The 8th Asian Ministerial Energy Roundtable (AMER8), hosted by the United Arab Emirates and co-hosted by India in Abu Dhabi on 10 September 2019 gathered 18 Asian Energy Ministers and 10 Heads of International Organisations to debate Global Energy Security in the Age of Change and empower responsible growth in Asia and the world.

Ministerial roundtable sessions, organised on the open and neutral platform of the International Energy Forum, focused on:

- **The role of new technologies for a more competitive and productive world energy mix.**
- **Advancing inclusive access to secure, affordable, and sustainable energy services.**

Roundtable discussions build on the outcomes of the 7th Asian Ministerial Energy Roundtable and 16th IEF International Energy Forum Ministerial held on 1-3 November 2017 in Bangkok and on 10-12 April 2018 in New Delhi respectively. Mindful of the challenges to Global Energy Security in the Age of Change, Delegates considered the opportunities that new technologies and efficiency gains bring to increase productivity and advance inclusive access to secure, affordable, and sustainable energy services. Ministers and Heads of International Organisations noted that:

**Session I**

The role of new technologies for a more competitive and productive world energy mix.

1. Asia’s consumer and producer countries are deepening dialogue to benefit from the trade and investment opportunities that changing energy markets provide. This includes jointly addressing global challenges to energy security while facilitating orderly transitions at an acceptable cost to societies and achieving globally shared goals faster together.

2. Empowering responsible economic growth demands inclusive energy market solutions that take into account human well-being in rapidly growing cities, development of rural areas, as well as planetary thresholds in respect of resources, environment, and climate.
3. Shifts in demand and supply and the deployment of new technologies change the global geography of energy. New oil and gas flows alter trade and investment patterns. A reduction in the cost of renewable energy sources diversifies energy sources. The deployment of clean energy technologies (e.g. Liquified Natural Gas (LNG), Carbon Capture Use and Storage (CCUS in combination with the versatility of Hydrogen, Batteries and Storage) create new opportunities and alliances but also compel producers and consumers to address new questions on access to mineral resources, markets, and the transfer of state-of-the-art technologies.

4. A growing range of countries already benefits from innovative and more agile energy production and transportation techniques that open up new perspectives on secure and sustainable energy futures in Asia. Investment in cross-border interconnection networks, and Digitalisation the force behind the 4th Industrial Revolution (Industry 4.0), brings these futures closer to empower responsible economic growth in Asia and the world.

5. The roll out of new technologies and returns on efficiency gains will grow when synergies between hydrocarbon, renewable, nuclear energy and other sectors are explored through dialogue and collaborative efforts. Existing infrastructure and available new technologies already provide enabling conditions and can serve as a bridge to new energy futures by cost effectively mobilising investment in a volatile and more uncertain energy market environment.

6. Considerable clean generation capacity is still needed to complement Asia’s growing energy demand for hydrocarbons. Government ambition and Asia’s manufacturing prowess have spearheaded clean energy deployment across the region. New price records for Solar Photo Voltaic and Onshore Wind in oil and gas producing regions further strengthens energy security globally. Diversifying sources to meet increasing energy demand helps to balance the water, energy, and food security nexus, and frees up hydrocarbon resources for overseas exports on which Asia and the world continue to rely.

7. Natural Gas resources for power generation will continue to be important to provide the necessary balance in electricity networks. They form an essential source to achieve reliability and sustainability in energy portfolios in Asia, and across the world. The flexibility natural gas infrastructures offer enhance secure and sustainable market functioning. Well-maintained and new supply, storage, and distribution networks increase overall energy sector resiliency by reducing harmful emissions, increasing efficiency and advancing new technologies and performance standards.

8. Governments and national oil and gas companies already enable innovation by investing more, reducing greenhouse gas and other harmful emissions and increasing efficiency gains to make hydrocarbon supply and demand more sustainable and competitive. Enhanced dialogue within the framework of the International Energy Forum (IEF), including on energy efficiency, new technologies, and innovation agendas, alongside joint voluntary efforts by industry, such as the Oil and Gas Climate Initiative (OGCI), that explore new business models on carbon recycling, allows producers and consumers to overcome vulnerabilities, capitalise on strengths, and engage investors.

