#### ECOSF Co-Hosts Panel on Decarbonizing Road Transport at COP29 in Baku

November 20, 2024: At the 29th Conference of Parties (COP29) to the United Nations Framework Convention on Climate Change (UNFCCC), the Economic Cooperation Organization Science Foundation (ECOSF), in partnership with the Commission on Science and Technology for Sustainable Development in the South (COMSATS), co-hosted a pivotal panel discussion titled "Decarbonizing Road Transport: Innovations and Policies for Electric and Hydrogen Vehicle Technologies. "The event took place at the pavilion of the Islamic World Educational, Scientific, and Cultural Organization (ICESCO) in collaboration with TÜBİTAK (Scientific and Technological Research Council of Türkiye) and the Food Security and Agriculture Centre of Excellence (FACE) in Pakistan.





The panel addressed the urgent need to transform the transport sector—a significant contributor to global greenhouse gas (GHG) emissions—by focusing on technological innovations, policy frameworks, and equitable adoption pathways for electric and hydrogen vehicle technologies.

Ambassador Dr. M. Nafees Zakaria, Executive Director of COMSATS, opened the session by highlighting the historical roots of climate change, citing pivotal moments such as the Industrial Revolution and advancements in transportation that have contributed to environmental degradation. He emphasized that

decarbonizing road transport is not only a technological endeavor but also a socio-economic and health-related challenge.

Moderated by Dr. Fahman from ICESCO, the panel included the technical session distinguished experts:

- **Dr. Gizem Çakmak**, Chief Researcher at TÜBİTAK
- Eng. Khalid Salmi, Sustainable Energy Management Expert at the Regional Center for Renewable Energy and Energy Efficiency (RCREEE)
- Mr. Khalil Raza, Programs Manager Energy and Climate at ECOSF

The panelists explored critical topics, including:

- The role of regulatory frameworks in reducing GHG emissions from the transport sector
- Financial mechanisms to promote the adoption of electric vehicles (EVs) in developing countries
- The potential of green hydrogen as a transformative energy source

Eng. Salmi highlighted the economic potential of green hydrogen production in Africa, particularly in countries like Morocco and Namibia, and stressed the importance of developing domestic technologies to maintain competitiveness. Dr. Çakmak addressed persistent barriers to the adoption of EV and hydrogen technologies, including infrastructure gaps, high costs, and limited technical expertise. Eng. Raza called for robust policy frameworks and capacity-building initiatives to facilitate the transition to sustainable transport.

In his closing remarks, **Prof. Seyed Komail Tayebi**, President ECOSF, emphasized that many developing nations lack the technological and financial resources to produce EVs locally, making them reliant on costly imports. He stated, "Collaboration between governments, international organizations, and private stakeholders is essential to overcome these challenges." He also added that at the ECO Science Foundation, we are fully committed to promoting EVs, supporting ECO Member Countries through technical advisory, and driving impactful initiatives that build sustainable future.



# China-Pakistan Joint Research Center Delegation visited ECOSF

A delegation from China-Pakistan Joint Research Center (CPJRC) visited ECOSF on November 14, 2024. The delegation was comprised of Prof. Hong Tianhua, Executive Director, Dr. Nazir Bazai, Research Associate and Ms. Li Wanhong, Program Coordinator. The delegation met with President ECOSF Prof. Seyed Komail Tayebi and its team (Engr. Khalil Raza, Program Manager and Mr. Ghulam Abbas Rahar, Manager (Administraiton)). President ECOSF cordially welcomed the delegation.



Head of Delegation Prof. Tianhua made an introduction of his Center and said that CPJRC is scientific research and talent education institution established by Chinese Academy of Sciences (CAS) and Higher Education Commission of Pakistan (HEC). The research center is located at Quaid-i-Azam University (QAU), Islamabad, Pakistan. He further said that CPJRC serves as the bridge and platform of scientific research and education cooperation between China and Pakistan in the field of earth sciences. As a China-Pakistan collaboration platform, it also focuses on such areas as natural disasters, ecological environment, resource development and sustainable development to promote the construction of China-Pakistan Economic Corridor (CPEC), added Prof. Hong.

