

The Inflation Reduction Act: Summary of Budget Reconciliation Legislation

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President Joe Biden signed the Inflation Reduction Act of 2022 (IRA) into law on Aug. 16, 2022, following its passage along party lines in the U.S. Senate and House of Representatives. This comprehensive legislation is the result of many months of negotiations among Democrats to advance some of President Joe Biden's highest policy priorities. The IRA will reduce the deficit and makes major investments in healthcare, domestic energy production and manufacturing, and climate change.

After decades of failed attempts, the IRA includes a first-time provision that would allow the U.S. Department of Health and Human Services to negotiate prices of certain prescription drugs in Medicare and Medicaid. In addition, savings would be generated by requiring drug manufacturers to pay a rebate for drugs whose prices increase faster than inflation under Medicare, and would create several reforms in the Medicare drug program, also known as Part D, including a cap on out-of-pocket drug spending for seniors beginning in 2025. It also extends by three years the expanded and enhanced Affordable Care Act tax credit ahead of planned premium increases set to take effect in 2023.

With regard to energy and climate change, the IRA provides unprecedented amounts of funding – nearly \$369 billion in direct investment to ensure energy security, reduce carbon emissions, increase energy innovation and support environmental justice objectives with direct support for underserved communities. It will allow for the deployment of low carbon energy technologies while ensuring the president's objective to create good-paying jobs and on-shoring domestic manufacturing are met – all while reducing emissions by approximately 40 percent by 2030. For the first time, this legislation not only creates a 10-year runway for many energy tax incentives, it also fundamentally revises the tax code to create a technology-neutral approach to incentivize the deployment of low carbon technologies. Finally, there are a number of provisions included to support conventional energy development in the United States.

The IRA raises revenue with a few, but significant, changes to the tax code. This includes an alternative minimum tax on corporations, an excise tax on stock-buy backs, reinstating the Superfund tax on petroleum and oil, and increasing funding to the Internal Revenue Service. Unlike previous iterations of the bill, the IRA does not contain sweeping tax provisions aimed at increasing taxes on individuals.

The bill passed the Senate, 51-50, on Aug. 7, with Vice President Kamala Harris casting the tie-breaking vote, before passing the House, 220-207, on Aug. 12. With the law now enacted, federal agencies will move quickly to implement the bill's directives, a process which will require significant resources. The federal agencies have significant authority and will be responsible for the success of the IRA; implementation will include the promulgation of many new rules and decisions on how to deploy funding.

Holland & Knight's Public Policy & Regulation Group, along with other attorneys in relevant practices, stand ready to assist clients in understanding this new law, and with navigating and engaging the agencies through implementation.



The following provides an in-depth summary of the IRA, including:

Tax Revenue Raisers

- Corporate Alternative Minimum Tax
- Excise Tax on Stock Buy Backs
- Changes to Net Operating Loss Limitations for Individuals
- o Internal Revenue Service Enforcement Funding

Healthcare

- Affordable Care Act Tax Credits
- Medicare Drug Pricing Negotiation
- Inflation Rebates
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Energy and Climate Tax Incentives

- Energy Generation
- Energy Manufacturing
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• Climate, Energy and Environment Investments

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- Federal Permitting Improvement Steering Council
- Federal Energy Regulatory Commission
- White House Council on Environmental Quality
- Government Accountability Office
- Office of Management and Budget

Tax Revenue Raisers

Corporate Alternative Minimum Tax:

The IRA will impose a 15 percent alternative minimum tax on book income on applicable corporations, which includes U.S.-headquartered corporations with global financial statement revenue in excess of \$1 billion over a three-year average. To be subject to the tax, foreign-headquartered groups must also



have domestic financial statement revenue in excess of \$100 million over a three-year average. An applicable corporation makes a series of adjustments to its applicable financial statement to arrive at the income subject to the minimum tax. For example, adjustments are made to address defined benefit pensions and taxes. Also, adjustments are made to include effectively connected income and the group's share of Subpart F and global intangible low-taxed income (GILTI). Adjustments are also made to eliminate timing differences from accelerated depreciation and amortization of qualified wireless spectrum. The minimum tax applies to taxable years beginning after Dec. 31, 2022.

Excise Tax on Stock Buy Backs:

The IRA will impose a 1 percent excise tax on the fair market value of stock repurchased by a publicly traded corporation. The provision provides for several exceptions to the excise tax, including where: 1) the repurchased stock is acquired pursuant to a tax-free reorganization where the shareholder does not recognize gain or loss; 2) the repurchased stock is contributed to an employer sponsored retirement plan; 3) the stock is repurchased by a regulated investment company or real estate investment trust; or 4) the stock is repurchased by a dealer in securities. The provision is effective for stock repurchased after Dec. 31, 2022.

Changes to Net Operating Loss Limitations for Individuals:

As a last-minute amendment from Sen. Mark Warner (D-Va.), the IRA would extend the current limitation on individuals for excess business losses arising from an active business (e.g., from a partnership). The limitation is generally \$250,000 per individual (indexed to inflation). Current law is extended from Jan. 1, 2027 to Jan. 1, 2029.

Internal Revenue Service Enforcement Funding:

The IRA will increase IRS funding in the following amounts, to be available through fiscal year 2031:

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

It is expected that this additional funding will raise significant revenue.

Healthcare

The IRA extends for three additional years the expanded premium tax subsidies first enacted in the American Rescue Plan Act (ARPA), allowing for expanded and more affordable coverage on Affordable Care Act (ACA) Marketplace plans. The IRA also includes significant drug pricing reforms, including Medicare drug price negotiation, Medicare inflationary rebates and Medicare Part D benefit redesign. Notably, there are many areas where Congress delegated decisions to the Secretary of the U.S. Department of Health and Human Services (HHS) and thus will require further clarification through the regulatory process. The drug pricing provisions are also likely to be subject to legal challenges.



ACA Premium Tax Credits

The Affordable Care Act (ACA) created subsidies to offset the cost of health insurance, capping how people signing up on the ACA Marketplaces pay at a certain percent of their income. These subsidies work on a sliding scale. Under the original law, people whose incomes are at or just above the federal poverty level (FPL) received the most generous subsidies, and no subsidies were provided for those above 400 percent of poverty. However, the American Rescue Plan Act (ARPA) expanded the premium tax credits for a two-year period, making them more generous for lower-income beneficiaries and also extending them beyond the 400 percent FPL cut-off by capping beneficiary premiums at no more than 8.5 percent of an individual's income for a silver plan. The ARPA tax credits were originally set to expire on Jan. 1, 2023. Under the IRA, these credits will now be extended for another three years.

Medicare Drug Pricing Negotiation

The legislation allows the Medicare program to set the price of certain high-expenditure prescription drugs. Negotiation is limited to the single-source drugs with the highest-spend in Part B or Part D for 1) U.S. Food and Drug Administration (FDA)-approved drugs for which at least seven years have elapsed from approval and for which there is no generic on the market and 2) FDA-licensed biologics for which at least 11 years have elapsed since licensure and for which there is no biosimilar on the market. Small biotech drugs (until 2028), orphan drugs, low-spend Medicare drugs and plasma-derived products are excluded from price negotiation.

Drugs subject to the new negotiated price requirement will be initially selected in 2023, and the prices set will be applied beginning in 2026. Drugs must be selected by the Centers for Medicare & Medicaid Services (CMS) and an agreement must be reached with the manufacturer two years before the new price will apply.

Specifically, the bill directs HHS to negotiate prices for:

- 2026 (only Part D drugs eligible for negotiation): 10 drugs based on Part D spending
- 2027 (only Part D drugs eligible for negotiation): 15 drugs based on Part D spending
- 2028 (first year both Part B and D drugs are eligible for negotiation): 15 drugs based on combined Part B and Part D spending
- 2029 and beyond: 20 drugs based on combined Part B and Part D spending

The IRA spells out a detailed timeline involving an exchange of information between HHS and the manufacturer of a selected drug over the negotiation period. For instance, once Medicare gives a manufacturer a "written initial offer" and concise justification (based on several factors outlined in the IRA, including but not limited to research and development costs and distribution costs) for the proposed price, a drugmaker would have 30 days to either accept the proposal or make a counteroffer that is justified based on those same factors.

Once the negotiated price is set, the manufacturer would be required to offer the drug at the maximum fair price (MFP) with respect to Medicare beneficiaries. The MFP represents the ceiling on a drug's negotiated Part B or Part D price. It cannot exceed certain specified percentages of a drug's non-federal average manufacturer price (non-FAMP) or an amount reflecting an average market price and determined by the number of years since a drug's FDA approval.

The bill also allows for a delay in the negotiation of no more than two years for certain drugs where there is a "high likelihood ... that a biosimilar biologic product" of the reference biologic product will be



both "licensed and marketed" within the next two years. To avoid efforts to game this provision (for instance, being licensed but not marketed), if the biosimilar does not come to the market during the two-year period, the originator biologic manufacturer would be required to pay a rebate for the maximum fair price (MFP) amount and the biologic would be included in the selected drug list for the next applicable price period. In cases where these negotiated drug prices are lower than the 340B prices, manufacturers would be obligated to make the MFP available to covered entities, but in a non-duplicated amount to the ceiling price.

The IRA also includes enforcement provisions. Manufacturers will be subject to significant civil monetary penalties (CMPs) up to 10 times the difference between the MFP and the price charged for failing to offer the MFP with respect to a Medicare beneficiary, violating the terms of an agreement or knowingly providing false information. Additionally, manufacturers can be assessed an escalating excise tax beginning at 65 percent of the drug's prior year's total sales, increasing to 95 percent once the manufacturer is out of compliance for more than 270 days. Alternatively, the manufacturer may withdraw its products from Medicare instead of engaging in negotiations.

