

**UNLV CLEAN ENERGY FORUM –
*A GAME CHANGING AGENDA FOR A
SUSTAINABLE ENERGY FUTURE***

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Opening Address Delivered by

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Institution

“A Call to Action: Climate Politics in an Age of
Uncertainty”

Thanks to President Smatresk, Ron Smith, Oliver Hemmers,
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Institute and Foundation.

UNLV and Brookings launched our partnership one year ago. We saw in Neal and his team a vision for UNLV to be both a national university, a thought-leader in Southern Nevada's resurgence. I believe that UNLV is taking the lead in helping Las Vegas become not just a global destination, but also a world class city.

UNLV does in Vegas what Brookings aspires to do in D.C. – research defined by its quality, independence and impact, and that goes from the local to the national to the global. Yesterday's Clean Energy Summit and today's forum speak to the quality of this university: well-designed, well executed, terrific speakers – scientists, economists, business leaders and policy experts.

As a historian of political ideas, I'd like to suggest that history provides three guideposts for thinking about where we currently stand in seizing control of our energy future. And why the three related issues of job creation, clean energy, and climate change should not be separated from one another.

The first guidepost is ethical. We are the first generation to know we are warming the planet, and probably the last with any chance to stop it.

The second guidepost is political. Transforming the planet's energy system is probably the most complex political transaction in the history of mankind.

The third guidepost is heuristic. We must embrace uncertainty – scientific uncertainty, economic uncertainty, and political uncertainty. Only if we recapture the humility

and hunger that comes with uncertainty are we going to fully tackle this challenge.

First, the ethical imperative.

We are fundamentally altering our climate, and we are the first generation to know this. We may also be the last generation to have any chance of doing something about it. Our forebears had the excuse of ignorance. Our descendants will have the excuse of helplessness. We have no excuse.

If nine out of ten doctors said that we were running a fever, and that we were passing it on to our kids, we surely would ask at least two questions: Can we treat it? How long do we have? The basic answer: we have about a decade to act before the warming reaches an irreversible and truly dangerous stage.

My youngest daughter, Kyri, will turn my age (45) in the year 2049. On our current path, the earth will have warmed by at least 3.6 degrees Fahrenheit -- warming that will be dangerous to Kyri and her kids -- unless we act now.

There is a precedent, of sorts, to this ethical imperative. My dad's generation was the first to be able to destroy the entire planet. Not doing so has simply required us to not push the nuclear button. Still, that has not been a cost-free enterprise. The Cold War demanded dangerous diplomacy, and vibrant domestic debate about how to structure our economy and even our political life. From the interstate system to international trade to the internet, we take for granted Cold War-era investments and innovations. There

was also a political cost: the nation's social fabric was occasionally stretched and torn by McCarthyism and overseas proxy wars.

We persevered, ultimately, because the country united around some core ideas, including that global destruction was too grave to bear.

Today's ethical imperative does have the potential to unite the nation. Lindsey Graham, the Republican Senator from South Carolina, has urged his GOP colleagues to realize that conservatism and conservatism can go hand in hand. "I have been to enough college campuses to know — if you are 30 or younger, this climate issue is not a debate," he told the New York Times in February. "It's a value ... From a Republican point of view, we should buy into it and embrace it and not belittle them."

Graham was speaking strategically. But the larger point is that, when facing an existential crisis, conservatives and liberals can unite in defense of shared values.

Previous conservatives have built ethical systems around these values.

Edmund Burke saw society and civilization as a "partnership of generations . . . between those who are living, those who are dead, and those who are to be born." He saw members of any one generation as "temporary possessors and life-renters in" society and in the earth; he feared that citizens might become "unmindful of what they have received from their ancestors, or of what is due to their posterity," and therefore run the risk of "leav[ing] to those who come after them a ruin instead of an habitation."

Thomas Jefferson – a favorite of both Tea Parties and progressives – made much the same point. Though he famously argued that “the earth belongs in usufruct [in effect, in trust] to the living,” he went on to argue that “no generation can contract debts greater than may be paid during the course of its own existence.”

Conservation is fundamentally a conservative value. I'm particularly cheered by the growing dialogue across religious faith traditions -- from Orthodox and Catholic leaders, to Episcopalians and Evangelicals, to Jews and Muslims and Buddhists -- that all embrace "creation care" as a common rallying cry, and about turning the world back to our children.

