

10% Investment tax credit for combined heat and power

Accounting methods and credit services

For combined heat and power (CHP) property, the federal investment tax credit (ITC) under section 48 provides for a credit equal to 10% of expenditures, with no maximum limit. Eligible CHP property includes systems up to 50 MW in capacity and that exceed 60% energy efficiency. The CHP credit is available not just for "new-build" but also for capital improvements to existing facilities, but construction must begin on the system prior to 2024 in order to qualify. The credit is claimed in the year the improvement is placed in service.

Eligible CHP property is defined as a system that uses the same energy source for the simultaneous or sequential generation of electrical power, mechanical shaft power, or both, in combination with the generation of steam or other forms of useful thermal energy.

Types of eligible property

Eligible ITC costs are for property used as an integral part of the cogeneration activity. Major categories of equipment that are potentially ITC-eligible include:

- Boilers (including power boilers, bark boilers, or recovery boilers), including the burner, ash
 handling, feedwater pumps and water treatment, and power generation equipment, including
 turbines, generators, condenser, and cooling towers
- Handling and delivery equipment that supplies fuel directly to and is integrated with such burners and boilers
- Bridge cranes and hoists for turbine generator equipment
- Balance of plant, including steam and condensate piping and supply and exhaust air ductwork
- Electrical and control devices for the major equipment above, including switchgear, transformers, and MCC
- Pollution control equipment, including boiler MACT compliance work
- Finally, ITC-eligible property may also include the civil and structural work, including foundations and structural steel for major equipment such as boilers and turbines.

The following equipment categories are typically not ITC-eligible:

- Property used for the collection, processing, or storage of fuel before its use in the production of electricity
- Transformers or other property used in the transmission of electricity after its production
- Ancillary site improvements, such as roadways and fencing
- Property used to transport the energy source to the facility or to distribute energy produced by the facility.

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Systems with an electrical capacity in excess of 15 MW

CHP systems can only receive the full credit if the system has an electrical capacity of 15 MW or less, and a mechanical energy capacity of 20,000 horsepower or less, or an equivalent combination of electrical and mechanical energy capacities. Larger combined heat and power systems can qualify for a reduced tax credit equal to the ratio between the actual system capacity and 15 MW. For example, for a system with a capacity of 30 MW, the applicable credit percentage is $10\% \times (15 \text{ MW} / 30 \text{ MW}) = 5\%$.

Projects that generate an electrical capacity of 50 MW or more, or mechanical energy capacity of 67,000 horsepower or more, are ineligible.

Operational requirements

To be eligible for the ITC, a CHP system must meet other requirements, including:

- Produce at least 20% of its total useful energy in the form of thermal energy;
- Produce at least 20% of its total useful energy in the form of electrical or mechanical power (or combination, thereof);
- Achieve an energy efficiency percentage exceeding 60% (the efficiency requirement does not apply to CHP systems that use biomass for at least 90% of the system's energy source, but the credit may be reduced for less-efficient systems).

Why KPMG?

The ITC group works as a national team that aligns the skills and core competencies of professionals across the country. Our team members include LEED-accredited professionals, licensed architects, professional engineers, and certified public accountants. We will meet with contractors, vendors, and project managers to gain an in-depth understanding of the project. On most of these projects, we have coordinated our work with other KPMG practices to provide a unified and integrated team to the client. Our services can be better communicated through a relatively brief personal presentation.



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