



Electric Bankers: Utility-Enabled Finance in Sub-Saharan Africa

Photo: Wim Opmeer, 2018 CGAP Photo Contest

Daniel Waldron &
Siena Hacker

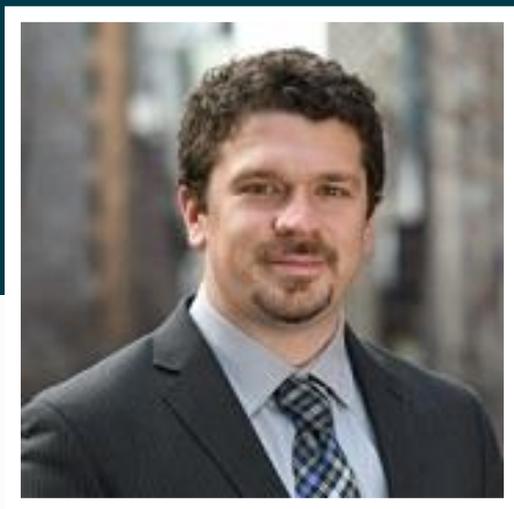
June 9, 2020



Agenda

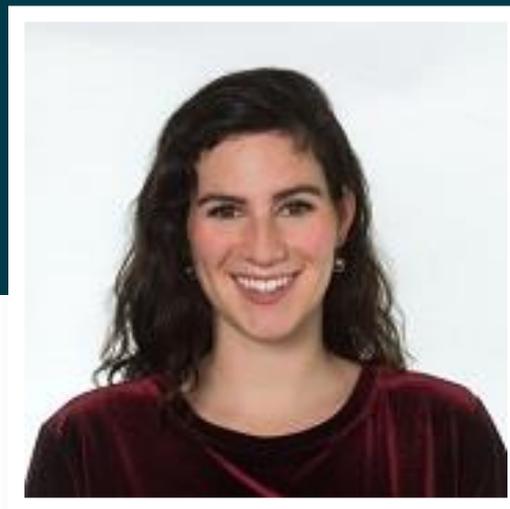
9:00	Introductions
9:05	Presentation of Paper
9:25	Panel Discussion
9:45	Q&A

Speakers



Daniel Waldron

Financial Sector Specialist,
CGAP



Siena Hacker

Clean Energy Access
Coordinator,
CLASP

Panelists



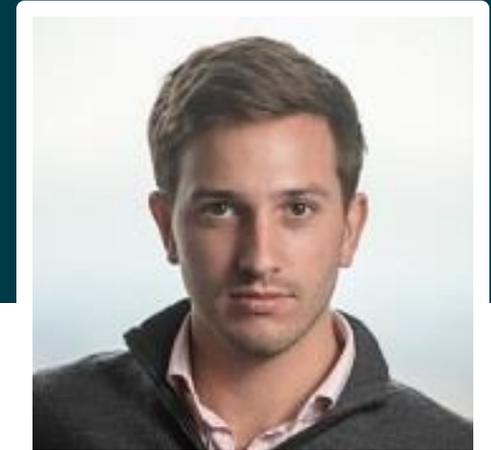
**Carlued
Leon**

Research Director,
MANAUS Consulting



**Martha
Kamanu-Mutugi**

Principal Marketing Officer,
Kenya Power and Lighting
Company



**Angus
Marjoribanks**

Chief Operating Officer,
EnerGrow

The number of people with energy access is increasing rapidly

514 million people have access to electricity in Sub-Saharan Africa (SSA), up **75%** from 2010.

22 countries in the region have doubled their population with electricity in that time.

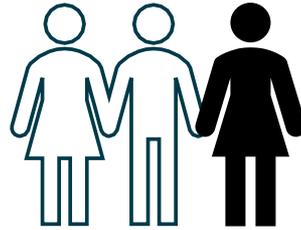


But households with electricity need more than access — they need appliances

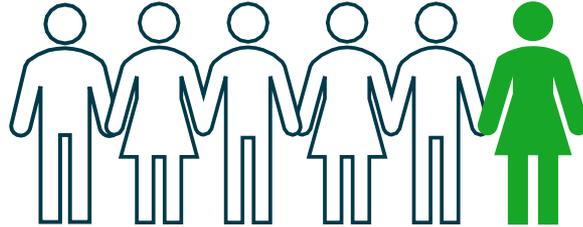
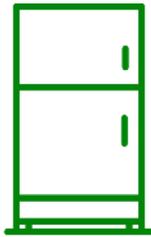
Appliances are the mechanism that transforms energy access into development impact.