9. New technologies and energy efficiency have gained tremendous importance and visibility globally and emerged as a cornerstone in energy security considerations to facilitate orderly transitions. To pool efforts on Global Energy Security in the Age of Change and accelerate innovation and energy efficiency gains enabling new business models across the full energy
sector spectrum, the neutral and open platform of the IEF and the IEF Energy Efficiency Knowledge Sharing Framework, will continue to pursue dialogue and to strengthen collaboration with relevant organisations and global platforms. Launched at the 6th Asian Ministerial Energy Roundtable in 2015, and part of the G20 Energy Efficiency Leading Program adopted under the G20 Presidency of China in 2016, the IEF Knowledge Sharing Framework with governments, industry, and key knowledge centres enhances energy productivity and sustainability to bring globally shared goals within the reach of all energy market stakeholders.

Session II
Advancing inclusive access to secure, affordable, and sustainable energy services.

10. Making access to secure, affordable, and sustainable energy services as inclusive as possible goes beyond alleviating energy poverty alone. Collective efforts that consider all available technologies and benefit from the comparative advantages among countries, regions, and industries through the IEF producer-consumer dialogue help to reduce risk in the Age of Change and facilitate orderly transitions. This includes constructive government engagement with market actors to leverage investment in research, proof of concept, and deployment at scale to speed up development of clean transport that enables mobility and reduces pollution.

9. Despite the progress made, much work still needs to be done. Leadership, collaboration, and data are needed to connect the hundreds of millions without access to electricity of which more than half live in Asia. High access rates are directly related to per capita income and social economic equity and development levels, living standards, and environmental sustainability of countries. Together, these criteria empower responsible growth in Asia, the engine of the global economy and responsible growth world-wide.

10. A gap is widening between countries where real progress is being made as a result of sustained policy focus and those that are falling behind in advancing inclusive access to secure, affordable, and sustainable energy services. Therefore, it is important to sharpen focus on high-impact countries and create the necessary policy and investment conditions to close the gap so that progress made remains inclusive.

11. Access to clean cooking energy sources increased only marginally over the past two decades and therefore requires urgent action to improve social economic equality, productivity, health and well-being. Access to clean and efficient cooling is becoming an increasingly important factor for energy markets to empower responsible growth in Asia and the world.

12. Natural gas and other gaseous fuels such as Liquified Petroleum Gas (LPG) in combination with renewable energy sources and modern infrastructure development provide cost-effective solutions to improve energy sector transformations that advance inclusive access in major urban areas. Micro-, and off grid systems in rural areas that rely on renewable sources and other clean and efficient gaseous technologies including small scale LNG can help to provide cost effective solutions. Digitalisation technologies can help to increase the granularity of data that informs policy and investment decisions and help to more efficiently connect consumers to modern energy services.

13. Dialogue and international cooperation among governments, international organisation and market stakeholders to expand cross border energy infrastructure and interconnections improves energy matrices across regions and overcomes hurdles to energy access in urban and
remote or isolated regions.

IEF Dialogue and Energy Market Governance

14. The International Energy Forum carries the vision, mission and values to strengthen Global Energy Security in the Age of Change. IEF Dialogue and collaboration on innovation and energy efficiency gains accelerates orderly energy transitions towards a more competitive and productive world energy mix, and advances access to secure, affordable, and sustainable energy services for all.

15. Energy policies and markets through the world are in a period of transformation and accelerated transitions towards new paradigms. These aim to alleviate climate change and environmental degradation while empowering responsible and inclusive economic development. A pragmatic two track approach can respond to population growth, rapid urbanization, and rising sustainable development needs, including the eradication of energy poverty that remains a key area of work within the IEF dialogue.

16. Asia’s reliance on open international energy trade and investment relations creates major opportunities but also leaves energy security and responsible growth vulnerable to risks associated with market volatility and disruptions. Producers and consumers must therefore continue dialogue on policy and market mechanisms that strengthen energy market stability, accelerate orderly transitions, and avoid major disturbances.

