

# CHECKPOINT EXECUTIVE SUMMARY

## *Inflation Reduction Act of 2022*



### IN THIS PACKAGE

Jump right to tax provisions related to:

- [Tax Revenue Provisions](#)
- [Tax Credits and Deductions](#)
- [IRS Appropriations](#)
- [Detailed Table of Contents](#)

Checkpoint presents this in-depth executive summary of the Inflation Reduction Act of 2022 (the Act, HR 5376). In addition to new taxes and credits, the Act directs \$80 billion to the IRS, with \$45.6 billion aimed chiefly at enforcement.

President Biden signed the Act on August 16, 2022, which becomes the Act's effective date. Specific provisions may be effective as of a prior or future date as detailed in the discussion below.

#### The Act covers, among other things:

- A 15% corporate alternative minimum tax on large corporations
- A 1% excise tax on stock buybacks
- Credits for new and used clean (EV) vehicles
- Credits for the production of clean hydrogen
- Credits for the production of zero-emission nuclear power

# Detailed Table of Contents

Tax Revenue Provisions .....	4
Corporate Alternative Minimum Tax .....	4
1% Excise Tax on Repurchase of Corporate Stock.....	8
Drug Manufacturers Who Don't Comply with New Pricing Agreement Rules Must Pay New Excise Tax.....	9
Hazardous Substance Superfund Tax on Crude Oil and Petroleum Products Reinstated, Increased.....	10
Coal Excise Tax Rates Permanently Extended .....	11
Tax Credits and Deductions.....	12
Favorable ARPA Premium Tax Credit Rules Remain in Effect for 2023-2025 .....	12
Extension and Modification of Credit for Electricity Produced from Certain Renewable Sources.....	14
Extension and Modification of the Energy Credit.....	15
Increased Energy Credit for Solar and Wind Facilities in Certain Low-Income Communities.....	18
Extension and Modification of the Credit for Carbon Oxide Sequestration .....	18
New Credit for Zero-Emission Nuclear Power Production .....	20
Extension of Incentives for Biodiesel, Renewable Diesel and Alternative Fuels.....	21
Extension of Second-Generation Biofuel Producer Credit to 2024 .....	22
New Income or Excise Tax Credit Allowed for Sustainable Aviation Fuel for 2023 and 2024 .....	22
Clean Hydrogen Production Credit.....	23
Extension, Increase, and Modifications of Nonbusiness Energy Property Credit .....	24
Extension and Modification of Residential Clean Energy Credit.....	25
Accelerated Cost Recovery for Green Building Property.....	26
Extension, Increase, and Modifications of New Energy Efficient Home Credit .....	27
New Clean Vehicle Credit.....	29
Credit for Previously-Owned Clean Vehicles.....	33
New Credit for Qualified Commercial Clean Vehicles.....	34
Alternative Fuel Vehicle Refueling Property Credit.....	34
Qualifying Advanced Energy Project Credit.....	35
Advanced Manufacturing Production Credit .....	36
Clean Energy Production Credit .....	38
Clean Energy Investment Credit.....	38
Certain Green Energy Property Classified as MACRS 5-Year Property.....	38
New Clean Fuel Production Credit .....	39

Elective Payments and Transferable Credits for Energy Property and Electricity Produced from Certain Renewable Resources, Etc. ....40

Increase in Qualified Small Business Payroll Tax Credit for Increasing Research Activities .....42

Extension of Limitation on Excess Business Losses of Noncorporate Taxpayers .....42

IRS Appropriations .....43

IRS Funding to Improve Taxpayer Service and Compliance .....43

# Tax Revenue Provisions

## Corporate Alternative Minimum Tax

The Inflation Reduction Act imposes a new 15% corporate alternative minimum tax on the adjusted financial statement income of applicable corporations. (Code Sec. 55(b)(2), as amended by Act Sec. 10101(a)(1))

The minimum tax will apply if it exceeds the taxpayer's regular tax including its base erosion and anti-abuse tax (BEAT) for the tax year. (Code Sec. 55(a)(2), as amended by Act Sec. 10101(a)(2) and Code Sec. 55(a)(3), as amended by Act Sec. 10101(a)(3))

**Observation. The Act's alternative minimum tax can be thought of as a "Book Minimum Tax" because the starting point of the calculation is a corporation's average annual adjusted financial statement income which includes financial statements prepared in accordance with generally accepted accounting principles (GAAP). This is a departure from the previous calculation of the corporate alternative minimum tax ("Old AMT") rules, in place prior to the Tax Cuts and Jobs Act (TCJA of 2017), where the starting point was taxable income.**

An applicable corporation for a tax year is any corporation (other than an S corporation, regulated investment company (RIC), or a real estate investment trust (REIT) which meets the average annual adjusted financial statement income test ("Income Test") for one or more earlier tax years that ends after December 31, 2021. (Code Sec. 59(k)(1)(A), as amended by Act Sec. 10101(a)(2))

A corporation meets the Income Test if its average annual adjusted financial statement income for the three-tax-year period (determined without regard to loss carryovers) ending with the tax year exceeds \$1 billion. (Code Sec. 59(k)(1)(B)(i), as amended by Act Sec. 10101(a)(2)) Special rules for corporations in existence for less than three years and short corporate tax years apply. (Code Sec. 59(k)(1)(E)(i) and Code Sec. 59(k)(1)(E)(ii), as amended by Act Sec. 10101(a)(2))

However, a corporation that is a member of a foreign parented multinational group, defined below, for any tax year is an applicable corporation if:

- I. the adjusted financial statement income of all members of the group (determined without regard to the exclusions of income that is not effectively connected and the inclusion of a pro rata share of a CFC's income) exceeds \$1,000,000,000 (Code Sec. 59(k)(2)(A), as amended by Act Sec. 10101(a)(2) and
- II. the adjusted financial statement income of the corporation (determined without regard to loss carryovers) is \$100,000,000 or more. (Code Sec. 59(k)(1)(B)(ii)(II), as amended by Act Sec. 10101(a)(2))

The \$1 billion Income Test is applied (i) by including the income of all corporations that are treated as a single employer under Code Sec. 52(a) (commonly controlled corporations) or Code Sec. 52(b) (commonly controlled entities) and including the income from all partnerships in which the corporation owns an interest and (ii) by disregarding the covered benefit plan adjustment described below. (Code Sec. 59(k)(1)(D)(i), as amended by Act Sec. 10101(a)(2)) The inclusion of members treated as a single employer under Code Sec. 52(a) is applied on the basis of Code Sec. 1563(b) (except for the inclusion of brother-sister controlled group) and the inclusion of members treated as a single employer under Code Sec. 52(b) is applied by treating activities described in Code Sec. 469(c)(5) and Code Sec. 469(c)(6) as trades or businesses. (Code Sec. 59(k)(1)(D)(ii), as amended by Act Sec. 10101(a)(2))

A foreign-parented multinational group for a tax year is two or more entities if (a) at least one entity is a domestic corporation and another entity is a foreign corporation, (b) these entities are included in the same applicable financial statements for the year, and (c) either (I) the common parent of the entities that is a foreign corporation or (II) if there is no common parent, the entities are treated as having a common parent which is a foreign corporation as described below. (Code Sec. 59(k)(2)(B), as amended by Act Sec. 10101(a)(2))

For this purpose, if a foreign corporation is engaged in a U.S. trade or business, then the trade or business is treated as a separate domestic corporation that is wholly owned by the foreign corporation. (Code Sec. 59(k)(2)(C), as amended by Act Sec. 10101(a)(2)) IRS is to provide rules for the application of this definition, including rules for the determination of (i) which entities (if any) are to be treated as having a common parent that a foreign corporation, (ii) which entities to be included in a foreign-parented multinational group, and (iii) the common parent of a foreign parent multinational group. (Code Sec. 59(k)(2)(D), as amended by Act Sec. 10101(a)(2))

**Observation. The Joint Committee on Taxation, Proposed Book Minimum Tax analysis, July 28, 2022, estimates that about 150 taxpayers would be subject to the corporate minimum tax annually; estimated to be about 30% of existing Fortune 500 companies. This means the Book Minimum Tax has an incredibly narrow base making 150 companies responsible for raising \$313 billion of the anticipated \$450 billion required to cover go-green decarbonization expenditures in the Act.**

A corporation that is an applicable corporation retains that status in perpetuity unless (i) the corporation has an ownership change or has a specified number of consecutive tax years, including the most recent tax year, in which the corporation does not meet the Income Test (to be determined by IRS, based on the facts and circumstances), and (ii) IRS determines that it would not be appropriate to continue to treat the corporation as an applicable corporation. However, IRS may later determine that the corporation meets the Income Test for any later tax year. (Code Sec. 59(k)(1)(C), as amended by Act Sec. 10101(a)(2))

IRS will provide regulations or other guidance for the purposes of carrying out these rules, including regulations or other guidance (a) providing a simplified method for determining whether a corporation meets the Income Test and (b) addressing the application of these rules to a corporation that experiences a change in ownership. (Code Sec. 59(k)(3), as amended by Act Sec. 10101(a)(2))

**Observation. While starting the calculation for Book Minimum Tax at the adjusted financial statement book net income level is a departure from the pre-TCJA starting point, it is not a novel idea. The global minimum tax (GLoBE) proposed by the Organization for Economic Co-Operation and Development (OECD) and the G-20 also recommend using adjusted financial statement net book income as the starting point in calculating minimum tax liabilities. (see Congressional Research Service: The Pillar 2 Global Minimum Tax, July 7, 2022)**

Adjusted financial statement income is the net income or loss of the taxpayer as presented in the taxpayer's applicable financial statements (defined under Code Sec. 451(b)(3)) for the tax year. (Code Sec. 56A(a), as amended by Act Sec. 10101(b)(1); Code Sec. 56A(b), as amended by Act Sec. 10101(b)(1))

Adjusted financial statement income must be adjusted where the applicable financial statement covers a period other than the tax year (Code Sec. 56A(c)(1)) and a consolidated financial statement for a group of entities is treated as the applicable financial statement for an entity within the group. (Code Sec. 56A(c)(2)(A), as amended by Act Sec. 10101(b)(1))

However, except as provided in IRS regulations, the adjusted financial statement income for the group as a whole, takes into account the items on the group's applicable financial statement allocable to members of the group, only if the corporations file consolidated returns. (Code Sec. 56A(c)(2)(B), as amended by Act Sec. 10101(b)(1))

Otherwise, the corporation only includes dividends it receives from the other corporation (reduced as provided by IRS) and other amounts that are includible in gross income or deductible as a loss (other than subpart F and GILTI income inclusions or other amounts provided by IRS). (Code Sec. 56A(c)(2)(C), as amended by Act Sec. 10101(b)(1))

Adjusted financial statement income of a disregarded entity owned by the taxpayer is included in adjusted financial statement income (Code Sec. 56A(c)(6)), but adjusted financial statement income of a partnership owned by the taxpayer is taken into account only to the extent of corporation's distributive share of adjusted financial statement income of the partnership. (Code Sec. 56A(c)(2)(D), as amended by Act Sec. 10101(b)(1))

In addition, the following adjustments are made in determining adjusted financial statement income:

- where the corporation is a shareholder in a CFC, the corporation's pro rata share of the adjusted financial statement income of the CFC is taken into account. However, no negative adjustment is made. Instead, the negative adjustment is taken into account in a later year in which the CFC has positive income. (Code Sec. 56A(c)(3), as amended by Act Sec. 10101(b)(1))
- a foreign corporation's adjusted financial statement income is computed by taking into account only income that is effectively connected with the conduct of a U.S. trade or business. (Code Sec. 56A(c)(4), as amended by Act Sec. 10101(b)(1))
- federal income taxes with respect to a foreign country or U.S. possession that are taken into account on the taxpayer's applicable financial statement are disregarded. However, to the extent provided by IRS, this rule doesn't apply to income taxes imposed by a foreign country or U.S. possession if the taxpayer does not elect to use the foreign tax credit. IRS shall prescribe regulations or other guidance to provide for the proper treatment of current and deferred taxes, including the time at which the taxes are properly taken into account. (Code Sec. 56A(c)(5), as amended by Act Sec. 10101(b)(1))
- the adjusted financial statement income of a subchapter T cooperative is determined after subtracting cooperative patronage dividends and per-unit retain allocations. (Code Sec. 56A(c)(7), as amended by Act Sec. 10101(b)(1))
- the adjusted financial statement income of an Alaska native corporation is determined by taking special depreciation and depletion deductions. (Code Sec. 56A(c)(8), as amended by Act Sec. 10101(b)(1))

- amounts treated as tax credits under an election under Code Sec. 6417 or Code Sec. 48D(d) are disregarded to the extent that these amounts were not taken into account under Code Sec. 56A(c)(5). (Code Sec. 56A(c)(9), as amended by Act Sec. 10101(b)(1))
- the adjusted financial statement income relating to mortgage servicing contracts is adjusted to prevent the inclusion of income before the income is taken into account for federal tax purposes and IRS is directed to provide regulations to prevent the avoidance of taxes on amounts not representing reasonable compensation with respect to a mortgage servicing contract. (Code Sec. 56A(c)(10), as amended by Act Sec. 10101(b)(1))
- except as otherwise provided by IRS, adjusted financial statement income is computed by taking the tax deductions and income with respect to a covered benefit plan (including qualified plans under Code Sec. 401(a), foreign plans and other plans), rather than under the financial statement reporting rules. (Code Sec. 56A(c)(11), as amended by Act Sec. 10101(b)(1))
- the adjusted financial statement income of a tax-exempt entity subject to the Code Sec. 511 unrelated business tax includes only the adjusted financial statement income relating to its Code Sec. 512 unrelated trade or business income and Code Sec. 514 debt-financed income. (Code Sec. 56A(c)(12), as amended by Act Sec. 10101(b)(1))
- the adjusted financial statement income is computed by taking the tax depreciation deductions allowed under Code Sec. 167 on Code Sec. 168 tangible property, rather than the financial statement depreciation. (Code Sec. 56A(c)(13), as amended by Act Sec. 10101(b)(1))
- the adjusted financial statement income is computed by taking the tax amortization adjustments under Code Sec. 197 relating to the qualified wireless spectrum used in the trade or business of a wireless telecommunications carrier where the property was acquired after Dec. 31, 2007, and before the enactment of these rules, rather than the financial statement amortization. (Code Sec. 56A(c)(14), as amended by Act Sec. 10101(b)(1))
- IRS will issue regulations or other guidance to provide for adjustments to adjusted financial statement income necessary to carry out the purposes of these rules including adjustments (a) to prevent the omission or duplication of any item and (b) to carry out the principles relating to certain corporate or partnership transactions. (Code Sec. 56A(c)(15), as amended by Act Sec. 10101(b)(1))
- adjusted financial statement income is determined by taking only 80% of the adjusted financial statement net operating loss and the remainder is carried forward. (Code Sec. 56A(d), as amended by Act Sec. 10101(b)(1))

