



AGENCY FOR ECONOMIC REGULATION

**The Gambia National Forum on Renewable Energy
Regulation**

**31st January – 1st February 2012
Kairaba Hotel, The Gambia**

Promoting Renewable Energy in Cape Verde

**Recent Development, Achievements
and Challenges**

Presentation : Rito Évora, Administrator ARE

Content

- Brief Country Overview
- Recent Developments
- Cape Verde's New Legal and Regulatory Framework for Renewable Energy Promotion
- The Road Map to 2020

Location : West Africa ≈600Km form Senegal
Land Surface Area: 4.033Km²
Economic Exclusive Zone: ≈ 700.000 km²
Population Census 2010= 491.575 inhabitants
GDP 2010*: US\$ 1, 66 billion
GDP per Capita 2010* :3247 US\$
GDP Growth 2010 : 5,6%

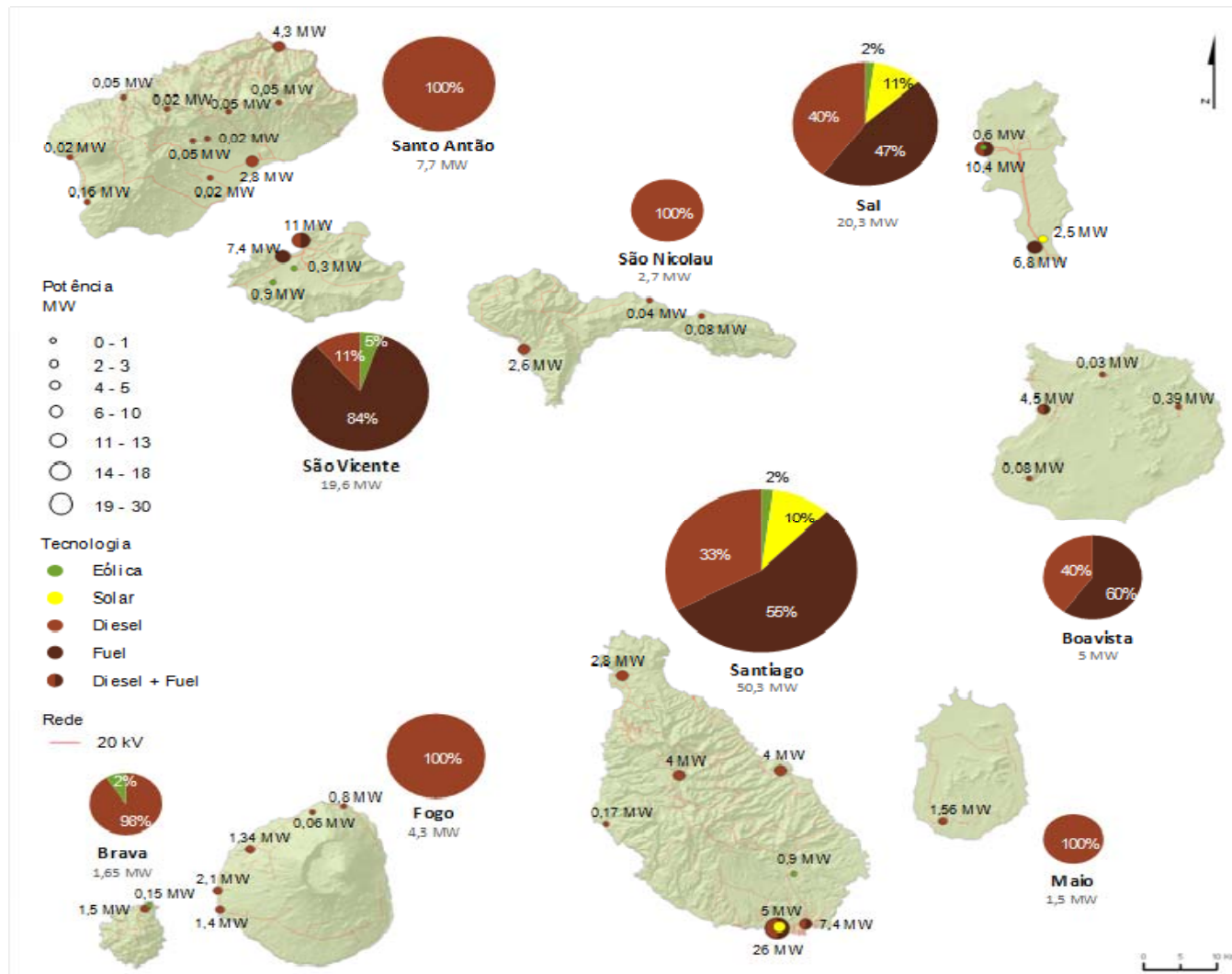
*Source IMF



Cape Verde's Energy Policy and Clean Energy Targets

- 25% Electricity production in 2012
- 50% in 2020
- 1 Island 100% in 2020

Installed Power Plants 2010



Source: Plano Director para Energias Renováveis

Solar PV projects

- Sal PV plant
 - Installed capacity: 2,5 MWp
 - Expected energy production: 3.960 MWh/year
- Santiago PV plant
 - Installed capacity: 5 MWp
 - Expected energy production: 8.120 MWh/year
- Concessional credit from Portugal to the Government of Cape Verde

The CabÉolica Project

Ilha	Potência (MW)	Tipo de Turbina	Nº de Turbinas	Localização
Santiago	9,35	Vestas - V-52	11	Monte São Filipe (8 km a norte da cidade da Praia)
São Vicente	5,95	Vestas - V-52	7	Monte Flamengo (6 km sudoeste de Mindelo)
Sal	7,65	Vestas - V-52	9	Lagedo (6 km de Espargos)
Boavista	2,55	Vestas - V-52	3	Extremo Nordeste da ilha (5 km da vila Sal-Rei)
Total	25,5 MW			

