

POWER BREAKTHROUGH: PRIORITY INTERNATIONAL ACTIONS FOR 2025

1. This document outlines the Priority International Actions for 2025 under the Power Breakthrough, in response to the recommendations in the [Breakthrough Agenda Report 2024](#) from the International Energy Agency (IEA) and the UN High Level Climate Champions (UN HLCs). These Priority Actions have been developed collaboratively by countries participating in the Power Breakthrough and leading initiatives. They seek to build on the range of important wider work underway and planned across the international landscape, including outcomes of the 28th and 29th UN Climate Change Conferences (COP28 and COP29), to build on the processes to develop, communicate and implement new nationally determined contributions, and to take forward the outcomes of the first Global Stocktake under the Paris Agreement. These aims will be pursued by strengthening international collaboration in specific areas where in doing so we can accelerate progress towards our shared Power Breakthrough Goal to make:

‘Clean power is the most affordable and reliable option for all countries to meet their power needs efficiently by 2030’.

2. Noting that each country will have its own national pathway to decarbonise key sectors and approach to competing for future clean technology market opportunities, and with full recognition of the many excellent wider international activities and partnerships already underway, we intend to prioritise our international efforts to advance specific Priority International Actions and projects as listed below.
3. Progress on these actions in 2025 will be tracked through the next Breakthrough Agenda Report from the IEA and UN HLCs, discussed through the Power Breakthrough dialogues co-led by the United Kingdom and Morocco and supported by the Power Breakthrough Facilitator hosted by the International Renewable Energy Agency (IRENA), in collaboration with the Clean Energy Ministerial, Mission Innovation and World Business Council for Sustainable Development, and reported on at COP30, alongside an updated set of Priority International Actions for Power for 2026.
4. In order to implement the Breakthrough Agenda launched by 45 World Leaders at COP26, and now backed by 61 governments, set out below are the Priority International Actions being taken forward by individual countries and governments as appropriate to their national priorities, noting the ambition to strengthen the international offer of assistance to Emerging Markets and Developing Economies (EMDEs) in support of all Priority Actions.

P1. Finance and Investment for EMDEs

Breakthrough Agenda Report Recommendation:

Governments, in collaboration with key institutions and funds, should ensure international support is offered on more favorable terms, including grants for early-stage investments in higher-risk projects. This involves creating tailored de-risking mechanisms to mobilize private sector investments while avoiding lock-in to high-carbon power generation. Additionally, there should be a significant increase in resources allocated to technologies that have not yet reached commercial maturity.

Priority International Action on Finance and Investment for EMDEs:	How this will be taken forward:	Collaborating initiative(s):	Collaborating governments:
<p><i>Enhance the international technical and financial assistance for emerging markets and developing economies to support the delivery of national and international commitments including the global stocktake outcomes to triple renewable energy and double the rate of improvement in energy efficiency.</i></p> <p>Strengthen the overall public offer of international assistance for a rapid transition to clean power systems, by coordinating and facilitating better access to financing instruments and new or expanded de-risking mechanisms and support programmes & initiatives that address obstacles to investment, with the goal of mobilising catalytic funding at scale in emerging markets and developing economies.</p> <p>Enhancements to international assistance mechanisms to be</p>	<p>By governments and other stakeholders engaging with and supporting the work of active international initiatives and organisations, to develop and deliver a coordinated portfolio of work for 2025 with the objectives of:</p> <ol style="list-style-type: none"> 1. Strengthening financing solutions in EMDEs, particularly including scoping new and additional grant-based instruments, highly concessional finance, risk mitigation solutions, and non-debt instruments, supported by technical assistance and knowledge sharing to speed up RE/EE deployment in a just and equitable manner 2. Encouraging having the principle of energy efficiency as the "first fuel" at the core of major investment decisions and integrating renewable energy investments with energy efficiency using various business models e.g. Energy-as-a-Service (EaaS), Energy service companies (ESCOs), etc. 3. Expanding and mobilising financial support for scaling renewable energy and energy efficiency programs in EMDEs, including multi-source investment from private sector, multilateral development banks, and philanthropy and set out best practice principles and 	<p><i>Coordinated by:</i></p> <ul style="list-style-type: none"> - Breakthrough Agenda Secretariat - IRENA - as the Power Breakthrough Facilitator - Energy Transition Council (ETC) <p><i>Partners:</i></p> <ul style="list-style-type: none"> - Energy Transition Council (ETC) - Green Grids Initiative (GGI) - Breakthrough Energy - Catalyst (BE Catalyst) - Sustainable Energy for All (SE4ALL) - Climate Investment Funds (CIFs) - Global Energy Alliance for People & Planet (GEAPP) - E3G - Clean Energy Transition Partnership (CETP) 	<p>Australia Cambodia Canada European Commission Finland France Germany Italy Morocco Netherlands Norway Panama Spain Sweden United Kingdom</p>

