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## Thomas C. Dorr Under Secretary for Development Panel Remarks; "Global Leadership"

Moderated Roundtable: Global Leadership

## **Session chair:**

Judy Siegel, President, Energy and Security Group Michael Eckhart, President, ACORE.

## **Speakers**:

The Honorable Thomas Dorr, Under Secretary of Agriculture, USDA The Honorable Reno Harnish, Deputy Assistant Secretary, U.S.

Department of State

Thank you, Mike [Michael Eckhart]. I want to begin by expressing my appreciation for ACORE's leadership in supporting WIREC 2008. We are excited to be partnering with you in this very important event.

We are here this afternoon to discuss "Global Leadership" on renewable energy. This <u>of course</u> is NOT a race against other nations. It is a race against our own potential.

So when we turn to the international comparisons, it is important at the outset to recognize that <u>national</u> systems and <u>circumstances</u> differ... and we therefore need to respect the choices that other nations have made.

To take just one example, Europe is reluctant to accept GMO's. <u>As</u> a result <u>it</u> is paying an <u>increasingly severe penalty</u> on both the food and fuel sides of the biofuels equation. This by the way is an area ... one of <u>many</u> in the renewables field ... where the United States now leads the world.

On the other hand, Europe also accepts <u>levels of corporate subsidy</u> ... levels of <u>taxation</u> ... and <u>consumer energy prices</u> that would be <u>anathema</u> in the United States. European gas prices would have Americans reaching for the

tar and feathers. Residential electricity prices are roughly double ours except in France, which benefits from its commitment to nuclear power.

National systems vary, and American consumers and taxpayers can be heartily glad of it.

Fortunately, however, there are different paths to success. The growth of renewable energy is truly an international story. No nation has a monopoly on good policy ... or for that matter, instructive mistakes. We have <u>much to learn</u>, and <u>much to share</u>.

I have often remarked that one of things we have <u>not</u> done well over the years in rural America is <u>celebrate success</u>. Increasingly today, I think the same is true of renewable energy.

This is a <u>highly self-selected</u> audience so I expect that most of you know the numbers. But if we were to walk outside and conduct random manon-the-street interviews, I suspect <u>that not one person in a thousand</u> would know that installed wind capacity in the United States has more than <u>quadrupled</u> since 2000 ... or that we <u>led the world</u> in new capacity in 2005 and 2006 ... or that we will <u>lead the world</u> again this year.

Very few Americans not in the business know that we have become one of the world leaders in biodiesel <u>in just seven years</u>. We have gone from <u>2</u> million gallons in 2000 to <u>379</u> million this year, headed for 680 million by 2010 ... from essentially zero to second in the world behind Germany.

A few more people, but not many, might know that we've tripled ethanol production in the last seven years ... that we're on pace to double it again in two years ... and that cellulosic ethanol is moving into production.

Annual domestic shipments of photovoltaic cells <u>have risen tenfold</u> since 2000. We lead the world in waste-to-energy. We lead the world in solar thermal. We are fourth in hydropower. We lead the world in geothermal. This is an impressive record, and most of it has been achieved in this decade. <u>But most Americans</u>, <u>because they've not been told</u>, <u>don't know that either</u>.

Clearly this is a field in which the United States ... after drifting in neutral through the 1990's ... has begun to make dramatic strides, thanks to very aggressive policy leadership in recent years.

Just as clearly, we <u>have begun to develop</u> a policy mix that <u>is beginning</u>

<u>to drive</u> a very rapid buildout. And we should be celebrating that success
... not because we want to rest on our laurels, but just the reverse ...

because we need to build public understanding and support for
sustaining and enhancing a viable growth strategy in the years ahead.

I would not suggest that <u>others</u> should uncritically copy what we are doing. Nor would I suggest that we uncritically copy them. But as the growth metrics I recited earlier suggest, <u>the United States IS</u> already a world leader ...

... <u>And</u> because of our lower subsidy structure and greater reliance on market signals, <u>we may in fact be uniquely positioned to respond</u>

flexibly and rapidly to a dynamic new environment for renewables.

