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California Air Resources Board**

**Joint Hearing of the Senate Environmental Quality Committee & the
Select Committee on Climate Change & AB 32 Implementation**

**Thinking Globally, Acting Locally: The Paris Climate Accord and what it
means for California's Climate Investments**

Wednesday, February 3, 2016
California State Capitol, Room 112
9:30 a.m.

Introduction

- Good morning, Chair Pavley, Chair Wieckowski and Members.
- It's a pleasure to be here, coming off a very successful meeting in Paris.

The California story is the Paris story

- As you know, California was well represented there.
 - Chair Pavley, Chair Wieckowski, Senate President pro Tem Kevin de Leon, and others from the legislature attended...
 - And Governor Brown led a delegation from his Administration.
- In addition to championing subnational action and international cooperation, as Matt described... we were there together to highlight our successful climate programs and tell **the California story: That economic growth and environmental protection can - and must - go together.**
 - It's the same story we've been demonstrating for 50 years now, since we started cleaning up smog in Los Angeles.

- It's a story that we shared broadly, at many events over the course of the Paris meetings where we were featured.. and it's a story that resonates broadly – just about everywhere except for a few, small and dwindling circles in Washington DC and a few states.
- If the tired argument that we can't grow our economy and protect our health and well-being at the same time didn't die in Paris... it's certainly on its last legs.
- That was what Paris was all about, and its true success... It wasn't just policy commitments by countries, but all those other commitments by the private sector, states and municipalities, civil organizations, universities... even Bill Gates!
- It was truly the whole world, getting on the same page, committing to invest lots and lots of money in better ways.

Summary of the Paris Agreement

- But of course, the agreement itself was equally historic:
 - It sets a framework for global climate action, expected to begin in 2020, and requires participation from all countries – including developing countries.
 - The clear, overarching goal of the agreement is to hold global average temperatures to “well below 2 degrees Celsius above pre-industrial levels.”
 - Countries must develop climate plans to reduce emissions – known as Nationally Determined Contributions (NDCs) – and update them every 5 years.
 - 160 climate plans, reflecting more than 180 countries, were submitted in advance of the Paris Agreement.

- Countries must also regularly report on emissions inventories and progress toward meeting their NDC targets.
- And it calls on developed countries to provide continuing financial support for developing countries to support their climate change mitigation and adaptation efforts.

Consistent with California's Efforts

- Many of the elements of the Paris Agreement are consistent with California's climate policies:
 - It recognizes the critical role of **all levels of government** in addressing climate change, which California has championed through the creation of the Under 2 MOU.
 - It reaffirms the goal of holding the global average temperature increase to **well below 2 degrees Celsius** above pre-industrial levels, as in Governor's Executive Order (April 2015) and the Under 2 MOU.
 - It recognizes that Parties may rely on **international cooperation** to implement their climate plans. California has been working with national and subnational partners throughout the world, including those in China, Mexico, Canada, the U.S., and others.
 - It allows for Parties to cooperate by transferring, or trading, their climate mitigation results with one another. These "internationally transferred mitigation outcomes" must meet accountability standards and avoid double-counting; the Agreement also establishes a mechanism to support international

cooperation. In a future which will rely on carbon markets and linkages to achieve our global climate goals, California's system is an important model and the success of our program generated great interest in Paris.

- It requires Parties to regularly report an **inventory of emissions sources and sinks**, similar to California's annual emission inventory.
- It **increases ambition over time**, just as California is doing with Senate Bill 350 and specific greenhouse gas goals for 2020, 2030 and 2050.
- It requires Parties to **track progress in achieving GHG reduction goals** and reassess programs to meet those goals. Similarly, California's Scoping Plan regularly reviews progress in meeting California's emissions reduction goals and sets the framework for meeting those goals.
- Finally – and importantly – it identifies the importance of **providing incentives** for emissions reductions and **investing in regions where help is needed the most**. California is doing just that – by reinvesting cap-and-trade proceeds to reduce greenhouse gas emissions and targeting reductions in disadvantaged communities, pursuant to Senate Bill 535.

What's Next?

- So, coming out of Paris, what's next? I want to highlight three specific areas that deserve our continued focus over the next year and beyond.

