Inflation Reduction Act

Tax Incentive Considerations for Counties

Presented by:
Chris Lover, Managing Director, *PFM Financial Advisors LLC*
Sarah Frey, Director, *PFM Financial Advisors LLC*

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Today's Presenters

Chris Lover

Managing Director, *PFM Financial Advisors LLC*

Chris provides strategic, technical and quantitative support for PFM's Public Power and Water & Sewer clients from coast to coast. His duties include structuring, sizing, and pricing new money and refunding municipal bond issues, assessing municipal issuer's outstanding debt and performing analysis of refunding opportunities.

Sarah Frey

Director, *PFM Financial Advisors LLC*

Sarah assists many local governments and water and/or sewer utilities in financial planning and the execution of bond transactions. Her duties include identifying and evaluating financing alternatives and restructuring opportunities, developing debt policies, and more. Sarah also focuses on strategies to make her clients more resilient to the unique challenges they face.

Agenda

- **3:00-3:30PM EST:** Main Presentation
- **3:30-3:45PM EST:** Q&A

Inflation Reduction Act (IRA) Overview

Largest investment in U.S. Energy Infrastructure, with varied incentives to help subsidize the cost of achieving your County's environmental & sustainability goals.

- Signed into law on August 16th, 2022
- Provides $369 billion over the next decade for new & existing programs
- Goal of reducing emissions by ~40% by 2030; accomplished through tax incentives & direct investment
- Potential for tax incentives to touch multiple aspects of your operations and community
  - Installation of energy facilities (e.g., solar, wind, microgrid facilities)
  - Conversion of vehicle fleets to electric/hybrid (e.g., police cars, school buses, garbage trucks)
  - Electric Vehicle (EV) deployment to include the charging station network
  - Use of renewable fuels, such as biodiesel
  - Energy efficient building design and construction
- Guidance on implementation still needed from Treasury (Initial comment period closed Nov. 4)

Source: Inflation Reduction Act, Pub. L. No. 117-169, 136 Stat. 1818 (2022), https://www.congress.gov/bill/117th-congress/house-bill/5376/text

Changes to Tax Incentives

- Previously, renewable incentives were only available to tax-paying entities; **now counties can benefit from these incentives directly**
- In many cases, existing incentives were **increased** and/or **extended**
- New incentives have been **added**
- Cost of achieving environmental objectives is likely lower now than it was prior to the IRA
- Projects currently under construction could be eligible depending when reaching commercial operations
- Potential synergy between the IRA & the Infrastructure Investment & Jobs Act (IIJA) passed into law near the end of 2021

Sample Increased and/or Extended Incentives

- Expanded the Production Tax Credit to include wind energy
- Extended both the Production Tax Credit & Investment Tax Credit to 2032
- Increased the credit for EV charging stations from $30,000 to $100,000 & modified the definition from "per location" to "per unit"

Sample New Incentive

- Added the Commercial Clean Vehicle Credit: Provides up to $40,000 subsidy for large vehicle replacement (> 7 tons)

Sources: Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021), https://www.congress.gov/bill/117th-congress/housebill/3684/text/pl

Inflation Reduction Act, Pub. L. No. 117-169, 136 Stat. 1818 (2022), https://www.congress.gov/bill/117th-congress/house-bill/5376

Tax Incentives for Counties

- Incentives available to counties primarily take the form of a direct payment from the U.S. Treasury
  - Investment Tax Credit (ITC), which is an upfront subsidy of up to 30% of project costs
  - Production Tax Credit (PTC), which is a subsidy over time based on power generated
  - In a few instances (e.g., commercial building retrofits), there is a tax credit that can potentially be traded to the business partner
- Key provisions to significantly enhance the base benefit plus other bonus credits could reach 50% of construction & operational project costs:
  - Paying a Fair Wage during both construction & operations (for a period of time)
  - Meeting apprenticeship program requirements
  - “Bonus” credit for meeting domestic content requirements
  - "Bonus" credit for serving low-income areas, & utilizing brownfield sites or former carbon-intensive locations (a.k.a., "energy communities")
- If issuing tax-exempt debt to finance these projects, the incentive is reduced 15%
- Some incentives decline over time or have more stringent requirements

