**The United Kingdom of Great Britain and Northern Ireland’s submission to the United Nations Framework Convention on Climate Change** on the Mitigation Work Programme

provided in line with the mandate given in November 2022[[1]](#footnote-2)



## Mitigation work programme submission

#### Introduction and context

The climate crisis remains one of the most urgent and cross-cutting global challenges that countries need to collectively overcome. At COP 26 and 27, we recognised that despite progress made through the latest Nationally Determined Contributions (NDCs) and net zero commitments, we are not on track to keep temperatures below 1.5C. Parties re-emphasised their resolve to keep average global temperatures below 1.5c and reiterated the need for further action in this critical decade. As per the COP27 outcomes, Parties that have not yet done so are requested to **revisit and strengthen the 2030 targets in their NDCs** as necessary to align with the Paris Agreement temperature goal by 2023, and communicate LT-LEDs towards net zero by COP28, and we call on all major emitters to do so. As agreed at COP27, it is also vital for 2030 NDCs and regularly updated LT-LEDs to remain aligned and guided by the best available science.

As highlighted by the science, to keep 1.5c in reach we must peak global greenhouse gas emissions immediately and by 2025 at the latest, **rapidly reduce greenhouse gas (GHG) emissions by 43% by 2030** relative to 2019 levels[[2]](#footnote-3), **followed by sustained reductions to reach net zero** CO2 emissions by mid-century. All Parties reaffirmed their commitment to keeping 1.5c alive at COP27 but **we will need further outcomes at COP28** that advance this, including to accelerate phase-out of fossil fuels, and furthering our phase-out and phasedown commitments for inefficient fossil fuel subsidies and unabated coal power.

The Mitigation work programme (MWP) can play an important role in supporting Parties to raise ambition in this critical decade. It must work at pace to highlight the highest mitigation potential for the pre-2030 period and support Parties’ collective efforts to align their targets and policies with the IPCC WGIII report findings. This includes **aiming for and implementing a trajectory that keeps 1.5c alive with immediate peaking of emissions** (ahead of 2025). The MWP can provide a space to help Parties are deliver on NDC targets, and set out how to best enhance their policies and commitments to address the ambition and implementation gaps, in order to kickstart the systemic transformation to clean, green energy that we need.

MWP expectations
It is vital for the MWP activities to **remain solutions-focused and lead to clear, collective next steps** on how to accelerate implementation of current NDCs and LT-LEDs and raise mitigation ambition to keep temperatures below 1.5c. Both aims will need to be achieved by effectively building on the current efforts and experiences of Parties and non-Party stakeholders (NPS), including sectoral initiatives, and ensuring the active participation of relevant stakeholders, including policy practitioners and experts, and those that are responsible for domestic implementation of policies and measures.

The co-chairs of the MWP should **work with the High-Level Champions across the organisation of the dialogues and investment-focused events**, to ensure effective involvement of NPS, and to share experiences and lessons learnt from their own activities (e.g. Regional Finance Forums and Implementation Labs).

The MWP should help **advance the implementation of commitments** captured in the latest Conference of the Parties serving as the meeting to the Parties of the Paris Agreement (CMA) cover decisions and **remain guided by the best available science** from the IPCC (including the concrete findings and recommendations from the AR6 WGIII report, particularly the specific systems transformations, mitigation strategies and enabling conditions). **MWP discussions should also be based on the latest relevant sectoral reporting and evidence, including the NDC and LT-LEDs Synthesis reports.**

These inputs will enable the MWP to serve as a well-informed mechanism to accelerate collective action for Party and NPS commitments (including for new and existing initiatives outside of the UNFCCC), with a view to **recommending options for closing the emissions gap** at the annual high-level ministerial round table on pre-2030 ambition (MRT). The annual recommendations set out in the summary reports should be presented by the co-chairs to the MRT to **inform ministers in their annual efforts to address pre-2030 ambition** at the CMA session and inform concrete outcomes through the CMA Decision. In turn, Ministers can provide **political guidance to the MWP** and beyond for the following year of work in this critical decade.

