Hydrogen Technologies Association

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MESSAGE FROM THE PRESIDENT



Dear Readers,

Rapid developments in energy storage and hydrogen technologies continue to enhance the importance of international scientific cooperation and global meetings. In this context, two major international events held in December 2025 produced valuable outcomes that shed light on the future of our field.

The 5th World Energy Storage Conference (WESC-2025), hosted by Yıldız Technical University in Istanbul between 7–10 December 2025, was successfully completed with more than 200 participants and presentations from over 34 countries. As the founding president of the conference, it was an honor to deliver the opening address of this distinguished event. In my presentation entitled "New Integrated Energy Systems with Storage Options," I emphasized the strategic importance of hydrogen storage technologies in the global energy transition.

In addition, the 16th International Exergy, Energy and Environment Symposium (IEEES) and the 16th International Conference on Hydrogen Production (ICH2P), held in Craiova, Romania, from 14–18 December 2025, provided an important platform for comprehensive discussions on the future trends, roadmaps, and the hydrogen economy in Europe. Together with my scientific team, we participated in these meetings as delegates and delivered the opening speeches at both events. The conferences, along with interviews conducted during the meetings, received extensive coverage on Romanian national television channels.

I firmly believe that these significant scientific gatherings will make valuable contributions to the development of sustainable energy systems and the global dissemination of hydrogen technologies. Our greatest expectation is that the knowledge gained and international collaborations established through these events will translate into concrete projects in the near future.

Sincerely,

Prof. Dr. İbrahim Dinçer

President of the Hydrogen Technologies Association

Chairman of the Board

LETTER FROM EDITOR



Dear Readers,

We are leaving behind a year in which we witnessed significant events of the Hydrogen Century. Every three months, we provide you with summaries of global hydrogen news from reliable online publications, divided by continent, along with contact information for the sources, on the National Hydrogen Association's website. It is impossible to fit all this news into the E-bulletin. I am sure you will find the current news interesting. I invite you to read and follow them. The developments in Europe and Africa during September-December 2025 are particularly noteworthy. Europe is making rapid progress in its Hydrogen Valley Projects, making investment decisions, and planning to minimize its dependence on natural gas within two years. News from African countries is also related to this. Green hydrogen production facilities are expected to be built in African countries in the very near future. Still, 600 million people in Africa lack access to electricity. This is a very high figure in the twenty-first century. It is planned that two-thirds of the green hydrogen (GH2) obtained from renewable sources will be exported primarily to the European continent. There are some speculations regarding natural hydrogen reserves. We may receive more reliable information on this subject in the next decade. You can also read published news about hydrogen in Turkey on our website.

This year, many international and national hydrogen congresses and strategy meetings were held. We are informing you of the articles of our association members who took part in these meetings. We would like to thank Prof. Dr. Aysel Kantürk Figen, Prof. Dr. Mehmet Karakılçık, Prof. Dr. Selmiye Alkan Gürsel, Prof. Dr. Can Özgür Çolpan, and Assoc. Dr. Gültekin Akay for their contributions to this issue. In each issue, we have introduced you to a researcher and their laboratory from Türkiye. In this issue, we are presenting to you Assoc. Dr. Sarp Kaya and his research team from the Department of Chemistry at Koç University.

I wish you a Happy New Year and hope that 2026 will bring peace, prosperity, and tranquility to our country and the world.

Sincerely,

İnci Eroğlu - Editor

Join Us at the 10th International Hydrogen Technologies Congress, IHTEC-2026, in Istanbul



We are delighted to invite you to the 10th International Hydrogen Technologies Congress (IHTEC-2026), which will be held on May 10–13, 2026, at Istinye University in Istanbul, Türkiye.

Organized by Istinye University and the Hydrogen Technologies Association, IHTEC-2026 is a prestigious international forum that brings together leading researchers, industry professionals, entrepreneurs, and policy makers from around the world to advance the hydrogen economy. The congress will highlight the latest scientific, technological, and industrial developments in hydrogen production, storage, transportation, utilization, safety, and policy, offering a dynamic platform for in-depth discussions and groundbreaking collaborations.

Over four inspiring days, participants will have the opportunity to engage in high-impact keynote lectures, cutting-edge technical sessions, and interactive panel discussions, while strengthening academic and industrial partnerships and expanding their global networks.

Beyond the scientific program, experience the unique spirit of Istanbul—a city where continents meet and innovation thrives. Its rich history, cultural heritage, and vibrant energy will make your participation in IHTEC-2026 truly unforgettable.

Mark your calendar for IHTEC-2026 and join us in shaping the future of hydrogen technologies!

The Türkiye Hydrogen Action Plan Workshop was held on October 24, 2025.

Within the scope of the Türkiye Hydrogen Action Plan project activities being prepared by TENMAK in cooperation with the World Bank on behalf of the Ministry of Energy and Natural Resources, a workshop bringing together valuable representatives from public institutions, academia, the private sector, and civil society was held in Ankara on October 24, 2025.

During the workshop, group discussions were conducted under thematic headings including legislation and regulation, financing and incentive mechanisms, hydrogen production and consumption, infrastructure, R&D, workforce development, and public engagement. These discussions generated essential inputs that will help shape the Hydrogen Action Plan.

Our Association's Board Member, Prof. Dr. Aysel Kantürk Figen, participated in the Türkiye Hydrogen Action Plan Workshop.

President of the Turkish Energy, Nuclear and Mining Research Authority (TENMAK), Mr. Abdullah Buğrahan Karaveli, stated that hydrogen has long been studied in Türkiye and that the Clean Hydrogen Action Plan has reached its final stage.

Speaking at the Clean Hydrogen Action Plan Working Group Meeting, hosted by the World Bank with the Ministry of Energy and Natural Resources and TENMAK as beneficiary institutions, Karaveli emphasized that hydrogen is addressed through a holistic approach within Türkiye's long-term energy policies. He emphasized that energy efficiency, the maximum utilization of renewable energy resources, the role of nuclear energy in the electrification process, strong energy infrastructure, and the strategic use of mineral resources constitute the fundamental components of the energy transition.



Karaveli also noted that the Clean Hydrogen Action Plan provides a guiding framework for legislation, standards, financing models, business mechanisms, and technology selection, and clarified the position of hydrogen within macro-level energy policies.

Speaking at the meeting, Ms. Özge Özden, Senior Energy Specialist at the World Bank, stated that Türkiye could gain a significant competitive advantage globally by strengthening its domestic production capacity, equipment manufacturing, and raw material supply chains for renewable energy and hydrogen production. She highlighted that, thanks to its strong industrial base, Türkiye could play a game-changing role in the transition to a green and clean hydrogen economy, particularly in strategic sectors such as iron and steel, fertilizers, and petrochemicals.

