



Uniting Europe's Energy, Today

Electricity Flows WB6 - EU

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CBAM Technical Meeting Brussels
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Content

Scheduled vs Physical Flows between WB6 and the EU

Net Import/Export vs Export & Transit to EU by WB
Contracting Parties with EU borders

Greece's Energy Shift: From Importer to Regional Exporter
– Progress Under CBAM Uncertainty

Southeast Europe's DAM Prices: Growing Correlation,
Persistent Spreads

Legend

- EU Member States
- EnC WB6 CPs
- EU → WB6
- WB6 → EU

Net Import of WB6: 0.15 TWh

EU-27 Consumption: 2724.12 TWh

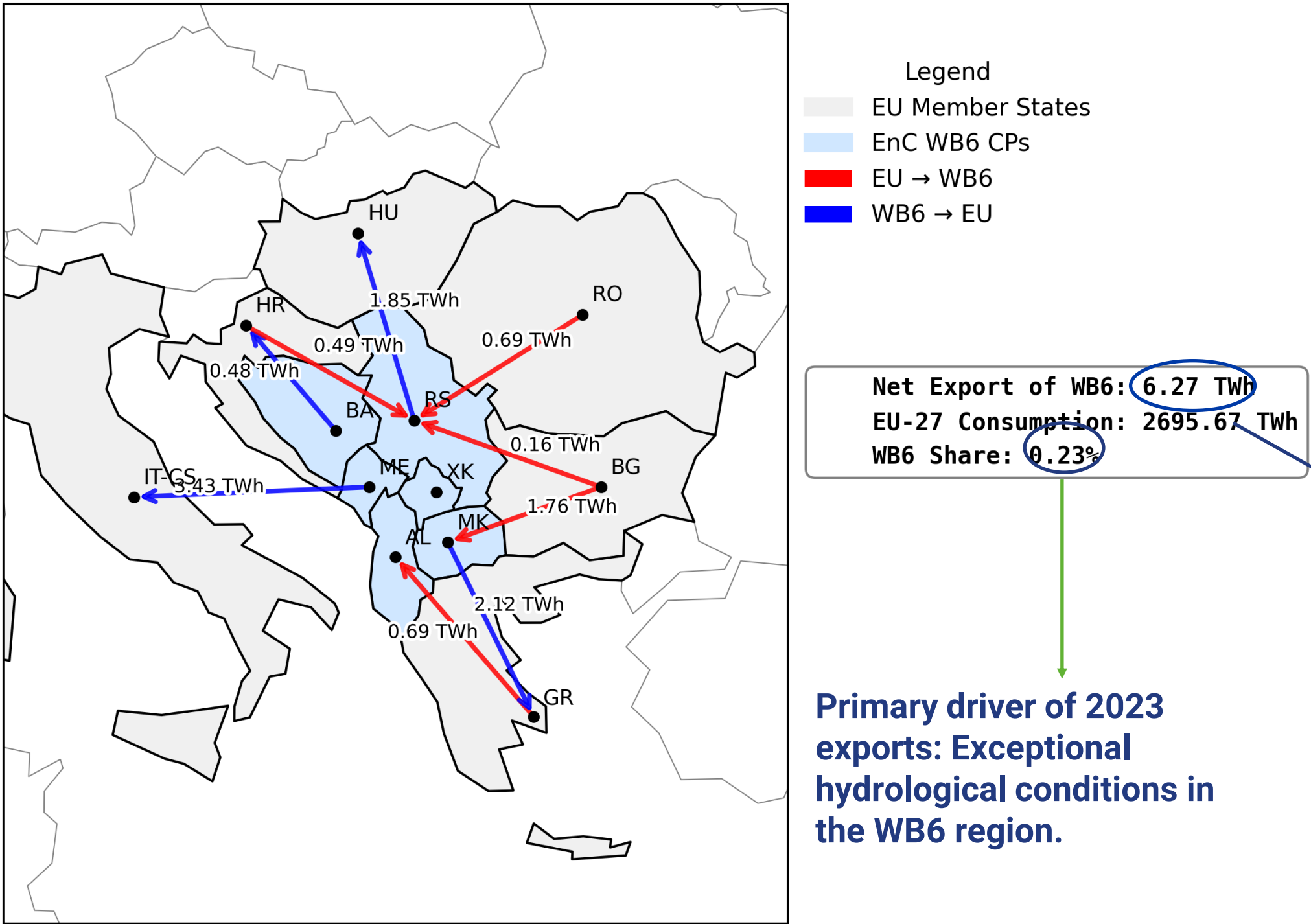
WB6 Share: 0.01%

Commercial Schedules do not always reflect the real direction or magnitude of Physical Flows.

