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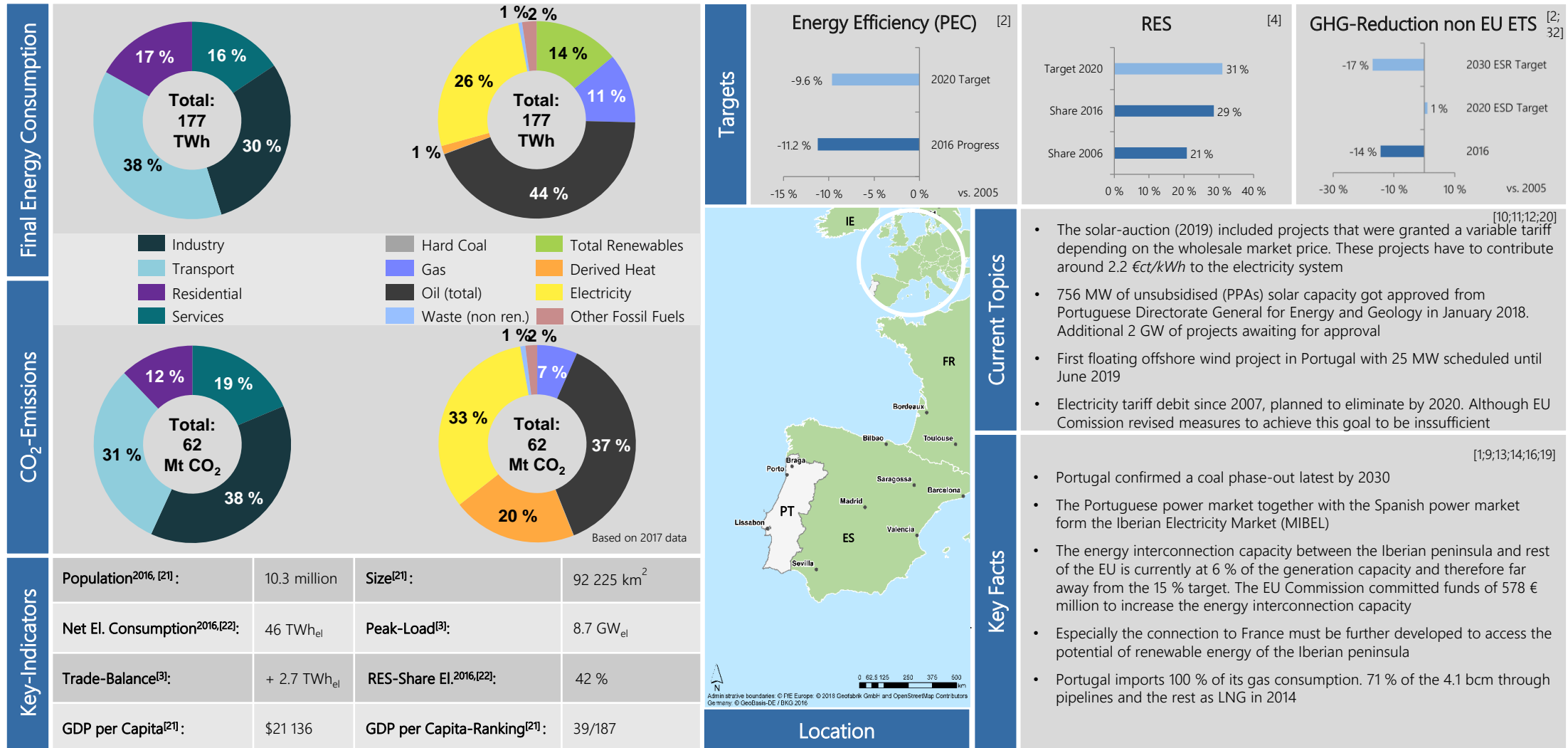
on the basis of a decision by the German Bundestag



