This is a transformative time for America's energy policy. That's not because the problems are new-in fact, they date back decades, decades during which we ignored the carbon content of our energy sources. We have put our environment at risk and deepened our dependence on foreign fuel sources. What makes this moment transformative is a window of political opportunity.

We have seen the dangers of global warming, and the dangers of dependence on foreign sources of energy, acknowledged by both the private sector and the public sector, and by leaders on both sides of the political aisle. This shared recognition of a problem does not mean we all agree on solutions. But it does mean that significant action on energy is more likely this year than at any time in recent memory.

Some of our most significant investments in a balanced energy strategy came in the Recovery Act and in the budget resolution passed by Congress already this year. The Recovery Act included $39 billion in funding and $20 billion in tax incentives for projects, including renewable energy generation, efficiency enhancement, a modernized electric grid, and clean energy jobs.

The budget also increased funding for energy programs by 10%, with a focus on cutting-edge research and development and increasing America's chance to become the world's leader in the most important emerging economic sector-energy technology. In the years to come, I hope that America will be selling clean technology to China and India-and not the other way around.

The centerpiece of our energy policy moving forward is the American Clean Energy and Security Act of 2009. Through this initiative we will help strengthen our economy by making America the world leader in new clean energy and energy efficiency technologies, create new clean energy jobs for American workers, and put America on the path to energy independence. This bill would be America's first serious effort to account for the costs of carbon emissions, which endanger all of us through the prospect of global warming.

I'm especially excited about the prospect of a ‘smart grid,' a system that would allow us to combine energy transmission with real-time communication. A smart grid would let utilities pinpoint the sources of outages and get the lights on faster-and it would help them select the best times to use clean power sources, meaning a smaller carbon footprint. A smart grid would

also allow homes and businesses to track the price of power from second to second and even sell electricity back to the grid.

For families, it would mean savings of hundreds of dollars a year on power bills; and for our country, it would mean a more efficient output from fewer power plants. That's why it's so encouraging that the Recovery Act set aside $4.5 billion to match utilities' investments in grid upgrades. Given the savings in energy and money that we can expect, I hope you will join me in pushing for continued support of smart grid innovations.

It's also important that America develop the most advanced transmission lines in the world. I've just introduced legislation to direct loan guarantee funds toward the expansion of U.S. facilities that make superconducting electrical cable, and to expand the production and distribution of advanced wires.

High-tech transmission will benefit us in a number of ways. For one, we will have a more reliable, secure grid: the latest cables can adjust rapidly and automatically to disruptions, whether weather-related or willful. Advanced cables also have clear environmental benefits: they go underground and carry the same amount of power as overhead wires, meaning a dramatically reduced footprint and less land use. Most importantly, just like investments in smart grid technology, advanced cables mean savings in energy and money.

Those, in my view, are some of the most important elements of our energy agenda. It may sound ambitions, but as President Obama has reminded us, our biggest leaps sometimes come out of our darkest moments: ‘In the midst of civil war, we laid railroad tracks from one coast to another ....And a twilight struggle for freedom led to a nation of highways, an American on the moon, and an explosion of technology that still shapes our world.' Adopting a new energy policy gives us a prime opportunity to add our own chapter to that story of achievement out of adversity.