The Catalyst Facility

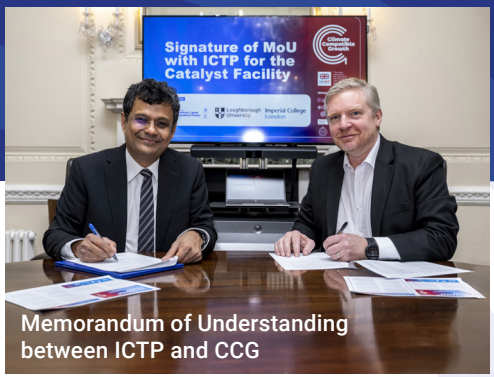
Empowering Academics to Contribute to National Policy across the Global South

Develop the People. Strengthen the Institution.
Sustain an Independent Capability for the Future

Climate Compatible Growth

COP31

Global Research and Technology Development
Funded by UK Government



Memorandum of Understanding between ICTP and CCG

KEY BENEFITS

The objective of the Catalyst Facility is to help governments in the Global South build and sustain the autonomy to plan their clean energy transition as part of their sustainable economic growth strategy.

Catalyst releases governments from a dependency on imported expertise from overseas, by building an academic powerhouse within local universities that sustains home-grown energy and policy expertise as a legacy for the future.

Catalyst does this by supporting local academics to empower themselves through access to targeted training, research and teaching opportunities, supporting the production of high-quality analysis that is respected on the world stage and credible with policymakers and investors.

A UNIVERSITY LEGACY

The objective is not just a series of trained individuals but a university unit able to produce expertise sustainably within country. In practice, that means:

- **local teachers** so that skills and knowledge can be reproduced locally rather than repeatedly imported.
- **champion academics** with strong high-level connections into both policy and research circles and the capacity to develop funding proposals.
- **a financially sustainable** MSc providing policy-oriented graduate education and generating reliable fee income that supports wider research activities.
- **a talent and research pipeline** with successful students working on policy-relevant topics – collecting data, building models, and developing high impact papers.
- **international scientific connections** forging stronger links with TWAS, ICTP, international universities and South-South research networks for mutual benefit.

PEOPLE TRACK

Teacher | Champion academic | Students & researchers | Internationally connected researcher | Published scholar

INSTITUTION TRACK

Teaching capability | Institutional commitment | Financially sustainable MSc | Research-active university unit | Recurring research & policy capability

→ Global South Universities supporting National and International Research

1 Train the Teacher

ICTP Bootcamp
Train academics to deliver CCG-developed courses in their home institutions.

BENEFITS
- The individual gains professional capability and status
- The institution gains a richer curriculum

2 Back the Champion and Secure University Commitment

TWAS Starter Grant
Give a champion academic protected time for research and support for proposal writing, conditional on university commitment to develop a sustainable, government-focused MSc model.

BENEFITS
- The individual develops their research agenda and gains a platform to raise funding
- The institution gains student fee income through new MSc model to fund teaching

3 Embed a permanent Talent Pipeline

TWAS and partner universities award
Prestigious partial scholarships and associations for qualifying MSc Programmes whose thesis work addresses policy questions.

BENEFITS
- The individual gains prestige, a research opportunity and wider network access
- The institution gains stronger student cohorts, more fee income, research students and a pipeline of energy analysts

4 Deepen the Research and Build the Network

ICTP Fellowship/ Associates Programme
This supports mini 1-2 month sabbaticals at ICTP and connections with LMIC peers and international research community.

