

Access to Electricity for All



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Agenda

1. Situation
2. SE4ALL
3. ElectriFI
4. Eurelectric
5. Alliance for Rural Electrification
6. Distributed Energy Services Companies
7. Inventory
8. Conclusions

Situation

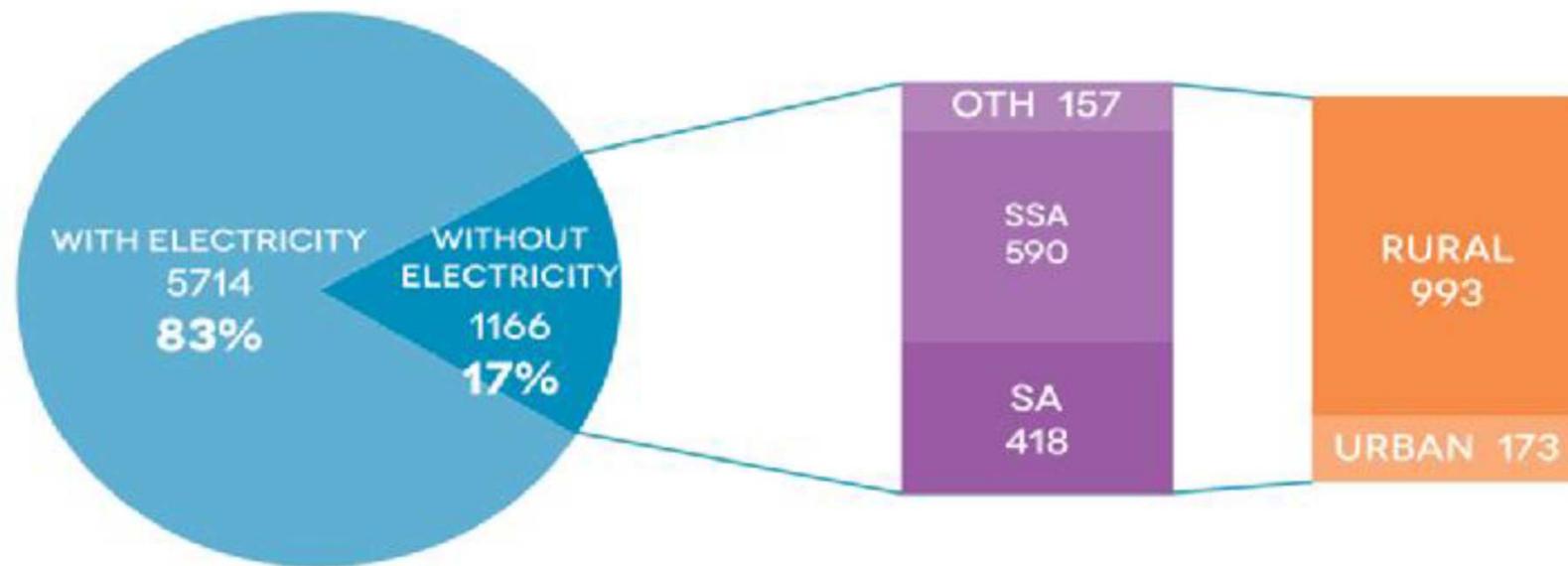
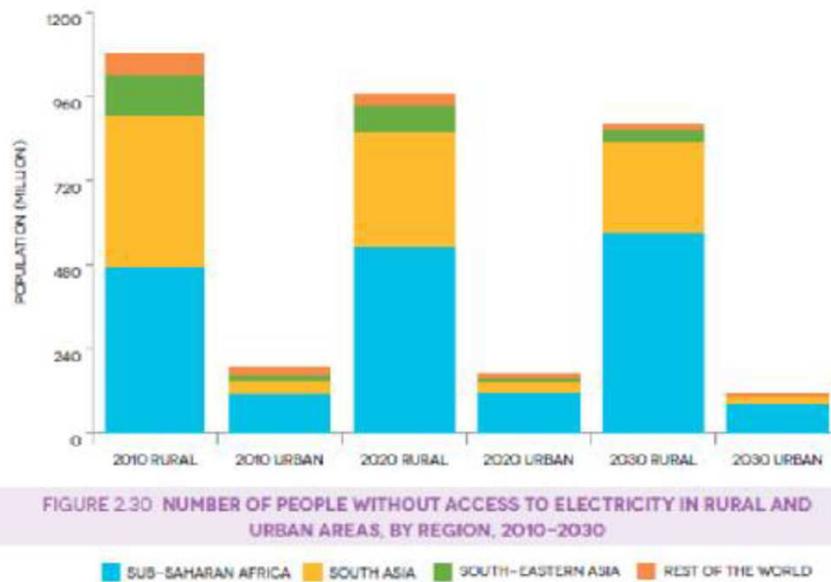


