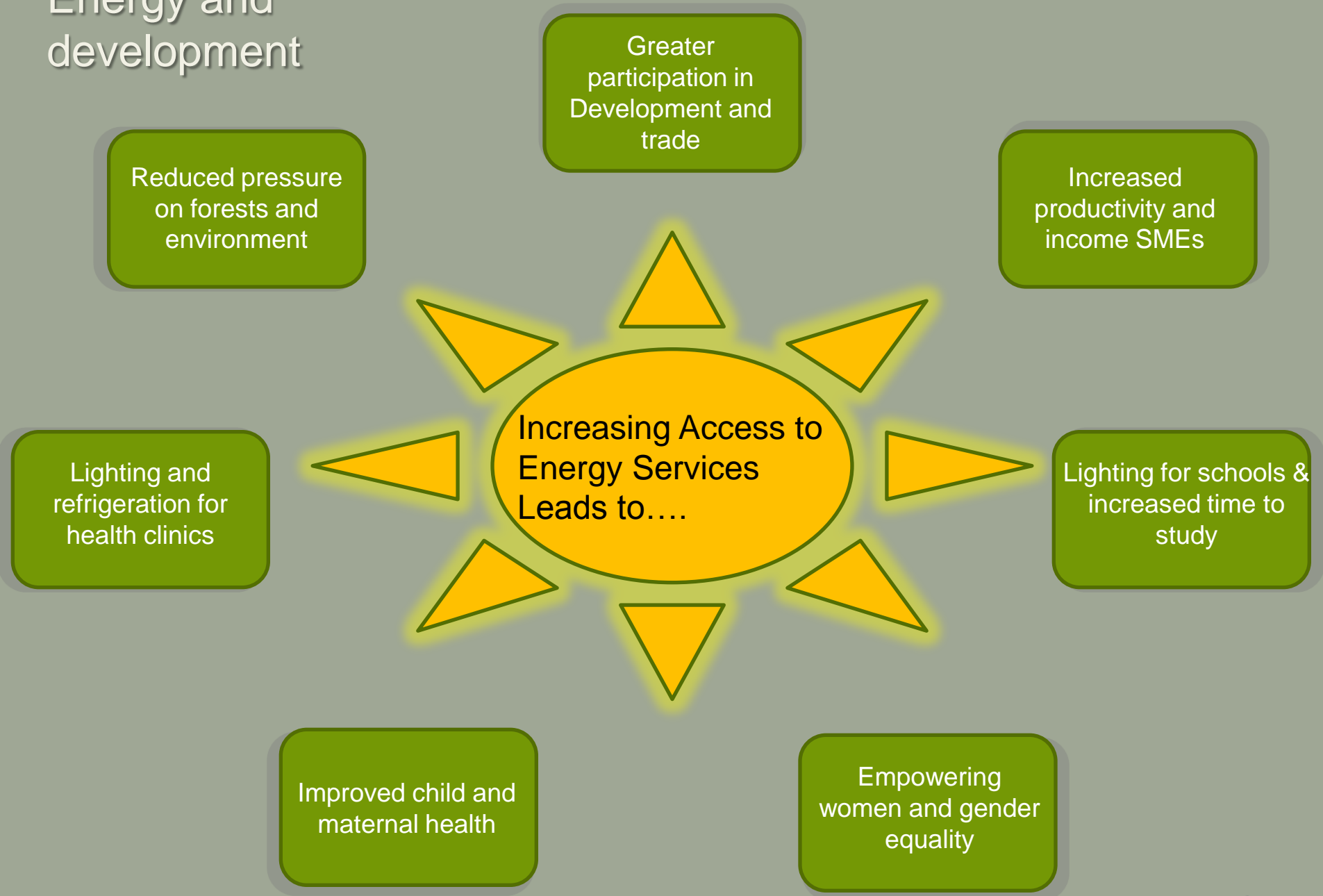





Ellen

Energy and development



Service	Energy System	Benefits
<p>Electricity</p> 	<ul style="list-style-type: none"> • Solar lanterns • Solar lighting systems for businesses and homes • Battery charging 	<ul style="list-style-type: none"> • Cleaner, brighter light for work, study and recreation • Safer- fewer burns, less breathing/vision problems • Reduced dependency on unreliable grid • Increased income opportunities
<p>Heat for cooking</p> 	<ul style="list-style-type: none"> • Biogas systems • Liquefied Petroleum Gas stoves • Efficient wood/ charcoal cook stoves 	<ul style="list-style-type: none"> • Cleaner and more efficient • Safer- fewer burns, less breathing/vision problems • Job creation in manufacture, sales and distribution
<p>Mechanical Power</p> 	<ul style="list-style-type: none"> • Multifunctional platform • Water pumps 	<ul style="list-style-type: none"> • Women's drudgery reduced • Higher quality product and higher prices • Job creation for operation and maintenance • Creates options for non-electrified villages

Access to finance needs across the value-chain

Manufacturers

- Initial capital for both R&D and the fixed assets for a production facility
- Working capital to purchase inputs and produce finished goods

Wholesalers/ retailers

- Typically offered little credit from international manufacturers
- Face disproportionately high inventory levels due to poor demand predictions in early years of operations
- Working capital challenges in light of long transport times and customs clearing
- Often required to extend credit to dealers in order to stimulate sales.

