

## Inflation Reduction Act of 2022

## OVERVIEW

Significantly smaller than previous Democratic proposals, while still the largest climate investment in U.S. history.

## Revenue Raised: \$737B

- $15 \%$ Corporate Minimum Tax - \$222B
- Prescription Drug Pricing Reform - \$265B
- Increased IRS Tax Enforcement - \$124B
- 1\% Stock Buybacks Fee - \$74B

Investments: \$737B*

- Energy and Climate Provisions - \$369B*
- Affordable Care Act Extension - \$64B
- Deficit Reduction - \$300B plus

Estimated to reduce U.S. greenhouse gas emissions (GHG) by 40\% by 2030 vs. 2005 baseline.*

* These are only estimates!

Resources:
White House Guidebook
USGBC Highlights Deck

## IRA Bill Text <br> USGBC Comments on IRA Provisions

Note: This slide deck is intended as preliminary summary information and does not constitute tax advice.

## Inflation Reduction Act + Green Buildings <br>  <br> 

Incentives For Onsite
Renewables, Energy
Incentives For Onsite
Renewables, Energy Storage, Microgrids, EV Charging, etc.

Incentives \& Rebates for Efficiency Upgrades to New \& Existing Commercial Buildings, Homes, Multifamily, Public Buildings (179D, 25C, 45L)

Grants for Neighborhood Access, Environmental Justice, Coastal Resilience, etc.

Grants for Affordable Housing Upgrades and Building Energy Codes


Federal Green
Building Upgrades, Technology


Funding for EPDs, Procurement of
Low-Carbon Materials

## Residential - Inflation Reduction Act

## Sec. 45L Homebuilder Tax Credit (Sec. 13304)

Significantly expanded homebuilder tax credit extended for 10 years, through the end of 2032:

- Increased from \$2,000 currently for meeting outdated IECC reference to \$2,500 for meeting ENERGY STAR and \$5,000 for DOE zero-energy ready.
- Previously restricted to multifamily buildings three stories or less, the updates would make it accessible to all multifamily at $\$ 2,500 / \$ 5,000$ per unit (full credit requires meeting prevailing wage provisions).
- For affordable housing, credits do not reduce LIHTC basis.

Sec. 25C Home Efficiency Improvement Tax Credit (Sec. 13301)
Significantly increased home improvement incentives extended for 10 years, starting Jan. 1, 2023, through the end of 2032. Increased from 10\% of eligible expenses up to $\$ 500$ per lifetime currently to a credit of $30 \%$ of eligible expenses up to $\$ 1,200$ per year for most projects, with a higher cap of $\$ 2,000$ per year for heat pumps, heat pump water heaters and wood stoves.

- Taxpayers could receive the credit for insulation work one year, HVAC the next year, water heater the next, etc.
- Equipment/materials must meet specified performance requirements, with lower caps for some products, such as $\$ 600$ for traditional HVAC and for windows, \$150 for energy audits, etc.
- Allows combining $\$ 2,000$ heat pump credit with $\$ 1,200$ for other projects for potential annual maximum of $\$ 3,200$.

Home Efficiency and Electrification Rebates and Workforce Training (Secs. 50121 and 50122)

- $\$ 4.3$ billion for Home Energy Performance-based Whole House Rebates through State Energy Offices for energy-saving projects. Rebates doubled for low- and moderate-income households.
- Complemented by $\$ 200$ million in State-Based Home Energy Efficiency Contractor Training Grants to support residential EE workforce by providing stipends in support of contractor training, transition workers to a green workforce, and help small-businesses hire to meet the worker demand generated by the rebates.
- $\$ 4.5$ billion in rebates for electrification projects for low- and moderate-income households.


## Residential - Inflation Reduction Act

## Affordable Housing (Sec. 30002)

\$1B in grants and loans through HUD for sustainability improvements to affordable housing, authorized to seed up to \$4B in loans. Eligible projects include energy or water efficiency; indoor air quality or sustainability; climate resilience; and low-emission technologies, materials, or processes such as zero-emission electricity generation, energy storage, or building electrification. Includes $\$ 42.5 \mathrm{M}$ for energy and water benchmarking activities.

## Building Energy Code Adoption (Sec. 50131)

\$1B for grants helping state and local governments adopt and implement building energy codes. \$330M for meeting 2021 IECC or ANSI/ASHRAE/IES 90.1-2019; \$670M for meeting or exceeding the zero energy provisions in the 2021 IECC or an equivalent stretch code.

