

Energy Access in Africa – WB/ESMAP Initiatives

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ACCRA

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Presentation



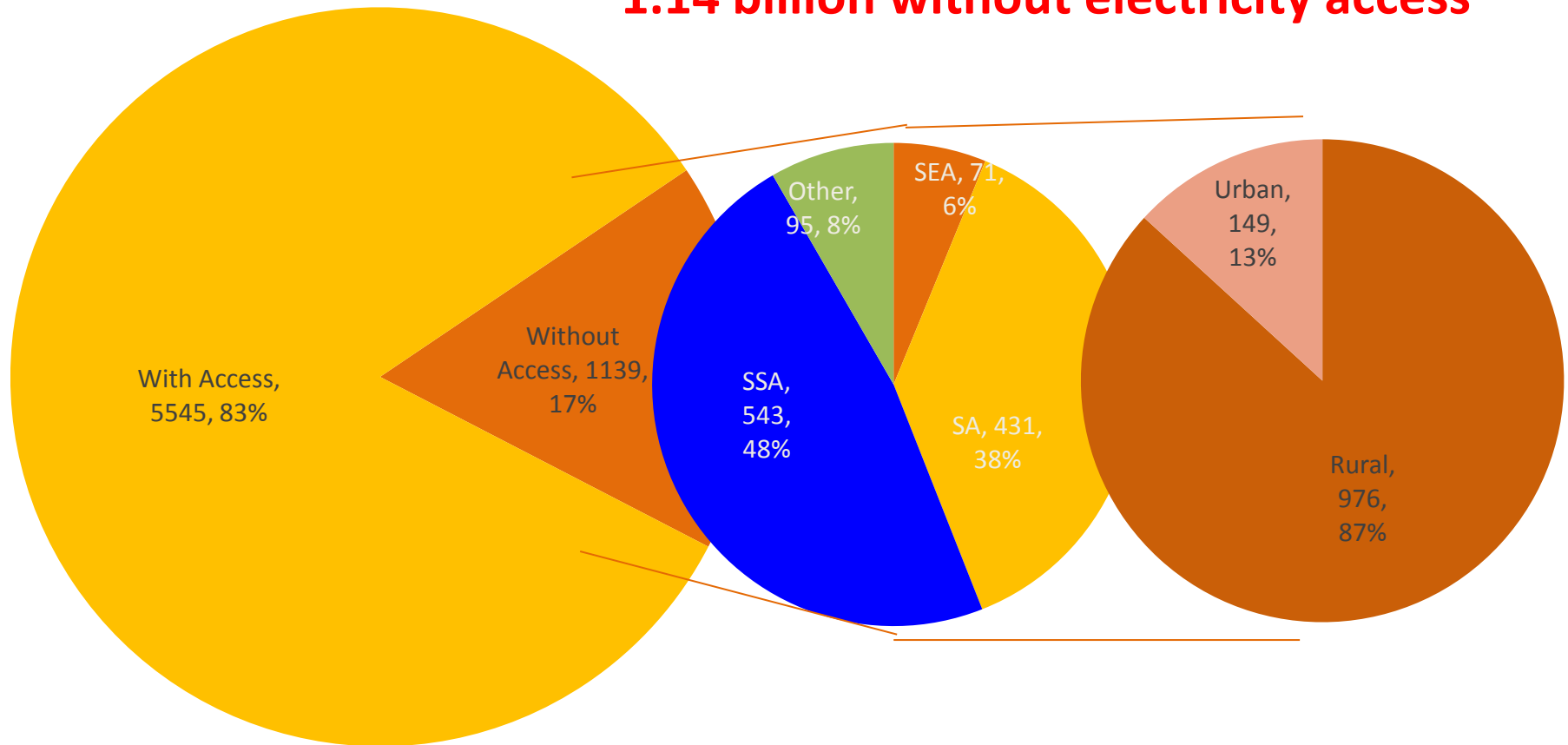
- INTRODUCTION
- WB AFRICA ENERGY PROGRAM
- ENERGY SECTOR MANAGEMENT ASSISTANCE PROGRAM (ESMAP)
- AFRICA RENEWABLE ENERGY ACCESS PROGRAM (AFREA)
- AFRICA CLEAN COOKING ENERGY SOLUTIONS (ACCES)
- SUSTAINABLE ENERGY FOR ALL (SEFA)