Total Investment: ~61 Mi€

Equity sources: Africa Finance Corporation, Finnfund, Infraco, Electra and GovCV

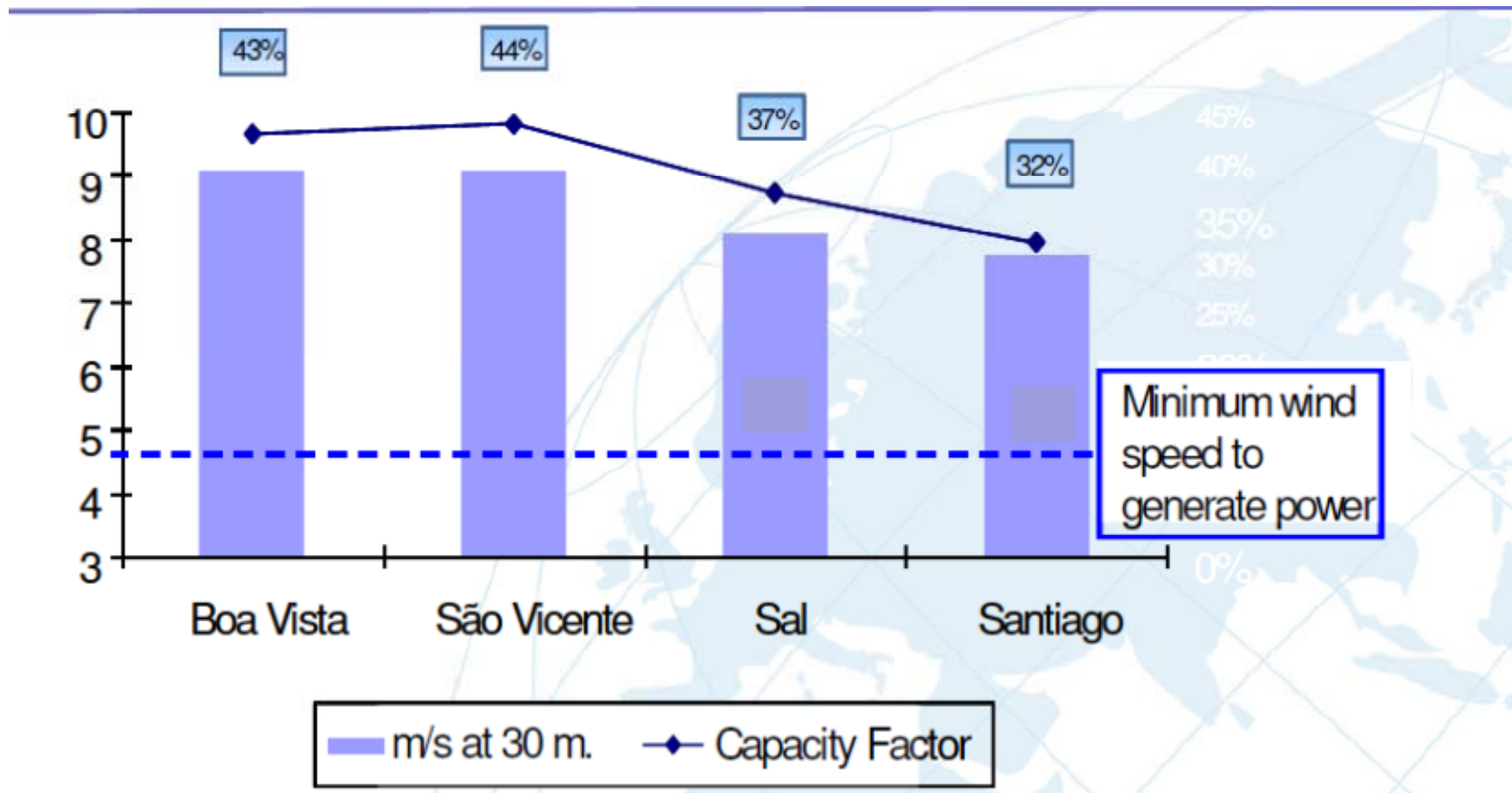
Debt sources: EIB (30 Mi€) and AfDB (15 Mi€)