Sources: Inflation Reduction Act, Congressional Research Service, "Tax Provisions in the Inflation Reduction Act of 2022", August 10, 2022; https://crsreports.congress.gov/product/pdf/R/R47202

Achieving Renewable Energy Goals: Before & After the IRA

Historically,…

- Prior to the IRA, only tax-paying entities could benefit from renewable energy tax credits
- Counties could enter into an agreement with a tax-paying developer, who would build & own the project
  - The County would agree to purchase energy at an agreed-upon rate over the term (e.g., 15 – 20 years), which would generally be adjusted annually for inflation
  - The developer received several incentives, including a Production Tax Credit or an Investment Tax Credit as well as the benefit of accelerated depreciation of the asset
  - The developer would embed ***some*** of these incentives into the County's cost of energy
  - The County's cost of energy would also reflect the Developer's investment return objectives

Now,…

- Counties can receive the Production Tax Credit or Investment Tax Credit directly, even when financing the project with tax-exempt debt

Solar Financing: Before & After the IRA

- If a County chooses to receive the tax credits directly:
  - Likely to result in lower energy costs, particularly with the financing at the County’s cost of funds & federal incentive received
  - Greater control over assets, timing of refurbishment, reinvestment into asset & control of operations

	Pre-IRA: Solar Developer Builds & Owns	**Under IRA: County Builds & Owns**
Tax Credits	Solar Developer receives 30% of eligible costs	County receives 25.5% of eligible costs*
Financing	Solar Developer secures at private cost of capital typically with a “Tax-equity” partner	County secures at lower cost of capital
Construction Risk	Solar Developer responsible	County responsible
Decisions at End of Useful Life	Solar Developer controls	County controls
Additional Considerations	- Pricing of contracts not very transparent - Unknown efficiency of depreciation benefit	- County's lease versus own strategy - Reporting & filing requirements

** Assumes the County elects Investment Tax Credit, meets Fair Wage & Apprenticeship requirements & finances the balance of the project with tax-exempt debt. Determining most efficient incentive requires project specific analysis.*

Sources: Inflation Reduction Act, Congressional Research Service, "Tax Provisions in the Inflation Reduction Act of 2022", August 10, 2022; https://crsreports.congress.gov/product/pdf/R/R47202

Renewable Energy Incentives

Renewable Energy Facilities		
Incentive	**Production Tax Credit (PTC):** • Funds received over time • 10 years, $26/per MWh, adjusted for inflation	**Investment Tax Credit (ITC):** • Funds received upfront (reimbursement) • 30% of eligible construction costs of a renewable energy facility assuming fair wage & apprenticeship requirements are met
Example Projects	Installation of solar & wind facilities	Installation of solar & wind facilities; battery storage
Eligible Projects	Solar, wind, landfill gas, geothermal, biomass, trash, qualified hydropower, marine & hydrokinetic resources	Solar, fuel cells, waste energy recovery, combined heat & power, small wind property, energy storage, qualified biogas property, electrochromic glass, microgrid controllers
Timing Considerations	Eligible projects are those completed in 2022 or projects that *start construction* by December 31, 2024 (geothermal extended to 2035)*	
Implication	*Counties can finance a renewable project with tax-exempt debt & claim 85% of the Production Tax Credit.*	*Counties can finance a renewable project with tax–exempt debt & receive a direct payment from the IRS for up to ~25.5% of eligible construction costs.*

** IRA also includes Clean Energy Production and Investment Tax Credits, which essentially rename and extend the Production Tax Credit and Investment Tax Credit for the next decade. Eligible projects are required to have greenhouse gas (GHG) emissions of zero to qualify.*

Sources: Congressional Research Service, "The Renewable Electricity Production Tax Credit: In Brief (R43453)," April 29, 2020; https://crsreports.congress.gov/product/pdf/R/R47202

Example: Comparison of Solar Financing Alternatives

- The sample below illustrates potential savings on a solar project:

