

ELECTRICITY Exchanges in SE Europe

Currently, there are eight (8) electricity exchanges operating in South East Europe. All of them are responsible for the operation of the spot electricity market or Day Ahead Market (DAM) in their respective countries. All of the regional electric power exchanges currently offer intraday market (IDM) products except HENEX and SEEPEX, as the corresponding internal Greek and Serbian IDMs are operated by the respective TSOs, i.e. IPTO and EMS. However, the Greek IDM is expected to be re-established and operated by Greece's Nominated Electricity Market Operator (NEMO), HENEX, with the respective market expecting to go live by the end of the 4th quarter of 2020.

A variety of power exchange products are offered by regional energy exchanges besides DAM and IDM products. Noteworthy is the extended centralized market for bilateral contracts offered by IBEX, EXIST and OPCOM. Romania's OPCOM offers a large variety of products, notably Renewable Energy Certificates (RECs), which although widely available in spot markets around the world, regionally they are only available at the OPCOM power exchange. SEEPEX, OPCOM and BSP South Pool maintain a well-established forward market, while HENEX has recently launched a derivatives market by establishing a new futures power market in Greece (23/03/2020). Furthermore, EXIST operates an organized balancing and ancillary services market in Turkey.

Power exchanges are a step forward towards full electricity market liberalization. In this regard, the only contracting party of the Energy Community Treaty that has an operational electricity exchange is Serbia, where SEEPEX operates. Serbian market is in the process of liberalizing its internal electricity market, as SEEPEX's share in the free market reached 18.5% and 6.9% of the total consumption in 2018, with volumes exchanged on SEEPEX's spot market gradually increasing, having reached 2.53 TWh in 2019.



Power Exchanges in SE Europe and PX Products Offered

Sources: IBEX, CROPEX, HENEX, HUPX, OPCOM, SEEPEX, BSP South Pool, EXIST, Shah D. et al. (2020)

Country	Power Exchanges	Year of Establishment	DAM	IDM	REC	Additional exchange product
Bulgaria	IBEX 	2014	✓	✓	-	Centralized market for bilateral contracts
Croatia	CROPEX 	2014	✓	✓	-	-
Greece	HENEX 	2018	✓	-	-	Forward Market
Hungary	HUPX 	2007	✓	✓	-	-
Romania	OPCOM 	2000	✓	✓	✓	Universal service market and green certificates market
Serbia	SEEPEX 	2015	✓	-	-	Forward market
Slovenia	BSP South Pool 	2008	✓	✓	-	Long term auction
Turkey	EXIST (EPIAS) 	2015	✓	✓	-	Balancing power market and ancillary services market

However, the penetration of the spot market has fallen to 6.4% of total electricity consumption, as a volume of the electricity traded in the free market moved to power derivatives market, reflecting the impact of recently deployed market for power futures on SEEPX (03/06/2019).

The volumes traded at DAM at SE European power exchanges increased in all spot markets except in HENEX and EXIST, as a result of reduced domestic power generation in Greece and Turkey in 2019 respectively. Spot market participants increased marginally in all markets in 2019, with most significant increases being recorded at IBEX, adding four new members, while EXIST exhibits high seasonal volatility in terms of participation.

The prospects for power exchanges to enter operation in the near future include the Albanian Power Exchange (APEX) and the Montenegrin power exchange (MEPX). APEX's establishment has been postponed, as Albania's Ministry of Infrastructure and Energy is currently actively

seeking partnership companies and financial institutions to join OST in the ownership of APEX, via an open bidding procedure (due on 27/04/2020). The Albanian Power Exchange (APEX) is designed to operate the DAM and IDM of Albania and Kosovo. MEPX is in the final stage of talks with its potential strategic partner, Norwegian power market operator Nord Pool, for establishing the first day-ahead power market in Montenegro, expected to start operating by the end of 2020.

