Concept Note

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

September 9 – 11, 2024
IRENA Innovation and Technology Centre, Bonn, Germany

Background

Government energy planners face challenges in the evolving energy landscape, such as integrating new technologies, managing market dynamics, and aligning energy development with social and climate goals. Long-term energy scenarios (LTES) help address these challenges and strengthen the planning and policymaking process for the clean energy transition.

IRENA's Global Network of Long-term Energy Scenario for the Clean Energy Transition (Global LTES Network) is a global platform for government scenario practitioners to exchange insights, share experiences, and learn from each other to plan the clean energy transition. The Global LTES Network focuses on three key areas: (1) improving scenario development, (2) enhancing scenario use, and (3) increasing institutional ownership of scenarios, all aimed at advancing the clean energy transition.

The Forum's objective is to explore the three key areas of the Global LTES Network to share innovative approaches, discuss policy frameworks, and explore strategies for developing energy scenarios that promote a global shift to a sustainable and efficient energy system.

The Forum will host a series of sessions, bringing together thought leaders, policymakers, financial institutions, and scenario experts. They will share innovative approaches, analyze policy frameworks, and discuss strategies that enhance the development and application of energy scenarios. This collaborative platform aims to align closely with the global narrative of energy transition, promoting the universal adoption of renewable energy solutions.

The Forum will host discussion sessions with thought leaders, policymakers, energy scenario experts, and other relevant stakeholders. Participants will share innovative approaches, analyze policy frameworks, and discuss strategies for developing and applying energy scenarios to promote the universal adoption of renewable energy solutions.

Discussion focus

The LTES International Forum aims to explore how long-term energy scenarios can support the global transition to a renewable and sustainable energy future. This edition will address the aspects of the energy transition, as reflected in the priorities set by the LTES Network Members and Partners to encourage in-depth discussions within the energy planning community.

Through these discussions, the Forum will provide actionable insights and strategies, contributing to the global effort to ensure a sustainable, efficient, and inclusive energy transition.

Format and Target Audience

The Forum will take place at the IRENA Innovation and Technology Centre in Bonn, Germany, from 9-11 September 2024 in a hybrid format (on-site and virtual), allocating only a limited number of participants on-site (priority given to the LTES members, partners, and speakers), and accepting registrations for virtual participation in the event.

Nine in-depth discussion sessions will be conducted during the three days. The discussion sessions will be organized around topics identified as highly relevant by LTES Network members and partners. In each session, experts will present and discuss the chosen topics.

The main audience for the Forum consists of energy planners, government officials, the energy industry, intergovernmental/multilateral agency representatives, and the scientific and climate community.

Agenda (TENTATIVE)

MC: Angela Khanali Mutsotso, Associate Professional – Clean Energy Transition Scenarios, IRENA

Day 1: "Building the Framework for Energy Transitions"

Time	Event
08:00 – 09:00	Registration and Coffee
09:00 – 10:00	**Opening Session** Welcome remarks: • Germany • Denmark • Clean Energy Ministerial • **Asami Miketa**, Head of Energy Planning and Power Sector Transformation, IRENA Scene-setting presentation and forum logistics: • **Juan Jose Garcia**, Programme Officer, IRENA
10:00 – 12:30	**Session 1: Roundtable: (Co-hosted with Brazil) Leveraging Long-Term Energy Scenarios (LTES) to Attract Investments - Bridging Planning and Funding for Energy Transitions** Under the G20 Presidency framework, this session explores how robust planning frameworks can facilitate the funding of the clean energy transition. Scenario practitioners will gain valuable insights into best practices and understand what funding institutions seek in energy transition plans. The discussion focuses on effectively using scenarios to unlock and accelerate clean energy investments.

