BRIDGING THE AFFORDABILITY GAP: HOW TO DESIGN PRO-POOR SUBSIDIES

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The market potential for Off-Grid Solar is impressive
PAYG continues to drive affordability

- Households that could not afford a single light & phone charger product upfront, can often afford a multi-light system if it comes with consumer financing
- Promoting PAYG means therefore to promote affordability for lower income households
Yet, we risk leaving behind 230 Million people

- **Global electricity access deficit**
  - Population (billions)
  - 2010: 1.20
  - 2019: 0.72
  - 2030: 0.23

- **2030 unserved population affordability breakdown**
  - Population (Millions)
  - Can afford: 118
  - Cannot afford: 112

Accessibility and affordability will be two of the key challenges to overcome in order to achieve SDG7.
The Covid19 Pandemic Compounds the Situation

Millions pushed into extreme poverty due to COVID-19

- East Asia & Pacific
- Europe & Central Asia
- Latin America & Caribbean
- Middle East & North Africa
- North America
- South Asia
- Sub-Saharan Africa

Millions of people
Bridging the Availability & Affordability Gap Requires Support on Demand and the Supply Side

Market’s Geographic Reach/ Products Available

Customer Ability to Pay

- **Commercial Potential**
  - Customer in reach of company’s distribution not (yet) willing or able to pay
- **Commercial**
  - Customer in reach of company’s distribution & able to pay
- **Not Commercially Viable**
  - Customer not in reach of company’s distribution and not able to pay
- **Commercial Potential**
  - Customer not (yet) in reach of company’s distribution but willing and able to pay
To Date, Most Support has Focused on the Supply Side

**Supply-side subsidies (SSS)**

- **Purpose**: Reduces cost/risk for the company in order to increase access
- **Examples**: Tax exemptions, grants, concessional financing, results-based financing*

\[\text{Gov't/donor gives benefit to business to reduce business' costs or risk}\]

*Indirect subsidies are a form of SSS and an important form of support to create an enabling environment (e.g. consumer awareness campaigns)*

**Demand-side subsidies (DSS)**

- **Purpose**: Addresses affordability gap for end users
- **Examples**: Cash transfers, vouchers, free products, results-based financing**

**Option 1**

\[\text{Gov't/donor gives benefit to consumer}\]
\[\text{Consumer uses benefit to purchase product from company}\]

**Option 2**

\[\text{Gov't/donor gives benefit to business with expectation that business reduces price for consumer}\]

**Legend:**

- ➡️ Direct monetary benefit
- 📊 Indirect monetary benefit

*Note*: *Result-based financing (RBF) can serve both to increase access and reduce costs for end consumers. RBF can also be used in DSS in which funds are provided to the business upon proof of a sale of a product to a customer at a reduced price. **Free products include public procurement programs that are based on willingness to pay of target customers*

Source: OCA / GOGLA / WB / ACE
Supply Side RBF in Kenya - Incentivizing Markets to Go Into Less Attractive Geographies

The Kenya Ministry of Energy is implementing an RBF program aimed at expanding off-grid markets into remote areas.

- Encourage uptake of OGS products in 14 of the most remote Kenyan counties that have the least-developed infrastructure and are relatively socio-economically underserved.
- RBF compensates OGS companies for initial, ongoing, and associated opportunity costs to expand their operations to customers they would not otherwise have served under their current business models.
Demand-side subsidies are more difficult to design
Pro-Poor RBF in Rwanda

*Rwanda: Currently in its early stages, EnDev’s ProPoor DSS pilot was launched in 2019 to address solar home system affordability*

**Overview**

**Key objective:** SSS initially launched in 2014 to support market development and alleviate market barriers as part of Rwandan national electrification strategy. DSS pilot launched in 2019 to address affordability

**Target customers:** HHs in five southern districts (off-grid areas with low-income HHs without electricity)

**Project status:**
- Completed: 2014 – 2018 (SSS RBF)
- On-going: 2019 – present (DSS pilot)

**Project details**

**Products:** Solar home systems (SHS)

**Subsidy level**
- Subsidy coverage of total SHS cost: Ubudehe I – 90 Euros, Ubudehe II – 70 Euros, Ubudehe III – 50 Euros

**Verification process / authority:** Potential benefit verified through gov’t database, at any participating solar provider. Field agents then verify receipt of product and correct benefit through on-site visits and questionnaires through mobile phones. Field visits also includes additional impact questions.

**Administration:** Up to companies to find and verify beneficiaries. EnDev and Rwanda Energy Group (REG) track program progress through online database
Togo Subsidy Model

**Togolese Government**
- Provides $4 per month subsidy for 36 months to companies selected in Cizo Project

**Telcos**
- Ensure that all eligible customers are integrated into their database
- Send SMS to all eligible customers to inform them on the subsidy
- Ensure MM transactions (Customer’s share + subsidy)
- Make the transactions reconciliations with DESCO’s

**LaPoste**
- Keep a database of subsidized customers
- Control the eligibility
- Do a report with the RM data

**DESCO’S**
- Sign-up customers and collect info
- VPN Link to access DESCO’s customer names

**End Customer**
- Subsidised Customer Payment

**VPN Link to verify customer details**
- Reporting on the Scheme

**Provide liquidity to the subsidy MM accounts**
## Next Steps for Pro-Poor Subsidies

### Data & HH Information
- Assess affordability gap
- Understand impact of Covid19 on rural households
- Targeting only possible with reliable household information

### Pilots
- Evaluate the ongoing pilots in Rwanda, Kenya, and Togo
- Run more pilots to in different contexts
- Develop learnings on how to best design subsidies in an efficient & sustainable way – and how to scale

### Collaboration
- Agree on design principles among government, development partners, industry, and investors
- Bring all stakeholders together in the design of end user subsidies
Achieving 2030 Target

Both public and commercial investment will be needed to reach the 2030 Target.
Thank you