

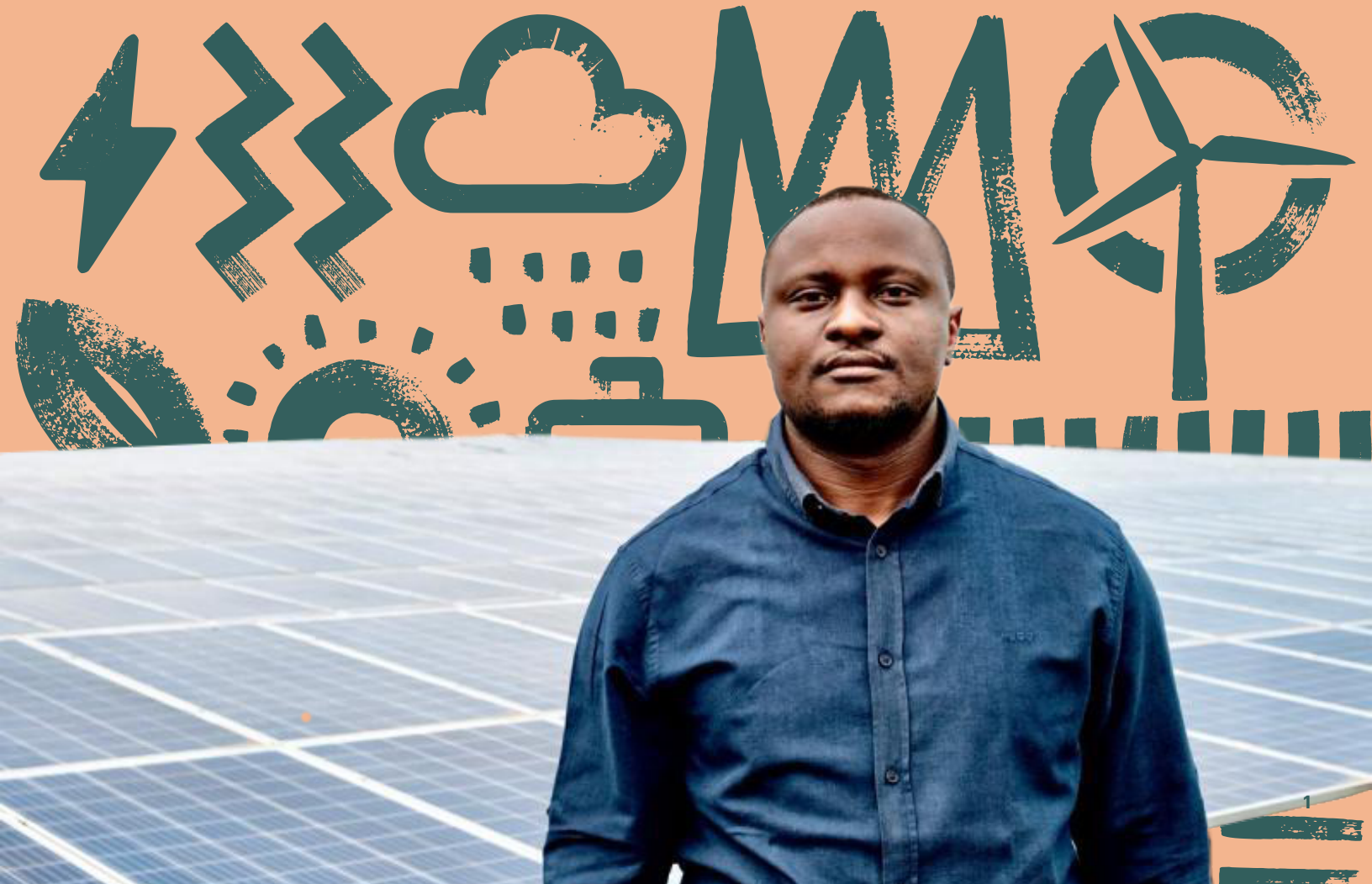
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## CHAPTER 02

# ENERGY



Electricity access is the most impactful catalyst for opportunity and development, with income and energy consumption tightly correlated on every continent. And yet, estimates suggest that more than three-quarters of all emissions globally come from the energy sector. For nearly 15 years, the Foundation has worked at the intersection of both challenges—bringing renewable energy to those who lack steady power while also pushing to reduce emissions. Since no one organization will solve this, we have worked alongside diverse partners to test new ideas, learn, and adapt together.



