



CABO VERDE

**Energetic efficiency
in sub-Saharan African cities
SE4All and the Covenant of Mayors in Africa
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CABO VERDE OVERVIEW



Area: 4,033 km²

Population: ~ 500 000

GDP per capita: ~ 3,800 US\$

10 islands, 9 inhabited – 9 Energy Systems

Production: ~400 GWh, **25% from Renewables**

Installed Capacity: ~150 MW of which **35 MW**

Renewables (~23%)

Access to Electricity: ~95%

Access to Modern Energy for Cooking: ~65%

Life Expectancy: 76 years

Literacy Rate: 87% for adults, 99% for young

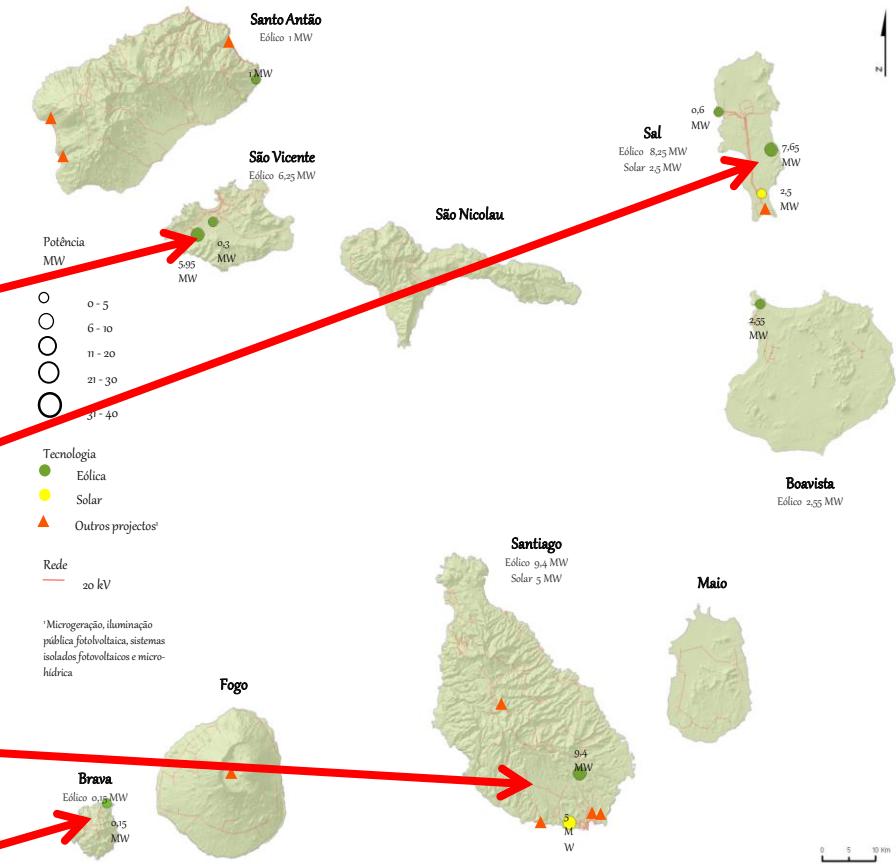
Active Population with Medium/Higher

Education: ~ 15%

Poverty Rate: ~20%

Energy Systems in Cabo Verde: Power Sector

Installed Capacity (MW)	Population	2010	2013
Santo Antão	43.915	6,0	6,0
São Vicente	76.107	19,4	19,4
São Nicolau	12.817	2,2	3,2
Sal	25.765	16,9	20,4
Boavista	9.162	4,5	17,0
Maio	6.952	1,4	1,0
Santiago	273.919	46,9	69,7
Fogo	37.051	3,8	3,2
Brava	5.995	1,1	0,9