Sec. 25D Residential Clean Energy Tax Credit (Sec. 13302)
Extends the full $30 \%$ credit for eligible expenditures for on-site residential solar electric, solar water heating, fuel cell, small wind energy, and geothermal heat pumps through 2032. Credit then phases down to 26 percent in 2033 and 22 percent in 2034, expiring at the end of 2034. Expands eligible property to include battery storage.

## Sec. 30C EV Infrastructure Tax Credit (Sec. 13404)

Extends through 2032 a credit of $30 \%$ of the cost, up to $\$ 1,000$, for "qualified alternative fuel vehicle refueling property," including home EV chargers. Eligible homes must be in targeted rural or low-income census tracts starting in 2023.

## Commercial/Multifamily Buildings - Inflation Reduction Act

## Sec. 179D Tax Deduction for Energy Efficient Commercial Buildings (Sec. 13303)

Significantly expanded incentive starting Jan. 1, 2023, from \$1.80 per square foot currently to sliding scale of \$2.50-\$5.00 per square foot, with new pathway for existing building retrofits to use the deduction. New construction must achieve $25 \%$ $50 \%$ > evolving 90.1 reference standard; retrofits must demonstrate $25 \%-50 \%$ improvement over existing building EUI.

- Made permanent, adjusted for inflation annually.
- Receiving full credit requires meeting prevailing wage and apprenticeship requirements.
- Opens new eligibility for REITs to access the deduction.
- Maintains provision allowing allocation of the deduction for public projects to project designer (for schools, municipal , etc.), and expands allocation option to be used by tribal government projects and projects by nonprofits.

Sec. 45L Homebuilder Tax Credit (Sec. 13304)
As noted under previous Residential slide, large multifamily residential buildings will be eligible, with credits of $\$ 2,500$ per unit for meeting ENERGY STAR or $\$ 5,000$ per unit for meeting DOE zero-energy ready. Under the old structure, the credit has been limited to buildings three stories or less. For affordable housing, new credits do not reduce LIHTC basis, allowing developers to take both 45L and LIHTC (and potentially 179D also).

## Home Efficiency and Electrification Rebates and Workforce Training (Secs. 50121 and 50122)

Rebate programs noted under previous Residential slide also include opportunities for multifamily projects.

- $\$ 4.3$ billion for Home Energy Performance-based Whole House Rebates through State Energy Offices:
- Up to $\$ 400,000$ (or 50 percent of costs) for building retrofits that achieve energy savings of at least $35 \%$.
- Up to $\$ 200,000$ (or 50 percent of costs) for retrofits that achieve energy savings of at least $20 \%$.
- $\$ 4.5$ billion in rebates for electrification projects for low- and moderate-income households:
- Awaiting Department of Energy guidance on how these grants will apply to multifamily projects.


## Commercial/Multifamily Buildings - Inflation Reduction Act

## Sec. 48 Clean Electricity Tax Credit (Sec. 13102 \& 13702)

Expands and extends the Investment Tax Credit (ITC) for clean energy property investments, including solar, geothermal and combined heat and power. For most projects, credit of up to $30 \%$ of costs if prevailing wage and apprenticeship requirements are met, dropped to $6 \%$ if requirements are not met.

- Credit is available as direct pay for government entities, nonprofits, etc. that don't have tax liability.
- Credit increased by an additional $10 \%$ if domestic content requirements are met and another $10 \%$ if project is located in a designated "energy community" such as a brownfield site or a census tract with shuttered coal operations.
- Eligibility is expanded to cover new technologies such as energy storage, microgrid controllers and dynamic glass.
- In 2025, for most technologies, ITC converts to tech-neutral structure with similar incentives tied to GHG reduction.

Sec. 30C EV Infrastructure Tax Credit (Sec. 13404)
Expands and extends through 2032 the tax credit for "qualified alternative fuel vehicle refueling property," including EV charging systems. Credit of $30 \%$ of expenses up to $\$ 100,000$ per charging/fueling unit on commercial properties, including retail, office, etc. (Past cap was $\$ 30,000$ per property.)

- Available as direct pay to nonprofits and government entities that don't have tax liability.
- Must meet prevailing wage and apprenticeship program requirements or credit is reduced to $6 \%$.
- Eligible properties must be in targeted rural or low-income census tracts starting in 2023.
- Bidirectional charging equipment eligible starting in 2023.

