

15th SE Europe Energy Dialogue



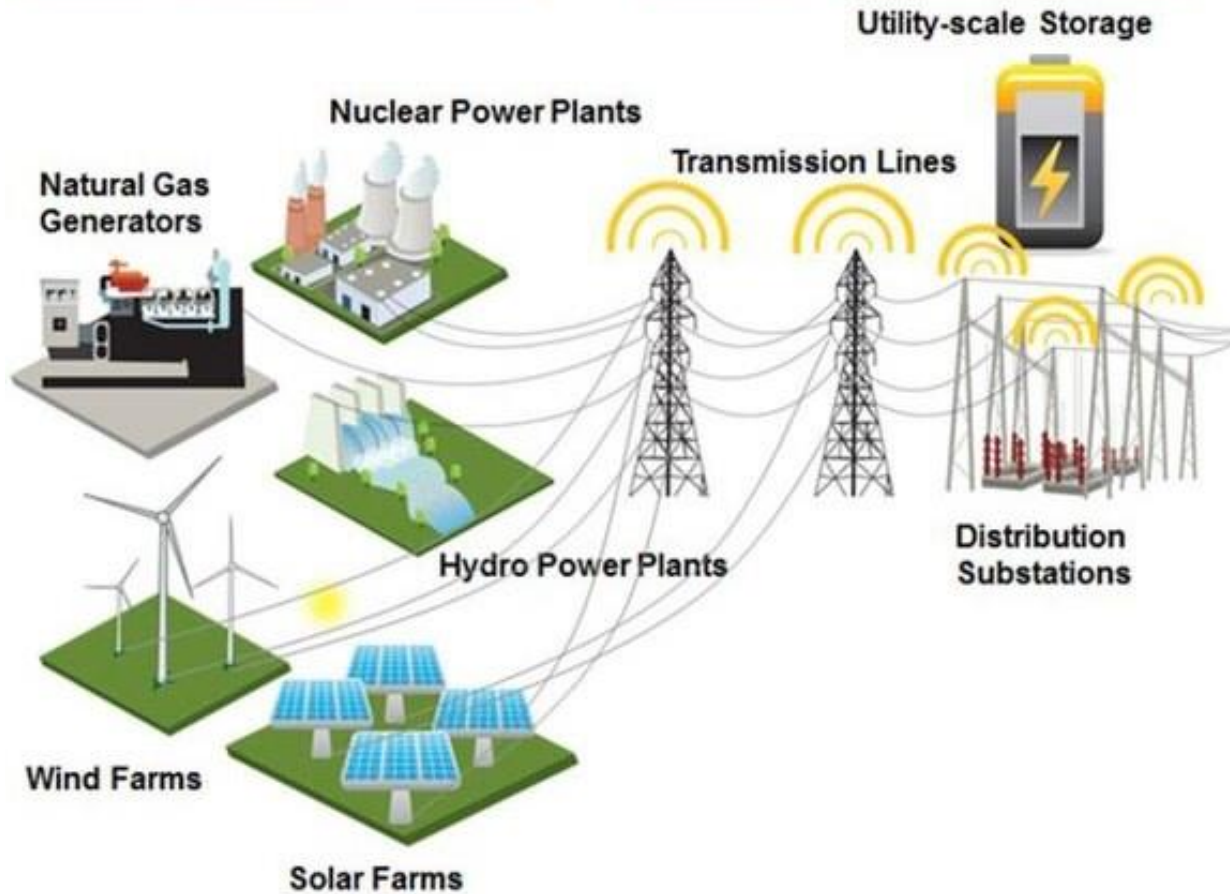
SEE Electricity Market Dynamics

Efi Milioni, Market Analysis & Back Office Department Manager
Energy Management Division, Elpedison

