

# Climate Action Incentives

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## Residential

Public and private entities offer several monetary incentives for climate action within homes, through energy efficiency, renewable energy, and transportation measures. With this report, C3 seeks to inform Charlottesville and Albemarle County residents of their options to save money and take action against climate change.

## Energy Efficiency

### Multipurpose

#### [City of Charlottesville & Albemarle County - LEAP Energy Smart Rebates<sup>1</sup>](#)

LEAP offers up to \$500 for Charlottesville City and Albemarle County homeowners who have completed LEAP's \$45 Home Energy Check-Up and installed select energy efficiency retrofits, including insulation, air sealing, duct sealing, HVAC upgrades, and water heater replacements. Residents participating in LEAP's income-qualifying program do not qualify to apply.

#### [City of Charlottesville - Special Tax Rate for Energy Efficient Buildings<sup>2</sup>](#)

"Energy efficient" buildings are eligible for a 50% reduction on the building real estate's tax rate (0.95% of the building value in 2019) for one tax year. All city residents qualify given that the building exceeds VA Building Code efficiency standards by 30% and meets or exceeds performance standards set by the GBI, EarthCraft House Program, and LEED rating systems, or is Energy Star qualified home.

#### [Dominion Energy \(VA\) - Income and Age Qualifying Home Improvement Program<sup>3</sup>](#)

The utility provides home energy assessments and installation of selected energy saving products at no cost to income and age-qualifying families in Virginia. Installation by pre-approved [local weatherization service providers](#) may include Energy Star certified LED light bulbs, low-flow showerheads and aerators, and insulation.

#### [Fannie Mae - Green Financing Loans<sup>4</sup>](#)

Fannie Mae's Green Rewards Program increases loan proceeds for energy efficiency and conservation measures up to 5%. To qualify, multifamily property owners must commit to reducing the property's annual energy and/or water consumption by at least 30%. Improvements may include lighting and Energy Star appliances upgrades.

#### [U.S. HUD - Title I Property Improvement Loans<sup>5</sup>](#)

The U.S. HUD insures Title I loans for improvements that substantially increase the basic livability of the property. Title I loans range between \$7,500 and \$60,000 and can be used to finance energy efficiency improvements such as lighting and appliance upgrades. Participation is universal.

### [U.S. HUD - Energy Efficient Mortgage Program<sup>6</sup>](#)

Property owners with FHA-insured mortgages may qualify for a higher mortgage to finance energy efficiency improvements. Homeowners need only to qualify for the original loan amount, and a home energy assessment must be conducted to ensure improvements will be cost-effective.

### [U.S. HUD - Section 203k Rehabilitation Mortgage<sup>7</sup>](#)

Section 203(k) insurance enables homeowners to finance the repair or modernization of their existing property through a single mortgage, which may include energy efficiency upgrades that improve the home's function and appearance. The investment must be of at least \$5,000 to be covered by the loan. All homeowners qualify.

### [VA DHCD - Weatherization Assistance Program<sup>8</sup>](#)

Virginia's DHCD installs energy efficiency measures at no cost for qualifying state residents based on family unit size and income level. Measures may include air sealing, insulation, and HVAC repair.

## Lighting

### [Dominion Energy \(VA\) - Home Energy Assessment<sup>9</sup>](#)

The utility provides home energy assessments and offers rebates for selected energy saving products. Rebates range from \$7.16 to \$16.90 per selected LED light bulb installed by a pre-approved contractor for Dominion residential customers.

### [Virginia Dpt. of Taxation - Energy Star and WaterSense Sales Tax Holiday<sup>10</sup>](#)

For three days in August, Energy Star and WaterSense appliances priced at \$2,500 or less are sales tax exempt. All Virginia residents may benefit from this 4.3% sales tax incentive to purchase select products, which can include Energy Star light bulbs.

