

نتقدم بثقة
Moving Forward
with Confidence



هيئة تنظيم الخدمات العامة
Authority for Public Services Regulation



Cross – border cooperation in the Balkans

SESSION III: CROSS-BORDER COOPERATION; MARKET INTEGRATION

Marko Bislimoski

President, Energy, Water Services and Municipal Waste Management
Services Regulatory Commission
Republic Of North Macedonia

#ERRAConference2025

Introduction



The Balkan region, comprising countries such as Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Kosovo, Montenegro, North Macedonia, Romania, Serbia, and Slovenia.

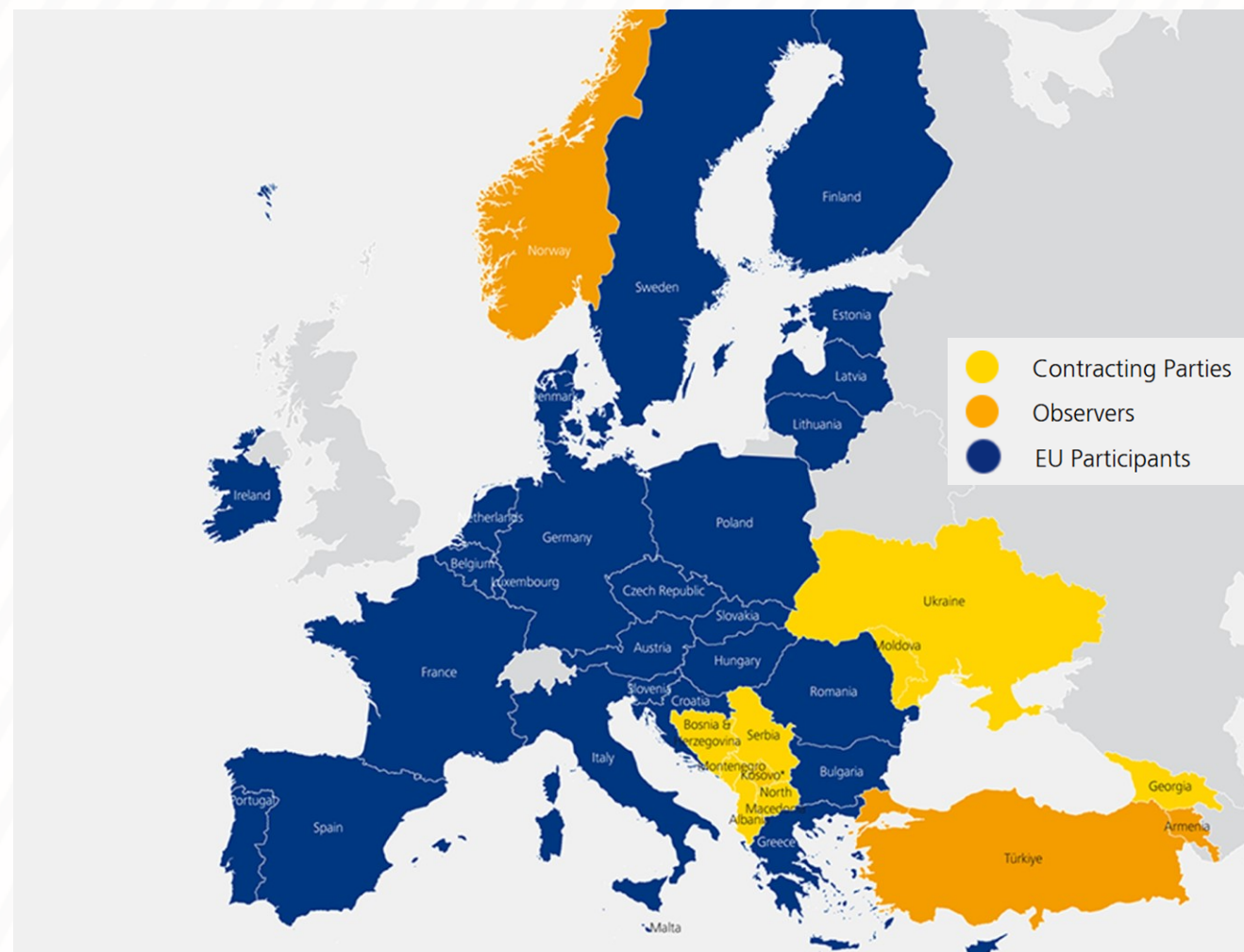
The Balkans have diverse energy mixes, from coal to hydropower and increasing renewables. Countries often depend on imports during shortages. Improved cross-border infrastructure is key to ensuring stability and efficiency in power distribution.

