European Council of Civil Engineers

E-JOURNAL 31 DECEMBER 2025

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European Council of Civil Engineers – ECCE President's message for the conclusion of the 40th ECCE Anniversary

Eur. Ing. Platonas Stylianou
ECCE President 2024-2027

Dear Presidents,
Dear Colleagues,
Distinguished members of the European Council of Civil Engineers (ECCE),

As we reach the end of the year and the celebrations of 40 Years of ECCE, we are reminded not only of our long and proud history, but also of our collective responsibility for the future. ***Since 1985, ECCE has stood as the unified voice of Europe's civil engineers — defending public safety, promoting professional excellence, and supporting the development of safe, resilient and sustainable communities across our continent.***

Today, as Europe enters a new era defined by accelerating climate risks, seismic vulnerability, aging buildings and infrastructure, and the urgent need for sustainable transformation, our mission has never been more important. Civil ***engineers are once again called to lead — as guardians of safety, stewards of resilience, and trusted partners in shaping a stronger, more secure Europe.***

Across all ECCE initiatives — from our Position Paper on "The Need for Integrating Structural/ Seismic Upgrade of Existing Buildings with Energy Efficiency Improvements" and the 3S Approach Manifesto (Safe, Sound, Sustainable), to the 2024 Manifesto "Building a resilient future: Climate-proof design of infrastructure for generations to come" — one principle is crystal clear:

**Fragmented approaches to engineering challenges no longer work.
Only holistic and integrated solutions will allow Europe to adapt and thrive in this new era.**

Structural safety, seismic resilience, energy performance, climate adaptation, digital transition, sustainability and heritage preservation must not be treated independently. They are interconnected pillars of modern engineering practice. This reflects the core of our 3S philosophy — Safe, Sound, Sustainable — a framework that must guide national policy, professional standards, and every renovation and development strategy across Europe.

As Presidents/ delegates of ECCE Member Organisations, you play a central role in turning this integrated vision into action. Together, we must ensure that ECCE's approach becomes:

- embedded in national and European directives,
- reflected in standards, training, and professional practice,
- and translated into real improvements in safety, resilience, and sustainability.

To support your leadership, the three fundamental ECCE documents — the Position Paper on *"The Need for Integrating Structural/ Seismic Upgrade of Existing Buildings with Energy Efficiency Improvements"*, the *3S Approach Manifesto (Safe, Sound, Sustainable)* and the 2024 Manifesto *"Building a resilient future: Climate-proof design of infrastructure for generations to come"* — are enclosed for your easy reference and dissemination. They set out the strategic direction Europe's built environment must take to remain safe, climate-resilient, and future-proof.

As we conclude this anniversary year, let us honour our past and our ECCE's 40-year legacy not only by celebrating our achievements, but by renewing our commitment to the decades ahead. The challenges before us demand unity, scientific integrity, and cross-disciplinary collaboration.

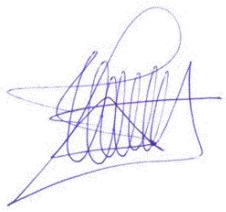
I strongly urge each one of you to disseminate this message through your national and international networks, ensuring that our shared vision for a holistic, integrated, and resilient approach reaches all civil engineers and stakeholders across Europe.

If we embrace these principles, Europe will not only adapt to the new era — it will lead it. **Remember Civil Engineering is not just a profession -it's a commitment to humanity.**

The European Council of Civil Engineers stands united in this mission.

Together, we can build a better, safer, stronger, and more resilient Europe for generations to come.

Sincerely,



Platonas Stylianou
Beng (Hons), Eur Ing, MSc, MCS, CEng, FICE, FCIArb, FCA
ECCE President

ECCE–ECEC Joint Policy Paper: A European Engineering Vision for Affordable, Safe and Sustainable Housing

The European Council of Civil Engineers (ECCE) and the European Council of Engineers Chambers (ECEC) have jointly issued a major policy paper entitled **"A European Engineering Vision for Affordable, Safe and Sustainable Housing"**

This collaboration comes at a critical moment, as Europe faces a growing shortage of adequate and affordable housing, alongside increasing pressures linked to urbanisation, climate change, safety requirements and energy performance obligations.

Recognising that housing is not simply a market commodity but a **fundamental public good**, ECCE and ECEC frame this challenge as one that directly affects Europe's social cohesion, competitiveness and long-term resilience. The policy paper positions engineers at the heart of the solution—calling for coordinated European action, modernised regulatory frameworks, and innovative delivery models that can accelerate the provision of high-quality, affordable dwellings across the continent.

Housing as a Cornerstone of Public Safety, Resilience and Social Well-Being

Referencing international human rights instruments, the paper reaffirms that **access to adequate, safe and affordable housing is a core element of human dignity**. Europe's current housing deficit—exacerbated by rising rents, ageing and unsafe buildings, energy poverty and spatial inequality—creates risks not only for individuals and families but for the stability and sustainability of European societies as a whole.

ECCE and ECEC therefore advocate for housing policy to be treated as **critical social and industrial infrastructure**, equivalent in importance to energy, mobility and digital systems. This requires long-term strategic planning supported by harmonised technical standards, robust regulatory frameworks and evidence-based decision-making.

Key Pillars of the Joint Policy Vision

1. A Coordinated European Strategy

The paper calls for stronger EU-level alignment across financing instruments, technical standards, education and professional competences. It highlights existing European initiatives—such as the Affordable Housing Plan, the Renovation Wave, the Green Deal and the New European Bauhaus—and urges further integration, especially in the areas of seismic resilience, climate adaptation, energy efficiency and long-term structural robustness.

2. Accelerating Affordable Housing Through Public–Private Synergies

ECCE and ECEC propose a balanced model combining public responsibility with private innovation. Recommendations include:

- expanding social housing,
- simplifying planning and permitting processes,
- promoting adaptive reuse before new construction,
- establishing a **Resilience and Adaptability Audit** for publicly financed or PPP-supported housing projects,
- ensuring human-centred quality criteria in all developments.

3. Industrialised Construction as a Transformational Lever

Industrialised (off-site) construction is identified as a key enabler for faster, safer and more sustainable housing delivery. The paper proposes:

- the creation of a **European Industrialised Housing Alliance**,
- a common European curriculum for industrialised and modular construction,
- demonstrator projects across Europe,
- harmonised guidelines on structural integrity, fire and seismic safety, and durability of modular systems.

Such measures aim to increase productivity while maintaining high standards of safety and habitability.

4. Empowering Engineers as Leaders of Innovation and Public Safety

The paper emphasises that engineers play a pivotal role in shaping Europe's housing transformation—not only as designers but also as **guardians of public safety**. ECCE and ECEC advocate for the formal inclusion of engineers, architects and planners in national and European housing councils, and for strengthening cross-professional collaboration to reflect the multidimensional nature of housing.

5. Human-Centred Housing as a Quality Imperative

As industrialisation expands, ECCE and ECEC stress the importance of ensuring that technological efficiency does not override user well-being. Daylight, ventilation, accessibility, thermal and acoustic comfort and adaptability must remain integral components of housing quality.

6. Financing Mechanisms that Reward Long-Term Resilience

Affordable housing requires accessible financing. The paper proposes:

- a **European Housing Finance Facility**,
- increased public investment,
- cost-rental and circular-economy-based housing banks,
- incentives for maintenance investments and digital building passports,
- financial advantages for projects demonstrating long-term resilience and low carbon footprint.

7. Modernising Regulations and Harmonising Professional Frameworks

To reduce fragmentation and accelerate innovation, ECCE and ECEC call for:

- harmonised regulations and performance-based requirements,
- mutual recognition of professional competences,
- integration of industrialisation and sustainability topics into professional education,
- a **European Housing Resilience Rating** for new and existing housing stock,
- AI governance frameworks for safe, transparent and ethical use of digital tools in housing decisions.

A Shared Call to Action

In their concluding message, ECCE and ECEC Presidents reaffirm that solving Europe's housing crisis requires **systemic innovation, cross-border cooperation and empowered engineering leadership**. Housing must be safe, resilient, sustainable, and accessible to all. As the paper states:

"Europe must deliver housing that is affordable for its citizens and engineered to be safe, resilient and sustainable."

This Joint Policy Paper provides a comprehensive roadmap—grounded in engineering expertise—for building the future of European housing. ECCE will continue to work closely with ECEC, European institutions, national authorities, and the wider professional community to promote policies and practices that support a better, safer and more resilient built environment for all.

Access the electronic version of the Policy Paper here:

ECCE-ECEC Policy Paper on Affordable Housing

ecec European Council of Engineers Chambers

ECCE EUROPEAN COUNCIL OF CIVIL ENGINEERS 40 YEARS

82nd ECCE General Meeting Announcement

We are pleased to announce that the 82nd General Meeting of the European Council of Civil Engineers (ECCE) will be held from 28 to 30 May 2026 in Tbilisi, Georgia.

The meeting will be graciously hosted by the **Georgian Society of Civil Engineers (GSCE)** in cooperation with the **Georgian Technical University (GTU)**.

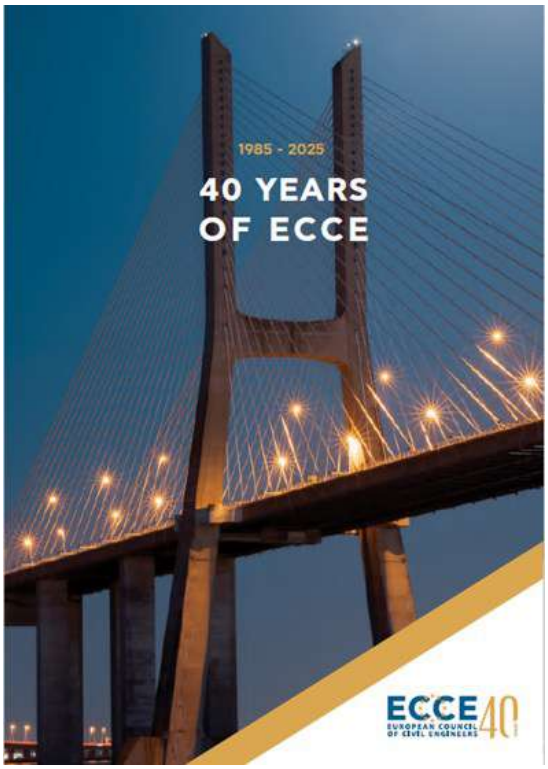
This important gathering will bring together ECCE members and partners to discuss current priorities for the civil engineering profession, advance ECCE's strategic initiatives, and strengthen our collaboration across Europe.

Further information on the detailed programme, agenda, accommodation options, technical visits, and social events will be published in due course.

Stay tuned for updates on the ECCE website, and be sure to save the dates.

We look forward to welcoming you to Tbilisi in May 2026!

Celebrating 40 Years of ECCE — Commemorative Book & Tribute Video



ECCE Presidents 1985 — 2025

As part of the celebrations marking the 40th anniversary of the European Council of Civil Engineers, ECCE proudly presents two milestone initiatives that honour the organisation's rich history and the individuals who have shaped its path: the publication of the book "40 Years of ECCE" and the release of the ECCE Tribute Video to Past Presidents.

"40 Years of ECCE" – A Commemorative Book

To mark four decades since its founding in 1985, ECCE has issued the second edition of its history book, **"40 Years of ECCE"**, following the first edition published on the occasion of its 30th anniversary.

The book chronicles the journey of ECCE from its inception in 1985 through to 2025. It presents the organization's evolution across four decades, with chapters organized chronologically by ECCE Presidencies. Each chapter highlights key events, achievements, and milestones, while also placing a strong emphasis on the individuals who shaped ECCE's course—especially its Presidents and leaders.

The content covering the years 1985–2016 is based on materials contributed by prominent ECCE figures who supported the first edition of the book:

- Yrjö Matikainen (Honorary President)
- Vassilis Economopoulos † (Past President)
- Fernando Branco (Past President)
- Włodzimierz Szymczak (Past President)

The chapters covering the years 2016–2025 were compiled by a dedicated working group composed of:

- Helēna Endriksone (ECCE Vice President / Treasurer)
- Jeanette Muñoz Abela (ECCE Vice President / President Elect)
- Maria Karanasiou (ECCE Secretary General)
- Andreas Brandner (ECCE Immediate Past President)
- Platonas Stylianou (ECCE President)

This publication stands not only as a historical record but also as an expression of gratitude for the passion, dedication, and vision that have guided ECCE over the past four decades.

Access the electronic version of the book here: **40 Years of ECCE**

ECCE Tribute Video – Honouring Our Presidents

Complementing the anniversary book, ECCE has also produced a Tribute Video to its Past Presidents, premiered during the 81st ECCE General Meeting in Split. This commemorative film brings together personal reflections, historic moments, and the collective wisdom of those who have led ECCE since its foundation.

Through interviews, archival material, and a unifying narrative, the video celebrates the leadership that shaped ECCE's identity, strengthened its voice in Europe, and contributed to the advancement of the civil engineering profession. It serves as a heartfelt acknowledgment of the Presidents whose commitment and vision propelled ECCE through its first 40 years.

Featured in the video:

- Gérard Baron – ECCE President 1994–1996 & 1996–1999
- António Adão da Fonseca - ECCE President 1999-2002
- Yrjö Matikainen - ECCE President 2002-2005
- Richard Coackley - ECCE President 2005-2008
- Gorazd Humar - ECCE President 2010-2012
- Fernando Branco - ECCE President 2012-2014
- Aris Chatzidakis - ECCE President 2018-2021
- Andreas Brandner - ECCE President 2021-2024
- Platonas Stylianou - ECCE President 2024-2027

Watch the ECCE Tribute Video here: **ECCE 40th Anniversary Tribute Video**

Recap of the 81st ECCE General Meeting - Celebrating 40 Years of ECCE and Advancing Civil Engineers' Role in Resilience

The European Council of Civil Engineers (ECCE) successfully convened its 81st General Meeting from 9–11 October 2025 in Split, Croatia**, hosted by the Croatian Chamber of Civil Engineers (HKIG).**

The meeting gathered delegates from ECCE member and associate organizations, honorary and past presidents, distinguished invited guests from across Europe and presidents of international organizations, marking another milestone in **ECCE's 40th Anniversary Year (1985–2025)**.

The three-day event combined governance sessions, strategic discussions, important presentations, a Round Table on "Civil Engineers' Responsibility Following Natural Disasters", and celebratory moments dedicated to ECCE's legacy and future vision.

Key Highlights of the 81st ECCE General Meeting

Opening Ceremony

The meeting opened with welcoming remarks by **Mr. Platonas Stylianou, ECCE President**, **Mrs. Nina Dražin Lovrec, President of the Croatian Chamber of Civil Engineers (HKIG),** and **Mr. Tonči Glavinić, State Secretary of the Ministry of Physical Planning, Construction and State Assets of Croatia.**

In their addresses, the speakers highlighted the importance of **civil engineers' contribution to public safety, resilience, and sustainable development**, emphasizing collaboration across Europe as the cornerstone of ECCE's mission.

ECCE President
Platonas Stylianou

HKIG President
Nina Dražin Lovrec

State Secretary of the Ministry of Physical Planning, Construction and State Assets of Croatia
Tonči Glavinić

Governance & Administration

ECCE members approved the minutes of the 80th ECCE General Meeting. Updates on ECCE's financial position were presented, including the Management Accounts up to the end of September 2025 and the financial planning for 2026. The proposed membership fees and budget were unanimously endorsed, reflecting the sound financial management of the organization and aligning with the Strategic Plan objective to strengthen ECCE's financial framework.

President Platonas Stylianou presented the ECCE Activity Report (March–October 2025), highlighting key developments since the 80th ECCE General Meeting. The report showcased ECCE's active engagement in strategic projects, the advancement of partnerships, and milestone initiatives marking the 40th Anniversary, underscoring the Council's continued momentum and growing European and international visibility.

Strategic Initiatives & Progress Reports

ECCE signs a Memorandum of Understanding with the International Coalition for Sustainable Infrastructure

ECCE President Platonas Stylianou and ICSI Executive Director Savina Carluccio

ECCE emphasized the importance of international collaboration in addressing global challenges, highlighting the **Memorandum of Understanding signed with the International Coalition for Sustainable Infrastructure (ICSI)** during the Split meeting. This milestone partnership reinforces joint efforts to promote resilience, climate adaptation, and the transition towards sustainable, future-ready infrastructure across Europe and beyond. As part of this collaboration, **ICSI Executive Director Savina Carluccio** delivered an insightful presentation on the Global Infrastructure Resilience Survey, providing a global perspective on the state of resilience in infrastructure systems and identifying opportunities for action that align closely with ECCE's strategic priorities.

ECCE supports the Luxembourg Declaration on Public Procurement

ECCE was among the signatories of the **Luxembourg Declaration on Public Procurement**, adopted in May 2025, which calls for quality-based, transparent, and sustainable procurement practices across Europe. During the meeting, **Nina Dražin Lovrec, President of the European Council of Engineers Chambers (ECEC)**, delivered a presentation outlining the main principles of the Declaration and its relevance for the engineering profession. The initiative emphasizes the need to move beyond lowest-price criteria, promoting professional competence, innovation, and long-term value in public procurement for the built environment.

ECEC President
Nina Dražin Lovrec

ECCE strengthens its ties with international partners

ECCE reaffirmed its strong relations with international engineering organizations and professional bodies. The Secretary General of ENGINEERS EUROPE, Dirk Bochar, and the President of ISHCCO, Evangelitsa Tsoulofta, delivered insightful presentations on the Engineers Europe (E4E) Project and "Occupational Safety and Health (OSH) in Construction: The Role of Civil Engineers", respectively. ECCE was further honoured by the presence of distinguished guests — Oscar Sánchez, President of the World Council of Civil Engineers (WCCE), Nikos Theodossiou, President of the Association of European Civil Engineering Faculties (AECEF), and Klaus Thürriedl, President of the European Council of the Liberal Professions (CEPLIS) — whose participation underscored the spirit of collaboration and mutual commitment to advancing the civil engineering profession at the European and global levels.

ENGINEERS EUROPE Secretary General
Dirk Bochar

ISHCCO President
Evangelitsa Tsoulofta

WCCE President
Óscar Sánchez

AECEF President
Nikos Theodosiou

CEPLIS President
Klaus Thürriedl

Strategic Plan Implementation & AI Position Paper (AIDE Initiative)

ECCE continued to advance the implementation of its Strategic Plan 2023–2030, as presented by **Vice President / President Elect Jeanette Muñoz Abela**, who outlined progress across key priority areas — education, digitalization, resilience, and societal impact. A major focus was placed on the role of artificial intelligence and digital transformation in shaping the future of the profession, with updates shared on the AIDE Position Paper (Artificial Intelligence for Digital & Ethical Civil Engineering), which aims to promote the responsible and ethical integration of AI in civil engineering practice.

To further strengthen collaborative engagement and define actionable pathways, three Strategic Plan Pillar Workshops were held in parallel, led by their respective Champions and co-chairs, focusing on Education, Research & Knowledge Transfer, Societal Factors & Impact, and Enterprise & Industry Impact — fostering dynamic discussions and concrete steps towards achieving ECCE's long-term vision for the profession.

ECCE Vice President/ President Elect
Jeanette Muñoz Abela

ECCE Strategic Plan Workshops

Review of the ECCE Articles of Association

ECCE Immediate Past President Andreas Brandner reported on ongoing efforts to refine the ECCE Articles of Association, focusing on improving clarity, removing outdated provisions, and adding necessary topics, aiming to enhance ECCE's administrative efficiency. The goal is to improve ECCE's services and administrative support.

A New Era for ECCE's Online Presence

ECCE Secretary General Maria Karanasiou presented the progress of ECCE's new website, marking a major step towards a more modern, accessible, and engaging digital presence. The redesigned platform — aligned with ECCE's updated branding — will feature improved navigation, a dedicated events calendar, a publications library, a news feed, and integrated member access. The new website aims to enhance visibility, strengthen communication with members and the public, and showcase ECCE's mission, values, and activities in a dynamic and user-friendly way ahead of its official launch.

ECCE Secretary General
Maria Karanasiou

ECCE Immediate Past President
Andreas Brandner

Progress of the ECCE Book project

ECCE presented the progress of its flagship publication "Civil Engineering Today: Mapping the Profession Across

Europe," coordinated by ECCE President Platonas Stylianou. The updated 2026 edition — the fourth in the series — will offer a comprehensive overview of the civil engineering profession across Europe, from education and registration systems to professional practice. With contributions from representatives of over 25 countries, all ten thematic chapters have now been completed, paving the way for data analysis, editing, and the creation of the forthcoming digital e-book edition to be released in 2026, marking ECCE's 40th Anniversary.

Recognition and 40th ECCE Anniversary Highlights

During the meeting, **former ECCE President Aris Chatzidakis** was awarded the title of **ECCE Honorary President** in recognition of his outstanding service and dedication to ECCE since its establishment in 1985. His continuous involvement over four decades has greatly contributed to ECCE's growth and to strengthening the voice of civil engineers across Europe.

The meeting was also honored by the presence of **ECCE Honorary President Yrjö Matikainen**, whose participation underscored ECCE's enduring legacy and the strong bonds among its past and present leaders.

As part of the 40th Anniversary celebrations, ENGINEERS EUROPE presented a commemorative gift to ECCE President Platonas Stylianou. The gift was delivered by ENGINEERS EUROPE Secretary General Dirk Bochar.

Participants enjoyed the premiere of the **ECCE Tribute Video** dedicated to *"40 Years of ECCE (1985–2025)"*, featuring reflections and messages from ECCE Presidents past and present, celebrating four decades of unity, collaboration, and service to the civil engineering community in Europe.

From top left to right: 1. ECCE Honorary President Yrjö Matikainen, 2. ECCE President Platonas Stylianou, ECCE Secretary General Maria Karanasiou, HKIG President Nina Drazin Lovrec, ECCE Honorary President Yrjö Matikainen, ECCE Vice President/ President Elect Jeanette Muñoz Abela, 3. ECCE President Platonas Stylianou and HKIG President Nina Drazin Lovrec awarding the title of ECCE Honorary President to Aris Chatzidakis, 4. ECCE members honouring the ECCE Honorary President Aris Chatzidakis, 5. ENGINEERS EUROPE Secretary General Dirk Bochar delivering a present to the ECCE President Platonas Stylianou for the 40 Years

Round Table – Civil Engineers' Responsibility Following Natural Disasters

A key highlight of the 81st ECCE General Meeting was the Round Table on "Civil Engineers' Responsibility Following Natural Disasters. The session brought together an impressive line-up of experts from across Europe to examine the vital role of civil engineers in disaster preparedness, response, and recovery.

The discussion was moderated by Ms. Zrinka Grancarić, a prominent Croatian journalist and TV presenter at the Croatian Radiotelevision (HRT). With her dynamic moderation, the session evolved into an insightful and thought-provoking exchange bridging engineering, policy, law, and societal resilience.

The Round Table opened with expert presentations by:

- Prof. Marta Šavor Novak (University of Zagreb, Faculty of Civil Engineering), on "Earthquake Risk Assessment of the City of Zagreb," highlighting Croatia's progress in disaster risk reduction since the 2020 earthquakes.
- Prof. Nikolas Kyriakides (Cyprus University of Technology), who presented "Post-Earthquake Emergency Assessment of Building Safety," offering practical guidelines for rapid and efficient post-disaster structural inspections.
- Prof. Nikos Theodossiou (Aristotle University of Thessaloniki, President of AECEF, Chair of the UN SDSN Black Sea), addressing "Climate-Related Risks: Floods and Droughts under Climate Change Conditions," emphasizing the need to rethink infrastructure design and management under non-stationary climate patterns.
- Prof. Antun Bilić (University of Zagreb, Faculty of Law), who examined "Civil Engineers' Responsibility Following Natural Disasters," analyzing the legal and ethical dimensions of engineers' liability in post-disaster contexts.

- Mr. Bülent Tatli (Secretary of the Turkish Chamber of Civil Engineers), who presented "The Reality of Earthquakes in Türkiye," illustrating lessons learned from the 2023 Kahramanmaraş earthquakes and the engineering community's response.

From top left to right: Prof. Marta Šavor Novak, Prof. Nikolas Kyriakides, Mr. Bülent Tatli, Prof. Nikos Theodossiou, Prof. Antun Bilić

Following the presentations, an engaging panel discussion brought together:

- **Eur. Ing. Platonas Stylianou**, ECCE President (Cyprus)
- **Dipl.-Ing. Andreas M. Brandner**, ECCE Immediate Past President (Austria)
- **Prof. Josip Atalić**, University of Zagreb, Faculty of Civil Engineering
- **Prof. Mario Uroš**, University of Zagreb, Faculty of Civil Engineering
- **Prof. Antun Bilić**, University of Zagreb, Faculty of Law
- **Ms. Danijela Anić**, Ministry of Construction of Croatia

The panellists explored how engineers' responsibilities extend beyond design and construction—to safeguarding life, heritage, and community resilience in the face of natural hazards. They emphasized the ethical obligation of civil engineers to integrate risk awareness, preventive action, and transparent communication with authorities and the public.

From left to right: Ms. Zrinka Grancarić, Prof. Antun Bilić, Ms. Danijela Anić, Dipl.-Ing. Andreas Brandner, Eur. Ing. Platonas Stylianou, Prof. Josip Atalić, Prof. Mario Uroš

The Round Table concluded with a lively Q&A session, reflecting a shared commitment among European engineers to strengthen interdisciplinary collaboration and advance **resilient, sustainable, and safe infrastructure across Europe**.

Technical & Cultural Programme

The event concluded with a technical visit to key infrastructure sites in Split, including the Žnjan Plateau coastal reconstruction project, showcasing Croatia's commitment to sustainable urban development.

A gala dinner and cultural programme provided networking opportunities and a celebration of ECCE's 40-year journey in the inspiring setting of the Adriatic coast.

Conclusions

In his closing remarks, **ECCE President Platonas Stylianou** expressed his deep appreciation to all delegates, speakers, and guests for their active participation and contribution to the success of the 81st ECCE General Meeting. He emphasized that the gathering in Split was more than a meeting—it was *"an opportunity to connect, collaborate, and shape the future of the civil engineering profession in Europe."*

President Stylianou extended heartfelt thanks to the Croatian Chamber of Civil Engineers (HKIG) for their warm hospitality and excellent organization, noting that the event's spirit of unity and reflection aptly honored ECCE's 40th Anniversary. He encouraged all members to continue engaging actively in ECCE's initiatives, sharing expertise and strengthening cooperation to advance resilience, sustainability, and innovation across the built environment.

He concluded with a message of collective purpose:

"Together, we are stronger. Together, we are engineering a sustainable future for Europe."

The 81st ECCE General Meeting thus marked not only the continuation of ECCE's 40-year journey but also a renewed commitment to collaboration, excellence, and societal responsibility within the civil engineering profession.

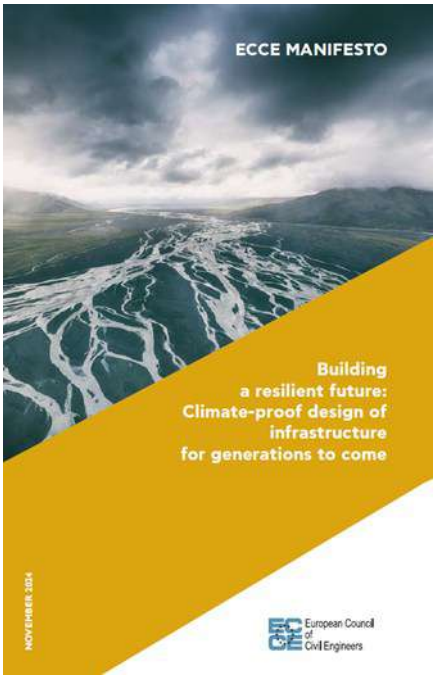
The European Council of Civil Engineers extends its heartfelt appreciation to the Croatian Chamber of Civil Engineers for successfully organizing the 81st ECCE General Meeting and for their exceptional hospitality, which contributed to the resounding success of the event.

Photo Gallery of the 81st ECCE GM

81st ECCE General Meeting participants

ECCE Manifesto

Building a resilient future: Climate-proof design of infrastructure for generations to come



The European Council of Civil Engineers has issued a powerful manifesto, "Building a Resilient Future: Climate-Proof Design of Infrastructure for Generations to Come," outlining the urgent need for the civil engineering profession to move beyond climate pledges and take concrete action in response to the climate crisis. This document aligns with ECCE's Strategic Plan for 2023-2030, which aims to empower European civil engineers to advance a more sustainable built environment while protecting the natural environment. The manifesto emphasizes the critical role civil engineers play in shaping a sustainable and resilient future by incorporating climate considerations into every stage of infrastructure design, construction, and operation.

The manifesto is a direct response to the escalating urgency of the climate crisis, which UN Secretary-General António Guterres has labelled a "code red for humanity". It highlights the pressing need for civil engineers to actively work towards reducing greenhouse gas emissions, preserving resources, and promoting resilience. This will ensure that the infrastructure designed and built today can withstand the challenges of a changing climate and contribute to a more sustainable future.

Transforming Principles into Action: Key Areas of Focus

The ECCE Manifesto outlines a comprehensive framework for action, encompassing eight key areas where civil engineers can make a significant difference. These areas provide a roadmap for the profession to transition towards a more sustainable and climate-resilient future:

Enhancing Climate Resilience in Infrastructure Design, Construction, Maintenance, and Operation: This crucial area focuses on adapting infrastructure to withstand the impacts of climate change. The manifesto stresses the need to incorporate climate projections into design standards, ensuring that infrastructure can withstand future climate scenarios such as sea level rise, increased rainfall intensity, and extreme temperature fluctuations. It also advocates for designing adaptable and flexible infrastructure that can be adjusted as climate conditions evolve, using modular designs, adjustable components, and materials that can withstand a broader range of environmental conditions. Prioritizing nature-based solutions like green roofs, permeable pavements, and urban forests is also highlighted as a key strategy for enhancing resilience while providing environmental and social benefits.

Championing Sustainable Financing and Investment: Recognizing the significant financial investments required for the transition to climate-resilient infrastructure, the manifesto emphasizes the need for civil engineers to actively advocate for and secure funding. This involves engaging with investors and financial institutions and effectively communicating the environmental and social returns of climate-conscious projects. The exploration of innovative financing mechanisms like public-private partnerships and green bonds is also encouraged to mobilize capital for sustainable infrastructure development. Additionally, the manifesto underscores the importance of advocating for supportive policy frameworks that incentivize sustainable infrastructure investments.

