



# Regional Approach Athens

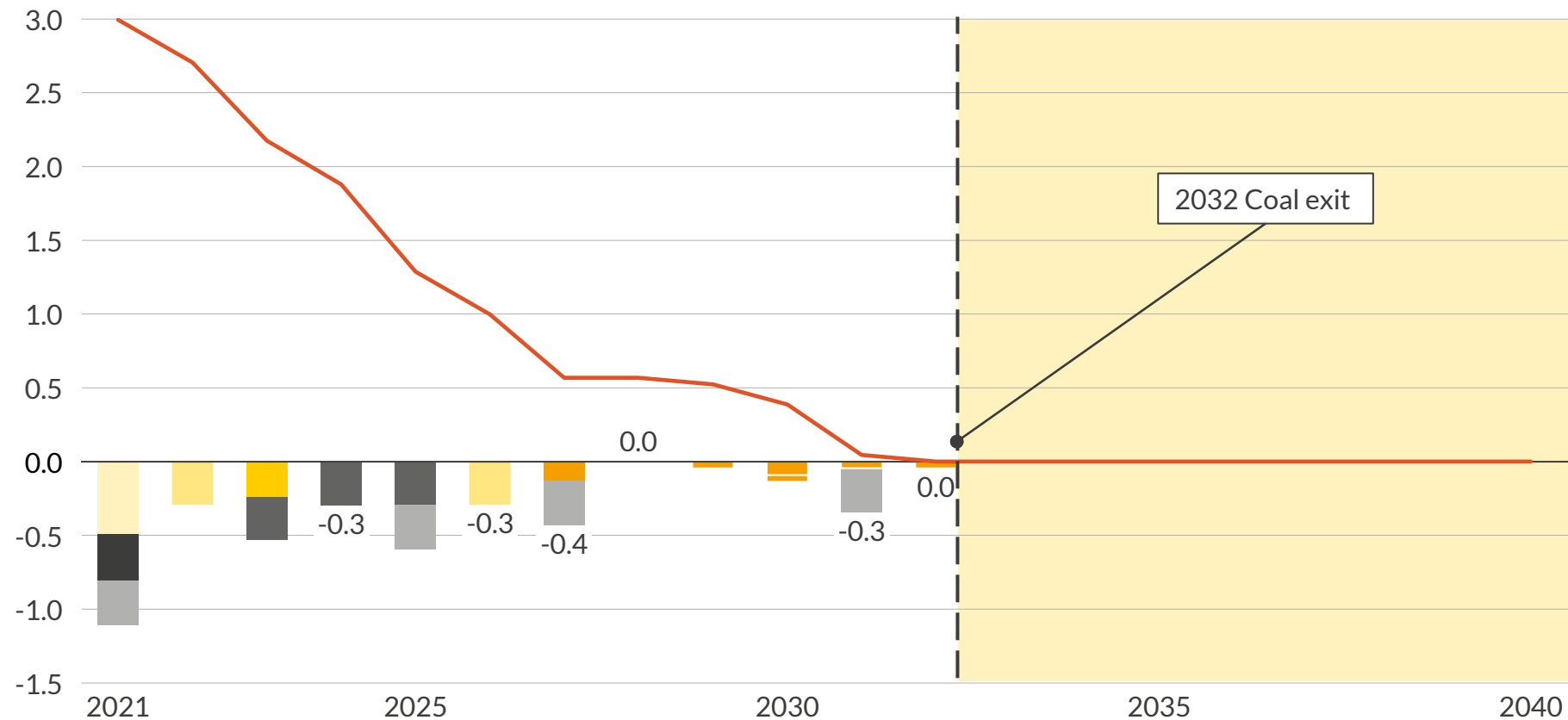
February 23<sup>rd</sup> 2024

Athens



# Romania's coal fleet is expected to be reduced by more than 50% by 2026 and eventually fully retire by 2032

Installed capacity  
GW



— Total   
 ■ Paroseni 4   
 ■ Isalnita 7-8   
 ■ Mintia-deva 5-6   
 ■ Turceni 3-7  
■ Coc-agg<sup>1</sup>   
 ■ Craiova-ii 1-2   
 ■ Mintia-deva 2-4   
 ■ Rovinari 3-6   
 ■ Arad