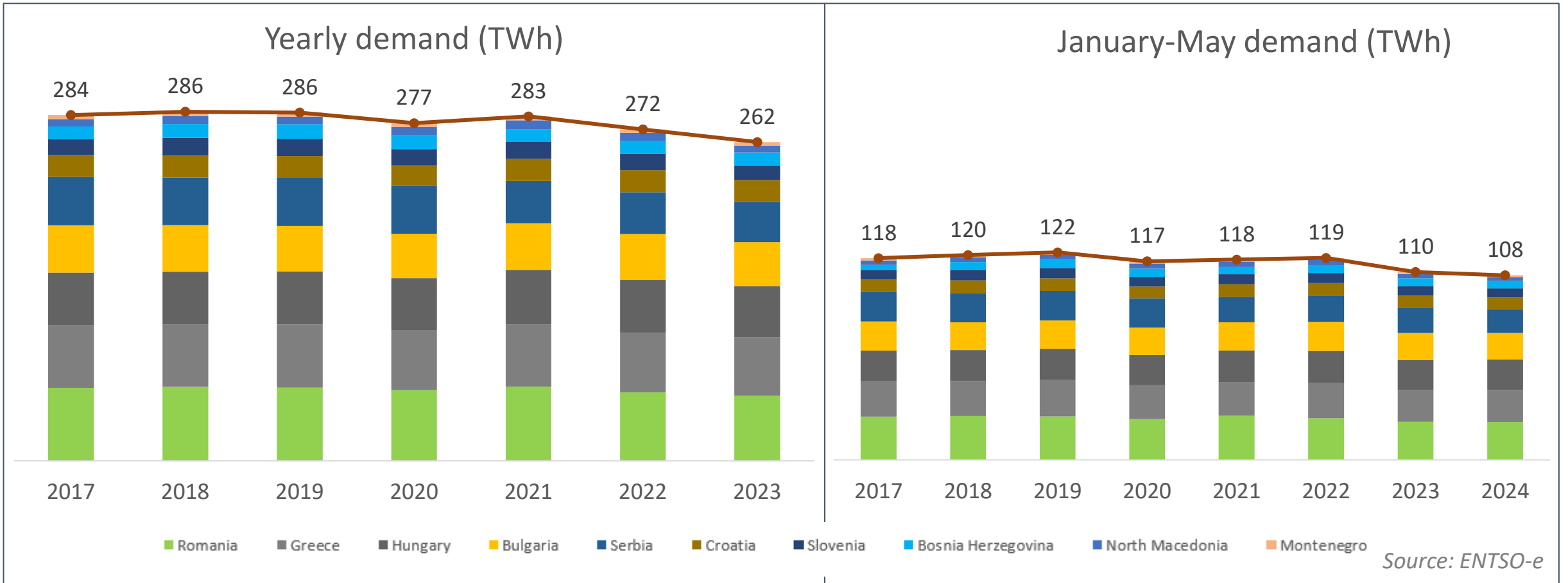
Energy Systems

Power Plants

Electric Grid

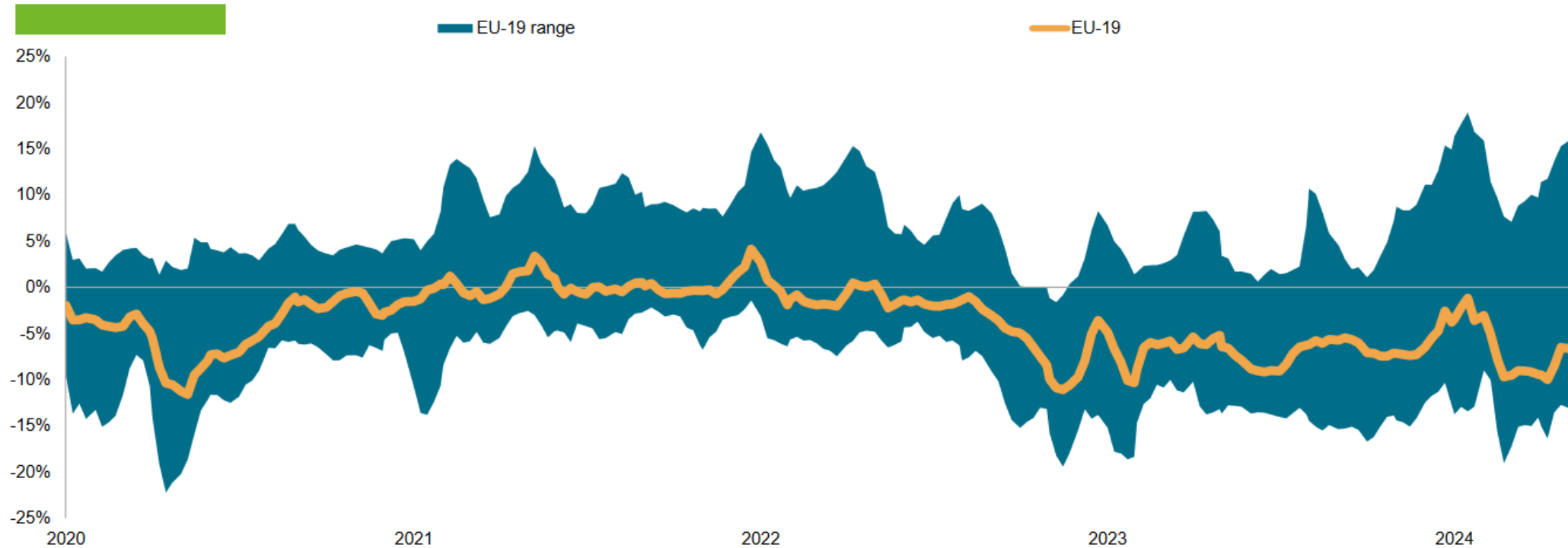


Electricity demand in SEE



Over the past years, electricity demand in Southeast Europe (SEE) is steady or declines.

Electricity demand in Europe



Data compiled June 4, 2024.

EU-19 refers to the following 19 countries: Austria, Belgium, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Italy, Latvia, Lithuania, Norway, Poland, Romania, Spain, Sweden, Slovakia and the UK.

Sources: ENTSO-E; National Grid ESO data, supported by EirGrid group data; S&P Global Commodity Insights.

S&P Global
Commodity Insights

