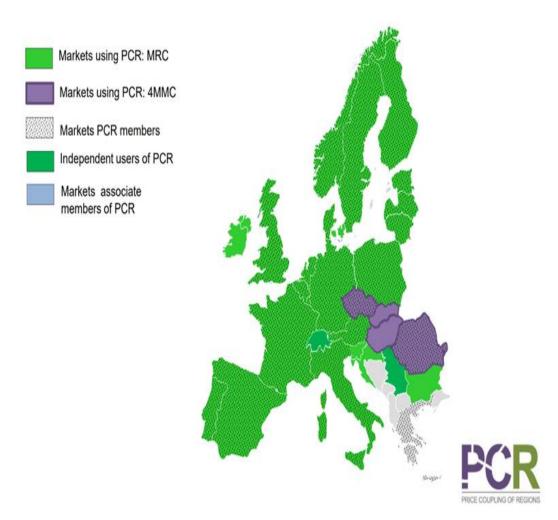


Market Integration in South-East Europe

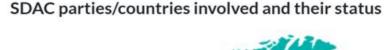
Assoc. Professor, Athanasios Dagoumas President, Regulatory Authority for Energy, Waste and Water

27th IENE Energy Forum, Athens, 14.11.2023

Target Model Implementation (Day Ahead Market) in South-East Europe



Markets that have adopted the EUPHEMIA algorithm of the Price Coupling of Regions in early 2020

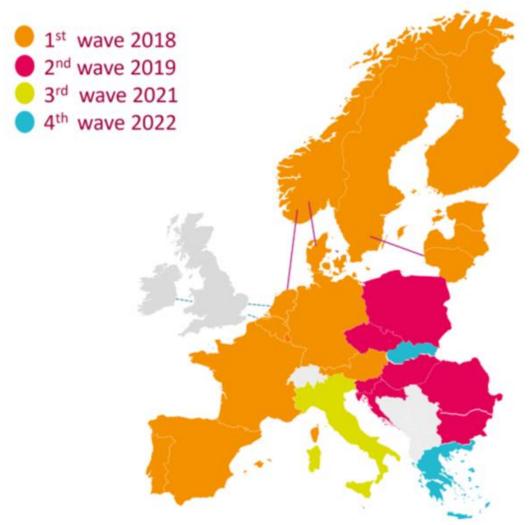




Markets that have implemented the Single Day Ahead Coupling (SDAC) in November 2023

(source: https://www.nemo-committee.eu/sdac)

Target Model Implementation (Intra-Day Market) in South-East Europe



Greece covered the gap from mature European markets

- in Day-Ahead market and
- Intra-Day market

Markets that have implemented Single Intra-Day Coupling - SIDC), in November 2023

source: https://www.nemo-committee.eu/sidc)

Electricity DAM-IDM markets in Greece in 2023



DAM Coupling (GR-IT): Dec. 2020

IDM Coupling-CRIDAs (GR-IT-SL): September 2021

IDM Coupling – XBID: November 2022

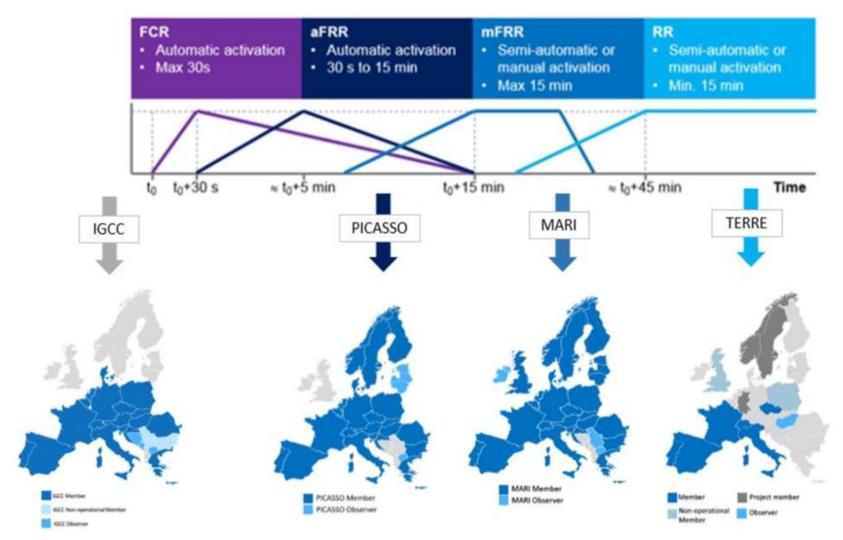


DAM Coupling (GR-BG): May 2021 IDM Coupling-XBID: November 2022

IDA (European coupling) – implicit allocation with IT, BG (Expected **4q2024**)

Explicit Intra-Day PTR auctions **on the non-coupled borders** will be activated upon competent TSOs and Auction Office agreement.

