

Final



**Remarks prepared for United States Energy Secretary Spencer Abraham
International Energy Agency Ministerial Working Dinner
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Thank you, Brian [Wilson], for that introduction.

And thank you, Director Mandil, and everyone at the IEA who has worked to put this week's Ministerial meeting together.

It is a pleasure to be with all of you.

I'd like to speak for a few minutes about tonight's topic, "New Dimensions of Energy Security," and, principally, the challenges facing natural gas and electricity markets. And then I would like to speak more broadly on one of the great energy opportunities facing all nations of the world: the hydrogen economy.

As you know, demand for natural gas is on the rise because most new electricity generation is gas fired, and projected increases in electricity demand over the next 20 years will significantly stretch our capacity to produce adequate supplies of natural gas both in the United States and around the globe.

So, even as we grapple with the energy security challenges pertaining to petroleum, we must broaden our overall energy security agenda to include these new issues of electricity demand and natural gas supply.

In President Bush's National Energy Plan, and in other contexts, the United States is trying to address these challenges.

On both the scientific and technical side, we are working to maintain a diverse mix of fuels to generate electricity to prevent unsustainable dependence on gas.

Specifically, the United States is making substantial investments in clean coal and carbon sequestration technologies, and in nuclear science technology and engineering.

Our goal is to maintain coal and nuclear as key parts of our electricity generation mix, while reducing the safety and environmental problems associated with them.

Our administration is also working with the U.S. Congress to modernize our electricity laws.

Legislation currently moving through Congress will, if passed, help increase competition and stimulate sufficient investment to meet 21st Century power generation and transmission needs.

Finally, the Department of Energy recently completed a national transmission grid study to identify our most significant transmission construction challenges and to find ways to surmount them.

We are now working to implement these solutions both on an administrative and legislative basis.

In addition to addressing the demand side of the equation, the United States is attempting to focus on the supply side as well.

For America, the importation of natural gas is a challenge because we have a limited number of LNG receiving facilities.

The Bush administration is reviewing the existing LNG regulatory structure to find ways to encourage the construction of additional facilities.

We are also examining how to improve the regulatory process for new natural gas exploration efforts, for building new pipelines, and for siting transmission lines.

Moreover, I recently asked the National Petroleum Council, an advisory arm of the U.S. Department of Energy, to conduct a study of new natural gas supplies, technologies, and other evolving market conditions that may impact supply and demand.

Despite these efforts, our administration knows that such steps, though important, are not enough. It is critical that we collaborate with you on an international basis to address challenges that face all of us in the 21st century.

Although tonight's discussion is to be primarily focused on natural gas and electricity, I do want to comment on what is, in my view, the single most important thing we can do to address energy security – transforming our economies from ones dependent on foreign petroleum to ones that use domestically produced hydrogen as the principal feedstock for powering our transportation sectors.

This is an exciting opportunity for the nations of the IEA to work together and with other nations of the world.

The next few decades will see the demand for oil skyrocket. In the United States, demand for oil will increase by nearly 50 percent by 2025.

We can expect similar or higher increases all over the world, particularly among major developing countries like China and India.

And with such increases in oil utilization will come growing environmental challenges.

That's why, in his State of the Union address last January, President Bush pledged to help usher in the hydrogen revolution that will transform the way people live, work, and drive.

The President's plan will help move us toward the age of cars and trucks powered by hydrogen fuel cells.

And it will do this during the next two decades so that, as the President said, "the first car driven by a child born today could be powered by hydrogen, and pollution-free."

Think about that: cars that run on hydrogen, not gasoline. Vehicles that emit water, not pollutants and greenhouse gases.

Success in this endeavor will have both a very significant impact on the environment, and it will help make the geopolitics of oil far less complicated for all nations.

To make this hydrogen vision a reality, the President pledged to invest \$1.7 billion over the next five years to research and develop hydrogen powered cars and the infrastructure to support them.

Our challenge is to lower the cost of fuel cells by a factor of ten.

We must also lower the cost of hydrogen production, which we think is approximately four times too high today.

And we must devise new methods to store sufficient amounts of hydrogen fuel aboard cars and trucks.

But perhaps most importantly, we must surmount the overarching obstacles to developing a hydrogen-based delivery and refueling infrastructure.

If successful, we estimate that by 2040 the United States could reduce its overall consumption of petroleum by 33 percent, and reduce carbon dioxide emissions by 19 percent.

These benefits await not just the United States, but all nations.

While the United States is prepared to make this investment, we are excited about the steps other nations have made.

The European Union is taking a robust approach to long-term research and development of renewable and hydrogen energy technologies.

Japan has made a similarly strong commitment. Australia, Canada, Germany, Iceland, Italy, the United Kingdom, and others have visited our Department recently regarding their programs.

We are aware that other countries are considering new hydrogen investments. All of these demonstrate a common interest in pursuing the promise of hydrogen.

But cooperation must go beyond IEA nations. Developing countries face the same energy and pollution challenges we do.

For the transition to a hydrogen economy to work globally, we must involve the major developing countries, such as India, China, South Africa, and Brazil.

And it is that common interest that is at the heart of a proposal I want to make tonight.

Bringing about the hydrogen economy is an area where we can work together.

So tonight I would like to propose an International Partnership for the Hydrogen Economy.

Building on our strong bilateral and multilateral relationships, I suggest that the international community combine efforts and to the extent appropriate work together on a unified front, sharing ideas and coordinating activities, all in the interests of pursuing the common goal of a hydrogen economy.

The Partnership I envision would develop common codes and standards for hydrogen fuel utilization.

It would establish cooperative efforts to advance the research, development, and deployment of hydrogen production, storage, transport, and end-use technologies.

It would strengthen exchanges of pre-competitive information necessary to build the kind of common hydrogen infrastructures necessary to allow this transformation to take place.

And it would formalize joint cooperation on hydrogen R&D to enable the sharing of information necessary to develop a hydrogen-fueling infrastructure.

By working together and leveraging scarce resources we can speed the day when consumers everywhere can purchase a competitively priced hydrogen powered car.

In the early stages of our hydrogen work, we have identified 14 key research, development, deployment, and infrastructure activities that will advance us toward our goal.

These are initial steps. We welcome the ideas and insights of those who might be interested in such collaboration. And we look forward to pursuing them in future meetings.

Let me also add that I know the nations represented here tonight are involved in hydrogen research to varying degrees, some quite a lot, others not as much.

My proposal reaches beyond those nations that have announced large programs, to all the nations that have work in these areas.

And we must construct this conversation in a way that looks at opportunities down the road in developing countries who share a common opportunity and need to develop their own infrastructure to take advantage of this future.

Every one of our nations should and will benefit when the hydrogen age arrives.

The proposal I make tonight offers a new framework, an umbrella under which we can all work together, and under which we can aggressively collaborate on these issues.

The world is moving toward the hydrogen economy.

Each of our nations has compelling reasons of national, economic, and energy security to do whatever is necessary to accelerate this revolutionary transformation.

Now is the time to make this commitment.

Working closely together, we can bring about the transformation to a hydrogen economy as smoothly, as efficiently, and as quickly as possible.

If we do so, our children and grandchildren can be spared the price spikes, the volatility, and the environmental uncertainty that we know today.

They can grow up in a world marked by energy security, economic vitality, and a healthy environment.

I look forward to working with you all to make that vision a reality.

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