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Climate Compatible Growth

It's About Partnership – with your support, and our expertise, the Global South can secure the finance it needs for a sustainable future

Empowering National and International Partnerships to achieve Sustainable Growth

Climate Compatible Growth's (CCG) engagement and research accelerates the release of domestic and international finance for inclusive, low-carbon infrastructure and economic growth in Low- and Middle-Income Countries (LMICs). Our co-created methods, currently supported by the **UK Government's Foreign, Commonwealth & Development Office (FCDO), have a proven track record, helping partners mobilise over $11 billion from International Finance Institutions in just two-years.** We move beyond traditional research and technical assistance to build enduring, self-reliant national systems that align nationally driven economic development with climate action – energising policy evolution and mobilising finance well into the future.

The Challenge: Overcoming Systemic Barriers to Investment

LMICs often struggle to attract the finance (and IFIs to disperse the funds) needed for climate-compatible development due to a set of interconnected, "wicked" problems:

1. **Government Fragmentation:** A lack of coherence between ministries stalls progress, particularly the early involvement of the Ministry of Finance in sectoral planning.
2. **Uncoordinated Support:** Fragmented technical assistance from various development partners often works at cross-purposes, undermining national strategy.
3. **A Weak Project Pipeline:** The above issues result in too few bankable, investment-ready projects, as upstream policy and planning are not aligned with financier requirements.
4. **A Local Knowledge Gap:** National universities often lack the incentives and capacity to conduct policy-relevant research or produce graduates with the skills to fill critical institutional roles, perpetuating a cycle of dependency on external expertise.

Our Process: Building a Self-Sustaining National Ecosystem

The CCG model directly addresses these challenges by creating a virtuous cycle of local expertise, evidence-based policy, and effective finance mobilisation. *The process is government-led and founded on deep partnership.*

5. **Mandate and Invitation:** Our engagement begins only upon invitation from an LMIC government (either directly or via a partner organisation), secured by high-level political commitment. This mandate empowers technical analysts to collaborate across ministries and drive reform.
6. **Partnership and Co-Creation:** We establish an in-country ecosystem linking key government institutions, local universities, and International Financial Institutions. We work with our partners to co-design work plans and deliverables that are context-specific and politically informed.
7. **Phased Capacity Building:** We deliver tailored training and support through a unique, phased approach:
   Phase 1 (Co-Create): CCG experts work directly alongside government and university teams to produce the first round of analytics, policy reforms, and finance applications, providing intensive, hands-on guidance. This is embedded via locally driven Special Interest Groups (SIGs) that can be important vehicles to ensure local ownership and agency.
   Phase 2 (Coach): We transition to a coaching role as the local institutions and their experts take the lead, embedding the skills and processes needed for independent operation.
   Phase 3 (Co-convene): LMIC champions are now in a position to lead and direct the process allowing for efficient south–south and south–north exchange. CCG, together with regional partners, platforms and enables those champions. The final phase shifts from direct support to driving strategic incentivises and locally sourced, self-sustaining systems.
8. **Strengthening the Science–Policy Interface:** A unique element is to incentives and create a link between local universities and government. This ensures a continuous flow of evidence from universities to inform policy, while government needs shape research agendas and the curriculum for the next generation of analysts and leaders.

TAKE A DEEPER DIVE:
For more on this, please see *www.climatecompatiblegrowth.com*, which covers:
- Programmed Research, including deep analytical capacity
- Country Partnerships, emphasising the impact of Special Interest Groups
- International Partnerships, combining global public goods with international coordination.
- Tailored offers, such as for critical materials research.

GET INVOLVED:
Join CCG to amplify impact with a proven public goods programme. We are a research partnership administered by Loughborough University, with the universities of Cambridge, Imperial, the Open University, Oxford, Strathclyde, UCL, KTH in Sweden and non-academic partners Climate Parliament and the Centre for Global Equity. We also subcontract with regional universities and partner organisations.

Join us as
- an **End User:** use our freely available open research and tools at www.ClimateCompatibleGrowth.com),
- a **Collaborator:** partner with us to deliver joint activities, through in-kind support.
- a **Funder:** providing financial support for core delivery, or co-created activities, and getting access to our delivery ecosystem of decision-makers, hundreds of analysts, and world-leading academics.