	County Uses Tax-Exempt Debt	County Uses Taxable Debt	County Uses Taxable Debt	Prior to the IRA
	ITC	ITC	PTC	NA
County Upfront Cost	$50 million	$50 million	$50 million	$50 million
Reimbursement Rate from IRS	25.5%	30%	$26/MWh	None
Reimbursement Amount from IRS*	$12.11 million	$14.25 million	$25.9 million	None
Net Upfront Cost	$37.89 million	$35.75 million	$50 million	$50 million
Net Present Value of Debt Service on Bonds*	$38.8 million	$36.9 million	$30.3 million	$51.2 million
Average Debt Service Cost per MWh	$24.09	$22.88	Years 1-10: $6.60 Thereafter: $32.44	$31.78

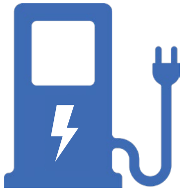
- Key Assumptions:
  - County meets Fair Wage & Apprenticeship requirements; no bonus credits
  - Investment Tax Credit (ITC) assumes 95% of the total costs are qualified costs
  - Production Tax Credits assume 24.5% capacity factor, 0.5% annual degradation factor
  - Construction begins by December 31, 2024
  - Debt service cost estimated for a triple-A rated county financing over 20 years with level annual debt service payments. Based on market conditions as of November 2,2022. Present valued at 4%.

Overview of Transportation Related Tax Credits

UPFRONT purchase of clean vehicles (e.g., electric, hybrid)

Qualified Commercial Clean Vehicle direct tax credit

UPFRONT installation of EV charging stations



Alternative Fuel Refueling Property direct tax credit

ONGOING purchase of alternative fuels

Alternative Fuel Excise tax credit

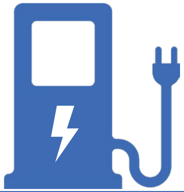
Source: Inflation Reduction Act, Pub. L. No. 117-169, 136 Stat. 1818 (2022), https://www.congress.gov/bill/117th-congress/house-bill/5376/text

Vehicle Fleet Incentives

	Qualified Commercial Clean Vehicle	Alternative Fuel Excise Tax Credit
Example Projects	Electrification of police fleet, school buses, & garbage trucks	Purchase of alternative fuel for County motor pool
Eligible Projects	• Plug-in electric vehicles, fuel cell vehicles • Varying weight & battery capacity requirements • For use on public streets, roads & highways	Biodiesel, renewable diesel, biodiesel mixtures, alternative fuel, & alternative fuel mixtures
Incentive	Tax credit (i.e., direct payment to County) is the lessor of: • 15% of vehicles cost (30% for vehicles not gasoline or diesel powered) • Incremental cost of clean versus “non-clean” (e.g., gasoline, diesel) vehicle Max amounts linked to vehicle size: • <7 tons: $7,500/vehicle • >7 tons: $40,000/vehicle (e.g., school buses, heavy-duty municipal vehicles)	Tax credit (i.e., direct payment to County) for alternative fuels: • 0.50/gallon for alternative fuels • $1.00/gallon for diesel-related fuels
Timing Considerations	Vehicles must be placed in service by the end of 2032	Expires after December 31, 2024
Implication	*Counties can replace vehicle fleets with cleaner options and receive a direct-pay subsidy to reduce the cost – although hybrid options could be limited.*	*Counties can reduce the operating cost of using biofuel (primarily biodiesel).*

Sources: Inflation Reduction Act, Congressional Research Service, "Tax Provisions in the Inflation Reduction Act of 2022", August 10, 2022; https://crsreports.congress.gov/product/pdf/R/R47202

Alternative Fuel Refueling Property Tax Credit



Alternative Fuel Refueling Property Tax Credit	
Example Projects	Installation of Electric Vehicle (EV) charging stations and supporting infrastructure
Eligible Projects	Property for the storage or dispensing of clean-burning fuel (CNG, LNG, electricity, hydrogen) or electricity into the vehicle fuel tank or battery; includes bidirectional charging equipment
Incentive	Tax credit (i.e., direct payment to County), with max of: • 30% of costs, assuming fair wage & apprenticeship requirements are met (6% of costs if not) OR • $100,000 per unit
Timing Considerations	• Starting in 2023, only eligible if placed within low income or rural areas • Incentive expires after December 31, 2032
Implication	*Counties could potentially receive tax credits for expansion of local EV charging networks.*