Guidepost 2: The politics

Of course, a huge distance remains between Lindsey Graham's vision and effective action. Graham's climate bill never reached the Senate floor. Worse still, he never endorsed his own bill.

The problem is not just the Senate. Former House Speaker Richard Gephardt once described the effort of changing how the planet generates and consumes energy as “the single most difficult political transaction in the history of mankind.”

Here is why. Energy is one sixth of our economy, roughly the same as health care. Senator Reid yesterday said, “If we can pass health care, we can pass anything.” But U.S. action alone is not enough.

To avoid dangerous global warming by the time Kyri turns 45, the world needs to cut global CO2 emissions from about

30 billion tons each year to about 15 billion tons each year.

So take the politics of health care. Multiply those politics by the world's 192 nations. Do that all at the same time. That is what did NOT happen at the world climate talks in Copenhagen. The meeting turned from Hopenhagen to Nopeinhagen.

In *Fast Forward*, Strobe Talbott and I argued that the global challenge is manageable. We focus on four key players – the Big Four of the United States, EU, China and India. We were immediately and loudly reminded by friends in Japan and Brazil (among others) that, they too, were critical to the solution.

So extend the focus to six and you have a Rubik's Cube. You remember the toy -- six faces, nine squares on each of the faces. Move one square in one country, and it moves five similar faces in other countries. That is the political challenge of climate change. Call it the Gephardt Cube.

U.S. leadership is one face of the cube. It is not sufficient, but it is necessary. The U.S. alone is responsible for one-fifth of annual emissions – about 6 billion tons a year, just behind China.

We must eventually cut our emissions by well more than half. The U.S. has been by far the world's largest historic contributor of CO₂. Developing countries such as China and India are far behind us in how much they have emitted historically, and only have a fraction of what they emit per capita. They won't act unless and until we do.

By mid-century, the U.S. probably needs to cut our

emissions to about one billion tons a year if the planet has any chance of getting global emissions down to 15 billion.

In that context, how are we doing?

Considering that Lindsey Graham was in favor of his own bill before he was against it, it seems to have gone from bad to worse. But it is easy to ignore progress. A little over a year ago, the House of Representatives passed the American Clean Energy and Security Act that would have begun cutting United States emissions to roughly the one billion ton target by 2050.

That bill has now died in the Senate. Most Republicans opposed any action. Some still deny the science. Others still see any Democratic victory as a Republican defeat. A handful have been waiting on the wings, watching to see what Democrats would do.

Many Senate Democrats were ready to act. But those from states such as coal-rich West Virginia and the manufacturing communities of the Midwest or oil-oriented states such as Louisiana feared that they would bear a disproportionate share of the costs of going green.

Senator Reid and President Obama hoped to convince five or more Democrats to support the bill by giving them valuable emissions permits or off-shore drilling concessions. They hoped to gain five or more Republican supporters out of concern for energy security. If Mary Landreau Democrats could be convinced to act, then Lindsey Graham Republicans might be convinced to go along as well.

This fragile coalition-making ended up being another casualty of the Gulf Oil spill. Off-shore drilling was now off the table. The nation focused on near-term disaster, and lost sight of the long-term crisis.

Climate change and clean energy activists are now distraught. The House bill will expire at the end of this Congressional session. New legislation next Congress must start from scratch. That will be harder, since Democrats are predicted to lose seats in both houses of Congress on November 2.

It is important not to lose sight of the big picture. We have to assume that the unforgiving math of carbon emissions will continue to grind forward -- much as nuclear weapons shaped my dad's generation.

The public gets this. Despite so-called "climate-gate", the public continues to largely believe the science. There has been little decline in the same core 50% of the public who are either "alarmed" or "concerned" enough to take action. Some decline in support has taken place among "cautious" segments of the public who believe something is happening, but are cautious about the costs of action. But that is hardly an irrational response coming out of the Great Recession.

And opinion polls have shown between 60 and 75 percent of the general public, including a majority of Republicans, believe that the EPA can and should regulate carbon emissions.