Emphasizing that Türkiye's existing energy and industrial capacity provides a strong foundation for the transition to a green and clean hydrogen economy, Özden noted that the vision established today is of critical importance for the decarbonization goals of industry, transportation, and buildings.

https://www.tenmak.gov.tr/haberler/

https://www.aa.com.tr/tr/enerjiterminali

CleanTech2025: Hydrogen and PV Breakthroughs Congress

Prof. Dr. Can Özgür Çolpan



CleanTech2025 was organized with the main support of the Turkish Energy, Nuclear and Mining Research Authority (TENMAK), to enhance international knowledge exchange and cooperation in clean energy technologies. The congress was technically supported by the Yıldız Technical University Institute of Clean Energy Technologies, while the Hydrogen Technologies Association took part among the supporting organizations.

The CleanTech2025: Hydrogen and PV Breakthroughs Congress was successfully held as an international scientific and industrial platform focusing on hydrogen and photovoltaic (PV) systems within the field of clean energy technologies. Bringing together representatives from academia, public institutions, industry, and civil society, the congress enabled a multidisciplinary discussion of the latest developments, innovative research, and application-oriented solutions in hydrogen and solar energy technologies.

Within the scope of the congress, oral presentations, keynote lectures, and technical sessions were organized on topics including green hydrogen production, PV–hydrogen integration, hydrogen storage and transportation technologies, fuel cells, digitalization in energy transition, sustainability, and carbon reduction strategies. The presented papers made significant scientific contributions in both fundamental science and applied engineering. In particular, PV-powered electrolysis, liquid organic hydrogen carrier (LOHC) systems, the ammonia–hydrogen cycle, and industrial scalability emerged as prominent themes.

Beyond producing academic outcomes, CleanTech2025 had a substantial impact on fostering international collaborations, advancing R&D projects, and building bridges between public policies and technological developments. Bilateral meetings and panel discussions held during the congress paved the way for joint project ideas and the formation of future consortia.

Our Association President, Prof. Dr. İbrahim Dinçer, delivered a keynote address at the congress. Our Board Member, Prof. Dr. Aysel Kantürk Figen, contributed to the event as Co-Chair, while our Board Member, Prof. Dr. Can Özgür Çolpan, participated as a panelist in the panel titled "Strategic Integration of Hydrogen into Grid Management."

We would like to extend our sincere thanks to the entire organizing committee, speakers, and participants for their contributions to the success of the congress.

Boron-Energy Axis Seminar Series at Yıldız Technical University Institute of Clean Energy Technologies

Prof. Dr. Aysel Kantürk Figen







The Boron–Energy Axis Seminar Series is organized by the Yıldız Technical University Institute of Clean Energy Technologies to address the role of boron in energy from a multidisciplinary perspective. Moderated by Prof. Dr. Aysel Kantürk Figen, the seminar series brings together stakeholders from academia and industry, providing a platform for sharing current research at the intersection of boron and energy technologies.

As part of the first seminar in the series, recent studies in energy and materials science were discussed. The guest speaker, Dr. Selçuk Acar, Plant Director at Pavezyum Chemical, delivered a presentation entitled "Boron-Based Superconductors and Their Applications." In his talk, Dr. Acar comprehensively addressed the fundamental principles underlying the superconducting properties of boron, synthesis methods of boron-based superconducting materials, and their potential applications in advanced energy technologies.

The second seminar focused on current research in nanotechnology and energy. The guest speaker, Dr. Ahmet Eymen Akşener, serves as the Materials Laboratories Team Leader at the Sabancı University Nanotechnology Research and Application Center (SUNUM). In his presentation titled "Freestanding Borophene and Its Energy Applications," Dr. Akşener provided an in-depth evaluation of synthesis approaches for borophene and other boron-based two-dimensional materials, their structural and electronic characterization techniques, and their potential applications in energy storage, energy conversion, and energy transmission technologies.

Another seminar featuring recent developments in the field hosted Dr. Ebru Karaçay as a guest speaker. In her presentation entitled "Eti Maden: Boron and Energy," Dr. Karaçay shared comprehensive insights into boron minerals in Türkiye, the operational fields of Eti Maden Enterprises, and ongoing R&D activities related to boron. The presentation highlighted the strategic importance of boron in energy technologies and Türkiye's strong position in this field.

Through this Boron–Energy Axis Seminar Series, the YTÜ Institute of Clean Energy Technologies aims to enhance the visibility of boron-based advanced materials in energy technologies, strengthen academia–industry collaboration, and create a high-quality scientific discussion environment for researchers and graduate students.

https://tet.yildiz.edu.tr/

EU Hydrogen Research and Innovation Days 2025: Shaping Europe's Clean Hydrogen Future in Brussels

Prof. Dr. Selmiye Alkan Gürsel

The **EU Hydrogen Research and Innovation Days 2025** took place on **24–25 November 2025** at the **Sofitel Europe Hotel in Brussels**, bringing together high-level representatives from the European Commission, the Clean Hydrogen Partnership, Hydrogen Europe Research, industry, and the research community. Building on the legacy of the former *Programme Review Days*, the event served as a flagship platform to assess progress, address key challenges, and define future priorities for hydrogen research and innovation in Europe. **The central message was clear: hydrogen research must accelerate the transition from laboratory-scale innovation to real-world deployment and market uptake**.

During the event, **Mirela Atanasiu**, Head of Unit for Operations and Communications at the Clean Hydrogen Partnership, presented an overview of the programme's current status and key achievements. She highlighted Europe's growing capacity to scale up hydrogen technologies, while underlining that maintaining global competitiveness will rely on sustained investment in research, strengthened knowledge consolidation, and faster pathways for innovation and deployment.

The meeting also provided a comprehensive overview of the **Strategic Research & Innovation Agenda (SRIA) 2021–2027** and the **Clean Hydrogen Joint Undertaking (JU) Programme**, both of which are driven by the shared ambition of *"from research to delivering hydrogen solutions and innovations in the market."* Particular emphasis was placed on cross-cutting activities essential for long-term success, including synergies with other European partnerships and programmes, regulations, codes and standards, European hydrogen safety, sustainability and circularity, knowledge management, competitiveness and SME engagement, international cooperation, and communication activities.

Across the two-day programme, sessions covered the whole hydrogen value chain, from renewable hydrogen production and next-generation electrolysers to infrastructure, mobility, clean heat and power, safety, and pre-normative research. Flagship projects such as **REFHYNE, MultiplHY, H2Haul, H2Ports, H2MARINE, HyCoFlex, and CLEANER** demonstrated how Clean Hydrogen Programme funding is translating into tangible technological progress, industrial-scale demonstrations, and integrated energy solutions across Europe.



Figure 1: Highlights from the EU Hydrogen Research and Innovation Days 2025: Mirela Atanasiu (Clean Hydrogen Partnership) and Luigi Crema (President, Hydrogen Europe Research) addressing key priorities for Europe's hydrogen research and innovation agenda.

