

**SAARC Energy Centre, Islamabad
Pakistan**

Report of Completed Webinars for FY 2025

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Introduction

SAARC Energy Centre, as per its approved plan for FY 2025, had organized and completed 11 Knowledge sharing Webinars. All the webinars were approved by the Sixtieth Programming Committee Meeting which was held in SAARC Secretariat on 28-30 April 2025.

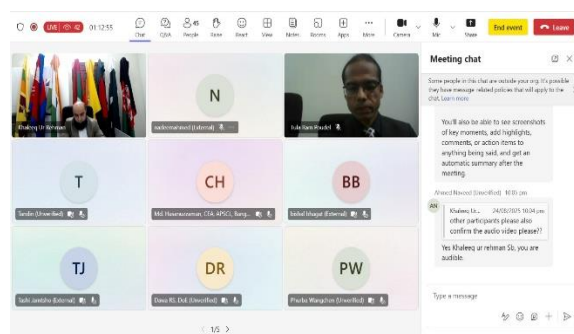
All of these Webinars were broadcasted from SEC's office and had provided a platform for experts, policymakers, and researchers to exchange knowledge, strengthen institutional capacity, and to explore effective strategies to address some of the SAARC Region's energy challenges and issues. The opening remarks in the webinars were delivered by Mr. Abdul Rasheed Jokhio, Director SEC and the moderator duties were performed by SEC Professionals. The experts engaged for these webinars shared their insight, experiences, and best practices across diverse topics including Green Hydrogen, Offshore Wind, Grid stability, Energy Efficiency, Digital innovation, Energy Transition, Emission Trading schemes, Biofuels, Energy sector reforms, and Pumped Hydro to the participants.

The contents of each Webinar including its Concept Paper, Agenda of the event, the Expert(s) Profiles, Presentation(s) delivered, and Recording Link of the event were uploaded, and are available on the SEC website. A brief note on each completed Webinar is provided in the following sections:

1. Webinar on “Exploring the Biofuel Technologies and Trends”

This webinar was conducted from 1000–1130 hrs on 25th August 2025. During the webinar, the presenter from Pakistan introduced and familiarized participants with the latest Biofuel technologies. By covering next generation biofuels technologies, the expert mentioned their potential and upcoming challenges, market trends, policies and regulatory frameworks. He informed the participants that using data engineering through machine learning and Artificial Intelligence offers an opportunity for its Biofuel forecasting. The webinar helped to understand the latest technologies and disseminated supportive policy frameworks and regulatory measures to enhance biofuel production. The presentation was followed by Q&A session.

This knowledge sharing activity helped to enhance capacity of the participants and provided an opportunity to them for networking. The material of the webinar can be downloaded from the link (<https://tinyurl.com/eay5vmfv>), while webinar event photos are given below:

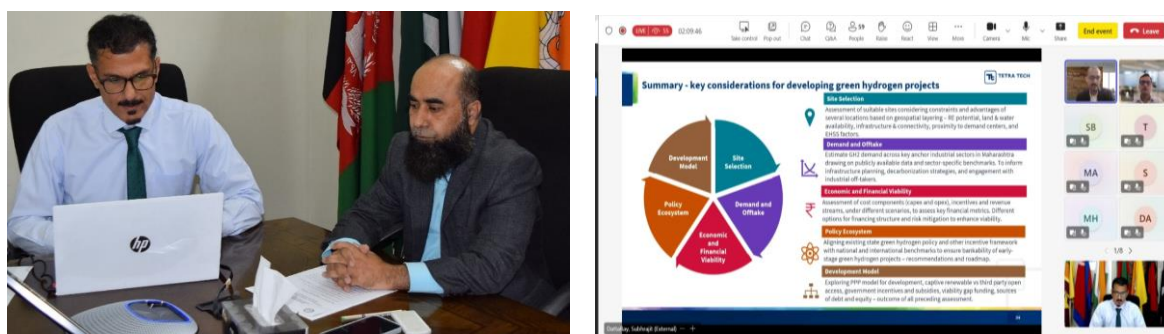


2. Webinar on “Hydrogen as Energy Carrier: Key Issues and learning from Pilot Projects in SAARC Region”

This webinar was conducted from 1000–1130 hrs on 2nd Sept 2025. During the webinar, the presenter from India discussed the potential of adapting and developing existing market structures and models to the new hydrogen market. He shared key issues emerging from different pilot hydrogen projects in SAARC Region, being rolled out by the Member States and private companies. He also highlighted key

drivers of bankability of global successful hydrogen projects such as strong policy support, secured offtake agreements, strategic location advantages, adequate infrastructure and financial de-risking. The presentation was followed by Q&A session.