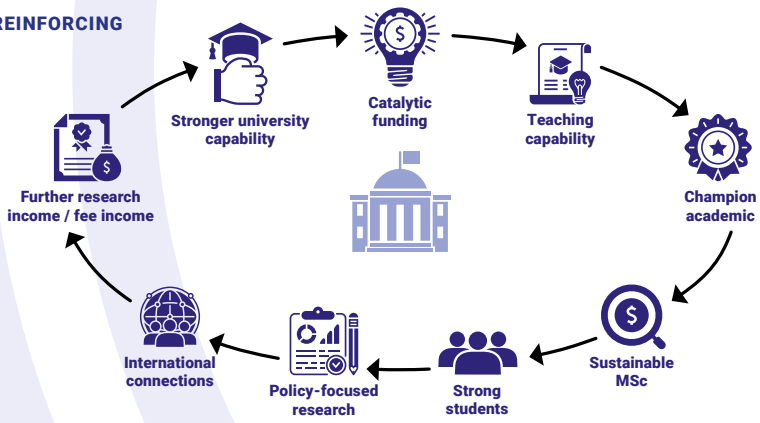
BENEFITS
- The individual gains research time, collaborators and international connections
- The institution gains a globally connected research leader and stronger links to international research network

5 Convert Research into Publication

ICTP Writing Retreat
Provide researchers with intensive scientific and writing support to complete papers from their research when it becomes substantial.

BENEFITS
- The individual gains publications and career progression incentive
- The institution gains stronger reputation and visibility through higher quality research output

A SELF-REINFORCING SYSTEM



WHY THE MODEL CAN SCALE

1 Avoids reinventing the wheel. Catalyst builds on and integrates successful programmes already underway in partner institutions for greater impact. TWAS and ICTP are already operating established, academically rigorous research activities and grant-awarding programmes. CCG has an established track record in capacity building and co-creation of applied research with a network of several hundred academics trained in energy modelling, and established partnerships with some 40 universities, across the Global South.

2 Incentives support sustainability. Catalyst supports the creation of successful MSc programmes, generating the income stream needed to underpin research centres. Catalyst raises the profile of academics through funding of policy-relevant research that connects them with local government actors and with the wider international scientific community, opening the door to further funding opportunities.

3 Catalytic economics. Catalyst adopts a cost-effective approach, whereby funding of about £100k is sufficient to establish a self-sustaining university centre, producing scores of graduates and dozens of policy-relevant research papers. That is equivalent to the cost of a single full scholarship and bursary for a student coming to the UK for a two-year MSc.

OpTIMUS www.optimus.community | twas The World Academy of Sciences | ICTP The Abdus Salam International Centre for Theoretical Physics | AEF African Energy Futures | Climate Compatible Growth

Plus any other appropriate partners who can help scale this positive impact

PARTNER WITH US

Catalyst is a partnership funding scheme, drawing on a well-established network of highly respected global partners. These include TWAS, ICTP, AEF, leading universities and the OpTIMUS Community, whose members include ADB, AfDB, GIZ, IAEA, IEA, IRENA, UNDESA, The World Bank, WRI and others.

Catalyst takes activities that already exist and work – CCG's training and university network, TWAS's grant award systems, ICTP's long-established Associates model and writing residencies – and integrates them into a structured and incentivised system to support universities. The menu of five complementary and mutually reinforcing offers includes: train the teacher; back the champion and secure university commitment; embed a permanent talent pipeline; deepen the research and build the network; convert research into publications.

Catalyst offers are tried, tested and shown to be effective. As a package, they can be applied in partnership and at scale for impact. Universities can apply for any one or more these offers that may help them to address a current constraint.

Catalyst is at an advanced stage of development, with foundational MoUs in place and pilot activities successfully completed. It is deliberately designed for coalition building – we invite aligned organisations and funders to partner with us. As we ramp up the capitalisation of the facility, the immediate requirement is for core funding.

SUCCESSFUL EXAMPLES OF THE CCG APPROACH IN ACTION

Strathmore University, Kenya.
Strathmore was the first to adopt our FlatPack curriculum and it now has a Master's course generating student income. This enables it to fund research and deepen its own knowledge. Strathmore is now a knowledge hub for the region and supports the Kenyan Government on policy issues.



Strathmore University
Energy Research Centre

CARBON TRUST

Transforming Energy Access
LEARNING PARTNERSHIP



National University of Laos NUOL academics undertook energy modelling training and with CCG funding were then able to undertake local research on the Air Conditioning market. They have since trained government personnel and launched the Clean Energy Green Growth Lab to support Government policy development through research.

