Fifth International Forum on Long-Term Energy Scenarios (LTES) for the Clean Energy Transition

Session 5: Broadening LTES to Feature Socioeconomic Aspects

1. Description

Long-Term Energy Scenarios (LTES) traditionally feature technological aspects of the energy system in the models and scenarios. However, to achieve a just transition, there is a need for the energy discourse to be more closely connected to socio-economic aspects. Only by analysing the socio-economic impact of proposed energy transition pathways, an economy can account and plan for the impact on people and societies, and align outcomes with sustainability and resilience objectives. Such analysis encompasses socioeconomic factors such as the impact on jobs, macroeconomics, gender, and local value chains, which are vital in ensuring a just transition

IRENA's work emphasizes the need for a holistic approach to the energy transition, encompassing both technological developments and socio-economic aspects. The World Energy Transitions Outlook 2023: 1.5°C Pathway Report highlights that the socio-economic dimension of the energy transition is critical to its success as it supports the 3 fundamental pillars of the transition: (1) physical infrastructure: (2) policy and regulatory enablers; and (3) skills and capacities. These elements are deeply interconnected and engage in continuous feedback loops with both the economy and societal structures. Additionally, IRENA's analytical work reveals that socio-economic impacts of the transition can vary significantly by region, depending on factors like the regional level of ambition and the existing economic structure, and the extent to which fair and just transition considerations are incorporated. It is therefore essential that countries and regions introduce a set of policies that provide resilience and a fair share of the transition's benefits.IRENA's finding also shows that depending on the structure of the economy and of the proposed transition roadmap, the energy transition can generate different overall and regional socio-economic footprints. Regions could fare better or worse depending on factors like the regional level of ambition for the energy transition, the existing economic structure

2. Objective

This session will provide participants with an opportunity to share their experiences in incorporating socio-economic aspects in LTES. The sessions will fulfill the following objectives:

i. Understand how countries have incorporated socioeconomic aspects in LTES;
ii. Discuss which socio-economic aspects (impacts on jobs, macroeconomic impacts, local value chains and gender) are incorporated in LTES in different countries and regions;
iii. Discuss challenges and potential solutions to ensure proper incorporation of socio-economic aspects;
iv. Highlight the changes to long-term energy planning resulting from the incorporation of socio-economic aspects.

3. Expected outcomes

This session will examine the inclusion of socio-economic elements in LTES to support a just energy transition. Participants will gain insights on how vital socioeconomic factors are incorporated in LTES and broader energy planning and learn from country examples and insights from the audience.

4. Proposed Agenda (100 minutes)

Time	Content
5 min	Welcome remarks and introduction Moderator: Kaare Sandholt, ERI
5 mins	Introductory presentation Presenter:: Gondia Sokhna Seck, IRENA
35 mins	Expert presentations (max. 7 minutes each, 5-6 slides): Presenters: • Elizabeth Doris, Director, Joint Institute for Strategic Energy Analysis (JISEA) at NREL (virtual) • Jessica Arias Gaviria, Deputy Director of Energy Demand, Mining and Energy Planning Unit (UPME), Colombia • Yang Hongwei, Chief Scientist, National Key Basic Research Development Program, Energy Research Institute of Academy of Macroeconomic Research, China (virtual) • Reshma Francy, Associate Director, Policy Pathfinding and Trilemma, World Energy Council • Feng Junshu, Researcher, Energy Strategy & Planning Research Department, State Grid Energy Research Institute, China
35 mins	Panel discussion Moderator: Kaare Sandholt, ERI
15 mins	Q&A
5 mins	Closing remarks Moderator: Kaare Sandholt, ERI

5. Suggested guiding questions

- How are socio-economic aspects incorporated in long-term energy scenarios in different countries and regions? Have you noted any regional trends?

- How do the different institutions work together to ensure the proper incorporation of socio-economic aspects through the provision of data on jobs, macroeconomic impact, local value creation and gender?
- What challenges have countries faced in incorporating socio-economic factors in their long-term energy planning? What practical steps can countries take to address these challenges?
- What technical capacity needs exist in different countries and regions that, when fulfilled, will lead to the proper inclusion of socio-economic aspects in long-term energy planning?
- How can governments ensure that interactions between energy and socio-economic systems maximize the benefits of the transformation? What policies can be linked to LTES to assess their impact?
- What can governments do to encourage wider social inclusion in energy transformations?
- How can local capacities be best leveraged to ensure that all regions and communities benefit?