# OUR BIG BET ON ENERGY: GEAPP

In 2021, we made the biggest bet in our history, **investing \$500 million to create and launch the Global Energy Alliance for People and Planet (GEAPP)**, along with the Ikea Foundation and Bezos Earth Fund, as a platform of partners to accelerate the speed and scale of renewable energy transition in low- and middle-income countries. GEAPP's ambition by 2030 is to avert four gigatons of carbon emissions, provide 1 billion people with new or improved energy connections, and create 150 million sustainable jobs and livelihoods.

Meeting these ambitious targets will require disrupting business-as-usual models and extending renewable energy solutions to as many people as possible while working to decommission high-polluting energy sources. It will also take time: infrastructure progress are intensive efforts.

## GEAPP Impact by the Numbers

In 2023, GEAPP, with support from the Foundation, helped:



**147MT**

**of CO2 emissions averted** through the provision of renewable energy

**1.2M**

**people connected** to new or improved energy systems



**600K**

**new jobs created**



**43MW**

**of power installed**

**722**

**minigrids and 902 commercial and industrial solar systems deployed**



**\$1.07B**

**direct and indirect investments mobilized** through GEAPP

## STORIES FROM THE FIELD

With help from The Rockefeller Foundation, GEAPP, and Care Sierra Leone, Hawa Jalloh received a solar-powered freezer through the flagship Solar Harnessed Entrepreneurs (SHE) initiative. She is one of 6,000 women in 23 minigrid communities in Sierra Leone who is being supported by this project to improve incomes through the use of renewable energy.



Hawa Jalloh stands outside the shop where she sells drinks from a solar-powered freezer.



# GEAPP PROGRAM HIGHLIGHTS

## India

GEAPP partnered with local government, regulators, and donors to create a strong regulatory environment and business case for increasing deployment of distributed renewable energy (DRE) solutions as well as battery energy storage systems (BESS). GEAPP's support for state government DRE programs helped accelerate the roll-out of almost ~1GW of tenders for DREs for productive uses in the states of Maharashtra, Uttar Pradesh, and Bihar. GEAPP's support for India's first commercial-scale BESS project reached regulatory approval and is set to achieve a 50% tariff reduction with a 30% equity stake from a major commercial investor.