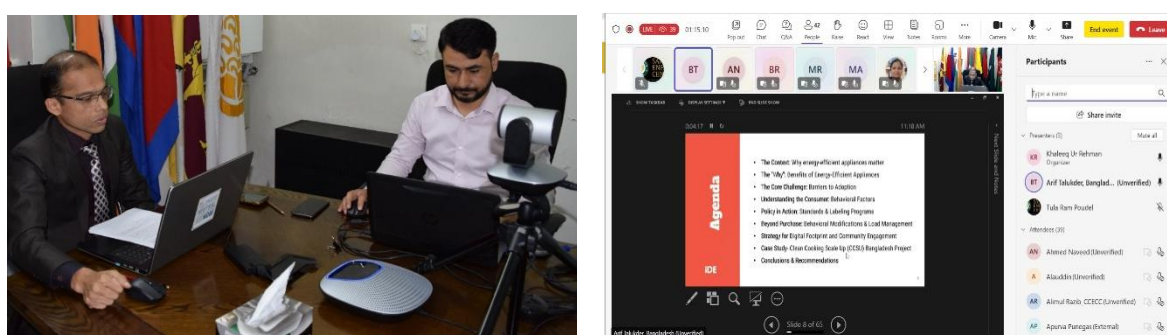
This knowledge sharing activity helped to enhance capacity of the participants and provided an opportunity to them for networking. The material of the webinar can be downloaded from the link (<https://tinyurl.com/37xtfuy5>), while webinar event photos are given below:



3. Webinar on “Adoption of Energy-Efficient Appliances: Challenges and Consumer Behavior in South Asia”

This webinar was conducted from 1000–1130 hrs on 3rd Sept 2025. During the webinar, the presenter from Bangladesh introduced the participants with the factors influencing the adoption of Energy-Efficient (EE) appliances in the SAARC Region including its awareness, affordability, and Government policies. The expert also elaborated on the impact of labeling programs, incentives, and the status of such labeling regimes in SAARC Region. The key takeaways in his presentation include a combination of strong policy, financial innovation and behavioral nudges which are essential to accelerate adoption of EE appliances in this region. The presentation was followed by Q&A session.

This knowledge sharing activity helped to enhance capacity of all relevant stakeholders and provided an opportunity to them for interacting with the expert. The material of the webinar can be downloaded from the link (<https://tinyurl.com/tdnwbwqx>), while webinar event photos are given below:

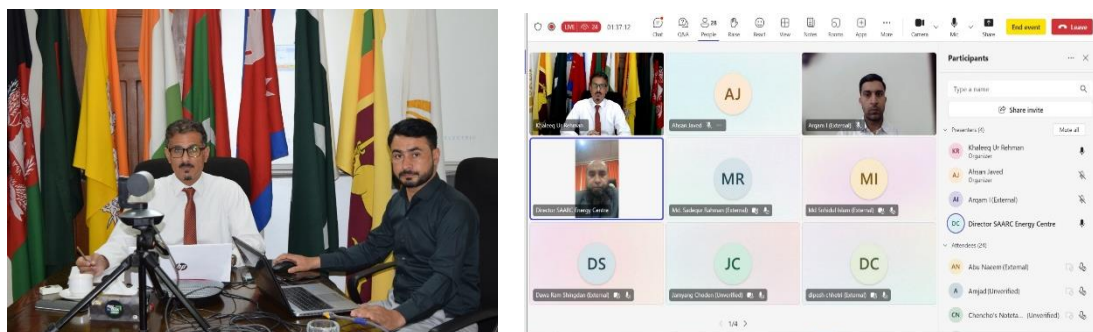


4. Webinar on “Grid practices advancing Renewables-based Electrification”

This webinar was conducted from 1000–1130 hrs on 10th Sept 2025. During the webinar, the presenters from Pakistan shared national grid practices currently in operation that facilitate in expanding the capacity of the power system to incorporate more and more renewables without compromising its stability. The experts also shared pioneering solutions and best practices that are already enhancing grid performance and enabling deeper integration of Renewables without necessarily building new, massive infrastructure. In conclusion, the experts warned that uncontrolled

proliferation of Renewables without proper planning may risk severe damage to grid infrastructure and its reliability. The presentations were followed by Q&A session.