<p>demonstrated by COP30 along with plans for 2026.</p>	<p>opportunities for scaling up investment through DFIs, multilateral initiatives and MDB programmes</p> <p>4. Strengthening collaboration between organisations on accessible financing mechanisms, market design and incentive schemes and investment frameworks to facilitate investments in renewables and energy efficiency to provide more investor certainty and reduce the cost of capital for RE/EE projects in EMDEs.</p> <p>5. Supporting international assistance architecture reforms, acting to align and coordinate international assistance offers at regional and national level.</p>		
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P2. Social engagement and impact

Breakthrough Agenda 2024 Report Recommendation:
 Donor governments and MDBs should align development funding with targeted support for local jobs and skills in fossil fuel-dependent regions. This includes repurposing fossil fuel assets and promoting economic diversification and environmental restoration. Monitoring and reporting on social outcomes should be transparent and independent, ensuring that clean energy infrastructure benefits local communities. Strengthening institutional capacities to absorb social components of clean energy finance is essential, alongside collaboration to establish international expertise on the just transition.

<p>Priority International Action on Social engagement and impact:</p> <p><i>Champion active citizen participation in energy transition planning and implementation and the adoption of measures to better ensure different communities are included, and the benefits of this transition are recognized and shared equally.</i></p>	<p>How this will be taken forward:</p> <p>By governments and other stakeholders engaging with and supporting the work of active international initiatives and organisations, to develop and deliver a coordinated portfolio of work for 2025 that supports progress on multiple workstreams, potentially including:</p> <p>1. Encouraging the creation of targeted support for new clean energy jobs that can enhance livelihoods and empower people to lead the transition at the local level.</p>	<p>Collaborating initiative(s):</p> <p><i>Coordinated by:</i> Energy Transition Council (ETC)</p> <p><i>Partners:</i></p> <ul style="list-style-type: none"> - International Renewable Energy Agency (IRENA) - International Labour Organisation (ILO) 	<p>Collaborating governments:</p> <p>Australia Azerbaijan Cambodia Canada European Commission Finland France Germany</p>
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<p>Coordinate international activities to better support national actions to ensure future energy systems are inclusive and resilient. This will require the development, sharing and adoption of enhanced measures to ensure active citizen participation, universal access to affordable and reliable energy services and equitable distribution of costs and benefits across all impacted communities including in particular those dependent on fossil fuels and those without consistent energy access, and those most vulnerable to the transition.</p> <p>Increased awareness and a growing range of good practice exemplars being shared internationally to be demonstrated by COP30 along with new or enhanced future plans.</p>	<p>2. Furthering scale up support for Just Transition by developing common plans by COP30 to accelerate the alignment of cross-cutting development finance lending programmes.</p> <p>3. Convening key actors to identify ways to enhance consistency between regional priorities and the deployment of international support.</p> <p>4. Raising public awareness and encouraging behavioural change on the need to accelerate the deployment of renewable energy and energy efficiency infrastructure and technology.</p> <p>5. Encouraging fair representation in ownership and decision-making processes, emphasizing transparency and equitable distribution of costs and benefits including by developing tailored strategies that address the unique needs of gender, low-income households, and marginalized communities to foster inclusive participation and build trust in the transitions.</p>	<p>- Climate Investment Funds (CIFs)</p>	<p>Italy Morocco Netherlands Norway Panama Spain Sweden United Kingdom</p>
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P3. Research & Innovation

Breakthrough Agenda Report Recommendation:

Governments should prioritize the identification and implementation of demonstration projects for deeply decarbonized power systems, emphasizing long-term energy storage and balancing. Adequate resources should be allocated for these demonstrations, accompanied by robust knowledge-sharing structures. Close collaboration with regional research and innovation networks is essential to facilitate knowledge exchange among a diverse set of countries and stakeholders.

