

## **A Market Based Approach to Addressing the Climate Crisis**

**The National Energy Transition Plan (NETP)** is designed to inform the development and refinement of proposed carbon dividend and tax plans being considered and to ensure the highest rate of success for a sound plan that shifts the U.S. from fossil fuel-based energy to renewable alternatives.

The U.S. and other countries must cut carbon emissions in half by 2030 and to near zero by 2050 to avoid the worst dangers of climate change. This plan provides an effective and fair means of accomplishing that goal. Leading economists endorse a tax and dividend policy.

The plan places a tax on all carbon-based fuels at or near their source, with revenue collected being paid back quarterly to all adult citizens in equal amounts. The initial tax rate is \$25/metric ton of carbon equivalent and increases by \$10/year, reaching \$125/metric ton by 2030.

The NETP is designed to gain public trust. The plan should be kept simple and universal with total transparency. Additionally, nothing should distract from the primary objective of eliminating fossil fuel emissions soon and fast.

A review of historic international experience with carbon taxes and regulations reveals the following critical criteria for choosing a successful energy transition plan for the United States:

- **Start Soon:** Must commence within two or three years (no later than 2022), requires bipartisan bill.
- **Effective in Achieving Emissions Goals:** Carbon must be priced sufficiently to discourage consumption.
- **Escalating and Adjustable Rate:** A non-political mechanism for mid-course adjustment is needed to keep the plan on track to meet the emissions goal.
- **Fair:** Those who pollute the most pay the most carbon tax through their purchases; and the poor/working classes receive dividends exceeding the embedded tax in purchases.
- **Tamper Proof:** Establish Independent Climate Council (i.e. Federal Reserve Board).
- **All American Plan:** All sectors participate including military and agriculture, which benefit from transfer to a renewable energy economy and mitigation of climate effects.
- **Border Carbon Adjustment:** A tariff equal to the U.S. carbon tax would be added to imported fossil fuels and products from countries that do not have an equivalent tax on carbon, pushing trading partners to adopt the same carbon levy as in the U.S.
- **No Export Subsidies:** The U.S. cannot lead if it encourages carbon emissions.

### **Climate Situation: Why A Transition Plan is Needed Now**

The *Fourth National Climate Assessment* finds that climate change is happening very rapidly. Global atmospheric concentrations of carbon dioxide (CO<sub>2</sub>) have reached 410 parts per million, a level that last occurred about 3 million years ago. This increase from 300 ppm in the pre-industrial atmosphere is due to burning of fossil fuels and land use change, leading to observed changes in surface, atmospheric, and oceanic temperatures; melting glaciers; diminishing snow cover; shrinking sea ice; rising sea levels; ocean acidification; and increasing atmospheric water vapor.

- Without major emissions reduction, average global temperatures could increase 9°F by 2100.
- Global average sea levels will rise another 1 to 4 feet by 2100. A rise of 8 feet is possible.
- Tidal flooding is accelerating significantly in more than 25 Atlantic and Gulf Coast cities.
- Oceans are absorbing 1/4 of CO<sub>2</sub> emissions, making them more acidic, harming ecosystems.
- Arctic sea ice coverage is melting, and loss of Greenland's ice is accelerating.
- Rising temperatures are causing Alaskan permafrost to thaw releasing CO<sub>2</sub> and methane into the atmosphere thus setting into play a vicious feedback loop.
- Heavy rainfall is increasing in intensity and frequency.
- Rising temperatures, earlier spring melt and reduced snowpack are affecting western U.S. water resources. Long-duration hydrological drought is possible before end of the century.
- Forest fires in western U.S. and Alaska have increased and are projected to increase further.
- Heatwaves are more frequent. Record setting hot years projected to become commonplace.

Humanity's effect on earth systems creates potential for surprises from multiple extreme events occurring simultaneously or sequentially (with greater overall impact), and critical threshold or tipping points could lead to large impacts. Positive feedbacks within the climate system can accelerate human-induced climate change and even shift the Earth's climate system into states that are very different from the recent past. The physical and socioeconomic impacts of compound extreme events (e.g., simultaneous heat and drought, hot and dry conditions coupled with wildfires) can exceed the sum of the parts. *Climate models more likely underestimate than overestimate the change ahead.*

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