Expected production : 80 a 110 GWh/year

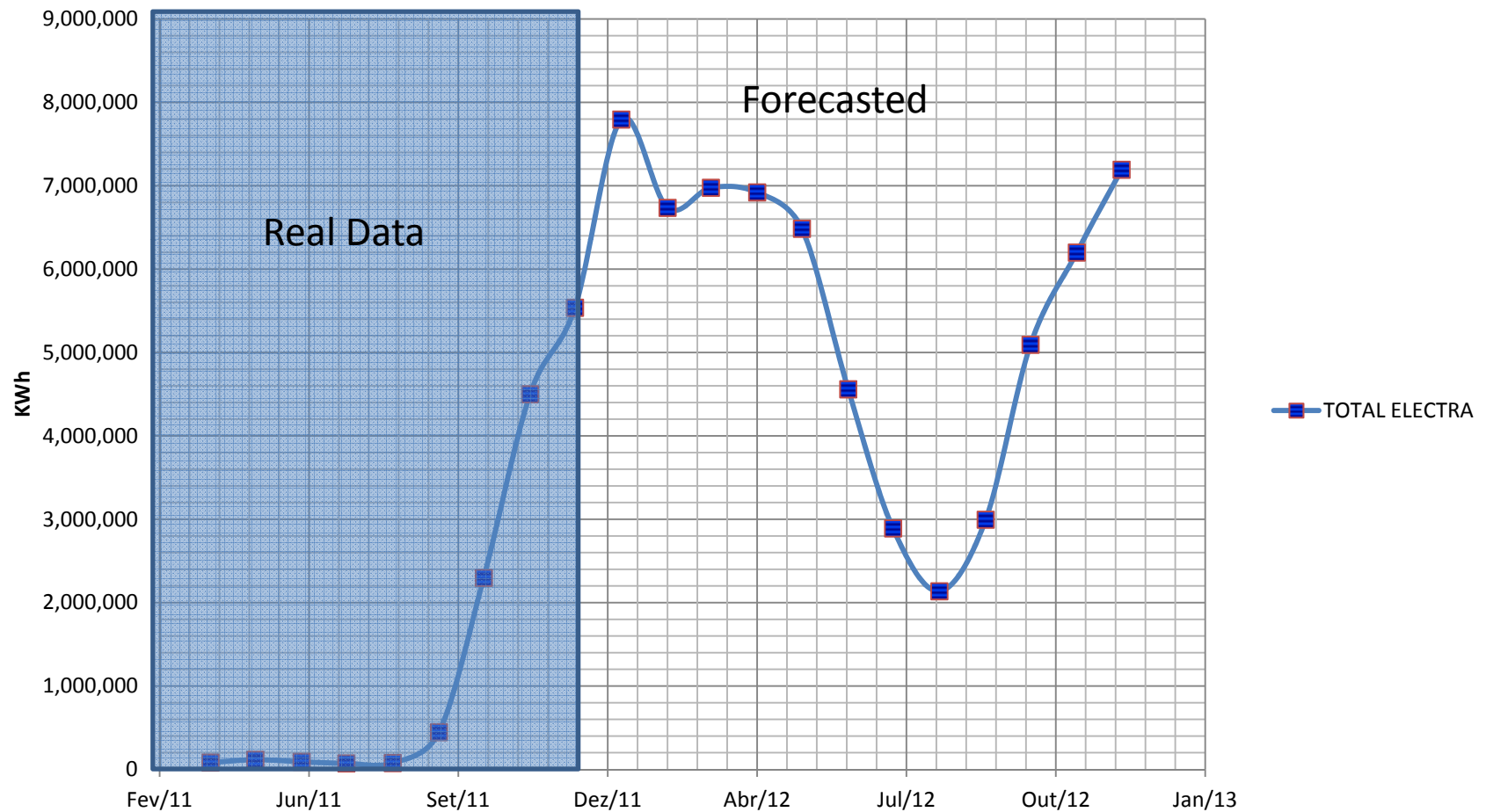
Displaced Fuel consumption: 12.000 ton/year

CO2 emission avoided : 20.000 ton/year

Wind Resources



Monthly Wind Energy Production Variation



Legal and Regulatory Framework

- Law Decree nº14/2006: Organizational framework, role of stakeholders and tariff regulatory principles;
- Law Decree nº30/2006: Licensing procedures for IPPs and Auto- Producers;
- Law Decree nº1/2011 : Incentive regime for Renewable Energy Promotion;

Law Decree n°1/2011 :Incentives for Renewable Energy Development

- Especial procedures for licensing renewable energy projects:
 - a) General Regime (IPP and Auto-Producer)*
 - » Need to be licensed
 - b) Regime for micro-producer (up to 100 kW)*
 - » Registration at DGE ;
 - c) Simplified Regime for rural electrification projects in remote areas.*
- Other provisions concerning:
 - Energy and territorial planning,
 - Fiscal incentives,
 - Remuneration

Energy and Territorial Planning

Renewable Energy Master Plan

- Maximum Renewable Capacity to be installed every year per Island by source
- Network's reinforcements needs