	Scene-setting: **Asami Miketa**, Head of Energy Planning and Power Sector Transformation, IRENA **Gustavo de Naciff Andrade**, Deputy Head of Energy Economics, EPE, Brazil Moderator: **TBC** Including prepared interventions from various countries and institutions.
12:30 – 13:45	Lunch
13:45 – 15:15	**Session 2: Effective Communication of Long-Term Energy Scenarios** Effective communication is crucial for stakeholder engagement and the successful implementation of long-term energy strategies. This session delves into how various stakeholders comprehend long-term energy scenarios. Energy planners will gain practical insights to improve their scenario communication methods, leading to more effective policymaking. Moderator: **Asami Miketa**, Head of Energy Planning and Power Sector Transformation, IRENA IRENA presentation: **Nadeem Goussous**, Associate Programme Officer, IRENA Speakers: • **Paul Deane,** Senior Research Fellow, University College Cork • **Paul Koutstaal**, Deputy department head and program manager energy supply, PBL Netherlands Environmental Assessment Agency • **Angelina LaRose,** Assistant Administrator for Energy Analysis, U.S. Energy Information Administration • **Alessia De Vita,** Technical Advisor, GET.transform
15:15 – 15:45	Coffee break
15:45– 17:30	**Session 3 (Co-hosted with UNFCCC): Aligning Energy and Climate Strategies: The Path to Consistent National Policy Frameworks** Aligning energy and climate strategies is essential for developing consistent and effective national policies. This session provides a comprehensive overview of aligning Long-Term Energy Scenarios (LTES) with Long-Term Low Emission Development Strategies (LT-LEDS). Participants will gain insights into aligning planning frameworks through various mechanisms and structures, ultimately aiding in the development of more robust Nationally Determined Contributions (NDCs). Opening remarks from Brazil: **Gustavo de Naciff Andrade**, Deputy Head of Energy Economics, EPE, Brazil

	Scene-setting presentations: • **Kenichi Kitamura**, Programme Officer, UNFCCC • **Iris van der Lugt**, Associate Professional, IRENA Panelists: • **Tiina Koljonen**, Research Team Leader, VTT Technical Research Centre of Finland • **Francisco Domenech Guzmán**, Energy Foresight Analyst, Ministry of Energy, Chile • **Glasha Obrekht,** Director, Environment and Climate Change Canada (ECCC) • **Michelle Akute**, Manager – Energy Planning, Energy and Petroleum Regulatory Authority
18:00 – 20:00	Reception (venue: IRENA IITC)

Day 2: "Scenarios in Practice"

Time	Event
08:00 – 09:00	Registration and Coffee
09:00 – 10:30	**Session 4: (Co-hosted with the Danish Energy Agency) Strengthening Institutional Ownership of LTES: Insourcing vs. Outsourcing** To effectively develop and use Long-Term Energy Scenarios (LTES), institutions must decide between insourcing and outsourcing their development processes, or a mixed approach. This session explores the roles of insourcing and outsourcing in LTES development. Practitioners will gain insights for decision-making, governance structures, and planning ecosystem-building in their specific contexts. Scene setting: **Rosie Collington,** Post-Doctoral Researcher in International Political Economy, Copenhagen Business School Moderator: **Charlie Heaps,** LEAP Developer and Senior Scientist, Stockholm Environment Institute Panelists: • **Mohammed Elsayed**, Senior Engineer, Ministry of Electricity and Renewable Energy, Egypt • **Camila de Araujo Ferraz,** Energy Research Analyst, EPE Brazil • **Malene Hovgaard Vested,** Advisor**,** Danish Energy Agency • Germany
10:30 – 10:50	Coffee break

10:50 – 12:30	**Session 5: Broadening LTES to Feature Socioeconomic Aspects** A just energy transition requires the consideration of socioeconomic factors to ensure fairness and inclusivity. This session examines the inclusion of socioeconomic elements in LTES to support a just energy transition. Gain insights on vital socioeconomic factors, particularly in regions transitioning from fossil-fuel-based economies, and learn how to incorporate these elements into LTES. Opening presentation: **Gondia Sokhna Seck**, Programme Officer, IRENA Moderator: **Kaare Sandholt,** International Chief Expert, China Energy Transition Programme, Energy Research Institute of Academy of Macroeconomic Research Speakers: • **Elizabeth Doris,** Director, Joint Institute for Strategic Energy Analysis (JISEA) at NREL • **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 • **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
12:30 – 13:30	Lunch
13:30 – 15:00	**Session 6: (Co-hosted with the World Energy Council) Incorporating Energy Security Considerations in Long-Term Energy Scenarios** Energy security is a critical aspect of any long-term energy plan, necessitating strategies to manage risks and ensure stability. This session discusses the challenges and management of energy security within LTES. Planners will acquire strategies for integrating energy security and its relevant indicators into scenario development. Moderator: **Reshma Francy**, Associate Director, Policy Pathfinding and Trilemma, World Energy Council Panelists: • **Filipe de Padua Fernandes Silva**, Energy Research Analyst, EPE Brazil • **Pamella Elleng Rosa Sangy**, Technical Consultant, EPE Brazil • **Bo Yuan**, Section Chief, Energy Strategy and Planning Institute, State Grid Energy Research Institute, China
15:00 – 15:30	Coffee break

