - Direct loans terms are the lesser of 90 percent of the projected useful life of the transmission facility or 30 years, no more than 80 percent of the total project cost, and cannot be subordinate to other financing. Interest rates are determined by DOE, taking into consideration market yields on outstanding marketable obligations of the U.S. of comparable maturities.

Department of Transportation

Through investments in low-emissions technologies and federal building infrastructure, the IRA aims to reduce the carbon footprint of the way we move and introduce lower-emissions materials to federal building construction. The IRA also makes significant investment to ensure equity and affordable transportation access. Pertinent funding streams are below.

- **Low-Carbon Transportation Materials Grants**
 - The IRA will provide \$2 billion to the Federal Highway Administration (FHWA) to reimburse or provide incentives to state, local governments and metropolitan planning organizations for the use of low-embodied carbon construction materials and products in projects.
- **Alternative Fuel and Low-Emission Aviation Technology Program**
 - The IRA will provide \$300 million to establish a competitive grant program for projects that develop, demonstrate or apply low-emission aviation technologies or produce, transport, blend or store sustainable aviation fuels (SAF), including:
 - \$244.53 million for production, transportation, blending, and storage of SAF
 - \$46.53 million for low-emission aviation technologies, and

- \$6 million for administration and oversight.
- Eligible entities include states or local governments, air carriers, airports, higher education institutions, research institutions, entities that produce, transport, blend or store SAF in the U.S., entities engaged RD&D of low-emission aviation technologies or nonprofits.
- Cost share is 25 percent for entities except small hub or non-hub airports, for whom the cost share is 10 percent. DOT must consider:
 - 1. The capacity for the entity to increase domestic production of SAF;
 - 2. Projected GHG emissions on a lifecycle basis;
 - 3. Job creation and supply chain partnership opportunity;
 - 4. SAF GHG emissions on a life-cycle basis including feedstock and fuel production as well as direct and indirect land use change;
 - 5. Benefits of ensuring a diversity of feedstocks for SAF, including the use of waste carbon oxides and direct air capture.
- Directs DOT to adopt a Life Cycle Analysis (LCA) model for GHG emissions within two years of bill enactment.
- **Environmental Review Implementation Funds**
 - The IRA will provide \$100 million to facilitate the development and review of documents for the environmental review process for proposed projects for state, local governments and metropolitan planning organizations.
- **Neighborhood Access and Equity Grant Program**
 - The IRA will provide \$3 billion to FHWA to support neighborhood equity, safety and affordable transportation access with competitive grants to reconnect communities divided by existing infrastructure barriers, mitigate negative impacts of transportation facilities or construction projects on disadvantaged or underserved communities, and support equitable transportation planning and community engagement activities.
 - Eligible funding recipients are a state, unit of local government or metropolitan planning organizations.

Environmental Protection Agency

One of the key pillars of the Inflation Reduction Act is investing in technologies and infrastructure to reduce carbon emissions into the environment. The IRA accomplishes this by requiring EPA to award grants for the development of zero-emission technologies and establishing tax credits for purchasing clean vehicles. A summary of pertinent EPA funding is below.

- **Greenhouse Gas Reduction Fund**
 - The IRA will provide \$27 billion to establish a new Greenhouse Gas Reduction Fund to invest in nonprofit, state and local financing institutions designed to rapidly deploy low- and zero emission technologies by leveraging investment from the private sector. Projects funded under this program must reduce air pollution.
 - The IRA requires that least 40 percent of benefits flow to low-income and disadvantaged communities to deploy or benefit from zero-emission technologies, including distributed technologies on residential rooftops, and direct investments are prioritized for projects that would otherwise lack access to financing, and that can ensure continued operability by monetizing repayments and revenues for other financial assistance.

