



Iowa
Environmental
Council

IRA

IRA Funds Workshop
Fairfield, Iowa

APRIL 28, 2023



WHO IS IEC?

- The Iowa Environmental Council is the largest environmental coalition in the state.
- We are committed to addressing the climate crisis through work on water and clean energy, as well as issues of environmental justice.
- *We actively work on federal, state, and local public policy and engage Iowans statewide to build a just, healthy environment and sustainable future for all Iowans.*



MEET THE PRESENTER

- Steve Guyer, Energy Policy Manger
- guyer@iaenvironment.org



IOWA ENERGY & INFRASTRUCTURE FUNDING HUB

- The **Iowa Energy & Infrastructure Funding Hub** is a resource developed by IEC to provide information to help Iowans access key federal programs.
- The site will be updated on an ongoing basis to keep Iowans in-the-know on current opportunities.
- URL: IAFederalFunding.org

AVAILABLE NOW

**Iowa Energy & Infrastructure
Funding Hub**



www.IAFederalFunding.org



INFLATION REDUCTION ACT - INDIVIDUALS

Investment tax credits and Rebates

- **Section 25D** – An investment tax credit for residential solar, wind, geothermal, battery storage greater than 3 kwh, and biomass fuel. A 30% credit starts in 2022 and goes through 2032, declining to 26% in 2033 and 22% in 2034.
- **Section 25C** - A 30% tax credit on energy efficiency home improvements such as insulation, air sealing, installation of energy-efficient doors and windows, and more.
- **Section 50121** - HOME ENERGY PERFORMANCE-BASED WHOLE HOUSE REBATES (HOMES) provides rebates to homeowners and aggregators for whole-house energy saving retrofits.
- **Section 50122** - HIGH-EFFICIENCY ELECTRIC HOME REBATE (HEEHR) provides point-of-sale rebates for eligible electrification equipment and projects. Limited to low income and moderate income households.