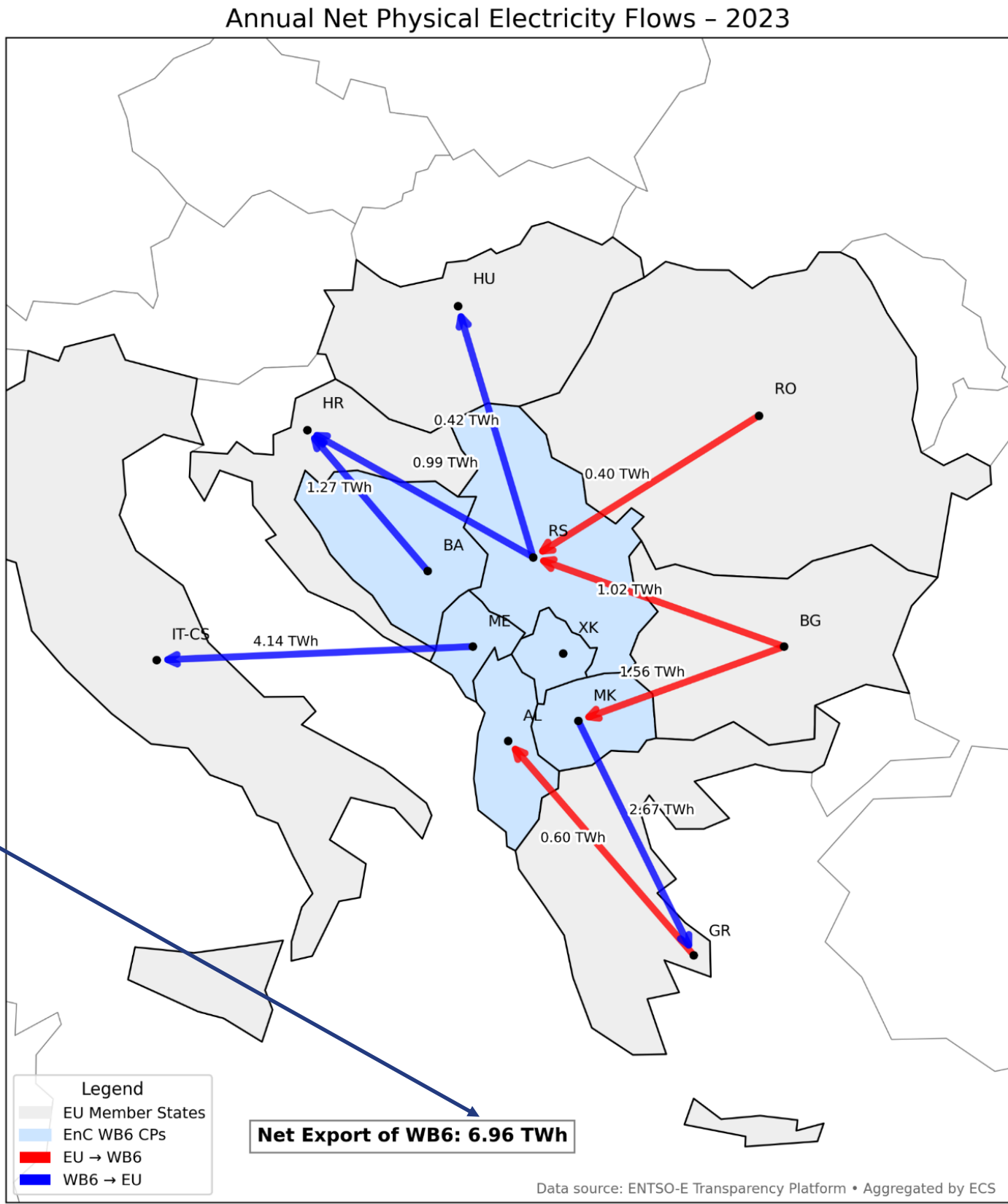


Scheduled Commercial vs Physical Flows 2023

Net Scheduled Commercial Electricity Exchange Flows - 2023

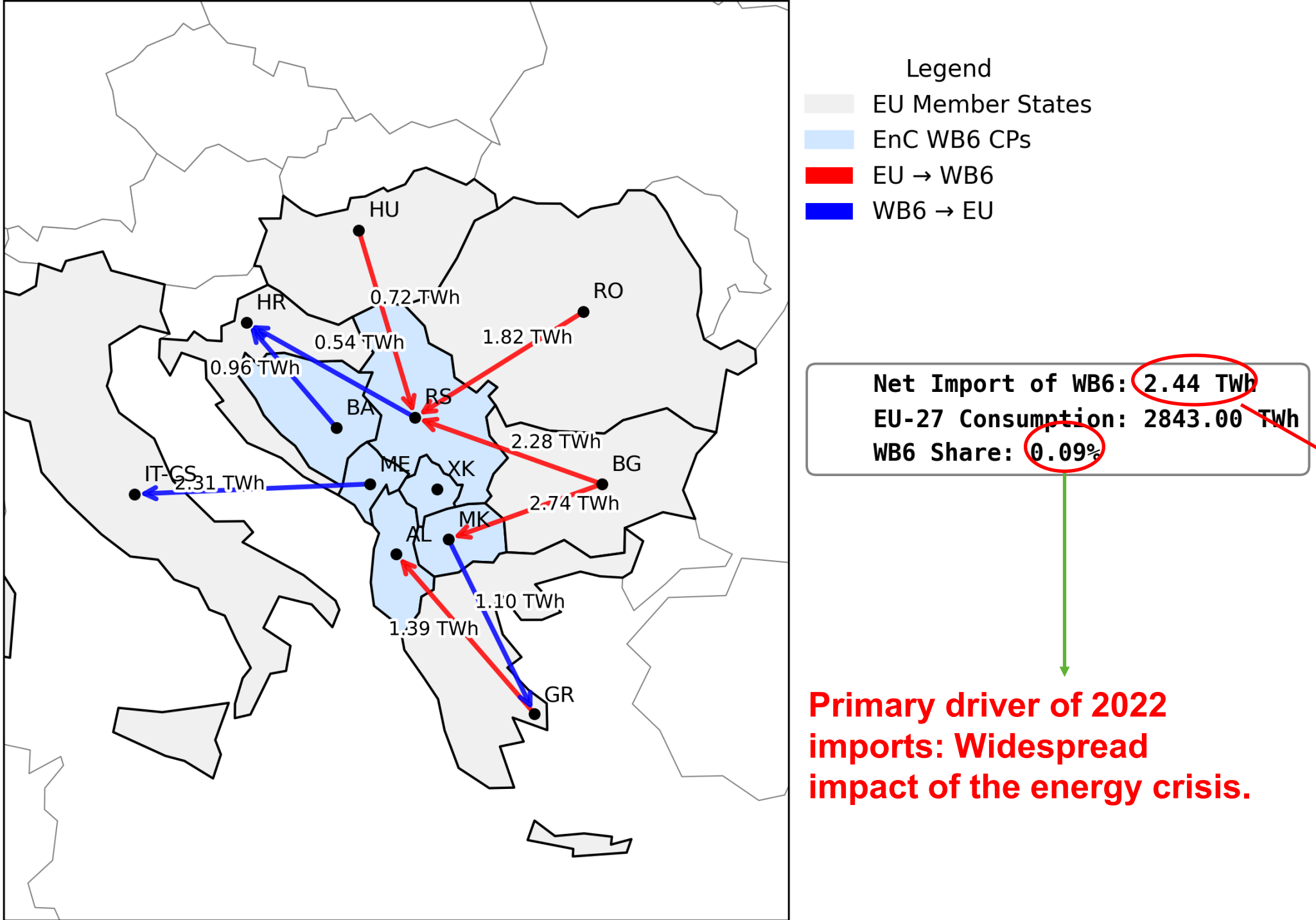


Data source: ENTSO-E Transparency Platform • Aggregated by ECS



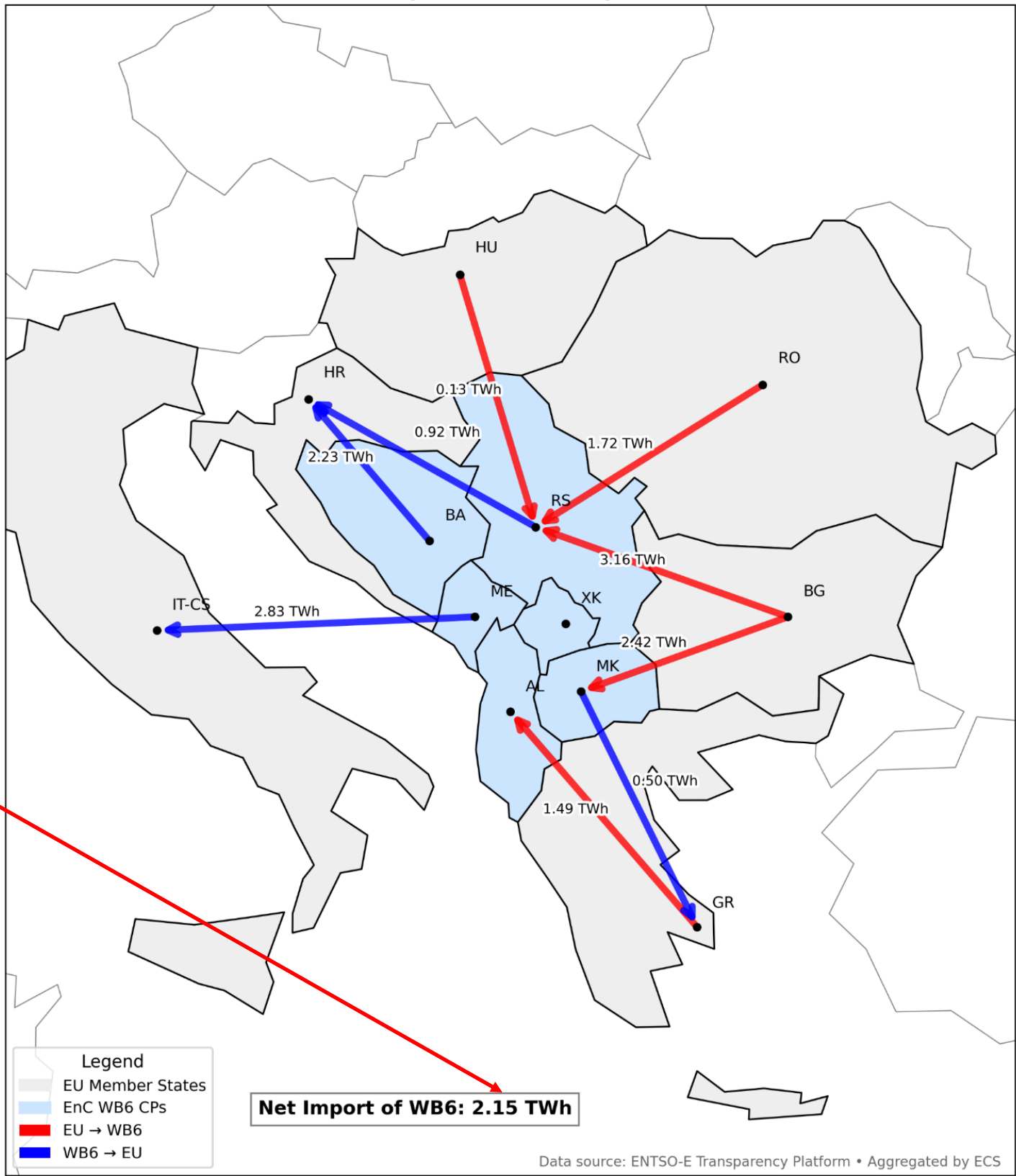
Scheduled Commercial vs Physical Flows 2022