THE NUMBER: > 30 Cents per kWh + Taxes

Cabo Verde National Energy Targets

ENERGY ACCESS

1. To achieve **100% Electricity Access** by 2017 (from more than 90%)!
 - Grid Extension
 - Renewable micro-grids
 - Individuals Energy Systems (Solar Homes Systems)
2. *To achieve 100% Access to Sustainable Cooking Services*
 - Eradicate Use of Three Stones** + Universalization of **Improved Stoves**
 - Promotion of Butane Gas**

ENERGY EFFICIENCY

1. **Efficient Electricity Distribution Grid:** distribution losses reduced to 8%
 - More than 30% of Distributed Electricity (15% technical+15% Commercial)
2. **Petroleum Products** (excepts Butane): 10% reduction/Baseline
3. **Final Electricity Consumption:** 15% reduction/Baseline
 - Promoting Energy Efficient Building**
 - Energy Standards and Labelling** for Appliance and Equipment's
 - Promoting Energy Efficient Intensive Consumers** (like Hotels)

RENEWABLE ENERGY

1. **100% Electricity from Renewables in 2020!**
2. New buildings: **Mandatory use Solar Water Heaters** (link to Energy Efficient Building)



Cabo Verde Energy Efficiency Strategy

The Renewable Energy Strategies call for an huge effort in Energy Efficiency:

*Reduce **Grid Losses**;*

*Improve **grid Management***

*Improve **Public Lighting** Efficiency.*

Energy Efficiency Strategy based on Three Axes:

- 1. Promoting Energy Efficiency in **Buildings***
- 2. Promoting Energy Efficiency in **Appliance and Equipment's***
- 3. Promoting Energy Efficiency for **Intensive Consumers***

- ✓ *Create a **National Certification System** for Buildings, Appliances and Equipment's;*
- ✓ ***Certification of Technicians and Installers**;*
- ✓ ***Discourage High Energy Consumption Appliances and Equipment's***
- ✓ ***Mandatory Solar Thermal Water Heating** in new Buildings and Hotel;*

Promoting ESCO: private leadership

Cabo Verde Energy Efficiency Project

The Energy Efficiency Project in Buildings and Appliances

Key institutions that will play a significant role in project implementation are:

- **General Directorate of Energy (DGE):** The DGE will be responsible for promoting and implementing measures for energy savings and for developing new policies and legislation.
- **Economic Regulatory Agency (ARE):** The agency regulates energy, electricity and fuels, water and wastewater, urban collective transports and maritime collective transports.
- **Municipalities** - Technical Cabinets: technical cabinets on each of the 22 municipalities of the country are currently responsible for land use planning, zoning enforcement and building permitting process on the land under their jurisdiction.
- **National Institute on Land Management (INGT)** is responsible to develop and implement policies in land-use planning and management, urban development, cadastre, housing, cartography, geodesy, toponymia, and Spatial Data Infrastructure.
- **ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE)** is a specialized agency, which acts as an independent body within the legal, administrative and financial framework of ECOWAS rules and regulations.

Cabo Verde Energy Efficiency Project

The Energy Efficiency Project in Buildings and Appliances

The Government is making efforts to develop or establish an agency or institution to deal with energy efficiency in buildings and appliances.

The primary objective is to transform the market for energy efficiency in the country by introducing a **new law on building codes** and for **domestic appliances**.

Listed below are the major Project Components:

- Component 1: Enabling policy, institutional, and legislative framework for energy efficiency in buildings;
- Component 2: Enabling energy efficiency improvements through S&L for appliances;
- Component 3: Energy efficiency solutions in a selection of public buildings through selected pilot demonstration projects;
- Component 4: Replication and dissemination of lessons learnt and best practices;

- Plano Nacional de Acção de Eficiência Energética (PNAEE), Cabo Verde, 2014;
- Plano Nacional de Acção de Energias Renováveis (PNAER), Cabo Verde, 2014;
- Agenda de Acção de Energia Sustentável para Todos (SE4ALL);
- Instituto Nacional de Estatística (INE), Cabo Verde (2010). IV Recenseamento Geral da População e Habitação. INE. Praia. 2010.

OBRIGADO!!

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