Prof. Tayebi appreciated the role of CPJRC. Later, he made a brief introduction of ECOSF and said that ECOSF is an intergovernmental organization of 10 countries and working for the promotion of science, technology and innovations (STI) among the Member Countries leading to economic development.

The purpose of the visit was to explore the possibilities of collaboration between ECOSF and CPJRC. Both the leaders agreed to carry out joint activities in countries along the belt and road including ECO countries.

To start with, a joint conference on climate change mitigation was proposed to organize

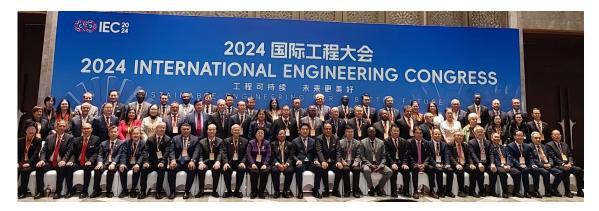


in one of the ECO countries with preference to Azerbaijan (Baku). The conference will be organized in the year 2025. The details and program of the conference will be shared and finalized at later stage.

It was agreed in the meeting that more scientific events would be organized in the future to enhance the collaboration.

#### ECOSF Contributed to the 2024 International Engineering Congress in Taizhou, China

The 2024 International Engineering Congress (2024IEC), a premier event in the field of engineering, was successfully held in Taizhou, China, under the theme "Sustainable Engineering for a Better Future" on November 8-10, 2024. 2024IEC was organized by the Federation of Engineering Institutions of Asia and the Pacific (FEIAP) in collaboration with UNESCO, WFEO, and other prominent organizations. The Congress was co-hosted by the Zhejiang Association for Science and Technology (ZAST), Taizhou Municipal People's Government, and Zhejiang University.



The Congress featured a plenary conference, three thematic sessions, and side meetings, including high-level dialogues and workshops. One of the significant outcomes of the congress was the release of the Taizhou Declaration—a visionary document aimed at fostering engineering innovation, capacity building, and international collaboration.

## **Thematic Sessions**

- Conference on Engineering Education Development
- Conference on International Cooperation for Emerging Technologies in Engineering
- Conference on Engineering Capacity Building



Participants included representatives from over 30 countries across Asia-Pacific, Africa, and Latin America, alongside leaders from more than 40 international and national engineering organizations, including ECOSF.

#### President ECOSF had an engaging and active contribution to the Congress:

Prof. Seyed Komail Tayebi, President of ECOSF, actively engaged in several thematic sessions, contributing towards engineering education development, international cooperation in emerging technologies, and capacity building, particularly from the ECO regions' perspectives. He participated in side meetings, including high-end dialogues on engineering education and standards for professional engineers, fostering discussions on sustainable engineering practices.



#### President ECOSF was one of the invited panelists at the review session of Taizhou Declaration:

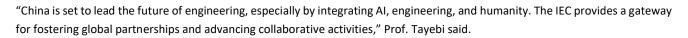
During this review session of the Taizhou Declaration, Prof. Tayebi emphasized the economic and social impact of engineering. He highlighted that engineering is not only the backbone of innovation but also a powerful catalyst for economic growth, particularly in emerging economies. From Al to sustainable infrastructure, engineering tools have the potential to drive job creation, enhance productivity, and improve living standards. Prof. Tayebi further added that we must equip our youth with robust engineering skills to contribute to local and global economies.

Prof. Tayebi also highlighted ECOSF's efforts in promoting engineering capacity development, highlighting projects on electric vehicles, decarbonization, and renewable energy as examples of successful international collaborations within ECO region and beyond.

Prof. Tayebi's visit to the Engineering and Technology Exhibition, where he interacted with Chinese companies showcasing cutting-edge engineering innovations. He explored advancements in electric vehicles, renewable energy technologies, and sustainable infrastructure, discussing potential collaborations to implement these innovations within the ECO region.

