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Technicians installing solar panels on a customer's roof in Plaisance, Haiti, July 2024. (Photo Courtesy of Alina Enèji via GEAPP)



Delivering Results

Reliable Power

Even in the 21st century, abundant energy is out of reach for billions of people, including the hundreds of millions who live without access to any electricity at all, limiting their access to modern healthcare, education, and jobs. In 2024, The Rockefeller Foundation continued building relationships with governments, partners, and other actors who are committed to the same goal as us: To ensure everyone on the planet can access the power needed to unlock a brighter future.

Stories from the Field

Haiti

Mesh grids help illuminate communities in Haiti.

Driko Ducasse, the founder of the energy company Alina Enèji, is bringing affordable electricity to people across Haiti, a nation where many must survive on just \$2 a day. Support from The Global Energy Alliance for People and Planet (GEAPP)—a philanthropic alliance co-founded by The Rockefeller Foundation in 2021—and the Off-Grid Electricity Fund are enabling Alina Enèji to connect Haitians to electricity with “mesh-grids,” which combine the simplicity of solar home systems with the resilience of a grid and can be driven by truck to remote areas with little infrastructure or security and set up quickly.

Alina Enèji also works directly with the people it serves: “98 percent of our staff are locals,” Ducasse says. “And we make sure the community wants the mesh-grid before we arrive.” It’s working: after starting in 2021 with just 35 houses, mesh-grids are now powering more than 3,000, and early results show 27% of users have used that electricity to launch or improve income-generating activities. GEAPP’s funding has also mobilized an additional \$3.5 million from the World Bank and IDB, which Alina Enèji will use to scale the project’s reach to 10,000 connections.

The mesh-grids are giving communities a different kind of connection, too. “Because they have porch lights, now they can sit outside at night together and have a conversation,” Ducasse says. “That matters.”

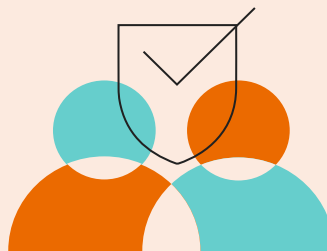


Jean Wislet, Alina’s lead technician, poses with an Okra system after completing a HUB installation. (Photo Courtesy of Alina Enèji via GEAPP)

PROGRAM SNAPSHOT

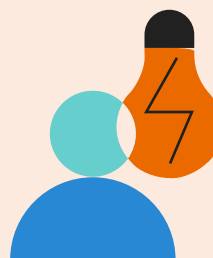
The Rockefeller Foundation’s Power team believes it’s possible to extend electricity access to everyone. That means reaching the 3.8 billion people living in energy-poor countries—including 700 million without any electricity—with the power they need to access well-being and opportunity.

2024 By the Numbers



2,500

high-level stakeholders and policymakers trained, supported, or engaged to advance the renewable energy transition



1.7 million

people with new or improved energy access from our Big Bet: GEAPP



Program Highlights

Want to install a mini-grid? The e-GUIDE is ready to help

In 2024, the Power team commissioned an in-depth evaluation on their partnership with Electricity Growth and Use in Developing Economies, AKA the e-GUIDE Initiative, which brought together teams from the University of Massachusetts Amherst, Carnegie Mellon University, Columbia University, Rochester Institute of Technology, University of Washington, and the Kigali Collaborative Research Centre to develop data products for energy planning, particularly in Africa.

Their findings showed that the e-GUIDE Initiative successfully established strategic relationships in eight African countries, influencing energy policy in Kenya, Uganda, and Zambia, and shaping tariffs for more than six million customers in Kenya, Sierra Leone, and Tanzania. e-GUIDE was also instrumental in helping countries select mini-grid sites. For example, in Ethiopia, e-GUIDE's mapping tools identified 200 mini-grid sites with the potential to provide energy access to more than 290,000 people, and accelerated project timelines by up to 24 months.