Inflation Rebates

Under the IRA, single-source Part B drugs and all Part D drugs, excluding certain low-spend drugs, would be required to pay a rebate on a unit of a drug paid under Part B or D where the price of the drug increases faster than inflation. The original intent was to apply this penalty to drugs under Medicare as well as private health insurance, but because of budgetary rules, the Senate parliamentarian determined that it could only be applied to Medicare. A manufacturer that does not pay a rebate would be subject to a civil monetary penalty (CMP) in an amount at least equal to 125 percent of the rebate amount.

According to an analysis by the Kaiser Family Foundation (KFF), these inflation-based rebates could apply to many drugs. The Foundation's analysis determined that, in 2019 and 2020, half of all Medicare-covered prescriptions saw price increases that outpaced inflation.

For Part B drugs, the rebate will be calculated as the total number of Medicare Part B units of the drug in the rebate quarter (excluding 340B units and packaged units); multiplied by the amount (if any) by which the rebate quarter Part B payment rate exceeds the inflation-adjusted benchmark quarter Part B payment rate. Part B drugs currently approved would have Q3 of 2021 as their payment amount benchmark quarter, while drugs approved after Dec. 1, 2020, would have the third full quarter after their approval as a benchmark quarter.

For Part D drugs, the rebate will be calculated as the total number of Medicare Part D units of the drug in the rebate year (excluding 340B units beginning in 2026); multiplied by the amount (if any) by which the volume-weighted average annualized average manufacturer price (AMP) for the rebate year exceeds the inflation-adjusted volume-weighted average annualized AMP for the benchmark year. The benchmark year for currently approved Part D drugs is 2021. Part D drugs approved after Oct. 1, 2021, will use the first calendar year following approval as their benchmark year.

A manufacturer subject to a rebate would receive a rebate invoice within six months of the end of the rebate quarter. The Secretary may choose to delay sending invoices for calendar quarters in 2023 and 2024 to not later than Sept. 25, 2025. A manufacturer would be required to pay the rebate within 30 days of invoice receipt.



Part D Benefit Changes and Other Notable Health Provisions

Out-of-Pocket Cap: While Medicare Part D has limits on patient copays, it does not have an explicit out-of-pocket cap for Medicare beneficiaries. When a beneficiary has incurred out-of-pocket costs and discounts slightly in excess of \$7,000, they reach what is known as the "catastrophic phase" of the benefit, where they pay 5 percent of the cost of their drugs (while Medicare covers 80 percent and plans cover the remaining 15 percent). The IRA eliminates this 5 percent cost-sharing in the catastrophic phase (effective in 2024) and caps total patient out-of-pocket costs in Part D at \$2,000 (effective in 2025).

Insulin Caps: The bill caps out-of-pocket costs for insulin copays under Medicare. Specifically, cost-sharing for Part D plans will be capped at \$35 for approved insulin products during plan years 2023 through 2025, after which it will be the lesser of \$35, 25 percent of the established maximum fair price or 25 percent of the negotiated price. There will be temporary subsidies for January-March 2023 for any cost-sharing over this amount and special limitations for insulin furnished under durable medical equipment. Senate budget procedural rules blocked the application of this price cap to private health insurance.

Pharmacy Benefit Manager Rebate Rule Further Delayed: The IRA further delays the implementation of a November 2020 HHS final rule that would have eliminated the safe harbor for Part D drug rebates and replaced it with a new one for point-of-sale discounts. The rule's implementation was previously delayed until Jan. 1, 2026, and this legislation further extends that delay to Jan. 1, 2032. Notably, the Congressional Budget Office (CBO) indicated that delaying the rebate rule saves money.

Enhanced Payments for Biosimilars: To incentivize the uptake of biosimilars, the IRA temporarily increases the Medicare Part B add-on payment for certain biosimilars from 6 percent to 8 percent of the reference product's average sales price (ASP) from Oct. 1, 2022, through the end of 2027. Additionally, for new biosimilars furnished on or after July 1, 2024, the IRA changes the initial period payment rate to be the lesser of the biosimilar's wholesale acquisition cost (WAC) plus 3 percent or 106 percent of the reference product's ASP.

Maximum Monthly Cap on Cost-Sharing Payments Under Prescription Drug Plans and Medicare Advantage Prescription Drug (MA-PD) Plans: The IRA creates a maximum monthly cap on cost-sharing payments beginning in 2025 and directs Prescription Drug Plan sponsors and Medicare Advantage organizations offering plans to provide beneficiaries with the option to pay copays in monthly installments.

Cap on Premiums/"Premium Stabilization": Under the IRA, Part D plans will have a cap on the amount that they can increase premiums from year to year – 6 percent through 2029. In 2030 and subsequent years, CMS will recalculate base premiums using the original Part D premium formula.

Low-Income Subsidy (LIS) Eligibility: The IRA expands eligibility for low-income subsidies under Part D of the Medicare Program from 135 percent of the federal poverty line (FPL) to 150 percent of the FPL beginning Jan. 1, 2024.

Vaccine Cost-Sharing: The IRA establishes a program to eliminate cost-sharing for Medicare Part D beneficiaries for vaccines recommended by the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices beginning in 2023.



Improving Access to Adult Vaccines Under Medicaid and CHIP: The IRA requires coverage of certain adult vaccinations under Medicaid and eliminates some cost-sharing. It also increases the Federal Medical Assistance Percentage (FMAP) by 1 percent for adult vaccines and their administration. Finally, the IRA requires the coverage of approved, recommended adult vaccines and their administration under Children's Health Insurance Program (CHIP) for individuals age 19 and older and eliminates cost-sharing.

Energy and Climate Tax Incentives

The IRA will rely heavily on the tax code to advance the deployment of clean energy technologies and to combat climate change. It will restore, modify and expand several tax credits and other incentives, while also creating new credits. The Joint Committee on Taxation estimates that in total, the provisions in Subtitle D – Energy Security of the IRA will cost approximately \$68 billion over the next 10 years. Below is a summary of Subtitle D.

Many of these provisions 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 identified communities, e.g., energy communities or low-income communities.

Another unique feature of the IRA is that it permits taxpayers, in particular situations, to elect a direct pay option in lieu of a tax credit, or the option to monetize the credits by transferring them to another entity.

Key Concepts: Bonus Credit		
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	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 project 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.	
Key Concepts: Credit Monetization		
Direct Pay	In certain limited circumstances a taxpayer can elect for direct payment of the tax credit. Importantly, direct payment is only available for an "applicable entity" which includes a tax-exempt entities, a state or political subdivision thereof, 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. This 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.	



Energy Generation

Production Tax Credit (PTC) Extension – Section 45:

- The IRA will extend the renewable energy production tax credit (PTC) until the end of 2024, after which the PTC will transition to technology-neutral.
- This credit applies to the production of energy from solar, wind, geothermal, biomass and hydropower and other eligible projects.
- The phasedown currently in place for wind energy is removed as of Jan. 1, 2022, permitting onshore and offshore wind projects to take the full value of the PTC for 2022, 2023 and 2024.
- The base credit will be 0.3 cents per kWh, with a bonus credit of 1.5 cents per kWh (credit multiplied by five) if prevailing wage and apprenticeship requirements are met (with an exception to these requirements for small projects).
- Taxpayers will be 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 is located in an energy community. If eligible for both, taxpayers
 can benefit from both of these percentage increases.
- The IRA will make a limited direct pay option available and the credits can be transferred.

Investment Tax Credit (ITC) Extension - Section 48:

- The IRA will extend the investment tax credit (ITC) for solar energy property and most other ITC-eligible property until the end of 2024. (Geothermal credit will be extended until 2035.)
- Like the PTC, the ITC will transition to technology-neutral in 2025.
- The IRA will expand what is eligible for the ITC, including energy storage technology.
- The base credit will be 6 percent, with a bonus credit of 30 percent (base credit multiplied by five) if prevailing wage and apprenticeship requirements are met.
- Similar to the PTC, taxpayers will be eligible for an additional 10 percent ITC if certain domestic content requirements are met or if the project is located in an energy community.
- In addition, there will be a potential 10 percent bonus credit for solar and wind facilities located in low-income communities.
- Alternatively, there will be a potential 20 percent bonus credit for solar and wind facilities that
 are part of a qualified low-income residential building project or a low-income economic benefit
 project.
- The IRA will make a limited direct pay option available and the credits can be transferred.

2022 - 2024: The IRA will extend, expand and modify the Section 45 PTC and the Section 48 ITC.



2025 - 2032: The IRA will establish a technology-neutral PTC and ITC, i.e., the Clean Energy Production Credit (Section 45Y) and the Clean Energy Investment Tax Credit (Section 48E).



Technology-Neutral PTC and ITC - Section 45Y and 48E:

- Beginning in 2025, the traditional ITC and PTC will generally no longer apply. They will be replaced by new technology-neutral credits.
- Eligibility for these credits generally requires that the facility's greenhouse gas (GHG) emissions are no greater than zero.
- The 45Y base credit value is 0.3 cents per kWh with a bonus credit (credit multiplied by five) if prevailing wage and apprenticeship requirements are met.
- The 48E base credit value is 6 percent with a bonus credit (credit multiplied by five) if prevailing wage and apprenticeship requirements are met.
- These credits phase 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.
- There will be a potential 10 percent bonus credit for energy communities 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.
- The IRA will make a limited direct pay option available and the credits are transferable.

Zero-Emission Nuclear Power PTC - Section 45U:

- The IRA will create a PTC for the production of electricity from a nuclear facility beginning in 2024. The credit expires after 2032.
- The base credit will be 0.3 cents per kWh, with a bonus credit of 1.5 cents per kWh (base credit multiplied by five) if the project meets prevailing and apprenticeship requirements.
- The credit is subject to reduction based on gross receipts of any electricity sold.
- The IRA will make a limited direct pay option available and the credit is transferable.

