Towards a Just and Equitable Clean Energy Future: the Benefits of Clean Energy Tax Incentives

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Executive Summary

As consumers struggle to keep up with record energy prices following Russia's invasion of Ukraine, it is essential that President Biden and Congress slow inflation and meaningfully address the climate crisis. To achieve this goal, the U.S. must significantly increase investment in renewable energy and American manufacturing of clean energy technology. While gas prices are a major driver of inflation — accounting for almost <u>one-third</u> of price increases since the pandemic began — clean energy sources such as wind and solar actually have a <u>deflationary</u> effect on the economy.

Passage of the \$555 billion package of clean energy tax incentives and related climate provisions under debate in Congress is one of the most effective steps that President Biden and Congress can take to invest in renewable energy and achieve energy independence. If passed, this package of tax incentives would constitute the largest-ever U.S. investment in climate action, including \$325 billion in clean energy tax incentives to supercharge the installation of renewable energy and increase its accessibility for low- and middle-income households. For example, a new investment tax credit for the build-out of regionally significant, high-voltage transmission lines is projected to add 30,000 megawatts of renewable energy capacity to the grid, providing \$2.3 billion in energy cost savings for the bottom 80% of income brackets.

The cost-savings associated with these tax incentives are significant. Together, they are predicted to lower the average family's energy bill by \$500 per year. Furthermore, these tax incentives would cut U.S. greenhouse gas emissions by more than one gigaton and help achieve President Biden's climate goals of 80% clean electricity by 2030, while delivering at least 40% of the investments to disadvantaged communities. Compared with a simple five-year extension of the existing tax code, the expansion and 10-year extension of these clean energy tax incentives are projected to result in 10-30 times greater emissions reductions.

Clean Energy Tax Incentives Save Money for Individuals and Families

The climate provisions currently under debate in Congress include a wide range of tax credits for individuals who purchase new or used electric vehicles (EVs), make

whole-home efficiency upgrades, or install residential solar systems. According to analysis by the Rhodium Group, energy efficiency and electrification rebates alone could save the average household up to \$500 a year in energy costs. Unlike some tax credits, these would be made refundable, meaning that low- and middle-income households that don't owe enough in federal income taxes would still receive the full value of the credit.

The creation of a new, two-tiered tax structure also ties these tax incentives to the use of American union labor. To unlock the "bonus rate," companies must meet prevailing wage requirements and "Made in America" domestic content standards. For example, under the Electric Vehicle Tax Credit (Section 30D), consumers who purchase new cars from manufacturers that use union labor are eligible for a "base rate" credit of \$4,000, plus an additional bonus credit for a total of up to \$12,500.

Without new legislation, the EV sector would remain reliant on existing policy: a \$7,500 maximum tax credit, which is reduced so it does not exceed the buyer's federal tax liability. The current buyer credit also <u>phases out</u> for each EV manufacturer once that brand hits a unit sales cap of 200,000 in the U.S. Two automakers, Tesla and General Motors, have already passed that cap and several others are nearing it.¹

Specifically, American households could benefit from the following clean energy tax incentives currently under debate in Congress.

Electric Vehicles:

- Save up to \$12,500 on the purchase of a new electric vehicle while supporting electric vehicle manufacturing at unionized U.S. factories.²
- Save up to \$4,000 on the purchase of a used electric vehicle, especially increasing affordability for low- and middle-income families.³
- The average family that purchases a new Chevy Bolt would <u>save</u> at least \$200 per month compared to a similarly equipped gasoline-burning car. These savings add up to \$16,500 over the course of an average 6-year car loan.

Residential Solar:

 Reduce the price of installing rooftop solar by an average of \$7,400, plus an additional \$2,500 for low- and middle-income homeowners.⁴

¹ Ford, Nissan, and Toyota are all projected to reach the 200,000 unit sales threshold in 2022 or 2023

² Section 136401 of the Build Back Better Act.

³ Section 136402 of the Build Back Better Act.

⁴ Section 136302 of the Build Back Better Act. Cost savings estimates are based on the current median cost of \$25,000 for the installation of a residential solar system.

• Reduce the costs of solar and wind installation by 30-50% for low-income communities, Indigenous communities, churches, schools, local governments, and nonprofits.⁵

Energy Efficiency:

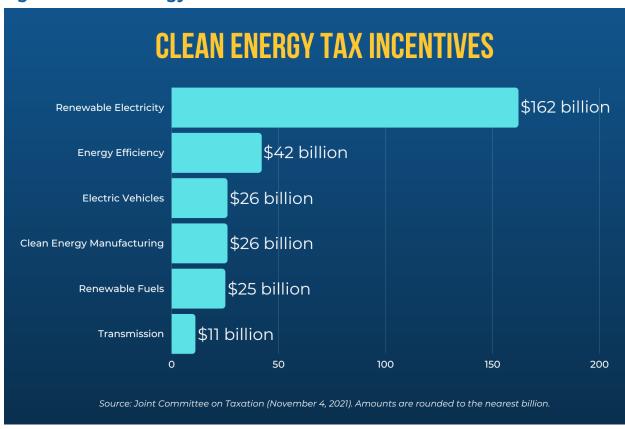
• Save homeowners up to \$8,000 for weatherizing or retrofitting their homes to be more energy efficient.⁶ These expanded rebates and tax credits apply to everyday household <u>appliances</u> like heat pumps, HVAC systems, water heaters, windows, and doors.

Bicycles:

 Reduce the price of an electric bike by up to \$900 and boost employee benefits for biking to work, reducing local air pollution and encouraging a healthier, more active lifestyle.⁷

In total, the clean energy tax incentives are estimated at a value of \$325 billion, as summarized in the graphic below. This represents the largest single federal investment in clean energy in history, and is a substantial piece of President Biden's goal of reducing America's net carbon emissions by 50% by 2035.





⁵ Sections 136803 and 136104 of the Build Back Better Act.

⁶ Sections 30411 and 30412 of the Build Back Better Act.

⁷ Sections 136406 and 136407 of the Build Back Better Act.

It is important to note, however, that the \$555 billion in clean energy tax incentives and related climate provisions will not be nearly as effective at addressing the climate crisis if they come at the cost of increased funding and subsidies for fossil fuels. Simply put, trading a decade of clean energy tax credits for the continued build out of fossil fuel infrastructure that will lock in another 40 years of greenhouse gas emissions is a short-sighted and unacceptable proposition.

Expanding Access to Clean Energy

While the clean energy tax incentives under debate in Congress would significantly increase the affordability of clean energy, other changes to the tax code would also dramatically expand equity in access. Specifically, the legislation would make many of the clean energy tax credits <u>refundable</u>, meaning that low- and middle-income households who don't owe enough in federal income taxes would still receive the full value of the credit. New federal solar tax credits also include a "<u>direct pay</u>" option so that groups without tax liability — such as schools, cities, nonprofit institutions, houses of worship, or tribes — are also able to take advantage of the credits in the form of a direct cash payment.

Under the existing tax code, clean energy tax credits are classified as "non-refundable," meaning the consumer must have enough tax liability to take advantage of the full credit. In some cases, like the installation of residential solar, any remaining credit rolls over to the following year, but in other cases, like the purchase of electric vehicles, taxpayers earning less than \$66,000 (or \$132,000 if filing jointly) are simply out of luck. They cannot claim the full value of the credit. In practice, this lack of refundability disproportionately favors the wealthy and limits the availability of clean energy tax incentives to low- and middle-income households. A 2021 working paper from the Rand Corporation found that it would take at least seven years for the bottom 50% of U.S. income earners to monetize the current solar tax credit.

The potential of refundability to expand access and supercharge the installation of renewable energy is already well documented. In 2009, Congress enacted a temporary provision in the American Recovery and Reinvestment Act whereby sponsors of commercial energy projects could choose to receive a 30% cash grant from the Department of the Treasury in lieu of the Production Tax Credit (PTC) or Investment Tax Credit (ITC).⁸ This effectively made the credits refundable. According to a report by the National Renewable Energy Laboratory, the program created up to 75,000 direct and indirect jobs over its operational period of 2009 to 2011. In total, adding refundability mechanisms to the clean energy tax code is projected to result in the installation of residential solar on an additional 5.5 million homes.

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⁸ Section 1603 of the American Recovery and Reinvestment Act.