Sources: Congressional Research Service, "Tax Provisions in the Inflation Reduction Act of 2022", August 10, 2022; https://bipartisanpolicy.org/blog/a-status-update-on-ev-charging-infrastructure-investments-in-the-iija/

Energy Efficient Building Incentives

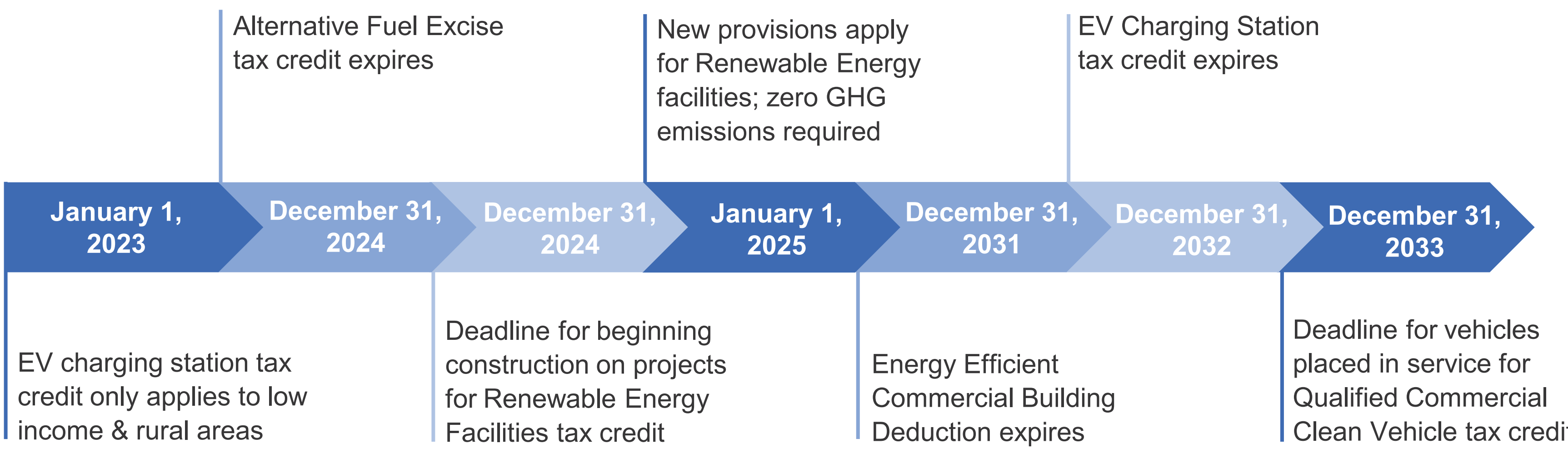
Awaiting guidance from the Treasury to understand the value of the transfer of this tax credit.

Energy Efficient Commercial Buildings Property Tax Deduction	
Example Projects	Install energy efficient systems (e.g., lighting, windows, HVAC) in new or existing County buildings
Eligible Projects	Install energy efficient property, in new or existing buildings, in at least one of 3 systems: 1) Interior lighting systems 2) Heating, cooling, ventilation, and hot-water systems OR 3) The building's envelope
Incentive	Tax deduction: • If meeting prevailing wage and apprenticeship, $2.50 per square foot increasing to as much as $5.00 per square foot. • Sliding scale is based on: • Efficiencies created compared to reference building • Certified efficiency targets and electric use reduction
Considerations	• No direct pay option; monetization of the credit could be achieved through transfer to the designer of the building or retrofit plan (e.g., architect, engineer, or a design-build contractor)
Timing Considerations	• IRA changes to this tax credit go into effect for property places in service beginning Jan 1, 2023 • Expire after December 31, 2031
Implication	*Counties could realize a reduced cost associated with building retrofits and construction of new buildings.*

Sources: Internal Revenue Service, "IRC 179D Energy Efficient Commercial Building Deduction, https://www.irs.gov/pub/irs-utl/irc-179d-energy-efficient.pdf

Timing Considerations

- Consider accelerating projects because over time, certain incentives stop and / or become more restrictive.



