October 25, 2016

Webinar:
Energy Access "Movers and Shakers" Showcase
State of Play and Potential for Scale in sub-Saharan Africa

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www.unfoundation.org
www.energyaccess.org
THE CHALLENGE

Energy is essential to development. Yet over 1.1 billion people around the world have no access to electricity and the many benefits it brings – improving health, generating income, enabling education, enhancing security and empowering women. A billion more people have electricity only some of the time. Without it, they are forced to rely on dirty, dangerous fuels that are harmful to their health and hinder their opportunities for social and economic advancement.
ENERGY ACCESS PRACTITIONER NETWORK

To help meet the energy access challenge, in 2011 the United Nations Foundation launched the Energy Access Practitioner Network. The Practitioner Network is the largest global network of small, medium, and large clean energy enterprises, joined up with participants from civil society, government and academia, to deliver modern energy services, particularly decentralized solutions for rural electrification.

The Network’s mission is to contribute to the Sustainable Development Goal of universal energy access by 2030 by:

- Promoting innovation in policy, technology, business and financing
- Amplifying the voice of practitioners in high-level decision-making
- Facilitating increased funding and financing of decentralized energy solutions.
This webinar will showcase some of the most impactful development partners contributing to the scale up of energy access in sub-Saharan Africa.

This webinar will kick off the UN Foundation's new country-focused webinar series with the generous support of the Mott Foundation.

Please follow live Tweets via @energyaccessPN using #PNwebinar!
Sub-Saharan Africa key to achieving universal energy access

The twenty countries with the lowest electrification rates, 2012 (% population with access to electricity)

Heat map courtesy of SEforALL
Sub-Saharan Africa key to achieving universal energy access

Access deficit of electricity in twenty high-impact countries, 2012 (millions of people)

Heat map courtesy of SEforALL
Addressing energy poverty in rural communities should be a priority

How many people are with access to electricity and how does this vary between rural and urban populations?

<table>
<thead>
<tr>
<th>Country</th>
<th>Electrification</th>
<th>Electric Access in Top 20 Large Access Gap Countries</th>
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<tbody>
<tr>
<td>Burkina Faso</td>
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<td>Burundi</td>
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<td>Central African Republic</td>
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<td>Chad</td>
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<td>Congo, DR</td>
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<td>Kenya</td>
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<td>Lesotho</td>
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<td>Liberia</td>
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<td>Madagascar</td>
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<td>Malawi</td>
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<td>Mauritania</td>
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<td>Mozambique</td>
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<td>Niger</td>
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<td>Papua New Guinea</td>
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<td>Rwanda</td>
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<td>Sierra Leone</td>
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<td>South Sudan</td>
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<td>Tanzania</td>
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<td>Uganda</td>
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<td>Zambia</td>
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</tbody>
</table>

Heat map courtesy of SEforALL
Encouraging signs for distributed energy solutions

• In 2015, the largest market for off-grid solar products was sub-Saharan Africa with almost 1.4 million units sold. (REN21)

• In the first six months of 2016, sub-Saharan Africa accounted for 45.5% of solar products sold with close to 2 million units. (GOGLA)

• In sub-Saharan Africa the market for solar portable lights has grown by 90% annually for the last four years (REN21).

• Within sub-Saharan Africa, East Africa represented about 70% of total sales volume in the region and 77% of revenues. (GOGLA)
Encouraging signs for distributed energy solutions

Number of Pay As You Go Enterprises by Country/Region

- **EAST AFRICA**
  - Kenya: 10
  - Uganda: 6
  - Tanzania: 6
  - Rwanda: 3
  - Ethiopia: 2

- **WEST AFRICA**
  - Ghana: 2
  - Sierra Leone: 2
  - Burkina Faso: 1
  - Côte d’Ivoire: 1
  - Nigeria: 1

- **NORTH AFRICA**
  - Mauritania: 1

- **SUB-SAHARAN AFRICA**
  - Sudan: 2
  - Zambia: 2
  - Comoros: 1
  - DR Congo: 1
  - Namibia: 1
  - Somaliland: 1
  - South Africa: 1
  - South Sudan: 1
  - Zimbabwe: 1

- **DEVELOPING ASIA**
  - India: 6
  - Cambodia: 2
  - Lao PDR: 1
  - Philippines: 1

- **LATIN AMERICA AND THE CARIBBEAN**
  - Peru: 3
  - Colombia: 1
  - Guatemala: 1
  - Haiti: 1

- **PACIFIC**
  - Marshall Islands: 1
  - Pacific Islands: 1
Access to finance a key barrier to growth for distributed renewable energy

Barriers to Growth in Distributed Renewable Energy

- Access to finance
- Access to finance for consumers
- Policy / regulatory environment
- Distribution challenges
- Lack of consumer awareness
- Recruiting and retaining trained individuals
- Poor product quality, market spoilage
- Lack of after sales services

*Based on the Energy Access Practitioner Network 2016 annual survey results*
Lack of support from local banks and limited track record of industry players limit financing

*Based on the Energy Access Practitioner Network 2016 annual survey results*
Clear regulatory frameworks & renewable energy support mechanisms key challenges to scaling-up

**Practitioner Regulatory and Policy Challenges to Scaling-Up Distributed Renewable Energy in Sub-Saharan Africa**

<table>
<thead>
<tr>
<th>Regulatory and Policy Challenges</th>
<th>Number of Selections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permitting and licensing, including clear regulatory frameworks</td>
<td>17</td>
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<tr>
<td>Taxes on distributed renewable energy products</td>
<td>12</td>
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<tr>
<td>Design/implementation of renewable energy support mechanisms</td>
<td>12</td>
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<tr>
<td>Financial awareness and capacity (among lenders)</td>
<td>10</td>
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<tr>
<td>Standards and import control</td>
<td>11</td>
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<tr>
<td>Power system planning</td>
<td>8</td>
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<tr>
<td>Clear mandates and institutional arrangements</td>
<td>10</td>
</tr>
<tr>
<td>Subsidized fossil fuel-based energy services</td>
<td>6</td>
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<tr>
<td>Training and skills development infrastructure</td>
<td>2</td>
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<tr>
<td>Mobile money tariffs and regulation</td>
<td>3</td>
</tr>
<tr>
<td>Financial infrastructure (central bank guidelines)</td>
<td>2</td>
</tr>
<tr>
<td>Financial regulations (foreign investment and exit)</td>
<td>1</td>
</tr>
</tbody>
</table>

*Based on the Energy Access Practitioner Network 2016 annual survey results*
To join the Practitioner Network: Visit our website to fill out our membership registration form.
For questions: Please contact us by email at: info@energyaccess.org