

# Non-interconnected Islands Implementation of Technologies

November 25th 2024



nine small independent electrical systems, without the capacity of exporting or importing energy

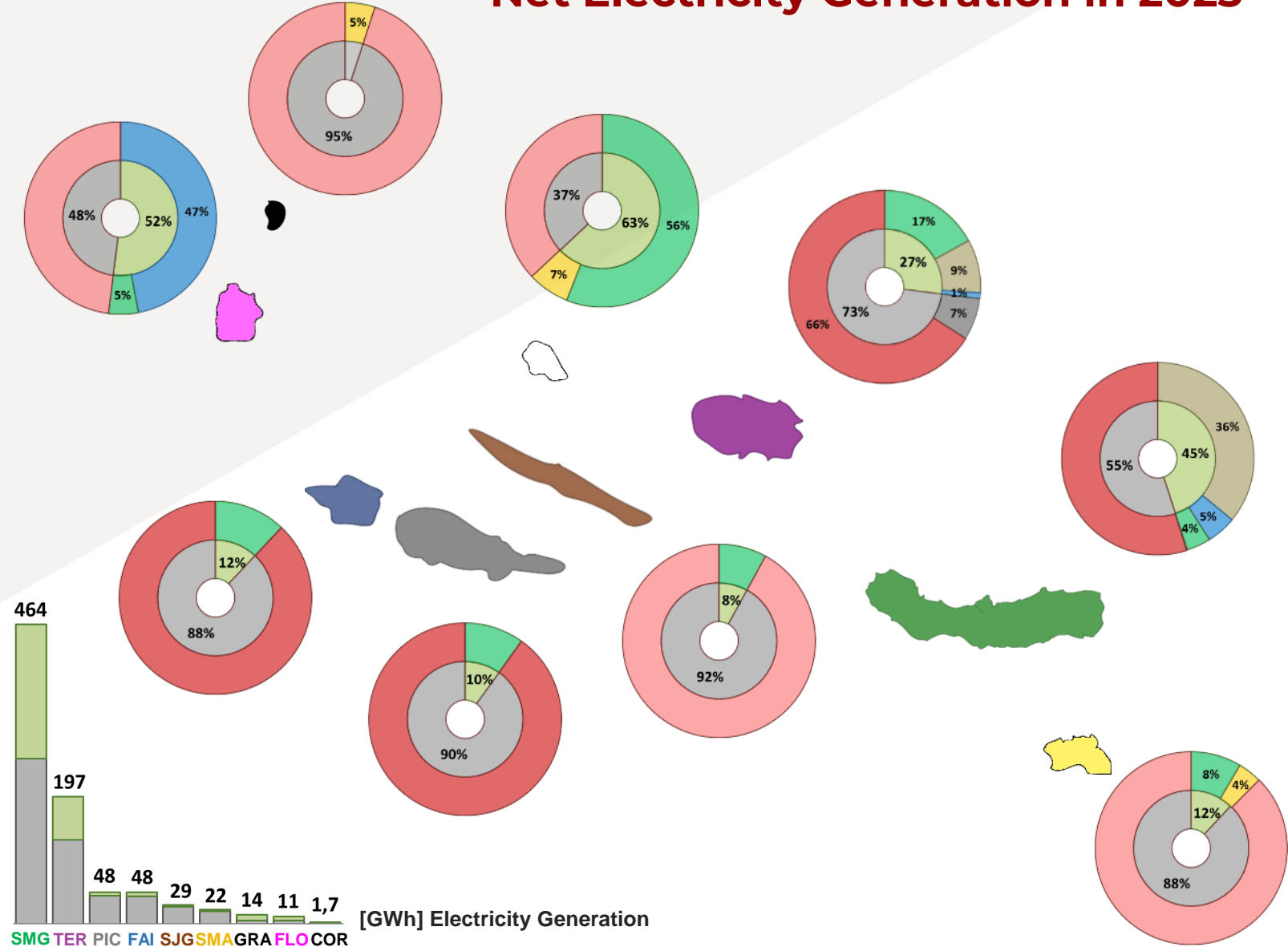
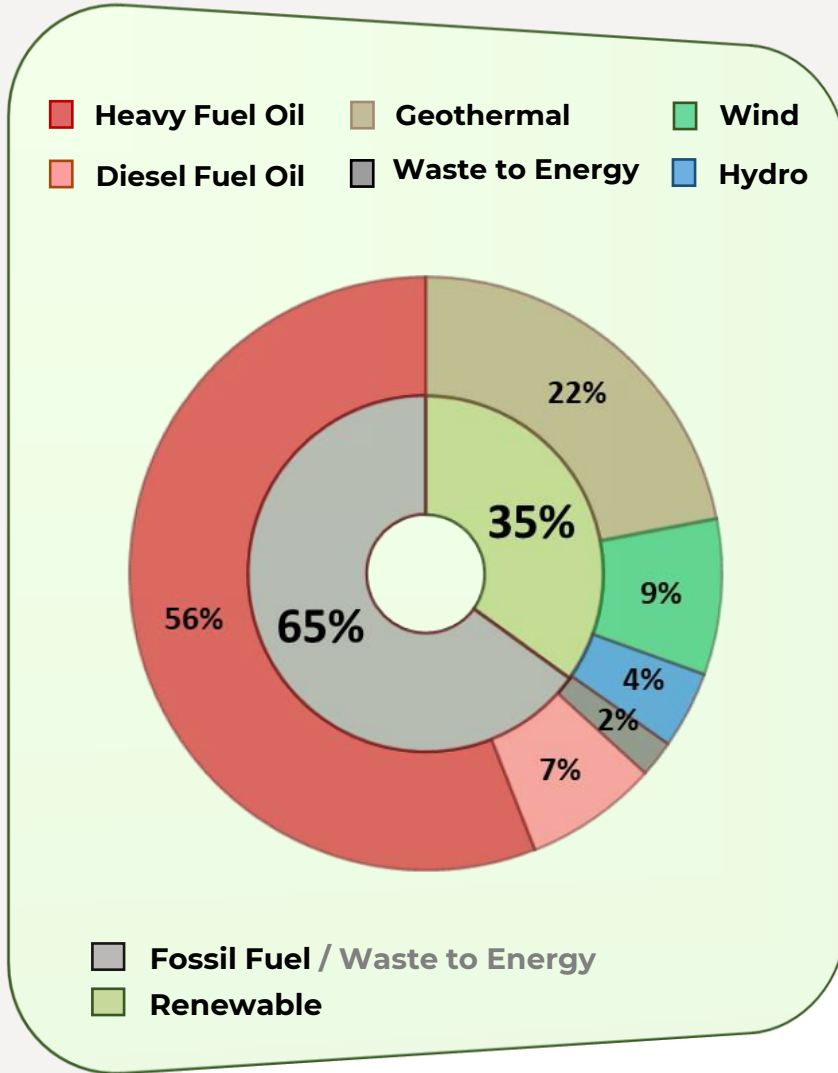


