

INTRODUCING THE CCG CATALYST FACILITY

LET'S EMPOWER RESEARCH EXCELLENCE TOGETHER



"The views expressed in this material do not necessarily reflect the UK government's official policies."

In partnership with



About CCG – the organisation behind the Catalyst Facility

CCG is a pioneering UK aid-funded project which aims to support investment in sustainable energy and transport systems to meet development priorities in the Global South. *Put simply, we support LMICs in the Global South to create investment cases that will attract vital climate finance and funding for their clean energy infrastructure plans.*

The programme brings together some of the UK's leading universities including Oxford, Cambridge, University College London, Imperial College, the Open University, Loughborough and Strathclyde, with the Centre for Global Equality, KTH Royal Institute of Technology, and Climate Parliament. It is directed from the Centre for Sustainable Transitions: Energy, Environment, and Resilience (STEER), at Loughborough University. Our team includes experts in practical, applicable research in sustainable development and related topics.

During our first five-year period, we have achieved credibility with UK and international

governments, with the World Bank, Asian Development Bank, IEA, IAEA and numerous other leading organisations. Our approach is grounded in rigorous fund administration processes, having mobilized £95 million. It allocates funds via strategies and competitions through a transparent theory of change, logical framework, and processes compliant with UK aid's Due Diligence requirements. We embed outcomes into national universities and governments, unlocking breakthroughs in concessionary and private climate finance.

Our strategy is based on partnership and collaboration. This means that we work with countries, empowering them to make their own decisions on energy policy and the infrastructure projects for which they wish to attract climate finance investment. Our approach is always to work with both a university and a government partner in-country with a view to strengthening the science-policy interface. Our goal is to develop and embed skills in energy modelling



IMPERIAL



STEER – Centre for Sustainable Transitions: Energy, Environment and Resilience



and analysis locally, to sustain this for the future. Our work has supported national breakthroughs in financing and energy infrastructure investments, particularly through the Data-to-Deal framework. That is why we have developed a range of open source tools,

models and datasets as global public goods, available to all countries.

We believe that our approach is unique, ground-breaking and a genuinely impactful response to the climate crisis.

Building on Early Success

Supported by its partners, CCG has established itself as a leading provider of capacity-building, empowering policymakers and academics in the Global South with the system modelling skills needed to develop locally owned and nationally grounded climate transition plans. CCG modelling tools follow the **Data-to-Deal (D2D)** framework, meaning they provide the analytics needed to support each stage of a clean energy project, **helping mobilize finance from national, concessionary, and private sources**. From demand projections to system planning, financing strategies, and securing project finance, CCG tools enable high-impact results. CCG has achieved over 200,000 worldwide downloads of its high-quality self-administered training materials in the OpenLearn Collection. These cover more than 14 different energy modelling tools developed by leading edge universities and international organisations, which have been translated into multiple languages.

Through the **Energy Modelling Platforms**, CCG and its partners in the *Optimus Community* provide in-depth face-to-face training for hundreds of influential academics and mid-career professionals across the developing world using accessible open source technical tools.

CCG capacity-building programmes are highly rated by students, and some have been encouraged to return as the next generation of trainers. *Several leading international organisations, such as the World Bank and the International Energy Agency, have demonstrated their confidence in the quality of CCG's training programmes by sponsoring*

students and integrating the training activities into their own capacity building programmes.

By partnering with local universities, CCG materials can be institutionally embedded to create a sustainable, long-term capacity-building ecosystem in each participating country through the CCG Flatpack programme. To make this possible, CCG supports the design and implementation of graduate courses by offering a menu of teaching materials, supporting the professional development of the academics and providing scholarships to enrolling students.

However successful, these efforts still fall far short of meeting the vast demand for skills in Low- and Middle-Income countries, as well as the urgent need to equip them for planning their climate transitions. *For every professional trained, another suitable candidate is turned away due to funding and space limitations.*

Participants at EMP-Global 2024



Introducing the Catalyst Facility

To meet the needs of the future, CCG wishes to take its capacity-building efforts to a bigger scale by embarking on a new delivery model that will permit a much faster, wider and even more cost-effective delivery of services.

To enable partnerships with educational institutions in low- and middle-income countries, CCG is launching the Catalyst Facility. The Catalyst Facility, a Trust Fund housed at the International Centre for Theoretical Physics (ICTP) - a UNESCO Category I institute - and managed by CCG, supports sustainable energy transitions through capacity-building initiatives.