FIGURE O.2A SOURCE OF ELECTRIFICATION ACCESS DEFICIT, 2010

SOURCE: WORLD BANK GLOBAL ELECTRIFICATION DATABASE, 2012; WHO GLOBAL HOUSEHOLD ENERGY DATABASE, 2012.
NOTE: ACCESS NUMBERS IN MILLIONS OF PEOPLE. EA = EASTERN ASIA; SEA = SOUTH-EASTERN ASIA; SA = SOUTHERN ASIA;
SSA = SUB-SAHARAN AFRICA; OTH = OTHERS.



SOURCE: BASED ON DATA/ANALYSIS FROM IEA (2012).

Business as Usual is not a viable option

 **12% OF THE WORLD'S POPULATION WILL STILL LACK ACCESS TO ELECTRICITY IN 2030 UNDER BUSINESS AS USUAL**

SE4ALL

Sustainable Energy for All (SE4A) by 2030 1 Goal & 3 Objectives



**ENSURING
*universal access***
TO MODERN ENERGY
SERVICES.



**DOUBLING THE GLOBAL
RATE OF IMPROVEMENT IN**
*energy
efficiency.*



**DOUBLING THE SHARE OF
*renewable energy***
IN THE GLOBAL
ENERGY MIX.

SE4LL

SDGs for 2030 unanimously passed by 193 countries in Sept. 2015



Symposium Fisuel – Maroc – 11 & 12 Mai 2016

Fisuel Symposium – Morocco – 11th & 12th of May, 2016

SE4ALL

Sustainable Development Goal No. 7 – Targets



- By 2030, ensure universal access to affordable, reliable and modern energy services
- By 2030, increase substantially the share of renewable energy in the global energy mix
- By 2030, double the global rate of improvement in energy efficiency

SE4ALL

Sustainable Development Goal No. 7 – Targets



- By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
- By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries

SE4ALL



The three objectives of SE4All could provide an important entry

- point to climate change mitigation, keeping the world below a maximum average 2 degrees Celsius temperature rise.
- Sustainability and poverty eradication can go hand in hand with mitigating climate risks through the unique multi-stakeholder platform of SE4All.

SE4ALL Utility challenge / New markets



- Today 1.1 billion people still lack access to electricity.
- Population growth leads to increasing demand for electricity
- In sub-Saharan Africa alone, around 950 million people will gain access to electricity from now to 2040
- Share of renewables in SSA power generation capacity will more than double, reaching 44% in 2040

SE4ALL Energy Challenge



Examples relevant to utilities & SSA as example:

- Financially weak utilities, mostly vertically integrated
- Demand far exceeds supply (~400 TWh in 2010), estimated to grow fold by 2040, cf. McKinsey
- High consumer electricity price levels
- Limited cross-border transmission capacity
- Power pools established but limited liquidity
- Vast unexploited renewables potential

Angola, Argentina, Armenia,
Bangladesh, Barbados, [Benin](#),
Bhutan, Bolivia, Botswana,
Burkina Faso, Burundi,
Cambodia, [Cameroon](#), Cape
Verde, Central African Republic,
Chad, Colombia, Congo, Costa
Rica, [Cote d'Ivoire](#), Dominican
Republic, DRC, Ecuador, Ethiopia,
Fiji, Gabon, Gambia, Ghana,
Grenada, Guatemala, Guinea,
Guinea-Bissau, Honduras,
Indonesia, Jamaica, Kenya, Laos,
Lesotho, Liberia, Malawi,
Malaysia, [Mali](#), Mauritania,
Mongolia, Montenegro, Namibia,
Nepal, Nicaragua, [Niger](#), Nigeria,
Pakistan, Peru, Rwanda, Sao
Tome and Principe, [Senegal](#),
Sierra Leone, South Africa, South
Sudan, Sri Lanka, Surinam,
Swaziland, Tajikistan, Tanzania,
Togo, Uganda, Uruguay, Zambia,
Zimbabwe

68 rapid
assessment gap
analysis finalised

SE4All Country Action Process: Global Status*

Angola, Bangladesh, Burkina
Faso, Burundi, Cambodia,
[Cameroon](#), DRC, Gambia, Ghana,
Guatemala, Guinea, Honduras,
Kenya, Liberia, Malawi,
Mozambique, Myanmar, Nepal,
Nicaragua, Senegal, Swaziland,
Tanzania, Zambia, Zimbabwe

35 action agendas under
development or finalised

Angola, Bangladesh, Burkina
Faso, Burundi, Cambodia,
[Cameroon](#), DRC, Gambia, Ghana,
Guatemala, Guinea, Honduras,
Kenya, Liberia, Malawi,
Mozambique, Myanmar, Nepal,
Nicaragua, Senegal, Swaziland,

24 investments
prospectus under
development or
finalized



EU

EU development cooperation in energy three priority areas:

- Build on strong political ownership for policy reforms needed to attract investments
- Increase the partner countries' capacity and improve the regulatory framework to attract investments
- Stimulate investments increasing access to energy with innovative co-financing schemes

EU

EU development cooperation in energy three priority areas:

- Joint Declarations on Enhanced Energy Cooperation;
- EU Technical Assistance Facility (TAF) for the Sustainable Energy for All (SE4All) initiative;
- Blending Facilities including the innovative Electrification Financing Initiative – ElectriFI

Joint Declarations on enhanced energy cooperation

nineteen Joint Declarations have been already signed
and

several Joint Declarations are under preparation

EU Technical Assistance Facility (TAF) for SE4ALL

- Massive TA operational for more than two years
- Covers all regions/partner countries
- Provided in response to country requests and
- Coordinated, at country level, by EU Delegations

ELECTRIFI Objectives

- intensive mobilisation of private sector investments in increasing and/or improving access to sustainable electricity and energy services
- encourage actions with emphasis on decentralised sustainable energy solutions for populations living principally in rural areas or underserved areas / unreliable supply areas,
- attract additional financing

ELECTRIFI Challenges

Main "obstacles" for investments:

- Lack of equity
- Lack of skilled developers
- Lack of scale to cover transaction cost
- Lack of affordable long term debt
- Lack of interaction between CSOs and private investors

ELECTRIFI Market imperfections

- Increase in risk capital to substitute for the lack of equity
- Increase long term debt availability
- Increase project scaling up possibilities
- Increase number of projects reaching financial close through structuring /arranging / advising
- Address social impact through partnership with CSOs and LAs

ELECTRIFI Financing initiative

- intensive mobilisation of private sector investments in increasing and/or improving access to sustainable electricity and energy Services
- encourage actions with emphasis on decentralised sustainable energy solutions for populations living principally in rural areas or underserved areas / unreliable supply areas,
- attract additional financing

ELECTRIFI

Step 1

Proposal submission by the Promoter or the Promoting Party to the ElectriFI Manager

Step 3

Mature proposals in terms of bankability and those submitted by a Promoting Party will be submitted to the ElectriFI Investment Committee for approval

Step 2

High-level early screening by Investment Committee to ensure that an application fits the scheme and meets

