CARBON PRICING PROPOSALS IN THE 116TH CONGRESS

C2ES CENTER FOR CLIMATE AND ENERGY SOLUTIONS

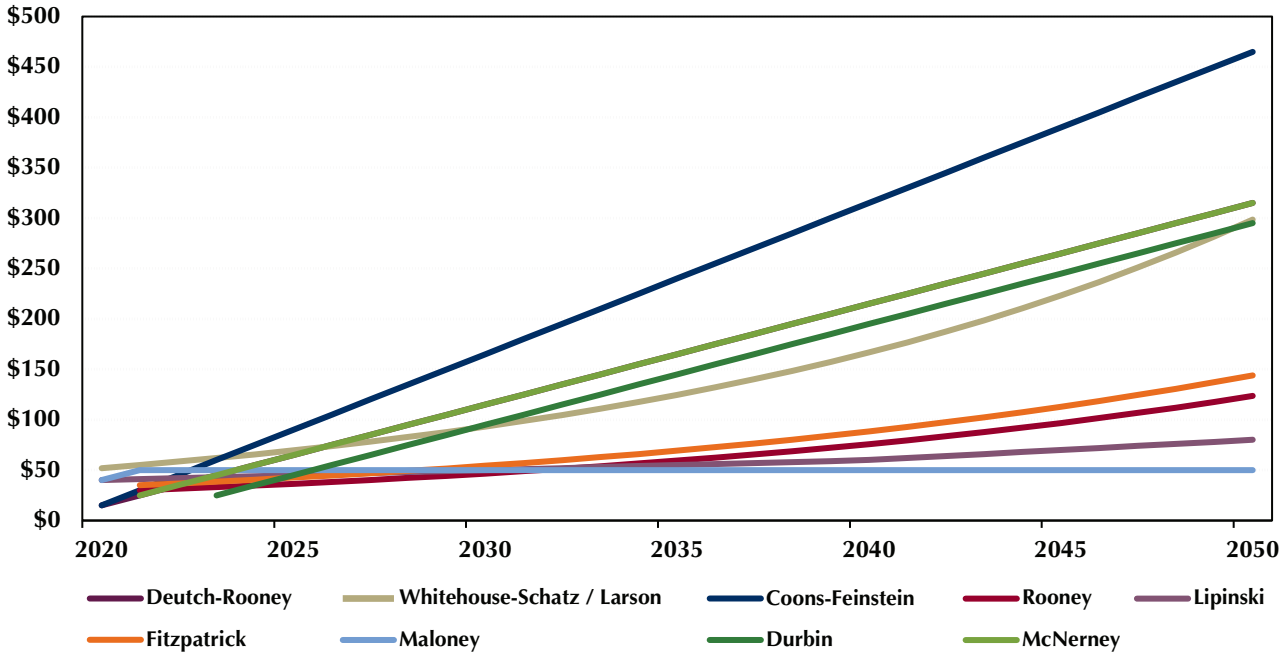
Jason Ye, Center for Climate and Energy Solutions

There are various market-based approaches to pricing carbon (e.g. carbon tax, cap and trade, and a clean energy standard). All of these can reduce emissions cost-effectively while driving clean energy innovation. This factsheet compares eleven carbon tax and cap-and-dividend proposals introduced in the 116th Congress (2019–2020).

Carbon pricing offers a cost-effective way to reduce greenhouse gas emissions. Eleven states are already pricing carbon, and a number of states are considering similar action. This factsheet summarizes and compares eleven federal carbon pricing proposals that have been introduced so far in the 116th Congress (2019–2020), highlighting similarities and differences. Ten of these proposals would establish a carbon tax (or "carbon fee") and one would establish a cap-and-dividend program (a cap-and-trade program that rebates program revenues to consumers). The eleven proposals are:

- The Energy Innovation and Carbon Dividend Act of 2019 (H.R.763) introduced by Reps. Ted Deutch (D-Fla.) and Francis Rooney (R-Fla.) on Jan. 24, 2019;
- The Healthy Climate and Family Security Act of 2019 (S.940 and H.R.1960) introduced by Sen. Chris Van Hollen (D-Md.) and Rep. Don Beyer (D-Va.) on March 28, 2019;
- The American Opportunity Carbon Fee Act of 2019 (S.1128) reintroduced by Sens. Sheldon Whitehouse (D-R.I.), Brian Schatz (D-Hawaii), Martin Heinrich (D-N.M.), and Kirsten Gillibrand (D-N.Y.) on April 10, 2019;
- The Climate Action Rebate Act of 2019 (S.2284 and H.R.4051) introduced by Sens. Chris Coons (D-Del.) and Dianne Feinstein (D-Calif.), and Rep. Jimmy Panetta (D-Calif.) on July 25, 2019;
- The Stemming Warming and Augmenting Pay Act of 2019 (H.R.4058) introduced by Reps. Francis Rooney (R-Fla.) and Dan Lipinski (D-Ill.) on July 25, 2019;
- The Raise Wages, Cut Carbon Act of 2019 Act of 2019 (H.R.3966) introduced by Reps. Dan Lipinski (D-Ill.) and Francis Rooney (R-Fla.) on July 25, 2019;
- The America Wins Act of 2019 (H.R.4142) introduced by Rep. John Larson (D-Conn.) on August 2, 2019;
- The Modernizing America with Rebuilding to Kickstart the Economy of the Twenty-first Century with a Historic Infrastructure-Centered Expansion Act of 2019 (H.R.4520) introduced by Reps. Brian Fitzpatrick (R-Pa.) and Salud Carbajal (D-Calif.) on September 26, 2019;
- The Carbon Reduction and Tax Credit Act (H.R.5457) introduced by Rep. Sean Patrick Maloney (D-N.Y.) on December 17, 2019;
- The America's Clean Future Fund Act (S.4484) introduced by Sen. Dick Durbin (D-Ill.) on August 6, 2020; and
- Consumers Rebate to ban Emissions and Boost AlTernative Energy Act (H.R.8175) introduced by Rep. Jerry McNerney (D-Calif.) on September 4, 2020.

