



STATE OF WASHINGTON
Office of the Governor

5th Annual Washington Future Energy Conference

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Remarks as Prepared

Thank you, Todd, for the introduction. There's an old saying in the computer science field that goes, "Garbage in, garbage out." As Todd and other energy leaders here today know, the updated version of that saying is, "Garbage in, clean energy out."

Good afternoon. It is truly a delight to be here at the 5th Annual Washington Future Energy Conference.

The reason I'm so excited to be here is because of what we can do together. You are the can-do leaders and visionaries whose work can make possible the future I envision for the great state of Washington.

And I can make possible what you envision, too, because you and I are interdependent. We need each other. You come from the technology realm, and I come from the policy realm, but together we can build a stronger economy, a cleaner environment and a better future for our state.

The truth is that policy helps spur innovation, and innovation helps spur policy. They are two sides of the same coin.

This conference couldn't be happening at a better time. I believe we are at a transformative moment in our state's history. Today I want to talk with you about why this is such a defining moment, why I'm optimistic about our state's future, and give you a preview of some of policies I'm pursuing to spur clean energy innovation.

I want to begin today by looking back. Nearly 80 years ago, the last governor from eastern Washington, Clarence Martin, poured the first bucket of concrete for what became the Grand Coulee Dam.





That ceremonial act marked the beginning of what we now recognize was a major transformative moment in our state's history. Governor Martin could not have imagined when he poured that first concrete on the dam how it would shape Washington's future for generations to come.

At the time, Washingtonians were rallying to meet the challenge of the Great Depression. The Grand Coulee Dam project helped create much-needed jobs, but it also spawned entire new industries that secured jobs for decades to come.

The Grand Coulee Dam became an integral part of Washington's world-class hydroelectric system, which attracted the aluminum industry to our state. This, in turn, provided an entrepreneur by the name of Bill Boeing the raw materials and power to build his first airplanes in a factory along the banks of the Duwamish.

The success of The Boeing Company firmly established our state's legacy of aerospace innovation. We built the first successful commercial jetliner. And that legacy of innovation continues today as we break ground in Everett to begin building the next generation fuel-efficient commercial jetliner, the 777X.

To build the world's best airplanes, you need the world's best workforce. And we have that workforce right here in Washington state.

And now, a technology pioneered by the aerospace industry, carbon-fiber and other composites, is yet another growth area for our economy. The largest carbon-fiber manufacturing facility in the entire world happens to be in Moses Lake, Washington at the SGL plant. They make the carbon fiber that goes into the all-electric BMW i3.

I think it's pretty cool that our state is not only going to manufacture one of the most fuel-efficient wide body jets in the world, but we also have a major role in making one of the most fuel-efficient cars in the world.





And all of this is thanks to one generation's bold vision of its energy future.

Which brings us to the present day.

Last week, I visited Helion Energy, in Redmond. Building on research at the University of Washington, this company is on course to be the first commercial operation of nuclear fusion to produce electricity by 2020.

They are on the fourth generation of a small fusion reactor that fires two plasma streams -- at one million miles per hour -- into an oscillating magnetic field where they collide and produce electricity.

I was allowed to fire the reactor from the control room.

For a few nanoseconds, I felt like a governor that had some real power!

Helion's innovation is expected to generate 8 times more power than it consumes, at an operational cost of 4 cents per kilowatt hour.

A small glass vial of deuterium, derived from seawater, is worth 18 megawatt hours. That's 10 tons of coal.

One 55-gallon drum of this water could power the city of Seattle for a year, without the risks or waste of traditional nuclear fission, or the emissions from carbon energy sources.

Their power plant will generate 55 megawatts and fit inside a standard-size shipping container. Think about the distributed generation opportunities!





And here's the kicker: only a few years ago, their technology was not possible. The breakthrough in solid state electronics needed to control their fusion reaction was developed by the wind industry. The wind industry helped the fusion industry. Like so many innovations, they don't stay in a silo.

Now, I can't tell you that deuterium is the fuel of the future. But I CAN tell you that creativity is the fuel of today.

That's why we need to look at energy with the same kind of ambition and confidence as Washingtonians did in 1935 when they built the Grand Coulee Dam.

We don't know what new innovations, our ambition and confidence may spark. But there are some things we do know.

One of them is that in another 80 years, our environment and our economy will experience the worst that climate change and ocean acidification are predicted to bring, unless we act now.

It is up to us to decide if this is our "Grand Coulee Moment." The choices we make now will determine how future Washingtonians see this moment as well.

