



UNDERSTANDING THE LANDSCAPE:  
TRACKING FINANCE FOR ELECTRICITY AND CLEAN  
COOKING ACCESS IN HIGH-IMPACT COUNTRIES

October 2017 Webinar



CLIMATE  
POLICY  
INITIATIVE



SUSTAINABLE  
ENERGY  
FOR ALL



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# SDG 7: affordable and clean energy for all by 2030

In September 2015, the world's leaders came together to agree on 17 Sustainable Development Goals (SDGs).

One of those goals, SDG 7, calls for us to “secure access to affordable, reliable, sustainable and modern energy for all by 2030”.



The series tracks and analyzes finance for electricity and clean cooking in 20 countries with the highest access gaps.



# A first-of-its-kind analysis of finance for electricity and clean cooking access



**ESMAP**  
Energy Sector Management Assistance Program



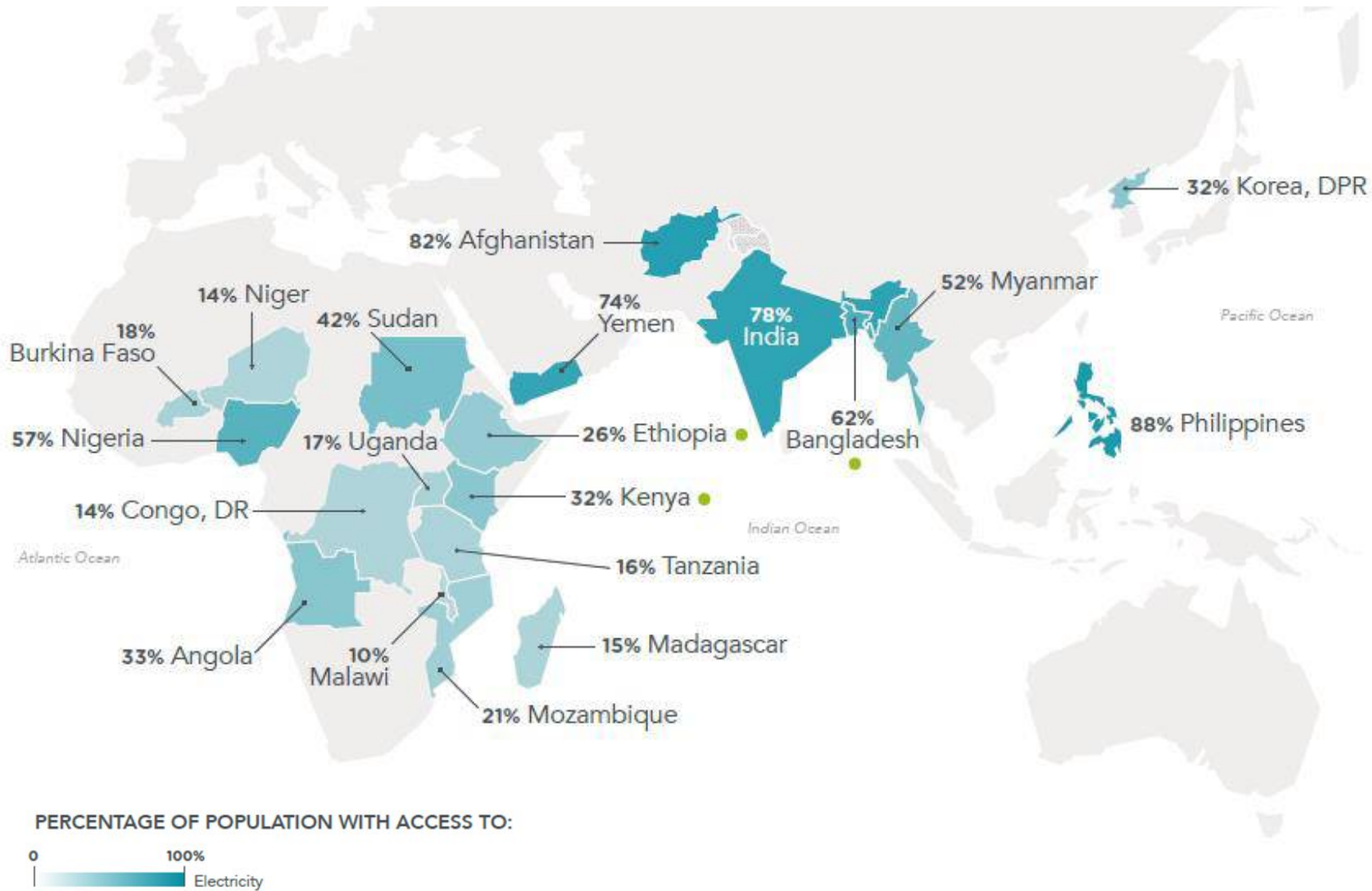
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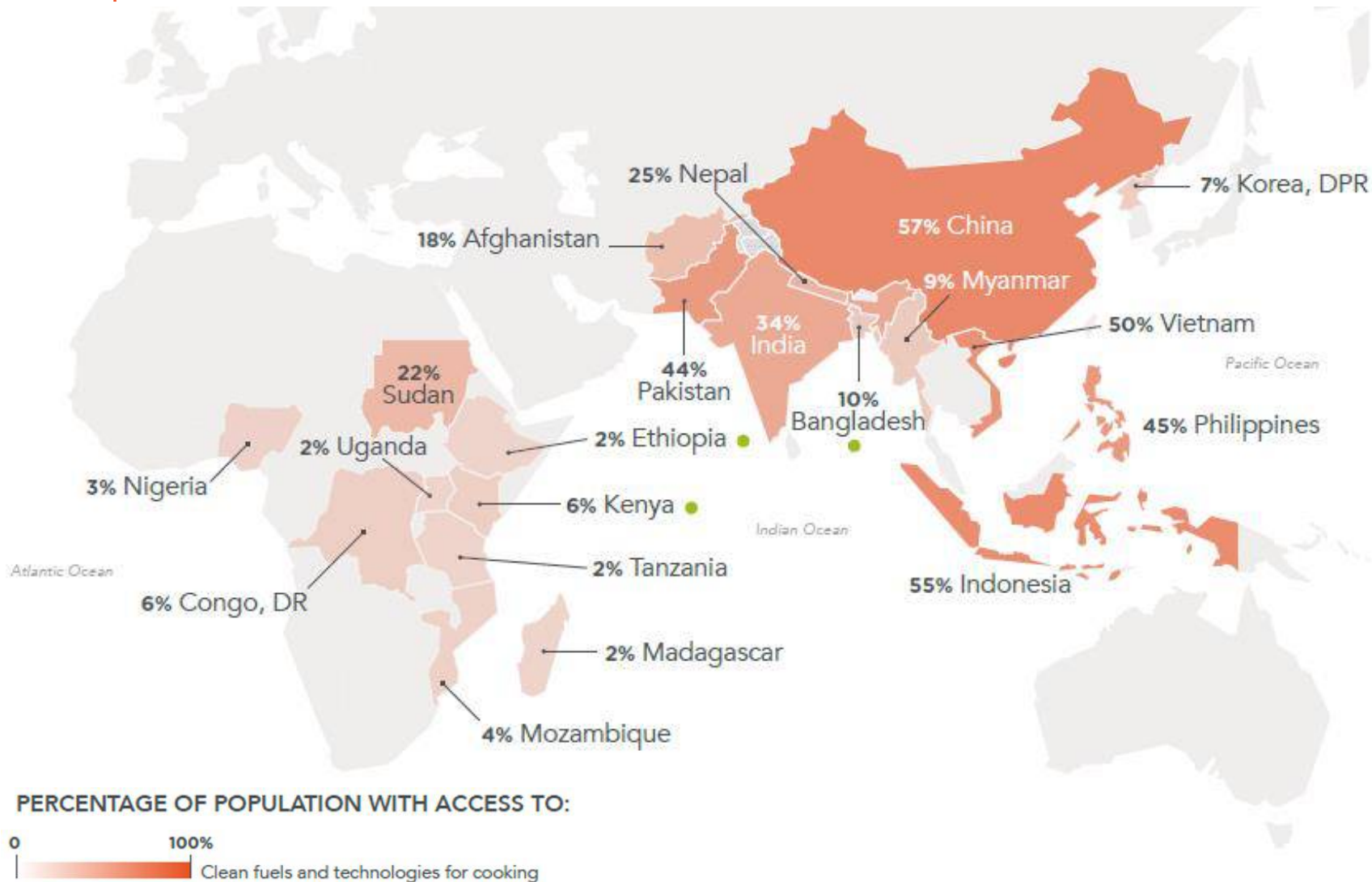
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# The Energy Access Problem

