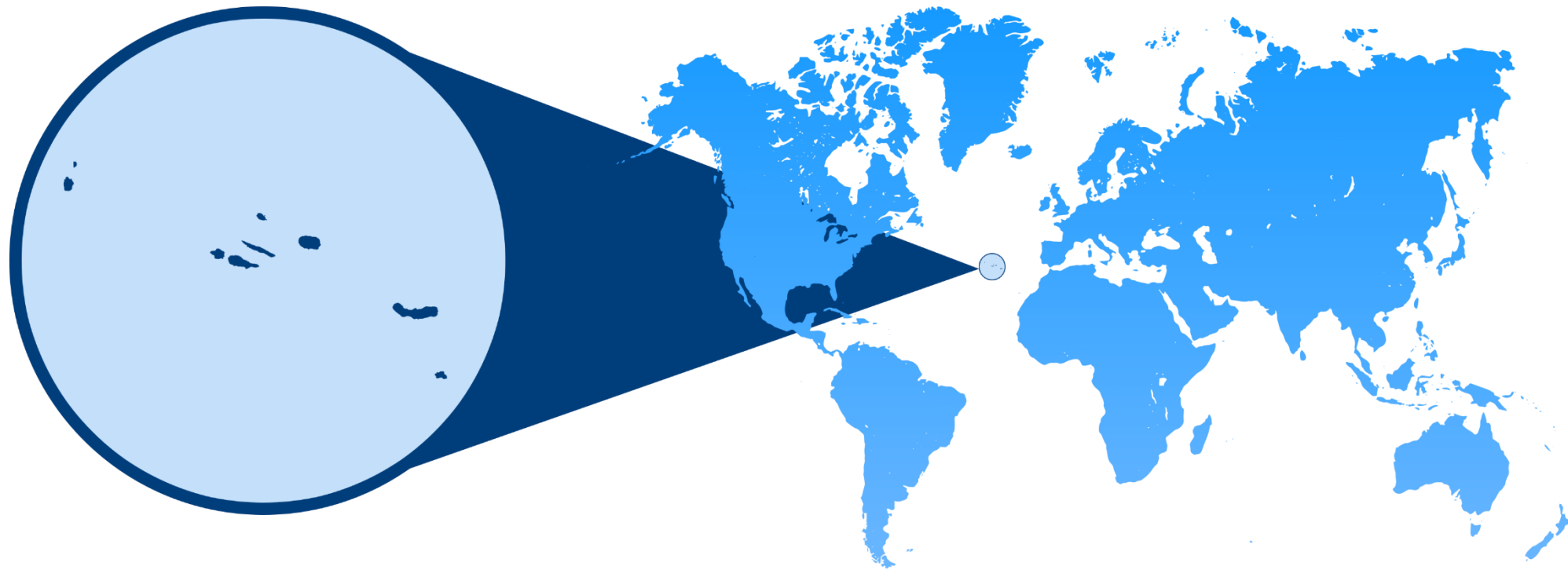




# From politics to plans **Preparing the 2030 Azores Energy Strategy**



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Regional Directorate for  
Energy



## Azorean Government

Secretariat for Energy, Environment and Tourism

### Directorate for Energy

The Azorean Directorate for Energy promotes the energy sustainability of the Azores, taking into consideration the economic and social development of the archipelago of the Azores:

- 9 islands
- ~250 thousand people
- ~1500km from mainland (Lisbon)
- **No grid connection**
- ~40% renewable electricity

# State of the art: Energy and GHG emissions



ELETRICITY PRODUCTION  
~33%

364 ktCO<sub>2</sub>eq.



ROAD TRANSPORTATION  
~33%

307 ktCO<sub>2</sub>eq.



AIR TRANSPORT  
~9%

83 ktCO<sub>2</sub>eq.



INDUSTRY  
~9%

77 ktCO<sub>2</sub>eq.



SERVICES AND HOUSEHOLDS  
~7%

63 ktCO<sub>2</sub>eq.



AGRICULTURE AND FISHERY  
~7%

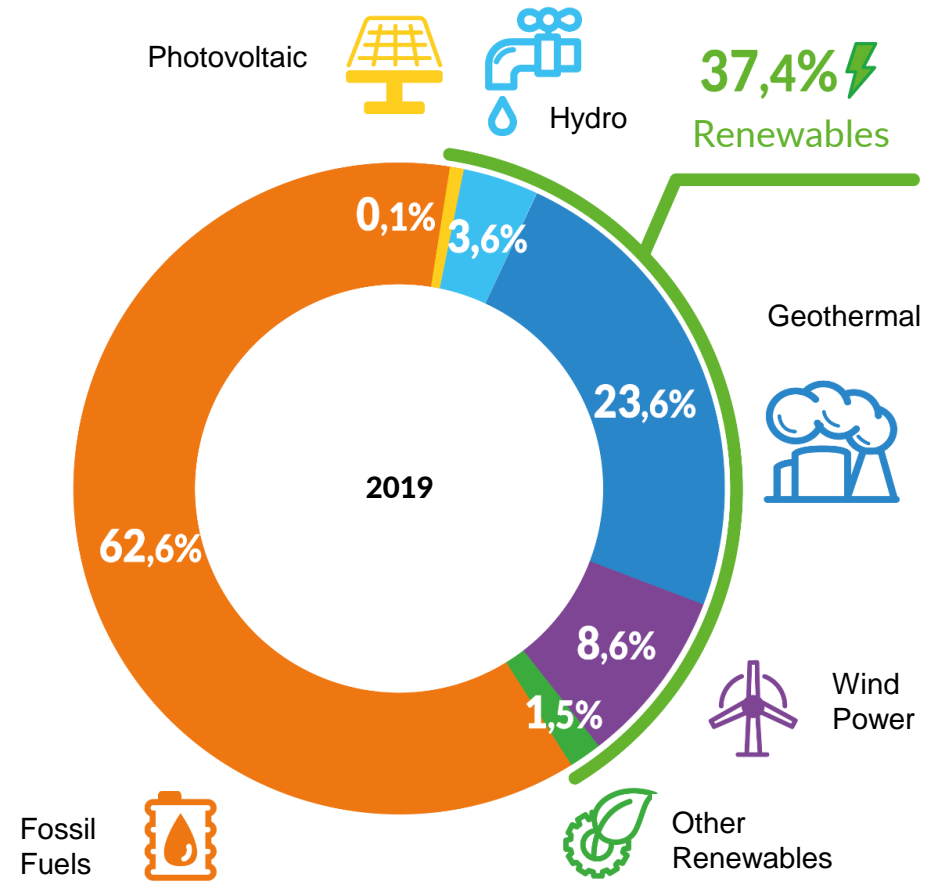
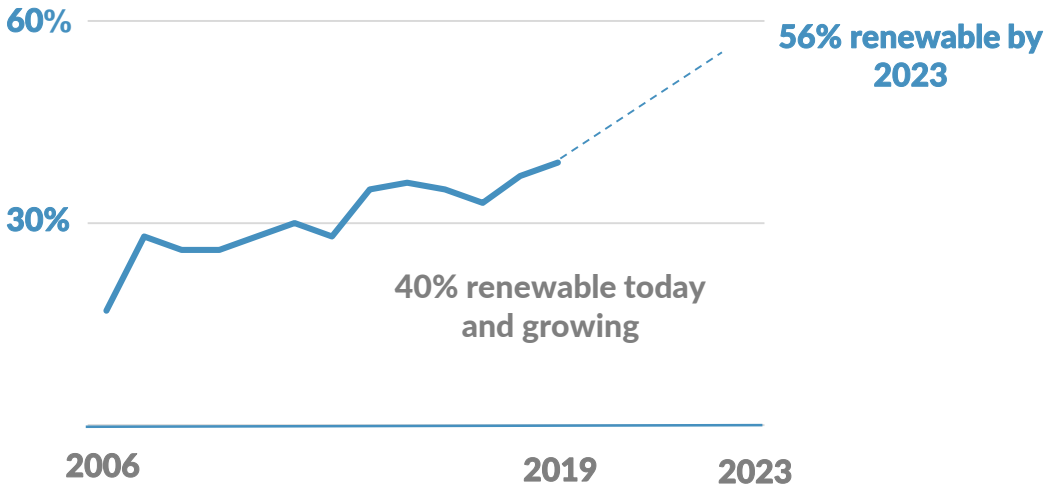
67 ktCO<sub>2</sub>eq.