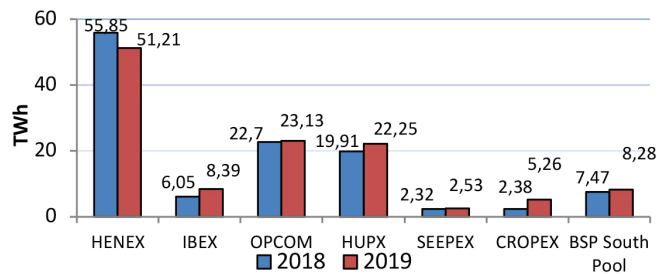
Furthermore, North Macedonia is also working to establish its own power exchange, while Bosnia and Herzegovina is still far from setting up such a market.

Number of Spot Power Market Participants in PXs of SE Europe

	Number of Participants							
	HENEX	IBEX	OPCOM	HUPX	SEEPX	CROPEX	BSP South Pool	EXIST (EPIAS)
2018	36	72	374	58	18	20	37	747
2019	38	76	375	59	19	20	38	750*

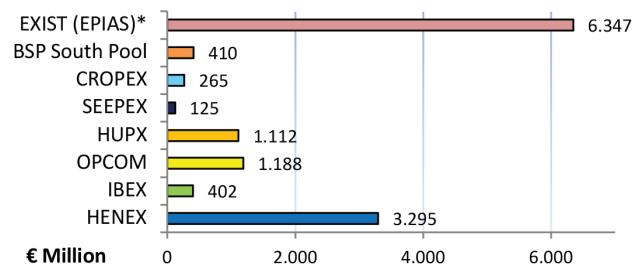
* Number of participants in Dec 2018
Sources: IBEX, CROPEX, HENEX, HUPX, OPCOM, SEEPX, BSP South Pool, EXIST

Electricity Volumes (TWh) Traded in Spot Markets (DAM) at SE European Power Exchanges (2018 – 2019)



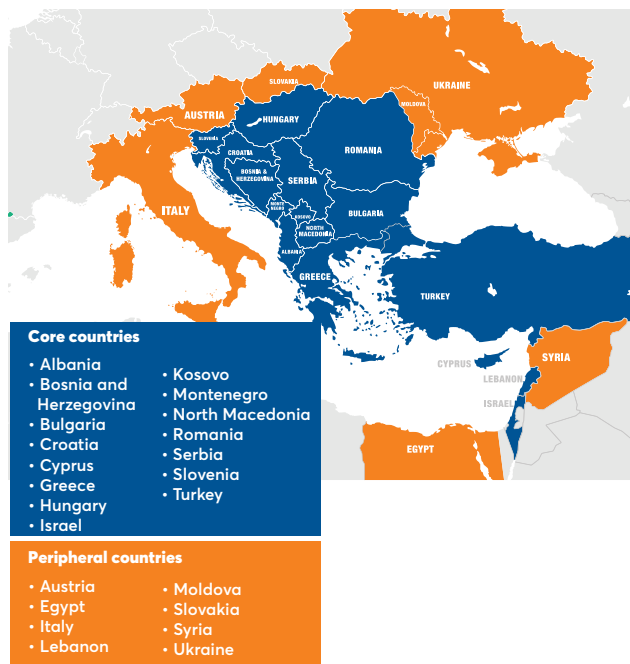
Sources: IBEX, CROPEX, HENEX, HUPX, OPCOM, SEEPX, BSP South Pool, EXIST

Turnover of Spot Market (DAM) at SE European Power Exchanges (2019)



* € - TRY Equivalence is based on daily average rates by ECB
Sources: IBEX, CROPEX, HENEX, HUPX, OPCOM, SEEPX, BSP South Pool, EXIST

The SE European Region as defined by IENE



Who are we?

The Institute of Energy for SE Europe (IENE) is a nonprofit organization active throughout South East Europe, focusing on energy policy and analysis but also on information dissemination. IENE aims to promote a broader understanding of the major energy and environmental issues in the region.

A key objective of the Institute is to contribute towards the implementation of the European Union's sustainable strategy which combines economic and social development, security of supply, environmental protection and climate change mitigation.

Further information on the Institute, its mission and vision and its various activities can be found in www.iene.eu

