COP31 Joint Side Event

Title: Delivering infrastructure for clean energy transition and adaptive agriculture

Location: Side Event Room 2, DALYAN

Date/ Time: Thu, 19 Nov 2026, 1645-1815 (local time)

Event description:

Engineering turns climate commitments into implementation: accelerating electrification and industrial decarbonisation; upgrading resilient power and digital infrastructure; and strengthening collaboration to deliver clean energy transition and resilience in food production.

Davide Stronati – World Federation of Engineering Organisations, WFEO

Marie-Line Vaiani – World Federation of Engineering Organisations, WFEO

Claudio Cañizares - Institute of Electrical and Electronics Engineers, IEEE

Priti Parikh – The Institution of Civil Engineers, ICE

Aitazaz A. Farooque – The Engineering Institute of Canada, EIC

The COP31 side event schedule will provide details on the scheduled events, the page will be updated the night before each programmed event.

Side event programme

Time	Description	Speaker
Thursday, 19 November 2026		
1645 (5 mins)	Welcome introduction/ Scene setting	Davide Stronati (moderator)
1650 (1 min)	Moderator introduces speaker	Davide Stronati (moderator)
1651 (12 mins)	Electrification: answer to the energy trilemma?	Marie-Line Vaiani, WFEO
1703 (1 min)	Moderator introduces speaker	Davide Stronati (moderator)
1704 (12 mins)	Technology for a sustainable climate organisation	Claudio Cañizares - IEE
1716 (1 min)	Moderator introduces speaker	Davide Stronati (moderator)
1717 (12 mins)	Delivering infrastructure for clean energy transition – ICE Perspective	Priti Parikh - ICE
1729 (1 min)	Moderator introduces speaker	Davide Stronati (moderator)

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1730 (12 mins)	From Precision Agriculture to Climate Resilience: Smart Technologies for Sustainable and Adaptive Food Systems	Aitazaz A. Farooque, EIC
1742 (1 min)	Moderator introduces speaker	Davide Stronati (moderator)
1743 (27 mins)	Panel debate and Questions from audience Moderator can ask specific questions to engage debate between panellists. Set what the debate questions will be.	Moderator: Davide Stronati All speakers:
1810 (5 mins)	Closing remarks	Davide Stronati
1815	Side event close	

Panel discussion – suggested topics:

We have heard today that reliable and affordable energy is essential for a thriving society. But the abundance of energy that has driven human progress since the industrial revolution has come at a colossal cost to the climate and nature.

“To halt this decline, “reliable and affordable” alone aren’t enough. Our energy systems must also be sustainable. But how do we get there? I will now invite speakers to discuss this topic further, and will invite questions from the audience also.”

1. Investor and industry confidence is crucial. A credible pipeline can unlock investment and improve resilience in the supply chain.
    a. What does the Panel think will offer greater incentivisation to speed up or improve the delivery of clean energy infrastructure?
    b. Are investors seeing clean energy infrastructure as a good investment, or are their changes in regulatory frameworks needed to realise this?
2. Design efficiencies can improve competitiveness – what can engineers do to support this?
3. With reducing costs of clean energy infrastructure, and improved generation results, does the panel foresee a tipping point on fossil fuel domination?
4. Public attitudes to clean energy remain mixed.
    a. How can engineers help reshape the narrative and clearly communicate the benefits?
    b. What should engineers be telling the public?
5. Can the Panel recommend good examples or case studies of nations who are on the right path to transitioning to clean energy?

Participant details

Moderator

Davide Stronati, Chair, WFEO Climate Change and Engineering Working Group

Speakers:

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WFEO representative:

Marie-Line Vaiani – in person

Presentation: ***Electrification: answer to the energy trilemma?***
This presentation will discuss the energy trilemma, and how we provide energy security, energy equity (affordability and access), and environmental sustainability.

Bio: Marie-Line Vaiani currently serves as Chair of the Energy Committee of the World Federation of Engineering Organizations, Secretary General of the French Committee of the World Energy Council, and Editor-in-Chief of the Revue de l'Énergie, a leading academic energy review.

With over 30 years of experience, Marie-Line began her career in research and development, focusing on the multi-use management of water from hydroelectric dams and the development of forecasting and real-time operation systems for electrical networks.

Following the liberalization of electricity and gas markets in Europe, she worked on establishing new regulations and managed market risk control for various energy assets, including nuclear, hydroelectric, and thermal production, long-term contracts and customer portfolios.She then led strategic studies for international development before focusing on local economic development, creating an investment fund and several territorial agencies to foster employment and innovation in hydroelectric valleys.

