SHURA NEWSLETTER

October - December 2025 | Issue: 28

"Transformation of Türkiye's Electricity Distribution Sector" Report Published

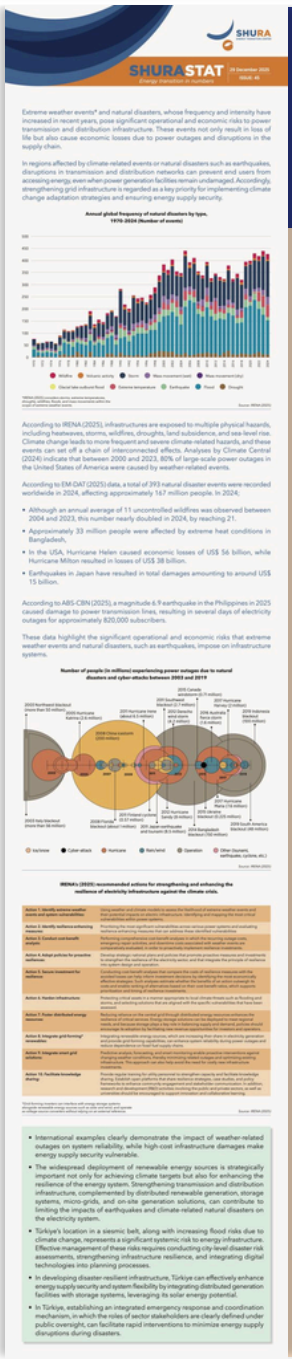
November 2025

Traditional electrical systems are defined as centralized, unidirectional power-flow structures in which consumers are positioned at the end of the value chain and whose fundamental components are generation, transmission, and distribution.

In line with countries' mid-century targets for transitioning to net-zero-emission economies, the rapid expansion of renewable generation, distributed energy resources, and clean electrification is shifting energy flows to a bidirectional structure and empowering consumers to take an active role in the evolving electricity system. Although this transformation affects the entire value chain of the power system, the increase in distributed energy resources (distributed generation, electric vehicles, heat pumps, behind-the-meter energy storage, etc.) necessitates a comprehensive transformation of distribution systems.

Enhancing, modernizing, and expanding the distribution system in parallel with these developments is one of the essential prerequisites for this transformation. The success of the energy transition envisioned within the framework of climate and energy targets depends not only on planning distribution systems with a focus on digitalization, but also on defining the new responsibilities and functions of distribution system operators (DSOs).

In the report 'Transformation of Türkiye's Electricity Distribution Sector' published by SHURA on November 6, the necessary steps for the modernization, digitalization, and expansion of distribution systems, as well as the new roles to be undertaken by distribution system operators, are evaluated in detail, while the transformation process is addressed considering different phases.



SHURASTAT ISSUE 45: EXTREME WEATHER RISKS TO ENERGY INFRASTRUCTURE / December 2025

SHURASTAT Issue 45 examines the operational and economic risks that extreme weather events and natural disasters pose to energy infrastructure. Key findings from Issue 45 include:

- Global disaster toll: In 2024, 373 natural disasters affected around 167 million people worldwide. Hurricanes Helene and Milton caused a combined economic loss of USD 94 billion.

- Grid vulnerability: Analyses indicate that 80% of large-scale power outages in the United States between 2000 and 2023 were weather-related. The 2025 earthquake in the Philippines left 820,000 customers without electricity for days.

- Türkiye's risk profile: As an earthquake-prone country, Türkiye also faces increasing flood risk linked to climate change, which constitutes a systemic risk for energy infrastructure. Strengthening the resilience of infrastructure and integrating digital technologies into planning are critical.

- Resilience and transformation: Renewable energy, storage systems and microgrids help bring the energy system closer to climate targets while also enhancing resilience to disasters.

New Issues of "SHURA AGENDA" Published

Three new issues of SHURA AGENDA, covering the most up-to-date topics in energy transition, have been published.

The topic of Issue 10, published in October, is the socio-economic impacts of the energy transition. This issue examines the transition's implications for economic development, production and employment. It highlights that the overall benefits of the energy transition are expected to reach approximately twice its costs, while underscoring the need to develop policies to address potential adverse impacts on traditional sectors. The issue also assesses how the energy transition roadmap affects socio-economic indicators and offers recommendations that can help guide policymaking.

The topic of Issue 11, published in November, is Renewable Energy Purchase Agreements (YETA) and the critical role of this mechanism in the energy transition. In line with Türkiye's target to reach 140 GW of wind and 220 GW of solar capacity by 2053, the issue details the opportunities that YETAs offer to accelerate private sector investment. It emphasises that these agreements provide revenue certainty for producers and predictable cost advantages for consumers, and that they play a key role among market-based instruments by supporting diversification of financing.

