## POLICY MEMO: A PALATABLE PATHWAY TO PROTECT THE PLANET

**ISSUE:** Globally, carbon dioxide emissions (CO2) have increased more than <u>50%</u> since the Industrial Revolution with average atmospheric concentrations of CO2 rising from 278 ppm to 417 ppm (Betts, 2021). In the United States, climate-fueled disasters such as <u>tropical storms</u>, <u>droughts</u>, <u>wildfires</u>, etc. cost <u>\$165 billion</u> in 2022 alone (Rott, 2023). Climate damage cost the global economy <u>\$16 trillion from 1992 to 2013</u>, and is projected to rise to <u>\$65 trillion</u> unless significant action is taken (Hart, 2022). The environmental and financial cost of carbon emissions is high.

**POLICY SOLUTIONS:** Our policy solutions are designed to achieve net zero carbon emissions by 2050 through a combination of economically, fiscally, and thus politically paltable measures. We recommend:

- Implementing a national carbon tax of \$20.35 per ton of emitted carbon. This fee is calculated by taking 11% of the total <u>social cost</u> (Auffhammer, 2022) of carbon at <u>\$185</u> per ton. Based on the <u>5.13 billion metric tons of carbon produced in 2019</u> (EPA, 2023), approximately <u>\$104 billion</u> would be generated per year in revenue (Tiseo, 2023). Additionally, this will incentivize the transition to green energy to avoid the fees being placed on fossil fuels.
- Implementing a carbon border adjustment mechanism (CBAM) or "carbon tariff" on carbon-intensive imports, such as Chinese steel, to (1) "globalize" incentives to reduce carbon emissions and (2) address economic and political concerns about loss of U.S. economic competitiveness.
- Investing carbon tax revenues (around <u>\$104 billion</u> annually) and carbon tariff revenues in public and private building energy efficiency through a variety of federal tax incentives, subsidies, and grants to individuals (including low-income households faced with higher energy bills in the short term), corporations, and states. Such measures present politically palatable, budget-neutral *choices* rather than mandates.

Investing the carbon tax and tariff revenues into energy efficiency initiatives, along with higher clean air standards, further reduces carbon emissions. By combining the implementation of a carbon tax and using the revenue created to invest in energy efficiency, we can reduce the effect of net greenhouse gas emissions by <u>approximately 20%</u> (Interactive, 2022). These mitigation efforts can be further augmented by higher energy efficiency building standards. In addition, adding standards to various industries that are large emitters requires improvement toward low carbon products and the implementation of energy managers. It is also crucial to create high fuel standards and energy efficient transportation. By implementing a national carbon tax, it is discouraging the use of large carbon emitting products as well as creating a fund for further protection against carbon emissions. Using the carbon tax policy and investing the collected taxes to spike innovation will disincentivize carbon usage and create an interest in clean, energy efficient products (Subraman, 2022). This combination of solutions—carbon taxes, carbon tariffs, higher clean air standards, and higher energy efficiency building stands—can get us to net-zero by 2050 in a politically palatable, fiscally sustainable manner.