Africa's Major Energy Challenges

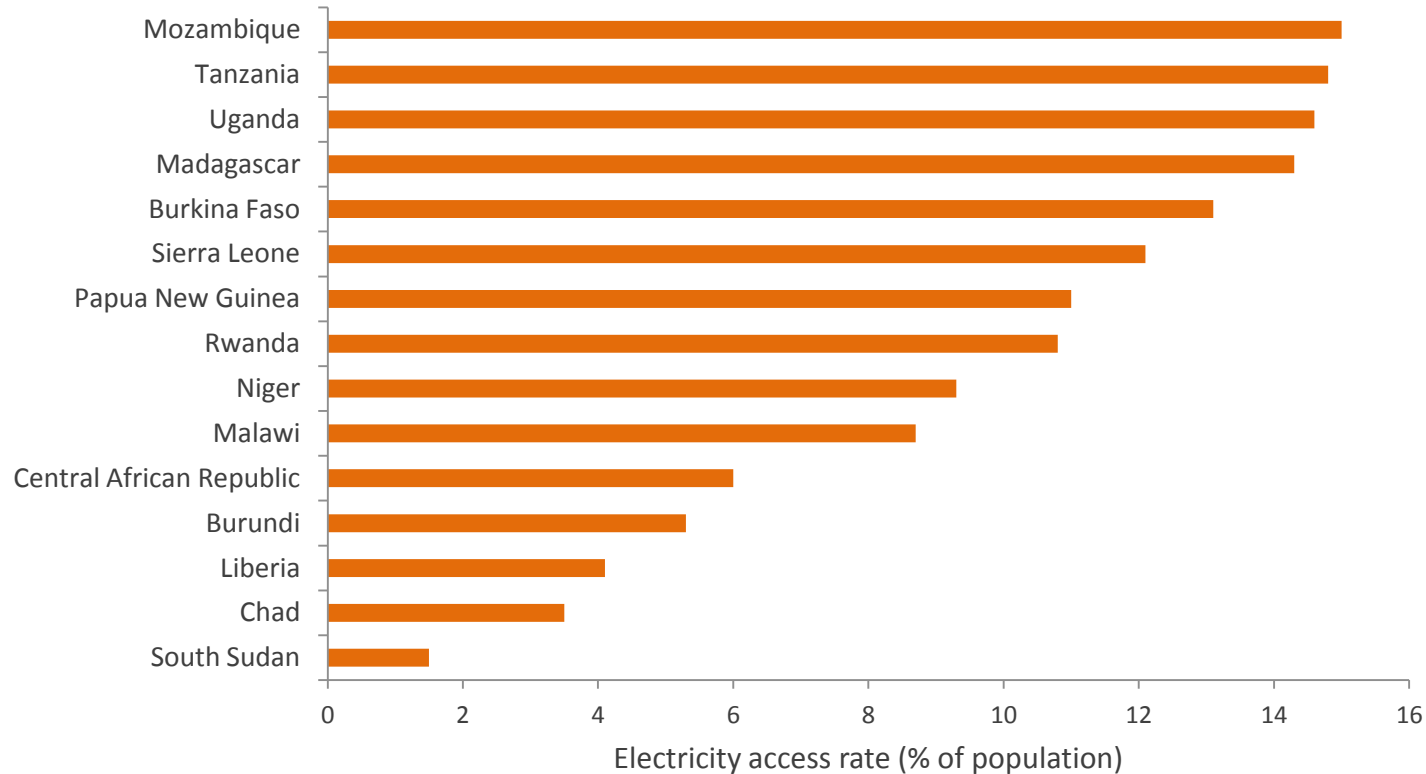
- Total installed generation capacity at 78 GW (2008)
- Only 31% of the population with access to electricity
- **Universal electrification more than 50 years away under BAU**
- Outside RSA, consumption is around 1% of OECD levels
- 82% of households still relying on solid biomass for cooking
- 30 countries facing regular interruption of services
- Interruptions costing 16%/6% of in/formal sector turnover
- **Sector inefficiencies costing 0.8 % of Africa's GDP**