Regional Initiatives and Organizations

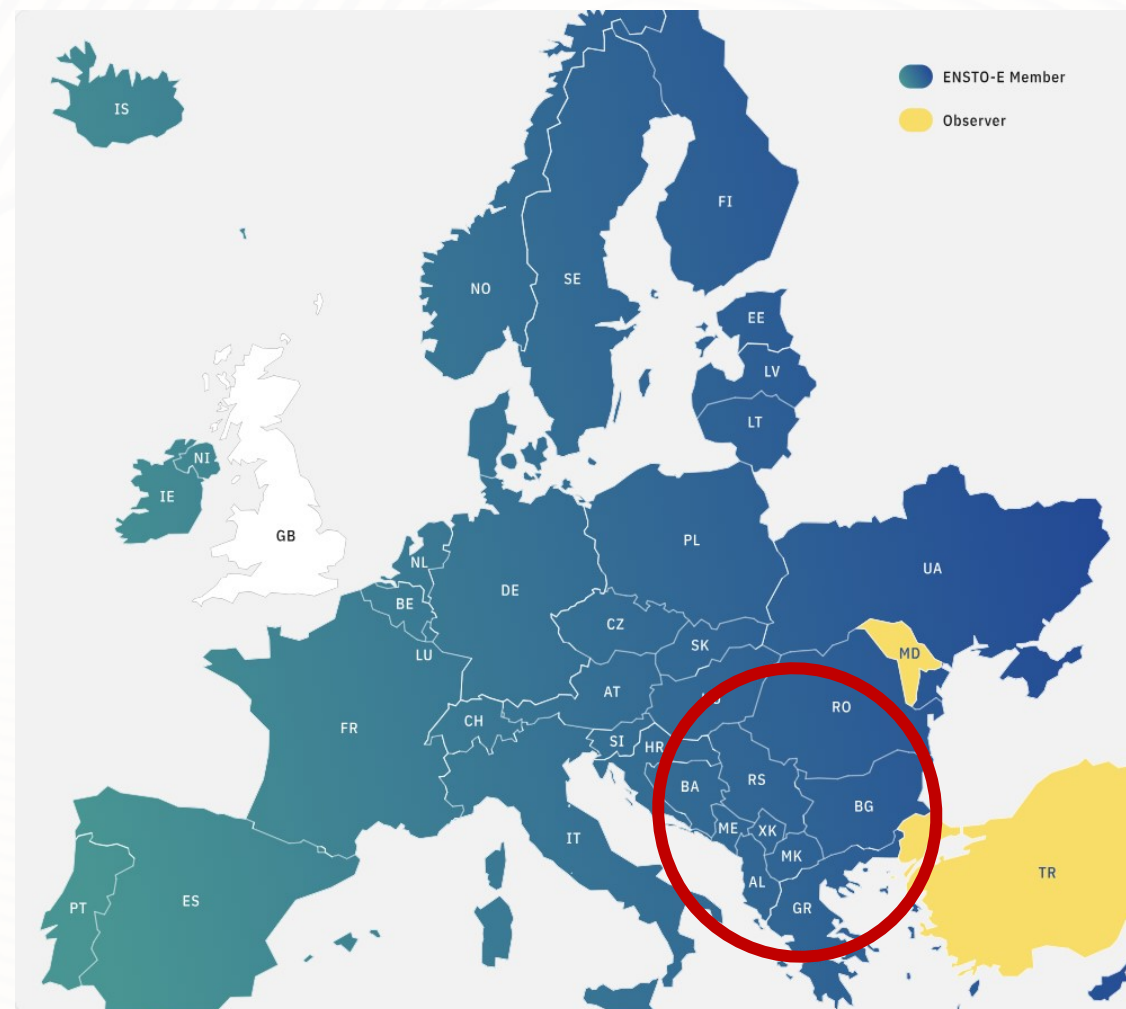
Key frameworks and players include:

- **Energy Community:** Promotes integration with the EU energy market
- **ENTSO-E:** European network of transmission system operators
- **Balkan Electricity Market Integration (WB6):** Market coupling and harmonization of regulations
- **SEE CAO:** Coordinated Auction Office in South East Europe

Energy Community



ENTSO-E



Other relevant associations:



Energy Community – Mission



Energy Community: REGIONAL INITIATIVES:



ENERGY INFRASTRUCTURE INITIATIVES:

PECI (Projects of Energy Community Interest)

Key infrastructure projects that have regional significance within the Energy Community.

