

Tax Provisions in the Inflation Reduction Act of 2022 (H.R. 5376)

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On July 27, 2022, Senate Majority Leader Chuck Schumer and Senator Joe Manchin released legislative text for budget reconciliation legislation, also known as the “Inflation Reduction Act of 2022.”¹ This text would replace the legislative text of the House-passed Build Back Better Act (BBBA; H.R. 5376) as a substitute amendment.²

This report summarizes the tax provisions in the Inflation Reduction Act of 2022, which include

- establishing a corporate minimum tax;
- modifying the tax treatment of carried interest;
- establishing an excise tax on drug manufacturers, producers, and importers who fail to enter into drug pricing agreements;
- extending the health insurance premium tax credit modifications made in the American Rescue Plan Act of 2021 (ARPA; P.L. 117-2) through 2025; and
- modifications to the tax treatment of the energy sector that would generally reduce revenues; including
 - extension and modification of the credit for electricity produced from certain renewable resources;
 - extension and modification of the energy credit; and
 - extension of excise tax credits for alternative fuels, biodiesel, and renewable diesel.

All tax provisions in the Inflation Reduction Act of 2022 text are summarized in a series of tables below. References to relevant CRS reports are included where applicable.

- **Table 1** includes the provisions in Subtitle A, Deficit Reduction;
- **Table 2** includes the provisions in Subtitle B, Prescription Drug Pricing Reform;
- **Table 3** includes the provisions in Subtitle C, Affordable Care Act Subsidies; and
- **Table 4** includes the provisions in Subtitle D, Energy Security.

A preliminary Joint Committee on Taxation (JCT) revenue estimate of provisions in Subtitles A and D was posted on the Senate Finance Committee’s website on July 30, 2022.³ According to this estimate, the revenue provisions of the Inflation Reduction Act of 2022 would increase federal tax revenue by \$68.2 billion over the 10-year FY2022 through FY2031 budget window. The revenue provisions in Subtitle A would generate additional federal tax revenue of an estimated \$326.2 billion over this period. The energy-related provisions in Subtitle D would reduce federal tax revenue by an estimated \$258.0 billion over the 10-year period. The JCT revenue estimate is presented in **Table 5**.

¹ Legislative text for the Inflation Reduction Act of 2022 is available at https://www.democrats.senate.gov/imo/media/doc/inflation_reduction_act_of_2022.pdf.

² For information on the provisions in the Build Back Better Act, see CRS Report R46998, *Senate Finance Committee Tax Provisions in the Build Back Better Act*, coordinated by Molly F. Sherlock; CRS Report R46960, *Tax Provisions in the Build Back Better Act: Rules Committee Print 117-18*, coordinated by Molly F. Sherlock; and CRS Report R46923, *Tax Provisions in the “Build Back Better Act:” The House Ways and Means Committee’s Legislative Recommendations*, coordinated by Molly F. Sherlock.

³ A link to the revenue estimate was provided at <https://www.finance.senate.gov/imo/media/doc/7.29.22%20Estimate%20of%20Manchin%20Schumer%20agreement.pdf>.

Table I. Subtitle A—Deficit Reduction

Section Title	Description	CRS Resources
Part 1—Corporate Tax Reform		
Corporate Alternative Minimum Tax Section 10101	<p>This provision would impose a new alternative minimum tax of 15% on corporations based on financial income. It would apply to corporations with \$1 billion or more in average annual earnings in the previous three years. In the case of U.S. corporations that have foreign parents, it would apply only to income earned in the United States of \$100 million or more of average annual earnings in the previous three years (and apply when the international financial reporting group has income of \$1 billion or more). It would apply to a new corporation in existence for less than three years based on the earnings in the years of existence.</p> <p>The provision would exclude Subchapter S corporations, regulated investment companies (RICs), and real estate investment trusts (REITs).</p> <p>Firms that file consolidated returns would include income allocable to the firm from related firms including controlled foreign corporations (and any disregarded entities); for other related firms, dividends would be included. The provision would allow special deductions for cooperatives and Alaska Native Corporations. It would make adjustments to conform financial accounting to tax accounting for certain defined benefit pension plans. It would apply with respect to items under the unrelated business income tax for tax-exempt entities.</p> <p>The additional tax would equal the amount of the minimum tax in excess of the regular income tax plus the additional tax from the Base Erosion and Anti-Abuse tax. Income would be increased by federal and foreign income taxes to place income on a pretax basis.</p> <p>Losses would be allowed in the same manner as with the regular tax, with loss carryovers limited to 80% of taxable income.</p> <p>Domestic credits under the general business tax (such as the R&D credit) would be allowed to offset up to 75% of the combined regular and minimum tax. Foreign tax credits would be allowed based on the allowance for foreign taxes paid in a corporation's financial statement.</p> <p>A credit for additional minimum tax could be carried over to future years to offset regular tax when that tax is higher.</p> <p>This tax would apply to taxable years beginning after December 31, 2022.</p>	<p>For background, see</p> <ul style="list-style-type: none"> CRS In Focus IF12179, <i>The Corporate Minimum Tax Proposal</i>, by Jane G. Gravelle. CRS Report R46887, <i>Minimum Taxes on Business Income: Background and Policy Options</i>, by Molly F. Sherlock and Jane G. Gravelle. CRS Insight INI1646, <i>A Look at Book-Tax Differences for Large Corporations Using Aggregate Internal Revenue Service (IRS) Data</i>, by Molly F. Sherlock and Jane G. Gravelle.
Part 2—Closing the Carried Interest Loophole		
Modification of Rules for Partnership Interests Held in Connection with the Performance of Services Section 10201	<p>Under current law, partnership interest transferred to the taxpayer in connection with the provision of services to a trade or business (carried interest) held for at least three years is taxed as a long-term capital gain.</p> <p>This provision would modify the tax rules surrounding “carried interest” by extending the holding period to qualify for long-term capital gains to five years for taxpayers with adjusted gross income of \$400,000 or more, broadening the definition of carried interest to</p>	<p>For background, see</p> <ul style="list-style-type: none"> CRS Report R46447, <i>Taxation of Carried Interest</i>, by Donald J. Marples.

Section Title	Description	CRS Resources
	include partnership assets under the taxpayer's direct or indirect control, and adding additional rules for measuring the holding period (including for tiered partnerships).	
<p>Source: CRS analysis of the legislative text of the "Inflation Reduction Act of 2022," as posted on the Senate Democrats website on July 27, 2022, at https://www.democrats.senate.gov/imo/media/doc/inflation_reduction_act_of_2022.pdf.</p> <p>Notes: Both provisions in this table are effective for taxable years beginning after December 31, 2022. The changes that would be made by these provisions are permanent. Part 3 of Subtitle A would provide additional appropriations of \$79.6 billion over the next 10 years to enhance IRS service and enforcement activities. For background on IRS appropriations, see CRS In Focus IFI2098, <i>Internal Revenue Service Appropriations, FY2023</i>, by Gary Guenther.</p>		

Table 2. Subtitle B—Prescription Drug Reform

Section Title	Description	CRS Resources
Part 1—Lowering Prices Through Drug Price Negotiations		
Selected Drug Manufacturer Excise Tax Imposed During Noncompliance Period	This provision would impose a new excise tax on drug manufacturers, producers, and importers who fail to enter into drug pricing agreements under Section 1193 of the Social Security Act, as added by the bill on selected drugs (i.e., are noncompliant with Section 1193). This excise tax would be found under the new Internal Revenue Code (IRC) Section 5000D.	For background, see
Section 11003	<p>The excise tax rate would range from 185.71% to 1,900% of the selected drug's price depending on the duration of noncompliance. The provision does not specify these rates explicitly, but instead defines an applicable percentage which equals the share of the post-tax sale price attributable to the excise tax. Specifically, the applicable percentage = $\text{tax rate} / (\text{tax rate} + 1)$ with the applicable percentages being 65% for the sales of selected drugs during the first 90 days of noncompliance, 75% for sales during the 91st to 180th days of noncompliance, 85% for sales during the 181st to 270th days of noncompliance, and 95% for sales after the 270th day of noncompliance. Hence, the corresponding tax rates would be calculated as $(\text{applicable percentage}) / (1 - \text{applicable percentage})$ and equal 185.71%, 300%, 566.67% and 1,900% respectively, depending on the duration of noncompliance. For example, if a selected drug was subject to the top tax rate of 1,900% and cost \$10 pre-tax, it would cost \$200 post-tax with \$190 of the \$200 cost (or 95%, the applicable percentage) being attributable to the excise tax.</p> <p>Selected drugs would be those defined in Section 1192(c) of the Social Security Act, as enacted under this bill, which are manufactured or produced in the United States or entered the United States for consumption, use, or warehousing. The excise tax would not apply to drugs sold for export, and the provision addresses the refund or credit process if tax is paid.</p> <p>Noncompliance periods as defined in the bill would generally begin one month after a drug was selected by the Secretary of Health and Human Services under Section 1192 and generally end when an agreement to negotiate or renegotiate prices has been reached or a</p>	<ul style="list-style-type: none"> CRS Report R47056, <i>Build Back Better Act (BBBA) Health Coverage Provisions: House-Passed and Senate-Released Language</i>, coordinated by Vanessa C. Forsberg and Ryan J. Rosso.