Building Energy Code Adoption (Sec. 50131)
As noted under previous Residential slide, \$1B for grants helping state and local governments adopt and implement building energy codes. $\$ 330 \mathrm{M}$ for meeting 2021 IECC or ANSI/ASHRAE/IES 90.1-2019; \$670M for meeting or exceeding the zero energy provisions in the 2021 IECC or an equivalent stretch code.

## Public Buildings - Inflation Reduction Act

## Sec. 179D Tax Deduction for Energy Efficient Commercial Buildings (Sec. 13303)

The 179D tax deduction is commonly used in public building projects. As noted on earlier Commercial Buildings slide, 179D is permanently expanded starting Jan. 1, 2023, from $\$ 1.80$ per square foot currently to sliding scale of $\$ 2.50-\$ 5.00$ per square foot, with new pathway for existing building retrofits to access the deduction. Opens new eligibility for REITs to access the deduction. Maintains provision to allocate the deduction for public projects (schools, municipal , etc.) to project designer, and expands allocation option to be used for tribal government projects and projects by tax exempt entities (nonprofits).

## Sec. 48 Clean Electricity Tax Credit (Sec. 13102 \& 13702)

## Sec. 30C EV Infrastructure Tax Credit (Sec. 13404)

As noted previously, both the clean energy investment tax credit and the EV tax credit are available as direct pay to government entities.

GSA Procurement and Technology (Sec. 60503)
\$2.15B to GSA through 2026 to acquire and install low-embodied carbon materials and products for use in the construction or alteration of GSA facilities. Defines low-embodied carbon materials as those defined by EPA as having substantially lower levels of embodied carbon as compared to estimated industry averages. (See new EPA program for embodied carbon materials in Catch-All slide).

## Public Buildings - Inflation Reduction Act

## GSA Emerging Technologies (Sec. 60504)

$\$ 975 \mathrm{M}$ to GSA through 2026 for emerging and sustainable technologies and related sustainability and environmental programs. This appears to be funding for GSA's Green Proving Ground program, which is aimed at demonstrating innovative building technologies in federal facilities to help drive down operational costs and stimulate market transformation.

Federal Buildings (Sec. 60502)
$\$ 250 \mathrm{M}$ in FY22 to be spent by 2031 for the General Services Administration's (GSA) Federal Buildings Fund to convert GSA-owned or managed buildings to high-performance green buildings (as defined in section 401 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17061) - see pg. 108.

## Addressing Air Pollution at Schools (Sec. 60106)

$\$ 37.5 \mathrm{M}$ in grants and other activities through EPA to monitor and reduce air pollution and greenhouse gas emissions at schools in low-income and disadvantaged communities, with an additional \$12.5M in technical assistance to schools to address environmental issues and air pollution and to develop school environmental quality plans that include standards for building, design, construction, and renovation. Funding through 2031.

## Clean Power and Electric Vehicles - Inflation Reduction Act

## Sec. 48 Clean Electricity Tax Credit (Sec. 13702)

Expands and extends incentives for a variety of clean power technologies, including the Sec. 48 Investment Tax Credit (ITC) as noted under the Commercial/Multifamily Buildings slide and the Sec. 45 Production Tax Credit (PTC) for clean energy generation. For projects beginning construction after 2024, the incentives are replaced by new technology-neutral incentives based on emissions reduction. Eligibility is expanded to cover new technologies including energy storage technology, microgrid controllers and dynamic glass.

## Sec. 30D Clean Tax Vehicle Incentives (Sec. 13401)

Expands existing Sec. 30D clean vehicle tax incentive through 2032 for a $\$ 7,500$ tax credit on purchases of qualifying clean vehicles (EV, hydrogen, etc.) that meet certain domestic content requirements. Eliminates permanufacturer cap. Implements a new credit of up to $\$ 4,000$ for qualifying used clean vehicles, up to $30 \%$ of sales price. Maximum sales price and income limitations apply to both credits. Also implements a new tax credit for clean commercial vehicles.

## Heavy Duty Vehicles (Sec. 60101)

$\$ 1 B$ in EPA grants for states, municipalities and nonprofit school facilities to purchase clean heavy-duty vehicles, with $\$ 400 \mathrm{M}$ reserved for areas with poor air quality. Eligible expenses include rebates for purchases of eligible vehicles (school buses, garbage trucks, etc.) as well as investments in EV charging infrastructure and workforce training to support the maintenance, charging and operations.