Selection Criteria:

- **Cross-border impact**
- **Contribution to market integration**
- **Sustainability and RES integration**
- **Security of supply**

PMI (Projects of Mutual Interest)

Projects with mutual benefit between EU Member States and Energy Community Contracting Parties.

PECI and PMI provide a roadmap for sustainable, secure, and interconnected energy systems in the region. Continued political and financial commitment is crucial for success.

Coordinated Auction Office in South East Europe (SEE CAO)



Shareholder Structure



Prior to establishment of SEE CAO:

- 50% : 50% capacity auctions TSOs
- Different Auction Rules per borders
- Different Auction Timing

By the establishment of SEE CAO:

- Joint auctions - From Nov 2014 (Auctions for 2015)
- Harmonised Allocation Rules - From Nov 2017 (Auctions for 2018)
- Coordinated auction timings
- 10 borders

Balancing Electricity Market in the Balkans



- **Current Status:** Fragmented balancing mechanisms with limited cross-border coordination.
- **Initiatives:** Regional Balancing Initiative (RBI) under the Energy Community and ENTSO-E support.
- **Goals:**
 - Establish a regional balancing platform
 - Promote standardization of balancing products
 - Enable cross-border exchange of balancing energy
- **Benefits:**
 - Reduced balancing costs
 - Improved grid reliability
 - More efficient use of renewable energy
- **Challenges:**
 - Need for regulatory harmonization
 - Limited interoperability of systems
 - Varying technical standards across TSOs