Again ... this is <u>not a race against other nations</u>. But it is suggestive that two recent Ernst & Young reports ranked the United States as <u>the most</u> <u>attractive market in the world</u> today for investors interested in renewable energy and biofuels.

That's the future. In this context, it is important to recognize that the single most important underlying factor driving renewables today isn't government investment. It is <u>price</u> ... which is also to say demand for energy driven by the collapse of the Soviet Union and the decisive turn of China, India, and much of the third world to market economies.

Since the <u>fall of the Berlin Wall</u>, between two and three <u>billion</u> people have joined the <u>world market system</u>. This is the greatest <u>explosion</u> of <u>economic freedom</u> in world history. The world is a <u>vastly richer</u> ... and <u>significantly more competitive</u> ... place than it was 20 or even 10 years ago. This is reflected in <u>commodities</u> prices, which are being <u>driven by</u> <u>demand from China, India, and other emerging economies</u>.

The bad news is, you and I will feel the effect every time we pull up to the pump. The good news, however, is twofold. This growth in demand reflects real increases in living standards for hundreds of millions of people. And the silver lining is that renewable energy will continue to become more competitive, at ever lower subsidy levels, versus ever-more expensive oil ... while simultaneously facilitating the cleanup of the environment.

I do not have a <u>crystal ball</u> ... but given the growth rates we have already achieved and the remarkable advances being reported almost daily from the research sector ... we are very likely approaching the point at which renewable energy will begin to graduate from public sector investment to market investment. That's what we need to be preparing for.

As we develop policy we need to keep this in mind. We should be looking <a href="mailto:ahead">ahead</a> to an era of self-sustaining growth based on competitiveness in the marketplace, not <a href="mailto:back">back</a> to the era when renewable energy was more dependent on subsidies. We've engaged in those policies in rural America – they shifted human and economic development and constrained our capacity to invest and grow.

That doesn't mean that our existing incentives are unimportant. They are.

They boost current-generation renewables over the threshold. But once
we are over that threshold, markets <u>can and should take over</u> ... and over
time the price equation will continue to shift in favor of renewables.

Secondly, I am convinced that a key driver in the development of renewable energy is distributed computing. This is revolutionary. Distributed computing allows networked production systems to achieve economies of scale and to be efficiently integrated into legacy systems.

Wind, solar, and biofuels would not be building out at anything approaching their current pace without this capacity.

This is doubly important because renewable energy resources are inherently distributed. Production and ownership can be widely dispersed. The result is the greatest new opportunity for wealth creation in rural America in our lifetimes.

Just consider: current ethanol production displaces as much oil as we import from Iraq, or almost half of what we import from Venezuela.

The next step is cellulosic ethanol. The President's 20 in 10 Initiative calls for a 35 billion gallon Alternative Fuels Standard by 2017. That implies a new market for biofuels half the size of today's net farm income.

This is an extraordinary opportunity. It is a key priority for us today at USDA Rural Development, and it is an opportunity we look forward to exploring at WIREC with our counterparts from around the world.

Finally, as we consider next steps on renewable energy, we need to recognize that an era of fundamental change is also likely to be an era of both <u>surprises</u> and "<u>creative destruction</u>." There is uncertainty.

Prudence is important.

There is a remarkable range of new technologies on the horizon. All of them ... <u>ALL</u> of them ... have dedicated <u>cheering sections</u>, confident that <u>theirs is the solution</u>, if only it were subsidized enough.

But not all of them are going to meet the test of the market. Biofuels must compete, not only against gasoline, but against hydrogen fuel cells and electric cars or some combination. Wind and solar must compete against next generation nuclear and, very likely, carbon-sequestered coal.

And the truth is, none of us today can predict the winners. But what we do know with certainty is that we have an historic opportunity, and that markets work. There will be adjustments along the way, but in the final analysis, I share the late Julian Simon's confidence in what he called "The Ultimate Resource," human ingenuity.

Yes, there will be adjustments along the way. But \$100 oil is already shifting the resource base. It's our job to plan accordingly ... and help smooth the transition. Thank you.