### 50%

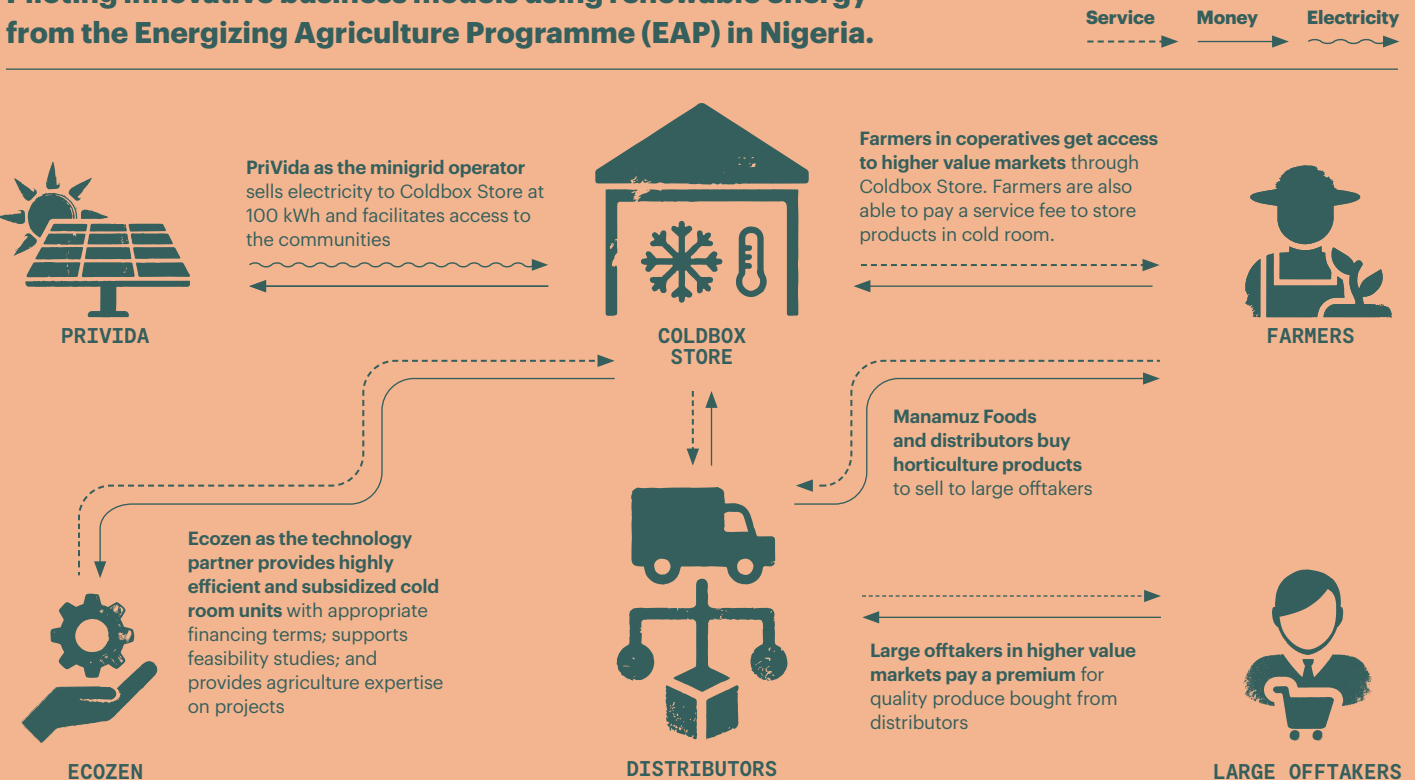
**tariff reduction achieved** because of GEAPP's support for India's first commercial-scale BESS project

### 30%

**equity stake** from a major commercial investor

## CASE STUDY

### Piloting innovative business models using renewable energy from the Energizing Agriculture Programme (EAP) in Nigeria.



Distributors pay a NGN 300/kg service fee to utilize cold rooms. Manamuz Foods serves as an anchor distributor and charges NGN100/kg to off-takers for cold transport services. Coldbox Store operates a network of cold rooms; Coldbox Store and Manamuz Foods are subsidiaries of Manamuz Foods.

GEAPP is just one way that the Foundation is supporting accelerating energy transitions globally.



Rose Mutiso, Research Director for the Energy Growth Hub, inspects solar panels in Amboseli National Park in Kajiado County, Kenya.

## The Foundation is also helping improve market economics of fossil fuel displacement and clean energy projects in lower and middle-income countries (LMICs)

The Foundation is testing the creation of a novel transaction structure to facilitate the early retirement of coal plants in emerging markets while encouraging clean energy expansion and supporting a just transition for impacted workers and communities. The transaction would cover the cost of replacing assets with renewable energy, transitioning workers and communities, and compensating for lost revenues from power contracts. The Coal to Clean Credits Initiative (CCCI) developed the first-in-market transition credits in partnership with South Pole, RMI, and VERRA and is assessing the early retirement of 246MW coal plant in the Philippines in partnership with ACEN, a local asset owner. Early findings from the assessment found a possible route to retiring the plant 10 years early by utilizing transition credits and that doing so could avert up to 19 million tons of CO2 emissions.



### LOOKING TO THE FUTURE

#### Energy for Growth Hub

When it comes to energy development, context matters. That's why the Energy for Growth Hub is developing a ten-year initiative to give African research teams time to pursue longer term projects that add to the evidence base around energy target-setting. The support comes in the form of a flexible fund.



