



## STATISTICAL FACTSHEET 2024

Med-TSO 2023 statistical data

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## Med-TSO Statistical Bulletin 2024

The 2024 Statistical Bulletin by Med-TSO provides a detailed picture at 12.31.2023 of electricity demand, installed capacity, and generation across the Mediterranean. The report captures regional and country-specific trends and offers insights into the shifting energy landscape, emphasizing the role of the different technologies in meeting the energy needs of the region.

### Demand Analysis

Electricity demand in the Mediterranean region has exhibited considerable dynamics in 2023, reflecting the diverse socio-economic and industrial growth patterns across Med-TSO member countries. The data presents a comparative view of electricity demand for 2022 and 2023, revealing both stability and notable growth in specific countries. This year's bulletin shows a total demand increase in many Mediterranean countries, with particular growth observed in non-European Mediterranean Countries where energy-intensive industries are expanding or where population growth is fuelling higher household consumption. In contrast, European Mediterranean countries displayed stable or stagnant demand levels, raising questions about the anticipated acceleration in electrification projected by European policies for 2030.

### Generation Composition

Electricity generation in the Med-TSO power systems mirrors the diversity of installed capacity, balancing between renewable sources, fossil fuels, and nuclear energy. The generation mix in 2023 shows that fossil fuels and renewables together account for the majority of energy produced, with fossil fuels contributing 42% of total generation and renewables contributing 31.5%. This highlights a significant alignment with regional sustainability goals as the Med-TSO members continue to increase the proportion of cleaner energy sources within their generation portfolios.

Detailed analysis of generation data reveals that the reliance on fossil fuels varies by country, with some countries still heavily dependent on natural gas or oil for generation. However, other countries with advanced renewable integration strategies have significantly reduced their dependence on fossil fuels, supporting the wider goals of emissions reduction and climate resilience. The nuclear share, although a smaller part of the generation mix (19 %), plays an essential role in maintaining a balanced and reliable energy system, particularly in countries (Spain, France, Slovenia) that have invested in nuclear infrastructure as part of their long-term energy strategies.

### Installed Capacity Insights

Installed capacity across the Med-TSO network reached substantial levels in 2023.

Fossil fuels and renewables form the primary components of the region's capacity mix. In total, fossil fuel capacity continues to provide a solid foundation for baseload power, supporting 42% of installed capacity. However, a strong shift towards renewable energy capacity reflects the region's commitment to sustainable energy goals, with renewables installed capacity accounting for 47% of total capacity in 2023.

Among the renewables, hydro, solar, and wind dominate, each playing a unique role in the energy mix. Hydro capacity represents 37% of the renewable energy mix, largely due to established hydroelectric infrastructure in various countries with favourable geographical conditions. Solar power, capturing 34% of renewable capacity, has been bolstered by significant solar investments in countries with high solar irradiation, while wind energy, representing 28%, has seen robust development in regions with suitable wind conditions. Geothermal and other renewable sources contribute marginally but reflect a growing interest in tapping diverse renewable resources.