A strong focus was placed on **Hydrogen Valleys** as a cornerstone of Europe's hydrogen strategy. Framed by the vision of **"Repowering the EU with Hydrogen Valleys,"** these regional ecosystems were highlighted as key enablers for creating a truly European research and innovation area for hydrogen. The **Hydrogen Valleys Platform** currently hosts **over 100 Hydrogen Valleys**, with **101 featured projects**, **78 of which are located within the European Union**, underscoring the growing importance of regionally anchored, integrated hydrogen initiatives. Within this European landscape, **HYSouthMarmara Hydrogen Valley**, **Türkiye's first Clean Hydrogen Partnership-supported Hydrogen Valley**, emerged as a strategically aligned initiative. By integrating green hydrogen production, storage, distribution, and end-use across industry, energy, and transport sectors in the South Marmara region, HYSouthMarmara reflects the core principles highlighted throughout the event. Its strong focus on regional collaboration, innovation close to market, and system integration positions the project firmly within the objectives of the Clean Hydrogen JU and the broader European hydrogen ecosystem.

A key highlight of the event was the contribution of **Luigi Crema**, President of **Hydrogen Europe Research (HER)**, who underlined Europe's rapidly growing hydrogen momentum. He noted that Europe has effectively become the **global testing ground for the hydrogen economy**, with **over 1,400 hydrogen projects worldwide** and an **investment pipeline exceeding €500 billion** (Hydrogen Council, 2025). Within this context, the **Clean Hydrogen Partnership supports more than 400 projects**, backed by **€2.8 billion in EU funding** and **over 50% industry co-funding**, demonstrating strong public–private commitment. At the same time, he stressed that implementation and innovation must advance hand in hand, and that hydrogen is no longer a single-vector solution but a **cross-sectoral system** spanning production, infrastructure, end uses, skills, and society. As articulated in the **HER Position Paper for Hydrogen Research**, published in **November 2024**, one of the key challenges ahead is **to bridge the gap between innovation and investment, and between research excellence and large-scale deployment**. In his words:

"Hydrogen will grow only through integration: research links technologies, sectors, policies, and people."





Figure 2: *Covers of some position papers of Hydrogen Europe Research (https://hydrogeneuroperesearch.eu/publications-2/)*

Luigi Crema further outlined priority research directions across the hydrogen value chain. In **hydrogen production**, electrolysis remains central, with strong emphasis on novel catalysts, **PFAS-free membranes**, and emerging concepts such as hybrid and depolarised electrolysis, alongside longer-term diversification through **photocatalytic, thermochemical, and biomass-based pathways**. Reversible and co-electrolysis for bidirectional operation and synthetic fuel production, as well as the exploration of **geological hydrogen** and **underlying biological processes**, were highlighted as emerging areas. In **hydrogen storage**, advances are needed in solid-state storage materials, underground storage in salt caverns and depleted fields, pipeline retrofitting and polymer-based transport, hydrogen carriers such as **green ammonia and LOHCs**, and compressed and liquid hydrogen systems with improved safety and reduced embrittlement risks. For **hydrogen applications**, priorities **span transport, covering next-generation fuel cells, aviation-specific storage** and cooling solutions, and **maritime** safety frameworks, as well as industrial applications, including hydrogen-based **metal production, combustion science, ceramics manufacturing**, and flexible energy systems such as CHP units, hydrogen turbines, and hybrid power-to-gas infrastructures.

The EU Hydrogen Research and Innovation Days 2025 concluded with award ceremonies recognizing outstanding achievements through the Clean Hydrogen Partnership Awards and Hydrogen Europe Research Awards, celebrating successful projects, innovative solutions, Hydrogen Valleys, and emerging researchers. Overall, the event reaffirmed Europe's commitment to a coordinated, research-driven, and market-oriented hydrogen transition, while highlighting the critical role of integrated regional initiatives, such as Hydrogen Valleys in translating European ambition into real-world impact.

IHTEC 2026 Awards

Organized by the Hydrogen Technologies Association (HTA), the IHTEC Awards are presented annually within the scope of the International Hydrogen Congress (IHTEC) to honor outstanding scientific, technological, and industrial contributions in the field of hydrogen energy. The awards aim to encourage individuals and institutions contributing to sustainable development and climate-friendly transformation.

Applications and nominations will be submitted through the official website of the Association. The evaluation process will be conducted by an independent and international jury in accordance with transparency and academic standards. Award recipients will be invited to the official IHTEC Award Ceremony, with congress registration and accommodation expenses covered by the Association.

We invite you to apply for the IHTEC 2026 Awards and join us in shaping the future of hydrogen energy.

Hydrogen Technologies Association
IHTEC Awards Committee

For more information:

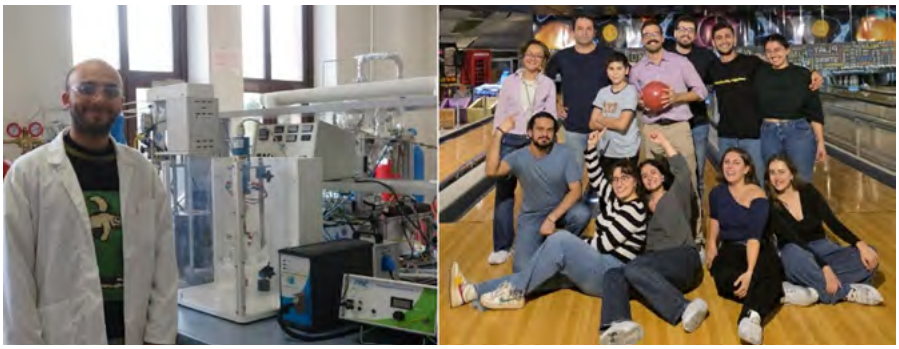
Award Categories

- **Nejat Veziroğlu Special Award:** Presented to individuals who have pioneered the international advancement of hydrogen technologies
- **Technology Award:** Granted to institutions or companies developing innovative products, facilities, or patented solutions
- **HTA Service Award:** Presented to individuals or institutions with at least 20 years of dedicated service in the hydrogen field
- **Young Researcher Award:** For researchers under the age of 35 with outstanding and original contributions
- **Student Researcher Award:** For undergraduate, master's, or PhD students under the age of 30



The Sustainable Energy Conversion Research Group at Koç University Investigates Electrified Interfaces at the Atomic Level

Doç. Dr. Sarp Kaya



Doç. Dr. Sarp Kaya Araştırma Grubu

Electrified interfaces lie at the heart of many of the electrochemical transformations required for a sustainable energy future. At these interfaces, electric fields, surface structure, and local chemical composition interact in a highly dynamic manner, giving rise to reaction pathways and selectivities that cannot be accessed in the absence of interfacial polarization. The research group of Assoc. Prof. Dr. Sarp Kaya at Koç University (sarpkayaLAB and KUHyTech) focuses on achieving a molecular- and atomic-level understanding of electrified interfaces, which is essential for the rational design of materials that efficiently drive key energy-conversion reactions. From an application perspective, his group is actively engaged in electrochemical, photoelectrochemical, photochemical, and thermocatalytic energy-conversion processes, with a particular emphasis on catalysis. Achieving an atomic-level understanding of surface reactions requires advanced materials synthesis and state-of-the-art characterization capabilities. Accordingly, the group designs, synthesizes, and systematically tailors materials to identify fundamental bottlenecks in energy-conversion processes and to establish clear structure–function–activity relationships.

