

## **Remarks by Secretary of Energy Spencer Abraham**

Luncheon Address to the Keidanren

January 9, 2004

Tokyo, Japan

Thank you, Dr. (Yumi) Akimoto, for that warm introduction. I am very pleased to be back in Japan, and it's a tremendous honor to be here with you this afternoon.

This is my second visit to Japan, and on each occasion I have looked forward to the trip because of the generous and welcoming spirit of the Japanese people, and because the United States and Japan have forged a long and productive friendship.

On a personal level, I have enjoyed personal and positive relationships with my counterparts at METI and MEXT, and I look forward to a continuation of our fruitful partnership on international energy security issues.

I know that this is representative of the larger friendship between our two nations.

President Bush noted the enduring and fruitful alliance between our nations when he spoke to the Diet and said:

“From that alliance has come an era of peace in the Pacific. And in that peace, the world has witnessed the broad advance of prosperity and democracy throughout East Asia.”

Prosperity, democracy, liberty. Common values, common ideals, common responsibilities ... and a common future together.

The closeness of our nations was never more evident than in the devastating wake of September 11, when Japan stood firmly beside the United States. You recognized that the attacks on our country were an attack on yours, because it was an attack on the civilization, modernity, and progress that our nations represent.

Your aid in the fight against terrorism – finding and disrupting terrorist cells; assisting U.S. and coalition forces; helping in the reconstruction of Afghanistan; and taking a hand in the political and economic rehabilitation of Iraq – has been greatly appreciated at the highest levels of the United States government.

On behalf of President Bush and the American people, allow me to say that we cherish and thank you for your friendship ... both in the past and in the years to come.

How we forge our alliance in the future is what I would like to discuss with you today. There is no question in my mind that the U.S.-Japan relationship in the 21st century should be – and will be – defined in large part by how we handle similar challenges with respect to energy.

One of the things I do in my job as Secretary is look beyond our borders to examine the energy needs and challenges of different countries and to identify nations that share with the United States similar challenges and visions for a secure energy future.

So it is with Japan. In fact, if you think about it, there are probably no two countries in the world that share greater energy challenges than the United States and Japan.

\* We are, after all, two of the most powerful and productive economies on the face of the earth.

\* Both our countries are among the largest energy consuming nations on the planet.

\* Both our countries must take adequate steps to meet the soaring demand for natural gas. Japan imports virtually all of its natural gas, and demand is rising nearly 4 percent each year. The United States, too, is confronting skyrocketing variance between supply and demand for natural gas. We are addressing a variety of ways to meet that demand, including measures to step up imports of LNG.

\* Both our countries are the largest energy importers, and in spite of our best efforts will likely continue to be for the foreseeable future. The U.S. Energy Information Administration estimates that by 2025, the United States will see energy imports jump by more than two thirds. Japan already relies on imports for nearly 80 percent of the nation's energy needs, importing substantial amounts of crude oil, natural gas, and uranium for your nuclear plants. That huge dependence is unlikely to change soon.

\* Both our countries rely upon a strong nuclear power component in our fuel mix. Nuclear power provides roughly one-fifth of America's electricity needs, and nearly one-third of Japan's. We must deal with a similar array of political and regulatory challenges to ensure that safe and clean nuclear energy continues to play a critical role.

\* Both our countries must take steps to ensure that our energy infrastructures and regulatory structures are adequate to meet the demands of the 21st century.

\* And both our countries possess large, strategic reserves of petroleum, which we manage in coordination with the International Energy Agency. We regularly share information and technical expertise about them with each other.

Given the similarity in our energy needs and the challenges we face, it is worth asking if there are additional steps we can take to address these challenges together.

It is also worth asking if there are elements to a sound approach to energy security that are common to both our situations.

I think the answer to these questions is yes.

First, there is a very clear need for both of us to have a diverse fuel mix. The need for such diversity as a key to energy security has been apparent to both of our nations since at least the 1970s.

President Bush has been forthright about our need to pursue coal, oil, gas, hydropower and other renewables, and nuclear energy. We want to spread our risk, so to speak, to ensure we are not overly dependent on any one fuel, and therefore, not overly susceptible to disruptions in supply.

Japan has had commendable success in this area, reducing dependence on petroleum as a source of energy from more than 75 percent in 1973 to 57 percent today. That is an example my nation must follow.

Second, just as we must seek a diversity of our sources of energy, it is also important to seek a diversity of supply. The most desirable and stable markets for oil, natural gas, or any other commodity, are those defined by a wide range of suppliers.

For these reasons we have reached out to international partners all over the globe. And we are optimistic about developments in recent years in places like the Caspian, or Algeria, or Sakhalin Island—where U.S. and Japanese companies are active, or Australia, or even tiny Trinidad and Tobago, which presently is one of the United States' largest suppliers of LNG.

Third, our nations both must work to ensure that nuclear power continues to play a key role in our respective energy mixes. Furthermore, it is critical that the United States and Japan do the things that will make sure nuclear energy remains an internationally accepted form of energy.

You and I know that nuclear power is safe. It is reliable. It is efficient. It is affordable.

Yet, we have to make it even safer, even more reliable, even more efficient, and even more affordable.

That means developing a fuel cycle that costs less overall, is more environmentally benign, and more proliferation-resistant.

It also means approaching the public discussion over nuclear power prepared to make the case that it is critical to dealing with global issues of climate change, the environment, and energy and economic security.