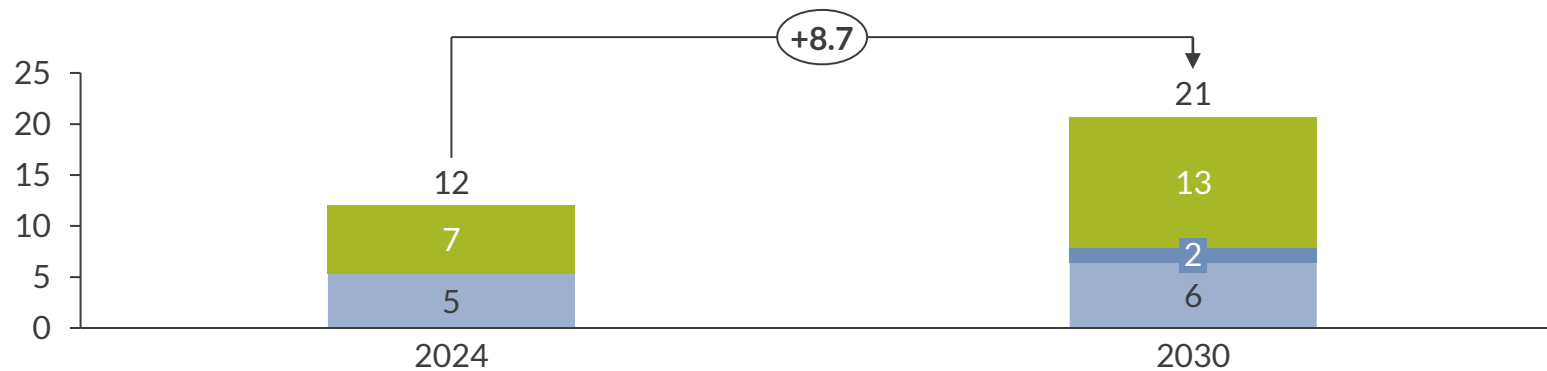
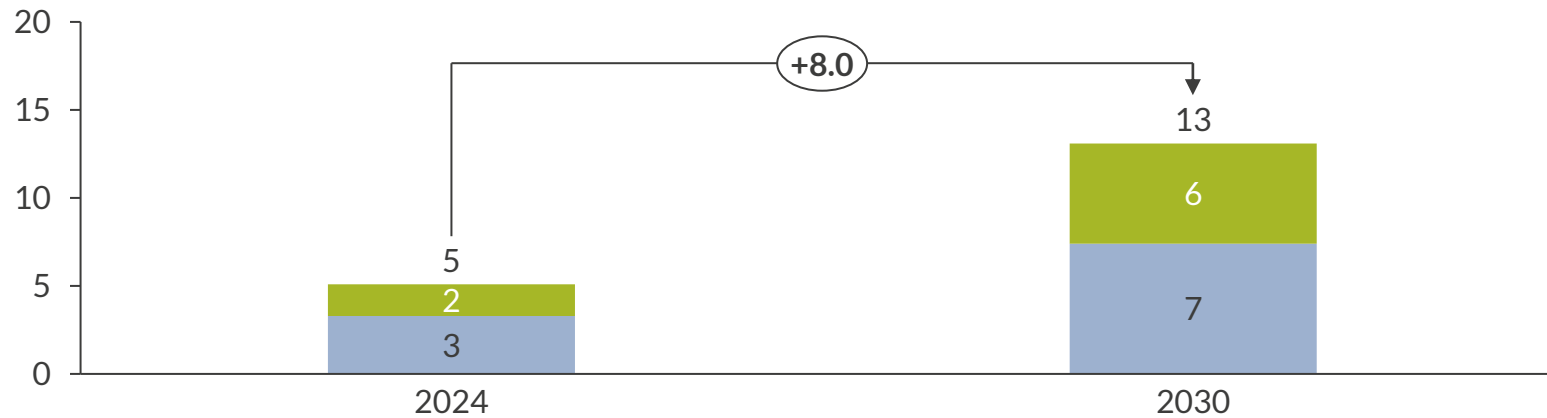
1) Aggregate of remaining coal CHP capacity.

