MEETING
STATE OF CALIFORNIA
AIR RESOURCES BOARD

JOE SERNA, JR. BUILDING
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
BYRON SHER AUDITORIUM, SECOND FLOOR
1001 I STREET
SACRAMENTO, CALIFORNIA

THURSDAY, MARCH 25, 2010
9:00 A.M.

TIFFANY C. KRAFT, CSR, RPR
CERTIFIED SHORTHAND REPORTER
LICENSE NUMBER 12277
APPEARANCES

BOARD MEMBERS

Ms. Mary Nichols, Chairperson

Dr. John R. Balmes

Ms. Sandra Berg

Ms. Doreene D'Adamo

Mrs. Barbara Riordan

Mr. Ron Roberts

Dr. Daniel Sperling

Dr. John Telles

Mr. Ken Yeager

STAFF

Mr. James Goldstene, Executive Officer

Ms. La Ronda Bowen, Ombudsman

Mr. Tom Cackette, Chief Deputy Executive Officer

Mr. Bob Fletcher, Deputy Executive Officer

Ms. Ellen Peter, Chief Counsel

Ms. Lynn Terry, Deputy Executive Officer

Ms. Lori Andreoni, Board Clerk

Ms. Karen Buckley, Manager, Goods Movement Strategies Section, Planning and Technical Support Division

Mr. David Kennedy, Staff, Program Development Section, Office of Climate Change
APPEARANCES CONTINUED

STAFF

Ms. Cynthia Marvin, Assistant Division Chief, PTSD

Mr. Scott Rowland, Chief, On-Road Controls Branch, MSCD

Mr. Doung Trinh, Air Pollution Specialist, Carl Moyer Off-Road Section, Mobile Sources Control Division

ALSO PRESENT

Mr. Rafael Aguilera, Climate Protection Campaign

Mr. David Arrieta, WSRL

Ms. Kate Beardsley, PG&E

Mr. Omar Benjamin, Port of Oakland

Ms. Susie Berlin, Northern California Power Agency

Mr. Paul Bernstein, Charles River Associates

Mr. Lakhbir Bhambra, NCPRTA

Mr. Louis Blumberg, The Nature Conservancy

Mr. James Brady

Mr. Todd Campbell, Clean Energy

Mr. Tim Carmichael, California Natural Gas Vehicle Coalition

Ms. Strela Cervas, California Environmental Justice Alliance

Ms. Brenda Coleman, California Chamber of Commerce

Mr. Brian Cragg, Goodin, MacBride, Squeri, Day & Lamprey, LLP

Mr. Ivinder Dhanda, NCPRTA
APPEARANCES CONTINUED

ALSO PRESENT

Ms. Kristin Eberhard, NRDC
Mr. Sean Edgar, Clean Fleets Coalition
Mr. Randal Friedman, U.S. Navy
Professor Larry Goulder, Stanford University
Mr. Frank Harris, Southern California Edison
Ms. Bonnie Holmes-Gen, American Lung Association
Mr. Mike Jacob, Pacific Merchant Shipping Association
Mr. Ed Juarez, NCPRTA
Ms. Barbara Lee, NSCAPCD
Mr. Steven Levy
Mr. Edwin Lombard, California Black Chamber
Mr. Mark Loutzenhiser, Sacramento Air Quality District
Mr. Bob Lucas, CCEEB
Mr. Bill Magavern, Sierra Club California
Mr. Nile Malloy, Communities for a Better Environment
Mr. Rick McVaigh, San Joaquin Valley Air Pollution Control Officer
Mr. Fred Minassian, South Coast AQMD
Mr. Ralph Moran, Sempra Energy
Mr. Torm Nompraseurt, Asian Pacific Environmental Network
Ms. Sofia Parino, CRPE
Mr. Norm Pedersen, South Coast Public Power Authority
Mr. Brad Poiriez, Imperial County ACPD
Mr. Shankar Prasad, Coalition for Clean Air
APPEARANCES CONTINUED

ALSO PRESENT

Ms. Betsy Reifsnider, Catholic Charities

Mr. Jim Rothstein

Mr. Mike Sandler, Climate Protection Campaign

Mr. Tim Schott, California Association of Port Authorities

Mr. Malak Seku-Amen, CA NCAACP

Ms. Sahar Shirazi, Ella Baker Center

Mr. Richard Sinkoff, Port of Oakland

Mr. Joseph Steinberger, Bay Area Air Quality Management District

Ms. Mari Rose Taruc, Asian Pacific Environmental Network

Mr. Vien Truong, Green for All

Mr. Tim Tutt – SMUD

Dr. Barry Wallerstein, SCAQMD
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CHAIRPERSON NICHOLS: The March 25th public meeting of the Air Resources Board will come to order. And we will begin before we take the roll call with the Pledge of Allegiance to the flag.

(Thereupon the Pledge of Allegiance was recited in unison.)

CHAIRPERSON NICHOLS: Thank you. And welcome, everybody.

We will now call the roll.

BOARD CLERK ANDREONI: Dr. Balmes?
BOARD MEMBER BALMES: Here.

BOARD CLERK ANDREONI: Ms. Berg?
BOARD MEMBER BERG: Here.

BOARD CLERK ANDREONI: Ms. D'Adamo?
BOARD MEMBER D'ADAMO: Here.

BOARD CLERK ANDREONI: Ms. Kennard?
Mayor Loveridge?

Mrs. Riordan?

BOARD MEMBER RIORTRAN: Here.

BOARD CLERK ANDREONI: Supervisor Roberts?
BOARD MEMBER ROBERTS: Here.

BOARD CLERK ANDREONI: Professor Sperling?
BOARD MEMBER SPERLING: Here.

BOARD CLERK ANDREONI: Dr. Telles?
Supervisor Yeager?

BOARD MEMBER YEAGER: Here.

BOARD CLERK ANDREONI: Chairman Nichols?

CHAIRPERSON NICHOLS: Here.

BOARD CLERK ANDREONI: Madam Chair, we have a quorum.

CHAIRPERSON NICHOLS: Thank you.

I need to make a few remarks before we get started.

First of all, just to make sure everybody is aware that we have made a change in the order of the agenda today. Agenda Item 10-3-7, which is the report of the Economic and Allocation Advisory Committee, will be heard before Item 10-3-6, the economic analysis update.

I'm also required to remind you that we need to pay attention to the emergency exits that are at the rear of the room. In the event of a fire alarm, we're required to evacuate this room through those exit doors and go down the stairs and out of the building. When the all-clear signal is given, we will return to the hearing room and resume the hearing.

Anyone who wishes to testify on any Board Item should sign up with the clerk of the Board. And we appreciate it, but it's not required, that you put the name on the card.
Also, we generally impose a three-minute time limit on all speakers. And we would appreciate it if you would state your name when you come up to the podium and actually speak. And we also appreciate it if you put your testimony in your own words rather than reading it. It helps to get us straight to the point and uses the time more effectively. We don't need written testimony to be read, because it's automatically entered into the record.

With that, we'd like to begin with our first item, which is a consent item, with a research proposal.

And I'd like to ask the Board members if there is any -- well, first of all, ask if anyone signed up to testify on this item on the research proposal. Okay.

Are there any Board members that would like to see this item removed from consent and opened up for discussion?

Seeing none --

BOARD MEMBER RIORDAN: Move staff recommendation.

BOARD MEMBER D'ADAMO: Second.

CHAIRPERSON NICHOLS: All in favor, say aye.

(Ayes.)

CHAIRPERSON NICHOLS: Thank you.

I'd just note this is something that was actually approved -- this particular proposal was approved in concept as part of the annual research plan. So just for
those in the audience who may not be following it, it's intended to support how the development of cost effective strategies that will support voluntary efforts for mitigating climate change through reduced consumption of residential energy. This is a very timely and useful proposal.

BOARD MEMBER SPERLING: Chairman Nichols.

Just for the record, I recused myself from that vote because of U.C. Davis.

CHAIRPERSON NICHOLS: Please note that Dr. Sperling did not vote on that item.

The next item on the consent calendar is Agenda Item 10-3-2, proposed amendments to the area designation criteria and the area designation for state ambient air quality standards.

Clerk, has anyone signed up to testify on this item?

Clerk, do we have anybody who's asked to testify on this item?

BOARD CLERK ANDREONI: No.

CHAIRPERSON NICHOLS: Are there any Board members who would like to remove this item from consent? Seeing none, we will then ask if there's any ex parte communications on this item.

Seeing none, we have before you Resolution 10-17
with the staff recommendations on the designations.

May I have a vote?

BOARD MEMBER BERG: So moved.

BOARD MEMBER RIORDAN: Second.

CHAIRPERSON NICHOLS: All in favor, please say aye.

(Ayes.)

CHAIRPERSON NICHOLS: Thank you.

We're new to this process, so sorry if it seems stumbling.

We have another consent calendar item. This is to consider approval of South Coast air basin PM10 redesignation request along with a maintenance plan and a transportation conformity budget.

And again I would like to ask the clerk if we have any sign-ups to speak.

None. Okay.

Any Board members who would like to remove this item from the consent calendar?

All right. In that case, we will close the record and ask for a motion on Resolution 10-21.

BOARD MEMBER BERG: So moved.

BOARD MEMBER RIORDAN: Second.

CHAIRPERSON NICHOLS: All in favor, please say aye.
(Ayes.)

CHAIRPERSON NICHOLS: Any opposed?

Carries.

All right. Now we move on to Agenda Item 10-3-3. And I want to call on Board Member Sandra Berg to make some opening remarks before we move into the staff discussion here. This is the item relating to incentive programs, and Ms. Berg has chaired our Incentives Advisory Group, spent many hours at staff workshops, and held many constructive meetings with stakeholders. I think they've developed some real solutions. And I want to thank her in advance for all of her good work here.

BOARD MEMBER BERG: Thank you, Chairman Nichols.

I've been asked to lay the foundation for the staff report on the Carl Moyer and the 1B guideline changes.

We all know how the incentive funding has been very important towards meeting our air quality goals and guidelines. But there's no question that these programs have provided two major, unique opportunities towards our goal of clean air. The first has provided a partnership opportunity with industry to reduce emissions early. But second and as important, it has also proposed and supported clean technology to the marketplace early.

In laying the foundation for our discussion
today, I'm pleased to do that in the context of the
Incentive Funding Advisory Group. You may notice a name
change from the Carl Moyer Advisory Group, which in and of
itself acknowledges the changing landscape of our
incentive program to programs.

By way of background, two years ago, Chairman
Nichols revitalized the Carl Moyer Advisory Group, which
had successfully tackled guideline changes over the years
and to meet our last guideline changes. One of the
outcomes of those two meetings was identifying a myriad of
opportunities and challenges administering several
incentive programs, and those challenges applied to all
stakeholders. It was a strong consensus of our advisory
group to continue our meetings and tackle these challenges
in order to maximize the opportunities to achieve maximum
surplus emissions for our dollars spent.

It might be of interest that the Incentive
Funding Advisory Group consists of all stakeholders: ARB
staff, district, CAPCOA, industry administrators, and
industry user groups, as well as community environmental
and our health advocates.

Our meetings are very well attended. We have an
average of 40 to 50 people who commit three to four hours
to each meeting.

Understanding that the incentive programs will
meet increasing demand over the next few years, however, a
larger group of users will come under regulation and no
longer be eligible for the funding, as our challenge
becomes multi-faceted how to reach out to the smaller
users who traditionally have not taken advantage of these
funding opportunities. And equally important is what do
our funding opportunities look like in the future? Couple
these challenges with the ever-increasing squeeze on
resources like time and money, it becomes more imperative
to streamline our administrative activities while
maintaining transparency and integrity of the programs.

As Barry Wallerstein reminds us during our
meetings, we are now managing a portfolio of programs, not
just one program. And our Committee has determined that
our goals need to be -- we need to be seamless on the
front end, so matter how many programs we have coordinated
on the back.

To that end, CAPCOA and ARB organized a one-day
retreat in January of this year. We focused on three
areas: Improving agency administration; second, project
specification issues; and the third issue was improving
end user experience. At the end of the day, we have, as
you can imagine, very dynamic discussions, but we left
with a two-page follow-up list.

This meeting was followed up by our Incentive
Advisory Group meeting on March 10th. I'm pleased to say that after a four-hour meeting, also bringing that group up to speed with what had transpired at the one-day retreat and going over the guidelines, that the group has the consensus that we are generally supporting the guidelines which will be presented by staff today, and also that there is a caveat with the NGOs having expressed concerned over the relaxation of the two-year California registration period for the Prop 1B. And I know we'll have some further discussion on that.

We'll hear that both in testimony and staff's input. As I turn the discussion over to staff, there's no question that the incentive programs have been a cornerstone for surplus emissions and benefits to our air quality.

That said, we have quite a lot of challenges still in front of us. And at the end of the meeting, I polled all of our group to make sure that this commitment of time and resources was still obtaining our goal, and they felt that the process was useful.

Chairman Nichols, I'm pleased to report that the Committee would like to continue its work, and has recommitted that this Advisory Group is very important, and that we would like to continue the work that we have begun.
Thank you very much.

CHAIRPERSON NICHOLS: Thank you. That possibly falls in the category of no good deed goes unpunished. But I would very much like to thank and commend you. Every Board member of this Board puts in hours of time that represents the Board and their communities and elsewhere. And, you know, we have had really a terrific amount of volunteer, very important high level activities from our Board members. But this one has been a long process, and I think the facilitation efforts that you have put in here are particularly appreciated. So thank you on behalf of all of us.

I'd now like to turn to staff for discussion of the specific item that's before us this morning, which is the 1B Goods Movement Emission Reduction Program guidelines.

EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman Nichols.

In this update, we've taken the opportunity to recommend improvements based on program experience and current economic conditions.

The proposed update responds to the Board's direction to increase access to grant funding and financing for cleaner trucks. It would also align the Prop. 1B and Carl Moyer programs where possible.
The changes incorporate many of the specific suggestions that we've heard over the last year from local air districts, ports, truckers, railroads, and environmental advocates. The priority continues to be on reducing the health risk to communities near freight facilities by cleaning up equipment sooner than otherwise required.

Where a compliance date has passed, the program will focus on incentives for equipment that goes beyond the regulatory requirements. The update also recognizes the value of reducing greenhouse gas emissions by proposing new project choices for electronic and hybrid technologies.

I'd now like to have Ms. Karen Buckley of the Planning and Technical Support Division begin the staff presentation. Karen.

(Thereupon an overhead presentation was presented as follows.)

GOODS MOVEMENT STRATEGIES SECTION MANAGER BUCKLEY: Thank you, Mr. Goldstene. Good morning, Chairman Nichols and members of the Board.

I'm pleased to present staff's recommendations to update the Goods Movement Emission Reduction Program guidelines.
BUCKLEY: After a brief review of the existing program, I'll highlight the progress to date and then summarize the proposed changes to update the program guidelines. Then I'll discuss the key comments we've heard in response to the update, followed by a few additional program modifications we suggest, and conclude with staff's recommendations for Board action today.

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BUCKLEY: The incentives available under this program are part of the Board's initiatives to reduce the localized cancer risks around freight facilities, regional ozone, and fine particulate pollution, and greenhouse gases.

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BUCKLEY: California voters approved Proposition 1B in 2006, authorizing one billion dollars in bond funding for cleaner freight equipment to cut diesel emissions and the related health risk in communities near ports, rail yards, freeways, and distribution centers.

--o0o--

BUCKLEY: The priority trade corridors encompass the most heavily traveled regions of the state. Prop. 1B funding
is available to owners of equipment based in these regions as well as equipment based elsewhere in the state as long as the equipment operates at least 50 percent of the time within these corridors.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: The implementing statute defines the core requirements of the program. ARB must adopt guidelines for implementation and award grants to qualifying local agencies. The bonds must be used to achieve early or extra emission reductions compared to what is required by regulation or enforceable agreements.

The program typically pays one-third to one-half of the total project cost, with the remainder covered by match funds from the equipment owners, local agencies, or federal sources.

Finally, projects must compete for program funding based on emission reductions and cost effectiveness.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: Consistent with statutory requirements, the Board adopted the initial program guidelines in early 2008, and then awarded the first funds to local agencies. The air districts and seaports quickly began
But in December 2008, the Department of Finance issued a stop work order for bond-funded programs, because the State couldn't access the bond markets due to the fiscal crisis. We had to ask the local agencies to suspend implementation of all grants until the funding to support them became available. Most of the local agencies have now restarted their grants with cash from bond sales in 2009.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: As part of the program guidelines, the Board established overall funding targets for each trade corridor. The regional allocations shown here were based on equal considerations of the three factors for each corridor relative to the other corridors:

First, the population.

Second, staff's best estimate of the PM and NOx emissions expected from goods movement sources in 2010.

And third, the NOx reductions needed in the South Coast and San Joaquin Valley to meet the State Implementation Plan targets to attain the federal PM2.5 standard in 2014. Staff is not proposing any changes to these funding levels today.
BUCKLEY: The Board also established overall category funding targets. These charts illustrate that the targets essentially mirror the contributions of each category to the estimated health risk from the goods movement emissions.

--o0o--

BUCKLEY: This slide shows the existing category funding targets in dollars, including the subset of funding for drayage versus non-drayage trucks. Drayage trucks receive the highest allocation because of the health risk near ports, rail yards, and inland distribution centers as well as the accelerated cleanup required by ARB's rule for these trucks.

--o0o--

BUCKLEY: I'll briefly discuss the progress that ARB and the local agencies have made to implement the program.

--o0o--

BUCKLEY: The last three State budgets appropriated a total of $7,500,000 for the program. In 2009, ARB received enough cash to fund 250 million in existing grants. We'll be receiving additional
moneys from bond sales this month, including about 200 million for new grants.

Staff expects to solicit proposals this April from agencies and recommend 2 million in awards at the June Board meeting.

As more bond funds become available, we expect to return to the Board with additional funding recommendations.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: This chart shows how the first year funds are being spent. Over 90 percent is dedicated to cleaning up diesel trucks through retrofits that exist in trucks with PM filters or replacement of old trucks with new models.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: By the end of the year, we expect over 5,000 cleaner trucks co-funded by the program to be on the road in California. In the South Coast, more than 600 of these trucks run on natural gas. We anticipate that the first year projects for trucks, locomotives, and ships at berth will reduce over two million pounds of fine particulate matter and 40 million pounds of NOx over their lifetime.
BUCKLEY: Given their importance in this program, I'd like to focus on the drayage trucks for a moment. As a reminder, ARB's drayage truck rule has two phases. In the first phase, most trucks serving ports and intermodal rail yards must reduce PM emissions by 2010, with the second phase to cut NOx emissions by 2014.

There are over 18,000 California-based complying trucks in ARB's drayage truck registry today. The Prop. 1B program provided $125 million to help owners upgrade more than 3,200 trucks, thanks to the hard work of the Bay Area and South Coast air districts. The major ports and air districts have contributed another 100 million to increase the public subsidy for new natural gas trucks, or encourage the use of cleaner diesel trucks.

--o0o--

BUCKLEY: The proposed changes to the guidelines are part of the periodic process to update the program requirements following each appropriation of funds.

--o0o--

BUCKLEY: We started the public process in fall 2008 to begin getting suggestions on program improvements from local agencies, affected industries, and environmental and
community advocates.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: The proposed updates incorporate many of the ideas that we've developed with stakeholders to streamline and enhance the program. The updates reflect the current state fiscal policy for bond programs. This will ensure that ARB has the bond funds already on deposit before starting new grants. They also expand the choices and funding for cleaner equipment in all source categories to take advantage of technology advances. They increase truckers' access to grants and supplemental financing. They also require local agencies to offer all equipment options within the funding categories. Finally, the proposed updates include reallocation of some drayage truck funds.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: The original category funding target of 400 million for drayage trucks was based on retrofitting or replacing trucks to reduce PM by the 2010 deadline in the drayage truck rule. We've spent 125 million of the allocation for this first phase. More than half of the drayage trucks will meet the 2014 requirements of the rule this year. The high
level of new trucks is largely due to gate fees on older trucks serving the port of Los Angeles and port of Long Beach. These 2008 fees transformed the industry much faster than ARB's rule or the port's own programs required.

For the few thousand drayage trucks with PM filters that will need to be upgraded again in the second phase, we recommend that the Board reserve up to 100 million for this purpose.

We also recommend that the Board reallocate 60 million of the drayage funds to ships at berth and cargo equipment projects, and the remaining 115 million to other trucks for early compliance with the statewide truck and bus rule.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: This table shows the effect of reallocating the drayage trucks funds as I just described. ARB and local agencies would administer a single pot of funds for trucks, but manage part of that pot as a priority reserve to further upgrade current drayage trucks.

The increased total of 160 million for ships at berth and cargo equipment would provide sufficient funds to cover fully half of the port's costs to bring electric infrastructure to all cargo berths that must comply with
ARB's rule. Essentially, 50 percent of the per-berth cost for 100 percent of the berth.

In contrast, the total of 475 million for non-drayage trucks would cover 50 percent of the per-truck cost for less than 10 percent of the California-based trucks.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: In this presentation, I will just characterize the project elements that are new or different from the current program.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: The proposal includes lower cost options for truckers to upgrade their vehicles through the purchase of used trucks or combined PM and NOx retrofits.

We recognize that grants are very helpful to purchase cleaner equipment, but many independents and small truck fleets have difficulty securing the financing to cover the remainder of the cost. The tighter credit standards in today's economy increase the difficulty.

In response, we recommend that Prop. 1B funds be used for truck loan subsidy and loan guarantee programs for fleets of one to 20 trucks.

We'd like to note that ARB staff expects to
submit a proposal to the Board for a Prop. 1B funding for this purpose, concurrent with the local agency proposals for the next round of funds.

The proposed changes would make additional trucks eligible to compete for program funding, including trucks and agricultural and construction fleets.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: Another way to cut the compliance cost for the statewide truck and bus rule is to allow reuse of the middle-aged trucks that would otherwise be scrapped. The middle-aged truck can be retrofit with a PM filter, and trickle down to replace an older truck that gets scrapped.

Staff proposes that the Board delegate authority to the Executive Officer to approve reuse programs that deliver an equivalent or greater air quality benefit in California and are consistent with the goals of this program.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: Currently, the program requires 100 percent California operation for old equipment. This approach provides the greatest certainty of air quality benefits within the four trade corridors as required by the implementing statute.
Some California-based fleets make short trips to major warehouse and distribution centers just across the border into Nevada, Arizona, and Mexico, as shown by the green dots on this slide.

The proposal would allow local agencies the ability to offer truckers a choice: Full funding for 100 percent California operation, or lower funding for 90 percent California operation if the truck is equipped with a global positioning system.

GOODS MOVEMENT STRATEGIES SECTION MANAGER BUCKLEY: These projects would help support the Board's direction to reduce locomotive emissions and health risk from the rail yard operations.

ARB staff is proposing a greater share of program funding for early introduction of technology, meeting the stringent Tier 4 emission standards.

The update to the guidelines would also add new options to repower a helper or hauler locomotive, and install locomotive emission capture and control system, otherwise known as the hood.

GOODS MOVEMENT STRATEGIES SECTION MANAGER BUCKLEY: The proposal includes several changes to this category in response to requests from ports and shippers.
I've already described staff's recommendation to raise the total funding for this category to $160 million. Based on plans submitted by terminal operators, grid-based shore power is the technology of choice to comply with the ARB's rule.

Additional changes for ships at berth include increasing the maximum funding per berth from 2.5 million up to 3.5 million, cutting the project life in half from 20 years to 10 years, and establishing lower operating levels for alternative technologies at the smaller ports.

For cargo equipment used at ports or rail yards, we propose to replace existing project options with two new options to electrify large gantry cranes and yard trucks.

GOODS MOVEMENT STRATEGIES SECTION MANAGER BUCKLEY: For harbor craft, we recommend adding funding for hydride power systems that reduce fuel consumption, greenhouse gases, and other air pollutants.

This completes the summary of the proposed changes for equipment projects.

GOODS MOVEMENT STRATEGIES SECTION MANAGER BUCKLEY: The priority for the Goods Movement Program is to reduce the localized health risk and regional pollution
from freight sources, but we also look for opportunities
to cut greenhouse gases.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: Many of the projects eligible for Prop. 1B
funding replace old diesel engines with more efficient
models or alternative power systems. An equipment owner
can receive program funds for cleaner diesel, natural gas,
electric, hybrid, or other technology that meets PM and
NOx performance standards.

ARB has also supported the ability of local
agencies to supplement the program funds with federal and
local monies to make alternative fuel choices more
attractive.

The proposal would make a minor change to the
calculation in cost effectiveness. Cost effectiveness is
based on the reductions in PM and NOx emission per state
dollar invested. Since reduction in greenhouse gases
aren't quantified as part of the benefit side of the
calculation, State incentives to cut greenhouse gases
shouldn't be included on the cost side of the calculation.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: We are recommending that the Board make projects
for trucks, locomotives, and rail yards and ships at berth
a priority for funding in the next round of awards. If
the Board identifies priorities, staff will reflect those
in the notice of funding availability that starts the
process for new local and State agency grant proposals.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: As of midday yesterday, the oral and written
comments we've received have been largely supportive of
the proposed changes to the guidelines. This slide
summarizes the requests for additional modifications.

Ports and shipping interests are asking that
Prop. 1B incentives cover 100 percent of the port's cost
to install grid-based shore power. This would be
inconsistent with state law and established policy for
incentive programs. It would also substantially erode the
health benefits from early or extra emission reductions.
The proposed update already includes numerous changes to
reduce the shore power compliance costs for sea ports.

Commenters also suggest that ARB should provide
an advantage for alternative fuel projects, in terms of
higher funding levels or funding priority. ARB staff is
updating the emission calculators for trucks to recognize
additional increments of PM and NOx reductions from
electric, hybrid, and other alternative fuel technologies,
which will increase their competitiveness for promised
Community and environmental groups have asked that ARB staff exercise strong oversight on the truck lease-to-own programs to ensure the program goals are met in practice. We will do so. For the last two issues, we are proposing additional changes to the guidelines today to accommodate these requests.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: We recommend that the program allow local agencies the discretion to offer 90 percent California operation for locomotives and harbor craft, at lower funding levels.

Staff supports further increasing the up-front administration funding that agencies receive for truck grants, given the extensive resources required to assist truckers through the process.

We have also identified some minor corrections to ensure accuracy and internal consistency within the guidelines.

GOODS MOVEMENT STRATEGIES SECTION MANAGER

BUCKLEY: Staff recommends that the Board adopt the proposed 2010 update to the Prop. 1B Goods Movement Program guidelines, including the additional changes I
just described. This action today would allow staff to
solicit agency proposals for new projects and the Board to
award the next 200 million in funds this June.

This concludes the staff presentation. Thank
you. And we'd be happy to answer any questions you may
have.

CHAIRPERSON NICHOLS: Thank you, Karen.

This is a very complicated proposal with a lot of
moving parts, and I'm sure we're going to be hearing a
mixture of different comments from those who have signed
up to testify here today.

I just want to emphasize that there is not enough
money in Prop. 1B to cover all the costs of compliance
with our clean air requirements. And it was never
intended to completely fulfill that need. But it's really
inspiring to see the impact that came about when the ports
in Los Angeles and Long Beach came up with extra money on
their own through a container fee, and added that to their
regulatory requirements and ours, and the money we were
able to put on the table. So we're now in a position to
have some access funds from the drayage trucks, which is
certainly not something we had ever expected to see.

But the demands for all the other categories that
we're talking about are huge, and the need is real. So
inevitably, I suppose there will be people disappointed on
What I think has been done here though is a really strong and creative effort to try to find ways both through changing the regulations, and through redeployment of funds in the different categories to cover more of the need as it exists right now.

The other thing I want to say is that it is important that we update these guidelines promptly, because ARB has been very aggressive and very successful in getting a share of all of the bond sales that the State has been able to do ever since this program came into existence. It's quite remarkable having had other experiences in state government to see this is obviously not just our work. We've had tremendous help and support from the local districts and from the private sector in putting together projects which could immediately put that money to work once we had it. But it is important that we keep our guidelines current.

So I just want to make sure we're all very aware of the need to quickly deploy the moneys to continue the tremendous progress that's been made in reducing health risks from freight operations.

Are there any Board member questions before we begin?

Yes.
BOARD MEMBER ROBERTS: If I could, help me understand. The port trucks versus the non-port trucks, these funds are not being completely merged. The port trucks will still have a separate fund, competing sort of with themselves as opposed to competing with all the other trucks?

ASSISTANT DIVISION CHIEF MARVIN: Supervisor Roberts, we're proposing a hybrid approach. For easier implementation, we in the local agencies would administer the funds as part of the single pot. But when drayage trucks apply for funding, they would be competitively ranked separately from the other trucks. So in a sense, it's two subsets of funding. And the drayage trucks would be eligible for that $100 million of extra money in that priority reserve first. If there is more drayage truck demand than that, they would need to compete with the rest of the trucks. But we think that 100 million is adequate for the second phase upgrades.

BOARD MEMBER ROBERTS: Okay. One of my concerns was, because it's very hard for them to compete openly with the others. And if your expectation -- I guess based on the first phase, 100 million should be pretty significant in terms of being able to handle this. Okay. That was my concern.

Let me ask one other thing. We're not covering
the retrofits and repowers. We're proposing ten percent travel outside of California, while we're reducing the grant amounts for those by $10,000? We're not allowing retrofits and repowers in that category?

ASSISTANT DIVISION CHIEF MARVIN: What we're suggesting is that, yes, if the local agencies want to offer the options for some travel outside of California and the truck owner chooses to do that, that there would be $10,000 less in the grant.

BOARD MEMBER ROBERTS: Why are we reducing it by $10,000? With the Carl Moyer money, we allowed significant travel outside of the state. There's no penalty or GPS or anything required. I'm just wondering why we're taking a position in one program and a completely different position in another.

ASSISTANT DIVISION CHIEF MARVIN: The baseline right now in the Prop. 1B program is 100 percent California operation. So the funding levels that have been established expect --

BOARD MEMBER ROBERTS: I'm not taking issue with the ten percent. I think that's a good idea, because we do have, in a lot of instances, trucks that are just running across the state border or international border and back, as you recognize. But the $10,000 reduction I guess is what I'm questioning. It's a pretty significant
reduction.

ASSISTANT DIVISION CHIEF MARVIN: What we looked at was which trucks were likely to take advantage of that opportunity to have travel outside the state. We thought those were most likely to be new truck purchases that would be eligible for a $60,000 grant. So it's roughly a $10,000 reduction we're proposing off of the 60,000.

BOARD MEMBER ROBERTS: Okay. We can come back to this. I want to make sure I understand it, because I'm not sure -- I think this is something that came up after your workshop, because we were just finding out about it. And let me think about it. I'm concerned about that. And it seems to be pretty inconsistent with what we've done in other programs.

CHAIRPERSON NICHOLS: Well, clearly those who live in or represent areas where there is a lot of outside of California travel should be thinking about whether this will really adequately deal with the needs they see.

BOARD MEMBER ROBERTS: Well, this is ten percent, which is minimal in the fact it's going to be outside of California. A lot of times it isn't very far outside of California. If I remember, Carl Moyer uses up to 75 percent out-of-state travel.

CHAIRPERSON NICHOLS: Ms. D'Adamo.

BOARD MEMBER D'ADAMO: I just have a question
about surplus emissions, slide 14, estimated emission reductions. How much of those are surplus emissions?

ASSISTANT DIVISION CHIEF MARVIN: Would you call up slide 14?

These emissions reductions are over the whole life of the project, as I believe Ms. D'Adamo's aware. That project life sometimes extends beyond the time period when the regulation requires those actions to be taken. Most of the projects require both early reductions and extra reductions. So by and large, the component of these reductions that are surplus are anywhere from roughly one-half to two-thirds of the total. When all of the projects are into our database and have been funded, we will go back and do an analysis for SIP purposes, and look at exactly how much of that is surplus.