A domestic corporation may take a corporate AMT foreign tax credit for the relevant foreign or U.S. possessions taxes that are taken into account on the corporation's applicable financial statement and paid or accrued (for tax purposes) by the applicable corporation. (Code Sec. 59(l)(1)(B), as amended by Act Sec. 10101(c))

In addition, a corporation may take a corporate AMT foreign tax credit for the tax year up to the lesser of (i) the aggregate of the applicable corporation's pro rata share of the relevant foreign or U.S. possessions taxes that are taken into account on the applicable financial statement of each controlled foreign corporation with respect to which the applicable corporation is a U.S. shareholder and paid or accrued (for tax purposes) by each controlled foreign corporation or (ii) 15% of the corporation's pro rata share of the adjusted financial statement income of the CFC that is taken into account under Code Sec. 56A(c)(3). (Code Sec. 59(l)(1)(A), as amended by Act Sec. 10101(c))

The unused foreign taxes are carried forward for up to five years. (Code Sec. 59(l)(2), as amended by Act Sec. 10101(c))

**Observation. The limit on deemed-paid foreign income taxes attributable to a U.S. shareholder's pro rata share of the CFC's income prevents the U.S. shareholder from using its deemed-paid foreign tax credits to reduce alternative minimum tax imposed on non-CFC income.**

The corporate general business AMT credit is limited to 25% of the taxpayer's net income tax exceeding \$25,000, without regard to the special empowerment zone rules. (Code Sec. 38(c)(6)(E), as amended by Act Sec. 10101(d))

Where regular tax is higher than the minimum tax, a corporation may carry forward a credit for the net minimum tax for all prior tax years beginning after 2022 to reduce the taxpayer's regular tax including base erosion anti-abuse tax (Code Sec. 59A) for the tax year. (Code Sec. 53(e), as amended by Act Sec. 10101(e))

**Effective date.** This provision is effective for tax years beginning after December 31, 2022. (Act Sec. 10101(f), New IRC Sec. 56A)

## 1% Excise Tax on Repurchase of Corporate Stock

The Inflation Reduction Act of 2022 imposes on each "covered corporation" a tax equal to 1% of the fair market value of any stock of the corporation which is repurchased (as defined in Code Sec. 4501(c)) by the corporation during the tax year. (Code Sec. 4501(a), as added by Act Sec. 10201(a))

A "covered corporation" is any domestic corporation the stock of which is traded on an established securities market (within the meaning of Code Sec. 7704(b)(1)). (Code Sec. 4501(b), as added by Act Sec. 10201(a))

The 1% excise tax does not apply:

- (1) to the extent that the repurchase is part of a reorganization (within the meaning of Code Sec. 368(a)) and no gain or loss is recognized on such repurchase by the shareholder by reason of such reorganization,
- (2) in any case in which the stock repurchased is, or an amount of stock equal to the value of the stock repurchased is, contributed to an employer sponsored retirement plan, employee stock ownership plan, or similar plan,
- (3) in any case in which the total value of the stock repurchased during the tax year does not exceed \$1 million,
- (4) under regulations prescribed by the IRS, in cases in which the repurchase is by a dealer in securities in the ordinary course of business,
- (5) to repurchases by a regulated investment company (as defined in Code Sec. 851) or a real estate investment trust, or



(6) to the extent that the repurchase is treated as a dividend. (Code Sec. 4501(e), as added by Act Sec. 10201(a))

**Effective date.** The 1% excise tax applies to repurchases of stock after December 31, 2022. (Act Sec. 10201(d))

## Drug Manufacturers Who Don't Comply with New Pricing Agreement Rules Must Pay New Excise Tax

*New manufacturers excise tax on noncompliant drug manufacturers, producers, importers.* The Inflation Reduction Act of 2022 adds new Code Sec. 5000D, which imposes a new excise tax on sales by drug manufacturers, producers, and importers of "designated drugs" (see below) during the "noncompliance period" (see below)-i.e., during the time that the manufacturer, etc., fails to enter into drug pricing agreements under Section 1193 of the Social Security Act (as added by Act Sec. 11001). (Code Sec. 5000D, as added by Act Sec. 11003(a))

*Rate of tax.* Under the formula set forth in Code Sec. 5000D(a) and 5000D(c), the rate of the excise tax ranges from 185.71% to 1,900% of the selected drug's price, depending on how long the noncompliance lasts. (Code Sec. 5000D(a) and Code Sec. 5000D(c), as added by Act Sec. 11003(a))

*Noncompliance period.* The noncompliance period with respect to a designated drug is any day if it is a day during one of the following periods:

- (1) The period beginning on the March 1st (or, in the case of initial price applicability year 2026, the October 2nd) immediately following the date on which such drug is included on the list published under Sec. 1192(a) of the Social Security Act and ending on the earlier of (A) the first date on which the manufacturer of such designated drug has in place an agreement described in Code Sec. 1193(a) of the Social Security Act with respect to such drug, or (B) the date that the Secretary of Health and Human Services has made a determination described in Sec. 1192(c)(1) of the Social Security Act with respect to such designated drug.
- (2) The period beginning on the November 2nd immediately following the March 1st described in (1) (or, in the case of initial price applicability year 2026, the August 2nd immediately following the October 2nd described in (1)) and ending on the earlier of (A) the first date on which the manufacturer of such designated drug and the Secretary of Health and Human Services have agreed to a maximum fair price under an agreement described in Sec. 1193(a) of the Social Security Act, or (B) the date that the Secretary of Health and Human Services has made a determination described in Sec. 1192(c)(1) of the Social Security Act with respect to such designated drug.
- (3) In the case of any designated drug which is a selected drug (as defined in Sec. 1192(c) of the Social Security Act) that the Secretary of Health and Human Services has selected for renegotiation under Sec. 1194(f) of the Social Security Act, the period beginning on the November 2nd of the year that begins two years prior to the first initial price applicability year of the price applicability period for which the maximum fair price established pursuant to such renegotiation applies and ending on the earlier of (A) the first date on which the manufacturer of such designated drug has agreed to a renegotiated maximum fair price under such agreement, or (B) the date that the Secretary of Health and Human Services has made a determination described in Sec. 1192(c)(1) of the Social Security Act with respect to such designated drug.
- (4) With respect to information that is required to be submitted to the Secretary of Health and Human Services under an agreement described Sec. 1193(a) of the Social Security Act, the period beginning on the date on which such Secretary certifies that such information is overdue and ending on the date that such information is so submitted. (Code Sec. 5000D(b), as added by Act Sec. 11003(a))

*Suspension of excise tax.* A day isn't taken into account as a day during a period described in (1) through (4), above, if that day is also a day during the period that: (A) begins on the first date on which (i) the notice of terminations of all applicable agreements of the manufacturer have been received by the Secretary of Health and Human Services, and (ii) none of the drugs of the manufacturer of the designated drug are covered by an agreement under Sec. 1860D-14A or 1860D-14C of the Social Security Act; and (B) ends on the last day of February following the earlier of (i) the first day after the date described in (A), above, on which the manufacturer enters into any later applicable agreement, or (ii) the first date any drug of the manufacturer of the designated drug is covered by an agreement under Sec. 1860D-14A or 1860D-14C of the Social Security Act. For this purpose, "applicable agreement" means: (1) an agreement under the Medicare coverage gap discount program under section 1860D-14A of the Social Security Act, or the manufacturer discount program under Sec. 1860D-14C of the Social Security Act; or (2) a rebate agreement described in Sec. 1927(b) of the Social Security Act. (Code Sec. 5000D(c), as added by Act Sec. 11003(a))

*Designated drugs.* A designated drug is any negotiation-eligible drug (as defined in Sec. 1192(d) of the Social Security Act) included on the list published under Sec. 1192(a) of the Social Security Act which is manufactured or produced in the U.S. or entered into the U.S. for consumption, use, or warehousing.

**Effective date.** The excise tax applies to sales after the date of enactment of the Act. (Act Sec. 11003(e)) However, the earliest possible date that a noncompliance period can begin is October 2, 2026. (Code Sec. 5000D(b), as added by Act Sec. 11003(a))

## Hazardous Substance Superfund Tax on Crude Oil and Petroleum Products Reinstated, Increased

Through 2025 (Code Sec. 4611(f)(2)), crude oil received at a U.S. refinery and petroleum products entered into the U.S. for consumption, use, or warehousing, are subject to a 9¢-per-barrel environmental excise tax, which funds the Oil Spill Liability Trust Fund. (Code Sec. 4611(c)(2)(B))

Under pre-Inflation Reduction Act of 2022 law, a 9.7¢-per-barrel excise tax on the above-described crude oil and petroleum products, which funded the Hazardous Substance Superfund Trust Fund (Code Sec. 4611(c)(2)(A)), was in effect but had expired after '95. (Code Sec. 4611(e))

**New law.** Under the Act, beginning after 2022, the Hazardous Substance Superfund tax is reinstated to apply to the above-described crude oil and petroleum products (Code Sec. 4611 as amended by Act Sec. 13601(a)(1)) at an increased tax rate of 16.4¢-per-barrel. (Code Sec. 4611(c)(2)(A), as amended by Act Sec. 13601(a)(2)(A))

For any tax year after 2023, the 16.4¢-per-barrel rate is adjusted for inflation (based on the cost-of-living adjustment determined under Code Sec. 1(f)(3), modified to measure inflation since 2022). (Code Sec. 4611(c)(3), as amended by Act Sec. 13601(a)(2)(B))

**Observation.** Thus, for tax years 2023 through 2025, above-described crude oil and petroleum products are subject to both: (1) a 9¢-per-barrel Oil Spill Liability tax; and (2) a 16.4¢-per-barrel (for 2023, increased for inflation thereafter) Hazardous Substance Superfund tax.

After 2025, such crude oil and petroleum products are subject to only the inflation-adjusted Hazardous Substance Superfund tax.

**Effective date.** These provisions are effective January 1, 2023. (Act Sec. 13601(c))

## Coal Excise Tax Rates Permanently Extended

Under pre-Inflation Reduction Act of 2022 law, for sales after December 31, 2021, the manufacturers excise tax on coal, which funds the Black Lung Disability Trust Fund, applied at the following reduced rates: 50¢ per ton for coal from underground mines and 25¢ per ton for coal from surface mines, not to exceed 2% of the sales price. (Code Sec. 4121(e))

**New law.** Under the Act, for sales in calendar quarters beginning after the date of enactment of the Act, the reduced rates are eliminated (Code Sec. 4121, as amended by Act Sec. 13901(a)), and the regular coal excise tax rates apply. (Code Sec. 4121(b))

**Observation.** That is, for sales in calendar quarters beginning after the date of enactment, no reduced coal excise tax rates apply and, instead, the tax applies at the regular rates, i.e., \$1.10 per ton for coal from underground mines and 55¢ per ton for surface mined coal, not to exceed 4.4% of sales price.

**Effective date.** This provision is effective for sales in calendar quarters beginning after the date of enactment. (Act Sec. 13901(b))

## Tax Credits and Deductions

### Favorable ARPA Premium Tax Credit Rules Remain in Effect for 2023-2025

A refundable premium tax credit (PTC) is available on a sliding-scale basis for individuals and families who are enrolled in an Exchange-purchased qualified health plan, and who aren't eligible for other qualifying coverage or affordable employer-sponsored health insurance plans providing minimum value. (Code Sec. 36B(a))

The PTC is limited to the excess of the premiums for the applicable second lowest cost silver plan (the applicable benchmark plan) covering the taxpayer's family offered by the Exchange over the taxpayer's contribution amount (required share). (Code Sec. 36B(b)(2))

The taxpayer's required share equals the taxpayer's household income multiplied by an applicable percentage for the tax year. The applicable percentage for a tax year is based on the taxpayer's income level relative to the federal poverty line (FPL) for the year. Within each income tier, a taxpayer's applicable percentage increases in a linear manner from the initial to the final premium percentage. (Code Sec. 36B(b)(3))

The applicable percentage table is indexed based on the rates of premium growth relative to the rates of income growth. The American Rescue Plan Act of 2021 (ARPA) suspended indexing for the 2021 and 2022 tax years and substituted a statutory table with lower applicable percentages (resulting in a higher PTC) for those years. (Code Sec. 36B(b)(3)(A)(iii)(I))

*Indexing was to have resumed for 2023.* IRS calculated the inflation -indexed applicable percentage table for tax years beginning in 2023 as follows (Rev Proc 2022-34, Sec. 2.01, 2022-33 IRB):

Household Income Relative to FPL	Initial Percentage	Final Percentage
Less than 133%	1.92%	1.92%
At least 133% but less than 150%	2.88%	3.84%
At least 150% but less than 200%	3.84%	6.05%
At least 200% but less than 250%	6.05%	7.73%
At least 250% but less than 300%	7.73%	9.12%
At least 300% but not more than 400%	9.12%	9.12%

*Income limit.* The PTC is generally available to individuals with household income between 100% and 400% of the FPL. Under ARPA, individuals with household income above 400% of the FPL were eligible for the PTC for tax years beginning in 2021 and 2022, but not for later years. (Code Sec. 36B(c)(1))

**New law.** The Inflation Reduction Act of 2022 extends the above ARPA rules for three additional years. The Act suspends indexing of the applicable percentage table for tax years beginning in 2023 through 2025. Instead, the following applicable percentages apply for those years (Code Sec. 36B(b)(3)(A)(iii), as amended by Act Sec. 12001(a)):

Household Income Relative to FPL:	Initial Percentage	Final Percentage
Up to 150%	0%	0%
150% to 200%	0%	2.0%
200% to 250%	2.0%	4.0%
250% to 300%	4.0%	6.0%
300% to 400%	6.0%	8.5%
400% and higher	8.5%	8.5%

**Observation.** This is the same table that applied for tax years beginning in 2021 and 2022. The Act supersedes the inflation adjusted table for 2023 that IRS computed in Rev Proc 2022-34 (above).