Energy Manufacturing

Advanced Energy Project Credit - Section 48C:

- The IRA will revise and extend the advanced energy project credit.
- This credit will be available for a wide range of renewable energy equipment, and will be focused on the manufacturing facilities related to the production of equipment.
- The advanced energy project credit will be an allocated tax credit, i.e., the IRA will set a
 maximum that can be allocated on a competitive basis.
- Specifically, the IRA will allocate \$10 billion; of which at least \$4 billion must be allocated to energy communities.
- The base credit will be 6 percent, with a bonus credit available (base credit multiplied by five) if prevailing wage and apprenticeship requirements are met.



Advanced Manufacturing Production Credit – Section 45X:

- The IRA will create a new production credit through 2032 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 credit amount will vary depending on the applicable eligible component, as shown in the chart below.

Component	Credit Amount		
Thin film PV cell	\$0.04/watt		
Crystalline PV cell	\$0.04/watt		
PV wafer	\$12/square meter		
Solar grade polysilicon	\$3/kilogram		
Polymeric backsheet	\$0.40/square meter		
Solar module	\$0.07/watt		
Wind energy component	Offshore wind vessel – 10 percent of vessel sales price All other – applicable amount (e.g., \$0.02 in the case of a blade)/watt		
Torque tube	\$0.87/kilogram		
Structural fastener	\$2.28/kilogram		
Inverter	Applicable amount (e.g., \$0.25 for central inverter)/watt		
Electrode active materials	10 percent cost of production		
Battery cell	\$35/kWh		
Battery module	With limitations, \$10 (\$45 if module does not use battery cells)/kWh		
Applicable critical mineral	10 percent cost of production		

Carbon Sequestration

Carbon Sequestration Credit - Section 45Q:

- The IRA will extend the carbon sequestration credit for facilities that begin construction before 2033, and provides additional modifications, including an enhanced credit for direct air capture (DAC) and lowering the carbon capture threshold requirements at facilities.
- Like PTC and ITC, there will be a bonus credit when prevailing wage and apprenticeship requirements are met.
- Generally, the prevailing wage and apprenticeship requirements will be met if:



- o for construction of a facility which begins 60 days after the Secretary of the Treasury publishes guidance, and any carbon capture equipment placed in service at such facility, such guidance is satisfied.
- for construction of any carbon capture equipment which begins 60 days <u>after</u> the Secretary of the Treasury publishes guidance, which is installed at a facility, the construction which begins prior to that date, such guidance is satisfied with respect to the carbon capture equipment.
- for construction of any carbon capture equipment which begins <u>prior</u> to the date that is 60 days after the Secretary of the Treasury publishes guidance, which is installed at a facility, the construction of which also begins prior to that date the requirements are deemed satisfied.

As with the prevailing wage requirements found in other IRA energy credits, there exists the opportunity for taxpayers to remedy violations.

- The IRA will lower the annual thresholds of carbon a facility must capture to qualify:
 - 18,750 tons of carbon oxide for power plants
 - o 12,500 tons of carbon oxide for industrial facilities, and
 - 1,000 tons of carbon oxide for DAC facilities.
- This credit will be available for direct pay for the first five years under broad conditions and the credits are transferable.
- The credit amounts per metric ton of carbon captured will be as follows:

	Base Credit (Per metric ton of carbon)	Bonus Credit (Per metric ton of carbon)
Carbon captured and used for enhanced oil recovery (EOR) or utilization	\$12	\$60
Carbon capture and sequestered	\$17	\$85
Direct air captured and used for EOR or utilization	\$26	\$130
Direct air captured and sequestered	\$36	\$180

Clean Fuels

Clean Hydrogen - Section 45V:

- The IRA will create a PTC and an ITC for clean hydrogen; taxpayers will have the option to elect.
- Clean hydrogen can be produced from different sources, including renewable electricity (green hydrogen) and natural gas reforming (blue hydrogen).
- To qualify, hydrogen must be produced through a process resulting in lifetime GHG emissions of no more than 4 kgs of CO2e per kg of hydrogen.
- The 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.



- A bonus credit multiplier is offered if prevailing wage and apprenticeship requirements are met, wherein the applicable credit may be multiplied by five.
- Taxpayers will be able to elect to receive an ITC in lieu of the PTC for a base credit of up to 6 percent, or 30 percent if prevailing wage and apprenticeship requirements are met.
- This credit will be available for direct pay for the first five years under broad conditions and the credits are transferrable.
- No clean hydrogen credit will be allowed for a facility which is already qualifying for the carbon sequestration credit.

Sustainable Aviation Fuel – Section 40B:

- The IRA will add 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).
- Upon expiration, the credit will transition to the Clean Fuel Production Credit (new Section 45Z).

Biodiesel Renewable Fuels and Alternative Fuels - Various Sections:

- The IRA will extend the biodiesel, renewable diesel, alternative fuels, alternative fuels mixtures and second generation fuels tax credits through 2024.
- Beginning in 2025, these credit will transition to the Clean Fuel Production Credit (new Section 45Z).

Clean Fuel Production Credit - Section 45Z:

- Beginning on Dec. 31, 2024, existing fuel credits will transition to the Clean Fuel Production Credit.
- The credit will expire at the end of 2027.
- 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.
- The base credit for transportation fuel will be 20 cents per gallon, while the SAF base credit will be 35 cents per gallon.
- The base credit is adjusted downward based on the emission factor of the fuel.
- The bonus credit is available (base credit multiplied by five) if production meets prevailing wage and apprenticeship requirements.

2022 - 2024: IRA extends the biodiesel, renewable diesel, alternative fuels, alternative fuels mixtures, and second generation fuels tax credits



2025 - 2027: IRA establishes the Clean Fuel Production Credit (Section 45Z)



Clean Vehicles

Alternative Fuel Refueling Property Credit – Section 30C:

- The IRA will extend and modify the tax credit available for alternative refueling property (i.e., electric vehicle charging), 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.
- A credit will also be available to individuals.
- The IRA will extend the credit availability to 2032.
- The IRA will require the property to be placed in a qualified census tract, and will make a bonus credit available if wage and apprenticeship requirements are met.
- 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.
- The IRA will make a limited direct pay option available and the credit is transferable.

Clean Vehicles Credit - Section 30D:

- The IRA will extend and modify 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:
 - Component 1 will be met when 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.
 - Component 2 will be met when a certain percentage of the battery is manufactured or assembled in North America.
- Vehicles meeting one but not both requirements 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.
- The new credit will eliminate the current statutory limit of 200,000 vehicles per manufacturer.
- The credit will apply to vehicles placed in service after Dec. 31, 2022, and runs through 2032.
- The credit can be transferred to a dealer under certain conditions, lowering the purchase price.

Previously Owned Clean Vehicles – Section 25E:

- The IRA will provide 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.
- Similar to the credit for new vehicles, taxpayers above certain income thresholds will not qualify and price thresholds exist:
 - 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 cannot exceed \$25,000.

Qualified Commercial Clean Vehicles - Section 45W:

The IRA will create a new credit for qualified commercial clean vehicles.



- The credit will be equal to 15 percent of its cost (30 percent if the vehicle is not powered by gasoline or diesel), or the incremental (excess) cost for such vehicle as compared to one that relies solely on gasoline or diesel.
- The maximum credit will be \$7,500 for vehicles with a gross weight rating of 14,000 pounds and \$40,000 for all others.
- The credit will apply to any vehicles placed in service after Dec. 31, 2022, through 2032.
- The IRA will make a limited direct pay option available.

Energy Efficiency

Nonbusiness Energy Property Credit – Section 25C:

- Beginning in 2022, the IRA will modify, expand and extend the nonbusiness energy property credit through 2032 by increasing the credit from 10 percent to 30 percent.
- The lifetime cap on the credit is replaced with an \$1,200 annual credit limitation, except in the case of heat pumps and biomass stoves, for which the credit may be up to \$2,000. Additionally:
 - o the credit for no one item of qualified residential energy property may exceed \$600
 - o the credit for all exterior windows and skylights, aggregated, may not exceed \$600, and
 - the credit for any single exterior door may not exceed \$250, and the credit for all exterior doors, aggregated, may not exceed \$500
- Qualified energy property made eligible for the credit cover a range of products, including water heaters, heat pumps, central air conditioners, hot water boilers, biomass stoves, oil furnaces, air sealing materials and systems, costs of home energy audits, and electrical panels installed to enable qualified improvements, with specific efficiency requirements for each upgrade.
- Roofs are made ineligible for the credit.
- Reporting requirements are updated to mandate that manufacturers and taxpayers label and report, respectively, a product identification number associated with the property in order to access the credit.

Residential Clean Energy Credit - Section 25D:

- The IRA will extend through 2034 the Section 25D credit, which allows taxpayers to claim a
 credit for qualified residential energy efficient property purchases, while implementing a
 phaseout as outlined below:
 - o through 2033, the credit is 30 percent
 - o in 2033, the credit is 26 percent
 - o in 2034, the credit is 22 percent
- Battery storage with capacity of at least 3 kWh is eligible for the credit.

Energy Efficient Commercial Buildings Deduction – Section 179D:

 Beginning in 2023, the IRA will modify, expand and extend the energy efficient commercial buildings deduction.