# 1.06 billion people lack access to electricity globally, 80% live in high-impact countries



3.04 billion people lack access to clean fuels and technologies for cooking globally, 84% live in high-impact countries



# Investment needs



ELECTRICITY: USD 45 billion per year to reach universal electrification by 2030 (SEforALL, 2015)



CLEAN COOKING: USD 4.4 billion per year as the minimum required investment in clean cooking annually (SEforALL, 2015)

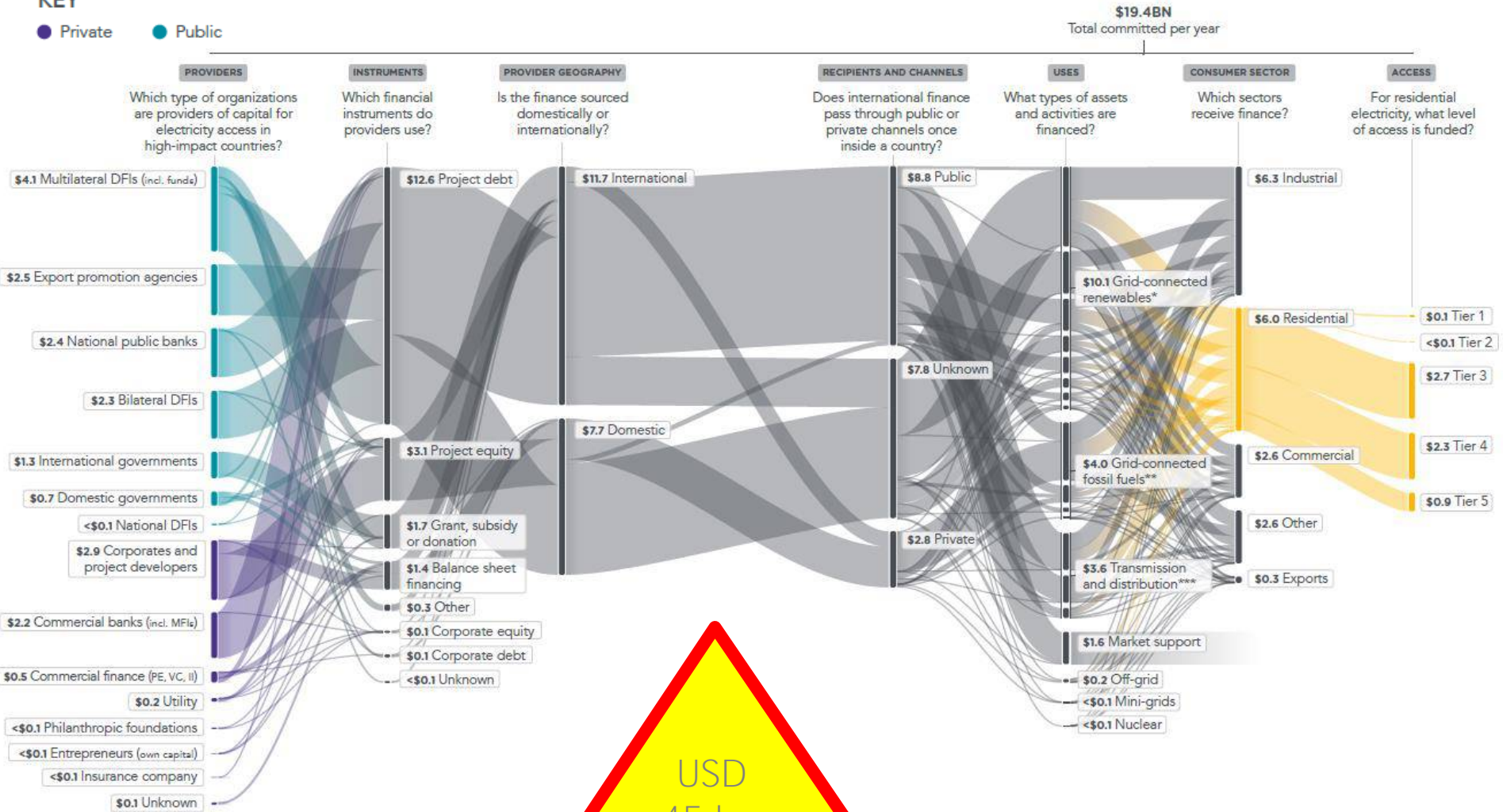