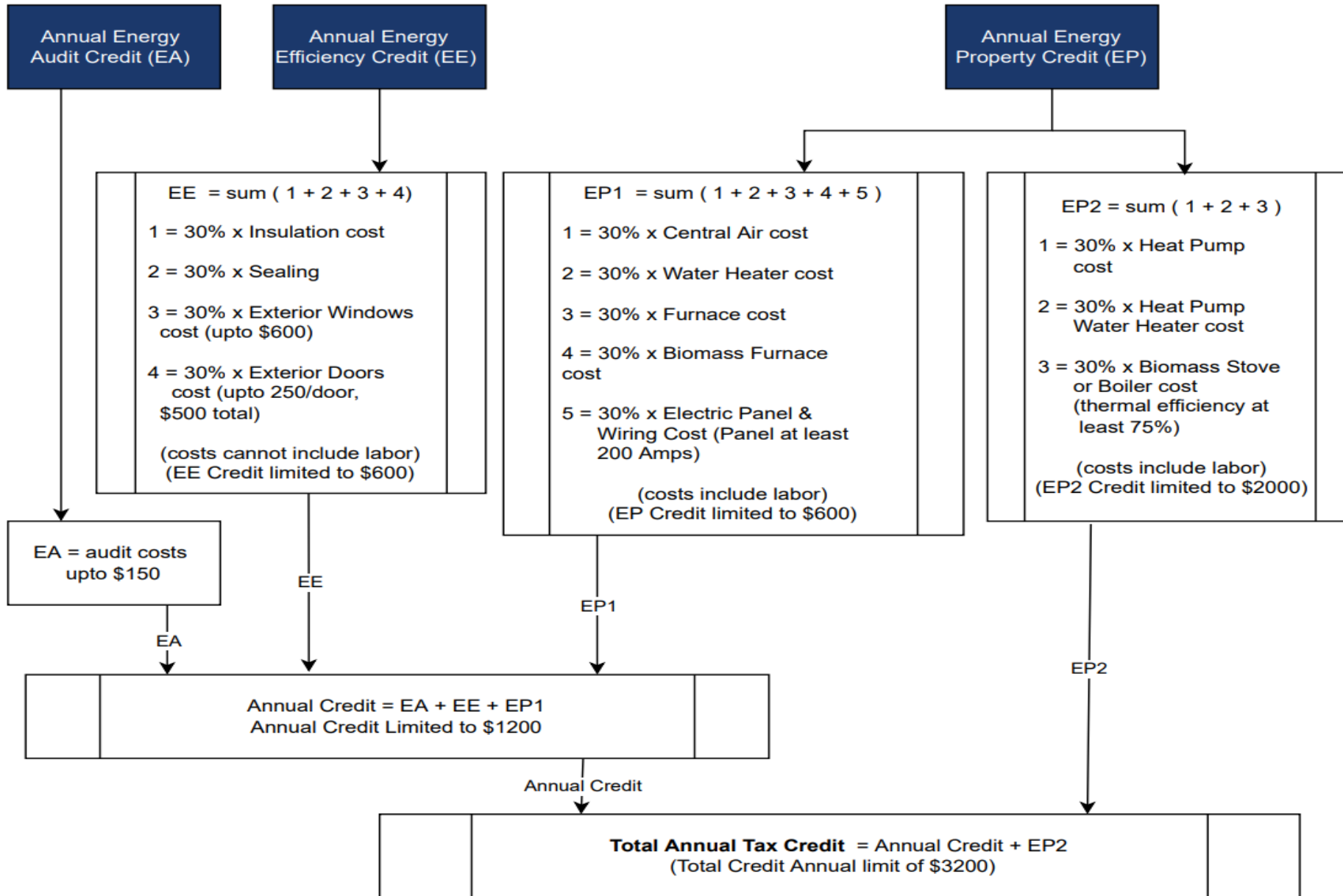


INFLATION REDUCTION ACT INVESTMENT TAX CREDITS RESIDENTIAL

| Residential Solar & Battery ITC | Section 25D | | | | | | | |
|---------------------------------|-------------|------|------|------|------|------|------|------|
| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| ITC Solar | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 30% |
| ITC Battery 3 Kw minimum size | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 30% |

| | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 |
|-------------------------------|------|------|------|------|------|------|------|
| ITC Solar | 30% | 30% | 30% | 30% | 23% | 15% | 0% |
| ITC Battery 3 Kw minimum size | 30% | 30% | 30% | 30% | 23% | 15% | 0% |

25C



HOMES

- Rebates for whole home retrofits.
- Measured energy efficiency savings greater than 15%.
- Modeled energy efficiency savings greater than 20%.
- Larger rebates for individuals earning less than 80% of AMI.



HEEHR

| Rebate can cover 100% of project costs | Qualifying Upgrades (Appliances and Non Appliances) | Rebate limited to 50% of project costs |
|--|--|--|
| \$1750 | Heat Pump Water Heater | \$1750 |
| \$8000 | Heat Pump | \$8000 |
| \$840 | Electric Stove, Cooktop, Range, Oven, Electric Heat Pump Clothes Dryer | \$840 |
| \$4000 | Load Center Upgrade | \$4000 |
| \$2500 | Electric Wiring | \$2500 |
| \$1600 | Insulation, Sealing, and Ventilation | \$1600 |



INFLATION REDUCTION ACT – BUSINESSES, GOVERNMENTS, NON-PROFITS

Renewable tax credits

- **Section 48 to 48E** – 30% **investment tax credit** for solar, small wind, geothermal, fuel cell, microturbine, combined heat and power, waste energy recovery, energy storage technology, and biogas constructed before January 1, 2025. After – 30% technology neutral investment tax credit. Credits start in 2025 and phase out on the later of 2032 or when emission targets are achieved (i.e., the electric power sector emits 75% less carbon than 2022). Taxpayers choose between a PTC (45Y) and an ITC (48E).
- **Section 45 to 45Y** – **Production tax credits** 1.5 cents/kwh (inflation adjusted to 2.6 cents/kwh) for solar, geothermal, wind, closed- and open-loop biomass, landfill gas, municipal solid waste, hydropower, and marine and hydrokinetic facilities constructed before January 1, 2025. After - technology neutral production tax credit. Credit of 1.5 cents/kwh (inflation adjusted projected at 2.8 cents/kwh) start in 2025 and phase out on the later of 2032 or when emission targets are achieved (i.e., the electric power sector emits 75% less carbon than 2022). Taxpayers choose between a PTC (45Y) and an ITC (48E).



