

**Videotaped Remarks by  
Energy Secretary Spencer Abraham  
International Energy Agency Hydrogen Seminar  
Paris  
March 3, 2003**

Hello, I'm Spencer Abraham, Secretary of the U.S. Department of Energy.

I'm delighted that the IEA is taking early action to investigate hydrogen's potential -- and I appreciate the opportunity to talk to you about the importance the United States attaches to hydrogen fuel and fuel-cell research and development.

President Bush recently announced a groundbreaking plan to transform our nation's energy future from one dependent on petroleum, to one that utilizes hydrogen -- the most abundant element in the universe.

The concept for this initiative is simple, yet profound -- create automotive operating systems that run on hydrogen rather than gasoline.

The potential benefits are incredible. Hydrogen can be produced from diverse domestic sources, freeing the United States and other countries from reliance on imported oil.

Hydrogen can fuel ultra-clean internal combustion engines and almost completely eliminate auto emissions. When used to power fuel cell vehicles, hydrogen will more than double the efficiency of today's gasoline engines. And it will not produce any polluting emissions -- or greenhouse gases, making it an important part of our climate change technology program.

The need for a new, clean and abundant fuel for the world is self-evident. The twenty-first century will bring a huge increase in world energy demand. In the United States alone, our analysts foresee a 54 percent increase in demand for electricity ... 54 percent for natural gas... and 47 percent for oil ... by the year 2025. We expect to see similar or even greater increases in energy demand all over the globe.

Without fundamental changes, our energy future will be one of greater dependence on imported oil, increased polluting emissions -- and increased emissions of greenhouse gases.

The U.S. government and our private sector partners are working together to develop concurrently the two essential elements for a successful transition to hydrogen: the hydrogen fuel-cell powered vehicle, and the extensive infrastructure needed to support it. Under our plan, the decision to go forward with commercialization could be made as early as 2015.

The transition to hydrogen will have a great impact on America and the world – to our energy and economic security, and to the public health and environment.

We will surmount the twin challenges of dependence on foreign oil and harmful emissions. In the United States, we estimate that by 2020 we could achieve mass-market penetration of hydrogen fuel cell vehicles and the availability of fueling stations nationwide. By 2040, we could reduce our overall use of petroleum by a third and our carbon dioxide emissions by 19 percent.

For the world, a hydrogen future means that whole new industries will be nurtured. Fuel cells that power homes and businesses will become common. Diverse supplies of affordable energy will strengthen economies. The geopolitics of oil will become less complicated as the world produces hydrogen fuels from a variety of feedstocks and processes. Carbon and other emissions will be substantially reduced. Moreover, less developed countries will have access to the energy they need to grow and prosper.

Hydrogen presents a challenge to government and industry – with potentially spectacular rewards for the global community.

Later this week, I will travel to Brussels to brief European Union officials on the President's hydrogen initiative. And next week, I will hold a meeting in London with European auto and oil company representatives to discuss how we might forge new areas of cooperation.

While the U.S. is pleased to take a leadership role in hydrogen research, this is truly an international endeavor. As we in the IEA have worked so closely and successfully together in the past on other issues, we must again work together to speed the arrival of a transformed energy future.

I look forward to receiving the recommendations that come out of your seminar so that we can develop an appropriate plan of action.

Thank you.

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