



PAKISTAN ENGINEERING COUNCIL

Achievements/ Initiatives of PEC Governing Body (2021-24)

MESSAGES

Dr. Khalid Maqbool Siddiqui
Federal Minister for Science and Technology



My dear engineers, PEC has come a long way to establish its credentials and therefore ranked among renowned professional organizations in the country as well as on globe, by promotion of engineering education and profession to meet the technological needs and advancements. The government is fully committed to putting the country on the road of self-reliance through achieving excellence in the field of engineering and technology. This accomplishment can be made through a participatory effort; wherein, the leading role of PEC is inevitable.

I am proud that PEC has successfully attained the full signatory status of Washington Accord (WA) for another six years besides being the authorized member of International Professional Engineers Agreement (IPEA), the highest engineering qualification recognition and standards of practice in the world.

I also appreciate the reforms made by PEC under the leadership of Engr. Najeeb Haroon for ensuring quality in engineering education and profession, which should further be strengthened through enforcement and policy support of the Government. I assure you to extend all the possible support in achieving the goals set by the PEC leadership towards sustainability and socio-economic development of the country.

Prof. Ahsan Iqbal
Federal Minister for Planning, Development and Special Initiatives



My Dear Fellow Engineers and Planners Our nation stands at the threshold of a transformative era in infrastructure development, and your role is central to this journey. As we navigate through the challenges of the engineering industry, the pivotal role of the PEC cannot be overstated. Our strategic initiatives, such as the CPEC and efforts to enhance connectivity with the Central Asian Republics, are not just projects-they are the

linchpins of national progress and regional prosperity. The government's five Es framework - Exports, E-Pakistan, Environment & Climate Change, Energy & Infrastructure, and Equity, Ethics & Empowerment provides a comprehensive roadmap, putting it on a sustained growth trajectory in the short to medium term, and making a trillion-dollar economy by 2035. As engineers, you are the architects of innovation and the drivers of economic growth.

Under the dynamic leadership of Engr. Najeeb Haroon, PEC actively collaborates with the Planning Commission in developing standards, advising on national policies, and serving as a think tank to the Federal Government. Recent reforms in the Price Adjustment Formula, addressing the hyperinflation in the construction sector are testament to our commitment to adaptive and forward-thinking governance.

Let us leverage the potential of our engineers to achieve all the milestones. By embracing the five Es framework and spirit of innovation, we can build a prosperous and equitable future for Pakistan.

Engr. Muhammad Najeeb Haroon
Chairman PEC



My dear engineers, your unique ability of out-of-box thinking sets you apart. As engineers, you possess the competence to devise innovative solutions, revolutionize lives through technological advancements, and contribute to a sustainable economy for a prosperous Pakistan. Our commitment lies in creating a corruption-free nation, upholding justice and merit, and safeguarding the engineering profession within organizations.

The Pakistan Engineering Council during 2021 to 2024 has tirelessly worked to elevate the status of engineers both nationally and internationally. As our young engineers were facing the unemployment challenges, we focused on resolving such issues by introducing initiatives like STEM education drive, Final Year Design Projects financing, Graduate Internship Program, strengthening the Academia - Industry linkages alongwith many more, ensuring a brighter future for our next generation. By promoting entrepreneurship, we have been paving path towards business incubation to empower the young engineers and preparing fresh graduates for global market. Together, let's forge a path toward progress and excellence.

Exploring PEC: A Comprehensive Overview

The Pakistan Engineering Council (PEC) is a statutory body, constituted under the PEC Act 1976, to regulate the engineering profession in the country such that it shall function as key driving force for achieving rapid and sustainable growth in all national, economic and social fields. The council shall as its mission set and maintain realistic and internationally relevant standards of professional competence and ethics for engineers, and license engineers, and engineering institutions to competently and professionally promote and uphold the standards.

Its main statutory functions include registration of engineers, consulting engineers, constructors/ operators and accreditation of engineering programmes offered by universities/ institutions, ensuring and managing of continuing professional development, assisting the Federal Government as Think Tank, establishing standards for engineering products and services besides safeguarding the interest of its members. The council shall encourage, facilitate and regulate working of professional engineering bodies for creativity and as custodians of engineering under the umbrella of the Council.