Net Scheduled Commercial Electricity Exchange Flows - 2022

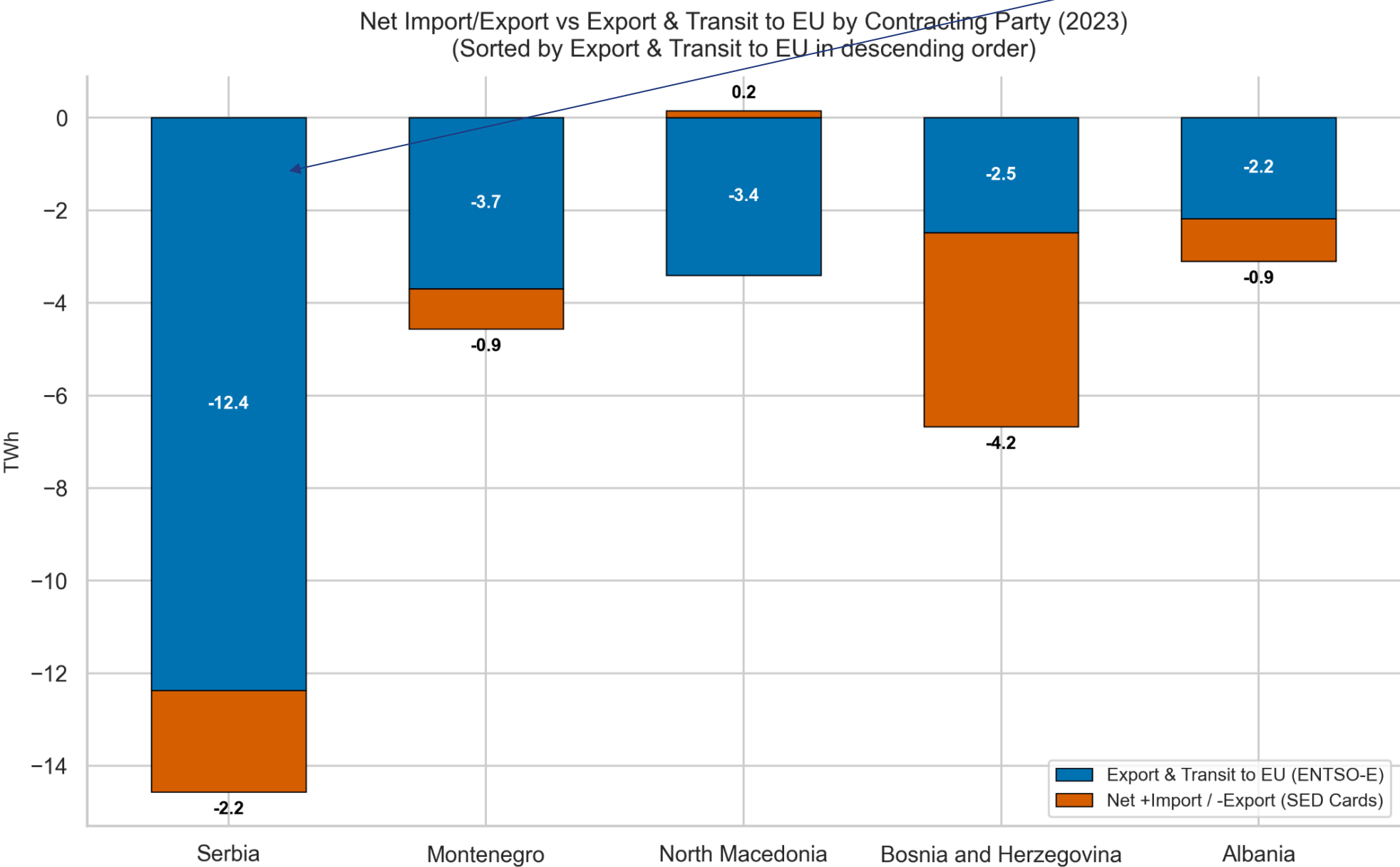


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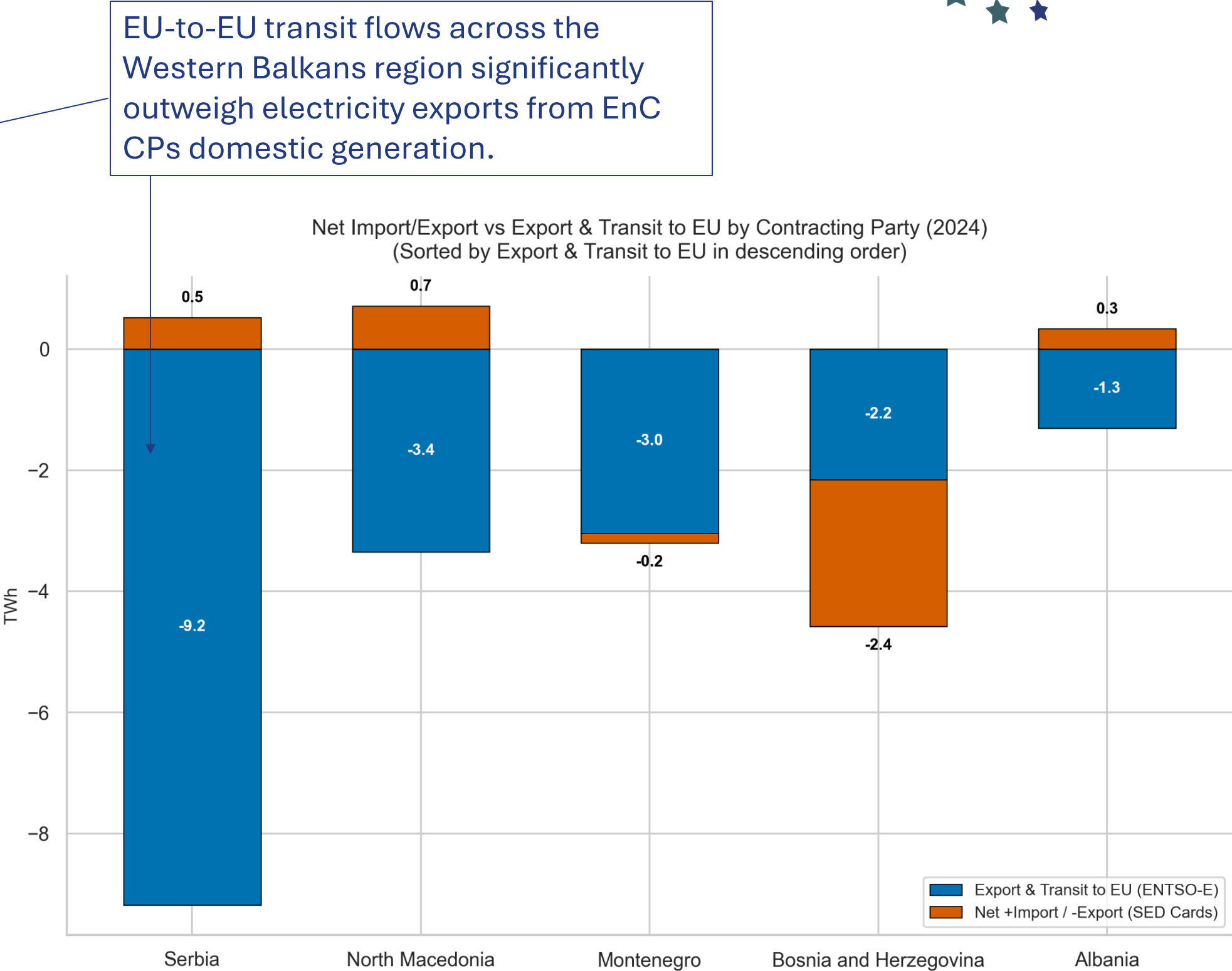
Annual Net Physical Electricity Flows - 2022



Net Import/Export vs Export & Transit to EU by CPs from WB with EU borders (2023 and 2024)



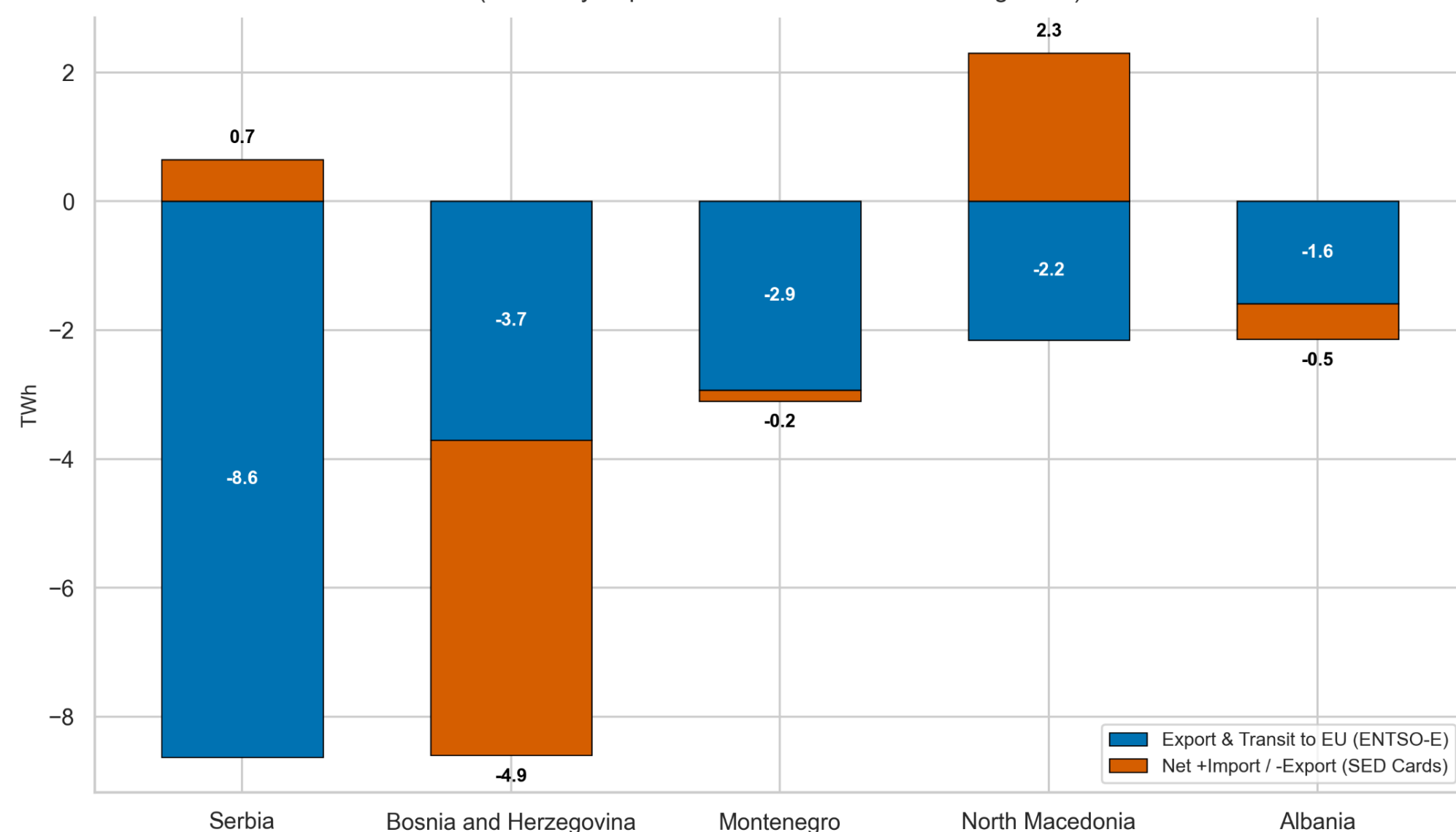
Net Import/Export: Contracting Parties' SED Cards • Export + Transit to EU: ENTSO-E Transparency Platform (Scheduled Commercial Exchanges) • Aggregated by ECS



