



India Energy Week 2022
Asian Ministerial Energy Roundtable

Panel 1: Addressing Energy Security and Justice Challenges in
Turbulent Times

An International Energy Forum document
with the Boston Consulting Group

IEF

BCG

Section 1: Key Questions to the Panel

Questions:

1. What role do you see **different energy sources** (conventional & low carbon) play in achieving a managed transition towards net-zero?
2. If we do require multiple sources – how do we **manage progressive substitution** from a world of conventional to low-carbon energy sources whilst maintaining energy market stability?
3. Given differences in stances of multiple countries as customer, competitor, and exporter of **hydrogen producing technology** – how should Asian countries frame policies for advancement of this technology for all?
4. To achieve Net-Zero while delivering on the principle of '**no-one is left behind**', what needs to be in place to create Universal Access, for a just, affordable & inclusive transition?
5. Each **energy pathway** presents their own set of **supply chain challenges**. How do we achieve supply chain decentralization across material, equipment & technology?
6. What can industry leaders do to **enable technology transfer** from developed to developing countries to ensure collective energy security and the delivery of their own commitments to decarbonization targets & carbon neutrality?
7. **Energy efficiency** is clearly a major lever for all energy transitions across the globe – how do we unlock its potential collaboratively?
8. What **role can India play** in the energy value chain to create a blueprint for universal access and achieve a just energy transition?
9. While renewables are a key part of the future energy mix, there are multiple approaches and different stances in the pace of renewable growth & type of technologies available. How can stakeholders come together to **accelerate renewable energy growth**? What role and impact do you see for electrification play in the different pathways?
10. What changes in **government policies & incentives** can enable financial institutions to provide lower-cost financing opportunities to accelerate development, and deployment of low-carbon technologies?
11. Multiple countries have to deal with the issues of both energy transition and adapting to the impacts of climate change. This requires funds & technology from the international community. How do we ensure that the energy systems we are building today also **tackle client resilience**?

Section 2: Key Themes from Panel Members in 2021 - 2023

- **The Great Debate**
 - Oil and Gas vs Renewables in the energy transition - can we settle the great 'public' debate through collaboration and aligning views
 - The dangers of a binary approach to the communication of what the energy transition means - single solutions versus energy portfolio approaches during the transition
- **Managing the energy transition**
 - The role of oil and gas in the energy transition
 - What does a just energy transition look like – energy access through markets or via self-reliance?
 - Managing the trade-offs between maintaining oil and gas demand-supply balance to manage energy market volatility and/or accelerating substitution to renewable solutions?
 - The critical role of natural gas - is it a bridge to a low carbon future, or just another hydrocarbon?
 - Using technology as a game changer to drive decarbonization (CCUS, DAC) and the Hydrogen based energy systems
- **Is driving energy efficiency the 1st order solution for energy security**
 - Managing Carbon footprints and ensuring energy efficiency across demand sectors
 - Growth of Electric Vehicles
- **The importance of the circular economy approach for developing nations, and identifying Fuels for the Future**
 - High level principles for developing Green Hydrogen for the Future
 - Positioning Biofuels, Green Hydrogen & Green Ammonia as key levers for energy transition, especially for transport (including aviation and shipping), industry, and other potential sectors such as storage-backed microgrids in remote areas
- **Financing the conventional energy solutions and energy transition through low-cost funding sources**
 - The impact of underfunding in Oil & Gas investment driving demand and supply imbalances to 2040
 - Is economic growth and investment in oil and gas inextricably linked?
 - Meeting the level of investment required to maintain oil and gas supply to manage market volatility (\$12.1Trillion by 2045)
 - Meeting the level of investment required to accelerate to a new energy system (\$131Trillion)
 - Access to capital markets and institutional funding for new energy to accelerate renewables acceleration
- **Policy -**
 - Clarity from Governments on their hydrocarbon policies and the link to market requirements or self-reliance
- **The New Energy System** – Changing the energy playing field that can be more just, affordable & inclusive
 - Developing synergy between Sustainable Development Goals and Climate Carbon Reduction Commitments
 - The need for collaboration on technology and funding from advanced economies
 - Dealing with energy intermittency
- **Positive impacts on developing nations and decentralizing supply chains**
 - Requiring diversified Renewable Energy Supply Chain to ensure availability of raw materials
 - Supply Chain to ensure affordable and reliable supply of energy across the globe
- **The emerging agreement on the need for enhanced collaboration**
 - Assess the socio-economic impact of transition
 - Ensure Workforce transformation through upskilling for the entire industry across the globe