REPORT CARD: PEC Governing Body's 2021-24

Under the visionary leadership of Chairman PEC, Engr. Muhammad Najeeb Haroon, the PEC Governing Body (2021 to 2024) has marked the incredible strides and milestones, reflecting its unwavering commitment to engineering advancements, covering the entire spectrum, first time in the history of the Council, from "STEM education" to "Engineer Parliamentarians Caucus" to attract potential minds towards Science & Engineering to the level of policy reforms and advocacy for the betterment of engineering education and practice.



CONGRATULATIONS

PEC Achieves Washington Accord (WA) Signatory Status for another Six Years [2024-30]



PEC successfully attained the Full Signatory status of WA for another six years during the International Engineering Alliance (IEA) Meeting of the WA (IEAM 2024), held on June 12-13, 2024, in New Delhi, India. This iconic achievement is testament to maintaining excellence in Outcome Based Education & Accreditation standards under the patronage of Engr. Najeeb Haroon and his team.

The extension of PEC's status as a WA signatory, underscores its pivotal role in advancing engineering excellence and ensuring the future of engineering professionals, by providing the enhanced cross-border mobility, increased job opportunities and contributing to the socio-economic development of Pakistan.

The periodic review of PEC was conducted by the three WA Signatories namely Turkey (MUDEK), China (CAST), and Hong Kong (HKIE) during October 29 to November 5, 2023 followed by second visit in January 2024. The objective of this mandatory periodic review

visit was to see the conformance of quality standards of teaching-learning and assessment including the evaluation of PEC's accreditation system/procedures. The unanimous decision to extend PEC's signatory status for six years is based on the overall satisfactory compliance to the WA standards as demonstrated by the WA Review Team in the Executive Committee Meeting of WA.



GLOBAL RECOGNITION: A COMMITMENT TO ENGINEERING EXCELLENCE

PEC attained the Authorized Membership of the International Professional Engineers Agreement (IPEA), under the International Engineering Alliance (IEA) in 2017. This alliance, a global entity overseeing engineering qualifications and competence, includes members from 29 countries across 41 jurisdictions. PEC is also a proud member of a number of international engineering fora including but not limited to the World Federation of Engineering Organization (WFEO), Federation of Engineering Institutions of Asia and the Pacific (FEIAP), Asia-Africa-America and the Pacific Council (AAP), Federation of Engineering Institutions of the Islamic Countries (FEIIC) wherein contributing as a leading Member of the Asia to advocating for the advancement of engineering education and mobility, bringing harmony among the regions, mutual recognition to explore new avenues of job market, necessary policy reforms and implementation of UNSDGs for sustainable development.

STRATEGIC PATH TO ENHANCE IPEA MEMBERSHIP AND CROSS-BORDER RECOGNITION

PEC stands as a beacon of professional excellence, steadfastly adhering to the IPEA, with its periodic review scheduled in late 2024, the council is poised to solidify its international standing. Engr. Muhammad Najeeb Haroon's proactive approach, including the recent annual report and the adoption of the IPEA Chair's insights from IEAM 2023, reflects a deep-seated commitment to propelling Pakistani engineering talent onto the international stage.

ENGINEERING EDUCATION SUMMIT: 4TH INTERNATIONAL DEANS CONFERENCE

PEC hosted the 4th International Deans Conference on May 6-7, 2024, in Karachi, under the theme "Engineering as an Engine of Growth". This pivotal gathering underscores the importance of collaborative efforts in advancing engineering education and addressing the engineering challenges, fostering a shared vision for a sustainable future.





PAKISTAN ENGINEERING COUNCIL

Achievements/ Initiatives of PEC Governing Body (2021-24)

MESSAGES

Engr. Nayyar Saeed
Senior Vice Chairman PEC



Dear Engineers, the global shift toward smart and sustainable infrastructure presents a significant opportunity for our engineering industry. As nations tie economic growth to sustainable development, PEC has positioned itself at the forefront of this transformation. By embracing smart technologies and eco-friendly practices, the industry would also have to demonstrate its commitment towards innovation. These efforts will yield long-term value, reduce environmental impact, and meet growing demand. Let's invest in cutting-edge tech, forge strategic partnerships, and continually enhance our sustainable construction expertise. This way, we contribute to regional economic vitality and secure leadership in the future of green infrastructure.

