

Remarks as prepared

**Prepared Remarks for John Rowe
“Cap-and-Trade: The Cheapest Route to a Low-Carbon Midwest Economy”
Indiana Council on World Affairs
Marten House Hotel, Indianapolis
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Thank you, Matt Fox, Indiana Council on World Affairs Board member.

Want to also thank the Council on World Affairs, Indiana Businesses for a Clean Energy Economy, and the Hoosier Environmental Council for hosting the event.

I am here tonight to talk about how we address a real problem for this nation and for our world at a price that we can afford.

Let me start by saying that this is a very difficult issue for Indiana.

It is the fifth largest carbon-emitting state in the nation.

95% of its electricity is generated by coal and it is home to the second largest coal plant in North America.

It is home to the largest oil refinery outside of Texas.

And I recognize that this issue sparks many fears about the price of energy and the impact on jobs.

My message is three-fold.

First, climate change is a real problem.

Second, since our nation is dealing with the climate issue regardless of what happens in Congress, we must do it in the cheapest way possible.

And in the way that best supports the creation of sustainable jobs.

And third, Indiana in particular and the Midwest generally have a unique opportunity to help shape a solution that is good for our economy.

My perspective is that of the CEO of the largest company in a sector responsible for roughly 40% of greenhouse gas emissions.

It is an issue I have been working on for a very long time.

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First testified before Congress in 1992 about the need to control carbon emissions.

When there was no immediate economic benefit to my company, which was largely coal-based.

Since 2002, I have co-chaired the National Commission on Energy Policy.

In 2004, NCEP released a bipartisan report calling for comprehensive, economy-wide cap-and-trade legislation.

Exelon has been preparing for a low-carbon future for the last decade.

Sold or closed most of our inefficient fossil fuel plants.

Invested billions in our fleet of 17 zero-emission nuclear reactors.

In summer 2008, released Exelon 2020, our plan to reduce, offset, or displace 15 million metric tons of greenhouse gas emissions per year, equal to our 2001 carbon footprint, by 2020.

We are one-third of the way to our goal, and have a plan to accomplish the rest.

Climate legislation is one of the critical issues that will be considered this year on Capitol Hill.

The House passed the Waxman-Markey legislation, a comprehensive, economy-wide bill.

Represents a moderate approach that was supported by a wide range of major American companies who make up the US Climate Action Partnership – including companies with a strong Indiana presence such as AES, Duke Energy, Alcoa, Dow, DuPont, GM, Ford, and Chrysler.

Want to thank Congressman Baron Hill and Congressman Andre Carson for their support of the bill.

Senate Environment and Public Works Committee has approved similar legislation.

As the Senate considers the bill, political rhetoric is escalating and is sure to get louder.

But it's important to recall the most critical part of the debate.

The evidence that the Earth's temperature is rising is unambiguous, and human activity almost certainly contributes to the increase.

That is the conclusion of some of the most respected scientific bodies around, including the National Academy of Sciences.

According to the International Polar Year research effort summer Arctic sea ice was smallest in size in the past 30 years and has lost half of its thickness.

We must begin to address climate change now.

Which brings me to my second point: governments and lawmakers are already acting.

I testified before the Senate last fall about cap-and-trade legislation.

All the senators advocated for one kind of action or another.

Some backed cap-and-trade legislation.

Others backed increased subsidies for renewable power.

Still others wanted to build 100 new nuclear plants and new coal plants with carbon sequestration.

Beyond Congress, some argue that limited regional solutions could work.

And still others think that the EPA could effectively address the matter through its regulatory actions.

Make no mistake: we are acting in one way or another to address climate change.

Regardless of what happens with cap-and-trade in the Senate, Congress will still spend money on tax credits for wind and renewables.

Twenty-nine states and the District of Columbia mandate that utilities buy renewable energy – and Indiana's legislature is currently considering adopting a similar measure.

The government will still support new nuclear plants through the loan guarantee program and state and local incentives.

The key consideration must be whether as we act we are doing the cheapest things first.

We owe it to our customers and ratepayers to find the options that effectively address the problem, entail the least cost, and create the most jobs.

Legislation that puts a price on carbon emissions is the critical first step to doing this.

Nothing else will efficiently encourage low-carbon investments and discourage high-carbon investments.

And that is essential to ensuring that we do the cheapest things first.

Perfectly illustrated by a poll by Resources for the Future.

Most Americans agree that global warming is real.

They oppose a carbon tax because they know it will cost them money.

They oppose cap-and-trade because they rightly suspect it will cost them money.

But they support mandates to buy renewable energy because they think it is free.

Exelon's analysis indicates the exact opposite.

SLIDE 1 – EXELON 2020 COST CURVE

As part of Exelon 2020, we analyzed all the options for reducing our GHG emissions.

Determined the price per metric ton of CO₂ (on the y-axis) needed to make each option economic and rank ordered them (along the x-axis) to form a supply curve based on their economic merit.