<p>Priority International Action on Research & Innovation:</p> <p><i>Accelerate global clean power research and demonstration projects across all regions, with mechanisms to capture and share learnings rapidly.</i></p> <p>Strengthen international coordinated action to identify and accelerate new system-wide innovations, large-scale demonstration projects, and emerging best practice across a wide range of regions and contexts particularly in EMDEs; working together to expedite their delivery; establish mechanisms to share lessons widely and support their replication or adaptation to local contexts.</p> <p>A diversity of innovative demonstration across a wide range of regions and contexts to be showcased at COP30 alongside enhanced knowledge sharing and plans to strengthen further.</p>	<p>How this will be taken forward</p> <p>By governments and other stakeholders engaging with and supporting the work of active international initiatives and organisations and engaging with leading national demonstration projects including encouraging the capture and sharing of learning internationally. Coordinated activities to particularly focus on:</p> <ol style="list-style-type: none"> 1. Building innovative, equitable partnerships and collaborative networks in the field of Science, Technology and Innovation between industry, academia and local stakeholders in developed and developing countries. 2. Enhancing and scaling novel technological solutions for renewable power, enhanced energy efficiency and end-use sectors electrification, through support in research, development and innovation, including but not limited to: <ul style="list-style-type: none"> • Advancements in digitalisation and cyber security requirements for electrified systems. • The development of new technologies and systems for managing systems that have largely phased out fossil fuel/thermal generation. • The commercialisation of long-term/seasonal storage and balancing at scale, and prove value of different options to manage seasonal balancing in different national conditions/environment 	<p>Collaborating initiative(s):</p> <p><i>Coordinated by:</i></p> <p>Mission Innovation Green Powered Future Mission (GPFM)</p> <p><i>Partners:</i></p> <ul style="list-style-type: none"> - International Smart Grid Action Network (ISGAN) - 21st Century Power Partnership (21CPP) - Breakthrough Energy Fellows and Catalyst (BE Catalyst) - Global Power System Transformation Consortium (G-PST) 	<p>Collaborating governments:</p> <p>Australia Cambodia Canada European Commission Finland Germany Italy Japan Kenya Morocco Netherlands Norway Panama Spain Sweden United Kingdom</p>
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	<p>3. Accelerating the deployment of diverse storage solutions, the strengthening of the balancing energy markets and the expansion of flexibility services at scale. These efforts should demonstrate the value of various options for balancing the supply and demand, while considering different national or regional conditions and optimizing overall system costs.</p>		
<p>P4. Enabling Infrastructure</p>			
<p>Breakthrough Agenda 2024 Report Recommendation: Governments should reassess opportunities for cross-border and regional power interconnection and engage with international efforts to identify key regional priorities. A broad coalition of public and private stakeholders is essential for appraising these opportunities and developing interconnections. Additionally, countries should collaborate on joint grid infrastructure planning, enhance permitting processes, and expedite alignment of regulations and markets for electricity and system services, including power pool integration.</p>			
<p>Priority International Action on Enabling Infrastructure:</p> <p><i>Facilitate accelerated grid development, expansion of storage capacity and the cross-border trading of electricity in all regions through strengthened collaboration and the sharing of good practice and experience on the design, investment, and construction of critical transmission and distribution infrastructure.</i></p> <p>Coordinate international actions that support countries in all regions to strengthen grid infrastructure, scale investment, and address supply chain challenges, ensuring progress towards</p>	<p>How this will be taken forward:</p> <p>By governments and other stakeholders engaging with and supporting the work of active international initiatives and engaging with relevant regional cross-border projects to develop and deliver a coordinated portfolio of work for 2025 – including encouraging the capture and sharing of learning internationally – to support progress on:</p> <ol style="list-style-type: none"> 1. Developing standardized approaches for products and frameworks that enable and enhance grid development, including cross-border electricity trading principles and protocols, and models for integrating climate finance into grid projects. 2. Fostering stronger cross-border cooperation and collaboration among governments, transmission and distribution operators, and relevant authorities to design and construct 	<p>Collaborating initiative(s):</p> <p><i>Coordinated by:</i></p> <ul style="list-style-type: none"> - Green Grids Initiative (GGI) <p><i>Partners:</i></p> <ul style="list-style-type: none"> - 21st Century Power Partnership (21CPP) - International Smart Grid Action Network (ISGAN) - Global Power System Transformation Consortium (G-PST) - Mission Innovation Green Powered Future (GPFM) 	<p>Collaborating governments:</p> <p>Australia Azerbaijan Cambodia Canada European Commission Finland Germany Italy Kenya Morocco Netherlands Norway Panama Spain Sweden</p>