Engr. Prof. Dr. Niaz Ahmed Akhtar (S.I)
Vice Chairman Punjab



My dear engineers, the world is currently experiencing the Fourth Industrial Revolution, marked by advancements in IT, cloud computing, AI, machine learning, Bio-Nano-Info, advanced manufacturing, robotics, megastructures, and smart cities. In this context, the PEC plays a crucial role in providing a platform for science, engineering, and technology. We are committed to incorporating these cutting-edge trends into the engineering curriculum for future generations. PEC actively contributes to outcomes-based education (OBE), international recognition through the Washington Accord, and the implementation of standards in engineering education nationwide. Let us collaborate to make Pakistan an engineering education driven economy!

PEC's International Mentorship: Elevating Standards

PEC is mentoring engineering bodies in Saudi Arabia, Nigeria, Kenya and Rwanda on behalf of Washington Accord and Asia-Pacific Federation under UNESCO umbrella towards international acclaim. Based on the quality mentorship and recommendation of the PEC, Saudi Arabia and Nigeriawere granted the provisional signatory status of the WA in 2022 and 2023, respectively. This achievement is a direct result of PEC's outreach in international arena and commitment to elevating engineering standards globally.

Engineering Practice Exam: Paving the Way to Professional Recognition

The transition from Registered Engineer (RE) to Professional Engineer (PE) through the Engineering Practice Examination (EPE) has seen a significant increase in both participation and qualifying rates. This positive trend underscores the PEC's successful initiatives to make the EPE more accessible and pertinent for engineers, reflecting a commitment to their professional development. A significant rise in both the number of candidates appearing in the EPE and the success rate has been observed in the current GB tenure (18th to 23rd EPEs) compared to the previous GB tenure (1st to 17th EPEs). Previously, a total of 2,931 candidates appeared, with 1,762 achieving a qualifying percentage of 60.12%. In contrast, a substantial increase has been observed with 4,068 candidates participating in the EPE during the current tenure, of which 3,121 applicants succeeded, resulting in a passing rate of 76.72%. This success is attributed to the impactful efforts of the Engr. Najeeb Haroon in spearheading these initiatives. The digitalization of the EPE has also played a crucial role, making the process more efficient and accessible.



STEM Education Drive: Cultivating Future Engineers

In wake of decline in the admission response in engineering programs and recognizing the importance of maintaining standards&inclusivity in engineering education, Engr. Muhammad Najeeb Haroon initiated the STEM education program to enhance both the quality and quantity of engineers in the country by a dedicated team of more than 100 STEM Ambassadors. It is a strategic campaign aimed at nurturing interest in Science, Technology, Engineering, and Mathematics (STEM) among middle school students.



MUET has extended significant support to this initiative. Vice Chancellor, Dr. Daur Muhammad Pathan and his dedicated team, has made substantial contributions to this cause, further strengthening the campaign's impact and reach.

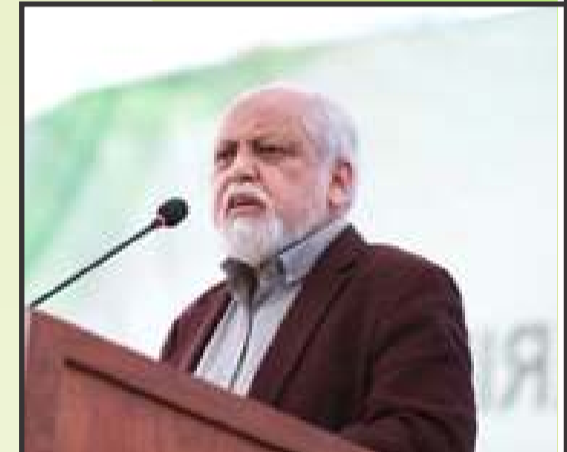
Advancing Engineering Empowerment: Initiatives for Quality Education and Competence