#### Topic selection

We support the MWP co-chairs selecting topics that:

* have been identified as a priority commitment through previous decisions under the CMA (for instance, from paragraphs 20 - 39, Decision 1/CMA.3 and paragraphs 21 - 30, 1/CMA.4).
* involve sectors and themes that **require urgent action** and will be **impactful in delivering the highest mitigation abatement potential** in the pre-2030 period.
* are aligned with the best available science and findings on how to close the emissions gap.
* will lead to **recommendations that can be replicated to scale**, in a format with which ministers can engage at the MRT, and be taken forward domestically.
* Have the support of a range of Parties and NPS without requiring support from all.

The topics that are chosen for the dialogues will need to remain explicitly aligned towards guidance on how to: revisit and strengthen current NDCs, develop and update ambitious LT-LEDs, and accelerate action and implementation of domestic mitigation measures.

The first year of the MWP should focus on the topic of Energy supply transitions as this area has one of the greatest potentials to close the greenhouse gas emissions gap[[3]](#footnote-4). This is because:

* **CO2 emissions from the power sector reached a new peak in 2021** of around 14.6GT - 40% of the global total of CO2 emissions from energy and industrial processes – and is **expected to have risen in 2022**, albeit by a slower rate than in 2021[[4]](#footnote-5). The IPCC AR6 report also sets out that **Energy supply is the largest emitting sector, accounting for 34% of global GHG emissions in 2019**[[5]](#footnote-6). Unabated fossil fuels currently account for over 60% of total global electricity generation[[6]](#footnote-7).
* To be consistent with the IEA’s Net Zero Emissions by 2050 Scenario, **that share of fossil fuels needs to drop to 26% by 2030**[[7]](#footnote-8). The **pace of deployment of low and zero-emission sources must pick up significantly** in order to meet this milestone.
* **Coal power specifically is the single largest contributor to climate change, accounting for around one-third of total growth in CO2 emissions globally, and all Parties have committed to accelerate its phase down**[[8]](#footnote-9). Both the IPCC and IEA agree that a rapid decline in coal use is necessary, and unabated coal power plants must be phased out by 2030 (OECD) and 2040 (non-OECD) to meet the IEA‘s Net Zero Emissions by 2050 Scenario[[9]](#footnote-10). The MWP should assist in the implementation of commitments made.
* **This sector has increasingly cost effective and high potential mitigation measures that need to be built on and replicated to a global scale**, e.g. solar and wind energy are both assessed to have over 2 GtCO2e cost-effective mitigation potential in 2030, more than any other mitigation option[[10]](#footnote-11).
* **Accelerating the clean Energy transition is the most effective way to improve security, stability and affordability of the global energy supply**. Therefore, this topic could support efforts to stabilise global Energy Security, and further inform how to accelerate the development and deployment of low-cost green technologies.
* **Setting Energy supply transition sub-targets, policies and measures is a core consideration in NDC development** that can also impact the range and ambition of other thematic sub-targets that are set in an NDC. Therefore, it is beneficial to discuss this as early as possible, to help Parties reconsider where they can revisit and strengthen their 2030 NDCs.

Participants will benefit from sharing lessons learnt, highlighting solutions in the discussions and discussing impactful recommendations to be taken forward immediately in this critical decade to accelerate the implementation of existing targets and revisiting targets to be 1.5c aligned.

**Some key solutions for accelerating a cost-effective Energy supply transition** are listed in the annex (including those from the IPCC WGIII report) and would be **central to informing the discussions under the global dialogues** to accelerate the Energy supply transition.

**Discussing Energy supply transition in 2023 does not preclude us from revisiting this important topic** in future MWP discussions, noting that the cross-cutting nature of this topic will also link to other sectors discussed in other MWP topics.

