

CORRIGENDUM of United Kingdom's 8th National Communication and 5th Biennial Report

Dear Sir or Madam,

Please accept the following corrigendum to the United Kingdom's 8th National Communication (NC8) and 5th Biennial Report (BR5) under the UNFCCC, correcting errors and omissions identified during the in-country technical expert review conducted April 24-28, 2023:

1. Pages 82-146, Table CTF3, new paragraph following the table

Addition: The projections in the UK's 8th National Communication (NC) included mitigation impacts for Policies and Measures (PaMs) in line with the UK's Energy and Emissions Projections (EEP) 2019 domestic publication. These mitigation impacts were collated before the deadline for submitting the report of August 2019.

PaMs announced after August 2019 or policies which were still under development at that point are not assigned quantified mitigation impacts in NC8. After submitting NC8, some additional policies were included in the October 2022 edition of the UK's domestic projections reporting, and are shown in EEP 2021-2040 Annex D.

2. Page Pages 82-146, Table CTF3, new paragraph following the table

Addition: Since March 2021, the Government has committed £30 billion of domestic investment at Spending Review 2021, £6 billion for energy efficiency for 2025-28 at Autumn Statement 2022, and up to £20 billion for carbon capture, utilisation and storage (CCUS) at Spring Budget 2023. Our policies helped encourage around £50 billion in public and private investment in low carbon sectors in 2021 and 2022 alone, and over 80,000 jobs have been supported by policies introduced since November 2020. Our policies will leverage around £100 billion of private investment over the period to 2030, and our ambitions will support up to 480,000 jobs in 2030.

3. Page 146, Table CTF, new paragraph following the table

Addition: We have included further clarity about the regional scope of our mitigation policies in table 3. We are aware there may still be some gaps which we will seek to address in future reporting.

- Sustainable Energy -Using Products – UK wide
- Building Regulations (2010, 2013) – England only

4. Page 205, sector "Agriculture", addition to first paragraph

Addition: The Agricultural Transition Plan sets out how we will support farmers and land managers. We will use funds previously allocated for environmental improvements, carbon emission reductions and support for farmers' productivity and animal health and welfare.

The UK Government is introducing a new environmental land management (ELM) scheme. This will provide a powerful vehicle for achieving net zero, and wider environmental goals, whilst supporting our rural economy. We are also providing support to farmers to improve productivity through the Farming Investment Fund and investing £270 million in the Farming Innovation Programme, as well as providing free business advice through the Future Farming Resilience Fund.

We will monitor uptake of our schemes and consider wider delivery mechanisms if required. We will continue to co-design our reforms with farmers and other experts. Since 2019, we have carried out co-design pilots, tests and trials with more than 5,000 farmers and several stakeholder organisations. We are continuing this through 2023.

We know that farmers want to better understand their sources of emissions and adopt low carbon practices as well as benefiting from new financial opportunities that low carbon practices will unlock. We will set out by 2024 how we will support farmers to understand their emission sources through carbon audits and take further actions to decarbonise their businesses, including through Environmental Land Management schemes.

5. Page 130, Table CTF3, footnote following "Wales: Just Transition".

Addition: The Environment (Wales) Act 2016 governs the Welsh approach to climate change and requires Wales to take different greenhouse emissions into account but it does not require Wales to capture or report a list of the GHGs affected by each individual policy. The timing and clarity of the reporting request meant this information was not included.

The current climate mitigation plan, Net Zero Wales, describes Government actions alongside those from other actors, reflecting the efforts needed from business, the third and public sectors as well as the general public. We are always looking for ways to improve our approach and so going forward, Welsh Government will work with policy officials and UK Government to identify and agree the list of GHGs affected by each Government policy reported in our Net Zero plans.

6. Page 282, Section 4.3, Paragraph 2, Sentence 2

Original: In addition, the UK provides selected data from the 'with additional measures' (WAM) scenario, which includes planned measures as at the same policy cut-off date.