While engaging with media, and in interviews with Global Times and a Chinese TV channel, Prof. Tayebi praised China's leadership in engineering, citing its investments in education and training programs. He emphasized

the importance of collaboration at local, national, and international levels to harness engineering's full potential.



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Prof. Tayebi also participated in the Congress's closing ceremony and signed the Taizhou Declaration, reinforcing ECOSF's commitment to advancing sustainable engineering and international cooperation. The Declaration outlines a shared vision for engineering innovation, capacity building, and collaborative efforts to address global challenges.

The 2024 International Engineering Congress was a great success. ECOSF's participation underline its commitment to advancing engineering education, capacity building, and sustainable development in the ECO region and beyond.

#### World Science Day – 2024 celebrated in Islamabad

ECO Science Foundation (ECOSF), UNESCO, Pakistan Science Foundation (PSF) and Pakistan Academy of Sciences (PAS) organized an event to mark World Science Day on November 12, 2024, for Peace and Development through raising awareness about the critical role of science in modern society and its impact on addressing contemporary global challenges.

Celebrated annually since 2001, World Science Day highlights the vital role science plays in society and fosters public engagement in discussions about key scientific issues.



This year's theme, "Why Science Matters – Engaging Minds and Empowering Futures," underscored the significance of science in shaping a sustainable and inclusive future.

The event was attended by the students specially girls, teachers, government officials, scientists, researchers, science communicators, and journalists who actively engage in the field of science.

Dr. Akram Shaikh, Member Science of PSF welcomed the distinguished guests and the participants. He also highlighted five years scientific activities/contribution of PSF.



President ECOSF Prof. Seyed Komail Tayebi also attended the event as co-organizer and guest of honor. In his speech, Prof. Tayebi said that this year's theme "Why Science Matters — Engaging Minds and Empowering Future" is extremely important to understand as to why science matters. Science matters because it helps us understand the world around us and improve our lives. Science gives us tools to explore and answer questions about the universe, he added.

Science is also important because it helps solve problems and create new things possible. From finding cures for diseases to creating new technologies like smartphones and

electric cars, science allows us to invent and protect the world we live in. Prof. Tayebi further said that in the context of economic development, science is the catalyst for creating a pool of skilled professionals and entrepreneurs and it lays the foundation for industries to flourish, drives research and innovation, and ensures a country's competitiveness in the international arena.

Dr. Aneel Salman who was keynote speaker made a comprehensive speech and talked about latest trends and technologies such as Artificial Intelligence, Robotics, Applications, scientific innovations in AI and autonomous systems in the arts, health, and social sectors are reshaping our world. With the focus on Pakistan, Dr. Salman also made five propositions such as research and development as national priority, steam education, create a supportive ecosystem for startups and innovation, leverage science for climate resilience and sustainable agriculture and empower women in science and technology.



The event also featured insightful remarks from Mr. Kar Hung Antony Tam, Officer-in-Charge of UNESCO Office in Pakistan, emphasizing the engagement of youth and women in science, technology and innovation.

An interactive science show for students was also conducted by Mr. Abdul Rauf and his team from Pakistan Science Club. The session focused on making science fun and accessible, aiming to ignite students' interest in STEM (Science, Technology, Engineering, and Mathematics) fields.

In his address, Chief Guest Prof. Dr. Aslam Baig, Secretary General, Pakistan Academy of Sciences, highlighted the role of Pakistani scientists in



supporting the country in the advancement of nuclear technology. He also emphasized on the importance of science and technology for Pakistan's development.

The event was a reminder of science's transformative potential and underscored the importance of empowering future generations to contribute to a sustainable and resilient Pakistan.