Strengthening Carbon Accounting and Transparency: The manifesto calls for rigorous carbon accounting practices to track progress and ensure accountability. This involves implementing whole-life carbon assessments to evaluate the carbon footprint of projects from material extraction to decommissioning, allowing for a comprehensive understanding of emissions associated with infrastructure projects. The use of standardized reporting frameworks is also advocated to enhance transparency and enable comparisons across projects and sectors. By integrating carbon data into decision-making processes, civil engineers can inform material selection, construction methods, and operational strategies, leading to more sustainable outcomes.

Fostering Collaboration and Knowledge Exchange: Acknowledging the global scale of the climate crisis, the manifesto stresses the importance of collaboration and knowledge sharing. Civil engineers are encouraged to engage in international networks and forums to connect with peers, exchange knowledge, and stay informed about the latest innovations in sustainable infrastructure. Contributing to capacity-building initiatives, particularly in developing countries, is seen as crucial for accelerating the global adoption of climate-resilient practices. The manifesto also advocates for promoting open-source resources and data sharing to facilitate innovation and progress in climate-conscious infrastructure development.

Promoting Social Equity and Community Engagement: The manifesto emphasizes that civil engineering projects should prioritize social equity, ensuring that the needs of vulnerable communities are met. This involves encouraging inclusive engineering practices that amplify community voices and incorporate their perspectives into the planning and implementation of infrastructure projects. The manifesto calls for advocating for designs that prioritize the well-being of all members of society, particularly those most vulnerable to climate change impacts.

Education and Capacity Building: The manifesto underscores the need for a skilled workforce capable of designing, constructing, and operating climate-resilient projects. It calls for providing training, resources, and platforms to empower engineers with the necessary knowledge and skills. Advocating for the integration of sustainability principles into engineering education curricula is also seen as essential to prepare future generations of engineers to address the climate challenge effectively.

Changing the Codes: The manifesto acknowledges the limitations of existing codes and standards, which often fail to address climate change impacts adequately. It calls for revising these codes and standards to incorporate climate projections and resilience considerations, ensuring that engineers consider climate change impacts in their designs. Implementing specific standards and guidelines for climate-resilient design and construction is also encouraged.

Education and Preparedness: The manifesto highlights the need for a more holistic approach to climate change preparedness in civil engineering. It emphasizes that preparation goes beyond technical skills like resilient design and carbon assessment. Educating engineers to understand the broader social and ethical implications of climate change, including the disproportionate impacts on vulnerable communities, is deemed crucial. This comprehensive approach will equip engineers to design and implement sustainable infrastructure that serves all communities equitably, fostering a just and resilient future.

A Collective Effort for a Sustainable Future

The ECCE Manifesto serves as a potent reminder of the crucial role civil engineers play in tackling the climate crisis. It underscores the need for a collective effort involving policymakers, industry, and academia. Policymakers are urged to establish targets, funding, and incentives such as carbon pricing, while the industry is encouraged to adopt sustainable materials, technologies, and transparent carbon accounting practices. Academia's contribution lies in research, education, and climate impact assessments. The manifesto highlights that by working together, these stakeholders can drive progress towards a more sustainable future.

The ECCE Manifesto concludes with a powerful call to action, urging all member organizations, individual engineers, and stakeholders to embrace this shared vision and collaborate in transforming these principles into tangible outcomes. It recognizes the pivotal role of the civil engineering profession in achieving global climate goals and calls for building infrastructure that is not only robust and efficient but also environmentally and socially responsible. The manifesto declares that engineers must innovate, be pioneers, create new designs, and improve existing techniques for a better, safer, greener, more sustainable, and more resilient Europe, safeguarding a better future for all.

The ECCE Manifesto Building a resilient future: Climate-proof design of infrastructure for generations to come is endorsed by the International Safety and Health Construction Coordinators Organization (ISHCCO).

For the full manifesto text, please follow this link: **Download**

Common Training Framework (CTF) for civil engineers – a way to enhance mobility

The European Council of Engineers Chambers (ECEC) and the European Council of Civil Engineers (ECCE) are currently in active discussion with the European Commission on the implementation of a Common Training Framework for Civil Engineers to enhance their mobility in Europe.

ECCE and ECEC have been participating in discussions with the European Commission - DG GROW, Skills, Services, Professions (GROW.D.1) since 2023. Our aim has been to provide valuable insights and advocate for the perspectives of engineers on this significant matter.

ECCE and ECEC shared with the European Commission the following proposal:

A Common Training Framework for Civil Engineers -

ACADEMIC REQUIREMENT

To meet the **requirements for fulfilling a CTF for Civil Engineering**, Civil Engineering students must **successfully complete (with a degree) at least five years /or 300 ECTS of full-time Civil Engineering studies at University level.**

A Common Training Framework for Civil Engineers

BASIC REQUIREMENTS FOR CURRICULA (Work in progress)

To be recognised as a component of professional recognition, Civil Engineering programmes delivered by university-level institutions must contain the construction of buildings (= all forms of civil construction) as the principal component. Civil Engineering programmes shall balance the theoretical and practical aspects of training and guarantee the following knowledge, skills and competencies.

a) to have the ability to shape the urban, the rural space and the environment with buildings and infrastructure satisfying technical requirements, the proper level of safety and friendly for use by people and societies in the modern world.

b) to have knowledge of the history of Civil engineering since the result of their work is to create a material layer of human culture.

c) to have knowledge of designing and sizing constructions, buildings and infrastructure according to the physical and mechanical principles of its nature, properties of used materials and technologies.

d) adequate knowledge of how to organise and steer investment processes gaining benefits from economic, social and business sciences.

e) understanding relationships between people and buildings, infrastructure and the environment influencing human relations.

f) understanding the profession of Civil Engineers in serving society, especially preparing briefings that include social factors.

g) to have practical knowledge of structural and geotechnical design, constructional solutions, and implementation of modern technology.

h) to have adequate knowledge to provide the buildings, infrastructure and the environment with human comfort and respecting requirements of a resilient and sustainable development and global climate changes.

i) to have adequate knowledge to comply with users' requirements of buildings, infrastructure and the environment imposed by cost factors and building regulations.

j) to have adequate knowledge of the building and infrastructure industry, organisations, regulations and procedure integrating their job into overall planning.

k) to have adequate knowledge of use of IT and KI in engineering and design.

They emphasized that this document forms the basis for more detailed discussions within both organizations and serves as an expression of the organizations' support and interest in a CTF for Civil Engineers. The EC expressed interest in the draft discussion paper, leading to a subsequent meeting in early May 2023. Following this meeting, the EC posed further questions and requested additional input from ECCE and ECEC on the topic.

In January 2024, ECCE and ECEC Presidents met with the President of the European Network for Accreditation of Engineering Education (ENAEE) seeking collaboration on the topic, and a second meeting took place in July 2024.

For more information consult the documents:

CTF Content **ECEC-ECCE CTF July 2024** **ECEC-ECCE Statement CTF July 2024**

ECCE project | "Civil Engineering Today: Mapping the Profession Across Europe"

A review of the profession in Europe today from education to professional practice

The European Council of Civil Engineers (ECCE) published the book "Civil Engineering Profession in Europe" for the first time in the early 1990s. A second edition appeared in 1998, and a third one in 2005 which can be accessed through the link here. The aim of the book "Civil Engineering Profession in Europe" was to present the civil engineering profession in Europe at that time through the eyes of the professionals themselves and to provide valuable insights into the state of the profession across ECCE's member states. In doing so, ECCE did not look at construction figures, nor major projects, but at the education, training and professional practice of civil engineers ranging from the northern tip of Finland across the European continent to the northern shores of the Mediterranean Sea.

The Executive Board of ECCE has undertaken an important and ambitious project to further enrich the Civil Engineering Profession in Europe by updating and expanding this essential resource to reflect the current status of the civil engineering profession in Europe.

The scope of this project holds great potential for a better understanding of our profession and its status in each country. The key objectives of this project are as follows:

- **Record data from each country on a common platform**: We aim to gather comprehensive and up-to-date data from each member country to understand the current state of civil engineering. By having this data on a common platform, we can conduct meaningful analysis, identify trends, and foster cooperation. This will aid in creating an ecosystem of infrastructure and support as per the ECCE Strategic Plan.

- **Constant learning, exchange, and enrichment of knowledge**: This project encourages continuous learning and the sharing of experiences among our members. The data collected will be used to create knowledge-sharing platforms and facilitate the exchange of best practices. This is in line with ECCE Strategic Plan Theme of Education, Research and Knowledge Transfer.

- **Record the various activities of countries for the benefit of society and the profession**: By documenting the diverse activities carried out by our member countries, we can showcase the positive impact of civil engineering on society and inspire further growth in the profession. This would promote the engagement of the professional community as per the ECCE Strategic Plan.

- **Create communication channels**: Establishing effective communication channels will strengthen collaboration among member countries, foster partnerships, and encourage joint projects that address common challenges. This enables the development of both internal and external communication and promotes collaborative skills.

- **Share data and raise awareness**: The data collected will serve as a valuable resource for raising awareness about different aspects of the civil engineering profession, including its contribution to sustainable development, infrastructure resilience, and environmental protection. This forms part of ECCE's effort in promoting public outreach.

- **Protect the profession of civil engineers**: By having a comprehensive understanding of the profession in each country, we can better advocate for the protection of our profession's interests and advocate for its recognition and importance on both national and European levels. This is in line with ECCE Strategic Plan Theme of Societal Factors and Impact.

To coordinate this extensive project, a dedicated working group has been established within the ECCE Executive Board formed by ECCE Vice President/ President Elect Platonas Stylianou, who is the coordinator of the group, ExBo member Jeanette Muñoz Abela, ECCE General Secretary Maria Karanasiou, and the President Andreas Brandner. Additionally, the active cooperation with the ECCE Honorary President Yrjo Matikainen and the former ECCE Vice President Carsten Ahrens who published the 2005 edition of the book and are now acting as consultants to the Working Group for the revision process will provide valuable insight and expertise in this endeavour. An open call to other National Delegate members of ECCE who may be interested in working on the project more actively has been addressed by the ECCE President.

The project is ongoing since November 2023, with surveys distributed among ECCE members to address the ten chapters of the upcoming edition of the book:

1. Profile of Professional Organizations
2. The Education System
3. Registration, Recognition, and Protection of the Professional Title
4. Legal Background to the Profession and Code of Conduct/Ethics
5. Contracts
6. Fee scales, Salaries, and Taxation
7. Insurances and Professional Liability
8. Civil Engineering Practice
9. Promotion of the Profession/ Changing working practices
10. National Practices in Design Regulation, Roles, and Supervision

Furthermore, invitations to non-ECCE-member civil engineering organizations in Europe have been extended, encouraging their participation in the project. We value their insights and contributions, which will contribute to the development of a comprehensive and current resource for our profession.

The data collection process is coming now to an end. In the beginning of 2026, the data analysis will start, and our goal is to publish an informative e-book within the new year.

We acknowledge the pivotal role of each member country's participation, and we cordially thank all our members and the organizations who participated in the surveys for their collaboration and active engagement.

ECCE Joins the World Federation of Engineering Organizations (WFEO) as an International Member

The European Council of Civil Engineers (ECCE) is proud to announce its admission as an **International Member of the World Federation of Engineering Organizations (WFEO)**, marking an important milestone in ECCE's 40-year journey of advancing the civil engineering profession in Europe and beyond.

The **World Federation of Engineering Organizations (WFEO)**, founded in 1968 under the auspices of UNESCO, serves as the leading global body representing the engineering profession worldwide. WFEO brings together national and regional engineering institutions, promoting collaboration, knowledge exchange, and policy advocacy on key global issues such as sustainable development, climate change, digital transformation, and engineering education.

ECCE's accession as an International Member was formally approved by the WFEO Executive Council, acknowledging ECCE's long-standing contribution to the promotion of civil engineering excellence, professional ethics, and societal responsibility across Europe. Through this membership, ECCE will gain a stronger voice in global engineering dialogues and will contribute to WFEO's mission to "advance the practice of engineering for the benefit of humankind."

Commenting on this new partnership, **ECCE President Platonas Stylianou** stated:

"Joining WFEO is a natural extension of ECCE's mission to connect the European civil engineering community with the broader global network of professionals and institutions. It offers us the opportunity to share European perspectives, contribute to worldwide initiatives, and reinforce the role of civil engineers as key enablers of sustainable, resilient, and inclusive societies."

As an International Member, ECCE will participate in WFEO's committees and working groups, particularly those addressing **infrastructure resilience, disaster risk management, climate action, and education in engineering**, fostering greater cooperation with engineering bodies from all continents. This affiliation opens new pathways for knowledge sharing, capacity building, and joint action on global engineering challenges.

ECCE looks forward to a fruitful collaboration with WFEO and its members, strengthening the bridge between **European and global engineering communities**, and contributing its collective expertise to the shared goal of a safer, more sustainable world.

ECCE Signs Memorandum of Understanding with the International Coalition for Sustainable Infrastructure (ICSI)

The European Council of Civil Engineers (ECCE) has strengthened its international partnerships by signing a **Memorandum of Understanding (MoU)** with the **International Coalition for Sustainable Infrastructure (ICSI)**. The MoU was formally signed on **10 October 2025**, during the **81st ECCE General Meeting** held in **Split, Croatia**, as part of ECCE's **40th Anniversary celebrations**.

This important agreement marks a shared commitment by both organizations to promote **resilience, sustainability, and climate adaptation** within the built environment. It reflects a common vision that the civil engineering profession must lead the transition toward **future-ready, inclusive, and sustainable infrastructure systems**.

The collaboration between ECCE and ICSI will foster **joint initiatives, knowledge exchange, and participation in global projects** aimed at integrating sustainability and resilience principles into engineering practice and policy. It will also encourage cooperation in research, professional development, and advocacy on topics central to the future of infrastructure.

During the Split meeting, **ICSI Executive Director Savina Carluccio** delivered an insightful presentation on the **Global Infrastructure Resilience Survey**, offering a comprehensive global perspective on the state of resilience in infrastructure systems. Her presentation identified challenges and opportunities for action that align closely with **ECCE's strategic priorities**, particularly those related to **disaster risk reduction, climate adaptation, and the resilience of the built environment**.

Commenting on the partnership, **ECCE President Platonas Stylianou** noted:

"This MoU reflects ECCE's commitment to working collaboratively with international partners to promote sustainable and resilient infrastructure. By joining forces with ICSI, we can strengthen our collective efforts to ensure that engineering solutions respond effectively to the global challenges of our time."

Through this new partnership, ECCE continues to reinforce its role as a platform for **international cooperation, knowledge sharing, and leadership** in sustainable civil engineering practice — furthering its mission to serve society through engineering excellence.

ECCE President Platonas Stylianou and ICSI Executive Director Savina Carluccio
October 2025, Split, Croatia

Recycling as a first step towards circularity – Photo Voltaic and partly - Built Environment

The announcement for ReSBE 2026, ReShaping the Built Environment through Sustainability and Circularity, in the last ECCE call for abstracts on this topic, clearly showed how important it is not only to produce, but also think about reuse or better about production within a circular economy. Up to now many different approaches within the built environment can be reported to reuse or to recycle material to come up with the enormous amount of otherwise lost material, just waste. But up to now the building industry is still the biggest polluter concerning waste material in

the world. So, the coming conference is a necessary step not only to leave behind this negative image, but to show the willingness and possibility to design and construct in a circular way.

Concerning the production of electricity from photo voltaic modules up to now it is the same situation. Solar PV is set to become the largest renewable energy source by 2029. Since 2000, when PV installations started their extensive rise, nearly nothing happened to work on recycling procedures for PV modules. By the end of this decade, solar PV is set to become the largest renewable electricity source, surpassing both wind and hydropower, which currently is the largest renewable generation source by far.

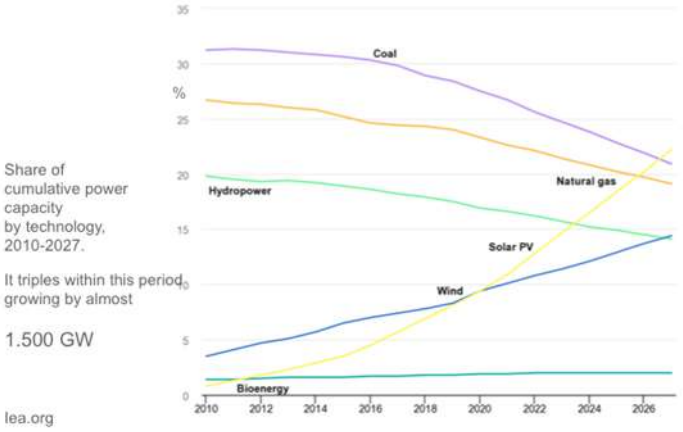


Fig. 1: Cumulative power capacity by technology [1]

The described development of PV electricity power is even more visible below in fig. 2.

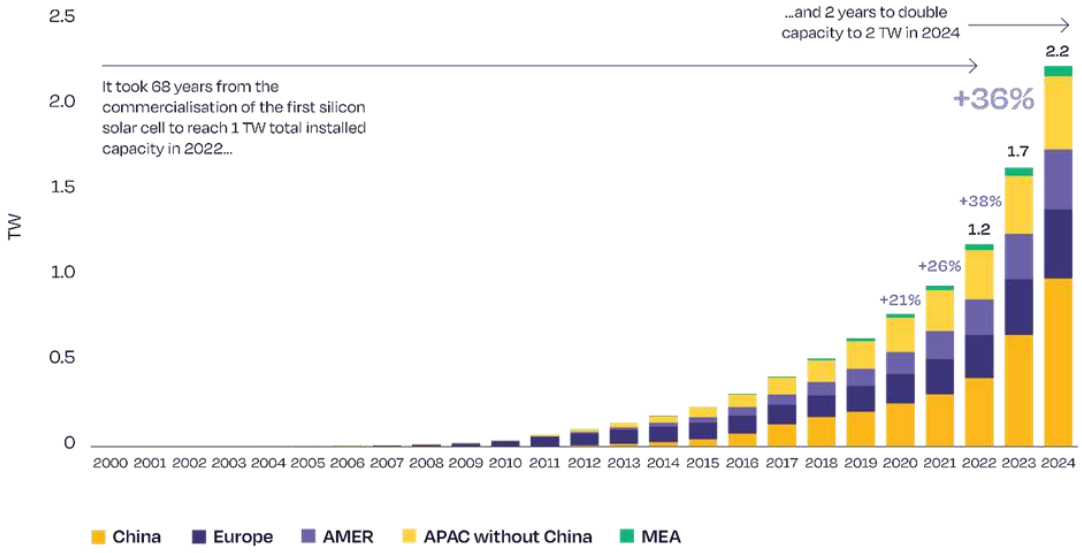


Fig. 2: Development of PV power between year 2000 and today [1]

Obviously, every year, huge numbers of new photovoltaic (PV) modules have been installed to create this increasing power slope. This, on one hand, greatly furthers the ecological transformation of the energy system. But to solve the climate crisis every aspect has to be taken into consideration, also waste problems.

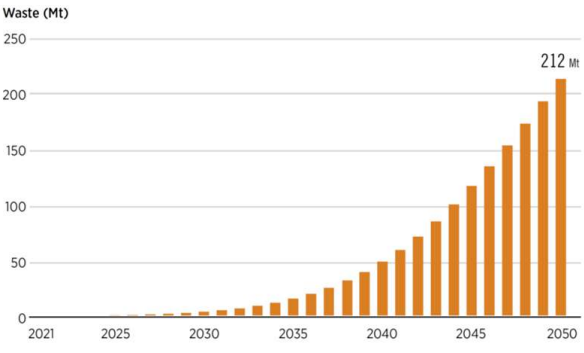


Fig. 3: Projected cumulative waste from solar PV projects under IRENA's 1.5°C Scenario to 2050 [2]

The simple reason for that waste problem is that PV modules are expected to have a life-span of about 25 years. So, at least this year most of the old, the very first modules have to be decommissioned - and reinstalled. Under IRENA's 1.5 oC Scenario [3] it is stated that renewable energy deployment has been accelerating globally in recent decades, presenting a new environmental challenge as decommissioned renewable energy equipment enters the waste stream in the years ahead. Solar photovoltaic (PV) is among those presenting the most significant challenges. As the global PV market increases, so will the volume of decommissioned PV panels, and large amounts of annual waste are anticipated by the early 2030s. IRENA projects that waste from cumulative solar PV projects globally will increase from 0.2 Mt in 2021 to 4 Mt in 2030, almost 50 Mt in 2040 and more than 200 Mt by 2050, see fig. 3. G20 member countries will contribute most of the projected waste.

Just in Germany today about 60,000 tons of used PV modules reach their end of life and will be disposed, most of them very likely by landfill method. In 2030 a quantity of about 1.000,000 tons is expected. - Just in Germany!

Worldwide it is a multiple of this number! See figure 3!

These numbers have to be reinstalled, and, in addition a multiple has to be added to reach the net-zero goals. But the still existing shortage of rare elements becomes a real problematic bottleneck, which could stop further increase of PV-electricity share in the renewable power supply.

Up to now recycling played a niche part in the life cycle of PV modules production and use. Forecasting the uninterrupted rapid increase of PV solar electricity was accepted as carved in stone. But the material supply side now is expected to encounter bottlenecks with the growing demand for minerals, and recycling can be a supply relief as panels reach the end-of-life stage.

To make this clear a closer view on the consistence of such PV modules, as sketched in figure 4, may help [3].

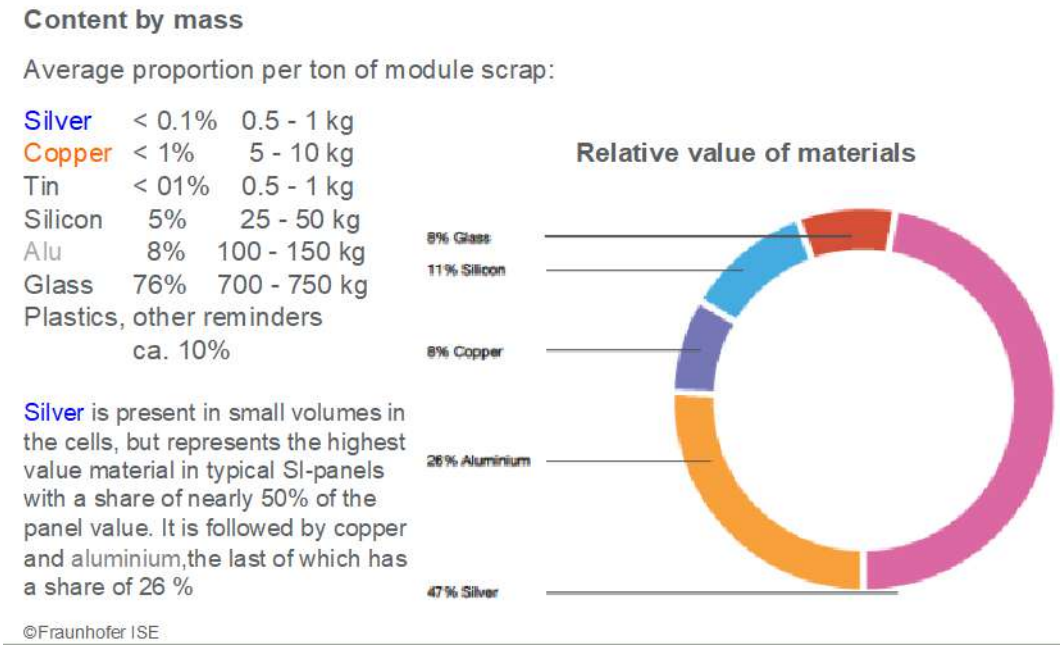


Fig. 4: Materials in crystalline Si modules [3]

Counting together these materials as contained in just 1 million tons of panels it sums up to highly relevant amounts of different, even rare and precious materials, and values. So, the development of solar PV is only possible, if all necessary materials, critical and non-critical ones are available. And, in addition, it is only possible, if processing is spread worldwide.

Today, the mining of critical materials is highly concentrated in specific geographical locations. Australia (lithium), China (graphite, rare earths), Chile (copper and lithium), the Democratic Republic of Congo (cobalt), Indonesia (nickel) and South Africa (platinum, iridium) are the dominant players.

Processing is even more geographically concentrated, with China accounting for more than 50% of the world's refined supply of (natural) graphite, dysprosium (a rare earth), cobalt, lithium, and manganese.

Up to now recycling played a niche part in the life cycle of PV modules production and use. Forecasting the uninterrupted rapid increase of PV solar electricity was accepted as carved in stone. But the material supply side now is expected to encounter bottlenecks with the growing demand for minerals, and recycling can be a supply relief as panels reach the end-of-life stage. In Germany two institutions together started a recycling process of PV-modules, which world-wide could become the first one on an industrialised basis, see figure 5. The recycling rate is close to 99 % for all typical materials of a crystalline Si-module. The purity of these materials has to be of such a quality that e.g. new Si-ingots can be produced out of the recycled Si. This is also the case for the recycled silver as it is the most precious part of the module even if its mass as part of a module is extremely small, see figure 4.

Fig. 5: Recycled PV materials [4]

As ECCE is a new member of WFEO it may be of interest that the necessity of recycling of PV modules has been postulated and published first at the GEC 2023 in Prague, in connection with WFEO. The speaker of WFEO, SC Energy, on this topic was the chair of the solar group, Carsten Ahrens.

WEC 2023
7TH WORLD ENGINEERS CONVENTION
PRAGUE, CZECH REPUBLIC
11 - 13 OCTOBER, 2023

The idea to address the necessity of PV module recycling worldwide has been spread through this conference and was then part of the on-going work within the WFEO SC Energy. As a result of this the solar group initiated a WFEO webinar on “Recycling of PV modules”. This webinar of 1.5 h duration should give an overview about the question what is going on in this field worldwide.

This webinar took place on Friday, 4th July 2025, and was led by Marie-Line Viani as the chair of SC Energy, who also gave the introduction on the topic. Members and speakers of the solar group came from four different world regions as listed below.

1. **Europe**
   Carsten Ahrens, chair of the solar group
   Jan-Philip Mai, CEO Solar Materials, Start-up in PV recycling, Magdeburg, Germany
2. **Africa**
   Ismail Jeffries, South Africa, member
   Steffen Schroeder, Reclite SA Ltd, Recycling Through Innovation
3. **Australia**
   Adrian Piani, member
   James Petesic, Co-Founder PV Industries, Australia
4. **North America**
   Yogi Goswami, USA, South Florida, member

A “Round Table” discussion concluded this webinar, the content of which can be found on the website of WFEO [5]. The webinar itself was just the start for a more extended investigation to find out where, with what kind of results etc. recycling of PV modules takes place. The questions of this survey, which is spread by WFEO, can be read below. Up to now about 15 answers from different parts of the world could be collected, which is by far not enough to give an overview about the PV module recycling situation in the different parts of the world.

WFEO Survey on PV Module Recycling

1. Do you have any national regulations for collecting and recycling end-of-life PV modules in your country?
2. What is the yearly and accumulated amount of end-of-live PV modules?
3. Are there any companies existing in your country, which collect and recycle those modules?
4. What is the recycling rate overall and what is the recycling rate with respect to the single material, like silver, copper, silicon etc. in the company you listed in 2.?
5. Please, announce the material ratio and the value of the recycled parts.

The WFEO SC Energy and its Solar Group faithfully will go forward with their work and by this try to help closing the loop from production through use and re-production of PV modules. This ambitious circular economy package shall remain as a part of the work of the solar group. Thus, SC Energy tries to follow the EU approach to come up with a circular PV economy and also to support the fulfilment of SDG 12.

The same direction will be followed by the coming conference ReSBE 2026 ReShaping the Built Environment through Sustainability and Circularity. The problems to be solved in the built environment seem to be much bigger, but including the design from the beginning makes it much easier to find sustainable solutions for a situation close to circular economy within the built environment.

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ECCE Participated in the EAMC General Assembly in Gorizia, Italy

Engineering Association of Mediterranean Countries

On 18 September 2025, the European Council of Civil Engineers (**ECCE) participated in the General Assembly of the Engineering Association of Mediterranean Countries (EAMC**), held in Gorizia, Italy. The event was hosted by the Consiglio Nazionale degli Ingegneri (CNI) and brought together prominent representatives of the engineering profession from across Europe and the Mediterranean region.

ECCE was represented by **ECCE President Platonas Stylianou and ECCE Past President Aris Chatzidakis**, who also serves as a member of the EAMC Executive Board. Their active engagement underscored ECCE's ongoing commitment to fostering regional cooperation and advancing the role of civil engineers in addressing shared societal challenges.

A Significant Milestone: Adoption of the New EAMC Statute

One of the key achievements of the General Assembly was the approval of the new EAMC Statute, marking an important step forward in strengthening the organisation's governance, operational framework, and long-term strategic orientation.

The revised Statute is expected to:

- enhance collaboration among member organisations,
- facilitate more structured and impactful joint initiatives,
- support stronger alignment on professional standards and shared priorities within the Euro-Mediterranean region.

ECCE welcomed this development as a foundation for deeper and more effective cooperation within the EAMC platform.

Exchange of Perspectives and Professional Priorities

The General Assembly provided a valuable opportunity for constructive dialogue among engineering leaders. Discussions focused on:

- emerging challenges and opportunities for the civil engineering profession,
- ways to advance education, regulation, and professional mobility,
- the importance of resilience, sustainability, and innovation in the built environment,
- strengthening collective capacity to respond to societal needs across the region.

ECCE's contribution highlighted the importance of unified engineering perspectives in a rapidly changing world and the necessity of cross-border collaboration to support safer, more resilient, and more sustainable communities.

EAMC General Assembly Participants

Strengthening Regional Partnerships and Future Initiatives

Participants reaffirmed their commitment to enhancing regional cooperation, promoting knowledge exchange, and developing joint initiatives that will benefit the engineering profession and society at large. ECCE emphasised the value of leveraging shared expertise, building professional networks, and supporting policies that reinforce the public interest through sound engineering practice.

ECCE President Platonas Stylianou and Past President Aris Chatzidakis conveyed ECCE's readiness to continue working closely with EAMC and its member organisations to advance common objectives and strengthen the visibility and impact of civil engineering throughout the Euro-Mediterranean area.