- The IRA will reduce the amount by which a building must increase its efficiency to qualify for the deduction from 50 percent to 25 percent, update the reference standard to ASHRAE 90.1-2007 and keep it current with any future ASHRAE updates, and eliminate the partial allowance of the 179D deduction.
- The base deduction will be 50 cents per square foot, and the deduction can be increased 2 cents for each percentage point increase in energy efficiency, up to \$1 per square foot.
- The bonus deduction will be \$2.50 per square foot (base credit multiplied by five) if prevailing
 wage and apprenticeship requirements are met, and the deduction can be increased 10 cents
 for each percentage point increase in energy efficiency, up to \$5 per square foot.
- The cap on the deduction is reduced from a lifetime cap to a three-year cap.

New Energy Efficient Home Credit - Section 45L:

- The IRA will extend through 2032 and increase the value of the residential energy efficient
 property credits providing contractors with tax credits for housing units built or remodeled to
 reach energy-saving specifications for a variety of home types outlined in the chart below.
- A bonus credit is offered for multifamily homes if prevailing wage requirements are met during the construction of the units.

Home Type	Efficiency Standard	Base Credit	Bonus Credit
Single-Family	Energy Star Single-Family New Homes Program	\$2,500	N/A
Manufactured Homes	Energy Star Manufactured Homes National Program	\$2,500	N/A
Multifamily Homes	Energy Star Manufactured National and Regional Program	\$500	\$2,500
Multifamily Homes – Zero-Energy Ready	DOE Zero Energy Ready Home Program	\$1,000	\$5,000

Superfund

Reinstatement of Superfund Tax – Section 4611:

- The IRA will reinstate the Superfund tax on crude oil received at a U.S. refinery and petroleum products entered in to the U.S. for consumption, use or warehousing.
- The tax will be increased from historic levels from 9.7 cents to 16.4 cents per barrel.
- The tax will be effective in 2023 and will not sunset.



Climate, Energy and Environment Investments

In supplement to the tax incentives for clean energy, the IRA will make direct investments in programs across more than a dozen agencies, providing unprecedented resources to the U.S. Environmental Protection Agency (EPA), U.S. Department of Agriculture (USDA), U.S. Department of the Interior (DOI) and U.S. Department of Energy (DOE) and other agencies to improve air quality, invest in climate-smart and resilient infrastructure, and advance domestic energy and transportation technologies. The IRA will encourage an "all-of-the-above" approach to U.S. energy policy, pairing funding for renewable energy development with policies to protect oil and gas development intended to ensure energy security. In parallel, the IRA will make wide-ranging investments in energy efficiency across buildings, industry, and transportation to reduce emissions, and aimed at saving money for consumers and businesses.

Throughout the legislation, the IRA prioritizes and directly targets funding for environmental justice. Numerous programs include requirements for investments to be made in low-income communities, communities of color, and rural communities that are oftentimes disadvantaged and disproportionately exposed to toxic pollution.

Noteworthy trends at the agency level include:

Environmental Protection Agency (EPA):

- The IRA will put a price on methane emissions, marking the first time EPA will directly levy fees onto emitters to price in climate externalities associated with superpollutants. This fee is also tied to \$1.5 billion in incentives for methane reduction technologies.
- The IRA will give EPA broad discretion over the bill's largest single pot of money, the \$27 billion Greenhouse Gas Reduction Fund, which will allow EPA to invest in clean energy technologies via green banking, offering federal financing for projects without the requirements associated with direct federal investment.
- The IRA will offer state, local and tribal governments a wide range of grants and financial incentives to reduce air pollution, with an emphasis on reaching disadvantaged populations, environmental justice and fenceline communities.
- The IRA applies across numerous EPA programs a specific definition of "greenhouse gas" that includes air pollutants, carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons and sulfur hexafluoride.

U.S. Department of Agriculture (USDA):

- The IRA will invest significant and gradually increasing resources in conservation programs administered by the Natural Resources Conservation Service (NRCS), to the tune of \$20 billion – the second-largest single pot of money in the bill.
- Funding for forestry programs is divided fairly equally between hazardous fuels reduction to reduce wildfire risks and conservation activities, including efforts to support forests' potential for natural carbon sequestration.
- The IRA will support climate-friendly development of rural communities through bolstered appropriations for a variety of popular programs, including nearly \$10 billion to support rural cooperatives' access to renewable energy.



• U.S. Department of Energy (DOE):

- Across DOE programs, the IRA bolsters domestic manufacturing, industrial emissions reductions, and energy infrastructure including transmission in addition to clean energy research, development and deployment initiatives.
- Nearly \$10 billion is allocated to building efficiency through DOE programs, with resources passing through to states, local governments, tribes, and directly back to homeowners in the form of residential efficiency rebates to lower household energy bills.
- The IRA will increase commitment authority for many of DOE's loan programs, leveraging federal resources as a multiplier for clean energy financing.

U.S. Department of the Interior (DOI):

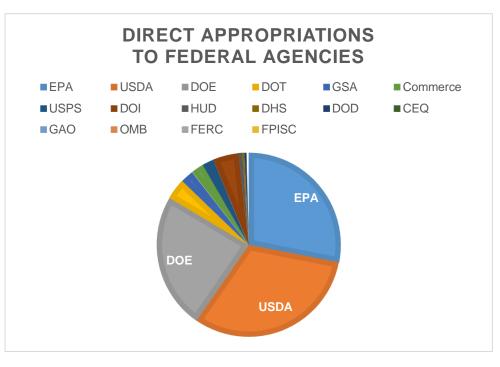
- The IRA's "all-of-the-above" strategy to U.S. energy development is reflected most notably in the DOI title: investment and opportunity for traditional and renewable energy development are paired together, including guaranteeing onshore and offshore leasing opportunities for both sectors.
- The IRA will raise royalties on natural resource extraction, including establishing a new royalty for methane extraction, including venting and flaring.
- During IRA negotiations, Sen. Catherine Cortez Masto (D-Nev.) advocated for increase funding for drought response and preparedness activities in Western states, resulting in a \$4 billion boost in the final package considered by the Senate.

• U.S. Department of Defense (DoD):

 The IRA builds on President Joe Biden's recent invocation of the Defense Production Act (DPA) to accelerate domestic manufacturing of clean energy technologies (solar; transformers and electric grid components; heat pumps; insulation; and electrolyers, fuel cells, and platinum group metals), providing an infusion of funding for DPA activities.

The graph below offers a holistic overview of direct IRA appropriations to federal agencies (beginning FY 2022).





Agency	Total Appropriation
USDA	\$46.684 billion
EPA	\$41.491 billion
DOE	\$35.292 billion
DOI	\$6.646 billion
DOT	\$5.442 billion
GSA	\$3.375 billion
DOC	\$3.310 billion
USPS	\$3.015 billion
HUD	\$1 billion
DHS	\$500 million
DoD	\$500 million
FPISC	\$350 million
FERC	\$100 million
CEQ	\$62.5 million
GAO	\$25 million
OMB	\$25 million
TOTAL	\$147.817 billion



U.S. Department of Agriculture (USDA)

Conservation Programs

Additional Agricultural Conservation Investments (\$20 billion)

- The IRA will provide \$20 billion for Farm Bill conservation programs (authorized through the Commodity Credit Corporation (CCC)), extend the program authorizations through 2031, and stipulate funding be prioritized for projects that mitigate or address climate change, including reducing, capturing, avoiding, or sequestering certain GHG emissions:
 - Environmental Quality Incentives Program (EQIP): Funding increased: \$250 million for FY 2023; \$1.75 billion for FY 2024; \$3 billion for FY 2025; \$3.45 billion for FY 2026; stipulating:
 - the additional funding is exempted from the statutory requirement that at least 50 percent of payments target livestock production, including grazing management,
 - within the allocations, the requirement for on-farm conservation trial funding is increased from \$25 million to \$50 million annually, with prioritization afforded to proposals that utilize diet and feed management to reduce methane emissions from livestock, and
 - funds must go to agricultural practices that directly improve soil carbon or reduce nitrogen losses, or reduce, capture, avoid, or sequester carbon dioxide, methane or nitrous oxide emissions.
 - Conservation Stewardship Program (CSP): Funding increased: \$250 million for FY 2023; \$500 million for FY 2024; \$1 billion for FY 2025; \$1.5 billion for FY 2026, stipulating:
 - funds must go to either: agricultural practices that directly improve soil carbon or reduce nitrogen, or reduce, capture, avoid or sequester carbon dioxide, methane, or nitrous oxide emissions associated with agricultural production.
 - Agricultural Conservation Easement Program (ACEP): Funding increased: \$100 million for FY 2023; \$200 million for FY 2024; \$500 million for FY 2025; \$600 million for FY 2026 for easements or interests in land that will most reduce, capture, avoid or sequester carbon dioxide, methane or nitrous oxide emissions associated with eligible land.
 - Regional Conservation Partnership Program (RCPP): Funding increased: \$250 million for FY 2023; \$800 million for FY 2024, \$1.5 billion for FY 2025, \$2.4 billion for FY 2026 stipulating:
 - funds prioritized for partnerships that directly improve soil carbon or reduce nitrogen losses, or reduce, capture, avoid or sequester carbon dioxide, methane or nitrous oxide emissions for either agricultural producers or nonindustrial private forestland owners.
 - funds may be prioritized for projects that either leverage corporate supply chain sustainability commitments; or utilize models that pay for outcomes from targeting methane and NOx emissions.



 clarifies that the statutory cap of not more than 15 alternative funding arrangements or grant agreements with one or more eligible partners each fiscal year does not apply to these funds.

Conservation Technical Assistance (\$1.4 billion)

- The IRA will provide \$1 billion to the Natural Resource Conservation Service (NRCS) to provide conservation technical assistance through Sept. 30, 2031,
- The IRA will provide \$300 million for NRCS to carry out a program to quantify carbon sequestration and carbon dioxide, methane and nitrous oxide to inform the USDA Greenhouse Gas Inventory and Assessment Program, and
- The IRA will provide an additional \$100 million to cover program administration expenses.

