

Breakthrough Agenda Sector COP29 Announcements

This summary captures some of the highlights and announcements we have seen in relation to the seven Breakthrough Sectors at COP29. This is not an exhaustive list but aims to provide summary examples of collective progress announced at COP29, including from initiatives and partnerships that participate in the Breakthrough Agenda.

Breakthrough Agenda Announcements:

- Since COP28, the number of countries supporting the Breakthrough Agenda rose to 61, covering over 80% of global emissions, as Kazakhstan and Singapore joined the Hydrogen Breakthrough at COP29.
- **Launch of Breakthrough Priority International Actions for 2025.** At the high-level event on 14 November 2024 co-hosted by the Breakthrough Agenda and Industrial Transition Accelerator (ITA), Nigar Arpadarai, UN Climate Change High-Level Champion for COP29, launched the '[Baku](#)' [Priority International Actions](#) across the road transport, power, steel, buildings, and hydrogen sectors. These actions build on outcomes of COP28 and COP29, driving progress towards COP30 in Brazil.
- **Launch of Business Breakthrough Barometer.** The [Business Barometer](#) is a new flagship report providing unique insights from leading businesses on the current pace of net zero transition, business opportunities and where governments can best focus efforts to create stronger market incentives for investment. Developed by the World Business Council on Sustainable Development (WBCSD) with the support of Bain & Co, the Breakthrough Agenda, Marrakech Partnership and Race to Zero, this first annual pulse check covers sectors responsible for 70% of emissions, including transport, power, steel, cement, buildings, and hydrogen.

Road Transport Announcements:

- The [Road Transport Breakthrough Priority Actions for 2025](#) will accelerate international collaborative action in key areas – such as finance and investment, demand creation, sustainable supply chain, charging infrastructure rollout, and trade conditions – to help ensure the world is on track to halve emissions by 2030.
- **Launch of the Global Zero Emission Vehicles (ZEV) Transition Roadmap's first annual update by the ZEV Transition Council (ZEVTC) at COP29.** The ZEVTC-endorsed Roadmap, which has been developed by world-leading experts and initiatives of the ZEVTC's International Assistance Taskforce, outlines actions governments and international partners intend to take to strengthen international support for Emerging Markets and Developing Economies (EMDEs) this decade. The

first annual update, launched on 14 November 2024, sets out the progress made since COP28 and articulates additional actions to be taken forward from 2025 to accelerate ZEV adoption worldwide. Examples of progress include:

- Doubling the number of countries able to access agile technical support from the [ZEV Rapid Response Facility \(ZEV-RRF\)](#) to 27.
- ZEVTC and partners piloted the Roadmap's Country Cluster Initiative and Training Programme, welcoming five Latin American countries to discussions on supply-side regulations.
- The [ZEV Emerging Markets Initiative](#) launched its Mexico track that has yielded an initial collective demand signal by [11 prominent companies](#) in Mexico of more than 17,000 electric trucks by 2030.
- The [Green Freight Support Program](#) in Eastern Africa was launched by the Smart Freight Centre and Kühne Climate Center to enhance capacity and enable greater peer-to-peer learning across the region.
- The [UNEP Global Electric Mobility Programme](#) is now supporting 60 EMDEs, with a total technical assistance budget of US\$130 million.
- The [Collective for Clean Transport Finance](#) held its first annual investors' roundtable, in the margins of New York Climate Week, to connect public sector ambitions with private sector finance institutions.
- ZEVWISE partners announced the launch of the [Global Green Road Corridors \(GGRC\)](#) Initiative to advance the development of at least 10 green charging infrastructure corridors for zero emission freight across regions by 2026, including in Africa, Asia, Europe, and the Americas.
- Ahead of COP29, partners launched the [Charging Infrastructure Resource Guide: A harmonised pathway to deploying road transport charging infrastructure](#) at the 15th Clean Energy Ministerial (CEM) and 7th Mission Innovation (MI). This comprehensive, step-by-step tool offers insights into best practices, policy recommendations, research, pilot projects, and strategy development for governments looking to accelerate the rollout of ZEV charging infrastructure.
- Building on [last year's update](#), the [COP29 Progress Update](#) highlights successful case studies from diverse stakeholders—including governments, automakers, truck manufacturers, and fleet owners and operators—to

showcase the tangible impact of these initiatives and their contributions towards a Paris-aligned emissions pathway.