# Finance for Electricity Access

# USD 19.4 billion per year was invested in electricity across the 20 high impact countries over 2013-14

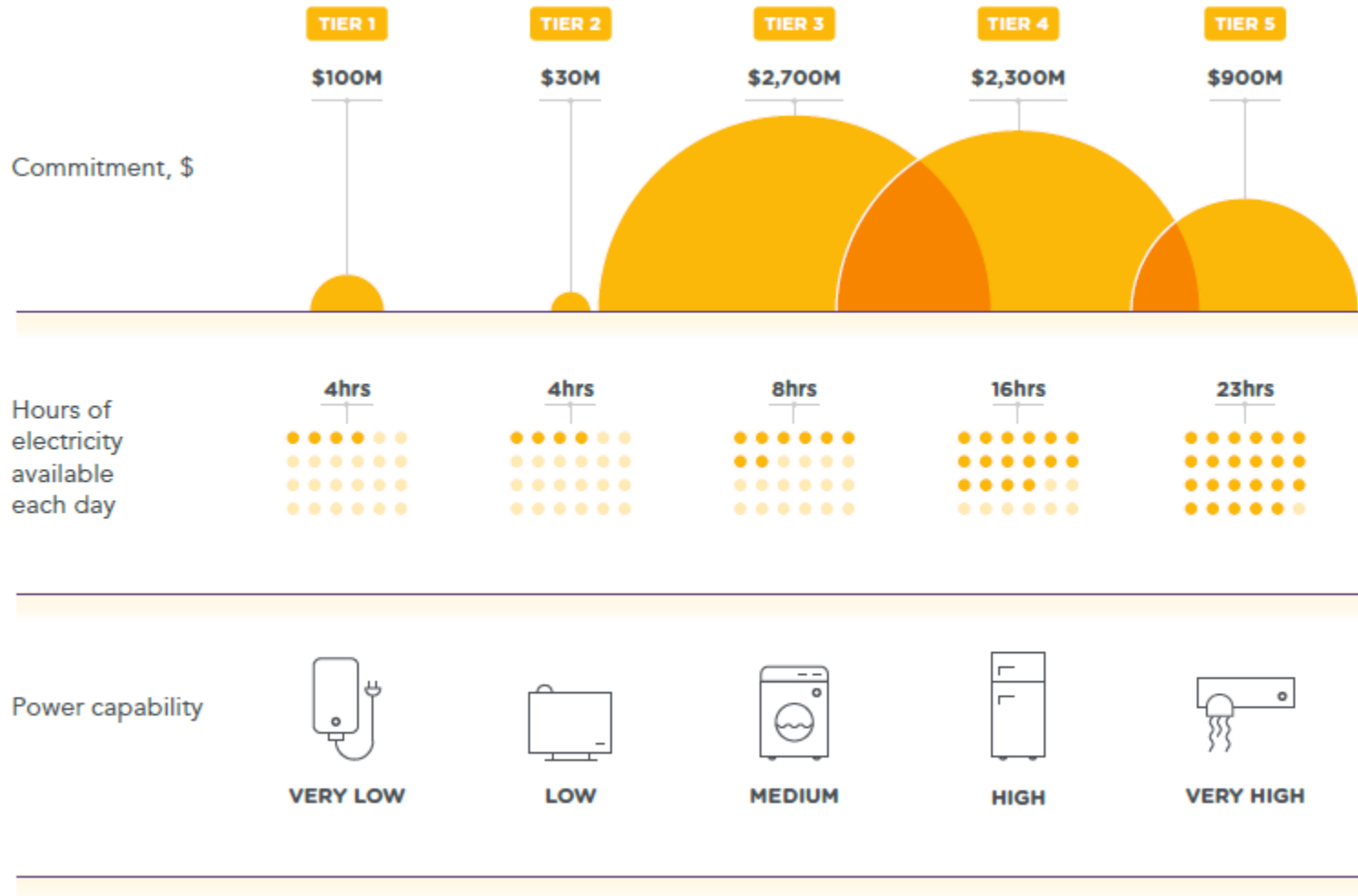
## KEY

● Private ● Public

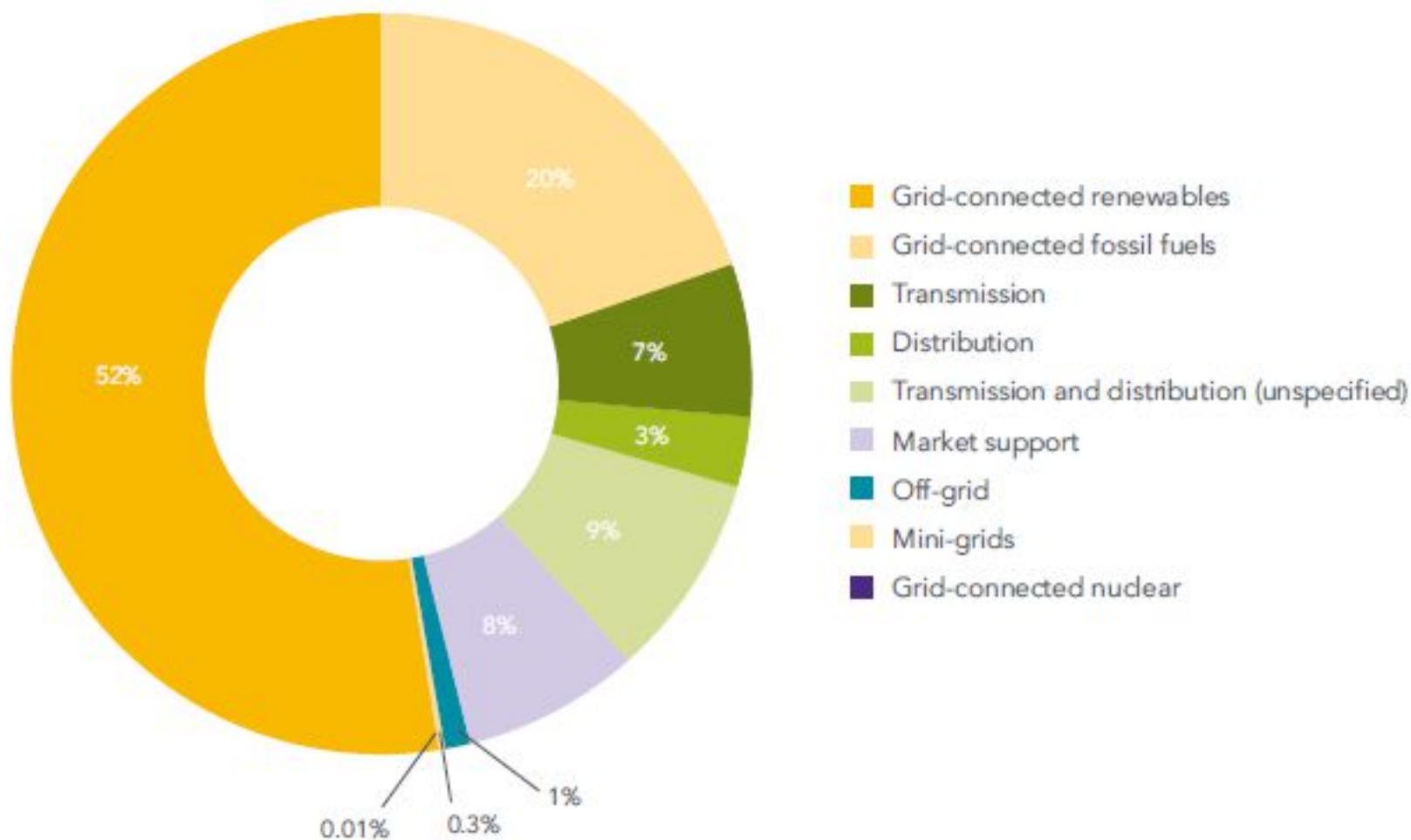


USD  
45 bn  
needed

# Most finance for residential electricity access supports a medium or high level of electricity service

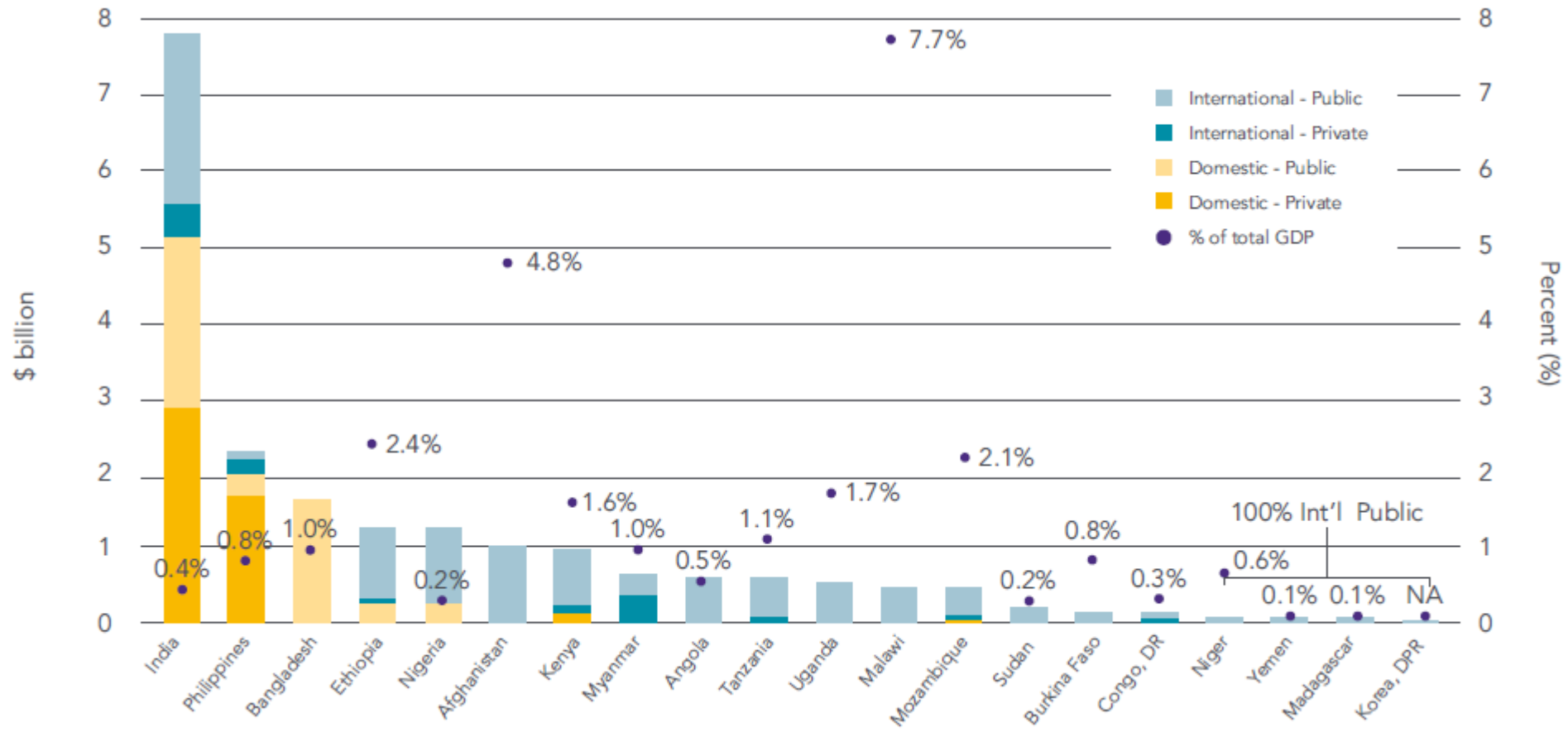


## Grid-connected renewables dominate



Note: Average over 2013-14

# Asia sees the majority of investment



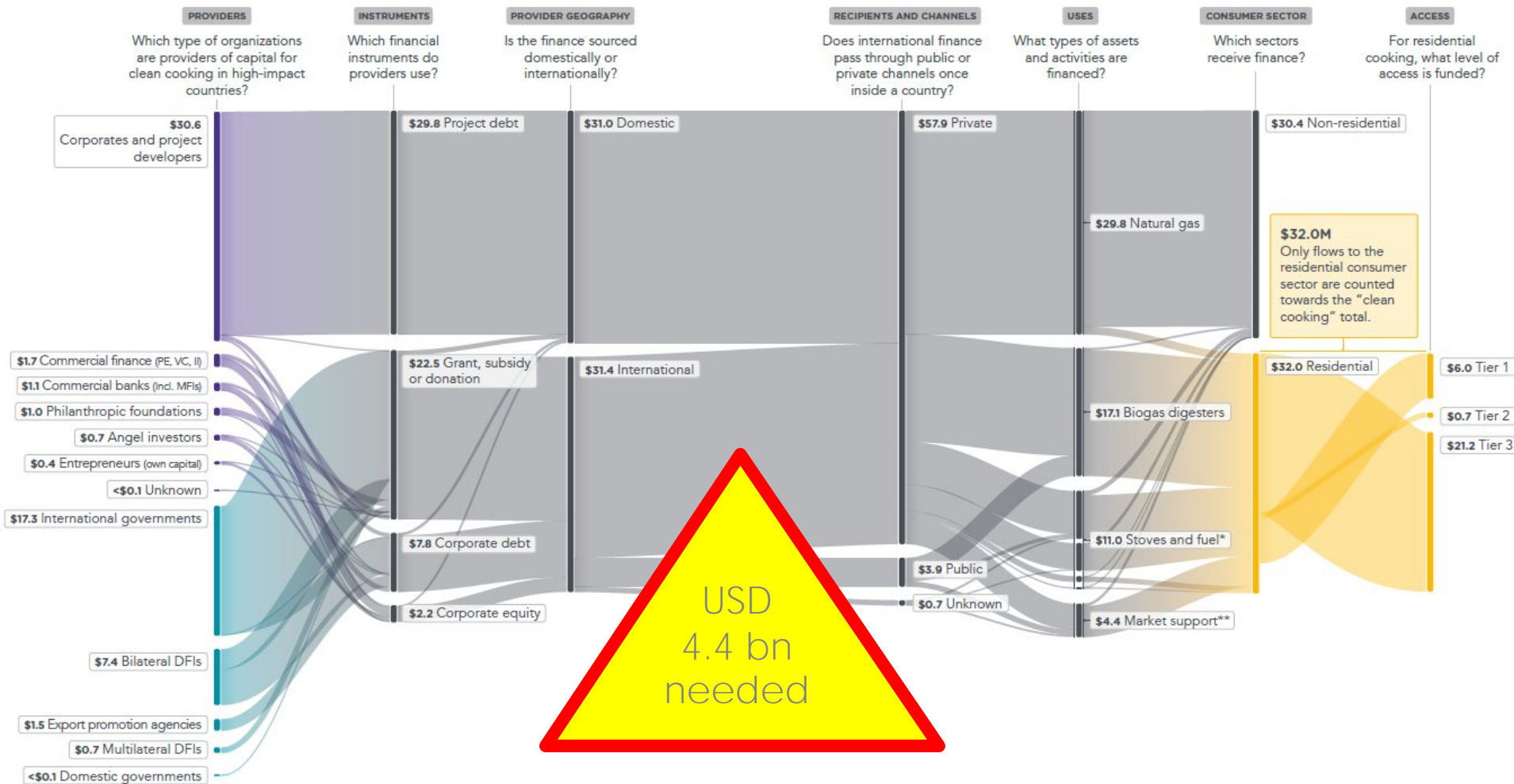