Case Study: How West Virginia Families Benefit

According to the U.S. Census Bureau, the median family income in the state of West Virginia is \$46,711. The analysis below demonstrates that, in addition to a \$500 reduction in their annual energy bill, the average family in West Virginia could save up to \$55,913 over the next decade by maximizing these clean energy tax incentives. This includes purchasing a new EV car, installing residential rooftop solar, upgrading their air condition unit to a more energy efficient heat pump or HVAC system, and buying an electric bicycle to commute to work in a city like Morgantown or Charleston.

Electric vehicles (EVs) already <u>save owners money overall</u>, but their higher upfront cost is often a major barrier to adoption. Under the new package of clean energy tax incentives, individuals making less than \$250,000 who purchase a domestically manufactured, union-made electric vehicle such as the Chevrolet Bolt are eligible for a refundable EV tax credit of \$12,000.

Figure 2: West Virginia Household Tax Credit Savings

| Item Description | Cost | Applicable Tax Credit | Credit Amount | Additional Cost Savings (10 Years) |
|---|----------|--|------------------|---------------------------------------|
| Chevrolet Bolt LT | \$33,500 | Electric Vehicle Tax Credit | \$12,000 | \$13,872 |
| Residential Rooftop Solar Installation | \$25,000 | Clean Electricity Investment Tax Credit | \$7,400 | \$5,748 |
| New HVAC System | \$7,500 | Residential Energy Efficiency Tax Credit | \$2,250 | \$4,193 |
| Batch Commuter E-Bike | \$2,099 | E-Bicycle Credit | \$629 | \$9,720 |
| | | | Total Savings | \$55,913 |

In addition to these upfront savings, our <u>analysis</u> demonstrates that the EV tax credit would save West Virginians \$1,372 in interest payments over the length of a typical six-year new car loan. Switching to an EV car also dramatically <u>reduces</u> fuel and maintenance costs. According to analysis by <u>Consumer Reports</u>, switching to an EV car also reduces fuel costs by an average of \$800 per year and maintenance costs by \$450 per year. These additional car loan, fuel, and maintenance savings add up to

⁹ See Appendix B for all data and methodology used to calculate consumer savings associated with the clean energy tax incentives. Appendix C provides a comprehensive list of assumptions and data sources.

¹⁰ Additional EV savings assume a six-year car loan at a 4.7% interest rate, an average of 15,000 miles per year, and gas prices for West Virginia from AAA as of November 17, 2021.

more than \$13,800 over a ten year period. Including the EV tax credit (\$12,000), the total ten-year cost savings associated with the purchase of a new Chevrolet Bolt LT in West Virginia are \$25,872 greater than purchasing a similarly equipped internal combustion vehicle.¹¹

Consumers could also take advantage of the Clean Electricity Investment Tax Credit (25D) to save 30% on the purchase and installation of a residential solar photovoltaic system. Currently, the cost of an average 5 kilowatt sized <u>solar system</u> is \$25,000 — an upfront savings of \$7,500.

After installation, homeowners with solar systems will continue to save money on their utility bills. West Virginia averages 3.65 hours of peak sunlight per day, meaning that a 5kW solar system produces around 18.25 kilowatts per day or 547.5 kilowatts per month. Assuming average monthly consumption by West Virginia residential utility customers (1051 kWh), that translates to 52% of a West Virginia household's monthly usage. Assuming the average price of electricity in West Virginia (8.75 cents per kilowatt-hour), the average household would save \$574.88 annually on their energy bill and \$5,748 over ten years.

The average family in West Virginia could also take advantage of the Residential Energy Efficiency Tax Credit (25C) to save significant money both upfront and over the long term. For example, the average cost to install a new <u>HVAC system</u> is \$7,500, but individuals would be eligible for up to a 30% tax credit for energy efficiency upgrades — a savings of \$2,250.

Upgrading from an older furnace or air conditioning unit to a new HVAC system could also have a major impact on consumers' monthly utility costs. The maximum energy efficiency of air conditioners and heat pumps is measured using a Seasonal Energy Efficiency Ratio (SEER).¹³ Similar to a car's miles per gallon, a SEER rating measures how much electricity is required to run a unit at full capacity over a given period of time to calculate energy efficiency.

Upgrading a decade-old air conditioning unit with a 10 SEER rating to a new HVAC system with a 16 SEER rating could yield a 38% savings on energy costs per year. Again, assuming average monthly consumption by U.S. residential utility customers

¹¹ In addition to \$7.5 billion in funding in the Infrastructure Investment and Jobs Act (IIJA) to build a nationwide EV charging network, the Build Back Better Act includes \$1 billion for the Department of Energy's Zero-Emission Vehicle Infrastructure Grants (Section 30431). These discretionary grants fund EV charging located in rural or underserved/disadvantaged communities.

¹² Statistics including the average price of electricity in the state of West Virginia and average annual consumption for residential utility customers are sourced from the U.S. Energy Information Agency (EIA).

¹³ A Seasonal Energy Efficiency Ratio (SEER) is the ratio of the cooling output of an air conditioner over a typical cooling season, divided by the total electric energy input during the same time in Watt-Hours. It is also referred to as a Seasonal Energy Efficiency Rating.

(893 kWh) and the average price of electricity in West Virginia (8.75 cents per kilowatt-hour), that translates to \$419.35 in annual energy cost savings, or \$4193 over ten years.¹⁴

Finally, the individuals would also be eligible for a 30% tax credit for the purchase of an e-bike to reduce the number of car trips and local air pollution. The tax credit can be applied to the purchase of any new e-bike up to \$4,000 in cost. Taxpayers claim credit for one e-bike per taxable year — two for joint filers — and the credit begins phasing out at \$75,000 of modified adjusted gross income (\$112,500 for heads of household and \$150,000 for married filing jointly) at a rate of \$200 per \$1,000 of additional income. Additional commuter benefits mean commuters could also receive \$81 per month in pre-tax benefits for biking to work that can be used in harmony with parking and transit benefits. Over the course of a year, bike commuters could take advantage of a maximum of \$972 in pre-tax benefits.

Conclusion

The \$325 billion in clean energy tax incentives comprises the largest portion of climate-related spending currently under debate in Congress. Together, these tax credits — including those for clean electricity, energy efficiency, and transmission lines — are estimated to achieve 61-69% clean electricity by 2030 and create millions of good-paying union jobs in clean energy manufacturing. Moreover, the analysis above demonstrates that consumers would save significant money over a decade, both upfront on their utility bills and over the year as they use energy. In addition to a \$500 reduction in their annual energy bill, a median-income West Virginia family could save up to \$55,913 over the next decade by maximizing these clean energy tax incentives

CPC Center thanks Evergreen Action, Friends of the Earth, Greenpeace, and Sierra Club for their comments and insights.

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¹⁴ Statistics including the average price of electricity in the state of West Virginia and average annual consumption for residential utility customers are from the U.S. Energy Information Agency (EIA).

Appendix A: Clean Energy Tax Incentives

The following clean energy tax incentives under debate in Congress are most applicable to individual consumers and residential homeowners.

| Clean Energy Tax Incentives | Description |
|--|---|
| Residential Energy Efficient Property (25D) | Increases the tax credit for net-zero ready homes to 30% for the cost of qualified residential energy efficient property expenditures, including solar electric, solar water heating, fuel cell, small wind energy, batteries, and geothermal heat pumps. The credit phases down to 26% in 2032 and 22% in 2033. |
| Electric Vehicle Tax Credit (30D) | Expands the tax credit for the purchase of new plug-in electric drive motor vehicles. and replaces the existing plug-in EV tax credit (30D). The base amount is \$4,000. The amount increases to \$7,500 for vehicles with >40 kWh battery capacity placed in service before the end of 2026, or >50 kWh battery capacity and placed in service thereafter. The amount increases to \$12,000 if final assembly is performed in the US at a facility that operates under a union-negotiated collective bargaining agreement. The credit also includes up to \$2,000 for the purchase of qualifying used EVs, with an additional \$2,000 based on battery capacity. The credit is authorized until 2031. |
| Residential Energy Efficiency Tax Credit (25C) | Extends and increases consumer rebates for the purchase of energy efficient appliances like furnaces, HVAC systems, and water heaters. Consumers may claim a tax credit for energy efficiency improvements made to the building envelope (insulation, windows, doors) of their primary residence. The credit is valued at 30% through 2031. |
| Energy Efficient Home Credit (45L) | Extends the new energy efficient home tax credit through the end of 2031. |

Homeowners of single-family dwellings may claim a \$2,500 credit for homes that meet recent Energy Star Single-Family New Homes or Manufactured Home Program requirements. Homeowners may claim a \$5,000 credit for certified zero energy ready homes under DOE Zero Energy Ready Home Program.