<p>2030 targets. Support the delivery of global goals for energy storage installed capacity by 2030 and global grid deployment goals for the addition or refurbishment of grids by 2030. Increase awareness and broader engagement of stakeholders and enhance knowledge-exchange mechanisms, to share experience from successful projects widely and support their replication or adaptation to local contexts.</p> <p>Broader engagement of stakeholders and enhanced knowledge sharing to be demonstrated by COP30 along with plans to strengthen further.</p>	<p>critical transmission and distribution infrastructure, ensuring secure and efficient cross-border trade of renewable energy.</p> <p>3. Ensuring regulatory support for grid investments through long-term strategies that remove barriers, incentivize proactive investment by operators, and align with regional decarbonization goals.</p>		<p>United Kingdom</p>
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P5. Energy Efficiency and Demand Reduction

Breakthrough Agenda 2024 Report Recommendation:
 Countries should collaboratively establish more ambitious minimum energy performance standards for energy-consuming appliances, including those for heating and cooling. Additionally, agreements on interoperability and digital standards should be pursued, supported by national awareness campaigns, enhanced labeling, and appliance retrofit programs. Improved technical assistance is essential to help developing countries implement these effective standards.

<p>Priority International Action on Energy Efficiency and Demand Reduction</p> <p><i>Accelerate progress on the COP 28 pledge to double the rate of energy efficiency improvement including through international action on awareness raising, knowledge sharing and the championing of energy efficient policies and products.</i></p> <p>Coordinate international actions that support countries and organisations in all regions to deliver on the COP28</p>	<p>How this will be taken forward:</p> <p>By governments and other stakeholders engaging with and supporting the work of active international initiatives and organisations, to develop and deliver a coordinated portfolio of work for 2025 with the objectives of:</p> <ol style="list-style-type: none"> 1. Accelerating the adoption of energy efficient products clean nationally, regionally and globally. 2. Encouraging the prioritization of energy efficiency in government and businesses’ policies and plans as a critical strategy for minimizing 	<p>Collaborating initiative(s):</p> <p><i>Coordinated by:</i></p> <ul style="list-style-type: none"> - Sustainable Energy for All - Mission Efficiency <p><i>Partners:</i></p> <ul style="list-style-type: none"> - Super-efficient Equipment & Appliance Deployment (SEAD) - BASE 	<p>Collaborating governments:</p> <p>Australia Cambodia Canada European Commission Finland Germany Ireland Italy</p>
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<p>pledge and Global Stocktake agreement to double the rate of energy efficiency improvement. Champion efforts to raise awareness of the need and policies to address that need. Establish mechanisms to share experience from successful approaches widely and support their replication or adaptation to local contexts.</p> <p>Increased awareness and a growing range of good practice exemplars being shared internationally to be demonstrated by COP30 along with new or enhanced future plans.</p>	<p>overall energy consumption and optimizing resource utilization across diverse sectors.</p> <p>3. Encouraging the accelerated electrification of key end-use sector as part of government and businesses' policies and plans.</p> <p>Portfolio to include collaboration on the increased adoption of energy efficiency standards and regulations across key sectors such as buildings, transportation, cooking, heating and cooling (such as industry minimum Energy Performance Standards, interoperability, and digital standards) supported by awareness campaigns, improved labelling and incentives, and appliance retrofit programmes</p>	<ul style="list-style-type: none"> - Digital Demand-Driven Electricity Networks Initiative (3DEN) - Energy Efficient End-use Equipment (4E) - Energy Productivity 100 (EP100) 	<p>Japan Kenya Morocco Netherlands Norway Panama Spain Sweden United Kingdom</p>
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P6. Landscape Coordination

