

# Inflation Reduction Act Tax Credits and Incentives Overview

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# Presenters

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# Agenda



**01 IRA OVERVIEW**

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**02 TAX CREDIT ENHANCEMENTS**

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**04 DIRECT PAY &  
TRANSFERABILITY PROVISIONS**

**05 RENEWABLE & ENERGY  
PRODUCTION INCENTIVES**

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**07 MANUFACTURING PRODUCTION  
CREDITS**

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**08 TRANSPORTATION & FUEL  
CREDITS**



# IRA Overview

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# What does the IRA include?

- Prescription drug price reform
- Affordable Care Act funding extension
- IRS tax enforcement
  - Invests \$80 billion over next 10 years
- 15% corporate minimum tax rate
  - AMT on Book Income of corporations with more than \$1B of income
  - 1% excise tax on corporate stock buybacks
- Clean energy investments



# Tax Credit Enhancements

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# Credit Base Rate, Prevailing Wage, Apprenticeship, and Bonus Credits

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Creates enhanced credit rate provision for various new and existing renewable energy and energy efficiency incentives.



# Credit Base Rate, Prevailing Wage, Apprenticeship, and Bonus Credits (Cont.)

- Base rate = 6%
- Bonus rate = 5x multiplier of base rate if prevailing wage and apprenticeship requirements are met
- Prevailing wage
- Apprenticeship = minimum percentage of total labor hours to construct facility
- 10% for 2022, 12.5% for 2023, and 15% after 2023
- Curing process





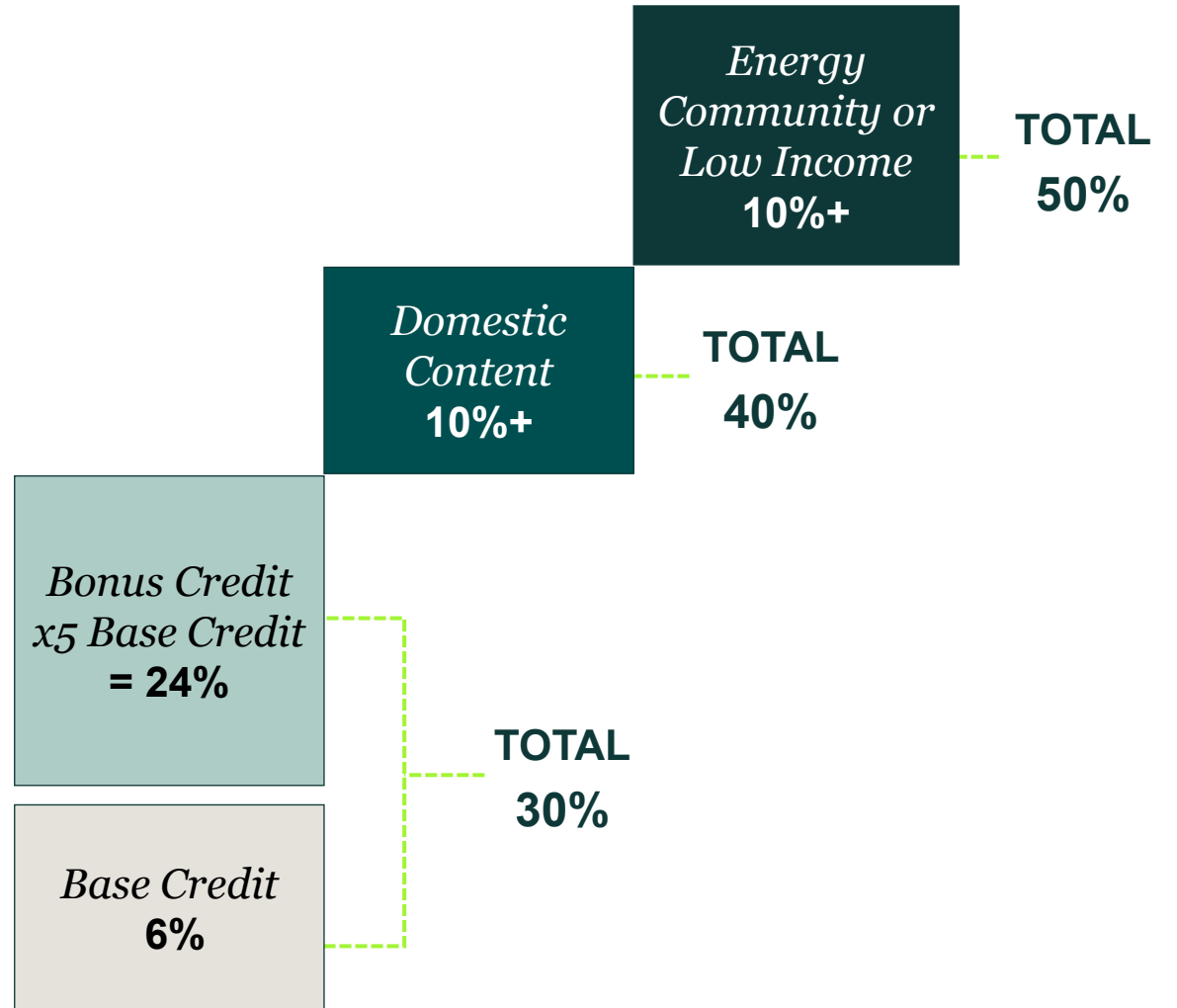
# Credit Base Rate, Prevailing Wage, Apprenticeship, and Bonus Credits (Cont.)