The ongoing research activities span a broad range of reactions, electrochemical and photoelectrochemical hydrogen evolution and oxidation, oxygen evolution and reduction, CO2 reduction to alcohols, and ammonia synthesis; as well as the thermocatalytic conversion of CO, primary alcohols, and acids. In addition, the group conducts research on perovskite solar cells.

Over the years, the laboratory has reached a level of maturity that enables the synthesis of a wide variety of materials, including two-dimensional materials, oxide semiconductors, high-aspect-ratio nanostructures such as nanowires and nanorods, single-atom catalysts, ultrathin epitaxial films, mesoporous materials, and solar cells. A central component of this work is the comprehensive characterization of these materials.

Establishing meaningful structure-activity relationships requires a clear understanding of the specific sites responsible for photo- and electrocatalytic activity. However, identifying active sites is rarely straightforward, as their nature can evolve during chemical transformations. Consequently, operando and in-situ analytical techniques are often essential for revealing the true origin of electrocatalytic behavior. For this reason, increasing emphasis is placed on in-situ and operando characterization of surfaces and interfaces. His group is combining multiple spectroscopic techniques, including XPS, Raman spectroscopy, and FTIR spectroscopy, with reaction product-determination tools such as mass spectrometry, gas-liquid-ion chromatography, and nuclear magnetic resonance to establish a general understanding of the elementary steps of electrochemical conversion reactions. His research group regularly uses synchrotron facilities to obtain more in-depth information about the interface of interest.

Dedicated and ambitious PhD and master's students, postdoctoral researchers, and undergraduate students work collaboratively within his group, fostering a dynamic and inclusive research environment. United by a shared passion for science, group members contribute complementary expertise and perspectives, enabling unorthodox approaches to complex scientific problems. This collaborative culture not only drives high-quality research outcomes but also provides a rigorous training environment in which young scientists develop strong fundamentals and the skills required for successful academic and industrial careers.



Short biography: Assoc. Prof. Dr. Sarp Kaya received his B.Sc. and M.Sc. degrees in Chemical Engineering from Middle East Technical University in 2000 and 2002, respectively. He earned his Ph.D. in Physical Chemistry in 2007, following his doctoral research on ultrathin metal oxide layers conducted at the Fritz Haber Institute of the Max Planck Society and Humboldt University. He then carried out postdoctoral research at Stanford University (2007–2010), followed by research scientist positions at SLAC National Accelerator Laboratory (2010–2014) and the Joint Center for Artificial Photosynthesis (JCAP, 2011–2014), where he extensively utilized synchrotron radiation to investigate gas–solid and liquid–solid interfaces. He joined the Department of Chemistry at Koç University in 2013. His research has been integral to the Koç University Tüpraş Energy Center (KUTEM) since 2019 and to the Koç University Hydrogen Technologies Center (KUHyTech), established in early 2024. He received the Academy of Sciences Young Scientists Award (BAGEP) in 2016 and the Young Scientists Award Program (TÜBA GEBİP) in 2017.

Some of his recent publications on hydrogen evolution reactions:

Cation Vacancy-Mediated Ultrafast Hole Transport in CuBi2O4 Photocathodes, E. Ardalı, H. Jahangiri, N. Solati, U. Yahsi, C. Tav, A. Sennaroglu, and S. Kaya, ChemSusChem 18, e202401345 (2025)

Compositional Alteration of Low-Dimensional Nickel Sulfides under Hydrogen Evolution Reaction Conditions in Alkaline Media, N. Solati, C. Karakaya, K. Şimşek, and S. Kaya, Materials Today Chemistry 38, 102081 (2024).

Single-Atom Sn-Loaded Exfoliated Layered Titanate Revealing Enhanced Photocatalytic Activity in Hydrogen Generation, T. Üstünel, Y. Ide, S. Kaya, and E. Doustkhah, ACS Sustainable Chem. Eng. 11, 3306 (2023)

Advancing the understanding of the structure-activity-durability relation of 2D MoS2 for the hydrogen evolution reaction, N. Solati, C. Karakaya, S. Kaya, ACS Catal., 13, 342 (2023)

The 10th World Hydrogen Technologies Congress convened in Dublin, Ireland, from October 21-23, 2025

Prof. Dr. İnci Eroğlu



WHTC 2025 Academic Organization Committee (Dr. Junhan Cheng,Dr. Ayfer Veziroğlu, Prof. İnci Eroğlu, Prof. Giuseppe Spazzafumo, Dr Ali Saberi Mehr, Paul McCormack).

The International Association for Hydrogen Energy (IAHE) supports the World Hydrogen Energy Congress (WHEC) in even-numbered years and the World Hydrogen Technologies Convention (WHTC) in odd-numbered years. This year, the World Hydrogen Technologies Convention WHTC 2025, organized by Hydrogen Ireland under the leadership of its CEO, Paul McGourmic, took place in Dublin, Ireland, from October 21-23. The meeting consisted of two parallel parts. In keeping with the character of WHTC meetings, the first part comprised the Industrial Program, and the second part the Academic Program. The Academic Program organization was overseen by IAHE President Dr. Ayfer Veziroğlu, IAHE Board members Prof. Giuseppe Spazzafumo and Prof. İnci Eroğlu, Congress Academic Program Chair Dr. Ali Sabari Mehr, and Dr. Junhan Cheng. Other IAHE Board members, including Prof. Bruno Pollet, Prof. Frano Barbir, Prof. Oliver Joubert, Prof. SA Sherif, and Prof. John Sheffield, gave presentations and helped foster a strong environment for discussion and information exchange. Oral and poster presentations highlighted the latest research in hydrogen exploration, spanning many countries worldwide through 2025. The conference program is accessible on the website. Selected articles from the presentations will be published in a special issue of the Journal of International Hydrogen Energy. The Industrial Program opened with speeches by the President of the Hydrogen Ireland Association and the Minister of Climate, Energy, and Environment. Speakers from private and public institutions participated in panels discussing regulations that enable hydrogen infrastructure projects and early actions towards hydrogen for the long-term security of energy systems. The Mannok Hydrogen Valley Project, SMARTH2, The HYreland Project, and SH2AMROCK Hydrogen Valley Projects were presented. The German, Canadian, and French Ambassadors to Ireland provided diplomatic perspectives on developments in inter-country cooperation. The other days of the conference focused on industrial uses and opportunities, the hydrogen economy, efficiency and technology, bankability, energy security, and green data.

The 25th World Hydrogen Energy Conference will be held in Singapore from June 22-26, 2026. Bros Group Chairman Cem Tuncer and Bilge Şener presented the WHEC2026 flyer and publicity movie (whec2026org).