Energy Country Profile Portugal

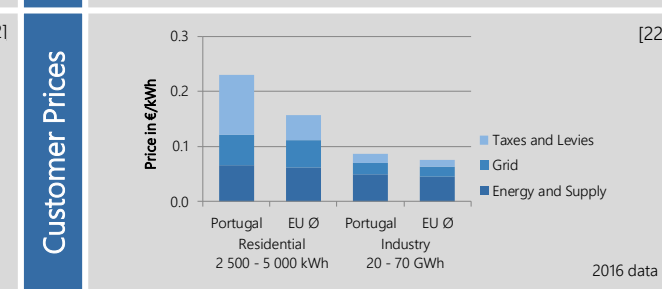
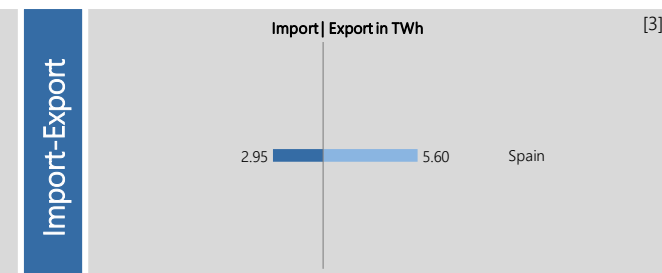
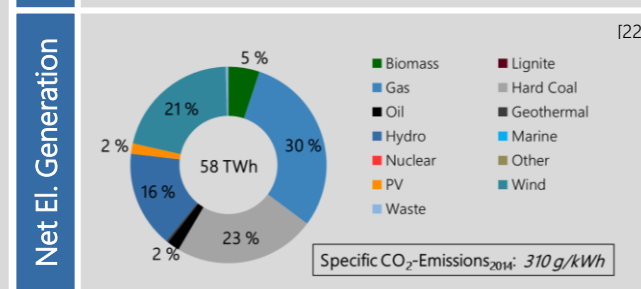
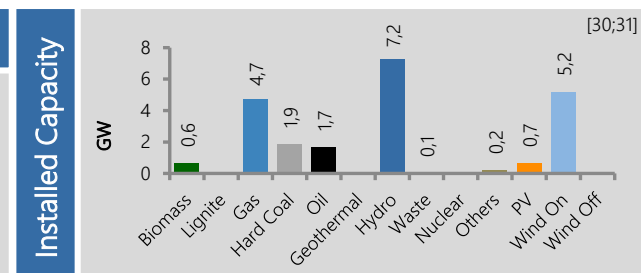
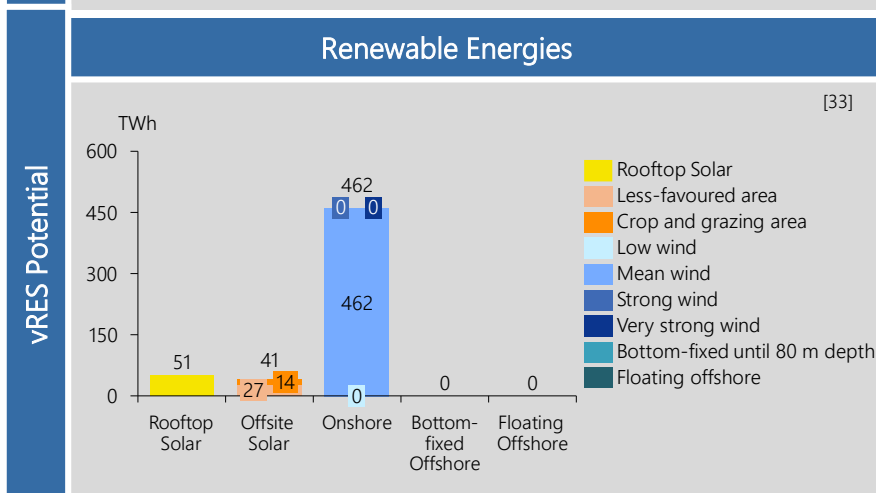
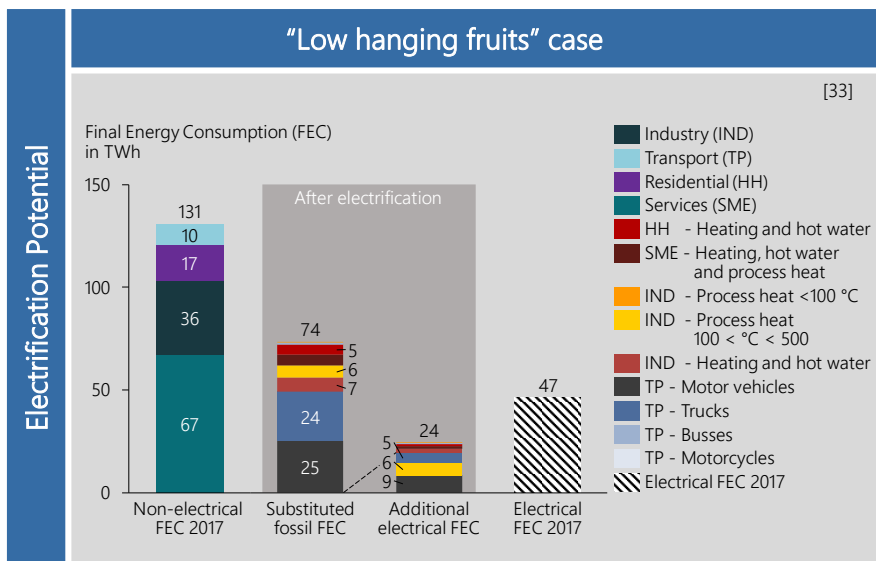
2020

