Thank you Chair Bass, Ranking Member Smith, and other members of the Subcommittee. I have been working on US policy, development finance, and US-Africa relations for three decades. I have worked in academia, at think tanks, at the World Bank, and proudly served as Deputy Assistant Secretary of State for African Affairs. I now run the Energy for Growth Hub, a nonprofit global research network dedicated to using data and evidence to build a world where no person's potential is wasted because power is unreliable or unaffordable. All people and all countries deserve a high-energy future to become prosperous, competitive, and climate resilient. I interact nearly every day with African researchers and policymakers at the nexus of climate and energy policy and a core function of my job is to learn from them. My comments today are my own views but also reflect the perspectives I hear in those conversations.

This hearing is timely. The dual fights against poverty and climate change are even more urgent with the pandemic and its uneven recovery exposing unacceptable levels of inequality. The pandemic also complicates the new Administration’s ability to put forward a clear alternative to the influence in Africa of strategic competitors such as China and Russia.

With rising attention to global inequality, racial injustice, and mounting frustration at vaccine nationalism, Africa must get fair treatment in climate policy. All nations must get to net zero, but that drive must start from a first principle of economic justice and the rights of all people to live modern dignified lives and have a fair shot at a decent job. Abundant reliable energy is the foundation of modern living and every modern economy. I have three points today.

One, climate justice starts with this basic fact: Africa contributes the least to the emissions causing climate change because it is energy poor. Cumulative CO₂ emissions from more than one billion people living in 48 sub-Saharan countries account for 0.55% of the global total (Figure 1). Global energy inequality is so great that Americans use more electricity playing video games than all of Nigeria, a nation of 200 million people (Figure 2). Vast disparities in power consumption are one reason that the average American emits 40 times as much CO₂ as the average Kenyan. Mitigating global emissions is an urgent priority. But Africa is not where the battle will be won or lost.

Two, African nations are already leading in the transition to a clean energy future, but every country has the right to determine its own path. Africa is not the United States, and our paths to net zero will not be the same. Many countries on the continent still must reach universal basic energy access while also rapidly building out energy infrastructure to create jobs, power cities, and enable climate-smart industrialization.

- I want to highlight that South Africa is not representative of the rest of the continent. South Africa faces a unique set of challenges to decarbonize a high-energy and coal-dependent economy with flat demand.
Nearly every other country on the continent is low-energy, low-carbon, and has explosive demand. For example, Senegal aims to use a mix of solar, wind, and domestic gas (developed by US-based Kosmos Energy) to expand electricity to all its citizens, transition away from dirty heavy fuel oil, and to power industry. Ghana aims to use a mix of hydro and gas, Nigeria solar and gas, while Kenya is exploiting wind and geothermal.

Each nation has its own objectives and will find its own path to a more prosperous and cleaner future. This notion is embedded in the Paris Declaration.

Three, US policy to accelerate a transition to clean energy absolutely cannot come at the expense of Africa’s own development goals and aspirations. Like us, Africa’s immediate priority is job creation, especially for the twelve million young Africans who enter the labor market every year and face staggering levels of unemployment. We must be flexible, pragmatic, and listen to our partners. This means avoiding two common mistakes I often hear.

- One is unrealistic expectations of leapfrogging. Yes, many countries should and will exploit cheap solar and wind power. Yes, new offgrid systems can deliver energy services to certain populations and small firms. The United States should absolutely lead in financing and accelerating the deployment of those solutions. But no modern economy can yet run competitively on variable renewable power alone. We cannot yet do it here and we cannot ask Africans to wait for jobs and development until energy storage costs come down.

- The second mistake is allowing misplaced fears of coal to justify a blanket ban on all fossil fuels. Outside of South Africa, coal is largely irrelevant while virtually zero new coal power will ever come online.\(^1\) Gas is a different story. Some African countries have their own gas, which they intend to use for industry, cleaner cooking, and to balance intermittent wind and solar power. In fact, gas is ideal for pairing with variable renewables for both technical and financial reasons. Fortunately, gas in Africa is not a threat to the global carbon budget. In an implausibly extreme case, if Africa tripled electricity consumption solely through natural gas, the additional CO\(_2\) would equal less than one percent of global emissions\(^2\).

To conclude, energy poverty must be defeated if we are going to tackle both climate change and global poverty. The White House has taken several important steps in recent days to put climate back on the US agenda. I urge Congress to support the Administration’s pledges to scale up support for low carbon energy and to invest in the research and development of new energy technologies. But Congress should also:

A. **Hold the Administration accountable** for its commitments to climate adaptation funding and other support for African economies;

B. **Encourage the Administration to be flexible** by avoiding overly restrictive rules on gas at US agencies (DFC, MCC, USAID, etc.) or multilateral organizations (e.g., World Bank) that would limit choices for low-emission, energy-poor countries.

C. **Listen to Africans.** US policies will be most effective when they support Africans’ own climate, job creation, and industrialization goals.

Smart, nuanced, and flexible policy can help to deliver a world that is safe, more prosperous, and more fair. Such an approach would be aligned with American ideals, our national interests, and Africa’s rightful demands for climate justice. Thank you.

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Figure 1: Who has contributed most to global CO₂ emissions?

- **North America**: 457 billion tonnes CO₂, 23% global cumulative emissions.
  - USA: 391 billion tonnes CO₂, 21% global cumulative emissions.
  - Canada: 32 billion tonnes CO₂, 2% global cumulative emissions.
  - Mexico: 18 billion tonnes CO₂, 1% global cumulative emissions.

- **Asia**: 457 billion tonnes CO₂, 29% global cumulative emissions.
  - China: 300 billion tonnes CO₂, 17% global cumulative emissions.
  - Japan: 62 billion tonnes CO₂, 4% global cumulative emissions.

- **Europe**: 514 billion tonnes CO₂, 33% global cumulative emissions.
  - EU-28: 333 billion tonnes CO₂, 22% global cumulative emissions.
  - Russia: 101 billion tonnes CO₂, 6% global cumulative emissions.
  - Ukraine: 13 billion tonnes CO₂, 1% global cumulative emissions.

- **South America**: 40 billion tonnes CO₂, 3% global cumulative emissions.
  - Argentina: 12 billion tonnes CO₂, 1% global cumulative emissions.
  - Brazil: 11 billion tonnes CO₂, 1% global cumulative emissions.

Cumulative carbon dioxide (CO₂) emissions over the period from 1751 to 2017. Figures are based on production-based emissions which measure CO₂ produced domestically from fossil fuel combustion and cement, and do not correct for emissions embedded in trade and consumption-based. Emissions from international travel are not included.

Figures for the 28 countries in the European Union have been grouped as the "EU-28" since international targets and negotiations are typically set as a collaborative target between EU countries. Values may not sum to 100% due to rounding.

Data source: Calculated by Our World in Data based on data from the Global Carbon Project (GCP) and Carbon Dioxide Information Analysis Center (CDIAC). This visualization has been adapted with permission by the Energy for Growth Hub based on the original work by OurWorldInData.org.

Figure 2: Electricity consumption

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Annual Electricity Consumption (TWh)</th>
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</thead>
<tbody>
<tr>
<td>US Gaming</td>
<td>32</td>
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<tr>
<td>Nigeria</td>
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Sources: IEA, Eurelectric (2018). Note: Latest years available.