BOARD MEMBER D'ADAMO: Do you have a sense for emission reduction by region? You know, if you go back and look at the slide of percentage by region -- I think it's one of the first ones you have -- are the emission reduction commensurate with the percentages? Or are certain regions getting a bigger bang for the buck?

ASSISTANT DIVISION CHIEF MARVIN: What I can tell you is in the staff report, in the very back there is a progress report that we submitted to the Department of Finance that shows for each one of the grants what
reductions are expected. And we have totals by corridor. For example, for the Central Valley, we're expecting 968,000 pounds of PM reductions and over 13 million pounds of NOx reductions.

CHAIRPERSON NICHOLS: But you didn't attempt to do a percentage calculation?

ASSISTANT DIVISION CHIEF MARVIN: No, we have not done that, but we could certainly do that.

BOARD MEMBER D'ADAMO: Just curious. Thanks.

CHAIRPERSON NICHOLS: Yes, Dr. Telles. Welcome.

BOARD MEMBER TELLES: In regards to Mary's initial comments that we have a long ways to go, slide 16, I'm just wondering how far we are from the target, in the sense that there's 18,000 trucks that are in compliance in drayage trucks and there's 3,000 of which were updated by 1B. How many drayage trucks are there out there that still need some work? And where are they located? What region?

ASSISTANT DIVISION CHIEF MARVIN: Because the Air Resources Board rule took effect on January 1st, all of the trucks that are continuing to serve the ports and the rail yards must either be in compliance -- in other words, they've already made their upgrades -- or operating under a temporary extension that ARB provided to allow time for the grant moneys and the backups with the manufacturers to
deliver retrofits. So those temporary extensions expire at the end of April. So by May 1st, the trucks will be complying. What we're seeing is that there are more than enough complying trucks available to carry the cargo to and from the port.

CHAIRPERSON NICHOLS: Okay. I think we should probably hear from the witnesses, unless there are further Board member comments.

Our first witness is Rick McVaigh from the San Joaquin Valley, followed by Dr. Wallerstein and Joseph Steinberger.

Mr. MC VAIGH: I'm Rick McVaigh, Deputy Air Pollution Control Officer for the San Joaquin Valley Air Pollution Control District.

I'd like to start off by thanking ARB staff for working closely with us and the other air districts in developing the guideline updates that were presented today.

In spite of some of the unfortunate delays in funding, we're still looking forward to great success in the Prop. 1B program as was presented earlier. For our first year allocation, we had a $38 million allocation for the San Joaquin Valley, and we actually received 2400 applications for 135 million. So there's great demand for these incentive funds. We were able to identify about 800
very cost-effective projects to receive the initial funding. The projects are about three to five times more cost effective than the third and fourth generations of stationary source controls that we're imposing under our SIP. So these are very cost-effective programs.

Our projections work for the San Joaquin Valley for 5,000 tons of NOx reductions and 360 tons of lifetime diesel particulate matter reductions from the first year funding alone. So we see this as a great success.

Wanted to talk a little bit about the allocations between the corridors. A couple years ago during discussions prior to the first year allocations, we'd recommended that SIP inventories actually be used in the allocations. And the reason we wanted to use SIP inventory is we thought that was most reflective of the air quality challenges in the region. Instead, ARB chose another option, which was to use the most up-to-date goods movement inventories at this time. And those most up-to-date inventories were the ones that were being developed in conjunction with the on-road truck and bus rule.

We understand that since that time your staff has developed even newer and more updated emission inventory numbers for goods movement based on 2007 truck emissions in each of the four corridors, and those numbers are
currently being used in your reevaluation of the truck rule that your Board began back in December. And we'd also like to see those considered in future allocations for Prop. 1B.

In order to kind of work towards that, we'd like to request that you ask your staff to facilitate a cooperative discussion between the staffs of the affected district, which would mostly be us and South Coast, regarding the use of the newest inventory data. And then report back to your Board within a couple of months with a report and a recommended direction on the use of the newer more accurate data.

But overall we look forward to continuing to partner with you on this great program and thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Dr. Wallerstein.

MR. WALLERSTEIN: Good morning, Chairman Nichols, members of the Board.

Barry Wallerstein, Executive Officer of the South Coast AQMD.

I'm here in support of the staff proposal this morning and to frankly shower some praise on Board Member Berg. She did a really marvelous job in helping bridge a consensus on the staff proposal. And Cynthia Marvin of
your staff, the manager who has been working on this project, has really worked hard in recent months to help us make this one really shining star among many state programs, especially related to bonds. We're delivering product as the public expected when they voted in favor of this.

The issue was just brought up about the allocation formula. And I had hoped to stop my comments frankly where I just finished, but I have to address this issue of allocation. When we came before you initially, we had an alternative method that was based on populational exposure. People matter. Proximity matters. The bulk of the populational exposure in the state as this Board knows is in South Coast. We regret that we have the highest ozone levels. We regret we have the highest particulate level. We regret we have the highest air toxic levels in the state. We regret that four of the five highest risk rail yards are in South Coast.

Having said that, we're working with your allocation formula. We're not here to ask for a change. But we would object to a lowering of the amount of allocation that our region receives.

And so we would ask that you proceed with the amendments that are before you. We want to assure you that we are working overtime to put that money to use.
There is pent up demand in South Coast for the funds, and we will do our best to continue the delivery that you expect on this program.

Lastly, if for any reason you were to consider a change to the allocation formula, we would request that go through an appropriate public process, including workshop, public hearing noticing, and a CEQA document.

Finally, because we knew this issue of allocation might come up today, yesterday we reached out to some of the legislators from our region as well as some of the members of Congress. You've received two letters, and again we did this in less than 24 hours. The first one is on letterhead from state Senator Lowenthal, and the second one was circulated yesterday by Grace Napolitano, a Congresswoman from our region. We would just ask you to leave status quo on the allocation.

CHAIRPERSON NICHOLS: I don't normally interrupt the flow of testimony, but since this has been teed up as a South Coast versus San Joaquin issue, I just want to comment that, you know, when we first began working on this and adopted a formula that we did, every area of the state had a legitimate reason to think they had not received as much of a share as they should have. At the end of the day, we adopted a formula which I know did not make anybody completely happy, as I indicated.
I also am aware that the San Joaquin has a historic belief that they have been treated less fairly than others, and this seems to have continued. This issue about the inventory as a basis for redoing the allocation formula, to me, is not a very promising approach for the simple reason that inventories change constantly. If you want to do the SIP inventory versus the inventories we use for other kinds of planning purposes, we would be at this in a never-ending fashion. And the amount of shift that would be likely to occur is not very great.

Having said that, there is also, clearly beyond just people's feeling about these matters, there is a reality that the San Joaquin Valley has I think a unique hardship in the sense of having a larger number of small and lower income operators than other areas do, although this whole industry is characterized but very widespread, as we've learned over the last few years.

And, you know, I think that it might be appropriate for there to be conversations between these two districts about whether there's any possibility of developing some way of funding projects that would be of greater benefit to the San Joaquin, which is a transit corridor as we know and receives the benefits but also the burdens of goods movement.

And, you know, my preference would be to see this
resolved outside of a legal regulatory process, and if at all possible that there should be some -- develop some kind of a proposal between the two districts that would be mutually agreeable. Do you think there is a possibility that that could happen?

MR. WALLERSTEIN: Chairman Nichols, if I could, I would like to suggest an alternative, and that is that the two air districts work together to increase the amount of funding that comes to the state of California.

If we look at the federal DERA money, Diesel Emission Reduction Program, we each get earmarks from Washington, D.C., recognizing the significance of our air quality problems in the Valley and in South Coast. My staff was in D.C. last week. San Joaquin staff is in D.C. this week. If we're going to really put our heads together and try and come up with solutions, we ought to be seeking additional funding rather than fighting over the existing funding.

CHAIRPERSON NICHOLS: Well, that's a good suggestion.

Other commenters wish to weigh in?

BOARD MEMBER TELLES: This is kind of about health to me, and the inventories change, I know. But also what changes is what happens in the community, and I would say that the San Joaquin Valley's health has
deteriorated at a rapid rate over the last two years, because of the economic downturn.

We have a population which is much more vulnerable to air pollution than probably any place in the state. If you look at any state health's statistics, we have more diabetics, more hypertensive, more people with coronary disease, more people with COPD per population base than any place in the state.

And if we're going to play by the rules of having an inventory deciding where the funding goes, to me, it seems like we play by the rules all the time. And if the inventory changes, that's basically a de facto change of the rules, to me.

The inventory has changed a couple times. Initially, it was the SIP and then the truck rule. Now there is a new inventory being considered for something else. I think that inventory should be used because that was the initial plan. And it should be used by, also I think, whoever it does benefit the most, fine. Let it be that way. But if ARB is coming up with a new inventory, that's the inventory that should be used.

MR. WALLERSTEIN: Chairman Nichols, would you allow me to comment?

CHAIRPERSON NICHOLS: Yes.

MR. WALLERSTEIN: Dr. Telles, when the formula
came before this Board, we ultimately looked at the bottom line as to what percentage would come to our region. As I mentioned originally, we had an alternative formula we thought was much more appropriate that frankly would have provided a higher percentage to South Coast. But in the spirit of cooperation, we agreed to the bottom line number. So I don't know about the new truck inventory, and I don't know which way the numbers would go, but we think the current allocations as I said are appropriate.

I again want to point out that -- and I'm not going to argue with the physician about percentage statistics per population base. But I believe if you look at the total number of individuals, because our population basis is three or four times higher, even if our incident rate is a little bit lower, the overall number of individuals suffering respiratory illness in South Coast due to air pollution is much greater than any place else simply due to the population base, and as I mentioned initially, proximity.

CHAIRPERSON NICHOLS: Ms. D'Adamo.

BOARD MEMBER D'ADAMO: I have a couple of comments. I think that this situation is not all that different to the situation we faced several years ago when I first came on the Board. Quite a bit of conflict between the Bay Area and the San Joaquin Valley.
And initially, I tried to make a difference when the reports came before us periodically about transported pollutants and the assignment of blame so to speak. And with the help of Lynn Terry, she was able to convince me that we could probably actually go a lot further if we could work cooperatively -- if the Valley could work cooperatively with the Bay Area and Sacramento. And we formed a Committee -- I can't remember the name of the Committee. I think it was North State Coordinating Committee.

But the three districts got together and over a period of time I think that we really did make a difference. We were able to compare regulations between the two districts and the districts work much better now. And I think that we can do something similar in this context.

I'm not interested in reopening it. I think that the vote was pretty clear that the Valley does not have the votes to make a change. But the issues remain. I think that the Chairman did a good job of outlining some of the ongoing concerns that the Valley has. Unemployment is high. The recession has hit the Valley more so than the rest of the state. And I would welcome the opportunity to have the district sit down.

I'd be willing to participate, as well perhaps Mayor
Loveridge would be willing to participate, and see what we can do to find some creative solutions, so that maybe the money can work best in both districts looking for additional projects that might provide benefits to both corridors.

So I think that would be a better approach than reopening the guidelines and going through the percentages, because in the end, I think that it forces extreme positions on both sides and may not accomplish anything. May not change anything in the end anyway.

So my question to you is, would you and your staff be willing to sit down and go through a process—

MR. WALLERSTEIN: As an Executive Officer, am I going to come before the Air Board and say we wouldn't have a meeting and sit down and work together? Of course, we'll sit down.

And we've actually had one meeting previously between our boards. We would welcome another meeting. I think again there are broad issues where we should be working better together. And I'd like to see us get past this one.

BOARD MEMBER D'ADAMO: And I would concur that getting past this one I think the result would be that the districts would work together. Why have one district go to Washington one week and the next district the next
week. Also opportunities for pulling together NGOs and
the private sector into a delegation that would seek
additional funds. I think that that would be the ultimate
goal, not just working out some changes with these
projects or how the formulas are allocated.

CHAIRPERSON NICHOLS: Your suggestion on that
point is well taken.

Ms. Riordan.

BOARD MEMBER RIORDAN: Just to add onto that, I
think you'll do very well at having some discussions.
But it did occur to me while you were all talking
that there are trucks that must go between the two
districts. And those trucks, I don't know where the
ownership is of the trucks that move up and down,
particularly the five. But there might be some
opportunities to work together on those kinds of trucks
and share in helping them to get some sort of improvement,
because they're going to help both districts. Thank you.

CHAIRPERSON NICHOLS: Other comments?

BOARD MEMBER ROBERTS: I just want to clarify. I
thought I heard that if we were to make any changes you
were making, those should go back to the public workshop?

MR. WALLERSTEIN: Yes. If there was to be any
changes in the allocation formula, since this was not
really brought up in the current process, it should go
through an appropriate public process.

BOARD MEMBER ROBERTS: The $10,000 reduction has not been aired in the workshop.

CHAIRPERSON NICHOLS: No. Haven't heard anybody challenging that procedural issue here. I think the problem with any change in the allocation formula --

BOARD MEMBER ROBERTS: I wasn't suggesting that. I understand -- I'm not questioning the formula.

CHAIRPERSON NICHOLS: It's a good observation. BOARD MEMBER ROBERTS: I'm looking for equity. That's all.

CHAIRPERSON NICHOLS: Other comments here? Yes. Dr. Telles.

BOARD MEMBER TELLES: Mrs. Riordan made a very pertinent comment and suggestion to maximize efforts in trucks that use both corridors. I don't know if that's been done or coordinated. Maybe our Air Pollution Control District office can tell us that.

I do know there is about 80,000 trucks that travel through the San Joaquin Valley that just use it as a conduit, and we don't get any economic benefit from those trucks. But we certainly do get their air pollution. Do you know if there is any coordinated effort going on right now?

CHAIRPERSON NICHOLS: I might ask Ms. Marvin to
Having been through several rounds of this myself and many requests in between for extra effort, one of the things that I think I've learned is that the larger trucking companies and the firms that generally travel the longest distances also tend to be the ones that have the newest trucks. But maybe you can add a little bit to that.

ASSISTANT DIVISION CHIEF MARVIN: Certainly.

This issue was raised by Ms. D'Adamo back in February 2008 when the Board originally adopted the guidelines. We did a quick analysis of the data we have, because we anticipated the question would come up.

To say of the trucks that are being funded by agencies and the different regions, how much of the travel for those trucks happens in alternate regions. So I can give you a couple of examples.

In the Bay Area, which has spent most of the funding so far on drayage trucks, about 20 percent of the travel for the trucks that have gotten grants from the Bay Area happens within the Central Valley corridor.

Interestingly, the same thing is true for trucks that have been funded by the San Joaquin Valley District. About 80 percent of their travel is within the Central Valley corridor. About 20 percent is within the Bay Area. There's also some back and forth with the Los
Angeles area with the South Coast area. We don't have all of the data for the trucks that have been funded in the South Coast corridor, but we expect to get that within the next couple months, and we expect to look at the through traffic we were expecting from longer haul trucks funded by South Coast but that transit up and down the Valley. So there is definitely some of that going on.

And as more of the funding shifts from drayage trucks to non-drugage trucks, we expect there to be more of this longer distance travel where the trucks have to pass through the Valley in order to get from one side of the state to the other.

CHAIRPERSON NICHOLS: But those that are traveling the longest distances tend to be those that have better economic ability to adapt to the regulations that are coming along also; isn't that right? In general.

ASSISTANT DIVISION CHIEF MARVIN: Generally, yes. And we see that particularly with interstate fleets. When you're looking at the fleet within California, at least the fleets that are applying for Proposition 1B money, we're seeing a mixture of middle-aged trucks that are traveling longer distances, as well as the older trucks that are more local.

The one thing I've learned in this process is it's hard to make any generalizations that are true,
because there's really a broad mixture of different kinds of projects and trucks and companies who own them.

BOARD MEMBER RIORDAN: And Madam Chair, they may also be seasonal. I'm thinking of the Valley crops that may come down into the central market in L.A. for disbursal. And my hunch is those are older trucks.

But I know what you're talking about the big long haul trucks. I'm thinking of the shorter haul that are bringing in crops and things.

CHAIRPERSON NICHOLS: Well, we've now had a significant airing of this issue. I think we need to move on. But thank you very much. Appreciate your being here today.

BOARD MEMBER D'ADAMO: If I may, when that data comes out, I think that might be the time to get the districts together, when we have more information. And if staff could notify the districts at that point. And I would like to be notified. I don't know if Dr. Telles. Maybe Mayor Loveridge as well.

CHAIRPERSON NICHOLS: Okay. Mr. Steinberger from Bay Area.

MR. STEINBERGER: Good morning, Chairperson Nichols and members of the Board. My name is Joseph Steinberger. I'm the principle planner with the Bay Area Air Quality Management District. I've been overseeing the
goods movement program there. We are very happy to be here this morning to provide our support to the staff's proposed changes to the guidelines.

In regards to the changes, the district is very supportive of many of the changes being proposed. Among those that we strongly support are:

The merging the port drayage trucks and on-road trucks into one category;
The reduction in California truck operations to 90 percent, and we've heard that even further reductions would be appreciated, such as those for the Carl Moyer program;
The increased funding for 2010 engine model year trucks also the funding of retrofits that would decrease NOx emissions to 2007 engine model years;
The streamlining of documentation for truck post inspections and mileage determinations. We've determined that's been a very large administrative burden for us. So streamlining that would be greatly appreciated -- or will be greatly appreciated.

Availability to fund fully electric yard equipment;
Provisions allowing grantees to re-apply for I-bond funding on a prorated basis.

And finally, we strongly support the reallocation
of the $60,000,000 that could be used for cargo ships at
berth and also cargo handling equipment.

The district has been working with the Port of
Oakland very successfully in the first year of this
funding to reduce emissions surrounding the highly
impacted area around the Port of Oakland. So this would
help us continue that effort.

In regards to measures that we would like to see
possibly some changes to, we heard already this morning
that two-and-a-half of the eight that we came with have
already been addressed. So we're very happy to hear that.

The first of those was the ability to recoup our
administrative costs up front. We would like to request
100 percent. We've heard from staff that you're willing
to go 90 percent. So we're happy. If you go the other
ten percent, we would be even happier.

Also secondly is the use of AB 923 and AB 118
funds as matched, to be able to use those would be helpful
to give us the flexibility. Sometimes when the state bond
funding doesn't come through, these programs do. That
would allow us to do that.

Also to allow vouchers for grantees for trucks
and marine projects would be very helpful. Hopefully,
you'll look at that again.

Also to allow the districts to request 100
52 percent of the cost of projects upon obligation by our
Board. So once our Board-approves projects on a list,
that we could recoup 100 percent of that. Otherwise, we
go out with contracts, and it makes it very difficult for
our legal team to stand behind those if the money doesn't
come through.

Three more items.
Allow I-bond money provided to projects to be
available for loan guarantees, allow shipping lines to do
shore side or ship side shore power.

Require companies providing lease-to-own services
to be pre-approved by the Air Resources Board. That's one
we heard that they will be doing, so we are very happy
about that.

And to reduce in-state operation of harbor craft
90 percent. That's another one we heard.

So thank you very much for the opportunity to
present our comments.

CHAIRPERSON NICHOLS: Thank you.

Omar Benjamin, followed by Richard Sinkoff and
Mike Jacobs. We're moving on to the ports.

MR. BENJAMIN: Good morning, Chair Nichols and
members of the Air Resources Board.

My name is Omar Benjamin, Executive Director of
the Port of Oakland.
I want to start out by thanking you and your staff for working with us and our community and the air district, the Regional Bay Area Air Quality District, in improving our air quality. You know we passed a very strict truck ban that's been working quite nicely, and you recently helped us on the transition for truckers. So we appreciate that.

We also appreciate that, working with your staff, there has been improvement on the guidelines. But what we're here to discuss and raise is that we believe that there's still more work to be done. And we'd like your help in directing your staff to improve the flexibility. So we can submit a feasible application so we can achieve the goal that we all set out to accomplish. The goal is the same. The challenge is the game. The impact is the same.

But the ports are not all the same. Although we're a port, L.A. and Long Beach have greater resources. And so that's where the challenge is and why we're asking for flexibility in three particular areas. Please allow greater flexibility in the match. As you know, to realize shore power, it requires three basic elements: Improvement on the land side, improvement relative to the ships, and improvement on the terminal. And that involves three basic partners: The carriers, the terminal
operators, the ports working with you, and the community, et cetera. And so we feel that the investment in the work that is being done by the carriers should qualify as a credit, as a match, as an example.

The funding, it's important -- I think you've heard from our colleagues at the air district that there is a cash flow issue here. So we request that funding be made available up front as an example.

And also to achieve the goal, we're already challenged in meeting the deadline as it is, and that we hope that you look towards the flexibility of the projects that achieve the goal should qualify for funding as well.

And then lastly, in the flexibility, the description of the project description. To realize shore-side power, it's not just the work on the terminal. We talked about work on the ships. But also there is a lot of work and expense associated with bringing the power from a substation to the terminal. And depending on the Board, on the berth, and the cost and the scale, the contamination of the site, that cost could vary. So we'd ask additional flexibility of project description.

In turn, we thank you and hope you direct your staff to work with us to create more flexibility so we can submit a cost feasible application. Thank you.

CHAIRPERSON NICHOLS: Thank, sir.
Richard Sinkoff and Mike Jacobs and Tim Schott.

MR. SINKOFF: Good morning, Chairman Mary Nichols and ARB members and staff of the ARB and members of the public.

I'm Richard Sinkoff, the Port of Oakland Director of Environmental Programs and Planning.

And I'm here also to express our appreciation to the air district staff in reflecting the comments that the Port of Oakland submitted in our letters of March 5th and also March 24th. We especially appreciate the reallocation of some of the truck funds, the 60 million extra dollars to shore power, and also the reflection of the particular cost at the Port of Oakland, our at-berth costs which are different from the other ports so that we can implement feasible project.

However, we do have some general comments. As Executive Director Benjamin said, we feel that the guidelines, particularly as they define eligible cost, are simply not flexible enough. They do not reflect the investments that are being made by our private sector customers to build what is a public asset that serves public health and the public interest. So we ask you again to work very closely with us as we move forward on our shore power program.

We do intend to submit an application. And we
really believe that working closely with the air district staff we can submit a successful application that will achieve the emission reductions goals that we all aspire to and deliver emission reductions of public health to our local community.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

MR. JACOBS: Good morning, Madam Chairman and Board members.

Mike Jacob, Vice President of Pacific Merchant Shipping Association. We represent ocean carriers and marine terminal operators that operate at all of California public ports.

We're here essentially to restate what we've said in our written submission to you, which you received this morning. We've had a good working dialogue during the workshop process and over the course of the last year with staff. We appreciate many of the changes that they've made and improvements to the guidelines.

However, our main point is that you really need to look at considering the full $325 million in project costs that were submitted to you by the ports during the workshop process for funding. We have a bit -- as you've heard from both Mr. Sinkoff and Mr. Benjamin from the Port of Oakland, we have a bit of a caesar's issue here. We
take some exception to the comments made by staff that what's being asked for is 100 percent of the project costs for cold ironing. That's far from the case. The total project costs with cold ironing set by this Board and estimated by the Board is $1.8 billion. $1.8 billion to achieve the 2014 benchmarks. And that's a cost that for good or ill our industry is striving to finance in the face of losing 15 to $20 billion in 2009 alone in ocean carriage.

What we're asking you to consider is to invest public money into the public assets that then facilitate early and extra emissions beyond that 2014 baseline. So for investing public money into an asset that's managed for the benefit of the state, the ports managed infrastructure owned for the benefit of the state of California, you can receive from private industry the benefit of early and extra emissions reductions if you forward the money to the ports.

If you don't forward the money to the ports now in an amount that's significant enough for them to feel there's a commercial component to us that's successfully implementable, which means you need to provide an incentive for us to choose to provide additional emissions to you above our 2014 baseline. And essentially what you have in front of you is a deal. The deal is you can
provide the ports enough resources to come up with a way
to partner with us to provide earlier extra emission
reductions or you just get the regulatory baseline.

As regulators, I do not blame this Board and I see exactly where you're coming from with saying, "That's fine. We set a baseline. Let's let people work towards that." But administrators of the Prop. 1B funds, we feel that's unacceptable.

I'd like to summarize by saying when Prop. 1B was passed and the California ports infrastructure investment account was set up, it was set up specifically to fund projects like this. We want to see this go forward. We'd like to provide you with early and extra emissions. But it only happens if the projects are feasible, and we don't believe the projects are feasible, unless the public portion of them is actually fully funded by public dollars.

CHAIRPERSON NICHOLS: Thank you. Appreciate your comments. They're well thought through.

Mr. Schott, and then we're going to turn to Irvinder Dhanda and Lakhbir Bhambra.

MR. SCHOTT: Madam Chair and Board members, Tim Schott on behalf of the California Association of Port Authorities, which is comprised of the state's eleven commercial publicly-owned ports.
Thank you for the opportunity to speak today.

Want to also thank your staff. We've worked closely with them over the months and greatly appreciate what we consider to be improvements that have taken place to the program.

Much of what I was going to say has been said by the last two speakers. But what I would like to do is give you a tiny bit of Ports 101. I know many of you may be familiar with the California ports system. But we have a tendency in the public arena when we think of California ports to think of Los Angeles, Long Beach which are mega ports, some of the largest ports in the world, let alone the nation or California. Approximately 90 percent of the goods going into California go through L.A. and Long Beach, perhaps eight to nine percent into Oakland, and the remainder split between the eight niche ports that serve local and regional markets.

This is very important to keep in mind, because it speaks directly to available resources and feasibility of projects. What may be feasible at one port is not necessarily feasible at another port. And we want to highlight this, remind you that California's ports are public agencies holding land and trust for all of Californians for the public interest. We believe that we would see better use of some of those drayage truck funds
that are proposed to be re-allocated to other trucks stay
within port facilities to improve emission reductions in
the communities around California's ports. Thank you for
your time.

CHAIRPERSON NICHOLS: Thank you.

We're going to be moving on now to three people
who have listed themselves with NCPRTA. I don't recognize
the acronym. It's Irvinder Dhanda, Lakhbir Bhambra, and
Ed Juarez. Please come forward.

MR. DHANDA: Good morning, everybody. Thanks,
Mary Nichols and the Board, for this opportunity. I
represent Northern California Port Rail and Truckers
Association.

CHAIRPERSON NICHOLS: Thank you.

MR. DHANDA: Okay. The thing is we represent
about 1300 truck drives and owner-operators of the Port of
Oakland, and it's a nonprofit organization.

I just heard a little while ago, they said they
have enough trucks right now at the port, you know,
because it's a slow season. They do not enough trucks.
Coming in May when there's more import/export starts, we
will not have enough trucks.

And another thing is, you know, there was a lot
of drivers. They couldn't put their applications in,
because they were out of the county, they were denied, and
the funds will run out. So they didn't even take their applications. And those people are out of job right now. And, you know, it's very hard for them to support their family.

And there is a lot of money still left. That money should not go back -- like $6 million, and that should be distributed to the drivers and start taking new applications for the people who couldn't apply, they were out in the country or sick or something. Because what happened is the timing limit was very short. And they could not come to that time they were taking the applications, and time was very short. So they couldn't even apply. So we would really recommend, if you can please start opening the applications again so those truckers have the opportunity.

That's all I can say. And my partner is going to tell you. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Mr. Bhambra and Mr. Juarez.

MR. BHAMBRA: Good morning, everybody. My name is Lakhbir Bhambra, and I represent also the owner-operators they operate through the Port of Oakland and rail yards.

Mayor of Oakland has been working on behalf of this Truckers Association, and he has driven a letter
directly to Ms. Nichols, and also I wrote a letter. I hope you got it. Only two issue are in here. The Port of Oakland is telling you guys that they have enough trucks. Comes to April 30th, the extension is over. See how many people have done their retrofits. The contracts are not through yet with Bay Area Air Quality Management District. Nobody ever received a contract yet.

Your own people are approved to do the retrofit. They are declining people. The people are put ahead to do the financing. They don't want to do the financing due to there is no equity in the trucks.

Bay Area Air Quality is telling us $5,000 is enough when originally granted the $22 million come to the first phase. People received 19,000 dollar each. It's not fair giving us $5,000. We tried to get $8,000 each from the federal government. Federal government declined telling us, telling the mayor, why you need the money when there is $6 million sitting in the State funds. What emergencies is there that we should fund?

Therefore, Bay Area Air Quality telling your department take the six million back. But we are in opposition of that. And we are asking your support in that not to send that $6 million. Those people have already qualified for $5,000. They should be given that $6 million so they don't have to carry the burden of the
loan and make the payments every month. That's a request. 

And please see very carefully Mayor Dellum's 
letter and our letter. This is his city. I think he's 
the main person. He's telling the right thing to do. 

We will have better government. And we need this 
funding if can be unrestricted to replacement instead of 
doing the retrofit. Retrofit is not working. And plus we 
have to waste lot of time to do the retrofit when we can 
move onto buy the newer truck with that money by putting a 
down payment in ours. And we have the newer truck with 
less problem, then we can replace the truck when the time 
come in 2014 to replacement with 2008 truck. At that 
time, 2008 truck fully equipped will be 20 to 30,000 
range. 

Thank you very much.

CHAIRPERSON NICHOLS: Mr. Juarez.

MR. JUAREZ: Good morning, everybody. Thank you 
for giving us the opportunity to speak at this meeting. 
I'm with the NCP also. Thank you. I'm 
representing Aquatis (phonetic) Trucking. 
And I just want to follow up with what he said. 

And we have an issue with like 400 of the 660 drivers 
apply for the $5,000 funding with the Bay Area AQMD. And 
we have like 400 people. They put a thousand dollar to 
deposit in December towards the filter and a few applied
for replaced truck to get a 2006 truck. But for the lack of credit, it was denied with the replace the trucks. And now they facing the retrofits. They say a thousand dollars is not enough to order the filter. And now the vendors -- they wait to get the money to the vendors to order the filter. But Cascade Sierra wait for the Bay Area to release the $5,000 so looking they hold. So I understand those people, they put a thousand dollars, they're not going to get the extension to June.

And I just want to ask you please give us the opportunity to stay in the pipeline and get another two-month extension like the others, because we need more time. And we appreciate your consideration of this and thank you very much for your attention.

CHAIRPERSON NICHOLS: Thank you. We could stop and address this issue right now or wait until the end. I think we'll wait. This is one I would like to hear from staff on.

Todd Campbell and Randall Friedman and Shankar Prasad.

MR. CAMPBELL: Good morning, Madam Chair and members of the Board.

Todd Campbell, Policy Director for the -- oh, gosh. I almost said Clean Air. Clean Energy. That was in a former life.
I want to say that we support Prop. 1B and the intent and goals this program sets out to achieve. We think it's done a tremendous job, and we're proud that we have 600 trucks as part of the program, achieving some of the most stringent emissions standards to date by this agency and federal government, as well as reducing greenhouse gases up to 23 percent with our product. And so we're very appreciative of the efforts and hard work especially Board Member Berg has done.

But we're also very supportive of the amendments to include other state funds that advance greenhouse gas goals. As you know, Clean Energy is a strong supporter of AB 32, and we thank you for your leadership on those issues.

Some of the concerns that we do have that we'd like to raise with you deal with -- to do with the drayage to non-drayage issue. I would say Ms. Marvin had mentioned most of these ports are requiring newer trucks to enter the gates. But I would also highlight the fact that there are issues with older trucks meeting newer trucks that get in the gates, pull out the goods, and then meet them outside the gates to take those goods to other destinations.

So in some cases, the pollution issue actually has only moved about a couple 100 yards. And that is a
big problem. So we're discouraged about drayage competing
with non-drayage trucks. Because as you know, drayage
trucks don't have the miles, and they can't compete. That
is a big issue. And we want to encourage those drayage
trucks, all of them, to convert to cleaner modes of
operation.

The other issue that we're concerned about is
we're funding, in some program proposals, 2007 emission
projects as opposed to 2010 projects when we're in 2010.
And certainly we believe that your intent is to push us to
2010 and beyond emission levels for criteria air
emissions. We would have liked to have seen the
categories not ease those emission standards and continue
to propose or move forward with the toughest emission
standards, which is the 2010 emission standards. And
that's it.