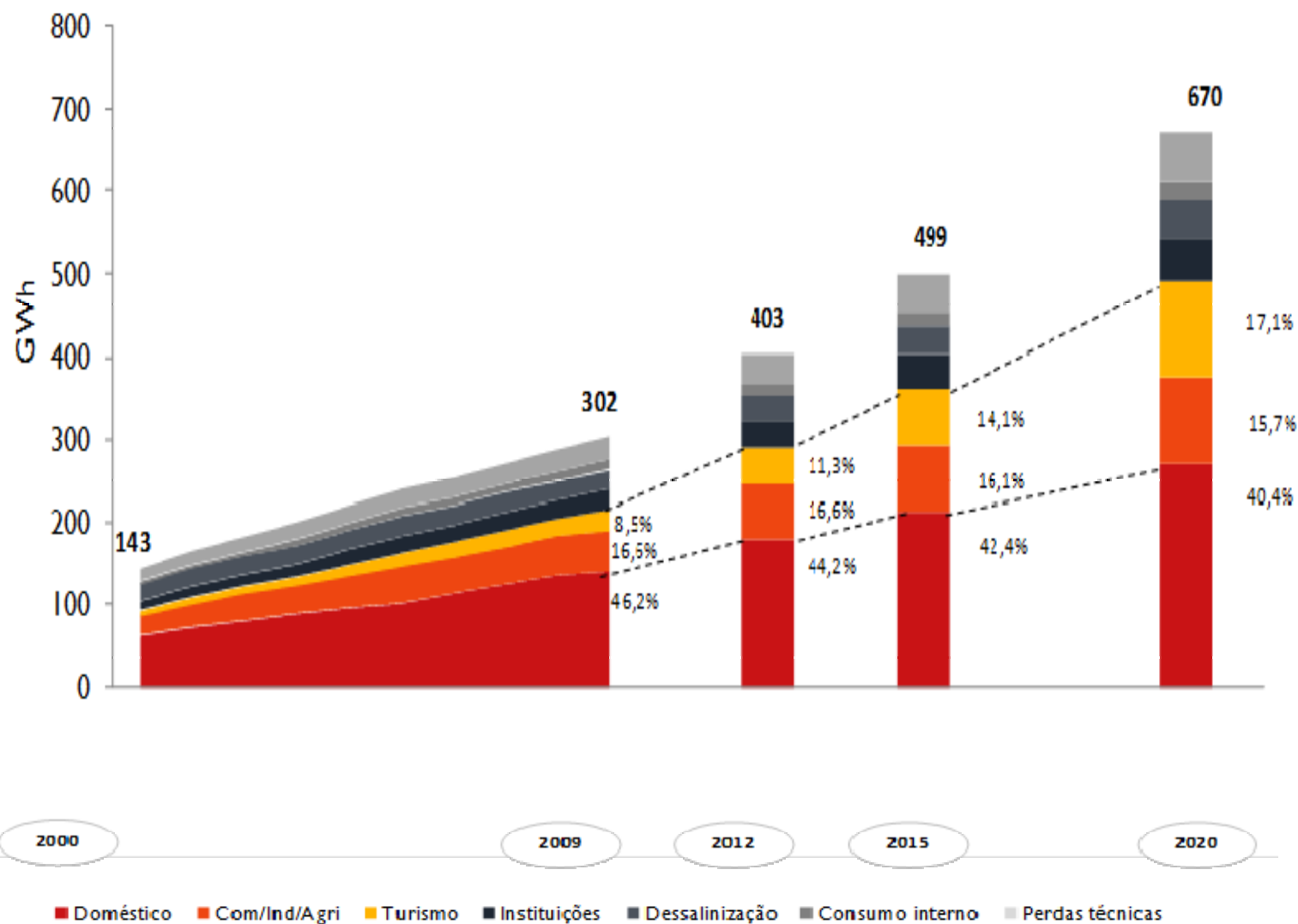
(ZDER)Renewable Energy Development Zones