- **Clean Heavy-Duty Vehicles**
 - The IRA will provide \$1 billion to establish a program to make awards of grants and rebates to states, local governments and nonprofit school transportation associations to replace Class 6 and Class 7 heavy-duty vehicles with zero-emission vehicles.
 - Funding could also be used to purchase, install, operate and maintain the infrastructure needed to charge, fuel or maintain zero-emission vehicles; for the workforce development and training to support the maintenance, charging, fueling and operation of the zero-emission vehicles; or to plan and provide technical assistance to support of zero-emission vehicle adoption and deployment.
 - The law requires that 40 percent of funding be directed to recipients proposing to replace eligible heavy-duty vehicles serving communities located in nonattainment areas.
- **Grants to Reduce Air Pollution at Ports**
 - The IRA will provide \$3 billion to establish a program to award grants and rebates for the purchase and installation of zero-emission equipment and technology at ports, as well as the development of climate action plans at ports.
 - Eligible funding recipients are a port authority; a state, regional, local or tribal agency with authority over a port authority; or an air pollution control agency. Private entities may apply in conjunction with eligible recipients.
 - The law allocates 25 percent of the funding for investments made at ports in nonattainment areas.
- **Climate Pollution Reduction Grants**
 - The IRA will provide \$5 billion to carry out Clean Air Act (CAA) Section 137.
 - Section 137 provides \$250 million for grants for the costs of developing plans to reduce GHG air pollution and directs the EPA to make such a grant to at least one state, air pollution control agency, municipality, or Indian tribe in each state. Each plan must include programs, policies, measures and projects that will achieve GHG air pollution reduction.
 - Section 137 further provides \$4.75 billion for the EPA to competitively award grants to implement GHG air pollution reduction plans. To apply for a grant, applicants must include information regarding the projected reduction of GHG air pollution reductions, including in low-income and disadvantaged communities in its plan.
- **Methane Emissions Reduction Program**
 - The IRA will provide \$1.55 billion in financial incentives (i.e., grants, rebates, contracts and loans) for industry to monitor and reduce methane emissions from petroleum and natural gas systems, mitigate legacy air pollution.
 - Funding may also be used to provide support for communities for improving climate resiliency, improving and deploying industrial equipment and processes that reduce methane and other GHG emissions and waste, supporting innovation in reducing methane and other GHG and waste from petroleum and natural gas systems, permanently shutting in and plugging wells on non-federal land, and environmental restoration.
- **Methane Emissions Fee**

- The IRA will create an EPA-charged and imposed fee for facilities that emit more than 25,000 metric tons of carbon dioxide annually. The fee will apply to facilities that support oil and gas production, including transmission, processing, storage or gathering facilities.
- The IRA will allow companies that comply with future federal methane rules to avoid paying the fee as long as the same levels of emissions reductions are reached.
- The fee structure is: \$900 per ton of methane in 2024, \$1,200 per ton of methane in 2025, and \$1,500 per ton of methane in 2026.
- **Diesel Emissions Reduction Act Funding**
 - The IRA will provide \$60 million for Diesel Emissions Reduction Act (DERA) grants to identify and reduce diesel emissions in low-income and disadvantaged communities to address the health impacts of emissions on those communities.
- **Low-Emissions Electricity Program**
 - The IRA will provide \$87 million to EPA to carry out the following low-emissions electricity investments:
 - \$17 million to educate consumers on GHG emissions that result from domestic electricity generation;
 - \$17 million to educate and provide technical assistance to low-income and disadvantaged communities on GHG emissions that result from domestic electricity generation;
 - \$17 million to educate and provide technical assistance to industry on GHG emissions that result from domestic electricity generation;
 - \$17 million to educate and provide technical assistance to state, tribal and local governments on GHG emissions that result from domestic electricity generation;
 - \$1 million to evaluate GHG emission reductions anticipated to occur over the next 10 years; and
 - \$18 million be used to ensure the assessed reductions are achieved.
- **Greenhouse Gas Corporate Reporting**
 - The IRA will provide \$5 million to support enhanced standardization and transparency of corporate climate action commitments and plans.
- **Environmental Production Declaration Assistance**
 - The IRA will provide \$250 million to establish and carry out an Environmental Product Declaration (EPD) Assistance program to support development and enhanced standardization and transparency of environmental product declaration for construction materials and products, including measurements of embodied GHG emissions of the material or products.
- **Low-Embodied Carbon Labeling for Construction Materials**
 - The IRA will provide \$100 million to EPA, in consultation with the U.S. Department of Transportation (DOT), Federal Highway Administration (FHWA) and the General Services Administration (GSA), to develop and carry out a program to identify and label, based on environmental product declarations, low-embodied carbon construction materials and products used for transportation projects.