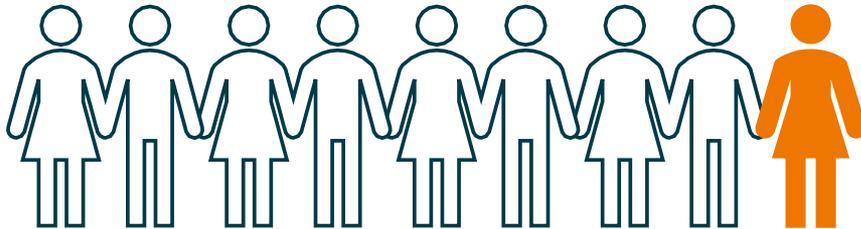
Yet appliance ownership is lacking in SSA



**1 in 3 households
owns a television**



**1 in 6 owns a
refrigerator**



**1 in 9 owns a
computer**

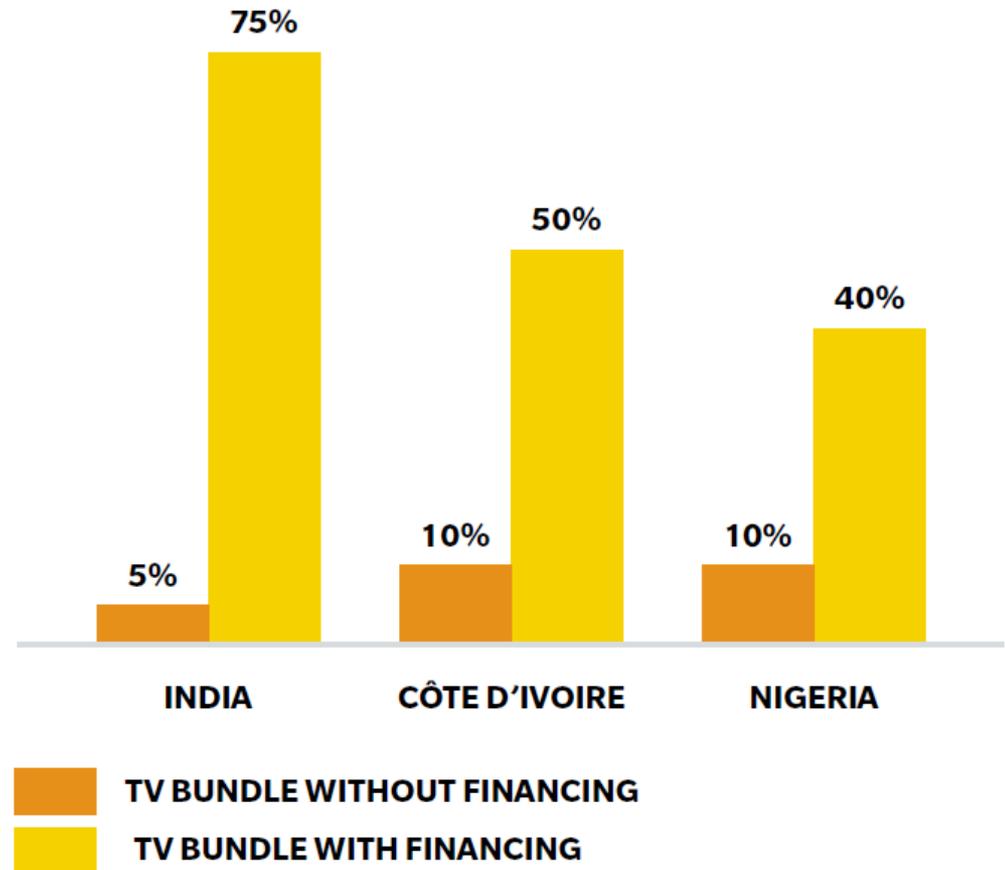
In rural areas access is even lower. Just 4% of rural households own a refrigerator

A lack of consumer financing contributes to the affordability barrier for many households

Poor households cannot afford the upfront cost of high-quality appliances.

But consumer financing is unavailable to many.

