#### CALIFORNIA COASTAL COMMISSION

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April 18, 2013

Mary Nichols, Chair California Air Resources Board 1001 I Street, P.O. Box 2851 Sacramento, CA 95812

#### **RE:** Cap-and-Trade Auction Funds/Ship Speed Reduction Program

Dear Chair Nichols and CARB members:

I write on behalf of the California Coastal Commission to express support for the Santa Barbara Air Quality Management District proposal to implement a Vessel Speed Reduction Incentive Program along the California coast, using funds generated from Cap-and-Trade auction credits. Existing programs already in place in the ports of Long Beach and Los Angeles have proven effective in reducing both greenhouse gas emissions (GHGs) as well as the potential for whale strikes.

Lowering vessel speed in shipping channels reduces particulate matter and GHGs in from diesel ship engines in coastal areas in much the same way that lowering freeway speed limits reduces emissions from vehicles. Expanding this successful model beyond the Ports of Long Beach and Los Angeles would significantly improve coastal air and water quality and benefit public health by reducing air toxics and particulate matter. These substances ultimately find their way into the marine environment, contributing to ocean acidification as well.

Vessel speed reduction can also benefit whales and other marine wildlife by reducing the likelihood and severity of collisions, which is especially important in migratory corridors and foraging grounds, such as the Santa Barbara Channel. For endangered species, such as the Blue Whale, preventing even a single lethal ship strike could be a significant benefit to the population.

Expanding the successful vessel speed reduction programs in Los Angeles and Long Beach would allow the state to enhance air quality, water quality, public health and marine wildlife safety with the implementation of a single, far-reaching policy. Once again, California has the opportunity to lead by example. The monitoring and implementation proposed by the Santa Barbara Air Quality Management District could provide science, data and management models useful to other states that share California's objectives to reduce GHGs and improve environmental health. Thank you for your careful consideration of this proposal.

Sincerely,

CHARLES F. LESTER Executive Director



DEPARTMENT OF THE NAVY NAVAL AIR WARFARE CENTER WEAPONS DIVISION 1 ADMINISTRATION CIRCLE CHINA LAKE, CA 93555-6100 575 I AVENUE SUITE 1 POINT MUGU, CA 93042-5049

> IN REPLY REFER TO: 5090 Ser 52F00ME/1545 April 24, 2013

Ms. Mary D. Nichols, Chair, California Air Resources Board, 1001 "I" Street Sacramento, CA 95814

Dear Ms. Nichols and California Air Resources Board Members:

Thank you for the opportunity to provide input and comments on your Draft Cap-and-Trade Investment Plan. We support including appropriate incentives for commercial vessel speed reduction within the Santa Barbara Channel Traffic Separation Scheme (TSS) in your Final Plan as a priority for funding and request Cap-and-Trade money be directed to the Vessel Speed Reduction (VSR) Initiative. This program, if properly designed, can benefit not only air quality in the region, but also help protect endangered whale species, increase vessel safety, and reduce potential conflicts with critical United States Navy (Navy) research, development, acquisition, testing, evaluation and training operations.

As background, the Navy's mission is to organize, train, equip and maintain combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. This mission is mandated by Federal law (Title 10 U.S. Code Section 5062), which charges the Chief of Naval Operations (CNO) with responsibility for ensuring the readiness of the Nations' Naval forces. CNO meets this directive by establishing and executing training programs, including at-sea training and exercises. Underlying this mission-readiness preparation is access to integrated ranges, operational areas, and airspace such as the Point Mugu Sea Range.

The Point Mugu Sea Range is the largest and most extensively instrumented air/sea range in the United States. The 36,000 square-mile Sea Range supports both developmental and operational test and evaluation of missiles, free-fall weapons and electronic warfare systems. The Range Operations Center hosts and monitors complex full battle group Fleet exercises involving aircraft, surface ships, and submarines. Any disruption of the Sea Range usage will have a degrading effect on numerous defense systems and required training, will add to range operation costs, and will limit our capacity to support national security interests. As such, careful attention must be paid towards any regulatory changes or incentives that might lead to an increase in shipping traffic through the Sea Range.

A recent National Oceanic and Atmospheric Administration Study shows that moving shipping traffic out of the Santa Barbara Channel TSS could significantly increase risk to endangered fin whales and would have no benefit to blue whales (Redfern, et al. 2013). While the study considers a modified scheme with shipping split between the existing TSS and an area to the south that runs through the Navy's Sea Range, it does not consider the air quality impacts of either route. Importantly, this study also concludes that when determining shipping routes in the area "…it may be more important to exclude shipping from certain areas within the military ranges."

One way to reduce risk to endangered whale species, while maintaining the current Santa Barbara Channel TSS is to provide financial incentive to ships that transit the existing TSS at lower speeds. It has been well documented that slowing commercial shipping traffic can help prevent ship strikes on whales. It is also well documented that reducing commercial shipping speeds significantly reduces greenhouse gas emissions.