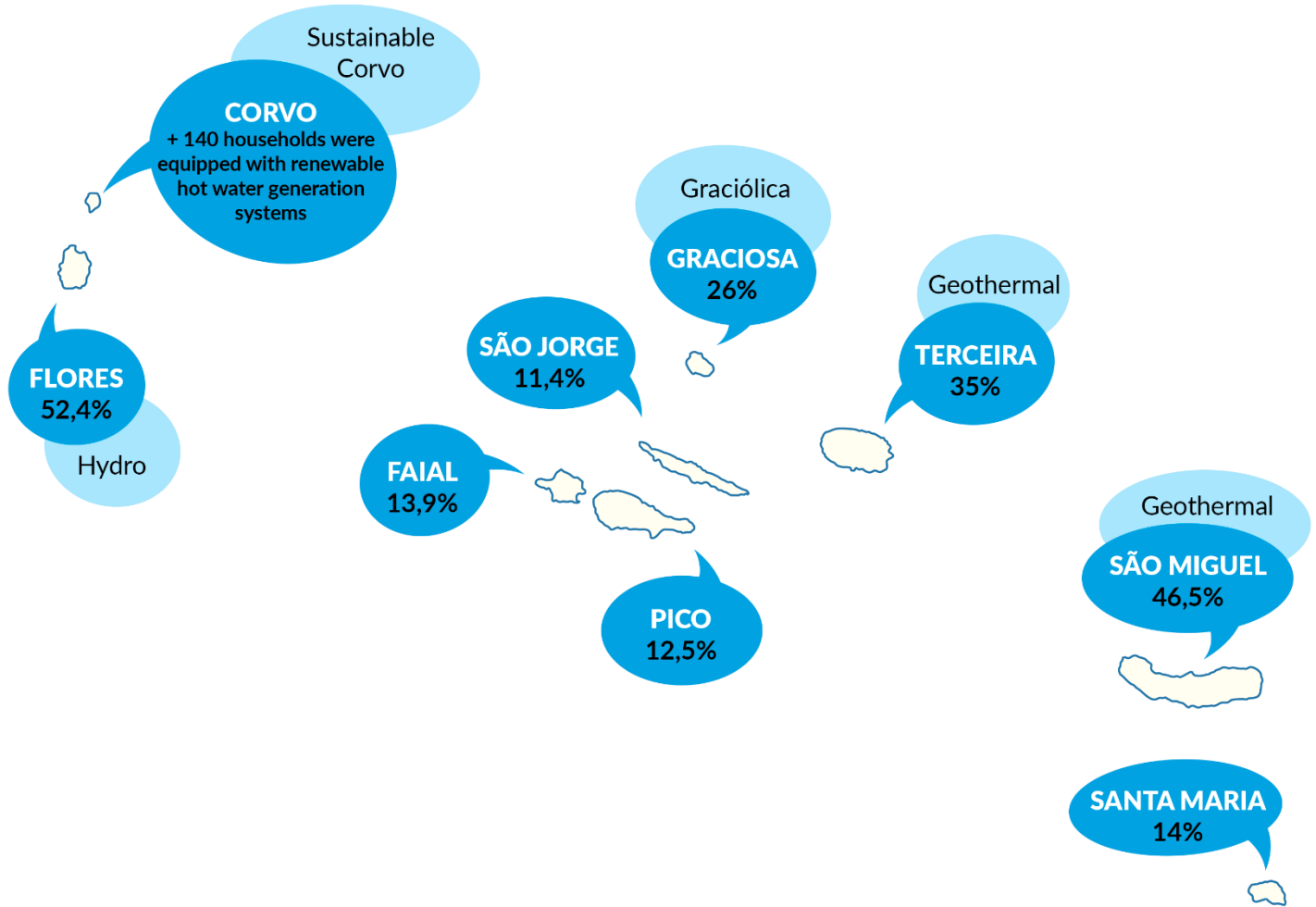
MARITIME TRANSPORT  
~2%

21 ktCO<sub>2</sub>eq.