Under the dynamic leadership of Engr. Muhammad Najeeb Haroon, it is the first time that the council has proactively focused on suggesting out-of-box proposals to strengthen the innovation, creativity, soft skills, exporting engineering services remotely and revival of declining trends towards engineering profession. Accordingly, PEC Pakistan Development Committee (PPDC) was constituted, under the convenership of Engr. Mir Masood Rashid. With the dedicated efforts of the IT department, significant strides have been made. The committee is dedicated to realizing several key projects, which includes STEM Education, Day Trip Learning, Annual Financing of Final Year Design Projects (FYDP), Engineering Capstone Expo, E-Library, Graduate Internship Training (GIT) Program, E-Gateway and UNSDGs Adoption, Engineer Parliamentarians Caucus.

BRIDGING THEORY and Practice: Industrial Day Trip Initiative

This innovative educational drive has been launched to bridge the gap between industry and academia, marking a significant stride towards enhancing engineering education. It provides engineering students with invaluable hands-on experience in contemporary industrial work environments.

The initiative offers a series of interactive Industrial Day Trips that seamlessly blend theoretical learning concepts with real-life applications. NUTECH under the guidance of Engr. Lt. Gen (R) Muazzam Ejaz make invaluable contributions that have greatly enhanced the initiative's impact and effectiveness.



Financing FYDPs– A move towards Creativity, Innovation and Solving Complex Engineering Problems

A significant step forward with the introduction of an Annual Financing Scheme dedicated to support quality Final Year Design Projects (FYDP) to bridge financial limitation of HEIs. This pioneering program is designed to inspire engineering graduates to delve into innovative projects that tackle key areas such as entrepreneurship, industrial challenges, and the development of inventive solutions focusing industrial and societal complex engineering problems. The scheme underscores PEC's commitment to fostering a culture of critical thinking and problem-solving approach.



This initiative has been realized through the invaluable support of Engr. Riffat Asim Pasha. PEC held significant gatherings in HEIs for FYDP financingscheme. The events centered on raising

awareness and competitiveness of selected FYDPs satisfying the requirement of Tripple-Helix model. These initiative marks a commendable effort by the VC-KPK, Engr. Ejaz Ansari, Engr. Azhar-ul-Islam and Engr. Faiz-Ullah Kakkar to support and recognize the innovative endeavours of engineering students. Glimps of events held at COMSATS University (Attock Campus), University of Chakwal and UCPLahore are as below:



PEC funded 250 FYDPs of 50 HEIs and 593 FYDPs of 103 HEIs in the year 2022-23 and 2023-24 out of 2140 projects, respectively.

Young Engineers: Shaping the Future

The Young Engineers Development Committee (YEDC), led by Engr. Nasir Khalili has launched a comprehensive Professional Skill Development Training Program (PSDTP). This initiative has empowered 459 young engineers with specialized training in solar panel installation, boiler operation, and Building Information Modelling (BIM) at NED Academy. YEDC hosted a neurolinguistic programming workshop at MAJU, Karachi for 400 engineers, aimed at enhancing communication skills and conflict resolution. Workshops on professional effectiveness at the workplace were also conducted in Lahore and Karachi for 600 engineers.



PMP Training Program

Chairman PEC has made a transformative contribution to support the engineering profession. YEDC provided Project Management Professional (PMP) training to 1,000 young engineers nationwide. This strategic distribution across regions ensures a broad impact, preparing a new generation of engineers for the challenges and opportunities to enhance future career progression.





PAKISTAN ENGINEERING COUNCIL

Achievements/ Initiatives of PEC Governing Body (2021-24)

MESSAGES

Engr. Mukhtar Ali Sheikh
Vice Chairman Sindh



My dear young engineers, the embedded systems and microelectronics play a pivotal role in techno-landscape at global stage. Their impact is far-reaching, enhancing efficiency, precision, and innovation. As engineers, you must embrace these technologies to position yourself at the forefront of progress across sectors like manufacturing and telecommunications etc. Let's integrate these technologies to stay ahead of global trends, and contribute towards technological advancement of Pakistan. Your expertise is vital for our nation's competitiveness.