Area : 2.322 km<sup>2</sup>  
Population : 236.440 inhab.  
Costumers: 129.157 clients  
Demand : 836 GWh

electric interconnections between islands are difficult and expensive, not yet economically viable

# Electric Generation by Energy Source

## Net Electricity Generation in 2023





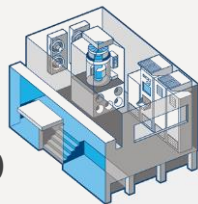
# Islands with higher RES share

## Flores and Graciosa Islands

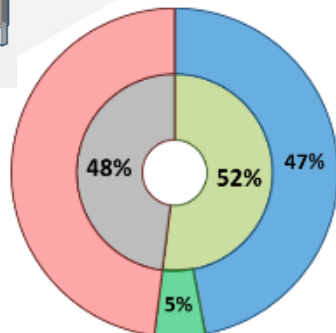
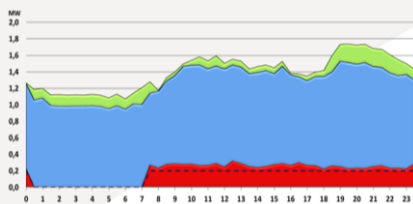
### Flores Island



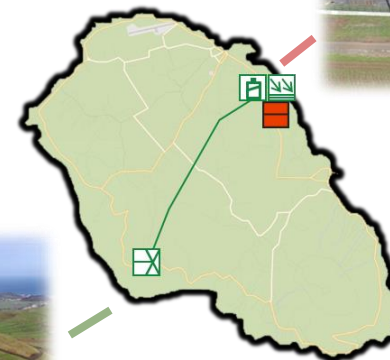
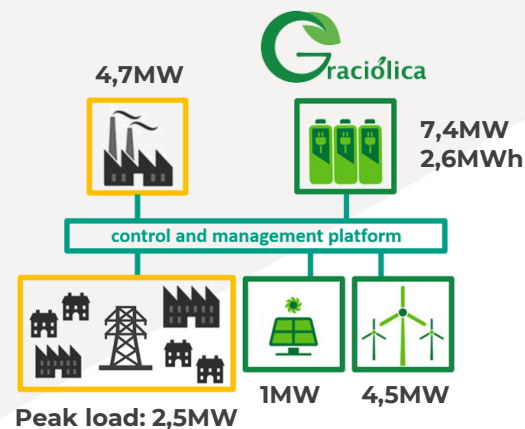
■ Diesel Power Plant  
■ Wind Farm  
■ Hydropower Plant



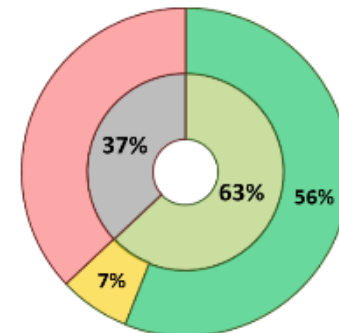
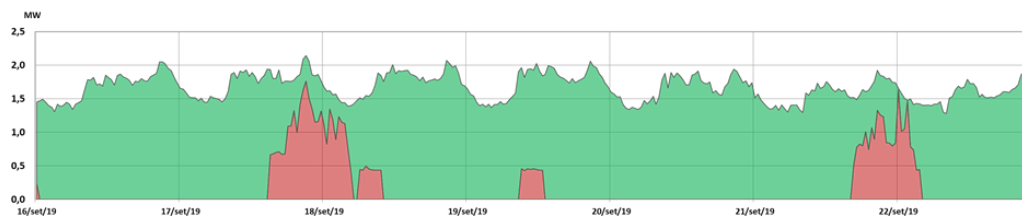
Flywheel of 350kW/18MWs (5kWh) to improve frequency stability