We do not believe also that the use of FELs
should be allowed for compliance under 2010 emission
projects. Certainly, we had, for example, our own product
has met the 2010 certification level for three years now.
So there has been product that has been available in the
marketplace, and we should continue to support that type
of product over products that do not meet 2010 emission
levels on their own merit.

And finally, we believe it's high time to
eliminate PM retrofits from the program. We realize this probably is not a reality today. But in the future, we would argue that we should be requiring PM retrofits without 30-year bond subsidies.

Thank you.

CHAIRPERSON NICHOLS: All right. Thank you.

Randal Friedman and then Shankar Prasad and Sean Edgar.

MR. FRIEDMAN: Madam Chair, let me start with an apology for late testimony between a New York Times article on Tuesday and listening to this, I was actually here for AB 32. But I've had one of those great moments of clarity tying several issues together. And it involves irony.

And I'm here on behalf of the U.S. Navy.

To me, the irony is at a time when you have 50 percent of the ships going in and out of the ports of L.A. and Long Beach, noncomplying, and avoiding compliance with your sulfur rule and adding perhaps as much as 15 tons per day of NOx because of that noncompliance, you're now here looking to hand out several hundred million dollars of taxpayer money to reduce the same NOx that these ships are adding to the inventory because of their noncompliance.

Now, the New York Times article has put this all out in the public now, and it has raised a couple of other
interesting points. And that is I've spoken for several
years about the military issues with this noncompliance,
but the head of the marine exchange in Southern California
said in the New York Times that this noncompliance has now
resulted in a far greater risk of ship collision.
Well, when you have laden oil tankers and
container ships out in national marine sanctuaries, there
is a significant environmental risk from this risk of ship
collision.

Also, three weeks ago, unfortunately, there was
the first victim of this avoidance, and that was a 42-foot
whale washed ashore at the Santa Cruz Island. The
National Marine Fisheries Association has listed the
probable cause a ship strike. The only way a ship strike
can occur in that area is from one of the ships that is
avoiding the ARB rule.

So I have a simple and bold proposal for you to
think about. And that is, why don't you tie the $700
million of public money to compliance with your low-sulfur
rule? Why don't you tell the ports -- why don't you tell
the shipping lines if they want to access this public
money, they need to demonstrate compliance with your rules
instead of avoiding them. You have a several hundred
million dollar carrot you're going to vote on today. I'm
not sure you fully recognize it for the carrot that it is.
I think that at minimum, since you don't have enough money to fund everything, you should give some very strong incentives for shipping companies and ports that would agree to comply with your rules.

As it is now, the air is getting worse. The national security is being impacted. There is an increase of oil spill. And there's also potentially been one whale that's a victim of this avoidance. You have the ability today to try to do something about and that I would urge you to consider that.

And again my apologies for bringing this up late. I urge you to look at that New York Times article from Tuesday, and consider the extremity of this issue is starting to get more in the public focus.

Thank you. And I'm here for any questions.

CHAIRPERSON NICHOLS: Thank you, Mr. Friedman. Shankar, Sean Edgar, Bonnie Holmes-Gen, and Tim Carmichael. And that will conclude the presentations.

MR. PRASAD: Good morning, Chairman Nichols and members of the Board. It's a pleasure to be here. And thank you Board Member Sandra Berg and staff for the excellent cooperation, and working with the stakeholders to arrive at this staff recommendation.

You have a letter from seven groups signed which clearly supports the staff recommendations and
modifications suggested today.

We are in support of combining the multiple funding sources. One concern we have is the issue of these violations. So we strongly urge the Board to direct the staff to look into the audit provisions, enforcement provisions, and to take that piece of the action as this moves forward.

Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Mr. Edgar.

MR. EDGAR: Good morning, Chairman Nichols and Board members.

Sean Edgar, Executive Director of the Clean Fleets Coalition, an association of both nonprofit associations and for-profit associations and private carriers. I'm also a member of the TRAC Committee. And I appreciate Ms. Marvin and 1B staff coming to our last meeting and giving a good rundown for the TRAC Committee members on the progress that they're making today, as well as hopefully in early action for the truck and bus rule.

I'll offer a few words of support and then conclude with a few words of caution.

On the positive side, I think staff is doing a good job to reduce the weight limit to bring more trucks down to 31,000 pounds gross vehicle weight rating into the
program. I think that can only be helpful. Combining federal and local sources of funding is also I think a very positive step. And I'll join with Mr. Wallerstein on increasing the size of the pie. To the extent that our associations can help increase the size of the pie, we'd be happy to do that.

There are a few words of caution on moving forward. The concept that was expressed in the staff report about sending older trucks from California up to Washington State, I think that needs a little bit of work. I think, if anything, the Board should look at rolling back the value of that older truck into the dismantler relationship or the relationship, the applicant, if you will, I think sending the vehicles out of state to benefit out of state is not consistent with the program. That concept needs work.

As much as reducing the award for a 2007 engine, I'll disagree with my friend Mr. Campbell that while I will agree with Dodd and others that the 2010 engine availability is a good thing, I think that cutting the amount of award for 2007 engines makes it less feasible for folks to do that who may not be able to afford the step change to get to the gold standard if you will.

Similarly, the RFP, the staff report talked about a potential RFP for a small business loan program, and
that's a good thing.

And I'll just caution the staff report seemed to be leaning towards nonprofits as a better way. I work for nonprofits and there's some things that we do well and other things we may not do well. So I'd caution you as you go forward to make sure you set a very high bar. There may be things that for-profit entities, with regard to financing programs, can do as well or better than nonprofits.

Mr. Friedman indicated there should be a -- similar to his commentary, there are existing bad actor provisions in your loan program under 1B for truck owners. It would only seem equitable that the bad actor provisions would apply to anybody who would, a, run your grant program, or b, as Mr. Friedman was indicating for his particular interest, ask for 1B funds from another source category.

Finally, on the allocation issue, I'll just join to say we're interested to collaborate with staff and the districts on that issue. In my mind, the $760 million in the program should be all about trucks, trucks, trucks. So as we get into allocation, I would dissuade diverting to other source categories, and we're interested in continuing to work with your staff.

Thank you.
CHAIRPERSON NICHOLS: Thank you.

Bonnie Holmes-Gen and then Tim Carmichael will be our last speaker.

MS. HOLMES-GEN: Good morning, Chairman Nichols and Board members. Bonnie Homes-Gen with the American Lung Association of California.

And we signed onto the letter mentioned by Mr. Prasad with seven other groups in support of these guidelines. We believe that these guidelines are very important to expand the use and accessibility of the 1B program funds, and we agree with your comments on the need to get these funds out quickly, get these guidelines past so we can take advantage of the bond sales and move on to achieve the early PM reductions and the health benefits and support the implementation of critical rules such as the on-road regulation.

And of course these funds are becoming more important in the current economic downturn. And we appreciate the Board's work and the staff's work to ensure that the funding is allocated efficiently so we can have maximum opportunities to get cleaner vehicles and engines deployed.

Want to comment that we appreciate the change that will allow better coordination of funding between programs to achieve criteria pollutant and greenhouse gas
goals. And we're glad to hear that staff plans to work on
better incorporation of the air quality benefits from
alternative fuels vehicles into the funding
considerations, and we look forward to working on these
changes.

We agree with the ongoing priorities for funding
in terms of funding trucks, the next phase of port trucks,
shore power, and locomotives.

And the one concern that we expressed in the
letter with other groups is that the ARB should retain the
two-year registration requirement to become eligible for
the funds. We again have greatly appreciated the process
staff has taken in engaging with stakeholders and the
personal engagement of Board Member Berg. We appreciate
that and look forward to continuing to work with you in
the next round.

CHAIRPERSON NICHOLS: Thank you.

Mr. Carmichael, it's been a long time.

MR. CARMICHAEL: Thank you very much. Doesn't
seem quite that long. Chair Nichols, members of the
Board, it's good to be back.

I'm actually back wearing a different hat I'm.

Representing the California Natural Gas Vehicle Coalition.

Some of you know Pete Price who's been representing them.

He's moving on to a new adventure. And I'm looking
forward to working with the Board and staff again.

CHAIRPERSON NICHOLS: He's actually moving on to an old venture. He's going back into the capitol.

MR. CARMICHAEL: That's true.

So the California Natural Gas Vehicle Coalition has more than 20 members, companies around the state and around the country, working to advance natural gas as a transportation alternative, heavy duty and light duty.

We support AB 32. And we'll continue to support AB 32 and hope you'll call upon us when you're looking for business support for that.

We support Prop. 1B and this program in general. We're happy to see the change allowing combining of funds. You may recall that we were among the groups that wanted that from day one. So this is a good change.

Mr. Campbell covered some of our concerns. I just want to touch on those. It does matter a lot where the funding goes and where the equipment is being used. That's why it's a big deal for our members that drayage trucks be given a fair shake. It's one thing to say they're going to be able to compete. It's another thing to look into the details and say can they really compete if the lower mileage effectively puts them out of the competition. And if you don't make a change to address this today, at a minimum, we encourage you to track this
closely and see if we're right, if there is a drop-off in
the applications and the funding going to these trucks,
because you'll hear from all sorts of advocates that
that's a very important piece of the pollution puzzle in
protecting community health in our state.

On the traps, it shouldn't surprise you we think
traps is a short-term strategy and funding new vehicles,
new engines is a longer term strategy. And we would
encourage more of the funding if not all of the funding
going to that, and less eliminating the funding to the
traps.

And finally, on the 2010 versus 2007, I think a
couple people have commented on this. We are in 2010.
And ARB needs to be pushing the threshold. It feels like
2007 came and went very quickly. But we feel like the
proposal before you today for updating accommodates
engines that are really just getting to 2007, and helping
them make modifications or adding on equipment to get to
2007, when really we should be pushing 2007 standards and
beyond.

Thank you very much. Look forward to working
with you all again.

CHAIRPERSON NICHOLS: As far as I know, that
concludes everybody who wanted to testify on this item.
So we should draw this back to a close.
And I'll just ask, we don't have a formal record closing, because it's not a regulation. But if the staff has any additional comments on based on what you heard, I would like you to briefly address Ms. Marvin. I know you have spent many hours on the issue about the drivers at the Port of Oakland.

I'm not sure if all the Board members are really aware of how heroically she has spent her Christmas vacation, New Years Eve, and other holidays that might have been holidays for other people trying to deal with this problem. So if you would conclude or at least talk about that, and then maybe we'll have some other questions from the Board.

ASSISTANT DIVISION CHIEF MARVIN: Certainly.

Thank you, Chairman Nichols.

We have been very involved in the joint need within Oakland to help truckers, many of whom are independents or small businesses, upgrade their trucks to meet ARB's regulatory requirements. And we're aware of some of the special economic challenges.

There is a grant that the Bay Area district implemented to help truckers upgrade Port of Oakland trucks. What happened was that the demand for the funding was greater than the supply. The district had combined its own funds and port funds as well, but they still ran
out of money. And on News Year Eve, the State made available additional funding to help those folks who had tried to get grant money before the compliance date of January 1 of this year.

And so what we did was say there is additional dollars that can be used for people who applied for money in 2008 or 2009, and the terms and conditions would be the same for people who would be able to loop back as they have been for everyone else in the state. By that I mean if you want to put a PM retrofit on your port truck, those truckers were eligible for the same $5,000 grant that Prop. 1B offered drayage truckers and other truckers elsewhere in the state.

So what we did was say that those who had previously applied and been denied were eligible to come back in and indicate interest in this supplemental pot of money. We worked closely with the Bay Area district to try and identify the milestones to get additional trucks into the grant process. And the time frames were short, but they were also well publicized.

The issue was trying to get truckers back into the grant process to get them, to indicate interest, to get them to line up supplemental financing and sign contracts in time so their equipment could be ordered and their trucks could be complying in early '20, because
these trucks are operating under extensions right now.

We're past the compliance date.

So the money that ARB made available had very specific conditions on it. And the key things are that it was only available for those who tried to get grant funding before the compliance date to achieve early emission reductions.

The second thing is that it's available at the same levels that we offered to every other truck in the state. In other words, we were not proposing that truckers at the Port of Oakland be eligible for a greater subsidy than every other trucker who took advantage of the Prop. 1B program. And there are roughly 660 trucks that came back in to take advantage of these supplemental grants and that are going through that process right now. And we're working closely with the Bay Area district to get them through the process as they're signing contracts. We've also been working with the district to make sure that those retrofits are ordered and that there's time for those retrofits to be delivered.

It's a messy process. I don't know how else to say that. And we are doing our best with both the district and also with the retrofit manufacturers and the installers to try to make sure that product is delivered as quickly as humanly possible so that it can be installed
on the trucks. So that we get the public health benefits
that the Board and the community in Oakland was expecting,
and we also get the opportunity to use those grants under
the conditions that the Board prescribed.

That was kind of a long response.

CHAIRPERSON NICHOLS: I think it explains the
situation though fairly.

Others? We've heard testimony generally
supportive with some specific proposals for change.

Anybody want to put a resolution forward now and then we
can work on that.

CHAIRPERSON NICHOLS: I think Supervisor Roberts
had an issue.

BOARD MEMBER ROBERTS: I think we all like to say
we're unique, and in many respects every area is different
in this, has different issues that it has to deal with.

We probably are singularly the only one that's
dealing with the border, which we call a land port. And
so the world looks different to you. And I guess I'm
concerned -- I'm not asking for any favoritism or
anything, but why -- we shouldn't be putting a discount on
the grants that could be used in this area because they're
going to have to cross the border. We have businesses
that straddle that border for all intents and purposes.
And if there were a restriction and you couldn't go so
many miles across it or something else, we wouldn't have a
problem about that.

But to all of a sudden come up with something
that is going to be 10,000 less, and you have to have a
GPS, and there's no retrofits or repowers, it just --

CHAIRPERSON NICHOLS: I have some questions about
that as well frankly. So maybe we could ask staff if they
are open to change on this, and what you think the adverse
consequences would be if we were to eliminate some of the
restrictions you've proposed.

ASSISTANT DIVISION CHIEF MARVIN: Certainly.
The intention of the 90 percent California
operation option was really designed in response to the
data that a number of trucking firms provided to us about
their travel, their short trips across the border to
Mexico, Arizona, and Nevada. If you remember, can you
pull up that slide that has California operation on it?

When we talked to a number of the trucking firms
that routinely make trips from California to warehouse and
distribution centers right over the borders in all three
of those areas, what they told us was about four, five, or
six percent of their miles would be outside of California.
So we looked at that and said, all right, if we set it at
ten percent, that should be adequate to cover these trucks
that are essentially -- they're California-based trucks
and they drive almost all their miles in California, but for the small trips on the other side of the border. So that was the population that we were recommending that the Board be allowed to be eligible for.

CHAIRPERSON NICHOLS: And I don't have -- I'm not questioning that, that part of it, because I know the number is something less than ten percent. It's not a significant amount. And the fact is they're not even -- they may be crossing the border, but they're not leaving the air basin. They're still in our air basin.

What I was questioning was for those, we reducing are the grants by 10,000, if I understand the latest recommendation.

ASSISTANT DIVISION CHIEF MARVIN: What we were trying to do was recognize that if some of the benefits of the California taxpayers' investment in these trucks would not be realized within California, then some of the level of funding that's used should be less.

We chose to propose a flat $10,000 to try to keep thing simple in the program so there were fewer different funding levels for all of the different options. I think that the change that we --

BOARD MEMBER ROBERTS: That's why I tried to point out to you that the Carl Moyer allows substantial travel out of the state without a penalty, without a GPS.
But all of a sudden, for this, it's a minuscule amount.

We're lowering the grants.

CHAIRPERSON NICHOLS: I think the easiest way to deal with this, since these projects do end up competing against other projects would be to just strike the 10,000 and the GPS provision, leave it at 90 percent of operations.

BOARD MEMBER ROBERTS: Yeah, because I think it's probably for us at least -- it may be five percent. It's a relatively small number, and it just concerns me. And I didn't mind that part of it.

What I'm objecting to is along with that we're making a substantial reduction of the grant.

CHAIRPERSON NICHOLS: For ease of operation in one person's eyes is arbitrary in another person's eyes. So if the rest of the Board is willing to consider that as a change, I would endorse that as an amendment to the resolution. I don't see any major disagreement.

BOARD MEMBER TELLES: I have a question on this, and it doesn't have anything to do with the ports. Are all these trucking companies based in California or --

BOARD MEMBER ROBERTS: Yeah.

BOARD MEMBER TELLES: This doesn't fund --

CHAIRPERSON NICHOLS: You can't get an award if
you're not a California-based company. And the trucks
have to be registered in California.

Okay. Questions or issues? Yes.

BOARD MEMBER D'ADAMO: I just had a couple
questions about enforcement. Todd Campbell's concern that
he raised about noncompliant drayage trucks outside the
port, does staff have a response to that? I'm not aware
of that problem.

And also just curious about staff's response to
the suggestion made by Mr. Friedman from the U.S. Navy
about noncompliant cargo ships with regard to sulfur.

ASSISTANT DIVISION CHIEF MARVIN: On the first
issue about the concern of cleaner trucks going into the
port, picking up or dropping off loads or picking up a
load, coming outside the port, and then transferring it to
a dirtier truck, that is something that happens
occasionally. It's something that we are concerned about.

But it's not something that's prohibited by ARB's drayage
truck regulation. So it's legal.

The issue is that this is clearly not the intent
of the Board's rule. We want to be cleaning up the
communities around the ports and the rail yards. And so
one of the things that we can do and are doing is using
our enforcement authority, our general enforcement
authority for trucks, to be looking for cases where this
is happening and making sure that any other trucks that
are coming in meet every other one of ARB's requirements.
So there is no excess smoke. There's an engine label on
it. There's no excess idling. They're doing their fleet
inspections. So all of the other resources or
requirements that we can bring to bear, that's the tool
that we're using to try to discourage this practice.

BOARD MEMBER D'ADAMO: Can you provide that
information to the ports and maybe get the ports to -- I
mean, it's not consistent with their intention either I
would imagine.

ASSISTANT DIVISION CHIEF MARVIN: We certainly
have talked to the ports about that, and we'll work with
them further.

The second issue you raised in terms of the
noncompliant ships, right now, the funding that is
available to support shore power for ships is only
available for the land side. So the shippers themselves
are not getting any of those dollars. So it would be
difficult to tie those dollars to compliance with the ship
regulations. I don't know if Mr. Fletcher wants to add
anything.

STATIONARY SOURCE DIVISION CHIEF FLETCHER: Well,
the issue that Mr. Friedman raised is one that we're
paying a lot of attention to now. They are in compliance
with the regulation; they are just choosing to go further
out from the shore so they're basically avoiding the 24
nautical mile requirement.

So there are a lot of complexities associated
with this. We're working with the Marine Exchange,
working the Navy, working with the ports to see if we can
come up with a solution.

Would point out that U.S. EPA is looking at a 200
nautical mile requirement that kicks in in 2015 or
something like that. So it may be a short term issue for
us, but it is one that we are spending some attention to.

CHAIRPERSON NICHOLS: We're certainly looking for
ways to increase the level of compliance with our rule as
it was intended and to get ships not to be interfering
with the Navy's operations.

So I would strongly encourage looking at any
legal way that we could link funding to compliance. I
don't know if we've completely thought through what might
be available out there. But certainly for the shore power
funding, the individual shippers are involved in the
operation of the berths, as I understand it, and there is
a public/private split there. And they are putting up a
fair amount of money; no question about it. But the ports
are seeking obviously a bigger public investment.

And I understand the point that the PMSA is
making in this regard. And I'd like to have more money available for this operation as well. I think we all see that the ports are increasingly emerging in people's minds as the major economic engines that they've always been. But it hasn't been so apparent until recent years to most of the public how important they are. And if we could find ways to access some additional funding in the Prop. 1B funds that come to us, as everybody knows, a small piece of what was out there in the goods movement bond, I would love to find a way to do that as well.

So I'd like ask for a motion on the resolution. Oh, you have one more comment.

BOARD MEMBER BERG: I'd like to also move for you.

But just in following up on your comment on the ports, are we comfortable that we have provided or have looked at the flexibility that the ports did bring up on understanding that there are three stakeholders and how the matching funds are available and so forth?

I would encourage that we continue to work with the ports to make sure that we have an understanding of the infrastructure that needs to be put into place and so forth and that we're helping them maximize -- we're creating the flexibility that helps them maximize to get the job done.
And with that, Chairman, I would like to move Board Item 10-3-3.

CHAIRPERSON NICHOLS: Thank you. Do we have a second?

BOARD MEMBER D'ADAMO: Second.

BOARD MEMBER BERG: With the amendment --

CHAIRPERSON NICHOLS: To strike the language limiting what could be done with the trucks that cross the border. Okay.

Any other comments?

We do have a motion and a second.

If not, I think we can do this on a voice vote.

All in favor, please say aye.

(Ayes)

CHAIRPERSON NICHOLS: Any opposition or abstentions?

Okay. Thank you very much.

The next agenda item is 10-3-4. And we're going to be considering proposed near-term revisions to the Lower Emission School Bus Program guidelines and the Carl Moyer Inventive Program guidelines.

Since its inception, the Carl Moyer Program has filled a critical niche in California's strategy to achieve clean air by providing individuals with financial incentives to voluntarily purchase cleaner engines and
technologies. This incentive program complements California's regulatory program by funding emissions reductions that are surplus to what is required by regulation.

Since 1998, the Carl Moyer Program has cleaned up over 17,700 engines throughout California, reducing smog-forming emissions by about 41 tons per day and diesel particulate emissions by about one-and-a-half tons per day.

The success of the Carl Moyer Program has paved the way for other incentive programs, such as the Lower-Emission School Bus Program. Since 2001, the Lower-Emission School Bus Program has protected vulnerable populations, particularly California's school children, from the harmful effects of air pollution through the replacement of older school buses and the installation of retrofits on existing school buses. Over 600 old buses have been replaced and 3,800 other buses have been equipped with verified retrofit devices.

I just wanted to underscore, perhaps everybody knows this by now, but many people don't realize that those most exposed to emissions from school buses are the people actually riding on the bus. It may be counter-intuitive, but the combination of exhaust recirculating back in as well as blow-back from the engine
has been demonstrated through research, some of which we
have sponsored ourselves to be the highest inside the
school buses as it is anywhere around them. So this is
descended a program that's aimed at children as well as, of
course, the school bus drivers.

Mr. Goldstene, would you please introduce this
item?

EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman
Nichols.

ARB's incentive programs have a successful record
of repowering, retrofitting, and accelerating the turnover
of old, highly-polluting engines and achieving much needed
surplus emission reduction. These incentive programs are
an important aspect to cleaning up California's vehicles
and equipment and achieving additional emission reductions
to those required by regulations.

However, in order for the programs to continue to
be successful, they must periodically be updated to keep
pace with technological statutory, regulatory, and policy
changes; and to benefit from the experience that ARB and
the local air districts have accumulated in overseeing and
implementing the Lower-Emission School Bus and Carl Moyer
Programs, it's critical now we be responsive to
stakeholder feedback as well as to changes in the economic
and regulatory climate.
To that end, staff designed the proposed revisions to increase program participation and increase funding eligibility across several categories, including on-road, heavy-duty vehicles, and off-road equipment. In addition, the proposed changes are designed to be easily integrated into air districts' day-to-day operations.

Staff worked in close cooperation with stakeholder and the local air districts to propose the near-term revisions, soliciting input during five public workshops, and numerous work group meetings.

Staff also received valuable input on key policy issues from the Incentive Program's Advisory Group.

I'd like to extend my appreciation to all participants in that advisory group and especially to Board Member Sandra Berg for her leadership.

I'd like to turn the presentation over to Duong Trinh of the Mobile Source Control Division who will cover the proposed guidelines' revisions in more detail.

(Thereupon an overhead presentation was presented as follows.)

AIR POLLUTION SPECIALIST TRINH: Thank you, Mr. Goldstene.

Good afternoon, Chairman Nichols and members of the Board.

Today, I will provide an overview of the staff's
proposed near-term revisions to the Low-Emission School
Bus Program and the Carl Moyer Program guidelines.

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AIR POLLUTION SPECIALIST TRINH: I will begin by
highlighting some background information for each program.

Next, I'll discuss the key issues related to the
Lower-Emission School Bus Program, and explain staff's
proposed near-term guideline revisions to the School Bus
Program.

I will follow this with key issues and proposed
near-term guideline revisions for the Carl Moyer Program.

We also look towards the future with potential
long-term program opportunities and close with staff's
recommendation.

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AIR POLLUTION SPECIALIST TRINH: The
Lower-Emission School Bus Program was established by the
Board in December of 2000. Through a partnership between
the Air Resources Board and local air districts, grant
funding is offered for new, safer school bus replacements,
and to place retrofits on existing high polluting school
buses already in use.

Funding supports the primary goals of the program
which are to reduce children's exposure to cancer-causing
and smog-forming pollutants, reduce toxic diesel
emissions, and provide new safer transportation.

AIR POLLUTION SPECIALIST TRINH: The school bus program has been very successful, having already provided over $100 million to school districts. This has resulted in the replacement of approximately 600 school buses and the retrofit of an additional 3,800 buses.

At the start of the program, there were about 1900 pre-1977 public school buses in California. More specifically, the oldest buses that pre-dated minimum federal safety standards. And today, there are less than 50 pre-1977 public school buses left in California. And those remaining buses will be replaced under this program.

Current funding is received through the sale of state bonds authorized by Prop. 1B, the bond act approved by California voters in November 2006. Prop. 1B authorizes $200 million for replacing and retrofitting school buses, with the first priority to replace all remaining pre-1977 buses. The next priority is to replace 1977-1986 buses and retrofit 1994 and newer school buses.

AIR POLLUTION SPECIALIST TRINH: Now I'd like to quickly provide some background on the Carl Moyer Program. Established in 1998, the Carl Moyer Program is a partnership between ARB and the local air districts that
provides grants to owners of vehicles and equipment to pay for the incremental cost of funding low emission technologies that provide reductions above and beyond those required by regulation.

By targeting unregulated sources and funding early and extra emission reductions, the program complements existing regulations to help California meet federal, State, and local air quality standards.

The state law establishes the basic structure of the program, including covered pollutants, eligible projects, and cost effectiveness limits. ARB has provided statutory authority to create a guiding document to help define and clarify the boundaries of the program while local air districts perform on-the-ground implementation of the program.

ARB has the responsibility to oversee that the program is implemented effectively and efficiently and in accordance with the statute and provide SIP-considerable emission reductions.

AIR POLLUTION SPECIALIST TRINH: The Moyer Program has provided over $360 million to replace, repower, or retrofit equipment, enabling the purchase of approximately 17,700 cleaner engines. The Carl Moyer program has been highly successful and has proven
extremely cost effective at about $2600 per ton of NOx reduced. Over the first nine years, the surplus emission reductions achieved equate to about 41 tons per day of NOx and one-and-a-half tons per day of particulate matter.

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AIR POLLUTION SPECIALIST TRINH: This chart shows cumulative funding provided by the Carl Moyer Program over the first nine years based on the project type. As such, the distribution of funding has evolved over this dynamic period and will continue to evolve over time as current regulations are amended and new regulations adopted by the Board.

As you can see, average over the first nine years of the program, demand for funding has been strongest for on-road, off-road, and agricultural equipment. Many of the changes staff is proposing today are geared toward increasing both accessibility to funding and participation in the program, in particular for these categories.

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AIR POLLUTION SPECIALIST TRINH: The success of the Lower Emission School Bus and Carl Moyer Programs is due in part to each program's ability to adapt and be responsive to change.

I will now highlight several issues that call out the need for changes in each program.
First, the impacts of new legislation and additional regulatory requirements must be addressed. Second is the need to improve program implementation. Comments received from our air district partners, public stakeholders, and internal staff review, indicate areas where program streamlining could increase effectiveness and efficiency.

Which leads me to our last bullet, the current economic environment has affected each program in different ways. As discussed previously, the change in the School Bus Program's funding source, bond sales, in conjunction with an economy in recession has led to the situation in which bond sales have been unpredictable and not all funds have been disbursed.

Concurrently, business activity has decreased in which current grantees are having difficulty in fulfilling their contractual obligations, and prospective applicants are hesitant to commit to minimum usage requirements.

AIR POLLUTION SPECIALIST TRINH: Now I would like to discuss staff's proposed revisions to the Lower Emission School Bus Program.

The first proposed revision is to adjust the retrofit purchase deadline of June 30th, 2010, to June 30th, 2012. Staff believes the extension is necessary to
address the slow infusion of bond funds. Although we received the good news that recent bond sales were enough to cover the entire amount allocated to the Lower-Emission School Bus Program, this change is still necessary in order to provide air and school districts time to receive the funding and install the retrofits.

The next proposed revision will allow the purchase of a 2010 or newer model year engine certified at or below 0.5 grams per brake horsepower hour of NOx. Currently, engine manufacturers are using regulatory flexibility to provide engines above the 2010 standards of 0.2 gram NOx. By setting a threshold of 0.5 grams, we ensure cleaner diesel buses are available statewide.

Staff will evaluate this threshold annually and, if necessary, utilize the Board's directed authority to the executive officer to make any changes.

Staff is also proposing to simplify the disbursements process to allow for faster disbursement of funds to the air districts. The last item is in response to requests for changes to the cost cap limit. An increase to the current 140,000 cost cap for replacement buses was considered. However, staff believes this would conflict with the program's goal of efficiently using program funds to maximize emission reductions as the overall number of
replacement buses and installed retrofits would effectively be reduced. Moreover, since a $25,000 match is required for any remaining replacement projects, funds totaling $165,000 are sufficient for a replacement school bus purchase.

It should be noted that we received a comment asking that school bus funding be made available to private school buses. However, ARB is bound by the California constitution which prohibits state funds going to private schools.

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AIR POLLUTION SPECIALIST TRINH: Now I will discuss staff's proposed revisions --

CHAIRPERSON NICHOLS: Could you just clarify that? Not private schools, but private fleets. Aren't there public schools that contract with private fleets?

ON-ROAD CONTROLS BRANCH CHIEF ROWLAND: The provision in the constitution I believe is for private schools. So a private fleet's servicing a public school district would remain eligible for public funds.

CHAIRPERSON NICHOLS: Thank you. I just wanted to clarify that.

AIR POLLUTION SPECIALIST TRINH: Now I'll discuss staff's proposed revisions for the Carl Moyer Program.

For the On-Road Program, staff is proposing to
expand the voucher incentive program, a streamlined truck
replacement program commonly known as VIP to allow medium
heavy-duty trucks to participate and increase funding to
$45,000 per truck.

Currently, 1993 and older trucks are eligible.

Staff is proposing to expand the VIP to include
eligibility for 2002 and older trucks and make the same
change in the traditional Moyer fleet modernization
program.

Staff also proposes a voucher option for
retrofits on on-road vehicles. Originally, staff had
proposed a maximum funding amount of $5,000. But based on
feedback from air districts and participants, we are now
proposing funding up to $10,000 per retrofit. This change
to staff's original proposal is available in Attachment B
to the resolution, which is available.

For the off-road, staff proposes to modify the
guidelines to reflect SB X2_3, which requires the Moyer
Program to allow a ten-year project life for farm
equipment and allow these projects to be eligible for
funding up to a regulatory compliance deadline.

Based on feedback of staff's original
interpretation, we are proposing to modify the definition
of farm equipment to be consistent with agricultural
operations as defined in the in-use off-road diesel
regulation for mobile equipment and Health and Safety Code definition of agricultural source for portable farm equipment.

Staff also proposes to expand the off-road equipment replacement program to allow Tier 1 and Tier 2 engines to participate as currently only uncontrolled engines are eligible.