Net Import/Export: Contracting Parties' SED Cards • Export + Transit to EU: ENTSO-E Transparency Platform (Scheduled Commercial Exchanges) • Aggregated by ECS

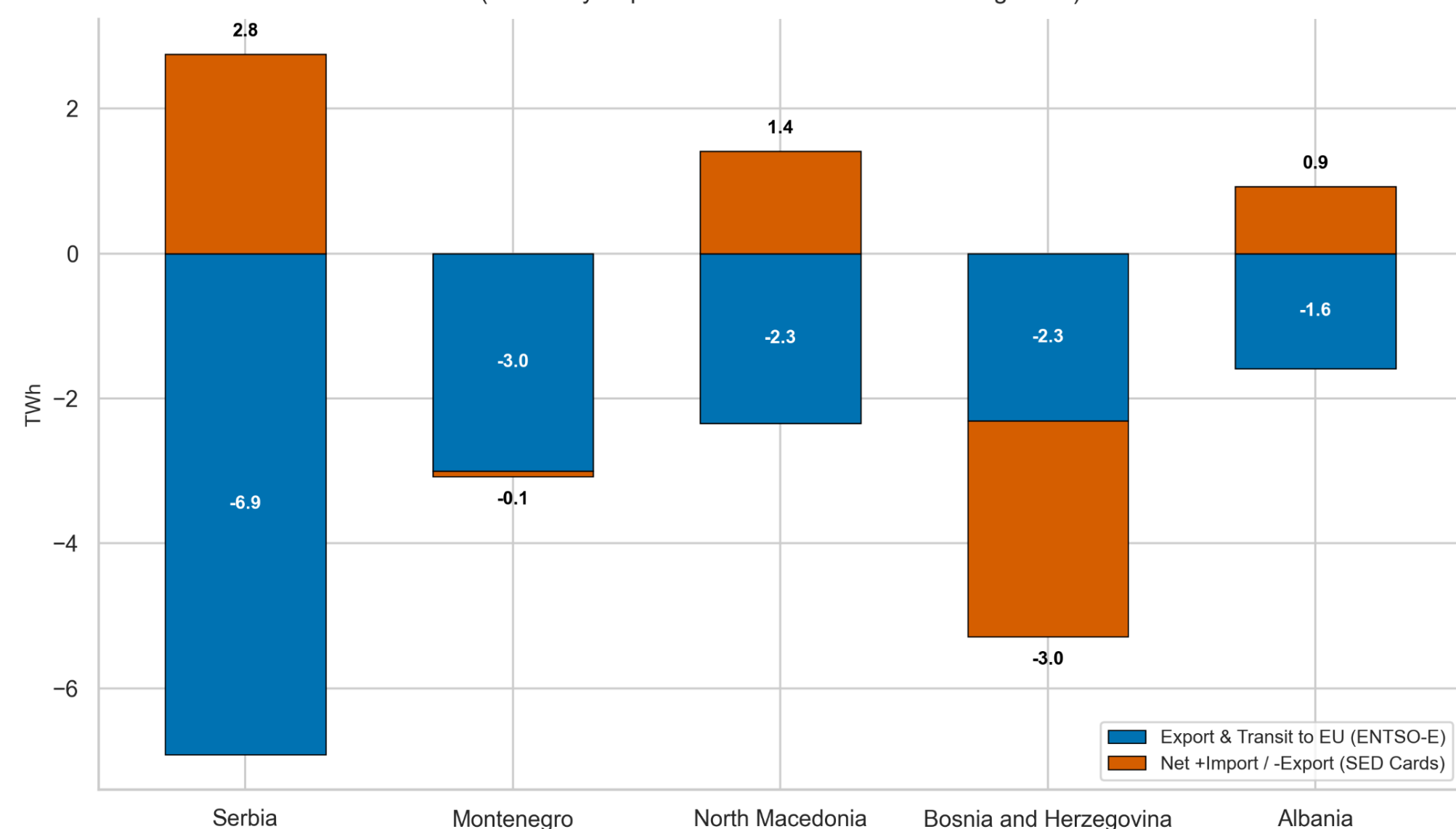
Net Import/Export vs Export & Transit to EU by CPs from WB with EU borders (2021 and 2022)

Net Import/Export vs Export & Transit to EU by Contracting Party (2021)
(Sorted by Export & Transit to EU in descending order)



Net Import/Export: Contracting Parties' SED Cards • Export + Transit to EU: ENTSO-E Transparency Platform (Scheduled Commercial Exchanges) • Aggregated by ECS

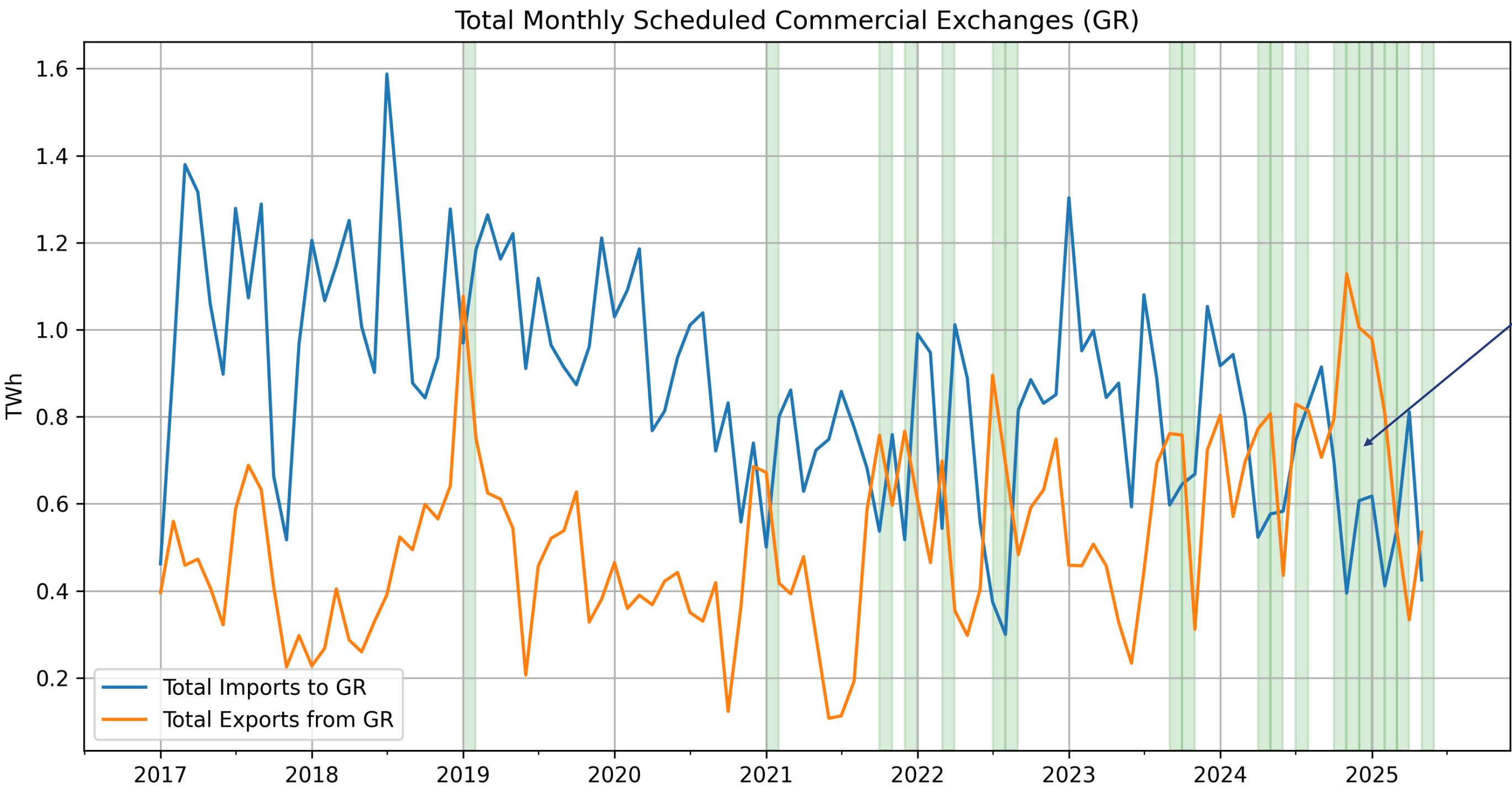
Net Import/Export vs Export & Transit to EU by Contracting Party (2022)
(Sorted by Export & Transit to EU in descending order)



