





Sustainable Energy for All (SE4ALL) Action Agenda for ECOWAS

Status: adopted by Member States

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ECOWAS Overview and Energy Situation



ECOWAS Overview

Area: 5,115,000 km² Population: 334 million GDP per capita: US\$ 2,097 **Electricity production**: 55.4 TWh 32% from renewables **Installed capacity**: 15.9 GW of which 4,5 GW renewable **energy** (28%) Access to electricity: ~ 34% (2012)Access to modern energy for cooking: ~ 25% (2012)





Total Primary Energy Supply in ECOWAS

 In 2012, total primary energy supply was 186.5 million toe



Power Sector in ECOWAS

• In 2012, total electricity generated was 55.4 TWh



Electricity source



ECOWAS Energy Strategy for 2030



ECOWAS Regional Objectives

ENERGY ACCESS

- Provide access to clean cooking energy to 100% (60%) of the population by 2030 (2020), including 26% (20%) of LPG users
- Promoting 60,000 mini-grids and 2.6 million stand-alone systems across the region by 2020

RENEWABLE ENERGY

- By 2020(2030), 6.8% (5%) of generation capacity worth 634 MW (2000 MW) from biomass residues or dedicated plantations
- The share of renewable energy (incl. large hydro) of the overall electricity mix will increase to 35% (48%) in 2020 (2030)
- The share of new renewable energy such as wind, solar, small scale hydro and bioelectricity (excl. large hydro) will increase to 10% (19%) in 2020 (2030)
- The share of ethanol/biodiesel in transport fuels will increase to 5% (15%) in 2020 (2030)



ECOWAS Regional Objectives

ENERGY EFFICIENCY

- Elimination of incandescent lamps by 2020
- Reduce losses in electricity distribution from currently 15% 40% to less than 10% by 2020
- Achieve universal access to safe, clean, affordable, efficient and sustainable cooking for the entire population of ECOWAS by 2030
- Create an ECOWAS technical committee for energy efficiency standards and labels, and adopt the first standards and labels on a regional scale for major energy-using equipment by the end of 2014
- Create instruments to finance sustainable energy, including carbon financing, by the end of 2013



ECOWAS - Energy Access



Target on electricity access

- The Electrification rate should increase from 34% (2012) to 88% (2030)
- Over 60 million households will gain access to electricity over the period 2015-2030

ECOWAS targets on electricity access





Planned Increase in Electrification

 Increase the number of households electrified (on grid and off grid) from 1.7 million per year to 4.7 million per year

5000 Thousand Households per year 4500 4000 3500 3000 2500 2000 1500 1000 500 0 2015 2016-20 2021-25 2026-30 Urban HH Rural HH

Annual number of connected Households



Target on modern & efficient fuel access

- The access to modern and efficient cooking fuel should increase from 25% (2012) to 83% (2030)
- Over 60 million households will gain access to modern and efficient cooking fuel over the period 2015-2030

efficient cooking fuel 83% 80000 90% 72% 80% 70000 households 70% 60000 57% rate 60% 50000 50% Access 40000 40% Thousand 31% 30000 25% 30% 20000 20% 10000 10% 0% 0 2012 2015 2020 2025 2030 HH w modern energy (Butane, Biogas) HH w improved cookstoves ——Access rate

ECOWAS targets for access to modern &



Planned Increase in Butane Consumption

- LPG consumption for cooking will increase from 0.5 to 3.5 million tonne per year
- The number of households gaining access to LPG will increase from 0.6 to 1.5 million per year





Planned Increase in Use of Improved Stoves

- The number of households gaining access to improved cook stoves (ICS) will increase from 1.1 million to 2.7 million per year
- After 2020, the number of HH gaining access to ICS will decrease because of saturation of the urban market and penetration of butane

Annual number of households gaining access to improved cook stoves ICS





ECOWAS – National Energy Efficiency Action Plan NEEAP



Planned Evolution of Biomass Consumption

- The promotion of LPG and improved cook stoves will permit to curb the firewood demand below sustainable supply capacity:
 - Less than 200 million tonne per year in 2030,
 - Instead of currently around 250 million tonne per year



Primary Firewood demand in ECOWAS region



ECOWAS- National Renewable Energy Action Plan - NREAP



Planned Increase in RE Generation Capacity

• The share of renewable generation capacity will stay around 20%



Renewable Energy Generation Capacity Forecast



The ECOWAS corridor of Solar projects

• The ECOWAS solar corridor has a total capacity of 10 GW





The ECOWAS corridor of Hydro projects (15 GW)





SE4ALL Action Agenda for ECOWAS

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Thank You

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