The current guidelines enable air districts to allow off-road diesel applicants to opt out of installing a retrofit when repowering their off-road equipment with Moyer funding. Staff proposes to continue this flexibility for equipment not subject to a Board-adopted regulation, such as agricultural equipment.

For those equipment subject to the regulation, the Board has made the determination that it is important to require retrofits in order to protect the public's health.

Finally, staff is proposing some modifications for locomotives to assist air districts with project implementation.

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AIR POLLUTION SPECIALIST TRINH: We are also proposing near-term changes to streamline some of the administrative requirements and to provide air districts with increased flexibility and ease of implementation.
Small and rural air districts that account for approximately 8 percent of annual program funds and generally have limited resources. In recognition of this, staff proposes to reduce administrative requirements for these districts, including project inspection and application tracking requirements.

Staff also proposes to streamline the application and funds disbursement process for all districts. All administrative funds would be provided up front, while disbursement of funds will be made more quickly.

Staff proposes to delete the equipment usage requirement from future contracts, so long as sufficient usage data is provided during the application process. For existing contracts, a temporary waiver from the usage requirement will be allowed in situations where usage has decreased due to unforeseen factors beyond the grantee's control. These revisions take into account changes in the economy, while ensuring accountability.

Finally, staff proposes to update the cost effectiveness cap and the capital recovery factor, which is used in calculating a project's cost effectiveness. On an annual basis, staff will calculate these figures using currently published data. These annual updates are authorized under state law, and will help the program respond to the current economic climate and maximize the
use of public funds to reduce emissions.

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AIR POLLUTION SPECIALIST TRINH: The modifications I've just described are all near term actions to improve the programs. But staff is working on longer term improvements as well. Our goals are to look for additional avenues to increase program efficiency while balancing simplicity, improving flexibility to current funded source categories and possibly new source categories, while adhering to Health and Safety Code requirements.

Among other items, staff intends to develop an on-road truck reuse program, otherwise known as tiered truck transaction, in coordination with the Goods Movement Program.

Staff will look for opportunities to address greenhouse gases and the potential of targeting the reduction of these sources.

School bus projects funded by AB 923 previously received additional flexibility from the Board when the 2008 guidelines were adopted. Stakeholders are now asking staff to re-visit that flexibility and consider expanding it to ensure funds can be spent on school bus projects through 2015. Staff proposes that once developed through the public process, these, and other changes, can be
approved by the Executive Officer under the Board's
dele gated authority similar to that provided previously
for the Moyer Program as well as the School Bus and Goods
Movement Programs.

Staff will continue to inform the Board of the
impacts of the regulations and coordinate implementation
of the incentive programs consistent with Board direction.
We will update you on our programs in early 2011 when we
return to the Board with program-wide changes.

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AIR POLLUTION SPECIALIST TRINH: In summary, the
proposed near-term revisions to both the Lower-Emissions
School Bus Program guidelines and the Carl Moyer Program
guidelines will assist with expanding program
participation, increase funding eligibility, and simplify
implementation for local air districts.

Staff has worked extensively with local air
districts and other stakeholders to develop these
near-term revisions to the guidelines that are flexible
and transparent, yet still institute accountability and
allow for oversight.

Ultimately, these proposed revisions, including
the Board's direction to delegate authority to the
Executive Officer to evaluate and approve future proposals
should enable each program to quickly and effectively
AIR POLLUTION SPECIALIST TRINH: Staff recommends the Board to approve the proposed near-term revisions to the Lower-Emission School Bus Program guidelines and the Carl Moyer Program guidelines as incorporated in the underline strike-out modifications provided by staff, including the revised modifications as presented to the public and the Board today.

This concludes staff's presentation, and we'll be happy to take any of your questions.

CHAIRPERSON NICHOLS: Thank you.

Are there any Board member questions before we proceed to testimony?

If not, we have a list of witnesses. There are six.

We'll start with Joseph Steinberger and Fred Minassian and Barbara Lee.

MR. STEINBERGER: Good morning, once again, Chairperson Nichols and members of the Board.

The Bay Area Air Quality Management District appreciates the opportunity to provide comment on the proposed 2008 ARB Carl Moyer Program guidelines and Voucher Incentive Program guidelines. The update of these guidelines presents an opportunity to improve the
efficiency, and the effectiveness of the Moyer Program for your agency, implementing air districts, and applicants. The district supports this retooling effort and a majority of the changes being proposed today. However, the district does not support the mandate for all districts administering the voucher program to incorporate the proposed retrofit component for the following reasons:

First, the retrofit opportunities are already available through the Moyer Program without the need to contract with installers or vendors. The proposed voucher program requirement and funding amounts are virtually identical to the Moyer Program On-Road Retrofit Program. The addition of the retrofits to the Voucher Program will create confusion amongst applicants for districts offering both the Moyer and Voucher Programs, with very little benefit.

Secondly, the proposed changes do not address the major barriers that prevent us from funding retrofit projects under the current guidelines. The first of these is limited vehicle model years that are currently eligible. That's only 2004 through 2006.

The second limitation is it's only for small fleets.

And the third, which I might have to withdraw
because originally it was only for 5,000, but now that it's been increased to $10,000, we're glad to see that you've accommodated our comments on that.

Third, the decision to require the retrofit component of the program was not discussed at any public meetings and not clearly indicated as a requirement in any of the proposed revisions. Since the requirement of the retrofit of the voucher program would not address the barriers of this project type, I would not create opportunities for funding.

We believe that our efforts would be best spent promoting the existing on-road retrofit opportunities through the Moyer Program, and that the participation in the retrofit portion of the program should be optional. Requiring participation in the retrofit voucher program would duplicate the efforts of an existing program without a clear benefit to the public and would create additional burden on districts that have already limited administrative resources.

Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Fred Minassian and then Barbara Lee.

MR. MINASSIAN: Chair Nichols, members of the Board, good morning.

I'm Fred Minassian, Technology Implementation
Manager at the South Coast AQMD.

The South Coast supports the revision of the Carl Moyer and Lower-Emission School Bus Program guidelines. And we will continue to work with your staff in implementing changes that will improve the longer term viability of the program.

We have three comments regarding the proposed revisions. First is that we agree with Bay Area AQMD's comment that it is a good thing that the retrofit amount was increased from 5,000 to $10,000. However, we still believe that in the Vehicle Incentive Program the retrofit component participation by air districts should be optional.

The second comment is again related to VIP. That program is funded by SB 1107 multi-district funds. However, CARB requires equal match funding from participating air districts. This requirement is not required in the Health and Safety Code and puts an unnecessary burden on the districts. If the VIP is successful, the districts will be augmenting it with their local funds. But matched funds should not be a requirement from the offset.

Our third comment is related to the Lower-Emission School Bus Program. The South Coast AQMD has been implementing this program and replacing pre-87
buses for the past ten years. Thus, there are schools
where the entire fleet of pre-1987 buses have been
replaced.

We propose that you allow the replacement of 1987
through 1993 school buses with AB 923 funds in future
guideline revisions, as long as the participating school
districts replace their pre-87 buses first.

I thank you for the opportunity to speak. And
this concludes my remarks.

CHAIRPERSON NICHOLS: Okay. Thank you.

Barbara Lee and then Mike Sandler.

MS. LEE: Good morning, Madam Chairman and
members of the Board.

My name is Barbara Lee. I'm the Air Pollution
Control Officer in the Northern Sonoma County Air
Pollution Control District. I'm also here as a
representative of the California Air Pollution Control
Officers Association.

I need to echo the three comments that Fred
Minassian made. Those were unanimous comments from
CAPCOA's Grants Committee.

But my main purpose in coming is to recognize the
efforts undertaken by the staff in bringing forward this
proposal. They have worked collaboratively and
cooperatively with the air districts. It's a good
partnership. We're very happy to be working with them in this way on this important program.

And I also want to say a special thanks to Board Member Sandra Berg for all the hard work she has put into this program. It is improving. There is still more work to be done, but we are very hopeful that we are going to come out at the end of this retooling process with a really superior Carl Moyer Program. And I just wanted to recognize the efforts of the Air Board and to thank you for that.

CHAIRPERSON NICHOLS: Thank you very much.

Mike Sandler and then Mark Loutzenhiser.

Mr. Sandler, if you're here. If not, then Mr. Loutzenhiser. Barry Wallerstein following him.

MR. LOUTZENHISER: Good morning, Chairman Nichols, members of the Board.

My name is Mark Loutzenhiser. I'm the Program Supervisor overseeing the incentive programs at the Sacramento Air Quality Management District. I apologize to Larry Greene, our Executive Officer, is not able to be here. Unfortunately, as happens in all cases, our Board meeting coincides with this Board meeting. So he is still at that Board meeting as of when I left after my consent items on that calendar.

One of the first things I want to do is just
again thank the ARB staff, Chairperson Berg, Mr. Goldstene in terms of the Executive Officer here at ARB, the APCOs as well, because there has been a lot of time spent over the last several months by all the parties and industry stakeholders as well. There has been a tremendous group effort going forward on these proposed changes in order to help facilitate the program going forward.

We are very supportive of the program. We administer the Carl Moyer Program for not just the Sacramento Air District, but also for El Dorado, Placer, Yolo, Solano. And in the case of the School Bus Program, we're administering it for the same districts plus Butte and Glenn as well. So we do view these changes as being a tremendous step in a great direction in helping us move forward with these different programs.

We also do support the change that has just been presented by staff today, in terms of raising the retrofit value from the 5,000 to 10,000. I think that may definitely help out the VIP Program. And although it hasn't been touched upon as much here, I do believe the other changes in the VIP Program will hopefully make it a very successful program going forward. So we do look forward to those opportunities being brought forward as part of that program.

We do look, as an agency, to probably want to
include the retrofit portions, but we agree with your
earlier comments we'd like to see it more on a voluntary
basis, for the main reason being that oftentimes getting
all the documentation together and the agreements with the
vendors like that can take time. And we're very
interested in trying to get as much of this funding out as
possible as quickly as possible under the VIP Program.
And we would like to be able to see the addition of the
retrofit portion not slow down those other efforts.
And so those are just our comments. And thank
you again to the Board, the staff, and of course all the
Executive Officers that have been a party to this program
as well.

CHAIRPERSON NICHOLS: Thank you very much. Okay.

Barry Wallerstein and Sean Edgar.

MR. WALLERSTEIN: It's still morning, and I'm
still Barry Wallerstein, the Executive Officer of the
South Coast AQMD.

My only purpose in coming up here is not to
address the technical comments that everyone has made, but
to really recognize what Board Member Berg mentioned in
her opening comments about a retreat that was held between
the CAPCOA members and the CARB staff. And I want you all
to know that from my perspective, and that of the other
Air Pollution Control Officers, that was a break-through
moment. And I think a tremendous amount of credit goes to Board Member Berg, because she got us to a point where we weren't talking past each other but talking to each other and developing mutually acceptable solutions.

And so as you've heard from all the witnesses, we've really moved this onto a good path with some good changes before you. We've asked for a few things to tweak what's before you. But we're also working to the future to make sure this continues to be the program that we all want to improve air quality throughout the state. So thank you.

CHAIRPERSON NICHOLS: Thank you. You can keep the praise coming for Sandy Berg.

Mr. Edgar.

MR. EDGAR: Chairman Nichols and Board members, Sean Edgar with the Clean Fleets Coalition.

I'll join the lovefest of praise, if I may.

Thank you, Board Member Berg, for your efforts during this process.

I'll make two very focused comments designed to make this program more meaningful to the fleet operators. The first is on the Truck Trade Down Program, I consider myself an uncle or nephew -- I don't know how to phrase my relationship -- but myself, San Joaquin Valley Air District, and the nonprofit associations, as well as
some private fleet owners in San Joaquin Valley were
really the driving force behind working with your staff to
get that as an eligible program under 1B. It's not
currently working. I make that assessment, because I'm
not aware of a single project that's been done under 1B
for truck trade down. I think part of that is due to the
rule timelines are extremely tight, and the truck and bus
rule essentially functions as a ban on 2003 and older
equipment. And I think that because of the short project
life, it doesn't fit well with the Proposition 1B. So
this might be a venue, and I'll pledge myself to work with
your staff to see if we can structure something meaningful
with regard to a truck trade down. And happy to work on
that project with staff.

The second item I noticed on the engine standard
issue that just caught my attention, I would hope and ask
Board staff and Board members to take a look at the issue
of the NOx standard that staff proposed there. It would
seem to me this is a voluntary process. And if there is
additional environmental benefit to the cleanest engine
available, then perhaps there is an extra credit provision
in there. It's not to discredit any of the fine engines
that are being produced, but only to recognize that extra
credit may be warranted and meaningful and meritorious of
some additional award beyond where staff set that bar.
So once again, thank you. And as a member of the lovefest I'll turn it over to our next speaker. Thanks.

CHAIRPERSON NICHOLS: We had one additional speaker, Brad Poiriez. Is that close?

MR. PIORIEZ: Very close, thank you.

Brad Poiriez, APCO for Imperial County.

I too want to echo the comments of my colleagues that have been said today. And I want to extend a thank you to Ms. Berg for being involved. I think that you personally being involved with those discussions that we had helped us a long way. It moved us along much faster and was much more beneficial for all parties. I'd like to thank you personally as well.

I'm from a rural air district, very small. Imperial County is down on the border of Mexico. These programs are vital for us rural districts in helping us achieve those positive benefits and reductions in air emissions.

And I would support the changes being proposed, and we look forward to working with your staff in the future and continuing this good working relationship that we have right now.

Thank you.

CHAIRPERSON NICHOLS: Thank you so much.

I can say from my own experience I've seen how
divisive some of these questions about the Moyer and other
incentive programs have been between the districts and the
ARB. So all of this praise is good to hear, not only
because it reflects the work of one of our Board members,
but because it also indicates that perhaps we're really on
a better path now in terms of being able to implement this
program successfully. So thanks to everybody who
participated.

I think it's time now to bring this back to the
Board.

Does staff have any additional comments they'd
like to make at this time?

ON-ROAD CONTROLS BRANCH CHIEF ROWLAND: Yeah. If
we can address some of the concerns that the witnesses
brought up, particularly with regards to the VIP Program
for retrofits.

We do believe that it provides value above and
beyond the current provisions in Moyer. One of the major
aspects of the Voucher Incentive Program both for trucks
and the proposed program for retrofits is it is a
statewide program that anybody can -- any applicant can
basically apply and be funded. It's also a simplified
process with less paperwork for both the districts and the
applicants for implementing, which makes it a lot easier
for these smaller fleets who are kind of struggling. They
don't have the time or possibly the legal resources to deal with the contracts. So it's a simplification for them.

We do recognize that the concern that the gentleman from the Bay Area brought up concerning the time it takes to develop contracts with the retrofit suppliers and the installers, and we want to commit to working with them to help them do that and to make sure that there is time to do it and do it right.

With regards to the match issue for VIP that Mr. Minassian brought up, that was a policy call made in the institution of the Voucher Incentive Program to ensure that there were funds available for this program. Very important to ensure a successful roll-out. And I would note that unlike other match funds that the districts must provide from local funding sources, the funds to match the VIP Program can come from their other Moyer funds. So hopefully that reduces their burden somewhat.

And then finally, I'd just like to touch on the request that school bus funding under AB 923 funds that basically we expand opportunities for that. That is something that we have identified in the presentation as something that we would like to do, and we will work with them to make sure that that can happen. Thank you.

CHAIRPERSON NICHOLS: Thank you very much.
Do we have a motion on this item?

BOARD MEMBER RIORDAN: I'd move approval, Madam Chair.

BOARD MEMBER YEAGER: Second.

CHAIRPERSON NICHOLS: Any further discussion on the part of the Board about this item? If not, we can just call for a vote.

All in favor please signify by saying aye.

(Ayes)

CHAIRPERSON NICHOLS: All opposed?

Any abstentions?

Thank you very much. Good work, all. Really appreciate it. This has been very tough, and I know how significant every element of this is to somebody involved. So I appreciate the great effort that went into it.

We will now be on break for an hour.

(Thereupon a lunch recess was taken.)
CHAIRPERSON NICHOLS: We're ready to begin.

As I indicated this morning, but in case there was anybody who didn't hear, we changed the order of the items from what it had been. We're proceeding with the presentation on the allocation advice before we get into the economic analysis report.

So this is involves a presentation from the Chair of our Economic and Allocation Advisory Committee, Professor Larry Goulder. He's also accompanied by another member of the Committee, Steve Levy.

Secretary Adams of Cal/EPA and I convened this 16-member Economic and Allocation Advisory Committee, which we fondly know as EAAC, in May of 2009. We asked a diverse group of economic, financial, and policy experts to help us work through one of the most contentious issues related to the Cap and Trade Program: That is how the valuable allowances created by the program should be distributed.

As you will hear, we also asked the EAAC to work with staff during the development of our updated economic analysis of the Scoping Plan.

The work of this Committee has examined every aspect of how the available allocation options could shift
the impact of the Cap and Trade Program between the regulated parties and California consumers of fuels and electricity. The report has elevated the debate around this issue and has allowed stakeholders to participate in thinking through the implications of various allocation choices.

But I want to emphasize, in case he doesn't do it himself, that this Committee was not selected by Linda and myself or by the Chairman to be a diverse -- to be a stakeholder group, to try to reach a consensus based on the balancing the interests of various groups within the state of California.

And also I would like to personally thank all of the members of the Committee for having given so much of their time and talent to this venture, and particularly to thank Professor Goulder who is actually a recidivist since he Chaired the MAC Committee that helped launch us on this venture in the first place.

All right. Mr. Goldstene, do you want to introduce the presentation?

EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman Nichols.

In developing the report on allocation, the Economic and Allocation Advisory Committee held an extensive stakeholder process involving nine public
meetings and conference calls. They received over 120 comments from stakeholders on their work and released six public drafts of the report prior to reaching the final document you have before you today.

As staff releases the next step draft of the cap and trade regulation this spring, probably near the end of April, a detailed section on allocation will be presented for public comment. This section will be informed by the Committee's recommendations. Staff will continue to refine this approach until we bring the cap and trade regulation to the Board for adoption most likely in the late fall.

With that, let me introduce Dr. Goulder. Professor Goulder is a professor in environmental and resource economics, Chair of the Department of Economics at Stanford University. He's also a research associate at the National Bureau of Economic Research and a University Fellow at Resources for the Future. I'd like now to ask Professor Goulder to present the report on allocating emission allowances under California's Cap and Trade Program.

Dr. Goulder.

(Thereupon an overhead presentation was presented as follows.)

PROFESSOR GOULDER: Thank you, James.
And thank you, Chair Nichols.

I want to say that on behalf of the whole EAAC Committee, we considered it a privilege to work on issues of allocation and provide advice to the Air Resources Board and Cal/EPA.

We also would commend Secretary Adams and the Board, in particular Chair Nichols, for having established the Committee and giving us the chance to provide our expertise on what we consider to be a very important issue, namely the issue of how to allocate emissions allowances under a Cap and Trade Program in California.

The other thing I would like to say is that we appreciated the helpfulness of the staff throughout both from Cal/EPA and from the Air Resources Board. And I'd like to mention, in particular, our appreciation to Mark Wenzel from Cal/EPA who consistently was very prompt in his help with us, and his contributions to the report were always of very high quality. His judgment was throughout very fine judgment, and we benefited a lot from his contributions.

So I'll try to be fairly brief, talk for maybe 15 minutes or so to give you a gist of what is in the allocation report. And so if we can turn directly to the next slide.
PROFESSOR GOULDER: There are two basic issues associated with the allocation of emission allowances. The first is what mechanisms or instruments do you use in order to put the allowances into circulation. In particular, how much should one rely on auctioning the allowances versus free provisions. That is, giving the allowances out free.

The second distinct issue, and also of great importance, is how do you allocate or to whom do you provide the allowance value, the value of the allowances? Who should receive what portions of the allowance value? What industries? What consumer groups? What other purposes might you devote the allowance value to?

Next slide.

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PROFESSOR GOULDER: The first issue is very important, because the method that you choose, auctioning versus free allocation, as I'll indicate in a moment, can affect the overall cost of cap and trade. So the choice of instrument can make a difference to the overall cost of cap and trade and to AB 32 as a whole.

Next slide.

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PROFESSOR GOULDER: Also the issue of to whom you provide the allowance value makes a significant difference
as well. There is a lot at stake. Depending on what the
allowance prices might be, whether the allowance price is
$20 a ton versus $60 a ton, the total allowance value
could be anywhere between 7 and $22 billion in 2020 alone.
That's a lot of change. Makes a huge difference, and
obviously there's political implications as well about who
gets how much of this allowance value.

I also want to emphasize something that's often a
misconception associated with allowance value. This very
high number, 7 to 22 billion in 2020 for allowance value,
is not the same thing and should not be identified with
the cost of AB 32 or of cap and trade. To a large extent,
almost entirely the allowance value stays within the
economy. It can go to some individuals, to some
enterprises or others, but it is not in itself a cost.
And some of the studies that have been done have
incorrectly identified allowance value with cost. The
overall cost to the economy is considerably less. Might
be a very small fraction of allowance value. Under some
studies, the overall cost to the economy is negative.
That is, there is an overall benefit even ignoring the
environment, despite the very large allowance value. So
it's important to keep those distinctions in mind.

Perhaps an analogy that would help in recognizing
this is if you introduced a tax, the revenues from a tax
is not the cost to the economy. Taxes do distort the 
economy and introduce cost. But a lot of the revenue used 
in the economy for various purposes may go back as 
transfers to households. May be used to help subsidize 
businesses and various investments. It could be used for 
a number of purposes. So the value of the revenue from a 
tax is not the same as the cost of the tax.

Similarly, allowance value is not the same as the 
overall cost of AB 32, and I'll touch upon that a little 
bit more in a moment.

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PROFESSOR GOULDER: In deciding which among the 
various design options to recommend for the Air Resources 
Board, perhaps our first decision was to decide upon the 
relevant criteria for evaluating the options. And the 
four criteria that we emphasized are given here. One is 
cost effectiveness. Other things equal, we would like to 
chose an allocation design, both in terms of allocation 
mechanisms and the provision of allowance value, that 
keeps the cost down as much as possible of the overall cap 
and trade system.

But in addition, we want to consider fairness. 
Some uses of allowance value or provision of allowance 
value might be fairer than others. So equity 
considerations are also important.
A third issue is environmental effectiveness. Depending on how you design the system, in some cases, you might have more leakage of emissions. That is, there could be offsetting increases in emissions outside of California that undue the effects within California, than in other cases where you'll have less leakage. So environmental effectiveness is an important consideration. And finally, and somewhat in opposition to the first three criteria, we have the concern for simplicity. We're trying to juggle many different normative criteria and come up with the best overall package. We think that is very much consistent with the language of AB 32 itself.

Advance the slide, please.

PROFESSOR GOULDER: I think they connect closely with some of the stated objective of AB 32. There's more in the report in terms of the language of AB 32. But if you'll see the bullets here, you'll notice that the Act stipulates in its own language that the regulation should, for example, seek to minimize costs, minimize the administrative burden, so that's very consistent with cost effectiveness. Also suggest that we should design the regulations in a manner that's equitable and ensures there is not a disproportionate impact on low-income households.
and that there's investment that's directed in a fair way
to disadvantaged communities in California. So that's
very much consistent with the fairness criteria.

And there's also language in the bill that
indicates -- in the law that indicates that AB 32 should
minimize leakage and ensure overall social benefits,
including reductions in other air pollutants which is
consistent with the environmental effectiveness goal.

So we chose those criteria as being our main
criteria. You'll notice one criteria is missing here. As
academics, at least, we have the luxury of being able to
stay away from politics, or at least in some ways we can.
So we did not include political feasibility as an
independent criteria.

Now, obviously these criteria here, such as
fairness and cost effectiveness, will impinge on the
politics. But we felt that we wanted to concentrate on
these elements, and independent of the politics, and we
think that is the right thing to do. We leave it to the
Board to figure out how much to weigh in the political
factors.

Next slide.

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PROFESSOR GOULDER: So I'm going to summarize
extremely briefly what's in about a 90-page report
focusing on our key recommendations and provide briefly the justification for those recommendations. And I'm going to basically talk about three or four of the key recommendations here. There are actually 12 that are listed in the report.

The first is -- and I'm going to divide the recommendations into two general categories, the first having to do with the mechanisms or the instrument of the approach used to introduce the allowances into circulation. And our first recommendation is to rely principally, if not exclusively, on auctioning as opposed to free provision or free allocation of allowances.

Now, let me tell you that when I started this work with the Committee, I had a different view. And my view's changed. I originally was more sympathetic to free provision, at least as part of the process, than I am now. And my discussions with a number of people on the Committee ultimately convinced me that free allocation had a lot less going for it than I originally thought. Let me indicate some of the arguments that we apply to try to indicate the advantages of auctioning. And I'll indicate we, in a sense, say that we should use auctioning almost exclusively with one exception, which I'll get to later. First advantage of auctioning is it's very transparent. It makes clear the amount that folks are
willing to pay to avoid emitting greenhouse gases. That's how much you're willing to pay for an allowance. And it reveals immediately the marginal cost of abatement perhaps more immediately and more clearly than under free provision.

But the next point is more important, and that is that auctioning can lower the overall cost, and indeed can lower those costs substantially relative to free provision. The reason is as follows. And I should say that it can do this. It doesn't necessarily do this. It depends on what's done with the auction revenues.

If you use the auction proceeds to help to go to the treasury and thus help finance government expenditure, then the government needs to rely less on ordinary taxes to meet its expenditures. For every dollar in auction revenue that goes to the government, that's one less dollar that needs to be collected through taxes. So you can either use the money to cut existing taxes or to avoid some of the increased taxes that might be envisioned.

And economists will tell you a well-worn notion in economics is that ordinary taxes distort the economy and cause dead weight loss or excess burden. Typical estimate is that for every dollar you raise in taxes, you actually cost the economy about a dollar-30, because of the affects on labor market efficiency or on investment
incentive.

So to the extent that you can use auction revenue to finance government expenditure, you avoid that extra 30 or 40 cents per dollar of waste. And I'll indicate later that that can be a huge gain that can gain perhaps two to $5 billion in the year 2020. That is, it can avoid a cost of two to $5 billion to the economy relative to using free provision of allowances.

But of course, this only is the case to the extent that the auction revenues are actually applied to help finance government expenditure. That is, to avoid other taxes. If the revenues are instead used to increase government spending, beyond what otherwise would have been the case, or if the revenues are given in a lump sum to households that aren't used to avoid raising taxes, then you don't get that benefit.

Next.

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PROFESSOR GOULDER: There are a number of misconceptions about auctioning I'd like to address here. One is there is some recent studies I'll mention later that suggest that auctioning is going to cause greater price increases than would be the case under free allocation. In fact, in most cases, consumers face the same prices irrespective of whether you auction or freely
allocate the allowances. That's because the marginal cost of emissions is the same under the two cases, and the marginal cost of emissions is what determines the prices of fuels or the prices of emissions allowances or the prices downstream.

So in most cases, there's no difference to the prices that consumers face under the two. So to argue that free allocation is going to help consumers relative to auction is an unfounded argument in the view of everyone on our Committee.

However, I do need to make a qualification, and that's why the words in most cases applies here. There are some institutional rules such as those that apply to electric utilities that have to do with cost pass-throughs. And it is in some cases the case that electric utilities can pass on the cost of auctioning, but they are not allowed to pass through the implied cost opportunity of free allocation. In that case, the consumers prices would, in fact, be lower in the case of free allocation.

Next, please.

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PROFESSOR GOULDER: Another thing to recognize is that if you're concerned about fairness to businesses, you can still achieve a lot of your fairness goals by using
the auction proceeds to provide some kind of relief. You
don't have to do it through free allocation.

Next, please.

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PROFESSOR GOULDER: Another important issue, and
obviously there's a great deal of political implications
of this, is the question of whether you need free
allocation or whether free allocation is warranted in
order to protect industry, whether it's stockholders,
managers, or employees.

Here's where my own views have changed over the
last ten months. I had first thought that you needed a
modicum of free allocation in order to make whole certain
industries in order to help stockholders avoid what would
otherwise be a loss of asset value. Free allocation would
enable them to maintain asset value better than
auctioning.

But many of my fellow Committee members pointed
out to me that in many cases the stockholders that you
might want to help have already left the scene. They no
longer own the shares. And moreover, the shares may have
already lost value, so you're no longer -- it's actually
somewhat late in the game to try to help those remaining
stockholders. The reason they lost value is that the
expected impacts of AB 32 have already been capitalized in
stock prices. So it's very hard to reach the stockholders or shareholders that you might want to reach through free allocation.

There's also a question of whether you're helping employees through free allocation versus auctioning. But very consistent with what I said two bullets before, the actual prices are the same under free allocation and under auctioning. And the affects on output are the same under the two as well. So there really isn't any difference in the affect on labor demand. The only difference is in the affect on profits, but not on labor demand. So you're not helping employees through free allocation either.

So I realize these are controversial and debatable issues. But the Committee as a whole found -- in fact, the Committee firmly believed unanimously that there really wasn't a strong argument to be made for free allocation as a matter of fairness.

However -- next slide.

PROFESSOR GOULDER: We do feel that there is a potentially important role for free provision in the form of output based allocation that could serve as a useful mechanism for addressing potential emissions leakage. Here, it would be devoted to the so-called energy-intensive trade exposed industries that in the
absence of some action taken might suffer a significant
disadvantage relative to their competitors out of state.
And one way that you can deal with that is through what's
called output-based free allocation. In fact, that's
envisioned and is part of the Waxman-Markey bill in the
federal level. It's used for the same purpose to help
prevent leakage associated with the energy-intensive trade
exposed industries.

We also felt, however, that free allocation is
not the only way to deal with this and that a more
efficient way would be border adjustments. I don't have
time to get into the details of that, but there is a
significant amount of discussion of this in the report.
And if there's questions later, I would be happy to answer
them.

So in a nutshell under allocation, we essentially
argue should focus on auctioning, except to the extent
that you want to use it to address potential emissions
leakage. And there you may want to use free allocation in
the form of output-based free allocation. But there's
also an alternative, namely border adjustments.

Next slide, please.

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PROFESSOR GOULDER: The second main area, the
other main area of focus, is allowance value provision;
what to do with the allowance value, who gets it.

And this is somewhat distinct from the issue of how to allocate the allowances through auctioning or free allocation. The allowance value is the same under the two. The question what is to do with that value.

Next.

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PROFESSOR GOULDER: As I have indicated, there's a lot of value involved. Depending on the price of allowances, I'm using the range that comes from the ARB's own reports, anywhere between 7 and 22 billion in allowance value in the year 2020.

Well, what the Committee decided to do was to take a two-stage approach here. First was involving earmarking certain purposes to which priorities should be given. And these are the three purposes listed.

One is addressing emissions leakage as I indicated on the previous slide. You can use output-based free allocation in order to -- and that would involve some allowance value -- to try to avoid emission leakage. That is, to avoid offsetting -- basically to avoid a contraction in the energy-intensive trade exposed industries within California which would just lead to offsetting increases by the competitors outside of California. That, of course, would contravene the spirit
of AB 32. Just having emissions reduced in the state
doesn't seem so good if it's being completely offset by
increased emissions out of state. So that would be one
way to apply allowance value that we would support.

A second, and in keeping with the language of AB
32, we felt that allowance value should be devoted to
avoiding a disproportionate impact on low-income
households in the state. Disproportionate in the sense
that the percentage impact on income would be larger than
those households which are not considered low income.

In the report, we provide some numbers, some
figures that were estimated by Dan Kammen on our Committee
and some other work done by James Boise on our Committee
to indicate how much allowance value would be used for
this. It was found that relatively little allowance value
would be needed to avoid a disproportionate impact.