Target Model Implementation (Balancing Market) in South-East Europe



Greek market to be integrated:

- in PICASSO (aFRR) July 2024
- in MARI (mFRR), in 2026 similar to other EU countries

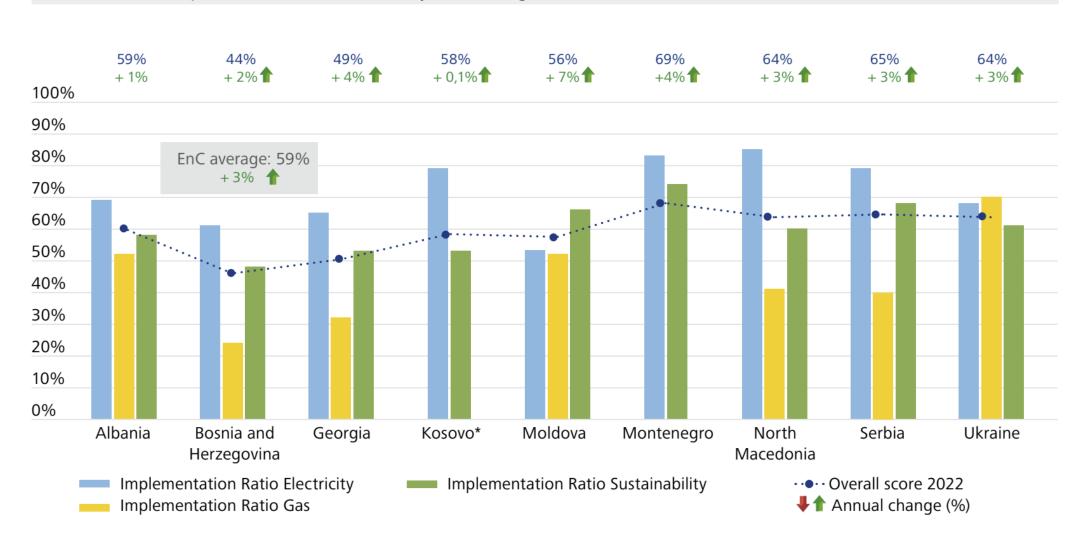
Markets that have been integrated in the European platform MARI, PICASSO, TERRE and IGCC, in November 2023

(source: https://www.admie.gr/agora/genika/perigrafi)

Energy Community Secretariat Annual Implementation Report – 1.11.2022

https://www.energy-community.org/implementation/report/

Overview of Implementation Performance by Contracting Parties

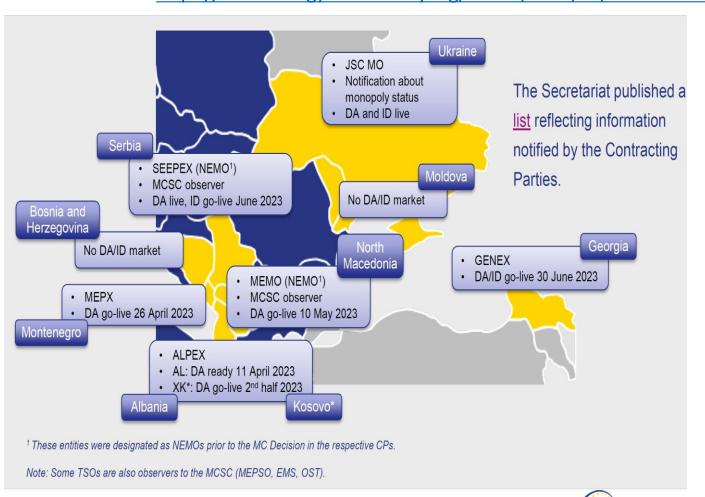


Market Coupling in Western Balkans

Energy Community Secretariat, Report on the implementation of Declaration on Energy Security and Green Transition in the Western Balkans – 17.10.2023

Sources: https://www.energy-community.org/dam/jcr:2229718d-018e-4643-858f-3765129f8c04/ECS_Report_on_Declaration_WB6.pdf https://www.energy-community.org/events/2023/05/WSCAMC.html (EC Workshop in Market Coupling – May 2023)

Energy Community



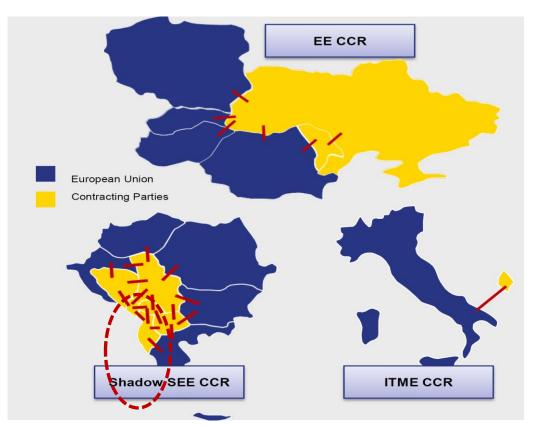
Significant developments related to the day-ahead markets took place in 2023 in Western Balkans.