بنقدم بثقة
Moving Forward
with Confidence



ERRA
22ND ANNUAL CONFERENCE

هيئة تنظيم الخدمات العامة
Authority for Public Services Regulation

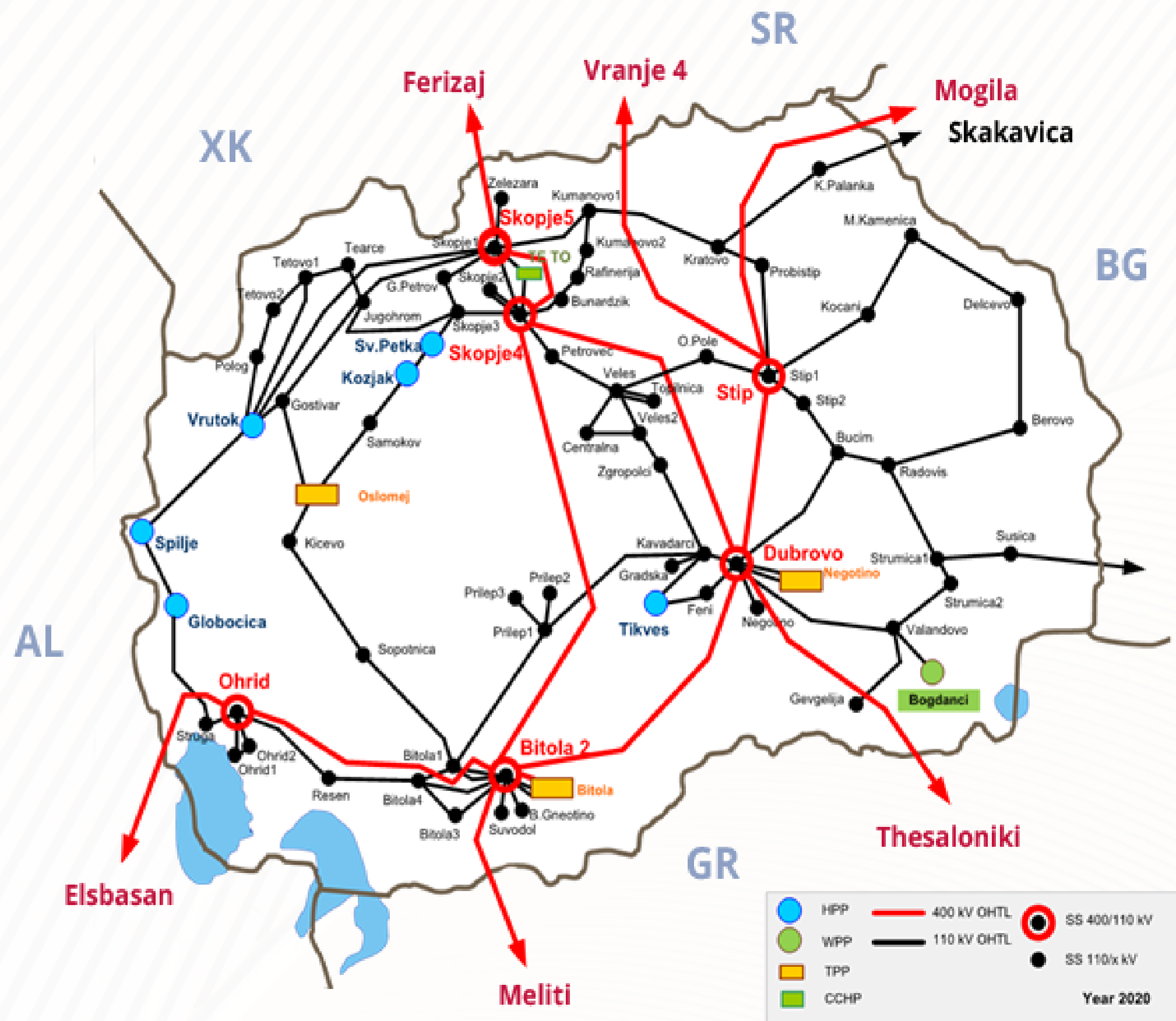


Cross – border cooperation and Market integration of North Macedonia

Power system and basic data



هيئة تنظيم الخدمات العامة
Authority for Public Services Regulation



The electricity transmission system of the Republic of North Macedonia is connected to the electricity transmission systems of all neighboring countries, except for Albania, through five 400 kV interconnections

- Greece (2x400 kV) SEE CAO
- Bulgaria (1x400 kV) joint auction
- Serbia (1x400 kV) joint auction
- Kosovo (1x400 kV) – SEE CAO

Ongoing project for construction of interconnection 400 kV line with Albania;

Interconnection 400 kV line North Macedonia – Albania (ongoing project)



This project shall finalize the construction of “Corridor 8”, and shall provide interconnection of North Macedonia, Bulgaria, Albania, Montenegro and Italy.

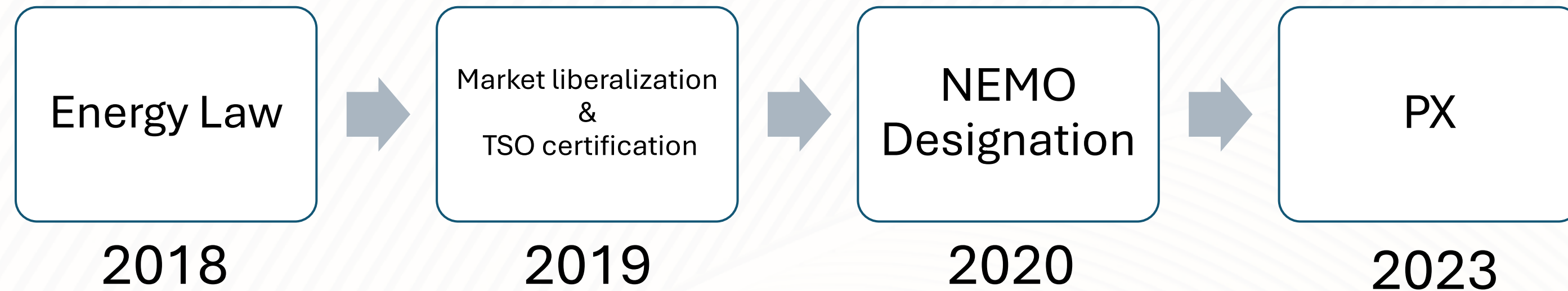
Most significant **BENEFITS for the Balkan region:**

- Growth of cross – border transmission capacity,
- Increase of electricity transit within the systems in the region, and
- Smoothing electricity price differences in the region,
- Connection with neighboring electricity markets.
- Exchange of electricity from renewable sources,
- Reduction of CO2 emissions,
- Shall provide the merging of day-ahead electricity markets.