Let's build more together: email us at *ccg@lboro.ac.uk*

For partners considering core funding alongside the FCDO, contact *alfie.alsop@fcdo.gov.uk.*

For Governments/universities: see more information at the end of this brochure.

The Result: From Dependency to Self Determination

Countries are in different phases of creating their plans: from building Data-to-Deal pipelines for projects and policies, to strengthening science–policy interfaces or creating enabling ecosystems. Depending on the need, CCG is happy to provide the following offers: (1) the full Data-to-Deal pipeline, (2) strengthening core policies (NDCs, LTS, IRP/IEP/IDP) with a finance ministry interface; (3) bridging policy to finance by aligning line and finance ministries with IFIs to build investable pipelines; (4) targeted capacity building via "Lite" or (5) multi-tool bootcamps; (6) institutional embedding through "FlatPack" universities and (7) Country Networks; and (8) bespoke research on "wicked problems". They are designed to develop and translate plans into updated policy and financed projects – using open models, curated data, capacity building, stakeholder engagement, and long-term knowledge management – with a track record in mobilising concessional finance (eg Costa Rica, Chile, Dominican Republic, Uruguay).

Ready Made Packages to Address a Range of Common Issues (1-4)

Service 1: Mobilising Finance: From Data-to-Deal

Timeline: 2–3 years depending on host country constraints

Challenge	Intended Partners	Approach	Deliverables (all negotiable)	Requirements	Cost (Aug 2025)
LMICs often struggle to turn their climate goals and national development plans into tangible, financeable infrastructure projects. D2D solves this problem.	**National Government and IFIs.**	Our seven stage Data-to-Deal approach focuses on systemic issues like organisational skills capacity and vision, using data to model options, securing high-level support from government, winning stakeholder support, creating a supportive policy framework, developing credible investment bids. The D2D process helped Costa Rica, Chile, the Dominican Republic, and Uruguay to secure $11Bn in concessionary finance.	A standard package includes Economic and financial planning through open-source models; Policy development, (NDC, LTS etc); Associated databases; Institutional capacity strengthening; delivering a Stakeholder engagement strategy; drafting an IFI funding application, long-term knowledge management plan.	High-level political commitment and mandate for timely co-ordination between ministries of environment, energy, transport, economics, and finance.	Approx. £950,000 per country (includes most stages of D2D)

Service 2: Strengthening Core Planning Processes

Timeline: 2–3 years depending on host country constraints

Challenge	Intended Partners	Approach	Deliverables (all negotiable)	Requirements	Cost (Aug 2025)
LMICs often lack the capacity to develop locally owned and grounded transition plans and become overly dependent on contracted services.	**Line Ministries and Technical Assistance (TA) Programmes** to those line ministries.	CCG supports the development of core policy processes, such as Integrated Resource Plans (IRPs), Integrated Energy Plans (IEPs), LTSs, and NDCs. Early on we would involve the finance ministry to ensure plans are designed with finance mobilisation in mind. We provide hands-on support initially, then intensive support for national analysts and institutions to foster national delivery and a self-sustaining evidence generation ecosystem. Ecuador's NDC used CCG's OSeMOSYS tool; Ghana, Botswana and Cyprus used CCG tools for national planning.	A standard package includes draft Policy document development (NDC, LTS, IRP, IEP, etc); open-source models for associated sectoral development plans; Associated databases; Sector-focused institutional capacity strengthening; delivering a stakeholder engagement strategy; Long-term (sector-specific) knowledge-management plan.	Ministerial-level commitment and mandate for timely inter-ministerial analytical engagement, capacity building, and report delivery, including the relevant line ministry and ministry of finance.	Approximately £450,000 per country per policy document (includes policy-specific application of 6)

