

**United States House of Representatives
Select Committee on the Climate Crisis**

**Hearing on October 1, 2020
“Creating a Climate Resilient America:
Strengthening the U.S. Financial System and
Expanding Economic Opportunity”**

Questions for the Record

**The Honorable Rostin Behnam
Commissioner
Commodity Futures Trading Commission**

The Honorable Kathy Castor

- 1. What are the costs to consumers, including public health implications, associated with business-as-usual electricity and energy policy? How do we maximize the benefits and minimize the costs of a transition to a clean energy economy?**

The costs to consumers and the general public resulting from business-as-usual electricity and energy policy and the attendant climate change are significant. *Managing Climate Risk in the U.S. Financial System* (the “Report”)¹ describes negative impacts across the economy, including on agriculture and ecosystem services, infrastructure, and commercial and residential real estate.² With respect to general economic impact, the report notes:

[T]he latest research suggests that, by the end of this century, the negative impacts on the United States from climate change will amount to about 1.2 percent of annual gross domestic product (GDP) for every 1 degree Celsius increase (Hsiang, et al., 2017). This is roughly the equivalent of wiping out nearly half of average annual GDP growth rates in recent years. There is great uncertainty about how those losses may be distributed across the United States and within any given sector or asset class. But the research suggests that the South, Central and mid-Atlantic regions likely will be more heavily impacted than northern regions.³

In particular, the Report explores health implications in depth:

¹ *Managing Climate Risk in the U.S. Financial System, Report to the CFTC’s Market Risk Advisory Committee by the Climate-Related Market Risk Subcommittee* (Sept. 2020), https://www.cftc.gov/About/AdvisoryCommittees/MarketRiskAdvisory/MRAC_Reports.html (the “Report”).

² *Id.* at 13-19.

³ *Id.* at 13.

Human health is significantly exposed to climate-related physical risks. Health impacts from climate change include extreme heat exposure; degraded air quality; infectious, water- and vector-borne diseases; food contamination and declining access to nutritious foods; chronic physical and mental stress; and, physical injuries and mental distress from extreme events (Ebi, et al., 2018). Many of these health impacts and corresponding financial costs have been shown to disproportionately burden low-wage workers and historically marginalized populations (Schmeltz, et al., 2016; Wondmagegn, et al., 2019). Thus, mitigating climate change would reduce economic burdens that amplify economic inequality. For instance, a decline in the use of fossil fuels will improve air quality, which would have a disproportionately positive impact in certain marginalized communities (Bullock, et al., 2018).

These impacts could also reduce labor capacity and productivity, which in turn could reduce the capacity of workers and employers to pay for healthcare services. Most critically, extreme heat is anticipated to greatly impact human health and lead to greater rates of premature mortality. From extreme heat alone, annual damages from premature death in 2090 were projected to be between \$60 billion (2015) and \$140 billion (EPA, 2017). States in the Southeast and Great Plains could see declines in labor capacity approaching 3 percent (Dunne, et al., 2013; Houser, et al., 2015); some locations in Florida and Texas could see a total loss in annual labor hours of 6 percent or more (Gordon, 2014; EPA, 2017). Six percent is the equivalent of losing two weeks of income a year. By 2090, total impacts from extreme heat attributed to climate change could result in more than 2 billion lost labor hours, corresponding to \$160 billion (2015) in lost wages (Graff Zivin and Neidell, 2014; Hsiang, et al., 2017; EPA, 2017). Indeed, companies that rely on outdoor and manual labor may face physical risks from declining labor productivity and higher costs associated with workers' compensation, health insurance, and general liability insurance. They may also face pressure to increase wages to attract workers for such physically demanding employment (Day, et al., 2019). . . .