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If properly designed, this type of incentive could not only have benefits to whales, but also reduce air quality impacts while simultaneously decreasing conflict with critical Naval operations and protecting our National Defense Mandate.

We have appreciated the substantial work you and your staff have done to recognize the importance of the Sea Range as well as your ongoing commitment to consider VSR. We think that an incentive-based approach centered on vessels remaining in the current TSS, perhaps coupled with additional coordination with incentive programs at the ports, could help all the stakeholders to achieve their goals.

We appreciate the opportunity to provide this input on the Cap-and-Trade Investment Plan. For further information please contact the undersigned at (805) 989-9209 or anthony.parisi@navy.mil.

Sincerely,

A. M. PARISI Head, Sustainability Office By direction of the Commander

Reference:

J. V. Redfern, M. F. Mckenna, T. J. Moore, J. Calambokidis, M. L. Deangelis, E. A. Becker, J. Barlow, K. A. Forney, P. C. Fiedler, And S. J. Chivers. 2013. Assessing the Risk of Ships Striking Large Whales in Marine Spatial Planning. Conservation Biology. Volume 27, No. 2, 292-302.



**Central Coast Coalition** 

Moving California's Economy

ghgreductfund13 XC: Board Members 13-5-4 Chairman Binder 4/25/2013 EO Binder JG

April 24, 2013

Mary Nichols, Chair California Air Resources Board 1001 "I" Street Sacramento, CA 95814

#### Re: Cap and Trade Investment Plan – April 16 Release

Dear Chair Nichols and Boardmembers:

The Central Coast Coalition represents the regional transportation and metropolitan planning agencies in the counties of Monterey, Santa Barbara, Santa Cruz, San Luis Obispo and San Benito Counties. We are writing to assure that your Cap and Trade Investment plan includes funding that will benefit the residents of and visitors to our region, all of whom will be contributing funds under the program. The Central Coast Coalition endorses the proposal for Cap and Trade investments submitted by the Transportation Coalition for Livable Communities.

We strongly support the plan's recommendation to dedicate a majority of Cap and Trade funds to transportation, since transportation sources are the largest contributor to greenhouse gas emissions. Below are our comments on the plan to assure that you create the most equitable plan to benefits all of the travelers in California:

• Broaden Disadvantaged Communities Designations. The current designations are overly focused on southern California and the Central Valley, to the neglect of the less populated coastal regions. We ask that you revise the CalEPA EnviroScreen designation of disadvantaged communities to assure that the low income/high unemployment and high minority population areas of the Central Coast region (including Salinas, south Monterey County, Watsonville, San Benito County, Santa Maria and Guadalupe) are represented. Our region also has high exposure to fertilizers and pesticides that are a feature of our agriculturally-focused economy. Our poorer regions are no doubt part of the areas envisioned in the legislation as eligible for disadvantaged area funds.

• Distribute All Transportation Funding to Regional Agencies. We believe that the most cost-effective and sustainable method for distributing the transportation share of Cap and Trade funds is via formula to the existing regional transportation planning agencies. As the agencies responsible for long-range plans and programming other funding sources, we are the best suited to assure that projects that receive Cap and Trade funds are delivered in a timely manner. We are also the agencies who can assure that the funding is used consistent with the sustainable communities' strategies in our Regional Transportation Plans. Our fear is that smaller agencies such as ours will be less able to compete statewide for funding, and yet may be the neediest in terms of alternative transportation projects. Our proposal is for regional agencies to receive a county by county formula share, prepare a plan for the use of funds consistent with our transportation Commission, as to the eligibility and feasibility of our program. This proposal is also consistent with your recommendation to enhance existing funding programs to match funds towards projects that can be implemented sooner.

• Assure that All Regions with Passenger Rail Needs Receive Rail Funds. We support the plan's focus on funding public transit, rail service, bicycle and pedestrian facilities. Our goal is

Letter to Chair Mary Nichols April 24, 2013 Page 2

> that the "rail modernization" funds would also be allocated for new rail service. This goal could be best met by allocating funds directly to the regional transportation planning agencies rather than existing rail operators and state agencies. Our coalition has actively supported adding new rail service to the Central Coast via a new Coast Daylight, in coordination with Caltrans Division of Rail. Our individual members have proposed adding new or additional rail frequencies with service to Santa Barbara and Salinas, and adding new light rail along the Monterey Peninsula, connecting rail service to Santa Cruz. But these projects need additional funding to move forward. Our concern is that without a direct source of regional rail funds, the monies will all be utilized to pay for existing projects rather than new projects that can have an even more air quality beneficial effect.