Engr. Ejaz Hussain Ansari
Vice Chairman KPK



My dear fellows, adhering to construction management best practices is vital in our engineering industry. Prioritize safety, efficiency, and quality. Leverage advanced technologies like BIM and IoT, and foster open communication across teams. Sustainability matters - embrace green building techniques and environmentally responsible practices. Invest in your professional growth and continuously enhance your skills. Together, let's build a future marked by excellence, innovation, and sustainable development.

Graduate Internship Training Program: A Resounding Success

The GIT Program has established itself as a cornerstone of professional development for new engineering graduates. Celebrated for its comprehensive approach to practical training, the GIT Program has been instrumental in bridging the gap between academia and industry. This successful program thrives under the mentorship of VC Sindh, Engr. Mukhtar Ali Sheikh, VC Balochistan, Engr. Nasir Majeed and Engr. Dr. Saeed Gull. Participants of the program have consistently reported a significant enhancement in their skill sets, making them well-prepared to meet the challenges of the engineering sector. To date, this initiative has successfully placed over 2,700 fresh graduates in various industries, with around 1300 completing their training. A significant majority of these trainees have been recruited by their respective industries, securing job placements within and outside the country. Furthermore, a notable number of participants have taken the entrepreneurial leap, starting their own ventures and contributing to the economic growth of the nation.



Showcasing Innovation: Engineering Capstone Expos

In a bid to elevate the standard of Final Year Design Projects, PEC initiated the Engineering Capstone Expo, a competitive event showcasing the most innovative FYDPs to industry and society. To date, six such expos have been held, with two in Islamabad, two in Lahore, one in Quetta, and one in Khuzdar, drawing attention to the burgeoning talent in Pakistan's engineering sector.

Punjab: Hosted expos in September 2022, and February 2024 at Lahore, with over 170 projects from 30 HEIs each time, culminating in financial rewards for the winners.

Islamabad: Celebrated student innovation in January 2023, and January 2024, with 156 and 252 projects from 25 HEIs, respectively, recognizing top achievers with financial awards.

Balochistan: Showcased 105 and 125 projects from 3 HEIs in expos in December 2022, and March 2024, in Quetta and Khuzdar, rewarding excellence with financial prizes.

Peshawar: Showcasing 100 projects from HEIs in expos on 1st July, 2024, and March 2024, and will be rewarding excellence with financial prizes.

Sindh: Will be showcasing more than 160 projects from 109 HEIs on 3rd July, 2024 and will reward excellence with financial prizes.

The contributions of VC Punjab, Engr. Dr. Niaz Ahmed Akhtar, VC Balochistan, Engr. Nasir Majeed and his team have been remarkable in making these expos successful. The Engineering Capstone Expo has become a hallmark of their efforts to promote quality education and competitiveness among Pakistan's future engineers, setting a new benchmark for academic and practical achievements in the field. This is a proven effort to achieve quality outcome in FYDPs as per the WA standards.



Roadmap for UNSDGs Adoption: Charting the Course for HEIs

PEC crafted a strategic United Nations Sustainable Development Goals (UNSDGs) Implementation Plan tailored for Higher Education Institutions (HEIs). This plan is pivotal to Pakistan's ambitious goal of meeting all UNSDGs by 2030. HEIs are set to play a crucial role in this national Endeavor, adopting and executing the UNSDGs through a comprehensive framework established by PEC.



E-Library

With a commitment to advancing knowledge, promoting research, and fostering excellence in engineering, PEC Pakistan Development Committee established the 'PEC E-Library' an online platform to provide engineers, researchers, and students nationwide with an extensive access to engineering resources aims a significant stride towards enriching knowledge, catalyzing research, and upholding the standards of engineering excellence across the globe.

E-Library has all e-version of all Design Projects of final year which participated in any Captone. E-Library Portal is developed by Azeem ullah Khan of Auksun Consultant and can be accessed through following link <https://elibrary.pec.org.pk/>



E-Gateway: Empowering Local Engineering on Global Scale

The PEC Pakistan Development Committee's E-Gateway, spearheaded by Convener PEC Pakistan Development Committee, Engr. Mir Masood Rashid is a successful initiative facilitating international business engagements with Pakistani consulting firms and engineers. It promotes local engineering services exports under transparent policies, positioning Pakistan as a trusted global player in the tech-driven economy and retaining local talent amidst economic challenges. This initiative has been supported by A2Z Consultants and Zaeem Ahmed, who have been instrumental in the development of the E-Gateway portal.