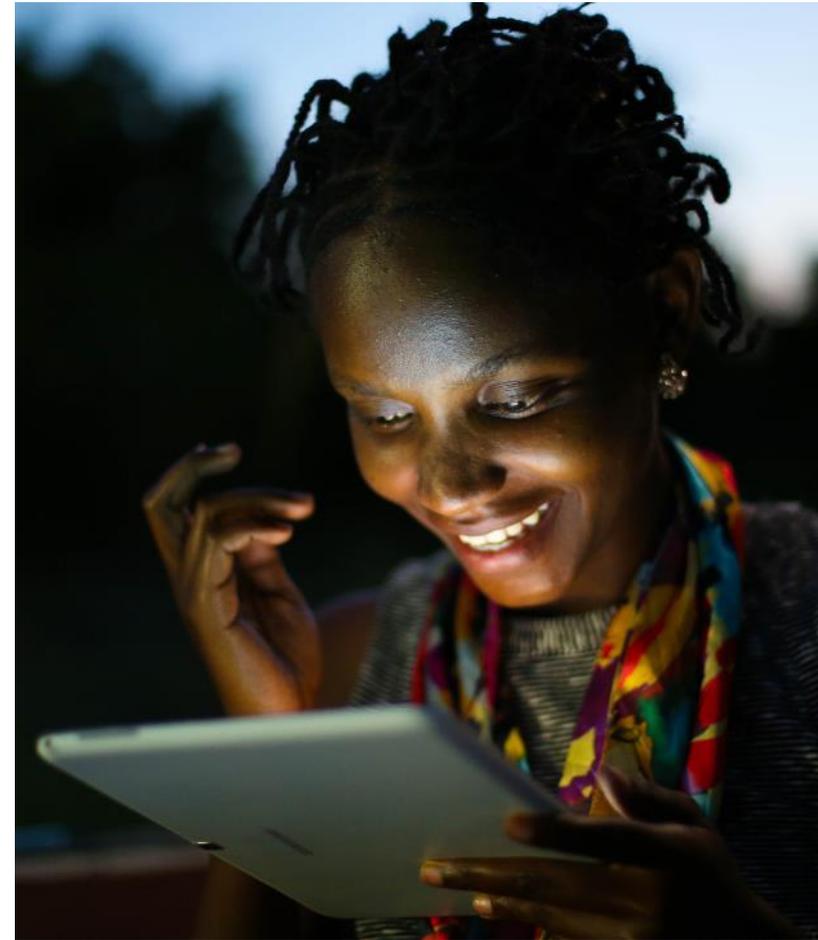
It is here that utilities and minigrids can help.



Utilities and minigrids can help facilitate appliance financing for low-income customers

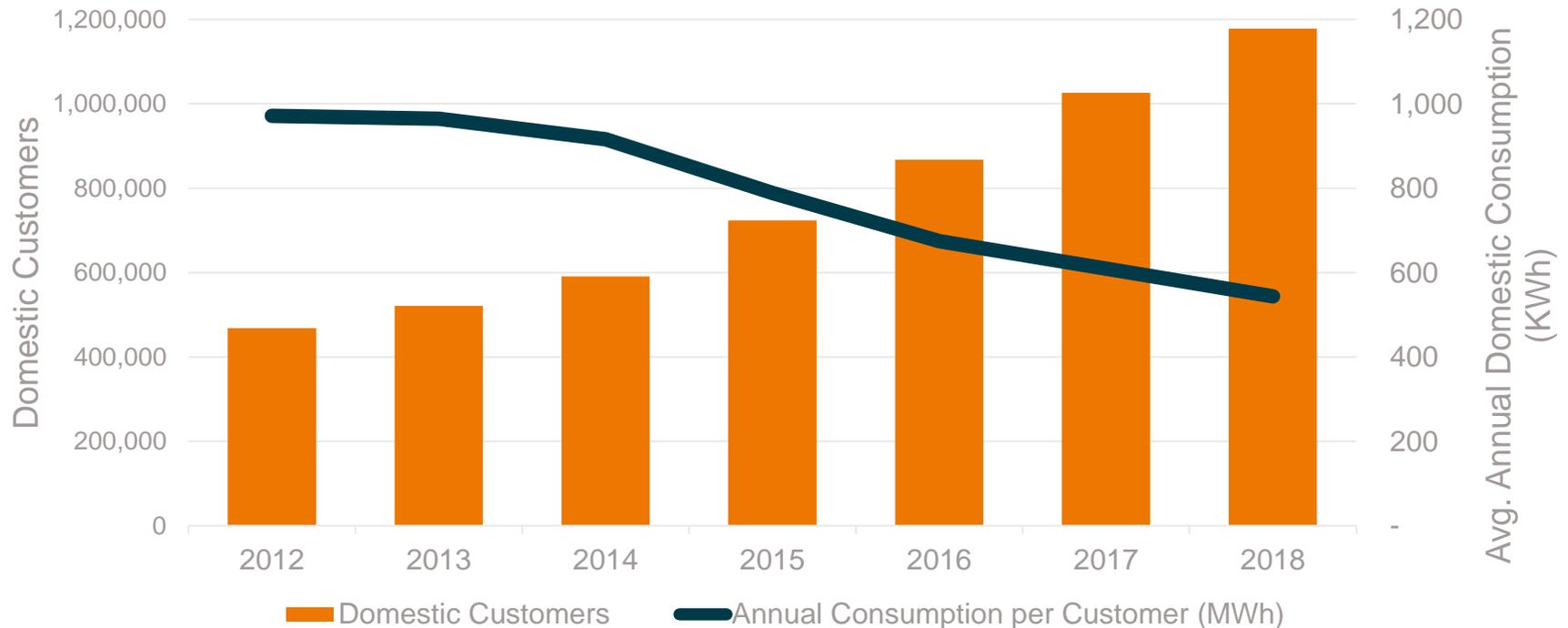
“The newly connected must be able to afford (through subsidy, financing, or other schemes) to use electricity, or the benefits of electrification will go unrealized.”