## Appliances

### [Dominion Energy \(VA\) - Appliance Rebates \(Efficient Products Marketplace\)<sup>11</sup>](#)

The utility's residential customers who purchase eligible Energy Star appliances can enter the information in Dominion's rebate portal and receive a rebate between \$25 and \$100 per appliance. Eligible products include dishwashers, refrigerators, freezers, clothes washers, electric clothes dryers, dehumidifiers, and room air purifiers.

### [Dominion Energy \(VA\) - Appliance Recycling<sup>12</sup>](#)

The utility's residential customers can receive \$20 for recycling old, inefficient refrigerators or freezers with Reclaim. Appliances must be at least 10 years old and in working condition to qualify.

### [Virginia Dpt. of Taxation - Energy Star and WaterSense Sales Tax Holiday<sup>13</sup>](#)

For three days in August, Energy Star and WaterSense appliances priced at \$2,500 or less are sales tax exempt. All Virginia residents may participate in the 4.3% sales tax holiday to purchase these specified products, which can include Energy Star dishwashers, washing machines, and refrigerators.

## Whole Building and/or Weatherization

### [Dominion Energy \(VA\) - Home Energy Assessment](#)<sup>14</sup>

The utility's provides home energy assessments and offers rebates for select energy saving products installed. Rebates range from \$0.35 to \$6.07 per linear foot of duct/pipe insulation installed by pre-approved local weatherization service providers.

### [Charlottesville Gas and LEAP - Energy Efficiency Program](#)<sup>15</sup>

Both organizations have partnered to offer energy efficiency upgrades at no cost to homeowners and renters who meet income-qualifying requirements and are Charlottesville Gas customers living in either the City or Albemarle County. Improvements may include attic insulation, hot water pipe insulation, and air sealing.

### [U.S. HHS - Low-Income Home Energy Assistance Program \(LIHEAP\)](#)<sup>16</sup>

Virginia's LIHEAP, using funds granted by the federal government, provides low-income households with weatherization improvements and heating/cooling costs. All Virginia residents meeting household size and income limits qualify for upgrades at no cost.

### [VA DHCD - Emergency Home and Accessibility Repairs Program](#)<sup>17</sup>

Virginia's DHCD installs emergency repairs at no cost for qualifying state residents with gross household income below 80% of area median income (AMI), adjusted by family unit size. Maximum assistance is \$4000, and potential repairs may include roof/ceiling/wall replacement or upgrade.

## Water-related (non-heating)

### [City of Charlottesville and Albemarle County - Free Water Conservation Kits](#)<sup>18</sup>

The [City](#) and the [County](#) both offer free water conservation kits to all residents of their respective areas who request them. In both programs, the kits include WaterSense showerheads, faucet aerators, and water saving tips.

### [City of Charlottesville and Albemarle County - Toilet Rebate Program](#)<sup>19</sup>

The [City](#) and the [County](#) both offer \$100 rebates to homeowners who replace old, inefficient toilets with new WaterSense certified toilets. To qualify for the City's program, participants must be the property owner and remain in good standing with the City. To qualify for Albemarle's program, participants must simply be pre-approved County Service Authority's customers. In both programs, residents may replace up to 3 toilets.

### [City of Charlottesville and Albemarle County - Rain Barrel Rebate Program](#)<sup>20</sup>

The [City](#) and the [County](#) both offer \$30 rebates per rain barrel purchased and installed. The City's program requires participants to be the property owner and remain in good standing with the City. Albemarle's program only requires participants to be County Service Authority's customers. Participants may replace up to 2 rain barrels.

### [Charlottesville Gas and LEAP - Energy Efficiency Program](#)<sup>21</sup>

Both organizations have partnered to offer energy efficiency upgrades at no cost to homeowners and renters who meet income-qualifying requirements and are

Charlottesville Gas customers living in either the City or Albemarle County. Improvements may include water-saving upgrades.