The **global dialogues** could be framed to provide an understanding of what steps are required to:

* Set fossil fuel exit pathways and supporting policies that rapidly transform the current system, including by removing barriers to renewables expansion and stop the lock-in or expansion of new fossil fuel intensive infrastructure.
* Develop strong transition plans to support the phasing out of coal power and fossil fuels in a just manner, and support cooperation building and investment on a just coal phase-out (from an international to sub-national level, drawing from existing examples such as the country platforms of the just energy transition partnerships).
* Reform the market to enhance and encourage a clean and renewable energy mix, including by advancing low-carbon technologies, adapting market rules of electricity system for high shares of renewables, consider actions to reduce non-CO2 greenhouse gas emissions by 2030 (including methane), consider how to promote behavioural change to sustain and deepen GHG reductions, and building support for initiatives on emissions-free electricity, clean energy (including renewables targets), power system flexibility (maintaining a green energy mix), accelerating the deployment of grids and interconnection solutions.

**Parties agreed on the urgency of the following elements in previous CMA decisions**, and as such, **progress and next steps** for these should feature as part of the global dialogues this year:

* accelerate the development, deployment and dissemination of technologies, and the adoption of policies, to transition towards low-emission energy systems, including by rapidly scaling up the deployment of clean power generation and energy efficiency measures, including accelerating efforts towards the phasedown of unabated coal power and phase-out of inefficient fossil fuel subsidies (paragraph 36, Decision 1/CMA.3 and paragraph 28, Decision 1/CMA.4).
* increase in low-emission and renewable energy, and other cooperative actions (paragraph 12, Decision 1/CMA.4).
* rapidly transform energy systems to be more secure, reliable, and resilient, including by accelerating clean and just transitions to renewable energy during this critical decade of action (paragraph 13, Decision 1/CMA.4).
* enhancing a clean energy mix, including low-emission and renewable energy, at all levels as part of diversifying energy mixes and systems (paragraph 14, Decision 1/CMA.4).
* Actions to reduce non-CO2 greenhouse gas emissions by 2030, including methane (paragraph 37, 1/CMA.3 and paragraph 29, Decision 1/CMA.4).

The **regional dialogues** can be adjusted so the sub-themes focus on what is required for the energy mix in that region to phase out fossil fuels and systemically transition toward a clean and renewable pre-2030 energy infrastructure. These dialogues can also **propose regional recommendations** that are reflected in reporting prepared by the Secretariat, to enable ministerial engagement on this at the annual MRT through the co-chairs’ presentation.

#### Organising the MWP

Given the urgent pace of climate action that is required to keep 1.5c in reach, **the MWP should start as early as possible in 2023** to build greater capacity across the year to engage with this new process. Due to the breadth of work required to lead to meaningful Energy supply transition solutions for the MWP outcomes, the co-chairs should **convene four global dialogues** in 2023. The dialogues should build on the work of the Clean Energy Ministerial, G7, G20 and other existing international fora. The dialogues should be **inclusive** by involving a relevant range of stakeholders (outlined in the annex). The co-chairs should also look to **improve the organisation of each dialogue** in an iterative manner to ensure that it is **fit-for-purpose** **and produces the required inputs** well in advance of the annual MRT and CMA sessions.

#### Global dialogues

To enable Party and NPS representatives to navigate the evidence ahead of each dialogue and best prepare for interactive exchanges based on submissions, the Secretariat could support the co-chairs by synthesising the inputs received **ahead of each dialogue** in an **information paper**, shared well in advance of each dialogue. This could highlight **key solutions and case studies**. This information paper could also be used to prepare short papers for small group discussions under each global dialogue that **highlight key findings and discussion prompts to focus discussion** on how to build actionable solutions, drawing from existing scalable best practice and experience, to keep 1.5c in reach.

**T**hese four **global dialogues could take place alongside existing meetings in the international climate and energy calendar**, e.g. in conjunction with the Clean Energy Ministerial, the UN Secretary General’s 2023 Climate Ambition Summit, IRENA events and the IEA general assembly (ahead of SB59 and COP28). Convening global dialogues in conjunction with relevant IEA and IRENA events would also encourage in-person participation from policy practitioners.