As Director of Industrial Sectors, she led initiatives to develop SMEs and mid-cap companies across offshore wind, solar, biogas, hydrogen, industrial decarbonization, energy efficiency, batteries, smart grids, and CCUS, and oversaw a task force on critical raw materials.

She has recently been appointed member of the Council of Engineers for Energy Transition, under the auspices of the UN Secretary-General.

IEEE representative – in-person:

Claudio Cañizares, Founding Director, Advanced Research Institute at Virginia Tech, USA and past IEEE President (2023)

Presentation: Technology for a sustainable climate organization
This presentation will discuss the IEEE and the development of tools for a sustainable climate organization.

Bio: Claudio A. Cañizares (Life Fellow, IEEE) has been a Professor at the Waterloo University, Canada since 1993; he is the Hydro One Chair and the 2021-26 Executive Director of WISE (Waterloo Institute for Sustainable Energy). His work on modelling, simulation, computation, stability, control, and optimization of power and energy systems is highly cited and recognized. He is a fellow of the Royal Society of Canada, Canadian Academy of Engineering, and Chinese Society for Electrical Engineering. He has received the IEEE PES 2025 Ramakumar Family Renewable Energy Excellence and 2017 Outstanding Educator Awards; the 2016 IEEE Canada Electric Power Medal; and various other awards, recognitions, and leadership appointments from IEEE, PES, Waterloo, and Chinese universities. He is the past EIC of IEEE Transactions Smart Gird and the IEEE and PES Boards' Director.

ICE Representative – in person

Priti Parikh, Vice President, ICE and

Presentation: Delivering infrastructure for clean energy transition – ICE perspective

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This presentation will discuss how we can manage and deliver infrastructure for a clean energy transition.

Bio: Professor Parikh is the Director of the Bartlett School of Sustainable Construction (BSSC). Professor Parikh is a Fellow of the Institution of Civil Engineers and a Council Member. She is also on the board of Engineers Against Poverty and Happold Foundation. Her work has received recognition through UCL's Education and Sustainability Research Award, Top 50 Women in Engineering in 2022 and as one of the top 100 academics for policy making for Apolitical.

She also set up and now leads the Engineering for International Development Research Centre (https://www.ucl.ac.uk/bartlett/construction/research/engineering-international-development-centre) which evidences the impact of infrastructure and links with climate change and sustainability in resource challenged settings.

She has substantial industry experience in India and UK and also a research based in infrastructure planning for cities to cover the areas of financial planning, institutional frameworks and societal impact. She has substantial in-country experience in South Asia, Africa and UK working with local governments and slum communities and has led multi-sectoral projects at both city and community scale.

EIC representative – in person:

Dr. Aitazaz A. Farooque, Professor & Associate Dean, Canadian Centre for Climate Change and Adaptation, University of Prince Edward Island

Presentation: From Precision Agriculture to Climate Resilience: Smart Technologies for Sustainable and Adaptive Food Systems

This presentation will discus how agriculture is facing increasing pressure to reduce its environmental footprint while adapting to climate change, extreme weather events, and growing demands on natural resources. Precision agriculture (PA) and digital technologies offer practical pathways to address these challenges by enabling more efficient, informed, and climate-responsive farm management.

This talk explores how emerging PA technologies can support the transition towards low emission, resource efficient, and climate resilient food systems. It will highlight the role of digital crop scouting and smart applicators in improving crop monitoring and optimizing the targeted application of agricultural inputs, alongside variable rate technologies that enhance resource use efficiency and reduce unnecessary input applications. The presentation will also examine greenhouse gas emissions monitoring and modelling as tools for quantifying agricultural emissions, informing mitigation strategies, and supporting evidence-based climate action. Furthermore, it will explore sustainable water management approaches, including drought forecasting, evapotranspiration modelling that improve water-use efficiency and strengthen agricultural resilience to flooding and changing water availability.

By connecting digital innovation with climate mitigation and adaptation, the talk will demonstrate how PA can contribute to more sustainable agricultural infrastructure and accelerate the transformation of food production systems in response to global climate challenges.

Bio: Dr. Aitazaz A. Farooque is Professor & Associate Dean at the School of Climate Change and Adaptation, University of Prince Edward Island (UPEI), Canada. Dr. Farooque is also leading the Centre of Excellence in Food Security and Sustainability at UPEI. Dr. Farooque's research focuses on fundamental understanding and development of state-of-the-art climate smart agriculture technologies to improve soil health, increase farm profitability, and mitigate environmental risks for Canadian agriculture industry.

