International Partnership for the
Hydrogen Economy (IPHE)

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Ministerial Statement for Germany

by

Georg Wilhelm Adamowitsch
State Secretary,
Federal Ministry
of Economics and Labour

Check against delivery!

On behalf of the German Government, I like to thank you for the invitation to this important meeting. I am pleased to give a short statement about Germany's engagement in hydrogen and fuel cell development.

As you may know, Germany has a long tradition in hydrogen and fuel cell research and development. And thus, we are among the leading countries in industrial hydrogen production and use.

I am happy to state that Germany is endorsing this initiative and willing to play a significant role in this International Partnership for the Hydrogen Economy.

Germany's engagement in this International Partnership is expressed by the large scale of participants:

Four Federal Ministries, several Federal States, two National Research Centres and other Research Institutions, and especially Private Industries are involved and are looking forward to the international co-operation in this frame.

Since a long time, the Federal Government is working on hydrogen and fuel cells under different perspectives:

Energy research and technological development in industry, national research centres, and universities have led to a broad know how and a lot of experience.

In working out a fuel strategy that will ensure the availability of an environmentally friendly mobility in the medium and long term, hydrogen may play an important role in this context.

Further more we are actively promoting international actions regarding vehicle regulations, and therefore have a strong interest in hydrogen utilization, infrastructure and codes and standards.

Last but not least we are regarding hydrogen with respect to environmentally favourable energy supplies and as a supplement for a development to renewable energies.

Hydrogen and fuel cells play a major role in the German Strategy for Sustainable Development as clean energy carrier and efficient energy converter, respectively, in the future.

In addition to the Federal Government, many of our States` Governments have set up important hydrogen and fuel cells programs, including research, and they are joining the Federal Government in our interest in international co-operation.

All together, the Federal and States' Governments have been funding hydrogen and fuel cell research substantially since nearly 30 years, and we are looking forward to sharing our experience with the international community on the basis of fair and trusting cooperation.

Even more important has been - and still is - the engagement of German industry in these fields.

All car manufacturers in Germany have a long tradition in hydrogen and fuel cell car development.

Fuel cell development centres of BMW, Daimler-Chrysler, Ford and Opel/GM have been established in Germany.

Co-operation of car manufacturers, the oil industry and the Government has led to an intensive debate on hydrogen as fuel for mobile applications.

This is being done in the so-called “Transport Energy Strategy”, a joint action of the German Government and all relevant industry partners.

Hydrogen car fleet tests started already in the 1980s in Berlin. And I am now happy to announce that there will be the first public gas station also offering hydrogen fuel, in the next year.

Two other German cities are involved in the “Clean Urban Transport for Europe" demonstration project with 9 European cities in testing hydrogen and fuel cell buses in their public transport system.

In the stationary application, fuel cell development and demonstration is in the focus of several German companies.

Some of them work already closely together with American industries like Vaillant with Plug Power and MTU with Fuel Cell Energy; Siemens Westinghouse is already a bi-national company.

Other German companies are developing their own technologies with national R&D partners like Viessmann and European Fuel Cell.

And not at least, many German power utilities are actively engaged in testing and demonstration of fuel cells for distributed heat and power production.

Germany is also one of the world's major hydrogen producing and utilising countries in traditional industries, including hydrogen transport on the road and in pipelines since many decades.

Companies like Linde and Lurgi are well positioned on the world market with hydrogen production technologies.

In the last two years we looked intensively into the option to produce electricity and hydrogen from fossil fuels without CO2 emissions.

The result is our new research concept COORETEC for highly efficient fossil fuel power plants and for carbon dioxide capture and storage.

This may include the CO2-free production of hydrogen as well, as a bridging strategy for a future hydrogen economy.

So far about our activities concentrated on hydrogen.

As far as fuel cell research and development is concerned, since 1990 a growing part of public funds is dedicated to this technology.

We have concentrated funding on basic research to tackle the main problem of fuel cells: cost reduction.

By this, we have established highly qualified competence centres including universities, institutes and industries.

Actually, the Federal Government is funding a substantial number of demonstration projects in the field of stationary fuel cells for combined heat and power production.

In parallel, we concentrate funding on research for materials, reformers and fabrication techniques.

In the mobile sector, we are co-financing four projects with hydrogen-fuelled public transportation busses: two of the already mentioned “European Clean Urban Transport for Europe” demonstration projects and two in individual cities.

At the same time, we are supporting in cooperation with industry the development and establishment of

- international codes and standards,
- test and certification tools and
- education materials,
- including technical training centres.

As I tried to show, Germany has accumulated a lot of experience.

Nevertheless we are aware that it is still a long way to go to a sustainable hydrogen economy.

The importance now is to take one step after the other to get satisfying answers.

The international cooperation will help to facilitate this in an efficient way.

We are looking forward to discuss the answers in the Hydrogen and Fuel Cell Partnership, and we are ready to bring in our experience.

On a national basis, we have established Advisory and Co-ordination Boards for hydrogen and for fuel cells to organize our contributions in the best possible way.

We actively support the activities of the European Commission.

Before I conclude my presentation, please allow me some general words in view of our future cooperation.

There is a large number of participants in the IPHE all of whom have a certain background which they want to bring in.

As I have tried to explain, Germany is among the leading countries in hydrogen and fuel cell technologies and market development.

And we have a long tradition of international co-operation, especially for hydrogen and fuel cells.

We know about the chances, but also about the difficulties in such a co-operation.

We have preferred to bring this political, industrial, technological and international experience already into the preparation of IPHE. We regard the Terms of Reference for the IPHE a well balanced document and would encourage the Steering Committee to focus on the most promising options for international cooperation.

Now I want to conclude my remarks by congratulating Secretary Abraham and the Department of Energy, as well as all the other institutions involved, once again for this valuable initiative.

May this partnership become a success for the benefit of all our countries, for the benefit of our world.

Thank you very much for your attention.