- **Announcement of new country signatories to the Global MoU on Zero-Emission Medium- and Heavy-duty Vehicles and ZEV Declaration.**
 - Mozambique and Ethiopia join growing number of countries under the [Global MOU](#) committed to reaching 100% new zero-emission truck and bus sales by 2040 with an interim goal of 30% zero emission vehicle sales by 2030 and 100% by 2040. In addition, 34 new global MOU endorsers were announced bringing the total number of industry partners to 220.
 - Costa Rica was the latest country, while Saitama City was the first Japanese sub-national signatory, to sign the [ZEV Declaration](#). Committing signatories to work towards all sales of new cars and vans being zero emission globally by 2040, and by no later than 2035 in leading markets.
- **Release of CALSTART's Annual Global Progress Towards Decarbonising Transportation Multi-Country Action Plan 2024 Update (MCAP).** Tracking the [progress](#) of leading countries around the world to decarbonise transport along with recommendations for accelerating the global zero-emission transport sector.
- **Launch of the results of 2024 Battery Passport Pilots.** Building on the successful launch of the world's first Battery Passport proof of concept in January 2023, the Global Battery Alliance launched the [second wave of Battery Passport pilots in June 2024](#). The [results of the 2024 Battery Passport pilots](#) were launched in parallel to COP29, where 10 integrated battery value chains representing 80% global battery market share are piloting this pioneering approach to battery value chain sustainability indicators and traceability.
- **Launch of UNFCCC Climate Champion Champions Avoid and Shift goal: [Avoid and Shift Breakthrough](#)** has the ambitious goal of [doubling the share of energy-efficient and fossil-free forms of land transport for people and goods by 2030](#) by focusing on shifts to public transport, walking, cycling, rail freight, electric vehicles and railways. This builds up on the call to action launched by SLOCAT and other sustainable transport stakeholders at COP28. It further highlights the enhanced potential of combining renewables and zero-emissions energy, bringing an [agenda of actions needed](#) for capacity, finance and ambition.
- **Launch of COP29 MAP Declaration for Resilient and Healthy Cities:** Launched in partnership with UN-Habitat, the [MAP Declaration](#) focuses on addressing the

challenges of climate change in urban environments. The call to action is for increased cross-sector engagement from local to global levels, with an emphasis on healthy cities, urban sustainable transport, climate resilience, green construction, agriculture and nature-based solutions in cities and urban climate finance. On transport, the declaration calls for *close coordination with existing initiatives and programmes to develop and implement a vision for low- and zero-emission integrated and connected transport systems.*

Steel, Cement and Concrete Announcements:

- **Announcement of COP29 Global Pledge:** Scaling international assistance for industry decarbonisation on 18 November 2024. Together, the governments of the United Kingdom, the Federal Republic of Germany and Canada undertook to lead the way at COP29 by scaling up support for industry decarbonisation efforts in EMDEs. The United Kingdom and Germany pledged to provide over USD 420 million. The Climate Investment Funds' Industry Decarbonisation Investment Programme plans to deploy up to USD 1 billion in concessional finance in support of this agenda. This joint commitment by the United Kingdom, Germany and Canada and the CIF will scale industry decarbonisation support to USD 1.3 billion and is designed to catalyse additional pledges from governments and philanthropies and mobilise investments from private sector in the lead up to COP30.
 - **COP29-Global-Pledge-Scaling-International-Assistance-for-Industry-Decarbonisation.** The Breakthrough Agenda, which facilitated discussions leading to the pledge, will continue working up to COP to maximise the impact of this financial assistance. It will identify gaps in the current financing offers and convene discussions with key stakeholders—including initiatives, philanthropies, multilateral development banks, and countries—to ensure alignment. The goal is to build on existing frameworks and efforts, leveraging them to drive this initiative forward effectively.
- **The Global Matchmaking Platform was officially launched** on 15 November 2024: First announced last year in Dubai, the Platform is designed to support the heavy industry transition toward net zero. By leveraging international cooperation, the platform aims to match industry players in developing and emerging economies with financiers, technology and expertise to create tailored decarbonisation solutions.
- On 15 November 2024, **IRENA unveiled a new partnership model that can accelerate renewable energy deployment and foster green industrialisation in Central Asia.** [Accelerated Partnership for Renewable Energy](#) in Central Asia

