

Capitol Tax Partners Summary of Energy Tax Provisions in the FY2022 Budget Reconciliation Bill¹

Energy Generation

<p><i>Production Tax Credit (PTC) Extensions</i></p> <p>§13101.</p>	<p>Extend beginning construction deadline for current section 45 technologies from before January 1, 2022 to before January 1, 2025.</p> <p>Reinstates 100 percent wind credit for facilities placed in service after 2021. Eliminates phase out for current offshore wind ITC.</p> <p><u>Credit value.</u> Base credit amount is 0.3 cents per kWh, indexed for inflation. Credit amount is multiplied by five if projects meet prevailing wage and apprenticeship requirements. Opportunity to cure deficiencies in labor requirements. Labor requirements are effective for projects beginning construction 60 days after Treasury publishes guidance on the labor requirements.</p>
<p><i>Investment Tax Credit (ITC) Extensions</i></p> <p>§13102.</p>	<p>Extends beginning construction deadline for section 48 technologies from before 2024 to before 2025. Extends geothermal credit to construction beginning before 2035 (with phase out beginning 2032).</p> <p>Reinstates 30 percent credit for property placed in service after 2021 for solar, fuel cell, and small wind property.</p> <p>Adds standalone storage (with normalization opt-out for large projects), biogas property, microgrid controllers, dynamic glass, and small interconnection to qualifying energy properties.</p> <p><u>Credit value.</u> Base credit amount is 6%. Credit amount is multiplied by five if projects meet prevailing wage and apprenticeship requirements throughout the credit recapture period. Opportunity to cure deficiencies in labor requirements. Labor requirements are effective for projects beginning construction 60 days after Treasury publishes guidance on the labor requirements.</p>
<p><i>Bonus credits for domestic content, energy communities,</i></p>	<p><u>Domestic Content.</u> Taxpayers can receive a bonus credit increasing the PTC/ITC by 10 percent (PTC) or 10 percentage points (ITC) for meeting certain domestic content requirements. If the ITC project doesn't</p>

¹ Version released by Senate Majority Leader Chuck Schumer (D-NY) on July 27, 2022. Two notable provisions were dropped from previous versions of the reconciliation bill: (1) transmission investment tax credit and (2) allowing renewable energy property income to be qualifying income for publicly traded partnerships.

<p><i>and low-income community investments</i></p> <p><i>§13103 and in each applicable tax credit section.</i></p>	<p>meet the prevailing wage requirements, the domestic content bonus credit is 2 percentage points. Eligible for projects placed in service beginning in 2023.</p> <p><u>Energy Communities.</u> Taxpayers can receive a bonus credit increasing the PTC/ITC by 10 percent (PTC) or 10 percentage points (ITC) for investments in certain brownfield and coal mining communities. Eligible for projects placed in service beginning in 2023.</p> <p><u>Low-income Communities.</u> Provides up to a 20-percentage point bonus credit for small wind and solar projects placed in service in certain low-income communities or low-income residential building or economic benefit projects. Credits are allocated by Treasury in 2023 and 2024 for up to 1.8 GW capacity each year.</p>
<p><i>Zero-Emission Nuclear Power PTC</i></p> <p><i>§13105.</i></p>	<p>Provides up to a 1.5 cent per kWh PTC for existing nuclear power facilities that never received the section 45J PTC.</p> <p><u>Credit value.</u> Base credit amount is 0.3 cents per kWh. Credit amount is multiplied by five if projects meet prevailing wage and apprenticeship requirements throughout the credit period. Credit reduced by 80 percent of the gross receipts exceeding 2.5 cents per kWh (credit zeroes out at 4.375 cents per kWh). Gross receipts include amounts received from any Federal, state, or local government for electricity production at the facility. The credit is adjusted for inflation.</p> <p>Opportunity to cure deficiencies in labor requirements. Labor requirements are effective for projects beginning construction 60 days after Treasury publishes guidance on the labor requirements.</p> <p><u>Effective date.</u> Credit is available for electricity produced and sold after 2023. The credit expires after 2032.</p>
<p><i>Technology Neutral Clean Electricity Production Credit</i></p> <p><i>§13701, 13703.</i></p>	<p>Provides a 10-year PTC for electricity generation facilities with a greenhouse gas emissions rate of zero. The credit applies to certain retrofits placed in service after 2024, provided the existing facility had not previously qualified for an energy credit. Emissions do not include amounts sequestered through carbon capture technology.</p> <p><u>Credit value.</u> Base credit amount is 0.3 cents per kWh, indexed for inflation. Credit amount is multiplied by five if projects meet prevailing wage and apprenticeship requirements or the facility is less than 1MW.</p>