FIGURE 1: Tax rate for carbon tax proposals ($/metric ton)



The figure shows the escalation rate for the carbon tax proposals. It does not reflect any potential changes to the tax due to meeting or not meeting an emissions reduction target. This figure does not include the Van Hollen-Beyer cap-and-dividend proposal since the permit price will be determined by auction.

While each proposal would establish a price on carbon, they differ in terms of the emissions covered. The Larson proposal would apply a tax to the carbon dioxide content of fossil fuels at a point upstream or midstream (i.e., coal mines, refineries, natural gas processing plants, or importers) while the Whitehouse-Schatz proposal would apply a tax to all greenhouse gases covered by the U.S. Environmental Protection Agency (EPA) Greenhouse Gas Reporting Rule, not just carbon dioxide. The Rooney, Lipinski, and Fitzpatrick proposals would apply a tax to greenhouse gas emissions from fossil fuels and certain industrial products and processes while the Deutch-Rooney and Coons-Feinstein proposals would apply a tax on carbon dioxide equivalent emissions from fossil fuels and a reduced carbon tax on fluorinated gases. The Fitzpatrick proposal would replace the gas and aviation fuel tax with a carbon tax.

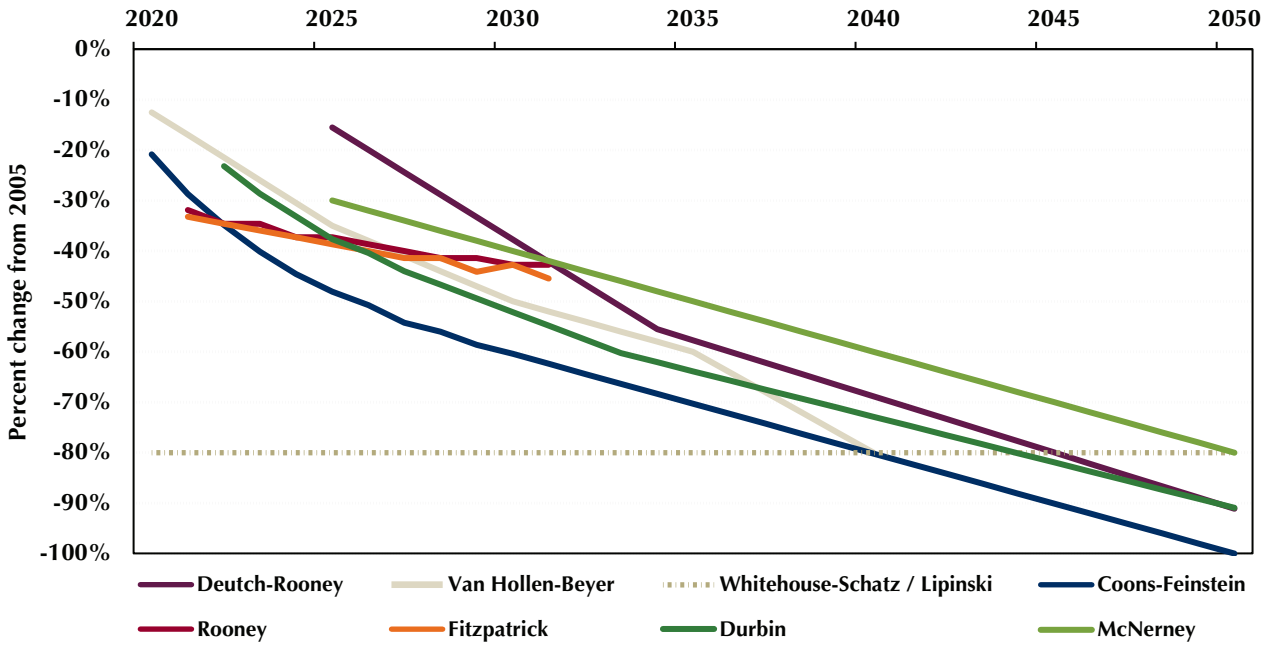
Other differences include the starting level of the tax, how quickly it increases over time (see **Figure 1**), and how the revenue is used. The Deutch-Rooney proposal, for example, would establish a $15 per metric ton carbon tax that rises $10 annually and could rise $15 annually if annual emission targets are not met. All of the revenues would be rebated to the American people as a dividend.

The Whitehouse-Schatz proposal, for example, would set a $52 per metric ton fee that rises at 6 percent over inflation annually until emissions are 80 percent below 2005 levels. Revenues would be used to provide an annual refundable tax credit to consumers and grants to states to compensate low-income households for impacts on energy costs.

The Rooney and Lipinski proposals have the same revenue goals of reducing payroll taxes but take different approaches to achieving this goal. The Rooney proposal would establish a $30 per metric ton carbon tax that rises at 5 percent over inflation annually and could rise $3 biennially if emission targets are not met.

While the Lipinski proposal would establish a $40 per metric ton carbon tax that rises at 2.5 percent over inflation. The Larson and Fitzpatrick proposals would primarily fund infrastructure. The Larson proposal would

FIGURE 2: Emission reduction target for carbon pricing proposals



The figure shows the emissions reduction targets relative to 2005 greenhouse gas emissions for nine carbon pricing proposals, four of which go out to 2050, one to 2040, and two to 2031. The Whitehouse-Schatz and Lipinski proposals have an emissions target of 80 percent below 2005 levels but with no target date, which is represented here as a horizontal line.

establish a $52 per metric ton carbon tax that rises at 6 percent over inflation. Whereas the Fitzpatrick proposal would establish a $35 per metric ton carbon tax that rises at 5 percent over inflation annually and could rise $4 biennially if emission targets are not met.

The Durbin proposal would establish a climate bank to foster innovation and investments in clean energy and climate resilience, provide transition assistance for impacted communities, provide rebates back to the American public, payments for agricultural- and land-based sequestration, and delay the carbon tax to pay for these programs until an economic indicator is met (but no later than 2023). The tax would start at $25 per metric ton and increase $10 annually, and could rise $15 to $25 annually if emissions targets are not met for a given year.

