Energy Modelling Platform for Latin America and the Caribbean (EMP-LAC) | 2026

Concept Note

Context

The Energy Modelling Platform (EMP) is an initiative supporting an open-source global community of practice made up of governments, finance institutions, universities, consultants and professionals, working together to achieve sustainable development and climate compatible growth. The EMP is divided into the following five chapters: African (#EMPA), Latin American and Caribbean (#EMPLAC), North American (#EMPNA), Asia Pacific (#EMPAPAC), Energy and Climate Modelling Platform for Europe (#ECEMP). The EMP has so far delivered 14 successful events worldwide (EMP-A, EMP-G, EMP-LAC).

The main objective of the EMP-LAC 2026 is to contribute to creating optimised investment business cases for the energy transition in Latin America and the Caribbean. Attracting this investment will meet the continent's growing demand for low-carbon, inclusive, and climate-resilient development pathways whilst making use of its large resource base.

This event is an excellent opportunity to acquire free training relevant to your professional role, to get access to discussion forums, and to obtain coaching skills in models and tools for energy planning needs.

To date, four EMP-LAC events have taken place, training over 150 individuals. The first one, EMP-LAC 2022, was held online and was a small training event. The second one, EMP-LAC 2023, was much larger and took place between in January 2023 in San Jose, Costa Rica. This training trained 45 individuals in person. The third event, held in January 2024, in the city of Niterói, Rio de Janeiro, Brazil, saw 51 individuals being trained in person. The fourth event held February 2025, in Buenos Aires, Argentina, trained a total of 40 participants.

The fifth EMP-LAC (EMP-LAC 2026) is planned to take place in Quito, Ecuador, at Escuela Politécnica Nacional (EPN).

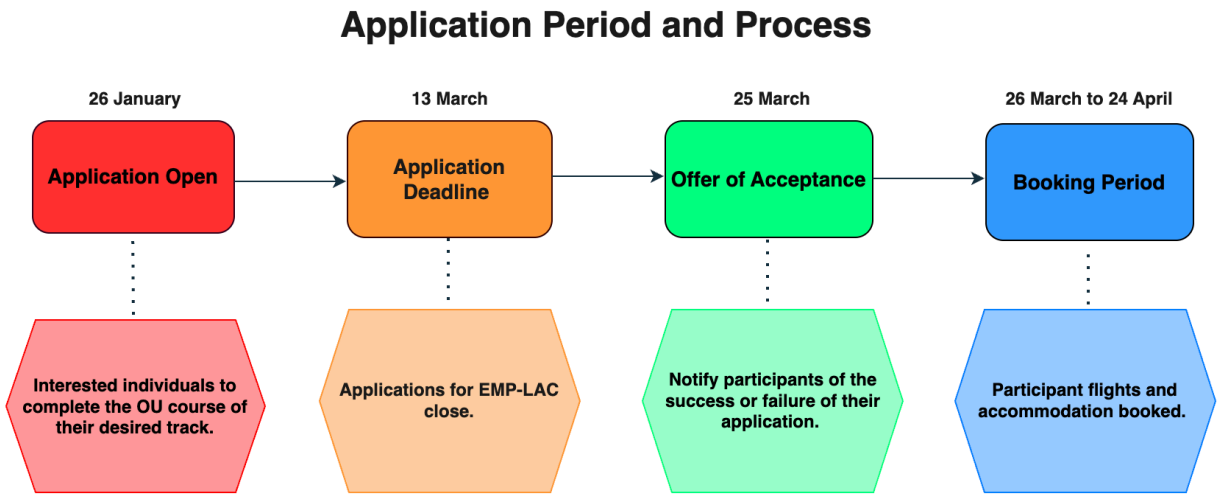
Objectives

- Gather the energy planning and modelling community in Latin America and the Caribbean to share experiences, models, and data in climate, land, energy, and water systems.
- Support human and institutional capacity in Latin America and the Caribbean for integrated energy modelling and investment planning.
- Support the development of centres of excellence for energy planning in Latin America and the Caribbean.
- Promote efficient and widespread use of open-source modelling tools to support the implementation of the SDGs and the Paris Agreement.