Section Title	Description	CRS Resources
	<p>maximum price for the drug has been agreed upon. The earliest potential noncompliance period would begin on October 2, 2026.</p> <p>For sales that were timed to avoid the excise tax, the Secretary of the Treasury could treat the sale as occurring during a day in a noncompliance period.</p> <p>Manufacturers would be prohibited from deducting excise tax payments from their federal income taxes.</p> <p>Internal IRS appeals would not be permitted with respect to this new excise tax. Additionally, no suit or proceeding for a refund of the tax would be permitted until the taxpayer had made full payment of the tax (including applicable interest and penalties).</p>	

Source: CRS analysis of the legislative text of the “Inflation Reduction Act of 2022,” as posted on the Senate Democrats website on July 27, 2022, at https://www.democrats.senate.gov/imo/media/doc/inflation_reduction_act_of_2022.pdf.

Notes: This provision would be effective on the date of enactment. Within the description, “Section” citations refer to the section within the Internal Revenue Code (IRC), 26 U.S.C., unless otherwise noted.

Table 3. Subtitle C—Affordable Care Act Subsidies

Section Title	Description	CRS Resources
<p>Improve Affordability and Reduce Costs of Health Insurance for Consumers</p> <p>Section 12001</p>	<p>Under current law, income eligibility for and calculation of the premium tax credit (PTC) incorporates temporary changes enacted under the American Rescue Plan Act of 2021 (ARPA; P.L. 117-2). For 2021 and 2022, ARPA expanded income eligibility by eliminating the phaseout for households with annual incomes above 400% of the federal poverty level (FPL). For those same years, ARPA also increased credit amounts by adjusting the percentage of annual income that eligible households may be required to contribute toward the premium. The percentages currently range from 0.0% to 8.5% of household income, with higher-income groups subject to larger percentages, as specified.</p> <p>This provision would extend these ARPA changes to 2023, 2024, and 2025.</p>	<p>For background, see</p> <ul style="list-style-type: none"> CRS Report R44425, <i>Health Insurance Premium Tax Credit and Cost-Sharing Reductions</i>, by Bernadette Fernandez.

Source: CRS analysis of the legislative text of the “Inflation Reduction Act of 2022,” as posted on the Senate Democrats website on July 27, 2022, at https://www.democrats.senate.gov/imo/media/doc/inflation_reduction_act_of_2022.pdf.

Notes: The provision in this table is effective for taxable years beginning after December 31, 2022.

Table 4. Subtitle D—Energy Security

Section Title	Description	CRS Resources
Part I—Clean Electricity and Reducing Carbon Emissions		
<p>Extension and Modification of Credit for Electricity Produced from Certain Renewable Resources</p>	<p>Current law provides a production tax credit (PTC), at a rate of 2.5 cents or 1.3 cents per kilowatt hour (kWh) depending on the technology used, for the first 10 years of production at qualifying renewable electricity production facilities that began construction before 2022. The credit amount is adjusted annually for inflation from a statutory rate of 1.5 cents per kWh, with some technologies qualifying for a half-credit amount. This</p>	<p>For background, see</p> <ul style="list-style-type: none"> CRS Report R43453, <i>The Renewable Electricity Production Tax Credit: In Brief</i>, by Molly F. Sherlock.

Section Title	Description	CRS Resources
Section 13101	<p>provision would extend the PTC for wind, biomass, geothermal, solar (which previously expired at the end of 2005), landfill gas, trash, qualified hydropower, and marine and hydrokinetic resources through 2024.</p> <p>The base credit amount for the PTC would be set in statute at 0.3 cents per kWh (0.5 cents per kWh in 2021, or 0.3 cents for half-credit technologies, after being adjusted for inflation). Facilities that pay prevailing wages during the construction phase and first 10 years of operation and meet registered apprenticeship requirements are eligible for a PTC that is five times the base amount, or 2.5 cents or 1.3 cents per kWh in 2021 after being adjusted for inflation. Facilities with a maximum net output of less than one megawatt are also eligible for the five times base credit amount (e.g., 2021 rates of 2.5 cents or 1.3 cents per kWh), as are facilities that begin construction before 60 days after the Secretary of the Treasury publishes guidance on the wage and registered apprenticeship requirements. Qualifying hydropower and marine and hydrokinetic renewable energy projects, which are half-credit technologies under current law, would be allowed the full PTC.</p> <p>A “bonus credit” amount would be provided for projects that meet domestic content requirements to certify that certain steel, iron, and manufactured products used in the facility were domestically produced. The bonus credit amount would be 10% of the credit amount.</p> <p>In 2024, the amount of the credit that could be received as direct pay would be limited to 90% for large facilities not meeting domestic content requirements (see “Elective Payment for Energy Property and Electricity Produced from Certain Renewable Resources, Etc.” below). This limit would be waived if materials are not available domestically or if including domestic materials would increase the facility’s construction cost by more than 25%.</p> <p>The credit amount could be increased by 10% for facilities located in an energy community. An energy community is defined as being a brownfield site, an area which has or had significant employment related to oil, gas, or coal activities, or a census tract or any adjoining tract in which a coal mine closed after December 31, 1999, or in which a coal-fired electric power plant was retired after December 31, 2009.</p> <p>The provision provides that for facilities financed with tax-exempt bonds, the credit amount would be reduced by the lesser of (1) 15%; or (2) the fraction of the proceeds of a tax-exempt obligation used to finance the project over the aggregate amount of the project’s financing costs.</p> <p>The proposal also extends the option to claim the energy investment tax credit (ITC) in lieu of the PTC.</p>	<ul style="list-style-type: none"> • CRS Report R46865, <i>Energy Tax Provisions: Overview and Budgetary Cost</i>, by Molly F. Sherlock. • CRS Report R46451, <i>Energy Tax Provisions Expiring in 2020, 2021, 2022, and 2023 (“Tax Extenders”)</i>, by Molly F. Sherlock, Margot L. Crandall-Hollick, and Donald J. Marples. • CRS Report R45171, <i>Registered Apprenticeship: Federal Role and Recent Federal Efforts</i>, by Benjamin Collins. • CRS In Focus IFI1927, <i>Federally Funded Construction and the Payment of Locally Prevailing Wages</i>, by David H. Bradley and Jon O. Shimabukuro.
Extension and Modification of Energy Credit	<p>Current law provides a temporary investment tax credit (ITC) for investments in certain energy property. This provision would extend and modify the ITC, with the credit generally extended through the end of 2024.</p>	<p>For background, see</p> <ul style="list-style-type: none"> • CRS In Focus IFI0479, <i>The Energy Credit or Energy Investment Tax</i>
Section 13102		

Section Title	Description	CRS Resources
	<p>The ITC would be extended through 2024 at a base rate of 6% for solar, fuel cells, waste energy recovery, combined heat and power, and small wind property, and 2% for microturbine property. These amounts would be increased to 30% and 10%, respectively, if projects pay prevailing wages during the construction phase and during the first five years of operation and meet registered apprenticeship requirements. The higher credit rates would also be available to any project with a maximum net output of less than one megawatt of electrical or thermal energy and for facilities that begin construction before 60 days after the Secretary of the Treasury publishes guidance on the wage and registered apprenticeship requirements.</p> <p>The ITC for geothermal heat pumps would be extended through 2034 with a 6% base credit rate with the 30% credit rate allowed for projects meeting wage and workforce requirements or for projects below the maximum net output threshold. The credit would phase down after 2032, with the rates being 5.2% and 26% in 2033 and 4.4% and 22% in 2034, with no credit allowed for property beginning construction after 2035.</p> <p>This list of qualifying property would be expanded to include energy storage technology (including thermal energy storage property), qualified biogas property, electrochromic glass, and microgrid controllers at the 6% or 30% rate. Linear generator assemblies would be added to the definition of qualifying fuel cells. The credit would also be available for interconnection property. Public utilities, under certain circumstances, would be able to elect out of normalization requirements for investments in energy storage technologies.</p> <p>A “bonus credit” amount would be provided for projects that meet domestic content requirements to certify that certain steel, iron, and manufactured products used in the facility were domestically produced. The bonus credit amount would be 2 percentage points, or 10 percentage points for projects that meet wage and workforce requirements.</p> <p>In 2024, the amount of the credit that could be received as direct pay would be limited to 90% for large facilities not meeting domestic content requirements (discussed below). This limit would be waived if materials are not available domestically or if including domestic materials would increase the facility’s construction cost by more than 25%.</p> <p>The provision provides that for facilities financed with tax-exempt bonds, the credit amount would be reduced by the lesser of (1) 15%; or (2) the fraction of the proceeds of a tax-exempt obligation used to finance the project over the aggregate amount of the project’s financing costs.</p> <p>An increased credit amount would be available to projects in an energy community, with the credit increase being 10 percentage points for projects meeting wage and workforce requirements or 2 percentage points otherwise. An energy community is defined as being a</p>	<p><i>Credit (ITC)</i>, by Molly F. Sherlock.</p> <ul style="list-style-type: none"> CRS Report R46865, <i>Energy Tax Provisions: Overview and Budgetary Cost</i>, by Molly F. Sherlock. CRS Report R46451, <i>Energy Tax Provisions Expiring in 2020, 2021, 2022, and 2023 (“Tax Extenders”)</i>, by Molly F. Sherlock, Margot L. Crandall-Hollick, and Donald J. Marples. CRS Report R45171, <i>Registered Apprenticeship: Federal Role and Recent Federal Efforts</i>, by Benjamin Collins. CRS In Focus IFI1927, <i>Federally Funded Construction and the Payment of Locally Prevailing Wages</i>, by David H. Bradley and Jon O. Shimabukuro.