**Distribute Low Carbon Freight – Zero Emission Passenger Transportation Vehicle Funding via Regional Air Districts.** We believe that distribution of this portion of funding via the regional air districts will result in the greatest penetration of low-emission/zero-emission vehicles statewide. Our region depends heavily on the movement of freight to market, and our agricultural industry would derive important economic benefits from receiving a share of these low emission funds. Eligible projects should be expanded to include marine vessel operations. Such funds could be used for a Vessel Speed Reduction Incentive Program along the California Coast. Similar programs have been successfully implemented at the Ports of Los Angeles and Long Beach. Significant GHG emission reductions could be achieved within the three-year plan horizon through this program.

Thank you very much for your consideration of the Central Coast region in your Cap and Trade investment plan.

Sincerely,

Jim Kemp, Executive Director Santa Barbara Association of Governments

Debra L. Hale, Executive Director Transportation Agency for Monterey County

Lisa Rheinheimer, Executive Director San Benito Council of Governments

Ron DeCarli, Executive Director San Luis Obispo Council of Governments

George Dondero, Executive Director Santa Cruz Co. Regional Transportation Commission

Maura Twomey, Executive Director Association of Monterey Bay Area Governments

cc: Assemblymember Luis Alejo P:\Correspondence\2013\Outgoing\Nichols - Cap and Trade April 2013 draft.docx STATE CAPITOL, ROOM 5080 SACRAMENTO, CA 95814 TEL (916) 651-4019 FAX (916) 324-7544



April 24, 2013

Mary D. Nichols Chairman, California Air Resources Board 1001 "I" Street Sacramento, CA 95814 P.O. Box 2815 Sacramento, CA 95812

RE: Cap-and-Trade Auction Funds/Ship Speed Reduction Program

Dear Chair Nichols:

I have reviewed the Draft Investment Plan and would like to recommend including the Santa Barbara Air Quality Management District proposal to implement a Vessel Speed Reduction Incentive Program along the California coast in CARB and Department of Finances' Final Investment Plan as a priority for funding.

This is a unique opportunity to leverage partnerships between environmental and conservation groups, the Air Quality Management District, and the shipping industry. The plan has received broad-based support from federal, state, regional and local agencies, elected leaders, NGO groups, industry, and the community. Not only do vessel speed reductions result in lower greenhouse gas emissions, but they also reduce the likelihood of lethal whale strikes. Most importantly, the programs provide an economic incentive to alter behavior which will likely be a key part of any comprehensive attempt to mitigate climate change. While the programs are voluntary, they are extremely popular and their demonstrated success is evident in high rates of participation by the shipping industry at the Los Angeles and Long Beach ports.

As we work to reduce greenhouse gas emissions it makes sense to prioritize partnerships that involve both a broad range of stakeholders, as well as deliver multiple goals from a single investment as this project does. The reduction in emissions accomplished by Vessel Speed Reduction Incentive Programs reduces emissions near ports, which presents an environmental justice issue as the pollution disproportionately impacts lower income communities that are often clustered in the immediate vicinity.

Page 2 of 2 April 23, 2013

The VSR program aligns with investment plan objectives and significantly reduces GHG emissions from transportation while also having the following co-benefits: improving air quality for public health, enhancing coastal air districts ability to meet state air quality standards, benefiting disadvantaged communities in Oxnard and Port Hueneme, and protecting whales. The ability to reduce greenhouse gas emissions, mitigate pollution in areas where marginalized communities have disproportionately suffered the impacts, and provide a conservation benefit to whales is exactly the type of program the Cap and Trade Funds seem designed to fund. Please consider including the Santa Barbara Air Quality Management District proposal to implement a Vessel Speed Reduction Incentive Program along the California coast as a funding priority in the final plan.

Sincerely,

Hannel Seth Jacken

HANNAH-BETH JACKSON Senator, 19th District



#### CALIFORNIA OCEAN PROTECTION COUNCIL

John Laird, Secretary for Natural Resources, Council Chair Matt Rodriquez, Secretary for Environmental Protection Gavin Newsom, Lieutenant Governor, State Lands Commission Chair Fran Pavley, State Senator Toni Atkins, State Assemblymember Geraldine Knatz, Public Member Michael Brown, Public Member

April 23, 2013

Mary Nichols, Chair California Air Resources Board 1001 I Street, P.O. Box 2851 Sacramento, CA 95812

Dear Chair Nichols and CARB members:

Urged by the Environmental Defense Center, and the Channel Islands National Marine Sanctuary, I write this letter in support for the inclusion of vessel speed reduction in the final *Cap-and-Trade Auction Proceeds Investment Plan: Fiscal Years 2013-14 through 2015-16* as a priority for funding and request that the Vessel Speed Reduction Initiative is funded with Capand-Trade funds.