Net Import/Export: Contracting Parties' SED Cards • Export + Transit to EU: ENTSO-E Transparency Platform (Scheduled Commercial Exchanges) • Aggregated by ECS

Greece's Energy Shift: From Importer to Exporter

Milestone in 2024 – Greece Becomes Net Electricity Exporter



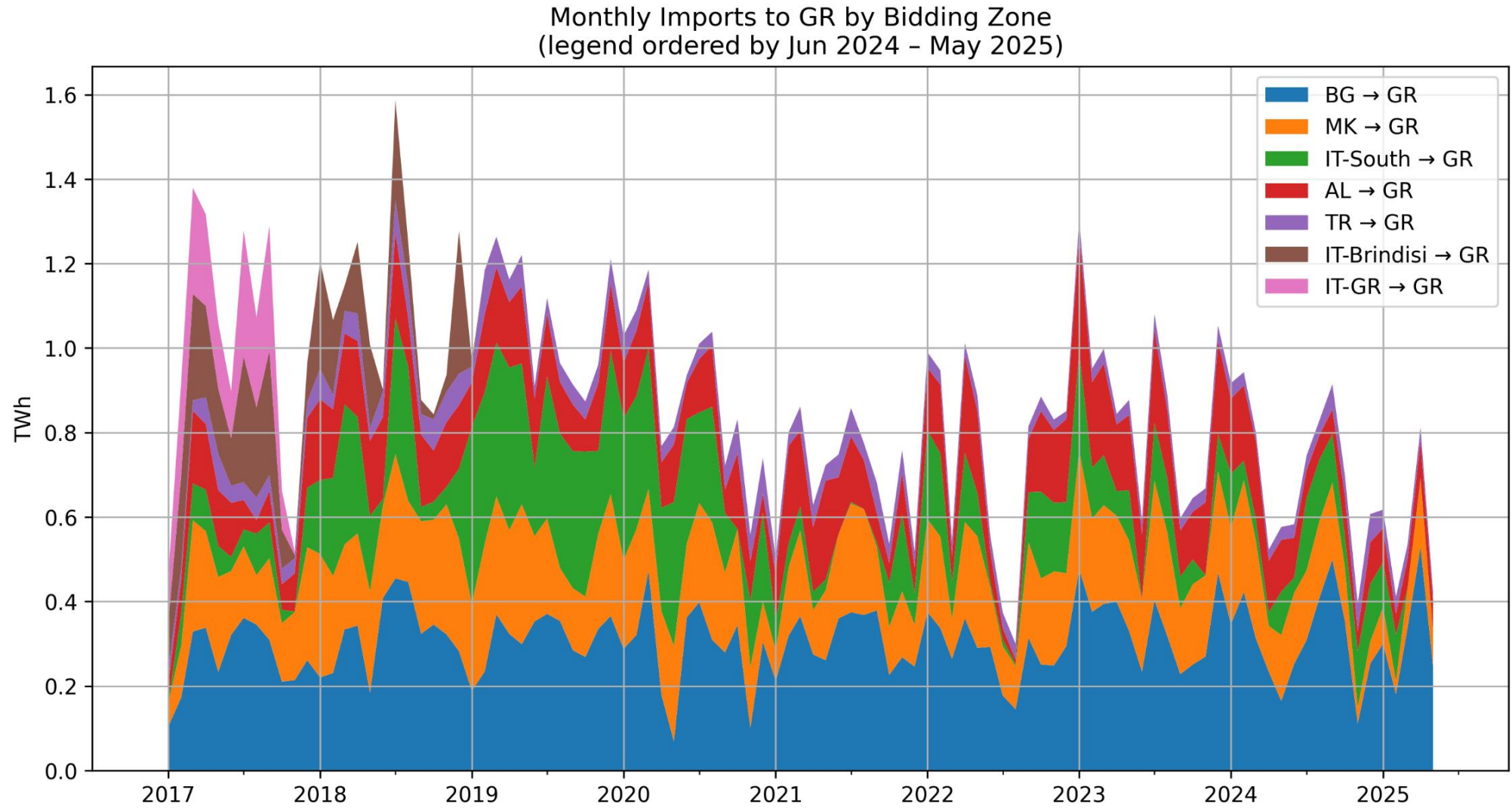
In 2024, Greece marked a significant milestone as a net electricity exporter with 0.8 TWh, only the second time since 2000. This trend persists into 2025.

The primary driver is the significant expansion of solar energy in recent years.

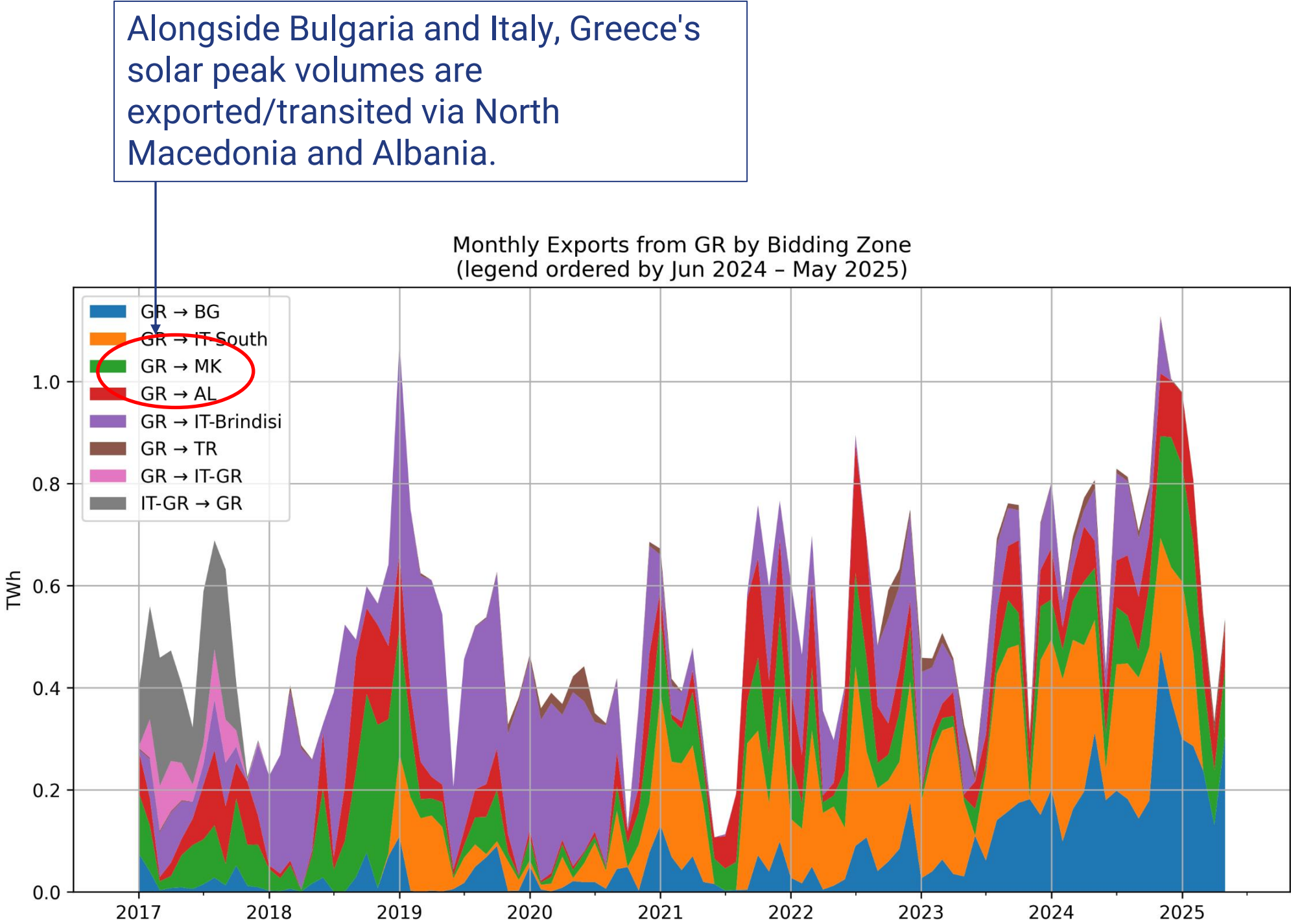
Data source: ENTSO-E Transparency Platform (Scheduled Commercial Exchanges) • Aggregated by ECS

