World Hydrogen Energy Summit Vision

How hydrogen can contribute to meeting the Kyoto and Copenhagen targets

It is widely acknowledged that “green development” is the way to protect the environment on one hand and for national economies to recover and for new workplaces to be created on the other. It is expected that in December 2009 an international agreement on climate will be signed in Copenhagen that will foster green development.

Energy efficiency, renewable energy sources and smart grids are important parts of green development and hydrogen can play a major role in all of them. With further R&D to produce cheaper materials and technologies, hydrogen is foreseen to replace gaseous and liquid fuels in transport and stationary applications. Hydrogen can be produced from a variety of primary energy sources but the most sustainable way is when it is produced from renewable energy giving zero emissions at the point of production. Similarly, when utilized in fuel cells at the point of use, hydrogen produces zero emissions and is not only an ideal solution for reducing vehicle pollution but also out performs rival technologies such as Li-ion batteries.

Hydrogen solves the problem of intermittent availability of renewable energy sources and allows their wider penetration into the energy market. For the last 20 years or so there has been tremendous progress in the development of technologies for hydrogen production, storage and utilization and in their demonstration and public acceptance. These developments have been generously supported not only by the governments of leading industrialized countries but also by major industries. The imminent transition towards greater utilization of renewable energy sources is an opportunity for hydrogen to go beyond technology demonstration and at the same time facilitate that transition on a global scale.

In the context of this major international event it is planned to bring together decision makers from government, industry and academia with the aim of identifying ways to facilitate the introduction of hydrogen to national energy policies. The target of the Summit is to formulate a list of recommendations for planning measures that will help overcome non-technical barriers to using hydrogen energy technologies. These will be compiled in the form of a Summit Statement.

The two and a half day event will be broken down into two main parts. The first day will be attended by all stakeholders. They will be addressed by speakers of international calibre in order to stimulate panel discussions that will aim to finalize the Summit’s Statement, to be issued at the end of the first day. The second and third days will be dedicated to translate the Summit Statement into practical terms. Dedicated sessions will be held addressing specific obstacles including financial, legal and safety issues, on analyzing road mapping practices and finally on hearing the views of the industrial and financial sectors.

This type of dynamic engagement of politicians, industrialists, scientists and financiers in deciding national and international initiatives and ways forward, will help move hydrogen energy technologies from early demonstration to real market stages whilst contributing to meeting the Kyoto and Copenhagen targets.