

**Deb's transcription of Matt Rodriguez's and expert testimony from Tuesday, April 14th
HB2250, HB2252 and HB3470 Bill Hearing**

Matt Rodriguez - Thank you very much. It is a pleasure to be here. I'm Matt Rodriguez, I'm the Secretary for Environmental Protection for the state of California and I was asked to very briefly touch upon three issues: essentially the experience that California's had with its cap and trade system; to look at what we've done with the revenue that's been generated by the cap and trade program in California; and also to talk about how we've been dealing with environmental justice issues related to the implementation of the cap and trade program.

CA Experience with AB32:

California's cap and trade program really originated from legislation that was adopted in 2006, known as AB 32. AB 32 directed the air resources board to develop programs to reduce California's carbon emissions to 1990 levels by the year 2020. Frankly we looked at a number of different ways to accomplish that objective and the Cap and Trade program is one of only a number of programs. We also have a renewable portfolio standard that encourages renewable energy. We have energy efficiency program where we are promoting electric vehicles in the state of California. We also have a low carbon fuel standard, among others. Cap and trade is best known of these programs. We adopted this program because it puts a price on carbon and carbon emissions to incentivize reductions in those emissions. It also provides some flexibility through regulated entities. It also, by having a cap it ensures that we will be meeting our targets. Currently the cap and trade program covers 85% of the emissions in California. And that applies to all our large industrial segments and this year the program was extended to those who sell fuel in California and natural gas to residential and commercial customers. The emissions are regulated. We know how many emissions there are in California through 3rd party verification. And then what happens is that at the end of the compliance period, the emitters of carbon are required to show allowances or offsets that meet their emissions targets. Offsets are a special category of projects where you can reduce greenhouse gas emissions by investing, for example, by reducing methane from mines or by carbon sequestration in healthy forest management. No more than 8%, however, of allowances can be coming from offset programs. Since the program was initiated and we had our first auctions under the program in 2012, there have been 10 auctions and we are pleased to report that all of those auctions have gone very, very well. Recently we have linked with a program that is very similar to California's in the Canadian province of Quebec. What that means is that allowances that are sold as part of the Quebec program can be used in California and California allowances can be used in Quebec. And I'm pleased to report that just yesterday, the province of Ontario indicated that it is looking at the adoption of a cap and trade program and its intent is to link with California's program. Now, I should say that in order to link our programs that we need to make certain findings in California and so there is an awful lot of work that we will have to do before we can link our programs, but we are interested in working with Ontario in the future.

Effects of the Program:

As to the effects of the program, we are constantly monitoring the effects of the program on the California economy as well as our manufacturing and industrial base. We just completed a scoping plan last year. We do a plan every five years to sort of track where we are on meeting our targets. It looks like we will meet our 2020 targets and it looks like we will be doing so without damaging the California economy, in fact, it looks like the California economy is recovering quite nicely from the recession that struck the entire country several years ago. In fact it's been reported just recently that California's economy got to the point where if California were its own country it would be the 7th largest economy in

the world. So we are constantly monitoring the impacts of this program on the economy. From where we sit at this moment it looks like it is all very positive. Now let me say that to date, the 10 auctions that we've had have produced about 1.6 billion dollars. That money has been put in a greenhouse gas reduction fund (GGRF) and that money is then used to further reduce greenhouse gas emissions around the state through a variety of programs. We've adopted an investment plan under the direction of the legislature. These investment plans are 3 year plans and they direct how we use the money from the GGRF in various programs throughout the state. As I said, the primary purpose for the use of the funds have to be to reduce greenhouse gas emissions, but if there are co-benefits that can be derived, then that's appropriate as well. So we are looking at whether there are areas that we can, for example, invest in healthy forests and urban forests in some of our urban communities. And a co-benefit of that is, not only do we sequester carbon, but we make those communities cooler when we experience warmer days. So we are using the funding in this current fiscal year there is \$832 million dollars that has been budgeted for these programs. The Governor's draft budget has \$1 billion dollars set aside for programs next year, though we will note that in the February auction California did take in \$624 million dollars, so it may be that we will have more than \$1 billion dollars that we can invest in the next year, but we will work on that as we go through the budget process.