Multi-family homes are eligible for a base credit of \$500 and bonus credit of \$2,500 per unit if prevailing wage and apprenticeship requirements. Eligible multi-family homes must meet Energy Star Multifamily New Construction Program requirements; \$1,000 base rate/\$5,000 bonus rate if zero energy ready.

Appendix B: Methodology and Calculations

Total Cost Savings: Clean Energy Tax Incentives

| | Total out of | aı | JUSI JAV | 9 | J. Dicali | -116 | igy iax ilice | , 1 1 C I V | 03 | | |
|----------------------|--------------------------------------|----|-----------------------|----|---------------------------|------|----------------------|-------------|------------|---------------------|---------|
| State | pocket cost/savings (10 years) | , | Total Cost Savings | | esidential oftop Solar | 2022 | Chevrolet Bolt LT | HV | AC Upgrade | Batch Commu Bike | ıter E- |
| Alabama | -\$9,466.75 | \$ | 58,632.25 | \$ | 14,992.18 | \$ | 25,903.41 | \$ | 7,387.66 | | 49.00 |
| Alaska | -\$2,982.62 | \$ | 65,116.38 | \$ | 21,734.72 | \$ | 25,793.72 | \$ | 7,238.93 | | 49.00 |
| Arizona | -\$4,457.92 | \$ | 63,641.08 | \$ | 19,846.34 | \$ | 25,892.38 | \$ | 7,553.35 | | 49.00 |
| Arkansas | -\$11,047.14 | \$ | 57,051.86 | \$ | 14,523.74 | \$ | 25,907.56 | \$ | 6,271.56 | | 49.00 |
| California | \$21.28 | \$ | 68,120.28 | \$ | 24,931.20 | \$ | 25,895.10 | \$ | 6,944.98 | | 49.00 |
| Colorado | -\$9,785.68 | \$ | 58,313.32 | \$ | 16,502.68 | \$ | 25,881.94 | \$ | 5,579.70 | | 49.00 |
| Connecticut | -\$2,711.29 | \$ | 65,387.71 | \$ | 20,722.66 | \$ | 25,863.80 | \$ | 8,452.25 | \$ 10,3 | 49.00 |
| Delaware | -\$10,490.34 | \$ | 57,608.66 | \$ | 15,296.74 | \$ | 25,361.01 | \$ | 6,601.92 | \$ 10,3 | 49.00 |
| District of Columbia | -\$9,648.58 | \$ | 58,450.42 | \$ | 15,146.94 | \$ | 25,858.70 | \$ | 7,095.78 | \$ 10,3 | 49.00 |
| Florida | -\$6,620.36 | \$ | 61,478.64 | \$ | 17,767.24 | \$ | 25,873.64 | \$ | 7,488.77 | \$ 10,3 | 49.00 |
| Georgia | -\$9,606.94 | \$ | 58,492.06 | \$ | 15,972.28 | \$ | 25,877.21 | \$ | 6,293.58 | \$ 10,3 | 49.00 |
| Hawaii | \$14,435.48 | \$ | 82,534.48 | \$ | 37,353.18 | \$ | 25,836.08 | \$ | 8,996.22 | \$ 10,3 | 49.00 |
| Idaho | -\$11,585.40 | \$ | 56,513.60 | \$ | 14,575.94 | \$ | 25,859.17 | \$ | 5,729.49 | \$ 10,3 | 49.00 |
| Illinois | -\$13,386.01 | \$ | 54,712.99 | \$ | 13,010.70 | \$ | 25,897.72 | \$ | 5,455.57 | \$ 10,3 | 49.00 |
| Indiana | -\$10,366.63 | \$ | 57,732.37 | \$ | 15,017.38 | \$ | 25,872.93 | \$ | 6,493.06 | \$ 10,3 | 49.00 |
| Iowa | -\$11,245.00 | \$ | 56,854.00 | \$ | 14,846.43 | \$ | 25,870.44 | \$ | 5,788.13 | \$ 10,3 | 49.00 |
| Kansas | -\$7,105.71 | \$ | 60,993.29 | \$ | 18,318.04 | \$ | 25,896.77 | \$ | 6,429.49 | \$ 10,3 | 49.00 |
| Kentucky | -\$10,313.87 | \$ | 57,785.13 | \$ | 15,129.34 | \$ | 25,858.70 | \$ | 6,448.09 | \$ 10,3 | 49.00 |
| Louisiana | -\$11,328.45 | \$ | 56,770.55 | \$ | 14,150.86 | \$ | 25,907.80 | \$ | 6,362.90 | \$ 10,3 | 49.00 |
| Maine | -\$7,637.32 | \$ | 60,461.68 | \$ | 18,491.77 | \$ | 25,851.59 | \$ | 5,769.32 | \$ 10,3 | 49.00 |
| Maryland | -\$8,304.24 | \$ | 59,794.76 | \$ | 16,471.29 | \$ | 25,858.70 | \$ | 7,115.77 | \$ 10,3 | 49.00 |
| Massachusetts | -\$4,966.76 | \$ | 63,132.24 | \$ | 20,072.93 | \$ | 25,466.94 | \$ | 7,243.37 | \$ 10,3 | 49.00 |
| Michigan | -\$9,586.29 | \$ | 58,512.71 | \$ | 16,291.20 | \$ | 25,858.70 | \$ | 6,013.81 | \$ 10,3 | 49.00 |
| Minnesota | -\$9,766.68 | \$ | 58,332.32 | \$ | 16,118.78 | \$ | 25,879.10 | \$ | 5,985.44 | \$ 10,3 | 49.00 |
| Mississippi | -\$10,058.19 | \$ | 58,040.81 | \$ | 14,796.70 | \$ | 25,874.00 | \$ | 7,021.12 | \$ 10,3 | 49.00 |
| Missouri | -\$9,384.52 | \$ | 58,714.48 | \$ | 15,707.50 | \$ | 25,889.06 | \$ | 6,768.92 | \$ 10,3 | 49.00 |
| Montana | -\$10,964.93 | \$ | 57,134.07 | \$ | 15,601.96 | \$ | 25,361.01 | \$ | 5,822.09 | \$ 10,3 | 49.00 |
| Nebraska | -\$10,251.77 | \$ | 57,847.23 | \$ | 15,233.93 | \$ | 25,870.80 | \$ | 6,393.49 | \$ 10,3 | 49.00 |
| Nevada | -\$8,803.63 | \$ | 59,295.37 | \$ | 17,111.15 | \$ | 25,889.29 | \$ | 5,945.92 | \$ 10,3 | 49.00 |
| New Hampshire | -\$4,061.95 | \$ | 64,037.05 | \$ | 21,299.57 | \$ | 25,361.01 | \$ | 7,027.47 | \$ 10,3 | 49.00 |
| New Jersey | -\$7,558.91 | \$ | 60,540.09 | \$ | 17,828.81 | \$ | 25,867.24 | \$ | 6,495.04 | \$ 10,3 | 49.00 |
| New Mexico | -\$7,895.29 | \$ | 60,203.71 | \$ | 18,869.54 | \$ | 25,884.67 | \$ | 5,100.50 | \$ 10,3 | 49.00 |
| New York | -\$7,879.42 | \$ | 60,219.58 | \$ | 17,644.31 | \$ | 25,894.27 | \$ | 6,331.99 | \$ 10,3 | 49.00 |
| North Carolina | -\$9,656.40 | \$ | 58,442.60 | \$ | 15,494.75 | \$ | 25,872.46 | \$ | 6,726.38 | \$ 10,3 | 49.00 |
| North Dakota | -\$10,216.54 | \$ | 57,882.46 | \$ | 15,192.35 | \$ | 25,870.80 | \$ | 6,470.30 | \$ 10,3 | 49.00 |
| Ohio | -\$11,315.07 | \$ | 56,783.93 | \$ | 14,551.68 | \$ | 25,875.30 | \$ | 6,007.95 | \$ 10,3 | 49.00 |
| Oklahoma | -\$10,671.71 | \$ | 57,427.29 | \$ | 15,177.31 | \$ | 25,900.32 | \$ | 6,000.66 | \$ 10,3 | 49.00 |
| Oregon | -\$12,556.88 | \$ | 55,542.12 | \$ | 13,898.03 | \$ | 25,361.01 | \$ | 5,934.08 | \$ 10,3 | 49.00 |
| Pennsylvania | -\$11,567.54 | \$ | 56,531.46 | \$ | 14,326.86 | \$ | 25,863.57 | \$ | 5,992.03 | \$ 10,3 | 49.00 |
| Rhode Island | -\$2,988.90 | \$ | 65,110.10 | \$ | 21,616.36 | \$ | 25,872.93 | \$ | 7,271.82 | \$ 10,3 | 49.00 |
| South Carolina | -\$8,223.91 | \$ | 59,875.09 | \$ | 16,516.92 | \$ | 25,879.10 | \$ | 7,130.07 | \$ 10,3 | 49.00 |
| South Dakota | -\$7,908.02 | \$ | 60,190.98 | \$ | 16,970.48 | \$ | 25,864.40 | \$ | 7,007.09 | \$ 10,3 | 49.00 |
| Tennessee | -\$9,395.98 | \$ | 58,703.02 | \$ | 15,125.52 | \$ | 25,908.07 | \$ | 7,320.43 | \$ 10,3 | 49.00 |
| Texas | -\$10,391.13 | \$ | 57,707.87 | \$ | 14,903.62 | \$ | 25,889.89 | \$ | 6,565.37 | \$ 10,3 | 49.00 |
| Utah | -\$11,397.87 | \$ | 56,701.13 | \$ | 15,330.04 | \$ | 25,872.10 | \$ | 5,149.99 | \$ 10,3 | 49.00 |
| Vermont | -\$5,776.81 | \$ | 62,322.19 | \$ | 19,639.72 | \$ | 25,861.31 | \$ | 6,472.15 | \$ 10,3 | 49.00 |
| Virginia | -\$10,762.95 | \$ | 57,336.05 | \$ | 14,309.54 | \$ | 25,853.73 | \$ | 6,823.77 | \$ 10,3 | 49.00 |
| Washington | -\$13,062.65 | \$ | 55,036.35 | \$ | 12,852.86 | \$ | 25,903.76 | \$ | 5,930.73 | \$ 10,3 | 49.00 |
| West Virginia | -\$12,185.19 | \$ | 55,913.81 | \$ | 13,248.75 | \$ | 25,872.57 | \$ | 6,443.49 | \$ 10,3 | 49.00 |
| Wisconsin | -\$10,369.90 | \$ | 57,729.10 | \$ | 15,855.20 | \$ | 25,850.76 | \$ | 5,674.14 | \$ 10,3 | 49.00 |
| Wyoming | -\$9,852.41 | \$ | 58,246.59 | \$ | 16,520.92 | \$ | 25,849.57 | \$ | 5,527.10 | \$ 10,3 | 49.00 |
| U.S. Average | -\$8,940.45 | \$ | 59,158.55 | \$ | 16,421.02 | \$ | 25,826.20 | \$ | 6,562.33 | \$ 10,3 | 49.00 |