Finally, as the COVID-19 pandemic has made clear, healthcare and public health systems in the United States have limited excess capacity to treat patients during extreme events (Bein, et al., 2019). Such events could include, for example, events stemming from infectious diseases and tropical cyclones attributable, in part, to climate change (Wu, et al., 2016). Public health infrastructure in the United States and around the world has been affected by significant reductions of public investment in recent decades (Masters, et al., 2017). Unless this trend is reversed, the U.S. healthcare system may not be able to cope with the burdens from climate-related physical risk. For instance, healthcare facilities, networks and enterprises could face financial challenges associated with the exposure of highly vulnerable and aging populations subject to increasing climate-attributed stresses, such as extreme heat and infectious disease, and shocks, such as stronger hurricanes and wildfires (Desai, et al., 2019).⁴

To maximize the benefits and minimize the costs of a transition to a clean energy economy, we must act swiftly but thoughtfully. The Report asserts that:

⁴ *Id.* at 17-18.

[T]he longer governments wait to adequately cut emissions, the more rapidly physical and transition risks are likely to increase in parallel. The physical impacts of climate change will intensify while the magnitude of the response needed to arrest further warming grows. The public and private sectors must simultaneously advance both climate mitigation and adaptation to effectively manage both physical and transition risks.⁵

2. **Please comment on the expected economic impact that would result from dramatic action to reduce carbon emissions, relative to the alternative of not mitigating carbon emissions. For example, what is the expected effect on GDP growth associated with achieving global net-zero emissions by mid-century, relative to the alternative of unmitigated global emissions, such as the IPCC RCP8.5 scenario?**

The Report notes that dramatically reducing carbon emissions to limit warming to “well below” 2 degrees Celsius would “...boost total global GDP by 2.5 percent, or 5.3 percent when considering the avoided climate-related damages relative to the reference case (maintenance of current plans and policies).”⁶

3. **In your testimony, you discussed the CFTC MRAC report calls for better understanding, quantification, disclosure, and management of climate-related risks by financial institutions and other market participants. What steps should Congress take to enable the development of common metrics and methodologies to support climate risk reporting and disclosure?**

To enable the development of common metrics and methodologies, the Report suggests that:

Financial regulators, in coordination with the private sector, should support the development of U.S.-appropriate standardized and consistent classification systems or taxonomies for physical and transition risks, exposure, sensitivity, vulnerability, adaptation, and resilience, spanning asset classes and sectors, in order to define core terms supporting the comparison of climate risk data and associated financial products and services. To develop this guidance, the United States should study the establishment of a Standards Developing Organization (SDO) composed of public and private sector members. Recognizing that this guidance will be specific to the United States, this effort should include international engagement in order to ensure coordination across global definitions to the extent practicable.⁷

4. **In addition to directly addressing climate-related risks to financial sector stability, what steps can Congress take to blunt the impact of climate-related financial shocks to households and businesses with the fewest resources to respond, especially in communities that have been historically marginalized and experienced environmental injustice?**

⁵ *Id.* at 22.

⁶ *Id.* at 104.

⁷ *Id.* at 70.

As I stated in my testimony, the Report recognizes that climate change already has placed disproportionate burdens on low-to-moderate income households and historically marginalized communities. As a result, all of the recommendations and the frame of the entire Report consider impacts on low-to-moderate income households and marginalized communities. Any policy prescription must not exacerbate existing inequitable burdens of climate change. This is absolutely critical in ensuring that any future policy does not make the problem worse. One approach to blunt the impact of climate-related financial shocks to these communities is found in recommendations 8.1 and 8.2 of the Report. These recommendations lean heavily on the opportunities that emerge from smart climate policy, and from congressional and regulatory action to spur investment, innovation and economic productivity.

Recommendation 8.1: The United States should consider integration of climate risk into fiscal policy, particularly for economic stimulus activities covering infrastructure, disaster relief, or other federal rebuilding. Current and ongoing fiscal policy decisions have implications for climate risk across the financial system.

Recommendation 8.2: The United States should consolidate and expand government efforts, including loan authorities and co-investment programs, that are focused on addressing market failures by catalyzing private sector climate-related investment. This effort could centralize existing clean energy and climate resilience loan authorities and co-investment programs into a coordinated federal umbrella.⁸

If carefully crafted with the recognition that climate change has posed inequitable burdens, fiscal policy and government programs correcting market failures can blunt the impact of climate-related financial shocks. More importantly, these steps can spur economic growth, job creation, and resilience in the very communities that have been historically marginalized and have suffered environmental injustice.

⁸ *Id.* at 116.