Rural Development and Agricultural Credit

Additional Funding for Electric Loans for Renewable Energy (\$1 billion)

The IRA will provide \$1 billion in loan subsidy under Section 317 of the Rural Electrification Act
with forgiveness authority up to 50 percent of loan amount, or greater, if granted a waiver from
the Secretary, including for projects that store electricity in support of renewable energy
production.

Rural Energy for American Program (REAP) (\$2.22 billion)

- The IRA will provide \$1.72 billion for the Rural Energy for America Program (REAP), including \$820.25 million for FY 2022 and \$180.28 million for FYs 2023 through 2027.
- The IRA will provide an additional \$144.8 million for FY 2022 and \$31.8 million for FYs 2023 through 2027 for underutilized renewable energy technologies and program technical assistance, including reducing the match requirement for these grants from 75 percent to 50 percent.

Biofuel Infrastructure and Agriculture Product Market (\$500 million)

• The IRA will provide \$500 million in FY 2022 for competitive grants for infrastructure improvements for blending, storing, supplying or distributing biofuels, including installation, retrofitting or upgrading fuel dispensers for higher ethanol and biodiesel blends (E15 or greater); or for construction and retrofitting home heating oil distribution centers to accommodate ethanol and biodiesel blends; the bill includes a 25 percent match requirement. The bill excepts transportation infrastructure not on location where fuels are blended, stored, supplied or distributed.

USDA Assistance for Rural Electric Cooperatives (\$9.7 billion)

 The IRA will provide \$9.7 billion for loans and grants to electric cooperatives to purchase renewable energy, renewable energy systems, zero-emission systems, and carbon capture and storage systems, to deploy such systems or make energy efficiency improvements to generation and transmission assets. USDA is directed to prioritize projects that achieve the



greatest GHG emission reductions and that will otherwise aid disadvantaged rural communities. Individual awards capped at \$970 million, and grants require a 75 percent cost share.

Farm Loan Immediate Relief for Borrowers with At-Risk Agricultural Operations (\$3.1 billion)

 The IRA will provide \$3.1 billion in FY 2022 for distressed borrowers of direct or guaranteed loans administered by the Farm Service Agency to provide relief to borrowers for agricultural operations are at financial risk.

USDA Assistance and Support for Underserved Farmers, Ranchers, Foresters (\$2.859 billion)

- The IRA will provide \$125 million for outreach, mediation, financial training, capacity building, cooperative development, agricultural credit training and other technical assistance to underserved farmers, ranchers or forest landowners, including veterans beginning farmers and ranchers, and those living in high poverty areas.
- \$250 million in loans and grants to improve land access for underserved farmers, ranchers or forest landowners, including veterans, beginning farmers and ranchers, and those living in high poverty areas.
- \$10 million to fund activities of one or more commissions to address racial equity issues within USDA
- \$250 million to land-grant institutions including tribal land-grant colleges and Hispanic-serving institutions for research, education, extension and scholarships for programs that provide internships and pathways to agriculture sector or federal employment.
- \$2.2 billion for financial assistance to farmers, ranchers or forest landowners determined to have experienced discrimination in farm lending programs, up to \$500,000 per individual
- \$24 million for administrative costs to implement this section

U.S. Forest Service (USFS)

National Forest System Restoration and Fuels Reduction Project (\$2.15 billion)

- The IRA will provide \$2.15 billion to the USFS, broken down as follows:
 - \$1.8 billion for hazardous fuels reduction projects on USFS land within the wildlandurban interface
 - \$200 million for vegetation management projects on USFS land in accordance with a water source management plan or a watershed production and restoration action plan
 - o \$100 million to improve efficiency and effectiveness of USFS NEPA review, and
 - \$50 million for the USFS to complete an inventory of old-growth and mature forests within the NFS system, and for protection of those forests
- Funds cannot be used for projects in wilderness areas or wilderness study areas, that include construction of permanent roads or trails, that are inconsistent with land management plans, or are carried out on lands not under the USFS system.
- The IRA includes a cost-share waiver authority.



Competitive Grants for Non-Federal Forest Landowners (\$550 million)

- The IRA will provide funds for grants under the Cooperative Forestry Assistance Act Section 13A, requiring at least a 20 percent cost share, as follows:
 - \$150 million for underserved foresters to invest climate mitigation or forest resilience practices
 - \$150 million for underserved foresters' participation in emerging private markets for climate mitigation and forest resilience
 - \$100 million for small forest landowners (fewer than 2,500 acres) to participate in emerging private markets for climate mitigation and forest resilience
 - \$50 million for states and other entities to pay private forestland owners to implement forest practices based on the best available science to provide measurable increases in carbon sequestration and storage beyond customary practices on comparable land, and
 - \$100 million for grants under the wood innovation grant program under Section 8643 of the 2018 Farm Bill, including for the construction of facilities and hauling removed material to reduce hazardous fuels to locations where the material can be utilized.
 Grants are capped at \$5 million and require a 50 percent cost share

State and Private Forestry Conservation Programs (\$2.2 billion)

- The IRA will provide \$700 million for the Forest Legacy Program to provide grants to states to acquire land and interests in land.
- The IRA will provide \$1.5 billion for the Urban and Community Forestry Assistance program, providing multiyear grants to state agencies, local governments, tribes or nonprofits for tree planting.



U.S. Environmental Protection Agency (EPA)

Decarbonization and Emission Reduction Programs

Greenhouse Gas Reduction Fund (\$27 billion)

- 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 zeroemission technologies by leveraging investment from the private sector. Projects funded under this program must reduce air pollution by reduction or avoidance of GHGs.
- 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; investment also available for indirect investment supporting public, quasi-public and nonprofit entities that offer financing for projects, including community and low-income focused lenders and capital providers.

Clean Heavy-Duty Vehicles (\$1 billion)

- 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 bill requires that 40 percent of funding (\$400 million) be directed to recipients proposing to replace eligible heavy-duty vehicles serving communities located in nonattainment areas (i.e., areas with high air pollution).

Grants to Reduce Air Pollution at Ports (\$3 billion)

- 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 partnership with the aforementioned eligible recipients.
- The bill allocates 25 percent of the funding (\$750,000) for investments made at ports in nonattainment areas.

Climate Pollution Reduction Grants (\$5 billion)

- The IRA will provide \$5 billion to carry out Clean Air Act (CAA) Section 137 as follows:
 - 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 (\$1.55 billion)

- 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 a fee, imposed and charged by EPA, 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 ramps up over the next few years as follows:
 - o \$900 per ton of methane in 2024
 - o \$1,200 per ton of methane in 2025, and
 - \$1,500 per ton of methane in 2026

Diesel Emissions Reduction Act Funding (\$60 million)

The IRA will provide \$60 million for Diesel Emissions Reduction Act (DERA) grants to identify
and reduce diesel emissions resulting from goods movements facilities (e.g., airports, railyards
and distribution centers), and vehicles servicing goods movement facilities, in low-income and
disadvantaged communities to address the health impacts of emissions on those communities.

Low-Emissions Electricity Program (\$87 million)

- The IRA will provide \$87 million to EPA to carry out CAA Section 135, via the following investments:
 - \$17 million to educate consumers on GHG emissions that result from domestic electricity generation and use
 - \$17 million to educate and provide technical assistance to low-income and disadvantaged communities on GHG emissions that result from domestic electricity generation and use
 - \$17 million to educate and provide technical assistance to industry on GHG emissions that result from domestic electricity generation and use
 - \$17 million to educate and provide technical assistance to state, tribal and local governments on GHG emissions that result from domestic electricity generation and use
 - \$1 million to evaluate GHG emission reductions anticipated to occur over the next 10 years, as a result from the aforementioned education initiatives, and
 - \$18 million be used to ensure the assessed reductions are achieved



Greenhouse Gas Corporate Reporting (\$5 million)

 The IRA will provide \$5 million to support enhanced standardization and transparency of corporate climate action commitments and plans, and progress toward meeting such commitments and implementing such plans.

Environmental Production Declaration Assistance (\$250 million)

• 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, by: providing grants and technical assistances to businesses that manufacture construction materials and products for developing and verifying environmental product declarations, and to states, tribes and nonprofits that support those businesses; and to assist in measuring, reporting and steadily reducing the quantity of embodied carbon of constructions materials and products.

Low-Embodied Carbon Labeling for Construction Materials (\$100 million)

- 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.