Each global dialogue should run for **three days** and involve the following parts:

1. An **opening plenary segment** where:
	1. **focussed presentations are provided on the progress made to implement the commitments relating to the MWP outcomes from the previous year**. This can draw on the latest NDC Synthesis report, other relevant inputs (examples relating to Energy supply transition are listed in the annex) and voluntary submissions from Parties and NPS (particularly the sectoral initiatives). Parties and NPS will be given the opportunity to ask questions and interact with the latest findings. This segment could also guide how the implementation of the MWP outcomes and sectoral initiatives can be improved on and incorporated in, ahead of the MRT that year.
	2. **focused presentations** are delivered **on the annual selected topics**, **considering key notable mitigation abatement solutions** that that help close the emissions gap.
2. A **longer segment on the annual topics** that takes place in **smaller groups** with more detailed interaction on how to build recommendations based on current solutions and best practice (based on the presentations from the first segment). These discussions should be **co-facilitated by sectoral experts and policy practitioners** from the NPS community.
3. A **segment on the Investment-focused events** that convenes a discussion on the financial architecture and investment patterns of a specific sector (in line with the MWP selected topics for that year), raises the profile of what the private sector currently can invest in and highlights opportunities for further investment to support sectoral ambition and implementation, and discusses best practice for unlocking finance flows, including private finance flows for clean energy in developing countries. This should be convened in a panel format, and co-facilitated by sectoral expert NPS, with oversight provided by the High-level Champions and MWP co-chairs. This can include key stakeholders, including the Glasgow Financial Alliance for Net Zero and technical assistance programmes (ensuring the solutions being discussed are replicable). One example of a topic would be to discuss how best to shape NDC and LT-LEDs policies to be investment ready and what the potential best practice is for this.

For both the plenary and technical small group discussions, **the co-chairs would need to ensure relevant case studies, investable projects and stakeholders are identified** to build practical, solutions focussed conversations. This is vital in ensuring the latest evidence can be discussed and support accelerated climate action.

**Investment-focussed events** could take place in the margins of an existing event, and **Parties could volunteer to host** one, to enable the participation of key financial stakeholders that are best positioned to network and collaborate on the areas specified above.

#### Regional dialogues

Regional dialogues should also be organised alongside each regional climate week programme that **focus on the speed networking events and involve key local stakeholders** (noting that participation should not be limited to Parties or NPS from this region).

The regional investment-focussed events should provide a **dedicated, organised opportunity** for Parties and NPS, such as project brokers, investment practitioners and technical assistance officers, **to meet in a speed networking format** that requires in person participation. This should focus on the themes agreed in **previous CMA decisions and MWP topics discussed to date** to enable multiple collaboration opportunities on these topics. The events could be convened in a format such as **rotating thematic tables**, to encourage informal participant engagement. There should be scribes and rapporteurs, enabling collaboration areas and opportunities discussed to be **captured for the final MWP report**, ahead of the MRT (particularly as not all Parties and NPS will be in attendance). Those that agree to partner up can also announce this in the High-level Champion yearbook ahead of and at the MRT, and showcase progress updates in subsequent years alongside the High-Level Champions.

**In advance of the annual regional events**, the Secretariat could build a list of stakeholders (according to region) involved in identifying pipeline projects that need support, and the areas without current projects where Parties need support to both implement and overachieve their NDC (where policy and measures have not been fully defined for the sectors within the MWP scope). To maximise successful matches and discussions, the Secretariat can use existing systems or initiate a new process (e.g. a survey). This information could be provided to a third party that is already involved in this technical assistance work (such as NDCP and other similar programmes) to facilitate this join up in an experienced manner. This data would also **help inform who should prioritise attending the regional dialogues in person**, and the organisation of the event, where the Party hosting the event can seek to involve relevant stakeholders to support matchmaking.