The McNerney proposal would establish a $25 carbon tax that raises $10 annually. If emissions met or exceed an emissions reduction benchmark, then the carbon tax will be zero for five years. The carbon tax can be reinstated at its previous rate if emissions do not meet the subsequent emissions reduction benchmark. The revenues from the McNerney proposal would be used to reduce the individual income tax, support the transition to a clean energy economy, and provide quarterly rebates back to the American public.

Most of the carbon pricing proposals include an emissions reduction target for covered emissions (see **Figure 2**). The Deutch-Rooney proposal has an emissions reduction target of 90 percent below 2016 levels by 2050 (about 91 percent below 2005 levels by 2050). The Van-Hollen-Beyer proposal would cap emissions at 80 percent below 2005 levels by 2040. The McNerney, Whitehouse-Schatz, and Lipinski proposals have an emissions reduction target of 80 percent below 2005 levels. The Coons-Feinstein proposal has an emissions reduction target of 100 percent below 2017 levels by 2050 (about 100 percent below 2005 levels by 2050). The Rooney proposal has a cumulative emissions schedule from 2021 to 2031, which would reduce emissions about 43 percent below 2005 levels by 2031. The Fitzpatrick proposal also has a cumulative emissions schedule from 2021 to 2031 that would reduce emissions about 46 percent below 2005

levels by 2031. The Durbin proposal has an emissions reduction target of 90 percent below 2018 levels by 2050 (about 91 percent below 2005 levels by 2050).

The proposals also differ in the treatment of greenhouse gas regulations and state programs. The Van Hollen-Beyer proposal would require the EPA administrator, starting four years after enactment, to begin issuing regulations under the Clean Air Act (and any other applicable law) for greenhouse gas emissions not covered by their proposed cap-and-trade program or those directly attributable to food production. The Deutch-Rooney, Lipinski, Rooney, and Fitzpatrick proposals would place a moratorium on most stationary source greenhouse gas regulations under the Clean Air Act. The Deutch-Rooney and Lipinski proposals would place a moratorium, which could be lifted starting in April 2030 and every five years thereafter if emissions reduction targets are not met. The Rooney and Fitzpatrick proposals would place a 12-year moratorium, which could be lifted in 2025 or 2029 if emissions reductions are not met. Under these proposals, if the moratorium is lifted, the EPA administrator would be required to issue regulations to bring greenhouse gas emissions from covered fuels to levels that are at or below emissions reduction targets. The Van Hollen-Beyer, Deutch-Rooney, and Coons-Feinstein proposals would not preempt state programs, while the Rooney and Fitzpatrick proposals would offer a declining annual credit to entities covered by both the federal tax and a state greenhouse gas program.

Almost all carbon tax proposals introduced in this Congress include some provisions to ensure environmental integrity (i.e., provide greater certainty that emissions reduction targets will be met). For example, if the target is not met for a given period, the tax rate goes up or EPA greenhouse gas regulations under the Clean Air Act could come back into force.

The following table highlights key characteristics of each proposal.

PROPOSAL	SPONSOR(S)	CARBON PRICING MECHANISM	START DATE	REGULATING AUTHORITY
Energy Innovation and Carbon Dividend Act	Reps. Ted Deutch (D-Fla.) and Francis Rooney (R-Fla.)	Carbon Tax	270 days after enactment	U.S. Treasury Department in consultation with EPA
Healthy Climate and Family Security Act	Sen. Chris Van Hollen (D-Md.) and Rep. Don Beyer (D-Va.)	Cap and Trade	Jan. 1, 2020	U.S. Treasury Department in consultation with EPA
American Opportunity Carbon Fee Act	Sens. Sheldon Whitehouse (D-R.I.) and Brian Schatz (D-Hawaii)	Carbon Tax	Jan. 1, 2020	U.S. Treasury Department in consultation with EPA
Climate Action Rebate Act	Sens. Chris Coons (D-Del.) and Dianne Feinstein (D-Calif.), and Rep. Jimmy Panetta (D-Calif.)	Carbon Tax	Next tax year after enactment	U.S. Treasury Department in consultation with EPA
SWAP Act	Reps. Francis Rooney (R-Fla.) and Dan Lipinski (D-Ill.)	Carbon Tax	Jan. 1, 2021	U.S. Treasury Department in consultation with EPA
Raise Wages, Cut Carbon Act	Reps. Dan Lipinski (D-Ill.) and Francis Rooney (R-Fla.)	Carbon Tax	Jan. 1, 2020	U.S. Treasury Department in consultation with EPA
America Wins Act	Rep. John Larson (D-Conn.)	Carbon Tax	Jan. 1, 2020	U.S. Treasury Department
MARKET CHOICE Act	Reps. Ryan Fitzpatrick (R-Pa.) and Salud Carbajal (D-Calif.)	Carbon Tax	Jan. 1, 2021	U.S. Treasury Department in consultation with EPA
Carbon Reduction and Tax Credit Act	Rep. Sean Maloney (D-N.Y.)	Carbon Tax	Jan. 1, 2020	U.S. Treasury Department
America's Clean Future Fund Act	Sen. Dick Durbin (D-Ill.)	Carbon Tax	Program benefits would start upon enactment. Carbon fee would start no later than 2023.	U.S. Treasury Department in consultation with EPA
Consumers REBATE Act	Rep. Jerry McNerney (D-Calif.)	Carbon Tax	Jan. 1, 2021	U.S. Treasury Department in consultation with EPA