## Comments

- Based on the lifetime and already announced retirement plans, Romania's coal capacity is expected to halve by 2026
- Coal is expected to be out of the Romanian power system by 2032 in line with the coal exit goal of the government
- By mid 2020s, a large retirement wave, as part of CE Oltenia's restructuring plan, is expected to lead to a significant loss of baseload capacity that could be replaced by gas, RES and potentially nuclear if the CfD scheme supports it

# As a result of thermal plant retirements and increasing commodity prices, renewables are set to experience a strong growth

Installed capacity  
GW



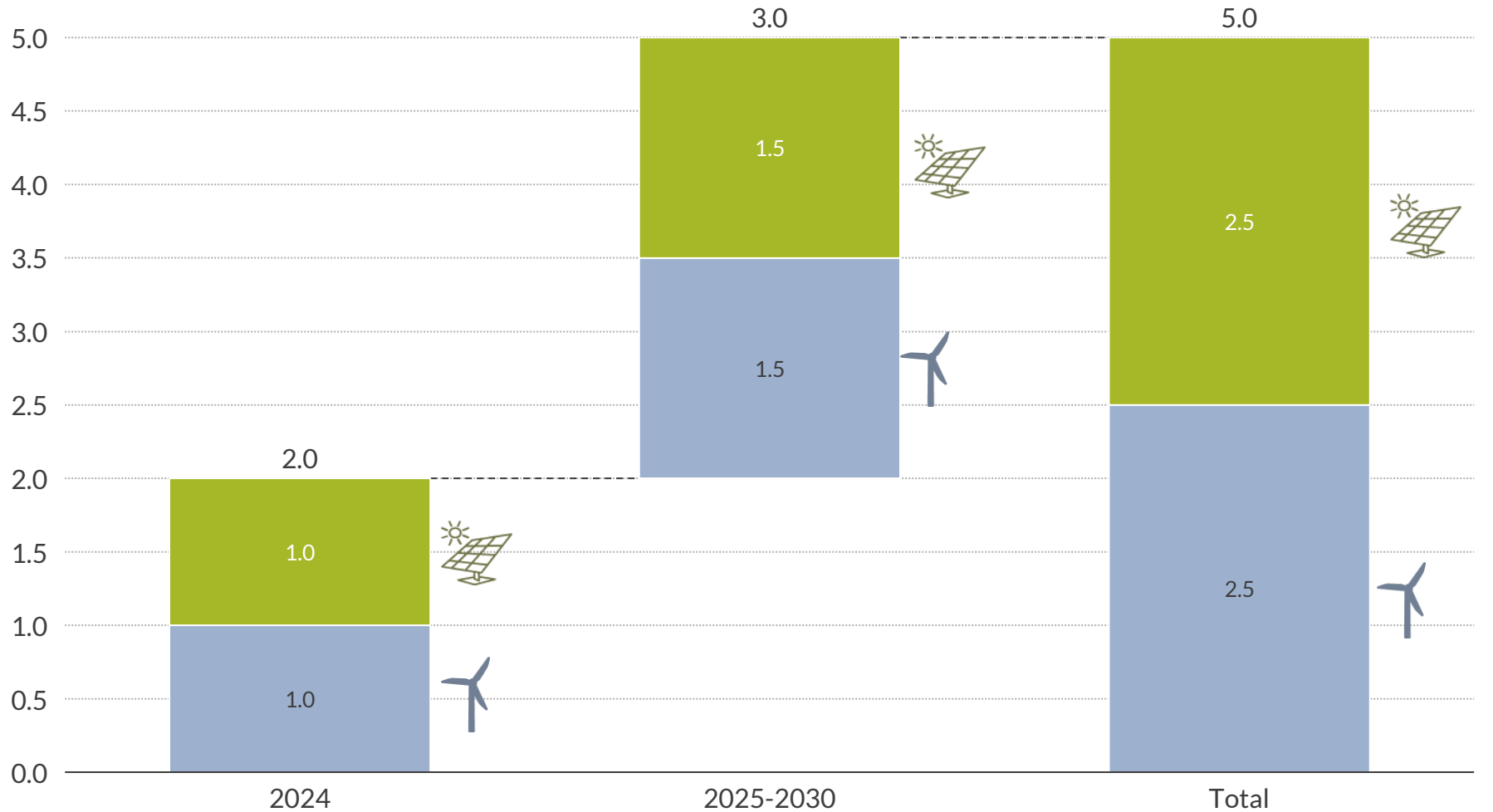
■ Solar 
 ■ Offshore wind 
 ■ Onshore Wind

## Comments

- Over 28 GW of new renewables capacity could be installed in Greece, Bulgaria, Romania and Hungary over the next 8 years, placing South Eastern Europe as a hot market for investors
- Renewables growth is expected to be higher in Greece followed by Romania
- The vast majority of new capacity is expected to come from solar PV as merchant economics appear more attractive than those of onshore wind
- The early wave of RES deployment experience in both Romania position these countries at the forefront of SEE for the new upcoming wave

# Romania's upcoming CfD scheme is set to support 5 GW of RES projects, split in two auctions, 2 GW in 2024 and 3 GW from 2025