| | EV Tax Credit (Section 30D) | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-----------------------------|--|----------------------------|-------|------------------------|--------------------------------------|----|-------------------------------|---------------------------------------|---|----------------|---|---|---|---|---------|----------------|---|--|-------|-------------------------------------|--|
| State | Chevro EV tax mainte | Savings on olet Bolt LT: credit, fuel, enance, and an (10 years) | 2022 Chevrolet Bolt LV | | ectric Vehicle Tax | : Average annual ICE fuel cost (car) | | rage ual BEV cost (car) | BEV average annual fuel savings | ICE Lifetime Per-Mile Repair and Maintenance Cost (150k miles) | IC Ma Co | CE Lifetime laintenance ost (150k iiles) | BEV Lifetime Per-Mile Repair and Maintenance Cost (150k miles) | BEV Lifetime Maintenance Cost (150k miles) | BEV Lifeti Maintenand Savings (1: miles) | e Combi | ined | Average car loan interest before EV tax credit | Average car loan interest after EV tax credit | lo | verage car an interest avings | Average costs savings over 10 years (maintenance, fuel, and car loan) |
| Alabama | \$ | 25,903.41 | \$ 33,500.0 | 00 \$ | 12,000.00 | \$ 1,420.00 | \$ | 620.00 | \$ 800.0 | 0 \$0.061 | \$ | 9,150.00 | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 9.14% | \$ 3,953.38 | \$ 2,549.9 | 97 \$ | 1,403.41 | \$ 13,903.41 |
| Alaska | \$ | | \$ 33,500.0 | 00 \$ | 12,000.00 | \$ 1,420.00 | \$ | 620.00 | \$ 800.0 | | 1 \$ | 9,150.00 | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 1.43% | \$ 3,647.20 | \$ 2,353.4 | 48 \$ | 1,293.72 | \$ 13,793.72 |
| Arizona | \$ | 25,892.38 | \$ 33,500.0 | 00 \$ | 12,000.00 | \$ 1,420.00 | \$ | 620.00 | \$ 800.0 | 0 \$0.061 | \$ | 9,150.00 | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 8.37% | \$ 3,922.78 | \$ 2,530.4 | 40 \$ | 1,392.38 | \$ 13,892.38 |
| Arkansas | \$ | | \$ 33,500.0 | | 12,000.00 | | | 620.00 | \$ 800.0 | | | ., | \$0.031 | \$ 4,650.00 | - | | 9.43% | \$ 3,965.00 | | | | \$ 13,907.56 |
| California | \$ | 25,895.10 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | ., | \$0.031 | | | | 8.56% | | | | | \$ 13,895.10 |
| Colorado | \$ | | \$ 33,500.0 | | 12,000.00 | | | 620.00 | \$ 800.0 | | | ., | \$0.031 | | | | 7.63% | | | _ | | \$ 13,881.94 |
| Connecticut | \$ | | \$ 33,500.0 | | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | | | | 6.35% | | | _ | | \$ 13,863.80 |
| Delaware | \$ | | \$ 33,500.0 | | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | | | | 0.00% | | | - | | \$ 13,361.01 |
| District of Colum | - | 25,858.70 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | | - | | 6.00% | | | | | \$ 13,858.70 |
| Florida | \$ | | \$ 33,500.0 | | 12,000.00 | | | 620.00 | \$ 800.0 | | | ., | \$0.031 | | | | 7.05% | | | | | \$ 13,873.64 |
| Georgia Hawaii | \$ | 25,877.21 25,836.08 | \$ 33,500.0 \$ 33,500.0 | | 12,000.00 12,000.00 | | | 620.00 620.00 | \$ 800.00 \$ 800.00 | | | ., | \$0.031 \$0.031 | | | | 7.29% 4.41% | | | - | ., | \$ 13,877.21 \$ 13.836.08 |
| Idaho | \$ | 25,859.17 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | | \$ 4,500 | | 6.03% | | | | | \$ 13,859.17 |
| Illinois | \$ | 25,897.72 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | ., | | | 8.74% | , | | _ | ., | \$ 13,897.72 |
| Indiana | S | 25,872.93 | | - | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | \$ 4,650.00 | | | 7.00% | | | _ | | \$ 13,872.93 |
| lowa | \$ | | \$ 33,500.0 | | 12,000.00 | | | 620.00 | \$ 800.0 | | | -, | \$0.031 | \$ 4,650.00 | | | 6.82% | \$ 3,861.24 | | _ | ., | \$ 13,870.44 |
| Kansas | s | 25,896.77 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | | | | 8.67% | | | - | | \$ 13,896.77 |
| Kentucky | \$ | 25,858.70 | | | 12,000.00 | | | 620.00 | \$ 800.0 | 0 \$0.061 | | | \$0.031 | \$ 4,650.00 | . , | | 6.00% | \$ 3,828.63 | | | 1,358.70 | \$ 13,858.70 |
| Louisiana | s | 25,907.80 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | ., | \$0.031 | \$ 4.650.00 | | | 9.45% | | | _ | | \$ 13,907.80 |
| Maine | \$ | 25,851.59 | | | 12,000.00 | | s | 620.00 | \$ 800.0 | 0 \$0.061 | 1 \$ | | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 5.50% | \$ 3,808.83 | \$ 2,457.3 | 24 \$ | 1,351.59 | \$ 13,851.59 |
| Maryland | \$ | 25,858.70 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | \$ 4,650.00 | \$ 4,500 | | 6.00% | | | _ | | \$ 13,858.70 |
| Massachusetts | \$ | 25,466.94 | \$ 33,500.0 | 00 \$ | 12,000.00 | \$ 1,420.00 | \$ | 620.00 | \$ 800.0 | 0 \$0.061 | 1 \$ | 9,150.00 | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 6.25% | \$ 3,838.59 | 9 \$ 2,871.0 | 65 \$ | 966.94 | \$ 13,466.94 |
| Michigan | \$ | 25,858.70 | \$ 33,500.0 | 00 \$ | 12,000.00 | \$ 1,420.00 | \$ | 620.00 | \$ 800.0 | 0 \$0.061 | 1 \$ | 9,150.00 | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 6.00% | \$ 3,828.63 | \$ 2,469.5 | 93 \$ | 1,358.70 | \$ 13,858.70 |
| Minnesota | \$ | 25,879.10 | \$ 33,500.0 | 00 \$ | 12,000.00 | \$ 1,420.00 | \$ | 620.00 | \$ 800.0 | 0 \$0.061 | 1 \$ | 9,150.00 | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 7.43% | \$ 3,885.55 | \$ 2,506.4 | 45 \$ | 1,379.10 | \$ 13,879.10 |
| Mississippi | \$ | 25,874.00 | \$ 33,500.0 | 00 \$ | 12,000.00 | \$ 1,420.00 | \$ | 620.00 | \$ 800.0 | 0 \$0.061 | 1 \$ | 9,150.00 | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 7.07% | \$ 3,871.20 | \$ 2,497.2 | 20 \$ | 1,374.00 | \$ 13,874.00 |
| Missouri | \$ | 25,889.06 | \$ 33,500.0 | 00 \$ | 12,000.00 | \$ 1,420.00 | \$ | 620.00 | \$ 800.0 | 0 \$0.061 | \$ | 9,150.00 | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 8.13% | \$ 3,913.30 | \$ 2,524.2 | 24 \$ | 1,389.06 | \$ 13,889.06 |
| Montana | \$ | 25,361.01 | \$ 33,500.0 | 00 \$ | 12,000.00 | \$ 1,420.00 | \$ | 620.00 | \$ 800.0 | 0 \$0.061 | \$ | 9,150.00 | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 0.00% | \$ 3,177.97 | \$ 2,316.9 | 96 \$ | 861.01 | \$ 13,361.01 |
| Nebraska | \$ | 25,870.80 | \$ 33,500.0 | 00 \$ | 12,000.00 | \$ 1,420.00 | \$ | 620.00 | \$ 800.0 | 0 \$0.061 | \$ | 9,150.00 | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 6.85% | \$ 3,862.43 | \$ 2,491.6 | 63 \$ | 1,370.80 | \$ 13,870.80 |
| Nevada | \$ | 25,889.29 | \$ 33,500.0 | 00 \$ | 12,000.00 | \$ 1,420.00 | \$ | 620.00 | \$ 800.0 | 0 \$0.061 | 1 \$ | 9,150.00 | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 8.14% | \$ 3,913.76 | \$ 2,524.4 | 47 \$ | 1,389.29 | \$ 13,889.29 |
| New Hampshire | \$ | 25,361.01 | \$ 33,500.0 | 00 \$ | 12,000.00 | \$ 1,420.00 | \$ | 620.00 | \$ 800.0 | 0 \$0.061 | 1 \$ | 9,150.00 | \$0.031 | \$ 4,650.00 | \$ 4,500 | .00 | 0.00% | \$ 3,177.97 | \$ 2,316.9 | 96 \$ | 861.01 | \$ 13,361.01 |
| New Jersey | \$ | 25,867.24 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | 9,150.00 | \$0.031 | | | | 6.60% | \$ 3,852.46 | | _ | 1,367.24 | \$ 13,867.24 |
| New Mexico | \$ | 25,884.67 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | -, | \$0.031 | | . , | | 7.82% | , | , | | ., | \$ 13,884.67 |
| New York | \$ | 25,894.27 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | | | | 8.49% | | | _ | ., | \$ 13,894.27 |
| North Carolina | \$ | 25,872.46 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | -, | \$0.031 | | | | 6.97% | , | | _ | ., | \$ 13,872.46 |
| North Dakota | \$ | ,_, | \$ 33,500.0 | - | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | \$ 4,650.00 | | | 6.85% | , | -, | _ | ., | \$ 13,870.80 |
| Ohio | \$ | 25,875.30 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | -, | \$0.031 | | . , | | 7.17% | , | . , | - | ., | \$ 13,875.30 |
| Oklahoma | \$ | 25,900.32 | | - | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | ., | | | 8.92% | , | , | | ., | \$ 13,900.32 |
| Oregon | \$ | 25,361.01 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | -, | \$0.031 | | | | 0.00% | , | | | 001.01 | \$ 13,361.01 |
| Pennsylvania | - | 25,863.57 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | \$ 4,650.00 | | | 6.34% | | | - | ., | \$ 13,863.57 |
| Rhode Island | \$ | 25,872.93 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | -, | \$0.031 | ., | | | 7.00% | * -, | , | - | 1,072.00 | \$ 13,872.93 |
| South Carolina South Dakota | \$ | | \$ 33,500.0 | | 12,000.00 | | | 620.00 620.00 | \$ 800.00 \$ 800.00 | | | | \$0.031 | | | | 7.43% 6.40% | | | _ | | \$ 13,879.10 \$ 13,864.40 |
| Tennessee | \$ | 25,864.40 25,908.07 | \$ 33,500.0 \$ 33,500.0 | - | 12,000.00 | | | 620.00 | \$ 800.0 | | | -, | \$0.031 \$0.031 | | - | | 9.47% | | . , | _ | ., | \$ 13,864.40 \$ 13,908.07 |
| Texas | \$ | 25,889.89 | | | 12,000.00 12,000.00 | | | 620.00 | \$ 800.0 | | | ., | \$0.031 | | | | 9.47% 8.19% | | | _ | | \$ 13,908.07 |
| Utah | \$ | | \$ 33,500.0 | | 12,000.00 | | | 620.00 | \$ 800.0 | | | -, | \$0.031 | | . , | | 6.94% | | | | | \$ 13,872.10 |
| Vermont | \$ | 25,861.31 | | _ | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | | | | 6.18% | | | | | \$ 13,861.31 |
| Virginia | \$ | | \$ 33,500.0 | | 12,000.00 | | | 620.00 | \$ 800.0 | | | ., | \$0.031 | | | | 5.65% | | | | ., | \$ 13,853.73 |
| Washington | \$ | 25,903.76 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | | | | 9 17% | | | _ | | \$ 13,903.76 |
| West Virginia | \$ | | \$ 33,500.0 | | 12,000.00 | | | 620.00 | \$ 800.0 | | | ., | \$0.031 | | | | 6.39% | , | | | ., | \$ 13,872.57 |
| Wisconsin | s | 25,850.76 | | | 12,000.00 | | | 620.00 | \$ 800.0 | | | | \$0.031 | | | | 5.44% | | | _ | | \$ 13,850.76 |
| Wyomina | s | | \$ 33,500.0 | | 12,000.00 | | | 620.00 | \$ 800.0 | | | ., | \$0.031 | \$ 4,650.00 | - | | 5.36% | \$ 3,803.25 | | | 1,349.57 | \$ 13,849.57 |
| U.S. Average | \$ | 25,826.20 | | | 12,000.00 | | | 620.00 | | | | | \$0.031 | | | | 6.52% | | | _ | | |