Electricity Access Deficit in 2010

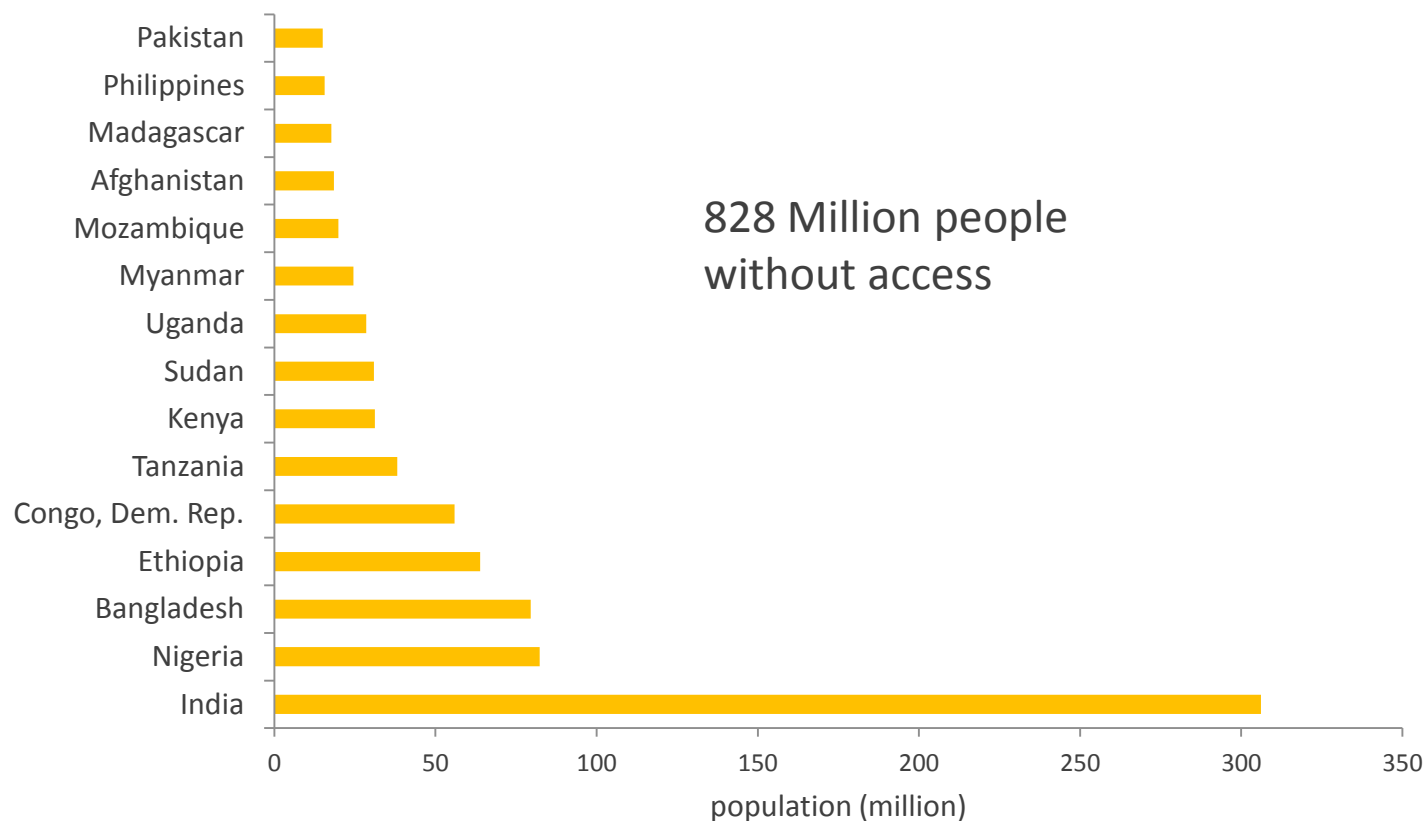
1.14 billion without electricity access