#### [Dominion Energy \(VA\) - Home Energy Assessment<sup>22</sup>](#)

The utility provides home energy assessments and offers rebates for select energy saving products. Rebates are \$22.87 per showerhead and between \$1.69 and \$2.30 per aerator installed by a Virginia homeowner.

#### [U.S. HHS - Low Income Home Energy Assistance Program \(LIHEAP\)<sup>23</sup>](#)

Virginia's LIHEAP, using funds granted by the federal government, provides low-income households with weatherization improvements and heating/cooling costs. All Virginia residents meeting household size and income limits qualify for upgrades at no cost. Products may include high-efficiency faucet aerators and energy-saving showerheads.

#### [VA DHCD - Emergency Home and Accessibility Repairs Program<sup>24</sup>](#)

Virginia's DHCD installs emergency repairs at no cost for qualifying low-income residents. Maximum assistance is \$4000, and potential repairs may include plumbing and water source upgrades.

#### [VA Department of Taxation - Energy Star and WaterSense Sales Tax Holiday<sup>25</sup>](#)

For three days in August, Energy Star and WaterSense appliances priced at \$2,500 or less are sales tax exempt. All Virginia residents may participate in the 4.3% sales tax holiday to purchase these specified products, which can include WaterSense sink faucets, aerators, shower heads, and toilets.

## Temperature Controls and HVAC Equipment

#### [Charlottesville Gas - Programmable Thermostat Rebate Program<sup>26</sup>](#)

The local gas utility offers a rebate of up to \$100 to City residents who purchase and install a programmable thermostat. To qualify, participants must be the property owner and in good standing with the City of Charlottesville.

#### [Charlottesville Gas - Tankless Water Heater Rebate Program<sup>27</sup>](#)

The local gas utility offers a \$200 rebate to City residents who switch from an electric, propane or natural gas tank water heater to an energy saving tankless natural gas water heater. Participants must be the property-owners and in good standing with the City.

#### [Charlottesville Gas and LEAP - Energy Efficiency Program<sup>28</sup>](#)

Both organizations have partnered to offer energy efficiency upgrades at no cost to homeowners and renters who meet income-qualifying requirements and are Charlottesville Gas customers living in either the City or Albemarle County. Improvements may include programmable thermostats.

#### [Dominion Energy \(VA\) - Home Energy Assessment<sup>29</sup>](#)

The utility provides home energy assessments and offers rebates for select energy saving products. Rebates range from \$156 to \$273 per select heat pump upgrade installed by a Virginia homeowner.

### [Dominion Energy \(VA\) - Smart Cooling Rewards<sup>30</sup>](#)

The utility installs an A/C cycling switch to regulate homeowners' cooling systems during periods of high energy demand in this program. Dominion offers a \$40 credit each year of participation.

### [U.S. HHS - Low Income Home Energy Assistance Program \(LIHEAP\)<sup>31</sup>](#)

Virginia's LIHEAP, using funds granted by the federal government, assists low-income households with weatherization improvements and heating/cooling costs. Virginia offers between \$50 and \$561 per qualifying household for heating and cooling costs.

### [VA DHCD - Emergency Home and Accessibility Repairs Program<sup>32</sup>](#)

Virginia's DHCD installs emergency repairs at no cost for qualifying low-income residents. Maximum assistance is \$4000, and potential repairs may include the replacement of heating/air conditioning systems.

### [Virginia Dpt. of Taxation - Energy Star and WaterSense Sales Tax Holiday<sup>33</sup>](#)

For three days in August, Energy Star and WaterSense appliances priced at \$2,500 or less are sales tax exempt. All Virginia residents may participate in this 4.3% sales tax holiday, which can include Energy Star air conditioners.

## Roof

### [City of Charlottesville - Green Roof Building Permit Fee Reduction<sup>34</sup>](#)

The City offers a 50% reduction to the building permit fee, based on project cost and type, for the construction of a green roof, which may entail a vegetative roof or a solar roofing system. All Charlottesville residents who install a green roof can participate.