Economic and Environmental Justice Concerns

I will conclude by saying that one of the issues that came up when we were looking at our cap and trade program was the question of environmental justice and what we were doing to help the communities where we find some of these emissions coming from and we have developed what we call CalEnviroScreen which is a tool that looks at 12 different environmental indicators throughout the state such as PM2.5, or ozone or proximity to hazardous waste sites, and assesses all the communities in California in a census tract basis using this information. We also have seven socio-economic indicators that we look at that identify those communities, because of certain issues such as a large percentage of the population living below the poverty line are having difficulty addressing some of these environmental issues. Under legislation sponsored by our Senate President Pro Tem, Senator Kevin de Leon, in 2012, 25% of the proceeds from the cap and trade auctions have to be spent in these communities that have been identified as disadvantaged. They have to benefit from the expenditure. 10% of the expenditure has to be exactly in the communities themselves. These can be used for programs such as improving the building stock in these communities to make them more energy efficient. We're looking at improving public transit in these areas. There are a wide variety of programs to help these communities. So that in a nutshell is the situation in California right now. We are looking at identifying targets for the next 15 years and the Governor's state of the state speech he suggested that we be looking at reducing petroleum use in cars and trucks by 50% by the year 2030. We'd like to have 50% of our energy from renewables by 2030 and we want to make our buildings more efficient by 2030 as well. We're also looking at short-lived climate pollutants and dealing with them. And we're looking at how we can work with our agricultural sector to sequester carbon in agricultural practices. So that in a nutshell is the California program and if you've got any questions, I'm available to answer any.

Sean Penrith, Executive Director of The Climate Trust, established in 1997 in response to the Oregon CO2 standard. He gave his testimony citing the key points from this publication that Climate Trust published in 2/12/2014: [*An Evaluation of Potential Carbon Pricing Mechanisms for the State of Oregon Policy Paper for the 2014 Oregon Legislature*](#)

Highlights were: Looking at NE US states regional greenhouse gas initiative (RGGI) and California AB32 they conclude that emissions reduction and positive economic impact are not mutually exclusive. RGGI

on first 3 years contributed \$1.6 billion and added 16,000 job years to the region. Most recent auction made totals surpass \$2 billion and they are ahead of target slated for 2020. Feb 2015 auction brought in \$84 million at \$5.40 per unit, the highest ever for this market. When Chris Christy pulled NJ out of program in 2011, estimates are that NJ lost \$144 million, and 387 in additional income through 2020. CA program added 490,000 jobs in first 18 months which is a 3.3% growth rate that out paces the 2.5% national growth rate for same period. CA GDP also grew the first 2 years while emissions dropped by 4%. CA added more jobs than any other state during the economic recovery and it has attracted \$21 billion dollars in venture capital investment, more than all the other states in this country combined, while its core clean economy grew 10 times faster than any other sector in the state. Revenues from auction have raised \$1.6 billion dollars, a significantly higher number than was expected at this point in the program. In addition to the transportation improvements, 1.7 billion is expected to be spent in the coming years on affordable housing, public transit, etc. Corporate influence....29 of the largest US companies are now internally pricing carbon. Prices vary from \$5 to \$60 per metric ton of CO₂ depending on company and sector. TCT works with several including Microsoft, Disney, CH2M & Hill. Use of offset does not cause companies to emit more. It is often used after they have done what they can internally to offset things outside their control like supply chain activities. These companies use offsets to mitigate emissions impacts by 25%.

Conclusion: Existing examples in US show that it is possible to institute pollution reduction programs without compromising economic prosperity or social equity. For Oregon, program should meet emission reduction targets, facilitates linkage (with other states), cost containments with offsets and price reserves, and reinvestment into low carbon economy initiatives thereby offering the benefits of economic growth while providing greater environmental equity to all Oregonians.