Japan and the United States are doing many of these things, particularly through our partnership in the Generation IV International Forum. Gen IV is an international consortium dedicated to forging a pathway to the next generation of nuclear reactors. We are pooling scientific expertise and sharing ideas in order to design the nuclear reactors of the future, and I expect that significant technological breakthroughs are not too far off.

Focusing on new technologies and scientific advancements leads me to the fourth step we must take together: It is absolutely critical that we pursue 21st century technologies in order to meet the special energy challenges of our age.

This requires a whole new way of thinking about energy. It requires vision, imagination. It requires us to conceive of a world fundamentally different from the one we know today.

One technology that holds special promise is hydrogen. President Bush is particularly excited about hydrogen, which may not just improve our energy, economic, and environmental security ... but could truly revolutionize the world in which we live.

In his State of the Union address last year, he pledged the United States' full involvement in the international effort to transform our respective economies from ones dependent on foreign petroleum to ones that use domestically produced hydrogen as the principal feedstock for powering our transportation sectors ... to go from a world where our cars and trucks run on petroleum to one where they run on hydrogen-powered fuel cells.

This is, at heart, a radical idea ... all the more so for a President who, in an earlier career, worked in the oil industry.

But President Bush sees in hydrogen the possibility of not just solving, but transcending, the old problems and old public policy debates surrounding energy.

We are pledged to invest \$1.7 billion over the next five years in this effort. We know Japan has also committed significant resources and is making significant progress on automotive research and development to meet this challenge. We are pleased to be working with you and with a wide array of other international partners to make this bold vision an even bolder reality.

Back in November, the United States hosted the inaugural meeting of the International Partnership for the Hydrogen Economy. I am pleased that the Japanese government sent representatives to this historic summit.

This meeting brought together – for the very first time – all of the major governments and industry leaders in an effort to bring about the hydrogen revolution. We agreed to work in a coordinated effort that will certainly speed the process along.

We already know how to power cars using hydrogen fuel cells. There are working prototypes that perform flawlessly, like the Nissan X Trail, the Honda FCX, or Toyota's Highlander Fuel Cell Vehicle.

The challenge now is to make hydrogen fuel cell vehicles manufactured in Japan, the United States and elsewhere affordable, so that consumers will not opt for models that run on fossil fuels simply because they cost less.

One challenge, then, is to lower the cost of fuel cells by a factor of ten. Similarly we must lower the cost of hydrogen production, which is approximately four times too high today.

We must also devise practical new methods to store sufficient amounts of hydrogen fuel aboard cars and trucks.

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

The International Hydrogen Partnership is the way to do this. This undertaking will coordinate research and development efforts, it will allow us to pool and leverage resources in order to handle the gigantic start-up costs, and it will adopt a series of uniform codes and standards.

I am confident that, thanks to the dedication of partners like the Japanese government and the world's leading energy and automotive companies, we will make tremendous progress toward our goal within our lifetimes.

Another such technology we must pursue together is fusion, which is the chemical process that powers the sun itself.

One of science's most impenetrable mysteries – understanding and harnessing fusion – offers the prospect of a limitless source of clean energy for the world.

Fusion power produces no troublesome emissions, it is safe, and has few, if any, proliferation concerns. It creates no long-term waste problems. Moreover, fusion plants could produce hydrogen – our ultimate freedom fuel – to power hundred of millions of hydrogen fuel cell vehicles in the U.S. and abroad.

Recognizing the transformative effect that a breakthrough on fusion would represent, the President committed the United States to join the international fusion energy experiment known as ITER early in 2003.

Many of you are aware that the nations involved in this partnership are working to reach agreement on a construction site for this critical, \$5-plus billion dollar scientific experiment.

I am proud to say the United States strongly supports building ITER in Japan.

From a technical standpoint you have offered the superior site.

The location of Rokkasho is superbly situated to receive the large materials need for ITER. You have outstanding scientific talent to contribute to the international team of scientists that would live and work in the area and your technical and engineering skill are known and admired in every corner of the world. What's more, the local community clearly welcomes this project and has always gone out of its way to encourage the siting of ITER in Rokkasho.

Fusion power could well be one of those technologies that allows the world to leapfrog the enormous acceleration in future energy demand we know threatens economic growth in every corner of the world.

Over the lifetime of a child born today, the demand for energy will more than triple. Most of that growth will take place in the developing world. And if fusion power proves practical, it will kick in at the right time. It will be there to meet the increasing need for large scale sources of clean energy around the world.

That defines the promise of fusion. And it points to its great benefits.

Japan and the United States are united in this vision and this hope.

We sincerely hope that when the process ends the other countries will join us in support of Japan's site.

The key to so many of the topics I've discussed today is international cooperation – strengthening ties, fortifying friendships, and buttressing alliances to take common approaches to shared challenges.

It is President Bush's belief that we can strengthen both our own energy security as well as the shared prosperity of the global economy by working cooperatively with key countries and institutions to expand the sources and types of global energy supplies.

I am proud of the United States' record in this regard under President Bush.

And I'm thankful that the people of Japan have become such close partners, as we seek the technological breakthroughs on hydrogen, on fusion, on nuclear energy – that will bring about true, lasting, global energy security.

Once again, thank you for giving me the opportunity to meet with you today.

It has been an honor to address so distinguished a group.

Thank you.