### [Dominion Energy \(VA\) - Home Energy Assessment<sup>35</sup>](#)

The utility provides home energy assessments and offers rebates for select energy saving products. Rebates are \$0.20 per square foot of "Cool Roof".

## Renewable Energy

### Solar

### [City of Charlottesville - Tax Exemption and Tax Credit for Solar Equipment, Facilities, and Devices<sup>36</sup>](#)

The City offers a tax exemption and a tax credit equal to the property tax rate (0.95% of the building value in 2019) applied to the full cost of installation of the solar system. The tax exemption and credit both apply for 5 years. To qualify, participants must be property owners residing in the City who install solar energy equipment.

### [City of Charlottesville - Green Roof Building Permit Fee Reduction<sup>37</sup>](#)

The City offers a 50% reduction to the building permit fee, based on project cost and type, for the construction of a green roof, which may entail a vegetative roof or a solar roofing system. All Charlottesville residents installing a solar roof qualify.

#### [Energy Star - Renewable Energy Tax Credits<sup>38</sup>](#)

Federal renewable energy tax credits apply to solar energy systems, fuel cells, small wind turbines, and geothermal heat pumps installed by property owners for 1 tax year. The credit is worth 30% of annual income tax liability for systems serviced by the end of 2019, 26% by the end of 2020, and 22% by the end of 2021. For residential solar energy systems, the tax credit expires December 31, 2021.

#### [Fannie Mae - Green Financing Loans<sup>39</sup>](#)

Fannie Mae's Green Rewards Program increases loan proceeds for energy efficiency and conservation measures up to 5%. To qualify, property owners must commit to reducing the property's annual energy and/or water consumption by at least 30%. Property improvements may include installing solar systems.

#### [LEAP - Solarize Campaign<sup>40</sup>](#)

The energy service provider offers free solar suitability property assessments, consultation, and connection to qualified solar installers through their annual Solarize campaign. All commercial property owners in Charlottesville and Albemarle qualify.

#### [U.S. HUD - FHA's Solar and Wind Technologies Program<sup>41</sup>](#)

In this program, homeowners can add the full cost of a new solar PV or wind system to a regular FHA-insured mortgage. The maximum amount financed will be 20% of the property's appraised value, and payment will be spread out over the existing mortgage term. All property owners qualify for participation.

## Transportation

### Electric Vehicle Acquisition

#### [U.S. DOE - Qualified Plug-In Electric Vehicle Tax Credit<sup>42</sup>](#)

The IRS offers a tax credit between \$2,500 and \$7,500 for new electric vehicles purchased for use in the United States for 1 tax year. The size of the tax credit depends on the size of the vehicle, its battery capacity, and whether the manufacturer of the vehicle has reached its 200,000 quota.

### Non-Motorized Vehicles

#### [Albemarle/Charlottesville RideShare - Guaranteed Ride Home \(GRH\)<sup>43</sup>](#)

Employees needing to leave work early due to an emergency can activate RideShare to have access to up to 5 free commuting trips per calendar year. Participants must be employed full-time or permanent part-time, registered with RideShare, and commute to work via carpool, vanpool, public transit, biking, or walking at least twice a week.