Section Title	Description	CRS Resources
	brownfield site, an area which has or had significant employment related to oil, gas, or coal activities, or a census tract or any adjoining tract in which a coal mine closed after December 31, 1999, or in which a coal-fired electric power plant was retired after December 31, 2009.	
Increase in Energy Credit for Solar and Wind Facilities Placed in Service in Connection with Low-Income Communities	This provision would allow for the allocation of 1.8 gigawatts for “environmental justice solar and wind capacity” credits in each of calendar year 2023 and 2024. Taxpayers receiving a capacity allocation may be entitled to tax credits in addition to otherwise allowed ITCs. Specifically, projects receiving an allocation that are located in a low-income community or on Indian land would be eligible for a bonus investment tax credit of 10 percentage points, while projects that are part of a low-income residential building project or qualified low-income economic benefit project would be eligible for a 20 percentage point bonus investment credit.	For background on the ITC, see <ul style="list-style-type: none"> CRS In Focus IF10479, <i>The Energy Credit or Energy Investment Tax Credit (ITC)</i>, by Molly F. Sherlock.
Section 13103	Qualifying solar and wind facilities would include those with a nameplate capacity of 5 megawatts or less, and qualifying property would include energy storage property installed in connection with the solar property and interconnection property.	For background on housing assistance programs, see <ul style="list-style-type: none"> CRS Report RL34591, <i>Overview of Federal Housing Assistance Programs and Policy</i>, by Maggie McCarty, Libby Perl, and Katie Jones.
	Facilities receiving an allocation would be required to have the facility placed in service within four years.	
Extension and Modification of Credit for Carbon Oxide Sequestration	Under current law, industrial carbon capture or direct air capture (DAC) facilities that begin construction by December 31, 2025, can qualify for the Section 45Q tax credit for carbon oxide sequestration. This tax credit can be claimed for carbon oxide captured during the 12-year period following a qualifying facility’s being placed in service. Currently, the per metric ton tax credit for geologically sequestered carbon oxide is set to increase to \$50 per ton by 2026 (\$35 per ton for carbon oxide that is reused, such as for enhanced oil recovery) and adjusted for inflation thereafter. This provision would extend the start of construction deadline to December 31, 2032.	For background, see <ul style="list-style-type: none"> CRS In Focus IF11455, <i>The Tax Credit for Carbon Sequestration (Section 45Q)</i>, by Angela C. Jones and Molly F. Sherlock. CRS Insight IN11710, <i>Carbon Capture and Sequestration Tax Credit (“Section 45Q”) Legislation in the 117th Congress</i>, by Molly F. Sherlock and Angela C. Jones. CRS Report R46451, <i>Energy Tax Provisions Expiring in 2020, 2021, 2022, and 2023 (“Tax Extenders”)</i>, by Molly F. Sherlock, Margot L. Crandall-Hollick, and Donald J. Marples. CRS Report R45171, <i>Registered Apprenticeship: Federal Role and Recent Federal Efforts</i>, by Benjamin Collins.
Section 13104	The amount of carbon oxide that must be captured at a qualifying facility would be reduced to 1,000 metric tons annually for a DAC facility, 18,750 metric tons annually for an electricity generating facility (and be designed to capture not less than 75% of the baseline carbon oxide production; 60% in the case of electricity generating facilities not yet or recently placed in service), and 12,500 metric tons for any other facility.	
	Base credit amounts would be \$17 per metric ton for carbon oxide that is captured and geologically sequestered and \$12 per metric ton for carbon oxide that is reused. Increased credit amounts of \$85 per ton and \$60 per ton, respectively, would be available for facilities that pay prevailing wages during the construction phase and during the first 12 years of operation and meet registered apprenticeship requirements.	
	The credit amount for carbon oxide captured using DAC and geologically sequestered would be increased to a base	

Section Title	Description	CRS Resources
Zero-Emission Nuclear Power Production Credit Section 13105	<p>rate of \$36 per metric ton, with a credit of \$180 per metric ton for projects that meet wage and workforce requirements. These amounts would be \$26 and \$130 per metric ton for carbon oxide captured using DAC that is utilized in a qualified manner.</p> <p>Projects financed with tax-exempt bonds would have the credit amount reduced by the lesser of (1) 15%; or (2) the fraction of the proceeds of a tax-exempt obligation used to finance the project over the aggregate amount of the project's financing costs. The provision would also provide flexibility with respect to the period in which credits can be claimed for projects affected by federally declared disasters.</p> <p>This provision would create a new tax credit for qualifying zero-emission nuclear power produced and sold after December 31, 2023. Qualified nuclear power facilities are taxpayer-owned facilities that use nuclear power to generate electricity that did not receive an advanced nuclear production tax credit allocation under Section 45J, and are placed in service before the date of enactment (i.e., are existing nuclear power plants).</p> <p>The PTC amount would be 0.3 cents per kWh. The credit would be reduced when the price of electricity increases. Credits would be reduced by a "reduction amount," which is 80% of the excess of gross receipts from electricity produced by the facility and sold over the product of 2.5 cents times the amount of electricity sold during the taxable year. Thus, the credit would phase down as annual average prices exceed 2.5 cents per kWh.</p> <p>Taxpayers that satisfy prevailing wage and registered apprenticeship requirements would be eligible for a tax credit of five times the base amount per kWh (i.e., up to 1.5 cents per kWh).</p> <p>Credit amounts and amounts in the reduction amount formula would be adjusted for inflation.</p> <p>The credit would terminate on December 31, 2032.</p>	<ul style="list-style-type: none"> CRS In Focus IFI1927, <i>Federally Funded Construction and the Payment of Locally Prevailing Wages</i>, by David H. Bradley and Jon O. Shimabukuro. <p>For background, see</p> <ul style="list-style-type: none"> CRS Report R42853, <i>Nuclear Energy: Overview of Congressional Issues</i>, by Mark Holt. CRS Insight INI0725, <i>The Advanced Nuclear Production Tax Credit</i>, by Molly F. Sherlock and Mark Holt. CRS Report R45171, <i>Registered Apprenticeship: Federal Role and Recent Federal Efforts</i>, by Benjamin Collins. CRS In Focus IFI1927, <i>Federally Funded Construction and the Payment of Locally Prevailing Wages</i>, by David H. Bradley and Jon O. Shimabukuro.
Part 2—Clean Fuels		
Extension of Incentives for Biodiesel, Renewable Diesel, and Alternative Fuels Section 13201	<p>Current law provides a 50-cents-per-gallon tax credit for alternative fuels and alternative fuel mixtures through 2021 and a \$1.00-per-gallon tax credit for biodiesel and renewable diesel (with an additional \$0.10-per-gallon tax credit for agri-biodiesel) through 2022. The biodiesel and renewable diesel mixtures tax credit may be claimed as an immediate excise tax credit against the blender's motor and aviation fuels excise taxes. Credits in excess of excise tax liability may be refunded. The biodiesel and small agri-biodiesel credits may be claimed as income tax credits. The alternative fuels credit can be claimed as an excise tax credit or received as an outlay. The alternative fuels mixture credit is an excise tax credit.</p> <p>This provision would extend the existing tax credits for alternative fuels and alternative fuel mixtures and biodiesel and renewable diesel through December 31, 2024.</p>	<p>For background, see</p> <ul style="list-style-type: none"> CRS Report R46865, <i>Energy Tax Provisions: Overview and Budgetary Cost</i>, by Molly F. Sherlock. CRS Report R46451, <i>Energy Tax Provisions Expiring in 2020, 2021, 2022, and 2023 ("Tax Extenders")</i>, by Molly F. Sherlock, Margot L. Crandall-Hollick, and Donald J. Marples.