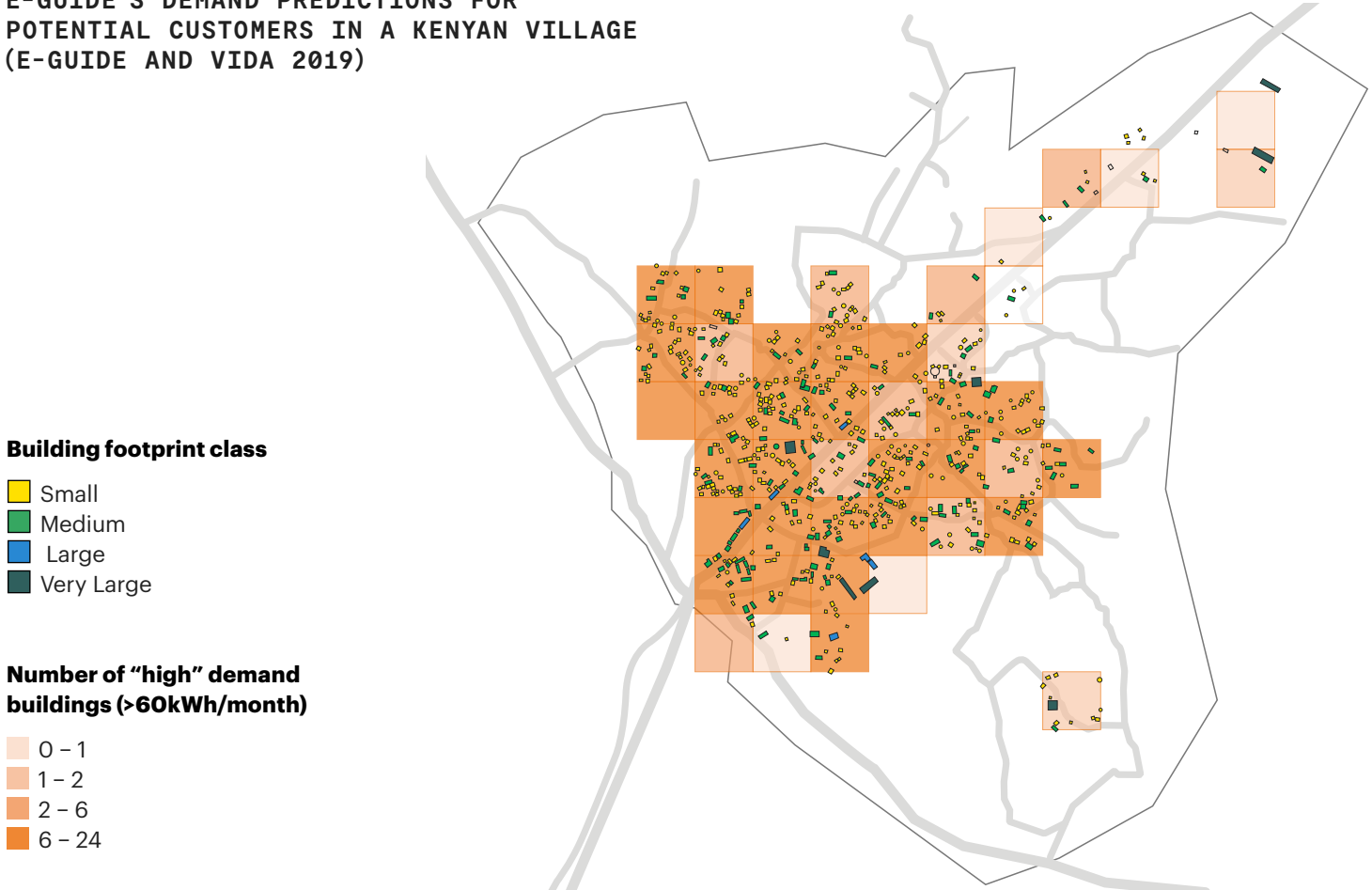
LESSONS IN ACTION



Bridging between data holders and data users is getting harder.

The success of e-GUIDE reinforces the critical role of accurate and granular data in planning and mapping energy systems. However, data alone is not a cure-all. Energy sector institutions need essential data infrastructure and skills to carry this work forward in-house long-term. To support the use of data to accelerate energy access, we must also prioritize supporting an enabling environment for its use and uptake.

