

TO: Rep. Jojo Spanmanchin  
FROM: Kevin Caggiano  
SUBJECT: The Climate Crisis  
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### **Executive Summary:**

*It is scientifically indisputable that human actions have directly contributed to our changing climate. It is also indisputable that we are on the precipice of a global climate crisis that will come about before the end of the 21<sup>st</sup> century. Both the United States and the greater world as a whole are at a dire inflection point, in which drastic action must be taken immediately. There are largely two possible options to pursue. One of adaptability, where the concentrated effort is placed upon adapting to the ramifications of climate change. And the other of mitigation, where the concentrated effort is preemptively taking action to mitigate the effects of climate change. I firmly believe that the problem of collective action will pose a significant barrier to any mitigative policies, and therefore much of our time and resources should be devoted to adaptability.*

### **The Coming Crisis:**

We are on the precipice of a global climate catastrophe. As of 2019, global greenhouse gas (GHG) emissions were higher than any time in the last 2 million years for CO<sub>2</sub>, and 800,000 years for CH<sub>4</sub> and N<sub>2</sub>O.<sup>1</sup> These increases far exceed any established natural patterns. As a result, the average global temperature (since 1850) has increased by 1.0-2.0 degree Celsius. Furthermore, more than 2/3 of that increase has occurred in the last 50 years.<sup>2</sup> We are already experiencing the ramifications. Sea levels have risen, the retreat of glaciers is at an all-time high, the incidence of severe weather events has increased, and dramatic heat waves and droughts have

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<sup>1</sup> "IPCC\_AR6\_WGI\_SPM\_final.Pdf. Pg. 8"

<sup>2</sup> "IPCC\_AR6\_WGI\_SPM\_final.Pdf. Pg. 5"

become more common. However, at current pace, the worst is yet to come. Each of these climate change effects will get radically more severe in the coming years and decades. Food scarcity, flooding coasts, and super storms will be the norm. Without action, the 21<sup>st</sup> century will be all but dominated by climate driven strife and conflict. For example, the UNHCR predicts that by 2050, there could be over 200 million climate refugees.<sup>3</sup> Something must be done urgently to prepare and adapt to this coming crisis.

### **The Problem of Collective Action:**

Over the last three decades, mitigation has been the most widely embraced policy. From the Kyoto Protocols, to the Paris Climate Accord, and the just concluded COP 26, the international community has placed great importance on collective mitigation. Yet, conference after conference has run into the same problem – lack of collective action. Climate change is not confined within borders. It is a global problem. In order to make any tangible impact on mitigating climate change, a large majority of the countries in the world must come to a shared consensus on elements such as emission limits, energy production, and monetary/resource distribution. William Nordhaus, a leading climate scholar and economist, has modeled out this conundrum. In order to cost effectively get to the golden 1.5 degrees Celsius increase, nearly every single country in the world will have to come to collective agreement.<sup>4</sup> If around half of the world cannot reach this widespread agreement, it will be all but impossible to reach the 1.5-degree figure, notwithstanding the significantly higher costs imposed on fewer participating countries. Unfortunately, the latter situation looks to be our reality. Considering the socioeconomic differences throughout the world, it is improbable to get 100% of countries to fully participate. For example, it is much easier for a developed country to decide to shift to

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<sup>3</sup> Refugees, “Climate Change and Disaster Displacement.”

<sup>4</sup> Nordhaus, *The Climate Casino*. Pg. 177

renewables compared to a developing country that relies on coal. And when you take into account the historical record of pollution for developed countries, developing countries see hypocrisy and are thus less inclined to fully participate. So, this strategy of mitigation leads us to elaborate global conferences year after year, filled with flowery talk that results in nothing other than weak promises.

### **The Responsibility to Adapt:**

Until the time where the international community can reach a broad agreement on participation in mitigation, which judging by human history will only be when the entire world is knee deep in water, the remaining option for individual governments is to pursue a policy of adaptation. Experts debate on the extent and timing in which climate change will significantly impact us. Regardless, preparations must be made now in order to best counter climate change in the most economical manner. Congress, and the US government as a whole has a responsibility to the American people to pursue this course of action. We must ensure that we are fully prepared to deal with this incoming climate crisis.

### **Adaptative Strategies:**

There are a number of adaptative strategies that can be implemented in the United States which are both cost-effective and effectual in adapting to the effects of climate change. As demonstrated by Bjorn Lomborg in the Wall Street Journal, some of these strategies cost a mere fraction of what mitigation entails, and can adequately deal with or even completely circumvent many of the great dangers of climate change.<sup>5</sup> There are a wide variety of possible mitigative actions to take. The Global Center on Adaptation has released an extensive report showing how everything from creating climate-resistant-infrastructure to implementing digital currencies can

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<sup>5</sup> “Climate Change Calls for Adaptation, Not Panic - WSJ.”

have positive effects at adapting to climate change, at little to no cost relative to mitigation.<sup>6</sup> An example of such practices could be how to effectively deal with predicated flooding. Some experts say that massive flooding could force close to 200 million people from their homes and causing over \$55 trillion in damages. Yet, Bjorn Lomborg shows that by preemptively spending the relatively low amount of \$48 billion to raise dikes and levees across the world, flooding can be drastically reduced to affecting 15,000 people and costing only \$38 billion.<sup>7</sup> The choice is obvious, rather than waiting (possibly endlessly) for the world to agree on how to best mitigate climate change, real tangible action can be implemented quickly to combat the effects of climate change, ensuring a better future for all Americans.

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<sup>6</sup> “GCA\_State-and-Trends-in-Adaptation-2021-Africa\_full-Report\_low-Res.Pdf.”

<sup>7</sup> “COP26 Summit: Climate Change’s Real Risks - WSJ.”

Sources:

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