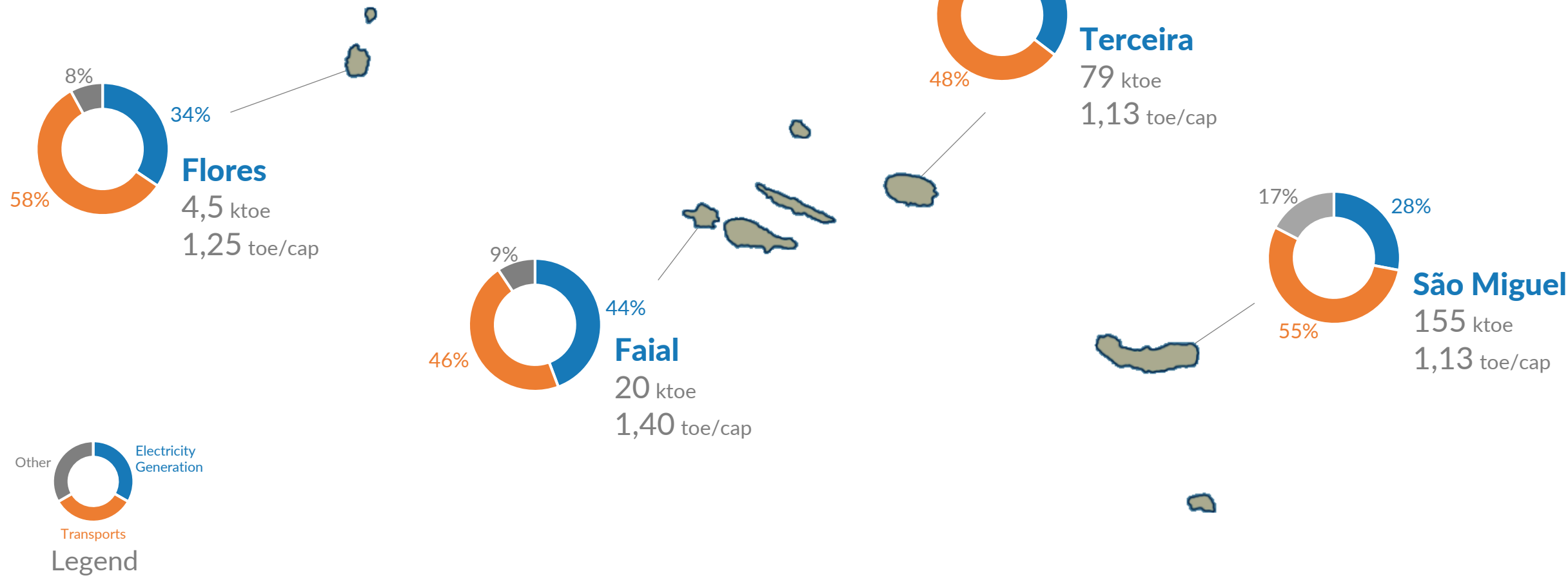
# State of the art: Renewables in Electricity



# Renewables in Electricity



# Use of fossil fuels



# Land transport

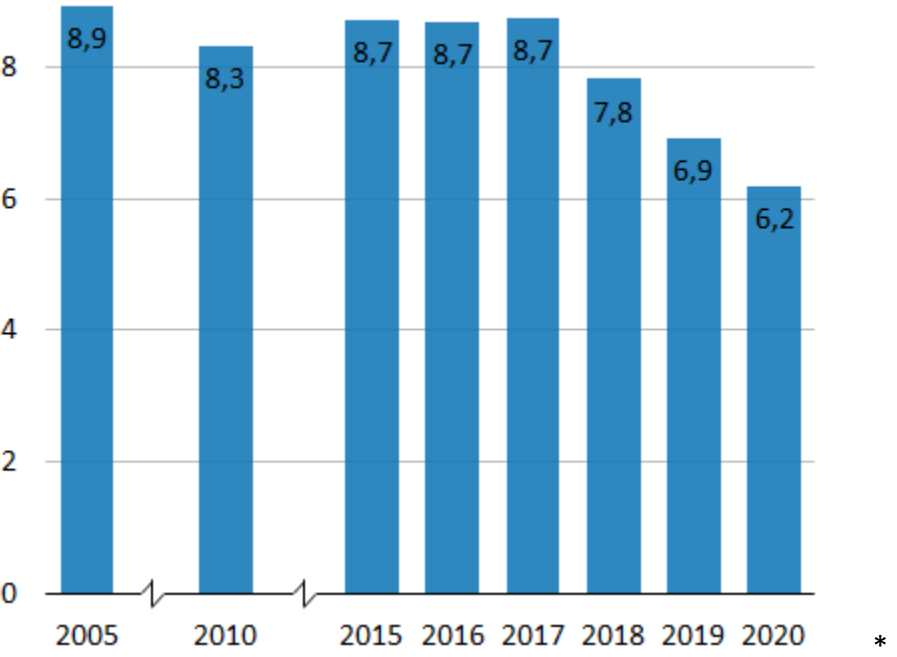


Fig. 13 - Passengers in regular public transport (million) \*

\*Estimated from jan to feb data.

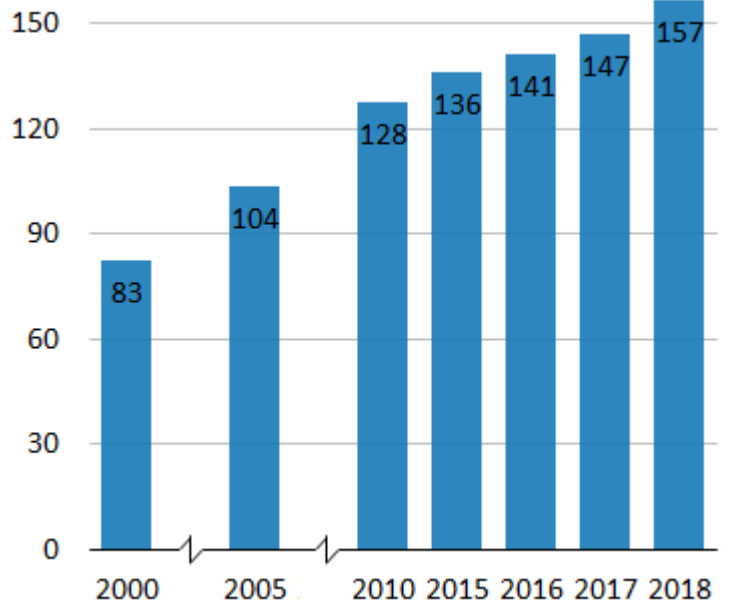
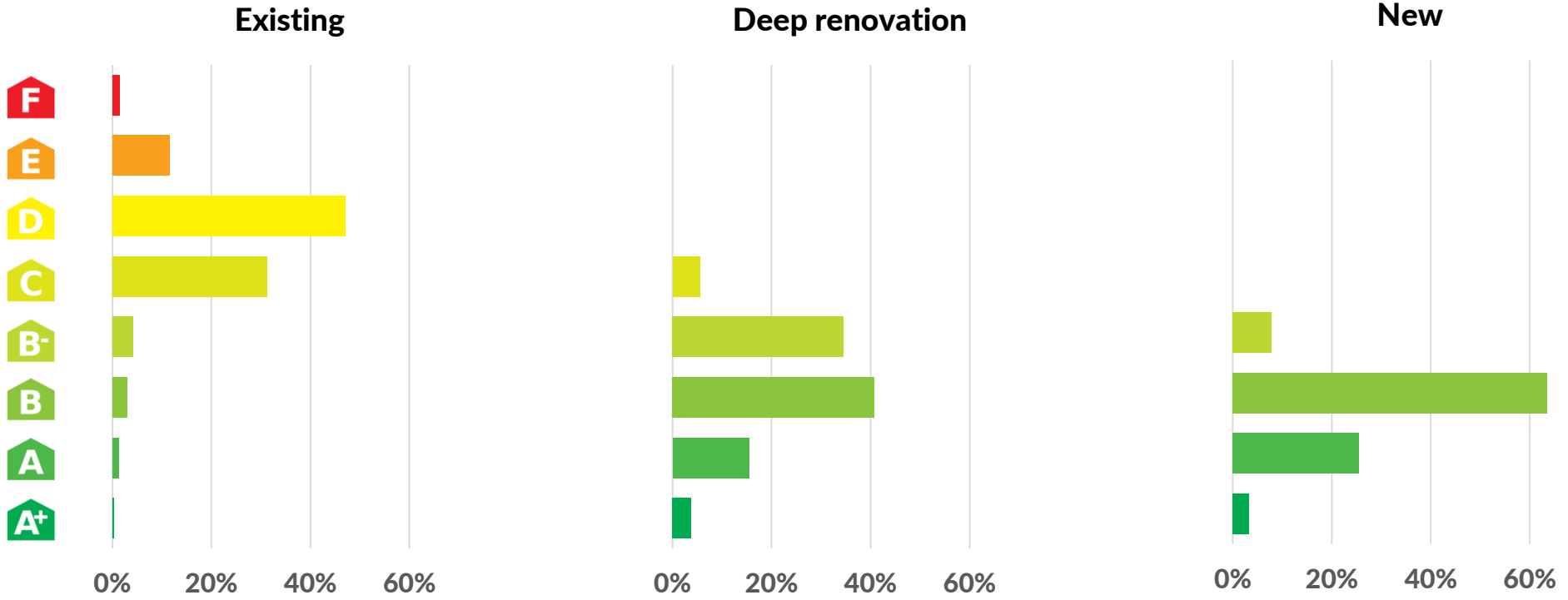