Obstacles and Delays:

- COVID-19: Border closures disrupted material supply chains and caused price inflation.
- Ukraine War: Steel prices surged due to Ukraine being a key exporter; the Mariupol Steel Plant was affected.
- Copper Prices: Increased from 3–4 million to 10 million per tonne.
- Import Costs from China: Oil price hikes and rerouting shipments around Africa (bypassing the Suez Canal) raised transport costs.
- Public Procurement Contracts: Signed in 2019 at fixed prices, these contracts became unfeasible due to pandemic and war impacts. Though the EU revised pre-war agreements and aligned public procurement rules, the updated regulations have not yet taken effect.
- MEPSO Leadership Changes: Six directors appointed over six years, contributing to project instability.

Implementation of market coupling



- PX began with operation on 10th of May 2023, EPEX SPOT trading platform and BSP Souhtpool platform for clearing are used
- Currently 38 market participants are registered on the PX,
- NEMO and ETSO participate in the implementation of the project on the electricity market coupling between North Macedonia and Bulgaria,
- ERC, NEMO, and ETSO participate in the regional cooperation for possible electricity market coupling between North Macedonia, Albania, Kosovo, and Greece.

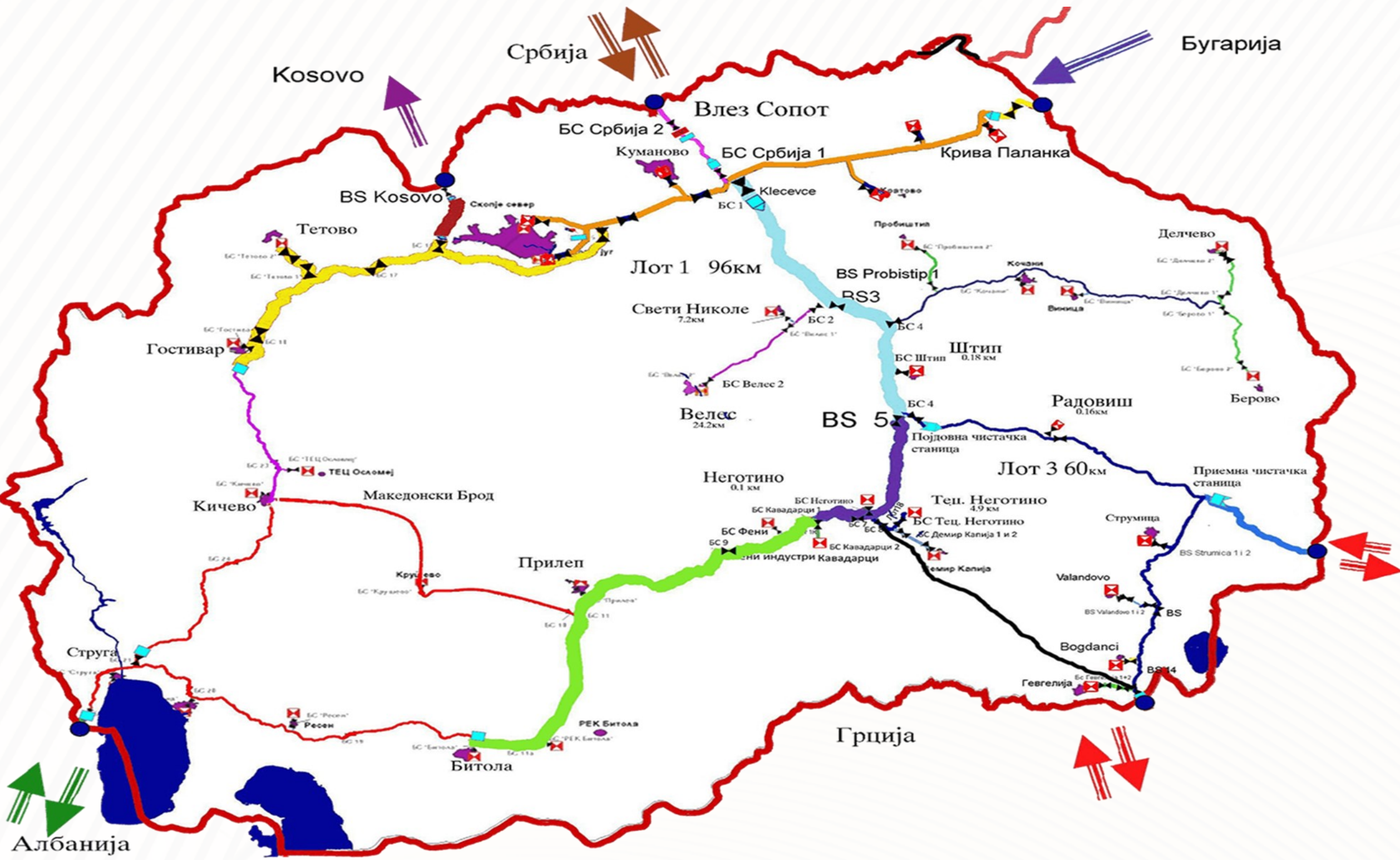
Day ahead Market in North Macedonia



Year	Average Price MEMO(Euro)	Average Price HUPX(Euro)	Average Price SEEPEx(Euro)	Average Price IBEX(Euro)	Average Price EnEx(Euro)
2024	102,51	100,81	101,76	102,55	100,88
January	93,15	85,73	86,01	89,60	93,02
February	70,17	69,35	67,86	70,00	73,61
March	65,79	65,12	64,51	63,37	67,54
April	59,10	61,96	64,59	58,24	60,11
May	78,43	72,21	81,15	82,22	81,08
June	92,52	91,72	98,00	97,92	98,89
July	136,80	135,54	134,29	136,47	135,18
August	127,50	120,81	127,15	126,70	129,83
September	106,01	106,10	107,07	106,94	112,35
October	93,75	92,20	89,66	89,36	90,06
November	165,06	163,72	159,96	167,75	137,42
December	140,16	143,86	139,42	140,61	129,81
Total	102,51	100,81	101,76	102,55	100,88

Small deviation of the average monthly price from stock exchange to stock exchange, which is a good indicator of a market-oriented stock exchange

Map of the natural gas transmission system of Republic of North Macedonia



- Gasification map**
- LOT 1-61 km Klechovce-VS5 (built but not operational)
 - LOT 1-36 km BS5-Negotino with MMRS Stip and MMRS Negotino (built but not operational)
 - LOT 2-92 km Negotino (Kavadarci) - Bitola
 - LOT 5-78 km Skopje-Tetovo-Gostivar (under construction)
