

BEYOND THE GRID OVERVIEW

JANUARY 2019

POWER
AFRICA

A U.S. GOVERNMENT-LED PARTNERSHIP



POWER AFRICA GOALS

GOAL: To Double Access to Electricity in sub-Saharan Africa

PILLAR 1: GETTING TO 30,000 MW

Transaction advisory services that help bring large-scale projects to financial close

PILLAR 2: GETTING TO 60 MILLION CONNECTIONS

On-grid and off-grid electricity services, including *Beyond the Grid* where national grids do not reach

PILLAR 3: UNLOCKING ENERGY SECTOR POTENTIAL

Policy, regulatory, and enabling environment enhancements to advance power projects

POWER AFRICA GOALS

GOAL: To **Double Access to Electricity** in sub-Saharan Africa



30,000 MEGAWATTS of new and cleaner power generation (PILLAR 1)



60 MILLION new electricity connections for homes and businesses (PILLAR 2)

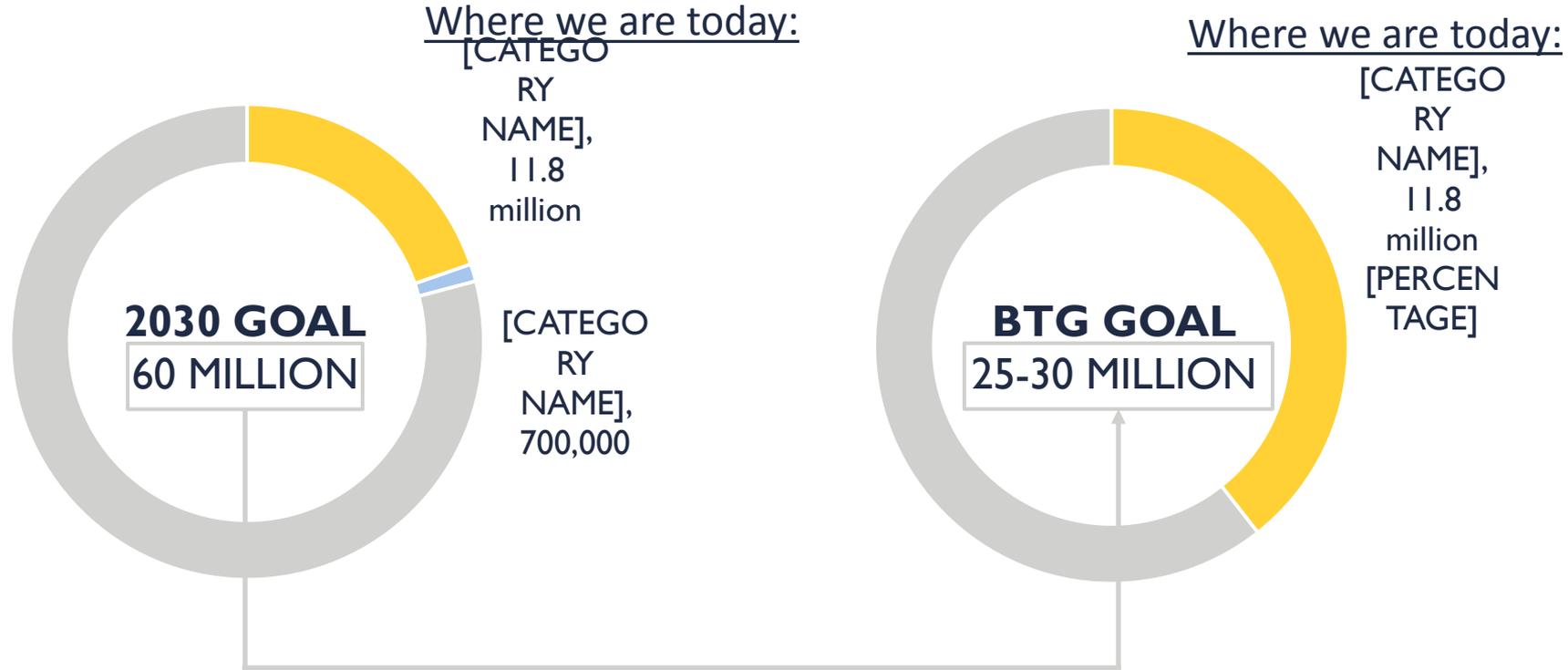
BEYOND THE GRID (BTG)

GOAL: 25-30 million off-grid connections by 2030

- **Launched:** June 2014 at U.S.-Africa Energy Ministerial in Ethiopia
- **Partners:** Over 60 investors and practitioners committed to invest over \$1 billion
- **Focus:** To unlock investment and growth for off-grid energy solutions in sub-Saharan Africa



GETTING TO 60 MILLION CONNECTIONS



BTG STRATEGIC PRIORITIES

GOAL: 17-20 million solar home systems connections

- **Strategy:** Address recurring constraints in the household energy market by increasing access to financing and providing technical assistance.