Size of each block is the amount of CO₂ emissions avoided by the method.

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Our analysis shows the most economic items are generally improvements in energy efficiency, some of which are economic even without a price on carbon.

Nuclear uprates – capacity expansions at our existing plants – are economic at carbon prices of less than \$10 per metric ton.

New natural gas plants become economic at carbon prices of \$20 to \$45 per metric ton.

Wind generation costs between \$45 and \$80 per metric ton.

New nuclear plants are economic at prices of \$75 per metric ton of carbon.

Coal with carbon sequestration costs over \$150 per metric ton.

And solar remains very expensive – at nearly \$700 per metric ton – though we see those costs decreasing rapidly.

The rule of thumb I use is that a \$10 per ton increase in the carbon price translates into a \$0.01 per kWh incremental increase in the price of electricity.

This analysis starkly illustrates the potential impact on consumers.

Some options add a penny per kWh to rates, while other add a dime or more.

Exelon uses supply curve to rationalize and order our choices about how to reduce our carbon emissions based on what is cheapest.

Passage of a federal cap-and-trade system will compel every company to do a similar analysis.

We must have a system that forces us to do the cheapest things first, like energy efficiency and nuclear uprates, and the other items in merit order.

We must have a system that uses the discipline of the market to control costs.

Prices may rise, but they will rise less than they would with cruder tools.

Unfortunately, ad hoc responses to the climate issue tend to subsidize the expensive solutions.

There are many objections to cap-and-trade legislation – all of which are answerable.

Some say it will cost too much.

But Exelon 2020 indicates that cap-and-trade is less costly than the array of alternatives we are already implementing.

Free allocation of emissions allowances to local delivery companies is a key consumer protection.

Both Waxman-Markey and Kerry-Boxer allocate 30% of emissions allowances to local delivery companies for free.

Utilities like Indianapolis Power & Light will use the free allowances to comply with the emissions caps and mitigate rate increases.

Exelon also supports the development of a price collar on emission allowances.

A collar can put a ceiling and floor on the price of emissions.

It will ensure that the price increases in the early years are modest.

Some say that cap-and-trade constitutes a regional wealth transfer from the Midwest to the coasts.

But according to analysis by the energy and environmental consulting firm of MJ Bradley, electricity rates will not go up dramatically as a result of a climate bill.

Their analysis indicates that the average monthly residential electricity bill in Indiana will go up \$6 if the Waxman-Markey bill became law.

The monthly bill here will still be only half of what a customer in Massachusetts or New York pays and only 60% of what a customer in California pays.

Carbon-intensive regions of the country will still be able to compete under a cap-and-trade system.

Some say that cap-and-trade legislation will be a job killer.

On the contrary, I believe that harnessing the power of markets to find the most efficient solutions is how our economy has created jobs for decades.

And they aren't public works jobs that exist only as long as the subsidies flow – they are lasting jobs that will be here in the long-run.

A 2009 study by the University of California, Berkeley estimates that a comprehensive climate policy stressing energy efficiency, renewables, and other low carbon investments could create between 900,000 and 1.9 million jobs by 2020.

Even China, which last I checked was a communist country, is moving ahead of the US in clean technology development and deployment.

The best way to create jobs is by searching for the lowest-cost solutions to the problem, which is what cap-and-trade forces us to do.

On the issue of climate change, doing nothing is simply not an acceptable option.

I believe that if Congress doesn't act, the EPA will.

The Supreme Court has given it the authority to regulate CO₂ as a pollutant.

The result will be more arbitrary and more expensive to Indiana consumers than a reasonable legislative solution.

The result will create no jobs – except those for the attorneys who will determine compliance

And the danger in the EPA's command and control response is that no one knows what the final technological solutions will look like.

Since we prepared the initial Exelon 2020 analysis, economic growth has slowed and natural gas prices have plummeted

Technologies that once looked attractive now look less so, while others have improved.

And therein lies the danger of choosing an option based upon a snapshot in time.

Be very wary of anyone who says “I have seen the future and it works.”

We need markets to give us feedback.

This brings me to my final point – Indiana, my own Illinois, and other Midwest states have a strong incentive to be involved in this debate.

The temptation to “just say no” and put our heads in the sand is strong.

But the problem will not go away, and the ad hoc solutions will continue.

Those solutions tend to focus on the costly at the expense of the cheap.

Those solutions will not include provisions to control costs – like giving allowances to local delivery companies to control.

Those solutions will not use the power of markets to create lasting, well-paying jobs.

Senators Lugar and Bayh have great influence in crafting a bill that meets these criteria.

Call, write, or email them and tell them to support comprehensive cap-and-trade legislation.

Tell them to work for solutions that control costs and create jobs.

Tell them that having the Senate act and Indiana having a say is better than the EPA mandating a one-size fits all solution.

The opposition is well-organized, and both senators want to hear that you support taking action on carbon emissions.

The climate challenge is one we must deal with.

We can do it in a way that is good for the planet and the economy.