The third earmarked area would be consistent with
the language of AB 32 would be to finance a contingency
fund to address any adverse local environmental impacts
that might ultimately result from AB 32. I would
emphasize that we didn't think that such impacts were
likely. To a large extent, of course, AB 32 is reducing
emissions. It's reducing not only greenhouse gas
emissions, but also the correlated emissions, the local
pollutants that go along with it.
So in general, we would expect that various communities will achieve improvements not only in terms of CO2 emissions reductions, but local air quality improvements. However, there may be some special cases in which that does not occur. And we thought a contingency fund to undo to provide environmental remediation or other counter balancing policies in those cases was useful.

Apart from the earmarked uses though, the remainder we thought should be used in two ways. What emphasized though that we thought that the remainder would actually be the lion's share of allowance value. Might be 90 percent or more of allowance value, that relatively little allowance value would be needed for the earmarked uses.

So we wanted to use the remainder in two main ways. About three quarters of it we suggested should be recycled to households, given back to households in one form or another. About 25 percent, or a quarter of this remainder, could be used for financing various government expenditures, including investments in R&D, environmental adaptation, job training to ease the transition, and state and local land use policies.

Next slide.

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PROFESSOR GOULDER: In general -- and this is
actually something that was very gratifying to me -- our Committee reached a very strong consensus on everything I've said up to now. I was very pleased. I think frankly we got dealt a good set of cards that the Committee members, with the exception of the extreme on my left here, were very cordial and fair minded.

(Laughter)

PROFESSOR GOULDER: I kid, Steve.

But one area that we did not achieve consensus was in what way that 75 percent of the remaining allowance value should be returned to households. Several on the Committee felt strongly that we should take an approach that's called the cap and dividend approach where you return the allowance value to households as a lump sum.

That is basically a rebate check.

The advantage of that -- next.

PROFESSOR GOULDER: It's very salient. It has some public relations advantages and political advantages in that the households will see that immediately, and it can be very advantageous in many ways in terms of the public awareness.

A slight majority of the Committee, however, felt that returning the revenues to households to the private sector in the form of lower taxes, that is avoiding future
tax increases or actual tax reductions, would be a better way to go. And the argument there is the one I made earlier, that this is a way you can reduce, and in my view reduce substantially, the cost of AB 32 or of cap and trade.

My own view is that this is an issue that's been under recognized. There's a whole lot at stake in terms of whether you return the allowance value as a lump sum versus allowing it to go back to the tax system and avoid the tax rate increases or promote tax rate reductions. As I mentioned, something like two to five billion dollars. And that's a lot as a share of the overall projected cost of AB 32.

But these are issues that we were not able to reach agreement on. So we agreed to disagree, and we presented in more detail in the report the arguments in both directions.

My final slide. Next slide.

--00o--

PROFESSOR GOULDER: Offer a couple general comments.

And I said, you know, we didn't consider politics as part of our analysis. But I recognize there is the elephant in the room, and that there's a lot of pressure now about whether to auction allowances or freely
allocate, because the more you freely allocate, the more you will beef up profits of some of the affected businesses. And I had two comments to make about that.

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PROFESSOR GOULDER: One is I would urge you -- I recognize that there are these political considerations that I think one thing you can do -- you asked us as experts to provide input. I hope you will relay this input to others, and in particular help dispel some of the false claims made about auctioning, such as -- and I hope I've at least indicated why these may be false, but auctioning causes higher prices or that auctioning hurts agreement, or that auctioning involves greater aggregate cost.

I'm convinced, and I believe my Committee members are as well, that each of these claims is wrong. And indeed the last comment that involves greater cost is completely wrong in that, if anything, auctioning offers potential to lower the aggregate cost.

And the very last point, the last bullet here is, if you do feel that you want to move to free provision beyond that which is recommended in the report, I would urge you to do so conservatively. The Waxman-Markey bill, where many may figure to step forward, it ends up over
compensating in that more allowances are given out free 
than is necessary to sustain the profits of the key 
stakeholder industries. I would very much hope that in 
California we avoid making that same mistake.

I'm not saying this in order to offer a strong 
criticism of Waxman-Markey. I'm very sympathetic to the 
bill. But in this particular aspect, my own work and work 
of a number of others has indicated that more free 
allocation was done.

For example, if you 100 percent free allocate, 
that is, do no auctioning, you can rise profits by a 
factor of two or three in some of the stakeholders indices 
relative to what they would be in the absence of any 
policy at all.

And this all comes at a cost to consumers and the 
rest of the economy. To the extent again that you freely 
allocate, you're avoiding having a source of revenue that 
could potentially lower the cost to all of California 
consumers, employees, owners of other industries as well. 
So I hope you'll take that advice seriously. At 
the same time, I do recognize there are strong 
considerations of a political nature to address.

CHAIRPERSON NICHOLS: Thank you.

Did you want to give some time to the gentleman 
on your left, or he just there as decor?
PROFESSOR GOULDER: That's up to him.

MR. LEVY: Just briefly.

CHAIRPERSON NICHOLS: Introduce yourself, please.

MR. LEVY: Sure. I'm Stephen Levy. I direct the Center for Continuing Study of California Economy, and I have met, despite his humorous comment, a wonderful new friend who chaired all of these efforts.

I think one point is to distinguish the overall impact on the economy, the common good issue from the fact that there will be some industries that will expand under these policies and some that might contract.

The point of the policy is to send a price signal that will help us reduce emissions. And you don't want to do anything -- whatever you think about the affected industries, you don't want to do anything that undercuts the purpose of the program, which is to send a price signal about the use of carbon-based fuel so that we can reduce emissions and shift our energy uses. That's the first point.

The second point is really to re-emphasize what Larry said, that under an auctions system, we'll collect some revenue. It will stay in the economy. And the overall impact of that auction revenue depends on how you utilize it; for example, for technology, partnering and investing in technology, or for environmental or health
remediation.

But we also all know that California is under an intense set of budget pressures and budget shortfalls. And so let me put a little bit different twist on what Larry said. We are going to be under pressure to raise revenues to maintain even the current level of services according to the Legislative Analyst's office. We face a ten to $20 billion ongoing shortfall. I think the Committee was unanimous in feeling that you should consider the use of a portion of these allowance price auction value revenues as a very positive, relative to tax increases, way of maintaining the existing level of spending. So I want you to see it in that light. We're allowed to put a little bit of the politics into the situation, the question of how we maintain the existing level of public spending in California is going to be a very important issue. And the issue of potential tax increases, as Larry said, will be right there. This is a way to avoid them.

Finally, it's that broader look of using the allowance value that I encourage you to think broadly about what returning allowance value to the public means. It can be writing a check. It can be investments that make our lives in California environmentally and health and in terms of environmental competitiveness better. It
could be used for the budget.

So the idea that we favor extensive use of
returning money to the public has a very broad set of
policy interpretations for you to select from.

CHAIRPERSON NICHOLS: Thank you.

Well, as Professor Goulder mentioned, we asked
this Committee to give us their best advice on what
approaches to allowance allocation and use of revenue --
so we thought about both of those things -- would do the
most to maximize the overall economic benefits to
California, and certainly did not ask them to limit their
devices based on their judgments of the legal or political
obstacles that might arise.

We are now at the point where ARB staff, and
before too much longer this Board, is going to have to
face the task of taking this expert advice and others and
using it to construct a program that will work technically
and legally and will also provide a smooth transition from
today's world, which is largely devoid of any kind of
carbon regulation, and trying to cope as well with the
very difficult economic circumstances that California and
the country find themselves in in order to construct an
effective program.

I think the Committee's recommendations give us a
very solid place to start from. And I want to not just
thank them for the work, but for the very high level of
thought that went into this.

I also want to say that, from my perspective, I
think this is not likely to be where we'll end up, and so
I want to be clear about that.

Many of you and Board members and many others
have seen the letter that I got from Governor
Schwarzenegger yesterday expressing his views about some
of these issues. And I know you know that we've been in
communication on a regular basis, because he is extremely
interested in this program and in the Board's work.

But rather than simply allude to that letter,
because it has a number of broad statements in it about
things that he would like to see us consider, I wanted to
indicate a couple of areas where in ongoing work with the
staff I have given some pretty specific direction about
what they should be working on so that when they do come
back with a draft regulation, which will be sometime late
April or early May based on what we're hearing in terms of
other input and other work that has to be done, that there
will be something here that we can successfully move
forward with this year.

And recognize, first of all, that in the context
of implementing AB 32, this Board either has already
adopted or is in the process of adopting the measures that
are going to get us about 80 percent of the reductions that are needed under AB 32, the reductions that will get us from where we were when we started this program to 1990 levels by 2020. Those are primarily going to be based on our Low-Emissions Vehicle Program, the Pavley Program, the low-carbon fuel standard, and the work that's being done on renewable energy resources. They represent the bulk of the specific reductions that we're going to be looking to take.

The cap that sits on top of all of this is extremely important, both for assuring that the reductions will get there and also for allowing to provide this price signal, which we keep talking about, as a way for people to begin to understand that carbon does have value and that we need to figure out ways in which we can capture that value.

So we think -- and you'll hear when we move to the discussion about the new economic report -- that the mix of measures and cap and trade that we put in our Scoping Plan that we adopted in December 2008 was about the best mix that you can come up with overall for what we know about what will work in the California economy, but it didn't tell us anything about how to design that piece of the program.

So in looking at what some of the challenges are
that we face in designing this program -- and I think it's important to remember that we're not operating in a vacuum here in the state of California. When you talk about industries that are trade exposed in California, practically everything -- with a possible exception of the two U.C. campuses that got swept into our list of 600 largest emitters -- could pick up and move somewhere almost at any moment, with the exception of the utilities. That doesn't mean that we can't find ways to reduce our emissions. I'm being a little bit factitious in pointing out that some of these terms that we use rather lightly can have much more complicated implications in the real world. And it's going to be very, very difficult for us to understand all of the details of how that would work in the amount of time that we have available under AB 32 to actually design this program.

Even more important perhaps, as Larry mentioned, from the very beginning of AB 32 -- and I wasn't here when it was passed, but certainly I've seen a lot of the statements that come from that period -- the idea that California was going to be leading the way in terms of how the country was going to approach this, and back in a time when we had a President that didn't believe the country should be doing anything about global warming. That has changed, and we now have a bill that's passed the House
and we have a bill that's being worked on in the Senate, although it's not yet been officially introduced, that gives us a lot of indication about how the country as a whole is likely to be addressing this problem.

And so it becomes even more important I think than it has been in the beginning -- from the beginning to understand how whatever program we start in California, assuming that we get to flip the switch before some others do, how that can mesh as seamlessly as possible into the national program.

So my feeling about this is that we need to kind of go back to where we started in 2007 when I first joined this discussion and reestablish the notion that this is something that we want to ramp up carefully. Start out perhaps smaller than the full program that we might get to in a few years to give ourselves time to understand what the implications are, and not send too great a shock signal through the California economy.

We want to make sure that we have in place enough safety valves. And I'm thinking now particularly about the issue of offsets, which the Committee did not address. But when you start to look at actual requirements for companies to comply within an emissions limit and have allocations that cover all of their emissions, we know that the program will be much more workable, much less
costly if there is an available supply of real, 
verifiable, approved offsets that can be used by 
companies.

So we have some issues there that we need to work 
through and we need to engage very actively with 
stakeholders I think to get us to a place where we have a 
proposal that we can come out with in roughly six weeks or 
so is the schedule we're talking about.

But I'm hoping that it's helpful if at least at 
the outset we can indicate to people that we're trying to 
do this in a way that may not achieve all of the results 
that the Committee has suggested at the very beginning, 
but which does represent a reasonable way of maintaining 
the progress that we've already achieved without creating 
the kind of response that could really make it very 
difficult for us to keep up the momentum that we've 
already established.

So it's I guess a way of saying that what we've 
received from the Committee is important and certainly not 
to be overlooked, but at the same time, it's not binding 
on us. And I believe that, in fact, we will need to at 
least at the outset take a few baby steps before we get to 
the point where we're actually running the full system.

I'd like to open this up for Board member 
discussion, and then we do have a number of people that
have indicated they want to speak.

Yes, Professor Sperling.

BOARD MEMBER SPERLING: Thank you.

Following up on your baby step theme, I thought it was a superb report. It was readable, understandable. It really communicated a lot of the major ideas really well, and I think it's going to be very useful for us.

But following up on that baby step theme, I think it would be useful to us if we had a better -- if we were able to quantify or have a sense of the trade-offs we're talking about between free auctioning, free allowances, and full auctioning.

So, you know, I understand in absolute terms what you're saying and I understand that's true from an economic sense. But as Chairman Nichols said, we do have these political circumstances we're dealing with and there's equity issues associated.

So the short question is: How much of an extra cost is there as best as you can quantify for different levels of free allowancing -- free allowances? Can you answer that?

PROFESSOR GOULDER: I think I can answer that two ways.

One is by mentioning some work that I've done at the federal level looking at Waxman-Markey. And that may
not apply perfectly to California, but it might indicate
in some sense the relative cost improvement from
auctioning. And if you take the extreme case of
auctioning where all of the auction revenue is used to
displace personal income taxes, then there's 40 percent
reduction in cost of Waxman-Markey compared to what would
be the case if you took the extreme, to allocate all of
the allowances free. So that 40 percent difference is
significant, but you could say that's a limiting case.

BOARD MEMBER SPERLING: What are the numbers here
that we're talking? What's the base?

PROFESSOR GOULDER: This is the present value of
the GDP cost over the period 2012 through 2030, in that
particular study. So it reduces -- in other words,
Waxman-Markey under free allocation would lower GDP by a
certain amount -- I don't have the number -- over that
interval. And with 100 percent auctioning, it also lowers
GDP, but by 40 percent less.

Now, for the state of California, unfortunately,
none of the models that we have looked at, not only from
the ARB, but also the Charles River model and other
models, none of them has looked at -- has done this
straight-up comparison, although Charles River has been
planning to do this. Their model is capable of it, but
they haven't done this.
I've done a back-of-the-envelope calculation, but I think we have to be careful how much faith we put in it using some simple diagrams and things like that. My rough estimate is that the cost of the cap and trade component of AB 32 would be about 50 percent higher if you rely exclusively on free provision of allowances versus if you rely on 100 percent auctioning. But that's the back-of-the-envelope calculation. It's based on a rough estimate of the dead weight lost from taxation and the amount of allowance value that's created.

BOARD MEMBER SPERLING: I think it would be useful at some point to actually have a memo or something on that, because I think that would be very valuable to us.

And you know, I mean, I guess I wonder how big a number that really turns out to be when you take into account what Chairman Nichols said, where 80 percent of the reduction is actually coming from all the other measures that we're talking about for 2020 and then you have offsets on top of that.

PROFESSOR GOULDER: I misspoke. When I said 50 percent higher, I meant 50 percent increase in the cost of AB 32 as a whole. I compared the gain from using the revenues to cut preexisting taxes under auctioning with the estimates of the overall impacts of AB 32 under free
provision. So it actually is 50 percent increase in the overall cost.

There is a brief discussion of this in the report. It may be kind of buried, but I'd be happy to provide more of the details of the analysis. I think the report says something like two or $3 billion savings in the year 2020.

BOARD MEMBER SPERLING: Two or three?

PROFESSOR GOULDER: Yeah. In the year 2020.

BOARD MEMBER SPERLING: Am I allowed to ask one more question?

CHAIRPERSON NICHOLS: Okay. And others are waiting in line, but go ahead with your question.

BOARD MEMBER SPERLING: The other question is: Including transportation in the cap -- and there was a couple references to it. And I guess what are your views on that? And also in the terms of when we talk about transportation, are you talking about full life cycle emissions or not?

PROFESSOR GOULDER: Yes. I don't know if I can speak for the whole Committee, but I can say I was quite happy with the emphasis up to now from the Air Resources Board that seems like they've been leaning towards eventually including transportation within the cap. I think that's a good idea. The general reason is the wider
you make the cap, the more potential there is for capturing low-hanging fruit and capturing emissions, the more gains from trade as a result. And so including transportation makes sense.

I would make clear that when we say including transportation, we're not saying try to monitor the emissions from each individual automobile. It would be done more upstream at the refinery level.

There are some arguments that say it's not worth it, because after all, you're not going to get that big of an increase in the price of gas. And you won't get that much reduction in emissions from transportation.

But my counter argument would be whatever the reductions are, they do pay for themselves, because there is an externality in having the price of gasoline better reflect its full social class. Means whatever reductions you get are giving you benefits exceeding the cost. So I'm very much in favor of that, and I believe the other EAAC members were. I know that in the MAC report from two-and-a-half years ago, we embraced include transportation. That was one recommendation I was pretty sure was not going to be followed. And at least it seems up to now there's been a lot of support for it. So I'm happy about that.

In terms of -- what was the second aspect of the
BOARD MEMBER SPERLING: When you say transportation fuels, are you meaning the full life cycle emissions all the way upstream or just at the refinery?

PROFESSOR GOULDER: Well, in principle, it should be life cycle. But our report doesn't comment on it and I'm not sure I'm competent enough to think about the administrative issues involved. That is something I would defer to others on.

CHAIRPERSON NICHOLS: I think the next question was Dr. Balmes and then on down.

BOARD MEMBER BALMES: So again, I want to complement the Committee for what I thought was an excellent report in terms of laying out important issues. And it's quite readable. If I can understand an economic report, it's got to be reasonably clearly written.

And I'd also compliment you on your presentation today, both of you.

So I have a couple comments, and actually one of those comments is actually to the entire group, including the stakeholders. Since whatever decisions we make as a Board with regard to this program are impacted by political reality, and I think a lot of different political viewpoints are represented in the room, I would like to see the comments be germane to the framework we're
working with and starting with the report, even if the
report is not going to be taken as the gospel for what we
should do. So the 25/75 split after free allowances, I'd
like to hear people comment about that from their
different perspectives.

I'd like to hear people comment about when we
should get to 100 percent auction, how many years should
that be. And, you know, I have an open mind, but I think
instead of sort of arguing at the extremes, I think we
should try to focus our comments on what we have before us
in terms of the report.

CHAIRPERSON NICHOLS: Excuse me. I just want to
mention the fact that the report itself is not going to be
adopted or rejected. But we are taking comment on it,
because we do take it very seriously as input to the
design of the regulation.

BOARD MEMBER BALMES: And I think that the
Committee did their work very carefully. So I think it is
an appropriate starting place.

And I have a specific question. So when you talk
about the Committee recommended the possible use of free
allocation for the output-based, free output cost
disadvantage to out-of-state competition, could you be
more specific about what kind of industries you're talking
about there? It's probably in the report that I missed,
but if you could refresh me.

PROFESSOR GOULDER: Yes. First thing I would say is I would like to clarify what might seem to be a contradiction to what I said earlier.

Free allocation in the simple form where you just give out the amount free and it doesn't depend on output decisions of the firm, it's exogenous, that should have no affect on -- should not differ in its affect on choices from the effects of auctioning, because the market price of allowances will be the same in both cases. And it's the margin or that market price that determines the optimal level of output.

However, output-based allocation is a different form of free allocation. It's where the amount that the firms get free is based on their level of output. In effect, it's like a subsidy to output, because the more output you do, the more allowances you get. That, therefore, does have an effect on output decisions. And the way it works is there would be sufficient free allocation through output-based allocations to prevent a contraction of output by the trade-exposed energy-intensive industries thereby avoiding a situation where they contract their output and that part of the market is made up for outside the state.

In terms of the particular industries that are,
in effect, the trade-exposed energy-intensive industries,
I might ask my colleague, Steve, to help me here. But
cement would be one. It would be an important point.
Would petroleum refining be one? And what else
would you add to the list, Steve?
MR. LEVY: I'm not sure there was a third. Oh,
yeah. I thought the utilities were considered in that.
BOARD MEMBER BALMES: Okay. Those were the ones
that came to my mind, too, but I wanted to make sure I
didn't miss one.
PROFESSOR GOULDER: I think the Air Resources
Board's own analysis of the economic impact displays in
some detail which industries are more likely to be
effected in terms of trade exposure than others. But
those are the three that come to mind.
BOARD MEMBER BALMES: My last comment would be,
you know, I just read the letter from Governor
Schwarzenegger, and I'm now aware of his perspective.
And I would say that just something to consider
is if we can reduce taxes considerably by a cap and trade
mechanism where there's not so much free allocation; I
realize we have to ramp up over time and can't do it all
it once -- that seems to be something that could resonate
with the public with regard to dealing with some of the
political realities. So I just throw that out there.
CHAIRPERSON NICHOLS: I think many people would be attracted by the notion of replacing inefficient taxes or taxes that we know cause businesses to decide to locate in other places with something that would be more economically rational. Unfortunately for us, in a way, I suppose we don't actually get to make that decision.

BOARD MEMBER BALMES: I understand.

CHAIRPERSON NICHOLS: So what we're trying to do here -- and it is hard to bear in mind, because you'd like to design the perfect system and then just have it execute itself.

But people use the word "politics" as a negative term, and I realize for many people it is. But for me, it's actually a noble term in the sense that you're trying to figure out how in a democratic society where people vote and participate you can come up with something that's sustainable over time. And that means in a situation where, you know, people change their votes all the time. They change their elected officials and so on.

So you have to try to create a system that will somehow be able to carry itself on for long enough that it does send the kind of signals we would like to send. It's a great challenge for us as a Board to come out with something that we can implement that will survive that kind of test.
Ms. D'Adamo.

BOARD MEMBER D'ADAMO: Good segue for some of the questions that I have.

And this may fall in the realm of public policy decisions that you indicated that you didn't make judgments on. But I'm curious from an economic perspective from your perspective if we were to direct the distribution of funds to lessen the impact on industries that are covered by the cap and trade and then also if we were to also direct some of the funds towards programs that could further our public policy goals, not sending it back to the general fund, but targeting those funds to conservation measures, public transit, some of the things that are transit, in particular, that are very underfunded. And if we look at the goals of SB 375, the big challenge that the communities are going to have in meeting the targets are directly related to whether or not we're going to be able to obtain funding for transit projects for more livable, walkable communities.

So curious if you looked at any of those issues in terms of specifically targeting where the funds go beyond just generally recycled to households, for example.

PROFESSOR GOULDER: I think the Committee is very sympathetic in spirit, indeed, the report is as well, to using some of the allowance value for just the purposes
you indicated. Those purposes are in what was called the 25 percent, the allowance value that doesn't go back to households directly.

I listed a couple. I mentioned adaptation and job training. I mentioned obliquely state and local initiatives. That could very well include public transit, for example, funding. And the report does also mention the use of allowance value for conservation measures.

We were unable to come up with numbers in a sense to try to measure the bang for the buck from each of these competing options. So we instead just said here are a number of options that look very good. We think the 25 percent should go to these kind of things, but we didn't have the resources. Even if we did, I'm not sure we would have been able to come up with very precise estimates as to which particular use of the allowance value we'd offer the most social gain. We thought that was just beyond our abilities.

But we also felt that they had enough going for them that we thought it was good to have some allowance value devoted to that as opposed to going back directly to households. I confess that the 25 percent versus 30 percent versus 20 percent is somewhat arbitrary. But for some reason, the Committee just seemed to converge on that 25 percent. But we couldn't give you hard analysis to
justify that. And we certainly aren't giving any analysis
to indicate the specifics of the elements within the 25
percent. But it would certainly embrace the various
actions that you refer to.

And you also mentioned some of it could be given
back to industry. And we are very much in favor of that,
to the extent that it helps with transition assistance or
helps provide investments that industries can make that
have other laudable social purposes.

What we were hesitant to embrace, however, was
simply giving allowance value free back to industry in
order to sustain profits. And we went through a lot of
discussion of that, in part because we felt that the
shareholders that you might be trying to help in doing
that have already left the scene. So there I realize that
there's going to be some controversy to that, but we were
relatively unsupportive of giving free allowance value
simply for the purpose of sustaining profits, with the
exception of the trade-exposed energy-intensive industry
where the effort is not to sustain profits, per se; it's
to sustain outcome and thus prevent leakage.

BOARD MEMBER D'ADAMO: Just a general comment for
the Board and staff.

I think it would be useful to have a further
analysis once we look at the entire package. I kind of
look at this as just one tool of many or like dials where these allowances, how much can be free, auctioned off. And same thing with offsets: In state, out of state, and the various configurations that we can make. And I'm in favor of pushing for as much as possible. But we have a very serious economic reality we're looking at. And so I think what it's going to get down to is what is the expert, for me, say in terms of how much relief we can offer to those that are going to be impacted. And it would be useful to look at the entire package in order to get the best advice.

CHAIRPERSON NICHOLS: Thank you.

Dr. Telles.

BOARD MEMBER TELLES: I probably of all people on the Board have the hardest time understanding this. In your presentation, which I almost understood, you mentioned that there is a dead weight value to taxes, like $1.30. And that you imply there's no dead weight value for allocations. And then when you answered Ms. D'Adamo's question on how to use allocations. You basically said presented things which taxes are used for. You know, all the things that you said, taxes are currently being used for that. So I really have a hard time understanding what's the difference between an allocation and a tax. I mean, if a tax is detrimental to the economy, why isn't an
allocation detrimental to the economy?

PROFESSOR GOULDER: Fair enough.

First of all, we're talking about dead weight loss, and it's the taxes have a cost depending on which tax it is. But the tax will generally have a cost over and above the amount of revenue brought in. So if you bring in a dollar in taxes, you might use that dollar for a number of purposes. And even if the benefit/cost ratio in general is one, you're still losing something from the private sector, because it's distorting the labor market through taxes, reducing labor incentives, reducing incentives to invest through capital taxes.

So I think I understand that your focus is then why is it that auctioned -- proceeds from an auction don't have a dead weight loss just like proceeds from an ordinary tax? Well, in fact, they do. They have a gross cost, which is the same. But then there's also something you have to net out which makes them have an advantage, which is there's the environmental benefit, the fact that they're dealing with an externality. They're dealing with the environmental costs that aren't incorporated in prices.

So whereas raising ordinary taxes hurts the economy overall because it just creates labor market and capital market distortions, having cautioned revenue, it
does cause some distortions in labor and capital markets,
but that's more than offset by the environmental gains.
So you're actually improving the allocation of resources.
You're not worsening it. Economists sometimes make a
distinction therefore between on the one hand ordinary
taxes, which were called distortionary taxes, and on the
other hand either auctioned permits or environmental taxes
which are called corrective taxes, because they deal with
an externality and they improve resource allocation rather
than worsen it.

So if we were to ignore the environment entirely,
then your intuition is exactly right; there would be no
difference. You might as well just stick with our tax
system and not try to substitute auction revenue for
ordinary tax revenue. But given the externalities and
given the concern about the environment -- there is a
difference. You can think of cap and trade as a kind of
green tax reform, whereas Chairman Nichols said, we're
substituting bad taxes or problematic taxes instead for
those -- we're introducing another revenue source which
has this environmental benefit and makes it on net a
beneficial on source of revenue.

I hope that helps.

BOARD MEMBER TELLES: Thank you.

CHAIRPERSON NICHOLS: Other questions or comments
Okay. We'll go to the witnesses, of whom there are many starting with -- I hope you have your list somewhere so you know where you are in line.

Norman Pedersen, Brian Cragg, Louis Blumberg.

MR. PEDERSON: Good afternoon, Chairman Nichols and members of the Board.

I am Norman Peterson here today for the Southern California Public Power Authority.

We're concerned about some gaps in the EAAC report. The report says it's important to send a strong price signal to consumers, including electricity consumers, to conserve energy and thereby reduce GHG emissions.

The report doesn't recognize that, under its recommendations, two price signals would be sent to electricity consumers: First, a price signal would be sent about the cost of carbon as revealed through an auction of allowances; secondly, a price signal would be sent about the cost of the complementary measures that are going to be undertaken by the electricity sector.

The cost of those complementary measures for the electricity sector is going to be substantial. The Scoping Plan puts the cost of just one measure, renewables, at $133 a ton. Compare that $133 a ton to the
projected cost of allowances, which I understand the new
economic analysis is putting in the 20 to $30 range.

Electric utilities can design rates to send a
price signal about the cost of carbon as revealed through
an auction. However, we believe it would be
counterproductive to also require the electric utilities
to send a potentially much greater price signal to
electricity consumers about the cost of the complementary
measures.

So we propose an administrative allocation of
allowances to electric utilities for the benefit of their
consumers. After the administrative allocation of
allowances to the electric utilities, there could still be
auctioning to develop a robust cost of carbon as
demonstrated through the auctioning process.

After auctioning, however, there should be a
proportional return of auction revenues to the electric
utilities. Insofar as the electric utilities are
pervasively regulated, you can be assured the value would
go to the benefit of consumers, not the shareholders, as
Mr. Goulder was concerned about. The revenues would then
be available to be used by the electric utilities for
concrete GHG emission reduction purposes. The return of
revenues would moderate the price signal about the cost of
the electricity sector's complementary measures and ease
the burden on consumers of moving to a low-carbon economy
while leaving in place that other price signal about the
cost of carbon.

Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Mr. Cragg, followed by Louis Blumberg and Strela Cervas.

MR. CRAGG: Good afternoon, Chairman Nichols and members of the Board.

I'm Brian Cragg representing the Independent Energy Producers Association, or IEP.

From what I've been able to read and gather from the reports, it sounds very interesting and I'm looking forward to understanding it much better and digesting it further.

I did want to call your attention today to some of the implications to one of the possible allocation proposals that's been made that I don't understand that the Committee endorsed, but it is kicking around and might be brought up again over the next couple months. And that's the proposal that would allocate the allowances to electric utilities, as my friend Norman Pedersen just mentioned. And the rational for that appears to be that the electric utilities are in the best position to provide benefits to consumers by making use of those allowances.
But I think it's important to realize and understand that electric utilities are not just retail providers of energy to retail customers; they're also wholesale -- also compete in wholesale electric markets both at the sale and regional levels and compete with IP members and other independent power producers.

I should probably mention that IP represents about 25,000 megawatts of independent non-utility installed capacity in California, which represents about 33 percent of the peak demand in California statewide.

The California Public Utilities Commission, which regulates investor-owned utilities, has adopted a hybrid market structure that allows electric utilities to compete directly with their electric utility-owned generation with independent power producers. If those electric utilities are allocated, the allowances, then the independent producers -- independent generation owners will have to go to these electric utilities' direct competitors to get those allowances. It's a little bit as if General Motors was given the right to allocate operational permits for the automotive industry and Toyota would have to go to GM in order to get the permits it needs to conduct its businesses.

Now, obviously the Board's choice of allocations in the electric utility industry could have a great effect
on competition, as I explained this morning -- or this afternoon. IP therefore urges the Board to carefully consider the competitive implications for the electric utility industry of the allocation methodology that you select as a result of this report in the further deliberations and also to consider carefully two principles. One is that entities with the compliance obligation, which include electric generation, may need and should have reasonable access to the allowances. And second, that all generators, whether they're utility owned or independently owned, should be treated equally in the allowance and allocation. They should be treated both in theory and in actual application of the allocation.

Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Louis Blumberg and Strela Cervas.

MR. BLUMBERG: Good afternoon, Madam Chair and members of the Board.

I'm Louis Blumberg with the Nature Conservancy based in San Francisco.

The Nature Conservancy is pleased and supportive of EAAC's recognition in its report of the importance of the natural landscape and working landscapes in the comprehensive climate policy, and we want to thank them for the work they did to work with us and be responsive to
the input that we provided.

Madam Chair, as you know well, our natural landscapes provide key roles in the climate policy. They can be part of the problem and part of the solution. They can store greenhouse gases, and they can also be a source of greenhouse gases. So it's appropriate that the report recognize those dual roles both in mitigating greenhouse gas emissions and in helping communities and people respond to the impacts already being felt and those expected through adaptation.

Mindful of Dr. Balmes' admonition, I would like to say the Nature Conservancy supports full auction as soon as is feasible, recognizing that there will be need to take some time to learn by doing. What that time frame is, I can't say.

We also acknowledge that in the auctioning part of the report, the 75/25 does seem to be a subjective decision made by the Committee. And we wanted to -- I would like to highlight three parts of these 25 percent, if you will. We don't have an alternative number, but we are pleased that in that recommendation that the -- the recommendation that we support says with the allowance value should be invested in natural system adaptation. There are a variety of public benefits that would be approved from that, and we think it's important and
appropriate use of the allocation dollars in part to deal
with flood, fire, and sea level rise that can protect
people and use nature to protect people from these
impacts.

