

Member Statement - Australia

The Australian Government recognises the potential of hydrogen to deliver significant economic and environmental benefits, and to reduce our dependence on imported fossil fuels, thereby contributing to increased energy security. For these reasons, the Australian Government has committed significant resources in recent years to investigating the potential benefits of hydrogen in Australia's long-term energy supply.

This work started with a specially commissioned national hydrogen study completed in September 2003. It has been well received by the various stakeholder groups in Australia.

The study's findings and recommendations are currently being considered by the Australian Government in the context of a national energy policy. The direction-setting nature of the study and its recommendations mean that they are relevant not just to Australia. The recommendations support participation in international forums such as IPHE and our continued active involvement in international research and industrial collaboration initiatives. The findings and recommendations also underscore the importance of Australia working with other nations and jurisdictions to remove or reduce policies and regulations that represent barriers to a transition to a future hydrogen economy.

With the study completed, Australia is in the process of doing a detailed national stock-take of our capabilities in hydrogen – in research, in technology and in industry and government. This work is expected to be completed in the latter half of this year. When finished, the stock-take will be a valuable resource for those wishing to identify potential research and industrial collaboration partners.

At the inaugural meeting of the IPHE in Washington last year, Mr John Ryan, representing the Australian Minister for Industry, Tourism and Resources, noted that the hydrogen study should not be seen in isolation. Rather, it is one of a number of significant initiatives aimed at stabilising, and ultimately lowering, Australia's greenhouse gas emissions.

Internationally, energy policy has moved centre stage in recent years because of mounting concern over energy security, climate change and the need for greater attention to sustainability in resource use. In Australia, an Energy Policy Task Force was formed early in 2003 to work systematically through a broad range of issues that bear on how we develop and use our energy resources. The Task Force, which reports to the Prime Minister and senior Ministers, is currently well through its work program. The outcome is expected to be a more up to date and coherent articulation of Australia's energy policy. It will see Australia better equipped to deal with the very significant energy challenges we face in the 21st century.

The policy development work of the Task Force will take in recent actions that are relevant to Australia's progress towards a future hydrogen economy.

The Commonwealth Scientific and Industrial Research Organisation (CSIRO), one of Australia's leading publicly-funded research bodies, launched its *Energy Transformed* initiative in October 2003. The research that will be undertaken through this initiative aims to develop technologies that will produce near-zero emissions power from fossil fuels. Other new CSIRO projects under this initiative involve solar reforming of natural gas, direct solar water-splitting, and advanced water electrolysis. In the longer term, the research being undertaken through CSIRO and similar organisations around the world could lay the foundations for large-scale hydrogen generation and the widespread application of hydrogen technology to the transport sector.

Australia is an active participant in international fora across a range of energy sectors.

In February this year, Australia hosted the IEA Asia-Pacific Zero Emissions Technology (ZETS) conference which promoted greater understanding of these technologies in the Asia-Pacific region. In August, an International Conference on Materials for Hydrogen Energy will be held in Sydney. In September, the World Energy Congress will be held in Sydney, where I expect the hydrogen economy will be the subject of extensive discussion. Also in September, the Hydrogen and Fuel Cell Futures Conference will be held in Perth, Western Australia, with distinguished speakers from around the world, and a focus on hydrogen activities in the southern hemisphere.

Immediately after the World Energy Congress, Australia will be hosting the second Ministerial meeting of the Carbon Sequestration Leadership Forum, and this will provide a further opportunity to progress policy and technological co-operation between the participating countries. This links to formative work being undertaken through our COAL21 initiative, a partnership between industry, government and researchers which covers carbon geo-sequestration and hydrogen production through coal gasification. In a related move, a new co-operative research centre on greenhouse technologies – the CRC CO₂ as it is known – is developing Australia's capabilities in this field.

I reiterate that Australia's participation in these activities provides a sound basis for our contributing to the work of both the Steering Committee and the Implementation and Liaison Committee.

At our inaugural meeting in Washington, Australia suggested that the success of the International Partnership for the Hydrogen Economy would depend upon the new body making a distinctive and valued contribution to international discussion and action on a wide range of hydrogen issues. At the inaugural meeting, and since then, we note that agreement has been reached on many of the key management and operational aspects that will be essential to the success of the Partnership. The next challenge is to develop specific work plans that deliver tangible outcomes towards the IPHE's objectives. Another function that the IPHE might be particularly suited to pursuing, on top of the collaborative technical advances it is positioned to achieve, could be as an information clearing house. The IPHE has membership from most geographical regions in the world, linkages to forums such as the IEA that cover other areas and related issues, and may develop relationships with multilateral organisations such as APEC that cover other regions and have highly developed information-sharing mechanisms of their own.

Australia will continue to work closely with other members and with the secretariat in pursuit of our shared objectives.