The webcast will start at 1:00 p.m. Eastern

- Visit capincrouse.com/clean-energy-projects to access these resources from today's webcast:
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Clean Energy Projects that Qualify for the Clean Energy Credits

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8.20.24

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Agenda

- Breaking News
- Energy Property Defined
- Eligible Technologies
- Effect of Using Restricted Gifts and Grants to Acquire Energy Properties

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Polling Question 1

Do you want CPE credit?

- Yes
- No

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Breaking News Regarding Pre-Filing Registration

- Regulations require that an energy property be registered with the IRS to obtain a registration number
- The IRS reviews data submitted during the registration process to make a preliminary eligibility determination
- On August 14, 2024, the IRS issued a statement "encouraging" taxpayers who plan to file for a credit for property placed in service in 2023 to do so immediately

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Breaking News Regarding Pre-Filing Registration (continued)

- To allow time for IRS review, the IRS recommends applying for a registration number no less than 120 days before an organization plans to file the return on which it plans to claim the credit
- Access the Pre-Filing Registration Tool here

What is an Energy Property?

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Energy Property Defined

- An **Energy Property** must satisfy these five elements:
  1. It must be one of 11 enumerated technologies
  2. It must be either:
     - Constructed, reconstructed, or erected by the taxpayer; or
     - Acquired by the taxpayer and the original use must commence with the taxpayer
  3. It must be property for which depreciation (or amortization in lieu of depreciation) is allowable
  4. It must meet performance and quality standards published by the Treasury in consultation with the Department of Energy
  5. The property must be placed in service within the prescribed dates

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Eligible Technologies

- Solar property used to generate electricity or to heat or cool
- Fiber-optic lighting/electrochromic glass used to heat or cool
- Geothermal property
- Qualified fuel cell property or qualified microturbine property
- Combined heat and power system property
- Qualified small wind energy property
- Geothermal HVAC systems

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Eligible Technologies (continued)

- Waste energy recovery property
- Energy storage technology
- Qualified biogas property
- Microgrid controllers

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Constructed, Reconstructed, Erected, or Original Use

- The constructed, reconstructed, or erected element is satisfied where the work is:
  - Performed by the taxpayer; or
  - For the taxpayer in accordance with the taxpayer's specifications
    - This appears to be satisfied where the taxpayer selects a product recommended by a vendor

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Constructed, Reconstructed, Erected, or Original Use (continued)

- The original use element means:
  - "the first use to which [the energy property] is put, whether or not such use is by the taxpayer"
  - Special rules apply to retrofitted energy property

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Depreciation Is Allowable

- The baseline rule is that property must be of a type which is subject to the allowance for depreciation under section 167
  - The cost or basis must be recovered using depreciation
    - i.e., use of section 179 to deduct the cost in the initial year is not permitted
  - Amortization is permitted in lieu of depreciation

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Performance and Quality Standards

- At present, standards have only been identified for:
  - Qualified small wind energy property; and
  - Electrochromic glass property
- For qualified small wind energy property, the Treasury has adopted:
  - The Small Wind Turbine Performance and Safety Standard 9.1 published by the American Wind Energy Association (AWEA)
  - The International Electrotechnical Commission standards 61400-1, 61400-2, 61400-11, and 61400-12
  - ANSI/ACP standard 101-1-2021, the Small Wind Turbine Standard

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Performance and Quality Standards (continued)

- Electrochromic windows must be rated in accordance with the National Fenestration Rating Council
- Secondary glazing systems must be rated in accordance with the Attachments Energy Rating Council's Rating and Certification Process

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Polling Question 2

True or False: To qualify as a credit eligible energy property, the property must be depreciable.