**Power For All,
“Utilities 2.0”**



Connected customers struggle to use electricity, which also hurts energy providers

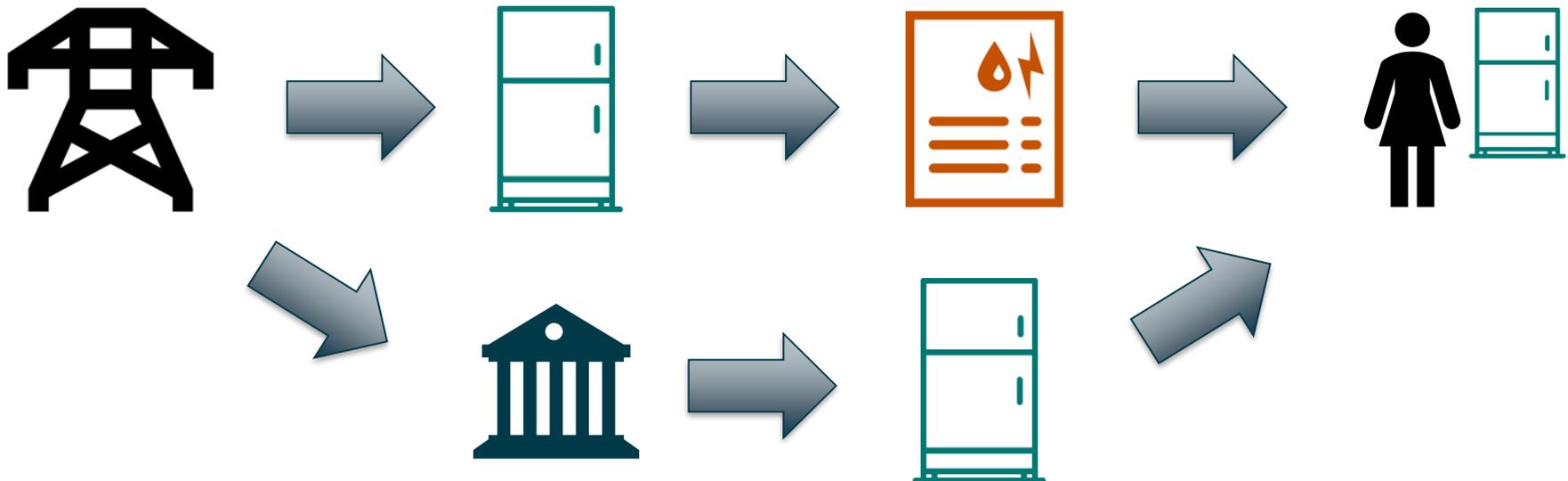
Umeme Access and Consumption, 2012-2018



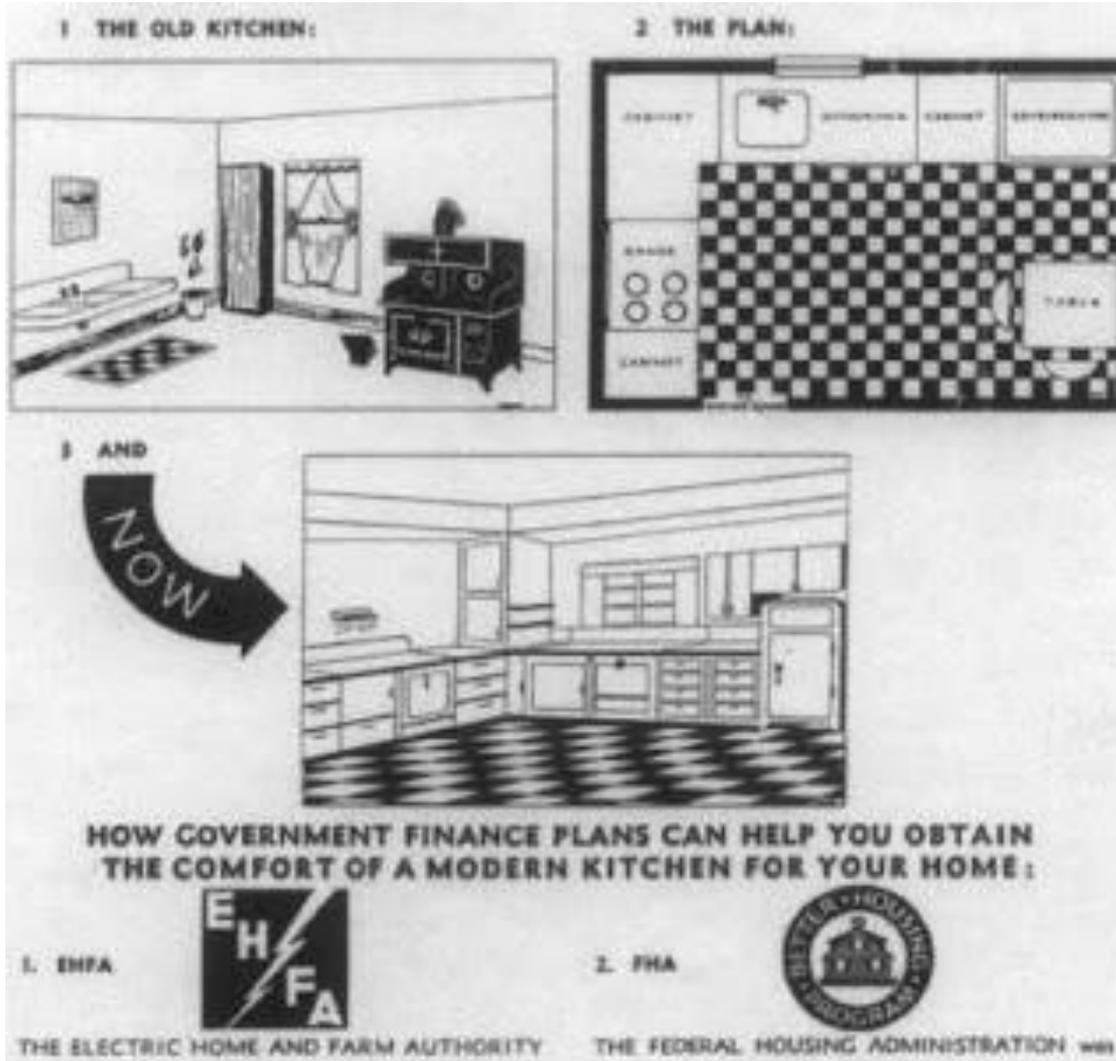
44 percent of one minigrad developer’s customers said they **“would purchase more electricity, if they could afford the upfront cost of appliances.”**

But what is “utility-enabled appliance financing”?

It is an umbrella term for a range of financial and business services that utilities and minigrids can offer or facilitate, with **the goal of increasing customer access to consumer finance for electric appliances.**