- These products must have substantially lower levels of embodied GHG emissions associated with all relevant stages of production, use, and disposal, as compared to industry averages as determined by EPA, based on environmental product declarations or determinations by state agencies and verified by EPA.

General Services Administration

The IRA also makes significant investment in greening federal buildings through the use of low-carbon materials and emerging technologies. A summary of funding is below.

- **General Services Administration (GSA) Assistance for Federal Buildings**
 - The IRA will provide \$250 million to the Federal Buildings Fund to convert GSA facilities to high performance green buildings.
- **Use of Low-Carbon Materials**
 - The IRA will provide \$2.15 billion to the Federal Buildings Fund to acquire and install low-embodied carbon materials and products for construction and alteration of buildings under jurisdiction, custody, and control of the GSA.
- **GSA Emerging Technologies**
 - The IRA will provide \$975 million to the Federal Buildings Fund for emerging and sustainable technologies, and related sustainability and environmental programs.

Tax Revenue Investments

Internal Revenue Service Funding

Through the IRA, the IRS will receive the following amounts of funding through fiscal year 2031.

- \$3.2B for Taxpayer Services
- \$45.6B for Enforcement
- \$25.3B for Operations Support
- \$4.8B for Business Systems Modernization

Stock Buyback Tax

The IRA will reform the tax code to apply a 1% fee on stock buybacks by publicly traded corporations. The tax goes into effect in the beginning of 2023 and it expected to raise \$74 billion.

Corporate Minimum Tax

The IRA establishes and imposes a 15% corporate alternative minimum tax on corporations that earn more than \$1 billion in annual profit, but do not pay at least a 15% tax rate. It is estimated that 125 companies would be subject to the tax, and that these 125 companies – which have average profits of \$9 billion – currently abide by tax rates of 1.1%. Corporations will calculate their annual tax liability through 1) 21% of profits less deductions and credits and 2) applying the 15% rate to the earnings they report to shareholders on their financial statements (known as book income). Whichever method produces a greater value will be the taxed figure. The provision is expected to raise \$222 billion.

Healthcare Investments

Prescription Drug Price Reform

Under the IRA, Medicare will be allowed to negotiate prescription drug prices beginning in 2023, with the negotiated prices going into effect in 2026. Only certain high-expenditure drugs can be negotiated on. Specifically, brand-name and biologic drugs without generic or biosimilar equivalents covered under Medicare Part B (administered by physicians) or Medicare Part D (retail prescription drugs) that are among the highest-spending Medicare-covered drugs and are nine or more years (small-molecule drugs) or 13 or more years (biologics) from FDA approval are eligible for negotiation. The number of negotiated drugs is limited to 10 Part D drugs in 2026, another 15 Part D drugs in 2027, another 15 Part B and Part D drugs in 2028, and another 20 Part B and Part D drugs in 2029 and later years.

Drug manufacturers will also be required to pay rebated to Medicare if they increase prices faster than inflation for drugs used by Medicare beneficiaries. The inflation rebate provision will be implemented in 2023, using 2021 as the base year for determining price changes relative to inflation.

Expanded Medicare Benefits

- Caps Medicare beneficiaries' out-of-pocket spending under the Medicare Part D benefit, first by eliminating coinsurance above the catastrophic threshold in 2024 and then by adding a \$2,000 cap on spending in 2025. The law also limits annual increases in Part D premiums for 2024 to 2030 and makes other changes to the Part D benefit design.
- Limits cost sharing for insulin to \$35 per month for people with Medicare, beginning in 2023, including covered insulin products in Medicare Part D plans and for insulin furnished through durable medical equipment under Medicare Part B.
- Eliminates cost sharing for adult vaccines covered under Medicare Part D, as of 2023, and improves access to adult vaccines under Medicaid and Children's Health Insurance Program (CHIP.)
- Expands eligibility for full Part D Low-Income Subsidies (LIS) in 2024 to low-income beneficiaries with incomes up to 150% of poverty and modest assets and repeals the partial LIS benefit currently in place for individuals with incomes between 135% and 150% of poverty.