

Hydrogen as marine fuel will reduce emissions

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THE shipping sector has relied on fossil fuels as a source of energy for more than a century.

Heavy fuel oil is the major fuel source in the global maritime transportation, making up 77 per cent of total fuel use in ship engines.

The use of fossil fuels has resulted in a significant increase in greenhouse gas emissions and the emission of harmful pollutants.

The use of hydrogen as an alternative fuel is seen as a promising technique to reduce or eliminate emissions.

The shipping sector uses 3.5 million metric tonnes of hydrogen per year, with ocean-going ships being the primary users of hydrogen as fuel.

Malaysia is exploring and fostering the hydrogen sector and economy.

The use of hydrogen as a marine fuel will reduce emissions from the shipping sector.

Furthermore, hydrogen is a vital

component required to accomplish the International Maritime Organisation 2050 goals.

A few challenges must be resolved prior to hydrogen's implementation as a decarbonisation solution for shipping.

The main challenges for Malaysia's hydrogen energy transition are high costs, limited infrastructure and a lack of a regulatory framework.

Despite these challenges, hydrogen remains the most promising alternative fuel for the shipping sector. Overcoming these obstacles will pave the way for a sustainable future.

Introducing incentives and government support early on is crucial to tackle this issue.

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