Section Title	Description	CRS Resources
Extension of Second Generation Biofuel Incentives Section 13202	<p>This provision would establish a special rule for paying claims for tax credits during the period of retroactive eligibility. The biodiesel and renewable diesel credit, alternative fuel credit, alternative fuel mixture credit, and payments for alternative fuels expired at the end of 2021. This provision would allow those credits for all of 2022. The IRS would need to create a process within 30 days of enactment for one-time claims for these tax credits. Taxpayers would have 180 days to submit a claim, which would need to be paid within 60 days of receipt (interest would be paid on any payment made after that date).</p> <p>Current law provides a \$1.01-per-gallon income tax credit for second-generation biofuel production through 2021. This provision would extend the second-generation biofuel producer tax credit through December 31, 2024.</p>	<p>For background, see</p> <ul style="list-style-type: none"> • CRS Report R46865, <i>Energy Tax Provisions: Overview and Budgetary Cost</i>, by Molly F. Sherlock. • CRS Report R46451, <i>Energy Tax Provisions Expiring in 2020, 2021, 2022, and 2023 ("Tax Extenders")</i>, by Molly F. Sherlock, Margot L. Crandall-Hollick, and Donald J. Marples.
Sustainable Aviation Fuel Credit Section 13203	<p>This provision would create a new tax credit for the sale or mixture of sustainable aviation fuel starting in 2023. The tax credit would have a base amount of \$1.25 per gallon, with a supplemental credit amount of \$0.01 per gallon for each percentage point by which the lifecycle greenhouse gas emissions reduction percentage for the fuel exceeds 50% (with a maximum supplemental credit of \$0.50 per gallon, making the maximum potential per gallon credit \$1.75). Sustainable aviation fuel is defined as liquid fuel that (1) meets the requirements of either ASTM International Standard D7566 or the Fischer Tropsch provisions of ASTM International Standard D1655, Annex A1; (2) is not derived from coprocessing an applicable material with a feedstock which is not biomass; (3) is not derived from palm fatty acid distillates or petroleum; and (4) has been certified to achieve at least a 50% lifecycle greenhouse gas reduction percentage as defined according to the most recent Carbon Offsetting and Reduction Scheme for International Aviation adopted by the International Civil Aviation Organization and agreed to by the United States (or a similar methodology which satisfies criteria in the Clean Air Act Section 211(o)(1)(H)), as compared with petroleum-based jet fuel.</p> <p>The sustainable aviation fuel credit would require claimants to be registered with the Secretary of the Treasury, and could be used to offset fuel excise tax liability or, in the case of insufficient fuel excise tax liability, be received as a payment. Like the tax credit for biodiesel and renewable diesel, there would be a coordinated income tax credit. Credit amounts would be</p>	<p>For background, see:</p> <ul style="list-style-type: none"> • CRS Report R47171, <i>Sustainable Aviation Fuel (SAF): In Brief</i>, by Kelsi Bracmort and Molly F. Sherlock.

Section Title	Description	CRS Resources
	included in a taxpayer's gross income for income tax purposes.	
	The \$1.00 per gallon tax credit for aviation fuel produced from biodiesel (under Section 40A) would terminate after December 31, 2022.	
	The credit would expire after December 31, 2024.	
Clean Hydrogen	This provision would create a new credit for the qualified production of clean hydrogen. The credit would be available for qualified clean hydrogen produced at a qualifying facility during the facility's first 10 years of operation. The base credit amount would be \$0.60 per kilogram (kg) times the applicable percentage. Credit amounts would be indexed for inflation.	For background, see
Section 13204	The applicable percentage would be determined by the lifecycle greenhouse gas emissions rate achieved in producing clean hydrogen. The applicable percentage would be 100% for hydrogen achieving a lifecycle greenhouse gas emissions rate of less than 0.45 kilograms of carbon dioxide equivalent (CO ₂ e) per kg. The applicable percentage would be 33.4% for hydrogen achieving a lifecycle greenhouse gas emission rate of less than 1.5 kilograms of CO ₂ e per kg (but not less than 0.45 kilograms). For hydrogen with a lifecycle greenhouse gas emission rate of less than 2.5 kgs of CO ₂ e per kg (but not less than 1.5), the applicable percentage would be 25%, and for hydrogen with a lifecycle greenhouse gas emissions rate of less than 4 kgs of CO ₂ e per kg (but not less than 2.5), the applicable percentage would be 20%.	<ul style="list-style-type: none"> • CRS Report R45171, <i>Registered Apprenticeship: Federal Role and Recent Federal Efforts</i>, by Benjamin Collins. • CRS In Focus IFI1927, <i>Federally Funded Construction and the Payment of Locally Prevailing Wages</i>, by David H. Bradley and Jon O. Shimabukuro.
	The credit would be five times the base credit amount (i.e., up to \$3.00 per kg) if the clean hydrogen is produced at a facility that meets prevailing wage and registered apprenticeship requirements.	
	The provision provides that for facilities financed with tax-exempt bonds, the credit amount would be reduced by the lesser of (1) 15%; or (2) the fraction of the proceeds of a tax-exempt obligation used to finance the project over the aggregate amount of the project's financing costs.	
	To qualify for the credit, new facilities must begin construction before January 1, 2033. Facilities existing before January 1, 2023, would be able to qualify based on the date that modifications to their facility required to produce clean hydrogen are placed into service.	
	Taxpayers may claim the PTC for electricity produced from renewable resources by the taxpayer if the electricity is used at a qualified clean hydrogen facility to produce qualified clean hydrogen. Taxpayers could elect to claim the energy investment tax credit (ITC) in lieu of the clean hydrogen production credit. Taxpayers could not claim credits for clean hydrogen produced at facilities that claimed credits for carbon capture under Section 45Q.	
	The provision would terminate the alternative fuel excise tax credit for hydrogen.	

Section Title	Description	CRS Resources
Part 3—Clean Energy and Efficiency Incentives for Individuals		
Extension, Increase, and Modifications of Nonbusiness Energy Property Credit	Current law provides a 10% tax credit for qualified energy-efficiency improvements and expenditures for residential energy property on a taxpayer's primary residence through 2021. The credit is subject to a \$500 per taxpayer lifetime limit. This provision would extend the tax credit through December 31, 2032, and make additional modifications.	For background, see <ul style="list-style-type: none"> CRS Report R42089, <i>Residential Energy Tax Credits: Overview and Analysis</i>, by Margot L. Crandall-Hollick and Molly F. Sherlock. CRS Report R46451, <i>Energy Tax Provisions Expiring in 2020, 2021, 2022, and 2023 ("Tax Extenders")</i>, by Molly F. Sherlock, Margot L. Crandall-Hollick, and Donald J. Marples.
Section 13301	<p>The proposed modifications would increase the credit rate to 30% with an annual per-taxpayer limit of \$1,200 and a \$600 per-item limit. For geothermal and air source heat pumps and biomass stoves, there would be an annual credit limit of \$2,000. Limits for expenditures on windows and doors would also be increased. Biomass stoves would be made eligible for tax credits.</p> <p>Required energy-efficiency standards would be modified, and changed to update over time without additional legislative action. Qualifying building envelope components would no longer include roofs, but would include air sealing insulation. Improvements to or replacements of panelboards, sub-panelboards, branch circuits, or feeders used with qualifying property would also be credit-eligible costs. The credit would be allowed for expenditures made on any dwelling unit used by the taxpayer (not limited to primary residences).</p> <p>A 30% credit, up to \$150, would be allowed for home energy audits. Treasury would be given the authority to treat errors related to this section as mathematical or clerical errors. Starting in 2025, taxpayers would be required to submit a product identification number to claim the tax credit.</p> <p>The credit would be renamed the energy efficient home improvement credit.</p>	
Residential Clean Energy Credit	Current law provides a tax credit for the purchase of solar electric property, solar water heating property, fuel cells, geothermal heat pump property, small wind energy property, and qualified biomass fuel property. The credit rate is 26% through 2022 (it was 30% through 2019), and is scheduled to be reduced to 22% in 2023 before expiring at the end of that year. This provision would extend the credit through December 31, 2034, restoring the 30% credit rate through 2032, and then reducing the credit rate to 26% in 2033 and 22% in 2034. Qualified battery storage technology would be added to the list of eligible property.	For background, see <ul style="list-style-type: none"> CRS Report R42089, <i>Residential Energy Tax Credits: Overview and Analysis</i>, by Margot L. Crandall-Hollick and Molly F. Sherlock. CRS Report R46451, <i>Energy Tax Provisions Expiring in 2020, 2021, 2022, and 2023 ("Tax Extenders")</i>, by Molly F. Sherlock, Margot L. Crandall-Hollick, and Donald J. Marples.
Section 13302	The credit would be renamed the residential clean energy credit.	
Energy Efficient Commercial Buildings Deduction	Under current law, a permanent deduction of up to \$1.80 per square foot is allowed for certain energy-saving commercial building property installed as part of (1) the interior lighting system; (2) the heating, cooling,	For background, see <ul style="list-style-type: none"> CRS Committee Print CPI0004, <i>Tax Expenditures: Compendium of</i>
Section 13303		