(APRECA) leverages the region's renewable energy and connectivity potential for economic growth.

- **UNIDO launched its [Support Package for NDC review to integrate industry targets, part of its NDCs 3.0 campaign](#).** The Package includes: a Guidebook for actionable guidance on mitigation targets, data, and MRV, an enhanced MITICA modelling tool to develop emissions scenarios and assess industrial decarbonisation policies, and technical assistance to support NDC development through goal-setting, stakeholder engagement, and transparency.

On standards and definitions

- **The [Steel Standards Principles \(SSP\) Statement 2024](#) was published on 14 November 2024.** Launched at COP28, the SSP aims to promote alignment on measurement methodologies for accounting for GHG emissions within the steel sector. The 2024 Statement highlights the key achievements and next steps: to promote reporting on a common boundary, enhancing data quality requirements, the use of common terminology and developing guidelines on recognition and interoperability between different approaches.
- **The World Steel Association published a comprehensive [mapping exercise](#)** on 13 November 2024, which summarises the most significant GHG measurement standards that exist for the steel industry. This complements the work of the [Steel Standards Principles](#).
- **The Global Cement & Concrete Association (GCCA)** has launched the International [definitions](#) for low carbon cement and concrete at COP29 with the [German Vice Chancellor](#).

On demand

- **ITA launched the [Green Demand Policy Playbook](#), to equip policymakers with the tools to boost demand for low-carbon materials, fuels, and chemicals.** By embedding robust demand-side policies, governments can unlock \$1 trillion in private investment for green projects globally. Backed by ITA's [global tracker](#).
- **ITA's [open letter](#)**, endorsed by global business leaders and organisations that represent more than 1,000 companies and financial institutions, calls on governments to take urgent policy action to stimulate demand for green industrial materials, chemicals and fuels.

- On 15 November 2024 there was an announcement of the updates from countries committed to the [Industrial Deep Decarbonisation Initiative \(IDD\) Green Public Procurement \(GPP\) Pledge](#).
- **The First Movers Coalition, Industrial Deep Decarbonisation Initiative, Net-Zero Government Initiative coordinated action for demand creation through [the joint call to action](#)**. The call was endorsed by Canada, Germany, Lithuania, UK, and US.
- **The IDDI presented two new guides** focusing on [disclosure requirements](#) to support market readiness and [setting commitments](#), expanding [its series](#) aimed at helping national and sub-national governments to implement green public procurement.
- **IDDI published a report on [The scale and impact of green public procurement of steel and cement in Canada, Germany, the UK, and the US](#)**. The report assesses the scale of public procurement and the CO2 emissions impact of pledge levels for Green Public Procurement (GPP) to the IDDI in the four countries on the decarbonisation of the steel and cement industries.
- **The World Steel Association published their [GHG chain of custody guidelines](#)** on 12 November 2024 which provide transparency and guidelines on the application of GHG chain of custody approaches within the steel industry and which can also be used as the basis for other organisations developing such approaches, including the new ISO 14077 standard and UNIDO's Industrial Deep Decarbonisation Initiative.