This is not a new idea

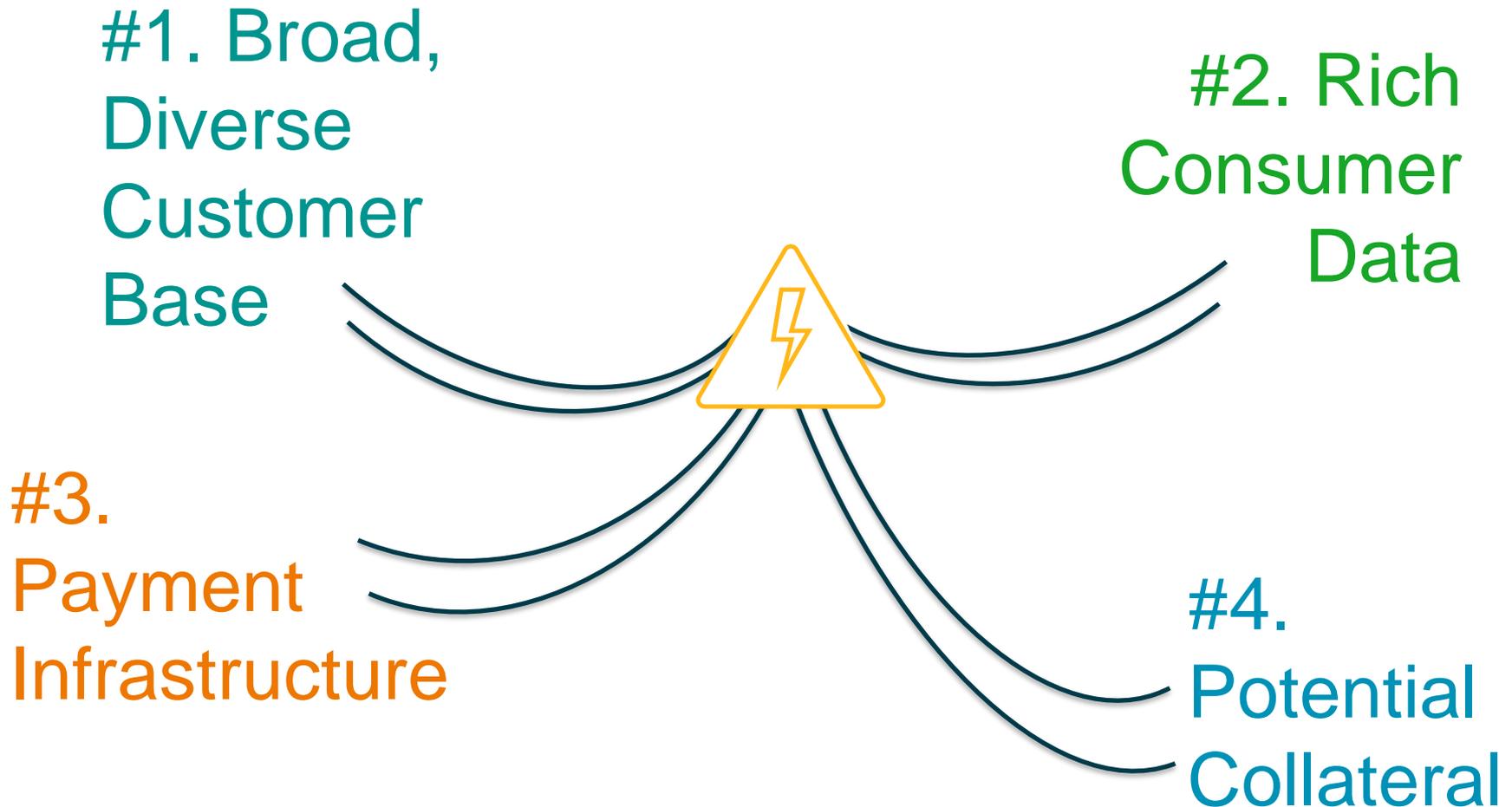


CROSSBOUNDARY



Black Star
Energy

Four key attributes help utilities and minigrids facilitate consumer financing



1. Providers have relationships with diverse customer bases

Utilities and minigrids serve over **300 million** low-income Sub-Saharan Africans.

Promigas, a Colombian utility, financed connections for decades. It used insights from that experience to develop a credit facility called 'Brilla', has facilitated at least **\$460 million** to over **1.7 million** customers.

Brilla

Más que un crédito:
UN CUPO PARA TI

2. Providers possess rich data on consumers who often lack measurable financial activity



Used with their **informed consent**, customers' usage and repayment data can expand their access to credit.

In Uganda, EnerGrow has financed MSME assets in communities that UMEME identified as having low levels of consumption.

3. Established payment channels simplify loan repayment

Through on-bill financing, customers can repay loans as a line item on their monthly utility bill or as an addition to prepaid tariffs.

CODENSA
 Más que energía

NÚMERO DE CUENTA
 citas este número para PAGOS Y CONSULTAS

www.codensa.com.co
 Codensa s.a ESP NIT-830.037248-0.Cr.13A No. 93-66 Factura de Servicios Públicos No:166263322-7

CLIENTES

REPARTO ESPECIAL

INFORMACION TÉCNICA
 Ruta de lectura: 1000 1 18 105 01
 Ruta de reparto: 1000 1 18 105 01
 Servicio: Residencial Prox lectura:22/04/09
 Medidor: 3889514 Estrato:
 Grupo (C): 1 Nivel de tension: 1
 Circuito: B012-1TR1 Carga: 11
 Código de facturación:

EVOLUCION DEL CONSUMO

Periodo Facturado: 20/01/09 A 20/03/09 Tipo de Lectura: Real
 Consumo Promedio últimos 6 meses: 171
 Anomalia: Lectura Normal

INFORMACION DEL CONSUMO
 Tarifa de mes: 01/2009 Fecha de expedición: 25/03/09
 Valor kwh Prom. 2.896.952

Lect Actual	Anterior	Diferencia	Energ Consum	Energ Factura
45721	12743	257	174	174

Total consumo (kwh) 84

DETALLE DE CUENTA

Concepto	Subtotal
CONSUMO DE ENERGIA	\$ 65.607
289.6952(Valor kwh)x84(consumo en kwh)	\$ 0
SUBSIDIO(0-84kwh.) (-15.00%)	
SUBTOTAL VALOR CONSUMO	\$ 65.607
Interes Por Mora (Res 26.61 - Nores: 30.7	\$ 648
Ajuste Decena Res. Creg 108-97 (Deb)	\$ -3

La energía que disfrutaste esta mes te costo \$2,116 Diarios

Subtotal valor otros... \$ 645
 Subtotal valor descuentos... \$ 0
 Subtotal conceptos de energía \$ 66.252