The goal of the Vessel Speed Reduction Initiative is to reduce Green House Gas (GHG) emissions and other air pollutants, with the added benefits of improving air quality in coastal communities reducing lethal ship strikes of endangered whale species along the California coast. The initiative would use California Cap-and-Trade auction funds to expand the existing vessel speed reduction incentive programs at the Ports of Los Angeles and Long Beach. The Ports of Los Angeles and Long Beach speed reduction incentive programs have been successfully implemented with participation rates over 90%, and have achieved significant air pollutant reductions by limiting vessel speeds to 12 knots or less.

Participation in an expanded program using Cap-and-Trade funds would be contingent on participation in the existing Ports programs, so the initiative would support the Ports' current clean-air goals while extending the benefits through the Santa Barbara Channel and possibly along the California coast.

Reducing vessel speed to 12 knots will (1) reduce shipping GHG emissions by 50%, which in California can be up to 1,435,318 tons/year<sup>1</sup> and (2) reduce NOx by 56%, which in California can be up to 23,782 tons/year<sup>1</sup>. Added benefits of the proposed Initiative include: improving air quality for human health by reducing particulate matter reductions beyond CARB marine vessel

<sup>&</sup>lt;sup>1</sup> "Santa Barbara County Air Pollution Control District calculations." Vessel Speed Reduction Initiative Fact Sheet, see Appendix.

fuel regulations<sup>2</sup> and improving whale protection because ships traveling 12 knots or less could help reduce the chance of a lethal ship strike of a whale<sup>3</sup>.

Inclusion of the Vessel Speed Reduction Initiative in the final *Cap-and-Trade Auction Proceeds Investment Plan* would address the purposes of AB32 (Global Warming Solutions Act of 2006), specifically addressing the following goals of the statute:

- Maximize economic, environmental, and public health benefits to the state.
- Complement efforts to improve air quality.
- Provide opportunities for businesses, public agencies, nonprofits, and other community institutions to participate in and benefit from statewide efforts to reduce greenhouse gas emissions.
- Lessen the impacts and effects of climate change on the state's communities, economy and environment.

I urge you to consider the Vessel Speed Reduction Initiative as a potential approach to reduce GHG emissions, complement efforts to improve air quality, advance California's clean-transportation goals and sustainable freight strategy, and potentially protecting endangered whale species along the California coast.

Sincerely,

Sarah C. Flores

Project Manager California Ocean Protection Council

<sup>&</sup>lt;sup>2</sup> Yusuf Khan et al. 2012. Greenhouse Gas and Criteria Emission Benefits through Reduction of Vessel Speed at Sea. Environmental Science & Technology. 46 (22) pp 12600-12607.

<sup>&</sup>lt;sup>3</sup> Vanderlaan, A.S.M. and Taggart, C.T. 2007. Vessel Collisions with Whales: The probability of lethal injury based on vessel speed. Marine Mammal Science 23(1): 144-156.



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL OCEAN SERVICE Office of National Marine Sanctuaries West Coast Region 99 Pacific St., Bldg. 200, Suite K Monterey, CA 93940

April 22, 2013

Mary Nichols, Chair California Air Resources Board 1001 I Street, PO Box 2815 Sacramento, CA 95812

# **RE:** Revise the Final Investment Plan to include the Vessel Speed Reduction Incentive Initiative

Dear Chair Nichols and Board Members:

The National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, West Coast Region (WCR) appreciates the opportunity to review the Draft Cap-and-Trade Auction Proceeds Investment Plan: Fiscal Years 2013-14 through 2015-16 (Draft Investment Plan)<sup>1</sup>. We offer one comment - **please include in the final plan the widely supported Vessel Speed Reduction (VSR) Incentive program as a priority for Cap and Trade auction funding.** 

We have partnered with the Santa Barbara County Air Pollution Control District (SBCAPCD) and the Environmental Defense Center to develop a VSR Incentive program that would provide financial incentives to large marine ships to voluntarily reduce speeds along the California coast to reduce greenhouse gas (GHG) emissions, improve air quality, and protect whales. The VSR Initiative tiers off the very successful vessel speed reduction program of the Ports of LA and Long Beach. We have built a strong coalition of local, state and federal agencies, shipping interests and non-government organizations who support the program. The VSR Incentive program fulfills multiple objectives of AB 32 (Global Warming Solutions Act of 2006), AB 1532 and SB 535 (Greenhouse Gas Reduction Fund), and priorities in the Draft Investment Plan while also meeting California's clean-transportation goals and sustainable freight strategies.