Signing the New EAMC Statute
From left to right: EAMC General Secretary Luca Scappini, ECCE President Platonas Stylianou, EAMC President Adil Al-Hadithi

Impact and Outlook

ECCE's participation in the Gorizia General Assembly further consolidated its role as a bridge-builder across the region, fostering dialogue, trust and professional solidarity. The reinforced framework provided by the new EAMC Statute and the collective commitment expressed during the meeting lay the groundwork for meaningful cooperation in the years ahead.

By engaging actively in regional platforms such as EAMC, ECCE continues to uphold its mission of promoting excellence in civil engineering, contributing to resilient and sustainable development, and supporting the advancement of the profession for the benefit of society.

ECCE Participated in the 28th ECEC General Assembly, in Nicosia, Cyprus

On 7 November 2025, the European Council of Engineers Chambers (ECEC) held its 28th General Assembly Meeting in Nicosia, Cyprus, hosted by the Cyprus Scientific and Technical Chamber (ETEK). Representatives from all 17 member organisations met to address some of the most pressing topics for the engineering profession in Europe, including digitalisation, public procurement, affordable housing, and professional mobility.

The European Council of Civil Engineers (ECCE) was represented by its **President, Mr Platonas Stylianou**, whose participation reaffirmed the strong and growing cooperation between ECCE and ECEC. In his contribution, President Stylianou highlighted ECCE's current strategic priorities, key initiatives, and ongoing efforts to support a more sustainable, resilient, and digitally enabled civil engineering profession across Europe. His intervention also underlined the importance of coordinated European action and of continued collaboration between partner organisations in addressing shared challenges.

Throughout the Assembly, delegates engaged in meaningful discussions on the results of recent ECEC surveys on digitalisation, the revision of the Public Procurement Directive, the European Commission's upcoming Affordable Housing Plan, and developments related to the Common Training Framework. A special moment was the presentation of the ECEC Award of Honour to former Treasurer Gabor Szöllössy, recognising his long-standing dedication to the engineering profession. The signing of a Memorandum of Understanding between ECEC and ISHCCO further demonstrated the commitment of European engineering organisations to closer cooperation.

The presentation delivered by the ECCE President at the 28th ECEC GAM is available here: **ECCE Presentation**

From left to right: ETEK President Constantinos Constanti, ECEC President Nina Drazin Lovrec, ECCE President Platonas Stylianou

From left to right: ECEC President Nina Drazin Lovrec, ECCE President Platonas Stylianou, ISHCCO President Evangelitsa Tsoulofta

ECEC General Assembly Participants

ECCE President Platonas Stylianou

ECCE participated in the Conference "Engineering in Security and Defence" in Lisbon, Portugal

On 4 December 2025, the Portuguese Order of Engineers (Ordem dos Engenheiros de Portugal – OEP) and the Consiglio Nazionale degli Ingegneri (CNI) of Italy jointly hosted the high-level conference **"Engineering in Security and Defence"** at the OEP Headquarters in Lisbon. The event brought together prominent representatives of the engineering profession, European institutions, defence specialists, and young professionals to discuss the evolving role of engineering in Europe's security and defence landscape.

ECCE President **Platonas Stylianou** was invited as a keynote guest and delivered one of the three **Opening Speeches**, alongside **Fernando de Almeida Santos**, President of OEP, and **Elio Masciovecchio**, Vice President of CNI.

Engineering at the Heart of Europe's Security

In his address, President Stylianou highlighted ECCE's longstanding mission to promote high professional standards and safeguard the essential role of civil engineers in society. Drawing from his opening speech, he emphasised that engineering is central to addressing today's complex security challenges—ranging from **geopolitical instability and cyber threats to climate-induced disasters and vulnerabilities in aging critical infrastructure**.

He underscored a guiding principle that sits at the core of responsible engineering practice:

"Safety must always come First."

This principle, he noted, is not only technical but deeply moral, stating that *every bridge, building, transport corridor, water network, energy facility, defence installation, and critical security structure must place human safety above all else.*

President Stylianou also presented ECCE's **3S Approach – Safe, Sound, Sustainable**, and the recently published **ECCE Manifesto on Resilient Infrastructure**, reinforcing that **resilience has become a strategic imperative for Europe's future security**.


ECCE President Platonas Stylianou

Conference Programme and Key Discussions

The conference opened with institutional addresses followed by an insightful keynote lecture by **Hélder Sousa Silva, Member of the European Parliament**, on **"Security and Defense in Europe."**

Two thematic roundtables explored the growing multidimensionality of modern security:

Round Table 1 – Engineering in Security and Defense
Experts from Portugal and Italy discussed the contribution of engineering to:

- national resilience,
- innovation in defence technologies,
- cybersecurity,
- and the protection of critical infrastructure.

Panelists included representatives from PROFORUM, the Military Engineering Corps, industry leaders such as Thales, and cybersecurity specialists.

Round Table 2 – The Perspective of Young Engineers
Young professionals from OEP, EYE, and CNI contributed fresh insights into:

- the evolving skillset required for engineers in defence-related sectors,
- interdisciplinary collaboration,

Strengthening European Collaboration

President Stylianou's participation reaffirmed ECCE's commitment to contributing expertise to Europe's security and defence agenda and to strengthening cooperation with fellow engineering organisations. The tripartite ECCE–CNI–OEP working meeting held the previous evening further reinforced avenues for joint initiatives in areas such as resilience, cybersecurity, professional development, and engineering policy.

A Shared Vision for a Secure and Resilient Europe

The Lisbon conference highlighted a shared understanding: **engineering is now inseparable from Europe's security, defence preparedness, and societal resilience**. ECCE remains fully committed to supporting this vision, promoting knowledge exchange, and empowering civil engineers to meet the challenges of an increasingly complex and interconnected world.

From left to right: Platonas Stylianou - President of ECCE, Fernando de Almeida Santos - President of the Portuguese Engineers Association

From left to right: Mattia Siciliano Member of the Cybersecurity Working Group of the Italian Committee for Informations Engineering (C3i, ECCE President Platonas Stylianou, CNI Vice President Elio Masciovecchio, CNI Head of Foreign Affairs Office Guido Razzano, CNI National advisor responsible for internationalization Luca Scappini

From left to right: Hélder Sousa Silva - Member of the European Parliament, Fernando de Almeida Santos - President of the Portuguese Engineers Association, Platonas Stylianou - ECCE President, Elio Masciovecchio - Vice President of the Consiglio Nazionale degli Ingegneri (CNI)

ECCE at the 2nd International Conference "Redefining the Future Horizons: Designing Tomorrow's Sustainable Strategies"

TMEΔE
ΤΑΜΕΙΟ ΜΗΧΑΝΙΚΩΝ ΕΡΓΟΛΗΠΤΩΝ ΔΗΜΟΣΙΩΝ ΕΡΓΩΝ

From 9 to 10 December 2025 in Athens, the **2nd International Conference "Redefining the Future Horizons: Designing Tomorrow's Sustainable Strategies"** brought together leaders from government, industry, academia, and civil society to chart a path toward resilient, inclusive, and sustainable development. The event was hosted at the historic **Bank of Greece Employees' Association Building** under the auspices of the **Bank of Greece** and the **Technical Chamber of Greece (TEE)**, highlighting its significant institutional relevance for the engineering and infrastructure sectors.

A cornerstone of the conference was the exchange of forward-looking insights on how societies can respond effectively to climate change, resource scarcity, technological transformation, and urbanisation. With over **50 distinguished speakers** from across Europe and beyond, the programme encompassed high-level plenaries, thematic panels, and interactive discussions aimed at aligning public- and private-sector strategies with just and sustainable outcomes.

ECCE President **Platonas Stylianou** was invited as a panelist in the high-level discussion titled **"Climate crisis, resilience and urbanization challenges"**, alongside:

- **Prof. Regina Gonthier**, President, International Union of Architects (UIA)
- **Academician/Prof. Paolo Desideri**, President, International Academy of Architecture (IAA)
- **Platonas Stylianou**, President, European Council of Civil Engineers (ECCE)

Moderator: Christos Konstas

The panel explored how cities and infrastructure systems must adapt to rapid environmental and societal change, and what policy and technical frameworks are needed to ensure long-term safety, resilience, and sustainability.

From left to right: Christos Konstas - Panel Moderator, Prof. Regina Gonthier - UIA President, Prof. Paolo Desideri - IAA President, Platonas Stylianou - ECCE President

ECCE President's Key Intervention: Safety, Sustainability and Structural Resilience Must Advance Together

President Stylianou centred his intervention on ECCE's long-standing principle that **there can be no sustainability without safety**. Drawing on ECCE's Position Paper on integrated renovation strategies, the **3S Approach (Safe–Sound–Sustainable)**, and the **2024 Resilience Manifesto**, he emphasised three core themes that civil engineers must champion in Europe's future resilience agenda.

1. Integrated Renovation: Structural and Seismic Safety Must Precede Energy Upgrades

Stylianou stressed that Europe's building stock cannot become sustainable—or climate-resilient—if energy-efficiency interventions occur without ensuring structural adequacy. He outlined ECCE's three essential policy recommendations:

- **Mandatory structural and seismic assessment** before any energy renovation.
- **Unified renovation programmes** that fund structural/seismic strengthening and energy upgrades in a single framework.

- **Performance-based incentives** tied to achieving both safety and energy targets.

He noted that a building cannot be considered “green” if it is not structurally safe, underlining that isolated, fragmented renovations waste public funds and increase long-term risk.

2. Embedding Safety into Europe’s Climate and Urban Resilience Strategy

Referring to ECCE’s **3S Approach**, Stylianou highlighted that **structural safety is a prerequisite to resilience**, not an optional component. For engineers and policymakers to collaborate effectively, he proposed:

- Placing **safety at the beginning** of all urban development and climate adaptation policies.
- Embedding **engineering expertise** directly into legislative and regulatory processes.
- Working toward **harmonised European resilience standards**, recognising that climate and seismic risks transcend national borders.

He emphasised that when the 3S principles guide decision-making, cities become not only sustainable but truly resilient.

3. Protecting Europe’s Historic and Traditional Buildings

Addressing a topic of great importance for European cultural identity, Stylianou reiterated ECCE’s call for **climate-proof, future-ready preservation strategies**. Europe’s heritage buildings are uniquely vulnerable to earthquakes, extreme weather, and deterioration.

He proposed a three-pillar approach:

- **Risk-based assessment** and minimally invasive seismic/structural strengthening.
- **Integration of climate-proofing measures**—thermal improvement, moisture control, flood and heat protection—within the constraints of heritage conservation.
- Establishing a **European framework for funding and technical knowledge exchange**, since heritage resilience is a shared continental responsibility.

ECCE’s Contribution to the Conference

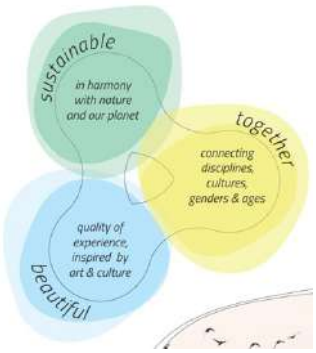
The participation of the ECCE President underscored the pivotal role of civil engineering in shaping Europe’s sustainable future. By bringing a strong technical, ethical, and policy-oriented perspective to the panel, ECCE reaffirmed that **resilience is built on engineering excellence, scientific grounding, and cross-disciplinary collaboration**.

The conference demonstrated that addressing the climate crisis and preparing cities for the challenges of tomorrow requires coordinated visions between architects, engineers, planners, institutions, and policymakers. ECCE will continue to contribute actively to this dialogue, ensuring that Europe’s transformation is **safe, sound, and sustainable**.

Platonas Stylianou - ECCE President

From left to right: Christos Konstas - Panel Moderator, Prof. Regina Gonthier - UIA President, Prof. Paolo Desideri - IAA President, Platonas Stylianou - ECCE President

New European Bauhaus news



New European Bauhaus: kick-starting the transformation

The New European Bauhaus initiative connects the European Green Deal to our daily lives and living spaces. It calls on all Europeans to imagine and build together a sustainable and inclusive future that is beautiful for our eyes, minds, and souls.

The New European Bauhaus is a creative and transdisciplinary movement in the making!

- It is a bridge between the world of science and technology, art and culture.
- It is about leveraging our green and digital challenges to transform our lives for the better.
- It is an invitation to address complex societal problems together through co-creation.

By creating bridges between different backgrounds, cutting across disciplines and building on participation at all levels, the New European Bauhaus inspires a movement to facilitate and steer the transformation of our societies along three inseparable values:

- **sustainability**, from climate goals, to circularity, zero pollution, and biodiversity
- **aesthetics**, quality of experience and style, beyond functionality
- **inclusion**, from valuing diversity, to securing accessibility and affordability

The New European Bauhaus brings citizens, experts, businesses, and institutions together to reimagine sustainable living in Europe and beyond. In addition to creating a platform for experimentation and connection, the initiative supports positive change also by providing access to EU funding for beautiful, sustainable, and inclusive projects.

Call for experts – New European Bauhaus Prizes 2026

DG REGIO is inviting expressions of interest from external experts to **assess applications** for the **NEB Prizes 2026** and **NEB Boost for Small Municipalities**. Experts will evaluate submissions based on the initiative's three core values—sustainability, inclusiveness, and aesthetics—as well as its working principles: participatory process, multi-level engagement, and transdisciplinary approach. Additionally, the call aims to select experts able to assess grassroots initiatives submitted by small municipalities, in the early stages of project development, with a focus on the built environment, as well as experts to evaluate applications with a focus on water resilience.

The European Commission will select **jury members** from the pool of applicants to assess finalist applications and recommend the competition's winners. Applicants to the call may express their interest in being considered for a jury role.

The work of the experts is planned to take place between March and April 2026, and the work of the jury between June and July 2026.

You can find more about the publication of calls for expressions of interest on this dedicated page. The expressions of interest should be submitted via this EU Survey.

Horizon Europe work programme for 2026-2027 adopted

The European Commission adopted the main Horizon Europe work programme for 2026-2027, a EUR 14 billion investment designed to drive research and innovation (R&I) across the EU's strategic goals. These goals include achieving climate neutrality, boosting the use of artificial intelligence (AI) in research and innovation, and ensuring resilience in a rapidly changing world.

The **NEB Facility**, the multi-annual funding tool to revitalise neighbourhoods, will allocate over EUR **210 million in 2026–2027**.

In 2026, the NEB Facility will, among others, address homelessness, develop new approaches to reusing spaces and improving thermal comfort in buildings, and unlock the market potential for investing in NEB solutions across neighbourhoods. Discover **all topics** under the NEB Facility 2026 here.

The online information session on NEB Facility call 2026 will be organised in February, with exact dates and registrations published in the beginning of January.

New NEB Lab project: Renovation, transformation, and renewal of church buildings and religious heritage in the EU

A new NEB Lab project will serve as an **open forum to explore ways of giving a second life to historic places of worship** in Europe. It will also provide guidance on the ethical and aesthetic questions that come with such transformations and policy recommendations for policymakers, professionals and managers/owners of sites.

The NEB Lab is open to all existing members of the NEB Community, as well as professionals in the heritage sector, academics, researchers, architects, engineers, climate-tech experts and more.

Learn more about the project on the NEB website.

High Level Construction Forum news

The High Level Construction Forum is an initiative of the European Commission (DG GROW) which has evolved from the previous Construction 2020 initiative.

Following the update of the EU Industrial Strategy (May 2021), the purpose of the High Level Construction Forum is to co-create (and monitor) the green, digital and resilient transition pathways for the EU construction industry ecosystem. This will be done in partnership with industry, public authorities, social partners and other relevant stakeholders.

Based on the experiences of stakeholders on the implementation of Construction 2020, stakeholder needs and new purpose, the High Level Construction Forum involves discussions around the following key topics of interest:

Digital topic: To enable a digital and innovative construction sector and built environment (e.g. digitising of design, planning and management in the built environment).

Green topic: To address the priorities, within the construction sector and built environment, of a circular economy, resource and energy efficiency as well as the decarbonisation of the economy.

Resilience topic: To enable a resilient construction sector and built environment (e.g. developing skills, better regulation of the internal market and ensuring international competitiveness).

Meeting report summarising the HLCF webinar 'The European Strategy for Housing Construction' from Monday 27 October 2025 is available

On Monday 27 October 2025, the Technical Secretariat of the High Level Construction Forum organised a webinar on the European Strategy for Housing Construction, during which its outline was presented to the HLCF stakeholders. The webinar was attended by 154 participants and the PowerPoint can be found here.

During the reflection moments, the HLCF stakeholders posed questions and gave feedback on the presented outline of the Strategy in relation to a variety of matters, such as the Affordable Housing Plan, secondary & raw materials, reuse and recycling of material, offsite construction, training and skills, cost of land, harmonisation across borders, permits, renovation and links to other EU Regulations and Acts. This feedback has been taken onboard for the further development of the Strategy.

Detailed information on the specific aspects raised and the clarifications provided by representatives of the European Commission can be found in the meeting report of the webinar, which is available here.

News from ECCE Members

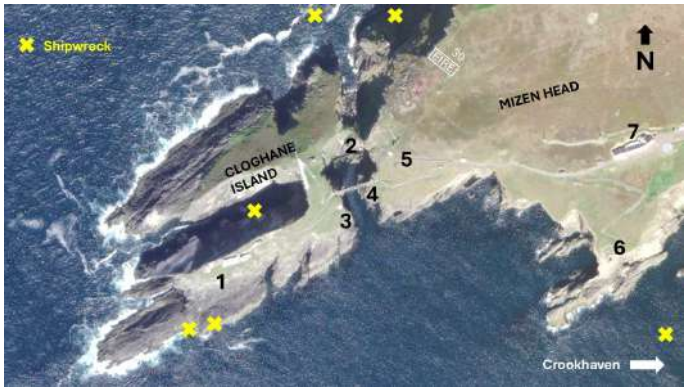
Ireland

The Bridge at Mizen Head

By Ross O'Donovan

The existing reinforced concrete bridge at Mizen head was opened in 2011. It replaced an identical structure that had stood for over a century in a harsh coastal environment. This article tells the story of the first bridge, its inception, design, construction, service life and eventual destruction.

"On the northside of the Mizen, south of James Sleabh, at Gortdove, the Field of the Man was where drowned sailors were buried. There is a large rounded rock that marks the site of the communal grave". – Pat McCarthy



Mizen head and Cloghan Island. 1, Signal station. 2, Causeway route. 3, Derrick crane platform. 4, Mizen bridge. 5, Access road. 6, Copper mine (1850s), Sea arch and CIL landing stage. 7, Mizen visitors centre.

Mizen Head Peninsula, situated on the southwest coast of Ireland, is renowned for its dramatic sea cliffs, which are both beautiful and foreboding. This perilous peninsula commands views over the busy transatlantic shipping route between Britain and America. During the 19th century, numerous ships foundered in storms and dense fog on the treacherous rocks and cliffs off Mizen Head.

In response to public outcry and to safeguard maritime traffic, the impressive Fastnet lighthouse was completed in 1904 at a cost of £84,000. Positioned as the first landfall after America, the light from the Fastnet could be seen up to 28 miles away. By 1905, ship owners, who contributed to the Commissioners of Irish Lights through harbour dues, demanded a lighthouse on Mizen Head. Despite the Commissioners' initial reluctance, having already invested significantly in Fastnet, the United Kingdom Board of Trade authorised the construction of a lighthouse and fog signal station on Cloghan Island in 1905. However the Commissioners of Irish Lights deemed that only a fog signal station was necessary and that the station would be managed by the principal lighthouse keeper of Fastnet. To facilitate access to Cloghan Island from the mainland, a footbridge had to be constructed across a sea gorge.

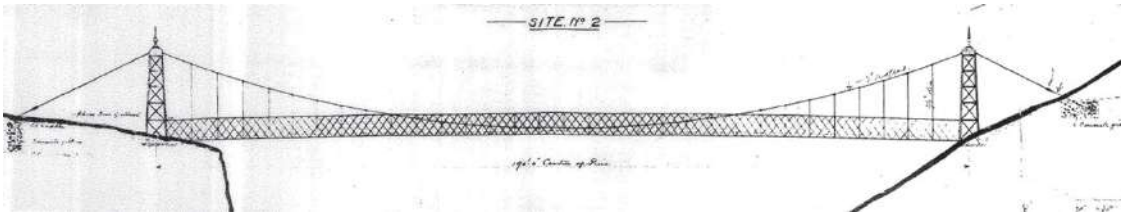
The Oswerty shipwreck (the copper boat) at Mizen Head 1899

The bridge design and construction competition was initiated by the Commissioners of Irish Lights, who specified options for either a steel or reinforced concrete structure. Participants in the competition were required to submit detailed drawings, calculations, and specifications. Additionally, once complete, the bridge was to be subjected to a load test to ensure its structural integrity and safety. Teams of engineers and contractors participated in the competition, some of whom had registered offices in Westminster, London. The choice of Westminster was intentional, as it is home to the influential Institution of Civil Engineers, established in 1818, located near the Palace of Westminster. The Institution continues to play a crucial role as a platform for the exchange of knowledge, promoting learning, and facilitating debates within the field to this day.

Six competition entries were considered as follows:

1. A steel truss design consisting of two 26.2m span braced trusses and a supporting pier by Anon.
2. A 55m steel suspension bridge by Anon.
3. A 52m steel suspension bridge by Alexander Findlay & Co. Ltd. of Motherwell.
4. A 58m steel suspension design by David Rowel Co. of Westminster.
5. A 49m reinforced concrete deck arch by Louis Gustave Mouchel of Westminster.
6. A reinforced concrete through arch by Noel Ridley of Westminster.

Both Alexander Findlay and David Rowel were well established steelwork firms that also manufactured kits for suspension bridges. These bridges were erected across the British Empire, spanning locations such as Burma, the Falkland Islands, India, New Zealand, and Chile. Notably, in Ireland, Daly's Bridge in Cork City, famously referred to as the "Shaky Bridge" and completed in 1927 is credited to Rowel. Its design closely resembles David Rowel's competition entry.



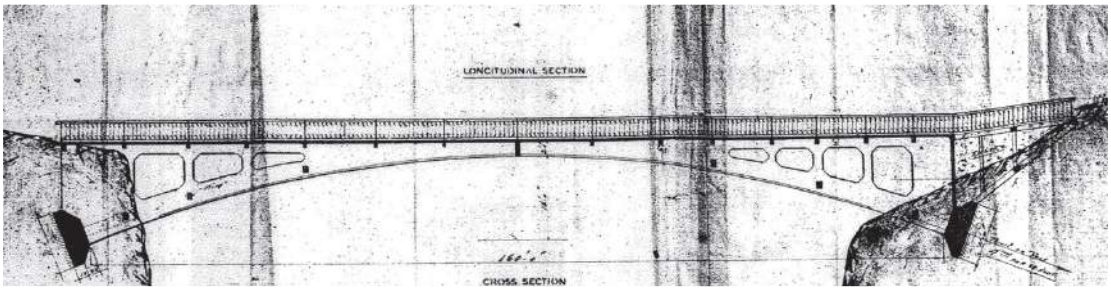
David Rowel's submission for a steel suspension bridge

What might have been - a "Shaky bridge" at Mizen Head.
(Image courtesy of Cork City Council)

Two designs for reinforced concrete bridges were submitted by Louis Gustave Mouchel and Noel Ridley. Prior to the Mizen bridge examples of reinforced concrete bridges in Ireland were rare and of modest span. Examples from the 1890s are the 3.6m span bridge at Barrowmount house, Goresbridge, Kilkenny, and a single-span bridge on the Glenagalt platform on the Dingle Railway.

Mouchel's and Ridely's competition entries reflected the growing uptake of the emerging construction material of reinforced concrete across Europe, driven by advancements in patents and concrete systems. Reinforced concrete, which integrates steel reinforcement with concrete, was demonstrating its effectiveness. However the theoretical understanding of its properties was still in its early stages, lacking textbooks or official regulations to oversee its application. Nonetheless, engineers and innovators in Europe and America were actively exploring the possibilities of reinforced concrete, experimenting with different patented systems.

The Mouchel proposal for a reinforced concrete bridge holds significance. Mouchel acted as the British agent for the French Hennebique concrete system. The submission featured a concrete arch with open spandrels supported laterally and topped with a concrete balustrade. Despite not winning the competition, we can imagine what the Mouchel bridge might have looked like, considering similar designs used by Mouchel in other projects such as the White Bridge (Brew Bridge) in Wales (constructed 1907), the Ardun Footbridge in Co. Donegal (constructed 1911), and the St John Bridge in Co. Kilkenny (constructed 1915). Mouchel's firm later evolved into one of Britain's largest engineering consultancies, ultimately acquired by WSP Global in 2016.



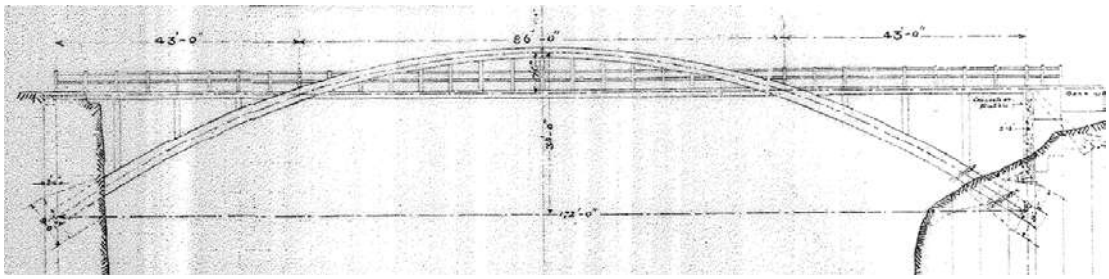
Mouchel's bridge submission using patented Hennebique concrete system

Mouchel's bridge submission using patented Hennebique concrete system

The competition winner was selected in 1907, by C. W. Scott, Engineer to the Commissioners. His choice was a reinforced concrete through arch bridge, favouring it over initially more cost-effective steel alternatives due to the expected high maintenance costs in the exposed marine setting. The contract price was £1,272 with a stipulated a completion timeline of seven months. George J.M. Bradshaw was appointed engineer in charge of the works representing the Commisioners of Irish Lights. Bradshaw's role was to supervise and instruct the contractor to ensure the works complied with the design specifications. Noel Ridley was the appointed bridge designer, while Messrs. Alfred Thorne and Sons of Westminster undertook the construction contract.

Both Ridley and Thorne were experts in the design and construction of marine piers. The emergence of railways spurred the popularity of seaside holidays. The seaside pleasure pier became an iconic representation of Victorian and Edwardian leisure culture, acting as a social hub for escaping daily life and enjoying amusements by the sea.

Constructing a marine pier posed numerous challenges,
including withstanding harsh marine conditions, strong tides, extreme weather and corrosive saltwater, all the while maintaining structural integrity and elegance. Similar challenges were faced by Ridley and Thorne at Cloghan Island.



The competition winner by Noel Ridley, designer, and Messrs Alfre Thorne and Sons, contractor.

The contractor, Alfred Thorne M.Inst.C.E (1847 - 1923), was born in Greenock, Scotland, to a family of distillers and merchants. After qualifying as a Civil Engineer, Alfred established his construction business specialising in bridges, piers and drainage works. He became the preferred contractor for the structural engineer John James Webster (1845-1914) and also engaged in successful joint ventures with contractor John Dixon (1835-1891). Alfred's sons, Alfred, Philip and Douglas, qualified as engineers and joined their father's business for a time to become Messrs Alfred Thorne and Sons.

- Rio Tino Pier, Spain (built 1876),
- Brighton West Pier extensions and additions (built 1883),
- Barrow Viaduct with John Dixon, New Ross (built 1885),
- Hammersmith Bridge, with John Dixon (built 1887),
- Shanklin pier with John Dixon (built 1890),
- Adelaide Bridge Leamington, (Built 1891),
- Dover Promenade Pier (Built 1893 - demolished 1927),
- Eastbourne pier new landing stage (built 1893),
- Torquay Promenade pier (built 1894),
- Llandudno, promenade piers (built 1896),
- Bangor pier (built 1896),
- Tenby Pier (built 1899—demolished 1952),
- Swanage pier (built 1890s),
- Cromer pier (built 1902),
- Cowes Victoria (built 1902—demolished 1961),
- Conwy Suspension bridge remedial works (1903),
- Newport transporter bridge (built 1906),
- Warrington Bridge (built 1915),
- Thorne is also reported to have built iron piers in Mexico and Brazil.

The designer, Noel Martyn Ridley M.Inst.C.E. (1860 - 1937) ,was born in Regent's Park, London, to Arthur Stone Ridley, a merchant and fundholder. Ridley graduated from University College School, London, and then trained with William Humber, contributing to several railway projects that never came to fruition.

Subsequently he gained experience under Eugenius Birch on pier works, before establishing his own consultancy in 1888. One of his first commissions was the Victoria pier at Folkestone (built 1888 - demolished 1952). Despite his efforts, not all of Ridley's projects were successful and he faced bankruptcy in 1893. However in 1894 he partnered AS Moss-Blundell engaging in various bridge projects in England and overseas, as well as irrigation schemes in America. By 1896, Ridley had resumed his private projects, amassing a diverse portfolio encompassing bridges, piers, buildings and patents.

Interestingly, Ridley collaborated directly with Alfred Thorne on the design and construction of the Shanklin Pier (built 1890 - demolished 2019). Alfred Thorne teamed up with John Dixon as contractors while Ridley and F.C. Dixon were the project designers.