- Bonus credits are available for projects placed in service after 2022:
  - Domestic content: PTC or ITC = 10%
  - Located in energy communities: PTC or ITC = 10%
  - Located in low-income communities = ITC for solar and wind up to 20%
- Exempt Projects:
  - Less than one MWac projects
  - Began construction before Treasury guidance on apprenticeship/prevailing wage + 60 days
  - Prevailing wage and apprenticeship requirements are met



# Tax Credit Enhancements

## Example



# IRC § 179D Energy Efficient Commercial Building Deduction

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# § 179D Background (Pre-IRA)

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- Created in 2006
- Made permanent in 2020



# Background (Pre-IRA) (Cont.)

- Pre-IRA deduction: Energy efficient commercial building deduction of up to \$1.80 per square foot (adjusted for inflation: \$1.82/SF in 2021, \$1.88/SF in 2022)
- Available for newly constructed buildings or building improvements placed in-service after January 1, 2006
- Must be claimed in the tax year when the property was placed in service; for previously filed open returns, an amended return or a filed Form 3115 is required to claim the deduction



# Background (Pre-IRA) (Cont.)

Pre-IRA, § 179D deduction can be claimed by:



Owners and tenants of commercial buildings who've built or installed improvements



Owners of four-story or greater residential buildings who've built or installed the improvements



**Designers** of government-owned, energy-efficient buildings (architects, engineers, or contractors)



# Eligibility

## **Pre-IRA Law: Jan 1, 2006, to Dec 31, 2022**

- Commercial building owners
- Designers of buildings owned by government entities

## **IRA Update: Beginning Jan 1, 2023**

- Commercial building owners
- REITs
- Designers of buildings owned by:
  - Government entities
  - Not-for-profit organizations
  - Churches and other religious organizations
  - Tribal organizations
  - Not-for-profit schools and universities



# Tax Deduction Range

## **Pre-IRA Law: Jan 1, 2006, to Dec 31, 2022**

- \$0.60/square foot for each of three eligible systems (HVAC and hot water, interior lighting, and building envelope)
- \$1.80/square foot maximum if energy savings is 50% or greater

## **Adjusted for inflation**

- 2021: \$0.61/system to \$1.82 max
- 2022: \$0.63/system to \$1.88 max





# Tax Deduction Range (Cont.)

## **IRA Update: Beginning Jan 1, 2023**

**Base deduction:** Sliding scale of \$0.50/square foot for energy savings of 25% and up to \$1.00/square foot for energy savings of 50% or greater

**Bonus deduction:** Sliding scale of \$2.50/square foot for energy savings of 25% and up to \$5.00/square foot for energy savings of 50% or greater



# Deduction Cap

## **PRE-IRA LAW: JAN 1, 2006, TO DEC 31, 2022**

Since 2006, there's been a lifetime cap of \$1.80/SF (or \$1.88/SF with inflation adjustment)