E-GUIDE'S DEMAND PREDICTIONS FOR POTENTIAL CUSTOMERS IN A KENYAN VILLAGE (E-GUIDE AND VIDA 2019)



Big Bet

The Global Energy Alliance for People and Planet

Since 2021, GEAPP has been working to connect 1 billion people to reliable, clean energy while reducing carbon emissions and supporting sustainable livelihoods. GEAPP, which was incubated by the Foundation and funded with support from founding partners IKEA Foundation, The Rockefeller Foundation, and the Bezos Earth Fund, brings together governments, investors, and innovators to ensure that energy access is equitable and environmentally sustainable.

2024 By the Numbers

GEAPP forges alliances between public, private, and philanthropic partners to end energy poverty and drive inclusive economic growth through clean energy across Africa, Asia, and Latin America and the Caribbean. It provides catalytic support through grants, financing options, and technical assistance to bridge gaps and overcome barriers to progress.



1.7 million
people connected to new or improved energy access



947 thousand
jobs and livelihoods supported



326 thousand
t/CO₂e* averted or reduced



\$1.5 billion
of capital directly and indirectly mobilized for GEAPP for renewable energy projects

A family in Haiti awaits installation of the mesh-grid. (Photo Courtesy of Alina Enèji via GEAPP)



*CO₂e—a common unit used to express a variety of greenhouse gases in terms of carbon dioxide equivalence

Deep Dive

India

Powers Up

In the last few years, India achieved a major milestone: reaching 100 percent of its households and villages with electricity, a huge step for health, education, women's empowerment, and job creation. Now the Indian government has set a new goal: to deploy 500 gigawatts of renewable energy by 2030, including 25 gigawatts of installed solar capacity.

To advance that ambition, GEAPP is supporting the Government of India in communities where expanding renewable power will most improve lives and livelihoods.

For example, in the Indian State of Rajasthan, the expanded grid gave rural farmers access to electric farming equipment. However, their power supply was not always reliable, and not always available in the daytime, sometimes forcing them to choose between sleep and work. To remove the need for that choice, the government has been working toward implementing new solar installations, which would have the dual benefits of providing farmers with consistent, reliable power while also advancing the country's transition goals. To help accelerate that progress, GEAPP leaned into its role as an organizer of unlikely partners to bridge the divide between farmers, distribution companies, and private entities, helping them communicate and align on goals.

To start, GEAPP facilitated conversations between stakeholders to better understand their needs, concerns, and barriers to success. Then, working with state officials in Rajasthan, they helped develop a tool for monitoring solar plant installations to make them more efficient and, importantly, scalable. The result was a digital product designed to track the life cycle of solar plants, ensure timely interventions, oversee resources, manage automated payments, and allocate jobs for local communities. That system built a common platform for a diverse set of partners, helping them achieve as much solarization progress in ten months as in the previous seven years.



Nirmal Das Swami, owner of Sawarda Solar Farm, observes a robotic solar panel cleaner. Badwali Dhani, Rajasthan, India. (Photo courtesy of GEAPP)

Today, 243 solar sites have been installed, impacting approximately 177,000 farmers in Rajasthan. An independent evaluation found that 94% of farmers reported having fewer power cuts, 65% reported reduced electricity bills, and 57% reported higher crop yields. In other words, more power leads to more crops, income, and satisfaction—all while keeping sustainability at the heart of the initiative. And, as a learning organization, GEAPP is continuing to adapt and refine the system to meet the emerging needs of the partners it serves.

Now, Rajasthan's farmers are growing more crops than ever before, and the impact of the new solar installations has also rippled even further, reaching 667,000 homes and creating 189,000 new jobs. GEAPP was able to leverage that impact from a modest \$400,000 investment in Rajasthan for two in-house tech developers and project-management fees. That was only possible because that money was spent building the foundation for further partnerships, based on human connections and aimed at enabling people to work, study, plan, invest, build, and dream bigger.

Lessons learned in Rajasthan will inform work there and beyond. Now, as artificial intelligence startups join in the effort to better map and improve grid performance, GEAPP's work and partnerships can serve as a model for accelerating renewables across India as the country continues toward its goal of unlocking 500 GW of renewable power.