Portafolio de productos y beneficios

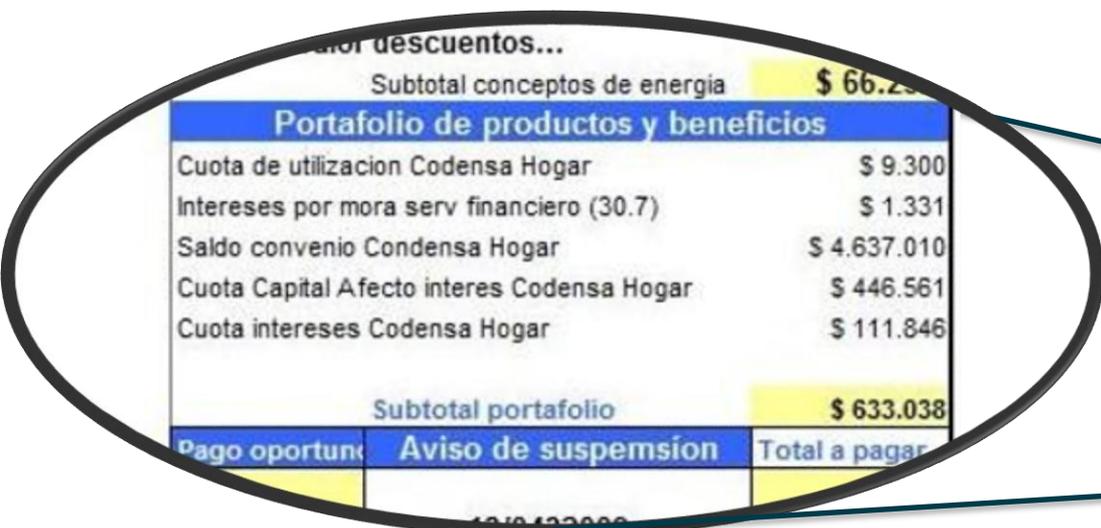
Cuota de utilización Codensa Hogar	\$ 9.300
Intereses por mora serv financiero (30.7)	\$ 1.331
Saldo convenio Condensa Hogar	\$ 4.637.010
Cuota Capital Afecto interes Codensa Hogar	\$ 446.561
Cuota intereses Codensa Hogar	\$ 111.846
Subtotal portafolio	\$ 633.038

Pago oportuno Aviso de suspensión Total a pagar

INFORMACION DE INTERESES
 Estimado cliente:
 La tarifa para el consumo de Subsistencia es de \$246.2409 Kwh
 Este es un servicio normal

Opcion tarifaria: \$ 289.6952

06/03/2009 13/0432009 75.360



4. Using electricity as collateral can dissuade loan defaults, but ...

... disconnection is a recourse of last resort.

It can eliminate future electricity sales, damage the reputation of the provider, and *hurt the same lower-income customers that these programs are meant to help.*

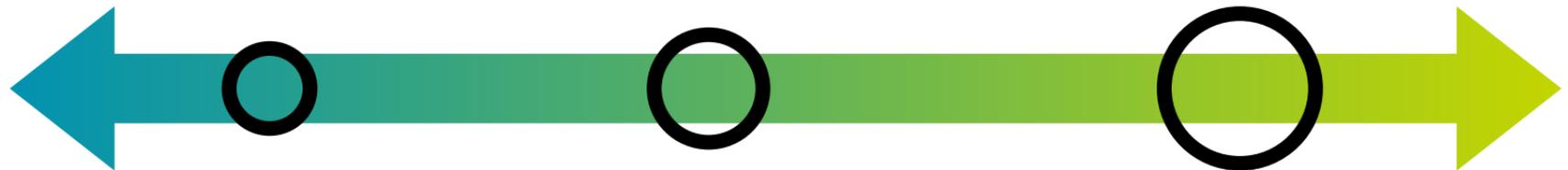


Utilities and minigrids that want to facilitate appliance financing have a range of options

- Energy providers can allow appliance finance companies to access data or use utility payment channels.
- They can also provide credit directly to customers for appliance purchases at specific retailers.

Low Involvement

High Involvement



Creates open platform for customers to share repayment data with potential lenders

Partners with nationwide retailer to market appliances to prequalified customers. Retailer offers financing and shares interest revenue with the utility.

Finances the purchase of certain appliances for select customers on utility's balance sheet, raising funds from bond markets or local banks.

- Level of involvement will depend on factors like regulations, politics, and operational and financial capacity.

Appliance financing can only succeed if it embodies consumer protection principles

If customers are sold financed assets they're unable to repay, no one benefits.