<p>Priority International Action on Landscape Coordination:</p> <p><i>Improve coordination among international initiatives to enhance global efforts and foster alignment.</i></p> <p>Support and facilitate the global landscape of initiatives and countries under the Power Breakthrough, facilitating information sharing and coordinating activities.</p> <p>Utilize the Breakthrough Agenda annual cycle to embed a process for regularly reviewing and updating a detailed map of international power initiatives and their workstreams, fostering a shared understanding of roles and plans,</p>	<p>How this will be taken forward:</p> <p>Countries and initiatives will seek to further strengthen forums and institutions that support international co-operation in clean power, with sufficient participation, deeper analysis and communication of the potential gains from co-ordinated international action, supported by a dedicated Power Breakthrough Facilitator role, hosted by IRENA to jointly support the Breakthrough Agenda Annual Cycle, which includes:</p> <p><i>Coordinating the Breakthrough Agenda Annual Cycle, including by:</i></p> <ul style="list-style-type: none"> • Embedding in the international landscape a light-touch process for regularly reviewing and updating a detailed map of 	<p>Collaborating initiative(s):</p> <p><i>Coordinated by:</i></p> <ul style="list-style-type: none"> - Breakthrough Agenda Secretariat - Power Breakthrough co-leads - IRENA as hosts of the Power Breakthrough Facilitator <p><i>Partners:</i></p> <ul style="list-style-type: none"> - All leading international power initiatives 	<p>Collaborating governments:</p> <p>Australia Azerbaijan Cambodia Canada European Commission Finland Germany Guinea Bissau Ireland Japan Netherlands Norway Panama Spain</p>
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<p>identifying gaps and overlaps, and brokering support for delivery.</p> <p>Explore how the power breakthrough framework and network can further support and enhance the international landscape for collaboration driving power sector decarbonisation.</p>	<p>the landscape of international initiatives and their hydrogen workstreams.</p> <ul style="list-style-type: none"> Facilitating a shared understanding of respective roles and plans, identify gaps and overlaps, develop options, and support delivery. <p><i>Guiding Priority Actions, including by:</i></p> <ul style="list-style-type: none"> Using the Breakthrough Agenda report to identify priorities and facilitate alignment with international goals and strategies for power systems decarbonisation. Preparing supporting plans, resources and deliverables (where requested and relevant by initiatives and countries) to support the delivery of priority actions. <p><i>Facilitating Information Sharing, including by:</i></p> <ul style="list-style-type: none"> Working with initiatives and countries under the Power Breakthrough to facilitate the sharing of information, delivery of key priority actions and light-touch coordination of activities where useful. 		<p>Sweden United Arab Emirates United Kingdom</p>
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Growing priorities for collaborative action

In addition to the specific Recommendations in the Breakthrough Agenda 2024 Report, the Report highlighted other topics that are key enablers of the above priority actions. Discussion in international fora suggest these topics warrant cross-cutting consideration for strengthened coordinated action and may be a future focus in the Breakthrough Agenda framework, subject to prioritization and resource availability. These include:

A. Skills and Capacity Building:

Enhancing the skills and capacities of stakeholders across the ecosystem is essential to ensure accelerate power sector transitions can proceed in all countries and regions, including through identifying and addressing skill gaps, fostering knowledge exchange, and building the capacity of individuals and organizations. Particularly, using technical assistance to remove barriers and build institutional capacity needed to support investments and lower risks. This applies to the energy sector, as well as to the broader financial systems in EMDEs and internationally. Most of the initiative's partnering in the power breakthrough include technical assistance and capacity building in their work programmes and there may be value in increased connections and coordination.

B. International Supply Chains:

Strengthening international supply chains is a critical enabler for achieving the 2025 priority actions, ensuring the rapid decarbonisation of the power sector at pace in all regions. Increased coordination across initiatives active in or exploring this topic could more efficiently strengthen regional and global approaches to ramping up of capacity in the RE/EE supply chains and help countries meet renewable deployment and energy efficiency goals.