Greece's Energy Shift: From Importer to Exporter

Solar-Driven Exports (including via North Macedonia and Albania)



Data source: ENTSO-E Transparency Platform (Scheduled Commercial Exchanges) • Aggregated by ECS

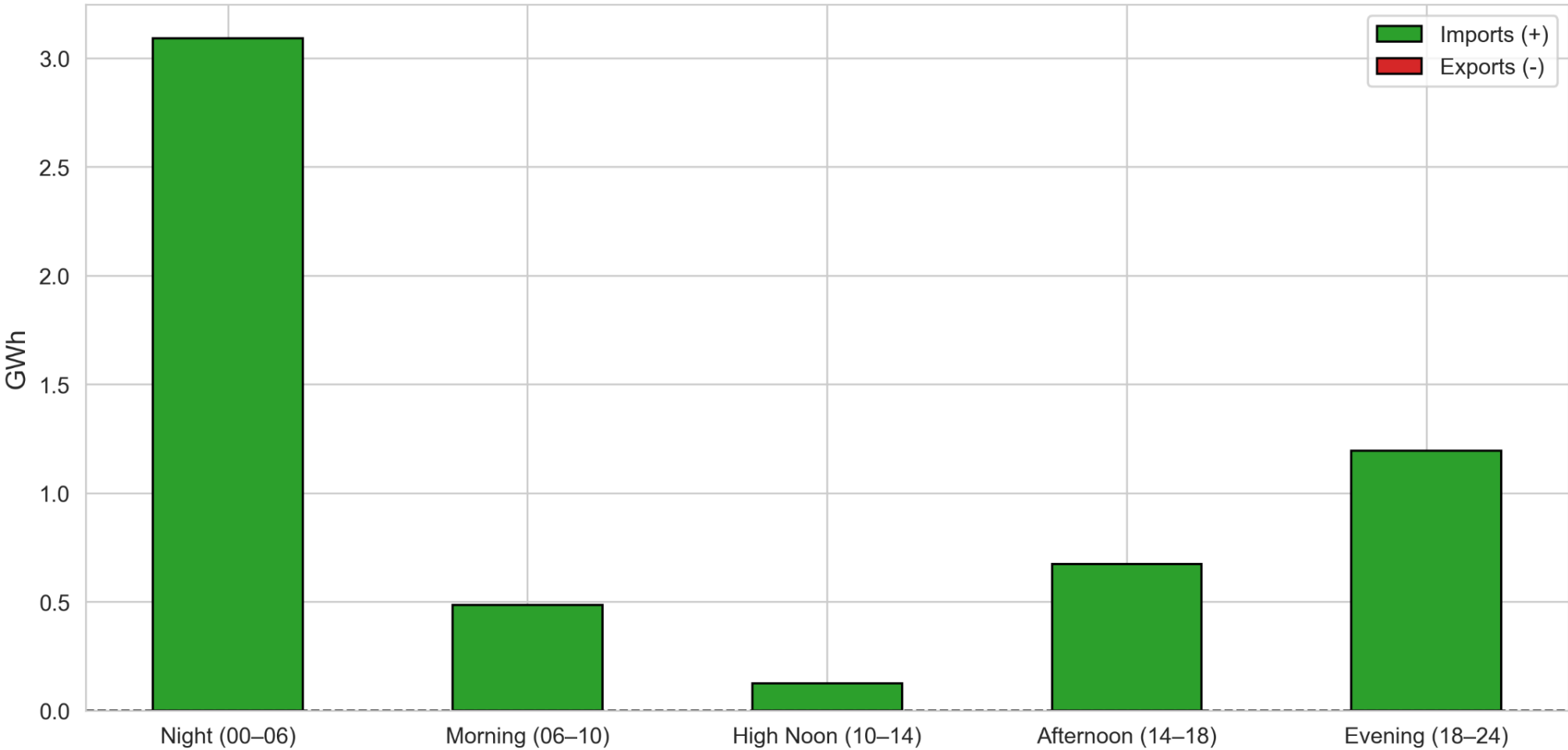


Data source: ENTSO-E Transparency Platform (Scheduled Commercial Exchanges) • Aggregated by ECS

Greece's Energy Shift: From Importer to Exporter

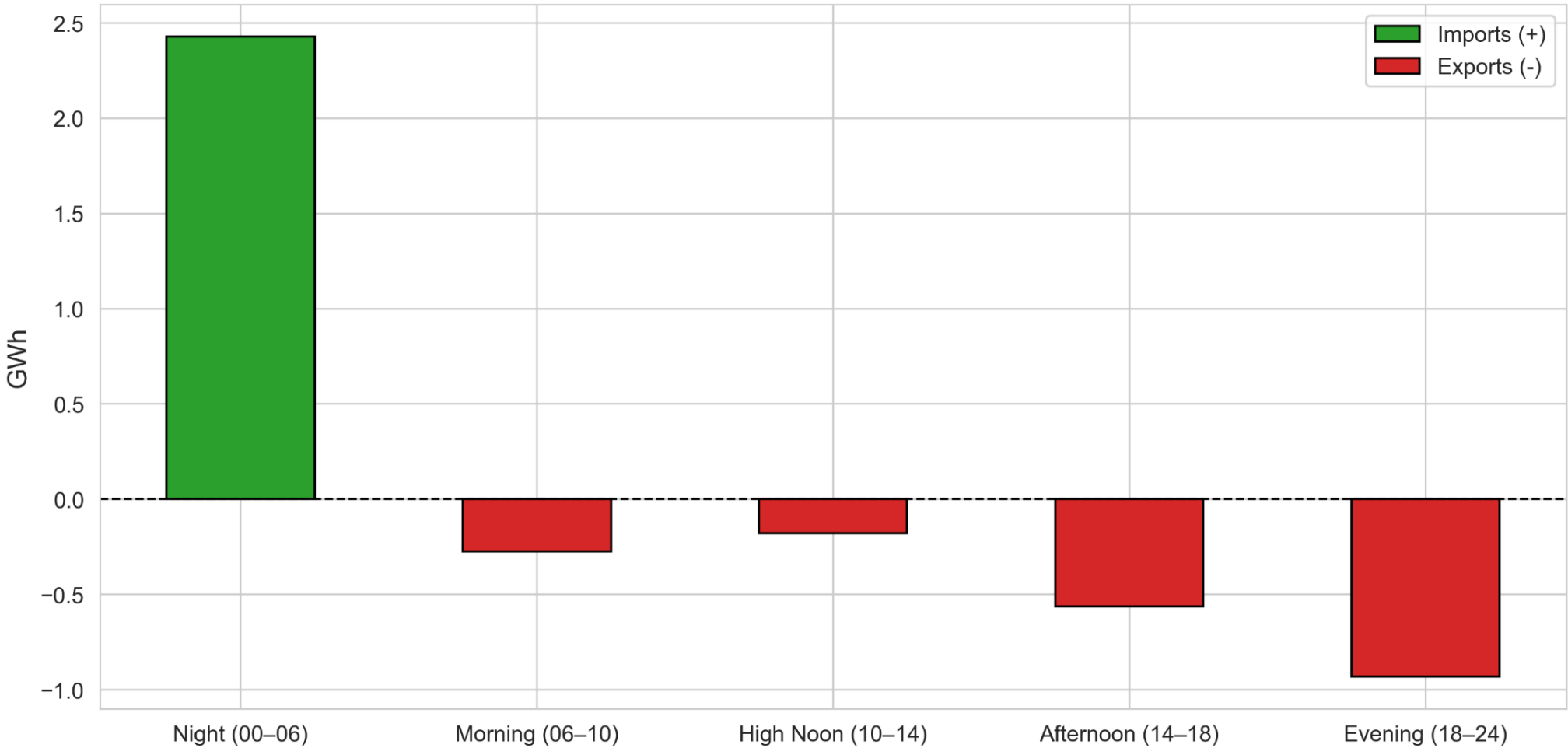
Transition from All-Day Net Imports to Daytime Net Exports – Hourly Blocks Net Flows (2023–2024)