- True
- False

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More on Energy Property Technologies

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Solar Energy Property (sec. 48(a)(3)(A)(i))

- Equipment that uses solar energy to:
  - Generate electricity
    - Includes any equipment that converts sunlight into electricity, including, but not limited to, solar cells
  - Heat or cool a structure
  - Provide hot water for use in a structure
  - Provide solar process heat
    - Except for purposes of heating a swimming pool
    - Solar process heat equipment uses solar energy to create steam at high temperatures for use in industrial or commercial processes

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Qualified Small Wind Energy Property (sec. 48(a)(3)(A)(vi))

- A wind turbine with a nameplate capacity of not more than 100 kWh
  - This compares to a capacity of 2.5 – 4.0 megawatts for the typical commercial wind turbine
- Construction must commence prior to January 1, 2025
  - Section 48E replaces section 48 for electricity-generating projects for which construction commences after December 31, 2024

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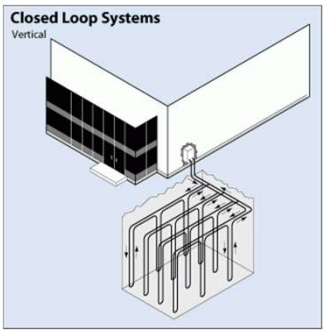
Geothermal Heat Pumps (sec. 48(a)(3)(A)(vii))

- Equipment that uses the ground, ground water, or other underground fluids as a thermal energy source:
  - To heat a structure; or
  - As a thermal energy sink to cool a structure
- Construction must begin prior to January 1, 2035



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Alternative Fuel Vehicle Refueling Property (sec. 30C)

- Alternative fuel vehicle refueling property includes:
  - An electric charging station
  - A facility dispensing fuel at least 85% of the volume of which consists of ethanol, natural gas, compressed natural gas, liquified natural gas, liquified petroleum gas, or hydrogen
  - A facility dispensing fuel that is a combination of biodiesel, diesel, and kerosene, with at least 20% biodiesel

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Alternative Fuel Vehicle Refueling Property (continued)

- Eligible installations must:
  - Be in a low-income community
  - Not be in an urban area
  - See map at https://bit.ly/eligibility-locator

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Qualified Commercial Clean Vehicles (sec. 45W)

- Includes a vehicle:
  - Manufactured by a manufacturer that has entered into an agreement with the Treasury to provide specified information
  - Manufactured primarily for use on public streets, roads, and highways (not including a vehicle operated exclusively on a rail or rails) and which has at least four wheels

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Qualified Commercial Clean Vehicles (sec. 45W)

- Includes a vehicle (continued):
  - Which is:
    - Propelled by an electric motor having a rechargeable battery of not less than 15 kWh (or, if the vehicle has a gross vehicle weight of less then 14,000 pounds, 7 kWh); OR
    - Prepared by power generated by a hydrogen fuel cell
- Eligible vehicles must be purchased before January 1, 2033

Polling Question 3

True or False: A project that uses solar heat to heat a swimming pool qualifies for the investment tax credit.

- True
- False

Fiber-Optic Solar Energy Property (sec. 48(a)(3)(A)(ii))

- Equipment that uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight
- Construction must begin before January 1, 2025
- This is not included in section 48E

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Electrochromic Glass Property (sec. 48(a)(3)(A)(ii))

- Electrochromic glass (sometimes call “smart glass”) uses electricity to change its light transmittance properties to heat or cool a structure
- Construction must begin before January 1, 2025
- This is not included in section 48E

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Geothermal Energy Property (sec. 48(a)(3)(A)(iii))

- Equipment used to produce, distribute, or use energy derived from a geothermal deposit
  - One example is a geothermal power station producing electricity using steam from underground hot springs
  - This is distinct from geothermal heating and cooling systems, which are discussed later

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Qualified Fuel Cell Property (sec. 48(a)(3)(A)(iv))

- Fuel cell power plant
  - An integrated system comprised of:
    - A fuel cell stack assembly or linear generator assembly
    - Associated balance of plant components

    which converts a fuel (commonly hydrogen) into electricity using electrochemical or electromechanical means

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Qualified Fuel Cell Property (continued)

- Has a nameplate capacity of at least .5 kWh
  - 1 kWh in the case of a linear generator assembly
- Has an electricity-only generation efficiency greater than 30%

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Qualified Fuel Cell Property (continued)