The topic of Issue 12, published in December, is green financing strategies and the proposal for a "Climate Bank." Building on the fact that Türkiye needs around USD 15 billion in annual investment to transform its electricity system on the pathway to net zero, the issue discusses the financial dimension of this transition. It proposes establishing a public-led "Climate Bank" to coordinate access to international finance, diversify funding sources and ensure that funds are managed through the most effective mechanisms, as a strategic step for Türkiye's green transformation.

New “Energy Transition Agenda” Podcast Episodes

The programme series “Energy Transition Agenda”, presented by SHURA and addressing the energy transition in all its dimensions, is available on SHURA’s YouTube channel as well as on Spotify and Apple Podcasts. Hosted by Didem Eryar Ünlü, Yael Taranto and Hasan Aksoy, the series featured expert guests such as Uygar Özesmi and Serdar Gökpınar and covers a wide range of topics–from the restorative economy to emerging climate technologies. The series continues to explore the energy transition’s core themes in depth, from renewables to batteries, from Türkiye’s net zero target to a just transition.

Episode 22

(24 October) With Uygar Özesmi, Chair of the Prosumer Economy Association (Türetim Ekonomisi Derneği), the programme examines the operating structure and importance of energy cooperatives, successful and unsuccessful international examples, the regulatory and market framework, investment processes, and the societal awareness needed to support the development of this field within the framework of the prosumer economy.

Episode 23

(28 November) With Özlem Yakut, Senior Finance Advisor at GEFF, the discussion covered the financing of energy efficiency, how it differs from conventional financing mechanisms, the roles of stakeholders and energy service companies, the impact of innovative financing instruments, key challenges, and potential solutions.

Episode 24

(26 December) With Serdar Gökpınar, Director of Innovative Technology Programmes at TTGV, the discussion focused on climate technologies with the potential to make an impact in tackling climate change, the commercialisation of these technologies, domestic technology development efforts, and the role of digitalisation and artificial intelligence.

SHURA EVENTS

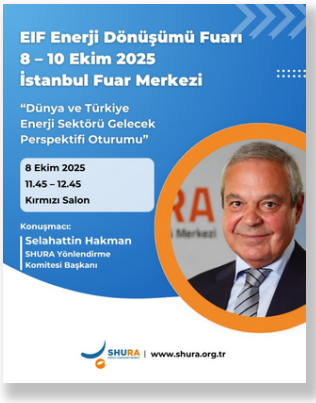
''Transformation of Türkiye's Electricity Distribution Sector" Report Launch & Panel / November 2025

Türkiye's electricity system is entering a period of profound transformation. The policies that will shape the direction of this transition, investments in digital infrastructure and the rollout of smart meters are redefining the future of the energy system. Published by the SHURA Energy Transition Center on 6 November, the report titled "Transformation of Türkiye's Electricity Distribution Sector" examines how Türkiye's electricity system is expected to evolve and identifies the critical policy needs required to enable this transformation.

In the online event held for the report launch, key findings were shared and future electricity distribution policies were discussed with experts. The event opened with remarks by Alkım Bağ, Director of SHURA, followed by a presentation of the report's main findings by Dr Sena Serhadlıoğlu, Senior Energy Analyst at SHURA.

The panel session, moderated by Hasan Aksoy, Research Coordinator at SHURA, was held under the title "The Future of the Electricity Distribution Sector." Speakers included Dr Oğuzcan Samsun, Director of Strategy, Business Development, and Mergers & Acquisitions at Enerjisa; Mert Bayer, System Operations Manager at MEDAŞ; and Mevlüt Akdeniz, Power Systems Engineer at MRC Türkiye.

SHURA at Events & Programs

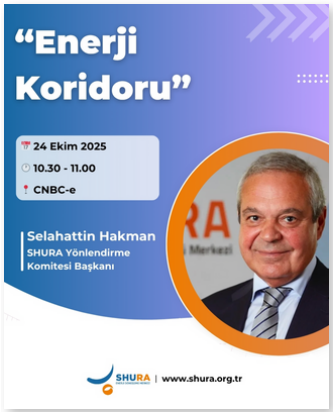


8 October Selahattin Hakman, Chair of SHURA's Steering Committee, participated as a speaker in the session titled "Future Outlook for the Global and Türkiye's Energy Sector", held on 8 October at EIF.

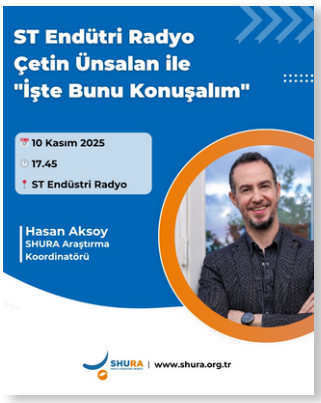
14 October Yael Taranto, Senior Energy Analyst at SHURA, spoke at the session she participated in during the 3rd Green Energy Summit, focusing on the impacts of carbon pricing on exports and related policy recommendations.