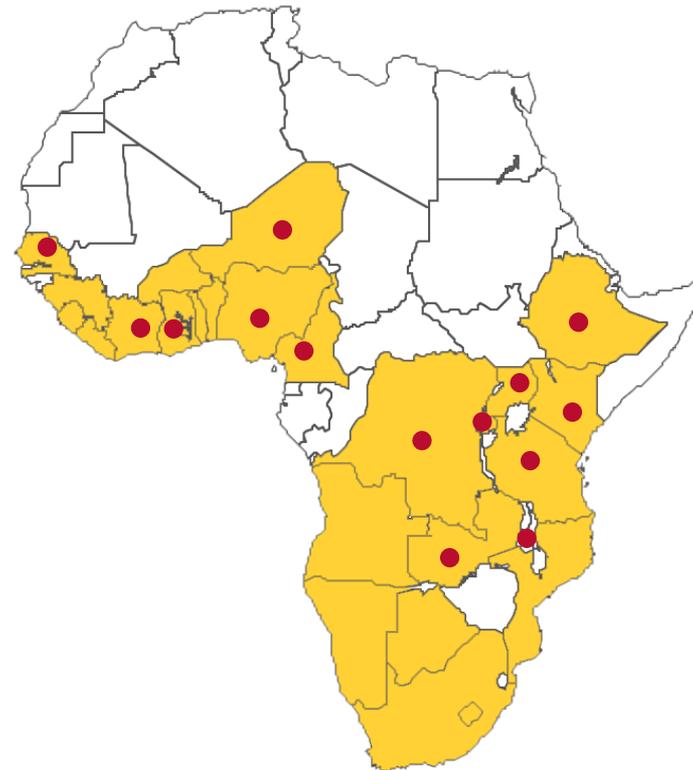
GOAL: 8-10 million micro-grid connections

- **Strategy:** Achieve scalable, cleaner **community-level solutions** that offer electricity access greater than the first tier of task lighting. Ensuring enabling environments are supportive through **regulatory and policy regimes** is critical to facilitate private sector success. Accelerating **business models and access to financing**.

OFF-GRID ADVISORS: EXPERTS IN THE FIELD

BTG has **20+ expert advisors** supporting off-grid energy access across sub-Saharan Africa, providing transaction and technical assistance to private companies, governments & investors to accelerate new connections.

- West Africa Regional (multiple)
- East Africa Regional (multiple)
- Southern Africa Regional (multiple)
- Pan-African (multiple)
- Cameroon
- Côte d'Ivoire
- DRC
- Ethiopia
- Ghana
- Kenya (multiple)
- Malawi
- Niger
- Nigeria (multiple)
- Rwanda
- Senegal
- Tanzania
- Uganda (multiple)
- Zambia



PRIVATE SECTOR ASSISTANCE

- Helping off-grid companies **develop business models**, promote products and services, build management skills, and reach scale
- Refining and strengthening **marketing and retail strategies**, including developing new partnerships with local distribution and retail partners
- Promoting **regulatory changes to encourage private sector investment**, and helping companies navigate regulatory processes for registration and licensing
- Facilitating **access to finance** through connections to private investors and financiers, and assistance with grant and commercial finance applications



COMPANY OPERATIONS



MARKET CONDITIONS



REGULATORY ENVIRONMENT



FINANCE

GOVERNMENT & PUBLIC SECTOR ASSISTANCE

- Assisting with **policy review** and recommendations to provide incentives for off-grid rural electrification
- Providing **best practices & lessons learned** on energy access policies
- Providing **technical assistance** to governments on key issues (e.g., micro-grid interconnection)
- Supporting the development of **technical standards** to facilitate micro-grid and SHS deployment
- Providing **capacity building** to governments to help them understand off-grid business models
- Supporting governments to **develop and implement rural electrification strategies**

STRATEGIC INITIATIVES

Scaling Off-Grid Energy Grand Challenge (SOGE)

- **Focus:** To accelerate SHS sales to reach 20 million; coordinates key partners

SCALING
OFF-GRID
ENERGY:
A GRAND CHALLENGE
FOR DEVELOPMENT

Smart Communities Coalition

- **Focus:** To provide technology & partnership solutions to focus refugee settlements in Kenya and Uganda tailored to connectivity, digital tools, and energy access

SMART
COMMUNITIES
COALITION

SCALING OFF-GRID ENERGY GRAND CHALLENGE

Expanding Supply: Helping Companies Grow

Opportunity:

Support companies that serve off-grid customers by helping them expand geographically, test new business models, and tap private sources of finance. Catalyze private investment through blended approaches.

Driving Demand: Spurring Innovation

Opportunity:

Build consumer demand for off-grid power systems by encouraging innovation in products and services that customers want and need, including energy efficient household appliances and digital financial services.

Strengthening the Marketplace

Opportunity:

Expanding off-grid energy solutions in specific countries by promoting policy and regulatory reforms, supporting the growth of mobile payment systems, and building capacity in local markets.

SCALING OFF-GRID ENERGY GRAND CHALLENGE

Impact:



3.75M

expected connections
reaching over 15M people



\$435M

private investment
catalyzed



50

off-grid companies &
market enablers supported

18

countries in
sub-Saharan Africa

\$8:1

For every dollar SOGE partners
commits, the private sector
invests nearly \$9.