The Catalyst Facility Trust Fund provides scholarships for master's students, sabbaticals for academic and policy paper writing, and funding for capacity-building activities. ***This is especially critical in developing countries, where researchers produce a small percentage of global academic papers.*** The Fund aligns with ICTP's mission to advance scientific expertise in developing countries by fostering education and research in areas critical for global energy and climate solutions. With a strategic focus on promoting collaborative learning and research, the Catalyst Facility will catalyze impactful, autonomous research and produce a steady stream of graduate experts.

Our Objectives

- **Create a sustainable graduate teaching model** that strengthens universities in the Global South with support from leading hubs.
- **Nurture world-class, locally based students** capable of developing nationally owned sector investment strategies to support the climate transition.
- **Empower academics** by funding time for their research, providing exchange opportunities, and supporting international collaboration with leading peers.

Funding Options

Various incentives will be offered through the Catalyst Facility to ensure lasting connections with partner institutions and prestigious universities within the CCG network.

become ICTP Affiliate Centres, gaining access to ICTP's research network, training, and funding opportunities to strengthen their role in sustainable energy transitions.

- 1. MSc Scholarship:** supports selected universities in developing sustainable, locally tailored MSc programmes that equip students with skills to shape policy, advocate for national positions, and mobilize climate finance. CCG will work with these universities to integrate CCG's energy modelling tools into curricula and *cover living and tuition expenses for a critical mass of students annually, for up to three cohorts initially, with the potential for renewal.* Host universities can apply to
- 2. Academic Training:** Grants fund three-week international training for Global South academics to deliver energy modelling modules developed by CCG and partners. These intensive EMP programmes train participants in teaching cutting-edge analytical methods and include guided work on nationally relevant case studies.
- 3. Associate Sabbatical:** Academics who have completed the CCG training and are

delivering high-quality instruction can apply for mini-sabbatical grants, covering two visits over two years to work on research agendas, publications, and funding proposals. These grants include a €150 Research Grant, with additional support for a student to join if justified.

4. Research Collaboration: Academics who have completed mini-sabbaticals and produced substantial research can apply for grants covering 20% of their time for one year. This funding allows them to focus on climate transition research projects, enhancing their capacity to inform public policy and enriching the learning experience for their students.

Support the Catalyst Facility

Join us in a transformative journey to revolutionize education and research in support of the climate transition in the Global South. Through our Catalyst Facility, we seek visionary philanthropists like yourselves to invest in this groundbreaking initiative that will nurture a new generation of leaders and drive sustainable development.

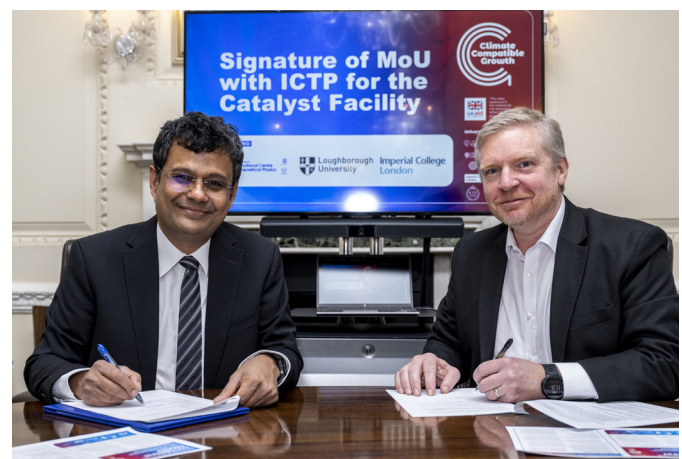
With modest investment, you can empower a network of universities to produce a wealth of academic output, resulting in the following tangible outcomes:

- Academic institutions fostering a research culture of innovation and collaboration across the Global South.
- Cohorts of highly skilled graduates from the Global South, equipped to tackle critical challenges.
- A significant flow of peer-reviewed academic papers co-authored by academics in the Global South, contributing to the global body of knowledge.
- A substantial series of policy support documents, shaping evidence-based decision-making in the Global South.

Your generous contribution will catalyze a ripple effect of transformation, empowering the Global South to take ownership of its development trajectory. Together, we can:

- Empower a community of experts with the knowledge and skills to address climate challenges.

Dr Atish Dabholkar, Director of ICTP (left) and Prof Mark Howells, Director of CCG sign the Memorandum of Understanding to launch the Catalyst Facility, 30 January 2024



- Strengthen research capacity and foster a culture of innovation.
- Generate policy-relevant insights to inform sustainable development.
- Bridge the gap between academia and real-world problem-solving.

Your partnership will be instrumental in shaping the future of education and research for the climate transition, paving the way for a more equitable and prosperous global landscape. We look forward to discussing this exciting proposal with you further.

Contact Us

If you have a question please email ccg@lboro.ac.uk