Projects of note include:

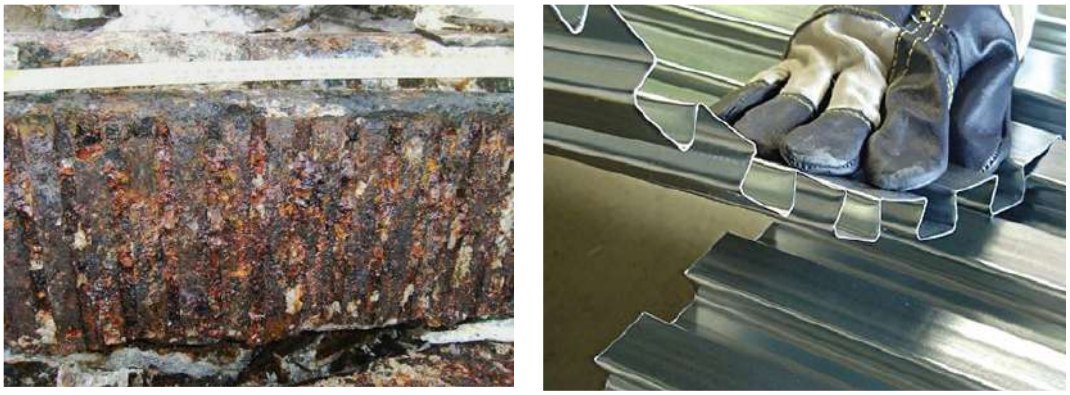
- A number of bridge designs for London County Council,
- Eastbourne Pier Pavilion Theatre (built 1901),
- Dover Promenade Pier (built 1901),
- Deller Cafés Exeter and Paignton (built 1910s),
- West Pier in Brighton (built 1916),
- World War 1 War Office, design of jetties , wharves and U boat defence for harbours.

In the 1920s he was reported as working as an engineer and manager to the Standard Construction Company, Leeds, while concurrently managing his private practice. He authored several engineering papers. He remained unmarried and passed away in Hastings in 1937.

Materials used in the bridge included the Ridley and Thomas I Cammel patented "Ridley Cammel" concrete system. This system consisted of corrugated dovetail metal sheeting and for which Alfred Thorne paid a royalty for its use. The Ridley-Cammel system originated from Cunnard-Wright Partitions, first invented by A. O. Wright in 1893. Hugh L. Cunnah and Henry A. Hughes subsequently patented methods for applying Wright's invention to floors and wall partitions.

By 1919, Ridley noted the widespread adoption of this sheeting in various applications such as floors, roofs, columns, walls, domes, air ducts and railway carriage flooring. He also proposed its potential application in shipbuilding and aircraft construction. Ridley further refined the system for the Lewis company, where it was manufactured until the Second World War, when the production facility was bombed.

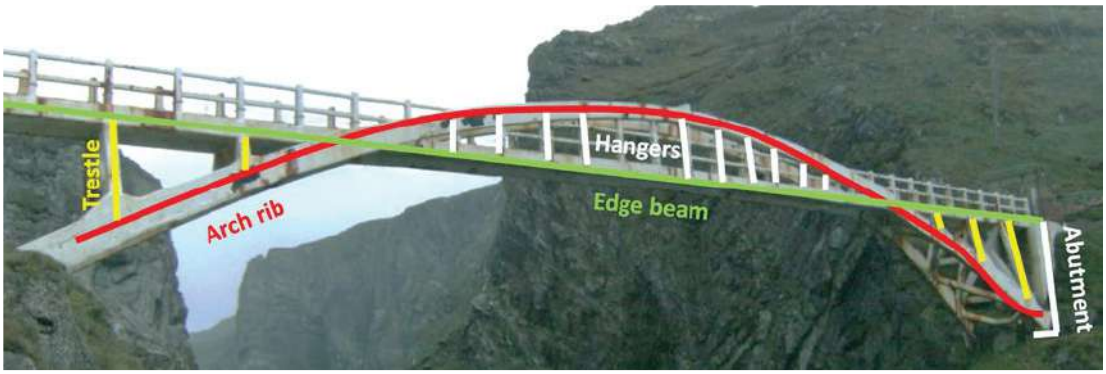
After the war, production relocated, first to Belgium and then later to Holland, under Reppel's ownership. Today the Lewis® system has evolved with a "S" shape profile, transitioning from a bent and crimped process to cold rolling. It



(Left) Ridley-cammel corrugated dovetail sheeting used in the Mizen bridge (Right)
Modern Lewis® corrugated dovetail sheeting used in flooring.

continues to prioritise reducing concrete usage while maintaining strength, fire resistance, acoustic insulation and waterproofing for floors.
The specified concrete mix for the bridge was 1 part Best Portland Cement to 1.5 parts Clean Sand to 3 parts Broken Stone passing through an 0.75 inch mesh. The Portland cement used was coarser compared to modern varieties, resulting in reduced strength and longer setting times. The concrete strength for the bridge was set at 13.7N/mm². In contrast, modern concrete strength for bridges are typically specified as 50N/mm². To ensure concrete quality, the Commissioners of Irish Lights required crush testing of concrete cubes after 30 days.

The bridge design was a single arch with a span of 52 metres. The arch ribs shape followed a parabolic curve, which splayed outwards to the abutments beneath the bridge deck. This configuration ensured stability despite its narrow width. The bridge deck was 1.372 metres wide, supported on two edge beams. The edge beams ends were supported on the abutments and below the bridge's deck was supported off the arch ribs using trestle supports and



Main structural members of the Mizen Bridge.

vertical hangers above deck. This innovative design enabled construction without the requirement for a costly support structure underneath.
Philip Howard Thorne M.Inst.C.E (1881 - 1956) was Alfred's son and a partner in the firm. Tasked with the construction of the bridge, he brought a wealth of experience having previously worked as a "Civil Engineer's Contract's Assistant" on Cowes pier Isle of Wright (1901 to 1902) and then moved to the Conway suspension bridge site (1903 to 1904).

The Conway Suspension bridge (built 1826) was designed by Thomas Telford (1757 – 1834). After years of service the iron suspension bridge had significant deterioration and was in danger of collapse. Webster was appointed designer and Philip, as contractor, completed the complex remedial works of installing new anchorages, cables, suspension links and stiffening girders. Additionally a new pedestrian suspension bridge was installed alongside the main bridge. Notably, all the works were carried out without disrupting the flow of busy traffic on the bridge.

Philip served with the Royal Engineers in World War 1. He was mentioned in dispatches, wounded twice, promoted to Major, and awarded the Military Cross in the 1918 honours list. In the following years, he worked on projects in Africa, Australia, and South America. He passed away in 1956 at Mayford in Surrey.

Arriving at Mizen head, Philip availed of the services of Florence McCarthy (1851 – 1917) who was a Crookhaven businessman and a self-professed “Jack of all trades”. Florence’s business included a hotel, farms, post office and general trader. In his role as an agent for the Shipwrecked Mariners Society, he had witnessed firsthand the human devastation caused by ships wrecked in the area. He was a strong supporter of the construction of the fog signal station. Florence would later become a member of Cork County Council on its inception, and chairman of the Committee of Management of the Skibbereen and Schull Light Railway.

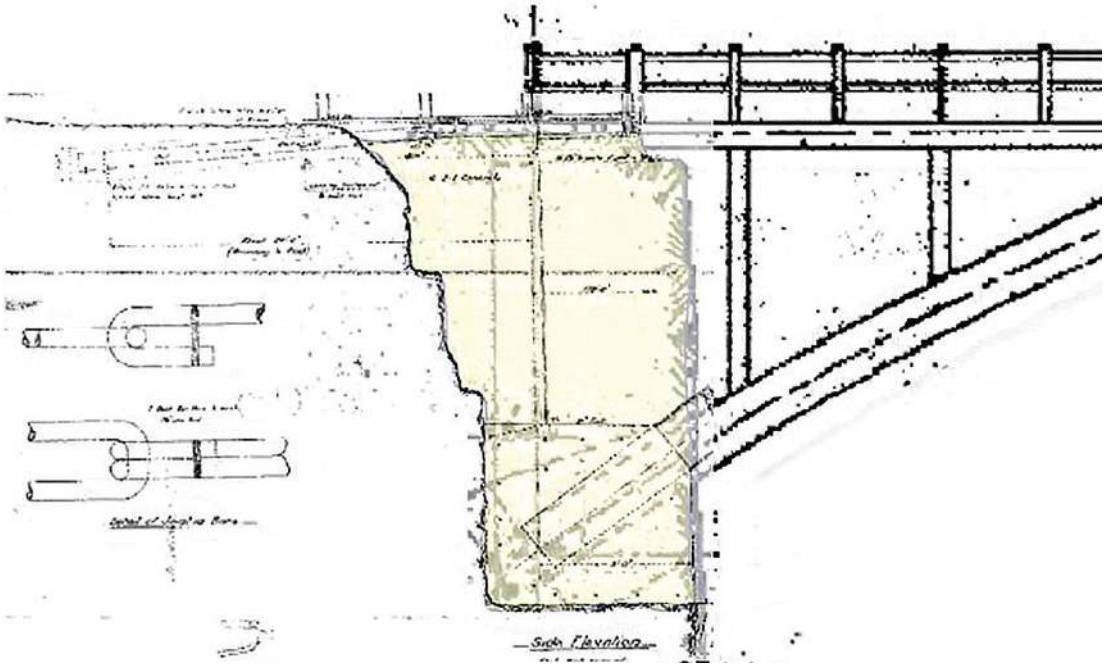
Once land was acquired, works initially began on the mainland access road. Florence reported that Philip employed around 40 workers for the project, including 30 locals. The access road terminated approximately 30 metres above the bridge, with a steep 1:1 slope leading from its end to the bridge site. Access to Cloghan Island was initially by means of steep steps and ladders attached to the cliff faces on the narrow precarious causeway on the northside of the bridge site. Remnants of these steps still exist today.

A derrick crane and landing platform were constructed on the island to the southwest of the bridge site. This crane facilitated the transportation of building materials to the island by boat. Cement, steel reinforcement bars and steel girders were shipped to Crookhaven and then brought the remaining 12km to site by Florence McCarthy. The dovetail sheets and bolts were delivered to Schull railway station and transported the remaining 26km by cart to the site.

Philip designed and built temporary works in the form of a cablestayed structure. This structure comprised of two steel towers linked by cables and rigging to create a stable structure capable of supporting loads and facilitating access for construction. This arrangement enabled movement of material between Cloghan island and the mainland.

The abutments were excavated into rock. However, issues occurred when it was discovered that the fractured rock on the Island was unsuitable and prone to sliding. Extensive additional excavations were required to remove the unstable rock leading to months of delays. Further setbacks occurred when work had to be suspended during the winter due to severe weather conditions.

According to the contract, extra excavation of rock was priced at 5 shillings per cubic yard and additional concrete at 10½ pence per cubic foot. Once the excavations were finally complete, construction began on the mass concrete



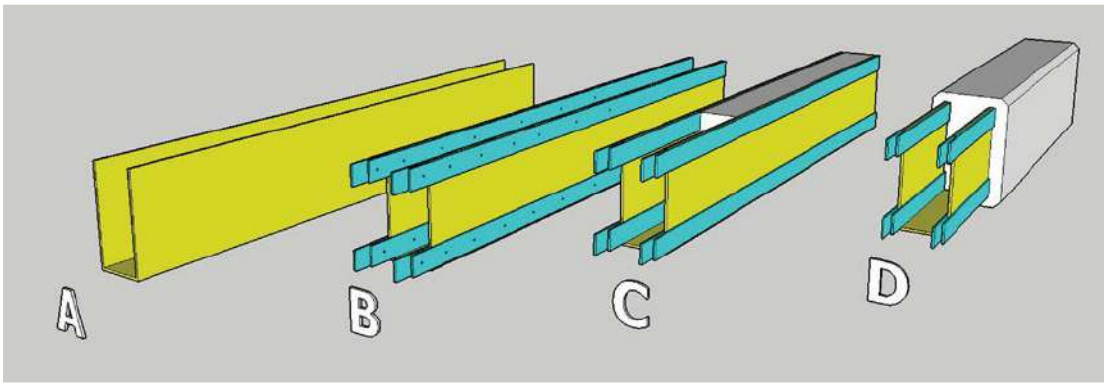
Drawings of the Island abutment. The highlighted area is the additional rock excavation. The anchor chains securing the top of the abutment wall into rock can be seen on the top left.

abutment base and walls. To ensure stability, the top of the abutment walls were anchored into the rock using anchor chains. Due to the additional excavations, the bridge design had to be revised, necessitating longer arch ribs.

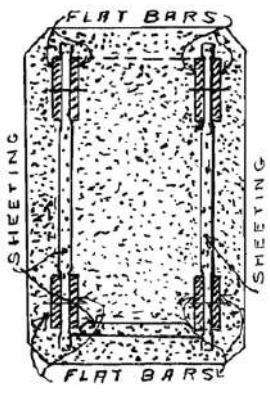
The arch ribs were the main structural members and were constructed in phases. The initial phase was done on land by shaping the corrugated sheeting into a trough. Each trough was open at the top and had two longitudinal flat bars attached by bolts at each corner. These troughs were made in four separate sections.

The subsequent phase involved using the cable-stayed structure to winch the four separate trough sections across the gorge. They were then bolted together to form a continuous arch. This was no easy feat requiring expert rigging to stabilise the troughs while temporarily extended over the gorge. Workers had to crawl along these narrow troughs, suspended 30m above the sea, to install and secure the bolts that joined the sections together. Once this operation was complete, the open trough arch was temporarily stiffened by securing it to the island and mainland using cables.

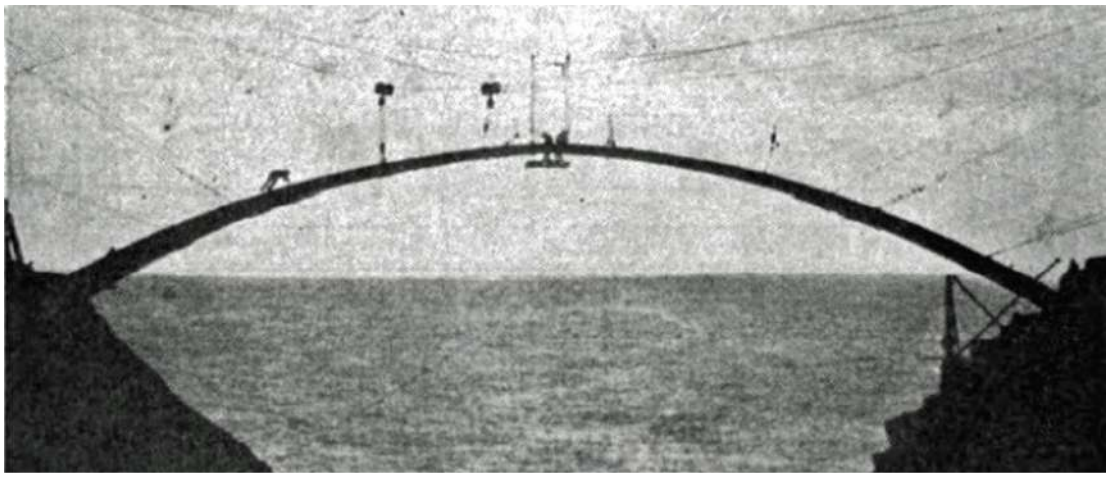
Winching the arch ribs troughs sections into position across the gorge. Part of the cable stay structure is seen on the left.



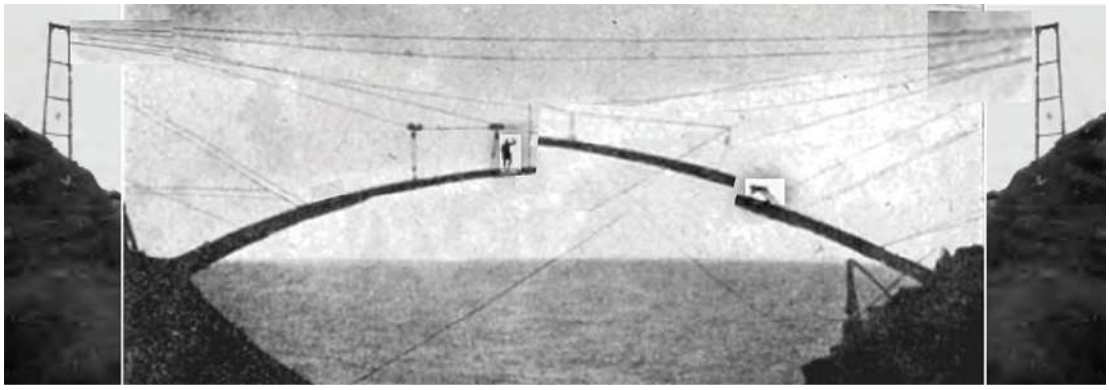
Construction of the arch ribs. (A) Sheeting bent to a trough shape on land. (B) Steel plates bolted to sheeting trough for strength and then winched across the gorge in 4 sections. The 4 sections then bolted together to form a continous arch. (C) Concrete infill placed inside the trough. (D) Render applied to external surfaces to complete the arch ribs.



(Left) Ridley's arch rib design. (Middle) 3D depiction of an arch rib makeup. (Right) Sliced section of an arch rib (photo taken during demolition).

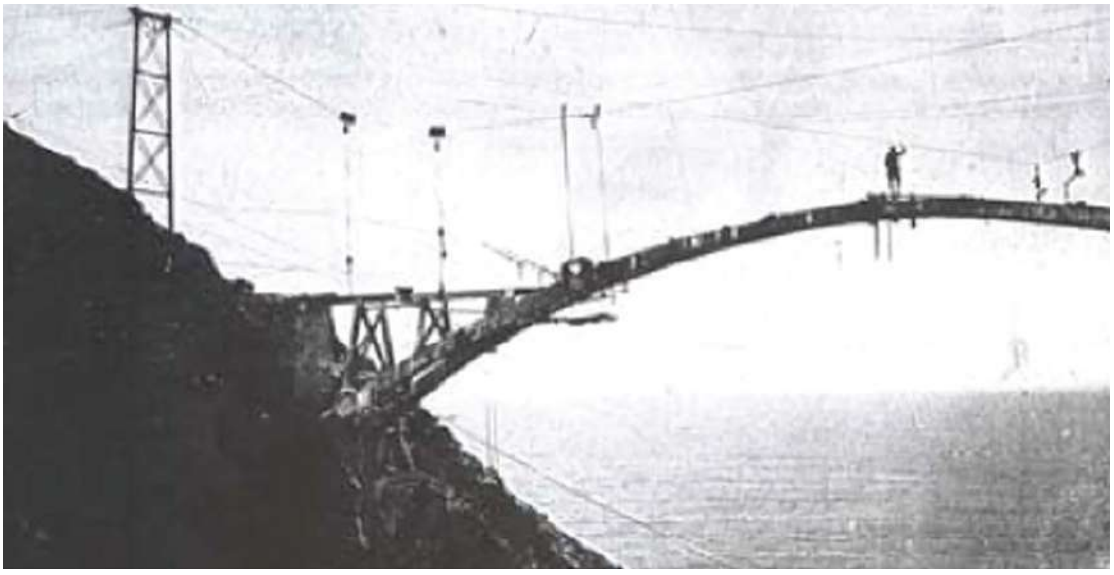


Completion of the arch ribs. “The connection between Mizen Head and Clohane Island was completed in 1909, the key of arch being swung into position midst the cheers of a large crowd of onlookers.” – Florence McCarthy.

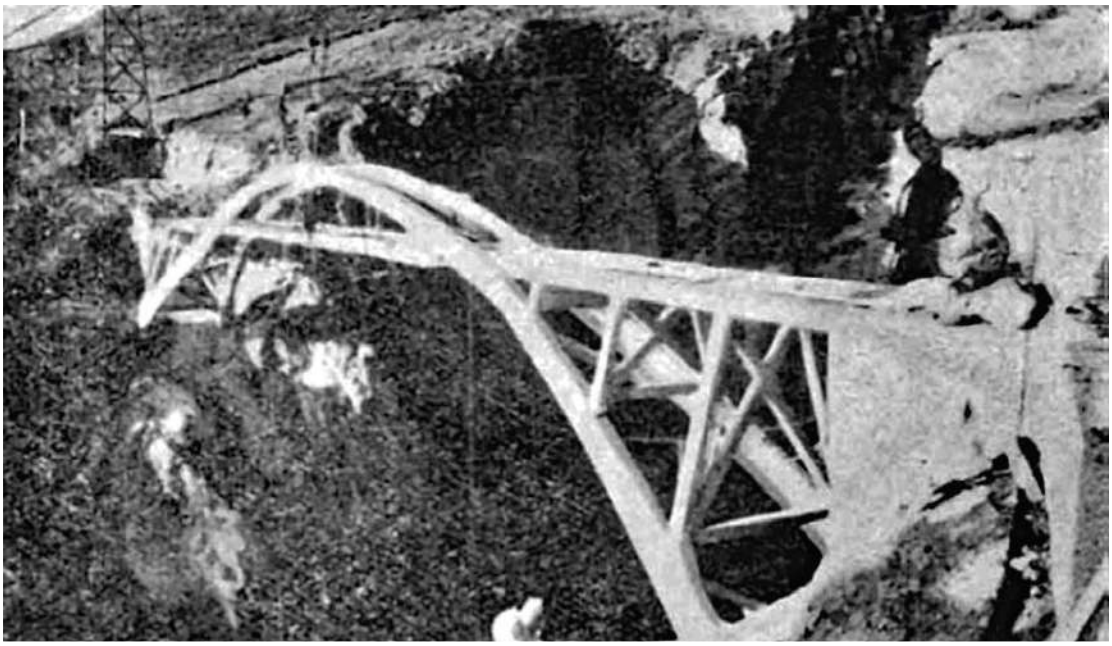


This illustration has digitally altered the photographs above and below to highlight the function of the cable-stayed stucture which was used to position the arch ribs sections. The illustration portrays the percarious nature of the construction, showing workers on the arch ribs, ready to secure the final section into place. The island derrick crane can be seen on the bottom right.

The final phase of constructing the arch ribs involved filling the open trough with concrete and then applying rendering to the outer surfaces of the trough to complete the arch ribs.



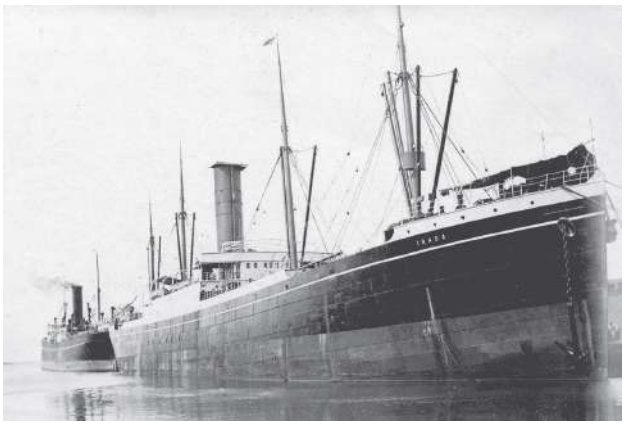
Arch ribs, trestles and part of the edge beam in place..



The bridge nearing completion, deck hangers and railing to finish "The novel feature of this bridge, apart from its great span (which is believed to be the greatest yet attempted in the British isles) and its height above the water, is that it was possible to erect without centering, thus effecting a great saving in cost." -Noel Ridley.

"Now when the bridge is erected the beauty of the design can be seen. At a distance it looks like a monster spider's web hanging in the air, its graceful curve of 30 feet adding much to its attractive appearance while its long span of 172 feet over the chasm and often times raging sea over 150 feet below seen against the bold precipitous bluffs of the Mizen Head side-view, leaves a picture in the mind's eye scarcely ever to be forgotten." – Florence McCarthy

The trestles and edge beams were precast on land, then winched across the gorge and stitched in place with in situ concrete. Although precasting of ornamental concrete was practised at the time, using precast units for significant structural members may have represented a novel approach at the Mizen bridge. Once the edge beams were completed it was then used to support the shuttering and in situ concrete for the floor and hangers.
Load testing of the bridge was undertaken two months after its
completion. A total of 52 ton of stone was gradually spread across the bridge deck surface. Once fully loaded the arch ribs deflected by just 6mm confirming the success of the test.



The 8124 ton cargo ship the Irada with a crew of 69 was one of the largest vessels of her time and was wrecked at Mizen Head. It was en route from Galveston to Liverpool with a cargo of cotton. The hull was later washed ashore at Paleen Harbour in Castletownbere.

Incidents occurred during construction which highlighted the urgent importance of the works. On September 29th, 1908, the steam trawler *Manaos*, crewed by nine men, ran aground on Cloghan Island in dense fog. This resulted in the drowning of the ship's mate, Charles McKenna. Skipper Thomas Salter skilfully guided the remaining crew onto the rocks, where they awaited rescue for ten hours until discovered by Thomas Forde (Lord), a worker at the fog signal station. The survivors were subsequently attended to by Bradshaw and later accommodated by Florence McCarthy, acting as agent for the Shipwrecked Mariners Society. In 1906 another steam trawler, *Ribble,* had a fortunate escape when its crew emerged unharmed after the boat sank in the same location as the *Manaos*.

Disaster struck on the 22nd of December 1908, when the immense *Irada* cargo ship was lost. In the days leading up to the disaster, stormy seas and dense fog severely hampered navigation. The *Irada* eventually struck rocks at Mizen Head, breaking apart rapidly in the rough seas. Captain Roberts responded promptly by ordering the launch of the ship's lifeboats. Other crew members scrambled onto nearby rocks. Construction workers arriving to work encountered the bay strewn with debris and witnessed the distressing sight of crew members clinging desperately to rocks. Ropes and ladders were swiftly deployed, enabling the safe rescue of 63 men from the cliff face. Tragically, Captain Roberts, a stewardess, and three crew members lost their lives. Several weeks later, another crew member succumbed to injuries at Schull hospital. Captain Roberts was buried in Crookhaven Cemetery and two of the crew members were laid to rest at the old Kilmore graveyard. In a poignant reminder of the tragedy the *Irada's* 9-ton propeller was recovered in 1995 and is now exhibited at the Mizen Visitors Centre.

SHIPPING.

(No. 11.)

NOTICE TO MARINERS.

SOUTH-WEST COAST OF IRELAND.

MIZEN HEAD.

INTENDED FOG SIGNAL.

Irish Lights Office, Dublin, 3rd May, 1909.

In accordance with Notice to Mariners No. 1 of 1909, the Commissioners of Irish Lights hereby give Notice that the Explosive Fog Signal at Mizen Head has been established. The character of the Fog Signal is

TWO EXPLOSIONS

IN QUICK SUCCESSION EVERY

7½ MINUTES.

When this Signal is in operation between the hours of sunset and sunrise, explosive charges (Tonite-aluminium), giving an intensely brilliant flash, will be used instead of the ordinary tonite explosive.

Approximate Geographical Position—

Latitude, 51° 27′ N.; Longitude, 9° 49′ W.

(By Order)

3691 HUBERT G. COOK, Secretary.

In response to the uproar caused by the *Irada* disaster, and prior to the completion of the bridge, the Commissioners of Irish Lights hastily arranged for a temporary fog signal, which was inaugurated on May 3rd, 1909. The fog signal was manned by Mr Johnson and Mr O'Hanlon.

It is reassuring that Florence McCarthy reported that throughout the challenging construction efforts at Mizen Head, there were no significant construction accidents, with only two or three minor incidents. One incident was particularly remarkable: a worker fell from the end of a girder, a fall of over 120 feet towards the perilous rocks and turbulent seas below. Fortunately, a protruding ledge of rock approximately 15 feet down broke his fall, allowing him to grasp onto it until he could be safely pulled up. Remarkably, he suffered only a shoulder strain from this ordeal.
The Crookhaven Carnival took place in September 1909 spanning two day s . It marked the culmination of a successful endeavour, led by Florence McCarthy as the president of the organising committee. Philip Thorne and Bradshaw were also pivotal members of the committee. Among the attendees were
Commissioners of the Irish Lights staff, contributing to a substantial turnout. The Carnival featured a diverse programme, including regatta races, horse racing, field sports, and various
entertainments. It was widely acclaimed as a triumph, reflecting the community's enthusiastic participation and enjoyment. The horse race was a notable highlight, with Bradshaw acting as the starter. Florence's horse *Radio*, ridden by J. Melville, secured third place initially. Undeterred, Florence himself took up the challenge, riding *Radio* in a thrilling rematch. This time, Florence emerged victorious in an exciting race, claiming first place.

Throughout its service life the bridge endured the ravages of storms and the threat of war. However it was a contaminated ingredient in the concrete mix that would eventually lead to the
demise of the bridge.

During World War 1, the waters off the south coast of Ireland were dubbed “torpedo alley”. This theatre of war witnessed German U-boats attacking merchant shipping, culminating in the sinking of the *Lusitania* in 1915, which led

Specialist Abseil Engineers inspect the bridge (2004?).

to the American entry into the War.

The fog signals used at the signal station consisted of explosive devices, including charges of tonite and detonators. Tonite explosives had been used in early hand grenades. After the outbreak of the War of Independence in 1919, the Irish Republican Army took an interest in the stocks of tonite, leading to three separate raids on the fog station. These repeated raids resulted in the temporary closure of the facility, and it was not until 1924 that the fog signal station was fully operational again.

Jutting into the Atlantic, the peninsula bears the full force of Atlantic storms. The bridge has endured over a century of severe weather. On occasion, rogue waves have been witnessed crashing over the bridge. Lighthouse keepers have recounted that, on certain days, the only safe way to traverse the bridge was to crawl.

Some 30 years after it was opened, the bridge began to show visible signs of deterioration. Defective areas of concrete were identified and subsequently removed and replaced. Remedial work on the bridge was carried out again in 1972, involving the application of a bituminous substance followed by a coat of white paint, which served as a navigational aid for ships.

Petrographic image captured of the bridge concrete revealing seashells. Comparable shell material can be identified at the nearby Barleycove beach.

Additional concrete repairs were conducted in 1980 and 1986. Throughout this period, the condition of the bridge continued to worsen. Investigations were undertaken in 1989 and again in 1992. In 2002, RPS Consulting Engi-

neers were appointed to assess the structural condition of the bridge and to recommend necessary repairs. The consultants determined that extensive corrosion of the reinforcement from chloride attack had effectively rendered many concrete elements unreinforced. They also warned of the potential for brittle failure in the structure. Consequently, the bridge was closed to the public in May 2005.
In June 2005, a temporary scaffolding supported off the arch ribs was installed on the bridge to provide access. The scaffolding was nearing its lifespan of 5 years in 2009 when the contract to demolish the bridge and construct a replacement was signed.

Chloride attack occurs when salt (chloride) from seawater permeates concrete over time. Once the chloride reaches the embedded steel reinforcement, it triggers corrosion, resulting in rust formation. Rust, an expansive by-product, causes concrete to crack, compromising structural integrity. At the time of construction chloride attack on reinforced concrete was poorly understood.