# Finance for Clean Cooking Access

# An average of USD 32 million per year was invested in clean cooking across the high impact countries,

## KEY

● Private ● Public

**\$62.4M**  
Total committed per year

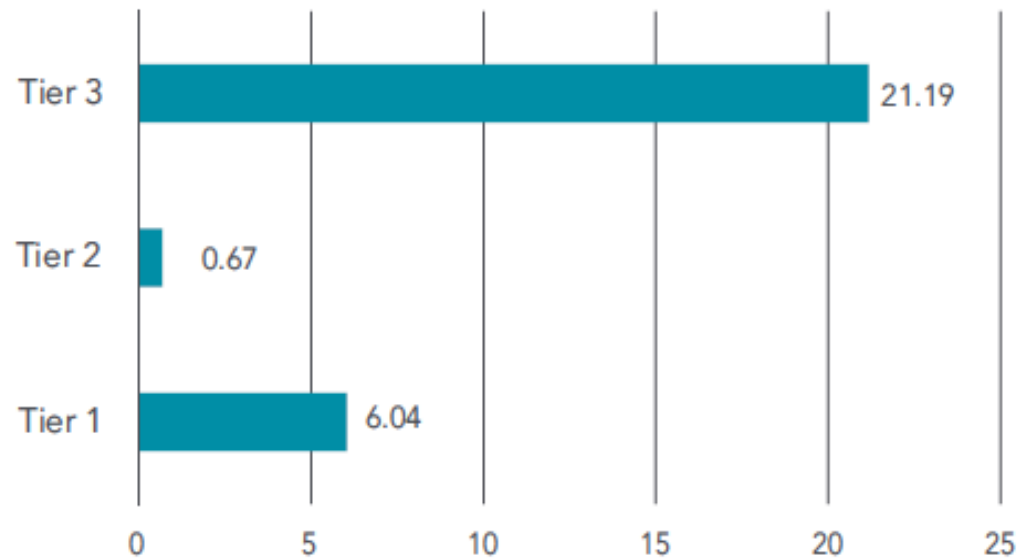


**\$32.0M**  
Only flows to the residential consumer sector are counted towards the "clean cooking" total.

USD  
4.4 bn  
needed

## Most investment will deliver Tier 3 cooking access

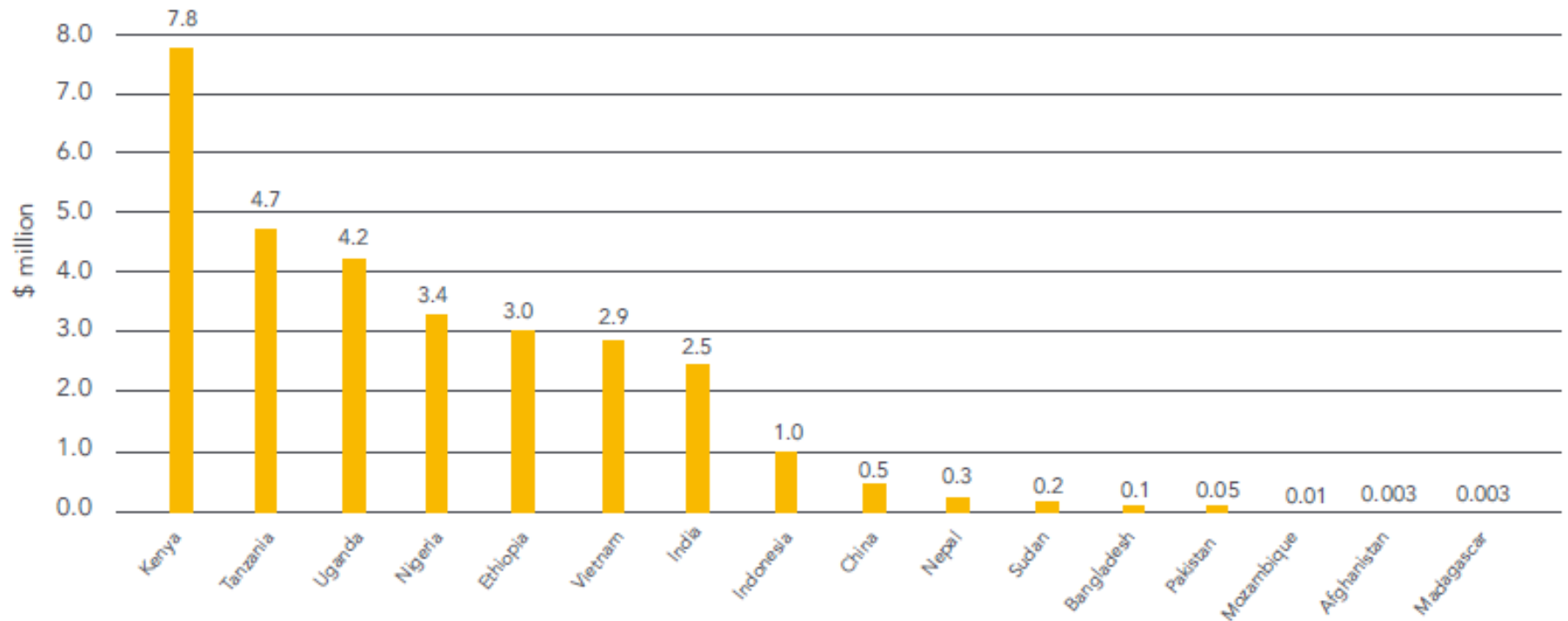