PROPOSAL	SUBSTANCES COVERED
Energy Innovation and Carbon Dividend Act	CO_2 equivalent emissions from covered fuels: crude oil, natural gas, coal, and fluorinated gases.
Healthy Climate and Family Security Act	CO_2 emissions from fossil fuel combustion (crude oil, natural gas, coal) or any other combustible fuel sold in the United States.
American Opportunity Carbon Fee Act	CO_2 equivalent emissions from fossil fuel (coal, petroleum, or natural gas) products, fluorinated gases, and GHGs covered under EPA's GHG Reporting Program.
Climate Action Rebate Act	CO_2 equivalent emissions from covered fuels: crude oil, natural gas, coal, solid biomass, and fluorinated gases.
SWAP Act	CO_2 equivalent emissions from fossil-fuel (coal, petroleum, natural gas) combustion and certain industrial products and processes.
Raise Wages, Cut Carbon Act	CO_2 emissions potential of a taxable carbon substance: coal, petroleum, natural gas, and fluorinated gases.
America Wins Act	CO_2 content of a taxable carbon substance: coal, petroleum and any petroleum products, and natural gas.
MARKET CHOICE Act	CO_2 equivalent emissions from fossil-fuel combustion and certain industrial products and processes.
Carbon Reduction and Tax Credit Act	CO_2 content of fossil fuels (coal, petroleum, natural gas).
America's Clean Future Fund Act	CO_2 equivalent emissions from covered fuels (crude oil, natural gas, coal), and CO_2 or CH_4 emissions from the energy or industrial sectors (excluding emissions or use of covered fuel).
Consumers REBATE Act	CO_2 content of the lifecycle emissions from a taxable carbon substance: coal, petroleum and any petroleum products, and natural gas.

PROPOSAL	POINT OF COVERAGE (I.E., COVERED ENTITY)
Energy Innovation and Carbon Dividend Act	Covered entities include: refineries, coal mine mouth, those entering pipeline quality natural gas into the transmission system, any importer of a covered fuels, and those who are required to report emissions of fluorinated gases. Exemption for covered fuels used: on a farm for farming purposes and non-fossil fuel greenhouse gas emissions which occur on a farm, or by the armed services.
Healthy Climate and Family Security Act	Covered entity is the first seller of oil, coal, or natural gas into the U.S. market. Participation in the auction of carbon permits is limited to covered entities.
American Opportunity Carbon Fee Act	Covered entities are facilities required to report emissions under the EPA GHG Reporting Program and emit at least 25,000 tons of CO_2 equivalent in the preceding calendar year.
Climate Action Rebate Act	Covered entities include: refineries, coal mine mouth, those entering pipeline quality natural gas into the transmission system, any facility that burns solid biomass fuel, any importer of a covered fuels or fuel products, and those who are required to report emissions of fluorinated gases.
SWAP Act	Covered fossil fuel entities include: coal mine mouth or coal preparation and processing plant, refineries, and natural gas processing plant or point of sale, and point at which imported fossil fuels enter the United States. Other covered entities include owner/operator of certain industrial facilities (initial list of 20) or owner/operator of a facility that makes or imports certain products (initial list of 8). The EPA can revise the list of source categories and producers.
Raise Wages, Cut Carbon Act	Covered entity means manufacturer, producer, or importer of a taxable carbon substance.
America Wins Act	Covered entity means manufacturer, producer, or importer of a taxable carbon substance.
MARKET CHOICE Act	Covered fossil fuel entities include: coal mine mouth or coal preparation and processing plant, refineries, and natural gas processing plant or point of sale, and point at which imported fossil fuels enter the United States. Other covered entities include owner/operator of certain industrial facilities (initial list of 20) or owner/operator of a facility that makes or imports certain products (initial list of 8). The EPA can revise the list of source categories and producers.
Carbon Reduction and Tax Credit Act	Covered entities include: coal mine, oil or gas well, or imports.
America's Clean Future Fund Act	Covered entities include: refinery, coal mine mouth, those entering pipeline quality natural gas into the transmission system, any importer of a covered fuels or fuel products, and facilities emitting at least than 25,000 tons of CO_2 or CH_4 in the preceding calendar year. Treasury Secretary can add additional entities that transports, sells, or use a covered fuel in a manner not covered by the fee.
Consumers REBATE Act	Covered entities include: wellhead or mine in the United States, or importers of a taxable carbon substance.

<table>
<tr><th>PROPOSAL</th><th>EMISSION TARGETS AND TIMETABLES</th></tr>
<tr><td>Energy Innovation and Carbon Dividend Act</td><td>The emission target is equal to the previous year's target minus the percentage listed in the table:

<table><tr><td>Year</td><td>Emissions Reduction Target (% of 2016 emissions)</td></tr><tr><td>2025–2034</td><td>5% per year</td></tr><tr><td>2035–2050</td><td>2.5% per year</td></tr></table>
The proposal's emissions reduction target is 90% below 2016 levels by 2050.</td></tr>
<tr><td>Healthy Climate and Family Security Act</td><td>Quantity of permits based on meeting decadal emission targets:

<table><tr><td>Year</td><td>Emissions Target (% below 2005 levels)</td></tr><tr><td>2020</td><td>12.5%</td></tr><tr><td>2025</td><td>35%</td></tr><tr><td>2030</td><td>50%</td></tr><tr><td>2035</td><td>60%</td></tr><tr><td>2040</td><td>80%</td></tr></table>
The proposal's emission reduction target is 80% below 2005 levels by 2040.</td></tr>
<tr><td>American Opportunity Carbon Fee Act</td><td>National emissions target attainment level is 80% below 2005 levels.</td></tr>
<tr><td>Climate Action Rebate Act</td><td>The emission target is equal to the previous year's target minus the percentage listed in the table:

<table><tr><td>Year</td><td>Emissions Reduction Target (% of 2017 emissions)</td></tr><tr><td>2020</td><td>90%</td></tr><tr><td>2021</td><td>81%</td></tr><tr><td>2022</td><td>74%</td></tr><tr><td>2023</td><td>68%</td></tr><tr><td>2024</td><td>63%</td></tr><tr><td>2025</td><td>59%</td></tr><tr><td>2026</td><td>56%</td></tr><tr><td>2027</td><td>52%</td></tr><tr><td>2028</td><td>50%</td></tr><tr><td>2029</td><td>47%</td></tr><tr><td>2030</td><td>45%</td></tr><tr><td>2031–2050</td><td>Reduce additionally by 2.25% of 2017 emissions per year</td></tr></table>
The proposal's emission reduction target is 100% below 2017 levels by 2050.</td></tr>
</table>