During demolition, samples were extracted from the old bridge for analysis. Some of these samples exhibited black and green rust, indicating the occurrence of an uncommon anaerobic corrosion processes. Testing revealed unusually high levels of chloride within the concrete. Moreover, chloride content profiles in the samples showed consistent distribution throughout the depth, contrary to expected variations predicted by standard chloride modelling techniques. These anomalies can be attributed to chloride contamination from the use of seawater and sea sand in the original concrete mix. The chloride contamination initiated chloride attack on the reinforcement, leading to the subsequent gradual deterioration of the bridge and ultimately to its demise.

Today a replica bridge stands in place of the original. It continues to serve the same purpose, providing access for the Commissioners of Irish Lights to Cloghan Island. The station eventually received its light some 50 years later, but lost its fog signal in 1970, and the lighthouse keepers were replaced with automation in 1994.

In changing times, the locals saw an opportunity. A cooperative was established to develop the Mizen signal station as a visitor attraction. The project has become a success story, attracting over 60,000 visitors per year and providing a valuable boost to the local economy.

Traditions and stories grew around the site. One such tradition held that when a lighthouse keeper married, the newlyweds would be required to walk hand in hand along the crown of the narrow arch ribs as a test of their trust. The bridge regularly features in the media and advertising campaigns. Another intriguing tale is the daring unsanctioned bungee jump that took place off the bridge in the 1990s.

However, its primary function must be acknowledged in the countless disasters averted, thanks to the signal station it provided access to. In a testament to the bridge and its creators it is described as *"one of the most innovative engineering structures to be found in Ireland" –The National Built Heritage Service.*

After 100 years of service, the contract to demolish the old bridge and reconstruct a replica was awarded in 2009, and the second Mizen bridge was opened on the 16th March 2010. However, the full story of the design and construction of the Second Mizen Bridge is for another day...

Notes

- L.F. Stephens, 'The Bridge at Mizen', *Head, Irish Engineers*, Volume 27, No. 7, July/August 1974, pp 18 -20.
- Noel Ridley, 'Dovetail Corrugated Sheeting', The Concrete Institute, paper read at the 84th OGM of the Concrete Institute, January 23rd 1919.
- B.E. Jones, *Cassells Reinforced Concrete*, 1913.
- 'Mizen Head Ireland', *Engineering Contracting* Volume XXXIV, 1910.
- S Doyle, 'Mizen Head Footbridge', *Beam, The Journal of the Irish Lighthouse Service*, Volume 34, 2006.
- A Graham, Form for Concrete Work, 46th Meeting of the Concrete Institute, c1920.
- C Hall, *Conquests of the Sea, Conquests of Engineering*, c 1910.
- K Ruane & A Healy, 2004, 'Assessment testing Mizen Head Footbridge Ireland', *Bridge Engineering*, Volume 157, September 2004, pp 117-122.

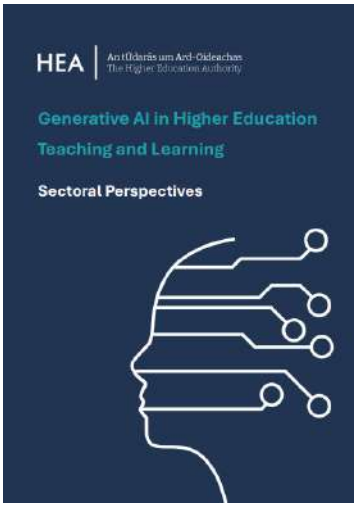
Generative AI in Higher Education: Insights from a National Sectoral Consultation

The Higher Education Authority (HEA) of Ireland has published a comprehensive report capturing how generative AI is reshaping teaching, learning, assessment, and governance across Irish higher education. Based on ten thematic focus groups and an institutional leadership summit, the report highlights a sector in rapid transition—innovative, engaged, yet in urgent need of coordinated guidance.

The consultation reveals widespread experimentation with AI among academic staff and students, alongside significant uncertainty around ethics, academic integrity, assessment design, skills development, and institutional policy. While AI offers valuable opportunities for teaching enhancement, personalisation, and inclusive learning, the report stresses that its benefits will only be realised through structured, values-led approaches.
Key cross-cutting themes include:

- **The need for national coordination**, as institutional responses are emerging unevenly.

- **Re-examining educational purpose**, especially in light of evolving notions of authorship, originality, and academic integrity.
- **Assessment redesign**, moving from detection-based to process- and authenticity-focused approaches.
- **Urgent investment in staff and student AI literacy**, recognising current gaps in critical, ethical, and technical understanding.
- **Inclusive strategies**, ensuring AI does not exacerbate existing inequities.
- **Robust governance and infrastructure**, moving beyond ad-hoc or individual experimentation toward coherent institutional systems.
- **Leadership responsibility**, not only to manage risks but to shape a shared educational vision for the AI era.



The report concludes that AI is not solely a technological issue, but a pedagogical, ethical, and strategic one. As Irish higher education moves forward, collaboration, clarity of purpose, and sector-wide coherence will be essential to ensuring that AI strengthens—rather than fragments—the educational mission.

Read the full report here: **Generative AI in Higher Education Teaching and Learning: Sectoral Perspectives**

Malta

Excellence Recognised - The Premju Galizia and the Built Environment in Malta

Every year, the Kamra tal-Periti (KTP) honours outstanding architectural and engineering work through the *Premju Emanuele Luigi Galizia*, Malta's national awards for the built environment. Named after the celebrated 19th-century architect–engineer Emanuele Luigi Galizia, the award recognises projects that advance architectural quality, structural ingenuity, sustainability, and civic purpose.

The 2025 edition — the largest to date — unfolded over six days and featured more than forty nominations across eight categories. Guided by the theme **"Legacy"** and the reflective question *"What would Galizia do?"*, this year's awards emphasised the long-term consequences of built-environment decision-making. Legacy, as articulated by KTP President Perit André Pizzuto, is not only what the profession inherits but what it chooses to leave behind — a message that resonates deeply across the European civil engineering community, where design quality, public responsibility, and resilience shape the future of our cities.

At a time of active debate around planning reforms in Malta, the emphasis on legacy gained particular urgency. Pizzuto highlighted a growing imbalance between legal processes and meaningful design outcomes, reminding practitioners that the profession must assert its role with integrity, courage, and purpose.

Award Categories and 2025 Winners

The Premju Galizia awards capture the breadth of Maltese built-environment practice and the vital role of interdisciplinary collaboration. The categories included:

- Adaptive Renovation Award
- Single Dwelling Design Award
- Workplace Design Award
- Hospitality Design Award
- Engineering Innovation Award
- Emerging Practice Award
- Unbuilt Projects Award

Beyond the project-based recognitions, the Premju Galizia celebrated the individuals and practices shaping the profession's culture and future. The Architecture Leadership Award was presented to *Ms Simone Mizzi*, honoured for her decades of heritage stewardship and advocacy — a powerful reminder that leadership in the built environment is fundamentally civic in nature. The Lifetime Achievement Award was conferred upon *Perit Vincent Cassar*, whose career has been defined by public service, integrity, and environmental sensitivity. The President's Award recognised *Valentino Architects* for their consistent excellence across multiple submissions, demonstrating a practice-wide commitment to design rigour and conceptual depth.

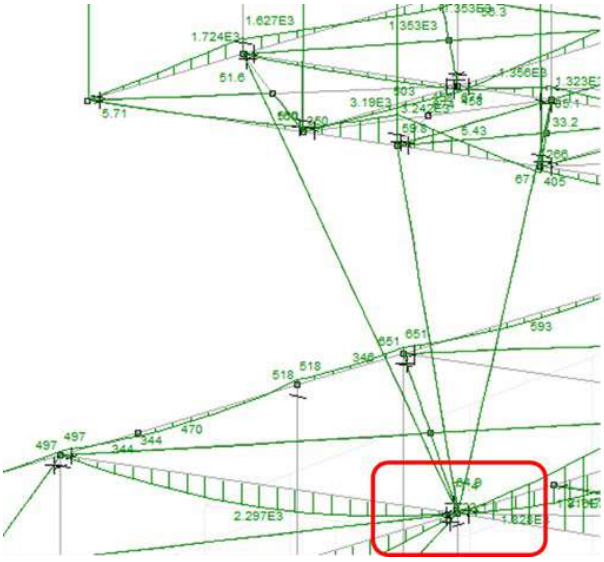
Engineering Innovation Award: The Sustainable Living Complex (SLC), Msida

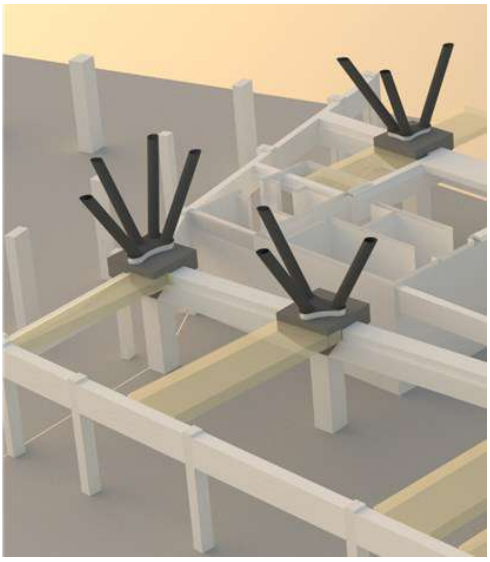
Among the project awards, the Engineering Innovation category stands out for its direct relevance to the engineering profession. The **Sustainable Living Complex (SLC)** — located along the University Ring Road in Msida — represents one of Malta's most technically ambitious and future-oriented buildings. Through its integration of advanced structural systems, digital precision, and sustainability-driven engineering, it positions itself as a national benchmark for interdisciplinary design excellence.

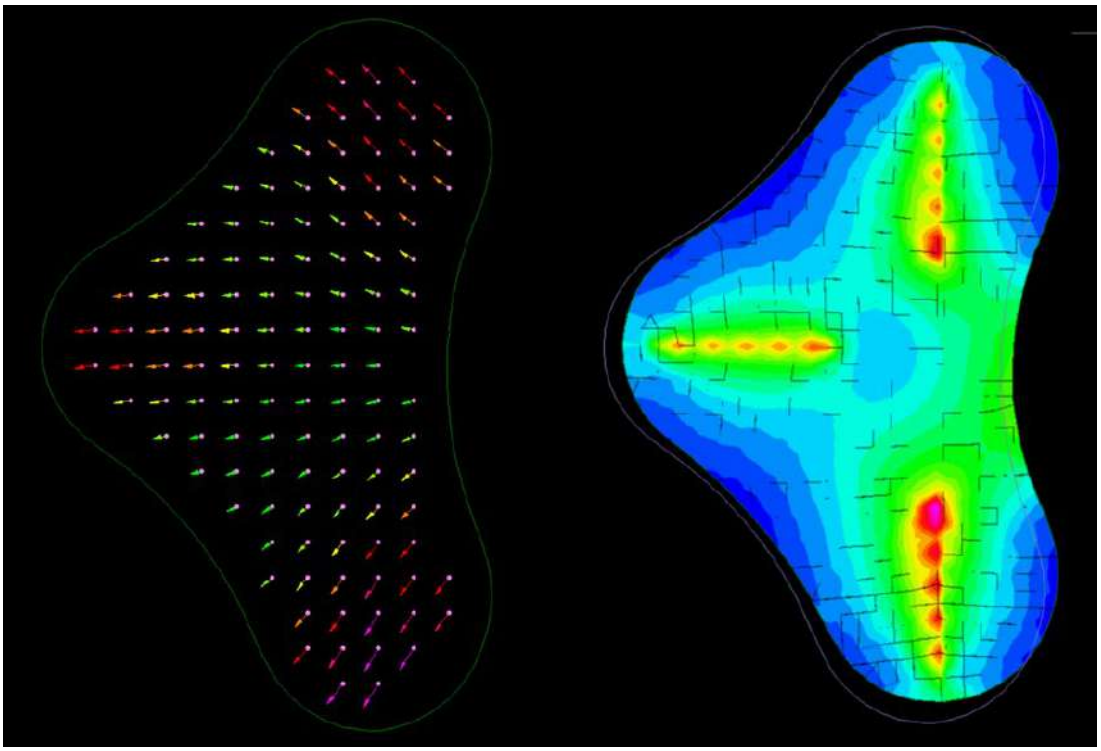
A Structural System Designed for Complexity and Adaptability

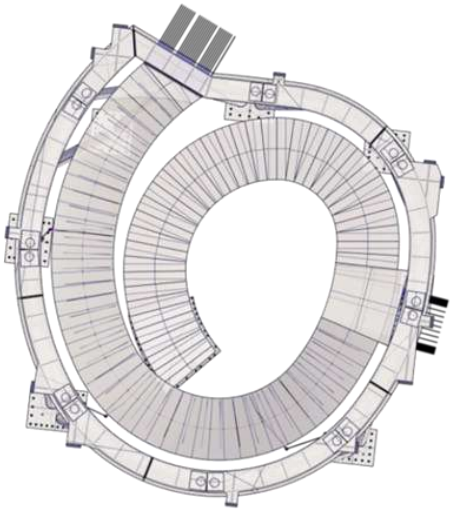
The SLC's structural design is a showcase of integration and ambition. Its hybrid vertical load-bearing strategy — combining cast in-situ reinforced concrete slabs, precast prestressed hollowcore units, predalles slabs, and reinforced and prestressed beams — enables diverse spans and architectural configurations to coexist seamlessly. Lateral stability is ensured by reinforced-concrete cores anchored into the rock and tied into diaphragm slabs, delivering robustness under seismic and wind actions.

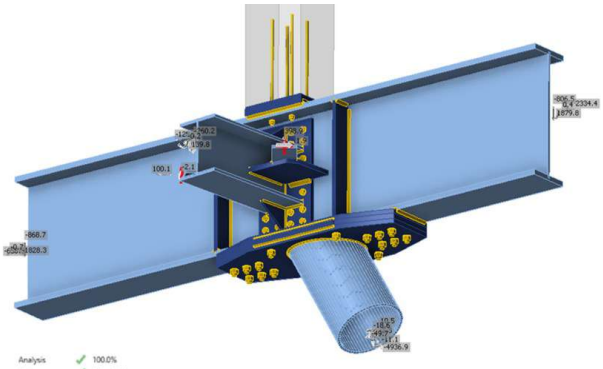
A sophisticated steel transfer structure at ground level reconciles differing structural grids between the upper office levels and the laboratory floors below. This unlocks architectural freedom without compromising stability. The introduction of inclined steel columns further enhances spatial fluidity while serving precise load-transfer functions through reinforced-concrete corbels and carefully engineered interfaces. The result is a structure that is functional, expressive, and future-ready.

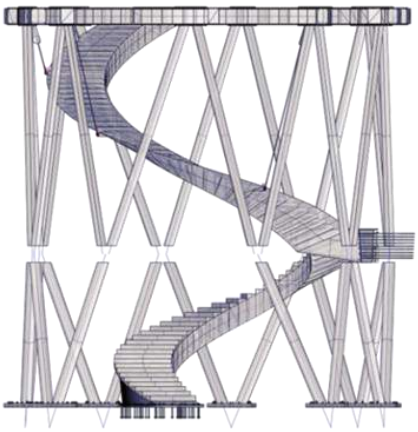


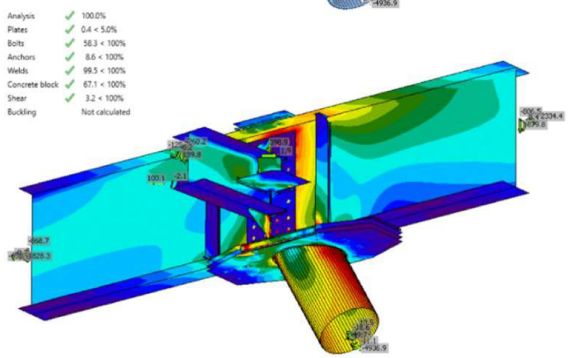











Analysis 100.0%
Plates 0.4 < 5.0%
Bolts 58.3 < 100%
Anchors 8.6 < 100%
Welds 99.5 < 100%
Concrete block 67.1 < 100%
Shear 3.2 < 100%
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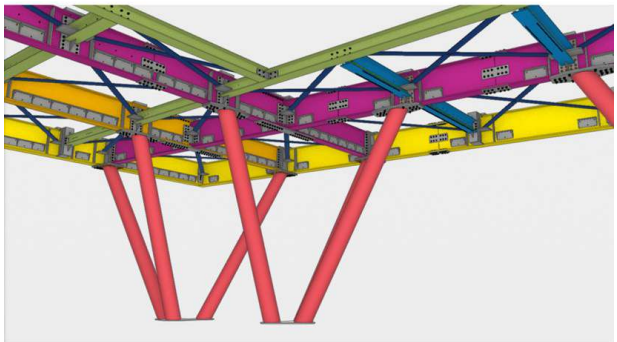
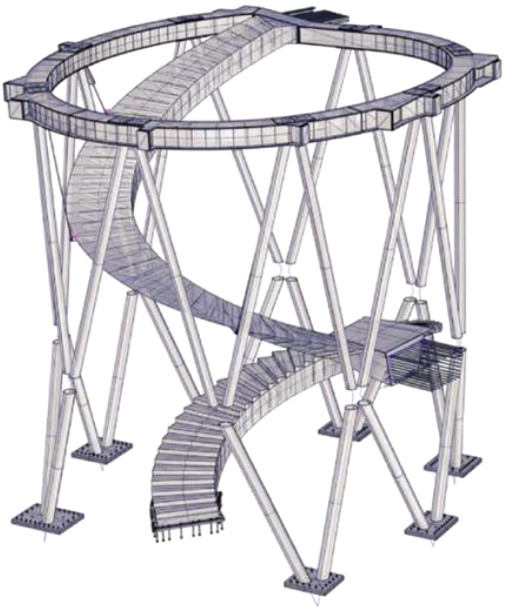




Digital Precision and Bespoke Connection Engineering

Innovation at the SLC extends beyond physical form and into the digital methodologies that underpin it. The engineering team adopted an integrated three-dimensional modelling workflow, aligning global structural analysis with fabrication-grade detailing. Because no two diagrid or transfer-structure nodes were geometrically identical, each was individually modelled and verified through finite element analysis to ensure constructability and longevity.

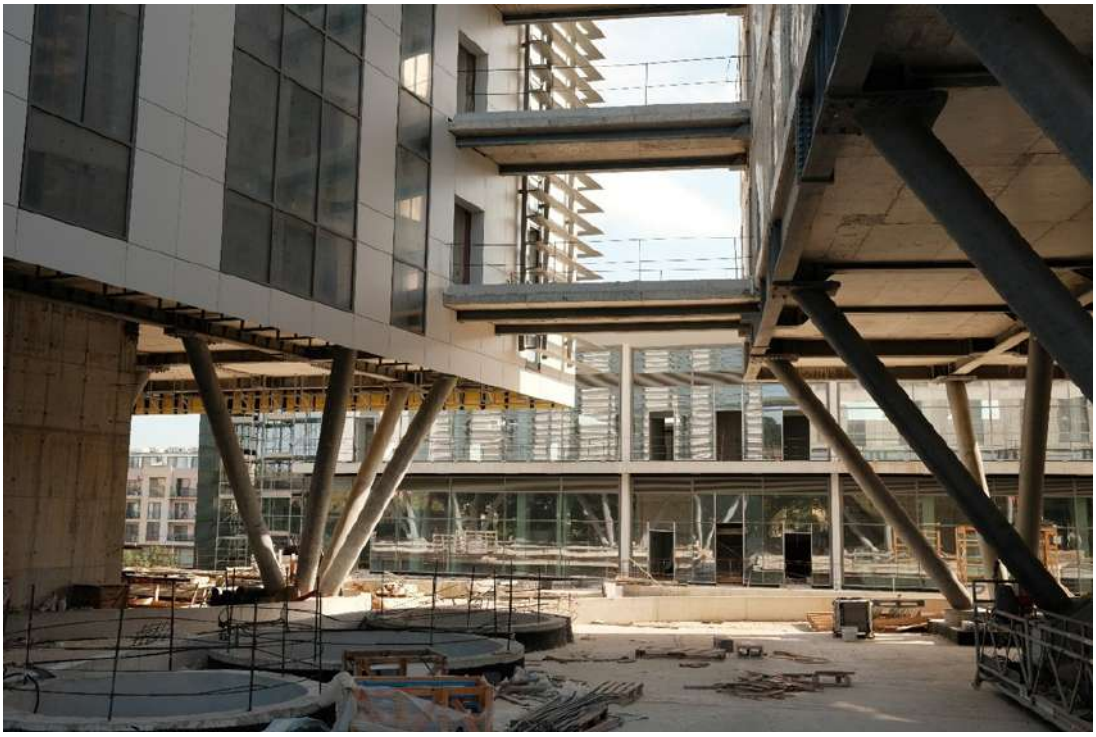
This digital precision allowed complexity to become a celebrated architectural feature. The monumental staircase — supported from above through a dynamically relaxed diagrid — demonstrates how computational methods can produce forms that are both materially efficient and visually compelling.

Sustainability as Engineering Practice, Not Add-On

Sustainability is embedded in the SLC's engineering DNA. The building functions as a live testbed for ground-source heat pumps, greywater recycling, energy monitoring, and circular resource strategies. Complementing this are advanced laboratories dedicated to structural testing, aerodynamics, maritime research, and flight simulation, positioning the complex as a national hub for innovation and applied research. Through these features, the SLC becomes more than a building: it becomes an infrastructure for knowledge, resilience, and future technological growth.

Impact on the Maltese Built Environment

The SLC raises expectations for how large public buildings can perform — technically, environmentally, and socially. It demonstrates that engineering innovation can coexist with architectural clarity and that research-oriented facilities can achieve civic presence. Its interdisciplinary nature advances Malta's capability in aviation, maritime technology, resource-efficient design, and higher education infrastructure. More broadly, it signals that engineering excellence is essential to national resilience: from energy systems to academic institutions and the long-term performance of the built environment.



A Broader Message for the Profession

The project illustrates how structural and civil engineering can actively shape architectural and urban form, rather than serve merely as technical support. It shows that engineering innovation provides answers to some of the most pressing questions of contemporary cities — density, adaptive reuse, sustainability, mobility, and civic infrastructure. Through thoughtful structural design, engineering becomes a cultural force, influencing not just how places are built but how they feel, perform, and endure.

Why the Premju Galizia Matters: Contributions to the Built Environment and the Profession

The Premju Galizia reinforces a much-needed cultural shift toward quality in Malta's built environment, highlighting work that prioritises long-term performance, structural integrity, and environmental responsibility over procedural compliance. By celebrating projects where architectural vision and engineering innovation are developed through genuine interdisciplinary collaboration, the awards underline the equal importance of spatial design, structural intelligence, material craft, and sustainability. They also play a formative role for younger practitioners, offering role models whose work demonstrates that excellence is a synthesis of creativity, precision, and civic responsibility. At the same time, the awards elevate public understanding of what considered design can achieve, influencing nation-

al conversations about planning and development through tangible examples of responsible and thoughtful practice. In doing so, they broaden appreciation of engineering as a driver of societal progress and affirm its indispensable role in shaping a resilient, forward-looking built environment.

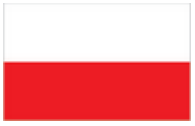
Conclusion: Legacy as a Continuing Commitment

The *Premju Emanuele Luigi Galizia* is more than a celebration of exemplary projects — it is a reaffirmation of the profession's collective direction and its responsibility toward Malta's future. The theme of **"Legacy"** challenges architects, civil engineers, and structural engineers to recognise how today's decisions will shape the built environment for generations.

This year's edition resonates strongly with a wider European understanding: that architecture and engineering are inseparable disciplines, working together to create environments that are resilient, humane, and prepared for emerging challenges. The diversity of recognised projects — spanning adaptive reuse, emerging practice, civic leadership, and technical excellence — illustrates what becomes possible when design quality and societal value are treated as inseparable aims.

In honouring these achievements, the awards carry forward the spirit of E. L. Galizia, reaffirming the profession's commitment to building thoughtfully, responsibly, and with a legacy mindset that extends well beyond the life of any single project.

Jeanette Muñoz Abela
Chair of Permanent Committee on Engineering
Kamra Tal-Periti, Malta



Poland

Elections at the Polish Chamber of Civil Engineers (PCCE)

The Polish Chamber of Civil Engineers has begun its election period. The current term of office ends next year. Elections are currently underway in individual provinces to select delegates for regional conventions, which in April will entrust the leadership of the professional self-government of civil engineers for the next four years. The National Convention will be held in Warsaw in June next year.

Podcasts – expert knowledge for civil engineers

The Polish Chamber of Civil Engineers focuses on effective communication, which is why it is gradually developing training channels, and podcasts are one of the most convenient ways to deliver professional knowledge. We know how valuable time is today – this format allows access to substantive content at any time: on a construction site, in the office or while travelling. The podcasts are prepared in cooperation with the PCCE Publishing House and are a practical source of information and inspiration. All episodes to date are available on the chamber's website.

Building Creator 2025

The year 2025 brings a special, 15th edition of the Construction Creator of the Year project, organised by the Polish Chamber of Civil Engineers Publishing House.

Although it has been accompanied by a gala ceremony for years, this year we decided to change the formula and get closer to the winners themselves. Instead of one meeting in one place, we set off on a journey. We visit companies to present the Construction Creator of the Year 2025 certificates in the spaces where real achievements are made.

This change is not just an organisational gesture. It is a symbolic nod to the individuals and teams who build the value of Polish construction on a daily basis. Each of the winners operates in a different environment, creates different solutions and faces different challenges.

Presenting the certificates in the winners' natural environment not only allows us to appreciate their achievements, but also to show what their work looks like 'from the inside' – where innovations, investments and decisions are transformed into concrete results.

The Construction Creator of the Year is not just an ordinary certificate. It is a prestigious title that confirms that a given company, person, product or investment stands out from the rest of the industry – that it sets the direction for change, shapes quality standards and is an example of entrepreneurship, responsibility and creativity. The winners include recognised brands that have been shaping the market for years and consistently strengthening their position in the sector.

The awards are also of great importance within companies – they confirm that the efforts of employees have real value and are recognised publicly. This builds team pride, strengthens motivation and attracts new specialists who want to be part of an organisation with a proven reputation.

The title of Construction Creator of the Year is also a powerful image-building tool. The winners become part of a broad promotional campaign including, among others, the monthly magazine "Inżynier Budownictwa" – Civil Engineer- (almost 120,000 e-subscriptions per month and 70,000 copies of the printed edition per year), the building creator and the PCCE websites, industry portals and active social media channels. Presentations of this year's winners will be published in "Inżynier Budownictwa" No. 12/2025, reaching a wide engineering community throughout Poland. In individual categories (Person and Company, and Product or Construction Investment), the following received distinctions:

- Agata Czereszko, Area Sales Manager at Delab Ltd.
- Tomasz Gierczyński, President of the Management Board at Forbuild SA
- Dominik Działak, President of the Management Board at KDM Group Ltd.
- Krzysztof Pruszyński, President and owner of Pruszyński Ltd.
- Marek Mielnik, Vice-President of the board at WPIP Construction Ltd

The results of the 2025 Construction Creator of the Year project were announced on 20 November 2025. Thanks to the new formula, we have the opportunity to get to know the winners better, their everyday lives, challenges and successes. This edition is closer to the people – closer to those who create Polish construction every day.

PCCE Youth Council

The resolution establishing the Youth Council at the National Council of the Polish Chamber of Civil Engineers was adopted during the December meeting of the body. According to the provisions of the document, this advisory and consultative group includes representatives of regional chambers who, at the time of their appointment to the council, are active members of the regional chamber and are under 40 years of age. Membership in the council expires

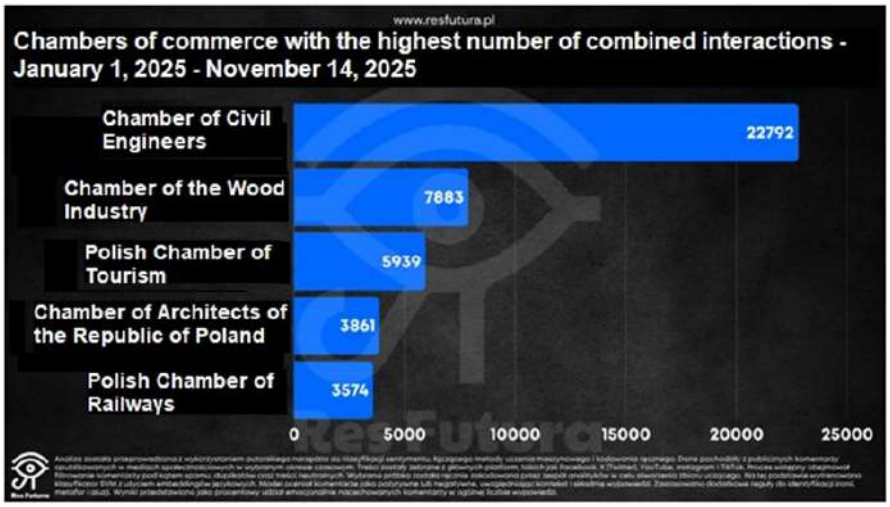
on the day the representative of the regional chamber reaches the age of 45. The first meeting of the advisory group appointed by the National Council of PCCE took place on 28 February this 2025 at the headquarters of the Polish Chamber of Civil Engineers in Warsaw. The next meeting took place on 22 May 2025 in Uniejów. The meeting preceded the National Forum of Young Engineers and brought together 24 active representatives of the young engineers community from all over Poland. The section devoted to current tasks discussed the work of thematic teams. Particular attention was paid to the activities of the social media team, which, among other things, launched the official profile of the Youth Council on LinkedIn and supports campaigns promoting the engineering profession, such as #BecomeAnEngineer and #wearebuildingyourworld. The Young Engineers Forum organisation team presented a joint presentation entitled “The image of the modern engineer – construction sector yesterday and today” and discussed the final programme of the event. The PCCE Youth Council consistently builds a space for dialogue between generations of engineers, proposing specific legal and systemic solutions that respond to the real challenges of the environment. The meeting in Uniejów was the best proof of this.

The Polish Chamber of Civil Engineers is a leader in digital communication

The Polish Chamber of Civil Engineers has been recognized as a leader in digital communication in the latest report, “Communication of chambers of commerce in social media in 2025,” prepared by the Res Futura portal. The analysis covered the largest chambers of commerce in Poland and identified PCCE as the organization with the best results in social media.