Portugal at a Glance



All evaluations based on the year 2017 if not mentioned otherwise.

Portugal's Electricity Sector



Wholesale Market

[6;7]

- Exchange:** OMI-POLO ESPAÑOL S.A (OMIE)
- Capacity Market:** No
- Additional CO₂-Pricing:** sector overlapping carbon tax with average price = 45,1 €/tCO₂e (2014) carbon tax in electricity sector: 1.4 €/tCO₂e
- Day-Ahead-Market:** OMIE

	2017	OMIE
Volume		50.6 TWh
Avg. Price		52.48 €/MWh

Support Schemes

[8;10;15]

Costs

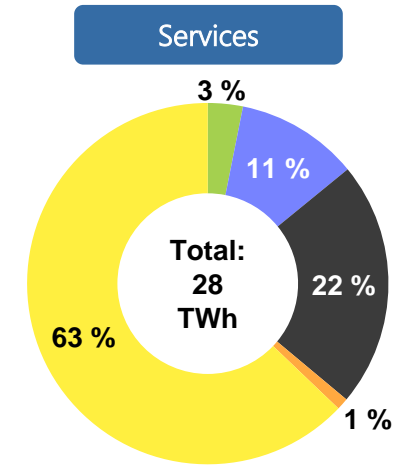
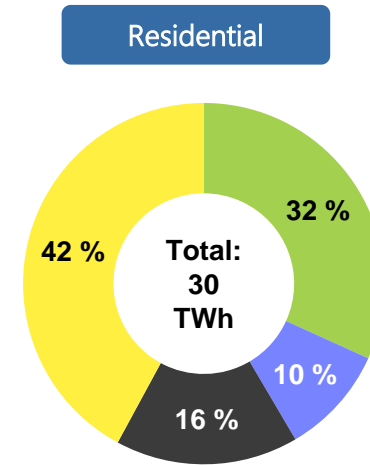
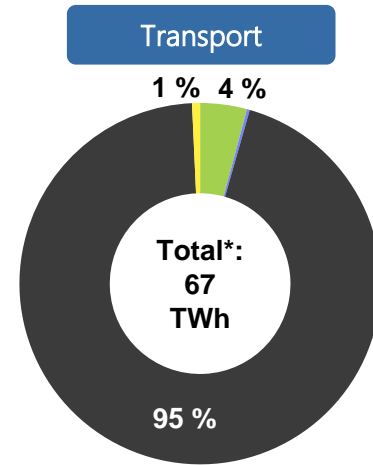
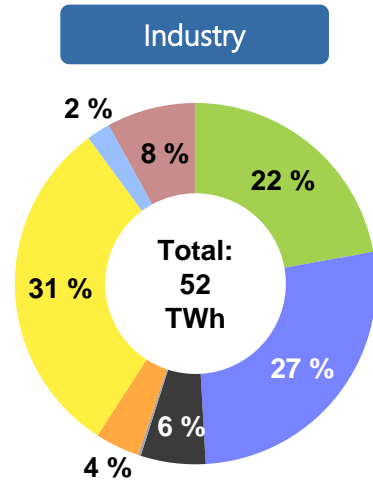
- PV up to 250 kW (2017): 9.5 €/kWh
- Already existing plants (before 2012): 25.7 €/kWh
- PV auction (August 2019): 1.5 – 3.1 €/kWh
- Onshore Wind (2016): average at 9.3 €/kWh