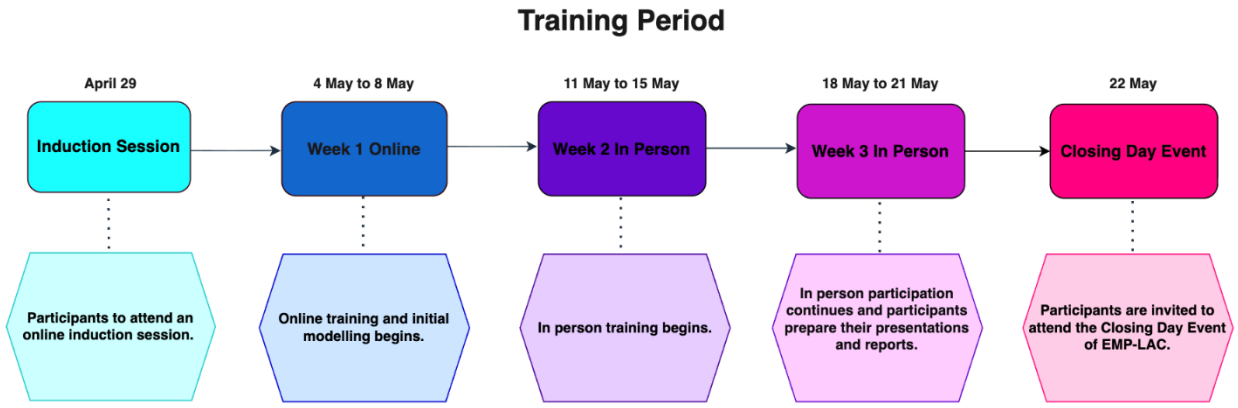
Structure of the EMP-LAC 2026

The next EMP-LAC (2026) will be an in-person event from 4 May – 22 May in Quito, Ecuador (with the first week of training being online).

The application period is shown in this diagram:



The application period will be followed by the training period, see below for dates and details. Please note that the majority of training sessions will be **conducted in English.** However, there will be Spanish and Portuguese speakers/trainers on hand to assist.



During the EMP-LAC 2026, you will acquire energy and resource modelling skills using one of the following open-source modelling tools/practices for sustainable development pathways under leading academics and researchers in the field of model-informed development strategies. There are six tracks in total, which will run for 3 weeks in total, **except for the Electricity Transition Playbook, which will take place only in Week 3 (18 May – 21 May)**.

They will focus on either:

- **Energy System Modelling using the Modelling User Interface for OSeMOSYS (MUIO)**

  This course will help you to understand what investments, at what time, and at what scale, are needed in the energy sector to meet the growing demand for energy while meeting security, environmental, and other constraints. Special considerations will be made for modelling the flexibility of the electricity system, to account for high renewables penetration.

- **FinPlan (Financial Planning of Energy Infrastructure) and Investment Pipelines**

  This training course will provide basic knowledge on financial theory and will show how financing is done in the power sector across the world. The primary focus will be on developing countries, and we will demonstrate how to carry out financial analysis of power projects using FINPLAN.

- **Introduction to CLEWS: Climate, Land-Use, Energy and Water Systems**

  This course will teach you how to analyse policy decisions on issues such as the promotion of clean energy, competition for water, and agricultural modernisation. This will be done by teaching how to define model components, linking them together in an integrated system representation, populating the model with data, running a model, and interpreting results using CLEWS.

- **OnSSET / The Global Electrification Platform**

  This course will help you to learn about geospatial energy modelling, how to build your own electrification analysis, how to include the geospatial dimension in your energy modelling to unlock new dimensions and gain an understanding of the earth's different energy resources, and how to incorporate them in your energy modelling.

- **Electricity Transition Playbook**

  This course will guide you through the key steps required to successfully deliver an electricity system transition. It will use an engaging "lectures and case studies" approach to set out how to create a long-term vision for the electricity mix. It will build understanding of the key elements of political support, policy and regulatory delivery mechanisms, network infrastructure, and operational requirements, all framed by enabling technologies, supply chain and workforce needs, and consumer and public buy-in. You will be required to bring your own case study to the course (eg a country or region), to work on collaboratively with course convenors and other participants. This will bring the course material to life and ensure practical value when returning home.

- **Spatial Data Management and Analytics for Integrated Energy Planning**

  From theory to practice, you will be introduced to the importance of spatial data and analytics for providing actionable insights for the expansion of clean energy services to support socio-economic development. You will work on practical hands-on exercises to identify high-priority areas for energy interventions. In addition, you will be guided through uploading, managing, and configuring custom data in Energy Access Explorer's (EAE) dynamic backend infrastructure. Through the training, you will have the opportunity to customise a fully functioning version of EAE for a given geography (this may be national or subnational) and/or use a case of interest.