R&D and Innovation

- On carbon capture and storage **IDDI launched a report on [Setting a foundation for carbon capture and storage in product life cycle assessment](#)**. The report focuses on integrating point-source CCS data into product category rules (PCRs) that guide the creation of EPDs for cement, concrete and steel products.
- **The winners of the Net-Zero Industries Mission (NIM)'s 2024 Net-Zero Industries Awards were announced at COP29**. This year's Awards celebrated achievements in three categories: Outstanding Projects, Young Talents, and Female Innovators. A new highlight for 2024 was the Prize for International Advancement in Industrial Decarbonisation, awarded to the top submission from the Global South across all categories. Find out more here: <https://mission-innovation.net/net-zero-industry-award-2024-ceremony-at-cop29/>
- **The Alliance for Industry Decarbonisation (AFID) has adopted [Enhanced Decarbonisation Commitment](#) at COP29** to address the challenges related to decarbonisation of industrial sectors to reduce 54% of direct and indirect

greenhouse gas (GHG) emissions and grow the installed renewable capacity 183 gigawatts (GW) from 2023 to 534 GW in 2030. AFID under guidance of IRENA in collaboration with Net Zero Technology Centre has launched an [Innovation Competition](#) to identify and accelerate the deployment of decarbonisation technologies with a focus on high TRL innovations. Competition is open to energy transition technology innovators around the world.

Buildings Announcements:

- The **Intergovernmental Council for Buildings and Climate (ICBC)** was institutionalised on 20 November 2024 at COP29 during the High-Level Roundtable on Green Construction, Energy Efficiency in Buildings, and Climate Resilience, with participation from Ministers and representatives of Brazil, Estonia, France, UK, Kenya, Lithuania, Tanzania, Uganda, among others. Led by a troika of France as Chair and Kenya and Brazil as Vice-Chairs, the ICBC embodies a global, collaborative effort toward sustainable buildings. This initiative aims to advance the **Chaillot Declaration**, a global policy framework launched in March 2024 in Paris during the Buildings and Climate Forum and endorsed by over 60 countries, mobilising stakeholders across the buildings sector for climate action. During this High-Level Roundtable, Nigar Arpadarai, UN Climate Change High-Level Champion for COP29, also launched the **Azerbaijan Sustainable Built Environment Blueprint paper**.
- Launched **three milestone deliverables** under the Buildings Breakthrough:
 - Interim report on **'Institutional and Personnel Capacity to Deliver Near-Zero Emission and Resilient Buildings'** (feedback [HERE](#)) - to be developed into an online resource portal in 2025.
 - **Blueprint for a Solutions Deployment Platform**, demonstrates real-life pathways to solution deployment in the buildings sector, in the form of 21 case studies from 15 countries - to be developed in 2025 into full report and pilot projects that can penetrate the market;
 - **Global Framework for Action** outlining five core principles to achieve NZERBs through Sustainable Public Procurements (SPPs) - to be developed in 2025;
- Launch of the **"10 Whole Life Cycle Recommendations for the Buildings Breakthrough"** report by the Materials Hub, supported by GlobalABC, One Planet Network, and Life Cycle Initiative, provides a roadmap to advance Whole Life Cycle

(WLC) policy thinking globally. The recommendations aim to address WLC emissions and promote near-zero emissions, resilient buildings.

- Launch of the **NDCs for Buildings Guide** by GlobalABC and PEEB, which provides countries with a framework to integrate building decarbonisation strategies into their NDCs 3.0. The guide offers actionable insights for policymakers and planners, delivering practical, country-specific strategies across the building lifecycle—from policy design to innovative financing. It empowers countries to adopt ambitious, coordinated approaches for bold climate action in the built environment.
- WorldGBC launched an “NDC Scorecard for Sustainable Buildings” to monitor building emissions. For the 2025 update cycle for NDCs, the World Green Building Council and **Green Building Council network** announced the development of an ‘NDC Scorecard for Sustainable Buildings’ and asked nations to level up their commitments, strengthen their NDCs, actions and policies and **Be Bold on Buildings**.
- Launch of the **New Step-by-Step Guide for Climate Action Roadmaps for Buildings and Construction** by GlobalABC, UNEP, UNOPS, and UN Habitat, which provides countries with tools to decarbonise the sector. It addresses the entire value chain, including material manufacturing and construction, while prioritising climate adaptation and inclusion. The guide, aligned with the Paris Agreement, focuses on four key objectives: zero embodied carbon, zero operational carbon, adaptation, and wellbeing. Climate Action Roadmaps for **Bangladesh**, **Ghana** and **Senegal** were recently launched & based on this guide.
- Launch of the **National Circularity Assessment Framework for Buildings**, developed in collaboration with UNEP, GlobalABC, One Planet Network (OPN), RMIT, UN-Habitat, and UNOPS, and funded by Finland, provides countries with a toolkit to assess circularity in their building sectors. The framework uses quantitative and qualitative indicators and a structured questionnaire to establish national baselines, identify gaps, and prioritise actions for improving material and waste flows, reducing environmental impacts, and enhancing economic and social benefits.
- Launch of the Report **"Sufficiency and the Built Environment"** by the Sufficiency Action Hub underscores that achieving a 45% emissions reduction by 2030 requires prioritising sufficiency measures alongside existing policies. The report highlights the "Sufficiency First" principle to reduce resource consumption, tackle energy poverty, and promote climate and social justice. Offering actionable solutions, it calls for