Policies [8]

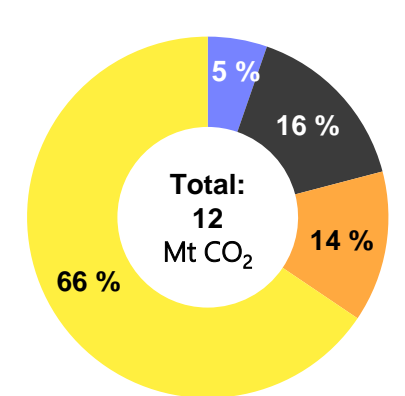
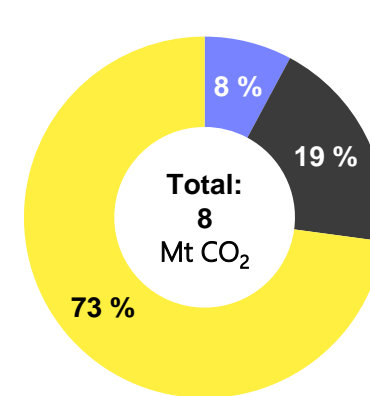
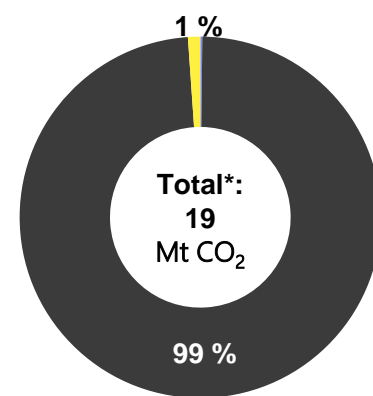
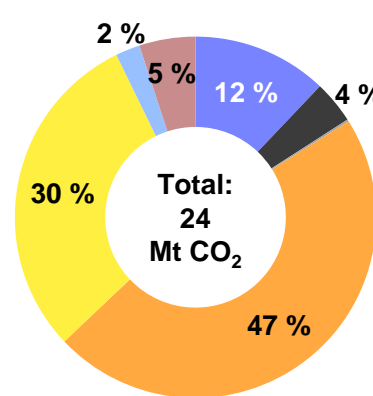
- Training programs for installers
- Certification of RES installations
- Exemplary role of Public Authorities: New buildings owned or used by public authorities shall be "nearly zero-energy buildings when certified after 31 December 2018"

Portugal's Energy Consumption & Emissions by Sectors and Energy Carriers - 2017

Final Energy Consumption



CO₂ - Emissions

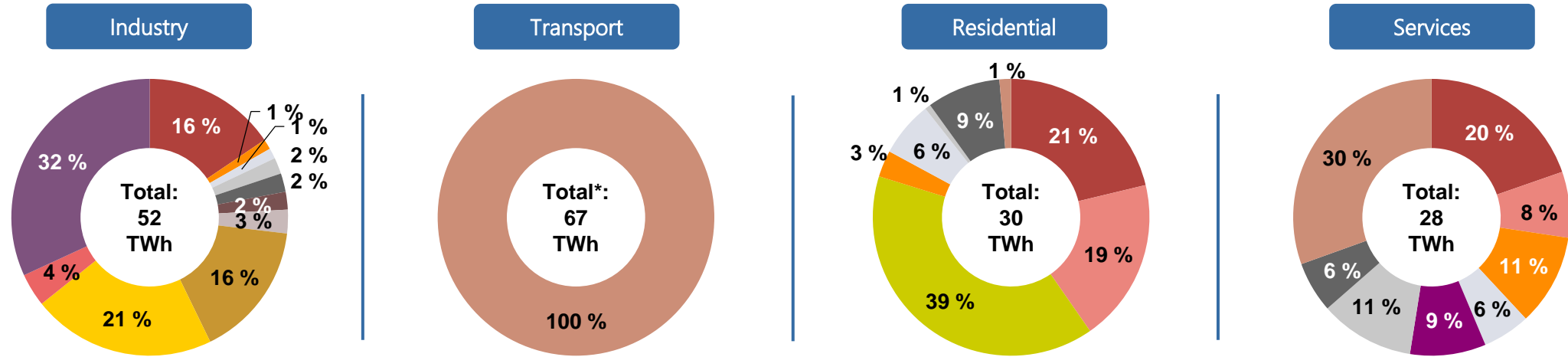


Hard Coal
 Oil (total)
 Gas
 Total Renewables
 Waste (non. ren.)
 Derived Heat
 Electricity
 Other Fossil Fuels

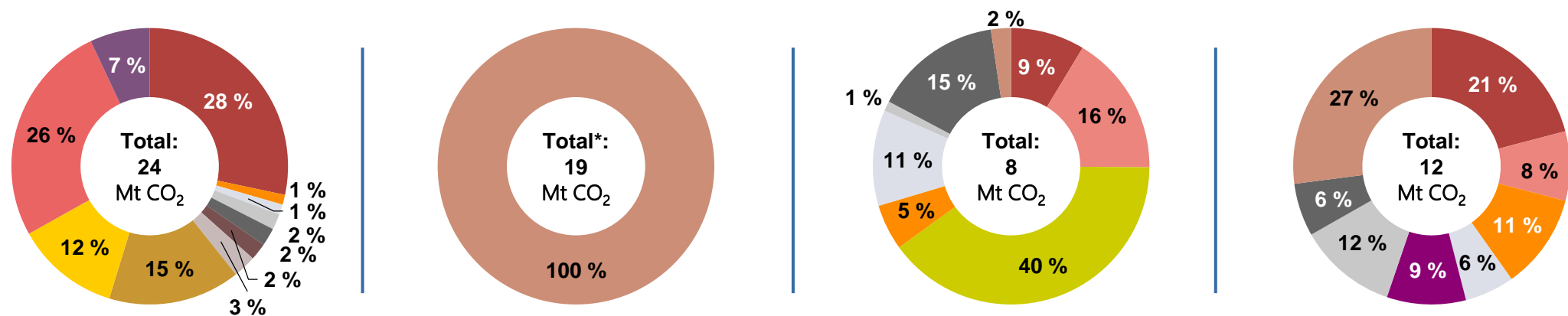
*excluding international aviation

Portugal's Energy Consumption & Emissions by Application & Sector - 2017

Final Energy Consumption



CO₂ - Emissions



- Space Heating
- Process Heat 100 - 500 °C
- Process Heating < 100 °C
- Other Process Cold
- ICT
- Process Heating
- Cooking
- Pumps
- Warm Water
- Process Heat > 500 °C
- Other Mechanical Energy
- Mechanical Energy
- Lighting
- Compressed Air
- Climate Cold

*excluding international aviation

Portugal: Sources

Institutions

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TSO	REN - Redes Energéticas Nacionais, SGPS, S.A.	https://www.ren.pt/en-GB
Regulator	Energy Services Regulatory Authority (ERSE)	http://www.erse.pt/eng/Paginas/ERSE.aspx
Main Power Market	OMI-POLO ESPAÑOL S.A.	http://www.omie.es/en/inicio

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Main Studies

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Abbreviations

RES	Renewable Energy Source
EFR	Effort Sharing Regulation
PEC	Primary Energy Consumption
GHG	Greenhouse Gases
ESD	Effort Sharing Decision
EU ETS	European Union Emissions Trading System
EL	Electricity
EU	European Union
TSO	Transmission System Operator