## Catch-All/Flexible Provisions - Inflation Reduction Act

## Low-Embodied Carbon Materials, ESG and EPD (Secs. 60112, 60111, 60116, 60506)

$\$ 250$ million for the EPA to support the development, standardization and transparency of environmental product declarations (EPDs), along with $\$ 5$ million for similar efforts around corporate climate commitments. Additionally, there is $\$ 100$ million for the EPA to work with the Department of Transportation and GSA to develop a program to identify and label low-embodied carbon construction materials and products. Department of Transportation also receiving $\$ 2 \mathrm{~B}$ for low-carbon materials for use in federal highways, with eligible materials to be defined by EPA.

## Neighborhood Access and Equity Grants (Sec. 60501)

$\$ 3$ billion for a neighborhood access and equity grant program at the Department of Transportation to help states and local governments make walkability, safety, affordable transportation access, and other improvements including by removing existing transportation infrastructure that adversely impacts communities.

## Environmental and Climate Justice Block Grants (Sec. 60201)

\$3B through EPA for grants of up to three years to local governments, universities or community-based nonprofits (or partnerships of those entities) for a variety of environmental projects benefiting disadvantaged communities. Eligible activities include community-led pollution monitoring, prevention, and remediation; low- and zero-emission resilient technologies and related infrastructure; workforce development tied to GHG reduction; mitigating climate and health risks from urban heat islands; climate resiliency and adaptation; and reducing indoor air pollution.

## Catch-All/Flexible Provisions - Inflation Reduction Act

## Greenhouse Gas Reduction Fund (Sec. 60103)

\$27B to EPA for a greenhouse gas reduction green bank initiative with flexible project eligibility, divided into three categories of grants to local entities to provide loans, grants, technical assistance and other financing:

- $\$ 7$ billion in competitive grants for low-income and disadvantaged communities to utilize zero-emission technologies.
- $\$ 11.97$ billion for competitive grants for projects that reduce or avoid greenhouse gas emissions.
- $\$ 8$ billion in competitive grants for low-income and disadvantaged communities for climate-related activities.


## GHG Planning and Implementation Grants (Sec. 60114)

\$5B in grants to states, municipalities and other public entities to develop plans for addressing GHG pollution. Calls for $\$ 250 \mathrm{M}$ for planning grants, with EPA directed to award one grant to each state for the costs of developing a plan to reduce GHG. Balance of $\$ 4.75$ B for implementation grants awarded on a competitive basis.

Port Air Pollution Reduction Grants (Sec. 60102)
\$3B in competitive grants and rebates through EPA for ports to purchase or install zero-emissions port equipment and technology, and to develop climate action plans. $\$ 750$ million reserved for ports located in areas designated as nonattainment for air pollution.

## Catch-All/Flexible Provisions - Inflation Reduction Act

## DOE Loan Programs Office (Sec. 50141)

\$40B available until 2026 for loans from DOE Loan Programs Office under Section 1703 of the Energy Policy Act of 2005. Loans intended to support the commercial deployment of cutting-edge clean energy technologies.

Coastal Communities and Climate Resilience (Sec. 40001)
$\$ 2.6$ billion through the National Oceanic and Atmospheric Administration for direct expenditures, contracts, grants, and technical assistance to help coastal states, local governments, nonprofits, universities and others with projects to conserve, restore and protect coastal and marine habitats and resources, and prepare for extreme storms and other changing climate conditions, among other activities.

## Building Resilient Infrastructure and Communities (Sec. 70006)

Allows FEMA, under the Stafford Act, to use BRIC funding for low carbon materials and incentives that encourage low carbon and net zero energy projects, including an increase in federal cost share for such programs.

## HFC Phasedown Grants (Sec. 60109)

$\$ 38.5$ million to EPA to phase down hydrofluorocarbons (HFCs), with $\$ 20$ million for general implementation of the new phasedown legislation (AIM Act), $\$ 3.5$ million for deploying implementation and compliance tools, and $\$ 15$ million for competitive grants for reclaiming HFCs and innovative HFC destruction technologies.