## **IRA UPDATE: BEGINNING JAN 1, 2023**

A three-year cap that allows IRC § 179D to be claimed on buildings if the previous full deduction claim occurred more than three taxable years ago



# Bonus Deduction

**PRE-IRA LAW: JAN 1, 2006,  
TO DEC 31, 2022**

Not applicable

**IRA UPDATE: BEGINNING  
JAN 1, 2023**

- Meet local prevailing wage
- Meet apprenticeship percentage hours for up to 15% of labor hours

Expect to see guidance from Treasury regarding prevailing wage and apprenticeship requirements

Note that these requirements are waived for construction that begins any time earlier than 60 days after the IRS produces guidance



IRC § 45L  
New Energy Efficient  
Homes Credit

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# IRA Extension of Existing Credit

Existing credit was extended retroactively from Jan. 1, 2022–Dec. 31, 2022

- Available for single-family home builders and multifamily developers who have basis in the construction of new (or renovated) dwelling units
  - \$2,000/dwelling unit tax credit that is transferred (sold/leased/rented) during your tax year
  - \$1,000 or \$2,000/unit tax credit for manufactured home developers
  - Units meet or exceed a 50% reduction in energy consumption from baseline unit using 2006 International Energy Conservation Code (IECC) standard



# IRA Extension of Existing Credit (Cont.)

Existing credit was extended retroactively from Jan. 1, 2022–Dec. 31, 2022

- Eligible dwelling unit types:
  - Single-family homes + townhomes
  - Multifamily developments (three stories or less)
  - Senior living facilities (not memory care units)
  - House boats
  - Manufactured and mobile homes

Amend tax returns to claim credits in prior open tax years



# Credit Amounts 2023–2032

Taxpayer	Credit through Dec. 31, 2022	Credit 2023-2032 ENERGY STAR	Credit 2023-2032 w/ ZERH	Credit 2023-2032 w/ PW	Credit 2023-2032 w/ ZERH + PW
Single-family home builder	\$2,000	\$2,500	\$5,000	PW N/A	PW N/A
Multifamily developer	\$2,000	\$500	\$1,000	\$2,500	\$5,000
Manufactured home developer	\$1,000 or \$2,000	\$2,500	\$5,000	PW N/A	PW N/A

ENERGY STAR: Relevant Department of Energy's ENERGY STAR Program based on Residence Type

ZERH: Department of Energy's Zero Energy Ready Homes

PW: Prevailing Wage



# Credit Amounts years 2023–2032 (Cont.)

- 2023 energy certification changes: Department of Energy’s (DOE) ENERGY STAR Single-family Homes National Program, DOE’s ENERGY STAR Manufactured Homes, DOE’s ENERGY STAR Multifamily New Construction National Program, Optional DOE’s Zero Energy Ready Homes (ZERH)
  - In some cases, HUD and LIHTC projects already require prevailing wages
  - Multifamily properties four stories or greater are now eligible for 45L as well as 179D beginning in 2023





# Direct Pay and Transferability

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# § 6417 Direct Pay

- Available to applicable entities:
  - Tax-exempt entities, states, or local governments
  - Tennessee Valley Authority
  - Indian Tribal Authority
  - Any Alaska Native Corporation
  - Any cooperative engaged in furnishing electric energy to persons in rural areas
  - Exceptions for § 45V, 45Q, and 45X



# Direct Pay and Transferability

CREDIT SECTION	NAME	DIRECT PAY	TRANSFERABLE
30C	Alternative Fuel Vehicle Refueling	Applicable Entities	Yes
45	Production Tax Credit	Applicable Entities	Yes
45Y	Clean Electricity Production Credit – Technology Neutral	Applicable Entities	Yes
45Q	Carbon Oxide Sequestration Credit	Yes	Yes
45U	Zero Emissions Nuclear Power Production Credit	Applicable Entities	Yes
45V	Clean Hydrogen Production	Yes	Yes
45W	Qualified Commercial Clean Vehicles	Applicable Entities	No
45X	Advanced Manufacturing Production Credit	Yes	Yes
45Z	Clean Fuel Production	Applicable Entities	Yes
48C	Qualifying Advanced Energy Project Credit	Applicable Entities	Yes
48	Energy Investment Tax Credit	Applicable Entities	Yes
48E	Clean Electricity Investment Credit – Technology Neutral	Applicable Entities	Yes



