



January 31, 2024

Re: Invitation to apply to participate in an applied training course on energy transition policymaking

Dear Madam/Sir,

It is my great pleasure to invite you to submit an application to participate in a training course on “The Economics of Energy Transitions: Concepts, Methods and Research for Policymaking”. This course is made possible by a collaboration between the [Environment for Development Initiative](#) (EfD), the University of Cape Town, and the [Inclusive Green Economy](#) (IGE) program, with funding from the Swedish International Development Cooperation Agency, Sida.¹ It is organized by the Environmental Policy Research Unit at the University of Cape Town.

The over-arching goal of the course is to provide participants with the most recent knowledge of sustainable energy transition concepts as they relate to low- and middle-income countries, especially those in Sub-Saharan Africa, and to offer training on evaluation methods that quantitative social scientists most often use to evaluate policy effectiveness and impacts. It will feature an applied component whereby all participants work on a challenging and timely energy transition policy problem facing their country, articulating the nature of the problem and developing a policy-focused learning agenda to help overcome it.

The course will be delivered in a hybrid format over the period March-May 2024. It includes two modules that will be delivered virtually for asynchronous learning, by several academics affiliated with EfD and the Sustainable Energy Transitions Initiative (SETI), a research collaborative focused on energy transitions challenges and opportunities in low- and middle-income countries. A third, in-person module will be delivered in person at the University of Cape Town during a week-long intensive session to participants who are granted funding or who are able to self-fund their travel and accommodation for that period. Preference for funding will be given to former IGE program participants, followed by doctoral students or EfD-affiliated researchers who are clearly focused on energy transitions research, and finally, other applicants. A certificate of accomplishment will be awarded to all participants who successfully complete all course elements. Course participants may include IGE program alumni, students, and other EfD fellows who wish to enhance their knowledge of energy transition issues in Africa.

We hope that you or your colleagues will apply to participate in this exciting program. Below you will find details related to the application and funding. Please do not hesitate to reach out with any questions.

Sincerely,

Marc Jeuland
Professor of Public Policy
Duke University & SETI
Lead Instructor

Amin Karimu
Professor of Economics
University of Cape Town & SETI
Co-Instructor

Anna Mellin
IGE Program Coordinator
EfD Unit, University of Gothenburg

¹ The responsible organization and organizer for the training is the University of Gothenburg, ref Environment for Development Initiative, ref Sida proj nr 61050402.

Practical matters:

- Application requirements: Deadline **February 23, 2024**.
 - **Completed application form** (see next page)
 - **Brief letter of motivation** (no more than 2 typed pages)
 - **Up-to-date resume or curriculum vitae**
- Course timing
 - **Self-paced virtual sessions:** March 15-May 10, 2024 (no funding required)
 - **In-person intensive sessions in Cape Town:** May 27-June 1, 2024 (funding required, will only be granted if budget allows; otherwise must be self-funded)
- Funding
 - **For accepted participants:**
 - Meals while on site at UCT during training hours will be covered
 - Visa costs, flights and accommodation for in-person component will need to be self-funded unless program funding is granted (applicants will be informed of this if they are admitted to the program). There will be no per diem support.



Application Form *(Please complete all relevant fields; information will only be used for admissions decisions and will not be shared with others)*

Surname (as it appears on official identification, e.g., passport): _____

Given names (official): _____

Citizenship: _____

Date of birth (DD/MM/YYYY): ____ / ____ / _____

Gender: ___ Male ___ Female ___ Non-binary ___ Prefer not to disclose

Full address (Street, City, Country): _____

Email contact: _____

Phone contact (inc. country code): _____

Do you require a visa for a week long visit to South Africa? ___ Yes ___ No

Current status (tick all that apply):

Student ___ Government employee ___ Other employee ___ Unemployed/seeking work ___

Have you previously participated in the Inclusive Green Economy program of EFD? ___ Yes ___ No

Are you affiliated or working with an EFD center? ___ Yes ___ No

If yes, please explain: _____

If student, indicate degree program _____ **University:** _____

If employed, indicate employer: _____

Highest degree earned to date and subject (and university): _____

Please confirm that you have also attached (tick all that apply, note these are required):

Statement of motivation to participate ___ Resume / curriculum vitae ___

Other instructions: Once you have completed this form, please send it and the other attachments, by February 23, 2024, to: June Titus, University of Cape Town (june.titus@uct.ac.za).