World Hydrogen Technologies Convention 2025 Successfully Completed

Doç. Dr. Ramiz Gültekin Akay

The World Hydrogen Technologies Convention (WHTC2025), held in Dublin from October 21–23, 2025, by the Irish Hydrogen Association and the International Association of Hydrogen Energy (IAHE), stood out this year as one of the most comprehensive and strategic gatherings of the hydrogen ecosystem, discussing the strategic role of hydrogen in the context of global energy transition and sustainable technologies. Bringing together academia, industry, government agencies, and international initiatives, the event addressed the latest scientific developments and sectoral transformation in hydrogen technologies from a holistic perspective.

Over 800 international participants from more than forty countries, including city representatives, research centers, industry professionals, policymakers, and academics, gathered at WHTC2025. Throughout the event, which covered the latest technological advancements in hydrogen production, storage, distribution, and applications, a wealth of information was shared through expert speakers, panels, and interactive discussions. As approved by the organization's scientific program committee, the event featured approximately 120 oral presentations and 75 poster presentations covering a wide range of topics from renewable hydrogen production techniques and industrial integration to infrastructure standards and policy frameworks. The conference program was not limited to technical presentations but also provided a platform for multilateral dialogues on the global viability of the hydrogen economy. In particular, critical topics such as hydrogen TCO (Total Cost of Ownership) and economic evaluation models, regulatory frameworks for policymakers, financing of industrial-scale projects, and standardization and certification strategies were addressed. These sessions, with strong participation from academia, energy companies, government agencies, and international NGOs, made significant contributions to the development of governance and implementation policies. The event was attended by Dr. Ayfer Veziroğlu, President of the International Association for Hydrogen Energy (IAHE), and Prof. Dr. Inci Eroğlu, who participated and delivered opening speeches, and academics from Turkey, Associate Professor Dr. Ramiz Gültekin AKAY, a faculty member at Kocaeli University and the founder and director of the Hydrogen, Fuel Cell and Electrochemical Technologies Laboratory (HYPET), and Dr. Berna Sezgin, also attended the event and gave academic presentations.



IAHE President Dr. Ayfer Veziroğlu WHTC 2025 Opening Speech



Prof. Dr. İnci Eroğlu's presentation in the Technological Innovations Panel.



Dr. Berna Sezgin, Prof. İnci Eroğlu, and Assoc. Prof. Dr. Ramiz Gültekin Akay presented at WHTC2025.

In conclusion, WHTC2025 strengthened sustainability-focused collaboration in the energy sector by addressing the economic, environmental, and regulatory aspects of hydrogen technologies in a holistic manner. The summit, which reaffirmed hydrogen's critical role in the global energy transition, laid the groundwork for new projects among participants and generated expectations that the knowledge and connections gained would translate into concrete industrial applications. The next World Hydrogen Technologies Convention (WHTC2027) will be held in Halifax, Canada.

Strategic Meetings in Türkiye's Energy Transformation

Doç. Dr. Ramiz Gültekin Akay

2025 Year-End Assessment: Türkiye›s Energy Technology Horizons Through the Lens of the mESC-IS and ELENTEK Symposiums

In the last quarter of 2025, Türkiye hosted two critical meetings that clearly revealed its strategic position and future vision in energy technologies, showcasing the country's competence in electrochemical energy storage and hydrogen technologies, both nationally and internationally. These were the 9th International Symposium on Materials for Energy Storage and Transformation (mESC-IS 2025), held at the Kocaeli International Congress Center on September 5-8, 2025, and the 2nd Electrochemical Energy Technologies (ELENTEK) Symposium, organized by the Chamber of Chemical Engineers of the Union of Turkish Chambers of Engineers and Architects (TMMOB), held at Gazi University in Ankara on November 27-28, 2025. Assoc. Prof. Dr. Ramiz Gültekin Akay has chaired mESC-IS 2025 and served on the ELENTEK2025 program committee. In this article, he analyzes Türkiye's current state in energy transformation, its alignment with global trends, and its roadmap for the future, highlighting the strong synergy and integrated vision between the two platforms.



Participants of the 9th International Symposium on Materials for Energy Storage and Conversion (mESC-IS 2025)



Participants of the 2nd Electrochemical Energy Technologies (ELENTEK 2025) Symposium

International Arena: 9th mESC-IS Symposium and Global Trends

The 9th mESC-IS Symposium, held in Kocaeli in September 2025, is a well-established platform that has transformed its journey, which began in Ankara in 2015, into a globally respected scientific forum. Bringing together scientists, researchers, and industry professionals from a wide geographical area, spanning Europe, the Caucasus, the Middle East, and Africa, as well as North America and East Asia, this event has reinforced Türkiye's central role in international scientific dialogue. The symposium serves as a showcase for the latest developments in energy technologies and the future research trends. This year's academic program of the symposium is structured around four main thematic headings that constitute the cornerstones of the field. The hydrogen section, of particular importance to readers of the Hydrogen Technologies Association (HTD) newsletter, covers a wide range of applications from production to storage and transportation:

- **Batteries and supercapacitors:** Next-generation lithium-ion, sodium-ion, solid-state, and flow battery systems and capacitive energy storage.
- **Fuels and electrolytic cells:** PEM, SOEC, and alkaline electrolyzers, PEM and SOFC fuel cells, and reversible systems.
- **Hydrogen for Energy Storage and Conversion**
  - **Advances in reformation processes for hydrogen production**
  - **Hydrogen production via water splitting**
  - **New materials for solid-state hydrogen storage**
  - **Dense membranes for hydrogen splitting**
  - **Hydrogen compression using metal hydrides**
  - **Electrochemical hydrogen splitting and compression**
  - **Materials for hydrogen transportation**
- **Research Methods in Batteries and Fuel Cells:** Machine learning, computational material design, and in-situ/operando techniques. This year's symposium demonstrated its alignment with the dynamic nature of the field through two strategic innovations added to the program:

1. **Addition of the Theme "Research Methods in Batteries and Fuel Cells":** The inclusion of this new area in the program is a strategic response to the methodological evolution of the sector. Approaches such as machine learning and computational materials design are key to reducing R&D costs and time. This theme reflects Türkiye's commitment to increasing its capacity to accelerate material discovery and characterization processes, a critical factor in competing with global R&D powerhouses.

2. **"Spin-Off Poster and Exhibition Session":** This special session, held for the first time, signals Türkiye's academic ecosystem's effort to build a conscious bridge to global deep tech and energy investors. Start-ups and entrepreneurial teams have undertaken the mission of filling the critical commercialization gap needed to scale local innovations by directly presenting their prototypes to investors.

mESC-IS also demonstrates its commit-

ment to developing young researchers through concrete steps. The four-day "mESC-School" summer school, held immediately before the event, offered young talents an intensive training opportunity. Furthermore, the "Best Poster/Young Researcher" awards given to Hakan Yüce, Ilgar Ayyubov, Mukhammed Kenzhebek, Tuana Bal, and Zhansaya Bakthytzanova reinforced the mission of encouraging future scientists. The high profile of the event was also evidenced by the strong support it received from a wide range of leading Turkish institutions and organizations, including TÜBİTAK, host Kocaeli University, Boğaziçi University, ENDAM, Gebze Technical University, Koç University, Middle East Technical University, Sabancı University, Tüpraş, Referans Kimya, and Kocaeli Metropolitan Municipality. To understand how the fundamental scientific breakthroughs showcased in this global event are rooted in Türkiye's industrial landscape, it is essential to examine the outcomes of the ELENTEK symposium, which brought together national actors.