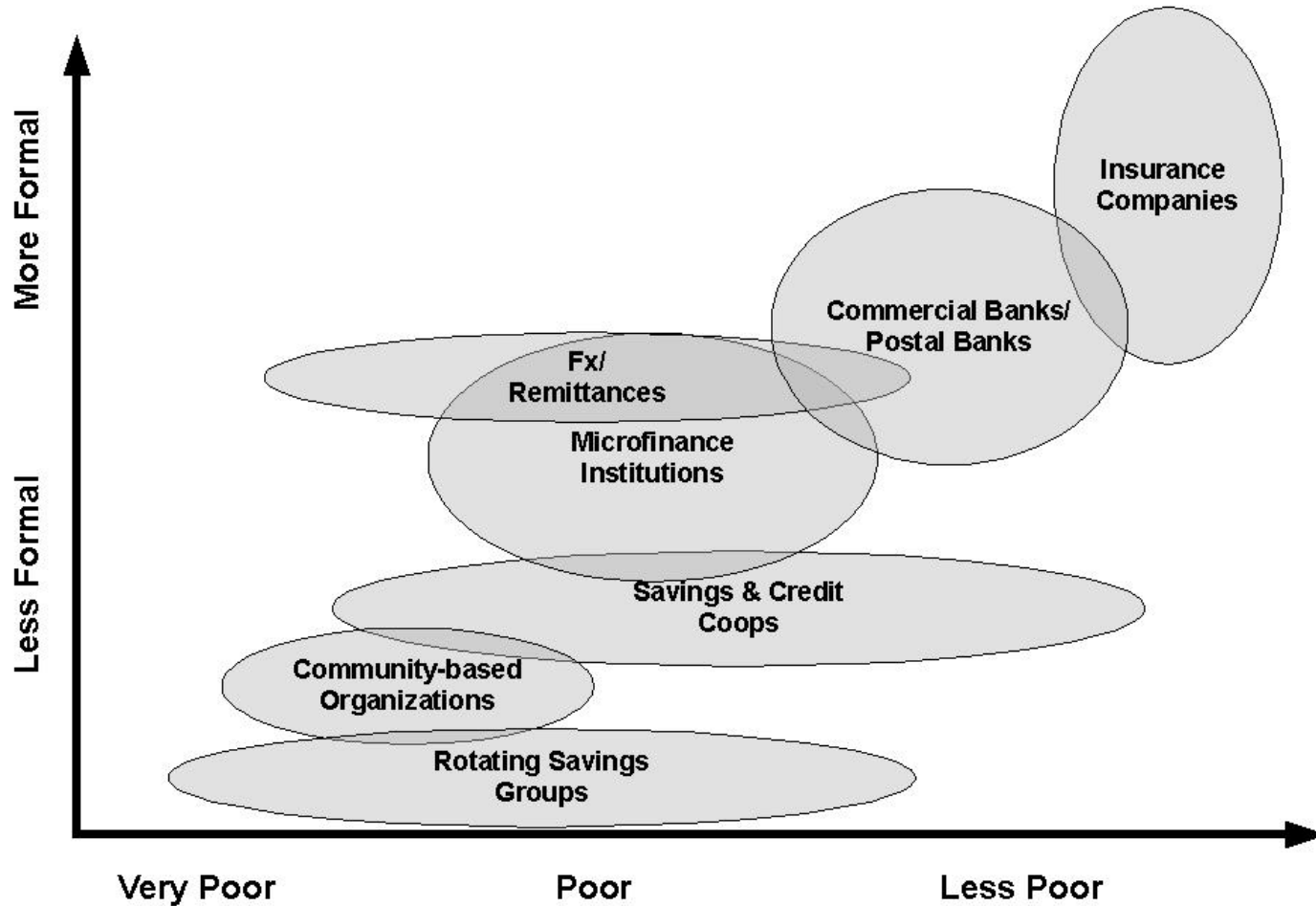
Last-mile dealers

- Often stuck between MFI and Commercial bank value propositions with no natural provider of capital
- Squeezed on working capital, as they are usually small rural/peri-urban operations
- Often unable to provide credit their customers need

Customers

- Affordability is the leading barrier – low-income households typically cannot afford to pay a lump sum of \$10 or more
- Credit schemes difficult to design due to small ticket size of the purchase and lack of familiarity by MFIs with lighting products