Service 3: Bridging Planning to Finance

Timeline: 2–3 years depending on host country constraints

Challenge	Intended Partners	Approach	Deliverables (all negotiable)	Requirements	Cost (Aug 2025)
Upstream planning and the specific requirements for attracting international finance can be disconnected, leaving governments with an underdeveloped investment portfolio for the finance ministry.	**Finance Ministries and Technical Assistance Programmes** looking to the finance ministry to increase its portfolio of infrastructure projects for national, IFI, and private investment.	By developing capacity in planning and finance units, fostering stronger links and collaborating with IFIs to create financeable strategies, this service bridges the gap between policy and finance mobilisation. Through better inter-ministerial coordination and scenario development, it ensures that "deal" requirements are integrated into line ministry planning from the start. Zambia and Uganda have used this approach successfully. The latter is funded by the French Development Agency (AFD) and involves updating Uganda's NDC.	A standard package includes draft IFI finance application based on an existing IRP; Lite (finance ministry focused) open-source models for associated sectoral development plans; Associated databases; Finance-ministry focused institutional capacity strengthening; Long-term (sector-specific) knowledge-management plan.	Finance Ministry commitment to capacity building, engagement, analytics, and report delivery.	Approximately £450,000 per country (includes finance focused application of 6)

Service 4: Targeted Capacity Strengthening

Timeline: One year

Challenge	Intended Partners	Approach	Deliverables (all negotiable)	Requirements	Cost (Aug 2025)
Countries cannot afford to commit to extensive, long-term programmes. They need accessible entry points to advanced modelling tools and best practices without this.	**National institutions (Line Ministries, Universities, Utilities)**, and international organisations (IOs) providing TA.	The lightest form of developing capacity is to support participants to attend a single Energy Modelling Platform (EMP) training event. This provides hands-on experience with a specific CCG modelling tool and creates useful connections between country analysts and international organisations who provide technical assistance. This is a low-barrier entry point for initial skill development and networking within key planning units. All participants must complete certified pre-training and have a written commitment from a director or dean-level supervisor stating that the analysis will contribute to policy support, research, or curriculum development.	A standard output would include a quantified sector outlook report for input into policy document development; sector model(s) and certified trained staff.	Appropriate institutional commitment.	Approximately £100,000 per country.

Ready Made Packages to Address a Range of Common Issues (5-8)

Each offer [below] uses a carefully chosen set of open and free tools that are fully transferred. The specific choice per package is made with the national partner. The tools come with long term on-line support and training via the Open University. A breakdown of tools available is described over the page.