**Observation.** Because a taxpayer's required share is less under the above table than it otherwise would have been, the PTC will be greater. Under pre-Act law, a taxpayer might have had to spend as much as 9.12% of household income on health insurance premiums in 2023. Under the Act, that amount is capped at 8.5%.

*Taxpayers with household income over 400% of FPL remain eligible for PTC.* For tax years beginning in 2023 through 2025, the PTC is available to taxpayers with household incomes that exceed 400% of the FPL, as it was in 2021 and 2022. (Code Sec. 36B(c)(1)(E), as amended by Act Sec. 12001(b))

**Observation.** This change allows more people to claim the PTC for 2023 through 2025 than would have qualified under pre-Act law.

**Effective date.** These amendments apply to tax years beginning after December 31, 2022. (Act Sec. 12001(c))

## Extension and Modification of Credit for Electricity Produced from Certain Renewable Sources

Under pre-Inflation Reduction Act of 2022 law, the renewable electricity production credit provided a credit of 1.5 cents per kilowatt hour (KWH) of electricity (i) produced by the taxpayer from qualified energy resources at a qualified facility during the 10-year period beginning on the date the facility was originally placed in service, and (ii) sold by the taxpayer to an unrelated person during the tax year. (Code Sec. 45(a)) Qualified facility status generally required construction on a facility to begin before January 1, 2022. (Code Sec. 45(d))

The 1.5 cent base amount was adjusted by the inflation adjustment factor for the calendar year of sale and rounded to the nearest multiple of 0.1 cent. (Code Sec. 45(b)(2)) The amount of the credit thus determined was reduced by a prescribed percentage where government grants, tax-exempt bonds, or certain other subsidies or credits were used to provide financing for the qualified facility. (Code Sec. 45(b)(3)) In the case of electricity produced in certain categories of qualified facilities, including qualified hydroelectric production and marine and hydrokinetic renewable energy facilities, the available credit amount (before rounding) was reduced by one-half. (Code Sec. 45(b)(4)(A))

**New law.** The Act extends the beginning of construction deadline to projects that begin construction before January 1, 2025, including for facilities using solar energy (for which a 2006 place-in-service deadline had previously applied). (Code Sec. 45(d), as amended by Act Sec. 13101(a), 13101(c), and 13101(e)(1))

Further, the Act adds two new requirements for taxpayers to obtain the full 1.5 cent base amount (as adjusted for inflation)-a prevailing wage requirement and an apprenticeship requirement. Subject to certain exceptions, taxpayers who do not meet these requirements are limited to a 0.3 cent base amount (as adjusted for inflation). (Code Sec. 45(a), as amended by Act Sec. 13101(b), and Code Sec. 45(b), as amended by Act Sec. 13101(f)) The rounding in this case is to the nearest multiple of 0.05 cent. (Code Sec. 45(b)(2), as amended by Act Sec. 13101(i))

The Act also introduces a domestic content bonus, which allows taxpayers to increase their credit by 10% if an applicable percentage of the steel, iron, or manufactured products that are components of the facility (upon completion of construction) are produced in the United States. The bonus is increased if the qualified facilities are located in applicable energy communities. (Code Sec. 45(b), as amended by Act Sec. 13101(g))

The Act narrows the reduction of the credit for other government financing to apply only where tax-exempt bonds are used and cuts the prescribed percentage reduction accordingly. (Code Sec. 45(b)(3), as amended by Act Sec. 13101(h))

Finally, the Act eliminates the 50% reduction in the credit amount for qualified hydroelectric production and marine and hydrokinetic renewable energy facilities. (Code Sec. 45(b)(4)(A), as amended by Act Sec. 13101(j)(1))

**Effective date.** The above provisions generally apply retroactively to facilities placed in service after December 31, 2021. (Act Sec. 13101(k)(1)) However: (1) the tax-exempt bond financing provision applies to facilities the construction of which begins after the date of enactment of the Act (Act Sec. 13101(k)(2)) and (2) the elimination of the 50% reduction to the credit amount for qualified hydroelectric production and marine and hydrokinetic renewable energy facilities applies to facilities placed in service after December 31, 2022. (Act Sec. 13101(k)(3))

## Extension and Modification of the Energy Credit

The Code Sec. 48 energy credit is available for all businesses and investors, not just producers for sale.

Under pre-Inflation Reduction Act of 2022 law, the types of property eligible for the credit were new or reconstructed depreciable property that was (1) using solar energy to generate electricity, heat or cool a structure or provide solar process heat (Type 1 solar property), (2) illuminating a structure using fiber-optic distributed sunlight (Type 2 solar property), (3) equipment used to produce, distribute, or use energy from a geothermal deposit (geothermal deposit energy property), (4) qualified fuel cell property, (5) qualified microturbine property, (6) combined heating and power (cogeneration property), (7) qualified small wind energy property, (8) using the ground or ground water to heat or cool a structure (ground water heating and cooling property), or (9) waste energy recovery property. (Code Sec. 48(a)(3)(A))

Except for Type 1 solar property and geothermal deposit energy property, to be credit eligible, construction of the property had to begin before 2024. (Code Sec. 48(a)(3)(A)(ii), Code Sec. 48(a)(3)(A)(vii), Code Sec. 48(c)(1)(D), Code Sec. 48(c)(2)(D), Code Sec. 48(c)(4)(D), Code Sec. 48(c)(5)(D))

Rules that phased down the credit percentage for Type 1 solar property, depending on time of beginning of construction and placement in service applied. (Code Sec. 48(a)(6)) And rules also applied that with different specifics as to dates phased out the credit percentage for Type 2 solar property, qualified fuel cell property, qualified small wind property, and waste energy recovery property. (Code Sec. 48(a)(7))

The credit amount was (1) 30% of the investment for Type 1 solar property (but only if construction began before 2024), qualified fuel cell property, Type 2 solar property, qualified small wind energy property, and waste energy recovery property and (2) 10% for any other property. (Code Sec. 48(a)(2)(A))

Taxpayers could elect the Code Sec. 48 energy credit, at a 30% rate, instead of the Code Sec. 45 renewable electricity production credit for some Code Sec. 45 property the construction of which begins before 2022 (2026 for qualified offshore wind facilities). (Code Sec. 45-to-48 election). (Code Sec. 48(a)(5)(C)(ii)); Code Sec. 48(a)(5)(F))

The credit amount for a project was reduced by the fraction of the project cost that is financed by tax exempt bonds plus certain other subsidies (the reduction-for-subsidy rule). (Code Sec. 48(a)(4))

Under pre-Act law there were no factors that increased the otherwise applicable credit amount.

**New Law.** *Expansion of qualifying property.* The Act adds the following qualifying types of property: energy storage technology, qualified biogas property and microgrid controllers. (Code Sec. 48(a)(3)(A)(ix), 48(a)(3)(A)(x), and 48(a)(3)(A)(xi), all as amended by Act Sec. 13102(f)(1))

Construction of the three types of property must begin before January 1, 2025. (Code Sec. 48(c)(6)(C), 48(c)(7)(C), and 48(c)(8)(C), all as amended by Act Sec. 13102(f)(3))

Additionally, the Act expands the type of property that qualifies as type 2 solar property (Code Sec. 48(a)(3)(A)(ii), as amended by Act Sec. 136102(h))

The Act also expands the type of property that qualifies as qualified fuel cell property. (Code Sec. 48(c)(1), as amended by Act Sec. 136102(g))

And under the Act, "qualified interconnection property" becomes eligible for credit. This is not a new type of qualifying property but is instead certain property used by a regulated utility in connection with other credit-eligible property (other than microgrid controllers). (Code Sec. 48(a)(8), as amended by Act Sec. 13102(j))

**Extension of the credit.** The Act changes the date before which construction must begin for Type 2 solar property (see above), qualified fuel cell property, qualified microturbine property, cogeneration property, qualified small wind property, and waste energy recovery property to January 1, 2025. (Code Sec. 48(a)(3)(A)(ii), Code Sec. 48(c)(1)(D), Code Sec. 48(c)(2)(D), Code Sec. 48(c)(3)(A)(iv); Code Sec. 48(c)(4)(C) and Code Sec. 48(c)(5)(D), all as amended by Act Sec. 13102(a)) The same date change is also made for property for which the Code Sec. 45-to-48 election (see above) is made. (Code Sec. 48(a)(5)(C)(ii), as amended by Act Sec. 13101(d))

Additionally, the Act changes the date before which construction must begin for ground water heating and cooling property to January 1, 2035. (Code Sec. 48(a)(3)(A)(vii), as amended by Act Sec. 13102(b)) Also, the credit is phased down for this type of property if its construction begins in 2033 or 2034. (Code Sec. 48(a)(7), as amended by Act Sec. 13102(d)(2))

**Observation. The credits for Type 1 solar property and energy-from-geothermal-deposits property continue to have no beginning-of-construction deadline.**

*Existing phasedown and phaseout rules changed.* In place of the pre-Act phasedown rules for Type 1 solar property and the pre-Act phaseout rules for Type 2 solar property, qualified fuel cell property, qualified small wind property, or waste energy recovery property, the credit percentage is 26% if construction of the property began in 2021 or 2022 and the property is placed in service before 2022. (Code Sec. 48(a)(6), as amended by Act Sec. 136102(c))

**Observation. The effect of the above change is to change the existing phasedown or phaseout rules for property placed in service before 2022 and not apply the existing rules at all to property placed in service after that date.**

**Observation. As discussed below, the applicable credit percentages for energy property are restructured as base amounts that can be considerably increased if the taxpayer fulfills the requirements of certain incentives.**

*Base credit amount.* Subject to the increases discussed below, the base credit is 6%, but only if construction begins before 2025, for Type 1 solar property and energy-from-geothermal-deposits property. (Code Sec. 48(a)(2)(A)(i)(II), as amended by Act Sec. 13102(a)(1), by Act Sec. 13102((d)(1)(A)(i), and by Act Sec. 13102(e)) And without a beginning of construction deadline to comply with, the 6% base credit amount applies to all other types of property that were eligible for the 30% credit (including elected-for Code Sec. 45 property) and the three new types of qualifying property (see Expansion of qualifying property above). (Code Sec. 48(a)(2)(A)(i), as amended by Act Sec. 13102((d)(1)(A)(i) and by Act Sec. 13102(f)(2); Code Sec. 48(a)(5)(a)(ii), as amended by Act Sec. 13102((d)(1)(B))

The base credit percentage is 2% for property to which the 6% figure does not apply. (Code Sec. 48(a)(2)(A)(ii), as amended by Act Sec. 13102(d)(1)(A)(ii))



*Credit increase for small projects or wage/apprenticeship-compliant projects.* The applicable base percentage is multiplied five times for a project if one of the following conditions is satisfied: (1) the project has a maximum net output of electrical or thermal energy less than 1 megawatt, (2) the taxpayer complies with (A) certain wage requirements (including for renovations and alterations for a five-year period after placement in service) and (B) apprenticeship program requirements for the project, or (3) the construction of the project begins less than 60 days after IRS issues guidance about the wage and apprenticeship program requirement. Taxpayers can retroactively comply with the wage requirements by paying back wages with interest to affected workers and penalties to IRS. The credit is subject to recapture for non-compliance with the wage requirements during the five-year period applicable to renovations and alterations. Taxpayers who have made a good faith effort (determined under specified rules) to comply with the apprenticeship requirements can retroactively comply by paying penalties to IRS. (Code Sec. 48(a)(9), Code Sec. 48(a)(10) and Code Sec. 48(a)(11), as amended by Act Sec. 13102(k))

*Credit increase for domestic content.* The credit is increased if the taxpayer meets requirements for the extent to which that the component materials of the project are produced in the U.S. (the domestic content bonus). The increase is 10 percentage points for a project that earns the *Credit increase for small projects or wage/apprenticeship-compliant projects* but only two percentage points for projects that do not. (Code Sec. 48(a)(12), as amended by Act Sec. 13102(l))

*Credit increase in energy communities.* The credit is increased for projects in certain brownfield sites, statistical areas in which certain coal, oil, or natural gas activities take place and that have an increase in unemployment, and areas where a coal mine has closed after 1999 or a coal-fired electric generating unit retired after 2009 (energy communities). The increase is 10 percentage points for a project that is eligible for the Credit increase for small projects or wage/apprenticeship-compliant projects but only two percentage points for projects that is not. (Code Sec. 48(a)(14), as amended by Act Sec. 13102(o))

*Credit increase for environmental justice facilities.* The Act increases the Code Sec. 48 credit for certain qualified solar and wind facilities for which Treasury makes an allocation, in accordance with required criteria, of environmental justice solar and wind capacity (Code Sec. 48(e), as amended by Act Sec. 13103(a))

Subject to certain caps, the increase is 20 percentage points for qualified facilities that are part of a qualified low-income residential building project or a qualified low-income economic benefit project and (2) 10 percentage points for a project located in a low-income community or on Indian Land and not described in (1). (Code Sec. 48(e)(1)(A), Code Sec. 48(e)(1)(B) and Code Sec. 48(e)(2)(A), all as amended by Act Sec. 13103)

*Reduction-for-subsidy rules changed.* The Act changes the reduction-for-subsidy rules by (1) removing their termination for periods after 2008, (2) applying them only tax-exempt bond financing (and not to other subsidies) and (3) providing a 15% cap on the subsidy reduction (Code Sec. 48(a)(4), as amended by Act Sec. 13102(m))

*Special rule for energy storage technology.* Facilities that use energy storage technology (see *Expansion of qualifying property* above) are exempt from the Code Sec. 7701(e) rules that recharacterize some service contracts as leases. (Code Sec. 7701(e)(3), as amended by Act Sec. 13102(n))

*Coordination with the low-income housing credit.* The rule that requires that the basis of property be reduced by 50% of the Code Sec. 48 credit determined for the property does not apply at all for purposes of determining basis eligible for the Code Sec. 42 low-income housing credit. (Code Sec. 50(c)(3), as amended by Act Sec. 13102(i))

**Effective date.** The above changes are effective for facilities placed in service after December 31, 2021, except that the following rules apply to property placed in service after December 31, 2022: the rules under *Expansion of qualifying property*, *Credit increase for domestic content*, *Credit increase in energy communities*, *Special rule for energy storage technology* and *Coordination with the low-income housing credit*. (Act Sec. 13101(q)(1); Act Sec. 13101(q)(2); Act Sec. 13103(b))