As I mentioned earlier, I'm optimistic about Washington's future. And the outcome of this year's election has not dampened my optimism one iota, for three main reasons:

The first reason is that our clean energy future was debated in this election, and that's a positive thing. We heard candidates say climate change is something we need to take seriously and need to address, even if they quibbled over policy differences. This marks a shift in the right direction.



Businesses are also taking this seriously. Over 100 businesses in our state have already signed the Washington Climate Declaration, publicly declaring their support for action that secures both a healthy climate and a healthy economy.

The second reason I'm optimistic is that Washingtonians of every stripe understand that of all our values, of all the things we cherish, of all the things we enjoy, our highest duty is ultimately to our children and grandchildren.

And we fundamentally understand the need to protect that upon which our children and grandchildren depend for their health and their economic prosperity.

I've yet to meet anyone in this state who wants future generations to be worse off than we are today. But every day I meet people who are working for a better, cleaner, healthier, and more secure future for everyone.

And the third reason I'm optimistic is because clean energy means more green -- and I'm not just talking about the environment.

We know the faster-growing sector of the economy today is in clean energy. Job creation in this sector in the past two years has been higher than many other sectors of our economy.

A study conducted by the West Coast states concluded that with continued focus on clean energy, jobs in these industries could see 200 percent growth in the period from 2010 to 2020.

I think you ought to be proud that you are part of the most vibrant growing sector of the United States economy.





So because of this, climate change is as much a tremendous opportunity for our state as it is a tremendous challenge. And there are tremendous rewards available to us economically if we move first in the clean energy economy.

I know Washington state has the winning formula of innovative spirit, entrepreneurial zeal and scientific literacy, because a lot of it is right here in this room. This is who we are as a people.

I can tell you I am confident that some of the remaining skeptics will come around when they see this through the green eye shade of the bottom line rather than the dark lens of ideology.

So if we choose to embrace innovation, to embrace leadership, and to embrace early adoption, we have the opportunity to shape our destiny.

As governor, I've been all in on this from day one.

Before I speak to the broader policy framework, I want to take a moment to preview some of the pieces I know you're particularly interested in, such as electric vehicles, solar power, and the Clean Energy Fund.

Electric Vehicles

I'll start with electric vehicles. I've made the advancement of electric vehicles a top priority, and directed the development of a comprehensive Electric Vehicle Action Plan.

With nearly 10,000 of these vehicles now registered in our state, we are one of the national leaders in market share, and we ought to be proud of that.





We also ought to be proud of the work that's already been done, like the West Coast Electric Highway network of publicly-accessible DC fast chargers. Isn't it great that you can now drive all the way from British Columbia to the California state line in your electric vehicle, and not worry about where to charge your battery?

For the 2015 legislation session, we're working on some innovative policies to further promote the use of electric vehicles:

First, we want to extend the sales tax exemption for these and other alternative fuel vehicles to reduce the cost of purchasing them.

Second, we want to explore giving EVs access to HOV lanes, because saving time can be as big of an incentive as saving money.

Third, we want to increase the number of charging stations to make range anxiety a thing of the past.

And fourth, we want to create incentives to get new buildings ready for high speed charging so it's much more practical for apartment and condo dwellers to own electric vehicles.

There's some great bi-partisan support for these ideas, but I'll be looking for your help in getting them across the finish line in 2015.

And as you heard from Secretary Peterson this morning, we are also examining ways to make our overall transportation system more efficient, improve our land use planning, and prepare ourselves for the sustainable transportation systems of the future.





Solar

I also believe solar energy will be an important part of the solution. Solar technology is leaping forward, solar costs are dropping, and solar deployment is growing rapidly. Last week, the Deutsche Bank reported that solar power will be as cheap as or cheaper than electricity from the grid in 47 states by 2016.

Compared to 2012, the capacity of PV systems installed in 2013 in the state of Washington increased 61 percent, and the number of systems increased 54 percent. Solar installations are up 260% in Bellevue and 350% in Edmonds.

We have also seen progress on permitting new solar systems, with leadership from Northwest Solar Communities and the Washington State Building Code Council.

Their work to streamline the approval process will save \$500-\$2,500 per system and avoiding unnecessary delays of up to 8 weeks.

You may have heard Jake Fey – Director of the Washington State University Energy Program – speak this morning on advancing solar in Washington. He is leading an effort to significantly expand the use of solar energy in Washington.

To start with, we need to extend the state's Renewable Energy Cost Recovery Program. This program has been central to the progress of solar energy in our state.