- Construction must begin before January 1, 2025
  - Will qualify for sec. 48E if there are zero greenhouse gas emissions
- The base credit amount is capped at $1,500 for each 0.5 kWh of capacity
  - The base credit amount is the standard 6%, multiplied by 5 if the conditions for the increased credit amount are satisfied
    - Project is less than 1 megawatt of electrical power;
    - Construction began prior to January 29, 2023; or
    - Prevailing wage and qualified apprenticeship labor requirements were met

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Qualified Microturbine Property (sec. 48(a)(3)(A)(iv))

- A microturbine power plant is an integrated system comprised of:
  - A gas turbine engine;
  - A combustor;
  - A recuperator or regenerator;
  - A generator or alternator; and
  - An associated balance of components

  that converts a fuel into electricity and thermal energy

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Qualified Microturbine Property (continued)

- A qualified microturbine property must:
  - Have a nameplate capacity of less than 2,000 kWh; and
  - Have an electricity-only generation efficiency of not less than 26%

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Qualified Microturbine Property (continued)

- Construction must begin before January 1, 2025
  - Probably will not qualify under sec. 48E
- The base credit amount is capped at $200 for each 1 kWh of capacity

35

Combined Heat and Power System Property (sec. 48(a)(3)(A)(v))

- An installation that combines the generation of steam or other forms of thermal energy with the generation of electricity or mechanical shaft power, all using the same energy source
- Must produce at least 20% of its total useful energy in the form of thermal energy that is not used to produce electricity or mechanical power (or a combination of the two)
- The energy efficiency percentage must exceed 60%

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Combined Heat and Power System Property (continued)

- For property with a capacity of more than 15 megawatts or 20,000 horsepower (the "applicable capacity") and less than 50 megawatts or 67,000 horsepower (or the equivalent combination of wattage and horsepower), the credit amount is reduced by the ratio of the applicable capacity to the actual capacity
  - No credit is allowed for projects with a capacity in excess of 50 megawatts or 67,000 horsepower

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Combined Heat and Power System Property (continued)

- Construction must commence before January 1, 2025
  - May qualify for sec. 48E if produces zero greenhouse gas emissions
- See EPA publication What is CHP?

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Waste Energy Recovery Property
(sec. 48(a)(3)(A)(viii))

- Property that generates electricity from heat from buildings or equipment where the primary purpose of the building or equipment is not the production of electricity
  - In other words, the heat is a by-product of some other process that is directed toward the production of electricity
- Eligible waste energy recovery property cannot exceed 50 megawatts of capacity
- Construction must commence before January 1, 2025
  - May qualify for sec. 48E if produces zero greenhouse gas emissions

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Energy Storage Technology (sec. 48(a)(3)(A)(ix))

- Energy storage technology includes:
  - Electrical energy storage property
  - Thermal energy storage property
  - Hydrogen energy storage property

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Energy Storage Technology (continued)

- Electrical energy storage property is property that:
  - Receives, stores, and delivers energy for conversion to electricity
  - Has a nameplate capacity of not less than 5 kWh
- Examples include:
  - Rechargeable electrochemical batteries, ultracapacitors, pumped storage hydropower, compressed air storage, flywheels, and reversible fuel cells

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Energy Storage Technology (continued)

- Thermal energy storage property is property:
  - Comprising a system that is directly connected to an HVAC system;
  - That removes heat from, or adds heat to, a storage medium for subsequent use; **and**
  - Provides energy for the heating or cooling of the interior of a residential or commercial building
  - Examples include:
    - Thermal ice storage systems connected to an HVAC system as a source to produce cold air
    - Heated bricks that store heat later used to heat a building through an HVAC system

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Energy Storage Technology (continued)

- Hydrogen energy storage property is property:
  - That stores hydrogen solely to be used as energy
  - Has a nameplate capacity of not less than 5 kWh
- Construction of a qualified energy storage property must begin prior to January 1, 2025
  - Sec. 48E includes specific provisions extending qualified energy storage

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Polling Question 4

True or False: IRC section 48E replaces IRC section 48 beginning in 2025 and focuses solely on clean electricity generation and energy storage facilities.