**Africans are basically rendered invisible in their own policy discussions. We have to end this unworkable status quo. African research and expertise are not optional.**

**Rose Mutiso**  
Research Director of  
Energy for Growth Hub





Now is the time to act. We have long passed the time to promise and plan... BESS brings together partners spanning development, technology, and finance to improve access to technology, finance, research, and innovation. Bringing these things together is important in creating the ecosystem necessary for the energy transition.

**The Honorable Mia Mottley**  
Prime Minister of Barbados



## We are helping advance new high-impact energy technologies, such as Battery Energy Storage Systems (BESS) to leapfrog the energy transition

Beyond testing new innovative ways to finance energy transitions, widespread renewable electrification will require dramatic new solutions. Core to the Foundation's mission is the use of its convening power to support the widescale advancement of these solutions. The Global Leadership Council (GLC), brought together by GEAPP and co-chaired by Jonas Gahr Støre, Prime Minister of the Kingdom of Norway, and Dr. Rajiv J. Shah, President of The Rockefeller Foundation, launched the BESS Consortium, a partnership designed to galvanize the transformation of energy systems in Africa, Asia, Latin America, and the Caribbean via expanded deployment of battery energy storage systems. To date, the BESS Consortium has secured commitments from 15 LMICs to advance 19 BESS projects in their existing pipeline, totaling a collective BESS capacity of 1.2GW with support from 18 resource partners, including all major multilateral banks and leading experts such as RMI and National Renewable Energy Laboratory (NREL).

### Global Leadership Council BESS Consortium

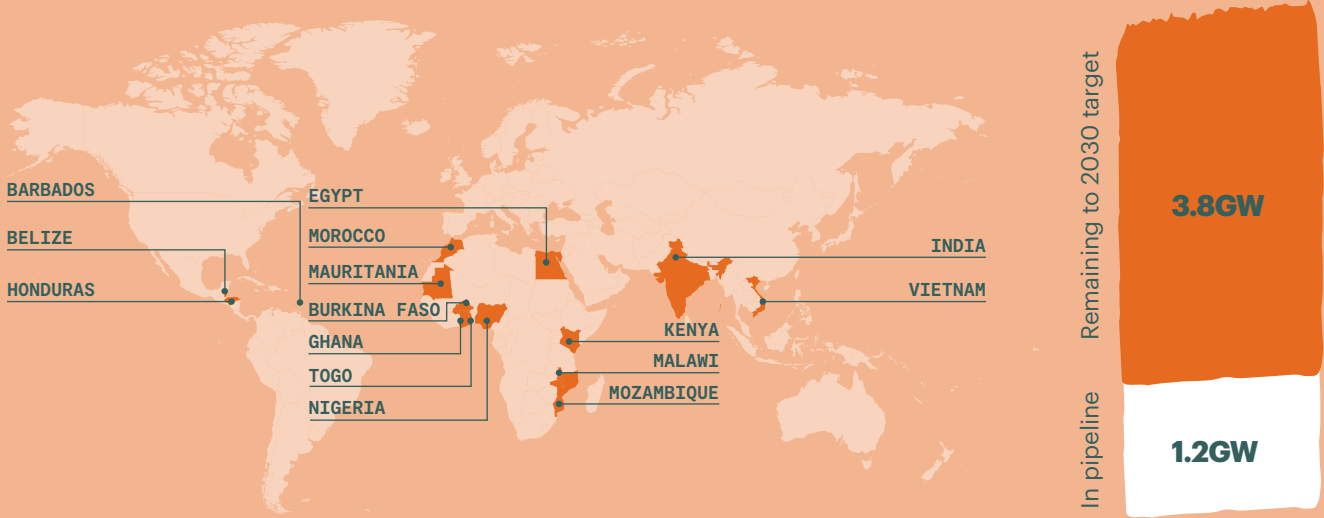


**15**  
Countries



**18**  
Resource Partners

**19**  
Projects in pipeline





## The Foundation is also helping create new alliances and coalitions to coordinate and mobilize high-impact solutions

Throughout 2023, the Foundation and the Environmental Defense Fund cohosted a series of convenings, culminating in a report on the future of Just Energy Transition Partnership (JETPs), designed to help countries plot their move away from fossil-fuel dependency. Beyond the four that now have JETPs—South Africa, Indonesia, Vietnam, and Senegal—the series identified the need to transform JETPs into “country platforms” to improve the translation of political commitments to investment dollars in real projects.

