

Innovation Insights on Hydrogen Strategies in APAC

The Emerging Hydrogen Economy in the Asia Pacific Region

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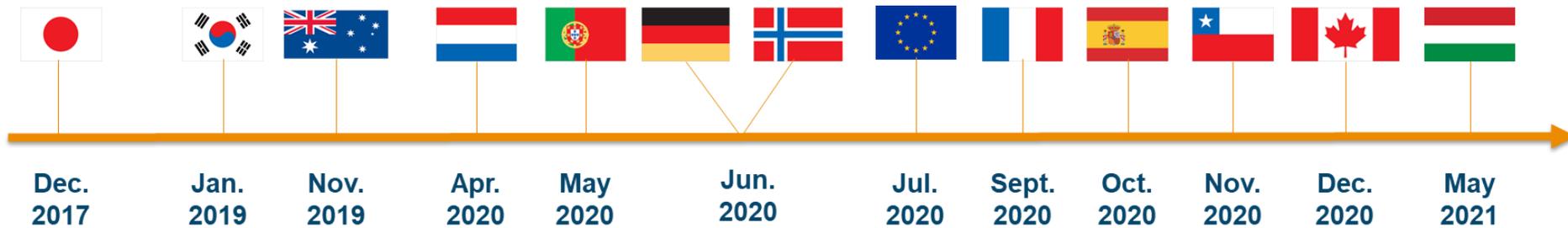
The World Energy Council's work on hydrogen

- The World Energy Council with our partners with EPRI & PwC **aim to better understand the differing drivers for global, regional & sectoral demand for hydrogen & impartially assess** hydrogen's true potential role in energy systems & transition, in line with our principle of technology neutrality
- We are particularly exploring:
 - **National hydrogen strategies** being published
 - Current / projected **hydrogen demand** & hydrogen economics
 - Global / regional hydrogen **value chain** development
 - How the Council's "**Humanising energy**" agenda could relate to hydrogen
- Will produce a **short series of new Innovation Insights Briefings on hydrogen** to inform a practical multi-stakeholder dialogue about hydrogen's role in energy transition

State of play in the Asia-Pacific region

FAST INCREASING GLOBAL INTEREST IN HYDROGEN - STARTED IN ASIA

- Increasing worldwide interest in hydrogen in all forms due to many potential benefits in energy systems / transition
- Evermore national hydrogen strategies being published:



- Asia-Pacific region is particularly active:
 - 3 national hydrogen strategies published: Japan, South Korea, Australia
 - At least 4 in preparation: China, New Zealand (*roadmap available*), Singapore, Uzbekistan
 - Policy discussions & demonstration projects: Bangladesh, Hong Kong, India

State of play in the Asia-Pacific region

DIFFERENT HYDROGEN STORIES ARE EMERGING IN DIFFERENT REGIONS

- Different **drivers**: Asia-Pacific countries focus on hydrogen for economic growth
- Different **hydrogen sources**:
 - Australia: clean hydrogen by 2030
 - Japan: fossil-based with CCS by 2030, CO₂-free by 2050
 - South-Korea: from natural gas by 2030, eco-friendly CO₂-free by 2050
- Differences in **sectoral priorities**: heating sector = immediate priority for Japan / South Korea but less explored elsewhere; road transport (i.e. light, medium & heavy duty, buses) & power generation also highlighted
- Differences in **policy actions** to support hydrogen development: activities on all fronts (direct investment, other financial & economical mechanisms, legislative / regulatory measures, standardisation priorities, R&D, international strategy...), with all 3 countries addressing social issues for hydrogen development

What's next

- Early stage of “hydrogen economy” → Facilitate experience sharing & learning
- More countries are entering the hydrogen field & sharing plans, which could reshuffle the cards → Track new developments & their implications
- Barriers & challenges to hydrogen development → Develop regional / global multi-stakeholders dialogue

Thank you

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