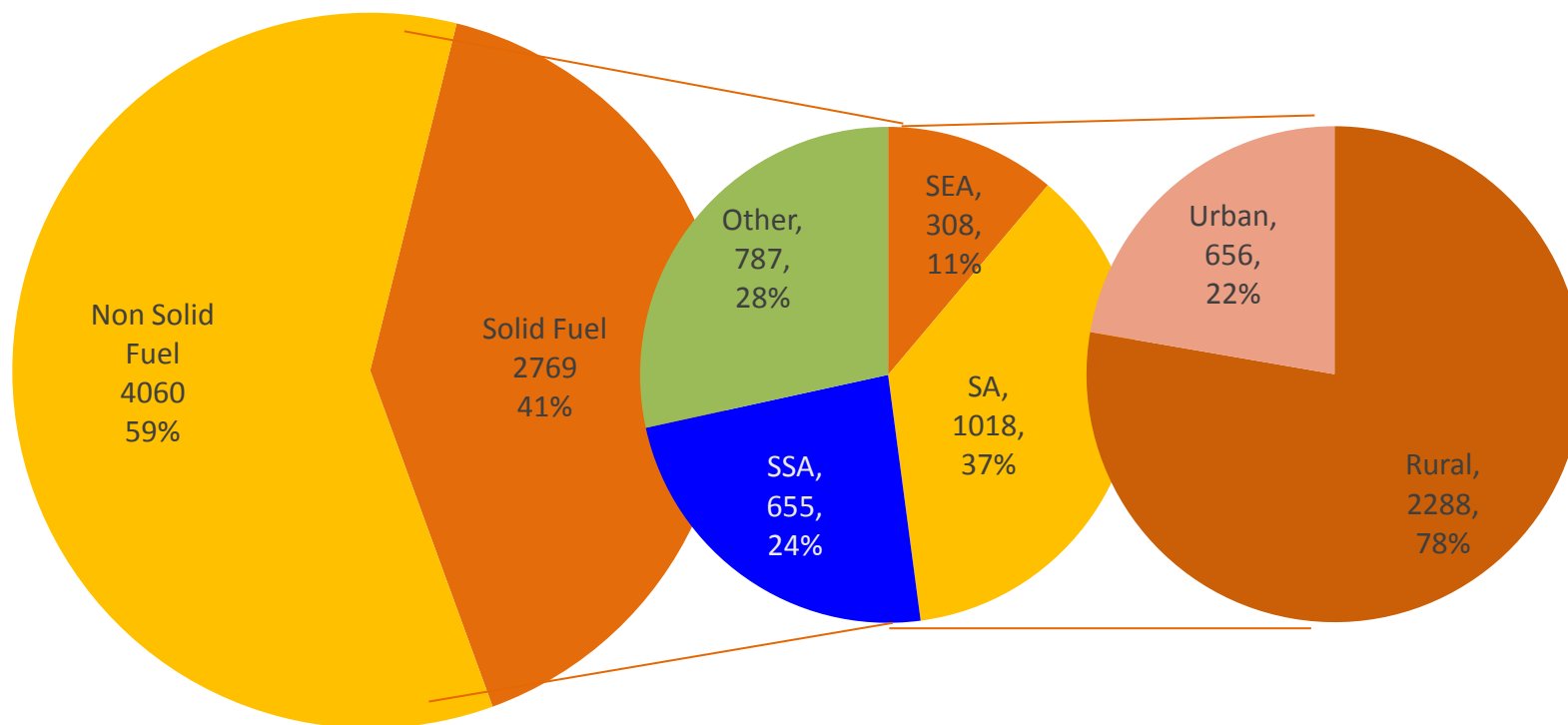
Top 15 Countries with the lowest electrification rate (% of population) 2010