We recognize that CARB and the Department of Finance face considerable challenges in determining how investment funds should be deployed equitably and efficiently. Thank you for considering our comment and including a **vessel speed reduction (which is missing from the Draft Investment Plan) in your Final Investment Plan as a priority for funding and request Cap-and-Trade money be directed to the Vessel Speed Reduction Incentive program.** 

Sincerely,

Christophen 7. MMley for

William J. Douros West Coast Regional Director







April 24, 2013

Mary Nichols, Chair California Air Resources Board 1001 Street, Po Box 2815 Sacramento, CA 95812

# **RE:** Revise the Final Investment Plan to include the Vessel Speed Reduction Initiative Project

### Submitted electronically via the CARB Comment Submittal Form

Dear Ms. Nichols and Board Members:

The Environmental Defense Center (EDC) is supportive of the Draft Cap-and-Trade Auction Proceeds Investment Plan: Fiscal Years 2013-14 through 2015-16 (Draft Investment Plan)<sup>1</sup> **but recommends including vessel speed reduction (which is missing from the Draft Investment Plan) in your Final Investment Plan as a priority for funding and requests that Cap-and-Trade money be directed to the Vessel Speed Reduction Initiative.** 

EDC is a non-profit, public interest law firm and environmental organization which represents environmental and other community groups within Santa Barbara, Ventura, and San Luis Obispo Counties. Our mission is to protect and enhance the local environment through education, advocacy, and legal action.

EDC has been working in partnership with the Santa Barbara County Air Pollution Control District (SBCAPCD) and Channel Islands National Marine Sanctuary (CINMS) to develop and promote a project known as the *Vessel Speed Reduction Incentive (VSR) Initiative*. This project would use Cap-and-Trade auction money to create an incentive program to voluntarily reduce speeds of large marine ships traveling along the California coast to reduce greenhouse gas (GHG) emissions, improve air quality, and protect whales. This project fulfills multiple objectives of AB 32 (Global Warming Solutions Act of 2006), AB 1532 and SB 535 (Greenhouse Gas Reduction Fund), and

<sup>&</sup>lt;sup>1</sup> California Air Resources Board and California Environmental Protection Agency 2013. Draft Cap-and-Trade- Auction Proceeds Investment Plan. Fiscal Years 2013-14 through 2015-16. Accessed at: http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/DraftCapandTradeInvestmentPlan.pdf

Ms. Nichols and Board Members Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships April 24, 2013

priorities identified in the Draft Investment Plan while also meeting California's cleantransportation goals and sustainable freight strategies.

The California Air Resources Board (CARB) and Department of Finance Draft Investment Plan omits vessels speed reductions as an example project in the Sustainable Communities and Clean Transportation Investment Priority section. We feel this is an oversight because the VSR Initiative provides a creative solution for meeting many of the priorities outlined in the Draft Implementation Plan including:

- Investing in low-carbon freight transportation which falls within the plans priority of "Sustainable Communities and Clean Transportation."
- Providing multiple co-benefits including: reduced GHG emissions, reduced air pollution, improved air quality, enhanced ability by coastal communities (such as Santa Barbara County) to meet State Air Quality Standards, and better protects whales.
- Achieving tractable and enforceable benefits within a three-year plan horizon (e.g. GHG reductions up to 2.5 million tonnes/year).
- Benefiting disadvantaged communities including Oxnard and Port Hueneme.
- Providing a phased approach to project implementation.

Each of these benefits is described in more detail in "Attachment A" below.<sup>2</sup>

We are also disappointed that Appendix A of the Draft Investment Plan-Characterization of Investments Recommended by Coalition- does not mention the VSR Initiative or its coalition of supporters. Our broad coalition includes federal, state, regional and local agencies, as well as NGOs, representatives of industry and the scientific community, and members of the public. Several of our coalition members provided public comments during CARB's February 2013 public meetings, including Dave Van Mullem, Air Pollution Control Officer for the SBCAPCD (Sacramento) and myself (Los Angeles). During public testimony we highlighted the benefits of the VSR Initiative, the three partnership leads (SBCAPCD, CINMS, and EDC), and the many other supporters. We have made a concerted effort to build a coalition and reach out to a wide range of stakeholders. The following coalition members have submitted a formal letter of support for the VSR Initiative:

- <u>Federal Agencies:</u> National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), West Coast Region, Office of National Marine Sanctuaries, and CINMS Advisory Council;
- <u>State Agencies and Regional Agencies:</u> California Coastal Commission, Beach Erosion Authority for Clean Oceans and Nourishment, and California Air Pollution Control Officers Association;

<sup>&</sup>lt;sup>2</sup> EDC letter submitted to CARB on March 8, 2013 Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships: Vessel Speed Reduction Incentive Program.

Ms. Nichols and Board Members Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships April 24, 2013

- <u>Local Agencies</u>: Bay Area Air Quality Management District, Santa Barbara County Air Pollution Control District, Santa Barbara County Air Pollution Control District Board of Directors, County of Santa Barbara, and City of Santa Barbara;
- <u>NGO Groups:</u> Environmental Defense Center (EDC), and Ocean Conservancy (OC);
- <u>Industry:</u> Maersk Shipping Line;
- <u>Community:</u> Over 150 letters of support from community members have been submitted to CARB since last week when the Draft Implementation Plan was released.