Fig. 13 - Number of cars (thousand)

# Buildings



Energy performance class for households





# EAE 2030

ESTRATÉGIA AÇORIANA PARA A ENERGIA - 2030



# Clean, Secure and Competitive Energy For All



## GOALS

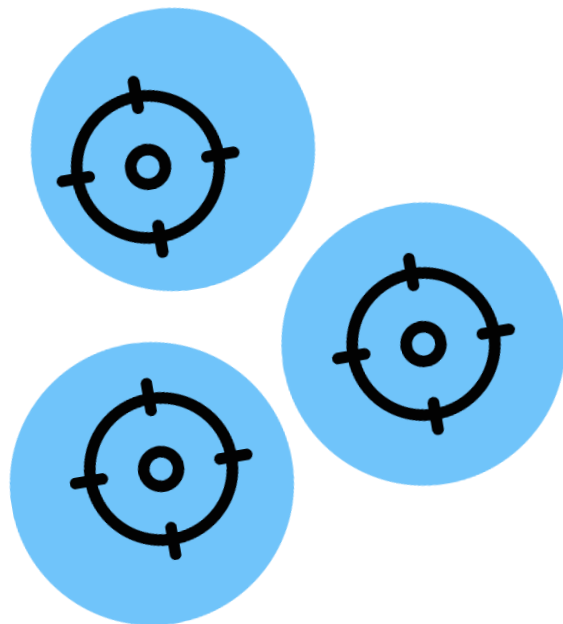
- Reinforce security of supply
- Reduce energy costs
- Reduce GHG emissions and other negative environmental impacts



## PRINCIPLES

- Energy sufficiency
- Energy efficiency
- Electrification
- Decarbonization

# TARGETS



- 1 – Reduce LPG use by 50%
- 2 – 25% Energy efficiency in road transport
- 3 – 28% energy efficiency in buildings
- 4 – 40% energy efficiency in companies
- 5 – 80% renewable electricity
- 6 – 33% energy efficiency
- 7 – 41% reduction in energy GHG emissions

# TARGET 1- Reduce LPG use by 50%

- a) Reinforce EPBD with limits to GPL
- b) Incentives to renewable hot water systems
- c) Inform consumers
- d) Train professionals
- e) Internalize externalities and eliminate incentives to fossil fuels
- f) Remove legal barriers
- g) Specific campaigns with local communities

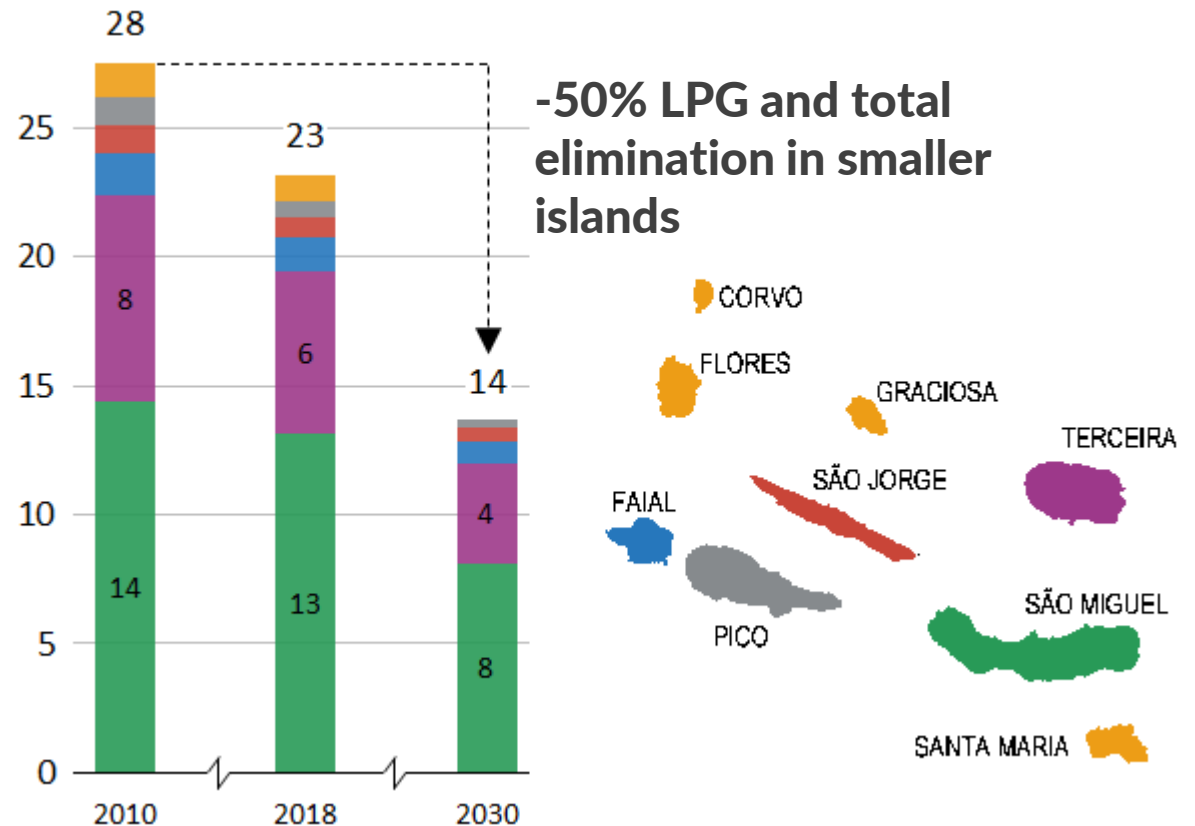


Fig. 16 - LPG consumption (ktep)

# TARGET 1- Reduce LPG use by 50%

Regional grant mechanism for the production and storage of energy provided by renewable sources

Encourages Azoreans to produce and store their own local clean energy for self-consumption.