Potential solar PV and onshore wind capacities eligible for the CfD auctions  
GW

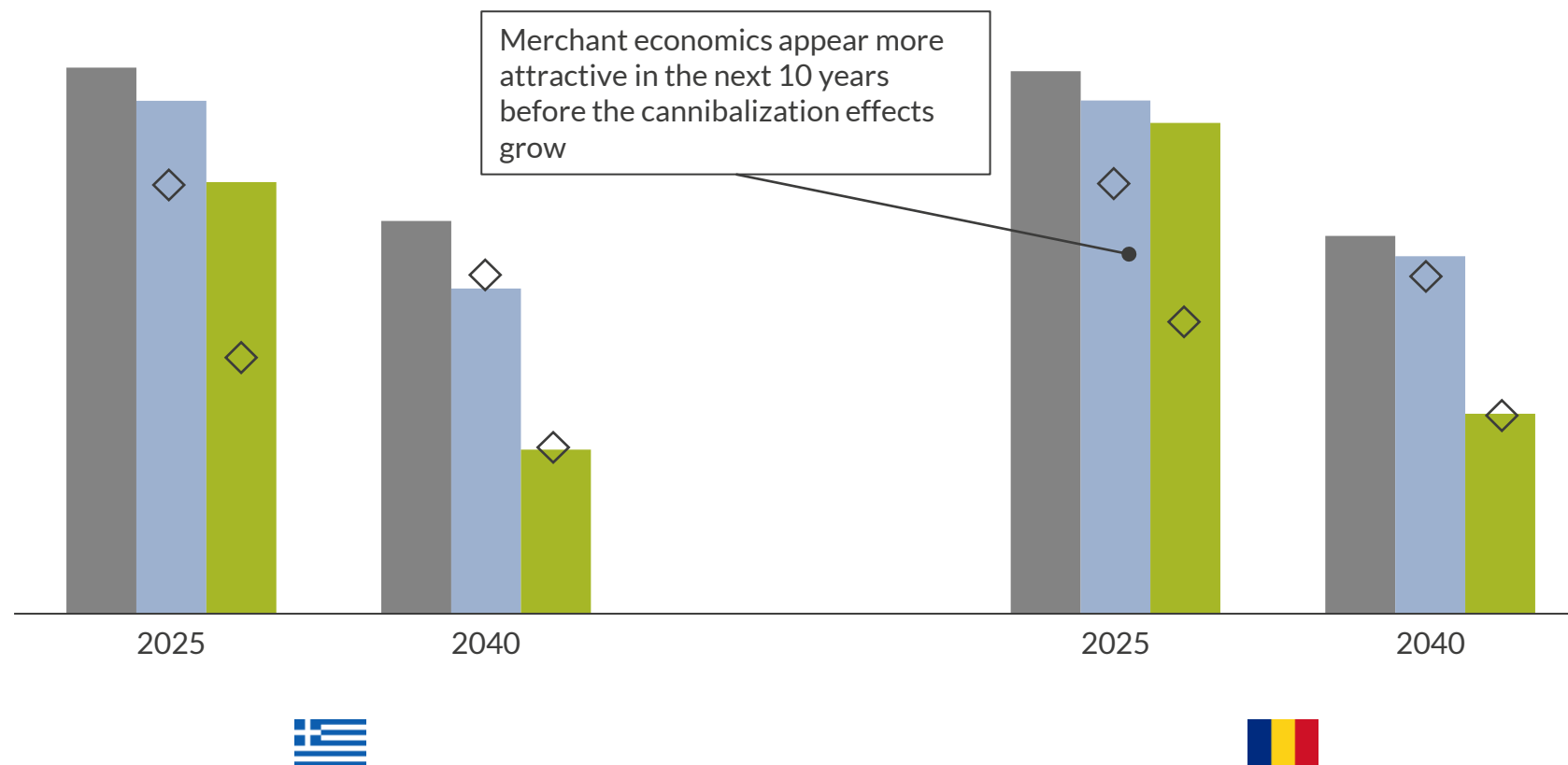


- The first stage of the CfD scheme is set to support onshore wind and solar PV projects with a total capacity of 5 GW
- It is split in two auctions, the first auction is planned for 2024 for 2 GW and the second auction in 2025 for 3 GW
- Each auction will be equally split between the two technologies
- Similarly to Greece for the past 3 years, Romanian CfDs can pave the way to a wide deployment of RES after a long stalling
- **Synergies** between the countries can be found when considering
  - Financing (how banks have adjusted to the new conditions)
  - Project planning and best practices
  - Licensing speed ups