The Procedure

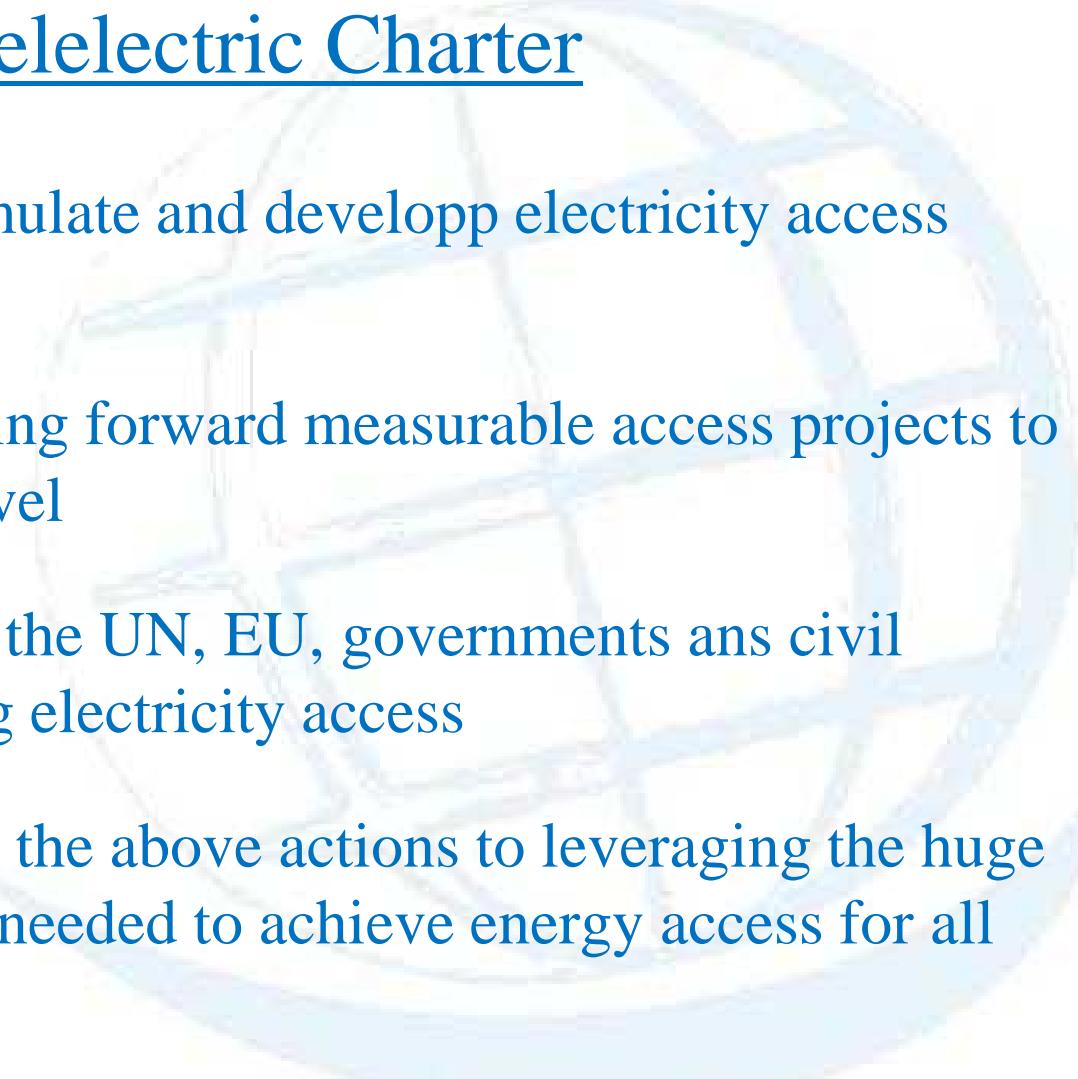
Step 4

Proposals in need of further technical assistance will receive due support in order to become bankable prior to their submission to the ElectriFI Investment

Eurelectric charter

1. Responsibility of the electricity industry to society
2. Demonstrating best practice
3. An European interface for the European Commission

Eurelectric Charter

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1. To encourage, stimulate and develop electricity access projects
 2. To identify and bring forward measurable access projects to an international level
 3. To cooperate with the UN, EU, governments and civil society in fostering electricity access
 4. To contribute with the above actions to leveraging the huge financial volumes needed to achieve energy access for all by 2030

Alliance for rural electrification

International business association representing the decentralised energy sector working towards the integration of renewables into rural electrification markets in developing and emerging countries

Created in 2006 by companies and pioneers with decades-long experience, ARE enables improved energy access through business development support for more than 90 members along the whole value chain for off-grid technologies by targeted advocacy and facilitating access to international and regional funding

Alliance for rural electrification

- Global platform for sharing knowledge and best practices to provide for rapid implementation of available and advanced RE technologies and services
- Working on a wide variety of topics including early finance access, business models and effective project implementation

Alliance for rural electrification

- Commercial, scalable and replicable model
- Addresses affordability levels of the end user (pay-as-you-go, fee for service...)
- Integrated capacity building (training and development)
- Manages risks and governance structure
- Financial sustainability within mid and long term
- Local management and maintenance
- High socio-economic impact at the local level
- Anchored within the communities
- Operational excellence

Inventory

Source : Empowering development (EU commission)

Title

Countries covered

Project summary

Total Cost

EU Budget cash, grant, technical assistance, ...

Les actions: Côte d'Ivoire, Ghana, Sénégal, Togo et Burkina Faso

Financer les investissements en matière d'efficacité énergétique et d'énergies renouvelables des entreprises privées de l'Afrique de l'Ouest

Mise en place de la facilité de financement concessionnelle de 30 millions d'€

Programme d'assistance technique mis en œuvre par une unité de gestion de projet

CT 37 500 000€

Lignes de crédit 93 000 000€

Co-financement de l'EU:

enveloppe budgétaire régionale FFEUAI 4 500 000€ approuvés au titre de subvention à l'investissement

1 500 000€ approuvés au titre d'assistance technique

Conclusions:

- X % de 2 500 000 000 000 \$ / 15 years
- 1 300 000 000 population
- No mention of « Electrical Safety », « Qualification of installors », « Users Education », ...
- Mini & micro grids, PV: potentially more dangerous
- New financial instrument: no more donation but grant, bonification of interest, = business
- No more pilot/demonstration project
- Note Borloo & Obama not included



Fédération Internationale pour la Sécurité des Usagers de l'Électricité
International Federation for the Safety of Electricity Users
Federacion Internacional para la Seguridad de los Usuarios de la Electricidad

THANK YOU
MERCI



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