Section Title	Description	CRS Resources
Extension, Increase, and Modifications of New Energy Efficient Home Credit	<p>ventilation, or hot water system; or (3) the building envelope.</p> <p>This provision would update efficiency requirements, providing that a qualifying building must increase its efficiency relative to a reference building by 25%. The deduction would be set at \$0.50 per square foot, and increased by \$0.02 for each percentage point by which the certified efficiency improvements reduce energy and power costs, with a maximum amount of \$1.00 per square foot. For projects that meet prevailing wage and registered apprenticeship requirements, the base amount is \$2.50, which would be increased by \$0.10 for each percentage point increase in energy efficiency, with a maximum amount of \$5.00 per square foot. The maximum deduction amount would be the total deduction a building can claim less deductions claimed with respect to the building in the preceding three years.</p> <p>Taxpayers making energy-efficiency retrofits that are part of a qualified retrofit plan on a building that is at least five years old would be able to deduct their adjusted basis in the retrofit property (so long as that amount does not exceed a per-square foot value determined on the basis of energy usage intensity). To qualify, retrofit plans must be expected to reduce a building's energy use intensity by at least 25%.</p> <p>Any tax-exempt entity would be allowed to allocate the deduction to the designer of the building or retrofit plan.</p>	<p><i>Background Material on Individual Provisions — A Committee Print Prepared for the Senate Committee on the Budget, 2020</i>, by Jane G. Gravelle et al. (pp. 99-104).</p> <ul style="list-style-type: none"> • CRS Report R45171, <i>Registered Apprenticeship: Federal Role and Recent Federal Efforts</i>, by Benjamin Collins. • CRS In Focus IFI1927, <i>Federally Funded Construction and the Payment of Locally Prevailing Wages</i>, by David H. Bradley and Jon O. Shimabukuro.
Section 13304	<p>Under current law, through 2021, a tax credit is available for eligible contractors for building and selling qualifying energy-efficient new homes. The credit is equal to \$2,000, with certain manufactured homes qualifying for a \$1,000 credit.</p> <p>This provision would extend the energy-efficient new home credit through December 31, 2032, and increase and modify the credit amount. For homes acquired after 2021, a \$2,500 credit would be available for new homes that meet certain Energy Star efficiency standards, and a \$5,000 credit would be available for new homes that are certified as zero-energy ready homes. Multifamily dwellings that meet certain Energy Star efficiency standards would be eligible for a \$500 credit per unit, with a \$1,000 per unit credit available for eligible zero-energy ready multifamily dwellings. The credits for multifamily dwelling units would be increased to \$2,500 and \$5,000, respectively, if the taxpayer ensures that the laborers and mechanics employed by contractors and subcontractors in the construction of the residence are paid prevailing wages.</p> <p>Taxpayers claiming the low-income housing tax credit would not have to reduce their basis for credits claimed under this section.</p>	<p>For background, see</p> <ul style="list-style-type: none"> • CRS Report R46451, <i>Energy Tax Provisions Expiring in 2020, 2021, 2022, and 2023</i> ("Tax Extenders"), by Molly F. Sherlock, Margot L. Crandall-Hollick, and Donald J. Marples. • CRS In Focus IFI1927, <i>Federally Funded Construction and the Payment of Locally Prevailing Wages</i>, by David H. Bradley and Jon O. Shimabukuro.

Section Title	Description	CRS Resources
Part 4—Clean Vehicles		
Clean Vehicle Credit	<p>Buyers of qualifying plug-in electric vehicles (EVs) may be able to claim a nonrefundable tax credit of up to \$7,500 under current law. The tax credit phases out once a vehicle manufacturer has sold 200,000 qualifying vehicles. Current law also allows, through 2021, a tax credit of up to \$8,000 for fuel cell vehicles (the base credit amount is \$4,000, with up to an additional \$4,000 available based on fuel economy). Heavier fuel cell vehicles qualify for up to a \$40,000 credit. This provision would modify the tax credit for plug-in electric vehicles, allowing certain clean vehicles to qualify and eliminating the current per manufacturer limit. The credit would be renamed the clean vehicle credit.</p> <p>The modified credit for clean vehicles would be \$3,750 for any vehicle meeting the critical minerals requirement, and \$3,750 for any vehicle meeting the battery components requirement. The maximum credit per vehicle would be \$7,500. Clean vehicles would include plug-in electric vehicles with a battery capacity of at least 7 kilowatt hours and fuel cell vehicles. Qualifying vehicles would include those that had final assembly occur in North America. Sellers would be required to provide taxpayer and vehicle information to the Treasury for tax credit eligible vehicles. Only vehicles made by qualified manufacturers, who have written agreements with and provide periodic reports to the Treasury, could qualify. For vehicles placed in service after 2023, qualifying vehicles would not include any vehicle with battery components that were manufactured or assembled by a foreign entity of concern (as defined in 42 U.S.C. §18741). For vehicles placed in service after 2024, qualifying vehicles would not include any vehicle in which applicable critical minerals in the vehicle's battery were from a foreign entity of concern. Taxpayers would be required to include the vehicle identification number (VIN) on their tax return to claim a tax credit.</p> <p>To receive the \$3,750 critical minerals portion of the credit, the vehicle's battery must contain a threshold percentage (in value) of critical minerals that were extracted or processed in a country with which the United States has a free trade agreement, or recycled in North America. The threshold percentage would be 40% through 2023, increasing to 50% in 2024, 60% in 2025, 70% in 2026, and 80% after 2026.</p> <p>To receive the \$3,750 battery components portion of the credit, the percentage of the battery's components manufactured or assembled in North America would have to meet threshold amounts. For vehicles placed in service through 2023, the percentage would be 50%. The percentage increases to 60% for 2024 and 2025, 70% for 2026, 80% for 2027, 90% for 2028, and 100% after 2028.</p> <p>The credit would be disallowed for certain higher-income taxpayers. Specifically, no credit would be allowed if the current year or preceding year's modified AGI exceeds \$300,000 for married taxpayers (\$225,000 in the case of</p>	<p>For background, see</p> <ul style="list-style-type: none"> • CRS In Focus IF11017, <i>The Plug-In Electric Vehicle Tax Credit</i>, by Molly F. Sherlock. • CRS Report R46864, <i>Alternative Fuels and Vehicles: Legislative Proposals</i>, by Melissa N. Diaz. • CRS Report R46231, <i>Electric Vehicles: A Primer on Technology and Selected Policy Issues</i>, by Melissa N. Diaz.
Section 13401		

Section Title	Description	CRS Resources
	<p>head of household filers; \$150,000 in the case of other filers).</p> <p>Credits would only be allowed for vehicles that have a manufacturer's suggested retail price of no more than \$80,000 for vans, SUVs, or pickup trucks, and \$55,000 for other vehicles. Taxpayers would be allowed to claim the credit for one vehicle per year.</p> <p>Starting in 2024, taxpayers purchasing eligible vehicles could elect to transfer the tax credit to the dealer, so long as the dealer meets registration, disclosure, and other requirements. The Secretary of the Treasury is directed to establish a program to make advance payments to dealers for transferred credits. Amounts provided as direct spending would be grossed-up (increased) by 6.0445%.</p> <p>The credit would not apply to vehicles acquired after December 31, 2032.</p>	
Credit for Previously-Owned Clean Vehicles	<p>This provision would create a new tax credit for buyers of previously owned qualified clean (plug-in electric and fuel cell) vehicles. The credit would be up to \$4,000 limited to 30% of the vehicle purchase price.</p>	For background, see
Section 13402	<p>The credit would be disallowed for taxpayers above modified AGI thresholds. Married taxpayers filing a joint return could not claim the credit if their modified AGI was above \$150,000 (\$112,500 in the case of head of household filers; \$75,000 in the case of other filers). The taxpayer's modified AGI would be the lesser of modified AGI in the taxable year or prior year.</p> <p>Credits would only be allowed for vehicles with a sale price of \$25,000 or less with a model year that is at least two years earlier than the calendar year in which the vehicle is sold. This credit could only be claimed for vehicles sold by a dealer and on the first transfer of a qualifying vehicle. Taxpayers could only claim this credit once every three years and would be required to include the VIN on their tax return to claim a tax credit.</p> <p>Starting in 2024, taxpayers purchasing eligible vehicles could elect to transfer the tax credit to the dealer, so long as the dealer meets registration, disclosure, and other requirements. Amounts provided as direct spending would be grossed-up (increased) by 6.0445%.</p> <p>The credit would not apply to vehicles acquired after December 31, 2032.</p>	<ul style="list-style-type: none"> • CRS In Focus IF11017, <i>The Plug-In Electric Vehicle Tax Credit</i>, by Molly F. Sherlock. • CRS Report R46864, <i>Alternative Fuels and Vehicles: Legislative Proposals</i>, by Melissa N. Diaz. • CRS Report R46231, <i>Electric Vehicles: A Primer on Technology and Selected Policy Issues</i>, by Melissa N. Diaz.
Qualified Commercial Clean Vehicles	<p>This provision would create a new tax credit for qualified commercial clean vehicles placed in service by the taxpayer during the year. The credit would be the lesser of (1) 15% of the vehicle's cost (30% for vehicles not powered by a gasoline or diesel internal combustion engine); or (2) the incremental cost of the vehicle relative to a comparable vehicle. Credit amounts cannot exceed \$7,500 for vehicles weighing less than 14,000 pounds, or \$40,000 otherwise. Eligible vehicles would have a battery capacity of not less than 15 kilowatt hours (7 kilowatt hours in the case of vehicles weighing less than 14,000 pounds) and be charged by an external source of electricity. Mobile machinery and qualified commercial fuel</p>	
Section 13403		