BONUSES

Bonus credits for investment tax credits and production tax credits (48, 48E, 45, 45Y)

- A 10% bonus for projects located in energy communities (defined as brownfield sites or fossil fuel communities).
- A 10% bonus for meeting domestic manufacturing requirements for steel, iron, or manufactured components.
- After 2024, a 10% bonus for projects located in low-income communities or on Tribal land; 20% bonus for projects located in low-income residential buildings or part of low-income economic benefit projects.



GOVERNMENT AND TAX EXEMPT ENTITIES DIRECT PAY

- **Eligible Organizations** - Nonprofit organizations, rural electric cooperatives, schools, state and local governments, Native American tribes, and other entities are eligible to receive direct government payment of the following tax credits.
 - 30% investment tax credit for solar, small wind, geothermal, fuel cell, microturbine, combined heat and power, waste energy recovery, energy storage technology, and biogas constructed before January 1, 2025.
 - 30% technology neutral investment tax credit replaces Section 48 with an emissions-based investment tax credit that is neutral and flexible between clean electricity technologies.
 - Production tax credits 1.5 cents/kwh (inflation adjusted to 2.6 cents/kwh) for solar, geothermal, wind, closed- and open-loop biomass, landfill gas, municipal solid waste, hydropower, and marine and hydrokinetic facilities constructed before January 1, 2025.
 - Technology neutral production tax credit replaces Section 45 with an emissions-based production tax credit that is neutral and flexible between clean electricity technologies. Credit of 1.5 cents/kwh (inflation adjusted projected at 2.8 cents/kwh) start in 2025 and phase out on the later of 2032 or when emission targets are achieved.
- Both PTC and ITC Bonuses
 - A 10% bonus for projects located in energy communities (defined as brownfield sites or fossil fuel communities).
 - A 10% bonus for meeting domestic manufacturing requirements for steel, iron, or manufactured components.
 - After 2024, a 10% bonus for projects located in low-income communities or on Tribal land; 20% bonus for projects located in low-income residential buildings or part of low-income economic benefit projects.
- A 10-year production tax credit for clean hydrogen production with four tiers of credit based on the carbon intensity of the hydrogen production process. The facility must start construction by 2033. Also available to tax payers.



INFLATION REDUCTION ACT INVESTMENT TAX CREDITS < 1 MW

| Commercial Solar and/or Battery ITC less than 1 Mw | Section 48 through 2024, Section 48E after | | | | | | | |
|---|--|------|------|------|------|------|------|------|
| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| ITC | 30% | 30% | 30% | 30% | 30% | 30% | 30% | 30% |
| Domestic Content Bonus | | 10% | 10% | 10% | 10% | 10% | 10% | 10% |
| Energy Community Bonus | | 10% | 10% | 10% | 10% | 10% | 10% | 10% |
| Low Income Community Bonus* | | 10% | 10% | 10% | 10% | 10% | 10% | 10% |
| Qualified Low Income Residential Building Project or Qualified Low Income Economic Benefit Project* | | 20% | 20% | 20% | 20% | 20% | 20% | 20% |

| | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 |
|---|------|------|------|------|------|------|------|
| ITC | 30% | 30% | 30% | 30% | 23% | 15% | 0% |
| Domestic Content Bonus | 10% | 10% | 10% | 10% | 10% | 10% | 10% |
| Energy Community Bonus | 10% | 10% | 10% | 10% | 10% | 10% | 10% |
| Low Income Community Bonus* | 10% | 10% | 10% | 10% | 8% | 5% | 0% |
| Qualified Low Income Residential Building Project or Qualified Low Income Economic Benefit Project* | 20% | 20% | 20% | 20% | 15% | 10% | 0% |

*Allocated credits will be based on an application and award process that will have to be developed by the Secretary. Maximum of 1.8 Gw dc/yr.



