

Notes for a Statement by

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to the

International Partnership for the Hydrogen Economy
Ministerial Meeting

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Good morning, Secretary Abraham, Ministers, distinguished guests from so many countries, ladies and gentlemen.

It is a pleasure for me, on behalf of the Minister of Natural Resources, Herb Dhaliwal, to be here today to represent Canada. Unfortunately, Mr. Dhaliwal had to return to Canada this morning because of an illness in his family.

Canada congratulates, Secretary Abraham, for his initiative in sponsoring this meeting and leading the creation of this partnership. Canada firmly believes that hydrogen and fuel-cell technologies are vital alternatives to power our long-term energy future, and they could play a central role in the transformation of our energy economies.

We have heard a good deal at this meeting, particularly yesterday, about the potential benefits of the hydrogen economy: the pathways it opens to a clean energy future, as well as to greater energy independence for countries having very different energy resource endowments. For Canada, the central attraction of hydrogen is its potential role in addressing climate change.

Scientific evidence continues to accumulate that climate change is happening as a direct result of our production and consumption of energy. Clearly climate change has very serious implications and when we are dealing with such complex issues as the interrelationships between climate, ocean, and biological systems there is a large element of risk that we shall never be able to predict the consequences of a significant rise in temperature. It was these concerns that led Canada to ratify the Kyoto Protocol.

That Protocol involves a commitment to explore promising technologies such as hydrogen and fuel cells. And we are glad to be here doing that today.

As it happens, Canada's interest in and support for hydrogen and fuel cells started well before the more recent focus on climate change. In fact, for more than 20 years, our Government has supported the development of hydrogen and fuel-cell technologies with a total investment at

the federal level of \$200 million. Some of this money has gone to universities and government laboratories, including the National Research Council's Fuel Cell Innovation Centre in Vancouver, British Columbia. Natural Resources Canada and the Department of Industry have worked with industrial partners over many years.

A number of these companies have become international leaders: Ballard Power Systems in fuel cells; Dynetek Industries in hydrogen storage technology; Hydrogenics Corporation in fuel cell test stations and fuel cells; and, Stuart Energy Systems in electrolytic hydrogen production. Canada now has over one hundred companies in our hydrogen industry with clusters of expertise in a number of our cities. Our hydrogen industry companies have gone far beyond the support they received from government. They have been able to raise several hundred million dollars in private equity to carry on with their research and development, which is now at a level of about \$200 million annually.

It is in this context, the Government of Canada recently announced an additional \$215 million investment over the next five years that will accelerate Canadian research and demonstration of hydrogen and fuel cells. This will bring the government's total investment in this period to over \$300 million, which on a per capita basis compares favourably with leading countries. Thus I hope you will recognize that the Government of Canada remains determined to help ensure the continued success of our hydrogen and fuel-cell industry. In fact, we aspire to continue to be leaders in this emerging industry.

While there has been considerable progress on hydrogen, Canada believes it is time to enhance international cooperation on hydrogen. There are a number of mechanisms in this regard already—the IEA, APEC, the International Standards Organization—all have activities, which are helpful and deserve continued support. As well, there are numerous bilateral agreements for cooperation.

But we recognize that the international effort has been rather scattered. It has not

enjoyed serious support or focus at the political level. And it has not kept up with the dramatic scale and scope of activities around hydrogen—activities in which the governments around this table have been the clear leaders. So we very much welcome the International Partnership for a Hydrogen Economy. It will provide a very valuable forum to share information, but more importantly to work cooperatively on the strategies which will be necessary to advance the hydrogen economy.

A central theme of this meeting is that while the potential benefits of the hydrogen economy are large, the challenges to getting there are very large. The only way to meet these challenges successfully—that is efficiently and in a timely manner—is through international cooperation.

There are many technical challenges. Like making fuel cells less expensive and more reliable. Storing hydrogen appropriately. Finding less expensive and clean ways to produce hydrogen. Creating common codes and standards. And developing a hydrogen refuelling strategy and infrastructure.

But beyond the technical challenges, there is the challenge of creating a climate of confidence and vision in which the private sector will make the large investments needed. We know that many companies around the world are engaged in this direction and prepared to do more. But their efforts will depend on the signals and actions coming from governments, as well as on technical progress. As international partners we can do many things.

We can work on opening up commercial opportunities — both domestically and internationally. We can work on international codes and standards and on removing barriers that could impede trade.

There are two areas where a partnership such as this could truly move the goal posts in a way that would not happen otherwise.

The first is large-scale demonstration projects. These should be selected strategically. Well chosen international demonstration projects have the potential to provide the scale necessary for driving down costs and providing clear signals to industry that each generation of technology will find appropriate uptake and opportunities for learning.

Such real-world demonstrations would also raise public awareness of hydrogen's potential and reassure our public about its safety. Although it's clear that "hydrogen highways" and "hydrogen villages" are very costly and complex, we hope that, through the IPHE, we can mobilize our expertise and joint funding to make such promising projects a reality.

The second area I would suggest merits special attention is that of fundamental research. Key issues of fundamental, pre-competitive research needing attention are natural areas for enjoying the benefits of international collaboration.

May I conclude with a final note on the functioning of this new Partnership. Canada believes it should maintain a strong political dimension, which means that the work of the Partnership should connect with international political gatherings – whether the G8, the IEA, APEC or other forums. And it may well be that Ministerial level meetings of the IPHE will be merited from time to time.

Canada looks forward to signing the Terms of Reference and to joining our IPHE partners in this promising initiative.

Thank you.