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	<p>cell vehicles would also be eligible for this credit. Qualifying vehicles must be depreciable property.</p> <p>Only vehicles made by qualified manufacturers, who have written agreements with and provide periodic reports to the Treasury, could qualify. Taxpayers would be required to include the VIN on their tax return to claim a tax credit.</p> <p>Tax-exempt entities would have the option of electing to receive direct payments.</p> <p>The credit would not apply to vehicles acquired after December 31, 2032.</p>	
Alternative Fuel Refueling Property Credit	Current law allows, through 2021, a tax credit for the cost of any qualified alternative fuel vehicle refueling property installed by a business or at a taxpayer's principal residence. The credit is equal to 30% of these costs, limited to \$30,000 for businesses at each separate location with qualifying property, and \$1,000 for residences. This provision would extend the credit through December 31, 2032, and make additional modifications.	For background, see
Section 13404	<p>For business property (property subject to depreciation), the credit would be extended at a rate of 6% (30% if prevailing wage and registered apprenticeship requirements were met), with the credit limit increased to \$100,000.</p> <p>The definition of qualifying property would be modified to include bidirectional charging equipment. The credit could also be claimed for electric charging stations for two- and three-wheeled vehicles that are intended for use on public roads.</p> <p>Starting in 2023, charging or refueling property would only be eligible if it is placed in service within a low-income or rural census tract.</p>	<ul style="list-style-type: none"> • CRS Report R46451, <i>Energy Tax Provisions Expiring in 2020, 2021, 2022, and 2023</i> ("Tax Extenders"), by Molly F. Sherlock, Margot L. Crandall-Hollick, and Donald J. Marples. • CRS Report R46864, <i>Alternative Fuels and Vehicles: Legislative Proposals</i>, by Melissa N. Diaz. • CRS Report R46231, <i>Electric Vehicles: A Primer on Technology and Selected Policy Issues</i>, by Melissa N. Diaz. • CRS Report R45171, <i>Registered Apprenticeship: Federal Role and Recent Federal Efforts</i>, by Benjamin Collins. • CRS In Focus IFI1927, <i>Federally Funded Construction and the Payment of Locally Prevailing Wages</i>, by David H. Bradley and Jon O. Shimabukuro.
Part 5—Investment in Clean Energy Manufacturing and Energy Security		
Extension of the Advanced Energy Project Credit	This provision would provide additional allocations of the qualified advanced energy manufacturing tax credit, which is a 30% tax credit for investments in projects that reequip, expand, or establish certain energy manufacturing facilities. The American Recovery and Reinvestment Act (P.L. 111-5) provided \$2.3 billion in allocations, which have been fully allocated.	For background, see
Section 13501	An additional \$10 billion in allocations would be provided with at least \$4 billion to be allocated to energy communities (as defined in the extended PTC, Section	<ul style="list-style-type: none"> • CRS Committee Print CPI0004, <i>Tax Expenditures: Compendium of Background Material on Individual Provisions — A Committee Print Prepared for the Senate Committee on the</i>

Section Title	Description	CRS Resources
	<p>13101). Credits cannot be allocated to projects located in census tracts in which projects having received prior allocations under Section 48C are located.</p> <p>The definition of qualifying advanced energy projects would be amended such that it would include projects that reequip, expand, or establish a manufacturing or industrial facility for the production or recycling of renewable energy property; energy storage systems and components; grid modernization equipment and components; property designed to remove, use, or sequester carbon oxide emissions; equipment designed to refine, electrolyze, or blend any fuel, chemical, or product which is renewable or low-carbon and low-emission; property designed to produce energy conservation technologies; electric or fuel-cell vehicles, including technologies, components, or materials for such vehicles and the associated charging infrastructure; hybrid vehicles weighing less than 14,000 pounds, including technologies, components, or materials for such vehicles; which reequips an industrial manufacturing facility with equipment designed to reduce greenhouse gas emissions by at least 20%; or which reequips, expands, or establishes an industrial facility for the processing, refining or recycling of critical materials.</p> <p>The base rate for the credit would be 6%, with the 30% credit rate allowed for projects meeting prevailing wage and registered apprenticeship requirements.</p> <p>The Secretary of the Treasury would be directed to establish a program to award credits to qualifying advanced energy project sponsors. Applicants accepting certifications for credits would have two years to provide evidence that the requirements of the certification have been met and to place property in service.</p>	<p><i>Budget, 2020</i>, by Jane G. Gravelle et al. (pp. 221-224).</p> <ul style="list-style-type: none"> CRS Report R45171, <i>Registered Apprenticeship: Federal Role and Recent Federal Efforts</i>, by Benjamin Collins. CRS In Focus IFI1927, <i>Federally Funded Construction and the Payment of Locally Prevailing Wages</i>, by David H. Bradley and Jon O. Shimabukuro.
Advanced Manufacturing Production Credit	<p>This provision would create a new production tax credit that could be claimed for the domestic production and sale of qualifying solar and wind components.</p>	
Section 13502	<p>Credits for solar components would include (1) for a thin film photovoltaic cell or crystalline photovoltaic cell, 4 cents per direct current watt of capacity; (2) for photovoltaic wafers, \$12 per square meter; (3) for solar grade polysilicon, \$3 per kilogram; (4) for polymeric backsheet, 40 cents per square meter; and (5) for solar modules, 7 cents per direct current watt of capacity.</p> <p>For wind energy components, if the component is an offshore wind vessel, the credit amount would be 10% of the sales price. Otherwise, credits for wind components would be computed as an applicable amount times the total rated capacity of the completed wind turbine for which the component was designed. The applicable amount would be 2 cents for blades, 5 cents for nacelles, 3 cents for towers, 2 cents for fixed platform offshore wind foundations, and 4 cents for floating platform offshore wind foundations. The credit for torque tubes and longitudinal purlin would be \$0.87 per kg, and the credit for structural fasteners would be \$2.28 per kg. The credit for inverters would be based on the inverter's capacity, with different types of inverters eligible for</p>	

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	<p>specified credit amounts ranging from 1.5 cents to 11 cents per watt. For electrode active materials, the credit would be 10% of the production cost. Battery cells could qualify for a credit of \$35 per kilowatt hour of capacity, and battery modules could qualify for a credit of \$10 per kilowatt hour of capacity (or \$45 in the case of a battery module which does not use battery cells). A credit of 10% would also be available for the production of critical minerals.</p> <p>The credit would phase out for components sold after December 31, 2029. Components sold in 2030 would be eligible for 75% of the full credit amount. Components sold in 2031 and 2032 would be eligible for 50% and 25% of the full credit amount, respectively. No credit would be available for components sold after December 31, 2032. The phaseout would not apply to the production of critical minerals.</p> <p>The credit could not be claimed for components produced at a facility for which a credit was claimed under Section 48C.</p>	
Part 6—Superfund		
Reinstatement of Superfund	<p>This provision would permanently reinstate the Hazardous Substance Superfund financing rate for certain excise taxes, but would not reauthorize the Superfund special environmental tax on corporate income that also once financed this trust fund.</p> <p>This provision would permanently reinstate Superfund excise taxes on domestic crude oil and imported petroleum products at the rate of 16.4 cents per barrel in 2023, with adjustments for inflation annually thereafter. The previous tax rate was 9.7 cents per barrel when this tax last expired at the end of 1995.</p> <p>Generally, the tax is paid by refineries that receive crude oil or by the person using or importing a petroleum product.</p> <p>The Infrastructure Investment and Jobs Act (P.L. 117-58) separately renewed other excise taxes that contribute to the Superfund. P.L. 117-58 increased the tax rate on domestically produced chemical feedstocks and imported chemical derivatives and renewed those taxes from July 1, 2022, through December 31, 2031. P.L. 117-58 also removed the statutory link between the dates of applicability of the crude oil and chemical products taxes.</p> <p>Revenues from the excise tax finance the Hazardous Substance Superfund Trust Fund. Borrowing would be authorized through repayable advances from the General Fund of the U.S. Treasury until the end of 2032.</p>	<p>For background, see</p> <ul style="list-style-type: none"> CRS In Focus IFI1982, <i>Superfund Tax Legislation in the 117th Congress</i>, by Anthony A. Cilluffo and David M. Bearden. CRS Report R41039, <i>Comprehensive Environmental Response, Compensation, and Liability Act: A Summary of Superfund Cleanup Authorities and Related Provisions of the Act</i>, by David M. Bearden.
Section 13601		
Part 7—Incentives for Clean Electricity and Clean Transportation		
Clean Electricity Production Credit	<p>This provision would create a new clean electricity production tax credit (PTC). This new PTC would be for the sale of domestically produced electricity with a greenhouse gas emissions rate not greater than zero. To qualify for a tax credit, electricity would need to be</p>	<p>For background, see</p> <ul style="list-style-type: none"> CRS Report R45171, <i>Registered Apprenticeship: Federal Role and Recent Federal</i>
Section 13701		