64%

of those companies
are joint investments
by SOGE partners

Including new deployments in: Cameroon,
Cote d'Ivoire, Madagascar, Malawi, Mali,
Mozambique, Senegal

40%

catalyzed nearly 40% more private capital
than in Year 1

20%

of companies supported are 2nd- or 3rd-
generation companies

Founding Partners:



Shell Foundation |

Aligned Partners:

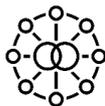
- Acumen
- Microsoft
- GSMA
- United Nations Foundation

SMART COMMUNITIES COALITION (SCC)

- Public-private model seeking to transform the operating model in refugee camps and settlements
- SCC will organize and mobilize stakeholders according to their core strengths to address three fundamental pillars:



Connectivity



Digital tools



Energy access

- More than **30 participating partners** who will focus initial efforts on refugee camps and settlements in Kenya (Kakuma, Kalobeyei) and Uganda (Bidi Bidi, Kiryandongo, Rwamwanja), which are among the ten countries with the largest refugee populations

Co-chairs:



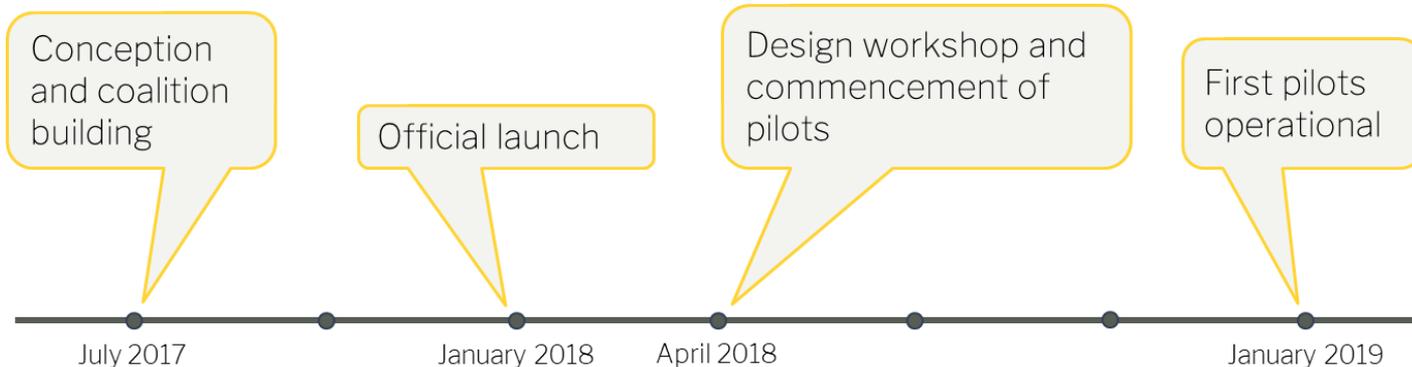
SMART COMMUNITIES COALITION (SCC)

Objectives

- Increase efficiencies in camp management and service delivery
- Empower refugees to provide for themselves and their families
- Equitably address the needs of host community members in and around targeted settlements

Principles

- Employ an “ecosystem” approach to technology deployment
- Build public-private models
- Integrate existing efforts and refugee response frameworks

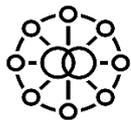


SMART COMMUNITIES COALITION (SCC)



Connectivity

A recent study found that mobile phone and internet access is as critical to refugees' safety and security as food, shelter and water.



Digital tools

Implementing agencies increasingly rely upon digital technology to reach refugees and locals. Digital tools open up new education, training, livelihood and information opportunities.



Energy access

Power is not provided in settlements as a service, so refugees rely upon poor quality, expensive diesel generators; solar home systems and micro-grids using pay-as-you-go (PAYGO) offer opportunities to enable livelihoods.

INTERAGENCY & STRATEGIC PARTNERSHIPS

Interagency & Strategic Partnerships are Vital to BTG Success

- **Quality Assurance Framework for Mini-grids:** Pilots with private sector companies, assistance to governments. Partnership with NREL and U.S. DOE.
- **Global LEAP Results Based Financing (RBF)** procurement incentive for off-grid efficient appliances in East Africa.
- **Global LEAP Awards Off-Grid Refrigerator Competition:** To identify the super-efficient, high-quality off-grid refrigerators. Partnership with SOGE, DFID and Power Africa. Winners announced Jan 2018.
- **USTDA:** Grants (i.e. project prep, feasibility studies)
- **USAID:** Local bank training and capacity building, grants to private sector companies.
- **USADF:** Grants for African-owned off-grid enterprises.
- **World Bank and AfDB:** Cooperation to advance energy access, pipeline for new lending facilities
- **OPIC:** Loans to off-grid companies (i.e. Lumos, SunFunder)



— THANK YOU

[www.usaid.gov/powerafrica/beyondthegr
id](http://www.usaid.gov/powerafrica/beyondthegr
id)

www.scalingoffgrid.org

www.tent.org/partners/smart-coalition