Service 5: Embedding Capacity in Government Institutions			**Timeline:** 1–2 years depending on host country constraints		
Challenge	Intended Partners	Approach	Deliverables (all negotiable)	Requirements	Cost (Aug 2025)
Governments often have specific needs for stages of the Data-to-Deal workflow, requiring flexible, modular assistance that can be integrated with existing efforts.	**National institutions (line Ministries, Universities, Utilities), and IOs providing TA.**	CCG provides targeted support for individual components of the Data-to-Deal workflow, with hands-on guidance, capacity building, and knowledge transfer for its open-source tools. Countries can select the support they need and integrate CCG tools with other technical assistance programmes. CCG facilitates "Partners' Bootcamps" for governments or international organisations and "Scholars' Bootcamps" for universities. Both include successive attendance at regional Energy Modelling Platforms (EMPs) and provide a coach and up to two in-country engagement sessions. An example of this is the International Energy Agency's support for Uganda's Energy Transition Strategy, which incorporated the Energy Modelling Platform and CCG methodologies.	A standard output includes a quantified sector outlook report for input into policy document development; sector model(s) and certified trained staff.	Appropriate institutional commitment.	Approximately £150,000 per country.
Service 6: Strengthening the In-country Science-policy Interface			**Timeline:** Typically spans one year for SIG set-up, subject to negotiation.		
Challenge	Intended Partners	Approach	Deliverables (all negotiable)	Requirements	Cost (Aug 2025)
Networks and Special Interest Groups (SIGs) to Bridge the National Science-Policy-Interface.	**National decision-making institutions and counterpart HEI.**	CCG has developed a framework for building equitable knowledge ecosystems called Country Networks. These networks are co-owned by in-country stakeholders and are driven by a bottom-up approach to ensure strong buy-in and long-term sustainability. The networks are organised around "Special Interest Groups (SIGs)" composed of cross-sectoral experts with a shared interest in a D2D policy theme. Importantly, the networks and SIGs must be requested by the partner government. By engaging with these networks, partners can embed knowledge products to achieve policy impact.	Operational SIG and HEI-based coordinator (that can - only with the demand and mandate of national government - be supported and embedded to a line ministry or national institution).	Appropriate HEI and policy institution commitment.	Approximately £95,000 per country.
Service 7: Embedding Sustainable Long-term Capacity in Universities			**Timeline:** Upfront funding commitment. Dispersed over 5–7 years. Annual average cost ~£46,000 per year		
Challenge	Intended Partners	Approach	Deliverables (all negotiable)	Requirements	Cost (Aug 2025)
By using external consultants to run modelling tools, LMICs do not develop their own knowledge for the future. This is expensive and perpetuates a lack of autonomy.	**National decision-making institutions and counterpart higher education institutions (HEI).**	For long-term, self-sustaining climate action, LMICs need a robust, in-country academic and research ecosystem that can continuously generate evidence and trained staff. CCG supports the establishment of "FlatPack" universities by incorporating its open-source knowledge products into their curriculum and research. The programme includes a staged funding approach, with initial staff training, a start-up grant, and coaching, followed by a five-year scholarship scheme, research support, and sabbatical programme through the UNESCO-ICTP Catalyst Facility. The goal is for these universities to produce around 15 peer-reviewed papers.	A post-graduate university unit that produces over 25 academic articles, 50 MSc graduates, its own applications for funds, a nationally-developed research agenda and policy relevant research.	HEI commitment to a financially sustainable business model, proposal and peer-reviewed paper output.	£275,000 (£75,000 for start-up and then £200,000 over five years if criteria are met)
Service 8: Bespoke Research and Innovation Services			**Timeline:** Delivery on a case-by-case basis depending on the question.		
Challenge	Intended Partners	Approach	Deliverables (all negotiable)	Requirements	Cost (Aug 2025)
LMICs and regions face complex, context-specific "wicked problems" that standard approaches do not address, hindering inclusive climate-compatible development and finance mobilisation.	**Policymakers, international institutions, and partner HEIs.**	Through its consortium of world-class research institutions, CCG offers bespoke research and innovation services by partnering with a country to co-create research projects. CCG's research spans critical areas including Energy Systems, Resource Efficiency, Governance and Equity, and Economics, among others, allowing for a holistic approach to complex development challenges. Projects are typically demand-led and aim to develop new knowledge, enhance technical cooperation, and strengthen the capacity of researchers from LMICs. The outputs can include policy briefs, reports, peer-reviewed papers, datasets, tools, and methodologies.	Policy briefs, comprehensive reports, peer-reviewed papers, datasets, tools, and methodologies, with the scope defined on a case-by-case basis.	N/A (project-specific).	Costed on a case-by-case basis.

Our work helps ministries and governments overcome their challenges using tools available in the CCG offer – free, open and ready to use

PROVIDING ACCESS TO ENERGY AND COOKING

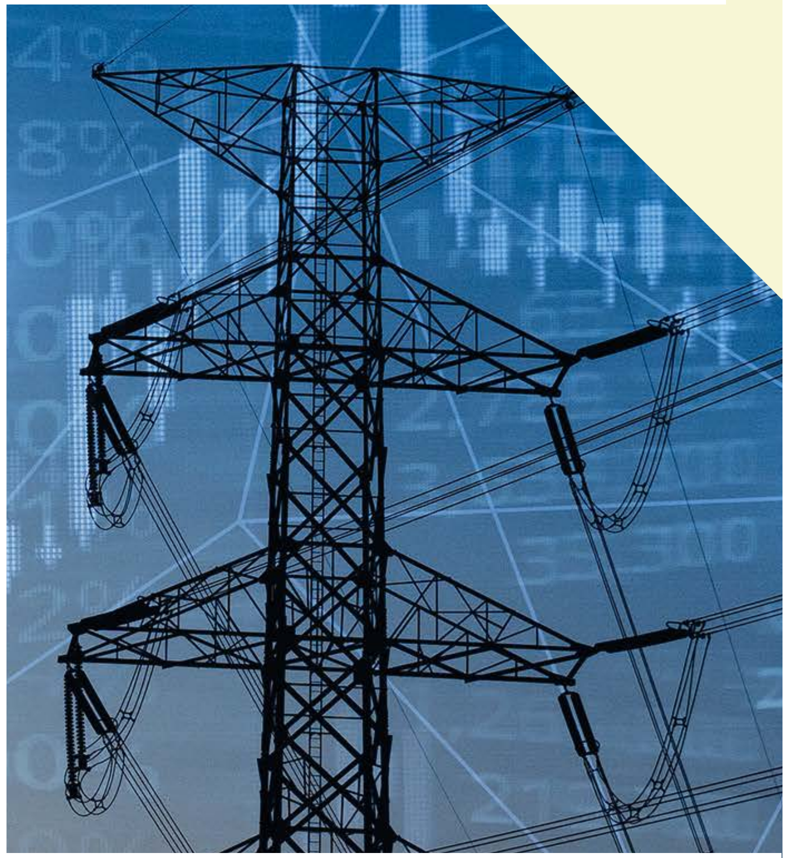
- We can help you decide where to get started with your plans for electrification.
- If you don't have much data, we can support you in tackling this.
- **Energy Access Explorer** can help you prioritise your activities and investments.