Revised: In addition, the UK provides selected data from the WAM scenario, which includes planned measures as at the same policy cut-off date. The UK does not produce a without measures (WOM) scenario. Many mitigation measures were already in place when emissions projections were first produced by the UK, and there are certain PaMs, such as Emissions Trading Schemes (ETS), for which no past counterfactual scenario can be reliably modelled. Currently, it is not feasible to remove all these effects to produce a robust WOM projection.'

7. Page 285, Section 4.4, Paragraph 1

Original: Table 4.5 shows the UK's projections of the distribution of greenhouse gas (GHG) emissions across sectors of the UK economy.

Revised: Table 4.5 shows the UK's projections of the distribution of greenhouse gas (GHG) emissions across sectors of the UK economy. The sectors presented in Chapter 4 are the

UK's National Communication (NC) sectors, which are defined in terms of IPCC codes in Annex 5: Sectoral definitions. As such, they differ from the sectors presented in Chapter 2. The NC sectors are relevant for policy making in the UK, and projections for non-CO₂ GHG emissions for UK crown dependencies and overseas territories (CDOTs) are calculated at a high level of aggregation in NC sectors. Therefore, the NC sectors are appropriate for reporting projections of UK emissions under UNFCCC coverage.

8. Page 295, Section 4.7, Paragraph 6

Original: The overall modelling approach is similar to that used in previous Biennial Reports submitted by the UK, although there have been incremental improvements to the projections which are described in the UK's domestic EEP publications.'

Revised: The overall modelling approach is similar to that used in previous Biennial Reports submitted by the UK, although there have been incremental improvements to the projections which are described in the UK's domestic EEP publications. The following table outlines a summary of these approaches:

Model	Purpose	Notes
Energy Demand Model	Projecting energy demand and associated emissions	Uses bespoke econometric analysis of past energy demand by fuel and sector as published in the UK's annual energy statistics publication – DUKES (Digest of UK Energy Statistics). The resulting projection equations are combined with projections for drivers such as UK GDP growth and separately modelled policy impacts to project forward energy demand by fuel and sector. Energy demand projections are converted to emissions projections through emissions factors and calorific values.
Dynamic Dispatch Model	Projecting electricity supply and associated emissions	This model is used to project emissions from the power sector. It takes projected electricity demand from the Energy Demand Model and provides a modelled generation mix that meets that level of demand under current power sector policies. It is a market-based model that simulates the operation of the electricity market and the investment decision of market participants. It is a profit-maximisation model incorporating the effect of UK policies which incentivise low-carbon generation through market mechanisms. Includes combined heat and power plants.
UK GHG Inventory Non-CO ₂ emissions models	Projecting non-combustion, non-CO ₂ Emissions	Use emissions statistics from the 1990-2020 GHG Inventory (GHGI) as the baseline for these emissions projections. Sectoral models are used to project forward emissions from these sources (See Section 4.7 for more detail).

Additionally, the following amendment have been made to Chapter 4 but are not tied to a specific correction/omission from the in-country review:

9. Page 282, Section 4.3, Paragraph 2, Sentence 3

Original: “Both projection scenarios exclude any use of flexible mechanisms such as the UK Emissions Trading Scheme (ETS) or Joint Implementation and Clean Development Mechanism (CDM) credits.”

Revised: “Both projection scenarios exclude the use of credits from flexible mechanisms such as the Joint Implementation and Clean Development Mechanism (CDM)”.

10. CTF table 7 2019 and table 7 2020, row 47

Addition: The UK was the first major donor to provide certainty to developing countries about the volume of our climate finance, by our commitment of £11.6bn from 21/22 to 25/26. This is a dedicated climate commitment that is new and in addition to our previous International Climate Finance (ICF) commitment of £5.8bn. ICF is the UK’s primary international instrument to support developing countries under the Paris Agreement. The UK is also committed to aligning its Official Development Assistance (ODA) portfolio with the Paris Agreement, recognising that all development must now be consistent with low-carbon and resilient pathways.

