ABU DHABI: A new report released Wednesday by the International Renewable Energy Agency (IRENA) indicate that the current move to harness national and regional energy solutions based on renewables will contribute to alter the dynamics of dependency, offering nations a greater degree of energy independence.

The report released on the sidelines of the 14th IRENA Ministerial Assembly currently taking place in Abu Dhabi, UAE, shows that while geopolitical factors – such as market manipulation and infrastructure disruptions – remain relevant in the current situation, their impacts are expected to be less severe in a renewable energy landscape.

The move towards electrification and a higher share of renewable energy, according to the new findings can reduce risks associated with weaponisation of fuels, market manipulation, interruptions in long-distance supply chains and environmental disasters such oil spills.

Latest official estimates show that Africa has a high dependence on fossil fuels whereby only 9% of all energy generated across the continent came from renewable sources. Data show that less than 3% of global renewables jobs are in Africa while only 2% of global investments in renewable energy in the last two decades were made on the continent, with significant regional disparities.

The 2023 World Energy Transitions Outlook show that Renewable energy deployment, improvements in energy efficiency and the electrification of end-use sectors would contribute to the current shift.

With the right policies, according to the 82-page official document, generating renewable energy locally optimises costs and offers substantial socio-economic and welfare benefits, aligning energy production more closely with local needs and capabilities.

The reports stresses that social acceptance and community participation also play a major role in this context, which may affect the speed of the transition.

IRENA Director-General, Francesco La Camera

Commenting on the new findings, IRENA Director-General, Francesco La Camera pointed out that the energy system is currently undergoing a profound

transformation, and renewables are bound to bring greater resilience through decentralisation and greater reliance on domestic sources.

“It is vital to proactively shape this resilience with foresighted policies and investments,” the statement quoted Mr. La Camera as saying.

While The evolving energy system calls for a security strategy that integrates environmental concerns, economic trends, and social ramifications, La Camera stressed that technologies, not fuels, are the centerpiece of the new energy system.

“By revisiting traditional security approaches and identifying emerging factors, this report seeks to equip policy makers with a better understanding of energy security in the era of renewables,” he said.

However, the reports show that despite latest commitments, in the short term, many countries will still need to import fossil fuels. For some countries, imported electricity constitutes the bulk of electricity supply.

In addition, according to new findings, control over energy resources and supply lines has been a currency of power, and lack of such control has been a source of geostrategic vulnerability.

Some states have sought to weaponize energy interdependence and use it as a foreign policy tool, the report said.

Estimates by the World Bank show that close to 600 million people in Sub-Saharan Africa live without electricity access, underlining the reality that the region simply does not generate enough power to meet its needs.

Under IRENA’s World Energy Transitions Outlook, renewables would comprise three-quarters of the global energy mix by 2050. Electricity would become the main energy carrier, meeting more than 50% of consumption by 2050. The renewables-based system is characterised by high electrification and efficiency, complemented by green hydrogen and sustainable biomass.

“The evolving energy system calls for a security strategy that integrates environmental concerns, economic trends, and social ramifications,” said IRENA IRENA Director-General, Francesco La Camera of the new Energy Security report.