

# Information About The Energy Sector In Cape Verde



## **1- CAPE VERDE ENERGY POLICY**

Cape Verde's energy policy aims to build a safe, efficient, sustainable energy sector free of fossil fuels. It is based on 4 pillars:

- A. Energy security and reduction of dependence on imports;
- B. Commitment to renewable energies;
- C. Sector sustainability;
- D. Efficiency in supply, distribution and consumption

Cape Verde's ambition is to be in the "Top 10" of countries with the highest adoption rate of Renewable Energy (RE) by 2020, with an Action Plan that will result in the installation of an additional 140 MW of renewable energy through a Investment Plan of more than 300 million Euros.

### **Cape Verde Renewable Energy Plan:**

- Current RE adoption rate - 20%
- Estimated RE potential of 2,600 MW
- Sources: solar and wind
- Strategy to achieve 100% RE in the grid (50% for 2018 and 100% for 2020), in accordance with the National Plan of Action for RE for the period 2015-2020/2030
- Promotion of Energy Efficiency of facilities and household appliances, of buildings, of energy intensive consumers and of the distribution of electricity, with a target to reduce the overall energy demand by 20% by 2030 - National Action Plan For Energy Efficiency, 2015-2020/2030
- Sustainable energy for all. Targets for 2030: 100% of the population with access to Electricity; 100% RE in electricity production; Strong membership (> 20%) of hotels and restaurants to the solar hot water system.

The Renewable Energy Sector Strategic Plan (PESER) defines Renewable Energy Development Zones for all islands based on identified renewable resources for the implementation of energy projects from wind, solar, thermal and solid urban waste. The installation of facilities in the Renewable Energy Development Zones is exempt from the Environmental Impact Assessment process for licensing, that is, PESER is also an instrument for facilitating investments in renewable energy.

One of the main objectives of the Government's energy policy is to cover 50% of electricity needs through renewable sources and to have at least one island with 100% renewable energy by 2020.

## **2- ENERGY PRODUCERS**

The electricity and fuel market has been regulated since 2004 by the Economic Regulation Agency (ARE). Two companies operate in the fuel market: ENACOL, a local company (partially

controlled by the Angolan company Sonangol and the Portuguese company GALP) and VIVO Energy, which markets Shell International products.

The energy consumed in Cape Verde consists mainly of petroleum products (LPG-Liquefied Petroleum Gas, gasoline, oil, diesel, fuel oil and Jet A1).

The main company operating in the electricity sector in Cape Verde is the public electricity and water company - ELETRA S.A., a public company that has been the concession holder since 2000 for the distribution network and operates the largest production plants. The exception is the island of Boavista where the public-private company Águas e Energia de Boavista (AEB) operates as a sub-licensee of the public service. The company Águas de Ponta Preta (APP), a water and energy treatment company, has operated on the island of Sal since 2005.

In the area of renewable energy, the largest wind power producer is Cabeólica, SA, a public-private partnership that started its activity in Cape Verde in 2009 with the installation of 4 wind farms, totalling 25.5 MW, on the islands of São Vicente, Sal, Boavista and Santiago. The private company ELECTRIC WIND has developed and operated a wind farm of 2 units of 250 kW each on the island of Santo Antão.

**Table 1 - Producers of energy and their respective capacities and production systems**

Producers	Power Installed, MW	Energy Produced in 2015, KWh	Production system
<b>Electra, S.A.</b>			
<b>Santo Antão</b>	8.8	13,399,347	- Thermal production (13 plants)
<b>São Vicente</b>	28,7	71,121,649	- Wind power production (1 wind farm)
<b>S. Nicolau</b>	4,22	5,963,869	- Solar photovoltaic production
<b>Sal</b>	13,55	56,887,462	(2 solar farms)
<b>Maio</b>	1,376	2,626,002	
<b>Santiago</b>	88,275	212,279,911	
<b>Fogo</b>	7,0	12,260,372	
<b>Brava</b>	1,056	2,574,862	
<b>Total</b>	152,977	377,113,475	
<b>Cabeólica, S.A.</b>			
<b>São Vicente</b>	5.95	19,072,000	Wind power production (4 wind farms)
<b>Sal</b>	7.65	18,776,000	
<b>Boavista</b>	2.55	7,633,000	
<b>Santiago</b>	9.35	31,672	
<b>Total</b>	25.5	77,153,000	
<b>Águas e Energia de Boavista</b>			
	14,11	23,902,321	- Thermal production - Wind power production
<b>Águas de Ponta Preta (Sal)</b>			
	6.3	17,166,609	- Thermal Production (1 Power Plant) - Wind power production (2 wind farms) Photovoltaic solar production (2

			solar farms)
<b>Electric Wind (Santo Antão)</b>	0.5	1,687,104	Wind power production (2 wind farms)

*Electra, S.A. acquired all the energy produced by Cabeólica and Electric Wind.*

### 3 - ENERGY RATES IN FORCE

According to the Economic Regulatory Agency ARE, the entity responsible for setting energy rates, the following tariffs are currently in force:

**Table 1 - Electricity Rates for Electra, SA**

(Effective 15 December 2016)

Bands	Rate Base, ECV	VAT (15%) ECV	Rate with VAT, ECV
<b>Domestic Low Voltage</b>			
<= 60 kW/month	20.29	3.04	23.33
>60 KW/month	27.15	4.07	31.22
<b>Special Low Voltage</b>	23.30	3.49	26.79
<b>Medium Voltage</b>	18.98	2.85	21.83
<b>Public Lighting</b>	20.29	3.04	23.33

*Note: VAT – Value added tax*

ECV - Cape Verdean Escudos

**Table 2 - Electricity Rates for AEB - Águas e Energia da Boavista (Boavista)**

(Effective 15 December 2016)

Bands	Rate Base, ECV	VAT (15%) ECV	Rate with VAT, ECV
<b>Domestic Low Voltage</b>			
<= 60 kW/month	23.39	3.51	26.90
>60 KW/month	30.25	4.54	34.79
<b>Special Low Voltage</b>	26.40	3.96	30.36
<b>Special Low Voltage - Lacacão</b>	28.57	4.29	32.86
<b>Medium Voltage</b>	22.08	3.31	25.39
<b>Public Lighting</b>	23.39	3.51	26.90

#### 4 - ELECTRICITY DELIVERED TO THE NETWORK

Producers	Energy Produced in 2015, KWh	Energy delivered to the network, KWh (*)
<b>Electra, S.A.</b>		
<b>Santo Antão</b>	13,399,347	13,232,292
<b>São Vicente</b>	71,121,649	60,887,970
<b>S. Nicolau</b>	5,963,869	5,939,454
<b>Sal</b>	56,887,462	45,856,735
<b>Maio</b>	2,626,002	2,611,121
<b>Santiago</b>	212,279,911	190,557,730
<b>Fogo</b>	12,260,372	12,167,618
<b>Brava</b>	2,574,862	2,557,229
<b>Total</b>	377,113,475	333,810,150
<b>Cabeólica</b>	77,153,000	77,000,000
<b>Águas e Energia de Boavista</b>	23,902,321	23,902,321
<b>Águas de Ponta Preta (Sal)</b>	17,166,609	13,041,673
<b>Electric Wind (Santo Antão)</b>	1,687,104	1,687,104

(\*) In the case of Cabeólica and Electric Wind, the energy was delivered to Electra, S.A.