Financial institutions serving the poor

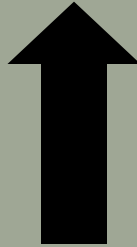


Phil



SELCO-India

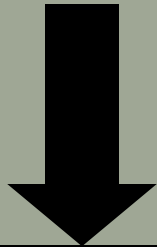
Enterprises such as TecnoSol (Nicaragua)



Energy Poverty
Opportunity
Energy Waste



Enterprises such as KWTE



SME-RE
Cambodia





La Esperanza
Honduras



Macro – Country-Region Framework

Human &
Institutional
Capacity

Policy &
Regulation

MARKET

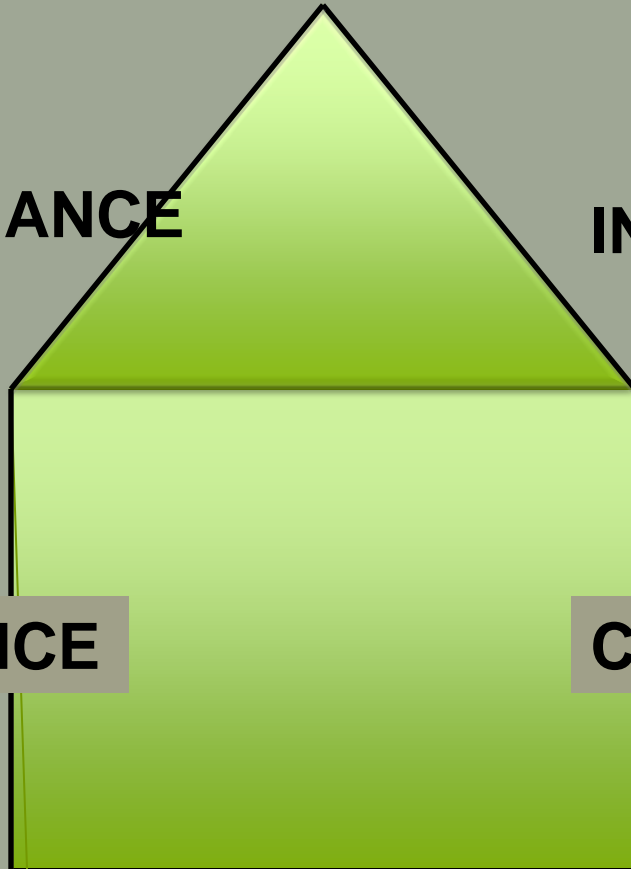
SIZE
AND
ATTRACTIVENESS

Business
Environment

MESO Framework: the delivery of modern energy requires that the delivery enterprise and clients have ACCESS to:

CUSTOMER FINANCE

INFORMATION

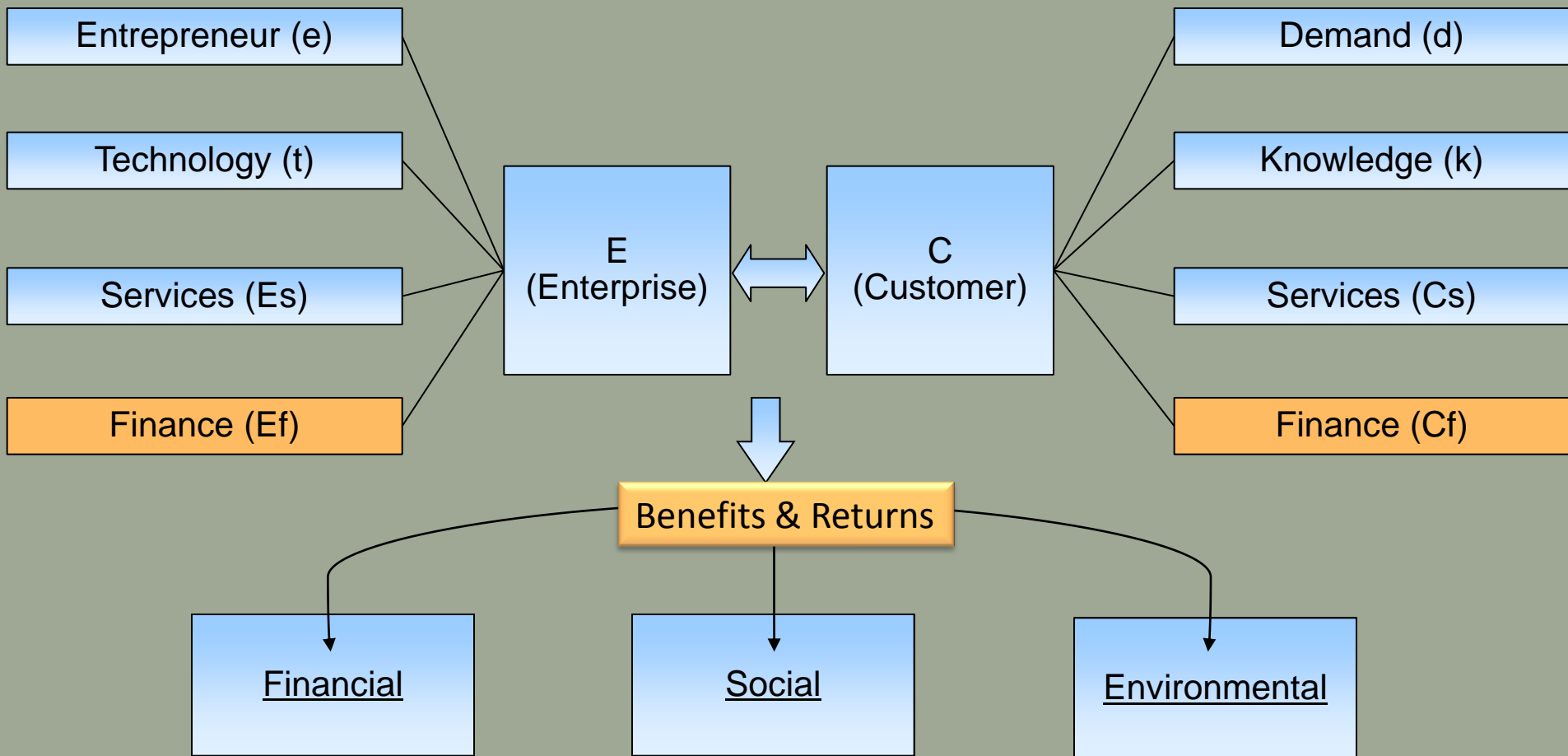


ENTERPRISE FINANCE

CAPACITY BUILDING