- Having access to good quality data is essential to secure finance.
- We can train your planning and data teams in collection and analysis.
- We can make them independent of external consultants.
- **Geospatial Data Management** for Energy Access Modelling and Planning tackles this.

- To use funding cost effectively you need to know where your communities are.
- **OnSSET/The Global Electrification Platform** can map these communities for you.
- That means you put the energy infrastructure exactly where it's needed without waste.

- Your rural communities are still cooking with charcoal and damaging their health.
- The **OnStove** tool maps cooking needs, identifies cost effective alternatives and plans the transition, improving your health and environmental situations.

- Your rural communities do not have the electricity they need to thrive.
- Connecting them to the national grid is unrealistic and expensive.
- The **MicroGridsPy** tool models off-grid energy systems (mini grids) to ensure they are cost-effective and clean.



BIG PICTURE ENERGY AND ELECTRICITY REQUIREMENTS, SUPPLY, INVESTMENT AND EMISSIONS

- Your bulk energy planning needs reliable data on production, transformation and consumption to create systems that supply everyone who needs energy fairly
- We can help your planners and statisticians create and assess an Energy Balance using a tool called **Energy Balance Studio**
- Your challenges with predicting national future energy needs will be overcome

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- You need to be able to predict future energy needs so you can make the right long-term choices and avoid high prices, fiscal damage and environmental problems
- For this your team need to be able to create accurate projections using the **MAED** tool
- When national budgets are limited and the energy landscape is changing rapidly, it helps to have flexibility in your planning.
- Creating national cost-benefit models using **OSeMOSYS** and **FlexTool** enables this.

TAKING INTO ACCOUNT EXTERNAL ENVIRONMENTAL, ECONOMIC AND STAKEHOLDER FACTORS

- Simulate stakeholder decisions and their potential impact on energy systems
- Use this to evaluate sustainable investment options, and inform policies for secure and eco-friendly energy transitions.
- We help you do this through the Agent-based Energy Systems model called **MUSE**.

- Often energy fuel supply chains cross national borders with different regulations and climate positions. This makes it difficult to assess the economic and environmental impact
- Train your team to use the tool **MARIO** and you will overcome this challenge and be able to minimise negative impacts.

FINANCIAL AND FISCAL ANALYSIS OF ENERGY AND OTHER INFRASTRUCTURE

- One aspect of infrastructure projects that can be overlooked is the financial viability of them. Without this, it is very difficult to secure investment.
- We can train your financial analysts on the **FINPLAN** model which assesses costs, revenues and financial viability effectively.

- We will also support you in modelling financially sustainable energy transitions, including sources of funding, using the tools **MinFin**, **FinTrack** and **FinCoRE**.

SUPPORTING PLANNERS AND POLICYMAKERS THROUGH QUALITATIVE APPROACHES

- We can support your analysts with deciding where to use information from their modelling analysis to impact real-world policymaking within complex decision-making environments.
- Our Modelling, Policy and Political Economy training shows them how to reflect political realities in their energy modelling, to improve its viability.
- The **Electricity Transition Playbook** can guide senior policymakers and planners through the key stages required for a successful shift to renewable energy – including policy, finance and infrastructure.