Engineers Parliamentarian Caucus: New Frontier in Engineering Advocacy

PEC has established the Engineers Parliamentarian Caucus, a pivotal initiative aimed at strengthening engineering policies and advocacy at a governmental level, chaired by Engr. Senator Rukhsana Zuberi. Chairman PEC, Engr. Muhammad Najeeb Haroon, who previously served as a well-known MNA, convened parliamentarians on a unified platform to advance the engineering profession's interests. This initiative is poised to significantly improve quality control measures and promote strategies for both export and import substitution, owing to the dedicated efforts of the Chairman of PEC.

In a historic act of consensus, the National Assembly of Pakistan passed a resolution on 1st August 2023, officially recognizing the Caucus, a sentiment echoed by the Senate of Pakistan. The Caucus has already embarked on several key initiatives, including the 'Make in Pakistan' policy and addressing technical HR issues in GCC countries. A landmark achievement of the Caucus is the integration of Engineering Services Pakistan (ESP) as the 13th Cadre of the Central Superior Services (CSS), marking a new era in the nation's civil service structure as passed by the Senate of Pakistan. The legislative process will be completed after the approval of National Assembly followed by its notification. Collective efforts are underway, in this regard.



Promoting Innovation and Entrepreneurship: Pakistan's first Innovation & Entrepreneurship Development Centre (PIEDC)



Led by Engr. Prof. Dr. Samreen Hussain, the PEC Innovation & Entrepreneurship Committee (ICE) has launched several transformative projects through PIEDC. The inaugural Seed Funding Project awarded PKR 1 million to the top 10 startups, with additional benefits for 5 runners-up, and saw 4 startups integrated into the Land Information Management System (LIMS) by SIFC. PEC signed an MoU with COMSTECH to enhance OIC states' engineering capacity, promote technology transfer, and rejuvenate the Federation of Engineering Institutions of Islamic Countries (FEIIC). A national dialogue was also conducted to address engineers' unemployment in Pakistan.

Internationally, PEC established an MoU with Coventry University, UK, to improve the CPD framework and foster collaborative R&D, promoting the exchange of engineering talent and knowledge. Partnering with Chemonics International and USAID GHSC-PSM, PEC is developing a national framework to standardize Pakistan's biomedical engineering services, collaborating with NIH and Pakistan Army's Centre of Excellence for Biomedical Engineering. Additionally, PEC certified Pakistan's first indigenously developed Bloodless Peritoneal Dialysis Machine. Training programs on E-Commerce & Freelancing for Engineers and a 1-month Entrepreneurship for Engineers (E for E) Program were also introduced to encourage self-employment among graduates.





PAKISTAN ENGINEERING COUNCIL

Achievements/ Initiatives of PEC Governing Body (2021-24)

MESSAGES

Engr. Nasir Majeed
Vice Chairman Balochistan



My fellow engineers! The significance of water resources in our country cannot be overstated. As we face the growing threat of water scarcity, your expertise and dedication are more crucial than ever. Efficient management and innovative solutions in water conservation, distribution, and infrastructure are vital to safeguarding our future. We must prioritize sustainable practices in all our projects, from designing water-efficient systems to implementing advanced technologies for resource management. Let's commit to making a lasting impact through our work, ensuring a secure and sustainable water future for generations to come.

Engr. Dr. Nasir Mahmood Khan (Pride of Performance)
Registrar/Secretary



My fellow engineers, PEC is committed to fulfilling its mandate under the obligations of its Act, focusing on the enhancement of engineering education and the profession. PEC leadership is dedicated to positioning it as one of the premier organizations both nationally and internationally.

PEC has made significant strides and accomplishments, including membership in all prestigious international forums. It has become a vibrant body in all professional activities related to the standardization of education and practice, capacity building, and professional development, continuously striving for excellence in the engineering profession.

I urge you to play your part in sustainable development of engineering profession in totality, contributing to the prosperity of our beloved country.