We also support the recommendation that
investment in SB 375 implementation be consistent with
related recommendations from the Regional Targeted
Advisory Committee, the RRAC, and the Strategic Growth
Council. They both acknowledge the important role of
conservation, land use, and transportation in addressing
climate change.

And third, we support the recommendation that
local governments and counties, in particular, be eligible
to receive allowance value for land use plans and programs
that incorporate natural resource protection for climate
benefits amongst the many other benefits they provide.

And given the recent interest in Washington, D.C,
or the progress as elucidated in the Governor's letter,
things seem to be moving. And regardless of what happens
federally, action at the local level will always be
important and remain a key part.

So thank you again to the EAAC, and we urge your
Board to include these recommendations in your final
implementation of AB 32. Thank you.

CHAIRPERSON NICHOLS: Strela Cervas.
MS. CERVAS: Good afternoon. My name is Strela Cervas. I'm the co-coordinator for the California Environmental Justice Alliance. CEJA is comprised of six of the leading base building environmental justice organizations in the state. So we have the Asian Pacific Environmental Network in Oakland and Richmond; the Center on Race, Poverty and the Environment in San Francisco and the Central Valley, and the Center for Community Action and Environmental Justice in Riverside and San Bernardino; the Communities for a Better Environment in Oakland and Los Angeles; the Environmental Health Coalition in San Diego; and the People Organized to Demand Environmental Rights in San Francisco. And we work to ensure that the most impacted communities participate in our state's policy making.

I commend the Economic and Allocation Advisory Counsel's recognition of the commitments in AB 32 to low-income residents and disadvantaged communities throughout the state. As we well know, low-income communities, immigrants, and people of color across the state are disproportionately impacted by environmental health hazards.

Just a few comments on the recommendations. I want to focus on the Community Benefits Fund starting with recommendation number ten. We suggest combining the
recommendations in number ten and eleven to establish a defined Community Benefits Fund that will be used solely in the most impacted and disadvantaged communities. The Community Benefits Fund would help direct investments in geographically defined neighborhoods for the purposes of achieving our AB 32 goals of reducing greenhouse gas emissions, while reducing local air pollution as well as minimizing the health and economic impacts of climate change.

The Community Benefits Fund fulfills the intent and requirements of AB 32 to direct investments into the most disadvantaged communities. It can provide for things like pollution reduction, job training, and job creation problems, increasing the availability of buses and training, as well as fair subsidies for mass transit riders, everything that we need in our community.

The funds would greatly benefit places like the San Joaquin Valley that is experiencing high rates of pollution-related birth defects or places like Mira Loma and Riverside and San Bernardino where communities that live next to the freeways, the truck routes, and trains suffer alarming rates of respiratory illness.

So we really urge the Air Resources Board to provide specifics to make the EAAC recommendations operational. We also support the approach that the
legislature make the final decisions about the
allocations. And I thank you for your time.

CHAIRPERSON NICHOLS: Thank you.

Sophia Parino and Shankar Prasad and Tim Tutt.

MS. PARINO: Good afternoon. My name is Sophia
Parino with the Center on Race, Poverty, and the
Environment.

And I would also like to express my
organization's support for the Community Benefits Fund,
which was in the EAAC report Recommendation 10, I believe.

AB 32 and the EAAC recognize that there's
disproportionate impacts from global warming as well as
possibly from the implementation of AB 32, and that is
communities should be protected. And we feel that the
Community Benefits Fund is really the best way to work
within AB 32 before these communities. It directs
investments to the most impacted communities. And it also
is an excellent way to fulfill your requirement under AB
32 to invest in these disadvantaged communities.

The Community Benefits Fund really avoids the
shortcomings of just a contingency fund, which was
Recommendation 11, where in the contingency fund you're
waiting for the harm to happen and then putting the burden
on the community to show that there was a harm before
going into address that harm.
And what we would urge the Board to do is to establish a defined Community Benefits Fund that could include a contingency fund but really focuses on preparation and prevention. And that this would really address the needs of these communities.

We need the strategies in the Community Benefits Fund to respond to the existing higher levels of air pollution and the anticipated disproportionate health impacts from climate change in our communities. And we would urge the ARB to provide specific rulemaking within the cap and trade rules that are coming up with the regulation that make these recommendations from the EAAC operational and especially looking at our communities and the Community Benefits Fund and making sure that there are investments there.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

Shankar and Tim Tutt and David Arrieta.

MR. PRASAD: Good afternoon. Very rarely I get the opportunity to speak to you twice in a day and do so favorably.

Chair Nichols and Secretary Adams, we are very pleased and applaud you in assembling this esteemed set of intellectuals whose expertise and guidance will help us in shaping the market component of the Greenhouse Gas
Reduction Program.

We are thankful to Dr. Larry Boulder's leadership and EAAC's efforts for following an excellent open public process and active participation in their meetings.

We also appreciate the efforts of Dr. Jim Boise and his commitment in bringing AB 32 to the low-income communities and bringing the attention of the whole Committee to the issue of how to ensure that disadvantaged communities are benefited and continue to be economically viable.

We sincerely urge this Board to endorse the report and include them after some serious deliberations into your cap and trade rulemaking. Though you may not be able to make a specific decision, I think you will be able to provide some specific guidance in order to ensure that these recommendations become operational as we move forward.

We agree and fully support EAAC's recommendation of 100 percent auctioning and coming to the question Dr. Balmes posed to all of us. I think about the five-year period to the 100 percent auctioning within about five years is a reasonable place to start thinking about.

And we also support the previous two who spoke in favor of the committee's benefits. I've talked to you many times about that, so I do not want to go into that
again. But we urge you all to combine the two,
Recommendations 10 and 11 so that the committee benefits
fund is formed with a dedicated portion of the allowance
value.

One of the key things -- one of the things that
was mentioned about the contingency fund is the monitoring
piece. We believe monitoring across the state at a
community level is very expensive and very unlikely
capable of differentiating minor changes.

Also, in this economic time, also changing
economic times, keeping the contingency fund is highly
uncertain. And in the context of EAAC's recommendation of
the dividend policy, we concur with Dr. Boise that both
policies can work together and not mutually an exclusive.

Thank you for the opportunity.

CHAIRPERSON NICHOLS: Thank you. Thanks for your
continuing participation.

Tim Tutt

MR. TUTT: Thank you for the opportunity to speak
today, Chair Nichols, Board. We appreciate your attention
to this critical component of AB 32 implementation, and we
appreciate the hard work of the EAAC in developing their
recommendations to you.

SMUD was an active participant in the EAAC
process, as were all the utilities in the state. As I
mentioned at your last Board meeting, the utilities
universally recommend a different structure than the EAAC
has for the electricity sector. The electric sector is a
key strategic stakeholder for AB 32, representing about a
quarter of the GHG emissions, but more importantly
representing significantly more than a quarter of the
reductions that can be achieved or are going to be
achieved through efficiency and renewable measures in AB
32 complementary policies.

Our position is simple. We believe that the
electric sector allowances should be administratively
allocated to the utilities on behalf of our customers,
required to be sold by the utilities at an auction, an
independent auction, and that the revenue then be used by
the utilities for investments in AB 32 related activities,
efficiency, renewables, and in the longer run,
transportation, electrification, smart grid, things of
that sort.

As the EAAC report recognizes, there remain
market barriers to energy efficiency in the state.
Utility efficiency programs are required to address these
barriers. Price signals alone are not sufficient to
achieve the 100 percent cost effective energy efficiency
that is a goal of the scoping plan and the energy policies
agencies in the state. Utilities have a robust and
growing efficiency program in place and can

cost-effectively invest allowance revenue to support and

further expand these programs.

The utilities is also the entity that makes

resource purchase decisions in the state in the electric

sector and can best use these allowance revenues to

support high cost renewable program purchases to achieve

the 33 percent renewable portfolio standard.

This position is similar to the position -- the

recommendations from the Energy Commission and the Public

Utilities Commission in their 2008 report to the ARB.

And in closing, we believe that using allowance

revenues to invest in AB 32 related policies, rather than

concentrating on raising prices, is a key component of

what you should establish in allowance policy for the

state. And the LDCs are a critical partner in this

investment.

You have an opportunity to once again lead the

nation and influence the off-again/on-again debates that

are happening at the national level. We urge you to

consider the utility role as you move forward this year.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

David Arrieta and Frank Harris and Susie Berlin.

MR. ARRIETA: Good afternoon. My name is David
Arrieta, and I'm here for the Western States Petroleum Association.

Today, we'd like to focus our comments on the leakage issue. But first we'd like to say that we, too, were disappointed that the Committee did not consider some of the legal and other hurdles that might impinge on their recommendations.

But having said that, we totally concur with the Committee that preventing leakage is critical to the implementation of AB 32. And we concur with their statement that if energy-intensive trade-exposed industry is -- if leakage is not addressed for energy-intensive trade-exposed industry, they will be significantly impacted. That is why we support their recommendations that fuel production be fully analyzed for leakage impacts.

But we also believe that crude oil production is an energy-intensive trade-exposed segment of the industry and that that element or sector should be fully evaluated. We believe that -- the Committee recommends a couple of mitigating measures for how to address leakage. One is border adjustments, and the other is free allocation. We believe that free allocation is the appropriate way to deal with it, considering that some of the other legal issues were not addressed.
And then finally, we'd like to concur with the baby steps approach that was outlined earlier today by Chairman Nichols. We think that transitioning into the 2020 time frame is really important and that it needs to be done in, as you said, baby steps. And we support that approach.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

Frank Harris and Susie Berlin.

MR. HARRIS: Hello. Frank Harris, Southern California Edison.

Appreciate the opportunity to speak to the Board today.

SCE supports the goals of AB 32 and appreciates the opportunity to participate in the ongoing effort to achieve -- to develop the rules to implement the legislation. Certainly, the EAAC Committee work and their report has worked to considerably move the ball forward and to increase the shareowner understanding.

As Professor Goulder indicated, the regulated utilities are uniquely positioned to be able to pass allowance value back to the customers. It's not a question of increasing or developing profits in the regulated utility sector.

Additionally, as a result of the regulated
rate-making process, the regulated utilities are in a position to still be able to pass along the proper price signal in rates to our retail customers so they are able to make demand decisions that are consistent with the economic and the environmental goals outlined in the EAAC report.

The PUC, in their joint recommendation with the Energy Commission, has already indicated its interest in accomplishing that goal.

As some other utility members representatives -- Southern California Edison is one of them -- supports an administrative allocation of allowances to the utility. And a key part of this is that those allowances then be placed into an open and transparent auction so that all regulated entities can have equal and objective access to those allowances.

Doing this would address, for example, the concerns that Mr. Cragg indicated from IEP. This would allow the generators, the regulated generators, regulated utilities, every AB 32 regulated entity equal access to these allowances. The revenue from that auction being returned to the regulated utilities according to the initial administrative allocation could then be used for many of the complimentary measures that have been developed in the Scoping Plan and generally to reduce the
economic burden that would be imposed on our customers. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Susie Berlin and Vien Truong.

MS. BERLIN: Chairman Nichols, members of the Board, my name is Susie Berlin, and I represent the Northern California Power Agency. NCPA is a joint powers agency comprised of publicly-owned utilities of all different sizes.

NCPA and its members have been aggressive in their efforts to achieve the goals of AB 32 and reduce their carbon footprint and look forward to continuing to do so.

However, NCPA has concern with some of the recommendations in the report regarding the use of auction value, program value, and the recommendation for a full auction. AB 32 sets out a very specific goal and objectives for the state, and that is to reduce GHG emissions in California. To do this, we must not only capture the low-hanging fruit, such as increased energy efficiency, but also transition to a low-carbon economy. Achieving these objectives will come with a very high but necessary price tag. Accordingly, it is paramount that any value that comes from a Cap and Trade Program be used directly to achieve the mandates set forth in AB 32.
These funds must be used to expand existing GHG reducing programs, such as energy efficiency and renewable energy procurement, further research and development of low carbon technologies to help transition into a low-carbon economy and protect our most valuable customers in transition to that economy. This cannot be achieved by giving each Californian a mere fraction of the value. Rather, these goals will be more economically and efficiently achieved by direct investments in the programs I just mentioned.

Achieving these goals can also be facilitated by the allocation of allowances directly to electric utilities. NCPA supports the allocation of allowances to retail electric providers to use for the benefit of their customers and to achieve the goals of AB 32. As Dr. Goulder noted, electric utilities are uniquely situated, but they're also subject to a number of mandates for complementary measures that must be funded in addition to the Cap and Trade Program. These measures, such as increased CHP and renewable energy, are going to be costly but necessary. Allowance value can be used by utilities to reduce the rate impacts for their customers, while still preserving the price signals for the carbon cost as they relate to the Cap and Trade Program itself.

Utilities have existing effective and direct
relationships with all Californians, and this relationship is ideal to deliver the GHG reductions through the programs that are already in existence and expansion of the programs. These programs directly benefit utility customers by controlling rate increases, and this is key to directly achieve the goals of AB 32.

Allocation to utilities does not have to put utilities in a position of competitive advantage with independent energy producers and the market design -- program design issues such as those mentioned by Norm Pedersen for NCPA and Frank -- for SCPPA -- and Frank Harris for Edison can protect against those kinds of concerns.

Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Vien Truong, Kate Beardsley, and Annebell Guierro.

MS. TRUONG: Thank you, Chair Nichols and Board members, for your leadership on the implementation of AB 32.

My name is Vien Truong. I'm here on behalf of the Green for All. Green for All is a national organization working to build an inclusive green economy strong enough to let people out of poverty. Our organization is proud to have worked with leaders in civil
rights, faith, labor, environment, and community groups in shaping and winning unprecedented legislation on the federal, state, and local levels across the country.

We're here today, because your guidance how to shape California's Cap and Trade Program will have a significant impact on the rest of the nation. In my work with state legislators across the nation, many have told me that they look to you for guidance on how the shape their policies. Thus, we ask for your continued leadership on getting us an environmentally sound future.

As such, we encourage you to adopt the EAAC recommendations. The Economic and Allocations Advisory Committee has demonstrated exemplary leadership by adopting recommendations that takes us towards implementing AB 32 in a way that protects and lifts up communities most vulnerable to the impacts of climate change. The effects of climate change threatens all people, but it's the impoverished who suffer the most from heat-related deaths, floods, lost jobs, and air pollution. Poor people and people of color are the first to be devastated when climate disaster strikes.

As such, we commend the Advisory Committee for drafting recommendations that balances environmental and economic concerns, and we encourage the Board to adopt these recommendations.
We are especially supportive of the idea of a Community Benefits Fund that would direct the investments to the communities most in need. A communities benefits fund will help vulnerable communities achieve the goals of AB 32 and reducing greenhouse gas emissions, ensure that residents in these communities have access to necessary training, and ensures that the disadvantaged communities have the necessary tools to transition to a green economy. These goals are key to developing an equitable green economy and thus should be prioritized in the allocations of funds.

Our country is facing multiple disasters and crises. You are in a position to guide us to a future that is cleaner, fairer, and more just. We are here to support your bold leadership. We support this, and we begin with the adoption of the EAAC recommendations and making sure that these priorities are valued before all else.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

Kate Beardsley.

MS. BEARDSLEY: Good afternoon. Thanks for the opportunity to speak.

My name is Kate Beardsley. I'm a manager in state agency regulations for Pacific Gas and Electric
PG&E and our customers share California's desire to continue its leadership on climate change. We were the first investor-owned utility to support enactment of AB 32. And our customers have invested in and will continue to invest in customer energy efficiency programs and a clean electric generating portfolio so that our emissions are among the lowest of any utility in the nation.

PG&E is committed to achieving AB 32's goal while managing cost for our customers. As you have heard from a couple of other utilities, the electric sector is responsible for about 25 percent of California's greenhouse gas emissions, yet our customers are being asked to obtain a much higher percentage of the total AB 32 reductions as a result of requirements to invest in increased renewable resources, energy efficiency, combined heat and power, in addition to participating in the Cap and Trade Program.

While we support the overarching goals of AB 32 and believe that complementary measures, such as energy efficiency, have the potential to deliver cost-effective emission reductions, we're concerned about over-burdening our sector without providing sufficient allowances to utilities to help mitigate these costs and to help ease the transition to the low-carbon economy.
We recognize that EAAC recommends against allocating allowances to utilities for our customers' benefit in order to avoid masking the price signal from the cap and trade. However, we are concerned about the impacts of the cumulative costs of AB 32. Regardless of how AB 32 is implemented, California utility customers will be asked to bear a significant portion of the cost, whether it is via allowances in a cap and trade or via the implementation of programs such as increased renewable resources.

For this reason, we also believe that allowances should be allocated to electricity customers via California's utilities to help mitigate the cost of AB 32 and to also help advance the goals of the program.

Following the allocation, we support the notion that allowances can be auctioned on a non-discriminatory basis to other complying entities.

We urge the ARB to join federal legislators, the California Public Utilities Commission, the California Energy Commission, and the many other institutions in recognizing that an allocation of allowances to electric utilities for the benefit of their customers is appropriate and fair, given the important role our customers are destined to play in helping the entire state meets its greenhouse gas reduction goals.
Thanks again for the opportunity to speak.

CHAIRPERSON NICHOLS: Thank you.

Annebell Guierro, are you here?

Betsy Reifsnider.

MS. REIFSNIDER: Thank you so much. I'm here representing Catholic Charities and the Stockton Diocese. And we're here to say thank you for these recommendations and this report.

Specifically, I'd like to point to Section 6.4, the provision of allowance value on page 66 and 67 as it relates to low income and disadvantaged communities in geographically defined areas. We agree with those EAAC members and with many of the previous speakers, including Dr. Shankar Prasad, who recommended that of the allowance value to be devoted to investment, that a specific percentage be set aside for investments in disadvantaged communities through a defined Community Benefits Fund.

Now, our Diocese includes Stanislaus and San Joaquin Counties where the unemployment rates are above the California average, where the poverty rates are 14 percent, which is also above the California average. In a place like south Stockton specifically, the poverty rate is 29 percent. And in other places, such as Modesto, in the unincorporated underserved areas, we have 30 unincorporated areas in Modesto. They are underserved.
The resident lack street lights, sewers, sidewalks. So a geographically defined Community Benefits Fund would profit these communities greatly.

And then, finally, we'd like to agree with the EAAC that 100 percent of allowances should be auctioned, just as Dr. Goulder recommended. And we would like to commend the EAAC. We would like to commend the Board. And we do hope that you will adopt these recommendations.

Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Ralph Moran and Michael Murray and Sahar Shirazi.

MR. MORAN: Madam Chair, Board members, thank you.

I'd like to thank Professor Goulder and the rest of the EAAC for a well done analysis and especially thank him for the open and inconclusive process. I know that requires a lot more work, but it's very much appreciated.

I think the EAAC report makes very clear how crucial it is that climate change policy address leakage. Failure to address leakage results in an overstatement of GHG emission reductions, because emissions are simply shifted to non-regulated areas rather than reduced. Many times, jobs follow these emissions.

For instance, a report on the potential for climate policy to result in emissions leakage in U.S.
refining concluded that emissions reductions would be largely offset by emission increases in non-U.S. refineries and that, over time, reliance on product imports could double. Coastal refineries such as those in California would be particularly effected.

So though the EAAC clearly makes the case for addressing leakage, unfortunately, we can't agree with what appears to be their preferred approach. And in the EAAC's defense, they have admitted they're trying to think outside the box and challenge the status quo. Unfortunately, most of us involved in policy have to work very much inside the box. So specifically, the EAAC proposal for use of border taxes on imported goods to address leakage, even if it were legal, we don't see it as viable or attractive.

So because aside from being highly controversial and complex, you have to try to figure out the carbon footprint for every car, computer, and cup that came into California or gallon of gasoline. That method would saddle Californians with paying the cost of the carbon footprint of other countries and other states.

Luckily, a much easier solution exists. And that is to protect California industry who is trade exposed through the proper allocation of allowances. This method is much simpler, less controversial, and will not require
1 Californian's to pay for the carbon footprint of other nations or states.

2 Thank you.

3 CHAIRPERSON NICHOLS: Thank you.

4 Mr. Murray.

5 MR. MURRAY: Good afternoon, Madam Chair and members of the Board.

6 My name is Mike Murray, and I'm the Regional Vice President of State Government Affairs for Sempra Energy, the parent company of San Diego Gas and Electric.

7 I first want to take this opportunity to thank Chair Nichols for her leadership and guidance in what has been a very, very lengthy process with a lot of stakeholder involvement and a lot of transparent discussion. I think it's been a great dialogue and shows you some of the things that we are looking forward to going forward and some of the challenges we have to implement AB 32.

8 Sempra is committed the working with ARB to ensure that AB 32 is implemented to achieve the law's goals in a cost-effective manner.

9 As you've heard before, the electricity sector is being asked to implement mandatory measures, including a 33 percent RPS, enhanced energy efficiency programs, and more combined heat and power, in addition to being a
participant in a Cap and Trade Program.

There have been some financial analysis which have concluded that a cap and trade is less expensive than mandatory measures, while cap and trade on top of mandatory measures will further increase costs to California utility customers.

If auctioning of allowances is carried out as EAAC has proposed, we believe that the economic impacts on California electric customers would be reduced if a substantial portion of these auction revenues are returned to utilities to partially compensate them for the cost of implementing mandatory measures.

We also strongly support the Governor's views as stated in his letter of March 24th that a free allocation of allowances and a robust offset market will significantly reduce the economic impacts on business and residents in California without compromising the intended goals of the state.

Finally, we also agree with the Governor's view that if allowances are freely allocated, they are distributed in a manner that rewards companies that have already made significant investments in energy efficiency and carbon reduction.

Thank you very much.

CHAIRPERSON NICHOLS: Thank you.
Sahar Shirazi and then Torn Nompraseurt and Mari Rose Taruc.

MS. SHIRAZI: Good afternoon. My name is Sahar Shirazi, and I'm here representing the Green Collar Jobs campaign for the Ella Baker Center for Human Rights in Oakland. We are a nonprofit dedicated to uplifting our communities through education, advocacy, and formal policy work. In particular, the Green Collar Jobs Campaign works to ensure equal opportunities for low-income people of color in the emerging green economy by promoting greater job training, job creation, and closing the climate gap.

We'd like to thank you for holding this public meeting and allowing all of our voices to be heard as well as creating an open and engaging process in implementing California's Greenhouse Gas Reduction Program.

The EAAC report recognizes the importance of addressing climate gap issues in disadvantaged and low-income communities. These geographically designed areas have suffered the most from pollution and will struggle the most with the consequences of the climate crisis, including increased air pollution, associated health issues, increased costs of living, and lost jobs.

In order to reverse the trend of jobless recovery and stimulate our economy, we must invest in job training and creation. The revenues generated by AB 32 are key in
creating the careers of the future, which will uplift our
finances, our state, and the communities that were left
behind in this economy.

As we form this new green economy, we must create
opportunities in all communities and focus on those that
are most vulnerable. This is why we support the
establishment of the Community Benefits Fund, which will
protect California's most vulnerable citizens while
creating local green jobs to lift communities out of
poverty.

We urge the CARB Board to consider these
recommendations and incorporate them into the implementing
of AB 32, specifically by establishing a Community
Benefits Fund with the percentage of the proceeds of
auctioned allowances. This fund will help strengthen the
neighborhood's response to environmental crisis and reduce
the overall negative impact of climate change in these
areas.

Recognizing that EAAC also recommended a dividend
policy, we want to point out that this concept is not
mutually exclusive from a Community Benefits Fund. These
policies can work together, alleviating the higher cost
from increased energy prices, through a dividend policy to
protect low-income consumers while establishing a
strategic policy, namely the Community Benefits Fund, to
respond to the existing higher levels of pollution and anticipated economic and health impacts of climate change in disadvantaged communities. Our new economy must not have any throw away resources, neighborhoods, or people.

The emerging green economy has the potential to be this generation's greatest possibility frontier. We have the unprecedented opportunity to simultaneously reduce our greenhouse gas emissions, improve our economy, and shrink the climate gap by addressing issues of health care, air pollution, accessible transportation, green job creation, and environmental inequity in low-income communities of color.

Let's take every step necessary to make sure we fulfill the potential which we are presented. Let's recover California's economy and lead the rest of the nation in the creation of high quality green jobs that puts citizens back to work today and ensures us all a cleaner, safer, more equitable tomorrow.

Thank you.

CHAIRPERSON NICHOLS: Torm Nompraseurt.

MR. NOMPRASEURT: Thank you, Mr. Chair Nichols and Board.

First of all, I really commend your leadership in terms of the reason of the EAAC to have the report.

And secondly, want to commend the EAAC, all the
members of the EAAC, especially Dr. Goulder who bring the report.

I'm from Richmond, and Richmond community have been suffer the most pollution in over 100 year. And there are many diverse low-income community from community of color. And I live there 35 year. And I know what it is and how it like.

And the EAAC recommendation, especially I want to commend in term of your morale, principle, and wisdom in term of look at the community that been suffering and disproportionate for many, many year. Richmond, over 100 year.

And that's not being the equal of the share. But I think at least this is start, a good place to start. And I'm very commend on that.

And also California we seem to take a lot of leadership. And I think California leadership start in this room and all of our Board here and also recommendation of the EAAC who also bring your hand to help out the community like us in Richmond who have been very suffering for many year.

And this fund will be helpful to our community and also our state here, also the nation. And also I thank you so much for open public process.

And we, the community, and also the Asian Pacific
Environmental Group is very hold the value of the public transparency. And I commend you for that. And thank you for speaking today.

CHAIRPERSON NICHOLS: Thank you very much for coming.

Mari Rose Taruc.

MS. TARUC: Good afternoon, Chairwoman Nichols and the Resources Board.

My name is Mari Rose Taruc here representing the Asian Pacific Environmental Network, who's a member of the California Environmental Justice Alliance that organizes throughout the state.

APEN organizes hundreds of low-income Asian-Pacific American families in Oakland and Richmond living next to congested freeways and polluting industries.

This morning, I had to leave my son who had an asthma attack to be here, so I hope you hear and take to heart what we have to say.

We support the Community Benefits Fund that the EAAC report recommends. We applaud the EAAC's findings to include a Community Benefits Fund and urge the California Air Resources Board to adopt these recommendations.

The Community Benefits Fund is a vitally important piece of closing the climate gap in California.
where low-income communities of color experience a disproportionate burden of the health impacts of greenhouse gas pollution from adjacent polluting facilities, like the Richmond Chevron refinery that's in our neighborhood, which happens to be the number one greenhouse gas emitter in California, to the 880 freeway that we can see and smell from the windows in our office in Chinatown as it carries goods to and from one of the busiest ports in this country.

From our work with the California Environmental Justice Alliance, we see across California the climate gap where low-income minority communities are the most vulnerable to extreme climate event. In Oakland, the poorest homes are not only located next to polluting industries, but also next to the shoreline, putting us at most risk from damage from sea level rise.

And because instead of a forest of trees, we have a forest of industries, because we're vulnerable to heat island effect that effect residents in extremely hot days. And because we are poor, lack insurance, and already have many health problems, we are the least able to bounce back from any climate disasters that are projected.

We didn't come here to illustrate these problems. We wanted to tell you about the plans we have for
greenhouse gas reductions as well. In fact, we have begun
the work of rebuilding our communities to be healthy and
vibrant while linking it to greenhouse gas emissions.
In Oakland, we are working on a transit-oriented
development at the BART train system in the Bay Area. We
have plans to link our affordable housing and public
health ideas to green infrastructure and green jobs. We
know the Community Benefits Fund can give a boost to this
important project as well as different communities like
ours around the state doing the same thing.
We see the Community Benefits Fund as a
significant step in the right direction and correcting the
injustice from historic pollution to the future of climate
disasters. We encourage you to adopt the EAAC's
recommendation to implement the Community Benefits Fund.
Thank you.
CHAIRPERSON NICHOLS: Thank you for your strong
statement.
Bob Lucas.
MR. LUCAS: Thank you very much.
My name is Bob Lucas. I'm here today
representing the California Council for Environmental and
Economic Balance, also known as CCEEB.
When reviewing this report and considering its
recommendations, perspective and context is very
important. To an economist, the value of an allowance does not represent a cost to the economy. But I can assure you to the people purchasing the allowance that the value of that allowance is very definitely a cost. And while it may be comforting to know that paying a tax is also not a cost to the economy, I also know when I pay taxes, I consider that a cost to me.

And with regard to the 7 to $22 billion in allowance value that we're faced with or was estimated for 2020, I think it's also very likely that the people that are going to need to pay that value or to monetize that value will consider that to be a cost and a quite substantial cost at the same time as they are also incurring substantial costs in investments in projects to actually reduce emissions to comply with AB 32. As I say, context is important here.

CCEEB believes that designing a working market is the most important effort before this Board at this time. We are very concerned that we have verified offsets, third-party verifiers, approvals, IT systems, linkages, organization, dispute resolutions, early warning systems in place. That's going to be a very daunting task. But it's necessary in order to have a regulatory compliance mechanism.

We believe that the Board should develop a work
plan with clear completion deadlines of tools,
organization policies, and systems that must be in place
for regulated entities to comply with the regulation.

As it's being developed, should be explicit,
transparent, alignment with current international,
national, regional programs would be the best opportunity
for a California Cap and Trade Program to work. Without
aligning definitions and policies, California will be
isolated and the program will suffer significant leakage,
and that was addressed earlier.

We believe that it is very important to phase in
a transition period. In order to avoid economic
uncertainty, any early auction should be phased and
gradual.

The Board should proceed deliberately and
cautiously in order to maintain market liquidity, prevent
price shocks, and leakage.

And with regard to leakage, this topic is raised
several times in this report, and it's also raised in the
EAAC report on the economic analysis that leakage could be
quite substantial. This significant potential for leakage
emphasizes the need for a transition period to address
uncertainties.

CCEEB also believes that it's important to
maintain flexibility in the program to link with these
regional, national, international trading programs. Along these lines, ARB should adopt definitions and market principles in order to allow future linkage as programs are developed. A large auction would create problems with future linkage.

With regard to revenue, we believe the allowance revenue should be used for AB 32 purposes and not create entitlement programs. The use of allowance values once monetized should be used to reduce the cost of direct measures. And I refer you to the last sentence of the Governor's letter. I'll reiterate the closing phrase that addresses the need for the Board to be sensitive to challenges our businesses face, particularly until our national economy fully recovers from this recession.

Thank you for your indulgence.

CHAIRPERSON NICHOLS: Thank you, Mr. Lucas.

I'm afraid I doodled on my list. And therefore I'm not sure -- is Brenda Coleman here to testify on this item? Or was her name taken off? Not seeing Brenda Coleman. You weren't going to testify? You were. Okay. Good. I didn't take you off.

MS. COLEMAN: Good afternoon, Madam Chair and members of the Board.

I had originally taken back my card to testify, but I do feel compelled to come up here and just say first
of all thank you so much to you all and to the EAAC for their hard work and for their recommendation.

We appreciate that you, Madam Chair, expressed that you will be taking considerations and taking a look at other avenues outside of the recommendations that have been brought to you before the EAAC.

Today, we'd just like to concur that what something that has already been mentioned several times in that what the Governor mentioned in his letter to you yesterday, which he states that a full auction of allowances may be too abrupt a transaction with great cost to those capped industries. We concur that a free allocation or at least a system where the auctioning of allowances are kept at de minimis levels would be the most cost effective way to reduce greenhouse gas emissions in a manner least burdensome to businesses. And, again, as Governor Schwarzenegger mentioned in his letter, rewards companies that already made significant investments in energy efficiency and carbon reductions.

Overall, it is vital that a Cap and Trade Program be designed in a way that mitigates extreme financial burden to businesses at a time like the present when unemployment is at an all-time high and our economy is struggling.

