## Policy Memo: Renewable Constrained Resolution Fiscal Policy

**ISSUE**: As of 2020, some of the <u>U.S.'s largest greenhouse gas sources</u> were from transportation (27%), electricity production (25%), and from commercial and residential use (13%). Only <u>5%</u> of U.S. vehicles and <u>3%</u> of the buildings utilized electricity. The continued use of nonrenewable resources like petroleum, coal, and natural gas, when other environmental sources are available, is predicted to lead to more <u>intense heat waves</u>, decreased snowpack in the western mountains, rising sea levels, etc. To mitigate further environmental damage, there needs to be an active and gradual shift to electrification in the U.S.'s most prominent sectors. The former gas and coal system has proved extremely effective, it has begun to provoke burdensome economic and environmental costs. Thus, we propose to invest in the electrification of buildings and the implementation of wind and solar power as our primary sources of industry. Executing these technological adaptations will enable the United States to mitigate climate change in a more financially and environmentally stable manner.

**POLICY SOLUTION**: We are recommending policies that involve aligning innovations and new technology discoveries to achieve the goal of net-zero emissions by 2050. We recommend investing financially in renewable energies as <u>energy efficiency will save citizens and companies money</u> on their homes and buildings. The renewable energies that we are looking to increase are solar and wind and to implement them as much as possible through new power plants and <u>grids</u>.

- We recommend the U.S. Department of Energy (DOE) fulfill its pledge of <u>\$30 million</u> to advance composite materials and additive manufacturing (AM) in large wind turbines, including for offshore wind energy systems. We also recommend that 15,000 sq miles of solar panels be built and funded by corporations incentivized by a 24% tax break on domestic revenue. We also recommend rebates to bring electrification within the reach of lower-income households. Our end goal is a <u>3.23tn dollar investment</u> in renewables by 2050 to mitigate carbon emissions through cooperate funding.
- We also recommend electrifying residential, commercial, and government buildings. <u>Electrifying buildings</u> could create over a million new, well-paying jobs that, in turn, generate income tax revenue to reinvest in more electrification initiatives. The electrification of buildings includes significant environmental and public health co-benefits. By creating healthier environments for citizens by shifting to electrification, we will establish a bipartisan foundation from which we can continue to strive for policies to mitigate climate change. To incentivize all (commercial and residential) to switch to electric appliances, we would want to offer an incentive of <u>32%</u> of the original cost of the appliance.

**CONCLUSION:** Investing in renewable energy sources and developing improved electrification technologies that aid in the transition of carbon-emitting vehicles and buildings to electric is critical to reaching the nation's target net emission standards of net zero by 2050. The push for electrification of commercial and residential buildings--which will be costly at the beginning, but could ultimately cost less on energy bills--will allow for decreased reliance on fossil fuel energy sources in favor of energy-efficient alternatives. Additionally, properly targeted incentives, like tax credits and rebates, provide financial security needed to drive innovation of new technologies that increase energy efficiency and affordability in both businesses and households. As such, packaging these two policies together will incentivize the shift from carbon-producing emissions to cleaner electric options and offset distributional concerns of equity by providing new\_jobs while the country transitions to less fossil fuel-dependent energy sources and updates electric grids.