Figure 2.21 - Finance for residential clean cooking access by Tiers of access (\$ million)



Note: Average over 2013-14

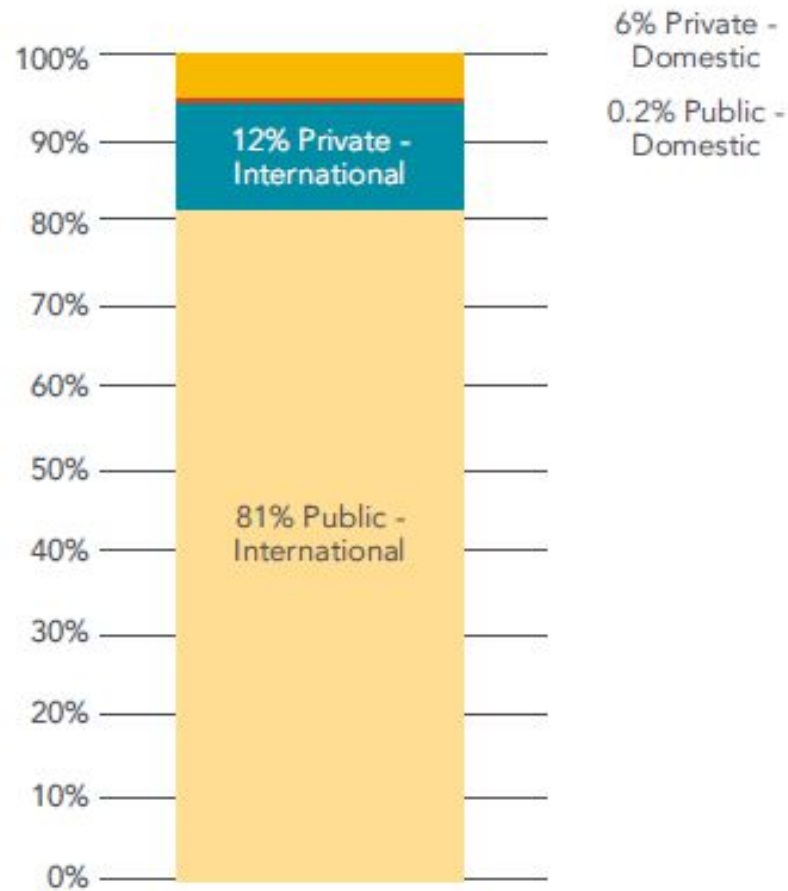


# Most finance for clean cooking access targets Sub-Saharan Africa



Note: Average over 2013-14. The graph does not show \$1.4 million targeting multiple high impact countries in Sub-Saharan Africa, due to a lack of detail in country destinations. No data was found for Congo DR, Korea DPR, Myanmar, Philippines.

International finance for clean cooking access was 15 times that of domestically sourced finance