11. CTF table 7 2019 and table 7 2020, row 35

Addition: Mitigation and adaptation spend is identified through internal analysis in line with the OECD Development Assistance Committee (DAC) definitions and the climate handbook, which include a list of activities that are climate finance eligible. We report this data to the UNFCCC so that the split for each bilateral programme is identifiable. For multilateral programmes, the CTF format means we cannot split spend across more than one theme. Therefore, the climate specific contributions to the Global Environment Facility and the Green Climate Fund for 2020 are marked as cross-cutting but are scored by the UK as 50% mitigation and 50% adaptation. This means the GEF 2020 climate specific contribution is USD 24.04m mitigation and USD 24.04m adaptation. The GCF 2020 climate specific contribution is USD 288.46m mitigation and USD 288.46m adaptation.

For 2019 table 7a there is an error in that the GEF climate specific contribution has been marked as mitigation and there a contribution reported to the Least Developed Countries Fund, which is marked as adaptation. However, the LDCF contribution should be for the GEF, so the 2019 GEF climate specific contribution is USD 31.62m and marked as cross-cutting in line with the approach we need to take within the CTF for 2020 contributions. The UK will score this spend as USD 15.81m mitigation and USD 15.81 adaptation.

12. CTF table 7 2019 and table 7 2020, row 36

Addition: The UK reports annual spend from its ODA budget (2019 and 2020 for BR5) that it has assessed as having clear climate change objectives. The spend must also be in line with the OECD-DAC rules on ODA.

The UK has not used Rio Markers for the purposes of its UNFCCC reporting. The UK identifies the amount of climate finance within each project. We consider this bottom-up approach as the most accurate method of reporting UK climate finance. However, the UK uses Rio Markers for reporting to the OECD DAC in line with their requirements.

The UK has reported climate specific contributions through multilateral channels. The Global Environment Facility undertakes environmental work, covering issues broader than climate change, and based on the anticipated work programme the UK scored 60% of GEF7 contributions as climate finance (increased from 40% from GEF6). The UK had worked with the GEF secretariat to assess the climate specific contribution.

The UK has reported core contributions it has made to the Multilateral Development Banks and UN organisations but we do not include any share of the core contributions we make to multilateral development banks as climate finance in order to avoid double counting internationally. For example, the UK is currently the largest contributor to the International Development Association (IDA), one of the world's largest providers of concessional climate finance to the poorest and most vulnerable countries, but this is not reported in NC8.

13. Page 364, section 6.8.1, new paragraph

Addition:

The monitoring aspect of the framework consists of 11 key performance indicators (KPI), covering achievements in adaptation, mitigation, nature, transformational change and mobilised finance. Programmes that are wholly or partly funded by International Climate Finance (ICF) report results against relevant ICF KPIs. These are collected and aggregated across the ICF portfolio for reporting publicly via our annual results publication (<https://www.gov.uk/government/publications/uk-climate-finance-results-2022>). The ICF KPIs, their detailed methodologies, and annual aggregate results are all published on the UK Government website (<https://www.gov.uk/government/publications/uk-climate-finance-results>).

These indicators are listed below:

- KPI 1 – People supported to better adapt to the effects of climate change;
- KPI 2 – People and social institutions with improved access to clean energy;
- KPI 4 – People whose resilience has been improved;
- KPI 6 – Tonnes of greenhouse gas emissions reduced or avoided;
- KPI 7 – Installed capacity of clean energy;
- KPI 8 – Ecosystem loss avoided;
- KPI 10 – Value of ecosystem services generated or protected;
- KPI 11 – Public finance mobilised for climate change purposes;
- KPI 12 – Private finance mobilised for climate change purposes;
- KPI 15 – Extent to which ICF intervention is likely to lead to transformational change; and
- KPI 17 – Area under sustainable management practices.

14. Page 366, section 6.8.1, after second paragraph

Addition: The UK reports annual spend from its ODA budget (2019 and 2020 for BR5) that it has assessed as having clear climate change objectives. The spend must also be in line with the OECD-DAC rules on ODA.

The UK has not used Rio Markers for the purposes of its UNFCCC reporting. The UK identifies the amount of climate finance within each project, we consider this bottom-up approach as the most accurate method of reporting UK climate finance. However, the UK uses Rio Markers for reporting to the OECD DAC in line with their requirements.