Section Title	Description	CRS Resources
	<p>produced at a qualifying facility placed in service after December 31, 2024.</p> <p>The base PTC amount would be 0.3 cents per kWh, with the tax credit amount increased to 1.5 cents per kWh for facilities that pay prevailing wages and meet registered apprenticeship requirements (0.5 cents and 2.5 cents, respectively, in 2021, applying the inflation adjustment factor; the amounts would be adjusted for inflation annually). Facilities with a maximum net output of less than 1 megawatt and that begin before 60 days after the Secretary of the Treasury publishes guidance on the wage and registered apprenticeship requirements would also qualify for the full 1.5 cents per kWh amount. The PTC would be available for electricity produced during the facility's first 10 years of operation.</p> <p>The credit amount would be increased by 10% for electricity produced in energy communities (as defined for the purposes of the increased credit amount under the PTC and ITC).</p> <p>The provision would provide that for facilities financed with tax-exempt bonds, the credit amount is reduced by the lesser of (1) 15%; or (2) the fraction of the proceeds of a tax-exempt obligation used to finance the project over the aggregate amount of the project's financing costs.</p> <p>A 10% domestic content bonus would be available for electricity produced at facilities that certify that certain steel, iron, and manufactured products used in the facility were domestically produced. The ability to claim the credit as direct pay would be subject to meeting domestic content requirements.</p> <p>Taxpayers would not be able to claim the clean electricity production credit if the facility or electricity produced from the facility claimed certain other energy-related investment or production tax credits. Taxpayers would choose between the clean electricity PTC and ITC, and could not claim both.</p> <p>The tax credit would phase out when emissions reduction target levels are achieved or after 2032 (the later of the two). The emissions target phaseout would begin after the calendar year in which greenhouse gas emissions from the electric power sector are equal to or less than 25% of 2022 electric power sector emissions. Once phaseout begins, the full credit amount would remain available for facilities that begin construction the following year. The credit amount for facilities beginning construction in the second year would be 75% of the full credit amount. This would be reduced to 50% for facilities beginning construction in the third year, and zero afterward.</p>	<p><i>Efforts</i>, by Benjamin Collins.</p> <ul style="list-style-type: none"> CRS In Focus IFI1927, <i>Federally Funded Construction and the Payment of Locally Prevailing Wages</i>, by David H. Bradley and Jon O. Shimabukuro.
Clean Electricity Investment Credit	This provision would create a new clean electricity investment tax credit (ITC). This new ITC would be for investment in qualifying zero-emissions electricity generation facilities or energy storage technology. Costs of interconnection property would be eligible for clean electricity projects smaller than 5 megawatts. This credit	<p>For background, see</p> <ul style="list-style-type: none"> CRS Report R45171, <i>Registered Apprenticeship: Federal Role and Recent Federal Efforts</i>, by Benjamin Collins.
Section 13702		

Section Title	Description	CRS Resources
	<p>would be available for facilities and property placed in service after December 31, 2024.</p> <p>The base ITC amount would be 6%, with the tax credit rate increased to 30% for facilities that pay prevailing wages and meet registered apprenticeship requirements. Facilities with a maximum net output of less than 1 megawatt and that begin before 60 days after the Secretary of the Treasury publishes guidance on the wage and registered apprenticeship requirements would also qualify for the full 30% amount.</p> <p>The clean electricity ITC is increased by one-third (2 percentage points or 10 percentage points) for property placed in service in an energy community (as defined above for the purposes of the clean electricity PTC). Similarly, a 10 percentage point domestic content bonus also applies for the clean electricity ITC. The ability to claim the credit as direct pay would be subject to meeting domestic content requirements.</p> <p>The provision would provide that for facilities financed with tax-exempt bonds, the credit amount is reduced by the lesser of (1) 15%; or (2) the fraction of the proceeds of a tax-exempt obligation used to finance the project over the aggregate amount of the project's financing costs.</p> <p>Taxpayers would not be able to claim the clean electricity production credit if the facility or electricity produced from the facility claimed certain other energy-related investment or production tax credits. Taxpayers would choose between the clean electricity PTC and ITC, and could not claim both.</p> <p>This provision would also allow for the annual allocation of 1.8 gigawatts for "environmental justice solar and wind capacity" credits. Taxpayers receiving a capacity allocation may be entitled to tax credits in addition to otherwise allowed clean electricity ITCs. Specifically, projects receiving an allocation that are located in a low-income community or on Indian land would be eligible for a 10 percentage point bonus investment tax credit, while projects that are part of a low-income residential building project or qualified low-income economic benefit project would be eligible for a 20 percentage point bonus investment credit. Qualifying clean electricity projects would include those with a nameplate capacity of 5 megawatts or less (other than facilities producing electricity through combustion or gasification). Facilities receiving an allocation would be required to have the facility placed in service within four years.</p> <p>The clean electricity ITC would phase out according to the same schedule as would apply to the clean electricity PTC.</p>	<ul style="list-style-type: none"> • CRS In Focus IFI1927, <i>Federally Funded Construction and the Payment of Locally Prevailing Wages</i>, by David H. Bradley and Jon O. Shimabukuro.

Section Title	Description	CRS Resources
Cost Recovery for Qualified Facilities, Qualified Property, and Energy Storage Technology	This provision would provide that any facility qualifying for the clean electricity PTC or any facility or property qualifying for the clean electricity ITC would be treated as 5-year property under the modified accelerated cost recovery system (MACRS), making it so that cost recovery for renewable energy investments would be generally similar to current law.	
Section 13703	This provision would apply to facilities and property placed in service after December 31, 2024.	
Clean Fuel Production Credit	This provision would create a tax credit for domestic clean fuel production starting in 2025. The tax credit per gallon of transportation fuel would be calculated as the applicable amount multiplied by the emissions factor of the fuel. To qualify, the fuel must be produced by the taxpayer at a qualified facility (excluding facilities that receive credits for producing clean hydrogen or carbon oxide sequestration, or the investment credit for energy produced in clean hydrogen facilities) and sold by the taxpayer. Qualified producers must be registered with the IRS.	For background, see
Section 13704	The “applicable amount” would be determined by the type of fuel and the producer’s labor practices. The base credit amount for zero-emissions fuels would be \$0.20 for nonaviation fuel and \$0.35 for aviation fuel. If the producer meets prevailing wage and registered apprenticeship requirements, then the applicable amount would be \$1.00 for nonaviation fuel and \$1.75 for aviation fuel. These amounts would be adjusted annually for inflation.	<ul style="list-style-type: none"> CRS Report R47171, <i>Sustainable Aviation Fuel (SAF): In Brief</i>, by Kelsi Bracmort and Molly F. Sherlock. CRS Report R45171, <i>Registered Apprenticeship: Federal Role and Recent Federal Efforts</i>, by Benjamin Collins. CRS In Focus IFI1927, <i>Federally Funded Construction and the Payment of Locally Prevailing Wages</i>, by David H. Bradley and Jon O. Shimabukuro.
	The “emissions factor” would be calculated according to the following formula: [(50 kilograms of CO ₂ -equivalent (CO ₂ e) global warming potential per metric million British Thermal Units (mmBTU) – emissions rate of fuel produced) / 50 kilograms of CO ₂ e per mmBTU]. The Treasury Secretary would publish tables of emissions rates for various fuel types that would be used in the calculation. Qualifying transportation fuel would be fuel with an emissions rate not greater than 50 kilograms of CO ₂ e per mmBTU.	
	The credit would not be available for transportation fuel sold after December 31, 2027.	
Part 8—Credit Monetization and Appropriations		
Elective Payment for Energy Property and Electricity Produced from Certain Renewable Resources, Etc.	This provision would allow certain organizations, generally tax-exempt entities including state and local governments and Indian tribal governments, to treat certain tax credit amounts as payments of tax. Payments in excess of tax liability can be refunded to these organizations, allowing the credits to be received as “direct pay.” This direct payment would be allowed for the Section 30C credit for alternative fuel refueling property, the Section 45 renewable electricity production credit, the Section 45Q carbon oxide sequestration credit, the new Section 45U zero-emission nuclear power production credit; the new Section 45V clean hydrogen production credit; in the case of certain tax-exempt entities, the new Section 45W credit for qualified commercial vehicles; the new Section	For background, see
Section 13801		<ul style="list-style-type: none"> CRS Report R45693, <i>Tax Equity Financing: An Introduction and Policy Considerations</i>, by Mark P. Keightley, Donald J. Marples, and Molly F. Sherlock.

Section Title	Description	CRS Resources
	<p>45X advanced manufacturing production credit; the new Section 45Y clean electricity production credit; the new Section 45Z clean fuel production credit; the Section 48 energy investment tax credit, and the Section 48C qualifying advanced energy project credit; and the new Section 48D clean electricity investment credit.</p> <p>Taxpayers who are not tax-exempt entities would be allowed to elect direct pay for the clean hydrogen, carbon oxide sequestration, and advanced manufacturing production credits for the first five years starting with the year a facility is placed in service. This election cannot be made after December 31, 2032.</p> <p>This provision would not apply to territories with mirror-code tax systems.</p> <p>Taxpayers who are not tax-exempt entities would be allowed a one-time transfer of these tax credits. Any payments received in exchange for the transfer of credits would be excluded from income, and any amounts paid to obtain a transferred credit could not be deducted from income. Credits that could be transferred would also be given extended carryback and carryforward periods. The carryback period for these credits would be extended from 1 to 3 years, and the carryforward period extended from 20 to 22 years.</p>	
Part 9—Other Provisions		
Permanent Extension of Tax Rate to Fund Black Lung Disability Trust Funds	Under current law, an excise tax is imposed on coal from mines in the United States. The tax rate depends on how the coal is mined. The current rates are \$0.50 per ton for coal from underground mines and \$0.25 per ton for coal from surface mines, with both limited to 2% of the sales price. The Black Lung excise tax is intended to fund benefits for U.S. coal miners who develop Black Lung disease as a result of working in coal mines.	For background, see
Section 13901	<p>Temporary, higher rates of \$1.10 per ton of coal from underground mines and \$0.55 per ton of coal from surface mines, limited to 4.4% of the sales price, have applied for much of the time since 1986. They most recently applied from the beginning of 2020 through the end of 2021.</p> <p>This provision would permanently extend the higher rates.</p>	<ul style="list-style-type: none"> CRS Report R45261, <i>The Black Lung Program, the Black Lung Disability Trust Fund, and the Excise Tax on Coal: Background and Policy Options</i>, by Scott D. Szymendera and Molly F. Sherlock.
Increase in Research Credit Against Payroll Tax for Small Business	Under current law, businesses are allowed a credit against income tax that is based on their qualified research expenses. The credit is calculated as the amount of qualified research expenses above a base amount that is meant to represent the amount of research expenditures in the absence of the credit.	For background, see
Section 13902	Some small businesses may not have a large enough income tax liability to take advantage of their research credit. Current law allows a small business, defined as a business with less than \$5 million in gross receipts and that is under five years old, to apply up to \$250,000 of the research credit toward its Social Security payroll tax liability.	<ul style="list-style-type: none"> CRS Report RL31181, <i>Federal Research Tax Credit: Current Law and Policy Issues</i>, by Gary Guenther. CRS Report R47062, <i>Payroll Taxes: An Overview of Taxes Imposed and Past Payroll Tax Relief</i>, by Anthony A. Cilluffo and Molly F. Sherlock.

