

Call for Papers:

Evidence on Climate Compatible Growth for COP26







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The views expressed in this note are informal and do not necessarily reflect the UK government's official policies.

11th May 2021

The aim of this Call for Papers is to assemble and synthesise evidence on climate compatible growth to support preparations for the COP26 climate change summit.

 Extended Deadline for abstract submission: end of Monday 24th May 2021 (GMT+1)

Overview

Climate Compatible Growth (CCG) is a UK government-funded programme to help lowand middle-income countries (LMICs) to develop economic strategies, plans, and policies to attract investment into low-carbon growth opportunities across multiple sectors. It focuses in particular on the energy and transport sectors. The programme's work will also help these countries to meet growth aspirations and the Sustainable Development Goals (SDGs).

CCG brings together some of the UK's leading research organisations and partners them with local researchers, governments, Multilateral Development Banks (MDBs), and International Organisations to identify low-carbon development pathways. This includes assessing the most effective policy, regulatory, market models, and risk mitigation options to implement them. The programme and its partners will also develop a range of open-source tools, models, and data sets that will be global public goods available to all countries.

In its initial phase, the CCG programme is supporting preparations for the UNFCCC climate change summit (COP26), which will be held in Glasgow in November 2021. CCG has been asked by the COP26 unit in the UK government's Cabinet Office to assemble and synthesise academic evidence on eight priority topics. These topics are directly relevant to the preparatory dialogues the Cabinet Office is convening with LMICs under the Energy Transition Council. This evidence will also help to shape the CCG programme's future research priorities.

In addition to synthesising evidence, this activity has another important aim: to provide an opportunity for researchers from outside the core CCG consortium to contribute to its research programme, especially researchers from LMICs.

This isn't a conventional Call for Papers. While papers that are selected will be published in a series of special issues of Elsevier journals¹, authors will also be required to submit a shorter briefing paper for a policy audience. This is to ensure that the evidence from the papers makes an impact on preparations for COP26. In some cases, authors may also be invited to contribute to bilateral dialogue meetings between the UK and other countries.

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¹ Papers will be published in special issues in high-impact journals. Candidate journals include: Energy Policy; Energy Research and Social Science; Renewable and Sustainable Energy Reviews; The Electricity Journal; Energy Economics; Applied Energy; Energy Strategy Reviews; Renewable and Sustainable Energy Transition; Transport Policy; Transportation Research Part D: Transport and Environment; Journal of Cleaner Production.

If you would like to submit a paper, you will be required to:

- Submit an abstract by the end of Monday 24th May 2021 (GMT+1). Abstracts should be up to 200 words and submitted using our online form at: www.climatecompatiblegrowth.com/research/opencalls. You can also indicate co-authors where applicable, and whether you would like to apply for funding (see below for more information).
- Those that are successful will be invited to submit a summary briefing of 1000 words with key insights, conclusions, and policy implications by the end of Wednesday 30th June 2021 (GMT+1), and
- A **full paper** by the end of Tuesday 31st August 2021 (GMT+1)

If you are interested in acting as an **editor** of one of the special journal issues that will bring together papers on a priority topic (see list below), you will also be able to submit an expression of interest at: www.climatecompatiblegrowth.com/research/opencalls.

If you have questions about this call, please contact Dr Stephanie Hirmer, CCG Research Manager (stephanie.hirmer@eng.ox.ac.uk) or Prof. Jim Watson, CCG Research Director (j.watson@ucl.ac.uk). Please include "CCG COP Call for Papers enquiry" in the subject line.

Priority Topics

Papers should address at least one of the following priority topics. They have been identified through discussions with the COP26 unit. The scope of each topic is provided in Appendix A.

- Renewables integration into reliable, secure electricity systems, including the future design of markets that take account of changes in technology and decentralisation
- Regional collaboration to achieve climate compatible growth, including international electricity grids
- Shifting away from coal-fired power, including innovative finance for retiring existing plants early
- The implications of electricity system change for materials, mining, and processing
- Political, economic, and energy system implications of a transition to clean transport
- Investment ready energy policies: a synthesis of existing evidence²
- The political economy of energy system transitions
- Covid recovery and climate compatible growth

Geographical Focus

Papers should focus primarily on evidence from LMICs. Submissions are particularly welcome that focus on countries that are taking part in COP26 Energy Transition Council dialogues with the UK. They are as follows:

- **South-East Asia**: Indonesia, Laos, Philippines, Vietnam
- South Asia: Bangladesh, India, Pakistan
- Sub-Saharan Africa: Kenya, Nigeria, South Africa
- North Africa: Egypt, Morocco

² We are primarily interested in a synthesis of existing academic and other literature on this topic.