According to the report, PIIB took first place in three key categories:

- Largest number of interactions
- Largest community of followers
- Highest media value (Ad-Value)



Portugal

Prospects for Civil Engineering in Portugal

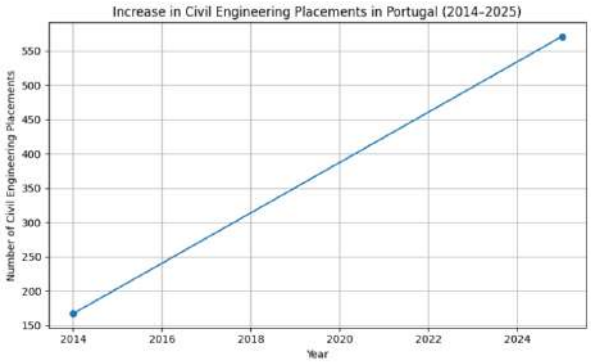
Each year, the commencement of the academic year is marked by the publication of the results of the National Competition for Access to Public Higher Education (CNAES) in Portugal. This represents a significant moment in several respects: on the one hand, it reflects the commitment that young Portuguese people are making with regard to the future they envisage; on the other, it provides an indication of the professional profiles that the country will have at its disposal to address the societal challenges it faces.

This year, 43,647 students were placed through CNAES in public higher education institutions (HEIs), representing 5,943 fewer students than in the previous year (2024/25). Of these, 8,814 new students were placed on Engineer-

ing programmes, corresponding to 20.19% of total placements - a figure marginally above the average proportion of placements on Engineering programmes over the preceding ten years (19.51%).

With regard to demand for Civil Engineering, 571 new students were placed in public HEIs during the first phase of the competition this year, from a total of 803 places offered. This figure is noteworthy, as it is the highest number of students placed in thirteen years, and because in 2014 only 167 students enrolled on Civil Engineering programmes throughout Portugal. Nevertheless, the figures for this year represent a substantial increase in demand for Civil Engineering, both in relative terms - having risen from 5.71% to 6.48% of Engineering placements - and in absolute terms, with more placements than in the previous year, notwithstanding an overall reduction exceeding 10% in total higher education placements this year. Furthermore, there has been an increase in the minimum entry grade of the last candidate placed, as well as in the number of admitted students who selected Civil Engineering as their first preference.

Said figures provide grounds for cautious optimism regarding the future, demonstrating that society continues to perceive Engineering as a profession of, and for, the future, with demand for Civil Engineering recovering from the marked decline observed during the sovereign debt crisis. However, this demand remains insufficient to meet the country's needs, nor is it adequate to ensure generational renewal, given that approximately 1,200 Civil Engineers retire each year on average. This modest growth in demand for Civil Engineering programmes is likewise insufficient to respond to the increasing demand that societal challenges in the areas of housing and infrastructure require.



Technical Site Visit to the Drainage Tunnels of the Lisbon General Drainage Plan

Ana Sofia M. Silva Louro
Board Member of the Civil Engineering Specialisation College

The Civil Engineering Specialisation College of the Portuguese Engineers Association organised a Technical Site Visit to the drainage tunnels of the Lisbon General Drainage Plan (PGDL), in Campolide, on 30 October, for a group of 20 members. A further visit is already scheduled, given the considerable interest demonstrated by College members.

The group was cordially received by the Project General Coordinator, Eng. Silva Ferreira, by Architect Rita Gomes and by Eng. Tiago Andrade Gomes, amongst other members of the extensive PGDL team. Eng. Tiago Andrade Gomes presented the suite of measures that Lisbon is implementing to protect the city from flooding and inundation associated with extreme precipitation events, thereby preparing it for future challenges. In summary, the PGDL measures are structured around **four key action areas**:

- Source control, through the construction of retention/infiltration basins and soakaway trenches;
- Inter-catchment transfer, through the construction of two tunnels with an internal diameter of 5.5 m and a total length of approximately 6 km;
- Reinforcement/rehabilitation of the larger-diameter sewerage network (foul and surface water);
- Improvement of knowledge of the Lisbon sewerage network and its operation.

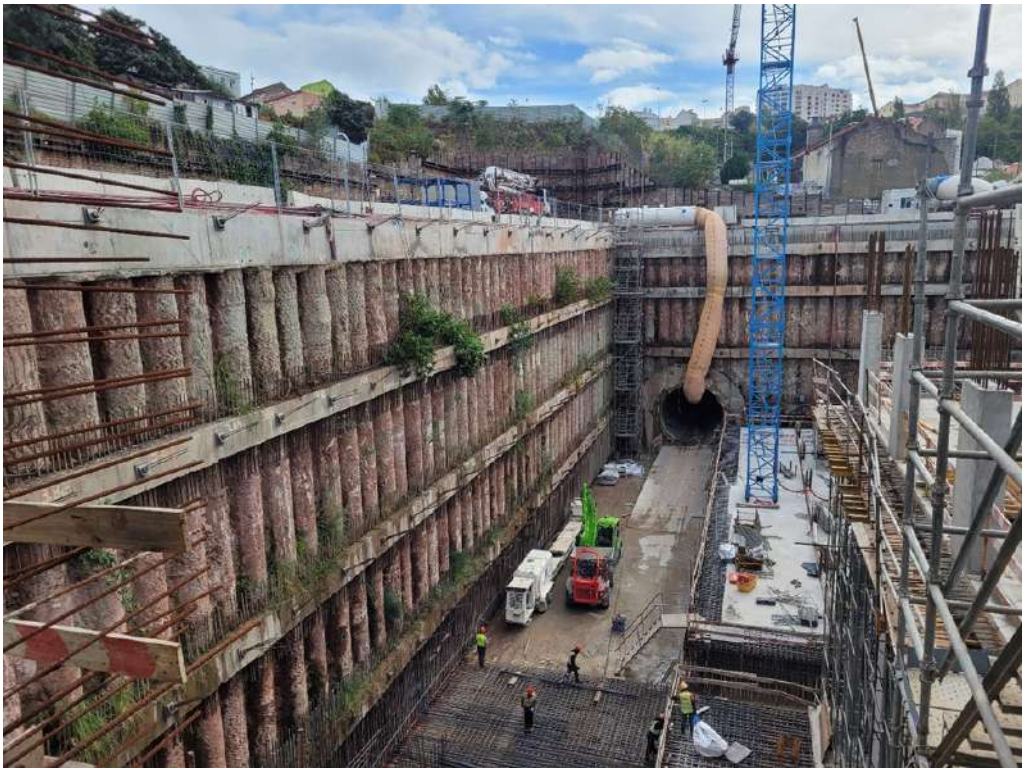
The tunnel construction will also take into consideration three **significant environmental issues**:

- Anti-pollution basins: these anti-pollution basins will **capture and store the first flush of rainwater** (the most polluted, as it carries residues deposited on the surface of pavements), subsequently conveying it to the Fábricas da Água (wastewater treatment works), having already undergone preliminary sedimentation treatment. In this way, it will be possible to **significantly increase the volumes of treated water discharged to the River Tagus, thereby minimising pollution levels.**
- Use of reclaimed water: a further advantage of **constructing these structures will be the possibility of using reclaimed water for road cleansing, irrigation and firefighting**. This will be possible because pipework will be constructed within the

tunnels to convey reclaimed water (from the Fábricas da Água to the anti-pollution basins, in the reverse direction to the drainage flow). This reclaimed water will be stored in separate tanks within the anti-pollution basins, which will in turn supply the reclaimed water standpipes to be installed throughout the city (purple-coloured structures, distinct from the existing red hydrants supplied with potable water).

- Sustainable mini-hydroelectric facility: a chamber will be constructed within the Monsanto/Campolide anti-pollution basin where, subsequently, a minimum flow of water from the Alcântara Culvert can be guaranteed and conveyed through dedicated pipework within the Culvert, which may feed a mini-hydroelectric plant, thereby contributing to a **significant reduction in electrical energy consumption at the Fábrica da Água** through this sustainable facility.

(Source: https://planodrenagem.lisboa.pt/sobre-o-plano)



Slovenia

Gorazd Humar – New Distinguished Member of the Slovenian Chamber of Engineers

On 17 November, Ljubljana hosted the Chamber Day, the central engineering event of the year, during which the Slovenian Chamber of Engineers presented its highest professional awards. Among the recipients was chartered engineer **Gorazd Humar**, former President of ECCE, who received the title **Distinguished Member of IZS**.

Humar is regarded as one of the prominent figures of Slovenian civil engineering. His professional career has been marked by the management of demanding infrastructure projects both in Slovenia and abroad, while his contribution to researching and preserving engineering heritage is even more remarkable. His more than forty-year publishing opus includes eight key monographs on bridges and

On the left, the President of the Civil Engineering Section of IZS Andrej Pogačnik; in the middle, Gorazd Humar; on the right, the President of IZS mag. Črtomir Remec.

tunnels in Slovenia. As an editor and initiator of international publications within ECCE, he has also significantly contributed to the recognition of European civil engineering heritage. This year, he prepared the Slovenian section of the international exhibition on the bridges of the Soča River.

Bridges on the river Soča – Building Connections for the Future

Alongside the European Capital of Culture Nova Gorica–Gorizia 2025, the international conference “Bridges on the reiver Soča: Rethinking Contemporary Bridge Design” organized by Ordine degli ingegneri della provincia di Gorizia in cooperation with the Slovenian Chamber of Engineers (IZS) gathered engineers, architects and experts to reflect on bridges as technical achievements and enduring symbols of connection. Supported by the Slovenian Chamber of Engineers, the event highlighted engineering’s cultural and social impact. Chamber President mag. Črtomir Remec noted: “Bridges are among the strongest symbols of connection – not only in space, but also between nations, cultures and knowledge.”

More:
V Gorici je 19.9.2025 potekal mednarodni kongres o mostovih na Soči - IZS

O razumevanju mostov na Soči in gradnji mostov prihodnosti, teh večnih simbolov povezovanja - RTV SLO.

Railway Line Divača - Koper: The Largest Infrastructure Project in Slovenia

Marko Brezigar, Director of the company 2TDK
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Introduction

The 27-kilometer-long railway line is being built as a single-track line with provisions for future double-tracking. It is a tunnel line, as 75% of the route between Divača and Koper runs underground. Only with tunnel construction is it possible to overcome the 430-meter difference in altitude between Divača and Koper over such a short distance. Slovenia has only 43 kilometers of coastline and only one cargo port, which makes a good rail connection from the coastal part of the country to the interior all the more important.

General information

Client:	*2TDK, Družba za razvoj projektov d.o.o.*
Construction contractor:	consortium of Kolektor CPG in cooperation with the Turkish companies Yapi Merkezi and Özaltin
Railway contractor:	consortium of SŽ-ŽGP in cooperation with Kolektor IGIN, GH Holding and Yapi Merkezi Construction

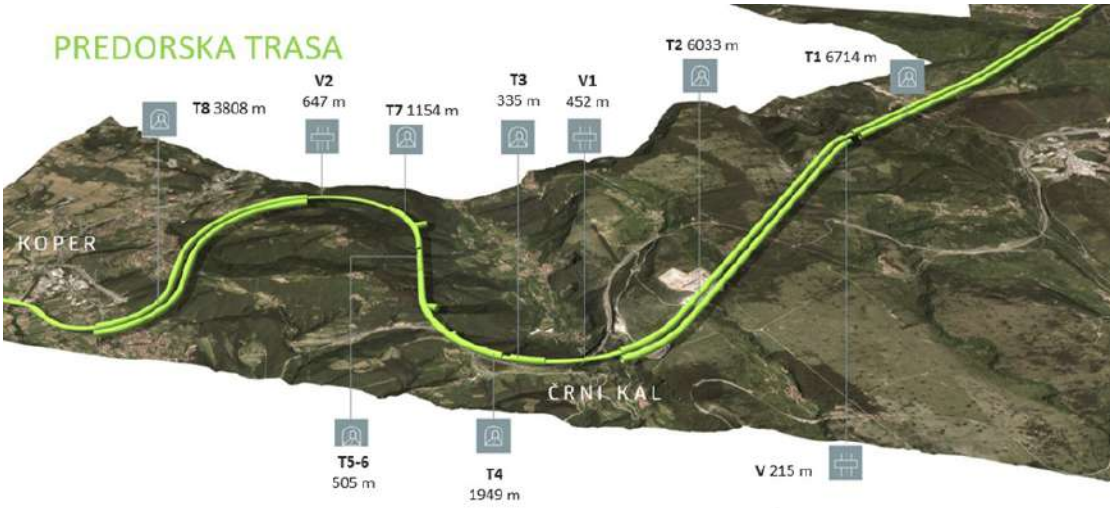

Figure 1: Map of the track between Divača and Koper

Main characteristics of the railway line

The Divača–Koper section of the line is part of the trans-European transport network. Three core network corridors run through Slovenia, of which the Divača–Koper line is an integral part, the Baltic-Adriatic Corridor, the Mediterranean Corridor, and the Western Balkan-Eastern Mediterranean Corridor.

The line under construction runs through seven tunnels and over three viaducts. Although the route between Divača and Koper is only 27.1 kilometers long, 37 kilometers of tunnels need to be built, as service tunnels are also being built alongside the three longest tunnels. This is more kilometers of tunnels than have been built on the entire motorway network in independent Slovenia.

History of the existing railway line

The railway line is being built primarily because of the role of the international cargo port of Koper in connecting the Slovenian and European hinterland economies with overseas countries. Koper is the only port in Slovenia, and the new railway line will replace the railway line currently in use, which was built in 1967. Single-track railway line no longer meets today's needs, since July 2018 has also been officially saturated, with traffic running increasingly slowly and with delays.

The main advantages of the line under construction compared to the existing one are: a reduction in the railway distance on the Divača–Koper section from 44.6 km to 27.1 km, an increase in throughput capacity from the current 94 trains/day to 212 trains/day, a reduction in travel time on the Divača–Koper section from 100–110 minutes to 30 minutes, and an increase in the maximum possible speed of trains on the section from 65–75 km/h to 160 km/h.

Figure 2: Existing railway line

Figure 3: Map of the track between Divača and Koper: existing line (green line), line under construction (orange line)

Start of construction

The connection between Divača and Koper began in 2019 with the construction of access roads. The contract for the main construction work on the project was signed in 2021, with the main construction work being carried out by the consortium: Kolektor CPG in cooperation with the Turkish companies Yapi Merkezi and Özaltin.

Tunnel construction

Excavation work began in September 2021, and all 37 kilometers of tunnels were excavated by June 2024. A particularly important milestone was the breakthrough of the longest tunnel in Slovenia, the Lokev Tunnel (T1), which measures 6,714 meters. For 120 years, the longest tunnel was the Bohinj Tunnel, measuring 6,327 meters, but now it is the tunnel on the Divača–Koper second track route.

Even before construction began, it was expected that around 100 smaller and 10 larger karst phenomena would be discovered, and in the end, 94 were discovered. Each karst phenomenon is explored, measured, and documented. Most of the karst caves discovered measured around thirty to forty meters, but some were longer or deeper. The route of the second track does not change regardless of the size of the karst phenomenon; a way must be found to bypass it.

Figure 4: Karst phenomena

Geophysical surveys

The discovery of karst phenomena is not entirely left to chance, as geophysical surveys are carried out. The purpose of such surveys is to detect any karst phenomena before they are encountered during excavation. Such surveys ensure safety during the construction. However, it is never possible to predict with complete accuracy how large karst caves will be and to what extent their course will affect the tunnel tubes. Even with the most modern technology, experts were unable to predict the extent of karst phenomena, as the longest cave is 600 meters long.

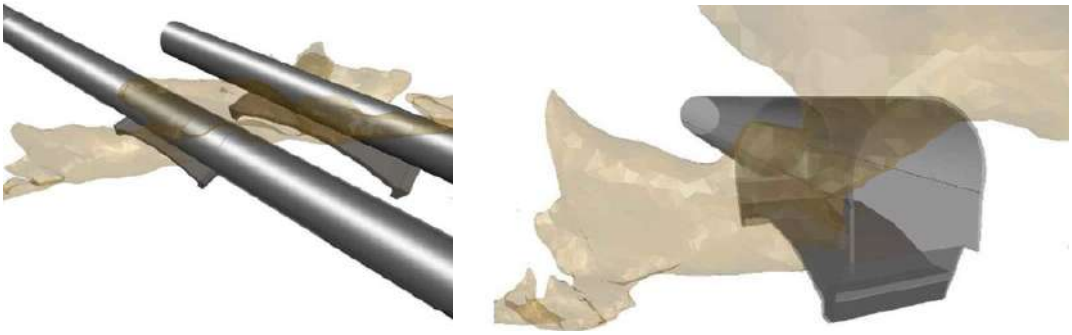

Figure 5: Graphical representation of the implementation of arch structures (bridges) under tunnel tubes

Bridges in tunnels

One of the challenges faced during construction was the construction of underground bridges. The longest karst formations had to be bridged, as the ground did not provide sufficient load-bearing capacity for the safe construction of railway infrastructure.

Figure 6: Start of construction of the bridge in the tunnel

The construction of bridge structures in six-kilometer tunnels began at the end of 2024. It was a challenging undertaking, as the conditions underground in the karst landscape are very specific. This type of construction was also unique for Slovenian experts, as no such structures had ever been built underground in Slovenia before. Even for the designers, planning underground structures was a new experience, as they had never encountered this in their professional careers in Slovenia. The longest underground bridge measured 42 meters in length, and five such large bridges had to be built, which was also a major logistical challenge. The bridges had to be carefully designed, as they are built under a tunnel tube, which they must adequately support. The solutions they found therefore had to be stable and safe in the long term, as the loads on the railway line will be enormous, with the heaviest trains from Koper to Divača weighing 2,300-2,500 gross tons. This is a unique case that goes beyond normal engineering practices and sets new milestones in underground construction.

Figure 7: Three viaducts

Three viaducts, three different construction methods

There are three viaducts on the route between Divača and Koper, named Glinščica, Gabrovica, and Vinjan. All were designed by Marjan Pipenbaher, a world-renowned designer who also designed the impressive Pelješac Bridge in Croatia. The viaducts differ greatly in terms of their structural design and construction technology. Each viaduct is structurally and architecturally adapted to its location, terrain, geology, and nature conservation requirements.

Figure 8: Three viaducts, three different construction methods

Viaduct Glinščica

The Glinščica Viaduct is designed as a closed box-shaped reinforced concrete structure. It connects the first Lokev Tunnel (T1), which at 6.7 kilometers is the longest on the second track, and the 6-kilometer-long second Beka Tunnel (T2) into a single tunnel almost 13 kilometers long. The innovative design of the viaduct allows for adequate ventilation of the Lokev and Beka tunnels and protection against derailment, wind, noise, and emissions in the protected landscape park. The viaduct is 215 meters long and was built as a monolithic concrete construction on scaffolding.

Figure 9: Viaduct Glinščica

Viaduct Gabrovica

The Gabrovica Viaduct is designed in the shape of a concrete trough that resembles the letter U. The four-meter-high side walls provide protection against derailment, noise, and wind. This is necessary because the viaduct runs under an existing motorway viaduct. Special attention was paid to the position of the fourth and fifth pillars of the Gabrovica viaduct, which are located in the area below the Črni Kal motorway viaduct, in the immediate vicinity of its pillars. The Gabrovica viaduct is 416 meters long and was built using the incremenal launch method.

Figure 10: Viaduct Gabrovica

Viaduct Vinjan

At 620 meters, the Vinjan Viaduct is the longest viaduct on the second track route. The viaduct was built using free cantilever construction technology and is designed as a valley viaduct with pillars up to 60 meters high and spans of 100 meters. The ratio of spans to pillar heights approximates the golden ratio.

Figure 11: Viaduct Vinjan

Start of railway works

Railway works began in 2024. Slovenia's rail network has generally been built on ballasted track, while such kind of track will only be installed on the open section of the route, covering 15% of the line. On 85% of the track between Divača–Koper, with a total length of 23 kilometers, will use slab track. It will be laid in all seven tunnels and on viaducts. The expected service life of a slab track is 50 to 60 years, which is longer than that of a ballasted track, which is 30 to 40 years.

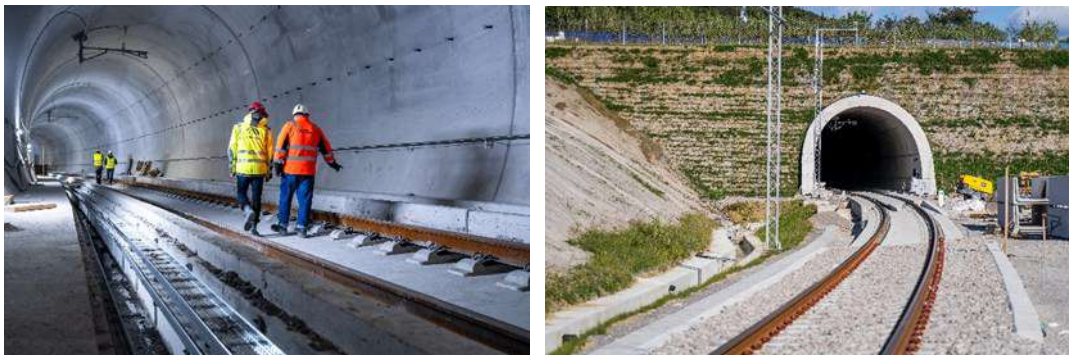

Figure 12: Railway works

Movements above the tunnel portal

Another challenge that had to be addressed was finding a solution to stop the movements. During construction, it was discovered that the entire hill above the first tunnel had begun to slide. Some measures to stabilize the terrain have already been implemented, such as piling and reinforcing the area with geotechnical anchors, while measurements are also being taken throughout to monitor the landslide movements and determine the amount of water in the landslide. Six wells will soon be constructed, ranging from 28 to 36 meters deep, with diameters between 6.9 and 8.5 meters.

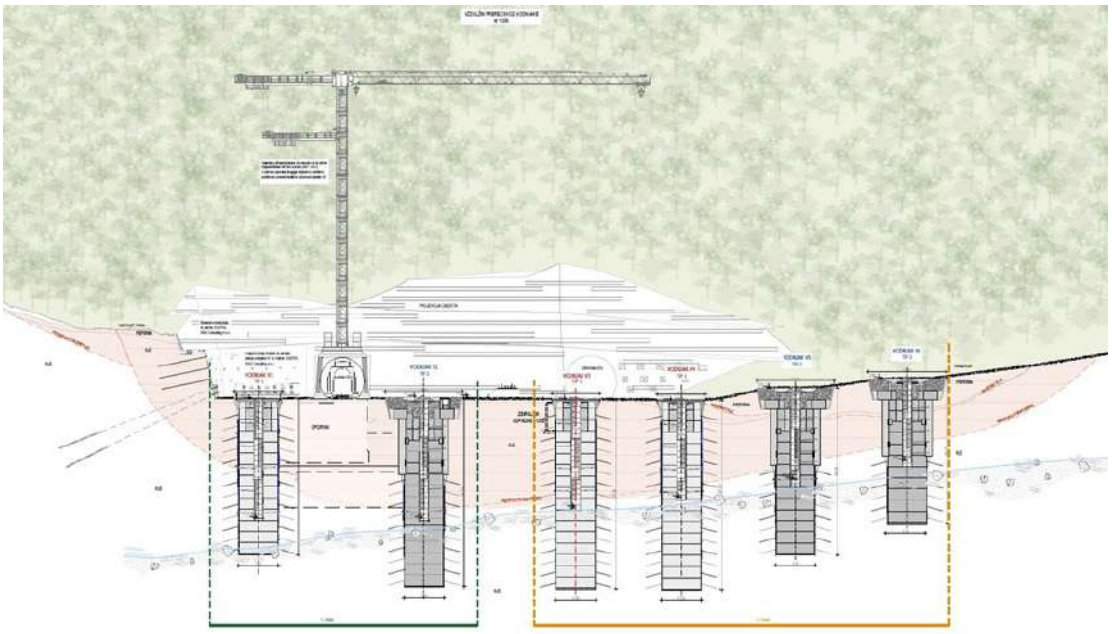

Figure 13: Six wells will need to be built to stabilize the slope

Completion of construction in 2026

The construction of the railway line between Divača and Koper is currently the largest infrastructure project involving tunnel construction in Slovenia and the largest railway infrastructure project in independent Slovenia. All work will be completed in September 2026, and the railway line is expected to start operating at the end of the same year.

Despite numerous challenges and several years of construction, the project has remained within the financial limits set at the outset. As the longest tunnels on the route are double-track, which means that there is a service tunnel alongside the main tunnel with the same profile as the main tunnel, more than 60% of the line is already structurally ready for future double-track operation. In 2024, a law was passed that also provides for the construction of a parallel left track, so the full dual-track line should be completed in 2030.

Figure 14: Full dual-track line should be completed in 2030

The most important thing now is to apply the knowledge gained from our project to the upgrading of railway lines on other key corridors in Slovenia and to the construction of tunnels and viaducts across the country.

Türkiye

10th Geotechnical Conference

The 10th Geotechnical Symposium, organized on behalf of The Chamber of Civil Engineers of Türkiye (https://www.imo.org.tr/), by its Ankara, Kocaeli, and Sakarya Branches in cooperation with the Turkish Society for Soil Mechanics and Geotechnical Engineering (ZMGM), was held on 7–8 November 2025 in Kocaeli. During the two-day symposium, a total of 87 papers were presented across 17 sessions in 3 parallel halls. The symposium covered a wide range of topics including soil properties and laboratory testing, ground improvement technologies, deep excavations and monitoring technologies, pile foundations and pile integrity testing, and geotechnical earthquake engineering. In addition, two invited lectures were delivered as part of the symposium program.

Our first invited speaker was Prof. Dr. Kubilay Keleşoğlu, a faculty member of the Department of Civil Engineering at Istanbul University–Cerrahpaşa. Prof. Keleşoğlu delivered a presentation titled “Excavation Support Systems Regulation (2022) in Türkiye: Past Practices, Current Situation, and Key Revisions.” The second invited speaker was Assoc. Prof. Dr. Nejan Huvaj from the Department of Civil Engineering at Middle East Technical University (METU). Dr. Huvaj gave a talk titled “From Offshore Wind Turbines to Oil Platforms and Pipelines: Offshore Geotechnical Engineering.” Video recordings of both invited lectures are available on the İMO Continuing Education Center Portal (https://imosem.imo.org.tr/).

All information related to the symposium can be accessed at https://www.geoteknik.org/.

10th Geotechnical Conference

Prof. Dr. M. Kubilay KELEŞOĞLU during his presentation

Assoc. Prof. Dr. Nejan HUVAJ during her presentation

The National Code on Excavation Support Systems (2022): A New Era in Practice and Evolving Paradigms in Türkiye

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Abstract

Deep excavation practices in Türkiye have undergone a profound transformation from the 1970s to the present, driven by advancements in machinery, computational methods, and legislative frameworks. This study examines the “paradigm shift” in geotechnical design and execution processes within the scope of the **Code on Excavation Support Systems (KDYY- 2022)** and the accompanying **Design Handbook**, which were enacted in 2022. Beyond theoretical calculation methodologies (Limit Equilibrium and Finite Element Analysis), the Code critically covers not only the newly introduced concept of the "Responsible Geotechnical Engineer" but also, design supervision mechanisms, mandatory instrumentation requirements, and specifically, the latent hazards posed by suspended excavation sites and etc. Validated by forensic case studies among Istanbul, this paper suggests that deep excavations should not be conceptualized as "fail or safe" static entities, but rather as dynamic systems necessitating the "Observational Method" (design, monitor and revise) throughout their service life.

Keywords: *Code on Excavation Support Systems, Responsible Geotechnical Engineer, Deep Excavation, Instrumentation and Monitoring, Suspended Excavations.*

1. Introduction and Historical Evolution

Deep excavation applications in Türkiye have evolved from shallow operations executed via tripod and mechanical winch rigs prior to the 1970s, to complex retaining systems engineered with state-of-the-art hydraulic machinery and sophisticated numerical modeling (FEM/FDM) in the contemporary era.

The design trajectory, which commenced with manual calculations and fundamental Limit Equilibrium Methods (LEM) in the 1990s, acquired a deformation-based dimension with the proliferation of Finite Element Methods (e.g., Plaxis, RS, FLAC) in the 2000s. However, despite this surge in technical capability, the persistence of catastrophic failures in the field has revealed that the challenge is not merely computational but fundamentally rooted in "process management and supervision."

2. Novel Approaches Introduced by the New Code

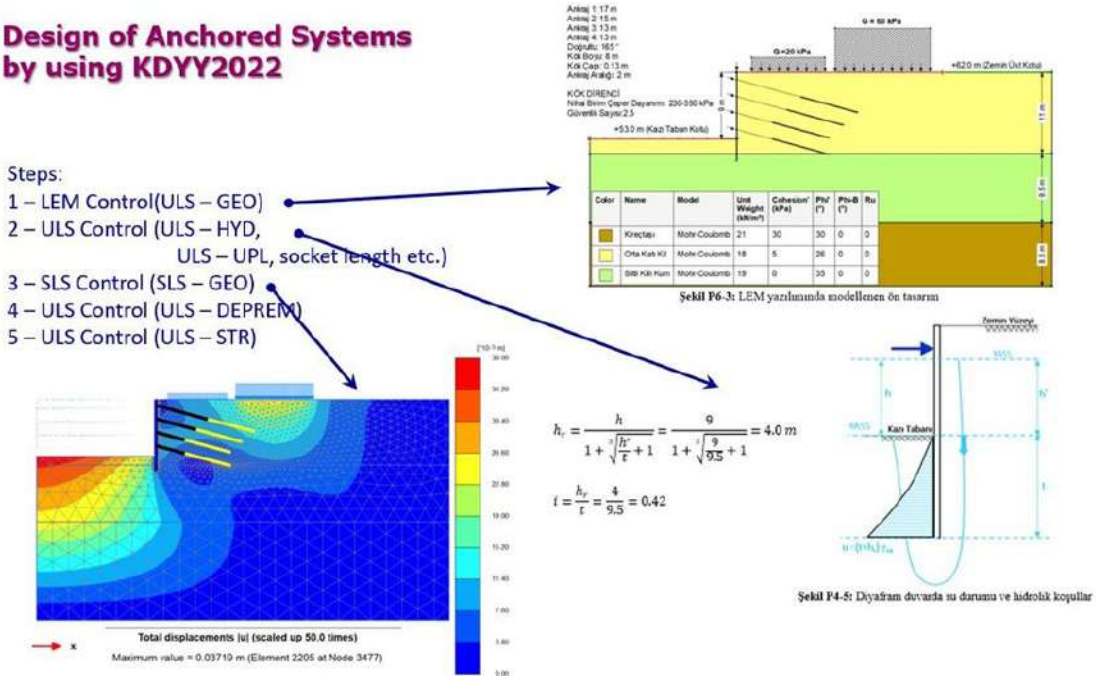
KDYY-2022 reconceptualizes deep excavation projects not merely as static structural problems but as comprehensive process management challenges. This transformation is operationalized through three fundamental pillars: the definition/redefinition of engineering responsibility, the adoption of a rigorous design philosophy, and a risk-based categorization of excavation sites.

