

WORLD ENERGY OUTLOOK 2014 FACTSHEET

Energy in sub-Saharan Africa today

- ▶ **Since 2000, much of sub-Saharan Africa (the focus of the study) has experienced rapid economic growth:** the region's economy more than doubled in size to reach \$2.7 trillion in 2013, although rapid population growth means that GDP per capita increased more slowly (about 45%). Policies are being put in place in many countries aimed at expanding domestic energy provision, but the current state of the sub-Saharan energy system is a major threat to the region's economic hopes.
- ▶ **Energy demand in sub-Saharan Africa grew by around 45% from 2000 to 2012, but accounts for only 4% of global demand despite being home to 13% of the global population.** The region's largest energy demand centres are Nigeria and South Africa, which together account for more than 40% of total energy demand. Two-thirds of total energy use occurs in the residential sector – mostly biomass used in an inefficient and hazardous way for cooking – compared with an average of 25% in other developing countries. Energy consumption in other end-use sectors is much lower than in other world regions, reflecting the very low availability of energy services.
- ▶ **Access to modern energy services, though increasing, remains very limited.** Despite many positive efforts, more than 620 million people (two-thirds of the population) in sub-Saharan Africa are without access to electricity. For those that do have electricity access in sub-Saharan Africa, average residential electricity consumption per capita is equivalent to around half the average level of China or one-fifth of Europe. Nearly 730 million rely on the traditional use of solid biomass for cooking. Each year nearly 600 000 premature deaths in Africa can be attributed to household air pollution resulting from the traditional use of solid fuels, such as fuelwood and charcoal.
- ▶ **Bioenergy, mostly fuelwood and charcoal, accounts for more than 60% of energy demand.** Despite rising incomes, bioenergy consumption continues to rise: its growth since 2000 has been greater than that of all other fuels combined. Coal makes up 18% of total energy demand in 2012 (thanks to its large-scale use in South Africa), followed by oil (15%) and natural gas (4%). Modern renewables account for less than 2% but they have also grown significantly in recent years.
- ▶ **On-grid power generation capacity was 90 GW in 2012, with around half being in South Africa.** 45% of this capacity is coal (mainly South Africa), 22% hydro, 17% oil (both more evenly spread) and 14% gas (mainly Nigeria). Insufficient, unreliable or inaccessible grid supply has resulted in large-scale private ownership of oil-fuelled generators and greater focus on developing mini- and off-grid power systems. Renewables-based capacity is growing rapidly but from a very low base (with the exception of hydropower).
- ▶ **Sub-Saharan Africa is rich in energy resources.** Huge renewable resources remain untapped; excellent solar across all of Africa, hydro in many countries, wind mainly in coastal areas and geothermal in the East African Rift Valley. In the last five years, nearly 30% of world oil and gas discoveries were made in sub-Saharan Africa; but the challenge to turn these discoveries into production and the resulting revenue into public benefits is formidable.
- ▶ **Oil resources are being developed, with production of 5.7 mb/d of crude oil in 2013, primarily in Nigeria and Angola** (the region exported more than 5 mb/d of crude, and imported around 1 mb/d of oil products). Natural gas use of 27 bcm in 2012 is similar both to the volume that was exported and to the volume flared. Coal production (nearly 220 Mtce in 2012) is concentrated in South Africa; and the region accounts for 18% of world uranium supply.
- ▶ **Low incomes, coupled with inefficient and costly forms of energy supply, make energy affordability a critical issue.** Electricity tariffs are often very high by world standards, despite often being held below the cost of supply. Oil products are subsidised in many oil-producing countries. Where subsidies exist, they are often designed to support energy access for the poor, but they are frequently not well targeted. Across sub-Saharan Africa, the wealthiest 20% of households account for about half of total residential spending on energy.