### Graciosa Island



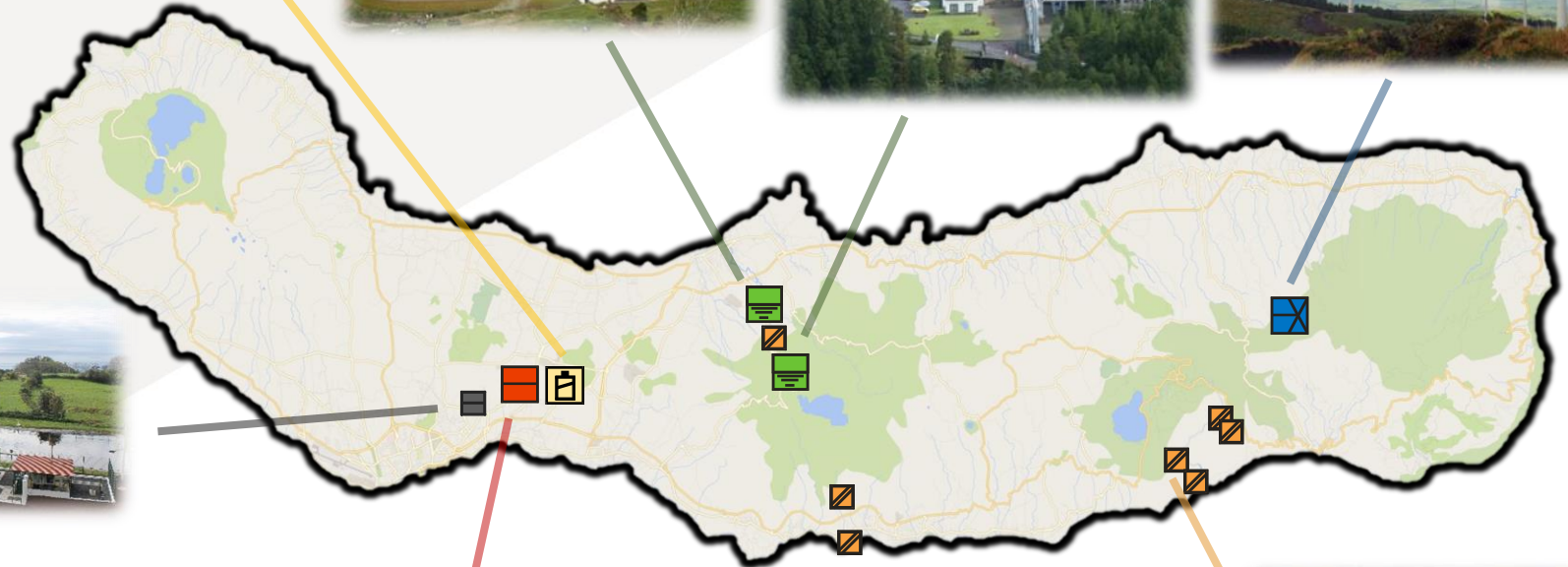
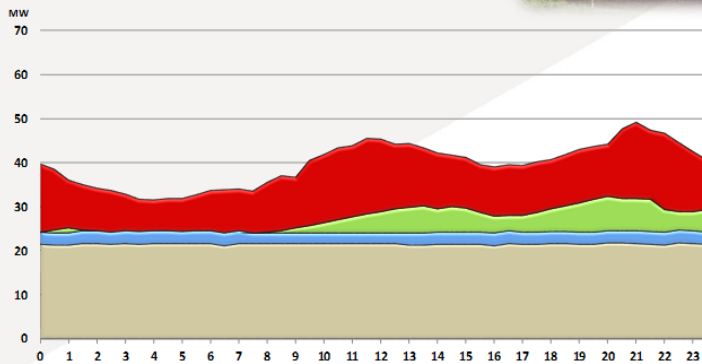
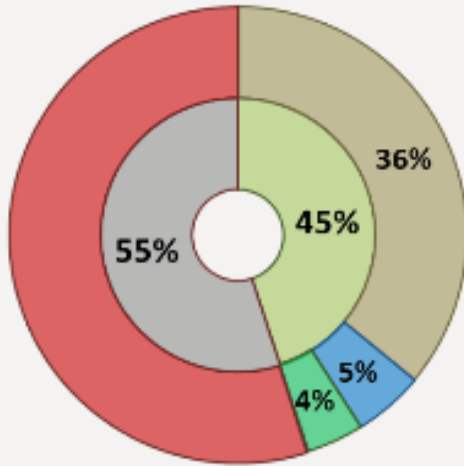
■ Diesel Power Plant  
■ Battery Energy Storage System  
■ Wind Farm  
■ PV Plant









# Islands with higher RES share

## São Miguel Island

### São Miguel Island



-  Diesel Power Plant (HFO)
-  Geothermal Plant
-  Wind Farm
-  Battery Energy Storage System
-  Small Hydropower Plant (run-of-the-river)
-  Biogas Plant



Obrigado  
Thank you