The rules under *Reduction-for-subsidy rules changed* are effective for property the construction of which begins after the date of enactment of the Act. (Act Sec. 13101(q)(3))

## Increased Energy Credit for Solar and Wind Facilities in Certain Low-Income Communities

Before the enactment of the Inflation Reduction Act of 2022, taxpayers could claim a credit of up to 30 percent (subject to applicable phase-down provisions) of the basis of solar energy and wind energy property that was placed in service during the taxable year, but there was no provision for an increased energy credit for solar or wind property placed in service in low-income communities. (Code Sec. 48(a)(2))

**New law.** The Act provides for an added credit of either 10% or 20% for any qualified solar or wind facility for which IRS makes an allocation of "environmental justice solar and wind capacity" under Code Sec. 48(e)(4). (Code Sec. 48(e), as amended by Act Sec. 13103(a))

The allocation provision applies for calendar years 2023 and 2024. To qualify for the allocation, a qualified solar or wind facility must be located in a low-income community or on Indian land, or must be part of a qualified low-income residential building project or a qualified low-income economic benefit project. A recapture provision applies for property that ceases to be eligible for the increased amount. (Code Sec. 48(e))

**Effective date.** The provision takes effect on January 1, 2023 (Act Sec. 13103(b)); no allocation may be made after calendar year 2024. (Code Sec. 48(e)(4)(C))

## Extension and Modification of the Credit for Carbon Oxide Sequestration

Under Pre-Inflation Reduction Act of 2022 law, a credit of \$20 per metric ton was available for qualified carbon oxide captured by a taxpayer at a qualified facility that was placed in service before February 9, 2018, and disposed of by that taxpayer in secure geological storage. In addition, taxpayers could take a credit of \$10 per metric ton of qualified carbon oxide that was captured by the taxpayer at a qualified facility that was placed in service before February 9, 2018, and used by the taxpayer as a tertiary injectant in a qualified enhanced oil or natural gas recovery project, or utilized in a manner consistent with Code Sec 45Q(f)(5). (Code Sec. 45Q(a))

If the carbon capture equipment was placed in service *after* February 8, 2018, the applicable dollar amount for either situation was determined through a linear interpolation formula. (Code Sec. 45Q(b))

Under pre-Act law, the construction of a qualified facility had to begin before January 1, 2026, and had to capture:

(A) in the case of a facility that emits not more than 500,000 metric tons of carbon oxide into the atmosphere during the tax year, not less than 25,000 metric tons of qualified carbon oxide during the tax year which is utilized in a manner described in Code Sec. 45Q(f)(5),

(B) in the case of an electricity generating facility which is not described in (A), not less than 500,000 metric tons of qualified carbon oxide during the tax year, or

(C) in the case of a direct air capture facility or any facility not described in (A) or (B), not less than 100,000 metric tons of qualified carbon oxide during the tax year.

For the credit amounts determined with respect to carbon capture equipment placed in service at a qualified facility before February 9, 2018, the credit terminates at the end of the calendar year after IRS and the EPA Administrator certify that 75,000,000 metric tons of QCO have been captured at a qualified facility and disposed of in secure geological storage.

**New law.** Under the Act, the credit is extended to qualified facilities that begin construction between December 31, 2022, and January 1, 2033. (Code Sec. 45Q(d)(1)), as amended by Act Sec. 13104(a)(1))

The credit will apply to any carbon capture equipment placed in service *before* February 8, 2018, with respect to qualified carbon oxide captured using that equipment before the earlier of January 1, 2023, or the end of the calendar year after IRS and the EPA Administrator certify that 75 million metric tons of QCO have been captured at a qualified facility and disposed of in secure geological storage. (Code Sec. 45Q(g), as amended by Act Sec. 13104(g))

Under the Act, the minimum annual capture requirements to qualify a facility for the credit have been reduced. The requirements are:

1. Direct air capture facilities must capture at least 1,000 metric tons per year,
2. Electric generating facilities must capture at least 18,750 metric tons per year; and
3. In the case of any other facility, it must capture at least 12,500 metric tons per year. (Code Sec. 45Q(d)(2), as amended by Act Sec. 13104(a)(1))

The credit amounts for property placed in service *after* February 8, 2018, have also been changed:

1. For capture and storage of carbon oxide that is disposed of by the taxpayer in a secure storage, the applicable credit is \$17 per ton. (Code Sec. 45Q(b)(1)(A)(i), as amended by Act Sec. 13104(b)(1)) For direct air capture facilities placed in service after December 31, 2022, the applicable credit is \$36 per ton. (Code Sec. 45Q(b)(1)(B), as amended by Act Sec. 13104(c)(1)(B))
2. For capture and use of the carbon oxide by the taxpayer as a tertiary injectant in a qualified enhanced oil or natural gas recovery project or utilized in a manner consistent with Code Sec 45Q(f)(5), the applicable credit is \$12. (Code Sec. 45Q(b)(1)(A)(ii), as amended by Act Sec. 13104(b)(2)) For direct air capture facilities placed in service after December 31, 2022, the applicable credit is \$36 per ton. (Code Sec. 45Q(b)(1)(B), as amended by Act Sec. 13104(c)(1)(B))

The amount of the credit is increased five times per ton for qualified facilities or any carbon capture equipment that satisfy a new prevailing wage and apprenticeship requirement. (Code Sec. 45Q(h), as amended by Act Sec. 13104(d))



**Effective date.** This is generally applicable to facilities or equipment placed in service after December 31, 2021. (Act Sec. 13104(i)(1))

The provision dealing with the modification of the carbon oxide capture requirements (i.e., the lowering of the minimum capture requirements) applies to facilities or equipment the construction of which begins after the Act is enacted into law. (Act Sec. 13104(i)(2))

The provision modifying the termination of the credit for carbon capture equipment placed in service at a qualified facility *before February 9, 2018*, applies to facilities or equipment the construction of which begins after the Act is enacted into law. (Act Sec. 13104(i)(3))

## New Credit for Zero-Emission Nuclear Power Production

The Inflation Reduction Act of 2022 adds new Code Section 45U, Zero-emission Nuclear Power Production Credit, which provides a credit for kilowatt hours of electricity produced by a qualified nuclear power facility. (Code Sec. 45U, as added by Act Sec. 13105(a))

A qualified nuclear power facility is one that: is owned by the taxpayer, is not an advanced nuclear power facility, and was placed in service before the Act was signed into law. (Code Sec. 45U(b)(1), as added by Act Sec. 13105(a))

**Observation. Thus, the provision applies to nuclear facilities that were already in existence as of the date of enactment of the Act.**

The credit amount is 0.3 cents multiplied by the kilowatt hours of electricity produced by the taxpayer at a qualified nuclear power facility and sold by the taxpayer during the taxable year, to the extent this amount exceeds the "reduction amount," which is based on the price of electricity. The credit amount, as well as the amounts in the reduction formula, are adjusted for inflation. (Code Sec. 45U(a), Code Sec. 45U(b)(2), Code Sec. 45U(c)(1))

The credit amount is reduced by other zero-emission payments received from a federal, state, or local government program, to the extent that payments from a such a program are not themselves reduced by payments received under this credit. (Code Sec. 45U(b)(2)(B))

Taxpayers that satisfy wage and apprenticeship requirements are eligible for a tax credit of five times the credit amount that otherwise applies. (Code Sec. 45U(d))

The credit terminates on December 31, 2032. (Code Sec. 45U(e))

**Effective date.** The credit applies to electricity produced and sold after December 31, 2023, in taxable years beginning after that date (Act Sec. 13105(c))

## Extension of Incentives for Biodiesel, Renewable Diesel and Alternative Fuels

Under pre-Inflation Reduction Act of 2022 law, taxpayers could claim a credit for sales and use of biodiesel and renewable diesel that is used by a taxpayer in the taxpayer's trade or business or sold at retail and placed in the fuel tank of the buyer for such use and sales on or before December 31, 2022. Taxpayers could claim a credit for sale of a biodiesel mixture for use as fuel or for use of a biodiesel mixture as fuel by the taxpayer producing such mixture for such sales and use on or before December 31, 2022. And the ultimate purchaser of a biodiesel fuel mixture who uses the fuel for a purpose other than which it was sold or who resells it, could claim a refund of excise tax for any such use or resale on or before December 31, 2022.

In addition, taxpayers could claim a credit for alternative fuel for use by the taxpayer as fuel, or sale by the taxpayer for use as fuel, in a motor vehicle or motorboat or as aviation fuel, on or before December 31, 2021. The ultimate purchaser of an alternative fuel originally intended for use by the taxpayer, or sold by the taxpayer for use as, fuel in a motor vehicle or motorboat or as aviation fuel, who uses the fuel for a purpose other than which it was sold or who resells it, could claim a refund of excise tax for any such use or resale on or before December 31, 2021. Finally, taxpayers could claim a credit for alternative fuel used by the taxpayer to produce an alternative fuel mixture for sale or use in a trade or business of the taxpayer on or before December 31, 2021.

**New law.** The Act permits taxpayers to claim a credit for sales and use of biodiesel and renewable diesel fuel, biodiesel fuel mixtures, alternative fuel, and alternative fuel mixtures on or before December 31, 2024. (Code Sec. 40A(g), Code Sec. 6426(c)(6), Code Sec. 6426(d)(5), and Code Sec. 6426(e)(3), as amended by Act Secs. 13201(a), (b)(1), (c), and (d)).

The Act also allows taxpayers to claim a refund of excise tax for use of:

- biodiesel fuel mixtures for a purpose other than for which they were sold or for resale of biodiesel mixtures on or before December 31, 2024 (Code Sec. 6427(e)(6)(B), as amended by Act Sec. 13201(b)(2)), and
- alternative fuel as fuel in a motor vehicle or motorboat or as aviation fuel, for a purpose other than for which they were sold or for resale of such alternative fuel mixtures on or before December 31, 2024. (Code Sec. 6427(e)(6)(C), as amended by Act Sec. 13201(e)).

**Effective date.** The amendments made by Act Sec. 13201 apply to fuel sold or used after December 31, 2021. (Act Sec. 13201(f)) With respect to the credit for alternative fuel used as fuel in a motor vehicle or motorboat or as aviation fuel, or any refund of excise tax with respect to such alternative fuel, IRS is required to establish procedures for claiming the credit for each calendar quarter in 2022 that begins before the signing of the Act. (Act Sec. 13201(g))

## Extension of Second-Generation Biofuel Producer Credit to 2024

The general business credit under Code Sec. 38 includes the alcohol fuels credit under Code Sec. 40(a). (Code Sec. 38(b)(3)) A component of the alcohol fuels credit is the second-generation biofuel producer credit (the Biofuel credit). Generally, the Biofuel credit is available for liquid fuel derived by, or from, "qualified feedstocks" defined at Code Sec. 40(b)(6)(F) (e.g., cultivated algae). The Biofuel credit had expired, and it no longer applied to biofuel production after December 31, 2021. (Code Sec. 40(b)(6))

**New law.** The Inflation Reduction Act of 2022 extends the availability of the Biofuel credit to production before January 1, 2025, and it includes all of 2022. (Code Sec. 40(b)(6)(J)(i), as amended by Act Sec. 13202(a))

**Effective date.** The extension of the Biofuel credit applies to production after December 31, 2021. (Act Sec. 13202(b))

## New Income or Excise Tax Credit Allowed for Sustainable Aviation Fuel for 2023 and 2024

*Credit for sustainable aviation fuel for 2023 and 2024.* Under the Inflation Reduction Act of 2022, a new sustainable aviation fuel credit is allowed against income tax or excise tax liability. The income tax credit (and most of the definitional terms) are provided in new Code Sec. 40B (Code Sec. 40B, as added by Act Sec. 13203(a)), and the credit is part of the general business credit. (Code Sec. 40B(a); Code Sec. 38(b)(35), as amended by Act Sec. 13203(b)).

Alternatively, an excise tax credit allowed against Code Sec. 4081 removal-at-terminal tax liability, or excise tax refund, is provided for under Code Sec. 6426(k) and Code Sec. 6427(e), respectively. (Code Sec. 6426(k), as amended by Act Sec. 13203(d)(1); Code Sec. 6426(a)(1), as amended by Act Sec. 13203(d)(2)(A); Code Sec. 6427(e), as amended by Act Sec. 13203(d)(2)(B))

For any sale or use of a "qualified mixture" (defined below) that occurs during the tax year, the amount of the credit equals the number of gallons of "sustainable aviation fuel" (defined below) in that mixture, multiplied by the sum of: (i) \$1.25, plus (ii) the applicable supplementary amount (see below) for that sustainable aviation fuel. (Code Sec. 40B(a); Code Sec. 6426(k)(1))

The *applicable supplementary amount* is \$0.01 for each percentage point by which the lifecycle greenhouse gas emissions reduction percentage for the fuel exceeds 50%; however, the applicable supplementary amount can't be more than \$0.50. (Code Sec. 40B(b); Code Sec. 6426(k)(2))

**Observation.** Thus, the basic credit is \$1.25 per gallon of "qualified mixture," plus, where the greenhouse gas emissions reduction percentage for the qualified mixture exceeds 50%, an increase resulting in a credit of up to \$1.75 per gallon.