## And we also helped build local institutions to drive energy transition planning in lower and middle-income countries (LMICs)

At a time when Africa has the lowest energy consumption and highest number of young people, The Foundation’s Building Africa’s Energy Transition Architecture program works to create institutional capacity and data-driven solutions to transform power systems within local organizations, non-profits, and universities in Africa. The Foundation backed the Energy for Growth Hub to study and report on the state of energy systems modeling in Africa and beyond and launched a coalition of partners to challenge the dynamics of how energy research is structured and executed in Africa at a Bellagio Convening in July 2023. That study led to the Africa Energy Futures Initiative, an initiative to boost African expertise, targeting the creation of 10 research hubs involving 400+ African experts to guide local energy planning.



# LESSONS LEARNED FROM OUR ENERGY WORK

**The size of the energy transition requires convening and catalyzing partners—public, private, philanthropic, and others—at a scale that has few peacetime precedents. Whether as formal members of GEAPP or outside it, the Foundation has to work with a greater number of partners, across a range of sectors, and at different levels—community, province, national, and global—than perhaps we ever have.**

Though the Foundation has been working on energy projects for 15 years, 2023 was a reminder that partnering and building alliances is difficult even on easy projects, let alone complicated ones. As much as the energy transition is a work in progress, each of our partnerships including GEAPP is a work in progress. Investing the time, energy, and resources in making these partnerships work is essential but can be overlooked amid an urgent crisis.

As we seek to continue to accelerate energy transitions—and work more broadly in the climate area—we will apply several lessons, including the following.



## **Alliances require structure and continuous alignment.**

GEAPP is an alliance with more than 50 partners, working on more than 130 projects, in around 40 countries. Rallying a diverse set of stakeholders each with their own perspectives, goals, and definitions of success around a collective vision poses challenges. We are working to align priorities, implementation approaches, and consistent communication so that everyone understands their roles and is empowered to implement.

## **New institutions take time and support.**

Building a new entity at the scale and speed of GEAPP is challenging, and we have learned much along the way about how to nurture the Alliance. We need to bring more comprehensive support—program support, capital mobilization, legal, finance, and communications—and ensure strong leadership to support this big bet.

## **Measuring systems change is a challenge on its own.**

Measurement and management of impact is happening at the individual investment level, which maintains a high level of accountability for the impact of those investments. At the same time, GEAPP and its partners are working together to achieve broader systems transformation goals. For any grantmaker, it is important to strike the right balance between accountability for investment impact and contribution to broader energy system transformation.

## **Build talent locally.**

We need to invest in human capital; inspiring, training, and investing in emerging leaders in nascent industries to not only ensure success today but the talent pipeline and local leadership essential to enabling future economic growth and development. Our stakeholders, beneficiaries, and partners consistently raised the need to leverage and build embedded, local expertise that provides critical context and long-term buy-in.

## **Think beyond grants.**

Philanthropy can have a great deal of impact when we look beyond traditional grant capital, especially by catalyzing the private sector. We must continue testing blended finance models, direct equity investments, and local currency financing platforms to demonstrate the potential for philanthropic capital to derisk investment and crowd in private capital over time.

## **Achieving gender equity requires intention.**

Women are underrepresented in energy jobs and are, on average, paid 20% less than their male counterparts. Through GEAPP's work with Shortlist to support the placement of women in green energy jobs, we have seen that hiring and technical assistance interventions for energy employers can significantly increase women's earnings to 95% of their male counterparts, but over time these earnings begin to drop as men receive promotions and raises at a higher rate. Gender equity engagement with employers works, but lasting and sustainable equity will require persistence.