# § 6418 Transferability

- Placed in service on or after January 1, 2023
- Elect to transfer all or a portion of an eligible tax credit to an unrelated third party for cash
- Transfer once
- Proceeds aren't a part of the taxable income of the transferring party nor deductible by the transferee
- Carried back three years or forward 20 years
- The transferee will be subject to recapture and basis reduction



# Topics for Additional Consideration

## **TRANSFER PROCESS AND ADDITIONAL PROCEDURES**

- Similar to state programs for certificated credits?
- Will cost certifications and certifications for prevailing wages and apprenticeship programs be required?
- Purchase and sale agreements, indemnity/guarantees against recapture, credit insurance considerations



# Topics for Additional Consideration (Cont.)

## **TYPES OF INCOME OFFSETS**

- Passive activity income and/or portfolio income for individuals? W-2 income?
- Corporate tax: minimum tax applicability and 75% offset limitation
- State tax implications?



# Renewable and Energy Production Incentives

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# Federal Tax Credit Basics

Investment Tax Credits (ITC) – Based on the cost of eligible property (e.g., solar panels, hydropower facilities, biomass facilities)

- Credit earned on placed-in-service date
- Start of construction date relevant
- 5-year recapture period
- Subject to reduction for certain tax-exempt ownership
- Can be owned and operated by different parties





# Federal Tax Credit Basics (Cont.)

Production Tax Credits (PTC) – Tax credits based on the production and sale of a manufactured product (e.g., electricity, renewable energy equipment)

- Credit earned annually as production and sales are made to unrelated parties
- Start of construction date relevant
- No recapture
- Not subject to reduction for certain tax-exempt ownership
- Must be sold to unrelated party
- Must be owned and operated by same party



# § 45 Production Tax Credit (PTC)

- Extends existing PTC for applicable renewable energy
- This tech-specific PTC ends in 2024 and is replaced by the new tech-neutral clean electricity PTC (§ 45Y)
- Extends the date of construction for geothermal, wind, biomass, landfill gas, municipal solid waste, hydropower, marine and hydrokinetic facilities to 2024
- Bonus rate of 1.5 cents per kWh; Base rate of 0.3 cents/kWh



# § 45Y Clean Energy Electricity PTC

- Tech-neutral PTC replaces § 45 once it phases out at the end of 2024
- § 45Y is an emissions-based incentive that's neutral and flexible between clean electricity technologies
- Choose between a PTC (§ 45Y) or an ITC (§ 48E)
- Creates a PTC credit of 1.5 cents per kWh of electricity produced and sold or stored at facilities placed into service after 2024 with zero or negative GHG emissions



# § 48 Investment Tax Credit (ITC)

- Extends the existing energy investment tax credit for applicable energy projects
- Ends in 2024 for most technologies and is replaced by the new tech-neutral clean electricity ITC (§ 48E), which begins in 2025
- Extends date of construction in most cases to 2024 and maintains a 10% or 30% credit



# § 48E Clean Energy Electricity ITC

- Extends the existing energy investment tax credit for applicable energy projects
- This tech-specific ITC ends in 2024 for most technologies and is replaced by the new tech-neutral Clean Electricity ITC (§ 48E), which begins in 2025
- Choose between an ITC (§ 48E) or PTC (§ 45Y)
- Extends date of construction in most cases to 2024 and maintains a 10% or 30% credit



# Carbon Oxide Sequestration

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§ 45Q

# Carbon Oxide Sequestration Credit

- Under current law, industrial carbon capture or direct air capture (DAC) facilities that begin construction by December 31, 2025, can qualify for the § 45Q tax credit for carbon oxide sequestration
- This tax credit can be claimed for carbon oxide captured during the 12-year period following a qualifying facility's being placed in service