Top 15 countries without access (million) 2010

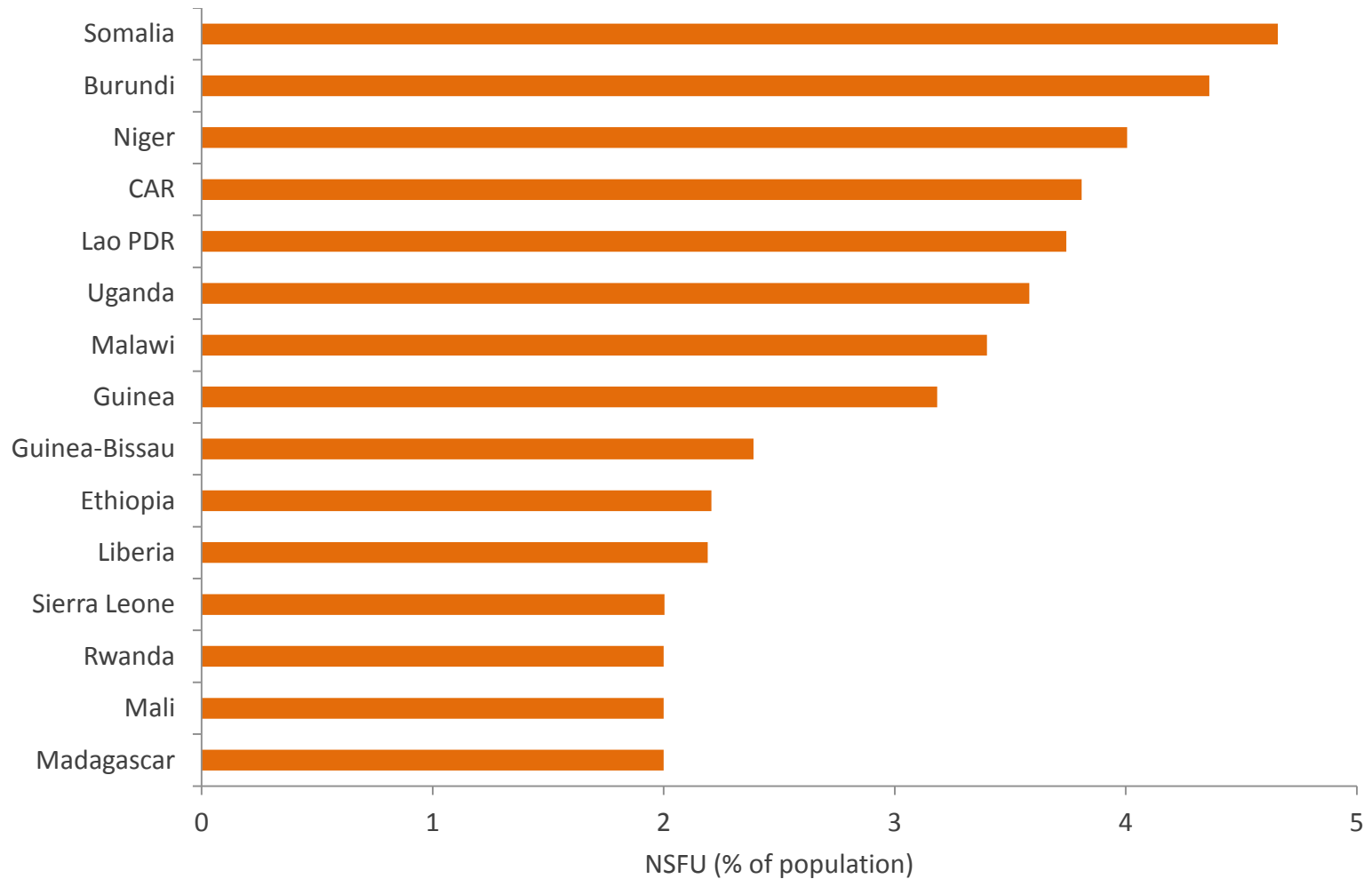


Solid fuel use in 2010

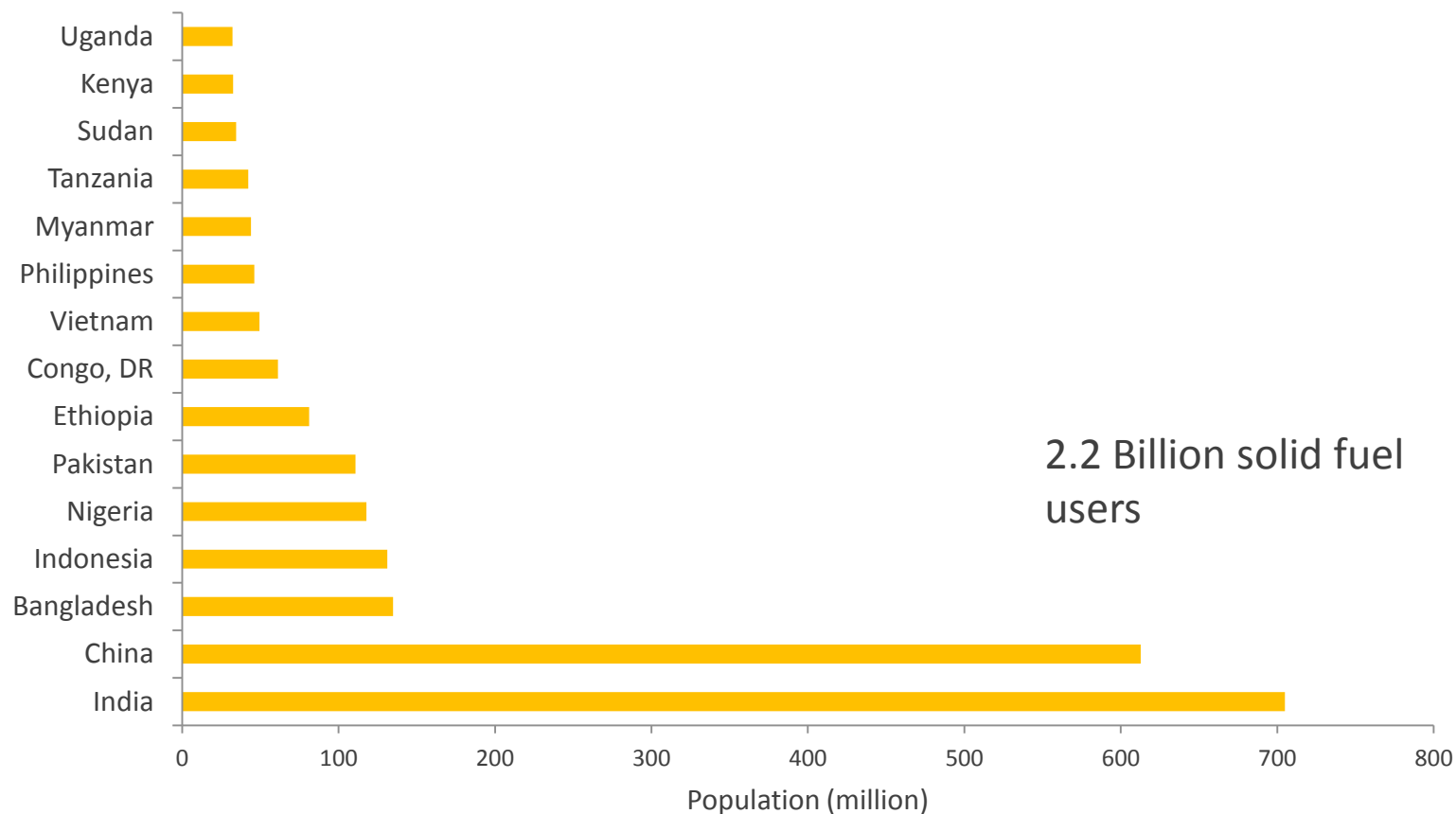