#### Annex

**Additional detail for topics for the Energy supply transition global dialogues in 2023:**

Global energy transition dialogues should focus on systemic transformations required across the energy sector, and within specific sub sectors, to align with a 1.5c trajectory. The energy sector solutions in the IPCC’s Sixth assessment report should be used as a basis for the dialogue alongside reports and inputs from relevant organisations and initiatives such as the latest Breakthrough Agenda report, Global Energy Monitor, public finance tracker (for fossil fuel subsidies), IEA (2022 coal report, 2021 Net Zero by 2050 special report, World Energy Outlook 2022, World Energy Investment 2022 report), BloombergNEF (New Energy Outlook 2022 and Energy Transition Investment Trends), IRENA World Energy Transitions Outlook 2022, the Energy Transition Council, UN No New Coal Compact, Powering Past Coal Alliance, Mission Innovation Green Powered Future Mission, WRI’s State of Climate Action 2022 report, UNEP Emissions Gap Report, Global Methane Pledge and Green Grids Initiative.

Key solutions for the energy supply transition presented in relevant reports can be discussed and advanced through energy dialogues to provide outputs for discussion at the MRT and CMA. This can inform how Parties and NPS can enhance mitigation ambition and implementation:

The IPCC’s Sixth Assessment Report Working Group III report:

* a substantial reduction in overall fossil fuel use, minimal use of unabated fossil fuels, deep reduction of methane emissions by 2030 and use of CCS in the remaining fossil fuel system through decommissioning and reduced utilisation of existing fossil fuel-based power sector infrastructure, retrofitting existing installations with CCS, switches to low-carbon fuels, and cancellation of new coal installations without CCS.
* electricity systems that emit no net CO2 through deployment of solar energy, wind energy, lithium-ion batteries and other energy storage.
* widespread electrification of the energy system including end uses.
* development of energy carriers such as sustainable biofuels, low-emissions hydrogen, and derivatives in applications less amenable to electrification.
* energy conservation and efficiency.
* greater physical, institutional, and operational integration across the energy system
* policy packages tailored to national contexts and technological characteristics and comprehensive policies addressing innovation systems
* public R&D, funding for demonstration and pilot projects, and demand pull instruments such as deployment subsidies to attain scale
* digital technologies and barriers such as weaker enabling conditions in developing countries, including limited finance, technology development and transfer, and capacity.

The Breakthrough Agenda 2022 report:

* Donor governments, working with key institutions, initiatives, and funds, should increase the scale, coordination, transparency and accessibility of international support for the power sector transition, building on established frameworks and successful models.
* Donor governments and MDBs should work together to more strongly align development funding with targeted support for local jobs, skills, and investment, for the repurposing of fossil fuel assets and for environmental restoration, in the fossil-fuel dependent regions and communities.
* Governments should work together to reassess the opportunities for cross-border and regional power interconnections and smart grids to support the transition to clean power systems.
1. Paragraph 12, Decision FCCC/PA/CMA/2022/L.17. [↑](#footnote-ref-2)
2. Intergovernmental Panel for Climate Change’s (IPCC’s) Sixth Assessment report (AR6) working group III (WGIII) Summary for Policy Makers, page 21. [↑](#footnote-ref-3)
3. We refer to ‘Energy supply’ in this context in line with IPCC sector disaggregation; i.e. including electricity and heat and fossil fuel extraction and processing [↑](#footnote-ref-4)
4. <https://www.iea.org/news/defying-expectations-co2-emissions-from-global-fossil-fuel-combustion-are-set-to-grow-in-2022-by-only-a-fraction-of-last-year-s-big-increase>. [↑](#footnote-ref-5)
5. IPCC AR6 WGIII SPM, B.2.1, page 12. [↑](#footnote-ref-6)
6. IEA Net Zero by 2050: Roadmap for the Global Energy Sector, page 26. [↑](#footnote-ref-7)
7. *Ibid*, page 60. [↑](#footnote-ref-8)
8. IEA Global Energy Review: CO2 emissions in 2021 report, page 4. [↑](#footnote-ref-9)
9. [IEA Phasing out coal report: Executive Summary](https://www.iea.org/reports/phasing-out-unabated-coal-current-status-and-three-case-studies/executive-summary). [↑](#footnote-ref-10)
10. IPCC AR6 WGIII, Figure SPM.7, page 42. [↑](#footnote-ref-11)