| | | | | | | Residential | Solar (Secti | on 48 ITC) | | | | | | |
|---------------------------|--------------------------------|---|---|-------|--|----------------------------------|--------------|--|---|---|--|---|----------------|---|
| State | Reside Installa Addition | Savings: ential Solar ation and onal Cost gs (10 years) | Average Price of 5kW Residential Solar System | In | lean Energy vestment Tax redit (Section 48 C) | Average retail price (cents/kWh) | · | Average daily production (5kW solar system) | Average monthly production (5kW solar system) | Average monthly consumption by U.S. residential utility customers (kWh) | Percentage of average household's monthly usage | Average annual household energy savings | ho en sa | verage usehold lergy vings (10 ars) |
| Alabama | \$ | 14,992.18 | \$ 25,000 | 00 \$ | 7,500.00 | 9.84 | 4.23 | 21.15 | 634.5 | 1145 | | \$ 749.22 | 2 \$ | 7,492.18 |
| Alaska | \$ | 21,734.72 | \$ 25,000 | 00 \$ | 7,500.00 | 19.82 | 3.99 | 19.95 | 598.5 | 552 | 108.42% | \$ 1,423.47 | \$ | 14,234.72 |
| Arizona | \$ | 19,846.34 | \$ 25,000 | 00 \$ | 7,500.00 | 10.44 | 6.57 | 32.85 | 985.5 | 1114 | 88.46% | \$ 1,234.63 | \$ | 12,346.34 |
| Arkansas | \$ | 14,523.74 | \$ 25,000 | 00 \$ | 7,500.00 | 8.32 | 4.69 | 23.45 | 703.5 | 1060 | 66.37% | \$ 702.37 | \$ | 7,023.74 |
| California | \$ | 24,931.20 | \$ 25,000 | 00 \$ | 7,500.00 | 18.00 | 5.38 | 26.9 | 807 | 572 | 141.08% | \$ 1,743.12 | 2 \$ | 17,431.20 |
| Colorado | \$ | 16,502.68 | \$ 25,000 | | | 10.27 | 4.87 | | | | | | | 9,002.68 |
| Connecticut | \$ | 20,722.66 | \$ 25,000 | | 7,500.00 | 19.13 | | | | | | \$ 1,322.27 | \$ | 13,222.66 |
| Delaware | \$ | 15,296.74 | \$ 25,000 | | | 10.24 | 4.23 | | | 932 | | | | 7,796.74 |
| District of Colun | | 15,146.94 | \$ 25,000 | | | 11.90 | | 17.85 | | | | | | 7,646.94 |
| Florida | \$ | 17,767.24 | \$ 25,000 | | | 10.06 | | | | 1142 | | | | 10,267.24 |
| Georgia | \$ | 15,972.28 | \$ 25,000 | | | 9.93 | | | 711 | 893 | | | | 8,472.28 |
| Hawaii | \$ | | \$ 25,000 | | | 27.55 | | | 903 | 537 | | | | 29,853.18 |
| Idaho | \$ | 14,575.94 | \$ 25,000 | | | 7.99 | | | | | | | | 7,075.94 5.510.70 |
| Illinois | \$ | | \$ 25,000 | | | 9.75 | | | 471 | 721 | | | | |
| Indiana | \$ | 15,017.38 | \$ 25,000 | | | 9.92 | | 21.05 | | | | | | 7,517.38 |
| lowa | \$ | 14,846.43 | \$ 25,000 | | | 8.97 | 4.55 | | | | | | | 7,346.43 |
| Kansas | \$ | 18,318.04 | \$ 25,000 | | | 10.38 | | | | | | | | 10,818.04 7.629.34 |
| Kentucky | \$ | 15,129.34 | \$ 25,000 | | | 8.58 | 4.94 4.92 | | 741 738 | 1073 | | | | |
| Louisiana | \$ | 14,150.86 18,491.77 | \$ 25,000 \$ 25,000 | | | 7.51 | 4.92 | 24.6 22.55 | | | | | | 6,650.86 10,991.77 |
| Maine | | | | | | 13.54 | | | | | | | | 8,971.29 |
| Maryland Massachusetts | \$ | 16,471.29 20,072.93 | \$ 25,000 \$ 25,000 | | | 11.15 18.19 | | | | 602 | | - | | 12,572.93 |
| Michigan | \$ | 16,291.20 | \$ 25,000 | | | 12.21 | 4.00 | | | | | | | 8.791.20 |
| Minnesota | \$ | 16,118.78 | \$ 25,000 | | | 10.57 | 4.53 | | | | | - | | 8,618.78 |
| Mississippi | \$ | 14,796.70 | \$ 25,000 | | | 9.13 | | | | 1146 | | | | 7,296.70 |
| Missouri | \$ | 15,707.50 | \$ 25,000 | | | 9.64 | | | | | | | | 8,207.50 |
| Montana | \$ | 15,601.96 | \$ 25,000 | | | 9.13 | | | | | | | | 8,101.96 |
| Nebraska | \$ | 15,233.93 | \$ 25,000 | | | 8.97 | 4.79 | | | | | | | 7,733.93 |
| Nevada | \$ | 17,111.15 | \$ 25,000 | | | 8.33 | | 32.05 | | | | | | 9,611.15 |
| New Hampshire | | 21,299.57 | \$ 25,000 | | | 16.63 | | 23.05 | 691.5 | | | | | 13,799.57 |
| New Jersey | \$ | 17,828.81 | \$ 25,000 | | | 13.63 | | 21.05 | | | | \$ 1,032.88 | | 10,328.81 |
| New Mexico | \$ | 18,869.54 | \$ 25,000 | | | 9.33 | | | 1015.5 | | | | | 11,369.54 |
| New York | \$ | 17,644.31 | \$ 25,000 | | | 14.87 | 3.79 | | | | | | | 10,144.31 |
| North Carolina | \$ | 15,494.75 | \$ 25,000 | 00 \$ | 7,500.00 | 9.43 | 4.71 | 23.55 | 706.5 | 1041 | 67.87% | \$ 799.48 | 3 \$ | 7,994.75 |
| North Dakota | \$ | 15,192.35 | \$ 25,000 | | | 8.53 | | 25.05 | | | | | | 7,692.35 |
| Ohio | \$ | 14,551.68 | \$ 25,000 | | | 9.44 | 4.15 | | | 873 | | | \$ | 7,051.68 |
| Oklahoma | \$ | 15,177.31 | \$ 25,000 | 00 \$ | 7,500.00 | 7.63 | 5.59 | 27.95 | 838.5 | 1078 | 77.78% | \$ 767.73 | \$ | 7,677.31 |
| Oregon | \$ | 13,898.03 | \$ 25,000 | 00 \$ | 7,500.00 | 8.82 | 4.03 | 20.15 | 604.5 | 916 | 65.99% | \$ 639.80 | \$ | 6,398.03 |
| Pennsylvania | \$ | 14,326.86 | \$ 25,000 | 00 \$ | 7,500.00 | 9.70 | 3.91 | 19.55 | 586.5 | 846 | 69.33% | \$ 682.69 | \$ | 6,826.86 |
| Rhode Island | \$ | 21,616.36 | \$ 25,000 | 00 \$ | 7,500.00 | 18.54 | 4.23 | 21.15 | 634.5 | 594 | 106.82% | \$ 1,411.64 | \$ | 14,116.36 |
| South Carolina | \$ | 16,516.92 | \$ 25,000 | 00 \$ | 7,500.00 | 9.90 | 5.06 | 25.3 | 759 | 1081 | 70.21% | \$ 901.69 | \$ | 9,016.92 |
| South Dakota | \$ | 16,970.48 | \$ 25,000 | 00 \$ | 7,500.00 | 10.06 | 5.23 | 26.15 | 784.5 | 1037 | 75.65% | \$ 947.05 | 5 \$ | 9,470.48 |
| Tennessee | \$ | 15,125.52 | | | | 9.52 | 4.45 | 22.25 | 667.5 | 1168 | 57.15% | | | 7,625.52 |
| Texas | \$ | 14,903.62 | | | | 8.36 | 4.92 | 24.6 | 738 | 1132 | 65.19% | \$ 740.36 | \$ | 7,403.62 |
| Utah | \$ | 15,330.04 | | 00 \$ | | 8.27 | | 26.3 | 789 | 769 | | | | |
| Vermont | \$ | 19,639.72 | \$ 25,000 | 00 \$ | 7,500.00 | 16.33 | 4.13 | 20.65 | 619.5 | 567 | 109.26% | \$ 1,213.97 | \$ | |
| Virginia | \$ | 14,309.54 | | 00 \$ | 7,500.00 | 9.16 | 4.13 | 20.65 | 619.5 | 1095 | 56.58% | \$ 680.95 | 5 \$ | 6,809.54 |
| Washington | \$ | | \$ 25,000 | | | 8.33 | 3.57 | 17.85 | 535.5 | 969 | | | | 5,352.86 |
| West Virginia | \$ | 13,248.75 | | | | 8.75 | | | | | | | | 5,748.75 |
| Wisconsin | \$ | 15,855.20 | | | | 10.82 | | | | | | | | 8,355.20 |
| Wyoming | \$ | 16,520.92 | | | | 8.27 | | | | | | | | 9,020.92 |
| U.S. Average | \$ | 16,421.02 | \$ 25,000 | 00 \$ | 7,500.00 | 10.59 | 4.68 | 23.4 | 702 | 893 | 78.61% | \$ 892.10 | \$ | 8,921.02 |

