



Virtual Regional Training Course on Energy Technology Assessments for Energy & Climate Strategies

Hosted by

The International Atomic Energy Agency
IAEA Headquarters
Vienna, Austria

15 to 26 March 2021

Ref. No.: TN-RER2017-2005945

Information Sheet

Purpose

The purpose of this online event is to improve participants' understanding of approaches for techno-economic assessments of supply-side energy technologies, considering their contribution to national energy and climate strategies. Selected approaches and tools will be covered in more detail, including the IAEA's energy systems model MESSAGE. The event will provide an opportunity to share regional experiences and practices in the participating Member States and to discuss how best to communicate findings. As part of this event, an e-learning based pre-training session on the IAEA model MESSAGE will be organised before the course to familiarise participants with the main functionalities of this IAEA modelling tool.

Working Language

The working language of the event will be English.

Deadline for Nominations

Nominations received after **31 January 2021** will not be considered.

Project Background

The Paris Agreement, adopted at COP21 in 2015, sets a target for holding the increase in the global average temperature to well below 2°C above pre-industrial levels, preferably below 1.5°C. To achieve this target, the Paris Agreement calls on all countries to prepare, communicate and maintain successive Nationally Determined Contributions (NDCs). NDCs are national climate plans outlining concrete targets, policies and measures that governments aim to implement as a contribution to global climate action. Energy systems are the major source of greenhouse gas (GHG) emissions. Developing national strategies for reducing energy related emissions are thus essential for complying with the Paris Agreement. In line with this, the EU requires its Member States to develop Integrated National Energy and Climate Plans (NECPs) from 2021 to 2030.

The TC project RER2017 “Assessing the Role of Low Carbon Energy Technologies for Climate Change Mitigation” was designed to support the development of energy strategies for climate change mitigation in line with the Paris Agreement, as well as country plans for the implementation of Nationally Determined Contributions (NDC) and National Energy and Climate Plans (NECPs). It is a platform to discuss the main features and challenges of such plans and supports assessments of the economic feasibility of energy technology mixes, including nuclear power, and considering political, socio-economic, commercial, technical, and financial issues, as well as associated risks. Through a series of workshops, trainings and expert assignments, the project will contribute to exchanging experience and best practices among Member States and to strengthening capacities for energy and climate strategy development in Member States. The project will also offer additional support to those Member States engaged in the development of national studies in line with the project’s objectives.

A balanced and holistic approach towards energy technology assessments is a key requirement for the development of affordable and effective energy and climate strategies in support of achieving the Paris agreement. Such an approach needs to investigate technological options in all energy sectors including power, heating and cooling, and transport. It needs to apply an integrative perspective across the energy system, considering available resources, the economic and environmental performance of supply technologies, as well as the needs and potential contribution of consumers. This balanced and holistic approach is a prerequisite for technology neutral assessments of the role of low carbon energy technologies for climate change mitigation, such as renewable energy or nuclear power. It further enables to analyse the system wide implications of current and future energy trends, such as: an increasing share of variable renewable generation and, related to this, an increased focus on options contributing to system flexibility, an increasing electrification of the energy system and a more central role for consumers.

By discussing the integration of demand-side options and greenhouse gas abatement cost curve, this event will further build on the preceding Virtual Regional Training Course on Assessing Demand-side Contributions to Energy and Climate Strategies, held from 2 to 13 November 2020.

Expected Outputs

The expected main output of this event is an improved understanding of the role of energy supply related emissions reductions as part of national energy and climate plans and strategies. In line with this, the event will build capacities for assessing the contribution of individual technologies to these reductions, considering the integration of demand-side contributions as discussed in the preceding training course. It will be encouraged that the presented approaches are applied as part of ongoing or future national studies.

This event thus contributes to the overall output of the energy planning component of the TC project RER2017, i.e., strengthened expertise to evaluate and assess (low-carbon) energy technologies and their contribution to climate change mitigation to support defining commitments under the Paris Agreement.

Scope and Nature

The event will introduce participants to approaches for assessing the role of supply-side energy technologies as part of energy pathways for achieving NECPs and NDCs under the Paris Agreement. Participants will be introduced to approaches for analysing potential future technology mixes and their impacts on future emissions applying tools such as the MESSAGE model. Communication strategies will also be discussed, drawing on experiences and practices in the participating countries.