	<p>Opportunity to cure deficiencies in labor requirements. Labor requirements are effective for projects beginning construction 60 days after Treasury publishes guidance on the labor requirements.</p> <p><u>Effective date.</u> Available to facilities placed in service after 2024. The credit begins phasing out two years after the later of 2032 or when annual greenhouse gas emissions in the U.S. are 25% or less of the annual GHG emissions in 2022.</p> <p><u>Cost recovery.</u> Facilities qualifying for the credit are five-year property under section 168(e)(3)(B).</p>
<p><i>Technology Neutral Clean Electricity Investment Credit</i></p> <p>§13702, 13703.</p>	<p>Provides an ITC for investments in energy property that generates electricity and has a GHG rate of zero. The credit applies to retrofits of property that previous has not qualified for an energy credit.</p> <p>Standalone storage qualifies for the credit.</p> <p><u>Credit value.</u> Base credit amount is 6%. Credit amount is multiplied by five if projects meet prevailing wage and apprenticeship requirements or the facility is less than 1MW. Opportunity to cure deficiencies in labor requirements. Labor requirements are effective for projects beginning construction 60 days after Treasury publishes guidance on the labor requirements.</p> <p><u>Effective date.</u> Available to facilities placed in service after 2024. The credit begins phasing out two years after the later of 2032 or when annual greenhouse gas emissions in the U.S. are 25% or less of the annual GHG emissions in 2022.</p> <p><u>Cost recovery.</u> Property qualifying for the credit is five-year property under section 168(e)(3)(B).</p>
<p><i>Hydrogen</i></p> <p>§13204.</p>	<p>Provides a 10-year PTC for U.S. production of hydrogen. Sale or use must be verified by an unrelated person. To qualify, the hydrogen must be produced through a process resulting in lifetime greenhouse gas emissions rate of no more than 4 kgs of CO2e per kg of hydrogen. No hydrogen credit is allowed for a facility which is already qualifying for the carbon sequestration credit. A taxpayer may retrofit an existing facility to produce qualified clean hydrogen.</p> <p>Taxpayers may use electricity from facilities qualifying for a section 45 credit or the proposed section 45U nuclear credit to produce qualified clean hydrogen.</p>

	<p><u>Credit value.</u> Base credit amount is \$0.60 per kilogram of qualified clean hydrogen produced during the 10-year period beginning on the date the facility was placed in service. Credit amount is multiplied by five if projects meet prevailing wage and apprenticeship requirements. Credit amount is multiplied by the applicable percentage, which decreases to 0 percent as lifecycle emissions increase above 0.45 kg of CO_{2e} per kg of hydrogen toward 4 kg of CO_{2e} per kg of hydrogen. Opportunity to cure deficiencies in labor requirements. Labor requirements are effective for projects beginning construction 60 days after Treasury publishes guidance on the labor requirements.</p> <p>Taxpayers may elect to receive an ITC in lieu of the hydrogen PTC for a base credit of up to 6%, multiplied by five if labor and apprenticeship requirements are met.</p> <p><u>Effective date.</u> The credit applies to hydrogen produced after 2022. The qualifying facility must begin construction before 2033.</p>
<p><i>Carbon Sequestration</i> <i>§13104.</i></p>	<p>Extends the current section 45Q carbon sequestration credit begin construction deadline from before 2026 to before 2033. The threshold for qualifying for the carbon sequestration credit for electricity generating facilities is capturing no less than 18,750 metric tons of qualified carbon oxide and the ability to capture at least 75 percent of the baseline carbon oxide production. Other facilities must capture at least 12,500 metric tons of carbon oxide during the year.</p> <p>Direct air capture facilities must capture at least 1,000 metric tons of qualified carbon oxide during the year to qualify.</p> <p><u>Credit value.</u> The base credit is: \$17 per metric ton for carbon captured and sequestered, \$12 per metric ton for carbon captured and used by the taxpayer as a tertiary injectant, \$36 per metric ton for direct air capture and sequestration, and \$26 per metric ton for direct air captured and used as a tertiary injectant. Credit amount is multiplied by five if project meets prevailing wage and apprenticeship requirements. Opportunity to cure deficiencies in labor requirements. Labor requirements are effective for projects beginning construction 60 days after Treasury publishes guidance on the labor requirements.</p> <p><u>Effective date.</u> The increased credits are available for projects beginning construction after date of enactment. The credit is available for construction beginning before 2033.</p>

Credit Monetization

The House-passed reconciliation bill (the “Build Back Better Act”) provided a “direct pay” election to allow taxpayers to monetize most of the tax credits in the bill. After a phase-in period, the direct pay election was only available with respect to certain projects that had met certain domestic content requirements.