| | | | HVAC Upgra | ide (Section 250 |) | | | |
|-------------------|---|---|--|----------------------------------|--|--|---|---|
| State | Total Savings: Upgrading from 10 to 16 SEER HVAC system and additional cost savings (10 years) | Average price of 16 SEER HVAC System | Residential Energy Efficiency Tax Credit (Section 25D) | Average retail price (cents/kWh) | Average energy savings (switching from 10 SEER to 16 SEER HVAC system) | Average monthly consumption by U.S. residential utility customers (kWh) | Average annual household energy savings | Average household energy savings (10 years) |
| Alabama | \$ 7,387.66 | \$ 7,500.00 | \$ 2,250.00 | 9.84 | 38% | 1145 | | \$ 5,137.66 |
| Alaska | \$ 7,238.93 | \$ 7,500.00 | \$ 2,250.00 | 19.82 | 38% | 552 | \$ 498.89 | \$ 4,988.93 |
| Arizona | \$ 7,553.35 | \$ 7,500.00 | \$ 2,250.00 | 10.44 | 38% | 1114 | \$ 530.34 | \$ 5,303.35 |
| Arkansas | \$ 6,271.56 | \$ 7,500.00 | \$ 2,250.00 | 8.32 | 38% | 1060 | \$ 402.16 | \$ 4,021.56 |
| California | \$ 6,944.98 | \$ 7,500.00 | \$ 2,250.00 | 18 | 38% | 572 | \$ 469.50 | \$ 4,694.98 |
| Colorado | \$ 5,579.70 | \$ 7,500.00 | \$ 2,250.00 | 10.27 | 38% | 711 | \$ 332.97 | \$ 3,329.70 |
| Connecticut | \$ 8,452.25 | \$ 7,500.00 | \$ 2,250.00 | 19.13 | 38% | 711 | \$ 620.23 | \$ 6,202.25 |
| Delaware | \$ 6,601.92 | \$ 7,500.00 | \$ 2,250.00 | 10.24 | 38% | 932 | \$ 435.19 | \$ 4,351.92 |
| District of Colum | \$ 7,095.78 | \$ 7,500.00 | \$ 2,250.00 | 11.9 | 38% | 893 | \$ 484.58 | \$ 4,845.78 |
| Florida | \$ 7,488.77 | \$ 7,500.00 | \$ 2,250.00 | 10.06 | 38% | 1142 | \$ 523.88 | \$ 5,238.77 |
| Georgia | \$ 6,293.58 | \$ 7,500.00 | \$ 2,250.00 | 9.93 | 38% | 893 | \$ 404.36 | \$ 4,043.58 |
| Hawaii | \$ 8,996.22 | \$ 7,500.00 | \$ 2,250.00 | 27.55 | 38% | 537 | \$ 674.62 | \$ 6,746.22 |
| Idaho | \$ 5,729.49 | \$ 7,500.00 | \$ 2,250.00 | 7.99 | 38% | 955 | \$ 347.95 | \$ 3,479.49 |
| Illinois | \$ 5,455.57 | \$ 7,500.00 | \$ 2,250.00 | 9.75 | 38% | 721 | \$ 320.56 | \$ 3,205.57 |
| Indiana | \$ 6,493.06 | \$ 7,500.00 | \$ 2,250.00 | 9.92 | 38% | 938 | \$ 424.31 | \$ 4,243.06 |
| Iowa | \$ 5,788.13 | \$ 7,500.00 | \$ 2,250.00 | 8.97 | 38% | 865 | \$ 353.81 | \$ 3,538.13 |
| Kansas | \$ 6,429.49 | \$ 7,500.00 | \$ 2,250.00 | 10.38 | 38% | 883 | \$ 417.95 | \$ 4,179.49 |
| Kentucky | \$ 6,448.09 | \$ 7,500.00 | \$ 2,250.00 | 8.58 | 38% | 1073 | \$ 419.81 | \$ 4,198.09 |
| Louisiana | \$ 6,362.90 | \$ 7,500.00 | \$ 2,250.00 | 7.51 | 38% | 1201 | \$ 411.29 | \$ 4,112.90 |
| Maine | \$ 5,769.32 | \$ 7,500.00 | \$ 2,250.00 | 13.54 | 38% | 570 | \$ 351.93 | \$ 3,519.32 |
| Maryland | \$ 7,115.77 | \$ 7,500.00 | \$ 2,250.00 | 11.15 | 38% | 957 | \$ 486.58 | \$ 4,865.77 |
| Massachusetts | \$ 7,243.37 | \$ 7,500.00 | \$ 2,250.00 | 18.19 | 38% | 602 | \$ 499.34 | \$ 4,993.37 |
| Michigan | \$ 6,013.81 | \$ 7,500.00 | \$ 2,250.00 | 12.21 | 38% | 676 | \$ 376.38 | \$ 3,763.81 |
| Minnesota | \$ 5,985.44 | \$ 7,500.00 | \$ 2,250.00 | 10.57 | 38% | 775 | \$ 373.54 | \$ 3,735.44 |
| Mississippi | \$ 7,021.12 | \$ 7,500.00 | \$ 2,250.00 | 9.13 | 38% | 1146 | \$ 477.11 | \$ 4,771.12 |
| Missouri | \$ 6,768.92 | \$ 7,500.00 | \$ 2,250.00 | 9.64 | 38% | 1028 | \$ 451.89 | \$ 4,518.92 |
| Montana | \$ 5,822.09 | \$ 7,500.00 | \$ 2,250.00 | 9.13 | 38% | 858 | \$ 357.21 | \$ 3,572.09 |
| Nebraska | \$ 6,393.49 | \$ 7,500.00 | \$ 2,250.00 | 8.97 | 38% | 1013 | \$ 414.35 | \$ 4,143.49 |
| Nevada | \$ 5,945.92 | \$ 7,500.00 | \$ 2,250.00 | 8.33 | 38% | 973 | \$ 369.59 | \$ 3,695.92 |
| New Hampshire | \$ 7,027.47 | \$ 7,500.00 | \$ 2,250.00 | 16.63 | 38% | 630 | \$ 477.75 | \$ 4,777.47 |
| New Jersey | \$ 6,495.04 | \$ 7,500.00 | \$ 2,250.00 | 13.63 | 38% | 683 | \$ 424.50 | \$ 4,245.04 |
| New Mexico | \$ 5,100.50 | \$ 7,500.00 | \$ 2,250.00 | 9.33 | 38% | 670 | \$ 285.05 | \$ 2,850.50 |
| New York | \$ 6,331.99 | \$ 7,500.00 | \$ 2,250.00 | 14.87 | 38% | 602 | \$ 408.20 | \$ 4,081.99 |
| North Carolina | \$ 6,726.38 | \$ 7,500.00 | \$ 2,250.00 | 9.43 | 38% | 1041 | \$ 447.64 | \$ 4,476.38 |
| North Dakota | \$ 6,470.30 | \$ 7,500.00 | \$ 2,250.00 | 8.53 | 38% | 1085 | \$ 422.03 | \$ 4,220.30 |
| Ohio | \$ 6,007.95 | \$ 7,500.00 | \$ 2,250.00 | 9.44 | 38% | 873 | \$ 375.80 | \$ 3,757.95 |
| Oklahoma | \$ 6,000.66 | \$ 7,500.00 | \$ 2,250.00 | 7.63 | 38% | 1078 | \$ 375.07 | \$ 3,750.66 |
| Oregon | \$ 5,934.08 | \$ 7,500.00 | \$ 2,250.00 | 8.82 | 38% | 916 | \$ 368.41 | \$ 3,684.08 |
| Pennsylvania | \$ 5,992.03 | \$ 7,500.00 | \$ 2,250.00 | 9.7 | 38% | 846 | \$ 374.20 | \$ 3,742.03 |
| Rhode Island | \$ 7,271.82 | \$ 7,500.00 | \$ 2,250.00 | 18.54 | 38% | 594 | \$ 502.18 | \$ 5,021.82 |
| South Carolina | \$ 7,130.07 | \$ 7,500.00 | \$ 2,250.00 | 9.9 | 38% | 1081 | \$ 488.01 | \$ 4,880.07 |
| South Dakota | \$ 7,007.09 | \$ 7,500.00 | \$ 2,250.00 | 10.06 | 38% | 1037 | \$ 475.71 | \$ 4,757.09 |
| Tennessee | \$ 7,320.43 | \$ 7,500.00 | \$ 2,250.00 | 9.52 | 38% | 1168 | \$ 507.04 | \$ 5,070.43 |
| Texas | \$ 6,565.37 | \$ 7,500.00 | \$ 2,250.00 | 8.36 | 38% | 1132 | \$ 431.54 | \$ 4,315.37 |
| Utah | \$ 5,149.99 | \$ 7,500.00 | \$ 2,250.00 | 8.27 | 38% | 769 | \$ 290.00 | \$ 2,899.99 |
| Vermont | \$ 6,472.15 | \$ 7,500.00 | \$ 2,250.00 | 16.33 | 38% | 567 | \$ 422.22 | \$ 4,222.15 |
| Virginia | \$ 6,823.77 | \$ 7,500.00 | \$ 2,250.00 | 9.16 | 38% | 1095 | \$ 457.38 | \$ 4,573.77 |
| Washington | \$ 5,930.73 | \$ 7,500.00 | \$ 2,250.00 | 8.33 | | 969 | \$ 368.07 | \$ 3,680.73 |
| West Virginia | \$ 6,443.49 | \$ 7,500.00 | \$ 2,250.00 | 8.75 | 38% | 1051 | \$ 419.35 | \$ 4,193.49 |
| Wisconsin | \$ 5,674.14 | \$ 7,500.00 | \$ 2,250.00 | 10.82 | | 694 | \$ 342.41 | \$ 3,424.14 |
| Wyoming | \$ 5,527.10 | \$ 7,500.00 | \$ 2,250.00 | 8.27 | | | | \$ 3,277.10 |
| U.S. Average | \$ 6,562.33 | \$ 7,500.00 | \$ 2,250.00 | 10.59 | 38% | 893 | \$ 431.23 | \$ 4,312.33 |