Eight GOP House members supported Waxman-Markey last summer. While that was hardly a mass defection, it was a meaningful one -- a high-water-mark of bipartisanship over

the past two years. Mike Castle of Delaware and Mary Bono Mack of California are from districts with active environmental constituents. Leonard Lance of New Jersey hoped his constituents would benefit from the creation of “green jobs.” John McHugh of New York—now secretary of the Army—wanted to cut our dependence on imported oil.

This is not to overstate support, or underestimate the opposition to action. President Obama won many of those districts two years ago, and he might not win many of those districts today.

But support continues to build. A decade ago, the Global Climate Coalition successfully lobbied on behalf of most energy companies to stop global warming legislation. In 1997, Al Gore held a meeting in the Roosevelt Room with green groups to discuss the prospects of cap and trade legislation. He asked them how many votes they could bring in the Senate. An activist responded, “We’ve got Wellstone”. Gore shot back: “Who else?” The response was silence.

We live in a far different world. The GCC disbanded in 2002. The most prominent and effective corporate lobbying group has been Climate Action Partnership – including General Electric, Duke Energy, Alcoa, Dow Chemical, DuPont, Ford Motor, NRG, and Honeywell – which worked with lawmakers in the House to create the framework for the Waxman-Markey bill.

These businesses see big opportunities in clean-energy – nuclear, natural gas, and other clean fuel production sources, more efficient homes, buildings, trains, and automobiles.

Many states and cities have made clean energy central to their strategic planning. Forty U.S. states have adopted climate change action plans. Cities from Seattle to Boston to Las Vegas are seeking to lower their carbon footprints by promoting energy efficiency, light rail, and “smart metering”.

And then there’s the Feds. The Obama Administration is investing about \$90 billion on energy efficiency, renewable energy, smart-grid technology, and public transportation.

Let’s pause on that for a second. In any other time period, that commitment of resources would be considered revolutionary. But in a time when the government spent \$700 billion to repair the financial system, and another \$700 billion on the recovery act, the final \$90 billion seems small. But it is really extraordinary, and its benefits are only now being felt.

Considerable stimulus money remains to be spent. Next year, a possible energy bill might be fashioned around a renewable energy standard. Republicans, such as Senator Sam Brownback, seem willing to support a standard, particularly if “renewable” includes nuclear energy or clean coal or electric vehicles.

And last, but not least, the President still has a very blunt but powerful tool in his kit. Thanks to activist state governments -- such as Mitt Romney's Massachusetts -- the Supreme Court ruled that EPA should treat CO₂ as a pollutant, subject to the Agency’s responsibility to regulate any air pollutant that endangers human health and safety. EPA has since ruled that CO₂ is indeed such a pollutant, and that climate change does indeed pose such a threat.

EPA authority only applies to power plants. If the President uses it, he could run into charges that this is undermining needed economic growth. Congress could choose to pass legislation that limited EPA's authority. Even if the President were to veto such a move, and EPA were to act, it would set back the idea of the country coming together around climate change.

Internationally, progress is being made. As I noted above, at Copenhagen the G-192 proved that the UN is not an effective place to negotiate. A small group of countries refused to block the unanimous consent required in the UN to embrace a new global deal.

But Copenhagen marked real progress as well. For the first time, the heads of state of the most important nations of the world sat down and hammered out an agreement. China, India and Brazil – one third of humanity, listed a set of emissions cuts that they were prepared to take, right alongside the United States, European Union, and Japan. And that general political agreement now has 100 national pledges. While it short of a legally binding treaty, it is the outline of how the world is going to tackle this problem.

Embrace uncertainty

So the ethical challenge is unique. The political challenge is daunting.

One thing that both have in common is that no outcomes are certain. That applies to science, as well as to economics and politics.

To tackle the problem, we need to let the science speak for

itself. That includes being honest about what we do not know.

We know that the planet is warming, but we don't know exactly how fast or how much. We know that humans are causing some or much of this, but we don't know exactly what that contribution is or will be. We know that places from Southern Nevada to sub-Saharan Africa will likely feel the impacts, but we don't know the magnitude.