## ECOSF participated in the Winter School on Urban and Rural Landscape Planning in Germany and Pakistan

The Winter School on "Planning in Germany and Pakistan: Cross-Cultural Perception of Urban and Rural Landscape and Cultural Heritage" was held from November 15 to November 21, 2024, the event was jointly organized by TU Dortmund University, University of Engineering and Technology (UET) Lahore, Lahore College for Women University (LCWU) Lahore, and National University of Science and Technology (NUST). The event brought together students, academics, and experts from Pakistan and Germany with an aim to develop a collaborative environment to exchange ideas on sustainable landscape planning and cultural heritage preservation.



The Winter School was inaugurated at UET Lahore with welcoming remarks from Prof. Shaker Mahmood Mayo, Chairman of the City and Regional Planning Department, UET Lahore, alongside Prof. Muhammad Atiq Ur Rahman of LCWU, Dr. Safi Ullah of NUST and Prof. Tabassam Raza, Executive Director of PLANDES (Planning and Development Research Foundation, The University of the Philippines). Prof. Seyed Komail Tayebi, President ECOSF delivered his remarks while emphasizing the importance of science and technology in capacity building and the pivotal role of young scholars in shaping sustainable solutions.

Prof. Dietwald Gruehn TU Dortmund University, delivered his speech who introduced the DAAD research project on Landscape Ecology and Landscape Planning where he outlined the objectives of the Winter School. During the course of Winter School, participants actively engaged in group work sessions, showcasing their research projects on various thematic areas.

President ECOSF Prof. Tayebi had an exclusive exchange with German delegation, and UET representatives to explore future joint projects to promote Science, Technology, and Innovation in the ECO region.

Technology, and Innovation in the ECO region.

Participants also got a chance to visit the Ravi Urban

Development Authority (RUDA), where they were welcomed by CEO Imran Amin. A detailed presentation on the Ravi City Master Plan, river training works, and infrastructure development was presented to highlight the importance of strategic planning in addressing environmental and urban challenges of Pakistan.



During the course of the event, Prof. Seyed Komail Tayebi, President of ECOSF, had the opportunity to engage with the leadership of several universities, including Prof. Shahid Munir, Vice Chancellor of UET Lahore, Prof. Uzma Quraishi, Vice Chancellor of LCWU Lahore, and Prof. Dr. Muhammad Ali, Vice Chancellor of Punjab University. These interactions focused on strengthening academic partnerships, exploring collaborative research initiatives, and fostering innovation-driven growth in the ECO region.

## ECOSF participated in the International Conference on Urban and Rural Landscape Planning

The International Conference on "Planning in Germany and Pakistan: Cross-Cultural Perception of Urban and Rural Landscape and Cultural Heritage" was held on November 19-20, 2024 in Lahore. Jointly organized by TU Dortmund University, UET Lahore, LCWU Lahore, and NUST, the conference highlighted the importance of international cooperation in landscape planning and cultural preservation.





The conference was hosted by UET Lahore with welcoming remarks from academic leaders, including Prof. Shaker Mahmood Mayo and Prof. Muhammad Atiq Ur Rahman. Prof. Seyed Komail Tayebi, President ECOSF delivered a keynote address emphasizing the role of science in fostering economic development and climate resilience. He urged policymakers and officials to support young scientists and promote sustainable innovations.

The conference highlighted the importance of integrating cultural heritage into urban and regional planning strategies. Discussions on future collaborations between Pakistan and Germany set the stage for further academic and research partnerships.

The conference hosted multiple sessions with insightful presentations by German experts and student groups, showcasing diverse approaches to urban and rural landscape planning. Topics covered included land use policies, building control acts, and success stories related to climate change and urbanization.



#### ECOSF co-hosts International Online Seminar on Capacity Building for Youth and Science Teachers

ECO Science Foundation (ECOSF) in collaboration with the Belt and Road International Science Education Consortium (BRISEC), Children and Youth Science Center (CYSC), and China Association of Children's Science Instructors organized an International Online Seminar focused on Capacity Building for Youth and Science Teachers. This virtual event aimed to enhance scientific understanding and pedagogical skills among educators and young learners across the Belt and Road regions. The webinar featured two experts or speakers: Prof. Pan Chong Dean and Professor, School of Aeronautic Science and Engineering, Beihang University, China and Mr. Khalil Raza Programs Manager - Energy and Climate, ECOSF. Prof. Tayebi, President ECOSF also attended the webinar.