| State | Purcha Comm and ad | Savings: ase of Batch uter E-Bike Iditional cost s (10 years) | | of 2022 Batch uter E-Bike | E-Bicycle T Credit | āx | commuter (monthly) | Pre-fi common bene (annu | nuter fit | Pre-tax commuter benefit (10 years) | | |
|-------------------|--------------------------|---|-------------|------------------------------|-----------------------|--------|-----------------------|-----------------------------------|--------------|--|----------|--|
| Alabama | \$ | 10,349.00 | \$ 2,099.00 | | \$ 629.00 | | \$ 81.00 | \$ 972.00 | | \$ | 9,720.00 | |
| Alaska | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.00 | |
| Arizona | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.00 | |
| Arkansas | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| California | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Colorado | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Connecticut | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Delaware | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| District of Colum | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Florida | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Georgia | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Hawaii | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Idaho | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Illinois | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Indiana | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Iowa | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Kansas | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Kentucky | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Louisiana | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Maine | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Maryland | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Massachusetts | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Michigan | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Minnesota | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Mississippi | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Missouri | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Montana | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Nebraska | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | | \$ | | |
| Nevada | | · · · · · · · · · · · · · · · · · · · | - | , | | | | | 972.00 | | 9,720.0 | |
| | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| New Hampshire | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| New Jersey | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| New Mexico | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| New York | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| North Carolina | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| North Dakota | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Ohio | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Oklahoma | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Oregon | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Pennsylvania | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Rhode Island | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| South Carolina | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| South Dakota | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Tennessee | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Texas | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Utah | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Vermont | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Virginia | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Washington | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| West Virginia | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Wisconsin | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| Wyoming | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |
| U.S. Average | \$ | 10,349.00 | \$ | 2,099.00 | \$ | 629.00 | \$ 81.00 | \$ | 972.00 | \$ | 9,720.0 | |

