

ASSOCIATION OF POWER EXCHANGES



APEx Annual Conference 2023
Sep 20-22, 2023
ISTANBUL, TURKEY

APEX Objective

To facilitate the development and communication of ideas and practices in the operation of global competitive electricity markets. One of its primary intentions is to provide a platform for the sharing of information between its members.

Dr. Cecilia Maya

*Energy Market Manager
XM SA ESP*



Message from the Board

We are just a few days ahead of our Annual Conference which has been an opportunity to meet in person, reference each other's markets, and discuss the most interesting topics that interest us all. The conversation this year will focus on the energy transition, what may be required to, among other things, rethink the market design for flexibility, ancillary services, and new technologies such as storage or hydrogen.

We, as market operators, celebrate the process of electrification that is taking place in our economies. Both industries and households are increasing the consumption of electricity for their processes, driven by automation and the internet of things. However, in practice, we have found many challenges to the deployment of the technologies that will allow us to have cleaner and more efficient energy. For this purpose, we need transmission and distribution networks on one hand, and non conventional renewables, in the other.

“No transition without transmission”, says the motto, meaning that we will not be able to achieve the goals in energy transition if we are not allowed by communities to build the necessary networks to transport that clean and efficient energy to the consumption areas. However, the communities have their own motto, NIMBY -Not in my back yard- or in Spanish “Sí, pero no aquí”.

Everyone seems to agree on the necessity and convenience of the energy transition, either for reasons of clean energy or cost-efficiency, or both. However, just a few are willing to accept the construction of what is needed on or near its own property. Governments should have clear policies for environmental and social licensing so the investors do not continue adding costs to these projects, making them inefficient and, in many cases, not viable.

In the Spotlight

Did You Know:

Energy Exchange Istanbul (EXIST)

or

Enerji Piyasaları İşletme A.Ş. (EPIAŞ)

By Kuruma Özel-Kişisel Veri içermez

1. Energy Exchange Istanbul (**EXIST**) was established on March 18, 2015 and is responsible for managing and operating energy markets, including power (DAM, IDM and power futures market) , gas (spot and futures markets) and environmental commodities (Renewable energy guarantees of origin market).
2. **EXIST** is also responsible for imbalance calculation and settlement of power markets, data publication related to electricity balancing markets as the delegated operator.
3. **EXIST** “Transparency Platform” provides more than 159 different data sets updated regularly from different stakeholder within the energy sector. Access and usage of data published on Transparency Platform is free of charge.
4. **EXIST** was ranked 3rd among the electricity spot markets in terms of volume in Europe.

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5. **EXIST** became the first in the Fortune 500 Türkiye 2022 ranking with its net sales revenues as 50 billion EUR.

6. Türkiye has the 5th biggest renewable capacity in Europe. The installed capacity of renewable has reached 54% of total installed capacity in 2022. Renewable installed capacity share never decreased below 38% in last 50 years and 1/3 in last 60 years.

7. Tuna- 1 (Sakarya) is the largest natural gas reserve discovered in the world in 2020. (710 bcm with updated numbers).

8. The Bosphorus, known as the Strait of Istanbul, runs through the city and separates Asia and Europe. This is the only city in the world that straddles two continents.

9. Istanbul's history goes back to at least 8,500 years ago and it is the only city which served as the capital of three universal empires in the history; Roman Empire, Byzantine and Ottoman Empire.

10. With a total population of around 20 million residents, Istanbul is one of the world's most populous cities, ranking as the world's fifth-largest city proper and the largest European city.

11. The historic centre of Istanbul is a UNESCO World Heritage Site. With an unparalleled variety and richness in terms of attractions in history, art, culture, eating and drinking and sports, the glorious Istanbul continues to fascinate visitors and locals alike with its vibrancy. It was one of the most visited cities in the world. Last year, more than 16 million foreign visitors came to Istanbul.



www.epias.com.tr

Another essential element to energy transition is the financial sustainability of all members of electricity markets. This requires adequate risk management, which comprises operational, legal, and specifically financial risk: price, liquidity and credit risk. The toolbox to manage these risks includes measuring (assessing the level of risk), insurance (transferring to others), and hedging (finding natural, operative or financial instruments to reduce uncertainty in cash flows).

In a market characterized by high volatility as ours, hedging alone is not an option. Healthy risk management means using all instruments available to reduce volatility for us and, more importantly, for the consumers to whom we are committed to provide reliable energy at affordable prices.