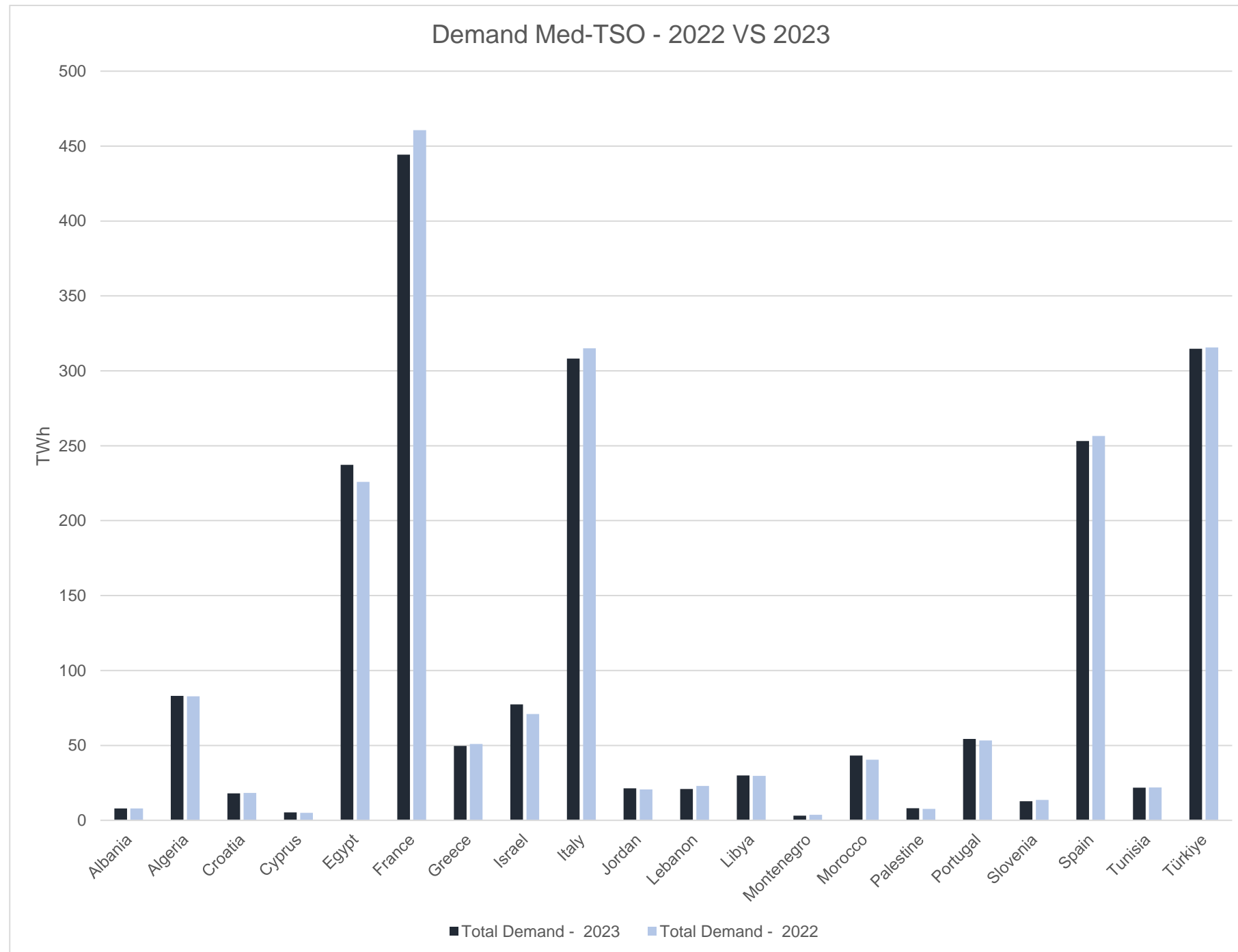
Nuclear capacity, though a smaller share, remains a stable component, providing reliable baseload power in select countries and contributing to grid stability.