National Ecosystem Capacity Demonstration: ELENTEK2025 Symposium

The ELENTEK2025 Symposium, organized for the second time by the Chamber of Chemical Engineers of the Union of Turkish Chambers of Engineers and Architects (TMMOB) in Ankara in November 2025, stands out as a national platform for collaboration focused on developing Türkiye's technological and institutional capacity for the energy transition. Bringing together representatives from the public sector, academia, and industry, this event aims to build concrete bridges between the country's R&D activities and industrial application areas.

The symposium examined Türkiye's current capabilities and future goals across a wide range of strategically critical thematic areas, including Batteries, Fuel Cells, Solar Energy, Recycling, Artificial Intelligence Applications in Electrochemical Technologies, Security in the Energy Transition, and Electrolyzers. Presentations, particularly in the field of hydrogen technologies, clearly demonstrated the importance the national ecosystem attaches to this issue:

- **"Global Hydrogen Economy and Turkey"** – Mehmet ÇAVUŞ (H2 Era)
- **"Green Hydrogen, Blue Future: The Electrochemical Basis of Sustainable Energy**" – Prof. Dr. Fatma Gül BOYACI
- **"Hydrogen Safety in Iron and Steel: POSCO Experience"** – Merve BİRİNCİ (POSCO Assan Tst)
- **"The Success of Hydrogen Depends on Safety"** – Selimcan MENEMENCİOĞLU (SHELL)
- **"Hydrogen Value Chain and CW Energy Green Hydrogen R&D Studies"** – Prof. Dr. Şadan ÖZCAN and his team (CW Energy)

The most striking aspect of the symposium is the strength and diversity of industry participation. When the participants' profiles are examined, it is clear that an integrated technology ecosystem, extending from R&D to production, is blossoming in Türkiye. This ecosystem includes actors representing different links in the value chain:

- **Material and Component Suppliers:** Companies such as Asos Proses and Ion Membranes provide the basic building blocks of the technology.
- **System Integrators and Manufacturers:** Companies such as Pomega, Siro Energy, ASPİLSAN, and CW Energy develop and commercialize the final products and systems.
- **Global Energy Giants and End-Users:** The presence of international players such as SHELL and POSCO Assan Tst demonstrates the potential for integration of the local ecosystem with global markets.
- **Specialized R&D and Consulting Firms:** Organizations like H2 Era contribute to the strategic and technical depth of the sector. This picture signals that academic studies and pilot projects are now beginning to find their counterparts on an industrial scale, and that the sector is maturing.

Strategic Implications

• 1. National Industry Signals a Transition from R&D to Production: The diversity of industrial participation in ELENTEK (materials, systems, end users) indicates that a transition from isolated R&D activities to an integrated production value chain has begun in Türkiye.

• 2. Hydrogen Takes Center Stage in Energy Planning: The central theme of hydrogen (production, storage, security) in both symposiums proves that this technology is no longer a niche research area but is now considered a fundamental component of the national energy strategy. • 3. Innovation Ecosystem Maturing with a Commercialization Focus: The "Spin-Off" session at mESC-IS and the industry-academia collaborations at ELENTEK demonstrate that the ecosystem is adopting a more conscious and structured approach to transforming academic knowledge into economic value.

Synthesis and Future Perspective: Lessons Learned from Two Symposiums

The mESC-IS 2025 and ELENTEK 2025 Symposiums, beyond their individual successes, present a larger and more meaningful picture of Türkiye's energy technologies strategy when considered together. These two events, with their complementary structures, have revealed both the depth and breadth of the sector. mESC-IS, with its focus on basic science and advanced research, connects Türkiye to the global innovation network; while ELENTEK, with its application and ecosystem-focused structure, represents the will to transform this knowledge into the competitiveness of the national industry. Common themes highlighted in both symposiums form the main pillars of Türkiye's energy future:

1. The Rise of Hydrogen: The two events reveal a maturation trajectory for hydrogen. While mESC-IS focused on the fundamental materials science (membranes, storage materials) required for hydrogen, ELENTEK2025 addressed the practical challenges of this technology (safety in iron and steel, the value chain, green hydrogen R&D). This shows that Türkiye has moved from the "what" question to the "how" question, i.e., making a strategic advance from basic research to field application.

2. Integrated Energy Systems: The focus of the discussions is not on individual technologies but on systems that combine batteries, fuel cells, supercapacitors, and solar energy, which reflects a critical shift in mindset. This approach shows that the Turkish ecosystem is now oriented towards solving the complex system integration problems required for the renewable energy-weighted grid of the future.

3. Technology and Commercialization Interface: On the one hand, mESC-IS's "Spin-Off" session, an effort to open academic discoveries to global investors, and on the other hand, the intensive and layered industrial participation at ELENTEK, are the most evident signs that the gap between technology and commercialization is closing in Türkiye. The cycle between knowledge production and value-added product development is accelerating significantly.

In conclusion, these two strategic events, realized by the end of 2025, concretize Turkey's ambition in the field of energy technologies. These symposiums demonstrate a critical transition from individual academic research to an integrated and market-oriented innovation pipeline, positioning Türkiye not only as a technology user but also as a future architect of regional energy solutions. These events are concrete evidence of the momentum and shared understanding achieved in the sector.

We must transition to a hydrogen economy

Prof. Dr. Mehmet Karakılçık

Prof. Karakılçık emphasized that transitioning to a hydrogen economy is no longer a choice but a necessity in line with Turkey's 2053 Net Zero Emissions target.

Hydrogen technologies play a key role in Turkey's energy future. Prof. Dr. Mehmet Karakılçık, Head of the Physics Department at Çukurova University's Faculty of Science and Literature, emphasized that transitioning to a hydrogen economy is no longer an option but a necessity in line with Turkey's 2053 Net Zero Emissions target. Karakılçık stated that hydrogen is not only an energy source but also a means of transformation, adding that Turkey could become a regional hub for green hydrogen production with its solar and wind potential. He said that cooperation between academia, industry, and the public sector is the strongest pillar of this process.

The work carried out at Çukurova University under the leadership of Prof. Karakılçık focuses on hydrogen production, storage, and integration into energy systems. Research conducted in university laboratories ranks among Turkey's pioneering projects, particularly in solar energy-based hydrogen production, fuel cells, and storage systems. Karakılçık emphasized that scientific knowledge must be applied, stressing that green



hydrogen production using domestic electrolyzer systems is critical for energy independence.

More info

Prof. Dr. İbrahim Dinçer gave an invited talk at WESC-2025.