*Qualified mixture.* For purposes of the credit, "qualified mixture" means a mixture of "sustainable aviation fuel" and kerosene that is:

1. produced by the taxpayer in the U.S.;

2. used (or sold for use) in an aircraft, in the ordinary course of a trade or business of the taxpayer; and
3. transferred to the fuel tank of the aircraft in the U.S. (Code Sec. 40B(c); Code Sec. 6426(k)(2))

*Sustainable aviation fuel.* Sustainable aviation fuel means liquid fuel, the portion of which is not kerosene, that meets certain requirements, and that has been certified as having a lifecycle greenhouse gas emissions reduction percentage of at least 50%. (Code Sec. 40B(d); Code Sec. 6426(k)(2))

*Registration.* To claim the credit the producer or importer of the fuel must be registered with IRS, and must certify it meets certain other compliance requirements. (Code Sec. 40B(f); Code Sec. 6426(k)(3))

*Inclusion in gross income.* Code Sec. 40B income tax credit amounts are included in a taxpayer's gross income. (Code Sec. 87(3), as amended by Act Sec. 13203(a))

**Effective date.** The credit applies to fuel sold or used after December 31, 2022 (Act Sec. 13203(f)) but before January 1, 2025. (Code Sec. 40B(h))

## Clean Hydrogen Production Credit

The Inflation Reduction Act of 2022 introduces a new credit for clean hydrogen production. The credit is available for the first 10 years that qualified clean hydrogen production facility is in service. (Code Sec. 45V(a)(1), as added by Act Sec. 13204(a)(1))

*Credit amount.* The amount of the credit depends on how clean the qualified clean hydrogen production facility is. The credit is \$0.60 per kilogram of clean hydrogen produced per year if the facility produces clean hydrogen in a process that results in a lifecycle greenhouse gas emissions rate of less than 0.45 kilograms of CO<sub>2</sub>e per kilogram of hydrogen. (Code Sec. 45V(b)(2)(D)), as added by Act Sec. 13204(a)(1)) The lowest credit is \$0.12 if the lifecycle greenhouse gas emissions occur at a rate of (i) not greater than 4 kilograms of CO<sub>2</sub>e per kilogram of hydrogen, and (ii) not less than 2.5 kilograms of CO<sub>2</sub>e per kilogram of hydrogen. (Code Sec. 45V(b)(2)(A), as added by Act Sec. 13204(a)(1))

*Increase for paying prevailing wages.* The amount of the credit is multiplied by five (i.e., the \$0.60 credit increases to \$3.00) if the qualified clean hydrogen production facility pays "prevailing wages" and adheres to certain apprentice requirements. (Code Sec. 45V(e), as added by Act Sec. 13204(a)(1))

**Effective date.** The credit is effective for hydrogen produced after December 31, 2022. (Act Sec. 13204(a)(5))

## Extension, Increase, and Modifications of Nonbusiness Energy Property Credit

Before the enactment of the Inflation Reduction Act of 2022, individuals were allowed a personal credit for specified nonbusiness energy property expenditures. (Code Sec. 25C(a)) The credit applied only to property placed in service before January 1, 2022. (Code Sec. 25C(g)(2))

The credit for a tax year was an amount equal to the sum of (a) 10% of the amount paid or incurred by the taxpayer for qualified energy efficiency improvements installed during that year, and (b) the amount of the residential energy property expenditures paid or incurred by the taxpayer during that year. (Code Sec. 25C(a)) Qualified energy efficiency improvements were any energy efficient building envelope components that met specified energy efficiency certification requirements. (Code Sec. 25C(c)) Residential energy property expenditures were limited to those made with respect to the taxpayer's principal residence. (Code Sec. 25C(d))

There was a lifetime limitation on the amount of the credit, with specific lifetime limitations applying to certain types of property. (Code Sec. 25C(b))

**New law.** Under the Act, taxpayers may take the credit for energy-efficient placed in service before January 1, 2033. (Code Sec. 25C(g)(2), as amended by Act Sec. 13301(a))

*Increased credit.* The Act increases the credit for a tax year to an amount equal to 30% of the sum of (a) the amount paid or incurred by the taxpayer for qualified energy efficiency improvements installed during that year, and (b) the amount of the residential energy property expenditures paid or incurred by the taxpayer during that year. (Code Sec. 25C(a), as amended by Act Sec. 13301(b)) The credit is further increased for amounts spent for a home energy audit (discussed below). (Code Sec. 25C(a), as amended by Act Sec. 13301(f)(1)) The amount of the increase due to a home energy audit can't exceed \$150. (Code Sec. 25C(b)(6)(A), as amended by Act Sec. 13301(f)(1))

*Qualified energy efficiency improvements.* The Act revises the energy efficiency certification requirements for building envelope components, eliminates treatment of roofs as building envelope components, and adds air sealing insulation to the definition of a building envelope component. (Code Sec. 25C(c), as amended by Act Sec. 13301(d))

*Residential energy property expenditures.* The Act substantially revises the definition of residential energy property expenditures, including repeal of the requirement that residential energy property expenditures must be made with respect to the taxpayer's principal residence. (Code Sec. 25C(d), as amended by Act Sec. 13301(e))

*Annual limitation in lieu of lifetime limitation.* The Act repeals the lifetime credit limitation, and instead limits the allowable credit to \$1,200 per taxpayer per year. In addition, there are annual limits of \$600 for credits with respect to residential energy property expenditures, windows, and skylights, and \$250 for any exterior door (\$500 total for all exterior doors). Notwithstanding these limitations, a \$2,000 annual limit applies with respect to amounts paid or incurred for specified heat pumps, heat pump water heaters, and biomass stoves and boilers. (Code Sec. 25C(b), as amended by Act Sec. 13301(c))

*Home energy audit.* The credit is increased by amounts spent for a home energy audit. (Code Sec. 25C(a)(3), as amended by Act Sec. 13301(f)(1))



A home energy audit is an inspection and written report with respect to a dwelling unit located in the United States and owned or used by the taxpayer as the taxpayer's principal residence which (a) identifies the most significant and cost-effective energy efficiency improvements with respect to such dwelling unit, including an estimate of the energy and cost savings with respect to each such improvement, and (b) is conducted and prepared by a home energy auditor that meets the certification or other requirements specified by IRS. (Code Sec. 25C(e), as amended by Act Sec. 13301(f)(3)(A)) The amount of the credit allowed with respect to a home energy audit can't exceed \$150. (Code Sec. 25C(b)(6)(A), as amended by Act Sec. 13301(f)(2))

*Identification number requirement.* The Act bars a credit with respect to any item of specified property placed in service after December 31, 2024, unless the item is produced by a qualified manufacturer, and the taxpayer includes the qualified product identification number of the item on the return of tax for the tax year. (Code Sec. 25C(h)(1), as amended by Act Sec. 13301(g)(1))

A qualified product identification number is the product identification number assigned to an item of qualified property by the qualified manufacturer under a methodology that will ensure that the number (including any alphanumeric) is unique to each such item. (Code Sec. 25C(h)(2), as amended by Act Sec. 13301(g)(1)) A qualified manufacturer is any manufacturer of specified property which enters into an agreement with IRS which provides that the manufacturer will comply with the product identification number requirements. (Code Sec. 25C(h)(3), as amended by Act Sec. 13301(g)(1))

An omission of a correct product identification number is treated as a mathematical or clerical error subject to the summary assessment and abatement procedure for such errors under Code Sec. 6213(g)(2). (Code Sec. 6213(g)(2)(S), as amended by Act Sec. 13301(g)(2))

**Effective date.** These provisions generally apply to property placed in service after December 31, 2022. (Act Sec. 13301(i)(1)) However, the extension of the credit by Act Sec. 13301(a) applies to property placed in service after December 31, 2021 (Act Sec. 13301(j)(2)), and the identification number requirement added by Act Sec. 13301(g) applies to property placed in service after December 31, 2024. (Act Sec. 13301(j)(3))

## Extension and Modification of Residential Clean Energy Credit

Before the enactment of the Inflation Reduction Act of 2022, individuals were allowed a personal tax credit, known as the residential energy efficient property (REEP) credit, for solar electric, solar hot water, fuel cell, small wind energy, geothermal heat pump, and biomass fuel property installed in homes in years before 2024. (Code Sec. 25D(a); Code Sec. 25D(h))

For property placed in service after December 31, 2019, and before January 1, 2023, the REEP credit rate (applicable percentage) was 26%. Thus, the REEP credit was 26% of the taxpayer's qualified expenditures listed above (although a dollar limit applied to the credit for fuel cell property). (Code Sec. 25D(b)(1); Code Sec. 25D(g)(2)) For property placed in service after December 31, 2022, and before January 1, 2024, the applicable percentage was scheduled to be 22%. (Code Sec. 25D(g)(3))

**New law.** The Act makes the credit available for property installed in years before 2035. (Code Sec. 25D(h), as amended by Act Sec. 13302(a)(1)) The Act also makes the credit available for qualified battery storage technology expenditures and provides a definition of those expenditures. (Code Sec. 25D(a)(6), as amended by Act Sec. 13302(b)(1), Code Sec. 25D(d)(6), as amended by Act Sec. 13302(b)(2))

Under the Act, the applicable rate is 26% for property placed in service before January 1, 2022, 30% for property placed in service after December 31, 2021, and before January 1, 2033, 26% for property placed in service after December 31, 2032, and before January 1, 2034, and 22% for property placed in service after December 31, 2033, and before January 1, 2035. (Code Sec. 25D(g), as amended by Act Sec. 13302(a)(2))

**Effective date.** These provisions generally apply to expenditures made after December 31, 2021. (Act Sec. 13302(d)(1)) However, the allowance of the credit for qualified battery storage technology, and the definition of that technology, apply to expenditures made after December 21, 2022. (Act Sec. 13302(d)(2))

## Accelerated Cost Recovery for Green Building Property

Code Sec. 179D provides an accelerated cost recovery deduction for energy efficient commercial building (EECB) property for the year placed in service. (Code Sec. 179D(a)) The maximum amount of the deduction allowed for a year was calculated by multiplying a statutory dollar amount (\$1.80), adjusted for inflation (\$1.88 for 2022), by the square footage of the building. Then, the product was reduced by the total EECB property deductions taken related to the building in all prior years to arrive at the applicable limitation. (Code Sec. 179D(b))

EECB property must satisfy certain installation requirements. Those include certification of being part of a plan for annual energy and power savings of 50% or more, based on a comparison to the most recent Reference Standards published jointly by two engineering societies. (Code Sec. 179D(c)) If a taxpayer did not satisfy that certification, then a partial deduction could be claimed if certain building systems satisfied energy-savings targets established by the IRS. (Code Sec. 179D(d)(1))

There is a rule for allocation of the deduction when EECB property is installed on/in "government" property. (Code Sec. 179D(d)(4))

**New law.** The Inflation Reduction Act of 2022 lowers the minimum EECB efficiency standard required for deduction benefits from a 50% reduction in total annual energy and power costs to a 25% reduction. (Code Sec. 179D(c)(1)(D), as amended by Act Sec. 13303(a)(2))

The Act modifies the formula for calculating the maximum deduction. The Act switches to an "applicable dollar value" (ADV) multiplication factor, which is variable based on the percentage of total annual energy and power cost reductions for the building. The ADV is \$0.50, and it can be increased by \$0.02 for each percentage point cost reduction over 25% (capped at \$1). Additionally, for the past deductions reduction factor, instead of totaling from all prior years, the lookback is the three (four in some situations) immediately preceding tax years. (Code Sec. 179D(b), as amended by Act Sec. 13303(a)(1))

The Act also provides an opportunity to exponentially increase the ADV. If, among other things, prevailing wage and apprenticeship requirements are satisfied, then the ADV is \$2.50 increased by \$0.10 per eligible cost reduction percentage point (capped at \$5.00). (Code Sec. 179D(b)(3), as amended by Act Sec. 13303(a)(1))

The Act updates the rules for determining what non-IRS standards and methods are incorporated for application to a taxpayer for any given year. (Code Sec. 179D(c)(2), as modified by Act Sec. 13303(a)(3)) This includes a change from the two-years-before-start-of-construction incubation period for the applicable "most recent" version to a four-years-before-placed-in-service period (Code Sec. 179D(c)(2)(B), as modified by Act Sec. 13303(a)(4); Code Sec. 179D(d)(1), as renumbered and modified by Act Sec. 13303(c))



The Act eliminates the allowance of partial deductions. (former Code Sec. 179D(d)(1), struck by Act Sec. 13303(a)(5))

The Act provides more detailed criteria for the allocation of the deduction when EECB property is installed on/in "tax-exempt" (replacing "government") property. (Code Sec. 179D(d)(3), as renumbered and modified by Act Sec. 13303(a)(6))

The Act establishes an election for a new alternative deduction for energy efficient building retrofit (Retrofit) property which is taken in the year of qualifying final certification. The alternative deduction requires a qualified retrofit plan, and it looks to percentage reductions in energy use intensity rather than total annual energy and power costs. The alternative deduction cannot exceed the aggregate adjusted basis of Retrofit property placed in service pursuant to the plan. (Code Sec. 179D(f), added by Act Sec. 13303(a)(7) following the elimination by Act Sec. 13303(a)(5))

The Act also adds a modification of deduction timing for REIT earnings and profits. (Code Sec. 312(k)(3)(B)(ii), added by Act Sec. 13303(b))

**Effective date.** These provisions, except for the alternative deduction for Retrofit property, apply to tax years beginning after December 31, 2022. The provisions of Code Sec. 179D for the alternative deduction apply to property placed in service after December 31, 2022, if such property is placed in service pursuant to qualified retrofit plan established after December 31, 2022. (Act Sec. 13303(d))

## Extension, Increase, and Modifications of New Energy Efficient Home Credit

Before the enactment of the Inflation Reduction Act of 2022, a New Energy Efficient Home Credit (NEEHC) was available to eligible contractors for qualified new energy efficient homes acquired by a homeowner before Jan. 1, 2022. (Code Sec. 45L(g)) A home had to satisfy specified energy saving requirements to qualify for the credit. (Code Sec. 45L(c)) The credit was either \$1,000 or \$2,000, depending on which energy efficiency requirements the home satisfied. (Code Sec. 45L(a)(2))

**New law.** The Act makes the credit available for qualified new energy efficient homes acquired before January 1, 2033. (Code Sec. 45L(g), as amended by Act Sec. 13304(a)) The amount of the credit is increased, and can be \$500, \$1,000, \$2,500, or \$5,000, depending on which energy efficiency requirements the home satisfies (Code Sec. 45L(a)(2), as amended by Act Sec. 13304(b)) and whether the construction of the home meets the prevailing wage requirements discussed below. (Code Sec. 45L(g)(1), as amended by Act Sec. 13304(d))

*Energy saving requirements.* A dwelling unit qualifies for the credit if it's certified as a zero energy ready home under the zero energy ready home program of the Department of Energy as in effect on January 1, 2023 (or any successor program determined by the Secretary), and it satisfies a set of requirements based up the type of home. (Code Sec. 45L(c)(1)(B), as amended by Act Sec. 13304(c))

Under the single-family home requirements, a dwelling unit qualifies for the credit if it meets:

1. in the case of a dwelling unit acquired before January 1, 2025, the Energy Star Single-Family New Homes National Program Requirements 3.1, or
2. in the case of a dwelling unit acquired after December 31, 2024, the Energy Star Single-Family New Homes National Program Requirements 3.2, plus