- a) Reinforce EPBD with limits to GPL
- b) Incentives to renewable hot water systems**
- c) Inform consumers**
- d) Train professionals**
- e) Internalize externalities and eliminate incentives to fossil fuels**
- f) Remove legal barriers**
- g) Specific campaigns with local communities

proenergía		EQUIPMENT	GRANT	LIMIT
Electricity		Photovoltaics	25%	4.000€
		Wind Turbine		
		Hydropower		
Heating		Biomass-Based		
Storage		Energy-Storage Systems		
Hot Water		Heat Pump	35%	4.000€
		Solar Thermal		
		Biomass-Based		

GRANT BONUS	ISLAND
+10%	Santa Maria
+5%	Pico e Faial
+12%	Graciosa, São Jorge, Flores and Corvo

# TARGET 1- Reduce LPG use by 50%

- a) Reinforce EPBD with limits to GPL
- b) Incentives to renewable hot water systems
- c) Inform consumers
- d) Train professionals
- e) Internalize externalities and eliminate incentives to fossil fuels
- f) Remove legal barriers
- g) **Specific campaigns with local communities**



## TARGET 2 – 25% energy efficiency in road transport

- a) **Promote the mixed usage of spaces and proximity services while fighting suburbanization**
- b) Telework and distance learning
- c) Promote active mobility, like walking and cycling
- d) Promote public transport, shared mobility and on-demand
- e) Fleet renovation by more efficient vehicles
- f) Fleet electrification
- g) Internalize externalities and eliminate incentives to fossil fuels

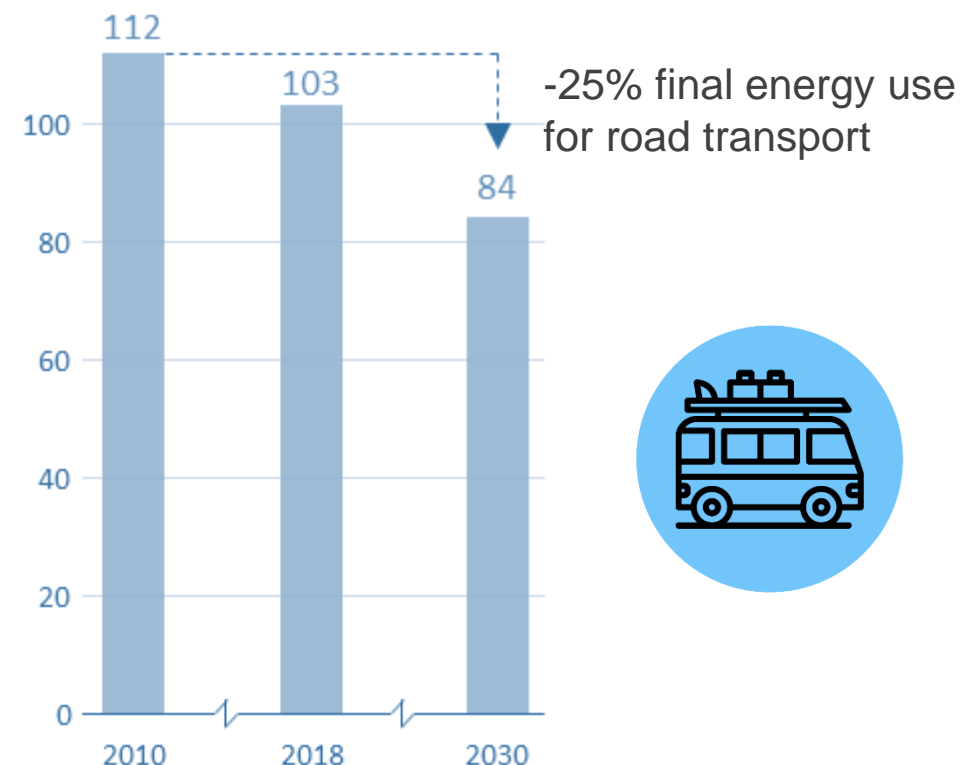


Fig. 17 – Final Energy consumption for road transport (ktep)

# TARGET 2 – 25% energy efficiency in road transport

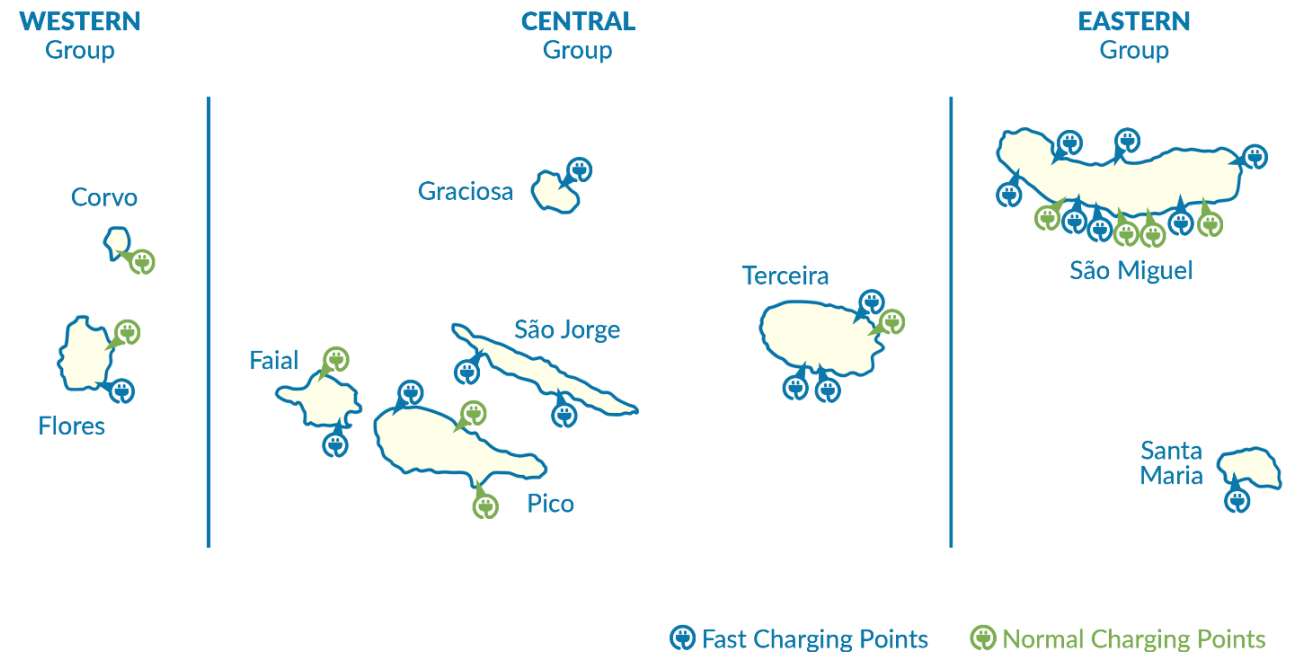
- a) Promote the mixed usage of spaces and proximity services while fighting suburbanization
- b) Telework and distance learning**
- c) Promote active mobility, like walking and cycling**
- d) Promote public transport, shared mobility and on-demand**
- e) Fleet renovation by more efficient vehicles**
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- g) Internalize externalities and eliminate incentives to fossil fuels