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- <sup>1</sup> (Local Energy Alliance Program)
  - <sup>2</sup> (City of Charlottesville, Green Building Incentives and Resources)
  - <sup>3</sup> (Dominion Energy, Income and Age Qualifying Home Improvement)
  - <sup>4</sup> (Fannie May)
  - <sup>5</sup> (U.S. Department of Housing and Urban Development, About Title I Property Improvement Loans)
  - <sup>6</sup> (U.S. Department of Housing and Urban Development, op. cit.)
  - <sup>7</sup> (U.S. Department of Housing and Urban Development, 203(k) Rehab Mortgage Insurance)
  - <sup>8</sup> (Virginia Department of Housing and Community Development, Weatherization Assistance Program (WAP))
  - <sup>9</sup> (Dominion Energy, Home Energy Assessment)
  - <sup>10</sup> (Virginia Department of Mines, Minerals, and Energy)
  - <sup>11</sup> (Dominion Energy, Lighting Discounts & Appliance Rebates)
  - <sup>12</sup> (Dominion Energy, Appliance Recycling)
  - <sup>13</sup> (Virginia Department of Mines, Minerals, and Energy, op. cit.)
  - <sup>14</sup> (Dominion Energy, op. cit.)
  - <sup>15</sup> (City of Charlottesville, Home Weatherization Program)
  - <sup>16</sup> (U.S. Department of Health & Human Services)
  - <sup>17</sup> (Virginia Department of Housing and Community Development, Emergency and Accessibility Repair Program (EARP) n.d.)
  - <sup>18</sup> (City of Charlottesville, Water Rebates & Incentives)
  - <sup>19</sup> (Albemarle County Service Authority)
  - <sup>20</sup> (City of Charlottesville, op. cit.)
  - <sup>21</sup> (City of Charlottesville, op. cit.)
  - <sup>22</sup> (Dominion Energy, op. cit.)
  - <sup>23</sup> (U.S. Department of Health & Human Services, op. cit.)
  - <sup>24</sup> (Virginia Department of Housing and Community Development, op. cit.)
  - <sup>25</sup> (Virginia Department of Mines, Minerals, and Energy, op. cit.)
  - <sup>26</sup> (City of Charlottesville, op. cit.)
  - <sup>27</sup> (City of Charlottesville, op. cit.)
  - <sup>28</sup> (City of Charlottesville, op. cit.)
  - <sup>29</sup> (Dominion Energy, op. cit.)
  - <sup>30</sup> (Dominion Energy, Smart Cooling Rewards)
  - <sup>31</sup> (U.S. Department of Health & Human Services, op. cit.)
  - <sup>32</sup> (Virginia Department of Housing and Community Development, op. cit.)
  - <sup>33</sup> (Virginia Department of Mines, Minerals, and Energy, op. cit.)
  - <sup>34</sup> (City of Charlottesville, op. cit.)
  - <sup>35</sup> (Dominion Energy, op. cit.)
  - <sup>36</sup> (City of Charlottesville, op. cit.)
  - <sup>37</sup> (City of Charlottesville, op. cit.)
  - <sup>38</sup> (Energy Star)
  - <sup>39</sup> (Fannie May, op. cit.)
  - <sup>40</sup> (Local Energy Alliance Program (LEAP))
  - <sup>41</sup> (U.S. Department of Housing and Urban Development, FHA's Solar and Wind Technologies Program)
  - <sup>42</sup> (U.S. Department of Energy, Electric Vehicles: Tax Credits and Other Incentives)
  - <sup>43</sup> (RideShare)



## Commercial

Public and private entities offer several monetary incentives for climate action within commercial operations, through energy efficiency, renewable energy, and transportation measures. With this report, C3 seeks to inform Charlottesville and Albemarle County business owners of their options to save money and take action against climate change.

## Energy Efficiency

### Multipurpose

#### [City of Charlottesville - Special Tax Rate for Energy Efficient Buildings<sup>44</sup>](#)

The City offers a 50% reduced tax rate on buildings that meet specified energy efficiency standards for one tax year. All Charlottesville commercial properties qualify, as long as the building meets or exceeds performance standards such as the EarthCraft House Program or the GBI and/or LEED rating systems.

#### [City of Charlottesville - Clean Energy Commercial Loan Program \(CELP\)<sup>45</sup>](#)

Local businesses in the City can apply for loans up to \$60,000 at rates as low as 0% for energy efficiency improvements and renewable energy technologies. The program was launched by LEAP, the City of Charlottesville, and UVA Community Credit Union.

