

# Key Messages from the Global Tracking Framework (Africa) 2017

## **1. Africa is not a homogenous region and its attainment of SDG 7 targets is determined by the income category of its countries, and tracking progress should be based on this categorisation**

According to the United Nations and African Union, Africa has five regions: North, South, East, Central and West. However, the energy performance does not neatly tie with the geographical position, with the exception on North African countries. The income group/cohort have implications in as far as achieving the SE4All and SDG targets on energy access, modern renewables and energy efficiency.

The high and upper middle income countries all have common energy patterns and traits. These countries compare favourably with other developing countries elsewhere in the world. First and foremost, they all have rather robust policies in major aspect of energy, especially on access. Secondly, all these countries have strong political will to implement programmes to drive energy access. Thirdly, these countries have considerable local investments as well as technical expertise to roll out energy projects. In some countries, private sector participation, through public-private partnerships, is the vehicle to deliver energy projects. Fourthly, these countries do not have major energy deficits. They all have universal access to electricity especially in urban areas. They normally faced challenges in distributing electricity to remote rural villages. As a result, they tend to have strong rural electrification programmes which are driven by alternative energy systems such as distributed generation and off-grid technology, mainly based on solar technology.

The low-middle income countries are sandwiched between upper middle-income and low-income countries, and have traits of both these economic cohorts. Most of these countries are resource-rich and commodity driven countries, whose economies tend to be vulnerable to the fluctuations of the commodity prices. Urban populations have universal access to electricity in particular, but face greatest challenge in supply the vast countryside with electricity. There are programmes in place to support various targets of extending modern energy, but political will and vulnerable economies have impacts in the implementation of initiatives.

The greatest number of countries in Africa fall under the low income category. This is the economic cohort with severe challenges and more attention should be directed on. These countries have rather weak policies to address energy poverty. The will to implement existing policies is further held back because there are competing and equally, if not more important, demands on the national fiscus. These demands include general poverty and health problems (particularly epidemics, such as HIV Aids, Malaria, Ebola, etc.). Government institutions, in the majority of these countries, are the sole provider of modern energy. The private sector plays no role in energy access, and is in turn depended on government. Similar, to low-middle income countries, their energy policy is largely focused on urban

settings, and rural areas are compromised. In providing modern energy in rural areas, the donor community is often engaged to assist. However, their largely donor-based rural electrification programmes or modern energy (in case of cooking energy) tend to have limited and unsustainable impact.

In the future tracking process, it is proposed that this analytical framework need to be employed to avoid misrepresentation as result of aggregation. Also, this will help in developing very strong, targeted and corrective policies and programmes to assist the countries to meet their SS4All and SDG 7 targets.

**2. In the current business-as-usual scenario, very few African countries will reach the aspirational targets by 2030. This include both access to electricity and clean fuel technologies (CFTs).**

Rural areas of most African countries will still lack access to electricity as the rate of electrification has not kept up with population growth and even with urbanisation process. Unlike in other developing regions of the world, urbanisation in many African countries is not driven by industrialisation, but by poverty and lack of opportunities in the countryside. This creates sprawling urban slums of mostly unemployed, and further put strains on the urban infrastructure including energy (electricity).

There is also evidence of the slowing down of the rate of electrification in almost all African countries between 2012 and 2014. It is important that to note that this slowing down occurred in the context of rolling power deficits in many African regions especially in Southern Africa, as well as in the context of economic recession of many Africa countries. In the context, as signalled in this GTF report, it is forecasted that more than half of African countries will not even reach 50 percent electrification by 2030 and even less will have access to CFTs. The rural areas – where most people still live – will fare the worst. Access to electricity for rural areas was in 0.3 percent in 1990, and this only slightly improved to 7.3 percent in 2014. This is a period of 24 years, and there are only 16 years between 2014 and 2030.

As indicated, poor rural energy development policies are partly the reason for this situation. In addition, there is generally very poor energy infrastructure, especially transmission and distribution networks which hardly reach rural areas. The rural settlements, often disperse and situated in topographically challenging areas, make it even costly to extend electricity connections. These areas are amenable to distributed and off-grid electrification, but these resources are often constraints. As indicated, the priority of many policies is often on centralised, grid connected systems, which generally favours urban areas. There are fewer resource investments in electrification programmes for rural areas without assistance from donor community.