Fiscal Incentives and Remuneration

Tax reduction

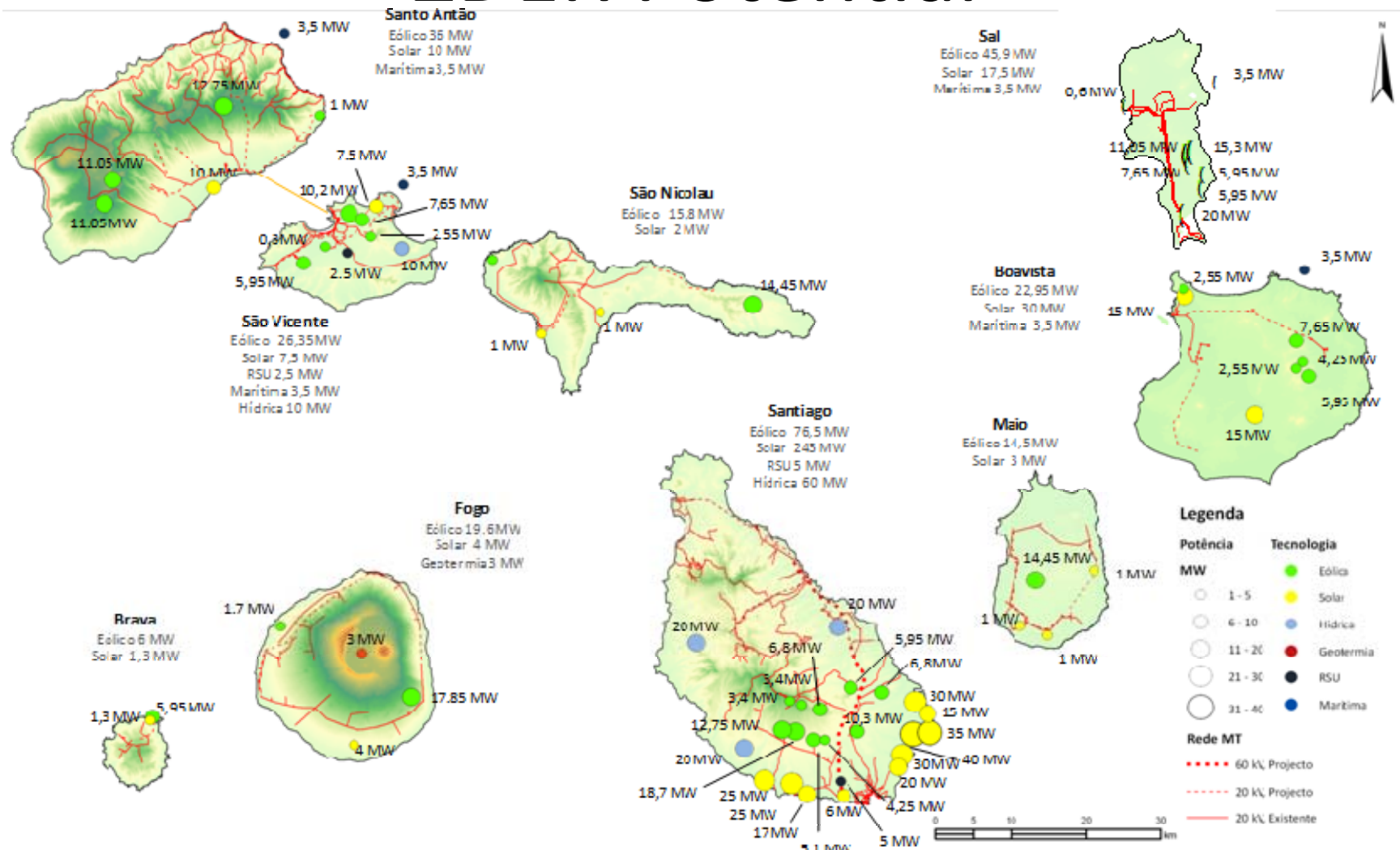
- First five years: 100% ;
 - *Next five years:50%;*
 - No import duties
-
- Fixed price for 15 years per kWh injected in to the grid ;
 - After 15 years, 20 ..35% reduction;