<table>
<tr><th>PROPOSAL</th><th>EMISSION TARGETS AND TIMETABLES</th></tr>
<tr><td>SWAP Act</td><td>The carbon tax can be adjusted if cumulative emissions from covered sources are greater than the specified emissions below:

<table><tr><td>Year</td><td>Total Emissions</td></tr><tr><td>2021</td><td>5,000</td></tr><tr><td>2022</td><td>9,800</td></tr><tr><td>2023</td><td>14,600</td></tr><tr><td>2024</td><td>19,200</td></tr><tr><td>2025</td><td>23,800</td></tr><tr><td>2026</td><td>28,300</td></tr><tr><td>2027</td><td>32,700</td></tr><tr><td>2028</td><td>37,000</td></tr><tr><td>2029</td><td>41,300</td></tr><tr><td>2030</td><td>45,500</td></tr><tr><td>2031</td><td>49,700</td></tr></table>
The proposal's emission reduction target is about 43% below 2005 levels by 2031.</td></tr>
<tr><td>Raise Wages, Cut Carbon Act</td><td>National emissions target attainment level is 80% below 2005 levels.</td></tr>
<tr><td>America Wins Act</td><td>Not specified.</td></tr>
<tr><td>MARKET CHOICE Act</td><td>The carbon tax can be adjusted if total emissions from covered sources are greater than the specified emissions below:

<table><tr><td>Year</td><td>Total Emissions</td></tr><tr><td>2021</td><td>4,900</td></tr><tr><td>2022</td><td>9,700</td></tr><tr><td>2023</td><td>14,400</td></tr><tr><td>2024</td><td>19,000</td></tr><tr><td>2025</td><td>23,500</td></tr><tr><td>2026</td><td>27,900</td></tr><tr><td>2027</td><td>32,200</td></tr><tr><td>2028</td><td>36,500</td></tr><tr><td>2029</td><td>40,600</td></tr><tr><td>2030</td><td>44,800</td></tr><tr><td>2031</td><td>48,800</td></tr></table>
The proposal's emission reduction target is about 46% below 2005 levels by 2031.</td></tr>
<tr><td>Carbon Reduction and Tax Credit Act</td><td>Not specified.</td></tr>
</table>

<table>
<tr><th>PROPOSAL</th><th>EMISSION TARGETS AND TIMETABLES</th></tr>
<tr><td>America's Clean Future Fund Act</td><td>The carbon tax can be adjusted if cumulative emissions are greater than the cumulative emissions target. The cumulative emissions target is the sum of emissions targets. The emissions target is as specified below :
<table>
<tr><td>Year</td><td>Applicable percentage of 2018 emissions</td></tr>
<tr><td>2022</td><td>85%</td></tr>
<tr><td>2023</td><td>79%</td></tr>
<tr><td>2024</td><td>74%</td></tr>
<tr><td>2025</td><td>69%</td></tr>
<tr><td>2026</td><td>66%</td></tr>
<tr><td>2027</td><td>62%</td></tr>
<tr><td>2028</td><td>59%</td></tr>
<tr><td>2029</td><td>56%</td></tr>
<tr><td>2030</td><td>56%</td></tr>
<tr><td>2031</td><td>50%</td></tr>
<tr><td>2032</td><td>47%</td></tr>
<tr><td>2033</td><td>44%</td></tr>
<tr><td>2034</td><td>42%</td></tr>
<tr><td>2035</td><td>40%</td></tr>
<tr><td>2036–2050</td><td>Reduce additionally by 2% from preceding year.</td></tr>
</table>
The proposal's emission reduction target is 100% below 2017 levels by 2050.</td></tr>
<tr><td>Consumers REBATE Act</td><td>The carbon tax will be zero if the emission reduction benchmark will be met or exceeded for the target years below:
<table>
<tr><td>Year</td><td>Emission Reduction (% of 2005 lifecycle emissions</td></tr>
<tr><td>2025</td><td>30%</td></tr>
<tr><td>2030</td><td>40%</td></tr>
<tr><td>2035</td><td>50%</td></tr>
<tr><td>2045</td><td>70%</td></tr>
<tr><td>2050</td><td>80%</td></tr>
</table>
The proposal's emission reduction target is 80% below 2005 levels by 2050.</td></tr>
</table>

<table>
<tr><th>PROPOSAL</th><th>CARBON PRICE AND ESCALATION RATE</th></tr>
<tr><td>Energy Innovation and Carbon Dividend Act</td><td>Starting at $15 per metric ton of CO_2 equivalent.

Increasing annually at $10 per metric ton, and at $15 per metric ton if emissions reduction target is not met in the previous year (adjusted for inflation).

The tax rate for fluorinated gases is 10% of the carbon fee rate for a given year.

The carbon fee will be phased out once emissions from covered fuels are 90% below 2015 levels, and the monthly carbon dividend payments to an adult has been less than $20 for 3 consecutive years.</td></tr>
<tr><td>Healthy Climate and Family Security Act</td><td>The carbon permit price is determined by auction. The quantity of permits auctioned is equal to the amount necessary to meet an annual emissions target.

The treasury secretary is required to hold at least four auctions a year, limit how many permits a single participant can purchase at a single auction, and set a price floor.

A carbon permit can be banked for later years.

If the carbon permit price increases more than 50% above the two-year average price, the Secretary can auction as many permits as needed to stabilize the price. Unsold permits in reserve must be auctioned first before additional permits can be auctioned. The auctioning of additional permits will reduce the aggregate number of permits made available in later years.</td></tr>
<tr><td>American Opportunity Carbon Fee Act</td><td>Starting at $52 per metric ton of CO_2 equivalent.

Increasing annually 6% above CPI, and increasing only by inflation when emissions fall at least 80% below 2005 levels.

Rounded to the next whole dollar.

The tax rate for fluorinated gases is based on an applicable percentage listed in the table:

<table>
<tr><th>Year</th><th>Applicable percentage</th></tr>
<tr><td>2020–2022</td><td>10%</td></tr>
<tr><td>2023</td><td>20%</td></tr>
<tr><td>2024</td><td>30%</td></tr>
<tr><td>2025</td><td>40%</td></tr>
<tr><td>2026</td><td>50%</td></tr>
<tr><td>2027</td><td>60%</td></tr>
<tr><td>2028</td><td>70%</td></tr>
<tr><td>2029</td><td>80%</td></tr>
<tr><td>2030</td><td>90%</td></tr>
<tr><td>2031 or later</td><td>100%</td></tr>
</table>
</td></tr>
</table>

PROPOSAL	CARBON PRICE AND ESCALATION RATE
Climate Action Rebate Act	Starting at $15 per metric ton of CO_2 equivalent. Increasing annually at $15 per metric ton, and at $30 per metric ton if emissions reduction target is not met in the previous year. The tax rate for fluorinated gases is 20% of the carbon fee rate for a given year. The carbon fee escalation rate will be phased out once emissions from covered fuels are 90% below 2017 levels.
SWAP Act	Starting at $30 per metric ton of CO_2 equivalent. Increasing annually at 5% above CPI, and starting in 2023, at additional $3 per metric ton biennially if cumulative emissions are greater than the emissions schedule.
Raise Wages, Cut Carbon Act	Starting at $40 per metric ton of CO_2 equivalent. Increasing annually at 2.5% above CPI. Rounded to the nearest whole dollar. The tax rate for fluorinated gases is 10% of the carbon fee rate for a given year. The carbon fee escalation rate will be phased out once emissions from covered fuels are 80% below 2005 levels.
America Wins Act	Starting at $52 per metric ton of CO_2 content. Increasing annually 6% above CPI.
MARKET CHOICE Act	Starting at $35 per metric ton of CO_2 equivalent. Increasing annually at 5% above CPI, and starting in 2023, at an additional $4 per metric ton biennially if cumulative emissions are greater than the emissions schedule.
Carbon Reduction and Tax Credit Act	Starting at $40 per ton of carbon contained in fuel. Increasing at CPI (rounded to nearest multiple of $50).
America's Clean Future Fund Act	Starting at $25 per metric ton of CO_2 equivalent in 2022. Increasing annually at $10 per metric ton. Fee is adjusted for inflation (rounded to the nearest whole dollar). If cumulative emission target is not met for the preceding year, then the tax can increase: $15 for years 2025–2030, $20 for years 2031–2040, and $25 after 2040. Starting in 2024, fee placed on noncovered fuel emissions equal to fee rate for a given year. The carbon tax escalation rate will be phased out once emissions from covered fuels are 90% below 2018 levels for three years.
Consumers REBATE Act	Starting at $25 per metric ton of CO_2 content of the lifecycle emissions. Increasing annually at $10 per metric ton. Carbon tax would be zero for five years if the emission reduction benchmarks will be met or exceeded for a target year. The carbon tax would be revived at the price rate if emission reduction benchmarks are not met for the subsequent target year.

PROPOSAL	TAX CREDITS OR REFUNDS
Energy Innovation and Carbon Dividend Act	Treasury secretary can issue payments to the amounts equivalent to the metric tons of CO_2 that is captured, sequestered or utilized from combustion of covered fuels in the United States.
Healthy Climate and Family Security Act	Treasury secretary can issue carbon permits in the amounts equivalent to the metric tons of CO_2 that is captured and sequestered from combustion of covered fuels in the United States.
American Opportunity Carbon Fee Act	A refund can be issued in the amount of the carbon fee for: the utilization or capture and secure storage of CO_2 from a covered fossil fuel, manufactured good that encapsulates CO_2, and export of fossil fuel product. Refunds for capture and storage or utilization are discounted by the amount of anticipated leakage.
Climate Action Rebate Act	Treasury secretary, in consultation with EPA administrator and other relevant agencies, can issue payments or refund in the amount of the carbon fee for the utilization or capture and secure storage of carbon dioxide. No payment will be issued to those receiving a credit under Sec. 45Q. Entities violating air quality regulations are excluded from the payment. Revenues could also be used to pay for land-based sequestration projects and direct air capture (no payment to those receiving a 45Q tax credit for the same unit of CO_2).
SWAP Act	Treasury secretary can issue credit or refund in the amounts equivalent to the metric tons of CO_2 that is captured, sequestered or utilized from combustion of covered fuels in the United States.
Raise Wages, Cut Carbon Act	Treasury secretary can issue a credit or refund (without interest) in the amount of the tax for a taxable carbon substance that is not emitted.
America Wins Act	Treasury secretary can issue a credit or refund (without interest) in the amount of the tax for a taxable carbon substance for the capture and sequester of CO_2 or use as feedstock that has no associated emission.
MARKET CHOICE Act	Treasury secretary can issue credit or refund in the amounts equivalent to the metric tons of CO_2 that is captured and sequestered from combustion of fossil fuels or use as feedstock that has no associated emission.
Carbon Reduction and Tax Credit Act	Not specified.
America's Clean Future Fund Act	Treasury secretary, in consultation with EPA Administrator and Energy Secretary, can issue payments in the amount of the carbon fee for the utilization or capture and secure storage of carbon dioxide or for direct air capture. Entities violating air quality regulations are excluded from the payment.
Consumers REBATE Act	Not specified.