Key features are:

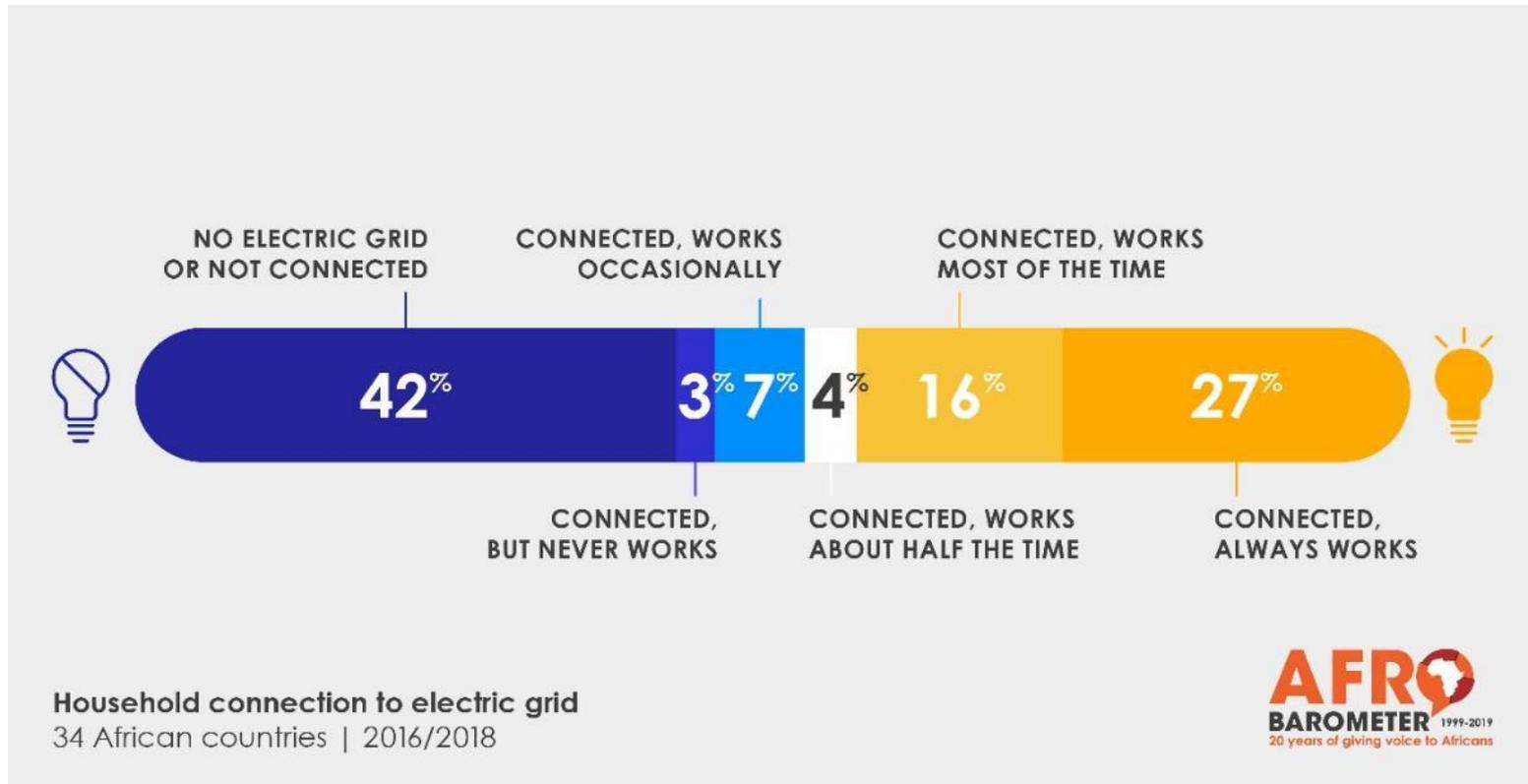
- Consumer data protections
- Quality assured products with warranties
- Customer understanding of terms and conditions



But the financial and market context of providers may pose challenges

- **Only 2 of 39 African energy sectors were profitable in 2015.**
- **Financial institutions may not be willing to lend to low-income customers.**
- **Coordinating multiple partners could strain available resources.**

In addition, operational issues represent a major risk to any program



Increased access to appliances benefits everyone involved

Inclusivity

- Utility financing has a track record of reaching lower-income, rural households.

Complementarity

- Programs can catalyze a shift to customer-centric, service-based approach.

Profit

- Consumer finance can offer an additional revenue stream.

Reputation

- Successful programs will create customer value, improve perception.

Four key enablers can help utilities and minigrids to facilitate consumer financing

Talk with customers about their appliances

Bring in data scientists and credit analysts.

Map all customer interaction points.

Review laws and regs around utility financing.



Thank you

To learn more, please visit
www.cgap.org &
www.clasp.ngo

