

DDW5: HYDROGEN

The panel discussion on Green Hydrogen Technology and Applications provides a comprehensive overview of green hydrogen as a key sustainable energy solution. The session began with an introduction to the concept of green hydrogen, emphasizing its production from renewable energy sources and its environmental benefits, such as zero carbon emissions from hydrogen vehicles. Panelists discussed Sarawak's initiatives in hydrogen mobility and highlighted potential applications across various sectors, including power, steel and shipping. Innovations in hydrogen production methods, such as electrolysis and biomass gasification, were explored, alongside economic considerations like cost factors and the necessity for business model innovation. The need for public-private partnerships and the establishment of the Malaysian Hydrogen Industry Alliance were underscored, with emphasis on international cooperation and policy support to drive the hydrogen economy forward. The session culminated in actionable items aimed at refining hydrogen technologies and understanding its socio-economic impacts in Malaysia.

Key points from the discussion included a detailed explanation of green hydrogen, produced using renewable energy sources and its benefits over traditional fuels. Sarawak's initiatives in hydrogen mobility for public transport were highlighted, showcasing the environmental benefits of zero carbon emissions from hydrogen vehicles. The panel also explored potential applications of hydrogen in the power sector, steel industry, and shipping industry, with international support and targets for hydrogen adoption being discussed. Technological advancements driving green hydrogen production, such as electrolysis and biomass gasification, were examined, along with economic considerations like electricity costs, capex investment, and the importance of business model innovation.

The session emphasized the importance of public-private partnerships and the creation of the Malaysian Hydrogen Industry Alliance to foster collaboration across the value chain. The need for international cooperation and policy support was highlighted to ensure hydrogen becomes a key player in the energy transition. The discussion also touched on the socio-economic impacts of the hydrogen economy, the role of government intervention, and incentives for fuel cell vehicle ownership in countries like China and South Korea. The potential of hydrogen in addressing climate change and enhancing energy security was also discussed.

Action items from the session included developing more efficient and cheaper technologies for green hydrogen production and compression devices, conducting socio-economic studies on the impact of hydrogen energy deployment in Malaysia, and launching the Malaysian Hydrogen Industry Alliance platform. These steps are aimed at advancing hydrogen technologies and understanding their socio-economic impacts, ultimately driving the hydrogen economy forward in Malaysia.