Cenário de evolução do consumo de energia eléctrica por sector



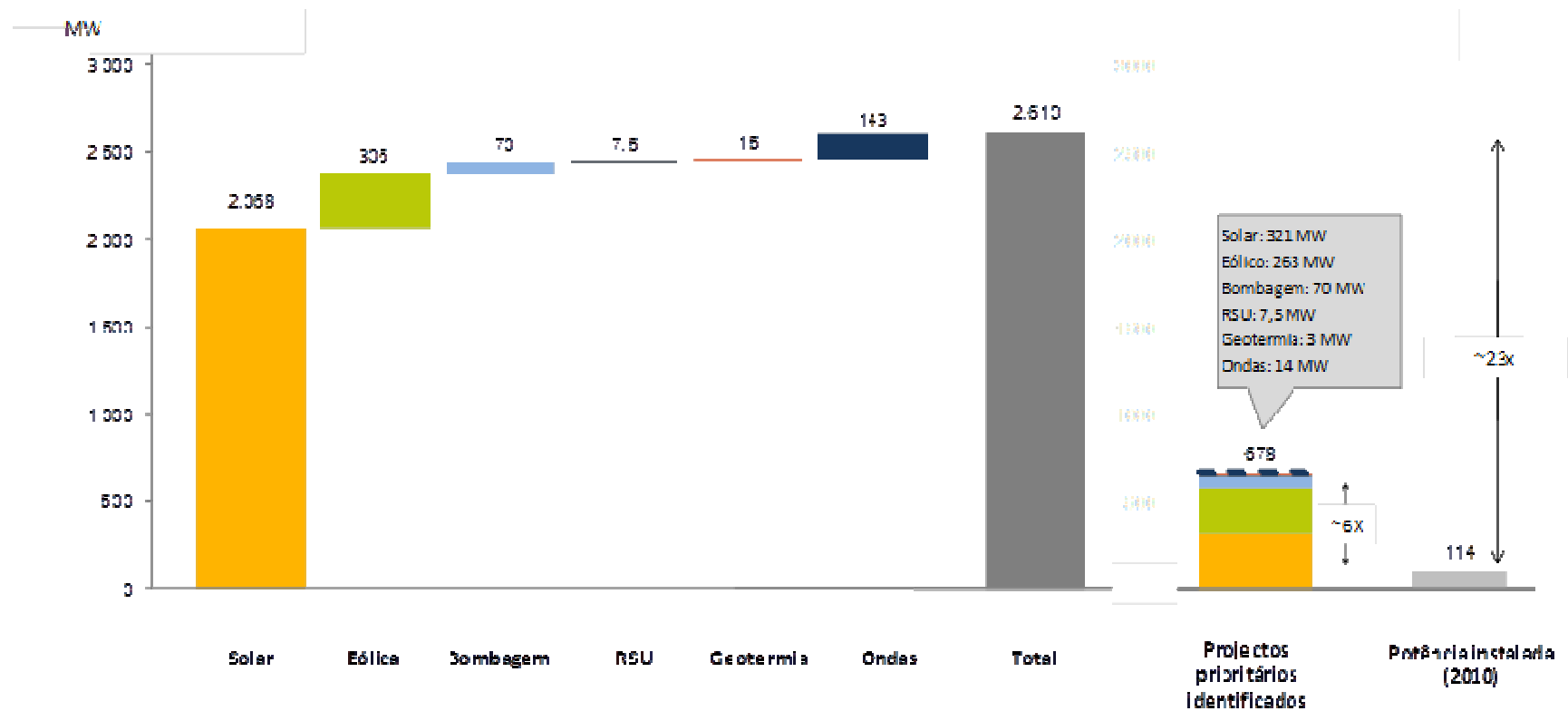
Source: Plano Director para Energias Renováveis