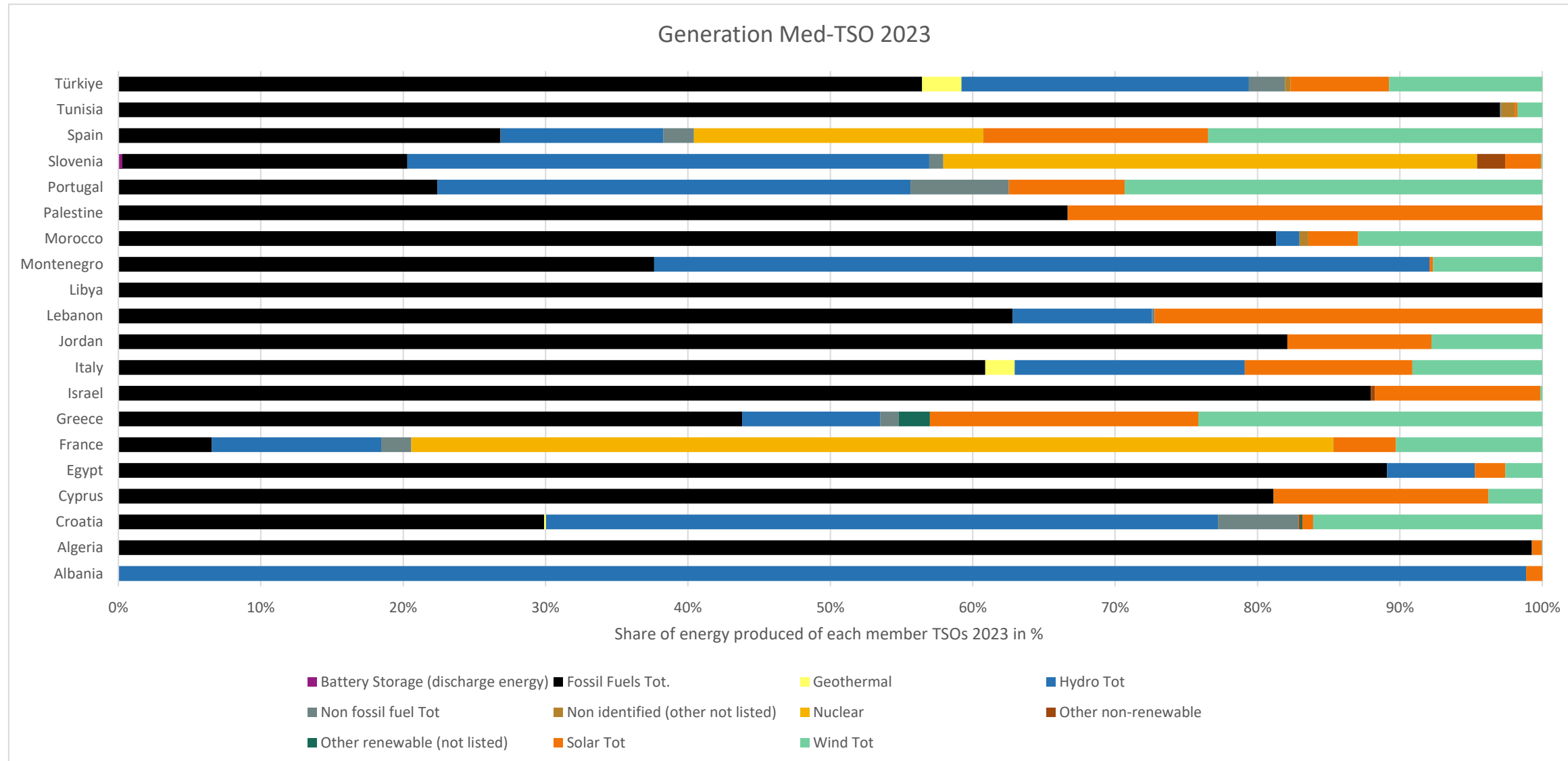
## The Power System data platform

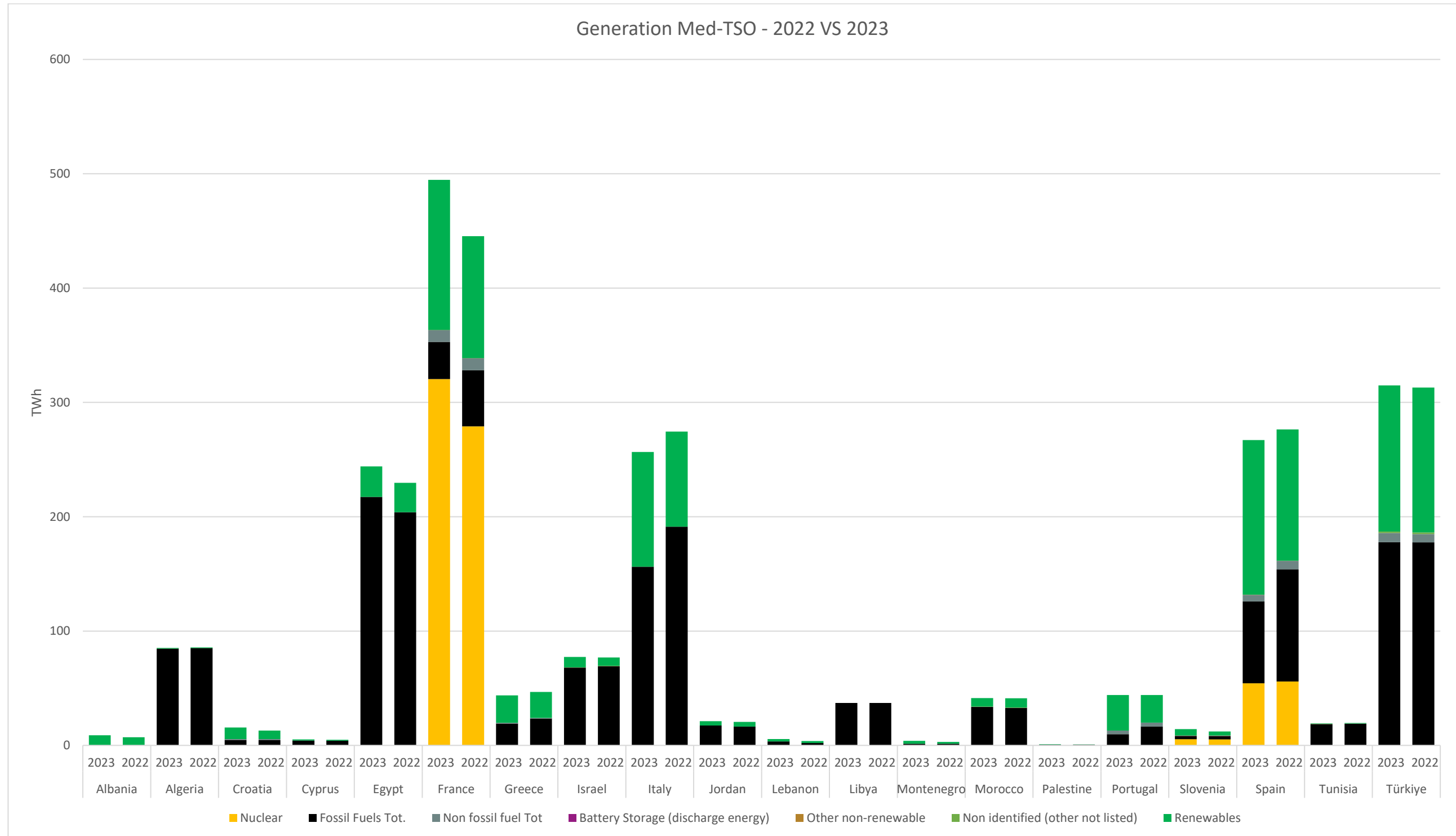
In order to get more detailed data, Med-TSO makes available in a single platform all the most relevant data of the Power Systems. The platform is accessible at this link: <https://data.med-tso.com/> or using the QR code.