Jeff Renfro, Senior Economist with Northwest Economic Research Center, from Portland State University. Showed slide. Results of BC and CA. BC implemented carbon tax, started at \$10/ton in 2008. Now \$30 (the cap). On fuels burned in BC. After tax there is a reduction in emission. After recession, grew slower than rest of Canada, then caught up. Too early to really tell impacts of carbon tax. Looked at Oregon, research used burned in Oregon and Electricity generated outside of Oregon. \$30/ton we get below 1990 levels....would need \$60/ton to hit targets. At \$150/ton we still wouldn't hit our long term 2050 goal. Revenues generated: at \$30/ton, would generate \$1.3 billion dollars annually. At \$100/ton that would be about \$3.5 billion dollars annually. Revenue = ~17% of ½ of lottery generated funds. If you give \$ to government and they employ people, impact is barely above base line jobs predicted. Even with negative scenario (money is put in a fund and not used to employ...barely have an effect. Take away: In order for the policy to have a net positive impact on the economy, there needs to be some kind of business support like corporate tax cut or targeted \$ for industries that might be negatively impacted. If you give all of the revenue to people as dividend it has a net negative effect (slight). Increase in consumption is not enough to offset the negative impact associated with the front end cost increases. They see positive economic impacts if use the transportation related revenues to fund the Highway Trust Fund ...(would add 41%-51% to this fund) That's a significant amount of many that gets spread around the state in what amounts to a large public works program. See positive economic impacts associated with the revenues going toward road construction and maintenance. Had more to share, but stopped there.

Russ Beaton, Professor Emeritus of Economics, Willamette University - Long time interest in this issue, 1973 appoint to task force by Tom McCall, formed because of drought and were anticipating energy shortages. Predicted the Oil embargo. Task force implemented odd/even gas days. Tom McCall also

implemented OLIS. Economist need to follow energy, helped establish in Oregon Department of Energy in the 70's. Co-authored three books. Learned a few things. Roots in economy is energy. Without energy there is no economy and also no negative impact on environment. A policy that pits energy against environment is doomed to fail. Should build policy on energy flow, not \$, but budgeting doesn't allow for that. Any successful policy must begin with the injection and tracking of carbon as everyone has said today. Cap and Dividend feature....revenue neutral mechanism. Create revenue to lessen carbon, the fees should be significant. Three main points: 1) Important to structure carbon pricing so that government doesn't come to depend on the revenue. 2) Cap and Dividend, lowest 2/3 of the population will get more money back than they pay for the higher energy cost. Addresses Social inequity issues. 3) Will create a stakeholders purchasing power that will sustain the broader economy. Melt down and reconstruction of economy has been hurt by lower purchasing power of lower and middle class. (Redistributes wealth). Congratulate committee to take this on....will get more and more strident with each passing session.

QUESTIONS:

Chair Vega Pederson – A quick questions. Can we get a summary description of what CA is doing with your Cap and Trade program?

Rodriguez – Yes, certainly, you can look at the website for the CA Air Resource Board, and I have some pamphlets that I can leave here with Chuck, that describe what we've been doing with the program.

Rep Bentz – We want to thank you for taking the time to travel up here. We could certainly use on this committee a measure, with the costs on one and revenue on the other. Do you have a metric that you apply to your carbon program?

Rodriguez – I can't say we have a metric or an easy formula that you can steal from, but there is the scoping plan that we did last year which looked at a couple of things. As I said, the success of the program, other areas where we could make changes to the program, and it talked about some of the economic analyses that we've been doing, to make sure we understand the economic impacts of the program. So looking at the scoping plan would be one of the things that I would suggest. At this point there are some analyses that we are doing on a sector by sector basis. We sort of take a look at what the impact of the program is on various sectors in California. Unfortunately I can point you to one particular formula, or one particular analysis that's out there, but I can say that if you have an interest, we can make available some of the ongoing studies that we are looking at to make sure we have the right balance for our program.

Rep Bentz – We very much would like those. The challenge for all of us is to see how much we are investing and what we are getting in return. To the extent that we can watch you guys, because you have been doing this awhile and We'd love to see how well you are doing first of all so we can pick and choose among the different paths here hacking our way through this difficult(?) material and see how well you are doing. But the measure is very [powerful(?)] and so to the extent that you've developed the process.

Rodriguez – Well I've talked about the fact, well there's two things. My intent when I became the Secretary of the EPPA was to sit in a corner office in a large building in Sacramento and make sure our program were working efficiently. I certainly didn't intend to go out to legislatures in Oregon, or Ontario or Quebec or China and talk about what we are doing. But there is interest in what we've been doing in California. And you're correct that what we need to do is a little bit more in terms of a nice presentation that talks about where we are and what the progress is we've seen in California. So I'll take that message back and we will work on making something accessible if folks are interested in what we are doing in California. A little bit more accessible than what we have right now.