2.77 billion people still use solid fuels (biomass and coal)

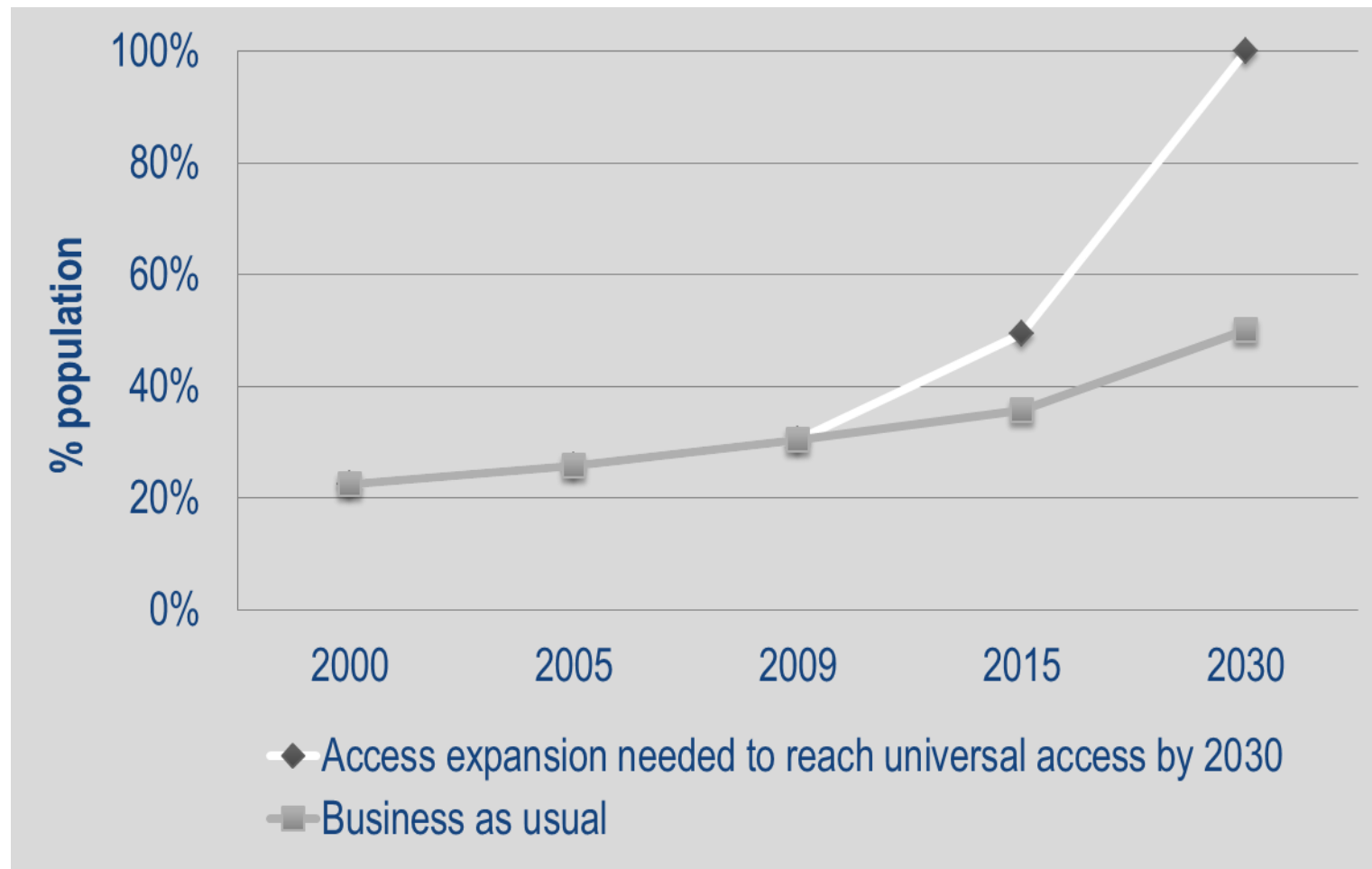
Top 15 countries with lowest rate of NSFU (% of population), 2010