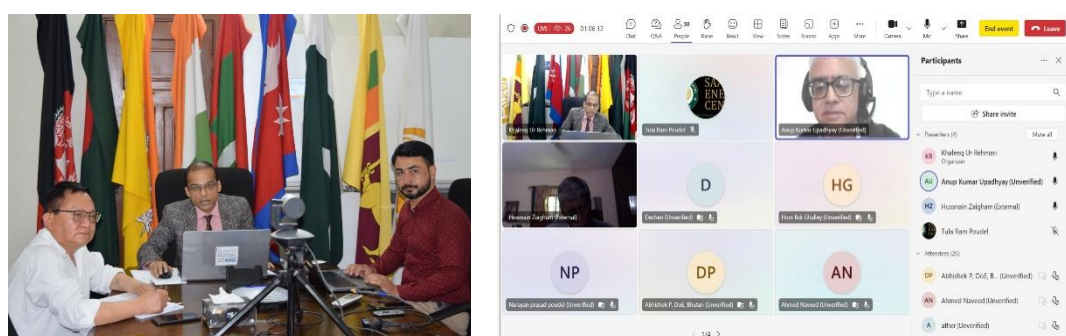
This knowledge sharing activity helped to enhance capacity of the power sector planners and provided an opportunity to them for interacting with the experts. The material of the webinar can be downloaded from the link (<https://tinyurl.com/3efsbfbf>), while webinar event photos are given below:



5. Webinar on “Regional experience in the Energy sector Restructuring and Reforms”

This webinar was conducted from 1000–1200 hrs on 15th September 2025. During the webinar, the experts from Nepal and Pakistan shared their insights and experiences on the evolution of energy sector reforms in their respective country. The webinar covered key topics in energy sector restructuring and reforms, including unbundling of the sector, fostering competition, and the development of effective regulatory frameworks. The expert from Pakistan mentioned that the Competitive Trading Bilateral Contract Market model, which allows power generators to supply electricity directly to large-scale consumers through bilateral agreements cultivates a competitive market environment, enabling consumers to select from both distribution utilities and other competitive suppliers. The presentations were followed by Q&A session.

This knowledge sharing activity helped to enhance capacity of the participants and provided an opportunity to them for networking. The material of the webinar can be downloaded from the link (<https://tinyurl.com/482bas8>), while webinar event photos are given below:

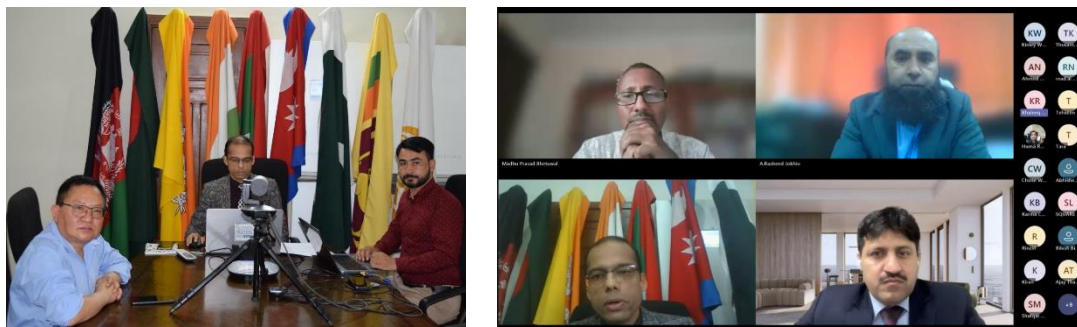


6. Webinar on “Project Management Consulting for Renewable Energy Projects (Hydro, Solar & Wind)”

This webinar was conducted from 1000–1200 hrs on 18th September 2025. During the webinar, the presenters from Nepal and Pakistan discussed the scope of consulting services including feasibility assessments, financing strategies, regulatory compliance, risk management, procurement, and construction oversight, etc. of Renewable Energy projects. The webinar equipped the participants with the knowledge, skills and tools needed to effectively manage the planning, execution, and operational

phases of Renewable Energy projects, ensuring compliance with environmental and regulatory standards. The experts emphasized the crucial role of PMC in reducing project risks and delays, ensuring compliance with national and international standards, and improving quality, safety, and sustainability. The presentations were followed by Q&A session.