- True
- False

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Qualified Biogas Property (sec. 48(a)(3)(A)(x))

- A system that converts biomass into a gas which:
  - Consists of not less than 52% methane by volume; **or**
  - Is concentrated by the system into a gas which consist of not less than 52% methane

  AND
  - Captures the gas for sale or productive use and not for disposal via combustion
- Construction on qualified biogas property must begin before January 1, 2025
  - Qualified biogas property is not covered by sec. 48E

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Qualified Biogas Property (continued)

- Biomass sources include:
  - Landfills, wastewater treatment facilities, livestock farms, and food waste
- Examples of biogas property include:
  - Waste feedstock collection systems, landfill gas collection systems, mixing or pumping equipment, and an anaerobic digester

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Microgrid Controllers (sec. 48(a)(3)(A)(xi))

- A **microgrid controller** is equipment designed and used to monitor and control the energy resources and loads on a microgrid

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Microgrid Controllers (continued)

- A **microgrid** is an electrical system that:
  - Includes equipment capable of generating not less than 4 kilowatts and not more than 20 megawatts of electricity
  - Is capable of operating:
    - In connection with the electrical grid and as a single controllable entity with respect to the electrical grid; and
    - Independently (and disconnected) from the grid
  - Is not part of a bulk-power system
- Construction must begin before January 1, 2025

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A Word About Grants and Restricted Gifts

- Under new Treas. Reg. § 1.6417-2(e)(3), the eligible credit amount is reduced by the excess of the sum of:
  - The credit amount; and
  - Grants or restricted gifts received by a nonprofit organization "for the specific purpose of purchasing, constructing, reconstructing, erecting, or otherwise acquiring an investment-related credit property" (i.e., a "restricted tax exempt amount")

  Over
  - The cost of the property

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A Word About Grants and Restricted Gifts (continued)

- Examples from the Regulations – Example 1:
  - Alpha School District (ASD) receives a $400,000 EPA grant to acquire an electric school bus
  - The grant is a "restricted tax exempt amount" because it was made **for the specific purpose** of purchasing a qualified commercial clean vehicle
  - ASD purchases a bus for $400,000; ASD's basis in the bus is $400,000
  - The max allowable credit under the qualified commercial clean vehicle rules is $40,000
  - The sum of $40,000 (the max allowable credit) and $400,000 (the restricted tax exempt amount), $440,000, exceeds ASD's $400,000 basis by $40,000
  - The max allowable credit of $40,000 less the $40,000 excess computed above is $0
  - Therefore, no credit is allowed

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A Word About Grants and Restricted Gifts (continued)

- Examples from the Regulations – Example 2:
  - Delta School District (DSD) receives a $300,000 EPA grant to acquire an electric school bus
  - The grant is a "restricted tax exempt amount" because it was made **for the specific purpose** of purchasing a qualified commercial clean vehicle
  - DSD purchases a bus for $400,000; DSD's basis in the bus is $400,000
  - The max allowable credit under the qualified commercial clean vehicle rules is $40,000
  - The sum of $40,000 (the max allowable credit) and $300,000 (the restricted tax exempt amount), $340,000, does not exceed DSD's $400,000 basis
  - Therefore, DSD is allowed the full credit amount

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A Word About Grants and Restricted Gifts (continued)

- Examples from the Regulations – Example 3:
  - Community Housing Corp (CHC) receives a HUD grant "for the development, financing, and modernization of public housing developments and for management improvements"
  - CHC uses its grant to purchase rooftop solar panels for its property and to pay for the related equipment and labor to install the panels
  - The purchase of the solar panels is within the scope of the permitted uses of the HUD grant, but is not an exclusive use for which the grant was made
  - Because the HUD grant was not "for the specific purpose of purchasing, constructing, reconstructing, erecting, or otherwise acquiring an investment-related credit property," the granted funds are not considered "restricted tax exempt amounts"

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A Word About Grants and Restricted Gifts (continued)

- Examples from the Regulations – Example 3 (continued)
  - The key takeaway is that gift restrictions should be carefully worded
  - A gift that is restricted generally to improvements to the physical plant should not be a “restricted tax exempt amount” if it can be used for any form of improvement but happens to be used for a credit-eligible project

