Tracking systems access to energy services Points of discussion

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SDG 7

Ensure access to affordable, reliable, sustainable and modern energy for all

7.1 By 2030, ensure universal access to affordable, reliable and modern energy services

> 7.1.1 Percentage of population with access to electricity
>
> 7.1.2 Percentage of population with primary reliance on clean fuels and technology

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

> 7.2.1 Renewable energy share in the total final energy consumption

7.3 By 2030, double the global rate of improvement in energy efficiency

> 7.3.1 Energy intensity measured in terms of primary energy and gross domestic product

"With today's strong pledge that we will assist developing countries in providing energy access for 500 million people by 2030, we are demonstrating our own commitment and hope that others will join us in making sure that by 2030, energy access is no longer a privilege but the right of all."

SE4all summit in Brussels, April 2012

Commissioner Mimica restated the commitment towards supporting developing countries to ensure access to sustainable energy services to **500 million people** by 2030

Business as usual will not deliver these ambitious results!

➢ **Need for a robust system of monitoring and reviewing of political targets**

o **to track the progress towards the achievement of our (and SDG7) objectives**

o **inputs from EUDs are being collected to quantify the impact of our strategic activities**

➢ **Global Partnerships**

- **What?**
    - methodology (binary or tier)?
    - which criteria/indicators to apply?
- **Who?**
    - should take the lead, coordinate, collect data?

- **How?**
    - to finance it?

- **When?**
    - which time frame?

How to ensure the tracking/monitoring of energy targets and SDG7?

o Many initiatives already ongoing:

   o Indicators are being selected for SDG7

   o **EU** result-oriented framework

   o **WB/SE4All** Global Tracking Framework (Multi tier approach)

   o **Other donors (Power Africa, GIZ, KFW,....)**

➢ **Need to increase coherence and reliability of the approach**

➢ **Who will lead this process?**

EU oriented framework

Level 1 – development progress

Level 1 11	**Percentage of the population with access to energy services (SDG 7.1.1)**	Electricity comprises electricity sold commercially, both on grid and off grid. It includes self-generated electricity (solar photovoltaic, hydro, thermal generators, wind turbines)
Level 1 12	**Renewable energy as a proportion of total energy production (SDG 7.2.1)**	Electricity produced from renewable sources (includes hydropower, geothermal, solar, tides, wind, biomass, and biofuel) - percentage of the total electricity produced.
	Level 2 - Results of development aid	
Level 2 11	**Number of people provided with access to sustainable, modern energy services with EU support (SDG 7.1.1 et 7.1.2)**	Additional number of people having access to sustainable, modern energy services as a result of an EU funded intervention. "Access to modern energy services is defined here as household access to electricity and to clean cooking facilities.
Level 2 12	**Renewable energy production supported by the EU (SDG 7.1)**	Additional quantity of electricity expressed in MWh per year produced from renewable sources (hydro, solar, wind, geothermal) thanks to EU funded interventions.
Level 2 13	**Kilometres of transmission/distribution lines installed or upgraded with EU support (SDG 7.b)**	Sum of km of transmission, sub-transmission and distribution lines which have been installed or upgraded through EU funded interventions including sub-stations and transformers

Access to electricity is defined as a binary metric:

- **DHS (Demographic and health survey WB):** The household has an electricity connection
- **LSMS (living standards measurements study (WB):** The household uses electricity as primary source of lighting

Data constraints imply that:
- Not reflective of usability attributes of supply
- Does not capture off-grid solutions
- Ambiguity about illegal and secondary connections

The multi-tier approach (electricity)

European Commission

Supply side: Tiers based on attributes of electricity supply

ATTRIBUTES	Tier-0	Tier-1	Tier-2	Tier-3	Tier-4	Tier-5
Peak Available Capacity (Weq)	-	>1	>50	>500	>2000	>2000
Duration (Hrs)	-	≥4	≥4	≥8	≥16	≥22
Evening Supply (Hrs)	-	≥2	≥2	≥2	≥4	≥4
Affordability	-	-	√	√	√	√
Formality (Legality)	-	-	-	√	√	√
Quality (Voltage)	-	-	-	√	√	√
Global Tracking for SE4All	No	Basic	Advanced			

Service side: Tiers based on regular use of appliances

Tier-0	Tier-1	Tier-2	Tier-3	Tier-4	Tier-5
-	Task Lighting AND Phone Charging	General Lighting AND Television AND Fan	Tier-2 AND any low-power appliances	Tier-3 AND any medium-power appliances	Tier-4 AND any high-power appliances

Access to Electricity Supply

- Technology Neutral
- Based on natural break-points in supply technologies as well as electricity services
- Gives minimum requirements for attributes of supply

Access to Electricity Services

- Based on ownership and regular use of appliances
- Tier design based on increasing requirements of energy attributes
- Regular use of at least electric lighting, radio television and electric fan considered as Advanced Access

Workshop on harmonising methodologies and principles for monitoring access in September

The current status of the discussion
(EU, AfDB, SE4all, WB, Power Africa, KFW, GIZ….)

Working groups on indicators/required data

1. Monitoring access to grid based electricity
2. Monitoring Cooking Energy
3. Monitoring off-grid access
4. Data Collection through surveys