3. the most recent Energy Star Single-Family New Homes Program Requirements applicable to the location of such dwelling unit (as in effect on the latter of January 1, 2023, or January 1 of two calendar years before the date the dwelling unit was acquired); or alternatively
4. the dwelling unit meets the most recent Energy Star Manufactured Home National program requirements as in effect on the latter of January 1, 2023, or January 1 of two calendar years before the date the dwelling unit is acquired. (Code Sec. 45L(c)(2), as amended by Act Sec. 13304(c))

Under the multi-family home requirements, a dwelling unit qualifies for the credit if:

1. the dwelling unit meets the most recent Energy Star Multifamily New Construction National Program Requirements (as in effect on either January 1, 2023, or January 1 of three calendar years before the date the dwelling was acquired, whichever is later), and
2. the dwelling unit meets the most recent Energy Star Multifamily New Construction Regional Program Requirements applicable to the location of the dwelling unit (as in effect on either January 1, 2023, or January 1 of three calendar years before the date the dwelling was acquired, whichever is later). (Code Sec. 45L(c)(3), as amended by Act Sec. 13304(c))

*Prevailing wage requirements.* Under the prevailing wage requirements, for any qualified residence, the taxpayer must ensure that any laborers and mechanics employed by the taxpayer or any contractors and subcontractor or subcontractor in the construction of the residence are paid wages at rates not less than the prevailing rates for construction, alteration, or repair of a similar character in the locality in which the residence is located as most recently determined by the Secretary of Labor. (Code Sec. 45L(g)(2)(A), as amended by Act Sec. 13304(d)) Failure to satisfy the prevailing wage requirements can be cured under rules similar to those of Code Sec. 45(b)(7)(B). (Code Sec. 45L(g)(2)(B), as amended by Act Sec. 13304(d))

**Observation.** Code Sec. 45(b)(7)(B) (as amended by Act Sec. 13101(f)) provides that a taxpayer that fails to satisfy the prevailing wage requirements will be deemed to have satisfied those requirements if it (a) pays to each affected worker an amount equal to the difference between the amount actually paid and the amount which would have been paid under the prevailing wages rules, plus interest, and (b) pays a \$5,000 penalty per affected worker.

*Effect on basis of property generating an NEEHC.* Under the Act, the reduction in the increase in the basis of property resulting from an expenditure generating an NEEHC by an amount equal to the NEEHC doesn't apply in determining the adjusted basis of any property under Code Sec. 42 (the low-income housing credit). (Code Sec. 45L(e), as amended by Act Sec. 13304(e))

*Regulations.* IRS is to prescribe regs and other guidance as necessary to carry out the purposes of the prevailing wage requirements, including regs or other guidance which provides for requirements for recordkeeping or information reporting for purposes of administering the prevailing wage requirements. (Code Sec. 45L(g)(3), as added by Act Sec. 13304(d))

**Effective date.** These provisions generally apply to dwelling units acquired after December 31, 2022. (Act Sec. 13304(f)(1)) However, the extension of the credit by Act Sec. 13304(a) applies to dwelling units acquired after December 31, 2021. (Act Sec. 13304(f)(2))

## New Clean Vehicle Credit

Before the enactment of the Inflation Reduction Act of 2022, a taxpayer could claim a credit for each new qualified plug-in electric drive motor vehicle (NQPEDMV) placed in service during the tax year (Code Sec. 30D(a))

The amount of the NQPEDMV credit is the sum of: (1) \$2,500; plus (2) for a vehicle that draws propulsion energy from a battery with not less than 5 kilowatt hours of capacity, \$417 for each kilowatt hour of capacity in excess of 5 kilowatt hours, but not in excess of \$5,000. Thus, the maximum credit is \$7,500, regardless of weight. (Code Sec. 30D(b))

A vehicle is an NQPEDMV if it meets certain requirements, including being propelled to a significant extent by an electric motor that has a capacity of at least four kilowatt hours and is capable of being recharged from an external source of electricity. (Code Sec. 30D(d)(1))

The credit phases out beginning in the second calendar quarter after that in which a manufacturer sells its 200,000th plug-in electric drive motor vehicle for use in the U.S. after 2009. (Code Sec. 30D(e)) Phase-outs apply for vehicles manufactured by Tesla (beginning Jan. 2019), and GM (beginning Apr. 2019).

For tax years before 2022, a credit was also allowed for qualified fuel cell motor vehicles. A qualified fuel cell motor vehicle was a motor vehicle that was propelled by power from cells that convert chemical energy directly into electricity by combining oxygen with hydrogen fuel and that meets other requirements. (Code Sec. 30B)

**New law.** The NQPEDMV credit has been retitled the Clean Vehicle Credit. (Code Sec. 30D, as amended by Act Sec. 13401(i)(1))

*Manufacturer limitation eliminated.* The limitation on the number of vehicles eligible for the credit has been eliminated. (Code Sec. 30D(e), as amended by Act Sec. 13401(d))

The elimination of the manufacturer limitation applies to vehicles sold after December 31, 2022. (Act Sec. 13401(k)(5))

*Calculation.* The Act changes how the clean vehicle credit is calculated. Taxpayers get a \$3,750 credit for meeting the critical minerals requirement and a \$3,750 credit for meeting the battery component requirement (see below). (Code Sec. 30D(b), as amended by Act Sec. 13401(a))

The change in the calculation rules applies to vehicles placed in service after the date on which the proposed guidance described in Code Sec. 30D(e)(3)(B) (see below) is issued. (Act Sec. 13401(k)(3))

*Final assembly requirement.* To qualify for the credit, the Act also requires that final assembly of the vehicle occurs in North America (the "final assembly requirement"). "Final assembly" means the process by which a manufacturer produces a new clean vehicle at, or through use of, a plant, factory, or other place from which the vehicle is delivered to a dealer or importer with all component parts necessary for the mechanical operation of the vehicle included with the vehicle, whether or not the component parts are permanently installed in or on the vehicle. (Code Sec. 30D(d)(1)(G) and (d)(5), as amended by Act Sec. 13401(b))

The final assembly requirement applies to vehicles sold after the date of enactment of the Act. (Act Sec. 13401(k)(2))

*Definition of new clean vehicle.* The Act changes the definition of new clean vehicle (formerly known as an NQPEDMV) as follows:

- The minimum battery capacity is increased from four to seven kilowatt-hours. (Code Sec. 30D(d)(1)(F)(i), as amended by Act Sec. 13401(c)(1)(B)(iii)(I))
- The seller of a new clean vehicle is required to furnish a report to the buyer and the IRS (the "report requirement") containing:
  - the name and taxpayer identification number of the buyer;
  - the vehicle identification number (VIN) of the vehicle, unless, in accordance with any applicable rules promulgated by the U.S. Department of Transportation, the vehicle is not assigned a VIN;
  - the battery capacity of the vehicle;
  - verification that the original use of the vehicle commences with the taxpayer; and
  - the maximum Clean Vehicle credit allowable to the buyer with respect to the vehicle. (Code Sec. 30D(d)(1)(H), as amended by Act Sec. 13401(c)(1)(B)(v))
- The term "new clean vehicle" includes any new qualified fuel cell motor vehicle (as defined in Code Sec. 30B(b)(3)) that meets the final assembly and report requirements. (Code Sec. 30D(d)(6), as amended by Act Sec. 13401(c)(1)(D))

The credit may only be claimed for vehicles made by a qualified manufacturer. (Code Sec. 30D(d)(1)(C), as amended by Act Sec. 13401(c)(1)(B)(ii))

In order to be a qualified manufacturer, a manufacturer must enter into a written agreement with the IRS under which the manufacturer agrees to make periodic reports to the IRS providing VINs and other information related to each vehicle it manufactures that is required by the IRS. (Code Sec. 30D(d)(3), as amended by Act Sec. 13401(c)(1)(C)(iii))

*Critical mineral requirement.* The critical mineral requirement is met for a vehicle if, with respect to the battery of the vehicle, the percentage of the value of the applicable critical minerals (as defined in Code Sec. 45X(c)(6)) contained in the battery that were (i) extracted or processed in the United States or in any country with which the United States has a free trade agreement in effect, or (ii) recycled in North America, is equal to or greater than the applicable percentage (as certified by the qualified manufacturer, in such form or manner as prescribed by the IRS). (Code Sec. 30D(e)(1)(A), as amended by Act Sec. 13401(e)(1))

Critical minerals include aluminum, antimony, barite, beryllium, cerium, cesium, chromium, cobalt, dysprosium, europium, fluor spar, gadolinium, germanium, graphite, indium, lithium, manganese, neodymium, nickel, niobium, tellurium, tin, tungsten, vanadium, yttrium, arsenic, bismuth, erbium, gallium, hafnium, holmium, iridium, lanthanum, lutetium, magnesium, palladium, platinum, praseodymium, rhodium, rubidium, ruthenium, samarium, scandium, tantalum, terbium, thulium, titanium, ytterbium, zinc, and zirconium. (Code Sec. 45X(c)(6), as added by Act Sec. 13502(a))

The term "new clean vehicle" does not include any vehicle placed in service after December 31, 2024, with respect to which any of the applicable critical minerals were extracted, processed, or recycled by a foreign entity of concern (as defined in section 40207(a)(5) of the Infrastructure Investment and Jobs Act (42 U.S.C. 18741(a)(5))). (Code Sec. 30D(d)(7)(A), as amended by Act Sec. 13401(e)(2))

*Battery component requirement.* The battery component requirement is met with respect to a vehicle if, with respect to the vehicle's battery, the percentage of the value of the components contained in the battery that were manufactured or assembled in North America is equal to or greater than the applicable percentage. (as certified by the qualified manufacturer, in such form or manner as prescribed by the IRS). (Code Sec. 30D(e)(2)(A), as amended by Act Sec. 13401(e)(1))

For vehicles placed in service in 2023, the applicable percentage is 50%; for 2024 or 2025, 60%; for 2026, 70%; for 2027, 80%; for 2028, 90%; and for 2029 and later years, 100%. (Code Sec. 30D(e)(2)(B), as amended by Act Sec. 13401(e)(1))

The term "new clean vehicle" does not include any vehicle placed in service after December 31, 2023, with respect to which any of the components contained in the battery of the vehicle were manufactured or assembled by a foreign entity of concern. (Code Sec. 30D(d)(7)(B), as amended by Act Sec. 13401(e)(2))

*IRS guidance requirement.* The IRS is required to issue such regulations or other guidance as it determines necessary to carry out the purposes of Code Sec. 30D(e) (the critical mineral and battery component requirements), including regulations or other guidance which provides for requirements for recordkeeping or information reporting for purposes of administering the requirements of Code Sec. 30D(e). The IRS is required to issue proposed guidance no later than December 31, 2022. (Code Sec. 30D(e)(3), as amended by Act Sec. 13401(e)(1))

The critical mineral and battery component requirements apply to vehicles placed in service after the date on which this proposed guidance is issued. (Act Sec. 13401(k)(3))

*Manufacturer's suggested retail price limitation.* The clean vehicle credit is not allowed for a vehicle with a manufacturer's suggested retail price in excess of the applicable limitation. For vans, sport utility vehicles, and pickups, the applicable limitation is \$80,000. For any other vehicle, the applicable limitation is \$55,000. (Code Sec. 30D(f)(11), as amended by Act Sec. 13401(f))

*MAGI limit.* No clean vehicle credit is allowed for any tax year if the lesser of the modified adjusted gross income (MAGI) of the taxpayer for the current or preceding tax year exceeds the threshold amount. The threshold amount is \$300,000 (for taxpayers filing joint returns or surviving spouses), \$225,000 (for heads of household), or \$150,000 (for other taxpayers). MAGI means adjusted gross income increased by any amount excluded from gross income under Code Sec. 911 (foreign earned income and housing exclusions), Code Sec. 931 (income from Guam, American Samoa, or the Northern Mariana Islands), and Code Sec. 933 (income from Puerto Rico). (Code Sec. 30D(f)(10), as amended by Act Sec. 13401(f))

*Transfer of credit.* The taxpayer who acquires a new clean vehicle can elect, on or before the purchase date, to transfer the clean vehicle credit to the dealer who sold the vehicle in return for full payment of the credit amount. Making the election cannot limit the use or value of any other dealer or manufacturer incentive to buy the vehicle, nor can the availability or use of the incentive limit the ability of the taxpayer to make the election. (Code Sec. 30D(g), as amended by Act Sec. 13401(g))

Dealers must register with the IRS and meet other requirements to offer the election to their purchasers. (Code Sec. 30D(g)(2), as amended by Act Sec. 13401(g))

The dealer's payment to the purchaser is not income to the purchaser, nor deductible by the dealer. (Code Sec. 30D(g)(5), as amended by Act Sec. 13401(g))

The IRS will make advance payments to dealers in an amount equal to the cumulative amount of the new vehicle credits allowed with respect to any vehicles sold by the dealer for which the election to transfer the credit has been made. Rules similar to the rules of new Code Sec. 6417(d)(6) (excess elective payments of applicable credits) apply to excess advance payments of clean vehicle credits to dealers. Any advance payments are treated in the same manner as a refund due from a credit provision referred to in 31 USC 1324(b)(2) (relating to refunds of internal revenue collections). (Code Sec. 30D(g)(7), as amended by Act Sec. 13401(g))

A buyer who has elected to transfer the credit for a new clean vehicle to the dealer and has received a payment from the dealer in return but whose MAGI exceeds the applicable limit discussed above is required to recapture the amount of the payment. The buyer's income tax for the tax year in which the vehicle is placed in service is increased by the amount of the payment received by the buyer from the dealer. (Code Sec. 30D(g)(10), as amended by Act Sec. 13401(g))

The rule allowing transfer of the clean vehicle credit apply to vehicles placed in service after December 31, 2023. (Act Sec. 13401(k)(4))

Beginning in fiscal year 2023 and each fiscal year thereafter, the portion of any clean vehicle credit allowed to a dealer that is direct spending will be increased by 6.0445%. (Act Sec. 13401(j))

*Other rules.* Only one clean vehicle credit is allowed per vehicle. (Code Sec. 30D(f)(8), as amended by Act Sec. 13401(f))

No clean vehicle credit is allowed with respect to any vehicle unless the taxpayer includes the VIN on the taxpayer's return. (Code Sec. 30D(f)(9), as amended by Act Sec. 13401(f))