# TARGET 2 – 25% energy efficiency in road transport

- Promote the mixed usage of spaces and proximity services while fighting suburbanization
- Telework and distance learning
- Promote active mobility, like walking and cycling
- Promote public transport, shared mobility and on-demand
- Fleet renovation by more efficient vehicles
- Fleet electrification**
- Internalize externalities and eliminate incentives to fossil fuels



# TARGET 2 – 25% energy efficiency in road transport



- a) Promote the mixed usage of spaces and proximity services while fighting suburbanization
- b) Telework and distance learning
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- d) Promote public transport, shared mobility and on-demand
- e) Fleet renovation by more efficient vehicles
- f) Fleet electrification**
- g) Internalize externalities and eliminate incentives to fossil fuels**

TYPE	BENEF.	AMT.	FINANCIAL SUPPORT	BONUSES			MAXIMUM VALUE
				TIME-OF-USE ELECTRICITY TARIFF	WORLD UNESCO BIOSPHERE RESERVE NETWORK*	SCRAPPING OF AN INTERNAL COMBUSTION VEHICLE	
PASSENGER CAR	natural persons	1	10% up to <b>3.000€</b>	500 €	250 €	150 €	<b>3.900€</b>
	legal persons	up to 3	10% up to <b>2.000€</b>	500 €	250 €	150 €	<b>2.900€</b>
TWO-WHEEL MOTORCYCLES OR CYCLOMOTORS	natural and legal persons	1	20% up to <b>400 €</b>	150 €	100 €		<b>650€</b>
MOTORIZED TRICYCLES OR QUADRICYCLES	natural and legal persons	1	20% up to <b>750 €</b>	150 €	100 €		<b>1 000€</b>
CYCLES WITH AUXILIARY MOTOR	natural and legal persons	1	<b>250 €</b>	50 €	50 €		<b>350€</b>
EVs CHARGING STATIONS	natural and legal persons	1	50% up to <b>500 €</b>				<b>500€</b>

# TARGET 3 – 28% energy efficiency in buildings

- a) **Reinforce EPBD**
- b) Renovation wave
- c) Energy efficient appliances
- d) Information campaigns
- e) Training for construction professionals
- f) Remove legal barriers

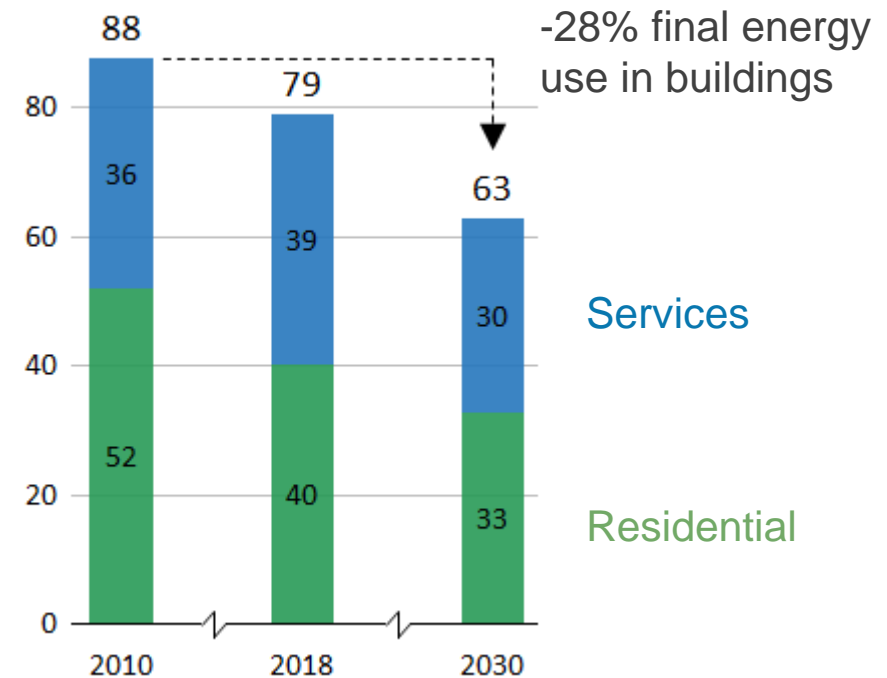


Fig. 18 – Final energy consumption in buildings (ktep)

# TARGET 3 – 28% energy efficiency in buildings

- a) Reinforce EPBD
- b) Renovation wave**
- c) Energy efficient appliances**
- d) Information campaigns
- e) Training for construction professionals
- f) Remove legal barriers



Aviso N° Acores-03-2020-03 - Aviso para apresentação de candidaturas  
**AUMENTAR A EFICIÊNCIA ENERGÉTICA  
NO SETOR PÚBLICO E NAS IPSS**



# TARGET 3 – 28% energy efficiency in buildings

- a) Reinforce EPBD
- b) Renovation wave
- c) Energy efficient appliances
- d) **Information campaigns**
- e) **Training for construction professionals**
- f) **Remove legal barriers**



# TARGET 4 – 40% energy efficiency in companies

- a) **Expand to smaller units and implement EU ETS and intensive energy use regulations**
- b) **Incentives for energy efficiency**
- c) Information campaigns
- d) Training of professionals
- e) Research, Development and Innovation