global collaboration and tailored strategies to address regional disparities, aiming to reshape the building sector within planetary boundaries.

- BPIE launched a publication “**Prioritising existing buildings for people and climate**”, with a focus on optimising the use of existing buildings to create a built environment that is attractive, affordable, and aligned with the actual space and accessibility needs of occupants, all while respecting planetary boundaries. This paper identifies sufficiency measures that reduce the need for unnecessary new construction by maximising the use of existing buildings.
- Launch of the **Zero Emissions and Resilient Buildings (ZERB) Accelerator** by the Subnational Climate Action Leaders’ Exchange (SCALE) aims to rapidly reduce greenhouse gas emissions and enhance resilience in the buildings sector through multilevel collaboration with subnational governments. Building on SCALE’s success with the 2023 LOW-Methane initiative, ZERB will unite cities, states, and regions to tackle emissions from building operations and construction, which account for over a third of global carbon emissions. The initiative aligns with the Buildings Breakthrough and GlobalABC’s Subnational Stakeholders Action Group to drive ambitious mitigation and resilience goals globally.
- The International Initiative for a Sustainable Built Environment (iiSBE), and the IEA EBC Annex 89 research network launched a ‘**Researchers’ Call for Collaborative Action and Offer of Support**’, on responsible researchers from all disciplines and stakeholders to engage in broad and deep collaborations in support of globally ambitious but locally targeted policy and practice in the sector to keep our planet within the defined safe and just limits of temperature increase. Interdisciplinary research and transdisciplinary innovation are needed more than ever to support the decision making and practical action of every stakeholder in the sector, especially those shaping the policy landscape.

Power Announcements:

- **Announcements from the COP29 Presidency:**
 - **COP29 Global Energy Storage and Grids Pledge.** The COP29 Presidency called on countries to collectively achieve a global target of 1,500 GW in energy storage, double global grid investments, and develop 25 million kilometres of grid infrastructure by 2030. This pledge builds on the COP28 Global Renewables and Energy Efficiency Pledge, where countries agreed to triple global installed renewable installed capacity and to double the global average annual rate of energy efficiency improvements. Over 50 countries

endorsed the pledge, including Brazil, Kenya, the USA, Ukraine, Pakistan, Morocco, Uruguay, Congo, Peru, Venezuela, Malaysia, Korea, Singapore, New Zealand. The Global Renewables Alliance urged more countries and non-state actors to [join global the pledge](#).