Funding

The CCG programme may have a limited budget to pay for the time required by some authors to write their papers. This will be confirmed when abstract submission opens. Funding will be prioritised for authors from low- and middle-income countries who do not have access to other sources of funding for research time and assistance. Authors that would like to apply for this funding should indicate this when they submit their abstract with a brief justification statement.

Appendix A: Scope of Priority Topics

This appendix sets out the scope of the priority topics in more detail. Authors should make sure that their papers fit within the scope of the relevant topic before submitting an abstract.

- 1. Renewables integration into reliable, secure electricity systems, including the future design of markets that take account of changes in technology and decentralisation.
 - National experiences of renewables integration in LMICs, in both national electricity grids and off-grid systems
 - Lesson learning from OECD countries on integrating significant shares of renewable electricity
 - Understanding the potential for high shares of renewable electricity in specific LMICs or regions, including how this potential could be achieved in practice
 - The technical challenges and solutions to achieve a high share of renewables in LMICs
 - Policy and market frameworks for renewables integration: what are the challenges and the solutions?
- 2. Regional collaboration to achieve climate compatible growth, including international electricity grids.
 - The scope for strategic collaboration between countries in a specific region that could deliver climate compatible growth.
 - Barriers to greater co-operation within specific regions, and how they could be overcome. Case studies of successful co-operation.
 - The potential for regional grids for LMICs: what could the costs and benefits be for specific countries or regions? What scale of investment might be required? How can financial risks be managed?
 - Policy and governance of regional or super grids what are the challenges for policy design, politics, and implementation?
- 3. Shifting away from coal-fired power, including innovative finance for retiring existing plants early
 - Experiences of phasing out coal from OECD countries. What are the lessons for LMICs? What are the key differences between OECD and LMICs that could limit the scope for lesson learning?
 - Plans for phasing out coal in middle-income countries: how can this be achieved without compromising electricity reliability and affordability? How can it be integrated into national energy plans?
 - Political economy implications of shifting away from coal including for employment, economic development, and industrial strategy
 - Financing the retirement of coal-fired power plants early: what are the options, and what can be learned from experience so far?
 - Alternatives to coal: how can LMICs that are highly reliant on coal increase electricity investment, reliability, and access without it?

- 4. The implications of electricity system change for materials, mining, and processing
 - What are the implications of the low-carbon electricity transition for demand for materials, e.g., for renewable energy technologies?
 - How will the development of the mining sector in specific LMICs or regions affect the electricity system? What are the opportunities and challenges?
 - How could a cleaner energy system promote the use of in country materials and agricultural processing? What would the costs and benefits be?
- 5. Political, economic and energy system implications of a transition to clean transport
 - Transitions to sustainable low-carbon transport so far: experiences from LMICs
 - Future trajectories: what are the priorities for sustainable, lowcarbon transport systems, infrastructure, and vehicles for LMICs? How will they affect the electricity system?
 - Costs and benefits of a shift to sustainable low-carbon transport, including for citizens, industries, and government?
 - What are policy options for high-income countries to accelerate the transition towards sustainable clean transport and energy systems in LMICs?
 - How to ensure a just transition towards a sustainable transport and energy system for all in LMICs?
- 6. Investment ready energy policies. A synthesis of existing evidence, including a focus on the following questions:
 - What are the investment challenges and opportunities facing specific LMICs?
 - What are the challenges and risks associated with achieving financial close on low-carbon infrastructure projects in LMICs, and how can they be mitigated?
 - How can policies overcome the investment challenges and exploit the opportunities? What is the scope for innovative approaches such as resultsbased financing?
 - What are the concrete lessons from successful instruments and policy packages that unlocked sustainable investments in developing countries?
- 7. The political economy of energy system transitions
 - How are transitions to low-carbon energy systems being shaped by political economy in LMICs? What are the experiences and lessons so far?
 - How can energy transition policies and strategies take political economy into account and minimise risks of disruption or delay?
 - The political economy of incumbency: what is the role of fossil fuel industries in LMICs? Is the fossil fuel industry part of the problem or the solution?
- 8. Covid recovery and climate compatible growth
 - Tracking and analysing economic recovery plans: are they compatible with global and national climate goals?
 - The potential for greener, climate compatible recoveries: what would a climate compatible recovery look like for specific LMICs or regions?
 - How can donors and international institutions support climate compatible recovery in LMICs?



