But we also have to provide more space for the solar industry to achieve additional growth and to open up opportunities to more participants in the State of Washington. This includes people interested in developing larger solar systems, and a broader range of both residential and business utility customers. And this will require adjustments in our program.





Clean Energy Fund

In 2013, I requested and the legislature created the Clean Energy Fund. It has already provided \$15 million in seed grants to fund loans for energy efficiency and renewable energy projects.

It has also loaned more than \$3 million to residents across the state to make their homes more energy efficient. Over the life of the program, we expect that it will create more than \$150 million in total loan activity.

Given this success, I will be requesting additional funding for the program in the 2015-17 capital budget.

Not only do we want to continue the loan program, we want to enlarge and expand our work in clean energy research, development, and demonstration... from expanding clean energy research and development at our universities, and piloting new smart grid technologies, to helping commercialize cutting edge technologies, and bringing Washington's bioenergy companies into national and global markets.

Now, while many other states have dedicated funds that they can use to build their clean energy industry, Washington does not. I've directed the state Department of Commerce to look for ways to establish a larger and permanent fund here, to help drive innovation and solutions in clean energy.

Recognizing the importance of this work, the Commerce director recently hired and appointed a new clean energy sector lead. Brian Young will work closely with many of you to help create more clean tech jobs and business opportunities in Washington. He will also be an advocate for your needs in Olympia.





I will also continue my efforts to make Washington's public sector a model for our energy future, including pushing to fund investments in cost-effective energy efficiency for schools, state agencies, and local governments.

If we are going to succeed in defeating climate change, in meeting our obligations and securing our economic future, we need more than these individual programs, more than just innovations that will drive policy.

I am committed to creating a comprehensive policy framework that will in turn drive innovation, and help secure the success of your clean energy businesses.

At the core of that commitment is a program that engages the market in reducing carbon pollution emissions.

My Carbon Emissions Reduction Taskforce includes 21 representatives from industry, tribes, environmental interests, labor, low income advocacy, energy as well as eastern and western Washington. Like the climate legislative group last year, this taskforce has met in public since their formation in April. On November 17, they will deliver their recommendations on the design and implementation of a market-based program to reduce carbon emission limits in Washington.

Based on these recommendations, I will ask the 2015 Legislature to enact a well-informed, responsible and fair carbon market program for Washington State.

I am glad to have had the chance today to talk with you about why I believe we are at a transformative moment in Washington's history. I've told you why I remain optimistic about Washington's future. And I gave you a little preview of my 2015 clean energy agenda.

Let me be clear about what drives me on this issue.





There's a tendency for some people to minimize this as some radical notion. But this is not some hippie, patchouli oil smoking – or whatever – Woodstock moment.

It's about caring about the future, for sure, and the radical notion that we care about our children and grandchildren.

But it's also about smart business. It's about strong economics. It's about building a prosperous future for our state, so that our children and grandchildren not only inherit a healthy environment, but a healthy economy with plenty of good-paying jobs.

Seven years ago I wrote a book. It wasn't about harnessing the power of yogurt and granola. It was about harnessing the power of clean energy. In that book, I made the case for transitioning to a clean energy economy sooner rather than later.

And this isn't about chasing away our traditional industries. In Congress, I proposed the Inslee-Doyle amendment to ensure that U.S. manufacturing jobs are not outsourced to countries with no restraints on carbon pollution. We will need similar care in the design of a program that will work for Washington.

Addressing carbon pollution makes sense, just common sense. The impacts of the pollution are real and I can tell you that the opportunities are real, too.

For months I've been traveling around the state talking to people about climate change, about what it means in their communities, about what worries them, about how they are addressing the present threats of rising sea water, increasing ocean acidification and a warming planet.

In Anacortes, the city has built a water treatment plant designed to anticipate the sea level rise and increased flooding that climate models warn are coming. These





folks can't afford to squander millions in capital infrastructure investments, so while some voices sow uncertainty, Anacortes is taking visionary action.

In Yakima, they're building the next generation agriculture economy of our region. New water systems will improve the productivity of our orchards and our fish runs while innovative projects like the biomethane operation I saw can put animal waste to use as clean energy, reducing our dependence on fossil fuels and providing new revenues to farmers. Like I said earlier, garbage in, clean energy out!

I get so excited when I visit a place like Helion, or when I'm in Moses Lake and see how SGL has become a world player in cutting edge composites.

That's why I'm an optimist. That's why I remain committed to an agenda that protects our economy and our environment.

With your help we can make that happen.

Thank you.