Rep Helms – Thank you Madam Chair. Before I ask the question, I just want to thank you for holding these hearings. As Mr. Beaton said the big ideas are coming to us near the end of the time we can work on them. But I think they are worth thinking about and they are very important and I appreciate the opportunity to get this information. Mr. Rodriguez, my memory, and you can correct me if I'm wrong, is that California has some of the aspects of our initiative system, so my question is, when your cap and trade system came into being, was it by a vote of the legislature or was it by initiative, or was there any type of public votes leading up to legislature adopting the program? I'm just trying to get a sense of the political history that led to where you are today.

Mr. Rodriguez – The Cap and Trade Program is part of legislation that was adopted by our legislature in 2006. It identified the overall goal to reduce our emissions to 1990 levels by 2020. And so ARB (air Resources Board) started working on a number of programs to try to achieve that goal. Now all those programs that have been adopted by ARB have been subject to a very, very visible and transparent process for their adoptions. As well, as you may know, we included fuels under the cap this year. There was an earlier proposal, an initiative that would have prevented us from having fuels under the cap several years ago, proposition 23, I believe was the number, and that proposition was defeated at the polls. So there has been a vote, not on the overall cap and trade program, but on this idea of whether we should exclude certain segments of the economy from the cap and trade program. And that did not come to pass so we got a program right now that covers 85% of our emissions.

Rep Holvey – Thank you...Just kind of following up on that. In California's experiences is describe the Cap and Dividend return and it returns money to the people. Did California consider that? And do you think your reductions in emissions would be just as great with the cap and dividend program as the Cap and Trade? It seems like the Cap and Trade allows you to reinvest in potentially in emission reducing measures. I'm kind of curious what your thoughts or if you had those thoughts as you were developing the program?

Mr. Rodriguez – To be totally candid, I am not totally up to speed on the Cap and Divided Program. But I can speak to the Cap and Trade program and the difference between what we are doing and what British Columbia is doing with a carbon tax. And let me mention that we've work collaboratively with British Columbia. British Columbia is a part of the western climate initiative and they are a member of a non-profit corporation that helps run our program. So even though there is a different between the British Columbia program and our program we still work collaboratively with them. British Columbia then has the freedom to use the money that they tax out of their tax in a wide variety of programs. Because of the nature of our program we are only using the cap and trade funds to reduce greenhouse emission. But as I said the programs that we are using them on are a broad base of programs that run the gambit from transportation programs—we're using a portion to fund our high speed rail project, for example. There's 200 million set aside for this fiscal year for low carbon transportation which is encouraging low emission vehicles, that sort of thing. We got, I forget the actual amount, I think it's 30 million, for weatherization projects that's going to be used primarily for disadvantaged communities which will be used to improve the building stock in those areas. We have a certain amount of money set aside for recycling projects that will reduce methane emissions. And so what we are trying to do is to find programs that do both the central mission of AB32, which is to reduce greenhouse gas emissions, but also help various segments of our economy and really put the money back into the community. That was part of the purpose of the investment plan that was written a couple of years ago. We are working on our new investment plan. So that's one of the things that will help out these communities by reinvesting in those communities. I'm not sure how that differs from a cap and dividend program, but we are interested in returning the money back to the communities. I'd like to follow up with Dr. Beaton with the question as far as the Cap and Dividend program is. Did you look at how effective it was as far

as reducing future emissions because of the potential for lack of reinvest of those dollars into programs to further reduce emissions.

Dr. Beaton – Rep Holvey, that's a good question. Of course an economist never saw a cap they didn't like. I'm not against the cap and trade at all. And of course as the discipline of economics began to think about this also the cap and trade is very attractive because of the market mechanism with regard to the dividends themselves. Some of us have come to believe that Wall Street benefits a lot with the whole manipulation of the dividends and there's a chance that speculation gets in there and sort of messes up the public policy purpose [] at all. I like what I hear from California as well, but a cap and dividend puts the money back in the community at the whim of the consumers themselves. And so a lot of us feel that the incentive system would trickle down to people's own behavior of themselves as well. And if I'm not mistaken, the California policy results, will require that the legislature will have to make conscious choices about how they would inject that money into the system. I would think it might not be a bad feature to allocate some of that money to research, for businesses to adjust or maybe to agriculture in key sectors like that before passing the dividend out completely to the people.