Digital Transformation & Automation: PEC Celebrated 2024 as IT Year

Computer Based EPE Exam: PEC successfully conducted computer-based 23rd Engineering Practice Examination (EPE) exam in online mode, the first in its history, at Rawalpindi and Islamabad. This approach not only streamlines the examination process but also aligns with international standards, enhancing efficiency and accessibility. The latest EPE witnessed participation of over 900 candidates, the highest turnout since its inception in 2011, and was held across 11 centers nationwide, including remote locations like Gilgit, Muzaffarabad, and Swat, ensuring country-wide reach and inclusivity. This online facility will be further extended across the country in the next stage and ultimately to offer the same in cross border jurisdictions.

E-office Initiative: Transforming office operations by digitizing administrative tasks, enhancing document management, and promoting collaborative communication. This initiative has not only streamlined workflows but also significantly cut down on paper usage, boosting productivity, cost-effectiveness and ensuring transparency and accountability in the processes. Following the directive of Prime Minister, PEC proudly achieved this digital milestone in December 2023.

PEC & NADRA e-Sahulat Partnership: A strategic partnership between PEC and NADRA is simplifying biometric verifications for engineers, offering a network of over 7,000 e-Sahulat centres nationwide, provides unparalleled convenience and cost savings.

Suite of Online Portals - Streamlining Professional Services: PEC has introduced a suite of online portals, marking a significant leap in digital convenience for a diverse range of users including engineers, constructors, HEIs, students, faculty, and administrative staff of PEC. These portals, which encompass the Constructor Operator Registration Portal, SAR Portal, SIS Portal, CPD Portal, EPE Portal, and Verification Portal, are designed to simplify processes and enhance the ease of doing business for all stakeholders without involving least human interventions at all stages.

Strategic Integrations: PEC integrations with PPRA, SECP and commercial banks is revolutionizing application processes, ushering in a new era of transparency and efficiency.



Regulatory Reforms: Elevating Engineering Standards through 'Pace-with-World' Approach

PEC has been instrumental in enhancing the construction sector's operational framework, ensuring a robust and business-friendly environment. Upholding the PEC Act of 1976, the Council has set exemplary standards for engineering works and services. Notably, during the 2018 - 2024 tenure, PEC embarked on revising 16 years old Standard Bidding Documents to make them compatible to the needs of this day and age. PEC has revised and updated the Pakistan Standard Bidding Documents (PSBDs), aligning with international best practices and current procurement trends. The latest update includes the "PSBD Construction for Building and Engineering Works Designed by the Employer (Following Prequalification) December 2023", reflecting the 2017 FIDIC Red Book conditions, in March 2024. Further updates are underway, with three additional documents set to be released by June 2024, marking a significant stride in PEC's commitment to regulatory excellence.

Price Adjustment Formula

PEC has updated its Price Adjustment Formula, approved by ECNEC, crucial for the sustainability of construction projects, with the latest edition released in May 2022. This revision addresses the dynamic economic challenges faced by the construction sector, including those exacerbated by the COVID-19 pandemic.

CIDB to Bolster Construction Industry

Construction Industry Development Board (CIDB) is being established under PEC to serve as a pivotal forum for the construction sector's growth and development. The CIDB's comprehensive role extends to advising the government on construction standards, resolving disputes through the PEC Alternate Dispute Resolution Centre, and ensuring transparency in the industry.

Reshaping Construction Dispute Resolution

In Pakistan International Disputes Weekend'24, the PEC ADR Centre was soft launched by the Honorable Chief Justice, Sindh High Court and Chairman PEC, Engr. Najeeb Haroon. The PEC ADR Centre would be the Pakistan's first specialized forum which is a significant milestone, providing a dedicated platform, a testament to Pakistan's commitment for improving the construction sector's dispute resolution process.



Third Party Rating and Profiling of Construction Firms



PEC initiated an independent performance evaluation system for registered construction entities. Partnering with PACRA and VIS; the only two rating agencies recognized by the Securities and Exchange Commission of Pakistan, PEC aims to fill the gap in performance data during a firm's active registration period. This new mechanism, focusing on accuracy and impartiality, will initially target the top tier construction firms on a voluntary basis, with the goal of establishing a system of professional ranking among the same categories of construction entities to enhance their professional capacity through productive competition.