Access the  
platform here



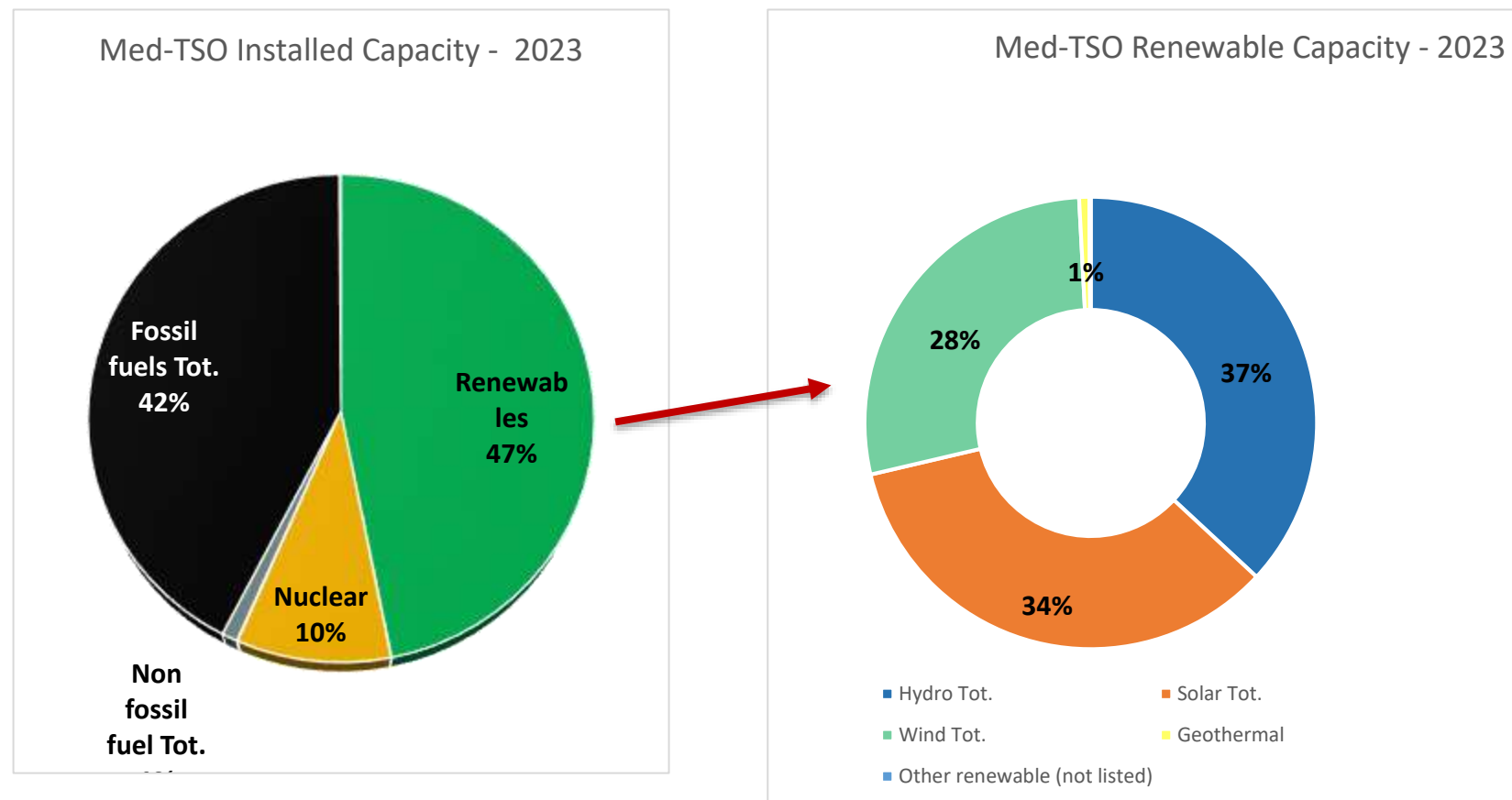




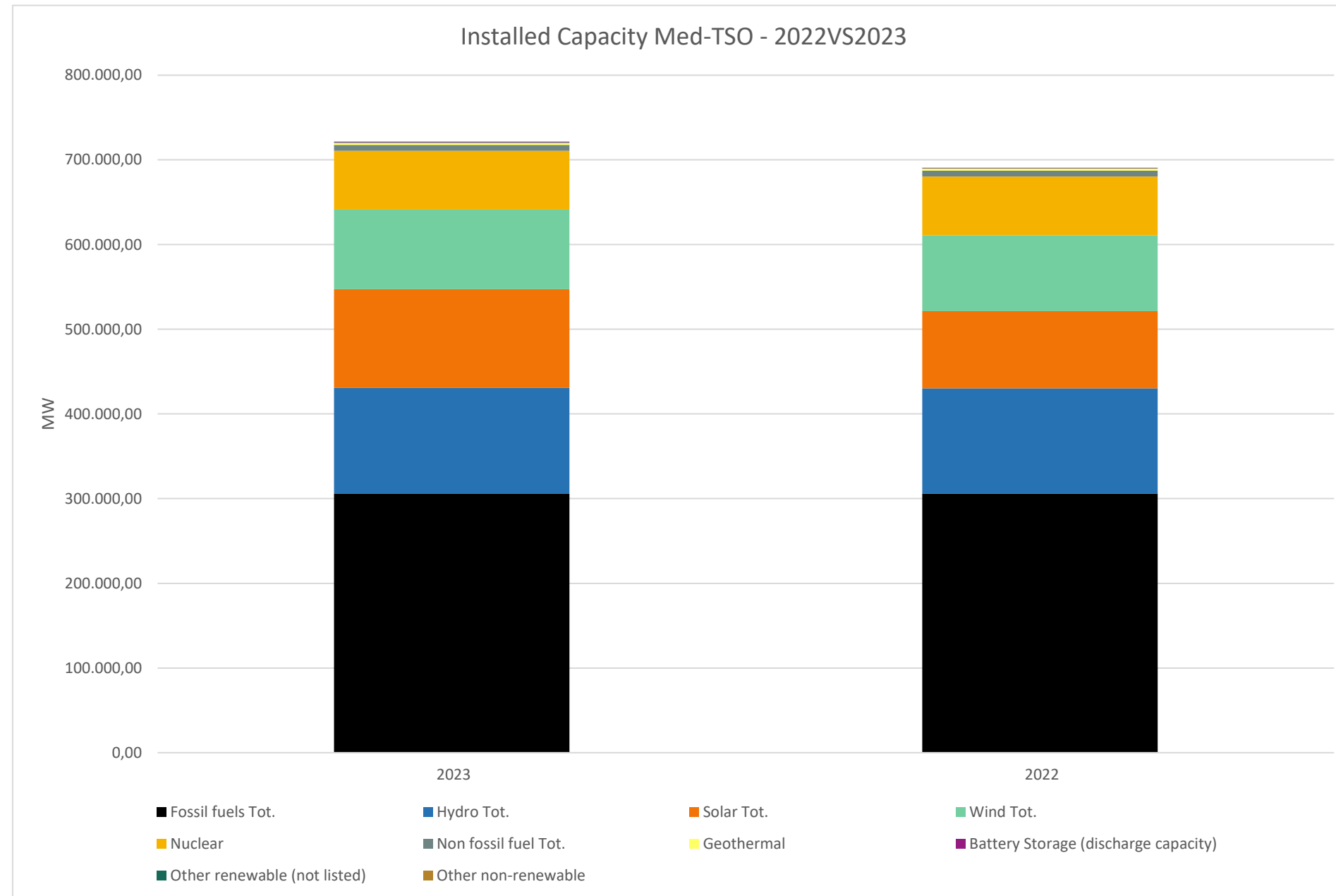


## Generation by Category % on the total generation per country 2022vs2023

Category	Renewables		Nuclear		Fossil Fuels Tot.		Non fossil fuel Tot		Battery Storage (discharge energy)		Other non-renewable		Non identified (other not listed)	
	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Albania	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Algeria	0.74%	0.73%	0.00%	0.00%	99.25%	99.25%	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.00%	0.00%
Croatia	64.31%	56.67%	0.00%	0.00%	29.90%	35.70%	5.66%	7.63%	0.00%	0.00%	0.13%	0.00%	0.00%	0.00%
Cyprus	18.87%	16.43%	0.00%	0.00%	81.13%	83.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Egypt	10.89%	11.19%	0.00%	0.00%	89.11%	88.81%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
France	26.53%	23.95%	64.78%	62.63%	6.57%	11.04%	2.10%	2.36%	0.00%	0.00%	0.02%	0.02%	0.00%	0.00%
Greece	54.92%	48.71%	0.00%	0.00%	43.80%	50.22%	1.28%	1.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Israel	11.77%	9.75%	0.00%	0.00%	87.97%	89.99%	0.00%	0.00%	0.00%	0.00%	0.26%	0.26%	0.00%	0.00%