Sean Penrith – I have a comment to that. The California Air Resources Board system is very sophisticated in California because what they realized is that if they can regulate main sectors of industry and have a trading mechanism, the trading mechanism allows the development of voluntary carbon reduction protocols, so a very good example is the bio-digester protocol for manure, for processing of manure [whether for a] meat thing, or the rice paddy cultivation. So ARB has realized that by having the market aspect develop the protocol to create these voluntary credits that's voluntary bio such as Microsoft Bi(?) basically tees up a whole new system and a sector that can eventually be considered perhaps under the caps, MS5(?) bio-digester is one of the sectors ARB is recognizing, or considering. So when you have a dividend and you're not supporting the development of new sectors that can help accelerate the attainment of the cost, and I understand that receiving a dividend check is wonderful, but if it is not accelerating the attainment there is a problem. And I think what California has done is very clever in teeing up the voluntary sectors.

Rep Johnson – You mentioned California GDP and the economic indicators seem to be positive since you've employed the carbon tax. How can you tell whether it's due to that or...Do you have any factors or economic control built in to determine whether California's economy might have grown even better without it? Do you have filters or indicators built into your economic model?

Mr. Rodriguez – Well we are looking at the economics, but I think one of the other speakers here talked at the job growth in California and how that job growth really does seem to be tied to a couple of factors that are related to this program at least. They're created in the renewable energy sector and certainly that's one of the ways to reduce emissions. There are jobs that we are seeing in the construction industry in the weatherization that we are working on. And then there are the jobs that are being created in the clean technology sector and the investment that we are tracking in California. California, as you likely know, is a magnet for joint venture capital. And we think that is related to these programs through the sense that we have them in these programs. Now we will continue to assess it and I don't want to make any false claims, if we can't justify them. But it is one of the things we want to look at. We are interested, just as other governments are, in having a strong economy and so we need to know what is creating these additional jobs. But we see that relationship between the program and the jobs that are being created.

Rep Johnson – You mention there has been about 1.6 billion in revenue that's come in I guess as a result of the trading, etc. What conversations have you had in California about putting money into R&D? You have some amazing Universities down there that do some great research and if you were truly serious about making a global impact, wouldn't it be better to put a significant amount of this money into

investing in technologies IE such as Daimler's done with a new engine for their long haul trucks. It's doubling the MPG and so forth. Technologies that we could develop here in the States and export out to other parts of the regions where we'd really have an impact on carbon output in the developing nations, in the developing world.

Mr. Rodriguez – Our energy commission, the chair of our energy commission has identified certain research areas that we should be looking at. Additionally I'm the chair of the climate action team which consists of really all the government entities in California that touch some piece of the climate puzzle and we have a research plan that we have been developing in California to identify those areas where we should be investing in more research. Now, what we want to do, particularly right now in the formative stages in the Cap and Trade program is make sure that we are really getting reductions for our investment, and so we really haven't been putting money from the Cap and Trade program into research so much because we know there is an awful lot of what we can do with that money right now that will lead to more immediate reductions. But, I agree with you that research, long term research looking at various ways to continue to reduce greenhouse gas emissions and change our energy base is something that we need to pay attention to. And we've been working on identifying those areas where we need to do additional research.

Rep Boone – And we are going to be having Minister (David) Heurtel (from Quebec) here I believe on the 30th, so they will be able to explain and we can ask a few more questions again as we think of them. (Here a link to video of Heurtel: [Québec in action in the Fight against Climate Change – Message from the minister of Sustainable development, Environment and the Fight against Climate Change, David Heurtel](#)) I'm interested in that. I've been communicating with Heurtel (?) for some time now and asked him if he would be interested in coming up and he's the one who offered up the Minister so that will be good for us to hear about the rest of what you are doing there.

Mr. Rodriguez - We have very good relations with Quebec and I have made many appearances with Minister Heurtel through the years so I feel you will have a very good session.

Chair Vega Pederson – For scheduling reasons, he couldn't join us today by phone, but I'm looking forward to having him. Thank you all very much for your time. I think we could all spend like a couple of weeks talking with you all on these very interesting issues. Thanks so much for taking time today.

Mr. Rodriguez – Thanks so much for the opportunity and I've left, they're not sales brochures, they're just brochures. Thank you.