

Headline	Experts: Nuclear energy can help nation achieve net zero target by		
MediaTitle	Borneo Post (KK)		
Date	14 Jan 2024	Language	English
Circulation	18,290	Readership	54,870
Section	Home	Page No	5
ArticleSize	199 cm ²	Journalist	N/A
PR Value	RM 1,665		



Experts: Nuclear energy can help nation achieve net zero target by 2050

KUALA LUMPUR: While renewable energy (RE) is widely touted as the future of energy to reduce greenhouse gas (GHG) emissions into the atmosphere, nuclear power is increasingly being discussed as a necessary part of the energy mix.

As the world pushes towards net-zero emissions by 2050, nuclear power has been described by scientists globally as the way to bridge the energy gap as it is not only clean but also considered reliable as it addresses the intermittent nature of renewables like wind, hydro and solar power. (Net-zero emissions or net zero refers to achieving a balance between the carbon emitted into the atmosphere and the carbon removed from it.)

Furthermore, it also operates emission-free, mitigating

emissions of carbon dioxide (CO₂) and harmful air pollutants. Nuclear energy is also deemed pivotal to the global clean and sustainable energy transition, which is the key to achieving net-zero emissions.

At the recently concluded 28th Conference of the Parties of the United Nations Framework Convention on Climate Change (COP28) in Dubai, United Arab Emirates, the UAE consensus reflected a clear commitment to triple RE and double energy efficiency by 2030, aiming to achieve net-zero GHG emissions by 2050 and keep the increase in global average temperature below 1.5 degrees Celsius above pre-industrial levels.

As pointed out by Malaysian innovation and nuclear advocate Sheriffah Noor Khamseah Al-

Idid Syed Ahmad Idid, the International Energy Agency (IEA) has reported that energy accounts for three-quarters of GHG emissions globally.

Thus, the energy sector holds the key to decarbonising the global economy and supporting its transition to a green economy, she told *Bernama* recently.

“Shifting from fossil fuels to low-carbon energy systems is at the heart of a green economy and energy transition,” she said, stressing that as a pathway to reach net-zero goals, nuclear power is part of strategic global solutions that are increasingly relevant yesterday.

In Malaysia, the government aims to achieve 70 percent RE installed capacity by 2050 through

the National Energy Transition Roadmap (NETR) launched in

August 2023.

Currently, Malaysia’s energy sources are predominantly fossil fuels, with coal and natural gas contributing to over 80 per cent of local electricity generation. Malaysia has vast potential for renewable energy, particularly from solar and other sources.

Scientists, however, have emphasised that nuclear energy is among the best options to consider when substituting fossil fuels. According to the experts, besides being similarly rich in energy, it also complements other RE sources.

Former special advisor to the director-general of the International Atomic Energy Agency (IAEA) and director of Nuclear Security at IAEA Raja Datuk Dr Abdul Aziz Raja Adnan said RE such as solar power still

has limitations when used to generate base-load electric power.

He said nuclear energy could support RE to make it work and to ensure energy security.

Speaking during the ‘Ruang Bicara’ programme aired by *Bernama* TV recently, he said in order to support the country’s electricity requirements, “we need a stable low-carbon source like nuclear to complement RE. In the meantime, our local grid cannot support large-scale RE inclusion without massive grid upgrading.

“Because of this limitation, if solar panels are installed in houses to cater to the energy needs of domestic users, we will still need the supply from Tenaga Nasional Bhd’s grid to ensure non-interrupted supply.”

He said since 2009, Malaysia had implemented a number

of important preparatory steps to pave the way for the implementation of a nuclear energy development programme, including establishing the Nuclear Power Corporation of Malaysia as the nation’s first Nuclear Energy Programme Implementing Organisation.

“The history of nuclear energy in Malaysia began during the time of former deputy prime minister Tun Dr Ismail Abdul Rahman, with the establishment of the Tun Ismail Atomic Research Centre for the development of nuclear technology in 1972.

“We were actually ready to seriously consider developing

nuclear energy but during the era of oil and gas and the establishment of Petronas, this (nuclear energy) no longer seemed viable,” he said. — *Bernama*