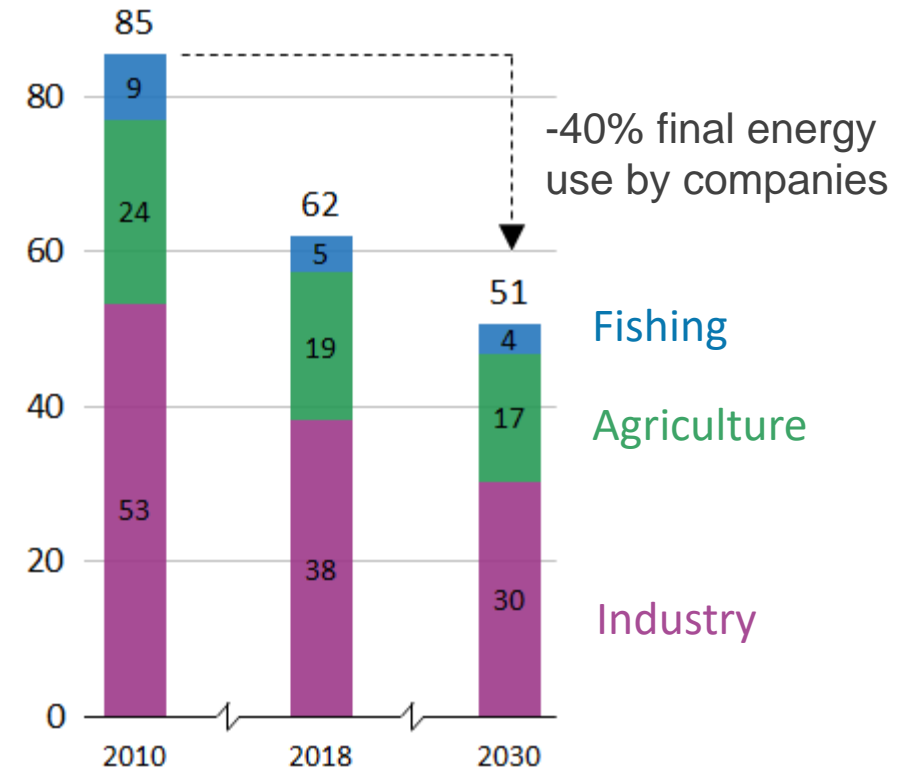


Fig. 18 – Final Energy consumption in primary and secondary sector (ktep)

# TARGET 4 – 40% energy efficiency in companies

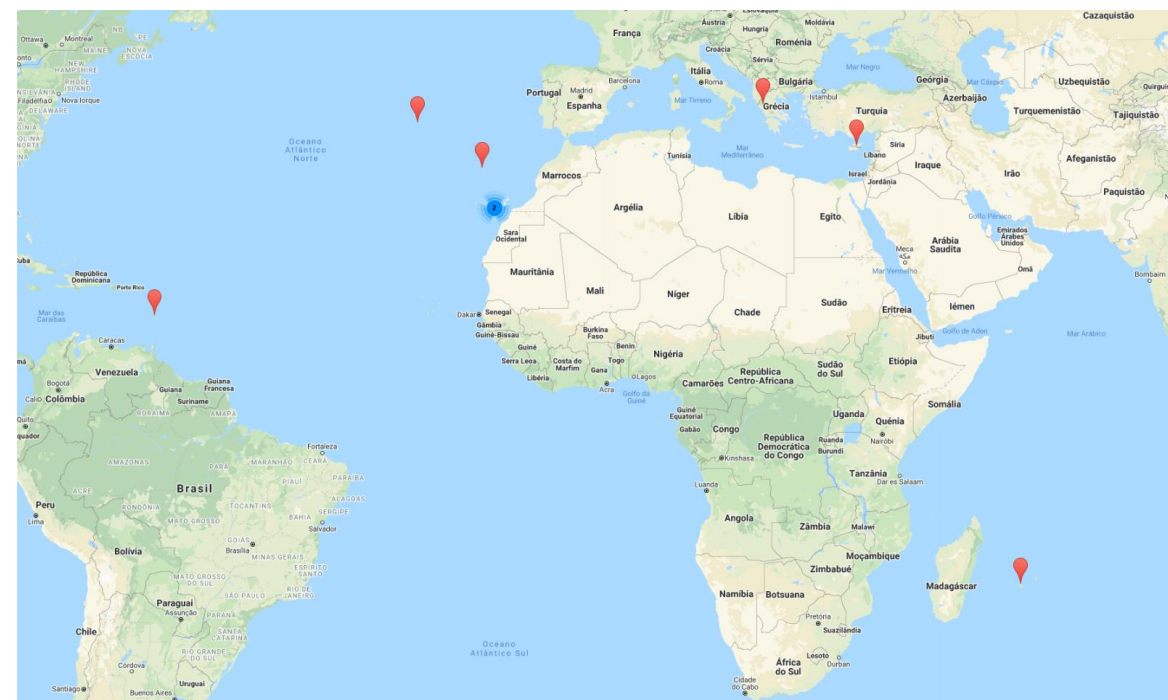
- a) Expand to smaller units and implement EU ETS and intensive energy use regulations
- b) Incentives for energy efficiency
- c) **Information campaigns**
- d) **Training of professionals**
- e) Research, Development and Innovation





# TARGET 4 – 40% energy efficiency in companies

- Expand to smaller units and implement EU ETS and intensive energy use regulations
- Incentives for energy efficiency
- Information campaigns
- Training of professionals
- Research, Development and Innovation**





# TARGET 5 – 80% renewable electricity

- Electricity market overhaul**
- Internalize externalities and eliminate incentives to fossil fuels**
- Empower consumers and communities
- Train professionals
- Map available resources and prepare an action plan for renewables
- Research, Development and Innovation

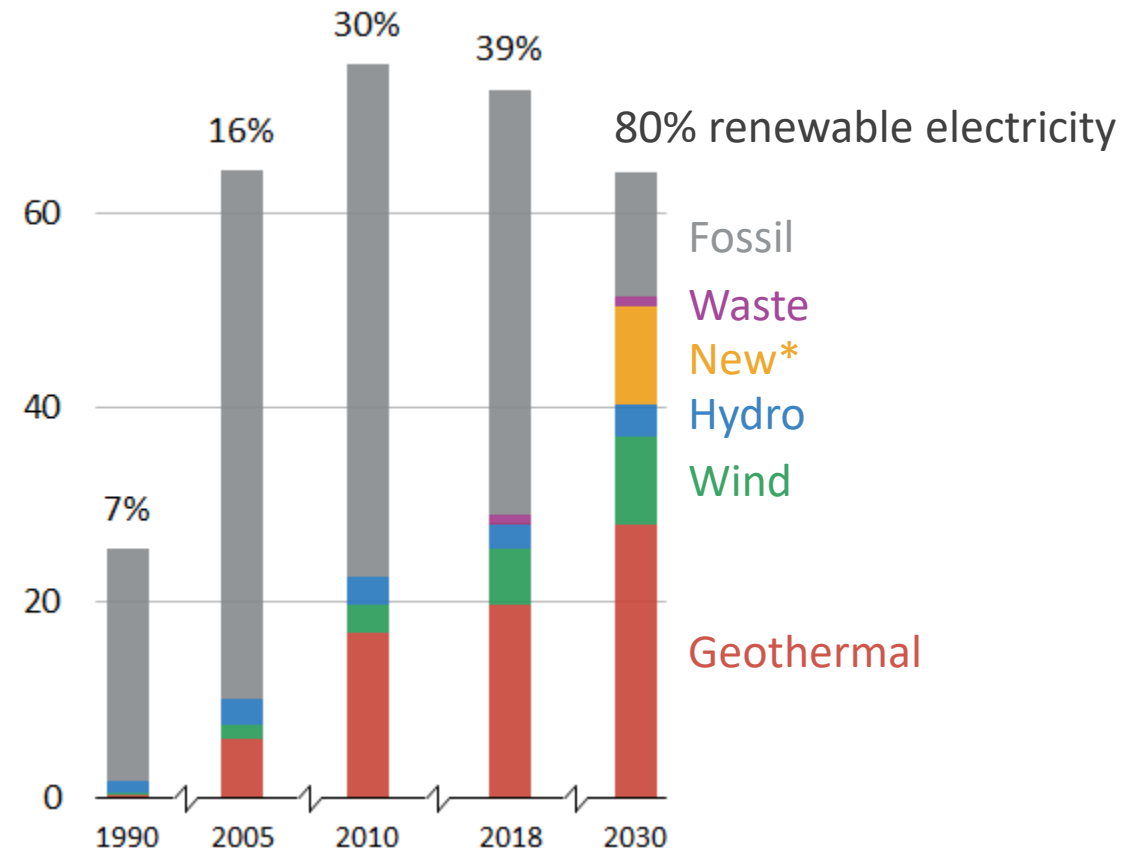


Fig. 20 – Electricity generation (ktep) and renewables penetration (%)

\*Mostly photovoltaics although it may comprise other sources such as biomass, offshore or marine technologies.