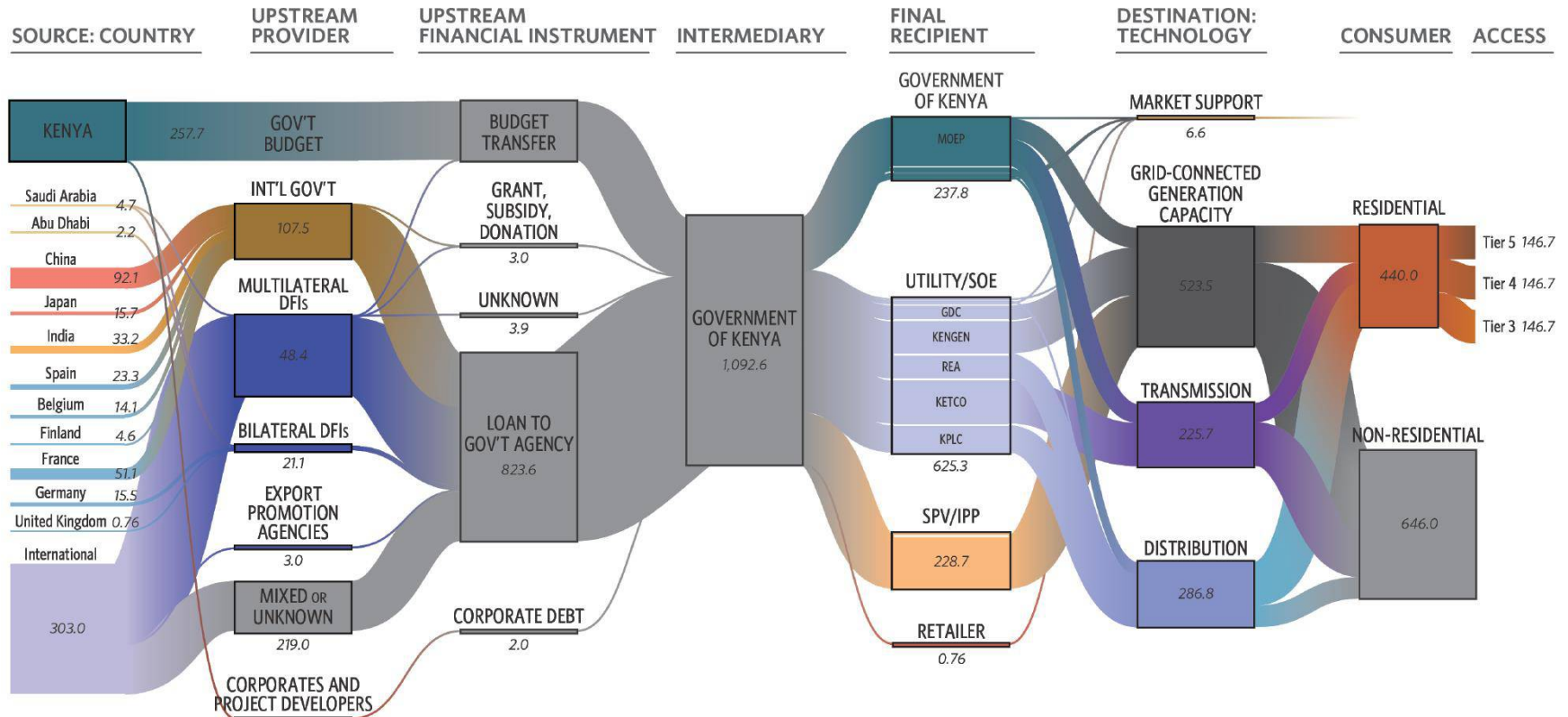
Note: Average over 2013-14

# Country Case Studies

# KENYA ELECTRICITY – Bulk of finance originates outside Kenya, with strong centralization of resources through Government

Average **electricity** finance flows in **Kenya** from 2013-2015: **USD 1,092.6 million** per year

The totals below are in USD millions per year, taken as an average of commitments made between 2013 and 2015.

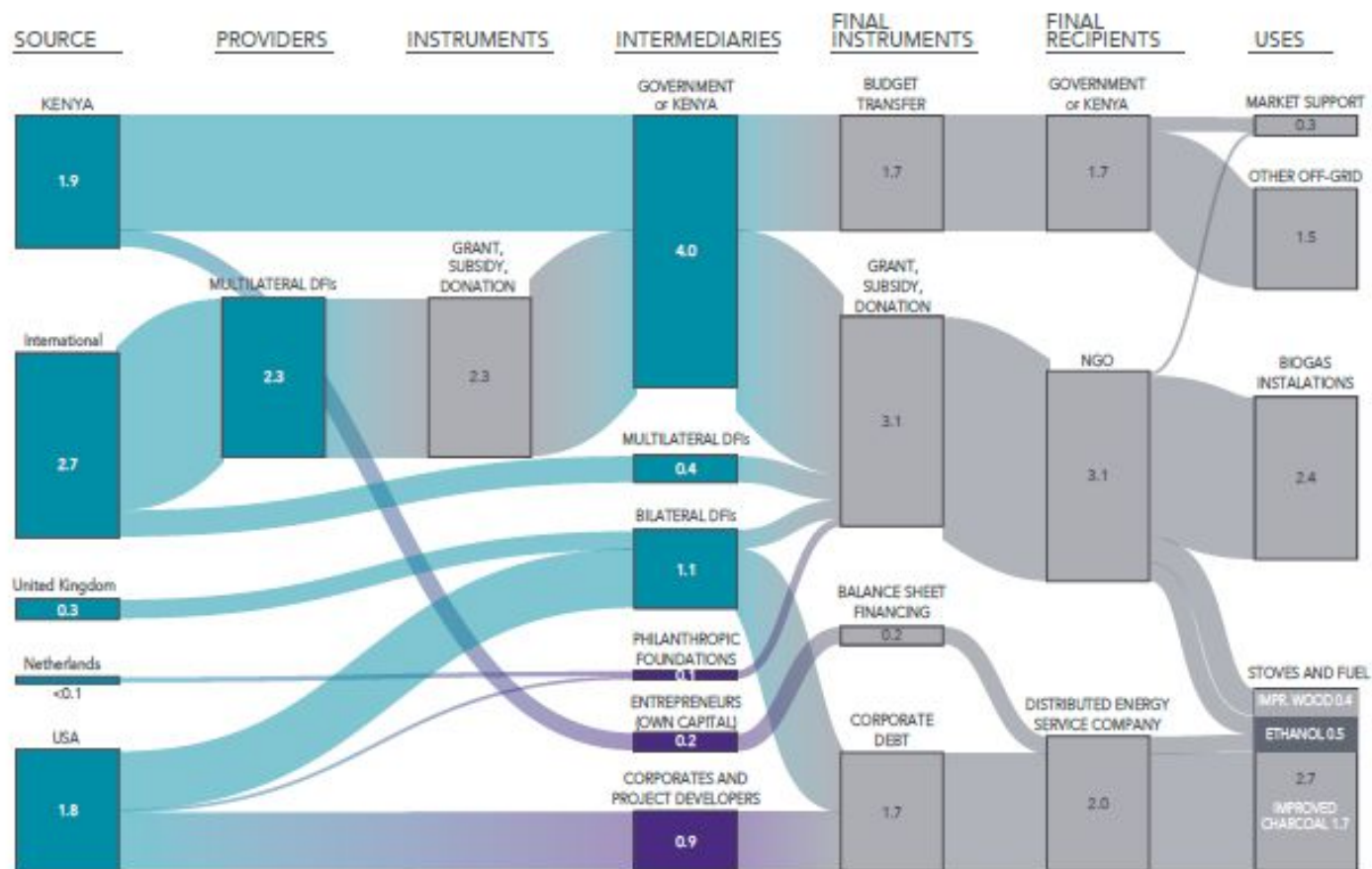


# KENYA COOKING - Relatively strong engagement on clean cooking both through public and private sector channels

## Kenya: Clean cooking finance flows in Kenya 2013-15 (\$, million)

Average of finance flows for clean cooking in Kenya from 2013-15: \$6.8 million per year

