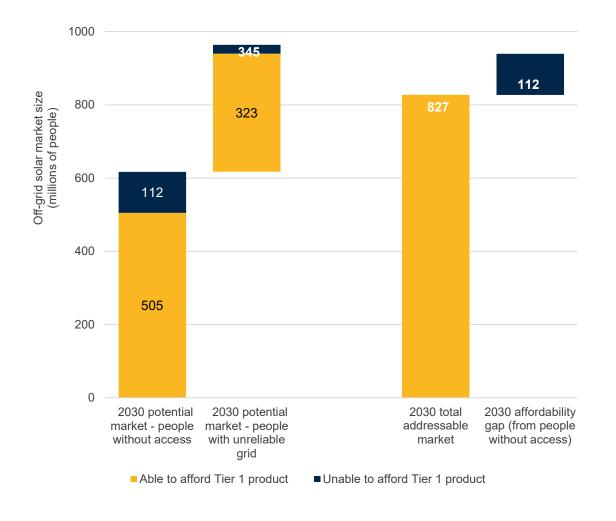
BRIDGING THE AFFORDABILITY GAP: HOW TO DESIGN PRO-POOR SUBSIDIES

Dana Rysankova Global Lead for Energy Access World Bank



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

Full Tier 1 access 6 11 22 21 29 40 56 65 111 63 93 89 53 33

Entry-Level SHS, Basic SHS. PAYGO

deposit

Sub-Saharan Africa - Practical Affordability

■ Affordable ■ Barely Affordable ■ Unaffordable

PAYGO deposit

Multi Light &

Mobile Charger

deposit

(1.5-3Wp), Cash (3-11Wp), PAYGO

Single Light &

Mobile Charger

17

High-Capacity

SHS, PAYGO

deposit

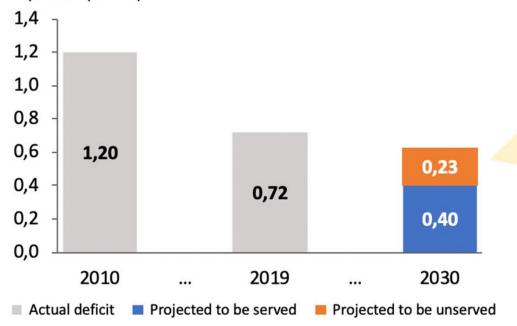
Medium SHS,

PAYGO deposit

Yet, we risk leaving behind 230 Million people

Global electricity access deficit¹

Population (billions)



2030 unserved population affordability breakdown Population (Millions)





Millions pushed into extreme poverty due to COVID-19



East Asia & Pacific 🛛 🔲 Europe & Central Asia 📒 Latin America & Caribbean 📒 Middle East & North Africa Sub-Saharan Africa

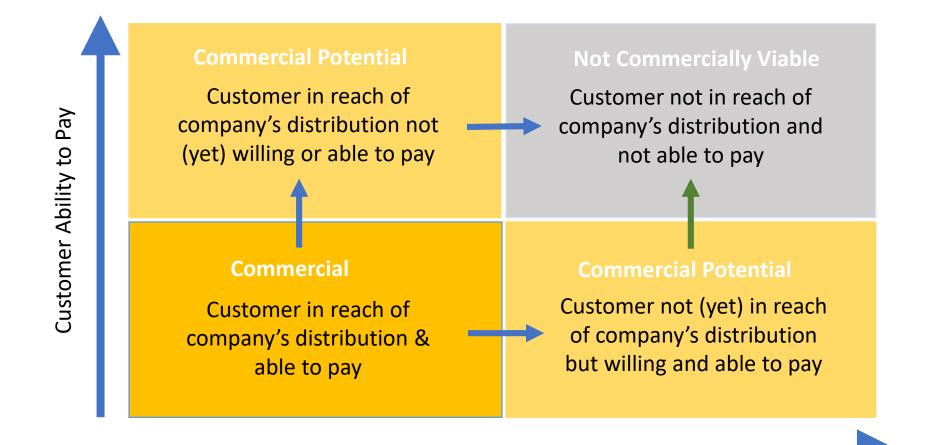


North America

4.5 2.8 15.6 22.6 5 10 15 20 25 30 35 45 40 50 0

Millions of people

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



Market's Geographic Reach/ Products Available

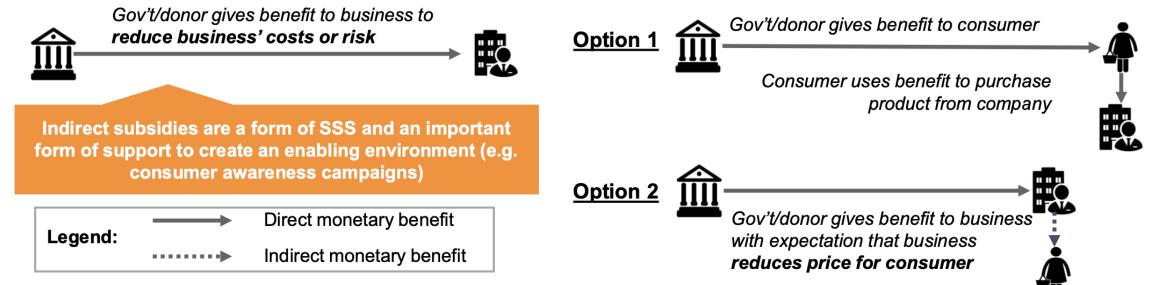
To Date, Most Support has Focused on the Supply Side