Each course has two parts:

- **Self-paced study**: You will complete the track of your choice and attach the certificate of completion onto your application form. If you are accepted for EMP-LAC 2026, an Induction Session will take place (29 April), in which you will attend an introductory session on energy planning to set the scene for the training course. Week 1 of the School (4 – 8 May) will be conducted online. Coaching and troubleshooting sessions will be scheduled to support applicants and further your modelling knowledge.

- **In-depth hands-on training** Week 2 and Week 3 (11 – 21 May) is comprised of an interactive component with dedicated trainers. You will receive further coaching and training on using the tool from your chosen track for a national case study. Course participants are expected to develop a report and an 'elevator pitch' presentation for a

senior decision-maker. You will be required to present the PowerPoint on the 21 May. Feedback will be given based on these presentations, as well as invitations to the closing event of EMP-LAC 26 (22 May).

You will receive a certificate from CCG and EPN on successful completion of the training event, subject to completing the report and presentation.

The last day of the School (22 May) will be dedicated to a closing event of EMP-LAC 26. The substance of the event is yet to be determined with event hosting partners.

Application

There is no fee to attend. However, competition for places is high, and places are limited. Applicants interested in participating in the EMP-LAC are required to complete the application form using the link below:

https://loughboro.qualtrics.com/jfe/form/SV_6F0FR88JsBalu5g

This form has a 'Personal Details' section and an 'Application' section, where you are required to share information such as, but not limited to, your current job responsibilities, motivation for the application, and field of interest. This information will subsequently be taken into consideration for the application process.

1. In order to be considered, you **must attach the Open University certificate** of completion for your chosen track to your application.

2. Additionally, you are required to complete the 'Modelling, policy and political economy' course available on the Open University website, and **attach the certificate of completion** on the application form.

3. Furthermore, a stamped **Letter of Commitment** stipulating an **express statement from participants' respective institutions towards attendance of the module of choice** is **also mandatory** for attendance. To apply, you will have to demonstrate:

    - That the output of your study is in demand by the government that you represent; or
    - That the skills, tools, and teaching material that you acquire will be used in university teaching or government planning knowledge management; or
    - That the output will fit into policy-relevant research to be published on a visible platform.

    Supporting documentation will require a letter from a head of unit or higher (government) or head of department or higher (university and others). Exceptions will be made for selected candidates from participating organisations and ongoing technical assistance programmes, and applicants will be notified via those channels. Priority will be given to participants from countries with a demonstrated need and ability to apply the training to policy development. The selection of participants will include considerations of equity, diversity, and inclusion.

4. Lastly, you must submit a **Letter of Motivation**, in **which the you state why you should be selected for the course, and how your background knowledge and experience makes you ideal for the course.**

The deadline to submit the application is at **12.00 pm (GMT-5) on 13 of March**, and applicants will be notified of their outcome by 12.00 pm (GMT-5) on 25 of March.

Funding for in-person participants

Funding will be made available for some in-person participants to cover the cost of travel, accommodation, and lunch. However, participants not selected for funding can still attend at their own expense. Please specify in your application if you wish to be considered for funding. In certain instances, subject to funding and co-funding, some tracks may be held online.

Partners

In alphabetical order:

- Climate Compatible Growth Programme (#CCG)
- Energy Sector Management Assistance Program (ESMAP)
- Escuela Politécnica Nacional (EPN)
- Green Grids Initiative
- International Atomic Energy Agency (IAEA)
- International Renewable Energy Agency (IRENA)
- Imperial College London (ICL)
- KTH Royal Institute of Technology (KTH)
- OpTIMUS Community of Practice
- Politecnico di Milano
- Simon Fraser University
- Sustainable Energy for All (SEforALL)
- The Loughborough Centre for Sustainable Transitions: Energy, Environment, and Resilience (STEER)
- United Kingdom Foreign, Commonwealth and Development Office (UK FCDO)
- United Nations Department of Economic and Social Affairs (UNDESA)
- United Nations Development Programme (UNDP)
- University of Cambridge
- University of Costa Rica
- University of Oxford
- World Bank Group (WBG)
- World Resource Institute
- 2050 Pathways Platform

IT requirements

Note that you will need a computer with stable internet access to participate in the training. It is recommended, for all tracks, that you have at least 8 GB of RAM and a relatively new computer. Specific tracks have additional computer requirements above and beyond this minimum:

- CLEWs - Windows 10 computer, 8GB of RAM
- Energy System Modelling using the Modelling User Interface for OSeMOSYS (MUIO): Windows 10 or later, 8GB RAM, MS Office

Further information contact inquiries@optimus.community or the organisers Rudolf Yeganyan (r.yeganyan1@lboro.ac.uk), or Rosie McGrane (r.mcgrane@lboro.ac.uk).