Prof. Dr. İbrahim Dinçer, Chairman of the Board of Directors of the Hydrogen Technologies Association, participated in the 5th World Energy Storage Conference (WESC-2025), one of the world's leading scientific conferences on energy storage and sustainable energy technologies.

Held in Istanbul from December 7-10, 2025, WESC-2025 brought together international participants in fields such as energy storage technologies, the transition to renewable energy, and the future of the hydrogen economy. The event created a critical scientific platform for academics, researchers, public representatives, and industry professionals.

Prof. Dr. Dinçer contributed to the scientific content of the conference as a member of the Founding Chair committee and shared his assessments on hydrogen storage technologies, energy conversion strategies, and sustainable infrastructure solutions in various sessions.

The conference covered topics such as:

- advanced energy storage technologies,
- innovative approaches to hydrogen production, storage, and transportation,
- digitalization and artificial intelligence in energy systems,
- transition strategies to a low-carbon economy

and featured comprehensive technical discussions with international participants. Prof. Dr. Dinçer's contributions have strengthened Turkey's visibility in scientific activities in the fields of hydrogen and energy storage.

5th World Energy Storage Conference (WESC-2025) was successfully held

Following the previous World Energy Storage Conferences held in the USA and Qatar in 2023 and 2024, the 5th World Energy Storage Conference (WESC-2025) was successfully held on 7–10 December 2025 at Yıldız Technical University in Istanbul. The conference brought together more than 200 participants and presentations from over 34 countries. As the founding president of the conference, Prof. Dr. Dinçer, President of the National Hydrogen Association, delivered the opening speech. In his presentation titled "New Integrated Energy Systems



with Storage Options," he emphasized the critical importance of hydrogen storage technologies.

More info

16th International Exergy, Energy and Environment Symposium (IEEES) and the 16th International Conference on Hydrogen Production (ICH2P)

The 16th International Exergy, Energy and Environment Symposium (IEEES) and the 16th International Conference on Hydrogen Production (ICH2P) were held in Craiova, Romania, from 14 to 18 December 2025. Prof. Dr. İbrahim Dinçer, President of the National Hydrogen Energy Association and Chair of the TÜBA Energy Working Group, participated in these events as a delegate together with his scientific team and delivered the opening speeches at both conferences. Alongside the meetings, future trends and roadmaps for hydrogen technologies in Europe, as well as the hydrogen



economy, were extensively discussed. The conferences and related interviews received wide coverage on Romanian national television channels.

More info

Powering the Clean Energy Transition: Battery Science and Engineering Minor Program at Sabancı University, Developed in Collaboration with Siro Energy

Prof. Dr. Selmiye Alkan Gürsel

Launched in 2024, the **Battery Science and Engineering Minor Program** at Sabancı University is built on a strong **university–industry collaboration with Siro Energy**, aiming to educate highly qualified engineers for the rapidly evolving battery and energy storage ecosystem. **Siro Energy and Sabancı University come together for a clean future**, establishing a shared vision for sustainable technologies, industrial relevance, and societal impact. This collaboration ensures that the program is firmly grounded in **real industrial needs**, while maintaining strong scientific and academic foundations.

Through this partnership, students are exposed to current battery technologies, manufacturing practices, and system-level challenges, effectively bridging the gap between academia and industry. **The program serves as a model for translating scientific knowledge into practical solutions that support clean energy technologies, electrified transportation, and large-scale energy storage.**

Battery technologies are a cornerstone of the global energy transition and play a complementary role within the broader **hydrogen ecosystem**, **where batteries and hydrogen technologies together enable flexible, resilient, and fully decarbonized energy systems**. As renewable energy integration accelerates and electric mobility expands, batteries enable flexible energy storage, grid stability, and decarbonization across multiple sectors. With global battery production capacity expected to increase nearly **tenfold by 2030**, the demand for engineers with interdisciplinary expertise in battery science and engineering is growing rapidly, both in Türkiye and worldwide.

The primary objective of the **Battery Science and Engineering Minor Program** is to provide students with a **comprehensive, interdisciplinary, and application-oriented education** in battery technologies. The program equips students with strong theoretical knowledge and hands-on experience, enabling them to understand, design, analyze, and test battery cells, modules, packs, and battery management systems. Graduates are prepared to contribute effectively to industrial R&D, battery manufacturing, energy storage systems, and advanced electrified technologies. The curriculum integrates electrochemistry, materials science and nanoengineering, thermodynamics, power electronics, modeling, and systems engineering, supported by **practice-driven laboratory training** using modern tools and methodologies. This structure ensures direct exposure to real-world engineering challenges and state-of-the-art battery technologies.



The program makes a direct contribution to **Türkiye's energy and industrial ecosystem** by addressing the critical need for skilled human capital in battery technologies. By training engineers with expertise in battery chemistry, cell and pack design, battery management systems, and sustainable production, the program supports national efforts in electric vehicles, energy storage systems, and clean energy integration, while contributing to reduced carbon emissions and energy security. Aligned with leading battery education initiatives in Europe and North America, the Battery Science and Engineering Minor Program also offers a strong **global perspective**. Graduates are well positioned to pursue careers in national and international battery, automotive, and energy companies, continue with MSc and PhD studies at top research universities, or contribute to innovation-driven start-ups.

From the industry side, **Siro Energy actively contributes to the Battery Science and Engineering Minor Program through curriculum input, guest lectures, and real-world engineering case studies drawn from ongoing battery cell, module, and pack development programs**. This direct engagement exposes students to current industrial challenges, design trade-offs, safety considerations, and system-level thinking that define modern battery engineering and large-scale manufacturing, while also creating structured opportunities for student engagement through applied projects, and early-career exposure to battery R&D and engineering environments**.**

By combining Sabancı University's academic excellence with Siro Energy's industrial leadership and a shared sustainability vision, the Battery Science and Engineering Minor Program stands as a strategic educational investment in the future of clean, secure, and resilient energy systems.

WIN EURASIA 2026: The Journey of "Driven by Automation" Begins!

WIN EURASIA Automation and Machine Technologies Trade Fair has launched its preparations for 2026 with the motto "Driven by Automation." WIN EURASIA, which has led the transformation of manufacturing and industry in Türkiye for 31 years and is organized by Hannover Fairs Turkey, will focus in its 2026 edition on electric, electronics transmission and distribution & energy automation, welding, joining, cutting, surface treatment technologies, compressor and compressed air technologies, as well as Internet of Things, 5G, and artificial intelligence integrations. The trade fair, which shapes the future of the manufacturing industry, will be held in six halls across a total area of 55,000 m².

WIN EURASIA will be held for the 32nd time, from 10–13 June 2026, at the Istanbul Expo Center. Organized by Hannover Fairs Turkey with the motto "Driven by Automation," the trade fair will welcome its visitors across a 55,000 m² exhibition area in six halls. At WIN EURASIA 2026, which has advanced production and industry in Türkiye for 31 years, hundreds of companies will showcase their products. This major organization will focus on solutions that advance digital transformation and productive automation into the future. The trade fair will unite a wide range of technologies under one roof—from electrical and electronics transmission and distribution to energy automation, from welding and machine automation to compressor and compressed gas technologies, and from robotics to digital factories.