- **The COP29 Presidency launched the first [Global Energy Storage and Grids Pledge](#), in partnership with UNIDO, UNECE and UNESCAP.** The pledge calls for the establishment of intercontinental and regional green energy zones and corridors. The first project is underway with the development of a Green Energy Corridor from Azerbaijan through Türkiye to Europe, with a planned export capacity for the first phase is 1 GW.
- **Ministerial roundtable to deliver [Global Cooling Pledge](#) at COP29.** The UAE COP28 Presidency and the UN Environment Programme-led Cool Coalition brought together ministers and leaders from over 30 countries, to deliver on the [Global Cooling pledge](#) launched at COP28 and to chart a bold path forward for sustainable cooling.
- **Announcements by countries at COP29:**
 - **Launch of the [Global Energy Efficiency Alliance \(GEEA\)](#).** The UAE Ministry of Energy and Infrastructure unveiled a new global alliance focused to double annual global energy efficiency rates by 2030 and reduce emission. Building on the “UAE Consensus”, the [Global Energy Efficiency Alliance](#) aims to support best practices, knowledge transfer and partnership models with the private sector.
 - **Initiative on [Energy Connectivity Dialogues for an Enhanced Energy Transition](#).** Bulgaria announced the first initiative on energy connectivity dialogues for an enhanced energy transition, calling for increased regional partnership to exchange best practices in the construction of interconnections. Several European countries have already joined this initiative, including Belgium, the Czech Republic, Greece, Italy, Moldova, Romania, the UK and Hungary.
 - **Launch of the [Global Clean Power Alliance \(GCPA\)](#).** The United Kingdom and Brazil launched the Global Clean Power Alliance to accelerate the global drive for clean power by uniting developed and developing countries across the Global North and South. With 13 signatories, the Alliance will work together and share expertise with the goal of meeting the COP28 commitments to triple renewable energy and double energy efficiency. The

Alliance will have 'Missions' to address the most critical energy transition challenges, with the first Mission focusing on finance and co-chaired by Brazil.

- **Launch of the first continental-level energy efficiency plan in sub-Saharan Africa.** The African Energy Commission (AFREC), a specialised of the African Union, launched the first energy efficiency programme to accelerate the continent's transition to energy-efficient systems, aligning with the global target to double energy efficiency by 2030. The [African Energy Efficiency Strategy and Action Plan \(AfeES\)](#) is a continental level programme establishing a roadmap for the industry, electricity supply, appliances, buildings, transportation and agriculture sectors. The Alliance brings together governments, businesses, NGOs, development partners, and academia.
- **Launch of the Hydro4NetZero initiative in Latin America and the Caribbean.** The initiative launched to develop and modernise sustainable hydropower infrastructure increasing the energy systems' flexibility and resilience. This initiative aims to enhance energy systems' flexibility and resilience across the region, contributing to the ongoing energy transition and supporting carbon neutrality goals.
- **Announcements by organisations:**
 - **USD 10 million commitment for Mission 300:** The [Rockefeller Foundation and the Global Energy Alliance for People and Planet \(GEAPP\)](#) announced an initial USD 10 million commitment to Mission 300 to support new energy transition projects in 11 African countries and across the Common Market for Eastern and Southern Africa (COMESA). Mission 300 is an initiative launched by the World Bank Group and African Development Bank (AfDB) in April 2024 to scale up electrification in Sub-Saharan Africa.
 - **Accelerated Partnership for Renewable Energy in Central Asia (APRECA).** The International Renewable Energy Agency (IRENA), in partnership with Azerbaijan, launched the [Accelerated Partnership for Renewable Energy in Central Asia](#). The Partnership aims to leverage the collective strengths and resources of the six countries in Central Asia to scale-up investment, enhance inter-regional connectivity to support renewable energy trade, and maximise socioeconomic benefits.
 - **Utilities for Net Zero Alliance members commit to massive investments.** The [Utilities for Net Zero Alliance](#), led by the International Renewable Energy Agency and the UN Climate Change High-Level Champions, announced

doubling its membership and reaching members operating across 5 continents, plus increased annual investments on grids and renewable power generation capacity, supporting the COP29 Global Energy Storage and Grids pledge.

- **OLADE member countries committed to a regional energy efficiency target.** The Latin America Energy Organization announced a [regional target for energy efficiency](#) set by member countries to deliver the doubling outcome of the Global Stocktake.