The Inflation Reduction Act of 2022 limits the availability of the direct pay election and provides a transferability provision for those taxpayers that are precluded from using direct pay.

Direct pay - §13801.

The direct pay election is available only with respect to certain tax credits and, in most cases, only for certain tax-exempt persons.

The applicable credits are:

- the alternative fuel vehicle refueling property credit of section 30C,
- the renewable electricity PTC of section 45 (for facilities placed in service after 2022),
- the carbon sequestration PTC of section 45Q (for facilities placed in service after 2022),
- the zero-emission nuclear power PTC of section 45U,
- the clean hydrogen PTC of section 45V (for facilities placed in service after 2012),
- the credit for qualified commercial vehicles of section 45W,
- the advanced manufacturing PTC of section 45X,
- the clean electricity (technology neutral) PTC of section 45Y,
- the clean fuel (technology neutral) PTC of section 45Z,
- the energy credit of section 48,
- the qualifying advanced energy project credit of section 48C, and
- the clean electricity (technology neutral) ITC of section 48D.

An election for the clean hydrogen PTC, the carbon sequestration PTC, and the advanced manufacturing PTC can be made by *any taxpayer* for any taxable year beginning before January 1, 2033. In these cases, the election is applicable to the taxable year for which the election is made and the subsequent four taxable years before 2033.

The election for the remaining applicable credits may only be made by certain non-profit persons, specifically:

- Entities exempt from tax,

- State and local governments,
- Tennessee Valley Association,
- Indian tribal governments, and
- Alaskan Native Corporations.

An election for the section 45 and 48 credits for these tax-exempt persons is conditioned on meeting domestic content requirements for projects that start construction after 2024.

Transferability - §13801.

The Inflation Reduction Act of 2022 allows taxpayers that cannot make a direct pay election to elect to transfer all or a portion of their applicable credits to another unrelated taxpayer. The applicable credits are the same as those on the domestic pay list above (except for the commercial vehicle credit). In addition, the placed-in-service requirement for the renewable electricity, carbon sequestration and hydrogen production PTCs do not apply.

The election must be made by the extended due date of the tax return for which the credit is determined and is irrevocable. The transferred tax credit is then taken into account by the transferee in its first taxable year that ends within or after the taxable year of the transferor. Tax credits can only be transferred once, and tax credit carryovers cannot be transferred.

There are no restrictions regarding to whom a credit can be transferred other than it must be an unrelated party. Presumably, transfers to individuals would be subject to the passive loss restrictions.

The credit must be transferred for cash. No income is recognized by the transferor and no deduction is allowed to the transferee with respect to the transfer.

In the case of partnership or an S corporation, the election is made at the entity level. The consideration received is treated as tax-exempt income under section 705 and 1366 that is allocated to a partner's distributive share in the same manner as the credit would have been allocated.

The transferor must reduce its basis in property with respect to transferred ITCs. The statute is silent on the treatment of recapture of ITCs.

If a transferee claims a tax credit greater than the amount of credit generated by the transferor, the transferee has a tax liability equal to such excess plus a 20% penalty that can be waived by a showing of reasonable cause.

Energy Manufacturing

<p><i>Section 48C Advanced Energy Project Credit</i> <i>§13501.</i></p>	<p>Allocates an additional \$10 billion to the section 48C advanced energy project program. At least \$4 billion must be allocated to brownfield or coal energy communities. The project must be placed in service within two years of the Treasury allocation. Credit will not be allocated to a project located in a census tract that previously received a section 48C allocation.</p> <p>Qualifying manufacturing facilities are expanded to include renewable and clean energy manufacturing, including electric vehicles and trucks.</p> <p><u>Credit value.</u> Base credit amount is 6%, indexed for inflation. Credit amount is multiplied by five if projects meet prevailing wage and apprenticeship requirements. Opportunity to cure deficiencies in labor requirements.</p>
<p><i>Advanced Manufacturing Production Credit</i> <i>§13502.</i></p>	<p>Provides a PTC for the production and sale to unrelated persons of certain solar, wind, inverter, battery, or mineral components. Components manufactured at facilities that received the 48C credit do not qualify for the production credit. The credit only applies to components produced in the U.S. or its territories. Components incorporated into another eligible component before being sold to an unrelated person qualify for the credit.</p> <p><u>Credit value.</u> The credit amount varies based on the eligible component produced and sold and is calculated on a per component basis.</p> <p><u>Effective date.</u> The credit applies to components produced and sold after 2022.</p>