Carbon reduction strategies must be done so in a
cost effective manner, recognizing the challenges of businesses in order to achieve the goals set forth by AB 32.

We thank you for your consideration and look forward to continuing.

CHAIRPERSON NICHOLS: Thank you very much. Okay.

Malak Seku-Amen and then Nile Malloy and Rafael Aguilera.

MR. SEKU-AMEN: Good afternoon, Madam Chair and members of the Board.

I'm Malak Seku-Amen. I represent the California state NAACP's 52 branches on behalf of the nation's largest and oldest civil rights and social justice organization.

We applaud the vision of the Governor, his administration, especially the Secretary Adams and Chairman Nichols for bringing together such an esteemed group of experts for the benefit of California's Greenhouse Gas Reduction Program.

We commend the EAAC and Dr. Larry Goulder's leadership for their efforts to create an open public process and their active and engaged participation on the Committee.

When the NAACP looks into the climate change microscope, the environment is not the only thing we see
in the lens. We see it as an issue of justice and human rights. Although communities of color are far less responsible for climate change and air pollution, they carry the greatest burdens from these conditions. And that's why it's important for the state and its policies to carve out a more equitable channel in its work to mitigate the impact of global warming.

And since Hurricane Katrina taught the whole world a valuable lesson about climate change and quality and racism, we are here to support EAAC's Recommendations Number 10 and 11 to make sure that all of California's communities have a fighting chance in the battle against air pollution and global warming.

We suggest combining recommendations from the EAAC's Number 10 and 11 recommendations and establish a defined Community Benefits Fund.

We support reaching the goal of 100 percent auctioning of allowances.

We don't have a particular position on a time line. We do want to support economic recovery in the state. Ultimately though for the program to be effective, price discovery and transparency provided by 100 percent auctioning we believe is necessary.

And finally, Chairman Nichols, you have consistently stated that the Legislature should ultimately
Thank you very much.

CHAIRPERSON NICHOLS: Thank you very much for participating.

Mr. Malloy.

Mr. MALLOY: Good afternoon, Chairman Nichols and Board.

My name is Nile Malloy. I'm the Northern California Program Director at Communities for a Better Environment. We are a statewide environmental health and justice organization. We do community organizing, science and research, and also litigation.

We are greatly appreciative of EAAC's recognition to the commitments to AB 32 and to low-income and working-class communities and consumers in the geographically defined areas.

I really want to speak about a few things. You know, CBE, we represent various different statewide members in Wilmington, southeast L.A., east Oakland, Contra Costa and Richmond. These communities breathe some of the dirtiest air in our nation. For example, in east Oakland, there are over 200 pollution facilities and over
a thousand diesel trucks that goes into the community near sensitive receptors or schools and homes.

I work in Richmond. We are dealing with the largest greenhouse gas emitter in the state. And nearly 90 percent of the greenhouse gases in that city in Richmond is being impacted by heavy industry.

Our members are very sick. We have a lot of members that have died of cancer over the last ten to 15 years.

In my work in Wilmington, a majority of the community hosts 13 major stationary pollutant sources based on U.S. EPA toxic release inventory and responsible for 718,000 pounds of pollution and generate over 18 million pounds of waste. And so these are very kind of serious issues that are effecting our community.

And building off this, we recently reviewed the staff report by Mark Jacobson who actually talks about the issues of the local impacts showing CO2 has an adverse impact to the local community. And the one thing he states in his report is that as in real estate, location matters. And so location matters in our work.

And in that context, we are supportive of addressing the climate gaps that we see in the state and support the Community Benefits Fund that has been supported by EAAC. The Community Benefits Fund avoids the
shortcomings of contingency funds which place the burden
of proof on impacted communities. It also supports the
maximum auction allocations, which is a more sustainable
approach and that can lower all overall cost.

We also just really support that the community
benefit fund fulfills the intent of AB 32 and its
implementation process and that the funds would help
strengthen the neighborhoods that I just spoke about and
others throughout the state, support public transit, build
cleaner and healthier and resilient communities and
support the building of the green infrastructure.

So we strongly urge that the CARB supports the
EAAC recommendations, and we really want to see those
included in the next step of the process.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

Rafael Aguilera, followed by James Brady and
Edwin Lombard.

MR. AGUILERA: Good afternoon.

Rafael Aguilera.

I want to start by saying on behalf of the Green
Line Institute that we support the Community Benefits Fund
as recommended by the EAAC, and we do so because of its
ability to fulfill a mandate of AB 32, but also because
it's the right thing to do for all the other reasons that
On behalf of the Climate Protection Campaign, I'd like to point your attention to the dividend section of the report and fully support its recommendations there. We talk about the politics of putting a price on carbon in a slow economy and the sensitivity of consumers to the impacts. And one thing that should be noted is that nearly 100 percent or at least above 90 percent of the costs that are borne by -- paid by industries for the carbon price are passed onto consumers. Therefore, it is a regressive sales tax. If we're going to go forward with AB 32 implementation, we need to put a price on carbon. If it's going to be regressive, we need to make sure that consumers are made whole. Dividends do that. They flip the policy from being a regressive policy to a progressive policy.

And if you want to be politically sensitive in this type of economy with foreclosures, joblessness, unemployment and all that, we need to make sure that as Warren Buffet says, consumer purchasing power is restored somehow. The best thing you can do to save the economy and the best thing you can do to implement AB 32 is to put that cash back into people's hands so they'll have the choice.

As Professor Dallas Burtraw mentions from the
EAAC, there's even potential to design dividends in a manner that would tell people about cost effective investment opportunities to reduce energy consumption. There's potential to leverage future dividends and pool those resources in communities and in projects to do long-term investments, for example. There's great potential for both of those things.

Dividends also would create local sales tax revenues, boosting up local government coiffeurs, and also create state income tax revenues, because they have to be reported as a source of income, so thereby helping out with the state's budget problem without giving a direct siphon off of the carbon budget.

So I just wanted to say that on behalf of the Climate Protection Campaign, the EAAC ran a gold standard of transparency in terms of its outreach. And it really did a masterful work when it came to the report you have today. So I hope you'll strongly consider, despite some of the comments and concerns that were mentioned today. We fully support.


MR. BRADY: Good afternoon, Madam Chair, Board. My name is James Brady. And although I haven't had time to really review the report in detail,
specifically talking about page 38, 39, and 47, and the
most important information in here is that the energy
prices will go up, that they'll go up, and mostly for
low-income households. And that job loss will be so
significant that there will be a need for assistance
programs for displaced workers.

If the most optimistic assumption of these
impacts prove to be wrong, there's no reason to believe
they won't especially in the near and medium term, you
will have been responsible for a lot of harm to those
families.

Regulated utilities need not be given extra
concession to further discourage entrepreneurial
aspirations. The community benefit fund should be given
strong consideration and work through some of the
nonprofits that you have heard from here today. And I
think that would create the most serious economic
opportunity for those folks in the communities.

Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Mr. Lombard and Bonnie Holmes-Gen and Bill
Magavern. And that will be the end of the list.

MR. LOMBARD: Thank you, Madam Chair and Board
members. My name is Edwin Lombard. I'm here representing
minority small businesses and community-based
organizations throughout the state of California.

I'd like to commend CARB on their EAAC report and the time and energy that you put in of producing such a document.

But if the Committee honestly thinks that revenue from an auction tax is somehow not a cost, they are gravely mistaken. Someone would have to pay the tax so the money that's going to be re-distributed to someone else is going to be available.

The taxing entity will pass along the tax that they incur to these groups that are going to benefit from the distribution. They're going to see those costs in the form of product increases and services, cost of increase on services. In other words, what's going to happen is you're going to put money in one pocket and it's going to come out the other in a larger amount.

You submitted a list of GHG emitters recently subject to the auction tax. That list included universities, dairies, wineries, public utilities and others agencies.

What's going to be the cost to go the college? The cost of a carton of milk? The cost of social beverages?

Seriously, we're not just talking about refineries here and utility organizations or companies.
We're talking about social -- I shouldn't say that -- educational institutions and products that people of color and minority groups use on a regular basis. I think it's important as you go forward you keep these things in mind. These are very important things that are not really being discussed here.

There is no free lunch, which coincidentally is not what your peer reviewers observed with respect to the first economic analysis. Until the Board goes back to an Econ 101 situation, and recognize you can't impose billions of dollars in costs on an industry and not have severe harm to the economy, then your plan has no credibility.

Thank you very much.

CHAIRPERSON NICHOLS: Bonnie Holmes-Gen and Bill Magavern.

MS. HOLMES-GEN: Good afternoon, Chairman Nichols and members of the Board.

Bonnie Holmes-Gen with the American Lung Association in California. And the American Lung Association has been participating in the EAAC process and in CARB's process to develop a Cap and Trade Program to work toward developing a strong program that will achieve our AB 32 greenhouse gas reduction goals and at the same time maximize air quality benefits, public health benefits
and achieve equity goals.

And we have greatly appreciated the hard work of the EAAC and Chairman Goulder in producing its report to the ARB. We agree this report is a strong starting point, and we appreciate the open public process in the EAAC under Chairman Goulder and their willingness to incorporate public comments.

And we also appreciate Chairman Nichols' comments and we need the start slowing and cautiously with the Cap and Trade Program. But we believe there are key elements that need to be incorporated into the program to ensure its success, and we think the EAAC report has hit on many of these.

We appreciate and support the strong EAAC recommendation for 100 percent auction. From a public health perspective, we believe this is the best way to proceed. And we hope that the Board can begin the 100 percent as soon as possible, as soon as feasible in terms of ramping up to that level.

We believe that the 100 percent auction sends right signals and ensures that a price is paid for pollution, that the public has the right price signals.

And we also urge the Board to continue to work closely with the public health working group in developing specific recommendations on the Cap and Trade Program, on
the auction. And we continue to participate in that process. There needs to be some connection of course between the regulatory development and public health working group findings.

We support the EAAC recommendations to invest allocation revenue in a range of adaptation and mitigation programs for disadvantaged communities, for public health and for land use planning and public transit. We think these are key categories.

And we do support the community's benefit fund. I think it's tremendous. There is such a wide showing, such a good showing of community groups talking about the need for investment in communities, and we hope the Board makes that a key consideration in looking at how to invest this huge pot of new money from cap and trade.

And we also support the specific allocation of funds to public health preparedness. And we think there is a need for a public health fund to work with state and local public health agencies to build and expand California's public health infrastructure to respond to the very, the very serious health impacts that are caused by climate changes from the pollution the heat waves, the disease outbreaks, and other public health concerns. And those public health needs include assisting with emergency preparedness and monitoring climate change health impacts,
working with vulnerable communities, and other elements of public health program.

And just would comment that the American Lung Association and 24 other public health organizations sent a letter to your Board in January supporting the need for this fund.

And, finally, we comment, the 75/25 percent split is something we're looking at closely, but think there is more money needed for this investment end of that.

Thank you very much for the time.

CHAIRPERSON NICHOLS: Thank you.

Mr. Magavern. And we have two more cards that have come in, so we aren't really at the end.

MR. MAGAVERN: Bill Magavern with Sierra Club California.

We also want to thank the EAAC for, first of all, having a very open and inconclusive process. We participated and made comments in person and submitted them in writing, but also for the high quality of the work that was done. We think this is a report that policy makers should give great respect to.

We support a policy of 100 percent auctioning for a variety of reasons, which the EAAC really spelled out very well. They made the case this is the most efficient way to go about it. It's the most fair.
I was particularly struck by Chairman Goulder's comment that auctioning would not result in higher cost to consumers than free allocation. I think it was very important to note and that, in effect, if you give away the allowances, what you get is the big polluters pocketing big windfall profits, and the consumers paying higher prices. And I believe this is what happened in Europe in the first phase of their Cap and Trade Program.

We have supported for many years the principle that polluters should pay for the cost of mitigating the damage that they do. And by putting that in place right from the start, then you provide the best incentive for bringing down emissions right away. And we really don't have time to lose.

We do support investing the revenues in a variety of programs related to AB 32. Many others have spoken about these, but energy efficiency, renewable energy, public transfer, land use planning, resource and public health, adaptation, training for green jobs, and also holding low-income consumers harmless would all be good uses of that money.

I also want to endorse the comments made by the civil rights and environmental justice groups. And I think that AB 32 requires and it is the right thing to do to make sure that the most disadvantaged communities do
not bear a disproportionate burden of pollution and climate change.

Thank you.

CHAIRPERSON NICHOLS: Can you prepare an ESA Version 1 was widely regarded as having allocated way too many allowances and was not considered effective in terms of bringing down emissions levels. And it did lead to what we're seeing as windfall of profits by many people. That has led the E.U. to start working on a second versions of ESA, which I understand is now being quite widely praised as having avoided those defects. And we are looking closely at what they're doing. They did us all a big favor, as did New York, with their RGGI program by jumping in and trying different approaches.

MR. MAGAVERN: I think I said in the first phase of the program. If I omitted that -- if I omitted that, that was not my mistake. That was my intention.

CHAIRPERSON NICHOLS: Thank you.

Kristen Eberhard and Mike Sandler.

MS. EBERHARD: Good afternoon.

Kristin Eberhard with NRDC. I apologize on the fake-out of almost ending after the public comment. I filled out the wrong card. But I am in some sense saving you, because I'm speaking on behalf of 12 groups today in addition to -- in addition to NRDC, Resources Solution,
CHAIRPERSON NICHOLS: Your time is up.

(Laughter)

MS. EBERHARD: All of us agreed on some things, and we agreed with the Committee on some things that I'd like to highlight for you.

The first I think you heard loud and clear from Professor Goulder, which is auction. Auctions are the simplest, fairest, most transparent way to allocate the allowances. And they don't result in any greater cost to consumers.

The second thing you heard from Professor Goulder is that what we really are trying to do here is transition, transition to a clean carbon economy, a clean energy economy, and not just compensate polluters for their past, present, or future pollution.

So towards that end, I just want to highlight for you that the report does recommend that a significant share of the allowance value be invested in that transition to a clean energy economy.
And our groups agree on a couple of criteria for thinking about when you're making those investments in energy efficiency/renewable energy, in the technology and infrastructure that we need to make the transition, there's a couple of other things that we can be thinking about, which is those investments will also help us maximize our air pollution benefits. Other environmental benefits will help us compensate disadvantaged communities through a Community Benefits Fund that you've heard about today. And that we can also use that to invest in adaptation.

And I'd like to call out in particular, as Professor Goulder said, everybody didn't agree on exactly what to invest or exactly how much to invest in. But I you want to call out for you one category of investment which is public transit, which is a great way of helping disadvantaged communities, improving air quality, and maximizing environmental benefits, while at the same time reducing greenhouse gas emissions.

There's other things we think are important, but that's a good example of accomplishing all of those things at once. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Mr. Sandler, you have the last word. That is, from the public.
MR. SANDLER: No one can rebut what I say.

My name is Mike Sandler. I'm here with the Climate Protection Campaign. And I am also saving you time, because I'm speaking on behalf of 36 million Californians. Hey. Sounds like a bold statement. What I'm trying to do is give you all money. That's another reason to listen to my quick three minutes here.

It was a very courageous report, and our group really endorses the EAAC and appreciates all the work they put into it. Some of the best ideas are in there. And if you wonder why they didn't say something else, there is a good explanation why in there. They resisted some of the bad ideas that have been put forth in the past.

And so the key one I think is 100 percent auction. Without that, it's hard to do a lot else with your potential proceeds and revenues.

I would encourage you all not to mess around for three or five years getting towards 100 percent auction. That's what Europe has been doing for many years. Eventually, we'll get there. Eventually, in years past voters lose interest and you see a backlash. And eventually -- and in California, we're already seeing a backlash against AB 32. So it's best to start with the right ideas and the right design.

Secondly, returning a majority of allowance
value -- in this case, 75 percent to households -- we're not talking two utilities on behalf of consumers, but directly to households. Our organization supports a cap and dividend approach rather than tax cuts. It addresses economic uncertainty. It will help you explain how consumers will pay the cost under AB 32. It's invisible to voters and provides low income assistance.

And we hope that you would include 100 percent auction and 75 percent allowance value back to households in the PDR that's coming up.

I should mention also that that 75/25 split is also found in a bill that's in front of the US Senate right now, the Cantwell-Collins CLEAR Act. So I hope you're aware that there is a federal counterpart to that design.

So I hope that you will be able to communicate the EAAC findings to others in Sacramento. So if you were to walk into an important room of decision makers and said cap and dividend, they'd know what you're talking about. And this would really advance the discussion.

And in fact, I'd like to offer a prop I have started using. This is a dividend. I don't think that will pick up there on the video screen. This is actually the Governor's dividend check, and then I brought one here for every voter in the state.
And next time I'll show up with my four-foot dividend I've been carrying around and I look like a talk show host.

So I guess to wrap up, AB 32 needs an action hero, not baby steps.

And thank you to the EAAC for providing a road map for implementation of cap and trade. Thanks.

CHAIRPERSON NICHOLS: Thanks, Mr. Sandler.

There is a few things that everybody agrees on. One is that there is value contained there in the carbon somewhere. And the issue is how do you capture and recognize it.

The other is I think there needs to be a transition. I hope that you understand that California is not taking baby steps when it comes to controlling carbon. We already have far and away the most advanced standards for vehicles and fuels in the world. We have SB 375, which is beyond anything that any other state has attempted to do at the state level. And we're moving forward to a mandatory 33 percent renewable energy standard. So none of these are in the category of baby steps. And if that comment of mine gets taken out of context and applied to our program, I will be sorry and I'll hear about it.

But I did attempt to say, perhaps not as
eloquently as I might have, is that we're now embarking on
a completely different type of program, something unlike
anything the ARB or any other agency of state government
has ever attempted to do before. We are fortunate that we
do have some models to look at of other cap and trade
programs. And we are now guided by some very thoughtful
and good advice that we've gotten by the group that we
appointed, Secretary Adams and myself, and we take that
advice very seriously.

One of the things that clearly has emerged from
this conversation, and I think we will need to bear it in
mind, is that both the language of AB 32 and the work that
we've done over the last couple of years in implementing
it have led to a great deal of interest -- I'd say maybe
even unprecedented interest on the part of a wide array of
community-based organizations in the possibility that some
of the value that is created as a result of this program
could be allocated squarely towards issues that those
communities face. And I think there is not just sympathy
for that view. I think there's actually the recognition
on the part of many people, including many in the
regulated community, that we do need to find a way to
formally address that need in whatever the decision is
coming forward with this program.

But beyond that, there is a lot of work to be
done. And I think there are some trade-offs as this discussion has made clear between the question of whether businesses -- in particular, those that are highly regulated like electric utilities -- can best implement programs on behalf of their customers or whether you just give the money back to the customers and let them decide for themselves. And those are kind of ideological questions but also practical questions.

NRDC, in particular, I think is kind of in an interesting position on this one, because they are at the forefront of organizations that have shown that through working through the regulatory system and with the utilities you can implement a wide array of very cost-effective programs that benefit customers and the environment and that don't cost the utilities on their bottom line. And both they and the utilities agree there is a lot more benefit that can be captured as a result of expanding on those programs. And so they're multiple possible design elements.

I can't remember -- I guess it was DeeDe D'Adamo who said that she wanted to see how the various elements worked together, because it is a bit like a jigsaw puzzle with a lot of different pieces that have to be fitted together to come up with a program that can actually work. Staff obviously has a lot of work to do. But I
think you have some good guidance here.

Do you want to have any final words on this before we move forward?

Mr. Goldstene?

EXECUTIVE OFFICER GOLDSTENE: No.

CHAIRPERSON NICHOLS: In that case, we have one other important report to deal with this afternoon. Some of the same people are involved in the next presentation. But I think we need about a five-minute break, which I know will really be a ten minute break, but could we please keep it to a ten-minute break?

(Thereupon a recess was taken.)

CHAIRPERSON NICHOLS: Back again for another lesson in economics.

The next agenda item is a staff presentation on the updated economic analysis of the AB 32 Scoping Plan.

Back in 2008 -- seems so long ago -- when we considered the Scoping Plan, we directed staff to come back with an updated analysis to address some of the concerns that had been raised about the first analysis that the staff had done.

This week, staff released the updated analysis, which shows how the California economy will respond to the range of measures included in the AB 32 Scoping Plan to reduce our current emissions of greenhouse gases by about
15 percent from their current levels. This analysis provides a useful broad look at our climate change program which compliments the specific analysis staff must conduct for each regulation as it comes before the Board, including the measure that we were just talking about a few minutes ago, the cap and trade proposal. This new analysis takes into account updated economic modeling assumptions, uses new modeling tools, and incorporated the economic downturn into the business-as-usual assumption.

We also directed staff to work with experts as they develop this analysis. And again as you've already heard, last May, Cal/EPA Secretary Linda Adams and I appointed the Blue Ribbon Committee of economic, business, and policy experts, known as EAAC, to advise us on the next round of analysis and the development of the cap and trade regulation. That Committee has been advising us since then, and we have benefited greatly as a result of the interaction. So what you're seeing is not just a product that the staff did and then ran past a Committee for review, but rather something that was done in a much more interactive fashion over a period of many months.

The EAAC Committee has also reviewed the staff document, however, as an independent body, and that review is submitted as an appendix to the staff report. And Professor Goulder will be summarizing it after the staff
Staff also collaborated with Charles River Associates, a consulting firm that was conducting simultaneously an industry-sponsored economic analysis of AB 32 implementation to provide them with ARB's inputs and assumptions so that we could see results from the different modeling approaches that used common input assumptions. So you will also hear a brief summary from Charles River on their results as well.

And I want to emphasize how useful and important I think this effort has been in making sure that there has been cross communication and some degree of comparability of apples and oranges or apples to apples when it comes to looking at the results of the various models. I'm not going to try to state the conclusion, but just say I think it was a very helpful move on the part of the sponsors of Charles River to make their consultants available for collaboration with us.

I want to note this is not an action item, but it is an early opportunity for the Board to hear the results of the analysis from staff and EAAC commentary on the report.

I also want to acknowledge that for such an important and complicated topic, it is unfortunate that very little time has been available to those outside the
group that worked on these reports to review them or their findings. And, therefore, I have asked the staff to plan an event to which we can invite Board members and that will allow a much more complete discussion about the staff report and other modeling efforts to analyze the economic impacts of reducing greenhouse gas emissions.

So after the presentation and Board discussion, I want to continue this item to the April Board hearing for the Board to hear testimony after all the members of the Board as well as stakeholders have had an ample time to consider the analysis.

So for that reason, I ask members of the public to reframe from public testimony to the maximum extent possible. I know people may not be able to resist saying something about the process, but we would like to reserve your time and ours until we've all had a chance to look more closely at the analysis and then have a really substantive conversation in connection with the April Board meeting.

And with that, I will turn it over to Mr. Goldstene to introduce this item.

EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman Nichols.

The Air Resources Board has a long history of thoroughly considering the economic impacts of its clean
air policies. These types of economic analysis are meant to help us make policy choices that are both cost effective and successful at reaching our environmental goals.

The analysis that staff is about to present looks at how the California economy will respond to the range of measures included in the AB 32 Scoping Plan to reduce our current emissions of greenhouse gases by about 15 percent from current levels. The analysis confirms that California can reduce our greenhouse gas emissions by transitioning to a cleaner energy supply while maintaining our economic growth, reducing emissions, reducing our dependence on oil, and improving our energy security. Our program will provide a gradual shift to a more renewable-based clean energy economy.

The findings of the analysis show the growth in the economy, jobs, and income continue as we implement these measures to reduce greenhouse gas pollution and at the same time achieve significant fuel savings.

In terms of process, as Chairman Nichols just indicated, staff's been working closely with the Economic Impact Subcommittee of the Economic and Allocation Advisory Committee in drafting the report you see before you today. We asked this Blue Ribbon Committee of economic, business, and policy experts to advise us on
this updated analysis as well as on the development of the
cap and trade regulation itself. This Committee wrote a
companion report that provides their expert review of the
work and findings of ARB staff.

Professor Larry Goulder from Stanford, who you
just heard from in the previous item, will present the
Advisory Committee's comments as part of this
presentation.

In addition, the Board directed staff to look for
opportunities for collaborative modeling efforts as we
updated our analysis. Staff collaborated with Charles
River Associates to ensure to the extent possible that we
could use different modeling tools with a common set of
inputs and assumptions.

Paul Bernstein from CRA will make a brief
presentation of CRA's results following the reports. Dr.
David Kennedy, ARB's principle staff member working on the
economic modeling and subsequent analysis, will present
this update.

Before he starts, I'd like to thank him and all
the staff who have been working tireless hours to get this
done.

With that, I'll ask David to begin the staff
presentation. David.

(Thereupon an overhead presentation was
presented as follows.)

Thank you, Mr. Goldstene.

MR. KENNEDY: Good afternoon, Chairman Nichols and members of the Board.

I'm here today to discuss our updated economic analysis of the AB 32 Scoping Plan.

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MR. KENNEDY: When the Board adopted the Scoping Plan in December of 2008, they directed ARB to perform an update of the analysis of the potential economic effects of implementing the plan. The update would include:

- Estimates of overall costs, savings, and cost effectiveness of the reductions, not only for greenhouse gases but for co-pollutants;
- Estimates of the timing of capital investments and the resulting savings;
- Sensitivity of the results to changes in assumed conditions;
- And the impacts on small business.

It is important to emphasize this is an analysis of the entire Scoping Plan. This analysis is not meant to be a substitute for any measure-specific analysis. However, this analysis will provide useful information as we implement specific measures and conduct measure-specific analysis such as the cap and trade regulation.

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MR. KENNEDY: The updated analysis includes a new business-as-usual projection that reflects the recent economic downturn.

We include as part of the business-as-usual scenario the impacts of the Pavley regulations and the full implementation of the 20 percent renewable portfolio standard.

The analysis uses a dual modeling approach that includes the energy 2020 model and the E-DRAM model. The two models, which have different strengths, are meant to act as compliments and provide alternative views of the potential effects of AB 32 policies. We recognize that there is no perfect tool for an analysis of this complexity, but feel that the tools we have selected are appropriate for assessment.

This report analyzes four additional cases to show the economic impacts of making different policy choices: Such as, getting fewer reductions from complementary measures and eliminating offsets entirely. The sensitivity cases are useful for identifying possible risks that are avoidable through well-designed policies and to provide insights into which aspects of the program are the most cost effective.

MR. KENNEDY: As you previously heard, the
Economic and Allocation Advisory Committee was tasked with advising ARB on economic analysis. In completing this analysis, staff has worked closely with the EAAC to refine methodologies and to discuss results.

Staff will continue to consult with the members of the EAAC on issues of program design as part of the cap and trade rule development.

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MR. KENNEDY: The original Scoping Plan analysis estimated the effects of implementing all Scoping Plan measures. This analysis takes a different approach by focusing on several key complementary measures. These measures include: Increased energy efficiency programs and standards; a 33 percent renewable energy standard; increased use of combined heat and power; regional VMT reduction targets; California's clean car standard; goods movements measures; and low-carbon fuel standard; and Cap and Trade Program.

Some of these measures are implemented in a modeling in a detailed manner, which some are implemented in less detail. Specifically, there are some important issues that could effect the cost of the Cap and Trade Program that warrant further examination.

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MR. KENNEDY: As previously mentioned, staff
relied on two modeling tools to perform this analysis. Energy 2020 is a multi-sector energy analysis system that simulates the supply, price, and demand for all fuels. This version of the model was developed for use by ARB by ICF International and Systematic Solutions, Incorporated.

Models such as Energy 2020 are used to investigate the impacts of greenhouse gas emissions constrained on the portfolio of technologies that make up the supply and demand components of the energy system. Through their use, models such as Energy 2020 can help identify low-cost abatement opportunities and to design technology-based subsidies or emissions standards.

MR. KENNEDY: This slide presents a flow diagram of the Energy 2020 model. There are three primary sectors: An economic sector, an energy demand sector, and an energy supply sector.

In this analysis, policies are imposed in both the supply and demand sectors, and the effects of these policies are transmitted across other sectors through changes in investments and energy prices.

For example, a renewable energy standard would increase investment by the electricity supply sector, which would increase the price of electricity. The higher prices would cause the economic sector to increase their
investment in devices of greater efficiency. The greater
efficiency causes less energy to be demanded, which
reduces the price of electricity since less needs to be
provided.

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MR. KENNEDY: E-DRAM is a computable general
equilibrium model of California economy originally
developed by Dr. Peter Berck of U.C. Berkeley for use by
the California Department of Finance.

CGE models, as they're referred to, are standard
tools that are widely used to analyze the impacts of
policies whose effects are transmitted across multiple
markets. CGE models have been the primary tools used in
the analysis of federal climate policy. CGE models
provide information about a policy's potential effect on
state product, employment, and income.

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MR. KENNEDY: All CGE models have the same basic
relationships which are shown in this figure called a
circular flow diagram. The relationships expressed in
this picture show how goods and services, labor and
capital, and money flow through a regional economy.
The solid lines are the flows of real items, such
as goods, services, labor, and capital. The inner flows,
shown as dashed lines, are the flows of money.
The participants in the economy are households who buy goods and services and supply labor and capital and firms who buy intermediate goods and services along with labor and capital to produce final goods and services.

Missing from this picture is government. Government buys and supplies goods and services. Government also supplies factors used in production such as roads and education and makes transfers to households.

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MR. KENNEDY: Neither of these models on its own provides answers to all the questions. So we have used these models together sharing certain pieces of information. By combining the two models, we were able to provide a more complete picture about the potential impacts of implementing the Scoping Plan measures.

This picture shows what information is shared between the two models. The CO2 price, energy supply, and energy demand investments and fuel expenditures from Energy 2020 are passed onto E-DRAM, and changes in economic conditions are passed back to Energy 2020.

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MR. KENNEDY: In this analysis, we present the results from five cases, though we do discuss some variations to these cases in the report.
The Scoping Plan policy case, which is referred to as Case 1 of the report, assumes that all complementary policy goals are achieved in full and includes a Cap and Trade Program that allows for the use of offsets.

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MR. KENNEDY: The four sensitivity cases look at eliminating offsets entirely and getting fewer reductions from complementary measures.

In Case 2, all complementary policy goals are achieved in full, but offsets are not allowed. In Case 3, there are fewer reductions from transportation measures.

In Case 4, there is reduced electricity and natural gas policy effectiveness.

And in Case 5, it includes a combination of both Case 3 and Case 4, reducing transportation and electricity and natural gas effectiveness.

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MR. KENNEDY: This chart displays the results for gross state product for the business-as-usual case and five policy cases. Across the cases, the change in gross state product ranges from -.2 percent to -1.4 percent.

The next chart displays the results for personal income per capital. Across the five cases, the change in personal income per capital ranges from 0.1 percent to
-0.6 percent.

MR. KENNEDY: Finally, this chart displays the results for employment across the five cases. The change in employment ranges from 0.1 percent to -1.7 percent.

MR. KENNEDY: Some overall conclusions from this analysis are that: California's emission target could be achieved while still maintaining economic growth; less effective implementation of some complementary measures could increase costs; and that offsets reduce costs.

MR. KENNEDY: While this analysis must be re-evaluated based on its own merits, we felt it was useful to compare these results to other economic analyses of AB 32 and federal climate change proposals. What we see is that modeling approaches vary, but reach similar conclusions. Impacts on gross state product or gross domestic product are small relative to projected growth between now and 2020.

MR. KENNEDY: This chart presents the change in gross state product or gross domestic product from the other analyses. The red bar on the left and the 100 percent line represent business as usual.
This chart provides three useful comparisons that are worth highlighting. In terms of policy design, the EPRI analysis shown in the fifth bar from the left does not allow for the use of offsets which makes the program more costly. A comparison of the Lieberman-Warner Climate Security Act, Senate Bill 921, and the Clean Energy Jobs and American Power Act, Senate Bill 1733, offers perspectives of how a change in economic conditions could effect the cost of compliance. The Senate Bill 1733 analysis uses slower growth assumptions reflecting more current economic conditions. As such, the effects of the policy are reduced. And a comparison between adage and IGEM, the models used by U.S. EPA, provide some perspective of how different models can lead to different results and provides the reason for looking at multiple models or modeling approaches when doing policy analysis.