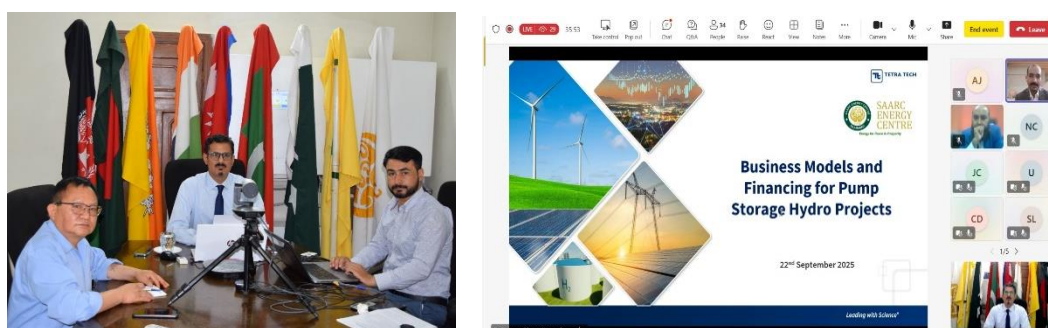
This knowledge sharing activity helped to enhance capacity of the participants and provided an opportunity to them for networking. The material of the webinar can be downloaded from the link (<https://tinyurl.com/2nk324hj>), while webinar event photos are given below:



7. Webinar on “Project Financing and Business models for large-scale Pump Hydro Projects”

This webinar was conducted from 1000–1130 hrs on 22nd Sept 2025. During the webinar, the expert from India mentioned Pump Storage Hydropower (PSH) as a proven storage technology that offers a cost-effective way to provide reliable large-scale balancing and grid services. He informed the participants that countries and regions around the world are developing storage targets, estimating requirements, and ensuring PSH is included as part of critical infrastructure planning. He specifically discussed challenges faced by project developers such as high upfront costs, regulatory uncertainty, market risks, environmental concerns, geotechnical risks, and technical complexities. He also shared his insights and experiences on project financing structures, revenue streams, risk management strategies, and successful business models for large-scale PSH Projects. The presentation was followed by Q&A session.

This knowledge sharing activity helped to enhance capacity of the participants and provided an opportunity to them for networking. The material of the webinar can be downloaded from the link (<https://tinyurl.com/5fude8ac>), while webinar event photos are given below:

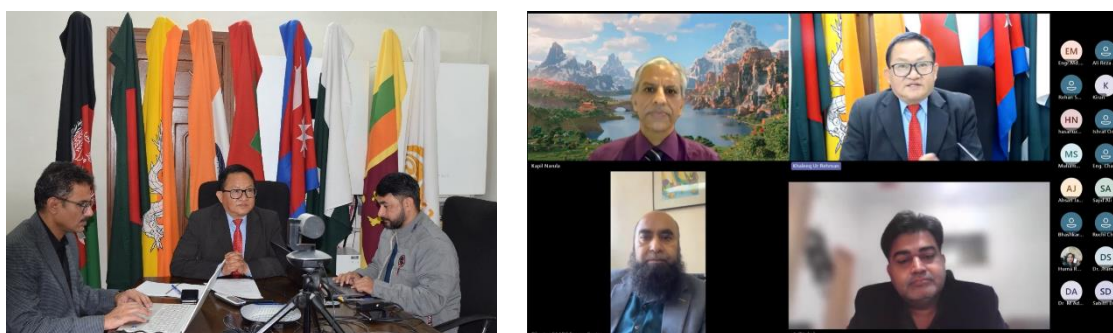


8. Webinar on “Scaling Sustainability: The Power of Digital Innovation in Green Initiatives”

This webinar was conducted from 1000–1130 hrs on 28th Nov 2025. During the webinar, the presenters from India and Pakistan introduced the participants with use of digital tools such as the

Internet of Things, Artificial Intelligence, data analytics, and blockchain in supporting green initiatives. The experts shared current policy status in SAARC Member States and the relevant deployment gaps in digital technologies. The experts also shared details of successful global and regional green projects leveraging digital technologies. In conclusion, the experts emphasized the importance of green-tech financing in converting pilot projects into national/regional scale programmes. The presentations were followed by Q&A session.

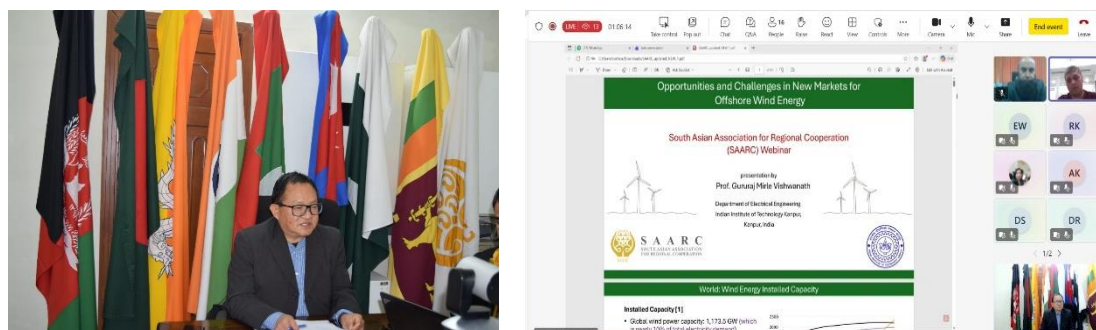
This knowledge sharing activity facilitated an advocacy among the SAARC Member States on the critical role of digital innovation in advancing green initiatives. The material of the webinar can be downloaded from the link (<https://tinyurl.com/wxrhrffd>), while webinar event photos are given below:



9. Webinar on “Opportunities and Challenges in New Markets for Offshore Wind”.

This webinar was conducted from 1030–1130 hrs on 1st Dec 2025. During the webinar, the presenter from India gave an overview of current global offshore wind power capacity and its projected capacity by year 2050. He highlighted huge potential of offshore wind energy in SAARC Member States such as Bangladesh, India, Pakistan, and Sri Lanka. He shared key challenges in developing offshore wind projects including harsh marine conditions, high installation and infrastructure requirements, and electrical grid integration. At the end, he recommended policy and regulatory frameworks for rapid growth of offshore wind energy sector in SAARC Member States. The presentation was followed by Q&A session.

This knowledge sharing activity shall help to realize the potential of offshore wind energy capacity among the relevant Member States. The material of the webinar can be downloaded from the link (<https://tinyurl.com/3rra225f>), while webinar event photos are given below:

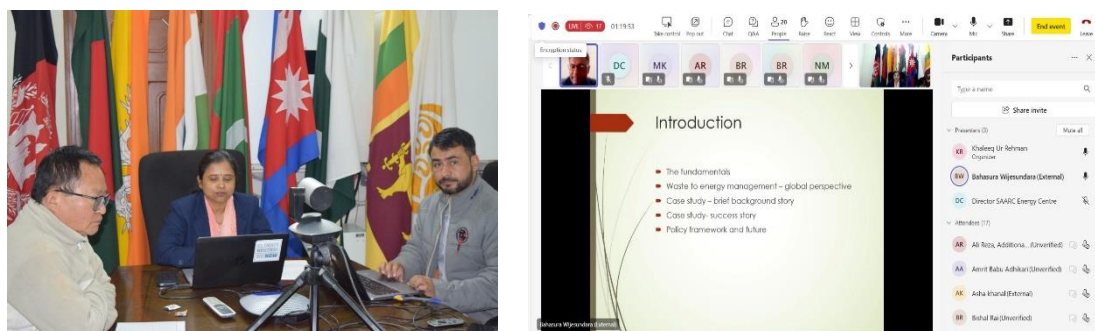


10. Webinar on “Energy Transition and Circular Economy: Turning Waste into Energy”

This webinar was conducted from 1000–1130 hrs on 3rd Dec 2025. During the webinar, the presenter from Sri Lanka shared knowledge among the energy sector professionals across the SAARC Region about the way waste to energy circular economy can help in the energy transition. The webinar

covered the importance of waste to energy conversion with respect to circular economy and energy transition; South Asian as well as global perspective in Waste to Energy management; Best practices adopted in South Asia with a case study of a Project in Member State Sri Lanka; Challenges and barriers in terms of technical, legal, financial and social perspective; and finally few policy recommendations and way forward that can be considered in this subject. The presentation was followed by Q&A session.

This knowledge sharing activity helped to enhance capacity of the participants and provided an opportunity to them for networking. The material of the webinar can be downloaded from the link (<https://tinyurl.com/575xtetd>), while webinar event photos are given below:



11. Webinar on “Realizing Potential of Emission Trading Schemes for Energy Projects in South Asian Region”.

This webinar was conducted from 1000–1130 hrs on 10th Dec 2025. During the webinar, the presenter from Pakistan shared knowledge among the SAARC professionals of energy sector about energy trading schemes for energy projects. The webinar covered the importance and benefits of adopting Emission Trading Schemes; Potential of energy trading schemes in SAARC Region in different energy projects; Methodologies, strategies and procedural aspects of the ETS; Market mechanism of ETS with a case study of EU; Regional cooperation pathways for SAARC Region; and EU Carbon Border Adjustment Mechanism (CBAM) policy tool. Concluding his presentation, he emphasized that Emission Trading Schemes offer SAARC Region a proven pathway to reduce emissions while supporting economic growth and energy security. The presentation was followed by Q&A session.

This knowledge sharing activity helped to enhance capacity of the participants and provided an opportunity to them for networking. The material of the webinar can be downloaded from the link (<https://tinyurl.com/8sn3bejk>), while webinar event photos are given below:

