Oral Statement of Dan W. Reicher
Director, Climate Change and Energy Initiatives, Google.org
To the Senate Energy Committee Energy Summit
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Senator Bingaman, Ranking Member Domenici and other Senators here today, thank you for organizing this summit and inviting me to participate. I serve as Director of Climate Change and Energy Initiatives for Google.org, a unit of Google which makes investments and advances policy in several areas including climate change and energy.

I previously served as Assistant Secretary of Energy for Energy Efficiency and Renewable Energy and DOE Chief of Staff in the Clinton Administration. I also was co-founder and President of New Energy Capital, a private equity firm focused on investments in clean energy projects.

To meet the critical challenges of the 21st Century – climate change, energy security, and economic development – we need a bold new vision for how America generates and uses electricity. We must:

- Become smarter and more efficient in the way we use electricity
- Green our electricity supply through a massive scale up of renewable energy
- Electrify our transportation fleet with plug-in vehicles to reduce our dangerous oil dependence

Our vision is a 21st century U.S. electricity system featuring:

- Hundreds of thousands of megawatts of renewable power
- Millions of plug-in vehicles
- Tens of millions of energy efficient homes and businesses

The biggest impediment to achieving this vision is not technology or even finance. It is policy, particularly at the national level.

The current regulatory model for electricity is broken. It does not encourage utilities to help people save energy. It retards renewable energy development. It discourages modernization of the grid. It fails to cut greenhouse gas emissions. We need to fundamentally rethink this model.

Most importantly, we need to put a price on carbon in order to significantly reduce global warming pollution. Putting a price on carbon, however, will not be enough to drive the urgent changes we need in our energy system. In addition to national climate legislation, we also need aggressive and targeted federal energy legislation. There are four critical elements:

First, we need large scale public and private investment in electricity infrastructure and modernization of the power grid. Spurring this investment will require overcoming the current barriers to siting and construction of new electricity infrastructure, especially large-scale transmission. This may require greater federal authority, balanced by strong environmental standards, to overcome resistance to long-distance interstate transmission lines that are essential to the development of large scale renewables.

Second, we need strong standards and incentives for clean energy. These include a national Renewable Energy Standard, a national Energy Efficiency Resource Standard, and aggressive new appliance efficiency standards. We also need stable long-term tax credits and other financial incentives for energy efficiency, renewable energy and plug-in vehicles.

Third, we need the federal government to take a leadership role in an exciting recent development: the increasing interplay between energy hardware and information software and the corresponding rise of the Internet and the connectivity it brings. From smart meters and smart appliances to smart homes and a smart grid we are poised to significantly advance our ability to make, monitor and use energy more productively. And with smart policy - like "revenue decoupling" - we can align interests, putting utilities in the position to make money helping consumers use less energy.

Fourth, we need major increases in government R&D. We must dramatically scale up investment in research and development for clean energy technologies. Total federal energy R&D is less than half what it was at its peak in the late 1970s. Federal investment in this area will more than pay for itself, just as it has in computer science, aerospace and biomedical research.

If enacted, these measures should stimulate trillions of dollars of investment – largely from the private sector -- over the next three decades to make the transition to a more efficient low carbon electricity system. They will also create millions of new jobs.

This is an enormous opportunity. One example - American consumers get a paper utility bill once a month that is complicated and encourages little except prompt payment. What if utility customers had on-line, real time information about their home energy use? What if their air conditioner, electronic equipment, appliances, and lights, were programmed to automatically cut their bills? What if these customers had the ability to push a button and switch their energy purchase from fossil fuels to renewable energy? And what if their car ran on electricity instead of gasoline, and automatically charged at night when electricity was cheaper -- or during the day from the solar panels on the roof?

These are exciting opportunities but we are unfortunately a long way politically from making them happen. Sadly, the Congress has been unable to pass even a one-year extension to renewable energy tax credits that will expire at the end of the year, to say nothing of the more fundamental changes outlined above.

But we have a big opportunity with a new President, a new Congress and unprecedented concerns about high energy prices, our oil dependence and climate change. There has never been a better moment. Let's seize the opportunity.