

# Energy for Development

Offering expertise in the strategic, technical, and policy aspects of sustainable energy markets



# **WHAT WE DO**

As a nonprofit research institution, RTI leads the efforts in energy market transformation by creating lasting change in market behavior. We work with host governments to remove barriers and catalyze opportunities to accelerate the adoption of cost-effective energy solutions of sustainable energy markets.



**WE ADVISE** governments on innovative approaches to increase energy access and improve the security and reliability of energy services in countries around the world.



**WE CATALYZE** energy sector reform through legal, regulatory, and market restructuring efforts that give investors confidence and enable increased private-sector investment in developing countries.



**WE LEVERAGE** strong industry connections and a global network of expertise to support implementation of promising energy projects.



**WE EQUIP** organizations across the energy value chain—from national government policymakers to small, rural solar companies—with the knowledge and skills to effectively run their agencies and companies.



**WE DEVELOP** innovative tools and processes to increase the professional participation and leadership of women in the power sector.



# **VALUE ADDED**

Energy, in its many forms, is an engine for economic growth and human development. Making modern energy available, accessible, and affordable is essential to reduce poverty and ensure economic development is sustainable and inclusive.



# TECHNOLOGY ADAPTIVE ENERGY NEXUS

### **TECHNOLOGY**

RTI leads the effort in delivering technical solutions for a sustainable tomorrow by developing transformative technologies through scientific and applied research.

In India, we support the state of Uttar Pradesh with the design and demonstration of a resilient micro-grid energy solution that utilizes two levels of voltage to reduce losses and enhance compatibility for future distribution extensions.

#### **ENERGY NEXUS**

The agro/water/energy nexus is rapidly expanding in policy settings as a novel way to address complex resource and development challenges.

We support fish companies in Somalia with acquiring solar freezers for fish stands. We also study the effects of climate change on water resources and availability for hydropower generation in Eastern Europe.

#### **ADAPTIVE MANAGEMENT**

We go beyond monitoring and evaluation (M&E) to a broad, iterative and adaptive process to harness and apply data to support learning and improvement across diverse stakeholders.

We apply adaptive management principles to identify best practices and scaling up off-grid models in Africa.

# GL BAL IMPACT 28 COUNTRIES IMPACTED THROUGH 2019

### **East Africa Energy Program (EAEP)**

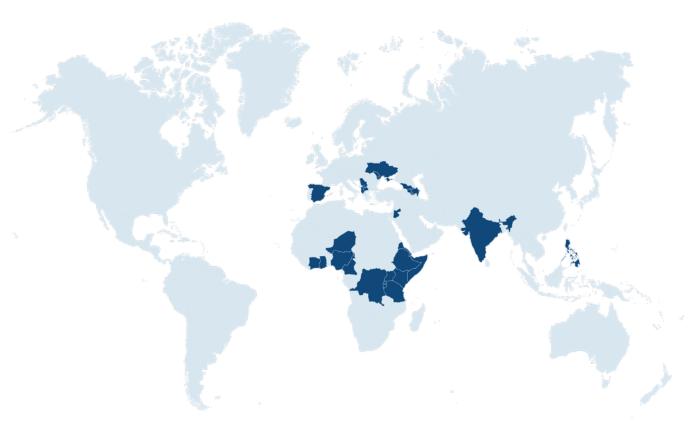
- Supporting Power Africa with connecting 5 million new customers to existing electric utilities while improving utilities' service and reliability metrics.
- Facilitating the addition of 1,500 megawatts of new power generation projects and improving the transmission and distribution systems needed to deliver that energy to customers.
- Improving 10 East African countries' ability to attract private investment to the energy sector.

# **Enhancing Capacity for Low Emission Development Strategies (EC-LEDS)**

- Developed over 70 national laws, policies, strategies, plans, and regulations that address regional energy market integration and conservation.
- Delivered over 600 person-hours of training on energyrelated policy and regulatory practices.
- Supported two cross-border market coupling and integration efforts to promote regional power trade (Armenia-Georgia and Albania-Kosovo).

#### **Energy Sector Technical Leadership Program (ESTL)**

- Created 28 **capacity building** products including online toolkits and supported 29 workshops and webinars, reaching more than 970 participants.
- Leveraged over \$500,000 in in-kind contributions from **electric distribution utilities** (electric utilities).
- Improved human resources policies and practices for
   7 electric utilities in 5 countries to increase gender equity
   through the Engendering Utilities program.



# Philippines Building Low Emission Alternatives to Develop Economic Resilience and Sustainability (B-LEADERS)

- Reduced 1,046,196 metric tons of carbon of **greenhouse gases** by developing renewable energy resources and supporting the improvement and adoption of 20 laws, policies, and regulations.
- Added 242 megawatts of **clean energy** capacity to the grid through the implementation of a coaching and mentorship program for new business entrants to the energy sector.
- Leveraged \$579 million in clean energy **investments**.

#### **Power Africa Off-Grid Project (PAOP)**

- Supporting Power Africa with creating 6 million off-grid connections by 2022.
- Working with private companies to improve business operations and scale up sustainable business models for rural off-grid electrification in over 11 countries in sub-Saharan Africa.
- Leveraging private sector investment for off-grid connections by working with investors and financial institutions to increase the availability of capital.

# Somalia Growth, Enterprise, Employment, and Livelihoods (GEEL)

- Supporting the Ministry of Energy and Minerals to **reduce energy losses** at two utility companies.
- Strengthening **hybrid mini-grids** with 8 utility companies and 4 renewable energy companies to enable 96 megawatts of energy addition by 2020.
- Trained 15 female engineering students in technical and professional skills, developed the first field protective equipment for women, and worked with 26 private companies and 4 universities to support internships for female students.

#### **Ukraine Municipal Energy Reform Project (MERP)**

- Developed 13 government resolutions to establish an incentive-based **district heating** tariff regulation system.
- Conducted over 930 **energy audits** of public facilities in more than 30 cities, with a total investment of \$101 million for the implementation of thermal modernization projects in 306 public buildings.
- Developed and implemented an online and print **public outreach campaign** on **energy efficiency** that included 155 TV channels and websites with 24.7 million viewers.

# **HIGHLIGHTS**

## We are proud to work with USAID and Power Africa to

Leverage

\$700+

worth of investments

**Facilitate** 



new connections

Generate

1800
Megawatts
of new power

#### More information

Tatyana Marshall Director, Energy International Development Group Phone Number: 202-816-3995 Email: tmarshall@rti.org RTI International is an independent, nonprofit research institute dedicated to improving the human condition. Clients rely on us to develop solutions that demand an objective and multidisciplinary approach—one that integrates expertise across the social and laboratory sciences, engineering, and international development. We believe in the promise of science, and we are inspired every day to deliver on that promise for the good of people, communities, and businesses around the world. For more information, visit www.rti.org.



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