Fuels

<p><i>Biodiesel Renewable Fuels and Alternative Fuels Extension</i></p>	<p>Extends a variety of fuels incentives through December 31, 2024. Upon expiration the fuel credits are scheduled to transition to the Clean Fuel Production Credit described below.</p>
---	---

<p>§13201.</p>	<p>The credits extended are: section 40A biodiesel and renewable diesel; section 6426(c)(6) biodiesel mixture; section 6427(e)(6)(B) biodiesel mixture; section 6326(d)(5) alternative fuel; section 6426(e)(3) alternative fuel mixture; and section 6427(e)(6)(C) alternative fuel.</p> <p>Section 6426(d)(5), which expired on December 31, 2021, is also retroactively extended for 2022.</p>
<p><i>Sustainable Aviation Fuels Credit</i></p> <p>§13203.</p>	<p>Creates a \$1.25 credit so long as the qualifying fuel reduces lifecycle greenhouse gas emissions by at least 50 percent. The value of the credit increases to \$1.75, increasing \$.01 for each percentage point by which the lifecycle emissions reduction of the fuel exceeds 50 percent.</p> <p>The credit expires on December 31, 2024. Upon expiration the credit is scheduled to transition to the Clean Fuel Production Credit described below.</p>
<p><i>Hydrogen</i></p> <p>§13204.</p>	<p>See description in the energy generation section above.</p>
<p><i>Clean Fuel Production Credit</i></p> <p>§13704.</p>	<p>This section directs that on December 31, 2024, existing fuel credits transition to the Clean Fuel Production Credit.</p> <p><u>Credit value.</u> Base credit for transportation fuel is \$0.20 per gallon. Credit is \$1.00 if production meets labor and prevailing wage requirements. Opportunity to cure deficiencies in labor requirements. Labor requirements are effective for projects beginning construction 60 days after Treasury publishes guidance on the labor requirements.</p> <p>SAF base credit is \$0.35 and \$1.75 if labor and prevailing wage requirements are met is \$1.75.</p> <p>The value of the credit is generally determined by the emission level of the fuel. To receive the credit the fuel must have a lifecycle emission level of less than 50 kilograms of CO₂e per mmBTU. The full value of the credit is available to fuels with 0 kilograms of CO₂e per mmBTU and proportionately decreases as emission level rises to 50 kg CO₂e per mmBTU.</p> <p>Facilities producing fuels that receive this credit are not eligible for credits under the sections 45V hydrogen and 45Q carbon sequestration credits.</p>

	<p><u>Effective date.</u> The credit applies to fuel produced after 2024 and expires on December 31, 2027.</p>
--	--

Clean Vehicles

<p><i>Clean Vehicle Credit</i></p> <p>§13401.</p>	<p>Provision replaces the existing electric vehicle credit with a Clean Vehicle Credit worth up to \$7,500.</p> <p>The definition of a qualified vehicle expands section 30D(d) by requiring that an electric vehicle increase from 4 to 7 its kilowatt hour capacity and expands the definition to include fuel cell vehicles.</p> <p><u>Credit value.</u> The \$7,500 credit is available in two \$3,750 tranches. The first requires that a percentage of the critical minerals in the battery are extracted or processed in a country with a United States free trade agreement. The second requires that a certain percentage of the battery is manufactured or assembled in North America.</p> <p><u>Means testing.</u> The credit institutes income and retail price thresholds. The credit is limited to taxpayers earning less than \$300,000 for a joint filer, \$225,000 for a head of household, and \$150,000 for a single filer.</p> <p>The credit is limited to vehicles with MSRP less than \$80,000 for vans, SUVs and pickup trucks. The limit is \$55,000 for any other vehicle.</p> <p><u>Effective date.</u> The new credit eliminates the 200,000 per manufacturer limit and expires on December 31, 2032.</p>
<p><i>Previously Owned Clean Vehicles</i></p> <p>§13402.</p>	<p><u>Credit value.</u> A credit worth the lesser of \$4,000 or 30 percent of the sale price is available for previously owned clean vehicles.</p> <p><u>Means testing.</u> The credit institutes income and retail price thresholds. The credit is limited to taxpayers earning less than \$150,000 for joint filers, \$112,500 for a head of household, and \$75,000 for a single filer. In terms of price limitations, the sale price cannot exceed \$25,000.</p>

