GOGLA

Accelerating the Off-Grid Solar Market to Reach Universal Access

www.gogla.org
Our Mission

GOGLA is the industry association for the off-grid lighting and electrification sector

Our mission is to help our members build sustainable markets, made up of profitable companies, delivering quality, affordable off-grid electricity products and services to as many customers as possible across the developing world.
GOGLA in numbers

> 100 members around the world

Two membership categories: industry members and associate members. **Industry members** represent mainly off-grid solar manufacturers and distributors. **Associate members** include investors, sector facilitators and research facilities.

13 team members

7 BoD members
Representatives of GOGLA members.

5 working groups
Policy, Impact, Technology, Business Development and Sustainability
GOGLA Focus

Solar Lanterns

Solar Home Systems (+ Household Appliances)

Community & Street Lighting

Off-grid Productive Use Appliances
The off-grid solar market at a glance

3.52m products sold globally in H1 ‘17

$95.6m Cash sales revenues in H1 2017

120.3m People with improved energy access historically

East African countries and India are key markets.
## Market Forecast

### OGS market forecast for pico and PnP SHS

**Million units; left axis: annual sales; right axis: cumulative sales (2017-2022)**

- **Aggressive case:**
  - Annual total sales growth: 30%

- **Base case:**
  - Annual total sales growth: 25%

### Source

Type and Amount of Capital Attracted to Date

Annual investment in OGS sector over time by type of financing
USD Millions (2012- YTD December 2017)

- Grants
- Equity
- Debt

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>YTD Dec 8, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt</td>
<td>21</td>
<td>18</td>
<td>75</td>
<td>207</td>
<td>317</td>
<td>284</td>
</tr>
<tr>
<td>Equity</td>
<td></td>
<td></td>
<td></td>
<td>56%</td>
<td>56%</td>
<td>40%</td>
</tr>
<tr>
<td>Grants</td>
<td></td>
<td></td>
<td></td>
<td>4%</td>
<td>40%</td>
<td>61%</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>18</td>
<td>75</td>
<td>207</td>
<td>317</td>
<td>284</td>
</tr>
<tr>
<td>Avg. size of top 5 transactions</td>
<td>2.8</td>
<td>2.4</td>
<td>9.8</td>
<td>21.3</td>
<td>31.7</td>
<td>25.4</td>
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<tr>
<td>Avg. size of overall transactions</td>
<td>1.4</td>
<td>1.0</td>
<td>3.1</td>
<td>5.6</td>
<td>4.0</td>
<td>5.0</td>
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<tr>
<td>Number of transactions</td>
<td>15</td>
<td>18</td>
<td>24</td>
<td>37</td>
<td>79</td>
<td>57</td>
</tr>
</tbody>
</table>

Note: 2017 figures include estimates of the acquisition of Fenix International by Engie and a follow-on investment from a consortium of investors led by Investec Asset Management into Mobisol. This study has not been able to verify the size of these transactions, and estimates that they collectively fall in the range of USD 30-45 million;
Source: GOGLA 2018 Deals Database
Funding Raised per Region 2012 - 2017

Source: GOGLA 2018 Deals Database; Off-Grid Solar Market Trends Report
Estimated Funding Needs 2017 - 2022

**Funding gaps**

*USD Billions (2017-2022)*

- **Total funding needs**: $5.1 – 5.7
- **Internal funding**: $1.1 – 1.3
- **Expected external funding from publicly announced sources**: $1.6 – 1.9
- **New external funding to be raised**: $2.4 – 2.6

Source 2018 Solar Off-Grid Market Trends Report; Dalberg OGS 2017-2022 financing needs forecast model; Dalberg analysis
The Role of Governments

Figure 10: 55 energy access countries answering yes to questions about framework for standalone solutions
- Source: RISE Database, World Bank

- Are there specific financing mechanisms to support operators or consumers?
- Is there no legal restriction on the price retailers or service providers can charge?
- Are there subsidies and/or duty exemptions for standalone systems?
- Are there national programs to support the development of standalone systems?
Expanding the Commercial Market

- Willing to buy
  - Commercial market
    - Those willing to buy off-grid solar, in geographical areas customers are able to serve
  - Potential commercial market
    - Those not willing to buy now, but who are likely to be willing to buy in time
    - Within geographical reach
  - Non-commercial market
    - Those who cannot be viably served by the private sector without subsidy
    - Out of geographic reach

Source: GOGLA guidance for governments
Ways to Deploy Public Funding

- Results-based financing
- Concessional finance schemes
- FOREX risk mitigation

VAT / tariff exemptions
Consumer education
Adoption / enforcement of quality standards
Market intelligence

Free distribution
Retail price subsidies
Voucher schemes
Concessions

Commercial and potential commercial markets
Non-commercial markets
There is a clear need for public & private to work together:

• Accelerated market growth
• Intensified geographic expansion
• Support 2\textsuperscript{nd} and 3\textsuperscript{rd} generation companies
• Bridge the viability gap
How to contact us

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All Materials/ Reports quoted in this slide deck can be found here: www.gogla.org/resources
Addressable Market

For 1.5-3Wp pico @ USD25 standard price (light and phone charging)