

Interim Framework Document on Hydrogen and Fuel Cells

Summary Document

At their October 2003 meeting in Bangkok, APEC Economic Leaders, as a way to accelerate implementation of the APEC Energy Security Initiative, endorsed, as appropriate, the APEC Action Plan to Enhance Energy Security. One element of the Action Plan called for the development of an Interim Framework Document to identify opportunities and obstacles in developing hydrogen and fuel cell technologies as a way to accelerate the development of an “APEC Hydrogen Economy”.

The Action Plan called for cooperation with the International Energy Agency (IEA) and the International Partnership for the Hydrogen Economy (IPHE), development of a program for capacity building assistance on policy and regulatory issues, and work in a long view toward harmonized codes, standards, and regulations.

The Interim Framework Document was produced following a workshop held in Honolulu, Hawaii, USA, on March 29-30, 2004. Workshop participants included government, research and private sector representatives from a number of APEC member economies, the IEA and the IPHE. All APEC economies were informed of the workshop outcomes and contributed to the development of the Document.

The Interim Framework Document is not intended as a vision, roadmap, or action plan document. Rather, it seeks to obtain general agreement on the first steps APEC economies could take to support hydrogen and fuel cell development, recommending a priority list of potential activities that would help create this foundation.

RECOMMENDATIONS

The Interim Framework Document identifies five recommendations for potential APEC activity in hydrogen and fuel cells:

1. **Creating a web-based “tool –box”** for policy makers in APEC economies to aid in the education and dissemination of current information on the challenges, opportunities, benefits and life-cycle costs of hydrogen and fuel cell technologies. This capacity building mechanism could also be made available to the public.
2. **Holding an APEC Policy Forum**, involving the private sector, on the successes and failures of various policy and regulatory mechanisms to advance hydrogen energy development.
3. **Organizing a comprehensive codes and standards inventory** relevant to hydrogen and fuel cell technologies as a starting point for longer term work on harmonization.
4. **Holding a workshop** to analyze hydrogen and fuel cell codes and standards gaps.
5. **Establishing an information exchange** on policies and RD&D status with the International Energy Agency and the International Partnership for the Hydrogen

Economy in order to draw upon expertise and to help identify potential market opportunities.

To emphasize that the Interim Framework Document is just a starting point, it recommends that “Next Steps” need to be articulated to clarify what more APEC can do in the near-term to address hydrogen. It is noted that a clear case for hydrogen and fuel cell technology as an alternative to conventional fuels must be developed and demonstrated, and that serious preparation for an APEC market in hydrogen and fuel cells requires broad and inclusive cooperation that recognizes APEC’s diversity and various stages of economic development.

Optimistically, the Document notes that for developing APEC economies, hydrogen and fuel cells have the potential for “leapfrogging” to more efficient and clean power technologies.