Sources: Inflation Reduction Act, Congressional Research Service, "Tax Provisions in the Inflation Reduction Act of 2022", August 10, 2022; https://crsreports.congress.gov/product/pdf/R/R47202

Complementary IIJA & IRA Programs

	IIJA (November 2021)	IRA (August 2022)
Electric Vehicles	**$7.5 billion** for charging infrastructure	**$2 billion** for domestic manufacturing grants
Schools & Ports	**$5 billion** for clean or zero-emission school buses	**$3 billion** for zero-emissions equipment at ports
Transit	**$66 billion** for passenger and freight rail	**$3 billion** Neighborhood Access and Equity Grants to improve transportation access
Electric Grid	**$65 billion** to modernize and expand the national grid	**$9.7 billion** for reliability and resilience improvements in rural areas
Homes	**$3.5 billion** to the Weatherization Assistance Program	**$8.6 billion** for energy efficiency upgrades
Environmental Remediation	**$21 billion** in environmental remediation	**$27 billion** for a national climate bank to finance green projects in underserved communities
Agricultural & Forestry	**$3.3 billion** for wildfire risk reduction	**$19.5 billion** for climate-smart agricultural practices

Sources: Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021), https://www.congress.gov/bill/117th-congress/housebill/3684/text/pl

Inflation Reduction Act, Pub. L. No. 117-169, 136 Stat. 1818 (2022), https://www.congress.gov/bill/117th-congress/house-bill/5376

Snapshot of IRA Incentives Available to Constituents & Businesses

Program	Description
The Home Owner Managing Energy Savings (HOMES) Rebate Program	$4.3 billion for state energy offices to establish rebate programs for residential retrofits.
Home Electrification Rebate Program	$4.5 billion to state energy offices to establish rebate programs for residential electrification. Participating households may be eligible to receive up to $14,000 in rebates.
Energy Efficient Home Improvement Credit	Modifies and increases the tax credit available for contractors for building and selling energy efficient homes.
Nonbusiness Energy Property Credit Extension	Allows for investments in energy efficient appliances with taxpayer receiving 30% credit for eligible costs. Allows for annual deduction (rather than lifetime cap).
Residential Clean Energy Credit Extension	Allows for Investment Tax Credit for residential investments in renewable resources to include battery storage.
Electric Vehicle Tax Credits	• Existing $7,500 tax credit for *new* EVs can now be transferred at the point of sale. • New credit for *used* EVs of up to $4,000. Credit may not exceed 30% of sale price. • Domestic sourcing requirements for vehicle manufacturers go into effect in 2023.

Source: Inflation Reduction Act, Pub. L. No. 117-169, 136 Stat. 1818 (2022), https://www.congress.gov/bill/117th-congress/house-bill/5376/text

What Can Counties be Thinking About Now?

- Identify & evaluate IRA incentives that may support the County's own environmental objectives
  - Compare the Investment Tax Credit vs. Production Tax Credit alternatives
  - Compare the financial impact of using tax-exempt debt & lower incentive vs. taxable debt & higher incentive
  - For projects under construction, determine eligibility & track eligible costs that can be incorporated into a request (accountant attestation)
  - Consider the potential use & benefits of "energy communities" and where these are in your county. Information likely resides with your state's environmental coordinating agency.
- Consider **accelerating** certain programs or projects in light of the step-down in incentives
- Consider **adding** programs or projects in light of the new incentives available
- Consider cross-cutting programs across departments to try to capture as many of these incentives as possible
  - Identify opportunities to combine credits & increase credits
  - Identify any overlap in IRA and IIJA incentives
- Awareness campaign for incentives available to residents & businesses

Let's Stay in Touch

Questions?

- Please type your questions into the chat
- Feel free to send us an email with your questions

Chris Lover
Managing Director
PFM Financial Advisors LLC
loverc@pfm.com

Sarah Frey
Director
PFM Financial Advisors LLC
freys@pfm.com

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