# Carbon Oxide Sequestration Credit (Cont.)

- Under the Inflation Reduction Act, the credit amounts (per metric ton of carbon oxide) are as follows, assuming the prevailing wage and apprenticeship requirements are met:
  - Carbon oxide captured and geologically sequestered - \$85
  - Carbon oxide captured and reused - \$60
  - Carbon oxide captured using direct air capture and geologically sequestered - \$180
  - Carbon oxide captured using direct air capture, then utilized in a qualified manner - \$130
- Available for direct pay in first five years of project





# Manufacturing Production Credits

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# § 48C Advanced Energy Project Credit

- Authorizes \$10 billion in credits
- At least \$4B is allocated to investments in:
  - A brownfield site
  - Communities formerly reliant on fossil fuel industries (coal, oil, natural gas)

The term qualifying advanced energy project is defined as a project that re-equips, expands, or establishes a manufacturing facility to produce various types of renewable or clean energy—solar, wind and CCS, electric grids, EVs, and components.



# Advanced Energy Project Credit (Cont.)

- Legislation expands the definition of qualified manufacturing facilities
- A taxpayer isn't allowed to benefit from the expanded section 48C credit if the investment in the factory already qualifies for a tax credit under §§ 48B, 48D, 45Q, or 45V
- Existing and modified industrial or manufacturing facilities may be eligible for the credit



# Advanced Manufacturing Production Credit

## NEW § 45X ADVANCED MANUFACTURING PRODUCTION CREDIT

- New production tax credit that can be claimed for the domestic production and sale of qualifying solar and wind components
- This includes related components, batteries and critical minerals
- The tax credit for each component decreases by 25% each year beginning in 2029 and ends in 2032
- Direct pay: Any eligible taxpayer may elect direct pay during the first five years of the credit



# Transportation and Fuel Credits

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# Qualified Commercial Clean Vehicles

- Creates a new tax credit for qualified commercial clean vehicles placed in service by the taxpayer during the year
- The credit would be the lesser of (1) 15% of the vehicle's cost (30% for vehicles not powered by a gasoline or diesel internal combustion engine); or (2) the incremental cost of the vehicle relative to a comparable vehicle
- Credit cannot exceed \$7,500 for vehicles less than 14,000 lbs, or \$40,000 for those that exceed 14,000 lbs



# Qualified Commercial Clean Vehicles (Cont.)

- Mobile machinery and qualified commercial fuel cell vehicles are eligible
- Vehicle manufacturer must be registered with Treasury
- Tax-exempt entities would have the option of electing to receive direct payments
- The credit applies to any vehicles placed in service after December 31, 2022, and before January 1, 2033



# Sustainable Aviation Fuel Credit

- SAF is currently 2-4x more expensive than conventional jet fuel
- IRA makes SAF eligible for two credits: Blender's Tax Credit and the Clean Fuel Production Credit





# Sustainable Aviation Fuel Credit (Cont.)

## **BLENDER'S TAX CREDIT (BTC):**

- BTC starting at \$1.25 per gallon for blenders that supply SAF with 50% or greater lifecycle emissions reductions compared to conventional jet fuel
- Fuels that exceed the minimum threshold are eligible for an additional \$0.01 per gallon credit for each percentage point of emissions reductions over 50%



# § 45Z Clean Fuel Production Credit

After the BTC sunsets in 2024, SAF will be eligible for the new Clean Fuel Production Credit until it expires at the end of 2027.

Creates a new business credit for clean fuel the taxpayer produces at a qualifying facility and sells for qualifying purposes.



# Clean Fuel Production Credit (Cont.)

The fuel must meet certain emissions standards.

- The base credit amount for zero-emissions fuels would be \$0.20 for nonaviation fuel and \$0.35 for aviation fuel
- Applicable amounts would be \$1.00 for nonaviation fuel and \$1.75 for aviation fuel, if wage and apprenticeship requirements are met



# § 45V Clean Hydrogen Production

- Creates a new 10-year incentive for clean hydrogen production with four tiers projects must begin construction by 2033
- Eligibility includes retrofit facilities
- Cannot stack with the carbon capture and sequestration tax credit (45Q)
- Includes direct pay and transferability
- Intensity calculated with GREET model





Questions?

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