## Tax Update Details - Inflation Reduction Act

| Sec. 45L New Home Construction | Old Incentive | New Incentive |
| :---: | :---: | :---: |
| Credit Value | \$1,000-\$2,000 per unit | \$2,500 or \$5,000 per unit |
| Performance Requirement | 50\% improvement over 2006 IECC | ENERGY STAR for $\$ 2,500$ and DOE Zero Energy Ready for \$5,000 |
| Duration | Old structure extended as-is through the end of 2022 | Updates take effect 1/1/2023 for 10-year extension through 12/31/2032 |
| Scope \& Conditions | - Available to single-family homes and multifamily projects of three stories or less under IECC <br> - No wage requirements <br> - Can't take Low Income Housing Tax Credit (LIHTC) and 45L credit | - Available for single family and multifamily projects of any size with \$2,500/\$5,000 per unit <br> - Multifamily projects must meet prevailing wage requirements or receive lower credit of $\$ 500 / \$ 1000$ Credit amended so it does not reduce basis for LIHTC, allowing affordable housing projects to use both |

## Tax Update Details - Inflation Reduction Act

| Sec. 179D Commercial Buildings | Old Incentive | New Incentive |
| :---: | :---: | :---: |
| Credit Value | \$1.80 per square foot | Sliding scale \$2.50 to \$5.00 |
| Performance Requirement | 50\% improvement over latest DOE-determined ASHRAE standard. (This was updated in December 2020 legislation from 50\% improvement over ASHRAE 90.1-2007) | Must exceed latest DOE/Treasurydetermined ASHRAE 90.1 by at least $25 \%$ to receive $\$ 2.50$, rising by 10 cents up to $\$ 5.00$ for each percentage-point improvement up to $50 \%$ > 90.1 OR <br> Existing buildings can get $\$ 2.50-\$ 5.00$ deduction by demonstrating 25\%-50\% energy use intensity reduction over existing baseline, making the deduction far more attractive to retrofits <br> * Projects must meet prevailing wage/apprenticeship requirements for full deduction |

Tax Update Details - Inflation Reduction Act

| Sec. 179D Commercial Buildings (cont.) | Current Incentive | New Incentive |
| :---: | :---: | :---: |
| Duration | Made permanent in December 2020 legislation | Updates take effect 1/1/2023 and have no expiration |
| Other |  | - Deduction adjusted annually for inflation <br> - Drops partial deductions and interim lighting rule <br> - Projects must meet prevailing wage and apprenticeship requirements to receive full deduction, or receive a lower deduction of 50 cents to $\$ 1$ per square foot <br> - Allows nonprofits and Indian tribes to use the deduction via allocation to project designer in the same way public projects have traditionally used it <br> - Creates new rules making it easier for REITs to use deduction <br> - Allows 90.1 "reference standard" to automatically evolve over time |

## Tax Update Details - Inflation Reduction Act

| Sec. 25C - Home Improvements | Old Incentive | New Incentive |
| :---: | :---: | :---: |
| Credit Value | $10 \%$ of eligible purchases up to $\$ 500$ lifetime limit, with lower caps on some products (e.g., max \$300 for central AC) | $30 \%$ of eligible purchases with no lifetime limit. Maximum annual credit of $\$ 3,200$, but with lower annual caps on most products: <br> - $\$ 2,000$ for qualifying heat pumps, heat pump water heaters and wood stoves <br> - \$1,200 for qualifying envelope upgrades (insulation, sealing, etc.) <br> - $\$ 600$ for qualifying traditional AC , water heaters, furnaces, boilers etc. <br> - $\$ 600$ for qualifying windows; $\$ 500$ for doors |
| Performance Requirement | Must meet 2009 IECC for envelope. For equipment, varies by product category, with static performance specs that don't evolve over time | For envelope, latest IECC. For equipment, highest CEE Tier (not Advanced) for most product categories, allowing performance requirement to automatically evolve. ENERGY STAR Most Efficient for windows |

## Tax Update Details - Inflation Reduction Act

| Sec. 25C - Homeowner <br> Improvements (cont.) | Old Incentive | New Incentive |
| :--- | :---: | :---: |
| Duration | Old structure extended as-is through <br> the end of 2022 | Updates take effect $1 / 1 / 2023$ for 10 <br> years through $12 / 31 / 2032$ |
| Qualifying Products | Envelope improvements, water <br> heaters, heat pump water heaters, <br> central AC, air source heat pumps, <br> boilers, furnaces, windows, doors <br> and skylights and roofing | Minor changes. Adds electrical panel <br> upgrades for a credit up to $\$ 600$ and <br> home energy audits for credit of up to <br> $\$ 150$. Roofing removed as qualifying <br> category, and air barriers/duct sealing <br> clarified as qualifying |

