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Tulika Narayan, Anu Rangarajan, and Faraz Usmani

Priorities for Climate Action

Climate change is a defining policy challenge of the 21st century. The need for innovative, sustainable solutions that help meet ambitious targets to reduce emissions and make vulnerable communities more resilient is greater than ever. As domestic and international policy coordination aligns and considerable resources are mobilized to tackle the global climate challenge, precise data and analytics, careful measurement and evaluation, and robust feedback loops that enable learning and dynamic policy adjustment are needed more than ever. This note outlines four priority areas for the new administration's consideration that offer opportunities for high-impact climate action: (1) sustainable climate finance, (2) analytic frameworks and decision support tools to maximize impact, (3) behavior change interventions combined with rapid-cycle evaluations to enhance intervention effectiveness, and (4) climate justice.

Sustainable climate finance

The past decade has seen a dramatic increase in funding committed to climate finance, but these efforts have overwhelmingly targeted the energy sector, and total financing for renewable energy or low-carbon transport overshadows the amount available for sectors such as agriculture or water. Similarly, although climate finance is equally important for adaptation, financing for mitigation activities far outpaces that for adaptation projects. An important priority for the new administration will be to finance mitigation activities in sectors such as agriculture, while also ensuring financing is available to support adaptation and climate resilience projects. In particular, there is a need to build a robust pipeline of bankable opportunities in these sectors, as there is more capital chasing a weak pipeline which needs to be energized. Results-based payments approaches such as prize competitions for business plans can spur new ideas and help identify non-traditional partners that are committed to social impact. Directing more climate finance toward mitigation efforts in sectors beyond energy as well as toward adaptation actions could also occur by creating

different types of investment platforms: (1) forums like the Sankalp Forum that includes summits and workshops around key themes, and helps match investors with potential projects and collate potential investment opportunities; (2) co-creation workshops like those hosted by the U.S. Agency for International Development (USAID) to convene a vetted set of actors looking to develop solutions for problems that are either broadly or narrowly defined; (3) platforms similar to the Power of Nutrition that leverage funding mechanisms and create implementation partnerships among the governments, donors, and implementers to provide scaled-up solutions for climate adaptation activities in targeted areas.

## Analytical framework and decision support tools to maximize impact

As the administration looks to increase its funding for climate change, there will be a need to use a clear analytical framework—one that articulates the nature and extent of underlying market failures to justify the use of public funds—to identify, assess, and fund projects. In particular, precise measurements of the additionality of

current investments (that is, the extent to which each dollar of financing delivers benefits over and above business-as-usual scenarios) will become increasingly important. Establishing additionality has proven elusive thus far, partly due to the complexity of intersectoral links. For instance, weather variability, soil health, water availability—all influence the productivity of agriculture, which in turn drives deforestation and biodiversity loss, soil and water pollution, and greenhouse gas (GHG) emissions. Promising agricultural technologies that achieve the dual goals of agricultural productivity and positive environmental outcomes can profoundly improve the sustainability of agriculture, but comprehensively measuring impacts and accounting for associated benefits and costs to optimize investments in such innovations pose challenges. As part of a USAID-supported consortium, Mathematica is developing a sustainable agriculture decision support tool (DST) that informs the scale-up of innovative agricultural technologies that offer opportunities to achieve win–win agricultural, environmental, and climate outcomes. The DST projects the financial costs and returns of agricultural technologies; rigorously documents associated GHG and environmental impacts; and enables joint analyses of financial, social, and economic costs under distinct intervention scenarios for different types of landscapes. In so doing, it explicitly highlights landscape-specific wedges between financial and economic returns (such as at agricultural frontiers, which are often characterized by pervasive land-use and land-cover change). Such tools can help policymakers channel existing resources toward impactful, climate-smart agricultural technologies that face financing gaps, and away from areas where the prospect of high financial returns means that business-as-usual trends in investment will be sufficient. Path-breaking approaches to measuring resilience can also sharpen the impact of investments to improve climate resilience. Innovative geographic information system (GIS)-powered tools for crowd-sourced self-reported data can simultaneously inform communities of climate risks and share information on their resilience and adaptive capacity.

Behavior change

Technical solutions and programs alone are rarely sufficient. People routinely fail to access services for which they are eligible, drop out of programs that help them pursue important goals, and "disadopt" technologies that deliver private and public benefits. Comprehensive behavior change—by individuals, households, and firms—is needed to ensure the sustainability of promising practices and innovations, including in the climate arena. USAID has invested significantly in behavior change in the past years, and an important lesson that has emerged from the challenges in changing behaviors is that context is key. Behavior change communications needs tailoring for every context and it is difficult to know in advance the specific strategy that will have the most success. For this reason, among the six steps (see diagram) that are key in developing a behavioral design process, including rapid evaluation, is a critical feature. Starting with the premise that is difficult to know the perfect behavior change strategy, interventions should begin with at least two well-formed solutions to test once they have understood the problem and have diagnosed the causes. Setting up rigorous rapid-cycle mechanisms that quickly test across different nudges or interventions will enable implementers to determine the more effective behavior change strategy. Indeed, recent estimates suggest behavioral solutions for mitigating climate problems (including

Behavioral science methods combined with rapid-cycle evaluations can enhance effectiveness of climate action
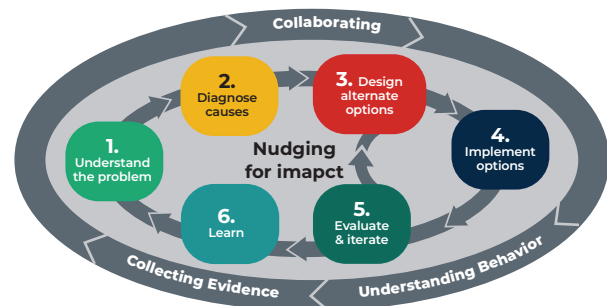
reduced food waste, increased reliance on mass transit, and sustained adoption of renewable energy technologies such as small-scale rooftop solar photovoltaic systems) have the potential to mitigate 20 to 40 percent of projected emissions by 2050.[1] Achieving behavior change at the level needed requires a significant shift and focus on using evidence based strategy, which in turn require changes in how implementation occurs.

Climate justice

The impacts of climate change—both domestically and internationally—are not distributed evenly. Extreme weather events in the future will disproportionately affect historically marginalized communities that bear the least responsibility for causing climate change. In addition, domestic and international responses to climate change stand to further exacerbate existing societal inequalities if not designed equitably. A recognition of this triple injustice of climate change should be a key priority for the new administration. For example, researchers can use existing data and data analytics to document and predict the impact of climate change on health and well-being of vulnerable populations. This, in turn, can guide equitable investments in health care resources that enhance the resiliency and adaptive capacity of vulnerable communities. Using such data analytic approaches can also ensure specific climate change investments do not lead to any unintended harm, particularly for the most vulnerable.

Endnotes

[1] Williamson, K., A. Satre-Meloy, K. Velasco, and K. Green. "Climate Change Needs Behavior Change: Making the Case for Behavioral Solutions to Reduce Global Warming." Arlington, VA: Rare, 2018.

Let's Progress Together. For more information, please contact Tulika Narayan tnarayan@mathematica-mpr.com or Anu Rangarajan arangarajan@mathematica-mpr.com.