Top 15 countries without access to NSF (million), 2010



Business-as-usual will not lead to universal access



[IEA 2010]

WB Africa Energy Program

- WB accounts for more than half of power project capacity under construction (8 out of 15.6 GW)
- Activities include rural electrification, sector reform, regional power pools, transmission infrastructure, large-scale renewable energy, etc.
- Household energy projects in a few countries

Agencies	Under Construction
World Bank	8.0
Other Multilaterals	1.4
Emerging financiers	4.8
Private sector	1.4
TOTAL (GW)	15.6

Energy Sector Management Assistance Program



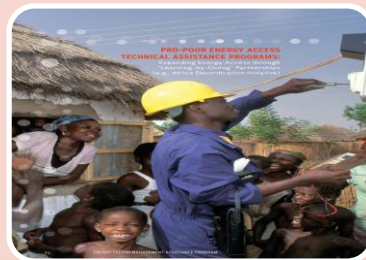
Program 1:
Energy Access



Program 2:
Energy Efficiency



Program 3:
Clean Energy



Program 4:
Energy Assessments
& Strategy

A global program of World Bank, supported by a Multi-donor Trust Fund, to assist client countries to increase know-how and institutional capacity, and to achieve environmentally sustainable energy solutions for poverty reduction and economic growth

ESMAP Energy Access Program

Analytical Work

- Economics of household energy
- Energy access indicators
- Direct delivery of subsidies to rural consumers

Knowledge Products

- Clean cook stoves mapping (global and Africa) with Global Alliance on Clean Cookstoves)
- Gender & energy case studies
- Urban and peri-urban energy access (e.g. Ghana country study)

Operational Support

- Household energy portfolios in Africa, East Asia, Central America and Bangladesh
- Africa Renewable Energy Access (AFREA) program

Africa Renewable Energy Access Program (AFREA)

- ESMAP's window for Africa managed by WB's Africa Region
- \$28.75m contribution to ESMAP from the Netherlands
- Operational since February 2009
 - Programmatic activities (e.g. Lighting Africa, Energy and Gender, Africa Electrification Initiative, Clean Cooking Initiative)
 - Recipient executed grants to complement IDA lending
 - Knowledge management activities (complements ESMAP block grants)
- **AFREA II is expected to follow from mid-2013**

AFREA Portfolio

Bank-executed activities

- \$12.25 million
- AFTEG programmatic activities: Lighting Africa (with IFC), AEI, Gender and Energy, BEIA/Clean Cooking
- Support to Africa energy strategy, consultation and conferences (e.g. Africa Energy Ministers conference)
- Studies and toolkits