PROPOSAL	BORDER ADJUSTMENT
Energy Innovation and Carbon Dividend Act	A carbon border fee imposed on imported covered fuels and on carbon-intensive goods. A credit or refund (without interest) is issued to exporters of carbon-intensive goods. This fee would be suspended by a treaty or international agreement, or by a determination that a country has implemented a climate policy at least equivalent to the U.S. program.
Healthy Climate and Family Security Act	A carbon equivalency fee imposed on imported carbon-intensive goods. Reimbursement for permit equivalency fee (without interest) paid on exports. This fee would expire when exporting countries adopt equivalent measures, or when it is no longer deemed necessary.
American Opportunity Carbon Fee Act	An equivalency fee imposed on imported energy-intensive manufactured goods. Refund of carbon fee on exported energy-intensive manufactured goods. The equivalency fee and refund will be reduced for countries that have policies that reduce GHG emissions.
Climate Action Rebate Act	A carbon border fee imposed on imported covered fuels and on carbon-intensive goods. A credit or refund (without interest) is issued to exporters of carbon-intensive goods.
SWAP Act	A border tax adjustment is placed on imported covered goods and a rebate of the tax on exported covered goods. Covered goods are those from eligible industrial sectors (manufacturing sectors, metal ores, soda ash, and phosphate processors) and has a GHG intensity of at least 5% and a trade intensity of at least 15%.
Raise Wages, Cut Carbon Act	A tax is imposed on imported taxable product unless they were already taxed in their country of origin. A credit or refund (without interest) is issued to exporters of taxable substance.
America Wins Act	An equivalency fee imposed on imported carbon-intensive goods. Reimbursement of equivalency fee paid on exports. This fee expires when: an international climate agreement with equivalent measures comes into effect, when exporting countries adopt equivalent measures, or when it is deemed no longer necessary.
MARKET CHOICE Act	A border tax adjustment is placed on imported covered goods and a rebate of the tax on exported covered goods. Covered goods are those from eligible industrial sectors (manufacturing sectors, metal ores, soda ash, and phosphate processors) and has a GHG intensity of at least 5% and a trade intensity of at least 15%.
Carbon Reduction and Tax Credit Act	Not specified.

PROPOSAL	BORDER ADJUSTMENT
America's Clean Future Fund Act	A carbon border fee imposed on imported covered fuels and on carbon-intensive goods. A credit or refund (without interest) is issued to exporters of carbon-intensive goods.
Consumers REBATE Act	A carbon equivalency fee imposed on imported goods containing or produced using a taxable carbon substance. A credit or refund (without interest) is issued to exporters of taxable carbon substance. This fee would be suspended by a treaty or international agreement, or by a determination that a country has implemented a climate policy at least equivalent to the U.S. program.

PROPOSAL	USE OF REVENUE
Energy Innovation and Carbon Dividend Act	Revenues from the program will be used to provide a monthly dividend to individuals with a valid Social Security number who are legally residing in the United States. A carbon dividend payment is one pro-rata share for each adult and half a pro-rata share for those under 19 years old, with a limit of 2 children per household. The dividend would be included in determining gross income for tax purposes. The carbon dividend amount will not be considered income when determining eligibility for federal assistance programs.
Healthy Climate and Family Security Act	Revenue from the program will be used to provide a monthly dividend to individuals with a valid Social Security number (other than a nonresident alien) who are legally residing in the United States. Any individual may opt out of receiving the trust fund dividend payment. The dividend would be excluded in determining gross income for tax purposes.
American Opportunity Carbon Fee Act	Revenues from the program will be used for: an annual inflation-adjusted tax credit (the lessor of 6.2% of the earned income of a taxpayer or $900 adjusted for inflation); benefits to Social Security, veterans and others; and at least $10 billion annually in state grants for low-income households and households to address increased energy costs, transition assistance for workers and businesses in energy-intensive and fossil-fuel industries.
Climate Action Rebate Act	Revenues from the program will be used to establish a Climate Action Rebate Fund. 70% of the fund will be used to provide a monthly dividend to individuals with a valid Social Security number or a taxpayer identification number and is a citizen or lawful resident in the United States according to an income adjusted level scale. The dividend amount will be phased out based on adjusted gross income. Revenues could also be used to pay for land-based sequestration projects and direct air capture (no payment to those receiving a 45Q tax credit for the same unit of CO2). 20% of the fund is used for infrastructure (e.g., transportation, water, rural broadband, climate resilience). 5% of the fund is used for innovation supporting RD&D for technologies that reduce or eliminate greenhouse gas emissions (e.g., carbon capture, advanced nuclear, grid modernization, transportation). 5% of the fund is used for transition assistance for workers. The Climate Action Rebate Fund will be phased out once emissions from covered fuels are 90% below 2017 levels, and the monthly carbon dividend payments to an adult has been less than $20 for 3 consecutive years.

PROPOSAL	USE OF REVENUE
SWAP Act	Revenues from the program will be used: 70% to reduce the payroll taxes, maintain the Social Security Trust Fund; 10% to make equivalent payments to social security beneficiaries; 20% of the evenly split between state block grants to help low-income households offset higher energy costs, and revenues to be used for climate adaptation, carbon sequestration, energy efficiency, and advanced R&D programs.
Raise Wages, Cut Carbon Act	Revenues from the program will be used: 5% for the Low-Income Housing Energy Assistance Program; 1% Weatherization Assistance Program; 10% for social security beneficiaries; and remaining revenues (84%) for payroll tax offsets.
America Wins Act	From fiscal year 2020 to 2029, revenues from the program will be used to: $1.2 trillion for infrastructure; and $70 billion for transition assistance; Starting in 2020, 12.5% of the revenue will be used to provide a monthly energy refund to low-income households to offset higher energy costs. Remaining revenues will be used for an individual tax rebate. For those receiving an energy refund, the refund amount will be deducted from the tax credit.
MARKET CHOICE Act	The bill creates a trust and would allocate three-quarters of the revenue from the program to the trust for the following: 70% for the Federal Highway Trust Fund; 10% to states in the form of grants for low-income households; 4% for flooding mitigation and adaptation infrastructure projects; 3% for displaced energy workers; 2.5% for the Airport and Airway Trust Fund; 2.2% for carbon capture utilization and storage; 1.5% for weatherization programs; and 1.5% Abandoned Mine Reclamation Fund; and Remaining will be used for R&D and other purposes (e.g., Reforestation Trust Fund, support for carbon sequestration, and Leaking Underground Storage Trust Fund).

