

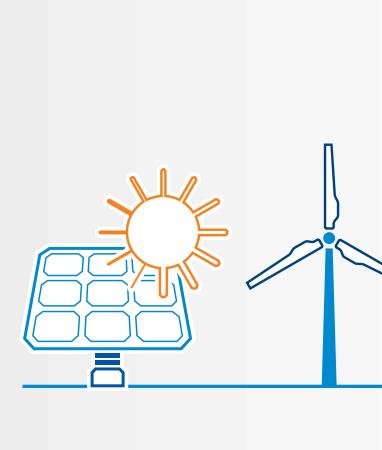
In a world with huge energy potential ABB's strengths make the difference

Africa is home to some of the most beautiful and abundant resources on Earth. How can we harness this energy to enrich the future of the world's fastest growing continent?



Rich in energy resources

Including enough hydropower to provide energy for 100 times the world's population



of people are without access to electricity

That's twice the population of the United States



50% of the growth in electricity generation till 2040 predicted to come from renewables



but poor in energy supply and infrastructure



However, Africa is rapidly growing

- Population
- Economy
- Consumer demand
- Fuel demand
- Transportation infrastructure
- Energy usage
- Electricity demand
- Grid capacity
- Water networks
- World demand for African resources



Huge hydropower potential in the Sub-Saharan region

ABB is promoting business growth and a better quality of life

Pioneers in innovative uses of energy resources

In Algeria, ABB provides

- Unique automation for a unique 150 MW integrated combined cycle and solar power plant
- Hydro mechanical and ICE packages for the MAO Water Transfer System, a 50 MW pumping station and
- EBoP for the biggest desalination plant in the country



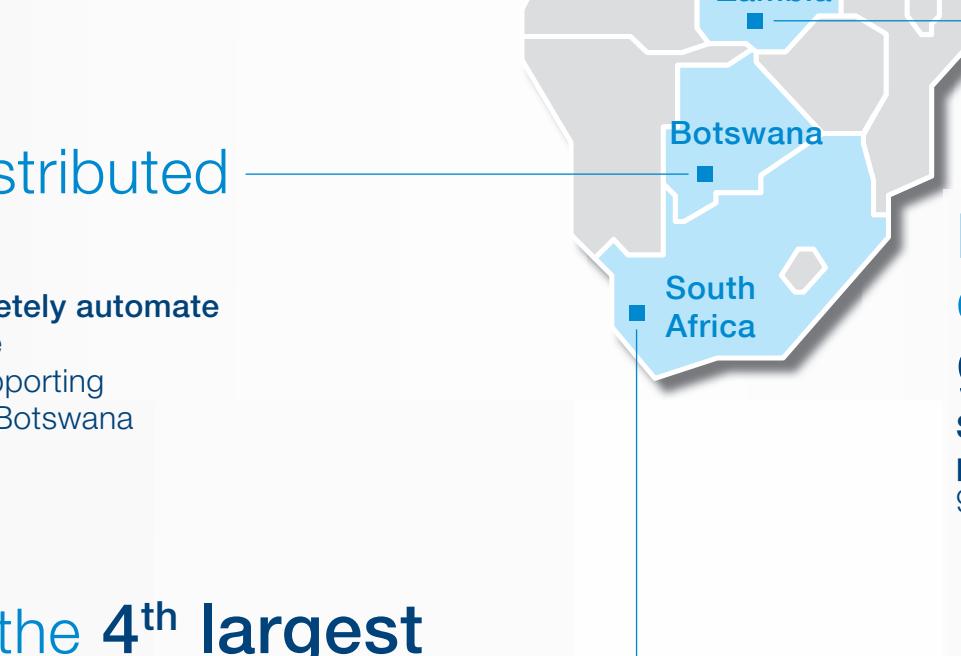
In Egypt, electricity consumption rose annually **7% between 2000-2010**
Automation systems support the Aswan 2,600 MW Hydro Plant and Ansaldo 600 MW Power Plant

Between 2011 and 2030 Algeria intends to install around 22,000 MW of renewable energy production



Integrated automation and electrical solution for pumping station

at the Mostaganem power plant to provide potable water to 2.5 million inhabitants
Mostaganem, Arzew, Oran, Algeria



Largest power plant in Sub-Saharan Africa

ABB provides control for the expansion of the Azito combined-cycle power plant

Over 30% of Egypt's power is automated by ABB

Complete electrical, control and instrumentation systems

- for the irrigation system of the Toshka area
- to support economical, safe and trouble-free expansion of a potable water and waste water network in New Cairo

4,800 MW Home to the **4th largest power station in the world**

Kusile is the biggest automation order in the history of ABB

Remote operation & monitoring systems
Eskom 1,195 MW in two fixed tilt PV power plants
Turnkey solar solution including design, engineering, installation and commissioning at Witkop 33 MW and Soutpan 31 MW Solar Parks

Providing cheap and readily available energy

ABB to automate the Grand Inga hydropower scheme

Grand Inga will be double the capacity of the largest dam in the world, the Three Gorges Dam in China

And this is just the beginning...

8 local manufacturing units on the continent

20 regional sales & service centers throughout the region

5,000 employees of which 1500 are engineers

ABB is supporting economic development of this growing region with integrated power and automation solutions for conventional and renewable-based power generation plants and water applications.

Sources:

International Energy Agency
Industrial Information Resources
Int Pow
International Rivers

www.iea.org

www.industrialinfo.com

www.intpow.com/index.php?id=487&download=1

www.internationalrivers.org/resources/grand-inga-hydroelectric-project-an-overview-3355