



International Partnership
for Hydrogen and Fuel Cells
in the Economy

Singapore Update

44th IPHE Steering Committee Meeting

24 – 25 November 2025

Riyadh, Kingdom of Saudi Arabia

Announcements / New Initiatives *Singapore*



• Investments/Funding/Policies/Initiatives

- Proceeding with Front-End Engineering Design (FEED) studies under the **ammonia pathfinder project for power generation and maritime bunkering**
 - Consortium led by Keppel will be entering a ~1 year FEED study before deciding whether to take the project to Final Investment Decision (FID)

• New Research & Development, Demonstration and/or Deployment Activities

- Two **hydrogen-ready open cycle gas turbine (OCGT) generation units**, with a total capacity of 682 MW was launched in October 2025.
- As part of the **Research, Innovation and Enterprise 2030 (RIE2030)** Strategy, Singapore is considering providing dedicated national research funding that focuses on hydrogen R&D, beyond the current approach of project-level funding. Dedicated funding to a research institute specialising in hydrogen R&D would help to build up a core pool of hydrogen research experts and allow shared use of equipment, thereby advancing hydrogen-related innovations.

• Key Collaborations

- Inaugural SG- Sweden Forum – panel discussions on ammonia turbines at the Singapore International Energy Week (SIEW) 2025.



Examples of Lessons Learned and Impact *Singapore*



Program initiative, policy, regulation or mandate	Lessons Learned/Outcomes
Ammonia Pathfinder Project for Power Generation and Maritime Bunkering	<ul style="list-style-type: none">• Technological readiness of direct ammonia turbines yet to be proven at scale, resulting in longer commissioning durations• Low-carbon ammonia prices remain high; and ammonia-derived power is still ~3 times more expensive than fossil-fuelled power, affecting offtake. Blending of ammonia-derived electricity with other sources of electricity to make the price more palatable to power offtakers• Uncertainty in ammonia bunkering demand

Status of Deployments

- **[Blending]** Two hydrogen-ready open cycle gas turbine (OCGT) generation units, with a total capacity of 682 MW, was launched in October 2025.

Leading Government Initiatives

- Proceeding with Front-End Engineering Design (FEED) studies under the **ammonia pathfinder project for power generation and maritime bunkering**
- Singapore's Agency for Science, Technology and Research (A*STAR) has launched a S\$62.5m (~US\$48.0m) **low-carbon technology translational testbed (LCT3)** on Jurong Island for companies and startups to use the cost-effective, modular testbed to scale up emerging technologies for commercial development.
- As part of the RIE2030 Strategy, Singapore is considering providing dedicated national research funding that focuses on hydrogen R&D, beyond the current approach of project-level funding. Dedicated funding to a research institute specialising in hydrogen R&D would help to build up a core pool of hydrogen research experts and allow shared use of equipment, thereby advancing hydrogen-related innovations.
- Airline passengers departing from Singapore will have to pay a sustainable aviation fuel levy ranging from US\$0.77 to US\$32.10 (S\$1 – S\$41.90) per ticket from 1 Apr 2026. The levy will apply to tickets sold from 1 Apr 2026, for flights departing from Singapore on or after 1 Oct 2026

Deployment Goals

- Nil

Goals or Focus Areas

- 5 Key Thrusts
 - Experiment with advanced hydrogen technologies e.g. pathfinder project
 - Prioritizing R&D efforts
 - International cooperation
 - Long term land and infrastructure planning
 - Workforce development

Funding

- Nil

Thank you



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