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*

Demand-side subsides (DSS)

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



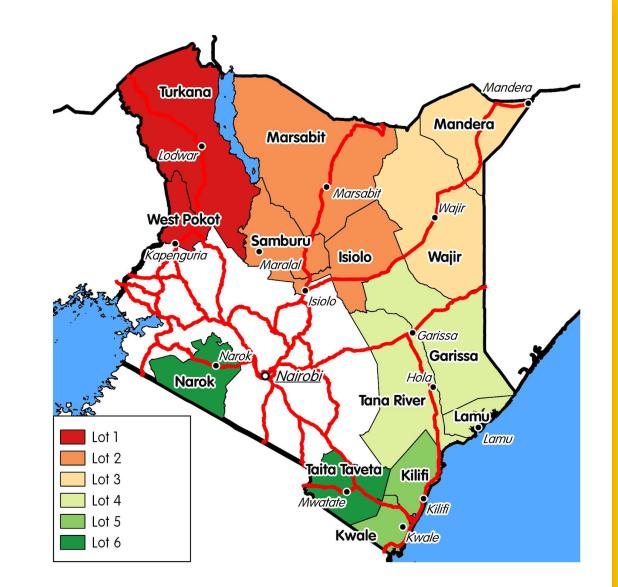
Note: *Result-based financing (RBF) can serve both to increase access and reduce costs for end consumers. RBF can also be used in DSS in which funds are provided to the business upon proof of a sale of a product to a customer at a reduced price. **Free products include public procurement programs that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





1. Well-targeted



2. Fill the affordability gap



3. Consultation and communication

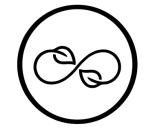


4. Verification and accountability



5. Efficient processes

- 6. Transparent processes



7. Market sustainability



8. Capacity building

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)

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

Project details

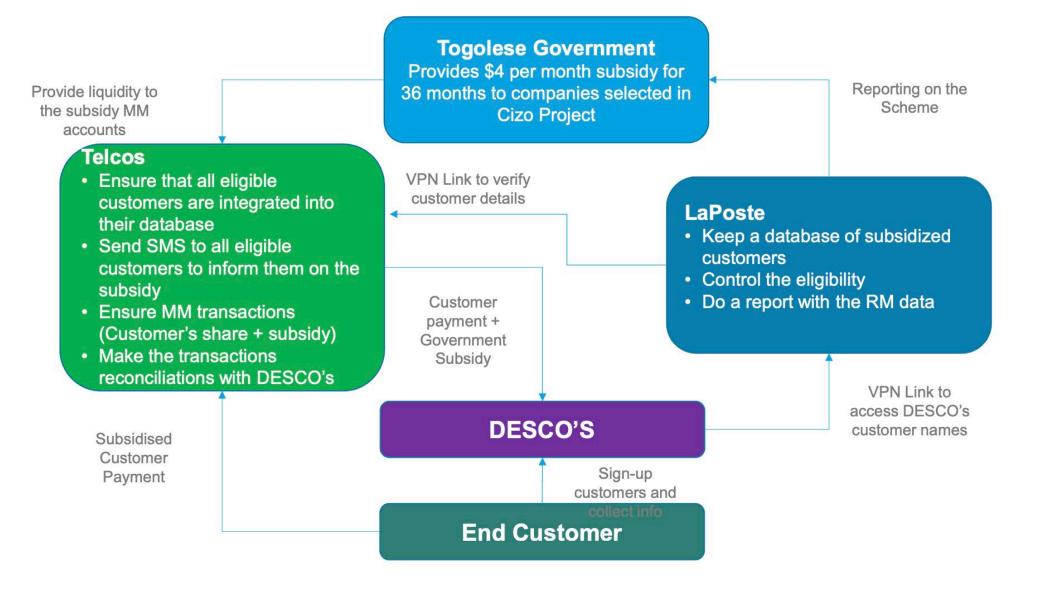


<u>Verification process / authority:</u> Potential benefit verified through gov't database, at any participating solar provider. Field agents then verify receipt of product and correct benefit through on-site visits and questionnaires through mobile phones. Field visits also includes additional impact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



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





Thank you