Time	Event
15:30 – 17:30	**Session 7: (Co-hosted with European Commission Joint Research Centre) Incorporating Behavioral Dynamics and Lifestyle Changes into Energy Demand Modeling** While the clean energy transition will require substantial changes in energy generation, achieving targets also necessitates significant changes in demand, including lifestyle and behaviors. This session explores methods for incorporating behavioral dynamics and lifestyle changes into energy scenario modeling. Energy planners will enhance their understanding of methodologies for integrating behavior and potential lifestyle changes into energy plans. Moderator: **Marija Miletic**, European Commission Joint Research Centre Speakers: • **Hazel Pettifor,** Senior Research Associate, Oxford University (co-presenting) • **Alessio Mastrucci**, Research Scholar, International Institute for Applied Systems Analysis (IIASA) (co-presenting) • **Alexandra O'Sullivan Freltoft,** Advisor, Danish Energy Agency • **Hannah Daly**, Professor, University College Cork
18:30 – 21:00	Dinner (venue TBC)

Day 3: "Future Landscapes of the Energy Transition"

Time	Event
08:45 – 09:45	Closed session: Quarterly meeting of LTES Network members and partners. Agenda will be shared prior to the meeting.
09:00 – 10:00	Registration and Coffee
10:00 – 11:30	**Session 8: (Co-hosted with VTT Technical Research Ltd., Finland) Communicating and responding to uncertainties in scenarios** Navigating uncertainties is crucial for developing robust Long-Term Energy Scenarios (LTES) that can adapt to changing conditions and inform policy. This session delves into managing uncertainties in LTES and translating them into actionable policy frameworks. Practitioners will gain insights into identifying uncertainties, communicating mitigation measures, and taking action towards implementing these measures. Moderator: **Tiina Koljonen**, Research Team Leader, VTT Technical Research Centre of Finland Panelists: • **Marissa Cerezo**, Director, Renewable Energy Management Bureau, Department of Energy, The Philippines • **Joel Flores**, Energy Planning Analyst, General Directorate of Energy, Hydrocarbons, and Mines of El Salvador • **Malene Hovgaard Vested,** Advisor**,** Danish Energy Agency • **Michelle Akute**, Manager – Energy Planning, Energy and Petroleum Regulatory Authority

11:30 – 11:45	Coffee break
11:45 – 13:15	**Session 9: Integrating Hydrogen Development into LTES: Addressing Key Policy Questions** As hydrogen emerges as a key component of future energy systems, integrating it into LTES raises critical policy questions that need addressing. This session identifies and explores key policy questions for developing hydrogen strategies within LTES. Practitioners will gain insights into addressing questions about hydrogen integration and aligning hydrogen strategies with long-term energy plans. Moderator: **James Walker**, Team Lead, Renewable Gases, IRENA Speakers: **Francisco Domenech Guzmán**, Energy Foresight Analyst, Ministry of Energy, Chile **Jessica Arias Gaviria**, Deputy Director of Energy Demand, Mining and Energy Planning Unit (UPME), Colombia **Mohammed Elsayed**, Senior Engineer, Ministry of Electricity and Renewable Energy, Egypt - TBC
13:15 – 13:30	Closing of the Forum **Roland Roesch,** Director, Innovation and Technology Centre, IRENA