Moreover, because of the biomass-based rural energy economy, the focus of many countries is not on fuel substitution (that is, replacing biomass with modern fuels like LPG or ethanol gel), but on efficient-burning biomass stoves. Despite decades of deployment of these efficient biomass stoves, there has been very little impact and mostly are not sustainable. This explains the very little penetration of CFTs mainly in low-income countries. In these countries, the share of CFTs in 2000 was 3.3 percent and, in 2014, this slightly increased to 4.4 percent. The donor-driven approach tends to have less traction and country ownership. High income countries, because of their resources, are able institute country-driven fuel substitution programmes. The examples are successes of LPG stoves, solar cookers, etc. in replacing biomass cooking.

**3. Focus on energy efficiency is less of a priority in many African countries, than improving access through increased generation and connection. Low and high energy intensity is not as result of specific policy intervention, but externally determined by circumstances.**

Almost of all governments' policies on energy, especially electricity, are centred on increasing generation capacity and connections, that is, improving energy supply. This could be justifiable as the generation of electricity in Africa as a whole is very minimal. More than half of the electricity generated on the continent, comes from one single country, that is South Africa. All the energy projects in the Programme for Infrastructure and Development in Africa (PIDA) focus on generation and interconnection. Even at the country level, major electricity projects (with substantial investments) prioritise electricity supply. In this policy environment, the benefits of energy efficiency are not prioritised.

The policy environment is not conducive to energy efficiency. The focus on the latter is more a demand-side management by continent's power utilities in the context of power shortages than a strategic choice. As a result, very few countries have effective and robust energy efficiency policies, actions and measures.

Importantly, the large use of traditional biomass energy on the continent (at average of 70 percent) is not amenable to efficiency gains. As such, there are weak policies governing biomass consumption. Many policies, for example fuelwood, do not fall under the ministries responsible for energy, but rather in ministries responsible for forestry and land/agriculture.

The energy intensity of many African countries reacts to external drivers, such as political disturbances and economic crises, that policy intervention. For example, the decline of energy intensity slowed down in 2010-2012 to -0.4%, due to a dip in oil prices in 2009, but improvement accelerated again to -1.2 percent in 2012-2014 as GDP returned to higher levels when the oil prices recovered briefly until 2015. The decline is mostly caused by large power users, mainly manufacturing plants, slowing or shutting down productions in crisis periods. The agricultural sector, arguably the biggest productive sector in Africa, is less energy intensive than other sectors, especially the service sector. This is owing to the low intensive agricultural practises, drought and food imports than a policy intervention.

This is a very difficult area to track progress because there is currently dearth of data and the fact that this is an area where policies are weak. In the case of biomass energy, the policies governing this subsector falls outside ministries of energy. It is proposed that different set of indicators for energy intensity be devised to accurately measure energy intensity, as the how the intensity of energy usage is not mainly policy driven. Secondly, there is a need for a concerted effort to raise the profile of energy policy in government agenda not only to reduce the conserve energy, but more as a strategy for energy security and increasing access.

**4. Share of renewable energy in the energy mix in Africa presents a compelling picture at face value. The share of total renewable energy in the total final energy consumption was the highest in the world, even though it declined from 62 percent in 1994 to 57 percent in 2014.**

However, the major driver of the share of renewable energy in Africa is the traditional biomass, as most countries are endowed with biomass resource base that is converted for both household and formal/informal commercial and industrial activities. Conversely, the share of modern renewable is

the lowest in Africa. This refers to hydropower, wind, geothermal, solar and modern bioenergy. In 2014, the share of modern renewables was at 8.1 percent from 6.9 percent in 1990.

The share of renewables in Africa are also illustrated according to income statuses of countries. The lower middle income and low-income countries have the greatest share of “traditional” biomass use between 80 and 90 percent, while innovation in, and use of, modern renewables is from high and upper middle income areas, such as North Africa and South Africa – in wind and solar technologies.