Our society has long been divided between "know it alls" and "know-nothings." But we are not a binary nation. In the middle those two groups sit most Americans. They are dismissive of "know-nothings," but they don't necessarily trust "know it alls." The following quote, from a leading foreign policy thinker Walter Russell Mead, captures a reality about how these Americans view climate change:

“... the environmental movement has gotten itself on the wrong side of doubt. It has become the voice of the establishment, of the tenured, of the technocrats. It proposes big economic and social interventions and denies that unintended consequences and new information could vitiate the power of its recommendations. It knows what is good for us, and its knowledge is backed up by the awesome power and majesty of the peer-review process.”

Mead has seen this in other foreign policy challenges, and it worries him. Lesson to all of us: it is important to embrace and not silence those who question the science of climate change. Skeptics are what move the scientific process forward.

But it is also important to acknowledge not only those who are skeptical that the planet is warming or that humans are causing it, but also those who find the current projections to be way too cautious.

This scientific uncertainty may actually be the most important reason that countries such as China and India have come to the table. There is a growing awareness that negative impacts of climate change could be worse than are being projected – or could be taking place right now. It is uncertainty about exactly how dramatic those changes will be that suddenly have China and India worried.

We often talk of greenhouse *gases*, but for me, the greater uncertainties have to do with greenhouse liquids and solids. This won't be news to anyone who lives in Southern Nevada, but water is as critical -- and as difficult to understand -- as any part of the climate equation. Recent floods in Pakistan remind us that climate change leads to intense storms and droughts, as well as to the melting of polar ice caps and glaciers. We can never know with certainty when the next hurricane or drought will hit. China and India both live in the shadow of the same Himalayan Mountains as Pakistan.

We also are only beginning to understand how water can help cut greenhouse gas emissions. That doesn't just mean our friends down past Boulder City at the Hoover Dam. It also refers to the considerable water needed in natural gas exploration.

Likewise, we need to have a better understanding of the “solids” out there that contribute to climate change – especially “black carbon” or “soot”. While we have largely addressed black carbon in the United States, it is

underexplored in developing countries.

We also need to understand, and even embrace, economic uncertainty – both in the US, and overseas.

Yesterday we heard a lot about where businesses see opportunities for profitable investment and job creation in clean energy. Clean energy is also an effective strategy for facing uncertainty about regulations in fossil fuels. The prospect of EPA regulating greenhouse gas emissions is creating considerable uncertainty in the business community -- which for the time-being may not be a bad thing. Investors in traditional power generation are either holding back from those investments, or are choosing ones least likely to run afoul of regulation.

There at least two more important sources of economic uncertainty -- geopolitics and global competition. The fact that nearly all transportation fuels depend on a global market that fluctuates wildly based on the latest crisis in the Middle East, Russia, Venezuela, or sub-Saharan Africa. Likewise, China and India are as dependent on those places as we are, and they have begun to notice that these are not the most stable regions of the world.

Whether solids, liquids or gases are the driving concern, leaders around the world recognize that clean energy technology is a key hedge against both climactic uncertainty, and the uncertainty of the economics and politics of fossil fuels.

China hopes to spend \$738 billion, and India will spend \$110 billion, on green technology. Along with Europe's continued leadership, that should be a cause for some optimism.

It is also a cause for concern for American efforts to stay globally competitive. Even if the threat of climate change does not spur us to action, economic competition may be enough.

As we heard yesterday, a price on carbon and a long-term target for emissions would be the most effective way to do this. By providing a bit more certainty to investors, it would spawn the greatest public-private partnership in our history, letting a thousand flowers bloom in response to the promising uncertainty of new opportunities.

Lastly, we need to embrace political uncertainty. Not that we have much choice, two months before the midterm elections. It is hard to predict what narrow Democratic majorities or narrow GOP majorities will do – whether climate and energy will be a priority, and if so, whether the White House or Congress will choose to lead.

But we can plan for that uncertainty now. What would a grand compromise on energy reform look like that would reflect a national consensus for change? A true, bipartisan effort would attract support from moderates in both parties who have been reluctant to take a stand during this election season. But there are not likely to be enough moderates, so we need to stretch ourselves to think about what unites environmentalists and Tea Party members.

As the world's leading democracy, we should embrace that debate. Debate and uncertainty are not an excuse for paralysis. Instead, they are a call to prudent action. We must embrace politics as the art of the possible in the face of what we must hope is only a *nearly* impossible problem.