Appendix C: Data Sources and Assumptions

This appendix outlines the methodology and data sources CPC Center used to calculate consumer savings associated with the clean energy tax incentives under debate in Congress. It also provides a detailed description of all assumptions and their data sources, if applicable.

National and state median household income levels are based on the <u>U.S. Census</u> <u>Bureau</u>'s 2020 report on Income and Poverty in the United States. The clean energy tax incentives outlined in this report are from Sections 130411, 130412, 136104, 136302, 136803, 136401, 136402, 136406, 136407 of the "Build Back Better Act" (H.R. 5376).

1) Electric Vehicle Tax Credit (Section 30D)

Estimated EV cost savings are based on a comparison between the purchase of a new 2022 Chevrolet Bolt LT (\$33,500 in 2022) and a new 2022 Chevrolet Trax LT (\$23,200 in 2022) – a similarly sized internal combustion car.

In addition, BEV savings were calculated using the following assumptions and data sources:

- Purchase of a 2022 Chevrolet Bolt LT (pre-tax credit cost of \$33,500) with an average range of <u>250 miles</u> per charge, as calculated by Consumer Reports.
- Fuel and maintenance savings assume an average of 15,000 miles driven annually and 92% home charging, the nationwide average according to NHTSA.¹⁵ Fuel savings were further calculated using the U.S. Energy Information Administration's estimates of the average retail price of electricity in each state as of November 2021.
- Repair and maintenance cost savings were based on estimated per-mile repair and maintenance costs calculated by Consumer Reports.¹⁶
- Estimated car loan savings assume a 20% down payment on the purchase of a new 2022 Chevrolet Bolt LV, a standard six-year car loan at a 4.7% interest rate, and an <u>average of \$300</u> for registration and associated fees. Estimated car loan savings further assume average <u>combined state sales tax rates</u>, sourced from the Tax Foundation and state revenue department websites.

2) Residential Rooftop Solar (Section 48 ITC)

Estimated residential rooftop solar cost savings were calculated using the following assumptions and data sources:

¹⁵ See Tables VI-212-214 in "Final Regulatory Impact Analysis The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Year 2021 – 2026 Passenger Cars and Light Trucks," *National Highway Transit Safety Administration*. March 2020.

¹⁶ See page 11 in "Electric Vehicle Ownership Costs: Today's Electric Vehicles Offer Big Savings for Consumers," *Consumer Reports*. October 2020,

- Purchase and installation of a 5kW PV solar system (the average size in the U.S.) at the nationwide, average pre-tax credit cost of \$25,000 in 2019 dollars, as estimated by the Center for Sustainable Energy.¹⁷
- Solar system output and average savings were calculated using Climatebiz' average daily peak sun hours (kWh/m2) for each state and average retail price of electricity in each state as of November 2021.
- Average savings also assume average monthly consumption by U.S. residential utility customers in each state.¹⁸

3) HVAC Upgrade (Section 25D Residential Energy Efficiency Tax Credit)

Estimated HVAC savings were calculated using the following assumptions and data sources:

- Energy efficiency savings assume the purchase and installation of a 16 SEER HVAC system (pre-tax credit <u>average cost</u> of \$7,500 in 2022 dollars) to replace a 10 SEER air conditioning unit, resulting in a 38% increase in energy efficiency.
- Average savings also assume the average <u>retail price of electricity</u> in each state as of November 2021 and the average monthly consumption by U.S. residential utility customers in each state.¹⁹

4) E-Bike and Pre-Tax Commuter Benefit

E-bike savings estimates assume the purchase of a new 2022 Batch Commuter E-bike (pre-tax credit cost of \$2,099 in 2022 dollars) and use of the proposed monthly pre-tax commuter benefit of \$81.

¹⁷ The average cost to purchase and install a 5kW PV solar system is \$15,000 to \$25,000 according to the Center for Sustainable Energy. CPC Center calculations conservatively assumed the high end range.

¹⁸ See detailed data in "Form EIA-861M, Monthly Electric Power Industry Report," *Energy Information Agency*. 2021.