Transformation in Energy Infrastructure: At the New Center of Automation

One of the most critical thresholds of digital transformation and productive automation in industry is now energy infrastructure. Sustainability of production, operational continuity, and efficiency targets make it essential for energy systems to become smarter, more integrated, and more manageable.

Rising energy costs, the integration of renewable energy sources into production processes, and the growing need for data-driven management are transforming electrical and energy automation from a mere supporting function into a strategic component of manufacturing. By highlighting the technologies at the heart of this transformation, WIN EURASIA 2026 aims to bring together, under one roof, solutions that redefine the relationship between industry and energy. Within this scope, the trade fair addresses solutions ranging from electrical and electronic transmission and distribution to energy automation through the lenses of productive automation, digitalization, and sustainability, offering industry professionals the opportunity to experience the industrial energy infrastructures of the future firsthand.

Special 5G and IoT areas will be created

WIN EURASIA 2026 will elevate the visitor experience with "special area" concepts that allow attendees to directly experience the future of the sector. The Industrial IoT Special Area, 5G Arena, Industrial Artificial Intelligence Special Area, Power Transmission Special Area, and Maintenance-Repair Workshop will feature interactive experience sets. These special areas, where the operating principles of next-generation production technologies and the transformation of automation infrastructures into operational outcomes can be observed, aim to offer visitors a "living" technology trade fair experience.

Global interest carries into WIN EURASIA 2026

WIN EURASIA 2026 will continue contributing to the strengthening of a sustainable industry vision by connecting global brands, visionary solutions, and integrated systems. In the previous edition of WIN EURASIA, Germany, Iraq, Bulgaria, Italy, Tunisia, Greece, Saudi Arabia, Jordan, and Serbia were among the countries showing the highest interest. This strong international visitor profile, together with Italy, Germany, India, China, and Japan standing out as exhibitors, once again proved that the trade fair is a global industrial gathering. This growing global momentum is expected to be reflected even more strongly in WIN EURASIA 2026, held on 10–13 June 2026, connecting industry leaders from all around the world again at the Istanbul Expo Center.



An opportunity to discover the future of industry

Offering visitors and exhibitors the opportunity to explore the future, WIN EURASIA 2026 will provide a 360-degree holistic view of the manufacturing industry. The trade fair will grant access to conferences, seminars, and presentations on industry trends and solutions. Professionals, experts, and decision-makers from around the world will come together to discover the latest technologies shaping the industry's future.

Hundreds of companies will showcase their newest products

Across the 55,000 m² of WIN EURASIA 2026's six halls, hundreds of companies operating in the sectors of Electric, Electronics Transmission and Distribution & Energy Automation; Industrial and Factory Automation Technologies; Robotic Automation and Digital Factory Technologies; Welding and Robotic Welding Technologies; Machine Automation and Technologies; COMVAC-Compressed Air and Vacuum Technologies; and Joining, Cutting, Surface Treatment Technologies will showcase their latest products.

NEW CORPORETIVE MEMBER



ABOUT İZMİR NATURAL GAS INC.

For the İzmir Natural Gas Distribution tender conducted by the Energy Market Regulatory Authority (EMRA), 21 companies applied for pre-qualification, and 14 of them were approved. Fourteen companies were invited to the tender held on 27 January 2005, and 11 submitted bids. After evaluating the offers, KOLİN A.Ş. won the tender by submitting the lowest unit service and depreciation fee. As a result, İzmir Natural Gas Distribution Inc., a subsidiary of KOLİN A.Ş., was granted the Distribution License on 07.07.2005 to carry out natural gas distribution and the transmission of natural gas through local gas pipeline networks within the "Distribution Region," which initially included the cities of İzmir and Tire.

Expansion of Licensed Areas

Starting with distribution and operational activities within the initial licensed region covering İzmir and Tire, İzmir Natural Gas has expanded its license boundaries over the years in line with increasing demand, the comfort offered by natural gas, and environmentally focused energy policies. These expansions were approved by EMRA through board decisions:

- **7.06.2015** – Bergama, Ödemiş, Kınık
- **02.07.2020** – Kiraz
- **27.05.2021** – Dikili, Beydağ
- **17.08.2023** – Çeşme

This growth has enabled the company not only to expand its infrastructure but also to build an integrated energy network across İzmir, enhancing service quality, operational capacity, and environmental responsibility.

From the first day of its establishment, İzmir Natural Gas has aimed to provide safe and uninterrupted access to natural gas—an environmentally friendly energy source. Today, the company serves 29 districts through its extensive natural gas network.

İzmir Natural Gas Distribution Inc. is the sole authorized company within the boundaries of the "Distribution Region."

SAFE INFRASTRUCTURE, STRONG FUTURE – A 20-YEAR GROWTH JOURNEY

Throughout its 20-year investment journey, İzmir Natural Gas has added long-lasting value to İzmir's infrastructure. During this period, the company has:

- **Installed 843,000 meters of steel pipeline,**
- **Installed 6,040,000 meters of polyethylene main pipeline,**
- **Installed 3,009,000 meters of service pipeline,**
- **Provided safe natural gas supply to 1,286,000 subscribers.**

Investments in digital transformation, field management systems, expanded emergency response teams, and improved customer experience have continuously elevated the company's service quality.

Each new connection point reflects 20 years of accumulated engineering knowledge and expertise.

These investments are integral components of İzmir Natural Gas's vision of "safe, efficient, and environmentally friendly energy."

20 YEARS OF STRONG PARTNERSHIP WITH INDUSTRY

Through its natural gas investments in industrial zones, İzmir Natural Gas contributes to increased production, employment, and exports.

Today, the company supplies approximately **4.5 billion cubic meters of natural gas annually** to **13 Organized Industrial Zones** and **276 industrial customers**, strengthening both the regional and national economy.

IN THE FIELD 24/7

For 20 years, our emergency response teams have been working in the field to ensure safe and uninterrupted gas supply for the people of İzmir. With **23 offices** located across **3 regions** and **45 fully equipped teams**, we provide continuous service.

Leak detection operations carried out periodically across **29 districts** exemplify the company's commitment to safe natural gas usage..

20 YEARS OF TRUST IN CUSTOMER SATISFACTION

Holding the ISO 10002 Customer Satisfaction Management System certification, İzmir Natural Gas has always prioritized its customers.

Every request submitted through the call center, website, mobile application, solution center, and social media channels is carefully assessed and resolved.

This approach reflects the company's long-standing principle over the past 20 years: "Each subscriber is our priority."

BOOK OF THE MONTH



Enerji, Su Kıtlığı ve İklim Değişikliği İçin Kesin Çözüm

Author: Prof. Dr. İ. Engin Türe

Kule Kitap, Published on June 2025.

REPORTS:



Raporları görüntülemek için QR kodu okutabilirsiniz.

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