As part of this event, a pre-training session on the IAEA model MESSAGE will be organised from 22 February – 5 March. The pre-training session on MESSAGE will familiarise participants with the main functionalities of this IAEA modelling tool. It is based on e-learning material which participants can go through at their own pace, supported by online sessions to introduce the material, provide guidance and answer questions. Participants can go through the provided e-learning material at their own pace, supported by joint online sessions.

The actual training course from 15 – 26 March will comprise online lectures, work sessions and discussions. The lectures will be given both by invited experts and IAEA staff members, which may be complemented by individual presentations given by selected workshop participants. Work sessions will include hands-on modelling exercises to deepen the participants' understanding of how to assess energy technologies. These work sessions may comprise both online sessions and home-based exercises to be done by the participants independently.

Participants should be well aware of their countries' energy and climate strategies and plans, specifically regarding the potential role of energy technologies for climate change mitigation. As a further preparation to this training, participants are expected to do some background research on the composition of their energy system and the contribution of technologies to national greenhouse gas emissions. If available, participants should be ready to share information on national energy supply scenarios, their national energy supply models and supportive national data regarding cost and performance of current and upcoming energy technologies, such as power plants.

Participants will be encouraged to reach out to relevant national institutions to share the findings of this event and apply the discussed approaches as part of currently ongoing or upcoming studies.

Separate future national and/or sub-regional events may be organised to support those participants from Member States engaged in such studies.

Participation

The workshop is open to participants from each of the participating Member States of RER2017.

Participants' Qualifications and Experience

Participants should be specialists in energy/electricity sector planning and/or environment/climate policy analysis from institutions mandated with the development of related national plans & strategies. Ideally, they are involved in the development of supply-side strategies for climate change mitigation. They can have professions such as engineer, economist or environmental specialist.

The nomination of two participants per Member States is encouraged, one from an institution in charge of developing energy plans and strategies and one from an institution in charge of developing climate strategies, such as NDCs, NECPs and other related long-term strategies.

Priority will be given to participants which demonstrate that they intend to apply the approaches discussed in this event as part of national studies.

Application Procedure

Candidates wishing to apply for this event should follow the steps below:

1. Access the InTouch+ home page (<https://intouchplus.iaea.org>) using the candidate's existing Nucleus username and password. If the candidate is not a registered Nucleus user, she/he must create a Nucleus account (<https://websso.iaea.org/IM/UserRegistrationPage.aspx>) before proceeding with the event application process below.
2. On the InTouch + platform, the candidate must:
 - a. Finalize or update her/his personal details, provide sufficient information to establish the required qualifications regarding education, language skills and work experience ('Profile' tab) and upload relevant supporting documents;
 - b. Search for the relevant technical cooperation event (EVT2005945) under the 'My Eligible Events' tab, answer the mandatory questions and lastly submit the application to the required authority.

NOTE: Completed applications need to be approved by the relevant national authority, i.e. the National Liaison Office, and submitted to the IAEA through the established official channels by the provided designation deadline.

For additional support on how to apply for an event, please refer to the [InTouch+ Help page](#). Any issues or queries related to InTouch+ can be addressed to InTouchPlus.Contact-Point@iaea.org.

Should online application submission not be possible, candidates may download the nomination form for the training course from the [IAEA website](#).

NOTE: A medical certificate signed by a registered medical practitioner dated not more than four months prior to starting date of the event must be submitted by candidates when applying for a) events with a duration exceeding one month, and/or b) all candidates over the age of 65 regardless of the event duration.

Administrative and Financial Arrangements

Nominating authorities will be informed in due course of the names of the candidates who have been selected, and will at that time be informed of the procedure to be followed with regard to administrative and financial matters.

For participants who indicate their need, the IAEA could provide financial support to contribute to the expenses of their costs for internet connection for the duration of the event in line with IAEA rules and procedures.

Disclaimer of Liability

The organizers of the event do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from or attending the course, and it is clearly understood that each Government, in approving his/her participation, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.

IAEA Contacts

Programme Management Officer (responsible for substantive matters):

Mr Christoph Henrich
Division for Europe
Department of Technical Cooperation
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA
Tel.: +43 1 2600 26038
Fax: +43 1 26007
Email: C.Henrich@iaea.org

Administrative Contact (responsible for administrative matters):

Ms Marina Lucic
Division for Europe
Department of Technical Cooperation
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA
Tel.: +43 1 2600 25982
Fax: +43 1 26007
Email: M.Lucic@iaea.org