Financing Energy Access for All

Using financial flows to stimulate market development

**Recommendations**
- Create leadership commitment from concessional financiers
- Provide gender-aware community training and financing for productive and community end-uses
- Fund national market activation campaigns
- Shift financier evaluation and reward metrics
- Increase financiers’ trust in energy access sector

**STEP 1: Market Activation**
Activating markets starts with building government capacity and consumer awareness, while skilling-up businesses.

1. Target-setting
2. Tax incentives
3. Awareness-raising
4. SME–NGO partnerships
5. SME training
6. SME grant funding
7. Support to women’s groups
8. Industry associations

**STEP 2: Bridging Public and Private Capital**
Creating links between public and private capital by building commercial financier understanding of rural energy access businesses, promoting MFI consumer energy finance, and training and financially supporting new rural enterprises.

1. Concessional local currency debt and equity
2. Consumer financing
3. Loan guarantees
4. Market intelligence
5. Sector coordination groups
6. Public–private partnerships

**STEP 3: Scaling Private Capital**
Rapidly expanding rural private-sector penetration and national business development with increased private capital through, for example, PPPs and bundling rural energy investments to test securitization.

1. Harmonized quality standards
2. Licensing and regulatory frameworks
3. Training institutions
4. Bundled project investments

**STEP 4: Mature Ecosystem**
Once rural energy and non-energy enterprises are thriving, with easy access to all forms of commercial and consumer finance, subsidies and guarantees can be reduced. Support will still be required for remote locations and poorest communities.

1. End-user price subsidies for the remote and vulnerable
2. Commercial local currency debt and equity

**Key**
- **Actions in each step. These will continue in subsequent steps, as appropriate.**
- Companies within different energy access markets grow and are joined by new market entrants over time.
- Market size grows over time and relationships between market actors are strengthened.
- Enabling environment grows more supportive over time.

---

Poor People’s Energy Outlook 2017
Financing National Energy Access: A Bottom Up Approach
policy.practicalaction.org/ppeo2017
@PracticalAction #PPEO2017
Kenya: Energy Access Journey

### Recommendations to address and accelerate energy access finance flows

#### FINANCING RECOMMENDATIONS

- Support project development
- Reform tariff policies for DRE products
- Focus on gender mainstreaming and empowerment
- Reduce taxes and charges for DRE products
- Facilitate bundling of projects
- Standardize project requirements
- Encourage more flexible loan requirements for fuel and stove enterprises
- Expand consumer finance/PAYGO
- Facilitate carbon credits and alternative financing mechanisms
- Streamline accreditation for stove and fuel companies

Ensuring women’s participation in energy decision-making and the design of financial instruments will accelerate women’s empowerment and energy access for all.

*Includes for SMEs, productive uses, street lighting and secondary lanterns

---

### Electricity Generation

<table>
<thead>
<tr>
<th>Year</th>
<th>Stand-alone Systems</th>
<th>Renewable Mini-Grid</th>
<th>Grid Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>1%</td>
<td>0%</td>
<td>43%</td>
</tr>
<tr>
<td>2020</td>
<td>20%</td>
<td>22%</td>
<td>58%</td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Cumulative Cost to 2030

<table>
<thead>
<tr>
<th>Year</th>
<th>Stand-alone Systems</th>
<th>Renewable Mini-Grid</th>
<th>Grid Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$16.4 billion</td>
<td>$5.3 billion</td>
<td>$4.3 billion</td>
</tr>
<tr>
<td></td>
<td>$5.3 billion</td>
<td>$4.3 billion</td>
<td>$0 billion</td>
</tr>
</tbody>
</table>

---

### Cooking Methods: User-Preferred Choice

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LPG cooking</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Electric cooking</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Solar or equivalent technology</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Advanced biomass cookstoves wood charcoal</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Basic improved biomass cookstoves wood charcoal</td>
<td>24%</td>
<td>24%</td>
<td>24%</td>
<td>24%</td>
</tr>
</tbody>
</table>
Bangladesh: Energy Access Journey

Recommendations to address and accelerate energy access finance flows

<table>
<thead>
<tr>
<th>ELECTRICITY GENERATION</th>
<th>2017</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stand-alone systems</td>
<td>1%</td>
<td>5%</td>
<td>19%</td>
<td>$60.8 billion</td>
</tr>
<tr>
<td>Renewable mini-grid</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>$1.0 billion</td>
</tr>
<tr>
<td>Grid extension</td>
<td>72%</td>
<td>80%</td>
<td>80%</td>
<td>$13.4 billion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COOKING METHODS: USER-PREFERRED CHOICE</th>
<th>2017</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPG cooking</td>
<td>0%</td>
<td>9%</td>
<td>46%</td>
<td>$34.9 billion</td>
</tr>
<tr>
<td>Electric cooking</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>$0 billion</td>
</tr>
<tr>
<td>Advanced biomass cookstoves wood/charcoal</td>
<td>0%</td>
<td>6%</td>
<td>6%</td>
<td>$4.9 billion</td>
</tr>
<tr>
<td>Basic improved biomass cookstoves wood/charcoal</td>
<td>1%</td>
<td>1%</td>
<td>47%</td>
<td>$17.6 billion</td>
</tr>
</tbody>
</table>

FINANCING RECOMMENDATIONS

- Reform financing system for mini-grids
- Focus on gender mainstreaming and empowerment
- Integrate energy and agriculture financing
- Devise a clearer grid extension plan
- Reduce policy conflicts on energy-for-work
- Increase government loan guarantees
- Fund awareness campaigns for clean cooking
- Facilitate working capital finance for stove enterprises
- Encourage microfinance for clean cooking

Reviewing market support mechanisms will encourage greater innovation as the sector continues to evolve.

*including for SMEs, productive uses, street lighting and secondary lanterns
Togo: Energy Access Journey

**ELECTRICITY GENERATION**

- **Stand-alone systems**: 2017 - 1%, 2020 - 42%, 2025 - 50%, 2030 - 42%
- **Renewable mini-grid**: 2017 - 0%, 2020 - 8%, 2025 - 50%, 2030 - 8%
- **Grid extension**: 2017 - 50%, 2020 - 50%, 2025 - 50%, 2030 - 50%

**COOKING METHODS: USER-PREFERRED CHOICE**

- **LPG cooking**: 2017 - 3%, 2020 - 47%, 2025 - 47%, 2030 - 47%
- **Biogas cooking**: 2017 - 0%, 2020 - 1%, 2025 - 5%, 2030 - 1%
- **Solar or equivalent technology**: 2017 - 0%, 2020 - 0%, 2025 - 0%, 2030 - 0%
- **Advanced biomass cookstoves wood/charcoal**: 2017 - 0%, 2020 - 38%, 2025 - 38%, 2030 - 38%
- **Basic improved biomass cookstoves wood/charcoal**: 2017 - 2%, 2020 - 9%, 2025 - 9%, 2030 - 9%

**FINANCING RECOMMENDATIONS**

- Focus on gender mainstreaming and empowerment
- Reduce taxes and charges for DRE products
- Encourage more flexible loan requirements for DRE enterprises
- Promote PAYGO
- Facilitate bundling of projects
- Include national targets for clean cooking
- Introduce targeted subsidies for the rural poor
- Reform collateral requirements for enterprises and consumers
- Facilitate carbon credits and alternative financing mechanisms
- Pre-commercial markets need market activation initiatives to encourage private investment and foster opportunities for last mile service delivery.

*including for SMEs, productive uses, street lighting and secondary lanterns*