

Energy at a Crossroads

Summit Seeks to Ignite Potential Solutions

By Tom Schuman

If the passion of the keynote presenters at the Lugar/Purdue Summit on Energy Security could be translated directly into solutions, Indiana (and the entire United States) would soon erase the concerns about its energy future.

U.S. Sen. Richard Lugar and Purdue University President Martin Jischke clearly demonstrated fervor for both the seriousness of the issue and Indiana's role as part of the solution. Lugar has proven time and again in his 30-year Senate career that no challenge is too large – and he told *BizVoice*® earlier this year that this topic will be one of his focal points during his next six years in Washington. Jischke, retiring in June 2007, has also demonstrated strong leadership on a variety of issues during his six years at Purdue.

This brief summit summary will focus on their comments, along with those from U.S. Rep. Pete Visclosky (D-Merrillville, the luncheon keynote speaker) and Indiana Gov. Mitch Daniels. Turn the page for a *BizVoice*® roundtable discussion that followed the summit, featuring reaction to the day's events and an outlook from four different perspectives on the next steps.

Martin Jischke

Opening: “The fuel of the future is ethanol.” The speaker was Henry Ford. The year was 1925. Jischke adds his assertion: “That future is today.”

Notable numbers:

- In 2003, the U.S. had 4.6% of the world's population, but consumed nearly 25% of the world's energy.
- More than two-thirds of the remaining oil fields in the world are in the Middle East. More than 60% of oil used in the U.S. is imported, with 47% coming from unstable areas in the Persian Gulf, Nigeria and Venezuela.

Concluding analogy: “In 1961, President John F. Kennedy called on all the resources of this nation to land an American on the moon and return him safely to Earth within that decade. President Kennedy never said this would be easy.

“It meant the nation had to come together and work as one toward the common goal. In July of 1969, Purdue graduate Neil Armstrong announced to the world ‘The Eagle has landed.’

“He took that giant leap for mankind only eight years after the President's challenge. Today, we are calling on all the resources of this nation to take the next giant leap. This amounts to nothing short of a great leap forward toward more energy independence.

“We need to commit ourselves to safe, clean energy from domestic sources. We need to do this for the sake of our nation; for the sake our prosperity, our posterity and our planet.

“Like the effort to reach the moon within a decade, it will take all of us working together. It will take commitment, courage, leadership and sacrifice from all of us.

“Can we do it?”

“I believe we can. And I firmly believe we must begin today echoing words that acknowledge the responsibility and the urgency of this calling: ‘If not us, who? If not now, when?’ “

Richard Lugar

Opening: “I believe that in the future, the United States can be energy self-sufficient or nearly so. Over the long term, we have the resources and the ingenuity to achieve this goal.

“The crucial question is what happens between now and then. Will we achieve this goal rapidly through a coherent and resolute national policy that takes advantage of

U.S. Sen. Richard Lugar minces few words in discussing energy security.



America's natural assets to create new economic opportunities, a cleaner environment and improved national security? Or will we achieve our objective only after many years of widespread economic pain and national vulnerability caused by scarcity, terrorist attacks, market shocks and foreign manipulation of our energy supplies?"

Six-pronged threat:

1. Oil supplies vulnerable to natural disasters, wars and terrorist threats.
2. Increased expense as large industrializing nations (primarily China, India) seek new energy supplies.
3. Adversarial regimes (Venezuela, Iran, Russia) using energy supplies as leverage against neighbors.
4. Revenues flowing to authoritarian regimes increases corruption.
5. Threat of climate change that could lead to drought, famine, disease and mass migration.
6. Rising energy costs in developing world often cancel the benefits of U.S. foreign assistance.

By the numbers:

- Within 25 years, the world will need 50% more energy than it does now.
- If oil prices average \$60 a barrel through 2006, the U.S. will spend about \$320 billion on oil imports this year.
- About 79% of the world's oil supply is controlled by state-run oil companies.
- A conservative estimate puts U.S. oil-dedicated military expenditures in the Middle East at \$50 billion per year.