Hydrogen Announcements:

- **IPHE's COP29 Recommendations report:** The recommendations outlined in the report build on the COP28 Declaration of Intent (DoI) on the Mutual Recognition of Certification Schemes for Renewable Energy and Low-Carbon Hydrogen and Derivatives (Dubai, 5 December 2023). The objective of the report is to outline the key takeaways from the work that has been undertaken to date. NB: If you are interested in seeing this report please email the IPHE Secretariat secretariat@iphe.net and/or Harley Higgins-Watson, Facilitator, Hydrogen Breakthrough at Harley.hw@iphe.net
- **[Enabling global trade in renewable hydrogen and derivative commodities:](#)** This IRENA-WTO joint report highlights the critical role of coherent strategies in promoting renewable hydrogen and derived commodities as essential means to decarbonise hard-to-abate sectors.
- **[Call to Action for Maritime Sector Decarbonisation:](#)** More than 50 stakeholders across the shipping value chain signed a Call to Action to strengthen targets and commit to increasing the uptake of zero or near-zero GHG emission shipping fuels to at least 5%, striving for 10%, by 2030. The joint statement calls for faster and bolder action to increase zero and near-zero emissions fuel uptake, investment in zero-emissions vessels, and global development of green hydrogen infrastructure, leaving no country behind. Signatories to the Call to Action include e-fuel producers, vessel and cargo owners, ports and equipment manufacturers.
- **COP29 Call to Action by the global hydrogen industry:** Coordinated by the Hydrogen Council and supported by nearly two dozen hydrogen industry associations and initiatives, highlights the need for making a collective commitment to scale demand for clean hydrogen and its derivatives by 2030

underpinned by robust off-take incentives and mandates. This Call to Action showcases private sector support to the COP29 Declaration, highlighting the key areas for public-private collaboration for the next two years which dove-tail with the Hydrogen Breakthrough priority actions. It features an important call for inclusion of hydrogen in the NDCs.

- **Market Assessment on Clean Hydrogen:** UNIDO's [Accelerate-to-Demonstrate \(A2D\) Facility](#) launched a new, comprehensive market assessment focused on innovation in clean hydrogen in developing countries. The large-scale market assessment analysed key markets, technologies, initiatives and projects, enhancing the global evidence base in these areas.
- **A Quality Infrastructure Roadmap for green hydrogen:** As part of the IRENA project entitled "[Quality infrastructure for green hydrogen: technical standards and quality control for the production and trade of renewable hydrogen](#)", implemented with the National Metrology Institute of Germany (PTB) and supported by Germany's Federal Ministry of Economic Cooperation and Development (BMZ), this publication aims to explore the importance of crucial QI services as a key instrument for the successful global production and use of green hydrogen.
- **10 GW Lighthouse Initiative Joint Communiqué:** On November 14, during COP29 Finance, Investment and Trade Day, 12 Development Finance Institutions (DFIs)—spanning international and national levels—united to pledge their support for the **10 GW Lighthouse Initiative**. This transformative initiative aims to bring renewable hydrogen projects of 100 MW to 1 GW to Final Investment Decision (FID) by 2030 in Emerging Markets and Developing Countries (EMDCs). It's a pivotal contribution to the COP-centered Breakthrough Agenda, championing international collaboration to make clean technologies and sustainable solutions, like hydrogen, affordable, accessible, and attractive for all regions and sectors by 2030. This commitment underscores the essential role of public and private sectors in accelerating the green transition and empowering EMDCs to lead the charge toward a net-zero future.
- **COP29 Hydrogen Declaration: Over 50 countries endorsed the Pledge** calling for scaling up renewable, clean/zero-emission, and low-carbon hydrogen production while accelerating the transition from unabated fossil fuel-based hydrogen, aiming for near-zero greenhouse gas emissions—particularly in

sectors that are challenging to decarbonise. The Breakthrough Agenda, which facilitated discussions, will continue working up to COP30 with stakeholders and initiatives to collectively build momentum and progressing coordinated international action.

- **Brazil, and the United Arab Emirates (UAE) announced new Nationally Determined Contributions (NDCs) at COP29, both of which highlighted Hydrogen.** Other countries, including Liberia, the Marshall Islands, and Malawi, also announced aspects of their NDCs 3.0, including the United Kingdom announcing their respective NDC targets to 2035, a commitment to reduce greenhouse gas emissions by 81% by 2035, based on 1990 levels. The UK also aims to be the first developed country with a fully decarbonised power system by 2030.