Air Pollution Monitoring, Mitigation and Reduction

Environmental and Climate Justice Block Grants (\$3 billion)

- The IRA will provide \$3 billion to establish program to provide grants invest in community-led
 projects in disadvantaged communities and community capacity building centers to address
 disproportionate environmental and public health harms related to pollution and climate change.
- Eligible funding recipients will be community-based nonprofits or organizations, or a partnership between community-based nonprofit organizations and a tribe, a local government or an institution of higher education.
- Eligible activities include:
 - community-led air and other air pollution monitoring, prevention and remediation, investments in low- and zero-emission and resilient technologies, and workforce development that help reduce GHG emissions and other air pollutants
 - mitigating climate and health risks from urban heat islands, extreme heat, wood heater emissions and wildfire events
 - o climate resiliency and adaptation
 - o reducing indoor toxics and indoor air pollution, or
 - facilitating engagement of disadvantaged communities in state and federal public processes



Funding to Address Air Pollution (\$280.5 million)

- The IRA will provide \$280.5 million to EPA for grants to address air pollution, broken down as follows:
 - a. **Fenceline Air Monitoring and Screening Air Monitoring:** \$117.5 million for grants to deploy, integrate, support and maintain fenceline air monitoring, screening air monitoring, national air toxics trend stations, and other air toxics and community monitoring.
 - b. **Multipollutant Monitoring Stations:** \$50 million for grants to expand the national ambient air quality monitoring network with new multipollutant monitoring stations, and to replace, repair, operate and maintain existing monitors.
 - c. Air Quality Sensors in Low-Income and Disadvantaged Communities: \$3 million for grants to carry out the activities described above (in (a) and (b)) to deploy, integrate and operate air quality sensors in low-income and disadvantaged communities.
 - d. **Emissions from Wood Heaters:** \$15 million for grants for testing and other agency activities to address emissions from wood heaters.
 - e. Methane Monitoring: \$20 million for grants for monitoring methane emissions.
 - f. Clean Air Act Grants (CAA): \$25 million to EPA for grants to carry out Section 103 of the Clean Air Act (CAA), a national research and development program (R&D) grant program at EPA for air pollution control agencies, as well as Section 105 of the CAA, grants for support of air pollution planning and control programs.
 - g. Other Activities (CAA): \$45 million for grants to carry out Sections 111 ("Standards of performance for new stationary sources"), 115 ("International air pollutants"), 165 ("Preconstruction requirements"), 177 ("New motor vehicle emission standards in nonattainment areas"), 202 ("Emissions standards for new motor vehicles or new motor vehicle engines"), 211 ("Regulation of fuels"), 213 ("Nonroad engines and vehicles"), and 231 ("Establishment of standards for aircraft emissions").
 - h. **Greenhouse Gas and Zero-Emission Standards for Mobile Sources:** \$5 million for EPA to provide grants to states to adopt and implement low- and zero-emission standards for mobile sources.

Funding to Address Air Pollution at Schools (\$40 million)

The IRA will provide \$37.5 million for grants to monitor and reduce air pollution schools in low-income and disadvantaged communities under CAA Sections 103 and 105, and provides \$12.5 million for providing technical assistance to schools in low-income and disadvantaged communities under CAA Sections 103 and 105, including to address environmental issues; to develop school environmental quality plans (e.g., standards for school building, design, construction and renovation), and to identify and mitigate ongoing air pollution hazards.

Funding for the Renewable Fuels Standard, per Section 211(O) of the Clean Air Act (\$15 million)

- The IRA will provide \$5 million to EPA for administration of the Renewable Fuels Standard, under Section 211 of the Clean Air Act, with respect to:
 - the development and establishment of tests and protocols regarding the environmental and public health effects of fuels and fuel additives
 - internal and external data collection and analyses to regularly updated applicable regulations, guidance, and procedures for determining lifecycle GHG emissions of a fuel, and
 - the review, analysis and evaluation of the impacts of all transportation fuels (including fuel lifecycle implications) on the general public and on low-income and disadvantaged communities



 This section also provides \$10 million for new grants to industry to support investments in advanced biofuels.

Program Implementation and Enforcement

Funding for Implementation of the American Innovation and Manufacturing Act (\$38.5 million)

- The IRA will provide \$38.5 million to implement the American Innovation and Manufacturing Act
 of 2020, enacted in Division S of the "Consolidated Appropriations Act, 2021" (Public Law 116260), which addresses the use and regulation of fluorinated compounds in products and
 manufacturing, including by requiring the EPA to establish specified production and
 consumption baselines for the phase-down of specified fluorinated compounds.
- Funding is broken down as follows:
 - \$20 million to implement the American Innovation and Manufacturing Act
 - o \$3.5 million to deploy new implementation and compliance tools, and
 - \$15 million for competitive grants for reclaim and innovative deconstruction technologies

Funding for Enforcement Technology and Public Information (\$25 million)

• The IRA will provide \$25 million, of which \$18 million is to update EPA's Integrated Compliance Information System (ICIS) and other technology infrastructure, \$3 million for grants to states, tribes and air pollution control agencies to update their systems, and \$4 million to acquire and update inspection software used by EPA, states, tribes and air pollution control agencies.

EPA Efficient, Accurate and Timely Reviews (\$40 million)

- The IRA will provide \$40 million to develop reviews for permitting and approval processes to improve agency transparency, accountability and public engagement.
- Eligible activities include hiring and training personnel, developing programmatic documents, procuring technical or scientific services for reviews, developing environmental data or information systems, stakeholder or community engagement, purchasing new equipment, and developing geographic information systems and other analysis tools.



U.S. Department of Energy (DOE)

Funding and Financing Programs

Domestic Manufacturing Conversion Grant Program (\$2 billion)

- 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 (\$5.912 billion)

- 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:
 - o 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 (\$3.6 billion)

- The IRA will provide \$40 billion in additional commitment authority for eligible projects under the
 Title XVII 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 (or sometimes included
 in the interest rate) 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.
- Additional provisions in this section clarify what constitutes a double benefit from the
 government except in the case of tax, federal land agreements, federal insurance, or projects
 using transmission facilities from a federal Power Marketing Administration or the Tennessee
 Valley Authority.

LPO Advanced Technology Vehicle Manufacturing (ATVM) (\$3 billion)

 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 (\$5 billion)

- The IRA will create a new program under LPO entitled, "Energy Infrastructure Reinvestment Financing," and provide \$5 billion through Sept. 30, 2026 to be leveraged for up to \$250 billion in commitment authority for loan guarantees (including refinancing) of eligible projects.
- Key provisions include:
 - The loan tenure 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 is defined as a facility, and associated equipment, used for 1) the generation or transmission of electric energy; or 2) the production, processing and delivery of fossil fuels, fuels derived from petroleum, or petrochemical feedstocks.
 - 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) if the applicant is an electric utility, the financial benefit of the program must be passed on to the customer or associated community.

Tribal Energy Loan Guarantee Program (\$75 million)

- 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

Transmission Facility Financing (\$2 billion)

- 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.

Grants to Facilitate the Siting of Interstate Electricity Transmission Lines (\$760 million)

- The IRA will provide \$760 million to issue grants to siting authorities, including state, local or tribal governmental entities, for the purpose of:
 - studying and analyzing the impacts of covered transmission projects
 - o examining up to three alternate transmission siting corridors



- participating in regulatory proceedings
- and for economic development activities for communities that may be affected by the construction and operation of a covered transmission project
- Transmission lines must be high-voltage interstate or offshore electricity transmission lines, proposed to be constructed and to operate at least 275 kilovolts (kV) of alternating or direct current (or 200 kV for offshore alternating or direct current), and must have indicated intent to apply for regulatory approval. To receive a grant, the siting authority must agree to reach a final decision on the application no later than two years after the grant is authorized. Cost share of 50 percent.

Interregional and Offshore Wind Electricity Transmission Planning, Modeling and Analysis (\$100 million)

- The IRA will provide \$100 million to perform transmission planning, modeling, and analyses
 regarding the development of interregional and offshore wind transmission projects and to
 convene stakeholders to address the development of such transmission projects. Topics of
 interest include:
 - clean energy integration into the electric grid, including the identification of renewable energy zones
 - the effects of changes in weather due to climate change on the reliability and resilience of the electric grid
 - o cost allocation methodologies that facilitate the expansion of the bulk power system
 - the benefits of coordination between generator interconnection processes and transmission planning processes
 - the effect of increased electrification on the electric grid
 - o power flow modeling
 - the benefits of increased interconnections or interties between or among the Western Interconnection, the Eastern Interconnection, the Electric Reliability Council of Texas, and other interconnections, as applicable
 - the co-optimization of transmission and generation, including variable energy resources, energy storage and demand-side management
 - the opportunities for use of non-transmission alternatives, energy storage and gridenhancing technologies
 - economic development opportunities for communities arising from development of interregional electricity transmission and transmission of electricity that is generated by offshore wind
 - evaluation of existing rights-of-way and the need for additional transmission corridors;
 and a planned national transmission grid, which would include a networked transmission
 system to optimize the existing grid for interconnection of offshore wind farms



Energy Efficiency and Electrification: Residential

Home Energy Performance-Based, Whole House Rebates (\$4.3 billion)

- The IRA will provide \$4.3 billion to DOE to award state energy offices to develop and implement a HOMES program, offering rebates for whole-house energy savings retrofits.
- Rebate amounts are as follows:
 - Single family homes
 - Retrofits with savings of 20 percent to 35 percent: the lesser of \$2,000 or 50 percent of the project cost
 - Retrofits with savings of more than 35 percent: the lesser of \$4,000 or 50 percent of the project cost
 - Measured energy savings in home or home portfolios with energy savings of at least 15 percent: payment rate per kWh saved, equal to \$2,000 for a 20 percent reduction for the state's average home, or 50 percent of the project cost
 - Multifamily building owners
 - Retrofits with savings of 20 percent to 35 percent: \$2,000 per dwelling up to \$200,000 per building
 - Retrofits with savings of more than 35 percent: \$4,000 per dwelling up to \$400,000
 - Measured energy savings in home or home portfolios with energy savings of at least 15 percent: payment rate per kWh saved, equal to \$2,000 for a 20 percent reduction for the state's average home, or 50 percent of the project cost
 - Single-family homes occupied by low- or moderate-income households or multifamily buildings with at least 50 percent of dwellings occupied by low- or moderate-income households
 - Retrofits with savings of 20 percent to 35 percent: the lesser of \$4,000 or 80 percent of the project cost
 - Retrofits with savings of more than 35 percent: the lesser of \$8,000 or 80 percent of the project cost
 - Measured energy savings in home or home portfolios with energy savings of at least 15 percent: payment rate per kWh saved, equal to \$4,000 for a 20 percent reduction for the state's average home, or 80 percent of the project cost.
- Recipients encouraged to provide rebates to low- or moderate-income households (household income of less than 80 percent of the median income of the area). Recipients may use up to 20 percent of grant amount for planning, administration, and technical assistance.