The trend of declining electricity demand is observed across most European countries. So far in 2024, power demand is 3% to 10% lower than the average levels recorded between 2015 and 2019.

Why has electricity demand decreased?

01 

Economic Factors

Economic Slowdown & Deindustrialization

02 


Weather

Recent mild winters in Europe have reduced the need for heating

03 

Energy Efficiency

More energy-efficient appliances, industrial processes, and building standards

04 

Behavioral Changes

Increased awareness and lifestyle changes

05 

Market Dynamics

High prices led to reduced demand

06 

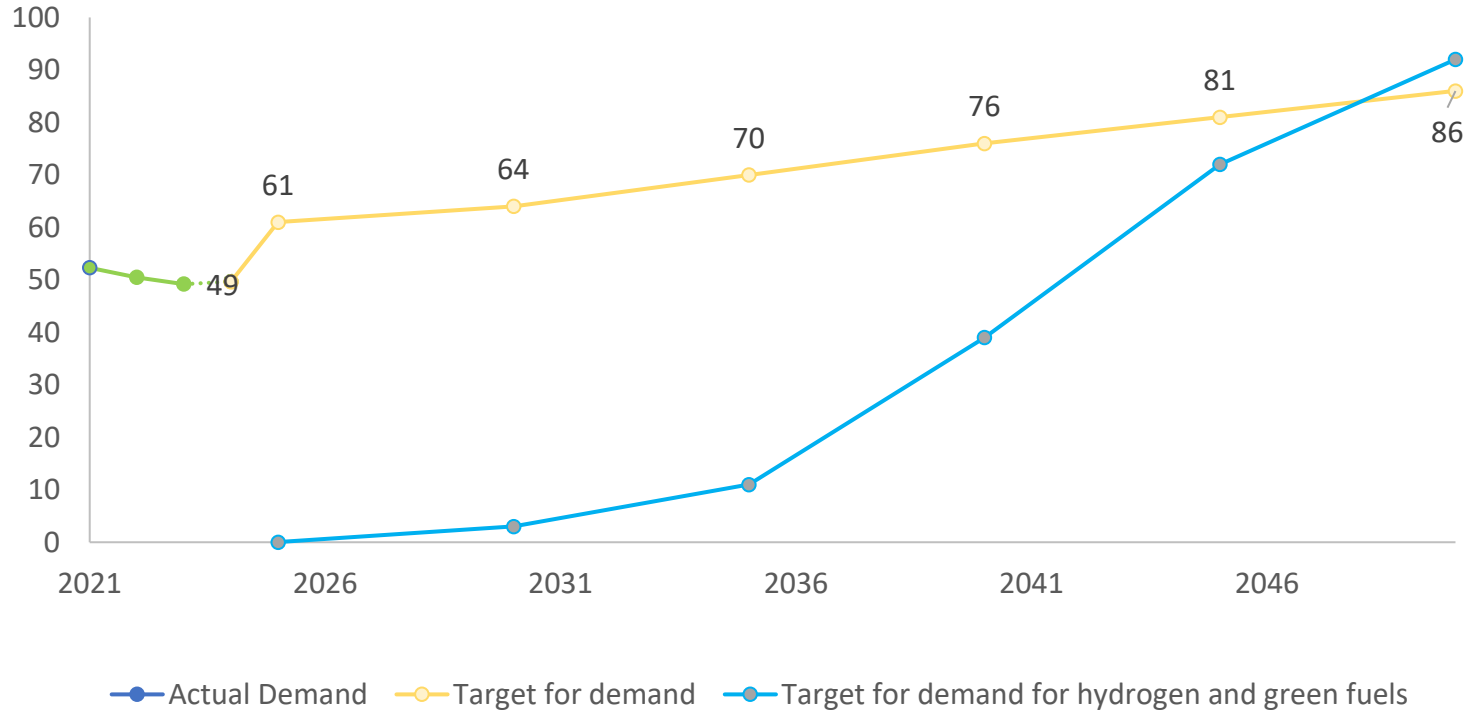
Accuracy of data?