Based on this impressive group of supporters we would like Appendix A in the Final Implementation Plan to be revised to include the VSR Initiative and acknowledge this coalition.

In conclusion, we recognize that CARB and the Department of Finance face considerable challenges in determining how investment funds should be deployed equitably and efficiently.<sup>3</sup> The VSR Initiative fulfills multiple objectives outlined in AB 32 (Global Warming Solutions Act of 2006), AB 1532 and SB 535 (Greenhouse Gas Reduction Fund) and the priorities in the Draft Investment Plan. We recommend including vessel speed reduction in your Final Investment Plan as a priority for funding and request Cap-and-Trade money be directed to the Vessel Speed Reduction Initiative.

Thank you for your consideration of these comments. Please do not hesitate to contact me at (805) 963-1622 should you have further questions or concerns.

Sincerely,

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Linda Krop Chief Counsel

Kristi Birney Marine Conservation Analyst

<sup>&</sup>lt;sup>3</sup> The Draft Investment Plan notes that inclusion in the plan does not assure funding (pg. B-2) while also noting that exclusion does not preclude future funding (pg. 31).

Ms. Nichols and Board Members Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships April 24, 2013

## Attachment A

EDC letter submitted to CARB on March 8, 2013 Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships: Vessel Speed Reduction Incentive Program.



March 8, 2013

Mary Nichols, Chair California Air Resources Board 1001 Street, Po Box 2815 Sacramento, CA 95812

# **RE:** Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships: Vessel Speed Reduction Incentive Program

### Submitted electronically via the CARB Comment Submittal Form

Dear Ms. Nichols and Board Members:

The Environmental Defense Center (EDC) supports the proposal by the Santa Barbara County Air Pollution Control District (SBCAPCD) to use some of the Cap-and-Trade auction revenue to develop an incentive program that will voluntarily reduce the speeds of large marine ships traveling along the California coast. This proposal, known as the *Vessel Speed Reduction Incentive (VSR) Initiative*, fulfills multiple objectives of AB 32 (Global Warming Solutions Act of 2006), AB 1532 and SB 535 (Greenhouse Gas Reduction Fund) while also meeting California's clean-transportation goals and sustainable freight strategies. By supporting this initiative the California Air Resources Board (CARB) would be investing in low-carbon freight transportation, a priority identified in the Cap-and-Trade Auction Proceeds Investment Plan Draft Concept Paper (Investment Plan).<sup>1</sup>

EDC is a non-profit, public interest law firm and environmental organization which represents environmental and other community groups within Santa Barbara, Ventura, and San Luis Obispo Counties. Our mission is to protect and enhance the local environment through education, advocacy, and legal action. We are pleased to provide input on the use of Cap-and-Trade auction proceeds to reduce greenhouse gases (GHG) contributing to climate change and to register our support for the VSR Initiative.

<sup>&</sup>lt;sup>1</sup> California Air Resources Board and California Environmental Protection Agency 2013. Cap-and-Trade-Auction Proceeds Investment Plan. Draft Concept Paper Accessed at:

http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/workshops/concept\_paper.pdf

Ms. Nichols and Board Members Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships March 8, 2013

It is rare when a single policy mechanism can have so many positive benefits. Incentivizing marine vessels greater than 300 gross tons to voluntarily travel at speeds 12 knots/hour or slower would reduce GHG emissions, reduce air pollution along the coast and in disadvantaged communities, protect whales from collisions with vessel and noise pollution, and provide other benefits associated with reduced speed.

The SBCAPCD letter of support is attached as an appendix and provides additional details including a Fact Sheet and Implementation Plan on the VSR Initiative program. The following EDC letter highlights the benefits from this VSR program including:

- 1. Significant GHG Reductions
- 2. Co-Benefit: Significant Air Pollutant Reductions Complimenting Existing Air Quality Efforts
- 3. Co-Benefit: Directing Investments to Disadvantage Communities
- 4. Co-Benefit: Improving Whale Protection
- 5. Supporting the State's Economy and Maximizing Economic Benefits
- 6. Creating Opportunities for Collaboration Between Businesses, Public Agencies, Non-profits and Others
- 7. Measurable and Verifiable Reductions

Each of these benefits is described in more detail below.