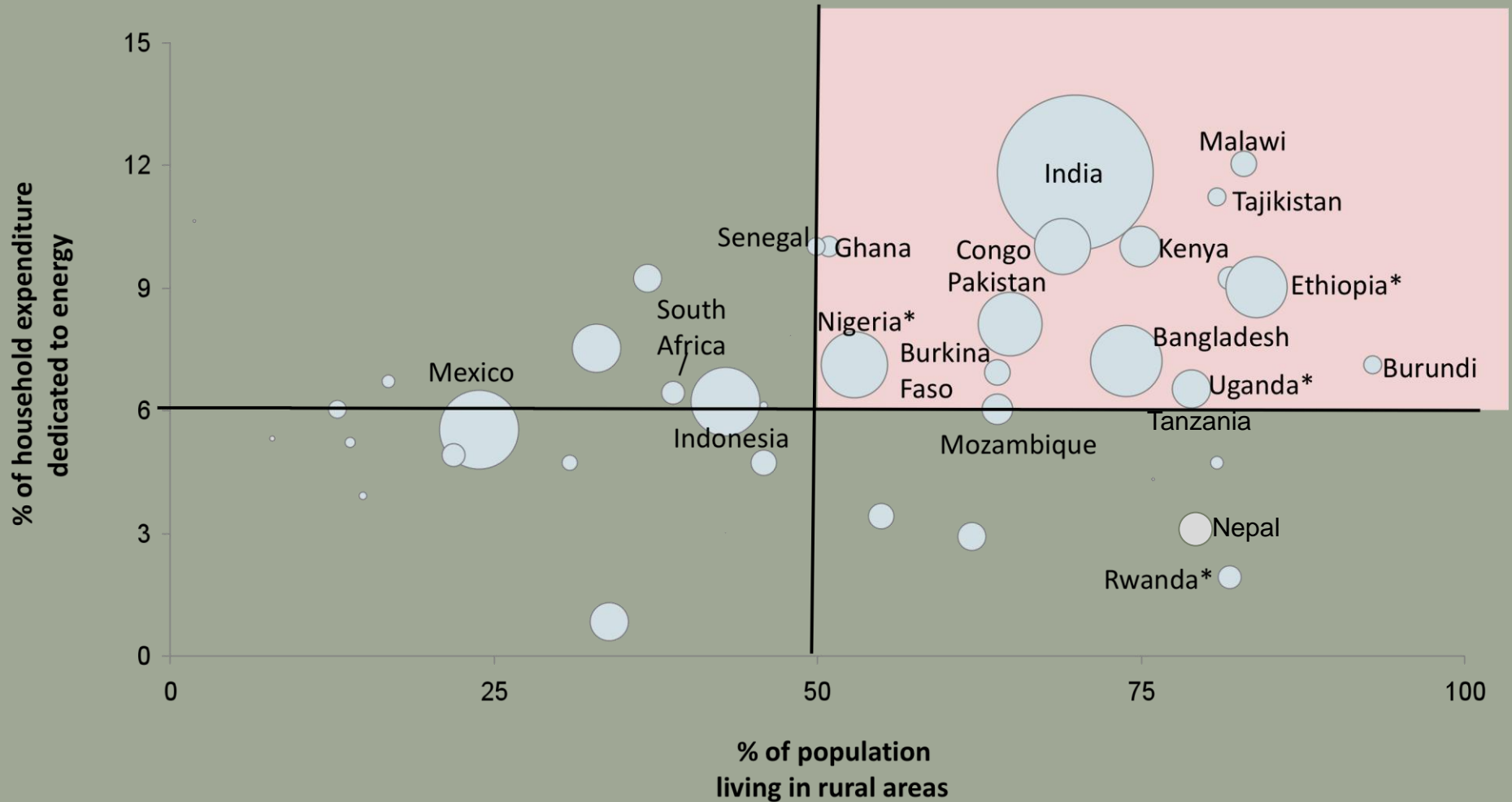
APPROPRIATE, AFFORDABLE PRODUCTS

The Enterprise-Customer Connection: Eight