#### [U.S. HUD - Title I Property Improvement Loans<sup>46</sup>](#)

The U.S. HUD insures Title I loans for improvements that substantially increase the basic functioning of the property. Title I loans range between \$7,500 and \$60,000 depending on the size of the property, and can be used to finance energy efficiency improvements such as lighting and appliance upgrades. Participation is universal.

## Lighting

#### [Dominion Energy \(VA\) - Lighting Systems and Controls<sup>47</sup>](#)

The utility offers rebates to every commercial customer that upgrade to new energy-efficient lighting and controls, such as T8s, T5s, LEDs, and occupancy sensors.

#### [Dominion Energy \(VA\) - Small Business Improvement<sup>48</sup>](#)

The utility conducts an on-site energy assessment, provides a report of potential energy-saving measures, and offers rebates for installing those measures. Rebates for lighting upgrades range from \$2.75 to \$400 per item, depending on fixture type.

## Appliances

#### [Dominion Energy \(VA\) - Non-Residential Prescriptive<sup>49</sup>](#)

The utility offers rebates for energy efficiency improvements. These rebates include upgrades to commercial kitchen appliances. All commercial customers qualify.

## Whole Building and/or Weatherization

### [Dominion Energy \(VA\) - Window Film<sup>50</sup>](#)

The utility offers rebates to businesses that install window film using pre-approved contractors on or after October 1, 2019. The rebate amount is based on the improvement in Solar Heat Gain Coefficient. All commercial customers qualify.

### [Dominion Energy \(VA\) - Non-Residential Prescriptive<sup>51</sup>](#)

The utility offers rebates to businesses that install energy efficiency improvements using pre-approved contractors on or after August 1, 2017. Rebates range from \$0.50 to \$300 per item, depending on improvement type. All commercial customers qualify.

## Water-related (non-heating)

### [City of Charlottesville and Albemarle County - Toilet Rebate Program<sup>52</sup>](#)

The [City](#) and the [County](#) both offer \$100 rebates to commercial property owners who replace old, inefficient toilets with new WaterSense certified toilets. The City's program requires participants to be in good standing with the City and the building constructed before 1994. Albemarle's program simply requires to be pre-approved County Service Authority's customers. In both programs, participants may replace up to 3 toilets.

### [City of Charlottesville and Albemarle County - Rain Barrel Rebate Program<sup>53</sup>](#)

The [City](#) and the [County](#) both offer commercial property owners \$30 rebates per rain barrel purchased and installed. The City's program requires participants to be in good standing with the City. Albemarle's program requires participants to County Service Authority's customers. In both programs, participants may replace up to 2 rain barrels.

## Temperature Controls

### [Charlottesville Gas - Programmable Thermostat Rebate Program<sup>54</sup>](#)

The local gas utility offers a rebate of up to \$100 to City commercial property owners who purchase and install a programmable thermostat. To qualify, participants must be in good standing with the City.

### [Charlottesville Gas - Tankless Water Heater Rebate Program<sup>55</sup>](#)

The local gas utility offers a \$200 rebate to City property owners who switch from an electric, propane or natural gas tank water heater to an energy saving tankless natural gas water heater. To qualify, property owners must be in good standing with the City.

### [Dominion Energy \(VA\) - Heating and Cooling Efficiency<sup>56</sup>](#)

The utility offers rebates to businesses that install new energy efficient heating and cooling systems, including air conditioners, heat pumps, chillers, variable frequency drives, and economizers. All Dominion Energy commercial customers in Virginia qualify.

### [Dominion Energy \(VA\) - Small Business Improvement<sup>57</sup>](#)

The utility conducts an on-site energy assessment, provides a personalized report of potential energy-saving measures, and offers rebates for installing those measures. Dominion offers rebates for HVAC upgrades including air conditioners, heat pumps, programmable thermostats, variable frequency drives, and economizers.

#### [Dominion Energy \(VA\) - Non-Residential Prescriptive<sup>58</sup>](#)

The utility offers to every commercial customer rebates for energy efficiency improvements, such as HVAC system tune-ups.