Recipient-executed activities

- \$13.2 million
- Complement IDA operations, finance innovations
- Mali, Tanzania, Benin, Rwanda, Liberia
- Innovation competitions (12 small grants – Lighting Africa and Biomass Africa Energy Initiative)
- Support to universities (REEP)

Key outcome: Support to Governments to innovate and scale-up

- Rwanda and Kenya SWAs completed, mobilized donor resources for access scale-up; Ethiopia underway
- Five AFREA grant agreements signed with the Governments and now being implemented (Benin, Liberia, Mali, Rwanda, Tanzania)
- First results on the ground are emerging and successful approaches are being replicated and mainstreamed
 - E.g. Lighting Rural Tanzania competition winners supported 87,000 people with improved access to basic lighting and electricity services; REA launching LRT II with government and IDA/GEF resources
 - E.g. Liberia established RREA and is finalizing first renewable energy projects and have mainstreamed approaches piloted by AFREA to IDA/GEF operation – Lighting Lives in Liberia
- Operations enhanced by gender sensitive approaches in Mali, Tanzania, Senegal, Kenya and Benin

SWAp is a tool to be extensively used for SEFA activities



LRT grantee ARTI establishes an innovative sales model relying on traditional credit

IMPROVING WOMEN OWNED BUSINESSES AND INCREASING ENERGY DEMAND



“With the arrival of electricity, I have:”

- Extended my hours of business for night time service
- Use many materials in my salon that require electricity (hair dryer, curling iron)
- I have provided improved comfort to my clients (radio with news/music, fan, TV, improved lighting)
- Due to these improvements, I have tripled my business
- With the additional income I have been able to diversity my business products (eg hair products)

Interview du 11.11.11

“One Day on Earth” Campaign

“Women at Work”

Konobougou, MALI

Key outcome: Developing sustainable markets for basic energy services

- Lighting Africa – transformation of the market underway
 - 2.5 million people with improved access with quality-certified lighting products
 - 29 quality-certified products by 20 manufacturers
 - 3rd off-grid lighting conference in November 2012
 - Lighting Africa expansion underway
- Innovative business models through small grant competition (LADM and BEIA) are now scaling up

LA identified as a replicable program under SEFA



COURTESY JARHIE SENO/LIGHTING AFRICA



COURTESY LUMINA PROJECT



COURTESY JARHIE SENO/LIGHTING AFRICA



LADM winner Nuru Light

Lighting Africa reached its target of 2.5m with access to modern lighting

BEIA pilots yield results



Charcoal production using agriculture waste in Tanzania



Promotion of improved biomass rocket stoves in South Africa



Biodiesel production in Kenya



Lighting Africa market transformation approach is now being adapted for cleaner cookstoves



Africa Clean Cooking Energy Solutions (ACCES)

- Develop an enterprise development platform to facilitate access to clean stoves across different segments
- Support market development, capacity building, quality assurance and innovative finance
- Promote sustainable fuel practices and cleaner fuels
- Initially demonstrate the platform approach in 3-5 countries
- Strategic partnership with Global Alliance (GACC); also to coordinate with ECREEE-GIZ West Africa initiative

Program to be formally launched on 16 November in Dakar, Senegal

Sustainable Energy for All (SEFA) – Role of WB/ESMAP

- WB President co-chairs the SEFA Advisory Group
- Part of the team that launched SEFA
- Currently assisting the SEFA Global Support Team in designing country action program (CAP)
- WB and IEA joint leads for knowledge management (annual tracking); Baseline Report to be released in early 2013
- ESMAP launching SEFA technical assistance program at country level in early 2013

SEFA Technical Assistance Program (S-TAP)

- To be launched in early 2013 with an initial budget of \$15m
- 5-6 countries to be chosen initially @\$2-3m per country
- To be implemented through WB operational regions and aligned with IDA programs
- Builds on the existing programs/plans and identify solutions to fill the gaps to reach the universal access goal (incl. focus on RE/EE where appropriate)
- Country-led process (government, private sector, civil society) in coordination with other agencies providing TA (EC, USDOS, AFDB, Bi-laterals, UN agencies, etc.)
- Support for creating enabling environment (policy/regulation, capacity, innovation, institutional strengthening)
- **EXPECTED OUTCOME: An Investment Prospectus as part of a National Energy Action Program**

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Thank You.

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