*Expiration.* No clean vehicle credit will be allowed with respect to any vehicle placed in service after December 31, 2032. (Code Sec. 30D(h), as amended by Act Sec. 13401(h))

*Transition rule.* A taxpayer who, after December 31, 2021, and before the date of enactment of the Act, purchased, or entered into a written binding contract to purchase, an NQPEDMV and placed the NQPEDMV in service on or after the date of enactment, may elect to treat the NQPEDMV as being placed in service before the date of enactment of the Act. (Act Sec. 13401(l))

**Observation.** In other words, the taxpayer may elect to apply the old rules under Code Sec. 30D to the vehicle.

**Effective date.** Except as provided above, the provision applies to vehicles placed in service after December 31, 2022. (Act Sec. 13401(k)(1))



## Credit for Previously-Owned Clean Vehicles

Under the Inflation Adjustment Act of 2022, a qualified buyer who acquires and places in service a previously-owned clean vehicle after 2022 is allowed an income tax credit equal to the lesser of \$4,000 or 30% of the vehicle's sale price. (Code Sec. 25E(a), as added by Act Sec. 13402(a)) No credit is allowed if the lesser of the taxpayer's modified adjusted gross income for the year of purchase or the preceding year exceeds \$150,000 for a joint return or surviving spouse, \$112,500 for a head of household, or \$75,000 for others. (Code Sec. 25E(b), as added by Act Sec. 13402(a))

*Previously-owned clean vehicle.* A previously-owned clean vehicle is a motor vehicle the model year of which is at least two years earlier than the calendar year in which the taxpayer acquires it, the original use of which starts with a person other than the taxpayer, is acquired in a qualified sale, and which generally meets the requirements applicable to vehicles eligible for the clean vehicle credit for new vehicles, or is a clean fuel-cell vehicle with a gross weight rating of less than 14,000 pounds. (Code Sec. 25E(c)(1), as added by Act Sec. 13402(a))

*Qualified sale.* A qualified sale is a sale of a motor vehicle by a dealer for a price of \$25,000 or less, which is the first transfer since the Act's enactment to a qualified buyer other than the original buyer of the vehicle. (Code Sec. 25E(c)(2), as added by Act Sec. 13402(a))

*Qualified buyer.* A qualified buyer is an individual who purchases the vehicle for use and not for resale, who is not a tax dependent of another taxpayer, and has not been allowed a credit for a previously-owned clean vehicle during the three year period ending on the sale date. (Code Sec. 25E(c)(3), as added by Act Sec. 13402(a))

**Observation.** Children who are (or can be) claimed as dependents by their parents are not qualified buyers, even if they have enough income to have to file a return. It makes no difference if the parent chooses not to claim the child as a dependent, because the dependency deduction is still "allowable" to the parent.

*Transfer of credit.* For vehicles acquired after 2023 (Act Sec. 13402(e)(2)) purchasers of previously-owned clean vehicles will be able to elect up to the time of sale to transfer the credit to the selling dealer in exchange for cash, or a partial payment or a down payment on the vehicle in an amount equal to the credit otherwise allowable to the buyer. Such an election will not limit the buyer from using other dealer or manufacturer provided incentives. Any payment or credit resulting from the election will not be includible in the buyer's income or be deductible by the dealer. IRS will establish a program to make advance credit payments of credits to registered dealers of transferred credits. (Code Sec. 25E(f), as added by Act Sec. 13402(b))

**Effective date and termination of credit.** The previously-owned clean vehicle credit applies to vehicles acquired after December 31, 2022, but will not be allowed for any vehicle acquired after December 31, 2032. (Act Sec. 13402(e)) The credit transfer provision applies to vehicles acquired after 2023. (Act Sec. 13402(e)(2))

## New Credit for Qualified Commercial Clean Vehicles

The Inflation Reduction Act of 2022 adds a new qualified commercial clean vehicle credit for qualified vehicles acquired and placed in service after December 31, 2022. The credit is a component of the Code Sec. 38 general business credit. (Code Sec. 45W(a), as added by Act Sec. 13403(a) and (c))

*Amount of credit.* The credit per vehicle is the lesser of: (1) 15% of the vehicle's basis (30% for vehicles not powered by a gasoline or diesel engine) or (2) the "incremental cost" of the vehicle over the cost of a comparable vehicle powered solely by a gasoline or diesel engine. The maximum credit per vehicle is \$7,500 for vehicles with gross vehicle weight ratings of less than 14,000 pounds, or \$40,000 for heavier vehicles. (Code Sec. 45W(b), as added by Act Sec. 13403(a))

*Qualified commercial clean vehicle.* The vehicle must be acquired for use or lease by the taxpayer, and not for resale. It must be manufactured for use on public streets, roads, and highways, or be "mobile machinery" as defined in Code Sec. 4053(8). The vehicle must have a battery capacity of not less than 15 kilowatt hours (7 kilowatt hours for vehicles weighing less than 14,000 pounds) and be charged by an external electricity source. Qualified commercial fuel cell vehicles are also eligible for the credit. Qualifying vehicles must be depreciable property. Only vehicles made by qualified manufacturers, who have written agreements with and provide periodic reports to the Treasury, can qualify. (Code Sec. 45W(c), as added by Act Sec. 13403(a))

*Technical requirements.* Special rules apply to vehicles placed in service by tax-exempt entities. This credit is not allowed if a credit was allowed under Code Sec. 30D, the general clean vehicle credit. (Code Sec. 45W(d), as added by Act Sec. 13403(a)) A vehicle identification number (VIN) is required on returns claiming the credit. (Code Sec. 45W(d), as added by Act Sec. 13403(a))

*Coming guidance.* IRS will issue regs or other guidance deemed necessary or appropriate to carry out Code Sec. 45W, including determination of the incremental cost of a qualified commercial clean vehicle. (Code Sec. 45W(f), as added by Act Sec. 13403(a))

**Effective dates.** The qualified commercial clean vehicle credit applies to vehicles acquired after December 31, 2022. (Act Sec. 13403(c)) No credit will be available for vehicles acquired after December 31, 2032. (Code Sec. 45W(g), as added by Act Sec. 13403(a))

## Alternative Fuel Vehicle Refueling Property Credit

Before the enactment of the Inflation Reduction Act of 2022 (the Act), Code Sec. 30C provided that a tax credit was available for the cost of any qualified alternative fuel vehicle refueling property placed in service by a business or at a taxpayer's principal residence before January 1, 2022. The credit was equal to 30% of the cost of the property placed in service by the taxpayer during the tax year at a given location, limited to \$30,000 for qualifying property subject to an allowance for depreciation or \$1,000 for property at a personal residence for personal use. (Code Sec. 30C)

**New law.** The Act extends the credit to eligible property placed in service before January 1, 2033. (Code Sec. 30C(g), as amended by Act Sec. 13404(a); Act Sec. 13404(f)(2))

Effective for eligible property placed in service after December 31, 2022 (Act Sec. 13404(f)(1)), the Act makes certain additional changes to Code Sec. 30C as set forth below.

The Act extends the credit for depreciable property at a rate of 6% (Code Sec 30C(a), as amended by Act Sec. 13404(b)(1)), increasing to 30% if certain prevailing wage and apprenticeship requirements are met (Act Sec. 13404(d)), and subject to a limit of \$100,000 (Code Sec 30C(b), as amended by Act Sec. 13404(b)(2)(B)). The Act modifies the definition of eligible property to include bidirectional charging equipment (Act Sec. 13404(b)(3)) and provides that the credit is available for electric charging stations for two- and three-wheeled vehicles that are intended for use on public roads. (Act Sec. 13404(c)) Under the Act, the credit limitation applies per single item of qualified alternative fuel vehicle refueling property instead of all such property at an individual location. (Code Sec 30C(b), as amended by Act Sec. 13404(b)(2)(A)) Charging or refueling property will only be eligible for the credit if placed in service within a low-income or rural census tract. (Act Sec. 13404(e))

**Observation. Thus, for 2022 the existing rules apply, but for 2023 through 2032, the changes to the rules discussed above will apply.**

## Qualifying Advanced Energy Project Credit

Code Sec. 48C provides for a qualifying advanced energy project credit as part of the Code Sec. 46 investment credit equal to 30% of the qualified investment. (Code Sec 48C(a)) The credit is measured by the taxpayer's basis in the eligible property. (Code Sec 48C(b)) A qualified advanced energy manufacturing project is a project that re-equips, expands, or establishes a manufacturing facility for the production of:

1. Property to produce energy from the sun, wind, or geothermal deposits or other renewable resources;
2. Fuel cells, microturbines, or an energy storage system for use with electric or hybrid-electric motor vehicles;
3. Electric grids to support the transmission of intermittent sources of renewable energy, including storage of that energy;
4. Property to manufacture equipment used for carbon capture or sequestration;
5. Property to refine or blend renewable fuels to produce energy conservation technologies (including energy-conserving lighting technologies and smart grid technologies);
6. Code Sec. 30D qualified plug-in electric drive motor vehicles or components that are designed specifically for use with these vehicles, including electric motors, generators, and power control units; or
7. Other advanced energy property designed to reduce greenhouse gas emissions. (Code Sec. 48C(c)(1)(A)(i))

Only depreciable tangible personal property, but excluding a building or its structural components, is eligible for the credit. (Code Sec. 48C(b)(1)) Also excluded is property used in the refining or blending of any transportation fuel, other than renewable fuels. (Code Sec. 48C(c)(1)(B)) A credit is not available under Code Sec. 48C if a credit is allowed under Code Sec. 48, Code Sec. 48A, or Code Sec. 48B. (Code Sec. 48C(e)) The amount treated as the credit eligible for all tax years for any qualifying advanced energy project may not exceed the amount designated as eligible by the IRS. (Code Sec. 48C(b)(3)) The total amount of credits available to be allocated under the program is limited to \$2.3 billion. (Code Sec. 48C(d)(1)(B))

**New law.** The Inflation Reduction Act of 2022 provides an additional \$10 billion in allocations with at least \$4 billion to be allocated to projects within specified census tracts; however, credits may not be allocated to projects located in census tracts having projects that have received prior allocations under Code Sec. 48C(d). (Code Sec. 48C(e)(2), as added by Act Sec. 13501(a))

The base rate for the credit will be 6%, with the 30% credit rate allowed for projects meeting certain prevailing wage and registered apprenticeship requirements. (Code Sec. 48C(e)(4), as added by Act Sec. 13501(a)) Taxpayers must apply with the Treasury Department for certification, and the projects would have to be placed in service within two years of certification. (Code Sec. 48C(e)(3), as added by Act Sec. 13501(a)) The credit will not available if a credit is allowed under Code Sec. 48, Code Sec. 48A, Code Sec. 48B, Code Sec. 48E, Code Sec. 48Q, or Code Sec. 45V. (Act Sec. 13501(d))

The Act expands the Code Sec. 48C credit to include projects that reequip, expand, or establish a manufacturing or industrial facility for the production or recycling of:

1. energy storage systems and components;
2. grid modernization equipment and components;
3. property designed to remove, use, or sequester carbon oxide emissions;
4. equipment designed to refine, electrolyze, or blend any fuel, chemical, or product which is renewable or low-carbon and low-emission;
5. property designed to produce energy conservation technologies;
6. electric and hybrid vehicles; and
7. property that re-equips an industrial manufacturing facility with equipment designed to reduce greenhouse gas emissions by at least 20% or that re-equips, expands, or establishes an industrial facility for the processing, refining or recycling of critical materials. (Code Sec. 48C(a)(A), as amended by Act Section 13501(b))

**Effective date.** These changes are effective January 1, 2023. (Act Sec. 13501(e))

## Advanced Manufacturing Production Credit

The Inflation Reduction Act of 2022 provides, as an addition to the credits that make up the Code Sec. 38 general business credit, the advanced manufacturing production credit (the AMPC). (Code Sec. 45X, as added by Act Sec. 13502(a))

**Observation.** The credit is distinct from the advanced manufacturing investment credit (also known as the CHIPS credit) that addresses computer chips as provided by the Creating Helpful Incentives to Produce Semiconductors (CHIPS) Act.

**Observation.** The amount of the CHIPS credit is determined by a simple percentage of the amount of taxpayer investment in property used to manufacture computer chips or chip manufacturing property. In contrast, as discussed below, the AMPC addresses the production of a variety of equipment components and the amount of the credit is determined under a variety of sales-based formulas.

