The Kingdom of Saudi Arabia has abundant natural resources, notably hydrocarbons; however, the fundamental goal in its Vision 2030 is to diversify the economy by utilising all resources and leveraging the full potential of clean technologies. The Saudi Vision 2030 is the blueprint for the country’s long-term growth based on three pillars: a vibrant society, a thriving economy, and an ambitious nation.

In addition to the goal of economic diversification, Saudi Arabia’s energy policy has been increasingly considering environmental sustainability and climate change. Energy-related institutions coordinate through an energy ecosystem, and new programs spearheaded by the Ministry of Energy include those on the circular carbon economy, hydrocarbon sustainability, and hydrogen market leadership. In 2021, the uncertainty associated with cyber threats decreased compared to the previous year, reflecting the initiatives undertaken in the country in this area. These action priorities are the ongoing focus of the leaders to reach the milestones set in the Vision.

In 2020, during the G20 presidency of Saudi Arabia, the Kingdom assumed a leadership role in carbon emissions management by showcasing the circular carbon economy framework to support the global clean energy transitions. The Kingdom has been investing in R&D and leading the development of technologies that support a circular carbon economy in which carbon is reduced, recycled, reused, and removed (4 Rs), avoiding the release of carbon dioxide and other greenhouse gases in the atmosphere while generating economic value and supporting sustainable development.

Toward this end, the Kingdom has taken initiatives to replace domestic hydrocarbon liquid consumption rapidly. It aims to meet 100% of domestic electricity generation with natural gas and renewable energy by 2030. High-value petrochemical industries will be developed using freed liquids and by increasing domestic gas production. The petrochemical industry will contribute to the sustainable use of hydrocarbons by transforming excess production capacity into high-value and zero-emission hydrocarbon-based products, as appropriate. Saudi Arabia also aims to be the world’s leading hydrogen provider. It is planning to produce a few million metric tons of pure hydrogen annually by 2035. While blue hydrogen is currently the focus of the Kingdom’s current efforts, it also wants to obtain a significant market share in green hydrogen and lead new energy markets. The green hydrogen initiative of NEOM is also gaining momentum.

The Kingdom has further unveiled a wide range of efforts to safeguard the environment and address climate change by launching the Saudi Green Initiative (SGI)’s goals. First announced in March 2021, the SGI’s initial wave of activities includes programs that seek to avoid and reduce emissions by more than 278 million tons of carbon dioxide equivalent per year by 2030. This first round of initiatives will invest over 700 billion Saudi riyals (187 billion US dollars) in the green economy. Finally, the Kingdom aims to achieve net-zero emissions by 2060 mainly through the circular carbon economy approach. The oil company, Saudi Aramco has also announced a net-zero greenhouse gas target for 2050 for its scope 1 and 2 emissions.
The Kingdom is also maintaining a crucial role in climate change mitigation and adaptation at the regional scale through its active participation and role in the Middle East Green Initiative. This initiative is led by and for the region, brings together leaders to decrease climate change-related impacts.

Saudi Arabia’s energy policies are also crucial to the global energy market’s security and stability. The Kingdom has continuously exhibited its commitment to ensure market stability and maintain energy supply security and safety. Its institutional energy ecosystem is dynamic and vibrant, and the country’s energy policies have been evolving rapidly by adopting an innovative, agile, and participatory approach considering economic diversification, environmental sustainability, and climate change management.