Potential discrepancies in the data as energy is produced and consumed locally

Greek draft NECP targets

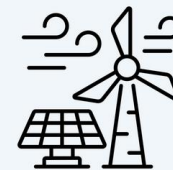


Evolution of electricity demand in Greece and draft NECP targets
(October 2023)



The draft of Greece's updated National Energy and Climate Plan (NECP) outlines ambitious electrification targets to decarbonize the economy for:

- Heating and Cooling
- Light Transport
- Industry

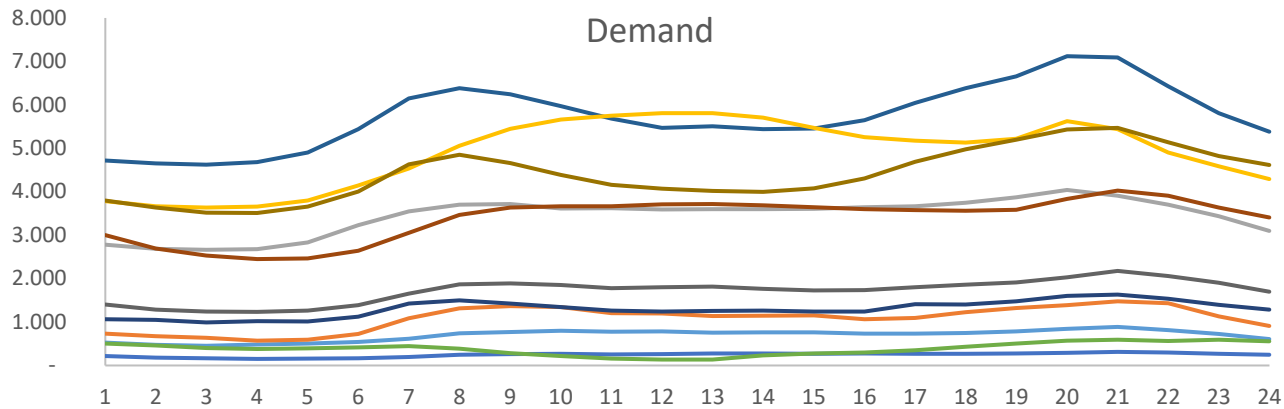


Target for 2030
44% of gross final
consumption by RES

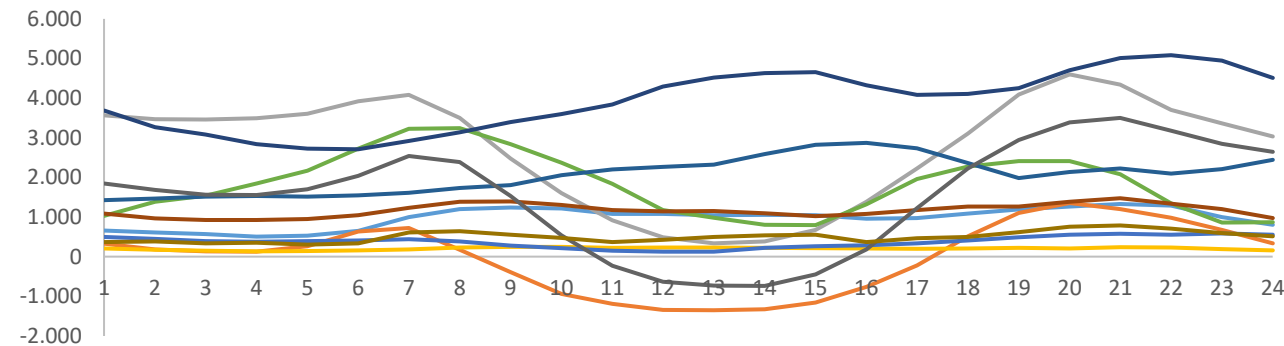
Daily patterns of consumption, 15/4/2024