- On <u>11 April 2023</u>, ALPEX inaugurated the **Albanian** day-ahead market and is also expected to operate the **Kosovo*** market starting in the <u>second half of</u> 2023.
- MEPX introduced the day-ahead market in Montenegro on <u>27 April 2023</u>.
- North Macedonia's MEMO conducted its inaugural day-ahead auction on 10 May 2023.
- Both MEPX and MEMO have plans to establish intraday markets, a goal that SEEPEX achieved on 25 July 2023.
- The setup of a short-term market in Bosnia and Herzegovina is still under discussion, and serious delays are to be expected (the same for Moldova).
- Ukraine and Georgia (postponed) have established DA and ID markets

Market Coupling in South-East Europe

Energy Community Secretariat, Report on the implementation of Declaration on Energy Security and Green Transition in the Western Balkans – 17.10.2023

https://www.energy-community.org/dam/jcr:2229718d-018e-4643-858f-3765129f8c04/ECS_Report_on_Declaration_WB6.pdf



By June 15, 2023, all WB6 transmission system operators (TSOs) in the Shadow SEE capacity calculation region (CCR) should have submitted coordinated capacity calculation methodologies, including cooperation agreements between TSOs of the Energy Community and neighboring EU Member States.

The integration into market coupling for WB6 parties must be achieved by the end of 2025

NRA, PX and TSO operating in Greece (RAEWW, Henex and IPTO) cooperate towards establishing the SEE Market Coupling initiative with NRAs, PXs and TSOs operating in Albania, North Macedonia and Kossovo, under the USAID auspices.

Memorandum of Understanding on SEE Electricity Day-Ahead Market Coupling

(Signed 14th November 2023, Athens)

Between 11 parties: (NRAs, TSO, PXs - Greece, Albania, North Macedonia, Kosovo):

- Regulatory Authority for Waste, Energy and Water (RAEWW) of the Hellenic Republic
- Albanian Energy Regulatory Authority ERE
- Energy, Water Services, and Municipal Waste Management Services Regulatory Commission of The Republic of North Macedonia ERC
- Kosovo Energy Regulatory Office ERO
- Hellenic Independent Power Transmission Operator S.A **IPTO**
- Albanian Transmission System Operator OST
- Electricity Transmission System Operator of the Republic of North Macedonia JSC MEPSO
- Kosovo Transmission, System and Market Operator J.S.C KOSTT
- Hellenic Energy Exchange S.A. **HEnEx**
- Albanian Power Exchange sh.a ALPEX
- North Macedonia National Electricity Market Operator MEMO Ltd

Signed within the Southeast Europe Electricity Market Coupling (SEE-MC) Initiative, Market Coupling Project Kick-off Meeting, Athens
13-14 November 2023

Summary

Market integration in South-East Europe

- Greek electricity wholesale market covered the gap from other mature European markets, becoming a benchmark for other countries in the region
- Significant developments related to the Day-Ahead markets in South-East Europe took place in 2023
 - On 11 April 2023, ALPEX inaugurated the Albanian day-ahead market and is also expected to operate the Kosovo* market starting in the second half of 2023.
 - MEPX introduced the day-ahead market in Montenegro on 27 April 2023.
 - North Macedonia's MEMO conducted its inaugural day-ahead auction on 10 May 2023.
 - Both MEPX and MEMO have plans to establish intraday markets, a goal that SEEPEX achieved on 25 July 2023.
- Market Integration in Western Balkans
 - The integration into Market coupling for Energy Community WB6 parties must be achieved by the end of 2025
 - SEE Market Coupling Initiative under the auspices of USAID and organized by <u>NARUC and RAEWW</u>
 - MOU among 11 parties (NRAs, PXs, TSOs from Greece, Albania, North Macedonia, Kosovo) signed in 14th November 2023 to facilitate the process

Enhances Green Transition (networks, RES and flexible assets) and the role of Greece

Thank you for your attention!



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Associate Professor in Energy and Resource Economics,
University of Piraeus