Stories from the Field

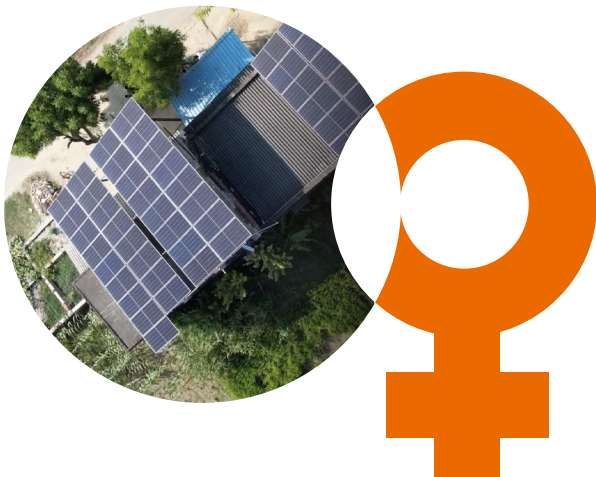
Uttar Pradesh, India

Nine million members.
10,000 women-led businesses.
One coalition for change.

In Uttar Pradesh, India, flourmill owners Renu Mehta and her husband, Ajay, have doubled their daily wheat flour production from 600 to 1,200 kilograms since switching to rooftop solar energy. They have also decreased their production costs, increased profits, and are able to spend more time with their family.

The Decentralized Renewable Energy for Women's Economic Empowerment (DEWEE) is a collaborative partnership with Uttar Pradesh State Rural Livelihoods Mission, GEAPP, the Gates Foundation, and HSBC that uses renewable energy solutions to boost productivity and sustainability for women entrepreneurs. For example, in 2024, the coalition's pilot project electrified three small manufacturing sites with solar energy, which saw a threefold increase in productivity, a 30 percent reduction in energy costs, and an income increase of 15 to 20 percent for the 60 women working at the sites.

The effort has created a model for economic development across the region. The DEWEE program is now run by the Uttar Pradesh State Rural Livelihood Mission, which supports women-owned businesses, including farms, shops, and service enterprises. The DEWEE project is expected to employ 1,000 women by mid-2025 and 4,000 women by the end of 2026.



LESSONS IN ACTION



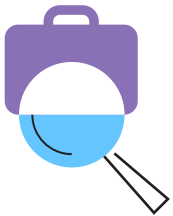
Agreement isn't essential, embracing candor and conflict is

In our partnership with GEAPP, we are learning that as a donor, our job is to create an environment for discussions, while respectfully co-developing the ideas and perspectives needed to succeed. To keep partnerships healthy, we need to be willing to acknowledge where there is misalignment, uncertainty or disagreement and confront it together. This lesson is even more crucial today as GEAPP continues to expand its donor base. We must recognize that we are one of many perspectives that our grantee must balance and we should prioritize making differing perspectives and priorities discussable, visible and workable to support GEAPP in reaching their goals.

Deep Dive: Highlight

Myanmar goes solar, providing renewable power and hundreds of jobs.

In Myanmar, over three-quarters of the population has access to electricity, but it's often unreliable, with some places receiving only two to four hours a day of power. As a result, many households and businesses rely on diesel, which is both expensive and polluting. That's why GEAPP, in partnership with Pact, an international human development nonprofit, helped Smart Power Myanmar use capital from local banks to build rooftop solar projects. So far, they have delivered 19 rooftop solar projects with an installed renewable generation capacity of 3.3 megawatts. Smart Power Myanmar has delivered real results: supporting 2,400 jobs, providing stability in underserved communities, and on track to prevent 75,824 tonnes of carbon emissions over its 20-year lifetime.



2,400

jobs supported



75,824

lifetime t/CO₂e prevention



Shan Orchard, Myanmar's first avocado oil producer, uses solar financing with support from Smart Power Myanmar to overcome lack of grid power and sustain production. (Photo courtesy of GEAPP)

Looking Ahead

Mission 300

The Rockefeller Foundation, in partnership with GEAPP, SEforALL, and others, is supporting Mission 300—an ambitious initiative led by the World Bank Group (WBG) and African Development Bank (AfDB) to connect 300 million people in Africa to electricity by 2030. By mobilizing governments, the private sector, and philanthropy, Mission 300 is unlocking reliable, affordable, and sustainable energy to power economies, improve public services, and create jobs.