	<p><u>Effective date.</u> The credit expires on December 31, 2032.</p>
<p><i>Qualified Commercial Clean Vehicles</i></p> <p>§13403.</p>	<p>This provision creates a credit for commercial clean vehicles. Amongst other requirements to qualify, a vehicle must be treated as a motor vehicle in title II or the Clean Air Act or mobile machinery for purposes of section 4053(8). Additionally, the vehicle must not be propelled by an internal combustion engine and have a battery capacity of at least 10 kilowatt hours.</p> <p>The value of the credit is limited to \$7,500 for vehicle with a weight rating less than 14,000 pounds or \$40,000 for other qualifying vehicles.</p> <p><u>Effective date.</u> The credit expires on December 31, 2032.</p>
<p><i>Alternative Fuel Refueling Property Credit</i></p> <p>§13404.</p>	<p>The provision expands the credit by providing a maximum credit of 30 percent (6 percent for items subject to depreciation) for expenses up to \$100,000.</p> <p>The provision also clarifies that bidirectional charging equipment is eligible and expands the list to include electric charging stations.</p> <p><u>Effective date.</u> The provision expires on December 31, 2032.</p>

Superfund

<p><i>Reinstatement of Superfund</i></p> <p>§13601.</p>	<p>Reinstates the Superfund tax on crude oil received at a U.S. refinery and petroleum products entered into the U.S. for consumption, use, or warehousing.</p> <p><u>Tax rate.</u> Levied at a rate of 16.4 cents per barrel. For years beginning after 2023, this amount would be adjusted for inflation (the chemical Superfund tax, which was reinstated on July 1, 2022, was not indexed for inflation).</p> <p><u>Effective date.</u> The reinstatement would be effective on January 1, 2023.</p>
---	--

Energy Efficiency

<p><i>Extension and Modification of Nonbusiness Energy Property Credits</i></p> <p>§13301.</p>	<p>Provides a 30% credit, subject to certain annual limitations, for certain residential energy property expenditures, such as energy efficient windows, doors, and appliances. Qualified energy property and residential energy property expenditures is updated and expanded with new efficiency standards. Provides up to a \$150 home audit credit.</p> <p><u>Effective date.</u> Generally applies to property placed in service after 2021 through 2032.</p>
<p><i>Residential Clean Energy Credit</i></p> <p>§13302.</p>	<p>Extends and expands the residential energy efficient property credit to provide a 30% credit for certain residential clean energy investments, including energy storage, before 2035. Beginning in 2033 the credit begins phasing out.</p> <p><u>Effective date.</u> Applies to expenditures after 2021.</p>
<p><i>Energy Efficient Commercial Buildings Deduction</i></p> <p>§13303.</p>	<p>Amends current section 179D energy efficient commercial buildings deduction to provide a scalable credit based on the total energy and power cost reductions over 25%. Deduction applies to new construction and retrofits. Modifies the efficiency standards under the current section 179D.</p> <p><u>Credit value.</u> Base credit is \$0.50 per square foot (increases to \$1.00 by \$0.02 for each percentage point reduction in energy and power costs over 25%). Credit is reduced by the amount of deductions previously taken under this section. Credit is multiplied by five if certain labor and apprenticeship requirements are met. Labor and apprenticeship requirements effective 60 days after Treasury publishes guidance. Opportunity to cure deficiencies in labor requirements. Credit is adjusted for inflation.</p> <p><u>Effective date.</u> Credit applies to tax years beginning after 2022.</p>
<p><i>Extension and Modification of New Energy Efficient Home Credit</i></p> <p>§13304.</p>	<p>Increases the credit for the construction of new, energy efficient single-family and multi-family homes. Modifies the efficiency standards to qualify for the credit.</p> <p><u>Effective date.</u> Increased credit applies to dwelling units acquired after 2021 and further modifications to the credit, including efficiency and labor provisions, apply to dwelling units acquired after 2022.</p>