INFLATION REDUCTION ACT INVESTMENT TAX CREDITS > 1 MW

| Commercial Solar and/or Battery ITC Greater than 1 Mw* | Section 48 through 2024, Section 48E after | | | | | | | |
|--|--|------|------|------|------|------|------|------|
| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| ITC | 6% | 6% | 6% | 6% | 6% | 6% | 6% | 6% |
| Domestic Content Bonus | | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| Energy Community Bonus | | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| ITC (Labor requirements) | 24% | 24% | 24% | 24% | 24% | 24% | 24% | 24% |
| Domestic Content Bonus(Labor requirements) | | 8% | 8% | 8% | 8% | 8% | 8% | 8% |
| Energy Community Bonus(Labor requirements) | | 8% | 8% | 8% | 8% | 8% | 8% | 8% |
| Low Income Community Bonus** | | 10% | 10% | 10% | 10% | 10% | 10% | 10% |
| Qualified Low Income Residential Building Project or Qualified Low Income Economic Benefit Project** \$/kwh | | 20% | 20% | 20% | 20% | 20% | 20% | 20% |

| | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 |
|--|------|------|------|------|------|------|------|
| ITC | 6% | 6% | 6% | 6% | 5% | 3% | 0% |
| Domestic Content Bonus | 2% | 2% | 2% | 2% | 1.5% | 1% | 0% |
| Energy Community Bonus | 2% | 2% | 2% | 2% | 1.5% | 1% | 0% |
| ITC (Labor requirements) | 24% | 24% | 24% | 24% | 18% | 12% | 0% |
| Domestic Content Bonus(Labor requirements) | 8% | 8% | 8% | 8% | 6% | 4% | 0% |
| Energy Community Bonus(Labor requirements) | 8% | 8% | 8% | 8% | 6% | 4% | 0% |
| Low Income Community Bonus** | 10% | 10% | 10% | 10% | 8% | 5% | 0% |
| Qualified Low Income Residential Building Project or Qualified Low Income Economic Benefit Project** \$/kwh | 20% | 20% | 20% | 20% | 15% | 10% | 0% |

| Commercial Solar ITC Greater than 1 Mw* | Section 48 meeting labor requirements | | |
|---|---------------------------------------|------|------|
| | 2022 | 2023 | 2024 |
| ITC | 30% | 30% | 30% |
| Domestic Content Bonus | | 10% | 10% |
| Energy Community Bonus | | 10% | 10% |
| Low Income Community Bonus** | | 10% | 10% |
| Qualified Low Income Residential Building Project or Qualified Low Income Economic Benefit Project** | | 20% | 20% |

*Construction starts less than 60 days after Department of Treasury issues guidance.

**Projects under 5 Mw ac. Allocated credits will be based on an application and award proces. Maximum of 1.8 Gw dc/yr.



INFLATION REDUCTION ACT PRODUCTION TAX CREDITS < 1 MW

| Commercial Wind/Solar PTC less than 1 Mw | Section 45 through 2024, Section 45Y after | | | | | | | |
|--|--|------|------|------|------|------|------|------|
| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| PTC ¢/kwh | 2.6 | 2.7 | 2.7 | 2.8 | 2.8 | 2.9 | 2.9 | 3.0 |
| Domestic Content Bonus ¢/kwh | | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Energy Community Bonus ¢/kwh | | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |

| | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 |
|------------------------------|------|------|------|------|------|------|------|
| PTC ¢/kwh | 3.0 | 3.1 | 3.2 | 3.2 | 2.4 | 1.6 | 0.0 |
| Domestic Content Bonus ¢/kwh | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.0 |
| Energy Community Bonus ¢/kwh | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.0 |

* The PTC is adjusted for inflation each year by the IRS. The levels for years 2023-2035 assume annual inflation of 2% for illustrative purposes