Italy	39.13%	30.31%	0.00%	0.00%	60.87%	69.69%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Jordan	17.89%	19.38%	0.00%	0.00%	82.11%	80.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Lebanon	37.02%	43.39%	0.00%	0.00%	62.79%	56.61%	0.18%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Libya	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Montenegro	62.38%	52.30%	0.00%	0.00%	37.62%	47.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Morocco	18.07%	19.72%	0.00%	0.00%	81.30%	79.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.63%	0.58%
Palestine	33.33%	25.00%	0.00%	0.00%	66.67%	75.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Portugal	70.68%	54.78%	0.00%	0.00%	22.40%	37.31%	6.92%	7.91%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Slovenia	39.25%	29.59%	37.49%	43.44%	20.01%	23.28%	0.99%	1.31%	0.28%	0.25%	1.97%	2.13%	0.00%	0.00%
Spain	50.68%	41.59%	20.32%	20.24%	26.84%	35.48%	2.15%	2.68%	0.00%	0.00%	0.01%	0.01%	0.00%	0.00%
Tunisia	2.00%	1.91%	0.00%	0.00%	97.03%	97.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.97%	0.86%
Türkiye	40.63%	40.49%	0.00%	0.00%	56.44%	56.73%	2.54%	2.36%	0.00%	0.00%	0.00%	0.00%	0.38%	0.42%
Med-TSO Total	31.41%	27.97%	18.99%	17.40%	48.05%	52.95%	1.44%	1.56%	0.00%	0.00%	0.03%	0.03%	0.08%	0.09%