Market members usually hedge by means of bilateral contracts. Sometimes, the counterparty is not willing or cannot fulfill its obligations. We have seen defaults for bilateral contracts when a hydraulic plant owner faces a draught or when fuel prices increase for a thermoelectric plant. Also, when an investor of a plant under construction that had suffered delays has to buy in spot market to meet the obligations of the contracts sold to finance it. Finally, retailers not hedged have defaulted when they are not able to pay for the high prices that sometimes they face in the spot market, for instance, during El Niño.

The high risk that is characteristic of electricity markets shall be managed through organized markets. That is a lesson learned by the financial sector and, taken from there, it has been adapted to our markets. In an organized market, the counterparty risk is managed by a clearing house with methodologies and supervision that mitigate default risk, where instruments like futures and options, useful for hedging price risk, are compensated. At the same time, those instruments are standardized which helps to increase liquidity in these markets.

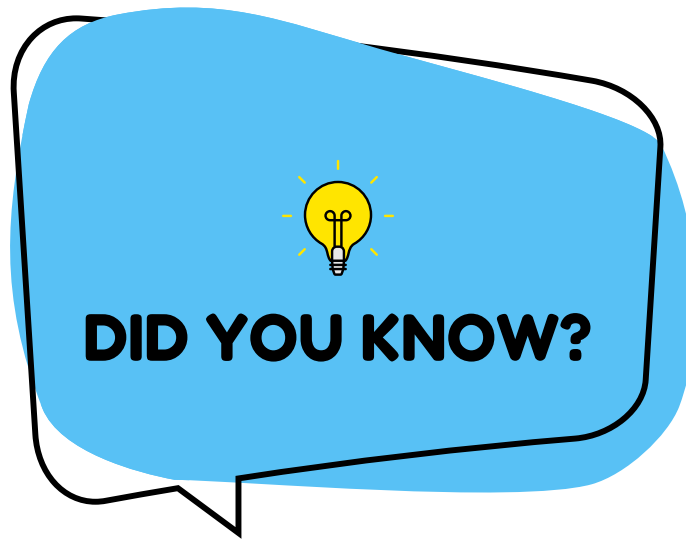
For all of the above reasons, organized markets have the necessary conditions to manage financial risk. Policy makers should promote their use in our markets in order to secure financial sustainability, and to have reliable and efficient markets. In addition to the deployment of new clean technologies, policies that aim to financial sustainability will help our countries to move faster to an energy transition that promises clean and efficient energy, that is, better energy.

Association of Power Exchanges

2750 Monroe Blvd., Audubon, PA 19403 Phone: (610) 666-8925 Website: www.theapex.org

Stu Bresler, APEx Chairman

Email: stu.bresler@pjm.com



- APEx stands for Association of Power Exchanges.
- APEx was established in 1996 at the first annual conference of the Australia Energy Market Operator (AEMO) in Melbourne, Australia.
- APEx is a non-profit corporation and all 11 APEx Board Directors volunteer their time.
- APEx Board Directors represent areas throughout the world and many attend monthly Board of Director Meetings during off business hours.
- APEx has hosted 26 annual conferences in 20 different countries across 5 different continents.
- The new APEx website will be live mid-2023 and will provide links to industry resources, annual conference papers, APEx resources, membership information, upcoming events and more.
- In 2023, APEx plans to offer opportunities for trainings, additional seminars and of course, another annual conference!

To have your member company featured “In the
Spotlight,” please send an email to:
Katrina.Zarczynski-Magee@pjm.com



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SAVE THE DATE

APEX 2023 CONFERENCE

SEPTEMBER 20-22, 2023
İSTANBUL- TÜRKİYE

Join us in Istanbul, the cradle of civilization and former capital of the Roman, Byzantine, and Ottoman Empires, for a unique three-day event.

Senior APEX Member representatives, sponsors, and industry participants from all over the world will come together to share information, network, and plan for the future of electricity markets.

This year panels will be oriented around:

- **Panel 1:** Integration and Applications of Storage in Markets
- **Panel 2:** Markets and Exchanges facilitating the Energy Transition: Flexibility, Renewables, and Technologies
- **Panel 3:** Regulators' Perspective
- **Panel 4:** Price Formation and Market Design
- **Panel 5:** What is required to ramp up markets for (green) hydrogen? What role can energy exchanges play?

For more information please visit
www.apex2023istanbul.com
or contact us on apex@epias.com.tr

EXIST
ENERGY EXCHANGE ISTANBUL

APEx
Association of Power Exchanges

Hotel Swissotel The Bosphorus – ISTANBUL, TURKEY

*Details will be forthcoming and communicated.

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