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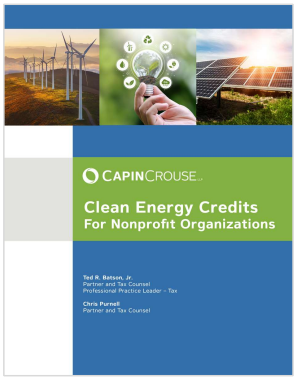

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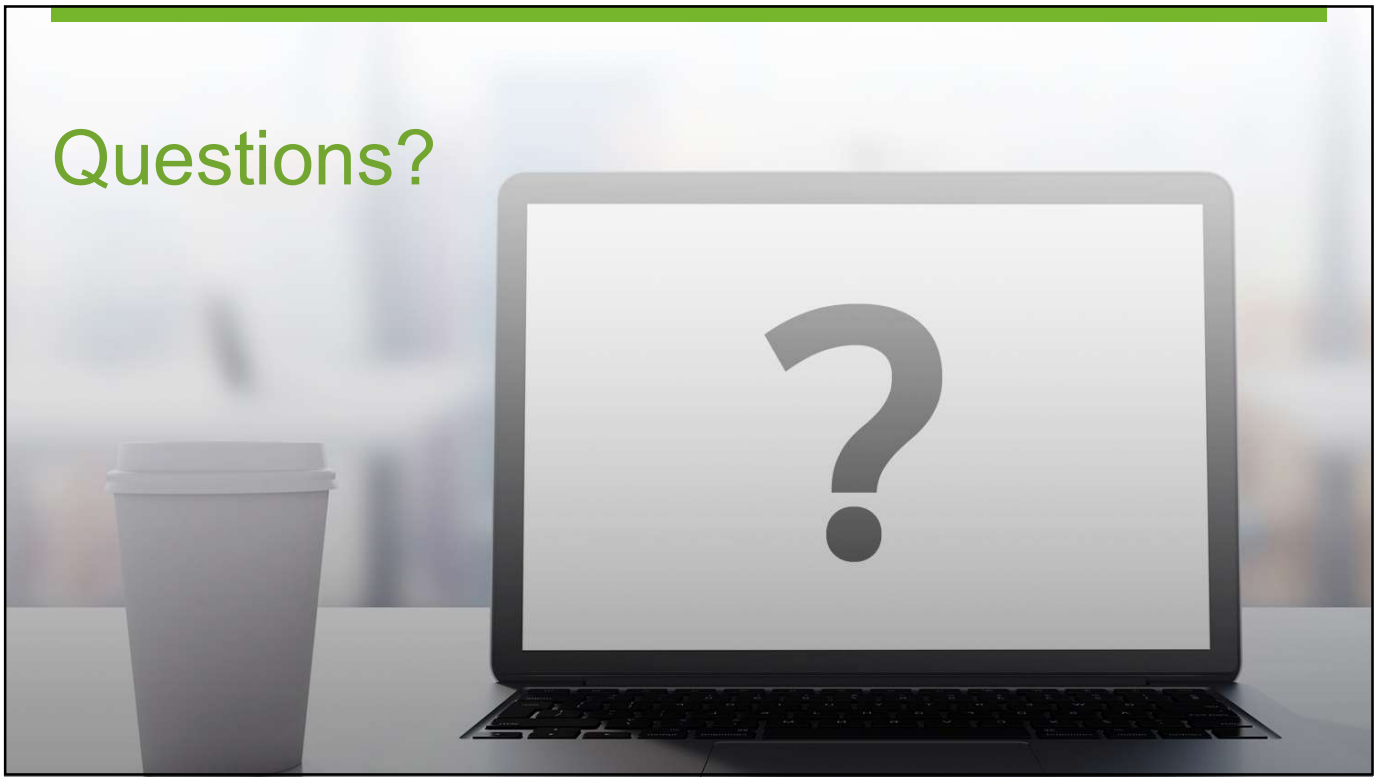

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