 - LOT 5-34 km Gostivar-Kicevo, Building permit
 - Gas interconnector with Greece (DESFA)
 - LOT 3 and 4 Basic design
 - Existing gas pipeline

Gas Pipeline Project North Macedonia - Greece



- North Macedonia - Greece Gas Interconnector (Project of Mutual Interest, promoted by Greece). Main gas pipeline section in North Macedonia is Stip-Hamzali-Stojakovo bordering Greece, line in length of 110 km with pipe diameter DN 700 (28"). The Greek part consists in a 24" to 28" pipeline of app. 50 km, at a max. operating pressure of 66,5 bar linking the Nea Messimvria valve station of the Greek gas TSO with the Greece/N.Macedonia border at Evzoni/Gevgelija. DESFA S.A and MER JSC Skopje signed MoU in November 2016, as a starting point for preparing Feasibility Assessment by DESFA S.A.
- All documentation and financing is in place, tender procedure for construction recently finished

New Gas Pipeline Infrastructure



The TSO plans to build several interconnection lines that will connect North Macedonia to neighboring countries, with interconnections planned with Greece, Kosovo, Serbia, Albania, and Bulgaria,

Continuous development of the TSO network in the country with an end goal to connect all major cities with gas

All new pipelines should be hydrogen ready, and assessment of the current pipeline for possible hydrogen use

Key developments in Natural Gas



- A long-term reservation of storage capacity (up to 250 million cubic meters) is planned in the UGS Chiren facility, within the additional capacity, during its expansion, that will enable Macedonian natural gas suppliers to store surplus of natural gas for subsequent use during periods of high consumption.
- Memorandum of Understanding was signed with the aim of NOMAGAS JSC Skopje to participate in the ownership structure of the LNG terminal in Alexandroupolis, i.e. acquire ten percent (10%) in "Gastrade", a company that is constructing the Alexandropulis, Independent natural gas system (INGS) LNG terminal in Greece*. The project documentation was prepared and all necessary permits for project realization were acquired. An agreement for monitoring the construction was concluded which had administrative support (management). In the next period tender documents for an inspection body shall be prepared in line with the rules of the European International Bank.

نتقدم بثقة
Moving Forward
with Confidence



هيئة تنظيم الخدمات العامة
Authority for Public Services Regulation



THANK YOU

marko.bislimoski@erc.org.mk

#ERRAConference2025