Spreading the blame:

- American people angered by \$3 a gallon gas, but buying it in record quantities.
- Oil and car companies have not "shown an inclination to dramatically transform their businesses in ways that will achieve the degree of change we need to address a national security emergency."
- Dropping speed limits or raising gas taxes are "non-starters for most state governments."
- Federal government is not treating energy vulnerability as a crisis. Congress, he says, is not even taking time to consider important legislation, while a program that was passed for the first commercial-scale cellulosic (using biomass and waste instead of corn) ethanol plant has been on hold for more than a year due to "glacial implementation" of regulations by the Department of Energy.

Lugar plan (later introduced in Congress as the National Fuels Initiative of 2006):

- Make virtually every new car sold in America a flexible-fuel vehicle.
- Ensure that at least one quarter of filling stations in America have E85 (a blend of 85% ethanol and 15% gasoline) pumps.
- Expand ethanol production to 100 billion gallons a year by 2025, a figure that could be achieved by doubling output every five years.
- Create an approximate \$45 per barrel price floor on oil through a variable tax credit to ensure that investments keep flowing

to alternatives.

- Enact stricter vehicle mileage standards to point automobile innovation toward conservation.

Lugar says, "The plan would achieve the replacement of 6.5 million barrels of oil per day by volume – the rough equivalent of one-third of the oil used in America and one half of our current oil imports. It would provide more jobs for Americans instead of sending a deluge of money to hostile countries, support our farmers instead of foreign terrorists and promote green fuels over fossil fuels.

He concludes, "Our energy vulnerability is analogous to rowing a boat to shore in rough seas. Each stroke moves us closer to safety, but until we reach the shore, we can be capsized. We have to measure progress not against where we have been, but against the distance to our goals. Achieving a positive trend line is almost inevitable as long as energy costs remain high, because these costs will lead to some improvements in investment and conservation. We need to have the discipline to understand that a modestly positive trendline is not enough. With the storm bearing down on them, the occupants of a threatened boat do not put up their oars and relax because the current has caused them to drift a little closer to shore."



Purdue President Martin Jischke is confident solutions can be developed.

Pete Visclosky

Setting the stage: "This is a problem that is not going to go away on its own. I feel like what we're doing in Washington is waiting around for something good to happen. We can't saddle the next generation with this albatross."

Even more numbers:

- Energy spending accounts for one-third of the U.S. trade deficit, with \$200,000 a minute expended on oil imports.
- China is beginning work on a new coal-fired power plant every 10 days.

Additional sources:

- "I believe very strongly in the potential of coal. The coal in the ground in the Illinois Basin has more energy potential than all the oil in Saudi Arabia."
- "I cannot envision a future without nuclear playing a major role. Nuclear is at a crossroads because the current fleet is in the second half of its expected life span."

Conclusion: "I don't want to see us fumble our way through the next dozen years. We already have a good deal of know-how. We can invent and invest our way out of this predicament. The planning and investment have to begin today."

Mitch Daniels

Past: As a staff person for Sen. Lugar in the early 1980s, Daniels worked on legislation that helped bring New Energy Corp. to South Bend. Never did he believe, he says, that 23 years later it would remain the only ethanol plant operating in the state.

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Present: At last count, 16 new ethanol and biodiesel plants have been announced. The 2008 goal of having an annual output of one billion gallons of ethanol has been reached if all the facilities meet their projections. This is projected to total 12% of U.S. ethanol production. Daniels says Indiana will be third or fourth in market share for ethanol and a national leader in biodiesel production.

Future: In the 2007 General Assembly session, the focus will turn to clean energy tax credits for cellulosic and biomass projects. The governor wants state matching funds to support research and development, with the 21st Century Research

and Technology Fund assisting in commercialization. Future incentives for the previously announced corn-based ethanol plants will be in the areas of training and infrastructure.

In closing the summit, Jischke offers the following: "I came away convinced the word crisis is not too strong a word. I concluded that if we're going to solve this problem, we're going to have to solve it ourselves. I didn't hear anything today that says we can't."

INFORMATION LINK

Resources: Martin Jischke speech at <http://news.uns.purdue.edu/UNS/html3month/2006/060829.SP.Jischke.energy.html>

Richard Lugar speech at <http://news.uns.purdue.edu/UNS/html3month/2006/060829.SP.Lugar.energy.html>