## Roof

#### [City of Charlottesville - Green Roof Building Permit Fee Reduction<sup>59</sup>](#)

The City of Charlottesville offers a 50% reduction to the building permit fee for the construction of a green roof on commercial or residential properties, which may entail a vegetative roof or a solar roofing system. All Charlottesville properties that install a green roof can participate.

## Renewable Energy

### Solar

#### [City of Charlottesville - Tax Exemption and Tax Credit for Solar Equipment, Facilities, and Devices<sup>60</sup>](#)

The City offers a tax exemption and a tax credit equal to the property tax rate (0.95%) applied to the full cost of installation of a solar system on commercial or residential properties. The tax exemption and credit both apply for 5 years. To qualify, participants must be property owners of real estate in the City and install solar energy equipment.

#### [City of Charlottesville - Green Roof Building Permit Fee Reduction<sup>61</sup>](#)

The City of Charlottesville offers a 50% reduction to the building permit fee for the construction of a green roof on commercial or residential properties, which may entail a vegetative roof or a solar roofing system. All Charlottesville properties that install a solar roof can participate.

#### [Energy Star - Renewable Energy Tax Credits<sup>62</sup>](#)

Federal renewable energy tax credits apply to solar energy systems, fuel cells, small wind turbines, and geothermal heat pumps installed by property owners for 1 tax year. The credit is worth 30% for systems serviced by the end of 2019, 26% by the end of 2020, 22% by the end of 2021, and 10% from 2022 onwards.

#### [LEAP - Solarize Campaign<sup>63</sup>](#)

The energy service provider offers free solar suitability property assessments, consultation, and connection to qualified solar installers through their annual Solarize campaign. All residential and commercial property owners in Charlottesville and Albemarle County qualify.

### [U.S. IRS - MACRS Solar Accelerated Depreciation<sup>64</sup>](#)

The IRS offer a 100% bonus depreciation on solar systems that steps down each year over the 5-year MACRS schedule. To qualify, participants must be the commercial property owner and install a solar system on the property.

## Transportation

### Electric Vehicle Acquisition

#### [U.S. IRS - Qualified Plug-In Electric Vehicle Tax Credit<sup>65</sup>](#)

The IRS offers a tax credit between \$2,500 and \$7,500 for new electric vehicles purchased for use in the United States for 1 tax year. The size of the tax credit depends on the size of the vehicle, its battery capacity, and whether the manufacturer of the vehicle has reached its 200,000 quota.

### Electric Vehicle Charging Station

#### [Albemarle/Charlottesville RideShare - Guaranteed Ride Home \(GRH\)<sup>66</sup>](#)

For employees needing to leave work early due to an emergency, RideShare will provide 5 free trips per calendar year. To qualify, participants must be employed full-time or permanent part-time, registered with RideShare, and commute to work via carpool, vanpool, public transit, biking, or walking at least twice a week.

#### [City of Charlottesville - EV Charging Station Mini-Grant Program<sup>67</sup>](#)

The City offers \$3,000 grants for the installation of Level I and II chargers in the City and \$7,000 grants for DC fast chargers. Charging stations must be accessible by the general public, near commercial and tourist activity centers, and located on private, non-residential property. Commercial properties can receive up to 2 grants.

#### [U.S. IRS - Qualified Transportation Fringe Benefits<sup>68</sup>](#)

Beginning on January 1, 2020, businesses may claim tax-free benefits for employees commuting via public transit, carpool, or vanpool of up to \$270 per month. Benefits may be in the form of transit vouchers, commuter highway vehicle fares, and/or parking fees.

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<sup>44</sup> (City of Charlottesville, op. cit.)

<sup>45</sup> (City of Charlottesville, op. cit.)

<sup>46</sup> (U.S. Department of Housing and Urban Development, op. cit.)

<sup>47</sup> (Dominion Energy, Non-Residential Lighting Systems and Controls)

<sup>48</sup> (Dominion Energy, Small Business Improvement)

<sup>49</sup> (Dominion Energy, Non-Residential Prescriptive - VA n.d.)

