POLICY MEMO: CLIMATE CHANGE AND ENERGY INNOVATION

Introductory: The United States must achieve net zero greenhouse gas emissions by 2050. With less than 3.5% of corporate buildings and 4% of residential homes using solar energy in the United States, to reach net-zero emissions, there must be an implementation of strategies, such as renewable energy proposed into everyday use.

Policy Solution:

- Renewable energy, such as solar and wind power, emits fewer greenhouse gases and is becoming increasingly affordable. Promoting the use of <u>renewable energy</u> can help to reduce emissions while also ensuring that energy remains affordable for consumers. Renewable energy sources such as solar and wind produce electricity without emitting greenhouse gases, making them a key component in achieving the goal of net-zero emissions by 2050. One of the most effective ways to increase the use of renewable energy is through implementing policies that promote their adoption, such as renewable energy mandates, subsidies, tax credits, and net metering policies. These policies incentivize the installation and use of renewable energy technologies by reducing upfront costs, making them more accessible to homeowners and businesses. A proposal of tax breaks of 20% of the domestic revenue for corporations in a certain square mile could help encourage other nations.
- Carbon capture and storage technologies can help to capture emissions from industrial processes and power generation, preventing them from entering the atmosphere. Continued research and development in this area could help to reduce emissions further while maintaining energy affordability and reliability. Carbon capture and storage (CCS) technologies are designed to capture carbon dioxide emissions from industrial processes and power generation and store them underground or in other locations, preventing them from entering the atmosphere and contributing to climate change. CCS technologies have the potential to significantly reduce greenhouse gas emissions while still allowing the continued use of fossil fuels in energy production. The approach to CCS involves capturing CO2 from industrial processes, such as cement or steel manufacturing before it is released into the atmosphere. The captured CO2 can then be transported to storage sites via pipelines or other means and stored underground or in depleted oil and gas fields. One incentive for these corporations could be to implement a Carbon Tax of \$100 per ton, putting the United States at a competing standpoint with other nations to reach net zero.

Conclusion: As a result, of humans' reliance on these fossil fuels, rising temperatures which is. Greenhouse gases get trapped within the atmosphere; the United States has set a goal to reach net-zero emissions. With this, the United States hopes to increase the use of renewable energies, such as solar and wind power, which is becoming increasingly more affordable. The second way the United States hopes to reach net-zero emissions is by developing carbon capture and storage technologies. These carbon capture technologies, prevent emissions from industrial processes and power generation from reaching the atmosphere, helping the United States to reach net-zero emissions.