Critical Factors for Success



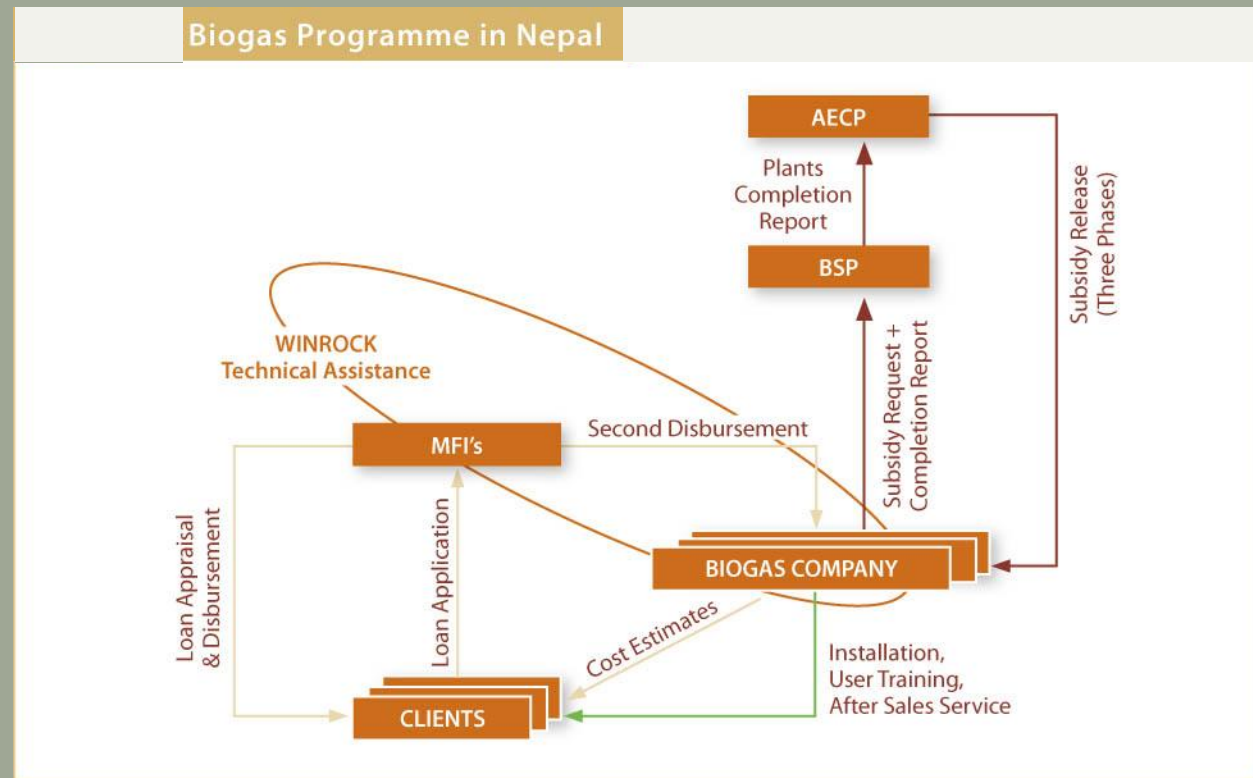
Ellen

What are people paying for energy?

