Nuclear power for energy security in South East Europe

dr.ir. Aliki van Heek
Bèta Research
Associate to Nuclear-21

Bèta Research GmbH
Energy Transition and Data Services

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Nuclear power for energy security in South East Europe

Daily security

firm and predictable electricity for the regional grid

Strategic security

less exposure to gas availability and price shocks

Transition security

a stable backbone for a higher-renewables power mix

SEE already has a nuclear base

Operating assets, shared ownership and new capacity underway

6 countries active in nuclear

Bulgaria, Croatia, Hungary, Romania, Slovenia and Türkiye

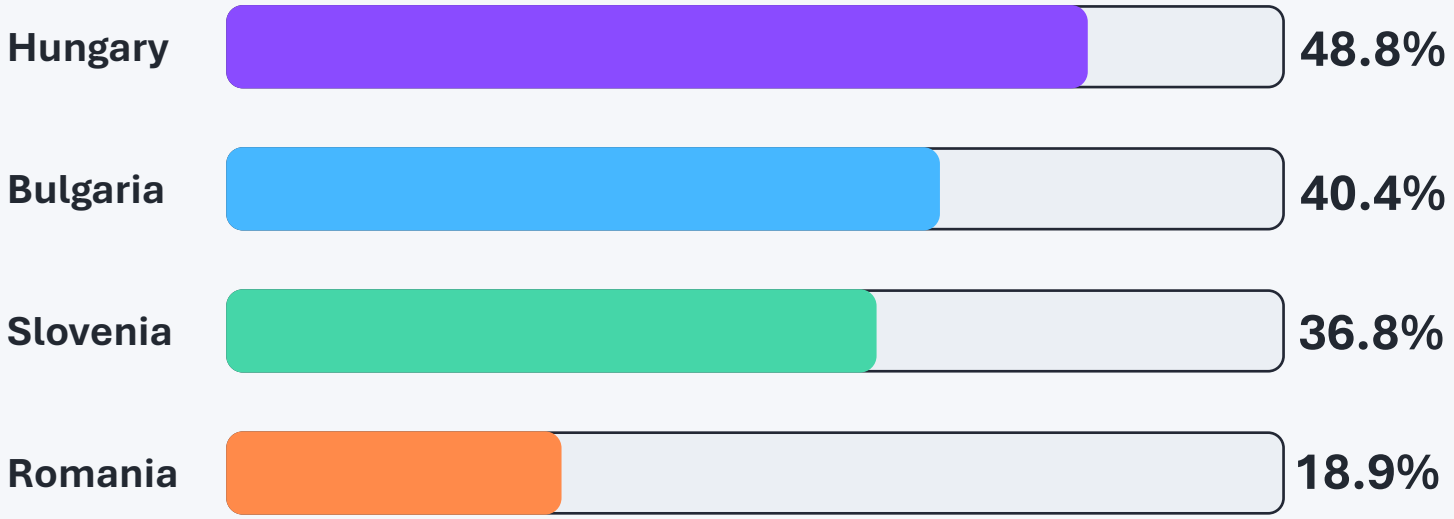
Operating today

Bulgaria, Hungary, Romania and Slovenia; Croatia participates through its 50% share in Krško.

Under construction

Türkiye is building 4 reactors at Akkuyu; when complete, the plant is expected to cover about 10% of national demand.

Nuclear share of electricity generation in 2023

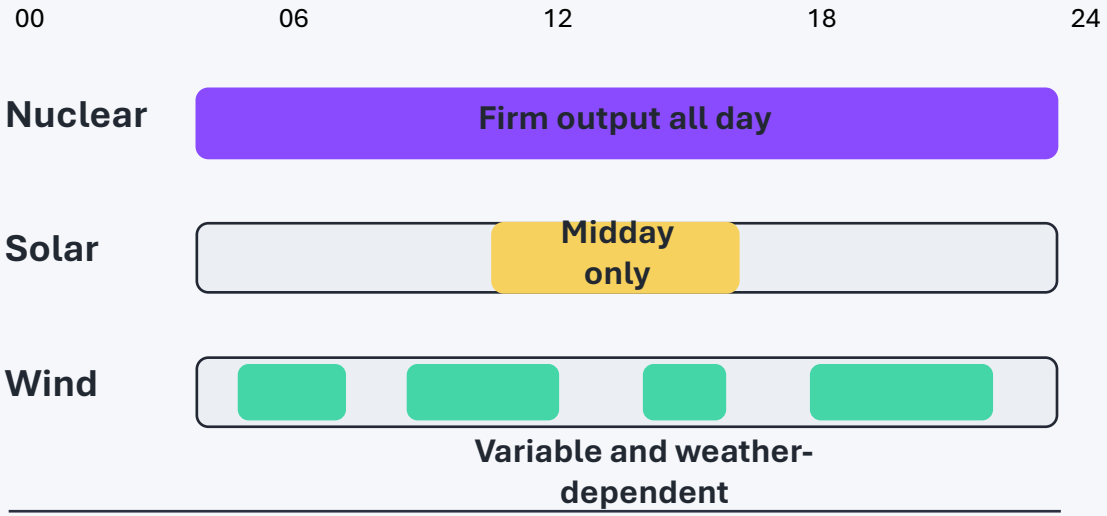


The existing fleet already supplies a large share of firm electricity in several SEE systems - and provides a platform for life extension and new build.

Why nuclear improves grid security

- predictable baseload
- long term: reduction of dependence on volatile fuel supply

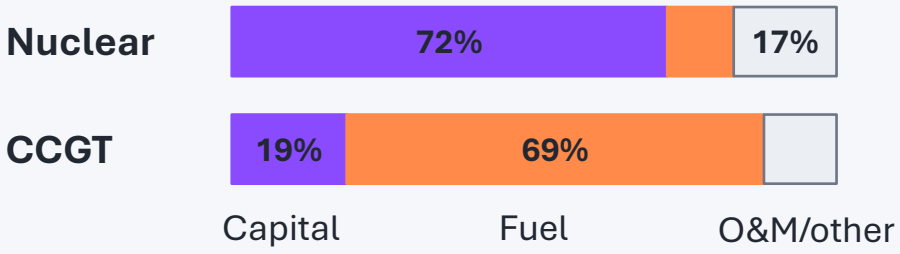
Illustrative daily adequacy picture



The larger the firm nuclear block, the less gas-fired or imported power the system must find during low-wind / low-solar hours.

- Predictable output regardless of wind and solar availability
- Long-lived assets support adequacy for decades
- Fuel-price shocks hit nuclear less than gas-fired generation

Cost structure of electricity generation



What Europe should back next in SEE

A balanced pathway:

1 Keep the current backbone

Life extensions at Kozloduy, Paks, Cernavoda and Krško preserve existing firm capacity at the lowest system-disruption risk.

2 Build at proven nuclear sites

Kozloduy AP1000, Paks II, Cernavoda 3&4, JEK2 and Akkuyu completion show where large-scale firm capacity can realistically be added.

3 Use SMRs selectively

SMRs are most relevant for coal-to-nuclear replacement, smaller grids, industrial nodes and sites where large reactors are impractical.

Enablers:

- Stable financing models (CfD, PPA, export credit, carefully structured state support)
- Strong regulators, skilled workforce and public credibility
- Fuel diversification, regional supply chains and cross-border system planning

For SEE, nuclear is not an alternative to renewables - it is the firm backbone of a secure, balanced electricity mix.

Thank you for your attention!

vanheek@nuclear-21.net

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