#### 1. Significant GHG Reductions

Large ships traveling along the California Coast produce significant air emissions. For Santa Barbara County alone the marine shipping sector contributes approximately 25% to the total Statewide GHG emissions inventory. Research shows that GHG emissions from large marine shipping vessels are directly proportional to fuel consumption, and the amount of fuel ships consume is directly and exponentially related to vessel speed. Studies have demonstrated that the most cost effective, feasible method to reduce emissions from ships is to slow them down.<sup>2</sup> The International Maritime Organization (IMO) reports that a 10% reduction in speed would result in a 23.3% decrease in GHG emissions.<sup>3</sup> At low speeds, ships are one order of magnitude more efficient than land transport and two orders more efficient than air transport.<sup>4</sup> However,

<sup>&</sup>lt;sup>2</sup> Friends of the Earth International. 2007. Prevention of Air Pollution from Ships: Recent Findings on Global Warming Justifying the Need for Speedy Reductions of Greenhouse Gas Emissions from Shipping. Submitted to the Marine Environment Protection Committee, IMO (May 4, 2007). (pg 6)

<sup>&</sup>lt;sup>3</sup> International Maritime Organization. 2000. Study of Greenhouse Gas Emissions from Ships: Final Report to the International Maritime Organization. Issue no. 2-31 (March 2000). Available at:

http://unfccc.int/files/methods\_and\_science/emissions\_from\_intl\_transport/application/pdf/imoghgmain.pd f (accessed June 19, 2012). (at pg 17, Table 1-5)

<sup>&</sup>lt;sup>4</sup> Isensee and Bertram 2004. Quantifying external costs of emissions due to ship operation. Proceedings of the Institution of Mechanical Engineers, Part M: Journal of Engineering of the Maritime Environment 218: 41.

Ms. Nichols and Board Members Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships March 8, 2013

as ship speeds increase much of these efficiencies are lost and very fast ships have been found to have similar energy demands to airplanes.<sup>5</sup>

Estimates by the SBCAPCD have shown that reducing ship speeds to 12 knots/hour along the entire California coast would reduce GHGs by 50%, resulting in 2.5 million tonnes/year of GHG reduction.<sup>6</sup> This is equivalent to removing over 480,000 vehicles from the roads or planting over 60 million trees.<sup>7</sup> Thus, reducing ship speeds could substantially contribute to California's GHG emission reduction goals.

# 2. Co-Benefit: Significant Air Pollutant Reductions Complimenting Existing Air Quality Efforts

In addition to significantly contributing to GHG emissions, ship emissions contain toxic air pollution that puts people at risk of cancer, asthma and premature death. Health risk pollutants from ships include nitrogen oxides (NOx), sulfur oxides (SOx), and particulate matter (PM). Locally in Santa Barbara County, marine shipping contributes over 54% of the total daily NOx emissions. This is more than all other sources combined, including: stationary sources, on-road motor vehicles, other mobile sources, and areawide sources. The SBCAPCD has estimated substantial emissions reductions over 50% for NOx, SOx, and PM pollutants if ships travel at 12 knots/hour within the Santa Barbara Channel. Extending the VSR Initiative along the California coast would result in even greater air quality improvements. An incentive based program to slow down ships would lead to measurable improvements to air quality and the long-term co-benefit of improving public health. This compliments clean air efforts at coastal Air Pollution Control Districts and aligns with clean transpiration and sustainable freight strategies.

### 3. Co-Benefit: Directing Investments to Disadvantage Communities

Emissions from ships in the Central and South Coast waters are typically transported downwind by prevailing winds and can impact disadvantaged communities<sup>8</sup> including: Oxnard, Port Hueneme, Long Beach, and Chula Vista. Clean air benefits from slowing ships down will reduce onshore impacts along the coast. The VSR Incentive program helps meet requirements under SB 535 (Greenhouse Gas Reduction Fund) by directing funds to a program that reduces GHGs and has a direct health benefit for some of the most impacted and disadvantaged communities in California.

<sup>7</sup> EPAs Greenhouse Gas Equivalencies Calculator http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results

<sup>&</sup>lt;sup>5</sup> Oceana (July 2008) Shipping Impacts on Climate: A Source with Solutions. By Ellycia Harrould-Kolieb. Page 9.

 $http://oceana.org/sites/default/files/o/fileadmin/oceana/uploads/Climate_Change/Oceana_Shipping_Report.pdf$ 

<sup>&</sup>lt;sup>6</sup> Santa Barbara Air Pollution Control District Letter, Submitted March 7, 2013. Re: Use of Cap-and-Trade Auction Funds for a Ship Speed Reduction Incentive Program along CA Coast to Reduce GHG Emissions.

<sup>&</sup>lt;sup>8</sup> Disadvantaged communities were identified using CalEnvironScreen more info can be found at http://oehha.ca.gov/ej/index.html

### 4. Co-Benefit: Improving Whale Protection

For more than five years the EDC has been actively working to pursue proactive mechanisms to reduce the incidence of ship collisions with large whales.<sup>9</sup> The urgent need to address ship strikes was tragically illustrated in 2007 when four blue whales were stuck and killed by large cargo ships within the Santa Barbara Channel during a three-week period. In the last four months, two fin wales have been struck and killed in Southern California. EDC has been seeking a comprehensive approach to this issue including advocating for the reduction in ship speeds (among other measures).