<sup>50</sup> (Dominion Energy, Non-Residential Window Film n.d.)

<sup>51</sup> (Dominion Energy, op. cit.)

<sup>52</sup> (City of Charlottesville, op. cit.)

<sup>53</sup> (City of Charlottesville, op. cit.)

<sup>54</sup> (City of Charlottesville, op. cit.)

<sup>55</sup> (City of Charlottesville, op. cit.)

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<sup>56</sup> (Dominion Energy, Heating & Cooling Efficiency)

<sup>57</sup> (Dominion Energy, op. cit.)

<sup>58</sup> (Dominion Energy, op. cit.)

<sup>59</sup> (City of Charlottesville, op. cit.)

<sup>60</sup> (City of Charlottesville, op. cit.)

<sup>61</sup> (City of Charlottesville, op. cit.)

<sup>62</sup> (Energy Star)

<sup>63</sup> (Local Energy Alliance Program (LEAP))

<sup>64</sup> (Paradise Energy Solutions)

<sup>65</sup> (U.S. Department of Energy, Federal Tax Credits for All-Electric and Plug-in Hybrid Vehicles)

<sup>66</sup> (RideShare)

<sup>67</sup> (City of Charlottesville, op. cit.)

<sup>68</sup> (U.S. Internal Revenue Service)

## Expected Incentives Following VA 2020 General Assembly

### Energy Saving Products; Tax Deduction for Energy Saving Products (HB633)<sup>69</sup>

The bill would offer a tax deduction for the installation of solar panels or appliances meeting Energy Star program requirements.

### Electric Vehicle Rebate Program (HB717)<sup>70</sup>

The bill would offer rebates of up to \$4,500 per unit for the purchase of select vehicles with zero-emissions engines.

### Bills Providing Social and Economic Assistance

Proposed bills HB1152<sup>71</sup>, HB77 (VA-GND)<sup>72</sup>, and HB1526 (VCEA)<sup>73</sup> seek to finance clean energy programs while decreasing the burden of energy inefficiency on vulnerable communities (i.e. low-income residents, persons with disabilities, veterans) and/or to create renewable energy jobs with worker training and protections.

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<sup>69</sup> (Willet n.d.)

<sup>70</sup> (Reid n.d.)

<sup>71</sup> (Lopez n.d.)

<sup>72</sup> (Rasoul n.d.)

<sup>73</sup> (Sullivan)

## Glossary

A/C cycling switch: A/C cycling or “smart” switch cycles on and off for short periods of time one or more air conditioner or heat pump compressor systems.

Climate action: Initiatives that help alleviate the consequences of climate change.

Climate incentive: Monetary or social reward offered to those taking climate action(s).

EarthCraft: Green building certification program with given standards.

FHA: Federal Housing Administration

GBI: Green Building Initiative

HVAC: Heating, ventilation, and air conditioning devices and/or systems.

IRS: Internal Revenue Service

MACRS: Modified Accelerated Cost Recovery System

LEAP: Local Energy Alliance Program

LED: Light-emitting diode

LEED: Leadership in Energy and Environmental Design; green building certification program with given standards.

Solar Heat Gain Coefficient (SHGC): SHGC is the fraction of incident solar radiation admitted through a window, and subsequently released inward.

Solar PV system: Solar photovoltaic (PV) system; a system composed of one or more solar PV panels combined with an inverter and other electrical and mechanical hardware that use radiant energy from the Sun to generate electricity.

Wind system: A system composed of one or more wind turbines powering electric generators, potentially combined with an inverter and other electrical and mechanical hardware to use wind kinetic energy to generate electricity.

U.S. HHS: United States Department of Health and Human Services

U.S. HUD: United States Department of Housing and Urban Development

U.S. DOE: United States Department of Energy

VA DHCD: Virginia Department of Housing and Community Development

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