KEY: ■ PUBLIC ■ PRIVATE

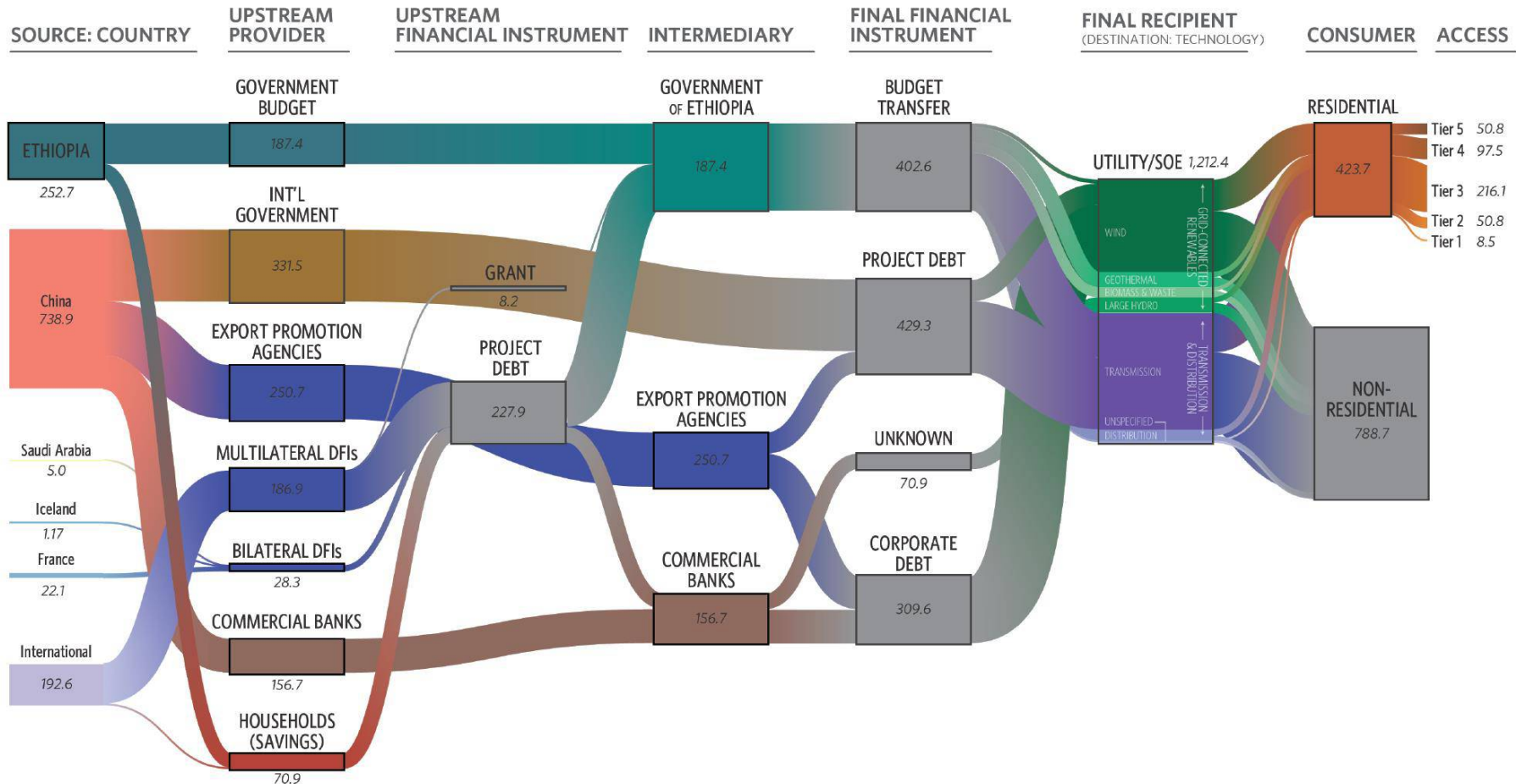


Note: Totals are an average of commitments made between 2013 and 2015.

# ETHIOPIA ELECTRICITY – China is by far the largest international source of finance channeled directly to state-owned utility

Average **electricity** finance flows in **Ethiopia** from 2013-2015: **USD 1,212.4 million** per year

The totals below are in USD millions per year, taken as an average of commitments made between 2013 and 2015.

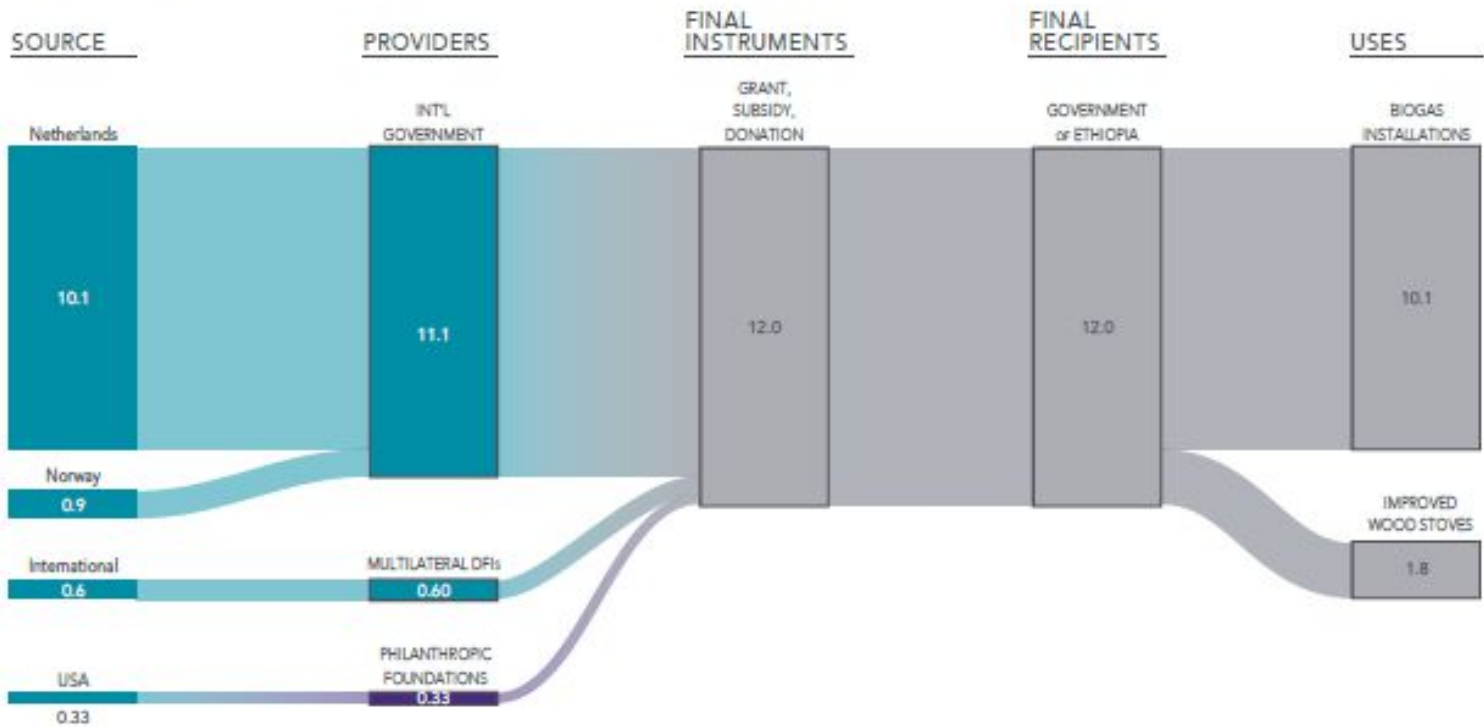


# ETHIOPIA COOKING – Finance exclusively from overseas donors, almost entirely from The Netherlands

## *Ethiopia: Finance flows for clean cooking in Ethiopia 2013-15*

Average finance flows for clean cooking in Ethiopia from 2013-15: \$12.0 million per year