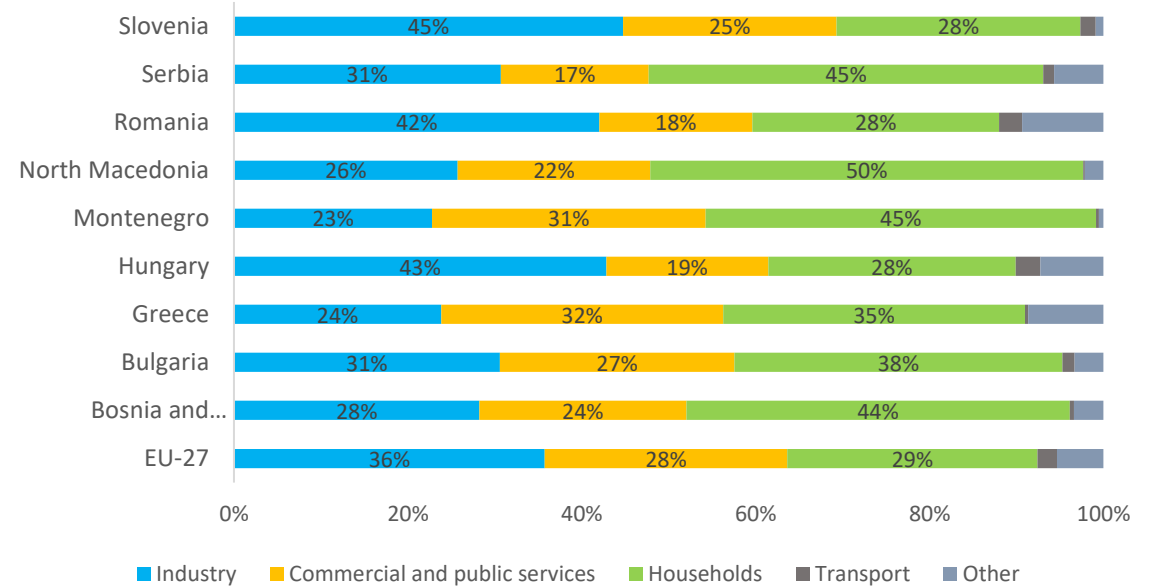
Demand



Residual demand



Electricity usage, 2021



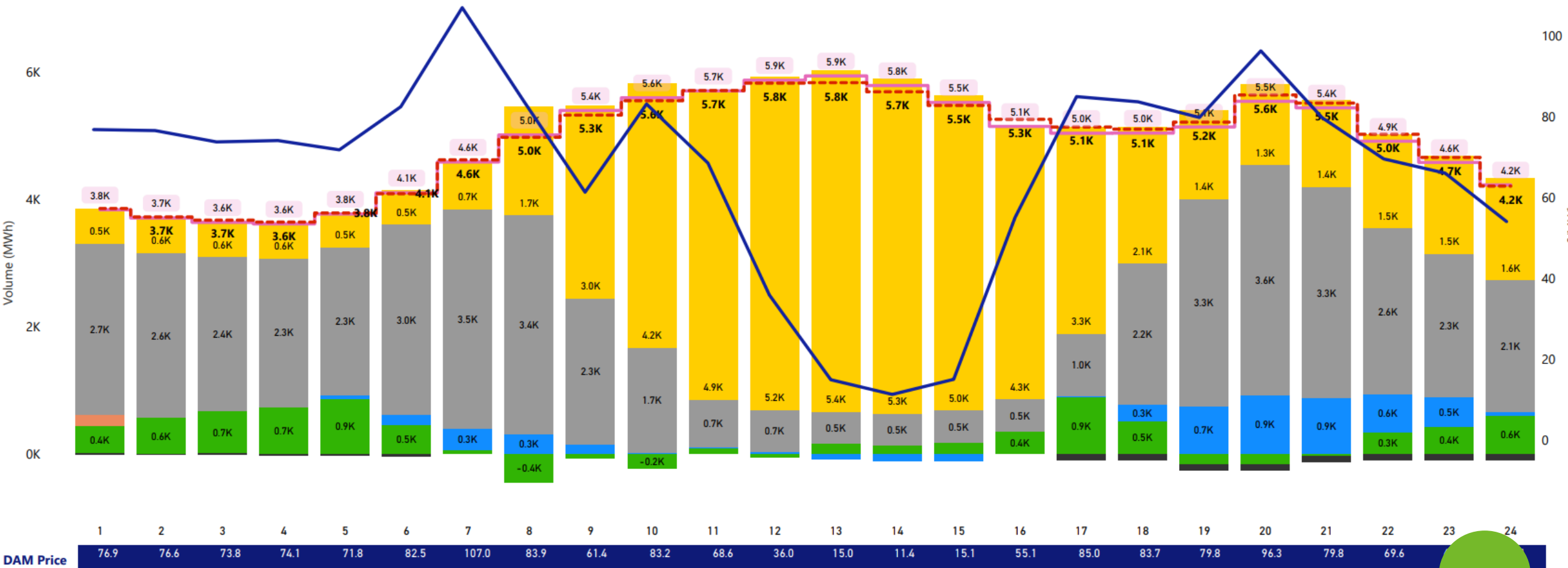
Consumption patterns vary throughout the day based on the unique characteristics of each country.

