

(This document should be read in conjunction with the proposal for a national hydrogen strategy presented to the COAG Energy Council in December 2018 by the Chief Scientist, Dr Alan Finkel AO).

## **National Strategy**

The Working Group will develop a comprehensive and ambitious national strategy for the development of an Australian hydrogen industry, to be considered by Council in December 2019. Policies and measures included in the strategy will reflect these principles:

- Be ambitious
- Prioritise safety and benefits to customers
- Have clear goals and objectives
- Use partnerships
- Be technology neutral
- Consider the distribution of costs and benefits for Australians
- Be commercially focussed
- Be consistent with sustainable environmental management

The national strategy will cover, but not be limited to, the topics listed in the workplan below.

The Working Group will work closely with industry, and take into account views of experts, end users, and environment and community groups. In considering policies and measures for the national strategy, the Working Group will have regard to international trends and best practices, reducing red tape and encouraging innovation. It will also consider potential co-benefits, like fuel security, regional development, and non-greenhouse gas air pollution.

## **2019 'kick-start' projects**

Council, on the Chief Scientist's advice, has also tasked the Working Group with carrying out three projects during 2019, to set the stage for implementation of the national strategy, and begin building Australia's standing in international markets as a major player. These projects, listed in the workplan below, will be done in partnership with industry and the community, and will engage towns and cities across the country. In addition, jurisdictions will continue individual efforts to encourage hydrogen projects, whether for production, distribution, export or end-use.

## WORKPLAN

|  | National Strategy  | Kick-start projects 2019  |
|--|--|---|
| <i>Developing a hydrogen export industry</i>   | <ul style="list-style-type: none"> <li>Infrastructure requirements (physical &amp; market)</li> <li>Regulation for safety and efficiency</li> <li>Inter-country agreements</li> <li>Bulk carriers</li> </ul>   | <i>Co-ordinated international outreach to enhance Australia's profile with major trading partners as a potential supplier</i>   |
| <i>Hydrogen in the gas networks</i>            | <ul style="list-style-type: none"> <li>Using hydrogen in the domestic gas network (initially at 10% and the potential for 100%)</li> <li>User and customer impacts</li> <li>Safety, metering and standards</li> </ul>                                    | <p><i>Commencing work to allow up to 10 per cent hydrogen in the domestic gas network, both for use in place of natural gas and to provide at-scale storage for hydrogen.</i></p> <p><i>Project partner: Future Fuels CRC</i></p> |
| <i>Hydrogen for transport</i>                  | <ul style="list-style-type: none"> <li>Regulatory change assessment</li> <li>Refuelling infrastructure needs study</li> <li>Assessment of potential for use in heavy vehicle, road and rail fleets and shipping</li> <li>Standards and safety</li> </ul> | <i>Scope potential for building hydrogen refuelling stations in every state and territory, building on work by Hydrogen Mobility Australia</i>  |
| <i>Hydrogen to support electricity systems</i> | <ul style="list-style-type: none"> <li>Potential of hydrogen to contribute to resilience of electricity markets</li> <li>Assessment of required regulatory changes</li> </ul>  |   |
| <i>Hydrogen for industrial users</i>           | <ul style="list-style-type: none"> <li>Hydrogen use potential in existing industries</li> <li>New industries using hydrogen</li> </ul>   |   |
| <i>Cross-cutting issues</i>                    | <ul style="list-style-type: none"> <li>Standards, regulation and labelling</li> <li>Research and innovation</li> <li>Safety and community engagement</li> <li>Governance</li> <li>Hydrogen precincts and cities</li> </ul>                               |   |