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Location: Side Event Room2 DALYAN

See maps below:

Location of side event rooms The side events area is situated in the Blue Zone (Zone A).



Illustration 1. COP 31 Map with the indication of the location of side event rooms (Zone A).

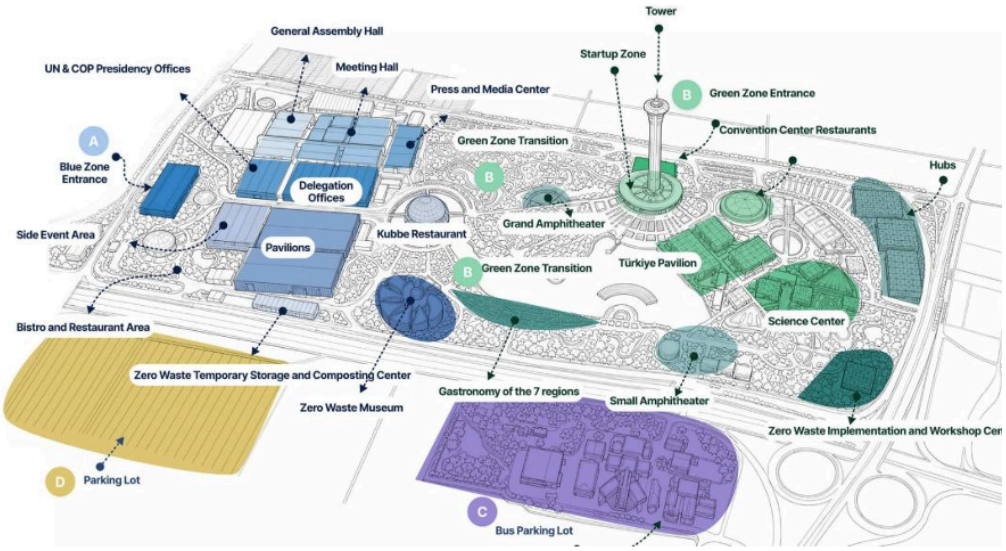


Illustration 2. COP 31 Map with the indication of the location of side event rooms (Zone A).

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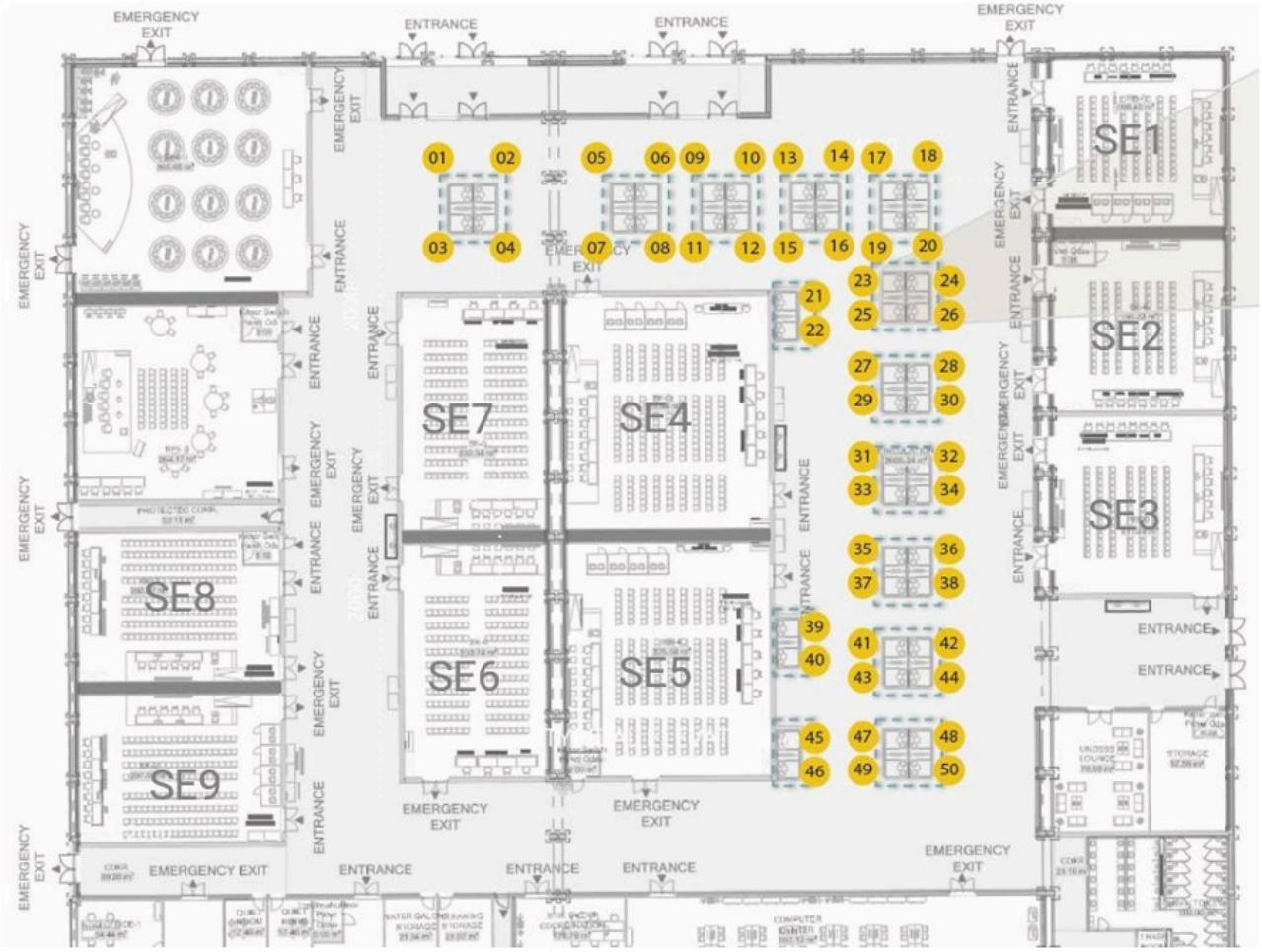