PROPOSAL	USE OF REVENUE
Carbon Reduction and Tax Credit Act	Revenues from the program will be used to provide a $1,000 tax credit (adjusted for inflation) for individuals and for each dependent. Tax credit phases out (adjusted for inflation) for those with an adjusted gross income exceeding $314,000.
America's Clean Future Fund Act	From fiscal year 2023 to 2032, revenues from the program will be used. 75% of the fund will be used to provide a quarterly dividend to individuals with a valid Social Security number or a taxpayer identification number and is a citizen or lawful resident in the United States. The dividend amount will be phased out based on adjusted gross income. Revenues could also be used to pay for agricultural, and land-based sequestration projects. 15% of the fund will be used for a Climate Change Finance Corporation to finance clean energy and climate resilience activities. 10% of the fund will be used for transition assistance for impacted communities. Initial funding for these programs will be appropriated (e.g., fiscal years 2021 and 2022) and will be paid back over 18 years once the carbon fee goes into effect.
Consumers REBATE Act	Revenues from the program will be used to establish a Carbon Trust Fund. The revenue will be used: The amount necessary to reduce individual income taxes by a specified amount. Of the remaining amount: 20% for worker transition assistance, rural energy assistance, energy-related R&D, air, rail, and marine transportation emission reduction and efficiency programs, electric grid and pipeline improvements, increase resilience of infrastructure, energy efficiency programs. 80% for quarterly dividend to individuals with a valid Social Security number who are legally residing in the United States.

PROPOSAL	TREATMENT OF FEDERAL GHG REGULATIONS
Energy Innovation and Carbon Dividend Act	This bill will establish a mortarium for most stationary source GHG regulations under the Clean Air Act upon enactment of this act. The moratorium is lifted if emission reduction targets are not met before April 2030 and every 5 years thereafter. If the moratorium is lifted, the EPA administrator shall issue federal GHG regulations deemed necessary to bring emissions from covered fuels to levels that are at or below the emission reduction targets.
Healthy Climate and Family Security Act	Starting four years after enactment of this act, the EPA Administrator is required to start issuing regulations under the Clean Air Act (and any other applicable law) for greenhouse gas emissions not covered by their proposed cap-and-trade program or those directly attributable to food production
American Opportunity Carbon Fee Act	Not specified.
Climate Action Rebate Act	Not specified.
SWAP Act	This bill will establish a mortarium for most stationary source GHG regulations under the Clean Air Act upon enactment of this act and is maintained for 12 years. The moratorium is lifted if emissions exceed the specified emissions levels for 2025 or 2029. This bill does not limit EPA's ability to regulate GHG emissions based on its non-GHG impacts on health or welfare.
Raise Wages, Cut Carbon Act	This bill will establish a mortarium for most stationary source GHG regulations under the Clean Air Act upon enactment of this act. The moratorium is lifted if emission reduction targets are not met before April 2030 and every 5 years thereafter. If the moratorium is lifted, the EPA administrator shall issue federal GHG regulations deemed necessary to bring emissions from covered fuels to levels that are at or below the emission reduction targets.
America Wins Act	Not specified.
MARKET CHOICE Act	This bill will establish a rolling mortarium for most stationary source GHG regulations under the Clean Air Act upon enactment of this act and is maintained for 12 years. The moratorium is lifted if emissions exceed the specified emissions levels for 2025 or 2029.
Carbon Reduction and Tax Credit Act	Not specified.
America's Clean Future Fund Act	Not specified.
Consumers REBATE Act	Not specified.

PROPOSAL	TREATMENT OF EXISTING STATE PROGRAMS
Energy Innovation and Carbon Dividend Act	Does not preempt or supersede state law or regulation.
Healthy Climate and Family Security Act	Does not preempt state and regional GHG programs.
American Opportunity Carbon Fee Act	Not specified.
Climate Action Rebate Act	Does not preempt or supersede state law or regulation.
SWAP Act	Starting in 2021, a covered entity will receive a credit for payment(s) on GHG emissions made under state programs. The amount of the credit will start at 100% of the amount paid under the state program, and then decline 20% annually. No credits will be provided beyond the fifth year.
Raise Wages, Cut Carbon Act	Not specified.
America Wins Act	Not specified.
MARKET CHOICE Act	Starting in 2021, a covered entity will receive a credit for payment(s) on GHG emissions made under state programs. The amount of the credit will start at 100% of the amount paid under the state program, and then decline 20% annually. No credits will be provided beyond the fifth year.
Carbon Reduction and Tax Credit Act	Not specified.
America's Clean Future Fund Act	Not specified.
Consumers REBATE Act	Not specified.

PROPOSAL	OTHER RELEVANT ITEMS
Energy Innovation and Carbon Dividend Act	Ten years after enactment of this act, the National Academies of Science is required to prepare a report to review the carbon fee program's impacts and efficacy in meeting the emission reduction targets, and to make recommendations to reduce emissions in economic sectors where carbon emissions have not decreased.
Healthy Climate and Family Security Act	N/A
American Opportunity Carbon Fee Act	Starting in 2022, directs Treasury to establish a program to collect data on methane leakage from fossil fuel sources, and directs Treasury Secretary to increase the fee assessed on covered fossil fuel products (i.e., coal, petroleum products, and natural gas).
Climate Action Rebate Act	N/A
SWAP Act	N/A
Raise Wages, Cut Carbon Act	N/A
America Wins Act	N/A
MARKET CHOICE Act	Extends the 45Q tax credit by 2 years. Would establish a bipartisan National Climate Commission to prepare a report to Congress with analysis and recommendations for reducing greenhouse gas emissions.
Carbon Reduction and Tax Credit Act	N/A
America's Clean Future Fund Act	Would require the National Academies of Science to conduct a study, every five years and make recommendations for meeting emission reduction goals.
Consumers REBATE Act	Every five years after enactment of this Act, the EPA Administrator shall issue a report on the effects of the carbon tax. The report shall include energy market conditions, impacts on consumers, impacts to the environment, emission reductions, and reliability and resilience of the grid.