2.1. The Responsible Geotechnical Engineer and Qualification Criteria

The Code aims to eradicate the era of "nominal supervision" (rubber-stamping) and initiate a period of competent engineering, characterized by professionals capable of interpreting in- situ soil and structure behavior.

2.2. Design Philosophy: ULS and SLS Verification

It is now mandatory to conduct independent verifications for Ultimate Limit State (ULS) and Serviceability Limit State (SLS). Particularly in anchored systems, a sequential analytical hierarchy is prescribed: global stability via LEM (ULS-GEO), hydraulic failure verification (ULS- HYD/UPL), and deformation analysis (SLS-GEO) and etc.



Şekil P6-3: LEM yazılımında modellenen ön tasarım

Şekil P4-5: Diyafram duvarda su durumu ve hidrolik koşullar

2.3. Excavation Categories and Competence Requirements

KDYY-2022 stratifies excavations into three risk-based categories:

- **Category-1 (Low Risk):** H < 7m, absence of groundwater and adjacent structures.
- **Category-2 (Moderate Risk):** 7m < H < 25m, presence of groundwater and interaction with adjacent structures.
- **Category-3 (High Risk):** H > 25m or presence of soft soil deposits. The Responsible Geotechnical Engineer assigned to this category must possess a minimum of 8 years of professional experience and a portfolio exceeding 20,000 m².

3. Site Constraints, Risks, and Mitigation Strategies

The efficacy of the Code is contingent upon the alignment of theoretical design with site realities. However, forensic analysis of recent failures highlights systemic vulnerabilities in the application and execution integrity in the site, the management of suspended works in urban areas, and emergency intervention protocols for problematic filed cases.

3.1. Critical Execution Errors and Forensic Analysis

Forensic analysis of failure cases highlights that application deficiencies frequently transcend design variables as the predominant failure mechanisms. Among the prevailing errors is the maladaptation of structural systems, encompassing both vertical retention elements (e.g., shotcrete, piles, diaphragm walls) and horizontal supports (e.g., anchors, nails). Additionally, the implementation of proscribed practices—specifically the utilization of water flush in lieu of cement grout within cohesive/cohesionless layers—and mechanical incompatibilities, such as the geometric mismatch at the anchor wedge-head interface, pose critical threats to the structural viability of the system.


3.2. Management of Suspended Excavations and the "Temporal" Factor

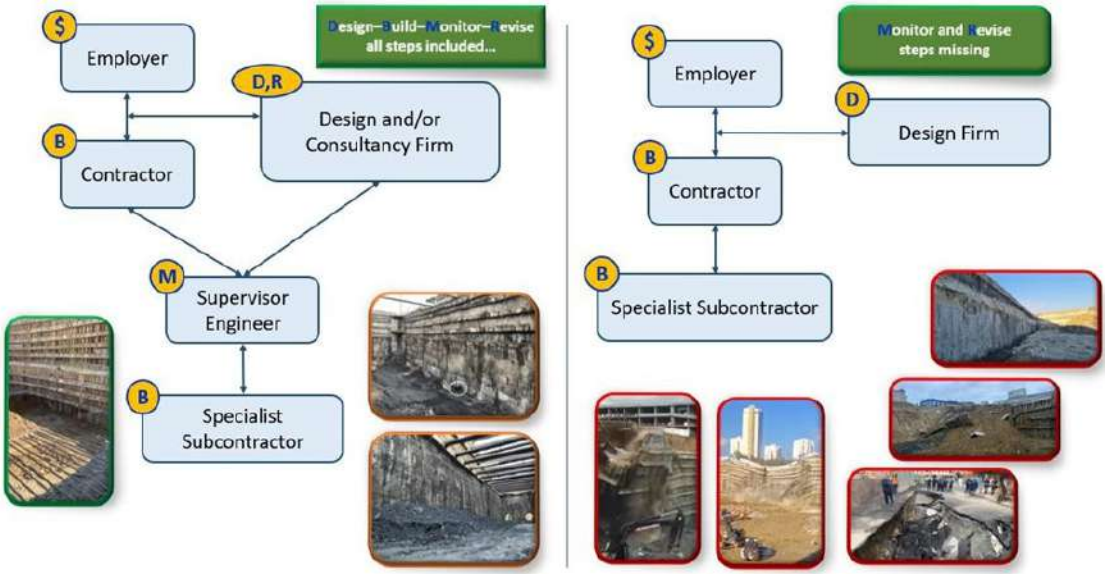
Construction sites suspended due to economic or legal disputes represent geotechnical "ticking time bombs." Among three cases in Istanbul, it was determined that 20-30% of ground anchors in systems installed eight to fifteen years ago, suffered complete functional loss due to corrosion while the remaining anchors still support some of the loads up to some extent. The Code mandates "Lift-off" tests to validate residual loads for temporary systems exceeding a 2-year service life.


3.3. Emergency Response and Intervention Protocols

"Red Alarm" protocols must be triggered immediately if monitoring data reveals displacements exceeding threshold values which is specifically defined by the Responsible Geotechnical Engineer (e.g., 0.003H).

3.4. Organizational Deficiencies: The Unsupervised Model

The absence of an "Independent Peer Review" mechanism within the direct "Employer- Contractor" relationship impedes the effective implementation of the "Design-Build-Monitor- Revise" cycle.



4. Conclusion and Recommendations

The Code on Excavation Support Systems (2022) constitutes a watershed moment for geotechnical engineering practice in Türkiye. However, the Code alone is insufficient; integration among the client, contractor, and designer must be established. Furthermore, support systems in suspended sites must not be derelict, and the Responsible Geotechnical Engineer must possess the competence to interpret field conditions beyond mere software utilization. The safety of deep excavations is an indivisible integration of accurate soil characterization, appropriate computational methods, and rigorous field supervision.

Recent Developments in Offshore Wind Energy in Türkiye

Assoc. Prof. Dr. Nejan HUVAJ
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This article presents a brief overview of recent developments in offshore wind energy for Turkiye, and it is part of the keynote talk presentation of Dr. Nejan Huvaj that was delivered at the 10th Geotechnical Symposium at the city of Kocaeli, Turkiye, on 8 November 2025.

Turkiye is still at an early stage in developing offshore wind power, but momentum seems to be building. The Government of Türkiye has set a target of 5 GW of installed capacity for offshore wind power by 2035, as announced in the Ministry of Energy's 2020-2035 National Energy Plan document (URL1). As of 2025, Turkiye does not have any offshore wind farms but there was a 2018 offshore wind farm auction in Türkiye which failed to attract any bids, perhaps because there was insufficient technical data for the proposed offshore sites. In 2023, the Ministry of Energy re-activated its offshore wind efforts: it announced candidate areas for offshore wind (near Bozcaada, Gelibolu, Karabiga and Bandırma in the northwestern part of Turkiye, see Figure 1), and started tasks aimed at collecting and analyzing data ahead of future tenders.

The most of the candidate offshore wind areas selected by the Ministry of Energy (Figure 1) are coinciding with the suitable offshore wind areas reported in separate studies such as by Caceoglu et al. (2022) as well as by the World Bank (2025) report. Caceoglu et al. (2022) presented a quantitative methodology for offshore wind power plant (OWPP) site selection in Northwest Turkey using Geographical Information Systems (GIS) and Analytical Hierarchy Process (AHP). More than 17 site selection criteria (decision criteria, exclusion criteria and buffer zones) have been considered and the relative weights of decision criteria are calculated. Some of the factors evaluated by Caceoglu et al. (2022) were wind speed at 100 m height above sea level, water depth, distance to shipping routes, distance to existing large ports, areas of commercial fishing activity, distance to environmentally protected areas, military zones, civil aviation, among others. Similarly, World Bank (2025) report identified suitable areas for offshore wind in Turkiye and highlighted that most areas with good wind resources are said to be suited for floating wind turbines rather for fixed-bottom turbines, given water depths that exceed 50 meters. Map of water depths up to 100 m in northwestern part of Turkiye can be seen in Figure 2 (Caceoglu et al. 2022). It can see seen that, up to 50 m water depth is available only in a limited area in Marmara Sea, whereas water depths greater than 50 m constitute the majority of the Marmara Sea. This might indicate that, for large scale offshore wind farms, floating wind turbines should be considered as a solution in Marmara Sea.

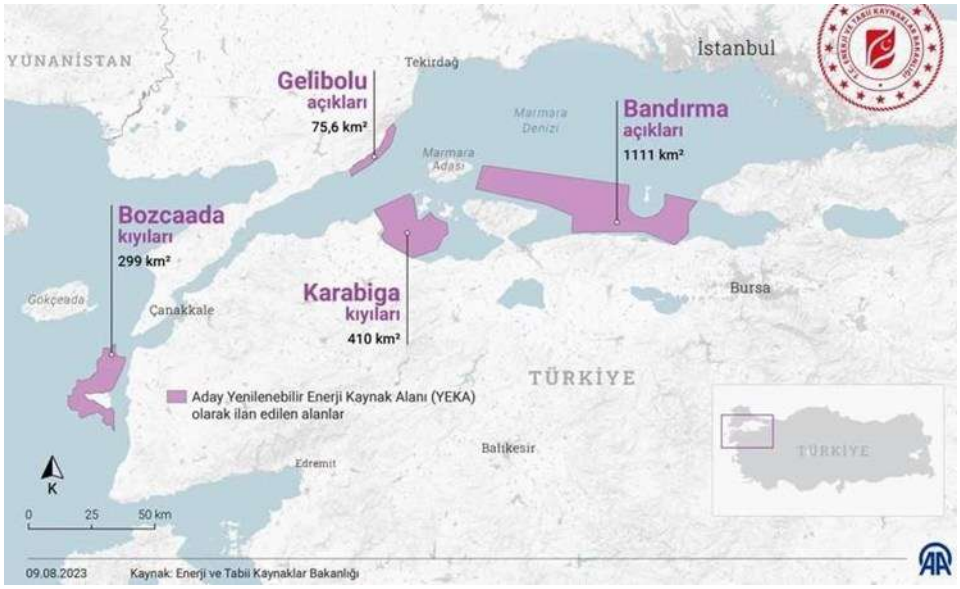

Figure 1. Candidate offshore wind sites announced by the Ministry of Energy in August 2023 (URL2).

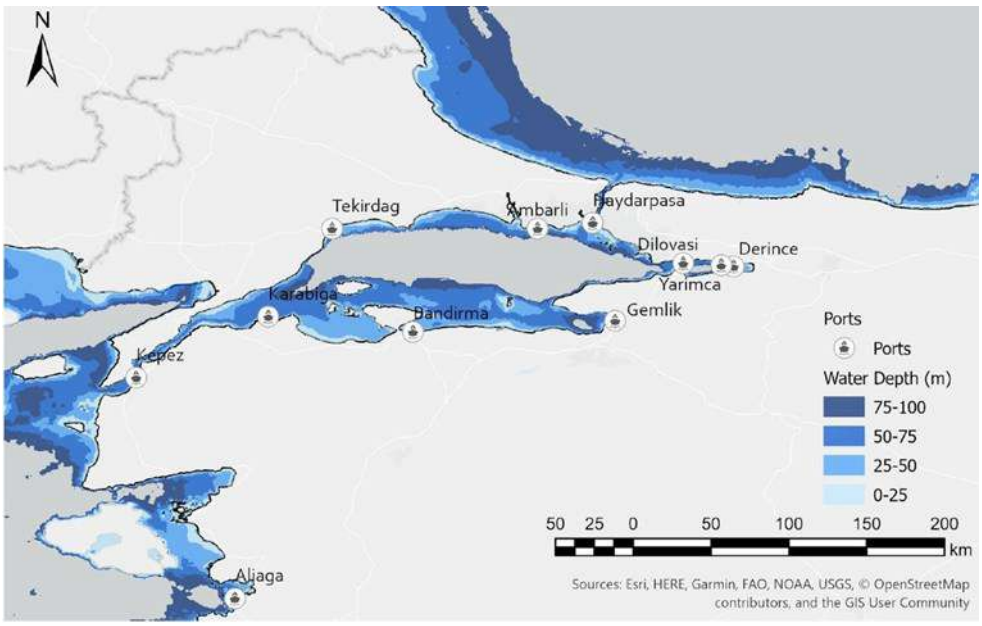

Figure 2. Ports of Northwest of Turkey and water depths in waters shallower than 100 m in Northwest Turkey (Caceoglu et al., 2022).

In May 2025 the first national event focused solely on offshore wind — Offshore Wind Türkiye 2025 — was held in city of Canakkale (URL3), bringing together investors, turbine manufacturers, shipyards, energy-sector stakeholders and policymakers to push the sector forward. Furthermore, according to a news on May 2025, meteorological and oceanographic measurements have started in Marmara Sea (URL4). The measurements are part of a project, supported by the World Bank, implemented for the Turkiye's Ministry of Energy and Natural Resources, within the scope of the IPA 2019 Energy Sector Programme. Within the scope of this project, three 126-meter-high lattice wind measurement masts are successfully installed on the Marmara coastline and two floating Lidar systems have been placed offshore in the Marmara coast for offshore wind and metocean measurements. Wind met-ocean resource measurements are planned to continue for 1 year (URL4).

Some of the main challenges and opportunities for offshore wind energy in Turkiye today, based on the current landscape can be summarized as follows.

Opportunities:
(1) **Strong wind resource:** Turkiye's seas—especially the Marmara, Aegean, and parts of the Black Sea—offer high-quality wind speeds and relatively favorable depths, giving the country multi-gigawatt offshore potential.
(2) **Strategic location & industry base:** Turkiye has an advanced onshore wind supply chain, strong shipbuilding capabilities and maritime industry, and major ports that could evolve into regional offshore wind hubs.
(3) **Government interest and targets:** National plans identifying several gigawatts of offshore capacity by 2035–2040 signal long- term political support.

Some of the challenges are:
(1) **No existing offshore projects yet:** regulatory frameworks, permitting processes, and grid-connection planning still need to mature.
(2) **Initial investment costs:** Offshore wind is capital-intensive, and Turkiye may need clearer financial incentives or risk-sharing schemes to attract large-scale foreign investors. In fact, a financial pre-assessment study was conducted by the Southern Marmara Regional Development Agency (URL5) and published in January 2023, where four different offshore wind scenarios were evaluated in Marmara Sea to provide a preliminary information: 20 MW bottom-fixed, 200 MW bottom-fixed, 1200 MW bottom-fixed, and 20 MW floating turbine systems.
(3) **Grid and maritime considerations:** Some of the best wind areas overlap with busy shipping lanes or environmentally sensitive zones, requiring careful planning and stakeholder coordination.
(4) **Technology readiness:** Floating offshore wind could unlock deeper-water sites, but this technology remains costlier and less mature globally. However, worldwide significant technological advances are being made in floating offshore wind energy at a fast pace, which seems promising for future projects in Turkiye.

In short: Turkiye has defined long-term ambitions and begun preparatory steps for offshore wind, but actual deployment is still pending, so the sector is in a "ready-to-launch" rather than "up and running" phase. Benefitting from the opportunities listed above and overcoming the challenges by long-term planning and careful stakeholder engagement can lead to successful offshore wind energy development in Turkiye.

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United Kingdom

Institution of Civil Engineers - Review of 2025 ICE activity

David Porter becomes 161st ICE President

David Porter spoke to Steph McGovern about the ICE's role in a changing world.
Image credit: Visual Eye Creative

At his inaugural address, David Porter spoke about the key to communicating with non-technical audiences. Engineers must improve how they communicate with non-technical audiences, said new ICE President David Porter at his inaugural address on 4 November 2025. “The engineering is hugely important but it’s actually the service that is provided by infrastructure that the public want to hear about,” David explained. While in conversation with TV presenter and journalist, Steph McGovern, he shared the moment he learned this lesson as a graduate engineer.

He’d been sent to a government council meeting in Northern Ireland to talk about a bridge replacement. He was prepared with all the technical details: the strength of the concrete, the size of the rebars, and so on. Instead, “they wanted to talk about how the lady up to the street couldn’t get to play bridge... because the road was going to be closed,” he said.

It became clear to him that people are interested in infrastructure because of the service that it offers.

David is the first infrastructure client to take on the role of ICE president in about a decade. He’s the chief highway engineer for Northern Ireland and previously served as chief executive of Rivers Agency, the flood defence authority for Northern Ireland.

David has not only seen the importance of good communication first-hand, but also of having the right information at the right times, in what he’s calling being an ‘informed client’. “An informed client is one that really understands the consequences of their decisions and how the current system actually works,” he said, replacing the often used term, ‘intelligent client’.

It isn't that an informed client will guarantee project success, but it will ensure that a project has a better probability of a positive outcome, he explained. It will also help clients take the difficult decisions needed to achieve objectives like net zero. Also passionate about closing the skills gap in engineering, McGovern asked David about the role the institution plays in making sure the industry is well informed.

David referred to the ICE's role as a knowledge-sharer. He pointed to the annual State of the Nation report, which assesses the lay of the land in the coming year, with input from industry professionals. The 2025 report highlighted that experts worry about the creaking state of ageing infrastructure across the UK.

But the report is one among a wide range of activities the ICE does to keep engineers not just informed**, but competent.**

McGovern brought up the rise in AI, with Porter stressing that the institution will play a part in guiding the profession in using the technology ethically.

Above all, Porter invited the audience to find their place within the ICE. He shared that, in his experience, the more you put into the institution, the more you get back. In all his years of involvement – as chair of ICE Northern Ireland, council member, trustee, and more – he didn't set out to be president.

"I would do it again," he said, even if he knew it wouldn't lead to the role of president. Addressing members at all stages in his career, he said: "There's a place for you here, in the ICE."

State of the Nation: Infrastructure in 2025

Based on extensive research and expert input from ICE members, State of the Nation has been the institution's flagship report since 2002. This annual industry assessment aims to stimulate debate and highlight actions that the ICE believes its members could take to improve the nation's infrastructure. Past reports have focused on topics such as how to meet the UN Sustainable Development Goals, improve the industry's productivity and better manage the risks of climate change.

This year's publication addresses the UK's key infrastructure problems across the transport, energy and water sectors, highlighting innovative engineering techniques and technologies that could help to solve them. It tackles several key concerns. These include: dealing with ageing transport infrastructure through honest reporting, digital technology and big data; unlocking new water resources through recycling; and addressing the net zero energy transition by exploring innovative sources of power and upgrading the grid. The solutions it proposes aren't simple fixes, but they are deliverable if the right long-term decisions are made.

The most pressing issue it reveals is that critical parts of the road network, particularly bridges, are "perhaps not as safe as the public thinks, while some structures should have usage restrictions but don't".

If the extent of the safety risks posed by these creaking assets were more widely known, "the government would have to act", according to the transport experts consulted in the making of this report.

Other News and Outputs

All that PAS: institutions begin work on a pair of new standards

The ICE and the British Standards Institution have started developing two new publicly available specification (PAS) standards. One will be on climate adaptation pathways and the other on optimising productivity in infrastructure development and delivery. They're both due to be published next year. The clear best-practice guidance that PASs provide is one of the main reasons why the ICE continues to favour them in its work to help organisations worldwide apply the expertise of its members and professional networks.

Culture club: learn the secrets of driving a digital transformation

The infrastructure sector's slow digitalisation is hindering efforts to increase productivity and may even be alienating young engineers. That was the conclusion of a roundtable recently hosted by the ICE and Bluebeam.

Decarbonisation at the double: get up to speed with the PAS 2080 standard

With some of the UK's largest infrastructure clients pledging to decarbonise projects worth £30bn, it's never been more crucial for ICE members to familiarise themselves with the PAS 2080 carbon management standard. Adopting PAS 2080 is one of the Construction Leadership Council's Five Client Carbon Commitments, which the Environment Agency, Transport for London and Scottish Water made last month – joining several other big signatories. For anyone seeking to implement PAS 2080, our guidance document offers a wealth of practical advice.

Aqueous solutions: how can the water sector fix its capacity crisis?

Water scarcity will damage the UK economy if urgent action isn't taken. That was the stark message arising from the ICE's Spring Prestige Debate, in which a panel of experts discussed the sector's resourcing problems. Discover which measures they think might enable water companies to handle inevitable increases in demand.

Money talks: how better communication can close the climate adaptation funding gap

Engineers must speak the language of financial decision-makers if they're to build the climate-adaptive infrastructure the world needs. So said Mark Crouch, decarbonisation expert at Mott MacDonald, at the inaugural session of the ICE's new Resilience Community Forum. He and Katie Momber, senior programme manager at the International Coalition for Sustainable Infrastructure (ICSI), were discussing the findings of the coalition's Engineering Climate Adaptation report, which has proposed five ways to close the funding gap that's hindering the sector's adaptation efforts.

Holistic remedies: why are engineers struggling to adopt systems thinking?

The infrastructure sector risks falling far behind the technological curve if its leaders don't embrace the systems approach. That was the warning issued by Andrew McNaughton, the Atomic Weapons Establishment's executive director of infrastructure projects delivery, at the first meeting of the ICE's new Engineering Excellence Community Forum. Other experts in attendance bemoaned a lack of data-sharing. They included the session's chair, ICE Vice President Julie Wood, who called on the engineering profession to improve "interoperability and connectedness across infrastructure".

A site better: welcome to the new and much-improved Knowledge Hub

The ICE Engineering Knowledge directorate are proud to introduce its all-new learning platform, the ICE Knowledge Hub – the culmination of several months' planning and hard work. The upgrade was informed by users who took the trouble to tell the team what enhancements would most benefit them.

As soon as potable: why we must learn to love wastewater re-use

The ICE's Spring Prestige Debate focused on a key theme of this year's State of the Nation report: the UK water sector's resourcing problems. Read our analysis of the challenge, which discusses the most urgent actions required and includes an exclusive interview with the Drinking Water Inspectorate's chief inspector, Marcus Rink.

Deeper than potholes: debating the disrepair of the UK's local road network

The fact that councils have skimped on maintaining the nation's local highways infrastructure for decades poses a growing threat to public safety. That was the key concern discussed by transport experts at the ICE's Summer Prestige Debate. With funds still falling short of what's needed to repair crumbling local roads, Helen Rowe, chair of the Association of Directors of Environment, Economy, Planning & Transport's national bridges group, advocated "a risk-based approach to investment nationally, so that needs can be prioritised".

Protective measures: the ICE's review of safety risk management explained

In June, the ICE published Building Safeguards, an extensive review of how safety risk management in civil engineering has – or hasn't – advanced in recent years. In a podcast on the ICE's new-look Knowledge Hub, the review's chair, Paul Sheffield, goes through its main findings with Mark Hansford, ICE director of engineering

knowledge. Acknowledging that the sector's response to 2017's Grenfell Tower disaster has been inadequate, Sheffield discusses the ambitious action plan that Building Safeguards has set out for the institution.

ICE Coastal Management conference 2025: the tough choices awaiting British coastal communities

Small seaboard settlements around the UK are "on the front line of the impacts of climate change". So said the ICE's President, Professor Jim Hall, in his speech at the institution's Coastal Management 2025 conference. Learn why he believes such communities are facing difficult decisions about their future.

Counter-intelligence: is job insecurity making engineers shun AI?

Infrastructure professionals have been relatively slow to adopt AI at work partly because of fears that the technology could replace them. That was just one of the theories to be aired at a recent ICE roundtable, sponsored by software firm Bluebeam, discussing factors that have hindered the sector's digital transformation.

Tidal range power: time to finally take the plunge?

Much has changed in the world since Theresa May's government vetoed plans for the UK's first tidal range power station at Swansea Bay in 2018. Geopolitical conflict, rising sea levels and a new infrastructure investment model have reawakened interest in this renewable source of electricity, according to panellists at the ICE's Autumn Prestige Debate. The event heard details about two proposed power plants – in the Severn and Mersey estuaries – and the added socioeconomic benefits that these projects could provide.

News from ECCE Partners

American Society of Civil Engineers (ASCE)

ASCE Releases the 2025 Comprehensive Assessment of America's Infrastructure

The American Society of Civil Engineers (ASCE) has published its latest national evaluation of U.S. infrastructure, the **2025 Report Card for America's Infrastructure**, offering an extensive, data-driven assessment of the country's built environment. This quadrennial report, issued since 1998, grades 18 major infrastructure categories using a familiar A–F scale and identifies priority areas for investment, policy action, and innovation.

Overall Grade Improves—but Challenges Persist

In its 2025 edition, the United States received an **overall grade of C**, marking an improvement from the C- score in 2021 and reflecting the positive impact of recent federal investments. Nearly half of the 18 assessed categories recorded higher grades, including historically underperforming sectors such as **drinking water, hazardous waste, and inland waterways**. This progress is attributed largely to the transformative funding introduced by the **Infrastructure Investment and Jobs Act (IIJA)**, enacted in 2021, which has begun to deliver visible benefits across transportation, water, energy, and broadband networks.

Despite this upward trend, the Report Card highlights that **nine categories remain in the D range**, underscoring the continued vulnerability of essential systems. Critical sectors such as **stormwater (D), transit (D), dams (D+), levees (D+), and roads (D+)**

still face aging infrastructure, substantial rehabilitation backlogs, and insufficient long-term investment.

Investment Momentum and the Remaining Gap

ASCE's analysis shows that while unprecedented federal support has slowed the growth of the nation's infrastructure deficit, a **10-year investment gap of $3.7 trillion** persists if current funding levels continue. Meeting the threshold for "state of good repair" (grade B) across all categories would require **$9.1 trillion** over the next decade, of which an estimated **$5.4 trillion** is expected to be invested.

The Report Card warns that if the United States reverts to pre-20121 investment levels, the economic consequences would be severe, including **$5 trillion in lost economic output over 20 years**, reduced exports, and hundreds of thousands of lost jobs.

Aging Infrastructure and Climate Resilience

A prominent theme of ASCE's 2025 assessment is the growing exposure of infrastructure systems to **extreme weather events and climate-related hazards**. In 2024 alone, the United States experienced **27 billion-dollar weather disasters**, costing more than $182 billion and demonstrating the escalating fragility of aging systems.

The report emphasizes that **resilience must be a central design and investment criterion**, noting that every dollar spent on resilience saves an estimated **$13 in disaster recovery costs**. ASCE calls for stronger adoption and enforcement of modern building codes, better land-use planning, robust asset management, and greater integration of nature-based solutions.

Policy, Data, and Innovation as Enablers

Beyond funding, ASCE underscores the need for **forward-looking policies** that streamline permitting, encourage innovation, and ensure that reliable data guides decision-making. Several infrastructure sectors—such as schools, broadband, levees, energy, and stormwater—still lack consistent, publicly accessible data on condition and performance, limiting their ability to optimize planning and investments.

Strengthening the engineering workforce is also highlighted as an urgent priority, as demand grows for professionals capable of designing, operating, and maintaining increasingly complex and interconnected systems.

A Call to Sustained Action

ASCE concludes that the United States is **moving in the right direction**, with clear evidence that strategic investment and policy leadership are beginning to pay off. However, continued progress depends on sustained funding, long-term planning, and a collective national commitment to modernizing the country's infrastructure. Only then can systems become resilient, future-ready, and capable of supporting a competitive and inclusive economy.

Link to the dedicated ASCE Report Card website: **https://infrastructurereportcard.org/**

Japan Society of Civil Engineers (JSCE)

JSCE International Activities Center Newsletter

We are pleased to share with you the latest edition of the Japan **Society of Civil Engineers (JSCE) International Activities Center (IAC) Newsletter, No. 147**, which offers a rich overview of JSCE's global initiatives and collaborative efforts across the international civil engineering community.

This issue presents an engaging selection of articles that reflect JSCE's longstanding commitment to international cooperation, knowledge exchange, and capacity building. Featured content includes:

- **Symposium Series on Global Leaders in Civil Engineering**, with a focus on the development of Asian cities and railway infrastructure.
- **Reports from the Asian Civil Engineering Coordinating Council (ACECC)**, highlighting recent Executive Committee Meetings and technical sessions on resilience, digital transformation, and regional collaboration.
- **Insights from the ICES Seminar** on the career paths of international engineers in Japan, emphasizing diversity, professional development, and the value of global perspectives.
- **Messages from Japan at the 10th World Water Forum**, addressing water resilience, green infrastructure, and integrated approaches to climate adaptation.

The newsletter reflects JSCE's dynamic role in supporting innovation, strengthening professional networks, and advancing civil engineering excellence on a global scale—values closely aligned with ECCE's own mission and priorities. We encourage our members to explore the full publication and draw inspiration from the initiatives and perspectives shared by our Japanese colleagues.

A link to the complete newsletter will be provided below.

JSCE International Activities Center Newsletter of November 2025: **IAC News No.147, November 2025**.

World Federation of Engineering Organizations (WFEO)

The World Federation of Engineering Organizations (WFEO) is the international organization for the engineering profession. Founded in 1968, under the auspices of UNESCO, WFEO brings together national engineering institutions from some 100 nations and represents more than 30 million engineers.

The European Council of Civil Engineers (ECCE) is an International Member of WFEO.

WFEO President Shares Visionary Inaugural Message for a Sustainable and Collaborative Engineering Future

Er. Dr. Seng-Chuan Tan
WFEO President

The World Federation of Engineering Organizations (WFEO) marked a significant moment on 17 October 2025, as **Er. Dr. Seng-Chuan Tan officially assumed the WFEO presidency during the General Assembly held in Shanghai, China.** In his inaugural message, Dr. Tan expressed deep gratitude for the trust placed in him and outlined an ambitious vision aimed at strengthening the global engineering community at a time of profound technological, environmental, and societal change.