*Credit amount-general rules.* The credit amount is equal to the sum of the credit amounts determined for each "eligible component" (below) that is produced by the taxpayer and, during the tax year, sold by the taxpayer to an unrelated person. (Code Sec. 45X(a)(1), as added by Act Sec. 13502(a)) A taxpayer can elect not to apply the unrelated person requirement if beforehand the taxpayer provides, to the extent required by IRS, any information and registration necessary to prevent duplication, fraud, or an improper or excessive amount. (Code Sec. 45X(a)(3), as added by Act Sec. 13502(a))

**Observation. Thus, production of the eligible components is a requirement of the credit, but the credit for a tax year is determined based on the volume of sales of those components made in the tax year.**

The production and sale must occur in a trade or business of the taxpayer. (Code Sec. 45X(a)(2), as added by Act Sec. 13502(a))

Persons are treated as related to each other if they would be treated as a single employer under Code Sec. 52(b). (Code Sec. 45X(d)(1), as added by Act Sec. 13502(a))

A person is treated as having sold an eligible component to an unrelated person if the component is integrated, incorporated, or assembled into another eligible component sold to an unrelated person. (Code Sec. 45X(d)(4), as added by Act Sec. 13502(a))

Sales are included only if they are sales of eligible components produced in the U.S. or its possessions. (Code Sec. 45X(d)(2), as added by Act Sec. 13502(a))

*Credit amount-specific computations.* The formulas that determine how much credit is earned for each sale of a unit of an eligible component are not the same for all five types of eligible components and different formulas can apply to different subtypes of eligible components. (Code Sec. 45X(b)(1), as added by Act Sec. 13502(a)) For example, the credit amount for solar grade polysilicon, a type of solar energy component, is \$3 per kilogram while the credit amount for a polymeric backsheets, another type of solar component, is 40 cents per square meter. (Code Sec. 45X(b)(1)(C), as added by Act Sec. 13502(a); Code Sec. 45X(b)(1)(D), as added by Act Sec. 13502(a))

*Eligible components.* Eligible components include: (1) solar energy components, (2) wind energy components, (3) inverters (products used to convert certain solar and wind energy from direct current to alternating current), (4) qualifying battery components, and (5) applicable critical minerals (certain minerals that are processed by the taxpayer). (Code Sec. 45X(c)(1)(A), as added by Act Sec. 13502(a))

Eligible components do not include any property produced in a facility if the basis of any property that is part of the facility is taken account of for purposes of the credit allowed under Code Sec. 48C (the advanced energy project credit) after the date of enactment of the Act. (Code Sec. 45X(c)(1)(B), as added by Act Sec. 13502(a))

Detailed definitions of the types, and often of the subtypes, of eligible components are provided. (Code Sec. 45X(c)(2) through Code Sec. 45X(c)(6), as added by Act Sec. 13502(a))

*Phase out of credit.* The amount of the credit is reduced to 75% of the otherwise determined credit amount for eligible components sold in 2030, 50% for sales in 2031, 25% for sales in 2032, and 0% for sales in 2033 and later years. However, the phase out does not apply to applicable critical minerals. (Code Sec. 45X(b)(3), as added by Act Sec. 13502(a))

**Effective date.** The AMPC applies to components produced and sold after December 31, 2022. (Act Sec. 13502(c))

## Clean Energy Production Credit

The Inflation Reduction Act of 2022 establishes a new credit for clean energy production. The credit is available for facilities placed in service after 2024 until certain emissions targets are achieved or 2032, whichever is later. (Code Sec 45Y(d)(3)(A), as added by Act Sec. 13701)

*Credit amount.* The base amount of this new clean energy production tax credit (EPTC) equals 0.3 cents per kWh of electricity produced and sold or stored at qualified facilities placed in service after December 31, 2024. However, an alternative credit amount equal to 1.5 cents is available for a qualified facility that has a maximum output of less than 1 megawatt and that meets other requirements. (Code Sec. 45Y(a)(2))

**Observation.** New clean energy production credit is an emissions-based incentive that doesn't favor a particular clean technology. Taxpayers will choose between the new clean energy production credit or the new clean energy investment credit.

**Effective date.** This applies to facilities placed in service after December 31, 2024. (Act Sec. 13701(c))

## Clean Energy Investment Credit

The Inflation Reduction Act of 2022 creates a new credit for investments in clean energy. This credit is available for property placed in service after 2024 until certain emissions targets are met or 2032, whichever is later.

*Credit amount.* The base rate for this new investment credit is 6% of the taxpayer's investment in qualified property for the year that property is placed in service. However, an increased credit up to 30% is available for investments in qualified facilities with a maximum output less than 1 megawatt that also meet certain other requirements. (Code Sec. 48E(a)(2))

A bonus credit of 10% or 20% applies to qualified clean energy production projects located in certain low-income communities or on Tribal lands. (Code Sec. 48E(h))

**Observation.** The new clean energy investment credit is an emissions-based incentive that doesn't favor a particular clean technology. Taxpayers will need to choose between a production credit and an investment credit.

**Effective date.** This applies to property placed in service after December 31, 2024. (Act Sec. 13702(c))

## Certain Green Energy Property Classified as MACRS 5-Year Property

For MACRS depreciation recovery periods, certain specified categories of property are classified as being 5-year property (e.g., automobiles). (Code Sec. 168(e)(3)(B))

**New law.** The Inflation Reduction Act of 2022 adds three categories of green energy property to the MACRS 5-year property classification.

1. Qualified Facility. This is a facility defined under Code Sec. 45Y(b)(1)(A) for the new Clean Electricity Production Credit.

2. **Qualified Property.** This is certain property defined under Code Sec. 48E(b)(2) for the new Clean Electricity Investment Credit which is a "qualified investment" defined under Code Sec. 48E(b)(1).

3. **Energy Storage Technology.** This is property defined under Code Sec. 48(c)(6) for the Energy Credit, but without application of the termination date for that provision. The MACRS provision adopts that definition via a citation to Code Sec. 48E(c)(2). (Code Sec. 168(e)(3)(B)(viii), as added by Act Sec. 13703)

**Effective date.** These MACRS classification provisions apply to facilities and property placed in service after December 31, 2024. (Act Sec. 13703(b))

## New Clean Fuel Production Credit

The Inflation Reduction Act of 2022 creates a new clean fuel production credit for low-emissions transportation fuel. (Code Sec. 45Z, as added by Act Sec. 13704) Transportation fuel is a fuel suitable for use in a highway vehicle or aircraft that meets certain emissions rate and processing requirements. (Code Sec. 45Z(d)(5), as added by Act Sec. 13704(a))

**Observation. While the fuel must be suitable for use in a highway vehicle or aircraft, it may be used for other purposes.**

*Eligibility for credit.* The taxpayer must produce the fuel at a qualified facility and sell it to an unrelated person for use either in the production of a fuel mixture or in a trade or business, or sell the fuel at retail to another person and place it in such person's fuel tank. (Code Sec. 45Z(a)(1)(A) and Code Sec. 45Z(a)(4), as added by Act Sec. 13704(a)) A qualified facility is a facility used to produce transportation fuels, other than a facility eligible for hydrogen production credits under Code Sec. 45V, Code Sec. 45Q or Code Sec. 48. (Code Sec. 45Z(d)(4), as added by Act Sec. 13704(a))

The taxpayer must produce the fuel in the United States while being registered with IRS as a producer of clean fuel. (Code Sec. 45Z(f)(1), as added by Act Sec. 13704(a))

*Credit amount.* The credit base amount is \$0.20 per gallon (\$0.35 per gallon for aviation fuel) multiplied by an applicable emissions factor. If prevailing wage and apprenticeship requirements are met, a higher base amount (alternative amount) of \$1.00 per gallon (\$1.75 per gallon for aviation fuel) applies. (Code Sec. 45Z(a)(2) and (3), as added by Act Sec. 13704(a)) The emissions factor is calculated using an annually published emissions rate table. (Code Sec. 45Z(b), as added by Act Sec. 13704(a))

The applicable base amount is adjusted for inflation for the calendar year in which the sale of the transportation fuel occurs. (Code Sec. 45Z(c), as added by Act Sec. 13704(a))

**Effective date.** The credit applies to transportation fuel produced after December 31, 2024 (Act Sec. 13704(c)), but will not be available for transportation fuel sold after December 31, 2027. (Code Sec. 45Z(g), as added by Act Sec. 13704(a))

## Elective Payments and Transferable Credits for Energy Property and Electricity Produced from Certain Renewable Resources, Etc.

**Elective payments.** The Inflation Reduction Act of 2022 provides, with respect to certain applicable credits, that applicable entities can elect to be treated as making a payment against their income tax (for the tax year with respect to which such credit was determined) equal to the amount of such credit. (Code Sec. 6417(a), as added by Act Sec. 13801(a))

*Applicable credits.* The applicable credits are:

- (1) So much of the credit for alternative fuel vehicle refueling property allowed under Code Sec. 30C which, pursuant to Code Sec. 30C(d)(1), is treated as a credit listed in Code Sec. 38(b).
- (2) So much of the renewable electricity production credit determined under Code Sec. 45(a) as is attributable to qualified facilities that are originally placed in service after December 31, 2022.
- (3) So much of the credit for carbon oxide sequestration determined under Code Sec. 45Q(a) as is attributable to carbon capture equipment that is originally placed in service after December 31, 2022.
- (4) The zero-emission nuclear power production credit determined under Code Sec. 45U(a).
- (5) So much of the credit for production of clean hydrogen determined under Code Sec. 45V(a) as is attributable to qualified clean hydrogen production facilities that are originally placed in service after December 31, 2012.
- (6) In the case of a tax-exempt entity described in Code Sec. 168(h)(2)(A)(i), Code Sec. 168(h)(2)(A)(ii), or Code Sec. 168(h)(2)(A)(iv), the credit for qualified commercial vehicles determined under Code Sec. 45W by reason of Code Sec. 45W(d)(3).
- (7) The credit for advanced manufacturing production under Code Sec. 45X(a).
- (8) The clean electricity production credit determined under Code Sec. 45Y(a).
- (9) The clean fuel production credit determined under Code Sec. 45Z(a).
- (10) The energy credit determined under Code Sec. 48.
- (11) The qualifying advanced energy project credit determined under Code Sec. 48C.
- (12) The clean electricity investment credit determined under Code Sec. 48E. (Code Sec. 6417(b), as added by Act Sec. 13801(a))



*Applicable entities.* An applicable entity is:

- (i) any organization exempt from income tax,
- (ii) any State or local government (or political subdivision thereof),
- (iii) the Tennessee Valley Authority,
- (iv) an Indian tribal government (as defined in Code Sec. 30D(g)(9)),
- (v) any Alaska Native Corporation (as defined in 43 USC 1602(m)), or
- (vi) any corporation operating on a cooperative basis that is engaged in furnishing electric energy to persons in rural areas. (Code Sec. 6417(d)(1)(A), as added by Act Sec. 13801(a))

**Transferable credits.** The Act also provides that eligible taxpayers can transfer certain eligible credits to other taxpayers. (Code Sec. 6418(a), as added by Act Sec. 13801(b))

*Eligible credits.* The eligible credits are:

- (i) So much of the credit for alternative fuel vehicle refueling property allowed under Code Sec. 30C which, pursuant to Code Sec. 30(C)(d)(1), is treated as a credit listed in Code Sec. 38(b).
- (ii) The renewable electricity production credit determined under Code Sec. 45(a).
- (iii) The credit for carbon oxide sequestration determined under Code Sec. 45Q(a).
- (iv) The zero-emission nuclear power production credit determined under Code Sec. 45U(a).
- (v) The clean hydrogen production credit determined under Code Sec. 45V(a).
- (vi) The advanced manufacturing production credit determined under Code Sec. 45X(a).
- (vii) The clean electricity production credit determined under Code Sec. 45Y(a).
- (viii) The clean fuel production credit determined under Code Sec. 45Z(a).
- (ix) The energy credit determined under Code Sec. 48.
- (x) The qualifying advanced energy project credit determined under Code Sec. 48C.
- (xi) The clean electricity investment credit determined under Code Sec. 48E. (Code Sec. 6418(f)(1)(A), as added by Act Sec. 13801(b))

*Eligible taxpayers.* An eligible taxpayer is any taxpayer which is not described in Code Sec. 6417(d)(1)(A) (i.e., any taxpayer that is not an applicable entity. (Code Sec. 6418(f)(2), as added by Act Sec. 13801(b))

**Effective date.** These elective payment and transferable credit provisions apply to tax years beginning after December 31, 2022. (Act Sec. 13801(g))

## Increase in Qualified Small Business Payroll Tax Credit for Increasing Research Activities

Under pre-Inflation Reduction Act of 2022 law, a "qualified small business" (QSB) with qualifying research expenses may elect to claim up to \$250,000 of its credit for increasing research activities as a payroll tax credit against the employer's share of Social Security tax. (Code Sec. 41(h), Code Sec. 3111(f))

In general, the research credit equals the sum of: (1) 20% of the excess (if any) of the qualified research expenses for the tax year over a base amount (unless the taxpayer elected an alternative simplified research credit); (2) the university basic research credit (i.e., 20% of the basic research payments); and (3) 20% of the taxpayer's expenditures on qualified energy research undertaken by an energy research consortium. (Code Sec. 41)

A QSB is one that, in the case of a corporation or partnership, with respect to any tax year, has gross receipts of less than \$5 million, and did not have gross receipts for any tax year preceding the five-tax-year period ending with the tax year. (Code Sec. 41(h)(3)(A)(i))

**New law.** Due to concerns that some small businesses may not have a large enough income tax liability to take advantage of the research credit, under Act Sec. 13902, for tax years beginning after December 31, 2022, QSBs may apply an additional \$250,000 in qualifying research expenses as a payroll tax credit against the employer share of Medicare. The credit cannot exceed the tax imposed for any calendar quarter, with unused amounts of the credit carried forward.

**Effective date.** This applies to tax years beginning after December 31, 2022. (Act Sec. 13902(d))

## Extension of Limitation on Excess Business Losses of Noncorporate Taxpayers

The Code provides that if a taxpayer other than a C corporation receives any applicable subsidy for any tax year, any excess farm loss of the taxpayer for the tax year shall not be allowed. (Code Sec. 461(j)(1))

Under pre-Inflation Reduction Act of 2022 law, Code Sec. 461(l)(1), effective for tax years beginning after December 31, 2025, provides that, in the case of a taxpayer other than a corporation, (A) for any tax year beginning after December 31, 2017, and before January 1, 2027, Code Sec. 461(j) does not apply, and (B) for any tax year beginning after December 31, 2020, and before January 1, 2027, any excess business loss (as defined under Code Sec. 461(j)(3)(A)) of the taxpayer for the tax year is not allowed.

**New law.** The Act extends both rules (A) and (B) in Code Sec. 461(l)(1) for any tax year beginning before December 31, 2029. (Code Sec. 461(l)(1), as amended by Act Sec. 13903(b)(1))

**Effective date.** This is effective for tax years beginning after December 31, 2026. (Act Sec. 13903(b)(2))

## IRS Appropriations

### IRS Funding to Improve Taxpayer Service and Compliance

The Inflation Reduction Act of 2022 provides \$3,181,500,000 towards taxpayer services, including prefilling assistance and education, filing and account services, and taxpayer advocacy services.

Under the enforcement category, \$45,637,400,000 (which comprises over half of the total amount appropriated to the IRS) is appropriated to cover the following expenses:

- Determining and collecting owed taxes
- Providing legal and litigation support
- Conducting criminal investigations
- Monitoring digital assets and carrying out related compliance activities
- Enforcing criminal statute violations and other financial crimes pursuant to internal revenue laws

The Act allocates \$25,326,400,000 for operations expenses, such as rent payments, facilities services, postage, security, research, telecommunications, maintenance, and information technology development.

To help modernize the IRS' computer systems and upgrade related in-house technologies, the Act sets aside \$4,750,700,000. This amount also includes developing callback technology and maintaining legacy systems.

The appropriations are to be used at the discretion of the IRS commissioner and are made available until September 30, 2031. (Act Sec. 10301)

Checkpoint Federal Tax Update subscribers can [access this summary on Checkpoint](#) along with client letters and additional resources on the Inflation Reduction Act of 2022. Not yet a subscriber? Sign up for a [free 7-day trial](#) today!