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MR. KENNEDY: With respect to small business, the analysis indicates that there are likely to be significant adverse or disproportionate impacts on small business. However, as we move forward with implementing the Scoping Plan measures, we are working with the Ombudsman's office to ensure that small business in California are actively involved in the discussion when measures are designed. ARB is sensitive to the affordability of measures for
small business and will help identify economic opportunities for them.

MR. KENNEDY: Overall, the analysis demonstrates that the Scoping Plan strategy for reducing greenhouse gases represents a cost effective approach to implementing AB 32. The design and implementation of individual Scoping Plan measures will be informed by this economic analysis.

MR. KENNEDY: Moving forward, we will provide a forum for discussion of this analysis in April. We will continue working with the EAAC. We will continue to performance analyses to support individual AB 32 measures.

Thank you very much.

CHAIRPERSON NICHOLS: Thank you, Mr. Kennedy.

EXECUTIVE OFFICER GOLDSTENE: Now Mr. Bernstein from CRA, unless there are any questions.

(Thereupon an overhead presentation was presented as follows.)

MR. BERNSTEIN: First of all, thank you very much for the opportunity to present here. But also I'd really very much thank the ARB and the Cal/EPA for approaching CRA and asking us to participate in this analysis. It's been a wonderful collaboration with the ARB and the EPA.
Thank you, David, for all your help. And to David's point, for those that don't know, the goal of ARB as we understand it of bringing under this analysis was to have a diverse set of models and diverse set of opinions so we can have the broadest exchange.

To that, I'd like to thank the Chair for holding the April meeting in which everybody can comment. And I think that would be an excellent opportunity to have the full comments.

Next slide, please.

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MR. KENNEDY: Okay. So I'd like to talk briefly about some of our results and also some of our insights. So on this slide, have a comparison between the ARB findings and the CRA findings.

First of all, let me stress that the estimates of the overall impacts vary greatly depending on the treatment of complementary measures, offsets, and technology cost assumptions.

We ran a number of different scenarios, and we find a wide range of permit prices. We find prices ranging from $50 to $80 a ton of CO2. And just to put that into common terms since we don't purchase carbon dioxide right now, that's roughly 50 cents to 80 cents a gallon of gasoline.
We find the cost per household ranges from 200 to $500 per capita or about half a percent to 1.1 percent of income per capital.

I think what's an interesting point here is that when CRA and the ARB under very similar assumptions and looking at what David just discussed was Case 5, which has the limited set of complementary measures, ARB and CRA find fairly similar cost estimates -- per capita cost estimates.

Another similarity between ARB and CRA is that we both find there are tremendous benefits from offsets. So even if we have four percent offsets, we find that permit prices decline by 33 percent and the ARB actually finds that they decline by 80 percent. And I'll discuss this more in one of the following slides.

However, holding to the idea of a diverse set of models, we have differences of opinion or we see differences with -- our results come up with differences from what the ARB sees. And in particular, we find that the command and control measures, or in other words, the complementary measures actually including them, leads to greater costs. Whereas, the ARB finds that these measures reduce cost. So CRA finds as we layer on the complementary measures and reduce the flexibility of the program or reduce the flexibility of the Cap and Trade
Program, this leads to greater costs.

Last, in all models, they're going to be sensitive to the assumptions about things such as economic forecasts and technology costs. And, therefore, again this emphasizes that flexibility in designing any policy is quite important.

One of the issues where we find a great range of costs is in what you assume about the availability and the cost to procure low carbon fuels. So if we use what we feel are more realistic assumptions for the ability to get these low carbon fuels and what they will actually cost, we find that including the LCFS as part of AB 32 raises costs by somewhere in the order of 40 percent.

Second, in terms of sensitivities, if one runs scenarios, your main reference scenario, scenario one, if you use the current assumption, the IPR 2009 as your economic forecast and you compare that to if you were to use the IPR 2007 forecast, you'll find that using the IPR 2009 forecast cuts costs in half. So put another way though, if the economy were to come to recover, which we all hope it will, and return to the growth path that was forecasted in the IPR 2007, we would see our cost doubling from what we have here.

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MR. KENNEDY: So what we're comparing here is the
effect of complementary measures. So what I have on the vertical axis is the permit price. On the horizontal axis, I have overall societal cost from 2010 to 2020. So you consider that overall program costs in discounted present value. And I'm comparing four different scenarios here. The 1A is essentially Scenario 1 that David just talked about, and that's a case in which complementary measures are included, and I'm using the ARB cost assumptions.

The Cap 1A, the complementary measures are excluded, and I'm also using the ARB cost assumptions. And then 1B in Cap 1B are analogous to 1A and Cap 1A, except now I'm using CRA cost assumptions. The CRA cost assumptions have the higher cost for the alternative transportation fuels.

So whether I use the ARB assumptions or I use CRA assumptions, you can see that if you look on the bottom part there with the complementary measures that if I remove the complementary measures and move up virtually and to left, I lower the cost dramatically.

So following along on the horizontal axis there, if I take the ARB's Case 1A, I see something like societal cost of somewhere around $65 billion. If we remove the complementary measures, that cost drops to somewhere around $37 billion. So a dramatic decrease in costs if
the complementary measures are removed.

Also I just want to point out that notice that the permit prices actually go up when we remove the complementary measures. So one needs to be careful when talking about the cost of programs. If you have command and control programs in your policy, you can't always just look at the permit prices as the metric.

So okay. Next slide.

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MR. KENNEDY: Here I'd like to discuss the effect of offsets, which are getting a fair bit of attention here. And we find the ARB the offsets can lead to dramatic reductions in the cost of AB 32.

So this is the same type of figure as what I had before. Namely, the same X and Y access or same horizontal and vertical axis.

And here on the top, I have the cases with the lower level of offsets. And on the bottom circle, I have the higher level of offsets. And so if I move from the lower level to the higher level of different types of cases, but in both examples I see a dramatic reduction in the cost of the program as well as a dramatic reduction in the permit price.

And let me just add that in reality we don't know where these diamonds are going to be on this figure.
Okay. So if we took Scenario 1 that we, both ARB and CRA, have analyzed, if we were to put where that blue diamond is there, we don't know where that blue diamond is. There are a lot of uncertainties out there.

But what I think we can state fairly conclusively though if we have a blue diamond or a diamond up on there and we were to -- and that represents Program A and we add offsets to Program A, we're going to move downward and to the left. And so we will reduce permit prices, and we will lower societal cost.

And doing this obviously has great benefits, just reducing the cost. But also it helps in doing that it lessens the incentives for investment to leave California.

Next slide.

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MR. KENNEDY: Here I'd like to show what we're finding when we look at a different set of cost assumptions for the alternative transportation fuels.

So the 1A and the Cap 1A are the policies I talked about a couple slides ago. In those, we're using the ARB assumption. The Cap 1A is a pure cap and trade policy. The 1A is essentially Scenario 1.

1B is analogous to Scenario 1A, except we're using the CRA assumptions. And Cap 1B is analogous to Cap 1A, except now we're using the CRA assumptions.
So what I take away from the slide is that there's a great range of costs depending on where the technology comes out at the end of the day. And so, in our judgment, if we account for these what we feel are the likely estimates for the cost of the alternative transportation fuels, we see this adding 20 to $40 billion to the cost of the program.

But just in general, there's an issue that the uncertainty surrounding technology and again emphasizing that even if you're going to have a command and control measure to have flexibility within that measure should the technologies -- do not come forward as easily as we would hope.

The other thing I would like to point out is that if you look at the distance or basically representing the societal cost, the differential and societal cost, when we have complementary measures and when we don't, you'll see the distance between 1A and 1B is much smaller than the distance between -- distance between Cap 1A and Cap 1B is much smaller than the distance between 1A and 1B, again suggesting if you don't have the complementary measures, you're less vulnerable to the uncertainties in the cost of technology.

Next slide.
MR. KENNEDY: So finally let me just summarize some of the points I've tried to make here.

Increase reliance on a market-based approach, such as a cap and trade or tax, can achieve the emissions target at what we find to be substantially lower cost than the Scoping Plan's approach that relies much more heavily on the complementary measures. Part of the issue here is when you have the market-based approach, you have much greater flexibility. And so this is pointing out the policy design choices are quite important.

Next, the inclusion of offsets greatly reduces permit prices and overall program costs. And if the offsets are designed correctly, it maintains the overall emission reductions.

The four percent offsets, we find that it lowers the program costs by 15 percent and it lowers permit prices by 33 percent. If we look at a case where no complementary measures are in place and we start with the four percent offsets and go to something like the availability under a Waxman-Markey program, we find that actually we can lower the program costs by 45 percent and the permit price is also dropping by 33 percent.

So external factors can also contribute to higher than expected costs, highlighting the need for compliance flexibility and cost containment mechanisms. These higher
than expected emissions and technology costs would increase program costs substantially. Last, I'd just like to say as the Governor pointed out and has been mentioned a number of times here that I think it's important to keep an eye on the ball in terms of the national program and again to have flexibility in your program to link up with a national program, as we find under the national program the impacts on California are substantially less. In fact, 50 percent less in the case we ran.

Thank you very much for your time.

CHAIRPERSON NICHOLS: Thank you. Does the staff want to respond? Or -- I'm sorry. Next is Professor Goulder. Out of order here.

(Thereupon an overhead presentation was presented as follows.)

PROFESSOR GOULDER: Thank you. I'd like to thank being both Cal/EPA and the Air Resources Board for the opportunity for the EAAC to contribute to the economic impact work. I think they showed a great deal of wisdom not only in asking for outside experts, but also I think in inviting Charles River Associates to introduce their own modeling work.

My view is it's been extremely informative to see the comparison and results from the Charles River model
from the ARB's modeling work. And it's really starkly
indicated what the differences are due to, and this is
very useful because it really tells us where we can focus
our attention in order to get more information and
hopefully reduce the uncertainties.

Also I just want to thank at the ARB Steve Cliff
and Kevin Kennedy and Dave Kennedy. It's been a pleasure
working with them and we'll look forward to continuing to
work with them.

I should mention it's really a subcommittee of
the EAAC, subcommittee of seven members that have been
involved in the economic impacts work. We call ourselves
the Economic Impacts Subcommittee. Jim Bushnell, who's at
Iowa State University, is the Chair of Energy and
Economics, Chaired that Subcommittee.

And then in addition, Steve Levy here on my
right, who's Director and Senior Economist for the Center
for Continuing Study of California Economy is on the
Committee. Chris Knittel, who's a professor at U.C.
Davis. Nancy Ryan, who, as many of you know, is the
Executive Director for Policy and External Relations at
California Public Utilities Commission. Nancy Sidhu,
Chief Economist at the Kaiser Center for Economic Research
at the L.A. County Economic Development corporation. And
finally, the seventh member is Jim Sweeney, my colleague
at Stanford, who's a Professor in the Department of Management Science and Engineering and also Director of the Precourt Energy Efficiency Center at Stanford.

Next slide.

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PROFESSOR GOULDER: So our subcommittee's tasks were the two-fold. As indicated, one is to offer ongoing input to the ARB staff as it prepared its economic analysis or updated analysis.

And secondly, to offer commentary on the completed product, the report that's just been issued. And our commentary appears as an appendix to that report.

Next.

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PROFESSOR GOULDER: I'll give the bottom line first and then provide a few details in the next ten minutes or so.

Our bottom line assessment is that although it's not a perfect study -- no study is -- it's a solid study. It's carefully done. Close attention to the data. Reasonable modeling assumptions. And although different elements of the work might buy us in one direction or the others in terms of cost, it's not clear how all the biases add up. Overall bias is not clear. And I think in general it provides useful information as a result.
And I hope that the ARB's modeling work therefore will help people reshape, perhaps revise their expectations and get a clear sense as to the potential impacts of AB 32.

Next.

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PROFESSOR GOULDER: And the bottom line results -- it's not doing justice to the work. One result that sticks out is that AB 32 will reduce California income, but not by much, anywhere from zero to one-and-a-half percent in the year 2020, depending on various assumptions. And by income here I mean gross state product. This is in 2020. The impact in earlier years is smaller than that in percentage terms.

CHAIRPERSON NICHOLS: Again, just for those of us that need to be reminded, this is about growth and income, not from where we are today in 2020. But over expected --

PROFESSOR GOULDER: Actually, it's relative to where income would be in the year 2020 in the absence of policy. Under business-as-usual, there's a zero to one-and-a-half percent reduction.

I'm glad you mentioned that, Mary, because in fact over the same period under business-as-usual, if you assume one-and-a-half percent or so increase in per capita in income, on average over that period in real income,
incomes will be rising about 29 percent between now and
2020. So what we're talking about is instead of growth of
29 percent over that from here to 2020, we have growth of
a little bit less than 28 percent. So that puts a
slightly different perspective on it.

And again, I think that Paul Bernstein's
presentation really helped bring out where the differences
are. But in some larger sense, you could say even if you
allow for the differences where there's different
assumptions made, it's true that both models are showing
results, which, to me, overall are fairly small impacts on
the California economy, whether you take the CRA results
or the ARB results.

Now, I realize different people have different
perspectives as to what's large and what's small. But I
think there's been a lot of discussion as to whether AB 32
would wreck the California economy. I don't think either
model under any scenario suggests it would wreck the
economy in any meaningful sense.

Next slide.

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PROFESSOR GOULDER: Let me very briefly indicate
some of the strengths and weaknesses that the subcommittee
used in the ARB's analysis.

First, we were impressed in terms of strengths.
We were impressed by the very close attention to details of energy supply and demand. In fact, we can't think of any other model of the California economy that has a closer attention to energy technologies than that in the ARB.

In addition, as was already mentioned by both Dave Kennedy and Paul Bernstein, there is a lot of work to produce a useful reference case or business-as-usual case. As Dave Kennedy mentioned, they try to incorporate some changes that are not part of AB 32 but should be considered part of the baseline.

I might add that the earlier economic analysis from two years ago was strongly criticized, because it was argued their baseline assumptions were problematic, and in particular, that a lot of elements that should have been in the baseline were, in fact, considered some of the positive impacts of AB 32. I think this has been corrected. So, for example, in the baseline now, there's the Pavley I rules, the 20 percent RPS for utilities, and also takes account of the federal renewable fuel standard.

So third point is there is some sensitivity analysis to isolate the contributions of various so-called components of AB 32, including the complementary measures such as the Pavley II rule, the 33 percent RPS, and energy efficiency standards.
And fourth, there is detailed attention to these complementary policies as part of those and their relationship to cap and trade.

On the other side in terms of weaknesses, the model does not account for either the Energy 2020 or the E-DRAM model. It accounts for policy-induced technological change. Nor is there an attention to emissions leakage. So the emissions reductions that are reported are only those in California. There is no attention to the offsetting potential increase in emissions out of state that are generated by California policy. So in both, if we were to account for technological change, the cost might lower than predicted.

On the other hand, if we account for leakage, things don't look as good as predicted. There's also in our view -- and we detailed this a bit in our appendix -- there might be some over-optimism in terms of the cost of complementary policies. I'm not claiming all the assumptions in the central Charles River approach are exactly on target. But at least some of the assumptions about cost of the complementary policy seem optimistic in the ARB's analysis. In particular, the vehicle miles traveled reductions that are part of the package, those apparently are brought in at zero cost and there's really not any clear justification for that. In prior economic
analysis by other parties suggest those would come at some

cost to consumers.

Related to what I mentioned a few hours ago,

there's no attention to allowance for allocation design

and associated cost impacts. So different issues about

recycling, the differences between auctioning versus

freely allocating the allowances, those are not captured.

And there's little attention to the macro impacts

in years other than 2020. This is because of a

restriction in the E-DRAM model. The E-DRAM model, which

is their macro model, only offers a snapshot of any

particular year. They chose 2020, so they're missing a

lot of useful macro economic impact for other years.

Next slide.

--o0o--

PROFESSOR GOULDER: So yesterday, there was a

brief meeting with reporters about the just-released

report. And one reporter asked me what I think is

probably the central question a lot of us are asking:

Here's's one more study, one more set of results from

another model, why should we believe this? There's other

models out there that say costs are much greater. What

should we believe?

And I can't give the final word. I don't know if

anyone can about this response to this question. But I've
tried to offer in my last five minutes some thoughts that
would suggest overall that it's reasonable to trust ARB
model, at least that it would help center our
expectations.

Next slide.

--o0o--

PROFESSOR GOULDER: So I put together a table
that compares results from some modeling. I'm going to
compare the results and talk about the differences and
hopefully lead to the conclusion that it's reasonable to
think that the differences aren't so great and that the
reasons for the differences, at least in the case of the
ARB and CRA international model are legitimate reasons.
And we have reasons to think the ranges that are spanned
by those two models collectively is a reasonable range.
And that would rule out then other estimates that lie
outside that range.

So first taking the ARB model or set of models,
the Energy 2020 and E-DRAM model, in their central case,
the allowance price is $25 a ton. This is all for 2020.
Emissions reductions is about 25 percent relative to what
would otherwise be the case in that year. The impact as
mentioned by Dave Kennedy on gross state product is
between .2 and 1.4 percent.

The final column is different from what you heard
earlier, because I'm measuring cost per household as the
cost in terms of reduced gross state product per
household. You'd have to come up with numbers that are
about one-third as big if you did it in terms of personal
income, the percentage changes.

But there you see a range of $105 to $738.

Notice -- and this again relates to the point that Mary
Nichols raised just a moment ago. This is the change
relative to what would otherwise be the case in the year
2020. Rough calculation is that personal income from
today to 2020 per capita should rise by about $4700. So
the per capita basis on average we're $4700. So what this
means is that AB 32 might, instead of our income going up
by $4700 on a per capita basis, only go up by somewhere
between 4,000 and $4600. You can draw your own
conclusions whether that's a lot or a little. But I think
it's important to keep that in mind. It's really a change
in the rate of growth that's relevant here.

CRA, on the other hand, is getting higher
allowance prices largely because of the differences, as
Paul mentioned, in complementary policies. It has the
same scenario emissions reduction. And impacts on gross
state product are slightly higher. You notice that the
low end for CRA in terms of gross state product
corresponds to the high end for ARB, and their range from
-1.4 and 2.2 percent. And correspondingly, the impacts on cost per household are higher.

I just mentioned briefly that the federal models IGEM and Adage used to look at Waxman-Markey come up with a cost per household of 80 to $146. But that's for somewhat -- of course, this is at the federal level and in some sense it's a less stringent policy, because the emissions reduction is 17 percent rather than 25 percent.

Very recently, in fact, I think it was two days ago, there was a study by Thomas Tanton that came out and suggested much higher costs per household. In fact, it suggested the cost per household was not the 1,054, which is from my calculations using some of its own input, but he suggested it was $2800 per household. So there you have a study that suggests it's much higher. And the now infamous varsity study suggests it's even higher than that.

So the next slide.

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PROFESSOR GOULDER: What should we make of these differences?

I think Paul did an excellent job in explaining the differences, and I don't want to repeat what he said. The reason I think it really comes out very cleanly, because they did a very nice analysis where they
replaced their own assumptions with some of the assumptions of ARB, and lo and behold, at that point, the difference in results ended up being largely eliminated. So it has to do with what you think of as the potential of these complementary policies. And underlying this -- and this I think Paul didn't mention but is useful, why might we think the complementary policies are less expensive or much cheaper, even in some case zero cost, compared to being more costly than when you add them in as in the CRA model.

I think it has to do with whether you think beyond the market failure associated with greenhouse gas emissions there are other market failures. If as in the central case for Charles River model you believe the only market failure that applies is the one that is due to the emissions of greenhouse gases, then you can correct all the market failures you need to correct by introducing through cap and trade a price on greenhouse gases. There's no other market failures to deal with. Anything else you try to do, such as introducing a complementary policy on top of cap and trade, is superfluous and costly. So, for example, if you think there are no other market failures, there's no reason to have building energy efficiency standards on top of cap and trade. Cap and trade will do everything you need. Adding an energy
efficiency standard if it's binding is only going to introduce greater costs.

In contrast, if you think that there are agency problems or information problems or other rigidities that the price system alone is not going to undue, then, in fact, an energy efficiency standard could be a very low cost item -- in fact, lower than cap and trade. And it lowers the overall cost of meeting your target.

Well, effectively there's almost a religious debate among economists as to whether, in fact, there are these market failures. And it's a shortcoming of economic analysis that hasn't been worked out. We just don't know. Different people take different views about the scope of these other market failures. Virtually everyone -- and I'm sure Paul on my left would agree -- that there are some other market failures. We just don't know how quantitatively important they are.

This is a valuable exercise that Charles River has done in showing market failures to guide future research.

My last question would be: Does it matter? My own view is you might want to narrow the difference between the CRA and the ARB models. But even if you take the span from both of the models together, I still think it's relatively modest. I don't consider 2.2 percent
change in growth state product relative to the fact over
the next 12 years you're going to have 29 percent growth,
that that's going to be such a big deal. But I realize
that different people have different assumptions about
that.

Finally, I read yesterday the Tanton study and I
just want to mention that in contrast to ARB and CRA work
where there is some biases in one direction and some
biases in other, but there's an attempt to get it right.
I'm struck by the fact in the Tanton study all of the
omissions or mistakes go in one direction. They all bias
towards higher cost. There's no potential for fuel
substitution fuel substitution. There's no technological
change. The focus is on $60 per ton allowance price
forever starting now, even though no one believes that the
allowance prices initially would be that high.

And in keeping with what I mentioned earlier,
that is in previous talk earlier the afternoon, it makes
the mistake of equating allowance value with cost, which
is why they get this $2800, ignoring the fact that
allowance value stays in the economy. Much of it goes
back directly and indirectly to households.

And, finally, there is a number of other
misleading aspects. It assumes that the costs are due to
auctioning were, in fact, price impacts as mentioned
earlier, the same under auction as free allocation with a few exceptions. And the consumers might well face lower cost under auctioning, because under auctioning some of the revenues can be used to benefit consumers directly.

And also as mentioned earlier, the economy-wide cost under auctioning are potentially lower, perhaps one to four billion dollars less than under free allocation. So I believe that my view is that that study should not be taken seriously, because it makes some fundamental mistakes.

--o0o--

PROFESSOR GOULDER: So my last slide is that I guess I would first commend the ARB for having decided to work with and compare their results with CRA. I think that's very useful, helps add credibility to all of this work.

And I would say the economic impacts assessment by the ARB in particular provides very useful insights. They provide good data, reasonable parameters, and the modeling framework is very useful.

I also feel that additional investments in some modeling improvements, as I mentioned some of the weaknesses already, and sensitivity analysis would be warranted.

Final comment, which may show my pedigree, but I
really think this is a serious issue. I think that the
folks at ARB have done a tremendous job given the number
of people involved. But there are really only I think
three economists working on climate change policy in this
group. Each of them has done a wonderful job
individually. But because of the numbers, they haven't
been able to do a lot of things which we would have hoped
they'd have been able to do. I think I'm very cognizant
of the fact that California is facing a severe budget
crisis, but I think it's an unfortunate allocation of
resources to only have three economists doing the economic
impacts analysis. While it helps to bring in outsiders, I
think you want to have more in-house work. So I would
make a strong pitch for that.

And perhaps, Steve, you want to make a comment.

CHAIRPERSON NICHOLS: Yes, I do. I'm looking at
the clock, because I was planning on leaving at 5:30 to
try to catch a flight, but other members I know can stay
at least a little bit past that. But take a minute or
two.

MR. LEVY: Couple of points.

The people in the room who did the public
testimony have been respectful through the nine or ten
meetings that we have heard from, really the same group of
people. Some of the environmental groups I'm a
card-carrying member of. They represent two sets of specific interests. Our work and the staff's work in the analysis was to incorporate their interest, the energy-intensive industries, the low-income communities. But to ask about the common interest, the general economic impact, the people who don't come and testify.

In that regard, this is a thorough but partial analysis to an economist by the staff's own admission and by our report. We leave out potential benefits on health, on the environment, on the reduction of co-pollutants, on the potential for jump starting a new industry. They're not part of this economic analysis, but they're part of an economic analysis that should guide policy. And they list a set of benefits that need to be included with the cost on output and jobs that are talked about here.

Last point, we're into a discussion about what is small at a time when people are hurting. We've lost ten percent of our jobs in 24 months and suffered a decline in real income.

Here, we're talking about whether over eight years jobs grow by X or X minus one percent and whether income grows by, as Larry said, 29 percent in real terms or a little less than 28 percent.

All of the members of the Committee would have characterized, did characterize those as small relative to
the size of the economy. And as Larry said, they occur, the larger ones, only in 2020 and only if the complementary policies are unsuccessful.

Larry mentioned at the beginning and I'll end with as you go forward to defuse some of the uncertainty and some of the fear, we think it would be very helpful for the staff to focus on an earlier year, perhaps 2015, to use updated economic inputs, which in contrast to what Paul suggested, are going to be even lower than what CEC did in the 2009 IPR. This stuff I do for a living so I can tell you in the 2010 IPR the numbers are going to be lower, but that you take not just a 2020 look, but a look at the more immediate impact, because that's the subject that you're getting hit with as you strive to make a policy choice.

CHAIRPERSON NICHOLS: Thank you for that good advice.

Does that conclude all of the presentations then at this point?

Okay. Well, as I indicated earlier, there's time to digest this and to talk about it. And I think we'll have an opportunity to ask questions at the April 21st meeting that's currently being scheduled.

If there is anybody who feels that they absolutely must speak at this time on this issue -- on
this issue? I thought you wanted to talk about what you
sent us earlier on public comment. You want to speak
about the modeling? Okay.

BOARD MEMBER TELLES: Can I just ask one burning
question?

On slide 14 of the first presentation where it
shows the incomes -- and we talked about the incomes not
being that much different between business-as-usual versus
including the plans, and you talk about cost. But in
talking about costs, as I understood you, you're talking
about cost as reduction of gross national product per
capita. But what would be the actual consumer cost? In
other words, sure, you're making 29 percent more, but is
the consumer cost 29 percent? 39 percent? 40 percent?
Cost of goods and services. In other words, are people in
California going to have more disposable income or less
disposable income based upon this?

PROFESSOR GOULDER: I meant to indicate over that
time period from now to 2020, consumer income would rise
by 29 percent. And that according to the ARB's analysis,
in the worst case, it would rise by only a little more
than 27 percent.

BOARD MEMBER TELLES: I'm talking about consumer
cost.

PROFESSOR GOULDER: Adjusted for inflation.
BOARD MEMBER TELLES: I'm talking about consumer cost. When you go out to a store and you buy goods and services, how much -- 

PROFESSOR GOULDER: The difference between those two is, in fact, the consumer cost. It's the difference in real purchasing power -- the difference between the 29 and the 27-and-a-half. And the numbers given there is meant to be the consumer cost.

BOARD MEMBER TELLES: I mean, the difference was just a total per capita income. You were mentioning there was 42,000 versus 47,000 or something like that. I'm talking about cost. You know, how much you spend on your budget as a person.

MR. KENNEDY: Let me attempt to jump in, and then the economists can correct me if I'm wrong. I believe what we're looking at is essentially a net number that incorporates both any increase in income and changes in the cost that the consumers would see. So the number you're seeing here actually does incorporate the cost you're concerned about. It's a net difference we're looking at.

BOARD MEMBER TELLES: I think, I mean, per capita income to me is per capita income and not -- 

PROFESSOR GOULDER: I think the fact it's real income adjusted for changes in the price of goods is what
accounts for the changes in consumer cost.

BOARD MEMBER TELLES: It's real income adjusted?

PROFESSOR GOLDSCHMID: It's real income adjusted.


MR. PETERS: Thank you very much, Madam Chairwoman and Committee.

Mary, I think you're absolutely right that this is not specifically laid out in your presentation today. However, the Air Resources Board is very definitely involved in this with a press release out indicating huge amounts of fraud in the system of smog check. And we believe that this could make a very significant contribution to helping with your reductions in CO2 and the economics of the state of California.

If my numbers have any validity at all, those kinds of reductions and the value of those reductions could also possibly be a very significant financial improvement and give you lots more flexibility to help address these issues.

So I would petition the Committee, the Chair and the Committee, to give consideration to incorporating this in your deliberations and seeing if it matters at all. And would like very much to see some conversations about these possibilities of improving the performance and improving what we're doing, because we think the public
deserves much better than what we've been getting.

CHAIRPERSON NICHOLS: Thank you. We agree with you about the need for a smog check improvement. I know we are working with -- the Legislature is working on a bill to try to start us in that direction. So thank you. You've been very persistent over the years in your criticisms of the program, and now you've finally got some traction on some of it anyway. Good work.

Okay. A number of other people have signed up. If any of you feel compelled to speak at this time, you may. Otherwise, we would welcome you back on April 21st. In the open comment period, there is an open comment period. Jim Rothstein wants to talk about solar cooperation with Jiangsu Province.

MR. ROTHSTEIN: Thank you.

Jim Rothstein, no affiliation.

I appreciate your listening to me. Yesterday, I was at the Energy Commission. They said they'd stay until midnight but promptly adjourned for lunch before lunch.

So thank you.

In October 2009, the state of California and Jiangsu Province in China signed an MOU to work together in areas related to energy, energy efficiency, greenhouse gas reduction, specifically in areas of policy, standards, codes, training, market development, as well as
technology.

Under that MOU, ARB is the lead agency. I support genuine cooperation with China and I believe this will benefit a return on investment to California and this country.

Speaking specifically to this six-month-old MOU, can you please give me the accomplishments to date in the eight areas covered by the MOU? For example, there's technology sharing, joint development, RD&D, best practices, harmonizing standards and codes, certifications, green buildings, academic and student exchanges, market development for PV, training, policies, data management, as well as a Steering Committee.

Also, I have been promised a copy of discussions of a group called C3, which has been organized by Secretary Adams, but I have not been able to get a copy of that. I'd like to do that -- not today. I can come back tomorrow.

And in general --

CHAIRPERSON NICHOLS: We won't be here tomorrow.

MR. ROTHSTEIN: Is it a furlough day?

CHAIRPERSON NICHOLS: The Board won't be meeting tomorrow. The Board members don't have to come when it's not a Board meeting day.

MR. ROTHSTEIN: I'm here today then.
CHAIRPERSON NICHOLS: Look, you have information you're seeking. We cannot provide it here on the spot, nor do I think you could reasonably expect us to do that. But I happen to know the person who has the information you wish to have about the MOU with Jiangsu Province. She's the China advisor to --

MR. ROTHSTEIN: I've spoken to her.

CHAIRPERSON NICHOLS: She's the source of the information. So if she doesn't have it, it doesn't exist.

MR. ROTHSTEIN: So there's no status? Nothing has been done on this MOU?

CHAIRPERSON NICHOLS: No report has been prepared. You want us to require a report to be prepared. Why don't you send me a letter or e-mail or note and we'll follow up with some information?

MR. ROTHSTEIN: Is something not clear? I asked for the accomplishments under this six-month-old MOU.

CHAIRPERSON NICHOLS: Please send it to me in writing and you will get a response in writing. I can promise you that.

Thank you. Okay. Anything further?

If not, the meeting is adjourned. Thank you all so much.

(Thereupon the California Air Resources Board adjourned at 5:25 p.m.)
CERTIFICATE OF REPORTER

I, TIFFANY C. KRAFT, a Certified Shorthand Reporter of the State of California, and Registered Professional Reporter, do hereby certify:

That I am a disinterested person herein; that the foregoing hearing was reported in shorthand by me, Tiffany C. Kraft, a Certified Shorthand Reporter of the State of California, and thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing nor in any way interested in the outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 8th day of April, 2010.

TIFFANY C. KRAFT, CSR, RPR
Certified Shorthand Reporter
License No. 12277