## SPOTLIGHT

Energy is not the only area where a changing world is changing how we work. The Rockefeller Foundation has sought for decades to ensure people have nourishing food, good health, and economic opportunity. The perils of climate change are making these initiatives more difficult as droughts or floods make it harder to keep crops and cattle alive, viruses spread farther faster, and work becomes more depleting in harsh conditions. Scaling solutions, in turn, increasingly requires supporting innovative thinkers and doers and convening a wide array of partners.

**For 111 years, the Foundation has sought to convene and connect a diverse group of leaders to drive transformative change. With what we call our Connected Leaders Platform, we seek to convene and connect those making change in many ways and locations.**

## THE CONNECTED LEADERS PLATFORM

The Rockefeller Foundation's Bellagio Center is one pillar of our Platform. Last year at the Bellagio Center, 1,001 leaders participated in convenings and over 100 individuals from around the world completed month-long residencies. 40% of these convenings and 22% of residencies were dedicated to reversing the climate crisis.

The Foundation has also deepened our capacity in other geographies. In October 2023, the Asia Regional Office hosted the seminal AsiaXchange event in New Delhi, India, bringing together a diverse cohort of policymakers, experts, funders, and executives converged to deliberate critical climate challenges, resource gaps, and opportunities in Asia. Last year, we also opened a convening center at our headquarters in New York, hosting 82 convenings and events that included nearly 5,000 leaders from around the world. During the annual United Nations General Assembly alone, we hosted 1,500 people in New York.



Participants of the Bellagio Convening of the Global Women Leaders. Bellagio, Italy. June 2022.



**Here are some examples of how we are convening and connecting leaders to reverse and respond to the climate crisis.**

**Apparel Impact Institute**

The apparel industry has a significant impact on the environment, producing 1.025 gigatons of CO2 annually. The Apparel Impact Institute convened at the Bellagio Center in 2023 to develop new energy and climate finance solutions towards decarbonization, pollution, and emissions reduction investments in Asia. As a result of the convening, they are developing a \$250 million blended capital solution with the International Finance Corporation to invest in decarbonization solutions.

**MERGE**

The climate crisis is producing extreme weather events that threaten lives and livelihoods. With the Foundation’s support for a pivotal convening at the Bellagio Center, Johns Hopkins University’s Debarati Guha-Sapir and Ben Zaitchik partnered with leading public data holders to launch MERGE, a global consortium to streamline humanitarian data and response to climate-related disasters. The platform will build awareness and evidence-based policies on the human impact of climate disasters.

**\$250M** blended capital solution developed at the Bellagio Center with the International Finance Corporation to invest in decarbonization solutions



Villa Serbelloni, The Rockefeller Foundation Bellagio Center

**Rising Water in Black and Brown Communities**

The most vulnerable communities experience the most deleterious effects of climate change. With support from The Foundation, award-winning filmmaker and writer *dream hampton* created a set of video dispatches, in collaboration with local community organizations, to document the effect of rising Great Lakes levels on Black and Latinx communities in the Midwest. *dream* shared her work in our NYC Convening Center, engaging the audience in dialogue about the impacts of our changing climate on Black and Brown communities in the United States.



From left to right: Danielle Goonan, Managing Director, The Rockefeller Foundation; Reverend Lennox Yearwood, President & CEO of Hip Hop Caucus; *dream hampton*, filmmaker and film producer

**LESSONS LEARNED**



**Convenings need to do more than bring people together, they must catalyze action.** The Foundation has seen an increasing demand for convenings. There is a need to ensure these convenings are strategic and move from prepared scripts and inspiring conversation to action. The Foundation will continue to influence convenings to be strategic, to make the most of the opportunity of bringing leaders together, using principles of effective convenings.

**Convenings must bring together unlikely partners.** For real, durable action to follow from convenings, we need a diversity of participants around the table. Convenings that include only one perspective don’t lead to innovation or new action. We will continue to emphasize that the right mix of perspectives is in the room to create value.