Prof. Pan Chong delivered his talk on "How to Fly Like Birds and How to Fly Beyond a Bird?" Prof. Pan Chong delivered an engaging lecture exploring the mechanics avian flight and advancements in aeronautical engineering that enable humanmade aircraft to emulate and surpass the capabilities of birds. He discussed the principles of lift, thrust, and wing design, drawing parallels between natural flight and technological innovations in aviation.



Mr. Khalil Raza, delivered his lecture on "Decarbonizing the Road Transport Sector with Electric Vehicles. Mr. Khalil Raza addressed the critical role of electric vehicles (EVs) in mitigating climate change by reducing greenhouse gas emissions from the transport sector. He highlighted the importance of transitioning to electric mobility, discussing the environmental benefits, technological advancements, and policy frameworks necessary to support the widespread adoption of EVs.

Following the presentations, participants engaged in a Q&A session. Discussions focused on the intricacies of flight mechanics, the challenges and opportunities in the EV market, and strategies for integrating these topics into science education.

## ECOSF Hosts Second Consultative Meeting with Embassies of ECO Member Country Embassies on ECO TTEC

The ECO Science Foundation (ECOSF) convened the Second Consultative Meeting with representatives from the embassies of ECO member countries in Pakistan on November 4, 2024 to discuss the progress and enhance engagement for the forthcoming **ECO Trade and Technology Exhibition and Conference (ECO TTEC)**, scheduled for February 2025.



Following representatives of Esteemed Embassies participated in the meeting

- Mr. Tamerlan Khalilov, Deputy Head of Mission, Embassy of Azerbaijan
- Mr. Manarbek Nurtazin, First Secretary, Embassy of Kazakhstan
- Mr. Yaşar Buğra, Third Secretary, Embassy of Türkiye
- Mr. Ravshan Jumanov, Third Secretary, Embassy of Uzbekistan

Prof. Seyed Komail Tayebi, President of ECOSF, welcomed the participants and outlined the meeting's objectives, focusing on reviewing the progress since the initial consultative meeting held in July 2024 and strategizing to support engagement from ECO Member Countries for the upcoming ECO TTEC.

Dr. Ghulam Muhammad Memon, Executive Director of ECOSF, expressed gratitude for the continuous support from the embassies and provided a comprehensive update on the developments and preparations for ECO TTEC.

Mr. Khalil Raza, Programs Manager at ECOSF, delivered a presentation highlighting the salient features of ECO TTEC, emphasizing its significance in fostering regional cooperation in trade and technology.

The representatives expressed their support to enhance participation and contribute to the event's objectives of promoting economic and technological integration within the ECO region.

#### **Announcement**

#### International Conference on e-Learning and e-Teaching (ICeLeT 2025)

Iranian Association of e-Learning (YADA) is planning to host 18<sup>th</sup> National and 12<sup>th</sup> International Conference on e-Learning and e-Teaching (ICeLeT 2025) on February 25-27, 2025. This conference aims to provide the premier interdisciplinary forum for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns, practical challenges encountered and the solutions adopted in the field of e-Learning and e-Teaching. Themes:

- Teaching/Learning models, methodologies & design for blended, self-navigating, game-based learning
- E-learning and improving employee skills in industries and organizations and developing organizational capital
- The role of social networks and other virtual environments in e-learning
- Interactive methods in electronic teaching and learning
- Social, cultural and ethical aspects in e-learning systems
- Policies, strategies and programs in e-learning
- Virtual and remote laboratories, metaverse and AR/VR for teaching and learning
- Artificial Intelligence and Advanced Technologies in Learning
- Learning analytics

For more details, please visit: <a href="https://icelet.ir/2025/Home/Index">https://icelet.ir/2025/Home/Index</a>