## Installed Capacity by technology % on the total generation capacity per country 2022vs2023

Technology	Fossil fuels .		Hydro .		Solar .		Wind .		Nuclear		Non fossil fuel .		Geothermal		Battery Storage (discharge capacity)		Other renewable (not listed)		Other non-renewable		
	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	
Albania	3.47%	3.71%	90.76%	94.36%	5.77%	1.93%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Algeria	97.67%	97.98%	0.82%	0.51%	1.46%	1.47%	0.04%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Croatia	23.32%	22.40%	44.39%	47.71%	3.91%	3.10%	23.42%	21.72%	0.00%	0.00%	3.75%	4.03%	0.21%	0.22%	0.00%	0.00%	0.68%	0.46%	0.33%	0.35%	
Cyprus	65.18%	71.83%	0.00%	0.00%	27.34%	19.93%	6.95%	7.65%	0.00%	0.00%	0.53%	0.59%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Egypt	89.28%	90.01%	4.65%	4.64%	2.98%	2.67%	3.09%	2.68%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
France	11.60%	12.20%	17.29%	17.86%	12.74%	10.92%	15.18%	14.62%	41.18%	42.53%	1.46%	1.52%	0.00%	0.00%	0.54%	0.34%	0.00%	0.00%	0.00%	0.00%	
Greece	33.22%	39.80%	14.52%	15.31%	29.03%	23.05%	21.61%	20.22%	0.00%	0.00%	0.59%	0.53%	0.00%	0.00%	0.00%	0.00%	1.03%	1.09%	0.00%	0.00%	
Israel	73.87%	77.24%	1.27%	1.34%	23.25%	20.62%	1.45%	0.62%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.17%	0.18%	0.00%	0.00%	
Italy	47.97%	49.96%	17.93%	18.90%	23.72%	20.72%	9.63%	9.77%	0.00%	0.00%	0.00%	0.00%	0.60%	0.64%	0.00%	0.00%	0.00%	0.00%	0.15%	0.00%	
Jordan	61.98%	61.85%	0.13%	0.13%	28.94%	28.59%	8.66%	9.13%	0.00%	0.00%	0.21%	0.22%	0.00%	0.00%	0.08%	0.09%	0.00%	0.00%	0.00%	0.00%	
Lebanon	57.41%	67.55%	6.67%	7.85%	35.75%	24.40%	0.00%	0.00%	0.00%	0.00%	0.17%	0.20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Libya	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Montenegro	20.29%	21.49%	68.02%	66.43%	0.29%	0.00%	11.40%	12.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Morocco	62.42%	62.92%	16.01%	16.14%	7.52%	7.58%	14.05%	13.37%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Palestine	41.18%	44.03%	0.00%	0.00%	58.82%	55.97%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Portugal	20.81%	21.61%	38.47%	39.77%	12.27%	9.24%	25.16%	26.00%	0.00%	0.00%	3.28%	3.39%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Slovenia	40.39%	38.11%	28.31%	32.53%	15.18%	11.44%	0.04%	0.07%	15.06%	17.35%	1.02%	0.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Spain	29.85%	31.51%	16.21%	17.11%	22.32%	18.65%	24.55%	25.27%	5.65%	5.96%	1.34%	1.41%	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.07%	0.07%	
Tunisia	91.09%	92.16%	1.00%	1.00%	4.21%	3.11%	3.70%	3.73%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Türkiye	42.87%	45.82%	28.91%	30.54%	14.12%	9.12%	10.68%	11.02%	0.00%	0.00%	1.89%	1.86%	1.53%	1.64%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Med-TSO al	42.36%	44.30%	17.31%	17.99%	16.17%	13.21%	13.05%	12.99%	9.59%	10.02%	0.98%	0.99%	0.34%	0.36%	0.11%	0.07%	0.05%	0.05%	0.04%	0.02%	

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