



Regional Training Course on Energy Supply Assessments for Energy & Climate Strategies

Hosted by

The Government of Montenegro

through the

University of Montenegro

Podgorica, Montenegro

6 to 17 March 2023

Ref. No.: TN-RER2018-2205587

Information Sheet

Purpose

The purpose of this event is to train participants in the application of the IAEA tool MESSAGE for techno-economic energy supply assessments of ambitious decarbonisation pathways, including towards net zero emissions by 2050.

Working Language(s)

The working language(s) of the event will be English.

Deadline for Nominations

Nominations received after **28 October 2022** will not be considered.

Project Background

The TC project RER2018 “Analyzing Low Carbon Pathways towards an Ambitious Decarbonized Energy Sector by 2050” builds on the previous TC project RER2017. It was designed to support the development of energy strategies for climate change mitigation in line with the Paris Agreement, including country plans for the implementation of Nationally Determined Contributions (NDC) and National Energy and Climate Plans (NECPs). It further aims to support MSs in their preparation for submitting related updates, which are due for NDCs by 2025, and for NECPs by 2023 and 2024 respectively for the draft and final updates.

Many of the countries participating in this project have committed to reaching net zero emissions by mid-century. To be able to translate such ambitions to energy pathways which are affordable, effective and sustainable, a holistic approach towards energy assessments is required. It needs to comprise all energy sectors including power, heating and cooling, and transport, while balancing supply- with demand-side energy and emissions saving measures. It further needs to be technology neutral to ensure an unbiased assessment of all mitigation options a country may consider, including renewable energy or nuclear power.

This regional training course will focus on analysing the role of supply-side energy technologies as part of national scenarios towards ambitious low-carbon energy systems. It will equip participants with skills to assess related pathways and trends, such as an increasing electrification of the energy system and increasing shares of (variable) low-carbon generation while maintaining the reliable operation of the power system and ensuring security of supply. The IAEA’s energy systems model MESSAGE will be applied for this purpose. Energy demand scenarios form an input to these supply scenarios, e.g., as analysed during a preceding training course on the IAEA tool MAED.

Expected Outputs

The expected main outcome of this event are improved capacities for assessing ambitious energy supply related emissions reductions with the IAEA model MESSAGE, including as part of national energy and climate plans and strategies. In line with this, the event will deepen the understanding for the role of individual technologies and their contribution to emission reduction scenarios. It will be encouraged that these approaches are applied as part of ongoing or future national studies.

This event will contribute to the overall outcome of the TC project RER2018, i.e., strengthened institutional capacities to develop national energy and climate plans and strategies to support defining commitments under the Paris Agreement.

Scope and Nature

As part of this event, an online **pre-training on MESSAGE** will be organised **from 16 January to 3 February**. This pre-training will consist of a self-paced e-learning module during the first week of this period, which introduces the main features of energy supply assessments with MESSAGE.

Week 2 and 3 will combine online training sessions and home-based exercises, focusing on hands-on modelling exercises to develop a demo case in MESSAGE. The combined effort to complete this pre-training is estimated at around 24 working hours. It will enable participants to get started with their work on their national country cases, which will be further developed during the subsequent face-to-face training. The completion of the pre-training is thus a requirement for the participation in the face-to-face training.

The actual **face-to-face training course from 6 – 17 March** will comprise lectures, work sessions and discussions. The lectures will be given by both, invited experts and IAEA staff members. Work sessions will focus on supporting participants in developing national case studies, which participants are expected to present at the end of this course. Participants should thus come equipped with their laptops.

To facilitate the development of national case studies, participants need to 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 (1) the composition of their energy system, (2) the contribution of technologies to national greenhouse gas emissions, and (3) existing energy demand scenarios, which may serve as input to the energy supply assessments. If available, participants should bring along studies on national energy supply scenarios, any existing national energy supply models and supportive 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 RER2018.

Participants' Qualifications and Experience

Participants should be specialists in energy/electricity sector planning and/or environment/climate policy analysis from institutions involved in the development of related national plans & strategies. Ideally, they are engaged 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 MS 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.

Only candidates that have successfully completed the online pre-training will be accepted for the face-to-face event.

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 (EVT2205587) 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.

Selected participants will receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses. They will also receive either a round-trip air ticket based on the most direct and economical route between the airport nearest their residence and the airport nearest the duty station through the IAEA's travel agency American Express, or a travel grant, or they will be reimbursed travel by car/bus/train in accordance with IAEA rules for non-staff travel.

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.

Note for female participants

Any woman engaged by the IAEA for work or training should notify the IAEA on becoming aware that she is pregnant.

The Board of Governors of the IAEA approved new International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. The Standards deal specifically with the occupational exposure conditions of female workers by requiring, inter alia, that a female worker should, on becoming aware that she is pregnant, notify her employer in order that her working conditions may be modified, if necessary. This notification shall not be considered a reason to exclude her from work; however, her working conditions, with respect to occupational exposure shall be adapted with a view to ensuring that her embryo or foetus be afforded the same broad level of protection as required for members of the public.

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 Zuzana Svakova
Division for Europe
Department of Technical Cooperation
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA
Tel.: +43 1 2600 22395
Fax: +43 1 26007
Email: Z.Svakova@iaea.org