Average Net Exports (-) / Imports (+) by Hourly Blocks in Greece (2023)



Data source: ENTSO-E Transparency Platform (Scheduled Commercial Exchanges) • Aggregated by ECS

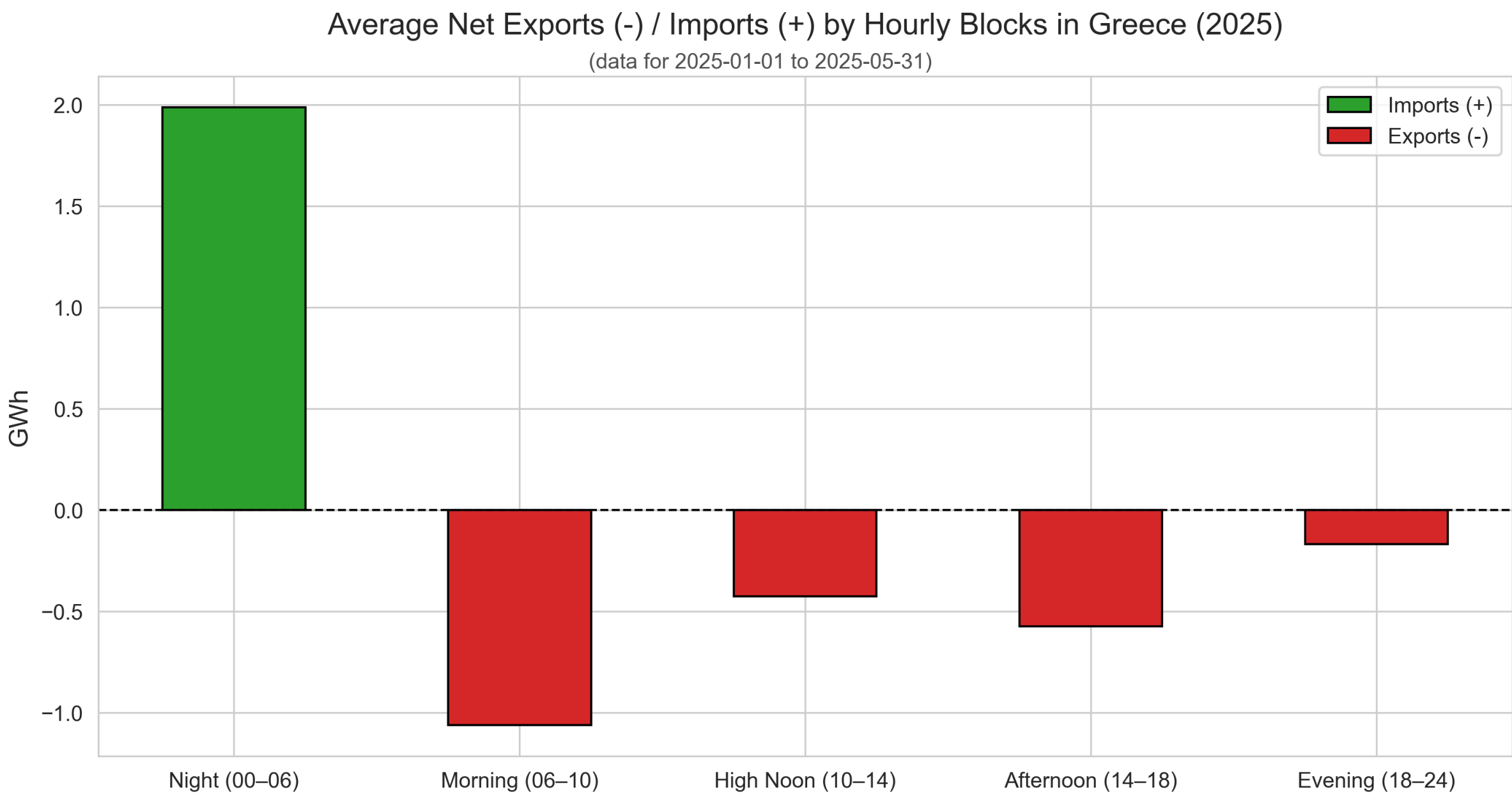
Average Net Exports (-) / Imports (+) by Hourly Blocks in Greece (2024)



Data source: ENTSO-E Transparency Platform (Scheduled Commercial Exchanges) • Aggregated by ECS

Greece's Energy Shift: From Importer to Exporter

2024/2025 Net Flow Patterns & CBAM-Linked Cross-Border Risks



Data source: ENTSO-E Transparency Platform (Scheduled Commercial Exchanges) • Aggregated by ECS

Current Power-Flow Patterns in Greece (2024–2025)

- **Nighttime (00:00–06:00): Net importer** – domestic demand > supply
- **Daytime & Evening: Net exporter** – surplus solar output & favourable market conditions

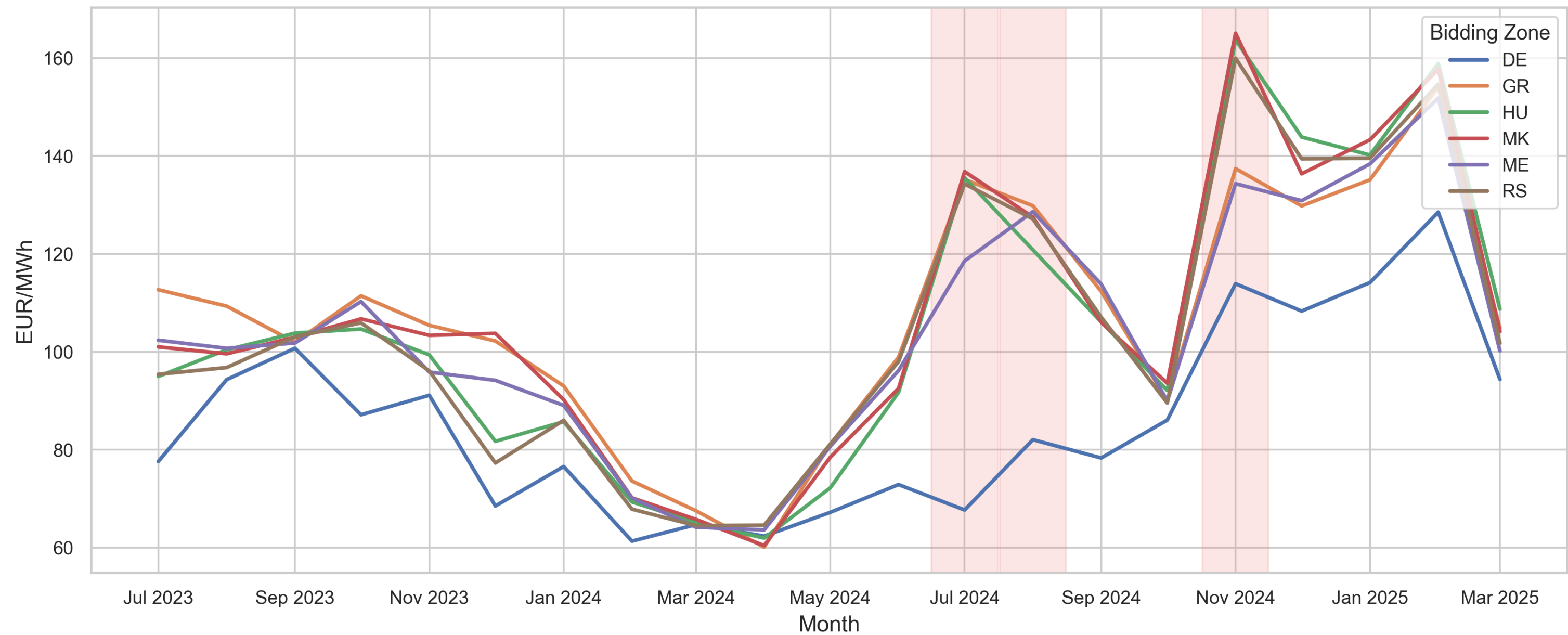
Key CBAM-Related Risks

- **Transit Flows Treatment:** Uncertainty over electricity flows via Third Countries (e.g. AL, MK)
- **Cross-Border Capacity:** Risk of suboptimal utilisation → lower market efficiency
- **Price Impacts:** Potential for constrained trade and widening price spreads
- **Investment Signal:** Regulatory ambiguity may deter renewables integration and optimal dispatch