Illustration 3. Overview of the Side Event room's location.

Technical and Logistical information:

- All useful information will be found in the COP31 Side event handbook
- Arrive **15 mins** prior to the start of the event (this time is allotted to set up for your event).
- Please note that it is not possible to have any testing in the side event room earlier than 15 minutes before the side event.
- There will be in-room technical support, they can assist with slides/ presentations.
- Run of Show template: this document should outline order of speakers, the sequence of presentation slides and video files, if applicable.
- Master slide deck (containing all speaker presentations) & Run of Show needs to be saved onto a **USB stick** and bought to the room on the day, to give to the in-room technical support.

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Virtual Speakers:

- Virtual speakers must be **registered as virtual participant**, via the official UNFCCC Online Registration System**:** UNFCCC Online Registration
- The following information must be sent to see@unfccc.int or via the SEORS communication log (no later than 48 hrs prior to the start of the side event):
    - Name:
    - Surname:
    - Email address with which the user is registered in ORS:
- The day before the event the lead organiser of the event will receive the MS Teams link for the virtual speaker. This will be forwarded onto the speaker.
- The virtual speaker will be able to join the side event 15 mins prior to the start of the event.

COP 31 Summary

COP (Conference of the Parties) is the highest-level global climate summit held annually under the United Nations Framework Convention on Climate Change (UNFCCC), which was adopted in 1992. Bringing together heads of state, ministers, scientists, business leaders, and civil society representatives from around the world, COP serves as the primary platform for negotiating and advancing collective action to combat climate change. COP31 marks the 31st session of this global process and will be hosted by Türkiye in 2026.

One of COP's core functions is to review the national communications and greenhouse gas inventories submitted by the Parties.

On the basis of this information, COP assesses:

- The effect of the measures taken by countries
- Progress towards the ultimate objective of the Convention
- The need to strengthen climate ambition and implementation

Through this structured review process, COP safeguards transparency, accountability and cooperation among nations.

Over the years, COP sessions have led to major milestones in global climate action — including the Kyoto Protocol and the Paris Agreement — and have shaped the direction of international climate policy.

Facts

Full name: UNFCCC 31st Conference of the Parties (COP31)

Dates: 9-20 November 2026

Location: Antalya, Türkiye

Host country: Türkiye

COP31 President: Murat Kurum (Minister of Environment, Urbanisation and Climate Change)

Previous COP: COP30 – Belém, Brazil (2025)

COP31's priority areas

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COP31 advances along three main tracks, aiming to turn the commitments made at previous sessions into concrete implementation:

- Emission targets and implementation — Countries delivering on their strengthened Nationally Determined Contributions (NDCs) under the Paris Agreement
- Climate finance — Delivering the new collective quantified finance goal set at COP29 to developing countries
- Adaptation and resilience — Strengthening the resilience of vulnerable countries and communities against climate risks

Why Türkiye, why Antalya?

Türkiye's hosting reflects the country's geographic position — bringing together its climate-diplomacy links across Europe, Asia and the Middle East — together with its growing commitments to renewable energy and the circular economy.

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