DECARBONISING TRANSPORT

- Commercial, private and public transport together produce large quantities of carbon emissions because they use fossil fuels
- Switching to electric alternatives reduces emissions and can create a new national industry
- To do this, you need data on costs, efficiency, public opinion and more. We can show you how to tackle this as part of the **Data-to-Deal** approach.

MANAGING LIMITED RESOURCES AND BUILDING RESILIENCE

- Energy, water, and land are crucial to key elements of a national economy – like agriculture, housing, irrigation, public health and industry.
- Balancing these finite resources is essential so that one area does not penalise another.
- Training your policy and planning team on Climate, Land, Energy and Water strategies (**CLEWs**) will address this issue.
- If you then want to evaluate the emissions from each of these sectors, and report them accurately to the UN, we can support you with CLEWS++ which is in development.
- Planning infrastructure that will be resilient to climate shocks is the key to safeguarding the investment you attract. We can train your planners to design climate resilient projects and adapt systems to withstand severe climate incidents, ensuring community safety.

Join this Partnership of Excellence

International Organisations and Partners

CCG actively collaborates with a diverse range of national donor agencies, international organisations, and international financial institutions to maximise its impact and facilitate climate-compatible development globally.

National Donor Agencies:

The majority funder is the UK Government's Foreign, Commonwealth & Development Office (including UK PACT). Other co-funders include the Danish Energy Agency, European Commission, French Development Agency, and the European Climate Foundation via the 2050 Pathway Platform.

International Organisations and partnerships:

OpTIMUS Community of Practice, Sustainable Energy for All, World Resources Institute, International Atomic Energy Agency, UN Department of Economic and Social Affairs, United Nations Development Programme, United Nations Economic Commission for Africa, United Nations Economic Commission for Asia and the Pacific, 2050 Pathways Platform, International Energy Agency, Clean Cooking Alliance, Energy Sector Management Assistance Program, UNESCO's International Centre for Theoretical Physics (ICTP).

International Financial Institutions:

World Bank Group, African Development Bank, Inter-American Development Bank, Asian Development Bank, Climate Investment Funds.

Add your strength to this partnership of excellence:

CCG receives its current core funding from the UK Government. It produces public goods that can be co-created, deployed, and scaled in partnership. It is a research partnership administered by Loughborough University, with the universities of Cambridge, Imperial, the Open University, Oxford, Strathclyde, UCL, KTH in Sweden and non-academic partners Climate Parliament and the Centre for Global Equity. It also subcontracts regional universities and organisations.

GET INVOLVED

HERE'S HOW TO ENGAGE WITH US:

- **End Users:**
  Use Our Work. You can use CCG's outputs – like research and tools – without a formal partnership and without providing funds. We track the impact of our work, so your use of our resources still helps our mission, and you'll have access to the reporting for your own result mapping.
- **Collaborators:**
  Contribute in-kind. If you want to partner with us, our "contribution in-kind" model is a great fit. This involves providing non-cash resources, expertise, or services. We don't receive funds, but we benefit by being able to count these among our outcomes and impact.
- **Funders:**
  Provide Financial Support. If you are keen to provide financial backing, the "funder" model ensures full co-branding and co-design of aspects of the work using our proven approaches and tools. (The extent of co-branding and involvement can vary depending on your needs and contribution). As a funder you will get direct access to the CCG delivery ecosystem which impacts decision-makers and hundreds of analysts – as well as our world-leading academics.

For more information, please contact us at *ccg@lboro.ac.uk*.

Find all our outputs, which are open source and freely accessible, at *www.climatecompatiblegrowth.com*.

If you would like to explore opportunities to contribute core funding to CCG alongside the FCDO, please email Alfie Alsop at *alfie.alsop@fcdo.gov.uk*.

If you are a representative of a country government or university. Please consider contacting counterparts in the UK's FCDO (find your local UK focal point through *www.gov.uk/world/embassies*) and ask them about supporting the CCG offer. Direct funding may not be immediately available, but your official interest can help initiate a process to that funding through donor coordination and other mechanisms.

We are a proud member of the OpTIMUS Community

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