Dr. Tan commended the esteemed leadership of his predecessors, particularly Engr Mustafa Shehu, and congratulated **Dr. K. N. Gunalan, the newly elected President-Elect**, along with the members of the Executive Council. He also extended appreciation to the China Association for Science and Technology (CAST), the Chinese Academy of Engineering, and the Shanghai Municipal People's Government for hosting the Global Engineering Congress and the WFEO 2025 General Assembly—an event he described as a new benchmark in engineering diplomacy and international collaboration.

A Six-Pillar Strategic Vision

In his message, Dr. Tan presented a clear and forward-looking agenda structured around six strategic priorities that will guide WFEO's work in the coming years:

1. **Advancing Engineering Excellence and Innovation** by promoting high standards in practice, ethics, and education, while driving innovation to address global challenges.
2. **Strengthening Global Collaboration** with member organizations, regional bodies, and international institutions to develop inclusive and scalable engineering solutions.
3. **Elevating the WFEO Academy** as a central platform for capacity building, professional development, and knowledge exchange.
4. **Developing a Long-Term Strategy and Operational Framework** to reinforce WFEO's effectiveness through transparency and strategic foresight.
5. **Achieving Financial Sustainability** to support WFEO's mission through diversified funding and strong partnerships.
6. **Recognizing Engineering Leadership and Achievement** by celebrating those who demonstrate excellence, innovation, and service to society.

Responding to Global Challenges

Dr. Tan highlighted the complex and evolving challenges confronting the engineering profession worldwide. Key issues include:

- Technological disruption driven by AI, robotics, and digitalization, demanding continuous reskilling and responsible innovation.
- Geopolitical and supply-chain volatility, calling for resilient systems and cross-border cooperation.
- Growing talent shortages in engineering, requiring stronger STEM pathways and inclusive career opportunities.
- Escalating environmental and sustainability pressures, with engineers placed at the forefront of climate adaptation and green innovation.

"These challenges," he emphasized, "are not obstacles—they are calls for action. And WFEO is ready to respond."

Looking Ahead to the World Engineering Day 2026

A major highlight of Dr. Tan's message was the announcement of **World Engineering Day 2026**, to be celebrated in **Jakarta, Indonesia, on 4 March 2026**. Central to the global celebrations will be the **World Engineering**

Day Hackathon, inviting engineering students and young professionals worldwide to collaborate on real-world solutions supporting the United Nations Sustainable Development Goals (SDGs).

Dr. Tan warmly encouraged global participation, noting the event's potential to foster creativity, connection, and purpose-driven innovation.

A Call for Unity and Collective Purpose

Closing his address, Dr. Tan reaffirmed his commitment to working closely with WFEO members, partners, and supporters to strengthen the global engineering community. With gratitude and determination, he called for a shared effort to advance engineering excellence and to ensure the profession continues to drive societal progress.

"Let us move forward together with purpose, unity, and the belief that engineering can — and must — build a better world."
— Er. Dr. Seng-Chuan Tan, President of WFEO

ECCE congratulates President Tan on his appointment and looks forward to continued cooperation with WFEO in promoting engineering excellence, sustainability, and international dialogue.

WFEO 2025 General Assembly & Global Engineering Congress Concludes in Shanghai with Major Milestones for the Global Engineering Community

From **12 to 17 October 2025**, the global engineering community gathered in **Shanghai, China**, for the **World Federation of Engineering Organizations (WFEO) 2025 General Assembly and Global Engineering Congress (GEC)**. The event—co-hosted by **WFEO**, the **China Association for Science and Technology (CAST)**, the **Chinese Academy of Engineering**, and the **Shanghai Municipal People's Government**—brought together leaders, experts, and institutions from around the world to advance collaboration, share knowledge, and set strategic directions for the engineering profession.

The week-long program featured high-level sessions, elections, strategic discussions, and the signing of a forward-looking declaration focused on engineering's role in shaping a sustainable future.

Key Decisions and Elections

A central highlight of the General Assembly was the election of new leadership positions within WFEO:

WFEO President-Elect

- **Mr. K. N. Gunalan**, nominated by the Engineering Societies of America and member of the American Society of Civil Engineers (ASCE), was elected President-Elect. He will serve as **WFEO President for the 2027–2029 term**.

Executive Vice President

- **Mr. Firas Bou Diab**, nominated by the Federation of Lebanese Engineers, was elected for a **four-year term (2025–2029)**.

National Member Representatives (2025–2029)
The following representatives were elected to the Executive Council:

- **Mr. Marco Vinicio Vargas** (Costa Rica)
- **Mr. Daniel Hanus** (Czech Republic)
- **Mr. Yonas Ayalew Tessema** (Ethiopia)
- **Mr. Nick Zygouris** (Greece)
- **Mr. Heru Dewanto** (Indonesia)
- **Mr. Fernando de Almeida Santos** (Portugal)

International Member Representative

- **Mr. Oscar Sanchez** (World Council of Civil Engineers – WCCE) was elected as the International Member representative.

New Appointments in Standing Committees and Working Groups
The General Assembly approved new hosts and chairs for WFEO's technical bodies:

- **Standing Technical Committee on Disaster Risk Management**
  Host: Swiss Society of Engineers and Architects
  Chair: Mr. Federico Ferrario

- **Working Group on System Engineering**
  Host: INCOSE
  Chair: Ms. Garima Bhatia

Membership Approvals

WFEO welcomed several new members across different categories:

National Members

- The Korean Professional Engineers Association
- The Institution of Engineers Somalia
- The Council of Engineers Thailand

Affiliated Member

- The Zimbabwe Institution of Engineers

International Members

- **The European Council of Civil Engineers (ECCE)**
- The Gulf Engineering Union

Associate Member

- The World Green Design Organization

This expanded membership strengthens the global reach and collaborative capacity of WFEO.

Recognition of Distinguished Fellows

The following individuals were admitted as **Distinguished Fellows** in recognition of their exceptional contributions to engineering:

- **Adil Al Hadithi**
- **Hilary Onil Obaloker**
- **Abdulla Yousef Al Ali**
- **Geng Yong**

Leadership Transition

At the close of the Assembly, WFEO President **Engr Mustafa Shehu** formally transferred leadership to **President-Elect Seng Chuan Tan**.

Dr. Tan was then ceremonially invested as **WFEO President for the 2025–2027 biennium**, marking the beginning of his tenure and strategic vision for advancing engineering excellence, international cooperation, and sustainability.

Signing of the Shanghai Declaration

A major outcome of the week was the adoption of the **Shanghai Declaration: "Taking Action: Engineering Shapes a Green Future."**

The declaration affirms WFEO's commitment to accelerating global action on sustainability, climate resilience, and the responsible application of engineering to support a greener and more equitable future.

A Forward-Looking Assembly for a Global Profession

The WFEO 2025 General Assembly and Global Engineering Congress in Shanghai marked a pivotal moment for the international engineering community. With new leadership, expanded membership, strengthened technical bodies, and a shared declaration for climate action, WFEO set a strong foundation for the years ahead.

ECCE congratulates all newly elected leaders and welcomes the opportunity for deeper cooperation through its newly approved International Member status.

Latest WFEO Flash Info

You can access the **WFEO Flash-Info #63, November 2025** at the link here [WFEO Flash-Info #63, November 2025](#).

European Council of Engineers Chambers (ECEC)

Highlights from the Latest European Council of Engineers Chambers Newsletter

The latest **ECEC newsletter** provides a snapshot of an active and productive period for European engineers, marked by important meetings, policy discussions, and cooperation initiatives across Europe.

Key highlights include **ECEC's recent General Assembly in Cyprus**, with a strong focus on digitalisation, supported by survey results and a best-practice example from Croatia. Other priority topics addressed throughout recent meetings and working sessions include the **revision of the EU Public Procurement Directive, affordable housing**, and the **Common Training Framework**, with particular emphasis on the **Luxembourg Declaration on Public Procurement**.

The newsletter also reports on ECEC's **Executive Board Meeting in Vienna**, the launch of the **new ECEC website** and introduction videos, the presentation of the **ECEC Award of Honour**, and the signing **of a Memorandum of Understanding with ISHCCO**. In addition, it features ECEC's participation in the **81st ECCE General Assembly in Split** and a rich selection of news from member organisations across Europe.

Read the full ECEC newsletter here: **link to the ECEC newsletter**

International Coaliton for Sustainable Infrastructure

International Coalition for Sustainable Infrastructure at COP30

COP30 was a milestone for ICSI, providing a platform to showcase research, tools, and partnerships while accelerating real-world implementation of climate-resilient, inclusive, and nature-positive infrastructure. We were delighted to launch the Climate-Resilient Infrastructure Report: A Focus on Gender Equality, Disability and Social Inclusion, Infrastructure Pathways 2.0, the Port Decision-Makers' Guide to Climate Risk Assessment and Chapter 4 of the Global Infrastructure Resilience Report 2025.

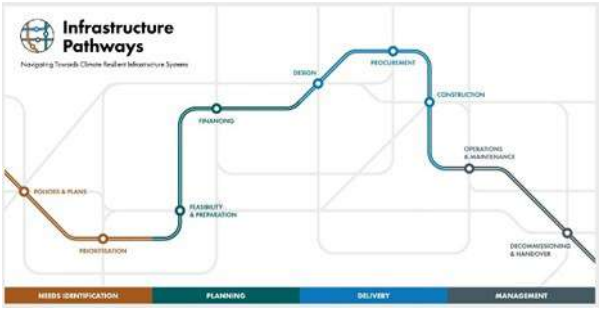
Climate-Resilient Infrastructure Report: A Focus on Gender Equality, Disability and Social Inclusion

The Climate Resilient Infrastructure Report series was first launched in May 2023 in an effort to report progress on the state of climate-resilient infrastructure and showcase best-practice case studies and initiatives from around the world. Launched at COP30, Issue 4, A Focus on Gender Equality, Disability and Social Inclusion (GEDSI), illustrates how GEDSI is critical to the development of sustainable and resilient infrastructure. It frames the need for better integration of GEDSI throughout the infrastructure lifecycle and explores disaster risk reduction and resilience for infrastructure through a GEDSI lens. The report showcases over 40 case studies that embed GEDSI principles throughout the infrastructure lifecycle, from inclusive planning and co-design with women, youth, and persons with disabilities to accessible procurement, construction practices, and GEDSI-responsive operations and maintenance.

Download the Report

Infrastructure Pathways 2.0

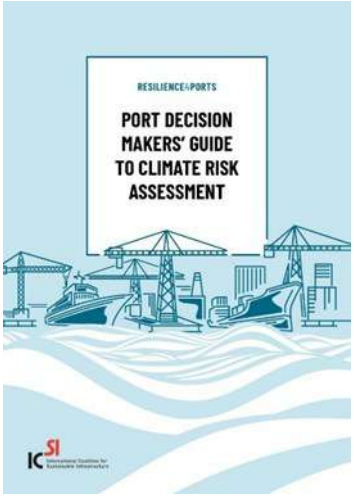
Infrastructure Pathways is a global resource that helps infrastructure practitioners, such as governments, owners, investors, designers, contractors, civil society, and users, integrate climate resilience into every phase of the infrastructure lifecycle. It translates the broad landscape of state-of-the art resilience reports and frameworks into practical actions, supported by best practices, case studies, tools, and key resources. Infrastructure Pathways 2.0 is a major upgrade featuring a clearer structure, updated references, and two additional phases, Feasibility & Preparation and Funding & Financing,



developed in partnership with Boston Consulting Group (BCG). Read more about the upgrade here.

Access Infrastructure Pathways 2.0 **here**.

Port Decision-Makers' Guide to Climate Risk Assessment



Port Decision Makers' Guide to Climate Risk Assessment (CRA) is an essential first step in helping ports understand, anticipate, and respond to the impacts of climate change. A structured CRA helps ports identify risks, prioritise adaptation measures, and ensure long-term resilience and sustainability.

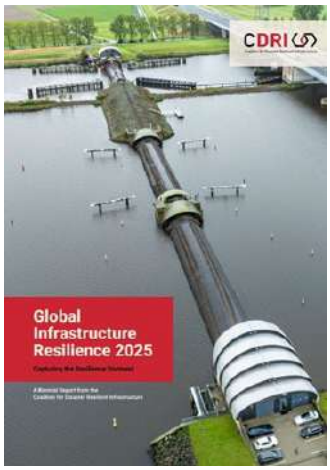
Based on published resources, this document aims to increase awareness of the scope, purpose and importance of a CRA. It provides practical, actionable insights to port decision-makers on how to effectively commission a CRA. Crucially, a well-executed CRA also serves as the essential evidence-based foundation required to access international climate finance. This approach turns a resilience necessity into a tangible investment opportunity. It also can empower ports that face challenges with lack of resources and capacity to take meaningful steps toward climate adaptation and secure finance, ultimately fostering a more equitable and robust global maritime network. This guidance will be instrumental in accelerating the uptake of CRAs in ports around the world, particularly those operating with resource and capacity constraints.

Download the guide **here**.

Global Infrastructure Resilience Report 2025

The Global Infrastructure Resilience Report 2025 (GIR2025) by the Coalition for Disaster Resilient Infrastructure (CDRI) was launched at COP30, marking a shift from defining the resilience dividend to demonstrating how it can be captured in practice. First published in 2023, this year's report shifts from awareness to action. With 60% of global infrastructure yet to be built by 2050, it presents a roadmap to embed resilience into future investments. ICSI is the lead author of Chapter 4 the GIR2025 presenting the findings from the Global Infrastructure Resilience Survey for Experts and Professionals (GIRS), the largest survey of its kind engaging with more than 3,000 infrastructure professionals across 100+ countries. One of the strongest messages from our global study is that strengthening policies, standards, codes, and regulations so they explicitly address resilience and future climate risks is the single most important action governments can take.

Download the report **here**.



Association of European Civil Engineering Faculties (AECEF)

The Association of European Civil Engineering Faculties (AECEF) aims to create conditions and links for closer cooperation of mainly European universities with Civil Engineering study programmes. It has held ten Symposia in several places around Europe and has proceedings available for the majority that address topics of interest for Civil Engineering in general and schools and faculties in particular.

AECEF News Flash – November/December 2025

1. European Construction Observatory
AECEF is a member, and a newsletter has been published. See more.

2. ISHCCO GA and Congress
ISHCCO will have its Congress in conjunction with ASPRECO in Madrid, Spain on 12Mar26 (a). The GA of ISHCCO will take place in the same city, on 13Mar26 (b). (a) See more and (b) See more.

3. EDEN Conference 26
European Digital Education Network will have next year's event in Porto, PT on 14-16Jun26. See more.

4. AI in Construction
AECEF Secretary General was invited and presented some ideas about the subject at the Ordem dos Engenheiros Tecnicos (OET), Azores Section, on 28Nov25, in PT with slides in EN. See more.

5. New European Bauhaus
AECEF is a member and NEB has published the last newsletter of the year. See more.

6. TUNE project
AECEF is an associate partner of the project TUNE, funded by the European Commission about "Nurture Future Green Leader", coordinated by the Universiti Teknologi Malaysia. New Training of Trainers seminar (#2) will be held in UNDIP, Semarang, Indonesia, 20-23Jan26. See more.

7. WFEO News
The World Federation of Engineering Organizations has published the Nov25 newsletter. See more.

8. ECCE Press release
ECCE had its 81st General Meeting with the 40thAnniversary, held from 9th to 11th October 2025 in the magnificent city of Split, Croatia. See more.

9. Pact for Skills in Construction
AECEF is a member and an invitation has been made to join a Regional Skills Partnership. See more.

10. BuildingSmart
AECEF is a member and has participated in the webinar, 25Nov25, about IDS (Information Delivery Specification) and EIR (Exchange of Information Requirements). See more.

11. ReSBE 2026
On 20-23Oct26, in Thessaloniki, Greece the ReSBE 2026 – ReShaping the Built Environment through Sustainability and Circularity will be held. See more.

12. WEEF and GEDC Recap
The World Engineering Education Forum (WEEF) 2025 held from September 21 - 25 in Daegu, South Korea. See more.

13. Circular Construction Ecology Update
ICE (Inventory of Carbon Energy) database has been updated to version 4.1. See more.

14. CREON 2026
Call for papers for the conference "Systemic Transformation in Construction: Productivity and Sustainability Leap in a Digital Age" is open until 6Jan26, in Helsinki, Finland. See more.

15. RIVER FLOW 2026
Call for papers for the conference "Welcome to River Flow 2026: Steering the future of hydro-environment research and practice", in Thessaloniki, Greece, on 30Jun-4Jul26. See more.

International Safety and Health Construction Coordinators Organization (ISHCCO)

The International Safety and Health Construction Co-ordinators Organization, commonly known as ISHCCO is a non-profit association of national Safety and Health Construction Co-ordinators Associations in European countries in application of the European Directive 92/57/EEC.

ISHCCO's purpose – in compliance with the spirit of subsidiarity – is to help the safety and health coordinators of Europe, through its National Member Associations, by giving them the opportunity to improve their career development, to complete their training and to develop their scientific capacities.

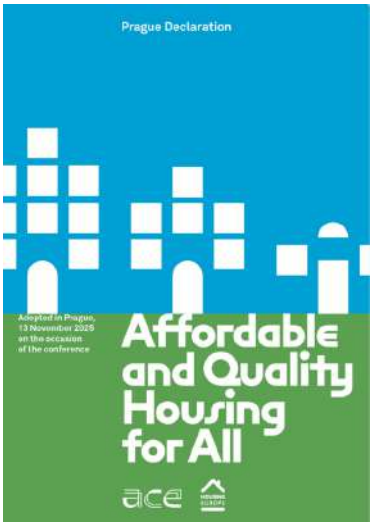
ECCE and ISHCCO have signed a Memorandum of Understanding in 2023 and are actively cooperating in the OSH field.

Read the latest ISHCCO News:

- Press Release: ISHCCO and ECEC Sign Memorandum of Understanding During ECEC General Assembly in Cyprus
- Press release: ISHCCO participated in the 81st General Meeting of ECCE, held from 9–11 October 2025 in Split, Croatia
- Press release: ISHCCO Joins the Luxembourg Declaration to Promote Quality and Safety in Public Procurement
- Press release: EU OSHA Event in Brussels in May 2025

Architects Council of Europe (ACE)

Prague Declaration: ACE and Housing Europe Unite for Affordable, Quality Housing



Europe is facing a widespread housing crisis, marked by a shortage of affordable homes, falling construction quality, and the deterioration of existing buildings. With housing essential to social cohesion, economic resilience and the climate transition, the EU is putting this issue at the forefront of its agenda.

The Architects' Council of Europe (ACE) and Housing Europe share a common vision for a fair and sustainable housing future. Together, they are calling for urgent and coordinated EU action. The joint statement—adopted at the conference *"Affordable and Quality Housing for All"* with the Czech Chamber of Architects (CKA) on 13 November 2025 in Prague—highlights four priorities:

1. **Housing as a Human Right and Public Asset** Housing must be recognised as a public good. Policies should embed the Right to Adequate Housing, support community-led models and strengthen participatory planning.
2. **Renovation First** Europe must prioritise the adaptive reuse and revitalisation of its existing building stock, supported by incentives and stronger financial frameworks.
3. **Quality by Design** Affordability cannot come at the expense of quality. We advocate for EU-wide quality benchmarks and procurement systems focused on life-cycle performance.
4. **Innovation and Digitalisation** Digital tools and off-site construction are essential for delivering affordable, sustainable and high-quality homes at scale.

A Call to Action

To overcome the housing crisis, Europe needs bold and coordinated measures that address its root causes. ACE and Housing Europe stand ready to turn these principles into concrete, measurable results.

Read the Prague Declaration here.

European Federation of Engineering Consultancy Associations (EFCA)

EFCA Autumn 2025 Barometer: European Consulting Engineering Shows Stability and Strong Demand

The European Federation of Engineering Consultancy Associations (EFCA) has released its **Autumn 2025 Barometer**, offering an updated overview of market conditions across Europe's consulting engineering sector. Based on input from 23 national associations, the report reflects a market that is **stabilising**, with demand remaining high across several key sectors.

Market Conditions and Workload

The overall **EFCA Market Index improved slightly**, indicating cautious optimism and a gradual return to more stable growth patterns. Order books remain exceptionally strong, averaging **over 10 months of secured work**, one of the highest levels recorded in recent years. Profitability also remains solid, despite minor downward pressure in some markets.

Sectoral Drivers

Energy and transport infrastructure continue to drive the strongest demand, supported by investments linked to the energy transition, large-scale mobility projects, and infrastructure resilience. Conditions in buildings, water, and industrial sectors remain generally stable, with variations between countries.

Employment Trends

Employment surged in 2025, with the **EFCA Employment Index rising sharply**, reflecting renewed hiring across many markets. Although some cooling is expected in early 2026, most countries anticipate stable staffing levels in the medium term.

Key Challenges

The sector continues to face significant structural challenges, particularly:

- Persistent **shortages of qualified engineers**,
- **Rising labour costs**, and
- Administrative and political uncertainties affecting business confidence.

Late payments and low-fee competition also remain chronic issues for many firms.

Outlook

The Autumn 2025 Barometer points to a sector that remains **resilient and fundamentally strong**, supported by sustained workload and ongoing investment in critical infrastructure. While uncertainties remain, consulting engineering continues to play a central role in advancing Europe's sustainability, decarbonisation, and resilience agendas.

Full EFCA Barometer Report available **here**

EU News

Commission adopts RESourceEU to secure raw materials, reduce dependencies and boost competitiveness

On 3 December, the European Commission adopted the RESourceEU Action Plan – a comprehensive initiative designed to reduce Europe's strategic dependence on critical raw materials and strengthen our supply chain resilience. The recent weaponisation of critical raw materials by dominant market players has further highlighted the need to accelerate the delivery of strategic projects to enhance security of supply. Building on the Critical Raw Materials Act (CRMA), the initiative provides financing and concrete tools to advance projects on critical raw materials in Europe and beyond, protect industry from geopolitical and price shocks, and partner with like-minded countries to diversify supply chains.

"Today, Europe acts on its independence in critical raw materials. With the RESourceEU Action Plan, we are equipping ourselves with the tools we need to accelerate our own production, and diversify our supply, of critical raw materials. This ranges from new financing to facilitated regulatory procedures, all the way to reinforced & new international partnerships. In this global race for the materials our industries need the most, RESourceEU is an engine of our industrial sovereignty. A cornerstone of Europe's economic security." - ***Stéphane Séjourné, Executive Vice-President for Prosperity and Industrial Strategy***

Read more **here**.

Reinforcing the Construction Ecosystem under the European Strategy on Housing Construction

The European Commission is stepping up support for Europe's construction ecosystem with new initiatives under the European Strategy on Housing Construction. Faced with skills shortages, an ageing workforce and the demands of the green and digital transitions, the strategy aims to modernise the sector, strengthen the single market and prepare construction for the future. Through targeted action on skills and updated rules for construction products, the Commission is laying the groundwork for a more resilient, innovative and competitive European construction industry.

Read more **here**.

Executive Vice-President Séjourné hosts implementation dialogue on EU construction sector

On 2 December, Executive Vice-President Stéphane Séjourné brought together key stakeholders from across the construction value chain to discuss the barriers affecting the sector's competitiveness and productivity, including Single Market fragmentation and complex permitting rules. Participants also highlighted practical solutions such as streamlining building permit procedures, advancing digitalisation, and supporting new markets and circularity. The insights gathered during the dialogue have contributed to shaping the European Strategy for Housing Construction, aimed at boosting competitiveness, innovation, safety and sustainability across Europe's construction ecosystem.

Read more **here**.

Commission seeks views on revising the EU Public Procurement Directives

The European Commission has launched a 12-week consultation to collect input and evidence for the upcoming revision of the EU Public Procurement Directives. As public authorities across the EU spend more than €2.6 trillion each year, the review aims to modernise and simplify procurement rules and ensure they support the EU's strategic priorities, including sustainability and strategic autonomy. Stakeholders are invited to contribute through a public questionnaire and a call for evidence to help shape the future legislative proposal.
The consultation remains open until 26 January 2026.

Read more **here**.

Public Consultations of the European Commission

Please note that the European Communications regularly does Public Consultations many of which are very relevant for the engineering professions. We would therefore advise to regularly check the page and contribute to relevant topics through the link **here**.

Upcoming events

Date	Event	Place
4 March 2026	World Engineering Day 2026 https://worldengineeringday.net/	Jakarta, INDONESIA & worldwide
7-9 May 2026	29th ECEC General Assembly Meeting https://www.ecec.net/	Madrid, SPAIN
28-30 May 2026	82nd ECCE General Meeting  ECCE Website	Tbilisi, GEORGIA
2-3 July 2026	32nd Global ISSA Construction Conference  https://www.issa.int/events/prevention/construction-2026-limassol	Limassol, CYPRUS
8-10 Oct 2026	83rd ECCE General Meeting	Warsaw, POLAND

Why a Country Should Participate in ECCE

Investing in the Future of Civil Engineering in Europe

Participation in the **European Council of Civil Engineers (ECCE)** offers significant benefits to a country's civil engineering professionals, institutions, and society at large. As ECCE marks its 40th anniversary, it continues to stand as a beacon of unity, excellence, and progress for the civil engineering profession in Europe.

Becoming a member of ECCE is far more than joining a professional network—it is a strategic investment in the future of civil engineering. Through its work, ECCE fosters cross-border collaboration, promotes the highest ethical and technical standards, and addresses pressing global challenges such as climate resilience, sustainability, and disaster preparedness.

Key Benefits of ECCE Membership

1. Cross-border Exchange and International Collaboration

ECCE offers a unique platform for exchanging ideas and solutions to shared engineering challenges across Europe. Members benefit from building international networks that promote deeper collaboration and professional solidarity.

2. Professional Development and Knowledge Sharing

ECCE supports ongoing learning through access to continuous professional development initiatives and international best practices. Members can participate in working groups, forums, and think tanks that foster innovation and thought leadership.

3. Advocacy and Policy Influence

By joining ECCE, countries help shape European-level discussions on engineering standards, ethics, governance, and regulation. ECCE serves as a recognized voice in influencing EU policies and advancing uniform standards across the continent.

4. Promoting Innovation and Resilience

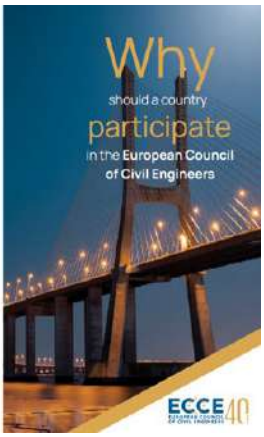
ECCE encourages the use of emerging technologies to address evolving societal needs. It also fosters cooperation on major issues like climate change, infrastructure resilience, and natural disaster response—areas that increasingly demand regional coordination and engineering leadership.

5. Recognition and Impact

Active engagement in ECCE initiatives raises the profile of national civil engineering institutions on the European stage and ensures that engineers' contributions are visible and impactful in society.

A Platform for Unity and Progress

ECCE's biannual General Assemblies, its publications, working groups, and strategic partnerships provide a vibrant platform for participation and influence. For any country, membership in ECCE is an opportunity to ensure that its engineers are not only part of the European conversation but are shaping it.



As stated in ECCE's outreach message:

"Being part of ECCE means building a better future for civil engineers and society. Together, we are shaping Europe's engineering future—stronger than ever."

To learn more about the advantages of ECCE membership and why your country should be involved, explore our informative brochure here: **Why Participate in ECCE – Triptych**

Dear Readers,

As the year draws to a close, we would like to extend my warmest Season's Greetings and to express my sincere appreciation, on behalf of the European Council of Civil Engineers, for your continued collaboration, support, and commitment throughout the past year.

This has been a particularly significant year for ECCE, as **we proudly celebrated 40 years** since our establishment. This milestone offered not only a moment to honour four decades of service to the civil engineering profession in Europe, but also an opportunity to reflect on the values, vision, and dedication that have shaped and strengthened our organisation since its founding.

As part of these celebrations, we paid tribute to ECCE's distinguished leadership through the **Video Tribute to our Past Presidents**, recognising their invaluable contributions to the growth and standing of our Council. We also marked the launch of the ***40 Years of ECCE History Book***, documenting the organisation's journey, achievements, and evolution over four decades.

At the same time, we continued to make important strides for the future. Key initiatives this year included the publication of the **Joint ECCE–ECEC Policy Paper, *"A European Engineering Vision for Affordable, Safe and Sustainable Housing"***, highlighting the central role of engineers in addressing major societal challenges at the European level. Our international

outreach was further strengthened through the Memoranda of Understanding signed with the **International Coalition for Sustainable Infrastructure (ICSI)** and the **Association of European Civil Engineering Faculties (AECEF)**, enhancing our strategic partnerships and collective impact.

We were also delighted to welcome the **Colegio de Ingenieros de Caminos, Canales y Puertos (CICCP), Spain** as an Associate Member of ECCE, further expanding our community and strengthening our collective voice within Europe.

Another notable highlight was ECCE's accession to the **World Federation of Engineering Organizations (WFEO)** as an International Member, a milestone that reinforces our voice within the global engineering community and opens new avenues for cooperation, knowledge exchange, and advocacy on issues of worldwide importance.

We also look back with great satisfaction on the successful ECCE General Meetings hosted in **Split, Croatia**, and **Madeira, Portugal**, both of which fostered meaningful dialogue, the exchange of expertise, and closer collaboration among our member organisations.

As we look ahead to the coming year, let us build on the momentum of this anniversary year, deepen our cooperation, and continue to promote excellence, responsibility, safety, and sustainability in civil engineering across Europe.

We wish you and your loved ones a peaceful festive season, and a healthy, successful, and inspiring New Year.

Platonas Stylianou
ECCE President

Maria Karanasiou
ECCE General Secretary

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ECCE

"Building A Better Future"

The European Council of Civil Engineers (ECCE) was created in 1985 out of the common concern of the professional bodies for Civil Engineers in Europe that the Civil Engineers working together across Europe could offer much more to assist Europe advance its built Environment and protect the natural environment.

ECCE supports and enables European civil engineers to advance a more sustainable built environment and to protect the natural environment. It does this by working with its national member organisations and partner organisations at the European level to promote the highest technical and ethical standards for engineers, to positively influence the development of the profession and the construction industry, and to be a force for good in European society.