The UK has reported climate specific contributions through multilateral channels. The Global Environment Facility undertakes environmental work, which is broader than climate change alone, and based on the anticipated work programme the UK scored 60% of GEF7 contributions as climate finance (increased from 40% from GEF6). The UK had worked with the GEF secretariat to assess the climate specific contribution.

The UK has reported core contributions it has made to the MDBs and UN organisations. We do not include any share of the core contributions we make to multilateral development banks as climate finance to avoid double counting internationally. For example, the UK is currently the largest contributor to the International Development Association (IDA), one of the world's largest providers of concessional climate finance to the poorest and most vulnerable countries.

15. CTF table 7a 2019 cell D27

Addition: The £3.17m figure reported in table 7a (2019) consists of £2.62m contribution to the Food and Agriculture Organisation (FAO) of the UN and £0.55m subscription for UK's membership of the UNFCCC.

16. Page 364, new paragraph in section 6.7.3

Addition: Supporting developing countries with any economic and social consequences due to our provision of climate finance.

The UK has several approaches to support developing countries with any economic and social consequences which have arisen due to our provision of climate finance.

We ensure our spend complies with the legally binding International Development (Gender Equality) Act 2014 <https://www.legislation.gov.uk/ukpga/2002/1/section/1>. This requires Ministers to have regard to the desirability of providing development assistance that is likely to contribute to reducing poverty in a way which is likely to contribute to reducing inequality between persons of different gender.

17. Page 352, section 6.4.5, new 2nd paragraph

Addition: The UK is committed to supporting countries that are particularly vulnerable to the adverse effects of climate change, including by:

- Targeting climate finance towards the countries that are most vulnerable to the impacts of climate change, based on criteria including the country's level of development, exposure to climate change risks and ability to adapt to climate change.
- Supporting country-led adaptation planning and implementation. We are supporting countries to develop and implement their own adaptation plans by providing funding, technical assistance, and capacity building.
- Investing in climate-resilient infrastructure, such as flood defences, drought-resistant crops, and early warning systems. This will help to protect people and livelihoods from the impacts of climate change.

Further details on our approach can be found in our International Climate Finance strategy (<https://www.gov.uk/government/publications/uk-international-climate-finance-strategy>).

18. Page 355, end of section 6.4.7

Addition: The UK uses a set of International Climate Finance (ICF) Key Performance Indicators (KPIs) to track the results of ICF spending, described in section 6.8.1. This includes a KPI (KPI 12) on private finance mobilised for climate change purposes. The detailed methodology note for this KPI can be found in UK Climate Finance results publications on gov.uk: <https://www.gov.uk/government/publications/uk-climate-finance-results>. £5.2 billion private finance was mobilised for climate change purposes in developing countries between April 2011 and March 2022. Private finance mobilised as a result of UK

contributions to specific programmes can be found on the Development Tracker website (<https://devtracker.fcdo.gov.uk>).

19. Page 333, section 5.6.13, following second paragraph.

Addition: The UK Government will continue to report on adaptation action using feedback provided by the Climate Change Committee (CCC) in their biennial progress reports on the UK's National Adaptation Programmes. This is the best measure as an independent assessment of Government progress against the objectives we outlined in the 2nd National Adaptation Programme (NAP).

As part of the Third National Adaptation Programme (NAP3) development, risk-owning departments across Government have been tasked with identifying adaptation indicators. After NAP3 is laid in Parliament, departments will continue to design and develop useful indicators to contribute to the CCC's first progress review of NAP3 in 2025. This process will support the Government's understanding and monitoring of responses to climate risk to provide a more accurate representation of adaptation progress. It will also move us closer to a more detailed and higher frequency assessment of progress against individual risks and in different sectors.

The internal governance structures to support the monitoring and evaluation of NAP3 actions following the publication of NAP3 will be informed by existing structures, including the network of risk-owning departments mentioned above and during the Review.

20. Page 405 section 8.1, additional paragraph at the end

Addition: The UK Government has a robust approach to public engagement, which is used to inform the policy decisions communicated in our national communication.

Since 2019, we have funded 13 deliberative dialogues on a range of net zero issues including homes, heating, transport decarbonisation, green savings, hydrogen, food, Carbon Capture Use and Storage, Advanced Nuclear Technologies, energy, and the environment. Through the UK Research and Innovation's Sciencewise programme, we have funded over 60 deliberative dialogues on science and technology in the last 15 years.