INFLATION REDUCTION ACT PRODUCTION TAX CREDITS > 1 MW

| Commercial Wind/Solar PTC Greater than 1 Mw* | Section 45 through 2024, Section 45Y after | | | | | | | |
|--|--|------|------|------|------|------|------|------|
| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| PTC ¢/kwh | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| Domestic Content Bonus ¢/kwh | | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Energy Community Bonus ¢/kwh | | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| PTC (Labor requirements) | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 |
| Domestic Content Bonus(Labor requirements) ¢/kwh | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Energy Community Bonus(Labor requirements) ¢/kwh | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

| | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 |
|--|------|------|------|------|------|------|------|
| PTC ¢/kwh | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.3 | 0.0 |
| Domestic Content Bonus ¢/kwh | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Energy Community Bonus ¢/kwh | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| PTC (Labor requirements) | 2.4 | 2.5 | 2.6 | 2.6 | 1.9 | 1.3 | 0.0 |
| Domestic Content Bonus(Labor requirements) ¢/kwh | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 |
| Energy Community Bonus(Labor requirements) ¢/kwh | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.0 |

| Commercial Wind/Solar PTC Greater than 1 Mw* | Section 45 meeting labor requirements | | |
|--|---------------------------------------|------|------|
| | 2022 | 2023 | 2024 |
| PTC ¢/kwh | 2.6 | 2.7 | 2.7 |
| Domestic Content Bonus ¢/kwh | | 0.3 | 0.3 |
| Energy Community Bonus ¢/kwh | | 0.3 | 0.3 |

*Construction starts less than 60 days after Department of Treasury issues guidance.



INFLATION REDUCTION ACT – BUSINESSES, GOVERNMENTS, NON-PROFITS

Energy Efficient Commercial Building Deduction

Section 13303 – Starting in 2023, building owners can get a section 179D tax deduction for new construction and retrofits to commercial buildings. The energy efficiency improvements, including lighting, envelope design, and heating and cooling, must reduce the energy consumption by a minimum of 25% when compared to a building that meets the minimum requirements of [Reference Standard 90.1](#) of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

- **Deduction.** The deduction for a 25% reduction is \$0.50 per square foot, increasing by \$0.02 per square foot for every additional percentage point reduction, capped at \$1.00 for a 50% reduction.
- **Bonus.** A bonus exists for prevailing wage and apprenticeship. If the prevailing wage and apprenticeship requirements are met, the deduction for a 25% reduction earns \$2.50 per square foot, increasing by \$0.10 per additional percentage point of reduction. The maximum deduction with the bonus totals \$5 per square foot for a 50% energy reduction.
- **Allocation.** Government buildings and buildings owned by tax exempt organizations, including charitable organizations, religious institutions, tribal governments, and any other organization falling under IRC 501(c), can allocate the deduction to the building designer including the architect, engineers, and contractors.
- **Subsequent improvements.** Building owners can get an additional 179D deduction every three years for subsequent energy efficiency improvements.



INFLATION REDUCTION ACT – BUSINESS (CONTRACTORS AND BUILDERS)

Tax credits

- **Section 45L** – Builders and contractors of single-family and manufactured homes can collect a credit for meeting the Energy Star Program requirements and the DOE Zero Energy Ready Home criteria. Builders and contractors of multifamily homes can collect a credit for each Energy Star-compliant unit or Zero Energy Ready Home-compliant unit.
 - **Single-family and Manufactured Homes:** Can collect up to \$2500 for meeting the Energy Star Program requirements, and \$5000 for meeting the DOE Zero Energy Ready Home criteria.
 - **Multifamily Homes:** Can collect \$500 per Energy Star-compliant unit and \$1000 per Zero Energy Ready Home-compliant unit.
 - The credits on multifamily homes increase to \$2500 and \$5000 respectively if they satisfy prevailing wage requirements.
 - Residential buildings that are four stories tall or more are eligible for both this credit and the section 179D deduction.



CONCLUSIONS

- The IRA will accelerate electrification and the development of wind, solar, storage, and transmission in Iowa.
- A paradigm shift is underway that will change every aspect of our energy system. In addition to a shift in how we generate electricity, how we plan and how we regulate will change.



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QUESTIONS?





THANK YOU!



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