# On top of subsidized renewables, capture prices for wind and solar appear attractive for large amounts of merchant deployment

## Baseload and uncurtailed capture prices<sup>1</sup>

EUR/MWh



## Comments

- Understanding merchant project economics will be crucial in both the Greek and Romanian markets since the lion share of new projects in the next 10 years are set to be unsubsidized
  - Finding alternative route to markets will prove more and more critical
  - The Greek PPA market is now developing quickly while the Romanian market has also seen some deals with industrial consumers
  - Sharing knowledge around PPA structuring, fair value estimations, efforts to educate off-takers and lobbying for PPA frameworks will be key for both countries

■ Baseload ■ Capture price Wind ■ Capture price Solar ◇ LCOE - 11% discount rate<sup>2</sup>

1) Average capture price for each MWh produced of theoretical generation. 2). Discount rate of 11%. Assuming load factors of 21-23% for tracking solar and 28-30% for onshore wind in Greece. Assuming load factors of 20-22% for tracking solar and 30-32% for onshore wind in Romania.

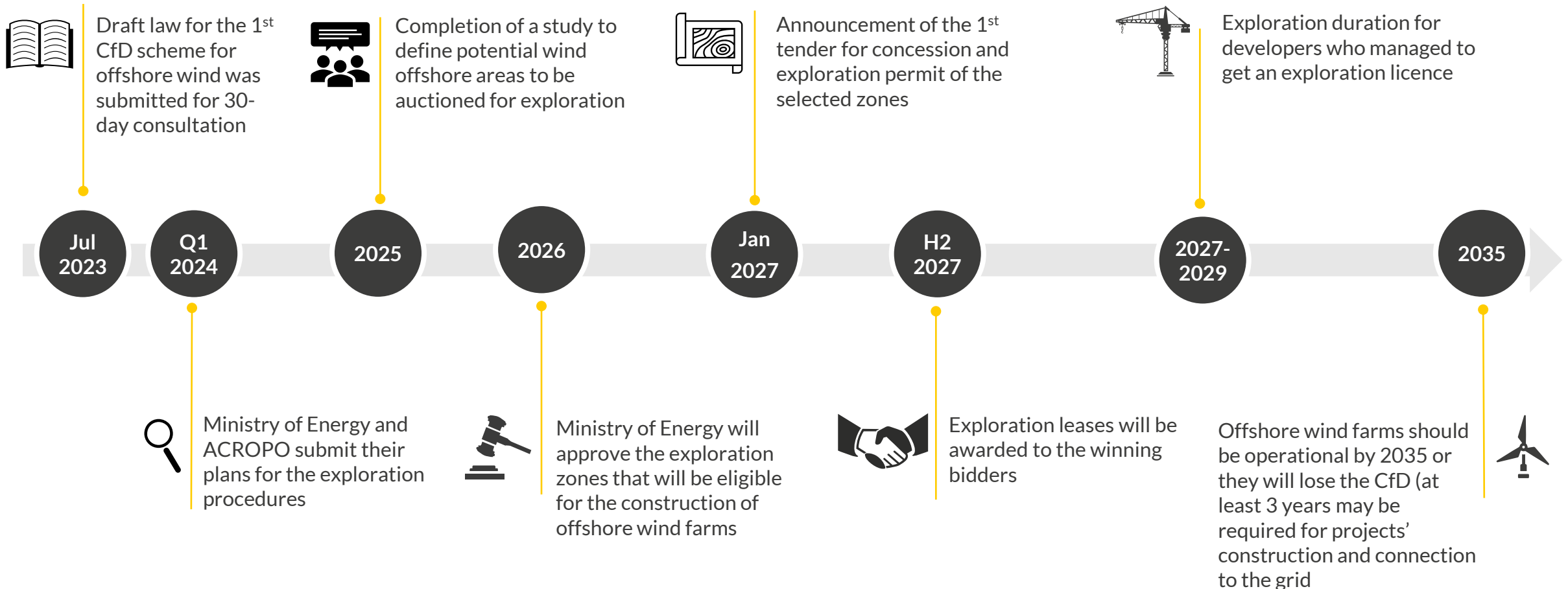
# Romania is expected to remain the largest power market in SEE until 2040, followed very closely by Greece

Annual demand demand in 2025 and 2040  
TWh



# Apart from onshore wind and solar, offshore wind plans are currently being finalised in Romania; 3 GW is targeted by 2035

Indicative timeline for the commissioning of the first offshore wind farms in Romania by 2035



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