Strategic Contributions as National Think Tank

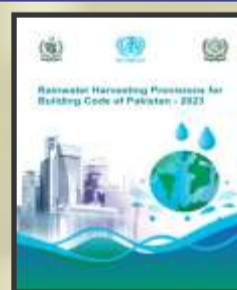
Groundwater Seminar Success: PEC hosted a pivotal seminar on groundwater management, aligning with global World Water Day initiatives. The event was held in June 2022 which was attended by major stakeholders and relevant ministers of the Government while endorsing PEC's efforts towards sustainable groundwater practices in the Country.



Collaboration for Dam Management: In a significant move, PEC and the Federal Flood Commission solidified their partnership through a MoC aimed at empowering the Pakistan National Committee on Large Dams (PANCOLD). This collaboration is set to enhance PANCOLD's role in addressing the nation's water resource challenges, especially in the management of large dams.



Rainwater Harvesting Code: PEC has developed the first-ever Rainwater Harvesting Provision for Building Code of Pakistan-2023. For the purpose a tripartite international agreement among PEC, Standards Council of Canada and International Code Council-USA was signed. The salient features of this code include harvesting rainwater potential uses, controlling urban flooding and replenishing rapidly depleting groundwater.



Green Building Code of Pakistan: PEC in collaboration with ICC, USA developed first ever Green Building Code of Pakistan (GBCP-2023) for adaptation of climate resilience-built environment by transforming conventional construction methods. The GBCP is a major step towards a green economy, provides green eco-friendly practices for building design construction, operation stages. Ensures utilization of sustainable sites, provides green construction materials to save energy, conserves water, and improves indoor environmental quality, lowers the

GHG emissions in compliance to UNSDG-7, 11, 12, 13. **PEC Triumphs with ICC Global Award-2023:** International Code Council (ICC) honoured PEC with the ICC Global Award-2023 during COP-28 at UN-Climat Conference held in December 2023 at Dubai. Under Secretary US Department of Commerce along with Senior Vice President of ICC Global Operations, presented the Global Award to the PEC.



PEC and PAE Collaboration for Education & Practice

The PEC and Pakistan Academy of Engineering (PAE) signed MOU in 2022. PEC role as a Think Tank under the MoU help in achieving the national endeavors. This partnership aims to foster a culture of engineering innovation, research, policy and development studies aligning with national plans and mega projects. In this regard, PEC and PAE jointly carried out various policy studies and developed technical reports as guiding principles for the federal and provincial governments such as:

- Third Party Assessment of Policies, Plans and Implementation of the Manufacture of Electric Vehicles in Pakistan
- Hydrogen Strategy for Pakistan 2022
- Third Party Assessment of Carbon Trading in Pakistan
- Survey of Creation of New Knowledge in UETs
- Survey of Employment Market for Young Engineers
- Impact of PEC Laws on Quality and Cost of Construction
- Report on Pakistan Energy Future
- Report on Pakistan Industrialization 2024

The major outcomes of above interventions under this include the far-reaching benefits for the engineering community, crystallization of national policies & plans, piloting and upscaling new ventures in a sustainable manner by promoting competitiveness in engineering education and profession.



PEC Excellence Awards: Decorating the Unsung Heros

PEC has instituted the "PEC Engineers' Excellence Awards" to honour the significant contributions of engineers to the nation's socio-economic growth. Recognizing their pivotal role in advancing strategic mega projects utilizing local resources, these awards commend the dedication and innovation of the engineering fraternity. The prestigious ceremonies of PEC Excellence Awards 2020 & 2021 and 2022, graced by the President of Pakistan, held at Aiwan-e-Sadr, Islamabad. The awards span over a range of categories, acknowledging the diverse expertise of engineers in academia and industry both within Pakistan and abroad. These categories include Lifetime Achievement for distinguished national service, Academia and Research, Innovation & Emerging Technology Development, Young Techno-preneurs, International Associates, Engineering Policy, Regulations and Advocacy, Infrastructure/ Construction Industry. Through this initiative, PEC underscores the vital role of engineers in the national socio-economic development, in a similar manner to the highest civil awards.