We have particularly targeted engagement to young people. In 2019, a Youth Steering Group was established by Government to review its policy, including reviewing the 25 Year Environment Plan Progress Report, Clean Growth Strategy and Resources and Waste Strategy.

Recommendations from the workshops and steering groups have formed part of the preparation of net zero policies communicated nationally. We will continue to encourage public participation throughout our domestic review of climate change policy.

21. Page 406 section 8.3.1., additional paragraph at the end

Addition:

On Ecorys: The Department for Education is developing an evaluation framework for commitments set out in the Sustainability and Climate Change Strategy for the education and child services sector in England, due for completion by the end of 2023. UK Government is also developing indicators to monitor progress on delivering our strategic aims and the policies set out in the Strategy. Specific policies, including the National Education Nature Park, Climate Action Award, and climate literacy survey of school leavers, will be evaluated by independent specialists to ensure a robust appraisal of performance.

On physical education estate: The Department for Education is currently piloting interventions on the education estate, to identify the most effective mitigation and adaptation measures in a range of contexts. Pilots include low carbon construction methods, building fabric improvements, microgeneration, heat decarbonisation, green infrastructure, and indoor air quality sensors. The Department also works with contractors, academics, and other experts to collect post-occupancy building use and performance data to evaluate the effectiveness of sustainable design guidance.

The results from pilots and evaluations are collated by the Department and analysed by suppliers as well as its own engineers, architects, and other specialists, who then use those insights to inform decisions, update design guidance, and inform policy. The process is iterative; guidance is subject to frequent minor updates every six months and major reviews every four years. The design guidance is then used by contractors on Department for Education funded building projects. The results are also shared with building design practitioners and other stakeholders through official publications and construction industry events.

22. Page 79, section 3.5.1, new sub section & paragraph

Addition: “3.5.1.1 International Civil Aviation Organization (ICAO) and International Maritime Organization (IMO)”

The UK’s reporting to promote and/or implement ICAO decisions to reduce emissions can be found in the following places:

- The document in the ICAO process that summarises the UK’s actions to reduce international aviation emissions is the State Action Plan. Due every three years, our last plan was published in 2021 and can be found at: https://www.ecac-ceac.org/images/activities/environment/United_Kingdom_Action_Plan_on_CO2_Emission_Reduction_2021.pdf
- More up to date and comprehensive is our latest strategy for reducing UK aviation emissions, the Jet Zero Strategy (<https://www.gov.uk/government/publications/jet-zero-strategy-delivering-net-zero-aviation-by-2050>). However, this is not an exhaustive assessment of all actions taken. It also covers domestic as well as ICAO policies, and domestic as well as international aviation emissions. It sets out at a high level how we intend to work through ICAO to reduce international aviation emissions.
- States are audited by ICAO for compliance with its standards. The UK was last audited in 2022 and the results will be published in due course.
- The single biggest ICAO emissions reduction mechanism is the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). Specific documents have been published in relation to the UK’s implementation of CORSIA, including a consultation in 2021 (<https://www.gov.uk/government/consultations/implementing-the-carbon-offsetting-and-reduction-scheme-for-international-aviation>) and a statement of intent in 2022 (<https://www.gov.uk/government/publications/initial-offsetting-approach-for-corsia-statement-of-intent>).

On IMO, The UK national action plan, the Clean Maritime Plan, can be found <https://www.imo.org/en/OurWork/Environment/Pages/RELEVANT-NATIONAL-ACTION-PLANS-AND-STRATEGIES.aspx>. It was published in 2019 and will be refreshed later in 2023.

In addition, the IMO has a Member State Audit Scheme, details can be found <https://www.imo.org/en/OurWork/MSAS/Pages/default.aspx#:~:text=The%20audit%20scheme%2C%20using%20the%20IMO%20Instruments%20Implementation,IMO%20instruments%20which%20are%20covered%20by%20the%20Scheme>. The Maritime and Coastguard Agency (MCGA) is responsible for the audit for the UK.