On **17 October, Sena Serhadlıoğlu** gave a presentation at the **Turkish Cement Manufacturers' Association meeting,** highlighting the importance of renewable hydrogen and carbon capture for decarbonisation. The presentation also shared strategic technological solutions to support the industry's green transition.

23 October Hasan Aksoy, Research Coordinator at SHURA, presented SHURA's reports on battery energy storage and the impacts of electric vehicles on distribution grids at the 8th National Electrical Installations Congress and Exhibition held in İzmir.



24 October Selahattin Hakman, Chair of the Steering Committee of SHURA, spoke on Energy Corridor, hosted by Şafak Tükle, about the current state of the energy transition globally and in Türkiye, as well as the key targets ahead.



10 November Hasan Aksoy, Research Coordinator at SHURA, was a guest of Çetin Ünsalan on ST Endüstri Radyo, where SHURA's report "Transformation of Türkiye's Electricity Distribution Sector" was discussed.

8 December Hasan Aksoy, Research Coordinator at SHURA, participated as a speaker in "Electricity Market Session I" held at the 15th Türkiye Energy Summit.

SHURA at Events & Programs

8 December Alkım Bağ, Director of SHURA, spoke at the event titled "From Europe to Asia: Resilience, Supply Chain, Digitalization and Connectivity," jointly organised by the Delegation of the European Union to Türkiye and MEXT.

12 December Hasan Aksoy, Research Coordinator at SHURA, attended the 15th Energy Symposium held in Ankara. In the session titled "Current Challenges and Solutions in Energy," he delivered a presentation entitled "Can Coal Power Plants Be Phased Out in Türkiye?"

17 December Alkım Bağ, Director of SHURA, was a guest of Pelin Yantur on Bloomberg HT. The discussion covered key themes of the energy transition, ranging from Türkiye's current energy efficiency outlook to 2026 priorities and the implications of the CBAM and COP31 for Türkiye.

17 December In an online event organised by the Turkish-German Energy Partnership, Hasan Aksoy, Research Coordinator at SHURA, spoke in a session addressing the current state of smart charging in Türkiye, along with key opportunities and barriers.

UPCOMING SHURA PUBLICATIONS

- **Enabling Renewable Hydrogen in Türkiye**
  This study aims to analyze the opportunities and challenges confronting Türkiye throughout the process of developing a hydrogen ecosystem, structured under specific headings.

- **The Impact of Locational Marginal Pricing on Power System for Accelerating Renewable Energy Integration**
  A mid and long-term roadmap for Türkiye concerning the need for moving towards the locational electricity pricing concept.

- **Combating Energy Poverty Through Clean Energy and Efficiency**
  A study aiming to contribute to the fight against energy poverty in Türkiye by conducting a comparative analysis of recommendation packages focused on energy accessibility and carbon reduction, and by developing these packages with input from stakeholders.

- **Unlocking Renewable Energy Integration through Power Market Reform: Insights from an International Think Tank Collaboration**
  This joint project aims to evaluate and strengthen power market structures in Türkiye, South Korea, Thailand, and Pakistan in order to unlock the full potential of renewable energy integration by identifying and promoting tailored market design, while fostering regional learning and collaboration.

SHURA IN THE MEDIA

14.10.2025
Installed renewable capacity exceeds 74 GW

16.10.2025
SHURA: Net Zero 2053 could create 432,000 additional jobs in Türkiye

17.10.2025
The overall benefits of the energy transition could be around twice its costs

06.11.2025
Digital transformation of the electricity distribution system is critical for the net zero target

06.11.2025
SHURA: A fundamental transformation of the distribution system is needed

06.11.2025
Digital transformation of the electricity distribution system is critical for the net zero target

07.11.2025
Türkiye's net zero target necessitates a fundamental transformation of the electricity distribution system

07.11.2025
Energy cooperatives need to be scaled up

17.11.2025
SHURA: Wind and solar could generate 77% of Türkiye's electricity in 2053.

01.12.2025
Industry is at the heart of the transition

01.12.2025
SHURA AGENDA: Renewable Energy Purchase Agreements (YETA)

07.12.2025
A new security paradigm: energy nationalism

24.12.2025
SHURA: A Climate Bank should be established to finance the energy transition

26.12.2025
What kind of "Climate Bank" model does Türkiye need?

Please find all the information on current activities and publications of SHURA Energy Transition Center on shura.org.tr. By registering on the website, you can subscribe to SHURA's e-newsletter.

Additionally, you can follow SHURA on social media platforms.

For more information:
shura@shura.org.tr