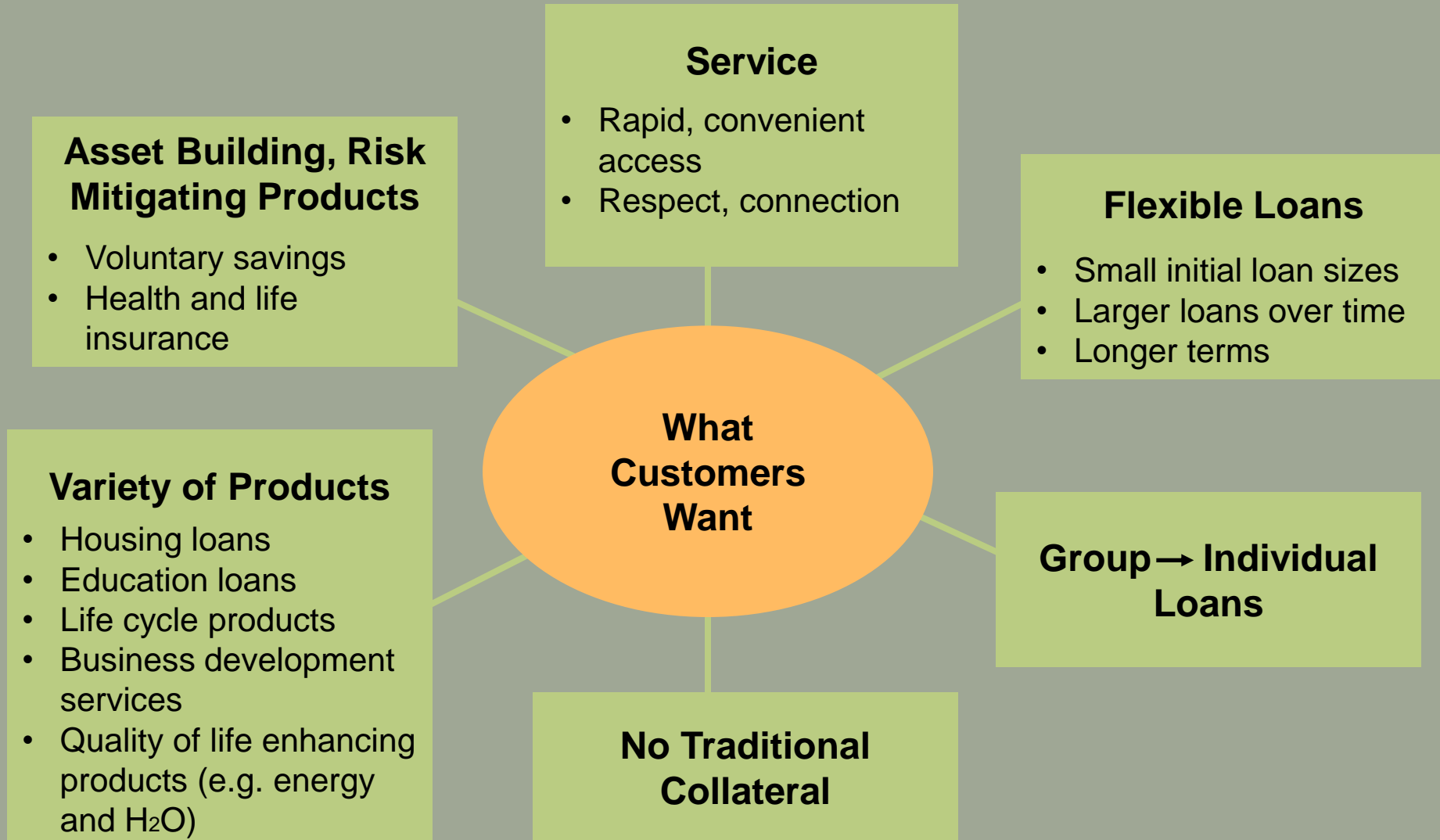


Note: Bubble size equals number of un-electrified

What is end-user finance?



Tailoring Financial Services to the Needs of Poor Customers



Harish

Access to Credit: Innovative Financing



Street Vendor



Cricket bat makers



Street Vendor



Handloom workers



Phil

Financial		Social & Economic			Environmental	
Investment Funds Disbursed		People with Access to Modern Energy Services	Households served		CO2 Offsets by Enterprises/tonnes	CO2 Offset for Life of Investment
\$14.7 million		3,607,599	721,000		2,201,780	13.3 million tonnes
Entrepreneurs Investment		Cumulative Clean Energy Generated	Energy saved from Efficiency initiatives/		Value of CO2 Offsets for Life of Project	Reforested Land/ Hectares and Number of Trees
\$29.1 million		59,539 GWh	118 GWh		\$65.6 million	220 thousand trees, 228 hectares
3 rd Party Capital		Jobs Supported	Improved Income		Clean Water Provided/liters	People with Clean Water
\$113.8 million		2,965	\$7.4 million		140 million	29,825
Capital Mobilized		Clean Energy Enterprises	Women Ownership/ Shareholding		Charcoal Displaced/tons	Firewood Displaced/tons
\$157.6 million		138	90		257, 506	207,984
Portfolio Return after Write-offs (Before 1X Costs)		Clean Energy Employees & Customers trained	Customers Installing Efficiency Equipment		LPG Displaced/kg	Kerosene Displaced/liters
8.3%		73,960	29,545		2,379,000	6,045,546
OPM Ratio		Entrepreneurs Identified	Entrepreneurs receiving Services		Barrels of Oil Displaced	
1 : 9.7		1,574	857		259,743	'98 thru '06