KEY: ■ PUBLIC ■ PRIVATE

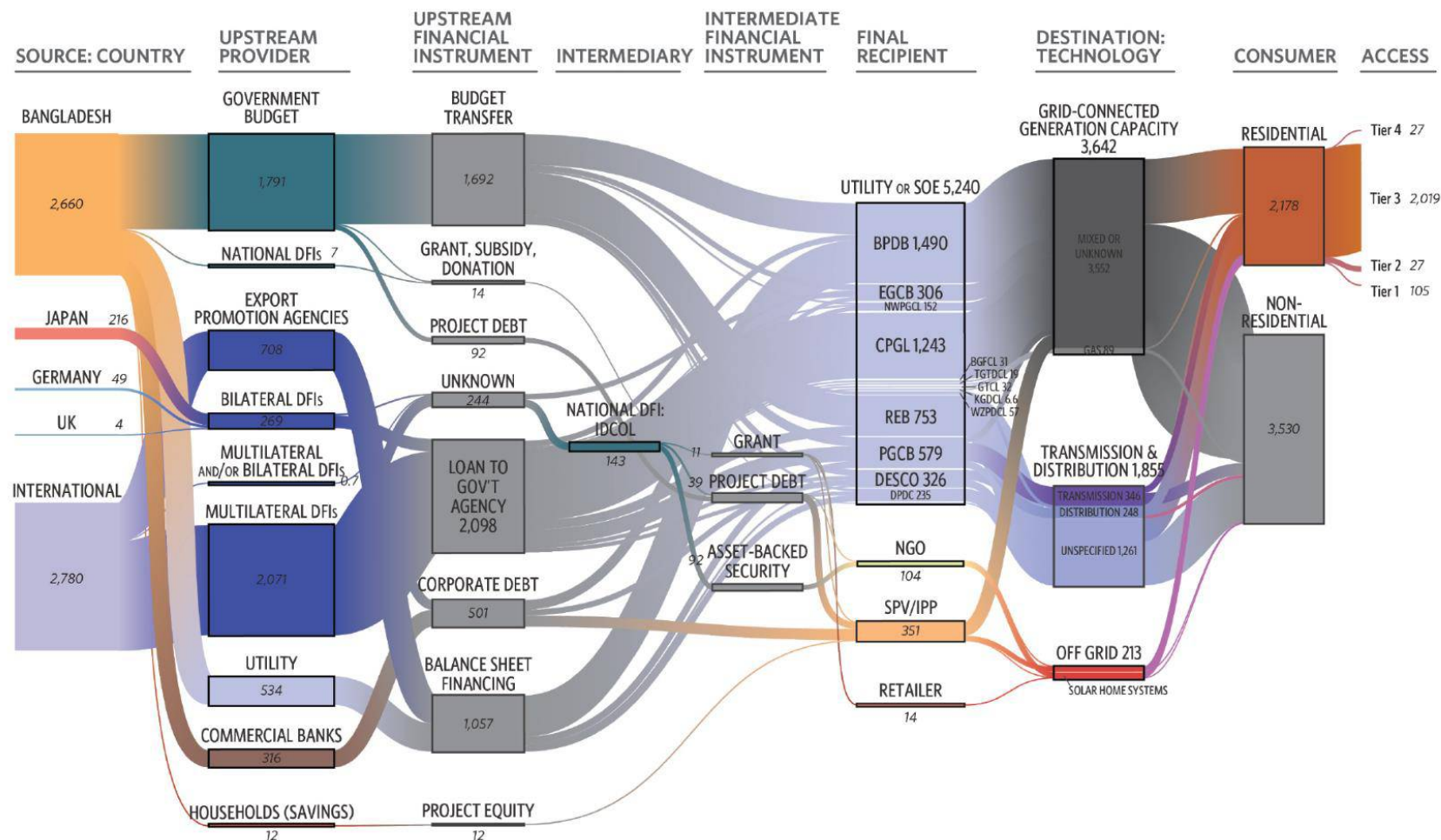


Note: Totals are an average of commitments made between 2013 and 2015.

# BANGLADESH ELECTRICITY – Almost half of financing originates domestically, from both government and utilities' cash flow

Average **electricity** finance flows in **Bangladesh** from 2013-2015: **USD 5,709.3 million** per year

The totals below are in USD millions per year, taken as an average of commitments and disbursements made between 2013 and 2015.



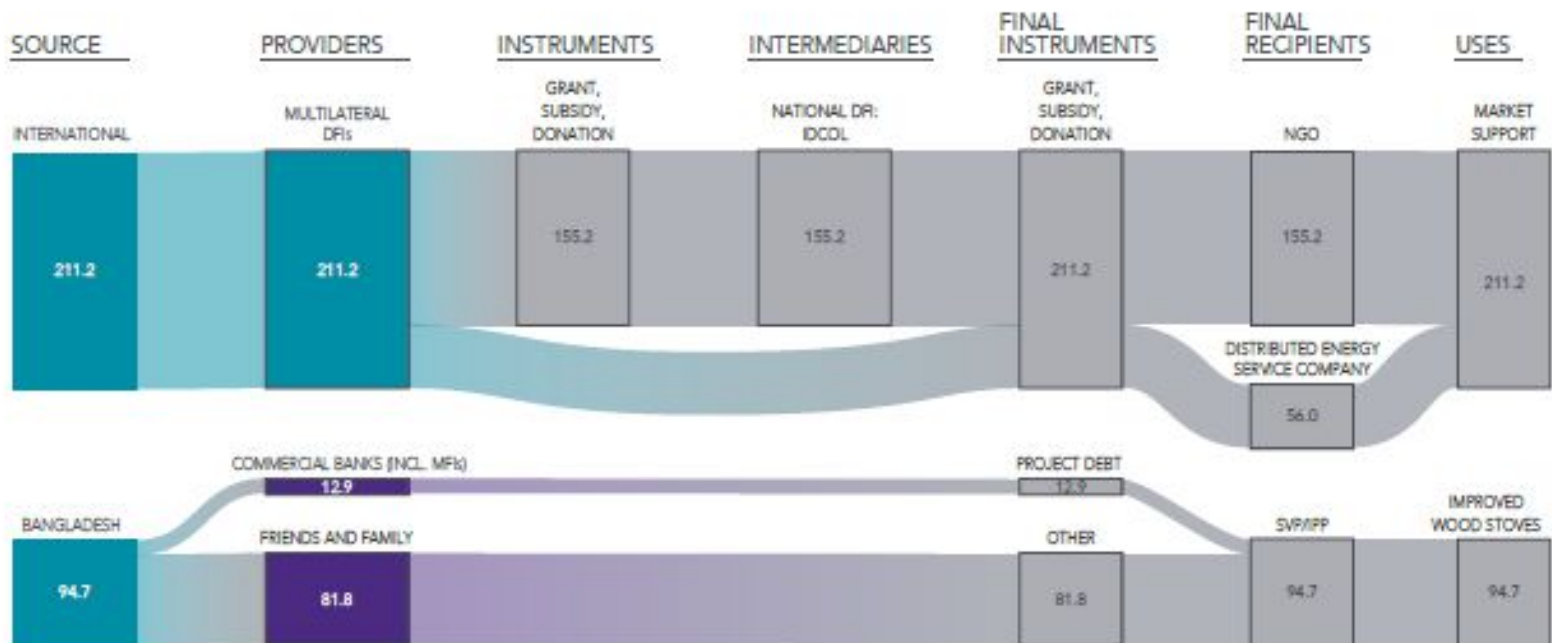


# BANGLADESH COOKING – In addition to international donor finance, there is significant financial contribution from population

## Bangladesh: Finance flows for clean cooking in Bangladesh 2013-15

Average finance flows for clean cooking in Bangladesh from 2013-15: \$305.9 thousand per year

KEY: ■ PUBLIC ■ PRIVATE



Note: Totals are an average of commitments made between 2013 and 2015. Due to data limitations, this visualization depicts average disbursements and Cost of Goods Sold (COGS) instead of commitments over the time frame.

## COMPARISON ELECTRICITY – Electricity finance represents substantial GDP share with 35-40% benefiting residential users

- ACROSS DEEP-DIVE COUNTRIES: Electricity Finance

	Bangladesh	Ethiopia	Kenya
<b>AVERAGE ANNUAL ELECTRICITY FINANCE</b>			
<b>Absolute financing volume (USD mn)</b>	5,200	1,212	1,100
<b>Finance per capita (USD per capita)</b>	33	13	24
<b>Finance as a share of GDP (% of GDP)</b>	3.0	2.2	1.8
<b>STRUCTURE OF ELECTRICITY FINANCE (%)</b>			
<b>Share coming from domestic sources</b>	44	21	24
<b>Share that is concessional</b>	62	65	100
<b>Share going to off-grid electricity</b>	4	<1	1
<b>Share going to residential access</b>	36	35	40
<b>Share going to Tiers 1-2</b>	6	14	0

## COMPARISON COOKING – Negligible levels of funding, with a strongly donor driven agenda

- ACROSS DEEP-DIVE COUNTRIES: Improved Cooking Finance

	Bangladesh	Ethiopia	Kenya
<b>AVERAGE ANNUAL COOKING FINANCE</b>			
<b>Absolute financing volume (USD Mn)</b>	0.25	12	6.7
<b>Finance per capita (USD per capita)</b>	<0.01	0.12	0.15
<b>STRUCTURE OF COOKING FINANCE (%)</b>			
<b>Share coming from domestic sources</b>	31	0	29
<b>Share going to biomass cookstoves</b>	31	15	31
<b>Share going to biogas facilities</b>	0	85	35

Thank you