17. One way to mitigate these threats is through engagement on the open and neutral platform that the IEF continues to provide to Asia and the world. Global energy security in the Age of Change requires more inclusive energy dialogue. More diverse energy pathways mobilise new-market entrants but also make outlooks less predictable eroding investor confidence to move forward with long-cycle projects that will shoulder global energy security in future.

18. Collaboration on making different outlook projections more comparable gives the dialogue a firmer footing. Inviting the Gas Exporting Countries Forum (GECF), the International Renewable Energy Agency and other regional and national organisations, to the Joint IEA-IEF-OPEC Symposia, bolsters inter-institutional and public-private sector exchanges and allows stakeholders to embrace the future with deeper insight, foresight, and confidence. Joint efforts to enhance energy market data transparency and increase the granularity of data across the full energy sector spectrum through the Joint Organisations Data Initiative that the IEF hosts lifts all boats with better informed policy and investment decisions.

19. Asian energy producers and consumers share a growing responsibility with the world to maintain global energy market stability and cushion excessive market swings. Dialogue on emergency preparedness and measures, including the build-up and maintenance of spare capacity and strategic stocks with other producer and consumer countries on the IEF platform further reduces the disruptive impact of excessive volatility on energy markets, and responsible growth prospects in Asia and the world.
**Backgrounds and Way Forward**

In its 8th iteration, the Asian Ministerial Energy Roundtable has evolved into one of the flagship events on the international energy calendar for Ministers and senior energy policy makers to improve collaboration on energy market security, and the deployment of new technologies to strengthen investment in secure, affordable, and clean energy services for all.

Energy security concepts have evolved and become more dynamic and forward looking since the IEF facilitated the First Roundtable of Asian Ministers on Regional Co-operation that was convened by India in New Delhi in January 2005 and co-hosted by Kuwait. The impact of sustained economic growth in Asia, disruptions caused by natural disasters and accidents, the U.S. shale revolution, and the rapid advancement of renewables and disruptive technologies, as well as the imperative of fulfilling globally shared goals together, bring Asian dimensions to bear. Over time, the Asian Ministerial Energy Roundtable has enhanced dialogue and co-operation among Asian energy exporters and importers within the bilateral, regional and global context.

The Asian Ministerial Energy Roundtables continue to enrich perspectives and renew impetus to cooperation among Asian energy market stakeholders in support of cross-national energy trade, investments, and technology transfer to strengthen energy security and empower responsible growth in Asia and the world. Recent energy market developments and more varied policy and technology pathways show that dialogue on the open and neutral platform that the IEF provides is vital to foster policy cohesion and boost market confidence. Energy Security considerations in the Age of Change continue to call on producers and consumers to mobilise timely investment, advance efficiency gains and innovation, improve market transparency, and avoid disturbances with spare capacity and emergency measures through dialogue and collaborative efforts.

The United Arab Emirates takes over the baton from the Kingdom of Thailand that focused dialogue on global energy markets in transition to move from vision to action at the 7th Asian Ministerial Energy Roundtable (AMER7) held in Bangkok, Thailand on 1-3 November 2017. The key findings laid down in the concluding statement by the Government of Thailand informed ministerial dialogue at the 16th International Energy Forum Ministerial hosted by India on 10-12 April 2018 in New Delhi (IEF16).

Outcomes of ministerial roundtable discussions and bilateral meetings on the margins of AMER8 will help to inform the 17th Ministerial International Energy Forum that the Kingdom of Saudi Arabia will host with Morocco and Nigeria when it takes over the G20 Presidency from Japan in 2020. India, the co-host of AMER8, will convene the 9th Asian Ministerial Roundtable (AMER9) in 2021 in New Delhi to advance collaboration and dialogue.

The AMER and IEF biennial Ministers meetings are the largest gatherings of producer and consumer countries, hosted on the neutral platform that the IEF uniquely provides for Asia and the world to sharpen collective focus on the governance of global energy markets.