The Economics of Energy Transitions: Concepts, Methods and Research for Policymaking

A Hybrid Virtual and Face to Face Training Course

Location

University of Cape Town; Cape Town, South Africa

Dates

Asynchronous (self-paced) virtual lectures and exercises: March 15-May 10, 2024

In-person intensive course: May 27-June 1, 2024

Instructors

Primary: Marc Jeuland; Professor of Public Policy; Duke University

Supporting: Amin Karimu, University of Cape Town; Edward Bbaale, Makerere University; Abebe Beyene, Policy Sciences Institute; Richard Mulwa, University of Nairobi; Remidius Ruhinduka, University of Dar es Salaam

Others TBD

Course topic

Energy consumption is strongly related to economic growth, but traditional and fossil fuel energy uses also induce substantial tradeoffs, most notably with global and local environmental quality, and also health. Accelerating climate change and associated damages are making these tradeoffs ever more apparent, as the world inexorably hurtles past temperature change thresholds and experiences disruptions that were once deemed to be far away. Today, policymakers have the opportunity to tackle these challenges by enhancing the uptake of clean energy innovations, but often lack the evidence and knowledge needed to support the design of effective policies.

This short course is aimed at mid-career civil servants and professionals (especially those based in African governmental bodies) and graduate students who are interested in acquiring both subject area and methodological expertise on the economics of energy transition as it relates to development. The particular emphasis will be on the energy transition challenges facing low- and

middle-income countries today, and on co-creating an applied Global South-driven research agenda that responds to the policy needs of African decision-makers seeking to confront those challenges.

Learning objectives

At the end of the course, participants should:

- Understand the links between energy and development, at the micro- and macro-economic level;
- Have a deeper appreciation of the welfare tradeoffs that come with different energy technologies;
- Demonstrate functional understanding of the quantitative empirical methods that can be used to study the effectiveness of energy sector interventions; and
- Possess practical experience in framing an energy transition problem facing their specific context, and articulating how an economic research agenda could inform solutions to that problem.

Syllabus

The course will consist of three separate modules, the first two delivered through a series of virtual lectures and interactions with participants, and the final module being held in person during a week-long intensive capstone experience held at the University of Cape Town in South Africa.

Module 1. The economics of energy transitions: Concepts, constraints, and opportunities.

1. What do we know about the links between energy and various outcomes related to economic and human well-being? What are some challenges that arise?
2. In depth exploration of challenges and policy solutions:
 - a. Incentive problems, especially externalities (environmental, health)
 - i. Problem of misaligned incentives in energy markets: Example of local pollution
 - ii. The role of the energy sector in climate change

- b. High costs and investment needs (upfront and over time), in light of resource constraints
 - i. Problems of natural monopoly or imperfect competition
 - ii. Constraints related to international finance
 - c. Issues and importance of quality of access
 - d. Inequality and justice issues (gender, sectoral aspects, rural/urban divide, marginalized sub-populations)
 - i. Concept of just or inclusive energy transition
 - ii. Policy acceptance
 - e. Heterogeneity arising from institutional, infrastructural, market complementarities
 - f. Political economy
 - i. Special interests
 - ii. Problems of public sector efficacy and corruption
 - g. The know-do gap: Bridging science and policy and the role of evidence-based decision making
3. Energy transitions opportunities as well as concerns
- a. Leap-frogging towards efficiency
 - b. Building climate resilience and improving adaptation
 - c. The risk of maladaptation

Module 2. Empirical methods applied to understand energy sector intervention targeting and evaluation. Building appreciation and basic skills.

- 1. Evaluation of programs – framework
- 2. Primer on evaluation methods
 - a. Experimental
 - b. Quasi-experimental
 - c. Observational
- 3. Understanding how to target interventions
 - a. Cost-benefit analysis w/distributional analysis
 - b. Non-market valuation and understanding of preferences
- 4. Collaborating with energy modelers, engineers, and natural scientists: Integrated models

5. Reading the scientific literature.

Module 3. In-person capstone: Describing an energy transition problem and proposing a research agenda that would inform policymaking to tackle that problem.

In this module, participants will apply what they have learned in modules 1 and 2 to a problem of their choosing, that is apparent in their country (or in a sub-region in their country). Prior to attending, all participants will be asked to prepare a short individual concept note. In this note, each participant will identify a problem with energy that is currently facing their country, and to brainstorm on potential solutions to that problem (and what might go wrong), based on their own knowledge and also what they will have learned in module 1. They will also do a mini-literature review related to that problem.

Then, during in-person lectures and work sessions, participants will learn to put structure around a research agenda to support policymaking to tackle that problem. Specifically, they will need to create and defend a plan to build an evidence-based case for the scale up of interventions to solve their problem. In that plan, they will need to emphasize how monitoring and evaluation research fits into achieving their impact goal.

During this module, participants will have in depth interactions with select course instructors and other cohort members. Joint sessions will be held during the mornings, with time granted for preparing written and presentation materials, and interacting with others, in the afternoons. We will cover the following major topics and discuss examples that help demonstrate:

- How to write a compelling policy-focused research proposal
- How to choose an appropriate research method for supporting evaluation and sound policymaking
- How to strategize around data scarcity or data collection challenges
- How to identify potential funding sources for applied research
- How to present your ideas clearly and increase the chances your proposal will be supported (by funders and administrators)