Low residual demand during noon in many countries

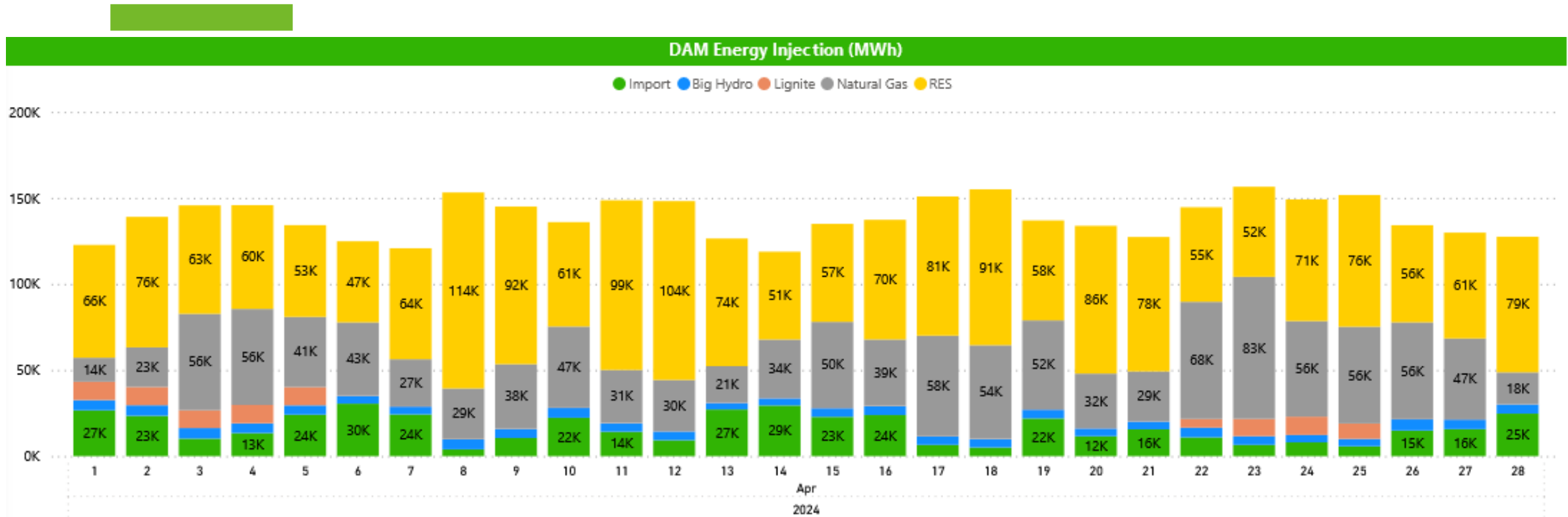
Greek Energy Mix, 15/4/2024

DAM Results: 15/4/2024

● Net Cross Border
 ● Net Hydro (Hydro -Pumping)
 ● Lignite
 ● Natural Gas
 ● RES
 ● Interconnected Crete
 — Interconnected Mainland
 — ISP1 Requirements
 — DAM Price



Greek Energy Mix, April 2024



Flexible and controllable generation is essential to cover demand when renewables are not producing, especially given the significant variations that can occur hour by hour or day by day.

There is the need for a capacity mechanism to ensure that the demand for electricity is always met.

Thank you for attention



Efi Milioni
e.milioni@elpedison.gr