Section Title	Description	CRS Resources
	This provision would allow an additional credit of up to \$250,000 against Medicare Hospital Insurance tax for taxable years beginning after December 31, 2022. The credit could not exceed the tax imposed for any calendar quarter, with unused amounts of the credit carried forward.	

Source: CRS analysis of the legislative text of the “Inflation Reduction Act of 2022,” as posted on the Senate Democrats website on July 27, 2022, at

https://www.democrats.senate.gov/imo/media/doc/inflation_reduction_act_of_2022.pdf.

Notes: Energy provisions that extend expiring provisions are generally effective in 2022, with new provisions generally effective in 2023. Exceptions are noted. The changes that would be made by the provisions are permanent, unless otherwise noted. Within the description, “Section” citations refer to the section within the Internal Revenue Code (IRC), 26 U.S.C., unless otherwise noted. Section 13802 would provide appropriations of \$500 million to remain available until September 30, 2031, for the IRS to carry out this subtitle.

Table 5. Estimated Budgetary Effect of the Revenue Provisions of the “Inflation Reduction Act of 2022”

Provision	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2022-2031
SUBTITLE A—DEFICIT REDUCTION											
Part 1—Corporate Tax Reform	—	52,618	44,000	29,738	26,464	27,191	29,697	32,160	34,463	36,808	313,138
Part 2—Closing the Carried Interest Loophole	—	1,594	1,511	1,430	1,389	1,379	1,389	1,413	1,445	1,487	13,037
Part 3—Funding the Internal Revenue Service and Improving Taxpayer Compliance	Estimates to be provided by the Congressional Budget Office (CBO)										
Total of Subtitle A	—	54,212	45,511	31,168	27,853	28,570	31,086	33,573	35,908	38,295	326,175

SUBTITLE B—PRESCRIPTION DRUG PRICING REFORM | SUBTITLE C—AFFORDABLE CARE ACT SUBSIDIES**Totals of Subtitle B and C***Estimates to be provided by the Congressional Budget Office (CBO)***SUBTITLE D—ENERGY SECURITY****Part 1—Clean Electricity and Reducing Carbon Emissions**

Extension and modification of credit for electricity produced from certain renewable resources	—	-1,562	-2,183	-3,317	-4,822	-6,428	-7,677	-8,232	-8,329	-8,511	-51,062
Extension and modification of energy credit	—	-2,140	-1,559	-2,458	-5,367	-2,359	-48	-38	-9	15	-13,962
Increase in energy credit for solar facilities placed in service in connection with low-income communities	Estimated included in “Extension and modification of credit for electricity produced from certain renewable resources” and “Extension and modification of energy credit” above										

Provision	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2022-2031
Extension and modification of credit for carbon oxide sequestration	—	-42	-303	-469	-495	-463	-429	-388	-343	-296	-3,229
Zero-emission nuclear power production credit	—	—	-2,188	-3,524	-3,710	-3,838	-3,960	-4,050	-4,279	-4,452	-30,001
Total of Part 1	—	-3,744	-6,233	-9,768	-14,394	-13,088	-12,115	-12,709	-12,961	-13,243	-98,254
Part 2—Clean Fuels											
Extension of incentives for biodiesel, renewable diesel, and alternative fuels	-104	-2,672	-1,780	-1,015	—	—	—	—	—	—	-5,571
Extension of second-generation biofuel incentives	-7	-17	-20	-10	—	—	—	—	—	—	-54
Sustainable aviation fuel credit	—	-10	-25	-14	—	—	—	—	—	—	-49
Credit for production of clean hydrogen	—	-131	-362	-610	-918	-1,251	-1,627	-2,082	-2,667	-3,518	-13,166
Total of Part 2	-111	-2,830	-2,187	-1,649	-918	-1,251	-1,627	-2,082	-2,667	-3,518	-18,840
Part 3—Clean Energy and Efficiency Incentives for Individuals											
Extension, increase, and modifications of nonbusiness energy property credit	-253	-1,634	-1,348	-1,324	-1,345	-1,327	-1,277	-1,301	-1,314	-1,327	-12,451
Extension of residential clean energy credit	-52	-407	-1,021	-2,692	-2,770	-2,850	-2,935	-3,019	-3,092	-3,185	-22,022
Energy efficient commercial buildings deduction	—	-62	-50	-46	-42	-38	-35	-32	-30	-28	-362
Extension, increase, and modifications of new energy efficient home credit	—	-273	-193	-203	-216	-230	-241	-240	-229	-217	-2,043
Total of Part 3	-305	-2,376	-2,612	-4,265	-4,373	-4,445	-4,488	-4,592	-4,665	-4,757	-36,879

Provision	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2022-2031
Part 4—Clean Vehicles											
Clean vehicle credit	—	-85	-451	-557	-681	-854	-1,024	-1,155	-1,303	-1,429	-7,541
Credit for previously-owned qualified plug-in electric drive motor vehicles	—	-99	-96	-120	-132	-146	-162	-179	-197	-215	-1,347
Credit for qualified commercial clean vehicles	—	-189	-177	-228	-298	-388	-469	-539	-607	-687	-3,583
Alternative fuel refueling property credit	—	-138	-128	-145	-164	-184	-207	-231	-257	-284	-1,738
Total of Part 4	—	-511	-852	-1,050	-1,275	-1,572	-1,862	-2,105	-2,365	-2,615	-14,209
Part 5—Investment in Clean Energy Manufacturing and Energy Security											
Extension of the advanced energy project credit	—	-1,463	-1,377	-915	-926	-614	-442	-280	-196	-42	-6,255
Advanced manufacturing production credit	—	-1,754	-2,502	-2,690	-3,164	-3,562	-3,937	-4,533	-4,561	-3,920	-30,622
Total of Part 5	—	-3,217	-3,879	-3,605	-4,090	-4,176	-4,379	-4,813	-4,757	-3,962	-36,877
Part 6—Reinstatement of Superfund											
Total of Part 6	—	902	1,230	1,271	1,304	1,336	1,368	1,402	1,436	1,470	11,719
Part 7—Incentives for Clean Electricity and Clean Transportation											
Clean electricity production credit	—	—	—	—	-12	-45	-571	-1,864	-3,497	-5,215	-11,204
Clean electricity investment credit	—	—	—	-39	-57	-6,575	-10,315	-10,742	-11,264	-11,865	-50,858

Provision	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2022-2031
Cost recovery for qualified facilities, qualified property, and energy storage technology	—	—	—	—	—	-26	-83	-134	-171	-211	-624
Clean fuel production credit	—	—	—	-641	-791	-1,177	-337	—	—	—	-2,946
Total of Part 7	—	—	—	-680	-860	-7,823	-11,306	-12,740	-14,932	-17,291	-65,632

Part 8—Credit Monetization and Appropriations

Total of Part 8

Estimates Contained in Relevant Items Above

Part 9—Other Provisions

Permanent extension of tax rate to fund Black Lung Disability Trust Fund	—	103	135	131	130	130	131	132	133	134	1,159
Increase in research credit against payroll tax for small businesses	—	-16	-13	-15	-16	-18	-21	-22	-23	-24	-168
Total of Part 9	—	87	122	116	114	112	110	110	110	110	991

Total of Subtitle D	-416	-11,690	-14,411	-19,630	-24,492	-30,908	-34,298	-37,528	-40,801	-43,806	-257,980
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NET TOTAL	-416	42,522	31,100	11,538	3,361	-2,338	-3,212	-3,955	-4,893	-5,511	68,195
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Source: Joint Committee on Taxation, *Estimated Budgetary Effect of the Revenue Provisions of Title I -Committee on Finance, of an Amendment in the Nature of a Substitute to H.R. 5376, the “Inflation Reduction Act of 2022,”* JCX-22-2-027, July 28, 2022, <https://www.finance.senate.gov/imo/media/doc/7.29.22%20Estimate%20of%20Manchin%20Schumer%20agreement.pdf>.

Notes: A “—” indicates no estimated budget effect.

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