High Efficiency Electric Home Rebate Program (\$4.5 billion)

- The IRA will provide \$4.275 billion for grants to State Energy Offices and \$225 million for tribes to create electrification rebate programs for homeowners and multifamily building owners.
- Rebate amounts may total up to \$14,000 for new construction purchases, replacement of nonelectric appliances, or first-time purchase of the appliance.
 - Covers up to 100 percent of project cost for households below 80 percent of the area median income, and 50 percent of the project cost for households between 80 percent to 150 percent of the area median income.



- Covers up to 100 percent of project cost for multifamily units where 50 percent of households are below 50 percent of the area median income, and 50 percent of the project cost for multifamily units where 50 percent of households are between 80 percent to 150 percent of the area median income.
- Appliance upgrades
 - Up to \$1,750 for a heat pump water heater
 - Up to \$8,000 for a heat pump for space heating or cooling
 - Up to \$840 for an electric stove, cooktop, range or oven; or for an electric heat pump clothes dryer
- Non-Appliance Upgrades
 - Up to \$4,000 for an electric load service center upgrade
 - Up to \$1,600 for insulation, air sealing and ventilation
 - Up to \$2,500 for electric wiring
- Installation
 - Up to \$500, commensurate with the scale of upgrades installed and project labor practices
- Applications must include plans to: verify income eligibility; allow rebates at the point of sale that ensures income eligibility can be verified at the point of sale; and prevent duplication or "double-dipping."

State-Based Home Energy Efficiency Contractor Training Grants (\$200 million)

 The IRA will provide \$200 million to provide financial assistance to states to develop and implement programs to train and educate contracts on installation of home energy efficiency and electrification improvements. Funds may be used to reduce training costs for employees, to provide testing and certification, or to partner with nonprofits.

Building Efficiency and Resilience

Assistance of Latest and Zero Building Energy Code Adoption (\$1 billion)

- The IRA will provide \$1 billion total for support to state and local governments to adopt updated building codes, broken down as follows:
 - \$330 million to DOE to support states and local communities to adopt updated building energy codes for residential and commercial buildings, or to implement a plan to achieve full compliance including training and enforcement programs. Under this title, residential buildings must meet or exceed the 2021 International Energy Conservation Code, or achieve equivalent or greater energy savings. Commercial buildings must meet or exceed the ANSI/ASHRAE/IES Standard 90.1-2019, or achieve equivalent or greater energy savings.
 - \$670 million for DOE to support grants for states and local governments to adopt building codes that meet or exceed zero energy provisions in the 2021 International Energy Conservation Code or an equivalent stretch code, and implement a plan to achieve full compliance including training and enforcement.



Environmental Reviews

DOE Environmental Reviews (\$115 million)

The IRA will provide \$115 million to hire and train personnel, develop programmatic
environmental documents, procure technical or scientific services for environmental reviews,
develop environmental data or information systems, engage in stakeholder and community
engagement, purchase new equipment for environmental analysis to facilitate timely and
efficient environmental reviews and authorizations.

Miscellaneous DOE Funding

National Laboratory Infrastructure (\$2 billion)

- The IRA will provide funding to the Office of Science through FY 2027, broken down as follows:
 - \$133.24 million for science lab infrastructure projects
 - \$303.66 for high energy physics construction and major equipment
 - o \$280 million for fusion energy construction and major equipment
 - \$217 million for nuclear physics construction and major equipment
 - \$163.791 million for advanced scientific computing research facilities
 - o \$294.5 million for basic energy sciences projects, and
 - \$157.813 million for isotope research and development facilities
- The IRA will provide \$150 million through FY 2026 to each office: Fossil Energy and Carbon Management (FECM), Nuclear Energy and Energy Efficiency and Renewable Energy (EERE) for infrastructure and general plant projects.

High-Assay Low-Enriched Uranium Availability Program (\$700 million)

- The IRA will provide funds through FY 2026 to carry out elements of the High-Assay Low-Enriched Uranium (HA-LEU) Availability program established in the Energy Policy Act of 2020 (42 USC 16281), which authorized DOE to establish and carry out of a program to support the availability of HA-LEU for civilian domestic research, development, demonstration and commercial use.
- The IRA will provide funding as follows:
 - \$100 million to carry out licensing and regulatory programs in support of HA-LEU research and development with commercial entities, including transportation packaging design
 - o \$500 million for acquisition, stockpiling and stakeholder assessment
 - \$100 million for support of civilian domestic R&D and commercial use of HA-LEU

DOE Oversight (\$20 million)

 The IRA will provide \$20 million to the DOE Office of Inspector General (OIG) for oversight of IRA programs.



U.S. Department of the Interior (DOI)

Fossil Fuel Resources

Offshore Oil and Gas

• The IRA will raise the minimum royalty from 12.5 percent to 16.66 percent (with a maximum royalty of 18.75 percent).

Lease Sales Under the 2017-2022 Outer Continental Shelf Leasing Program:

- The IRA will require DOI to reinstate lease sale 257 by accepting the highest valid bid within 30 days of the enactment of the Act
- The IRA will require the Interior Secretary to hold Lease Sale 258 by Dec. 31, 2022
- The IRA will require the Interior Secretary to hold Lease Sale 259 by March 31, 2023
- The IRA will require the Interior Secretary to hold Lease Sale 261 by Sept. 30, 2023

Mineral Leasing Act Modernization

- The IRA will raise the minimum royalty from 12.5 percent to 16.66 percent.
- The IRA will increase the oil and gas minimum bid from \$2 per acre for a period of two years to \$10 per acre during the 10-year period beginning on the date of enactment of the Inflation Reduction Act of 2022.
- The IRA will increase the fossil fuel rental rates from \$1.50 per acre to \$3 per acre per year during the two-year period beginning on the date the lease begins, \$5 per acre per year for the following six-year period, and not less than \$15 per acre per year thereafter.
- The IRA will authorize the Secretary to hold a new round of competitive bidding for any lease
 where no bid is accepted or received or the land for which a lease terminates, expires, is
 canceled or is relinquished.

Royalties on all Extracted Methane

- The IRA will establish royalties for gas produced from federal lands and on the Outer Continental Shelf, including gas consumed or lost by venting, flaring or negligent releases through equipment during upstream operations.
- Royalties will not apply when gas is vented or flared for less than 48 hours in an emergency situation; gas is used or consumed within the area of the lease, unit, or communitized area for the benefit of the lease, unit or communitized area; and gas that is unavoidably lost.

Ensuring Energy Security

- The IRA will prohibit wind or solar energy development on federal land for 10 years unless the following conditions are met:
 - an onshore oil and gas lease sale has been held in the 120 days prior to the issuance of the right-of-way, and
 - The acreage offered to lease for oil and gas development in the last year is at least 2 million acres or 50 percent of the acreage for which expressions of interest have been made, whichever is smaller



- The IRA will prohibit leasing for offshore wind development unless the following conditions are met:
 - o an offshore oil and gas lease sale has been held in the last year, and
 - at least 60 million acres have been offered for offshore oil and gas development in the last year

Offshore Wind

 The IRA will authorize DOI to grant leases, easements and rights-of-way off the Atlantic, Gulf Coast and U.S. Territories Continental Shelves, directing a call for information and nominations for prosed wind lease sales for the latter by Sept. 30, 2025.

Public Lands

National Parks and Public Lands Conservation and Resilience (\$250 million)

 The IRA will provide \$250 million to carry out projects for the conservation, protection and resiliency of lands and resources administered by the National Park Service (NPS) and the Bureau of Land Management (BLM).

National Parks and Public Lands Conservation and Ecosystem Restoration (\$250 million)

• The IRA will provide \$250 million to carry out conservation, ecosystem and habitat restoration projects on lands administered by the NPS and BLM.

NPS Employees (\$500 million)

• The IRA will provide \$500 million to hire employees in units of the NPS.

NPS Deferred Maintenance

 The IRA will provide \$200 million for priority deferred maintenance projects within the bounds of the NPS.

Drought Mitigation in the Reclamation States

- The IRA will provide \$4 billion available through FY 2026 for drought mitigation in reclamation states, prioritized to the Colorado River Basin and other basins experiencing comparable longterm drought.
- Activities eligible for funding include: compensation for a reduction in water use; voluntary system conservation projects; and ecosystem and habitat restoration to address issues caused by drought

Drought Response and Preparedness

Bureau of Reclamation Domestic Water Supply Projects (\$550 million)

• The IRA will provide \$550 million to the Bureau of Reclamation for grants, contracts or financial assistance agreements for disadvantaged communities for the cost of planning, design or construction of water projects with the primary purpose of providing domestic water supplies to communities or households that do not have reliable access to water.



Canal Improvement Projects (\$25 million)

The IRA will provide \$25 million for the design, study and implementation of projects, including
pilot and demonstration projects, to cover water conveyance facilities with solar panels to
generate renewable energy.

Bureau of Indian Affairs

Tribal Climate Resilience (\$235 million)

- The IRA will provide \$220 million for tribal climate resilience and adaptation programs.
- The IRA will provide \$10 million for fish hatchery operations and maintenance programs at the Bureau of Indian Affairs.
- The IRA will provide \$5 million for administrative costs.

Tribal Electrification Program (\$150 million)

 The IRA will provide \$150 million through FY 31 for the provision of electricity to unelectrified tribal homes through zero-emissions energy systems; transitioning electrified tribal homes to zero-emissions energy systems; and associated home repairs and retrofitting necessary to install the zero-emissions energy systems.

Native Hawaiian Climate Resilience (\$25 million)

• The IRA will provide \$25 million through FY 31 to carry out, through financial assistance, technical assistance, direct expenditure, grants, contracts or cooperative agreements, climate resilience and adaptation activities that serve the Native Hawaiian Community.