Keep Working with Subnational, Federal, and International Partners

- First is to continue to work with our partners to help reduce emissions and do all that we can – within California and beyond – to keep global warming well below 2-degrees Celsius.
- Within California, we need **to keep implementing our policies effectively... and extend them and ratchet them down** to meet climate targets that are squarely in-line with the 2-degree objective.
- Other jurisdictions clearly see that our policies are working, and now that we have a global commitment need to limit emissions, states and countries will increasingly look to California to learn how to similarly reduce emissions.
- **So we'll continue to work with other subnational and international** partners to help us all design and implement programs to effectively and efficiently meet our separate and shared goals.
- We'll also **keep working with the federal government** to ensure progress in other States and nationally:
 - This includes supporting President Obama's **Clean Power Plan** to reduce emissions from the electricity sector.
 - It also includes continuing our effective partnership with federal agencies to keep pushing **light-duty and heavy-duty vehicle greenhouse gas standards** and supporting markets for **zero emission vehicles...**
 - And as the Obama Administration and we both increasingly target immediate climate benefits by cutting short-lived climate pollutants, we'll keep working with the U.S. EPA, USDA and other

agencies to cut methane emissions and phase down the use of HFCs.

Target Short-Lived Climate Pollutants

- This brings me to the next focus area – we need immediate, targeted actions on short-lived climate pollutants.
- As Governor Brown said at the Paris meeting, “This is probably the most immediate challenge, and the most important thing to do leaving this conference.”
- Short-lived climate pollutants include black carbon, methane, and refrigerants (HFCs). They’re potent greenhouse gases and air pollutants with a much shorter atmospheric lifetime than carbon dioxide, and reducing their emissions can deliver immediate climate, health, and crop benefits.
- California is already the global leader on cutting black carbon emissions from diesel, and we’ll continue to do more.
- We must also invest to build infrastructure to put potentially valuable waste streams to beneficial use. There is a billion dollar market to be had there – much of it concentrated in the Central Valley and rural California – as well as significant reductions in methane and black carbon emissions.
- The Governor has proposed spending \$215 million in the next fiscal year to help cut SLCP emissions. That’s a good start. We’ll also need targeted regulations and market support to get organic waste out of landfills, avoid methane emissions from dairies, and phase down the use of HFCs.

- One last note here – in order to capture the full economic and environmental value from our organic waste streams, we need to convert them into biomethane or liquid fuels. And we need to get those fuels into the natural gas pipeline or the transportation sector.
- This will require work by state agencies and the legislature to overcome stubborn institutional and economic barriers.
- If we can do so, we would unlock a torrent of investment that would create new industries and markets for clean technologies... and bring billions of dollars and thousands of jobs to the Central Valley and rural California.

Mobilize Investment

- This must be our third focus area: Mobilizing investment.
- The consensus coming out of Paris is that we have to mobilize massive amounts of capital to flow towards clean energy, clean transportation and away from sources that are the primary drivers of climate change.
- Market supporting efforts like enabling pipeline injection of renewable natural gas or building markets for compost are one example.
- Another is **pricing carbon** – which is widely accepted as a critical mechanism for driving clean energy investment. In the lead up to Paris:
 - California was one of 74 countries and 23 states, provinces and cities—together responsible for 54 percent of emissions and 52 percent of GDP—who joined over 1,000 businesses and investors in signaling their support for carbon pricing through the Carbon Pricing Leadership Coalition. Almost 40 countries and more than 20 cities, states and provinces responsible for more than 22% of

global GHG emissions are already use carbon pricing mechanisms or are planning to implement them.

- 6 of Europe's largest oil and gas companies wrote a letter, published in the Financial Times, calling for a global agreement to help connect national or regional carbon trading schemes.
- 154 major companies signed onto President Obama's "American Business Act on Climate Pledge" calling for an ambitious agreement and accelerated transition to a low carbon economy.
- Here again, California is leading. We have put a price on carbon in the form of our **Cap-and-Trade program**, which is working well:
 - We're finding 99.9% compliance,
 - Our economy is growing, while carbon intensity declines,
 - We're tops for clean energy investment and jobs,
 - And our job growth continues to outpace the rest of the country.
- Finally, we're also mobilizing capital by **directly investing** in efforts to cut greenhouse gas emissions.
- Among other sources, this comes in the form of re-investing Cap-and-Trade auction proceeds to reduce emissions.
- The Department of Finance, in consultation with the Air Resources Board and other State agencies, is required to submit a triennial Investment Plan to the Legislature.
- The Investment Plan identifies priority investments that will help California achieve its GHG reduction goals while realizing additional health, economic, and environmental benefits.
- I'll hand it over to my colleague from the Department of Finance to discuss these investments in further detail.