ZDER Potential



Source: Plano Director para Energias Renováveis

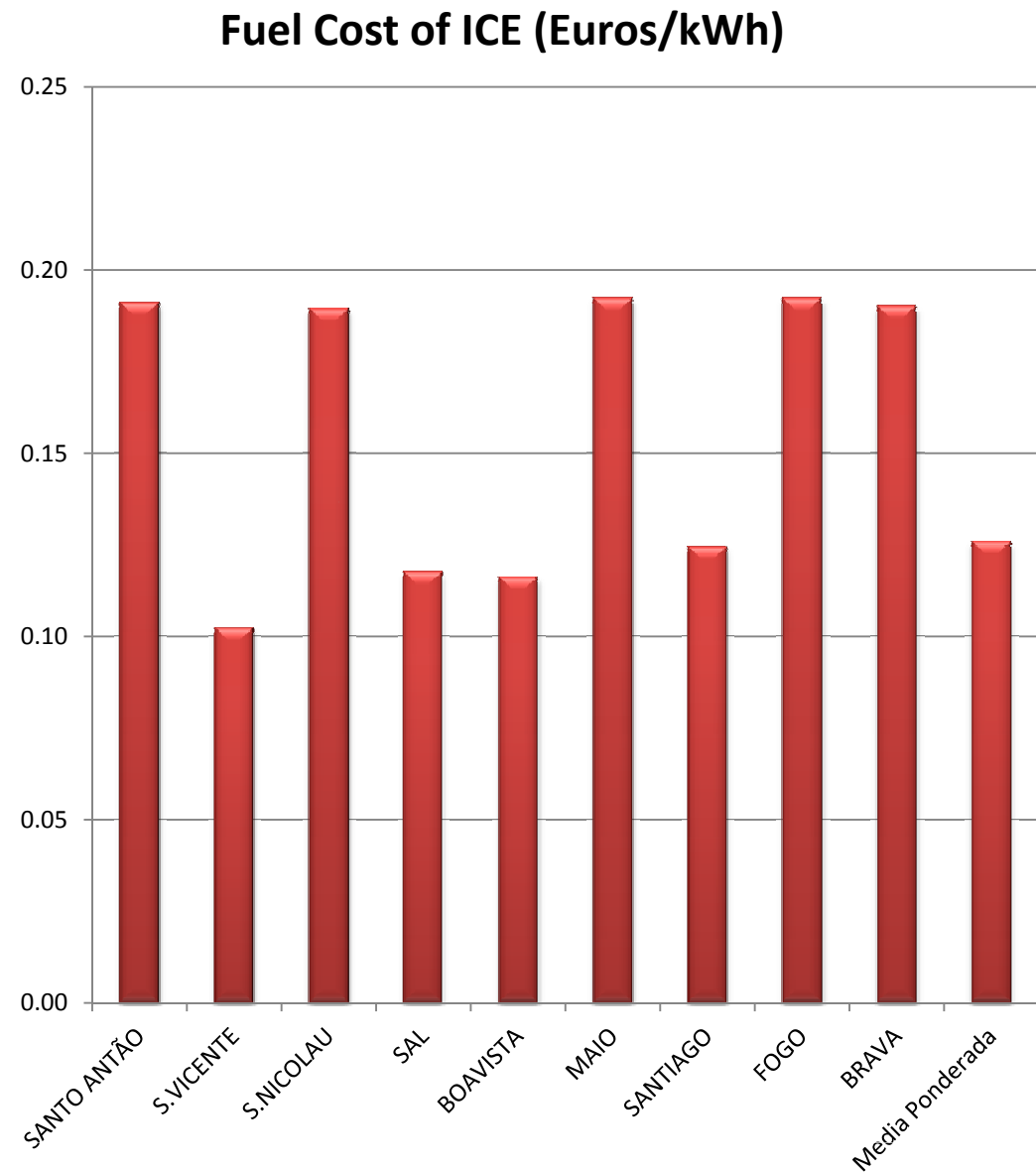
ZDER Potential



Source: Plano Director para Energias Renováveis

Electricity generated from wind power is distinctly cheaper than other power sources used in the islands.

Solar also can be competitive in some cases.





AGENCY FOR ECONOMIC REGULATION

C

Thank You!