In the next tracking period this picture may change as many of the hydropower schemes are commissioned to benefit mainly lower middle-income and lower income countries. However, in the future tracking there should be a determination of what constitutes renewable energy. Is biomass use, in its current and traditional use, renewable? Are large hydropower schemes defined as renewable energy? In the African definition, as espoused by the African Union, all energy derived from hydro (small and large) is renewable.

**5. African countries have in place enabling policies and associated institutions to grow and strengthen the energy sector, but policy making in energy efficiency is lagging. This policy environment has made it possible to access international investment, mainly for electricity infrastructure to improve access.**

Nearly all African countries have energy policies. or the policies are being developed or revised. Renewable energy policies/strategies and action plans are also found in many countries and regions. In the case of institutions for energy access, over 70 percent have dedicated rural electrification agencies or units and nearly 60 percent have energy regulators. In terms of target setting, nearly 70 percent of African countries have energy access targets and nearly 60% have renewable energy target.

The regional economic communities of Economic Community of West Africa States (ECOWAS), East Africa Community (EAC) and Southern African Development Community (SADC) have strong policy regimes in terms of regional renewable energy/energy efficiency and energy access strategies, supported by dedicated institutions in the form of ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), East Africa Centre for Renewable Energy and Energy Efficiency (EACREEE) and SADC Centre for Renewable Energy and Energy Efficiency (SACREEE). Although the latter institutions are new, there is strong RECs commitments with good technical support from United Nations Industrial Development Organization (UNIDO). The three RECs also have regional energy regulators that are creating an environment for private sector participation.

Support is needed to ensure that these institutions are effective in assisting countries in their region to implement measures to address all the SDGs roles. Also, it is important that these regional bodies take part in the tracking process, as they are closer to the countries in their regions, and should be used to review or “ground truth” the findings of the GTF as well as offer recommendations.

**6. The GTF database has provided critical results that have been achieved so far since 1990 but data situation for Africa needs further improvement to continue providing reliable progress in the SE4ALL goals. So far information provided is for the 3 SE4ALL goals but there is no reporting for the 4<sup>th</sup> and 5<sup>th</sup> SDG 7 targets, as both indicators and data required are not agreed upon yet. There is a need for uniformity in data collection and validation.**

Crucial energy data for Africa is incomplete and may not be reliable for some indicators as countries that provide the initial data also do not have strong capacity and resources to regularly provide reliable data on access rates and energy balances. Regional data sources such as the African Energy Commission (AFREC) also lack some of the data to derive SE4All/SDG 7 indicators. Certain indicators require revision in order to reflect the actual changes to people's lives. For instance, electrification rate should include minimum levels of consumption and reliability of supply. Again, energy efficiency should contain improvements in both supply losses, reliability of supply and demand-side management. Moreover, additional indicators for 4<sup>th</sup> and 5<sup>th</sup> goal of SDG 7 are still to be defined and relevant data collected and reported.

Moving forward, the following are proposed for the African region:

- Agree on data collection tools/templates and mobilize the necessary resources for training
- Conduct training on data collection approaches, analytical skills and reporting,
- Mobilize resource to conduct Baseline studies per agreed frequency ensuring adequate data are collected to answer to the gaps mentioned above,
- Conduct training for data verification and validation – both secondary and primary data collected,
- Allocation of mandate to agencies for data<sup>1</sup> channelling to GTF and creating an ownership framework,
- Conduct training for compilation of regional/country SDG #7 tracking reports; Peer review of national and regional reports feeding into GTF, and
- Create Credible Data Platforms as sources of data for continued GTF reporting.

The disparities that are evident between the global GTF data and national/ regional data sets need to be harmonised through a process of data verification and validation. This can be done through coordination by some notable regional agencies e.g. ECREEE, SACREEE, RCREEE, EACREEE, AFREC, as well as the SE4All Africa Hub. The World Bank should share data collection templates and models so that African countries can collect data required for GTF reporting. In that regard, countries can have a credible baseline as a starting point and build own capacity to model data and channel data that they can own.

---

<sup>1</sup> It will be important here to ensure that this involves both the technical agencies (e.g. statistical offices) but also the SE4All focal points at country-level (in several cases dedicated Secretariats/delivery units for SE4All are under development which naturally should serve the point of contact to ensure consistency with the national monitoring of their AAs etc.