Emergency Drought Relief for Tribes (\$12.5 million)

• The IRA will provide \$12.5 million through FY 26 for near-term drought relief actions to mitigate drought impacts for Indian tribes that are impacted by the operation of a Bureau of Reclamation water project, including through direct financial assistance to address drinking water shortages and to mitigate the loss of tribal trust resources.

U.S. Fish and Wildlife Service (USFWS)

Funding to Address Climate Induced Weather Events (\$125 million)

- The IRA will provide \$121.25 million to the USFWS to make direct expenditures, award grants, and award contracts to rebuild and restore units of the National Wildlife Refuge System and state wildlife management areas, including by:
 - o addressing the threat of invasive species
 - increasing the resiliency and capacity of habitats and infrastructure to withstand climate induced-weather events, or
 - o reducing damage by climate-induced weather events
- The IRA will provide \$3.75 million for USFWS to implement this program.



Endangered Species Act Recovery Plans (\$125 million)

- The IRA will provide \$12 million to the USFWS to develop and implement recovery plans under Section 4(f) of the Endangered Species Act of 1973.
- Section 4(f) of the Endangered Species Act requires the Secretary to develop and implement recovery plans for listed species. Recovery plans must include any site-specific management actions needed to achieve the species' conservation and survival, the estimated time and cost associated with those actions, and specific criteria for determining that the species has recovered and may be delisted.

Insular Affairs

Office of Insular Affairs Climate Change Technical Assistance (\$15 million)

 The IRA will provide \$15 million to provide technical assistance for climate change, planning, mitigation, adaptation and resilience to the United States Insular Areas; provides an additional \$9 million for necessary administrative expenses.

U.S. Geological Survey (USGS)

USGS 3D Elevation Program (\$23.5 million)

• The IRA will provide \$23.5 million to produce, collect, disseminate, and use 3D elevation data.

Miscellaneous DOI Provisions

Environmental Reviews (\$150 million)

The IRA will provide \$150 million to hire and train personnel, develop programmatic
environmental documents, procure technical or scientific services for environmental reviews,
develop environmental data or information systems, engage in stakeholder and community
engagement, purchase new equipment for environmental analysis to facilitate timely and
efficient environmental reviews and authorizations.

DOI Oversight (\$10 million)

• The IRA will provide \$10 million for oversight by the DOI Office of Inspector General (OIG) of IRA programs.



U.S. Department of Transportation (DOT)

Neighborhood Access and Equity Grant Program (\$3 billion)

- The IRA will provide \$3 billion to Federal Highway Administration (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.

Low-Carbon Transportation Materials Grants (\$2 billion)

- The IRA will provide \$2 billion to 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, and for the operations and administration
 FHWA.
- Reimbursement amounts equal to incrementally higher cost of using materials relative to the
 cost of using traditional materials; Incentive amount equal to 2 percent of the cost of using lowembodied carbon construction materials and products.

Alternative Fuel and Low-Emission Aviation Technology Program (\$300 million)

- The IRA will provide \$300 million 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:
 - o \$244.53 million for production, transportation, blending, and storage of SAF
 - o \$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 nonhub 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; and 4) for SAF, GHG emissions on a life-cycle basis including feedstock and fuel production as well as direct and indirect land use change (must demonstrate at least a 50 percent GHG reduction utilizing either GREET or ICAO models); and 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 (\$100 million)

 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.



General Services Administration (GSA)

Assistance for Federal Buildings (\$250 million)

 The IRA will provide \$250 million to the Federal Buildings Fund to convert GSA facilities to highperformance green buildings.

Use of Low-Carbon Materials (\$2.15 billion)

 The IRA will provide \$2.15 billion to the Federal Buildings Fund to acquire and install lowembodied carbon materials and products for construction and alteration of buildings under jurisdiction, custody, and control of the GSA.

GSA Emerging Technologies (\$975 million)

• The IRA will provide \$975 million to the Federal Buildings Fund for emerging and sustainable technologies, and related sustainability and environmental programs.

U.S. Department of Commerce (DOC)

National Oceanic Atmospheric Administration (NOAA) Funding

Investing in Coastal Communities and Climate Resilience (\$2.6 billion)

The IRA will provide \$2.6 billion for NOAA for conservation, restoration and protection of coastal
and marine habitats and resources, including fisheries, to prepare for extreme storms and
climate change effects, as well as for projects that support natural resources to sustain coastal
and marine resource dependent communities. Funds may take the form of grants, cooperative
agreements, or technical assistance to coastal states, District of Columbia, tribal governments,
nonprofits, local governments and higher education institutes.

Facilities of the NOAA and National Marine Sanctuaries (\$200 million)

The IRA will provide \$200 million for construction of new NOAA facilities, including piers, marine
operations facilities and fisheries laboratories; provides \$50 million to construct facilities to
support the National Marine Sanctuary System.

NOAA Efficient and Effective Reviews (\$20 million)

The IRA will provide \$20 million to accelerate and improve planning, permitting and approval
process. May support hiring and training of personnel, purchase of technical and scientific
services and new equipment, and improve agency transparency, accountability and public
engagement.

Oceanic and Atmosphere Research and Forecasting for Weather and Climate (\$200 million)

 The IRA will provide \$190 million for NOAA to procure high-performance computing, data processing capacity, data management and storage assets.

Computing Capacity and Research for Weather, Oceans and Climate (\$190 million)

• The IRA will provide \$190 million for NOAA to procure high-performance computing, data processing capacity, data management and storage assets.

Acquisition of Hurricane Forecasting Aircraft (\$100 million)

The IRA will provide \$100 million for NOAA to acquire hurricane hunter aircraft.



U.S. Postal Service (USPS)

USPS Clean Fleets (\$3 billion)

• The IRA will provide \$1.29 billion to purchase zero-emission delivery vehicles and \$1.71 billion for related infrastructure, including design and installation at USPS facilities.

USPS OIG (\$15 million)

• The IRA will provide \$15 million to USPS Office of the Inspector General (OIG) to support oversight related to IRA implementation.

U.S. Department of Housing and Urban Development (HUD)

Improving Energy Efficiency or Water Efficiency or Climate Resilience of Affordable Housing (\$1 billion)

- The IRA will provide \$837.5 million to provide loans and grants to fund projects targeting
 affordable housing and improving energy or water efficiency, enhance indoor air quality or
 sustainability, implement the use of zero-emission electricity generation, low-emission building
 materials or processes, energy storage, or building electrification or to address climate
 resilience. Principal amount of direct loans supported by the program not to exceed \$4 billion.
- Funding for related activities, including:
 - \$60 million for implementation, including financial reporting, research and evaluation, and cross-program costs
 - o \$60 million for cooperative agreements administered by the Secretary, and
 - \$42.5 million for energy and water benchmarking of eligible properties (regardless of whether they receive grants), and data analysis and evaluation at the property and portfolio level

U.S. Department of Homeland Security (DHS)

DHS Office of Chief Readiness Support Officer (\$500 million)

 The IRA will provide \$500 million to the DHS Office of the Chief Readiness Support Officer to carry out sustainability and environmental programs.

FEMA Building Materials Program

 The IRA will authorize the Federal Emergency Management Agency (FEMA) to allocate funds for purchasing low-carbon building materials and incentives for low-carbon and net-zero energy projects via disaster recovery programs.

U.S. Department of Defense (DoD)

Enhanced Use of the Defense Production Act of 1950 (\$500 million)

• The IRA will provide \$500 million to carry out programs authorized by the Defense Production Act (DPA) of 1950 for the accelerated domestic production of 1) solar; 2) transformers and electric grid components; 3) heat pumps; 4) insulation; and 5) electrolyzers, fuel cells, and platinum group metals.



Federal Permitting Improvement Steering Council (FPISC)

Federal Permitting Improvement Steering Council Environmental Review Improvement Fund Mandatory Funding (\$350 million)

 The IRA will provide \$350 million for FY 2023 to remain available through Sept. 30, 2031 for the Environmental Review Fund established under the Fixing America's Surface Transportation Act (FAST Act).

Federal Energy Regulatory Commission (FERC)

FERC Environmental Reviews (\$100 million)

The IRA will provide \$100 million to hire and train personnel, develop programmatic
environmental documents, procure technical or scientific services for environmental reviews,
develop environmental data or information systems, engage in stakeholder and community
engagement, purchase new equipment for environmental analysis to facilitate timely and
efficient environmental reviews and authorizations.

White House Council on Environmental Quality (CEQ)

Environmental and Climate Data Collection (32.5 million)

- The IRA will provide \$32.5 million to CEQ for the following activities:
 - to support and facilitate data collection efforts relating to disproportionate negative environmental harms and climate impacts, and cumulative impacts of pollution and temperature rise
 - to establish, expand and maintain efforts to track disproportionate burdens and cumulative impacts (including academic and workforce support for analytics and informatics infrastructure and data collection systems)
 - to support efforts to ensure that any mapping or screening tool is accessible to community-based organizations and community members

CEQ Efficient and Effective Environmental Reviews (\$30 million)

• The IRA will provide \$30 million to CEQ to carry out CEQ's functions and for the purposes of training personnel, developing programmatic environmental documents and developing tools, guidance and techniques to improve stakeholder and community engagement.

Government Accountability Office (GAO)

GAO Oversight (\$25 million)

• The IRA will provide \$25 million for oversight of the IRA, including the distribution and use of funds and whether economic, social and environmental impacts are equitable.

Office of Management and Budget (OMB)

OMB Oversight

• The IRA will provide \$25 million for OMB to oversee implementation and to track labor, equity and environmental standards, and performance of the IRA.



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