Price Convergence Signal

Strong Correlation Between WB and Neighbouring EU DAM Prices

Monthly Average Day-Ahead Prices by Bidding Zone
01 Jul 2023 – 31 Mar 2025



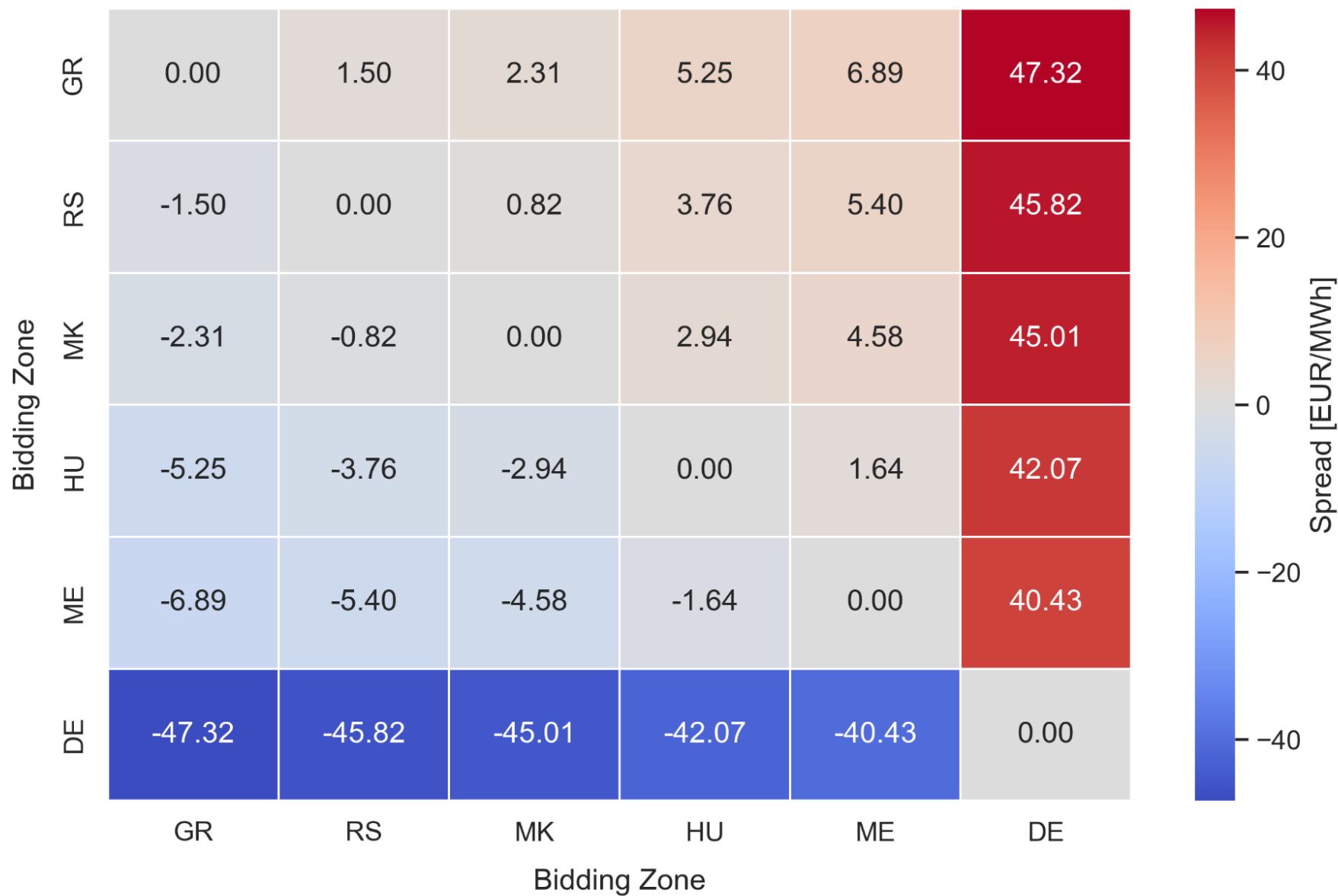
Data source: ENTSO-E Transparency Platform • Aggregated by ECS

Price Spreads

Southeast European countries share similar challenges

Average DAM Hourly Price Spreads between Bidding Zones

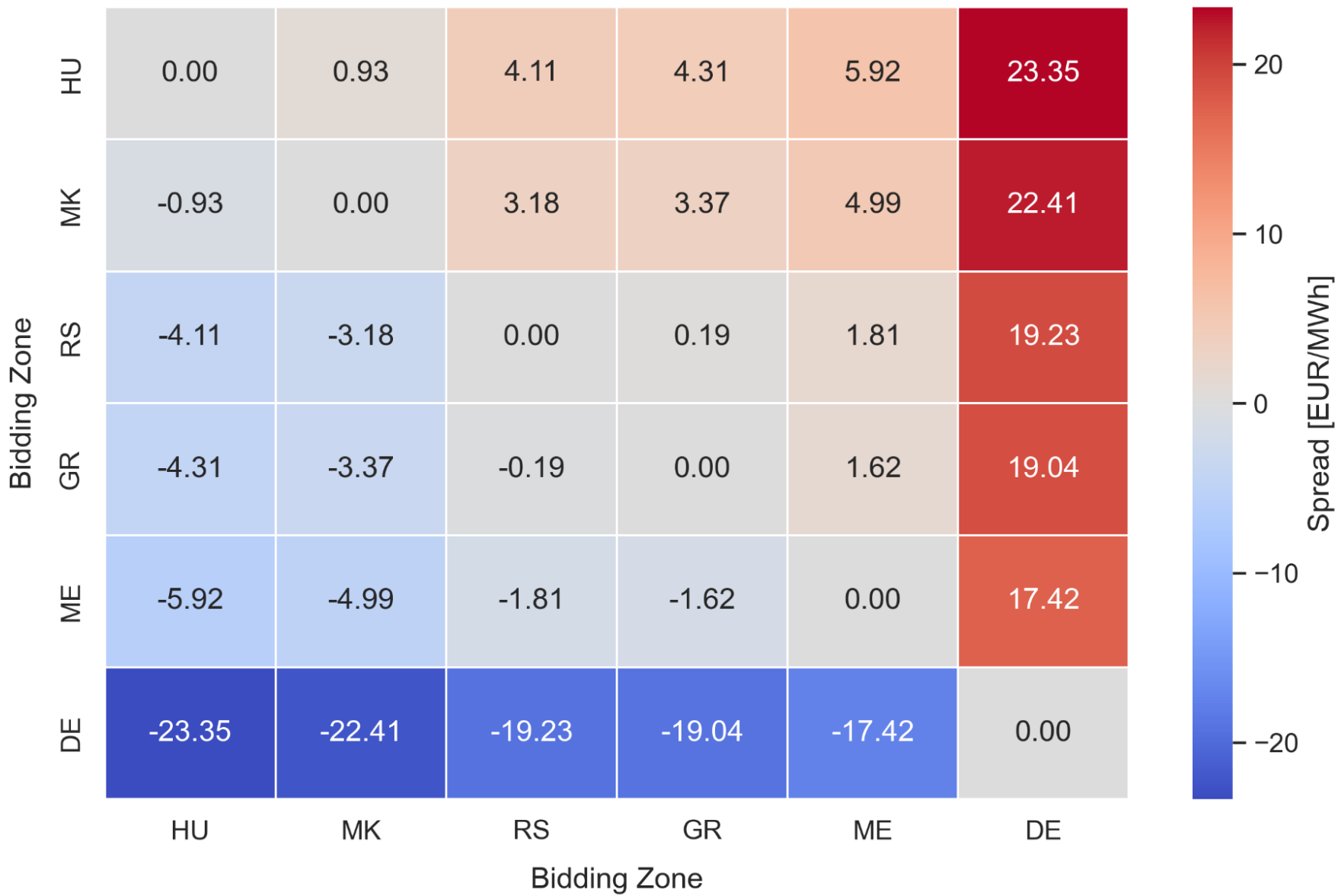
01 Jun 2024 – 31 Aug 2024



Data source: ENTSO-E Transparency Platform • Aggregated by ECS

Average DAM Hourly Price Spreads between Bidding Zones

01 Jan 2025 – 31 Mar 2025



Data source: ENTSO-E Transparency Platform • Aggregated by ECS

Key Takeaways

System Realities	Yearly Trade Dynamics	WB6's Role in Cross-Border Flows	Greece's Energy Shift	CBAM-Linked Uncertainties	Market Integration Signals
Scheduled ≠ Physical Flows: Commercial schedules often diverge from actual electricity flows.	- WB6's net import/export share in EU-27 consumption is negligible (<1%) 2023: WB6 net exporter thanks to exceptional hydrology. 2022: WB6 net importer due to the energy crisis.	- Predominantly a transit corridor for EU-to-EU flows. - Exports from domestic generation are secondary.	- Solar expansion made Greece a net exporter in 2024–2025. - Net exports during daytime, imports at night. - Besides Bulgaria and Italy, exports flow via North Macedonia and Albania.	- Unclear treatment of transit flows via AL/MK. - Risk of suboptimal use of cross-border capacity. - Potential market inefficiencies and discouraged RES investments.	- High price correlation between WB6 and neighbouring EU DAMs. - Persistent price spreads show shared SEE challenges.



THANK YOU!



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