# TARGET 5 – 80% renewable electricity

- a) Electricity market overhaul
- b) Internalize externalities and eliminate incentives to fossil fuels
- c) **Empower consumers and communities**
- d) **Train professionals**
- e) **Map available resources and prepare an action plan for renewables**
- f) **Research, Development and Innovation**



# TARGET 6

33% energy efficiency

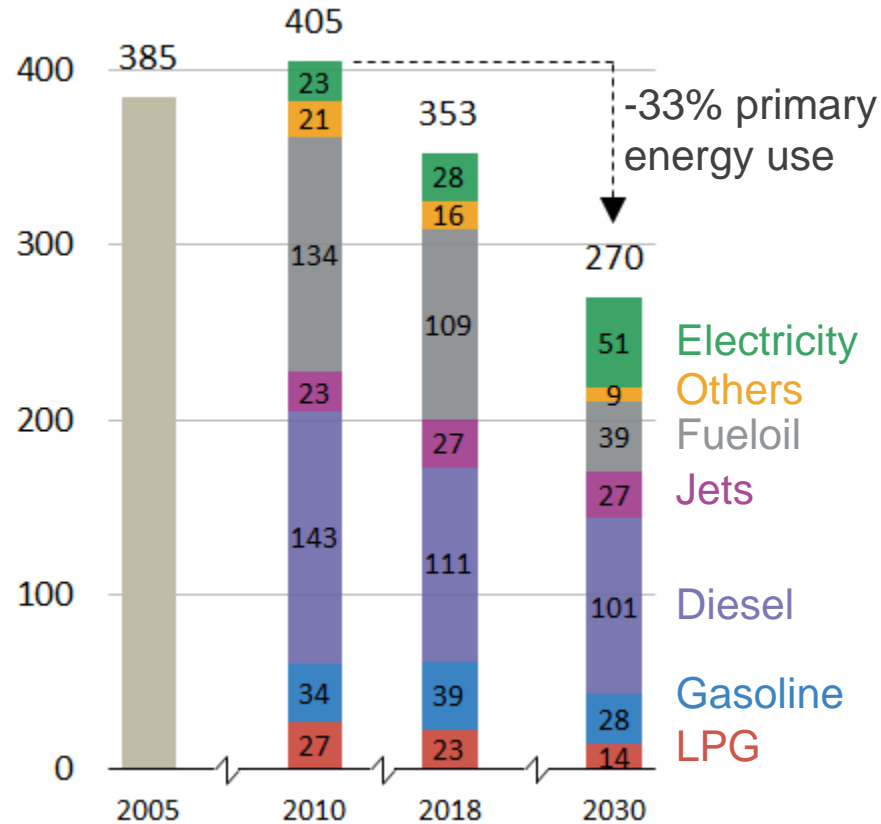


Fig. 21 - Primary energy use (ktep)

# TARGET 7

-41% in energy GHG emissions

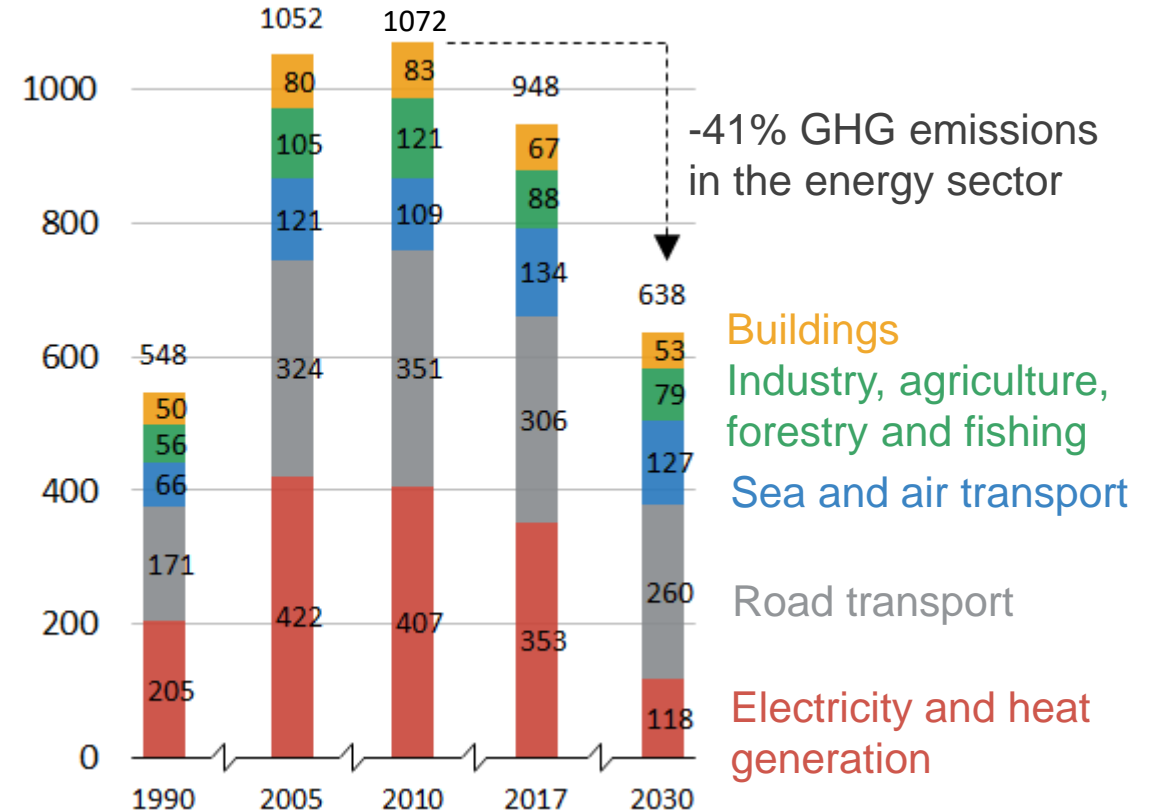


Fig. 22 - GHG emissions in the energy sector (ktCO<sub>2</sub>eq.)



# From politics to plans

# Preparing the 2030

# Azores Energy Strategy



GOVERNO  
DOS AÇORES

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