Comparison of Paris Agreement Goals & California Climate Policies

<i>Paris Agreement Goal</i>	<i>Related California Climate Policies</i>
<ul style="list-style-type: none">• Hold the global average temperature increase to well below 2 degrees Celsius above pre-industrial levels	<ul style="list-style-type: none">• Target to reduce GHG emissions to 40 percent below 1990 levels by 2030—in line with steps needed to limit global warming below 2° Celsius (April 2015 Executive Order)
<ul style="list-style-type: none">• Prepare climate plans every 5 years and increase ambition over time	<ul style="list-style-type: none">• Established series of progressive, economy-wide GHG reduction goals:<ul style="list-style-type: none">○ 2020: Reduce GHG emissions to no greater than 1990 levels○ 2030: Reduce GHG emissions to 40 percent below 1990 levels○ 2050: Reduce GHG emissions to 80 percent below 1990 levels• Developed comprehensive Scoping Plan for meeting GHG reduction goals and evaluating progress; Scoping Plan is updated at least every five years—an update on meeting California’s 2030 GHG reduction goal is currently in development

<i>Paris Agreement Goal</i>	<i>Related California Climate Policies</i>
<ul style="list-style-type: none"> • Recognizes the use of cooperative international approaches to achieve climate mitigation goals. 	<ul style="list-style-type: none"> • Leader of Under 2 MOU, which has been signed or endorsed by 127 jurisdictions representing 27 countries and six continents. Together, they represent more than 729 million people and \$20.4 trillion in GDP, equivalent to more than a quarter of the global economy. • Leader of International Zero-Emission Vehicle (ZEV) Alliance, which aims to make all new passenger vehicles ZEVs by 2050 • Linked with Quebec in 2014 • California is exploring other potential linkage partners
<ul style="list-style-type: none"> • Identifies the importance of providing incentives for emissions reductions 	<ul style="list-style-type: none"> • California incentivizes emissions reductions in a number of ways including the Low Carbon Fuel Standard, Renewable Portfolio Standard, and most notably by putting a price on carbon in the form of Cap-and-Trade. • California then invests auction proceeds into programs that further incentivize emissions reductions like the California Climate Credit and Clean Vehicle Rebate Program.

<i>Paris Agreement Goal</i>	<i>Related California Climate Policies</i>
<ul style="list-style-type: none"> • Reduce emissions from deforestation and forest degradation, including through result-based payments 	<ul style="list-style-type: none"> • Funding from Cap-and-Trade auction proceeds to reduce GHG emissions from California’s forest sector • Cap-and-Trade includes offset credits for projects that sequester carbon on U.S. forestland • Evaluating potential role of a program to provide offset credits for policies that reduce tropical forest degradation and deforestation • Founded the Governors’ Climate and Forests Task Force, a subnational collaboration of 29 states and provinces seeking to promote low emissions rural development, reduce emissions from deforestation and land use, and link these activities with result-based payments
<ul style="list-style-type: none"> • Develop inventory report of GHG emissions and track progress in achieving GHG reduction goals 	<ul style="list-style-type: none"> • Annual, statewide inventory of GHG emissions • Scoping Plan sets framework for meeting GHG reduction goals and evaluating progress

<i>Paris Agreement Goal</i>	<i>Related California Climate Policies</i>
<ul style="list-style-type: none"> • Encourage capacity-building in developing countries to promote effective climate change action 	<ul style="list-style-type: none"> • Collaborates with Mexico, China, and other jurisdictions on developing effective climate policies • Serves as technical partner in the World Bank’s Partnership on Market Readiness, which provides support on preparing and implementing climate policies
<ul style="list-style-type: none"> • Engage in adaptive planning to address the effects of climate change 	<ul style="list-style-type: none"> • State climate adaptation strategy, Safeguarding California, is prepared every three years; strategy identifies risks and vulnerabilities as well as priority actions to reduce those risks