California hosts some of the busiest ports in the world and large commercial vessels regularly speed through our waters on their way to port. California waters also host some of the highest densities of marine wildlife including a wide variety of whales such as: blue, humpback, gray, fin, sperm, and killer whales. The Santa Barbara Channel is home to the largest seasonal population of endangered blue whales on the planet, while also hosting one of the busiest shipping corridors in the country. Scientific research has shown that there is a direct correlation between vessel speed and ship strikes resulting in whale mortality. Vessels traveling at 14 knots/hour or faster resulted in 89% of lethal or severe injuries to whales.<sup>10</sup> This research also shows that none of the whales hit at a speed of 10 knots/hour or less were killed. Studies show that when vessel speeds fall below 15 knots/hour, there is a substantial decrease in the probability that a vessel strike to a large whale will prove lethal.<sup>11</sup>

In addition to collisions, shipping also results in ocean noise pollution that may have a range of impacts on marine life and whale species. There is increasing awareness that the potential for chronic exposure from shipping noise can have harmful impacts on marine ecosystems and wildlife. Noise-related stress can lead to disruptions in feeding, mating, migration, predator avoidance, navigation, or may trigger an abandonment of habitat.<sup>12</sup> Speed restrictions have been identified as a possible mitigation measure to reduce the potential impacts from shipping noise.<sup>13</sup> An incentive based program reducing ship speeds would accomplish both a reduction in the likelihood and lethality of ship strikes and reduction in underwater noise pollution.

<sup>&</sup>lt;sup>9</sup> See "Whale of an Opportunity: Coast Guard Study of Los Angeles/Long Beach Port Access Routes Holds Great Potential for Reducing Ship Strikes within Santa Barbara Channel," 37 *Ecology Law Currents* 58 <u>http://elq.typepad.com/currents/2010/08/currents37-07-segee-2010-0816.html</u> (2010).

<sup>&</sup>lt;sup>10</sup> Laist, D.W., Knowlton, A.R., Mead, J.G., Collet, A.S. and Podesta, M. 2001. Collisions between ships and whales. *Marine Mammal Science* 17(1): 35-75.

<sup>&</sup>lt;sup>11</sup> Vanderlaan, A.S.M. and Taggart, C.T. 2007. Vessel Collisions with Whales: The probability of lethal injury based on vessel speed. Marine Mammal Science 23(1): 144-156.

<sup>&</sup>lt;sup>12</sup> Popper, A.N. 2003. Effects of anthropogenic sounds on fishes. Fisheries 28(10): 24-3

<sup>&</sup>lt;sup>13</sup> Merchant N.D., Witt M.J., Blondel P., Godley B.J., Smith G.H., Assessing sound exposure from shipping in coastal waters using a single hydrophone and Automatic Identification System (AIS) data. Marine Pollution Bulletin (2012), http://dx.doi.org/10.1016/j.marpolbul.2012.05.004

Managers, <sup>14</sup> scientists, <sup>15</sup> and National Marine Sanctuary Advisory Councils<sup>16,17</sup> have all supported policies that support slowing ships down to better protect whales and other marine life. The VSR Initiative provides the clear co-benefit of protecting important natural resources off our coast like endangered whales.

### 5. Supporting the State's Economy and Maximizing Economic Benefits

The VSR Initiative would assist with offsetting the cost to the shipping industry for reducing ship speeds. Initial upfront cost to the industry could include (but are not limited to): scheduling adjustments, additional ships, and/or additional crew.<sup>18</sup> However, reducing vessel speed reduces the emissions of pollutants per ton of cargo carried, which has the benefit of improving fuel efficiency (and cost) for ships.

By slowing ships down, the industry will experience annual fuel cost savings. The industry has increasingly recognized the economic value of reducing vessel speed.<sup>19</sup> In order to lower costs and environmental impacts, some within the shipping industry have voluntarily implemented "super slow steaming," the practice of operating a ship at a greatly reduced speed in order to burn less bunker fuel. In 2007, Maersk, a major international shipping company, initiated a comprehensive study of 110 vessels that proved, contrary to the traditional policy of running vessels with no less than a 40-60% engine load (a measure of how hard the engine is working), that its container ships can run safely with as little as a 10% engine load. In other words, Maersk found that its vessels could travel safely and efficiently at lower speeds. This makes it possible for vessels to travel at half-speed while realizing a 10-30% savings in fuel costs. By implementing slow steaming, Maersk experienced significant overall saving even after the costs of adding another container ship to their fleet was taken into account.<sup>20</sup> The economic benefits of a VSR include offsetting up-front costs to the industry and fuel cost savings. These savings could be passed through to the global, state, and/or local economy.

<sup>&</sup>lt;sup>14</sup> National Marine Fisheries Service (NMFS). 2008. FEIS to Implement Operational Measures to Reduce Ship Strikes to North Atlantic Right Whales (August 2008).

<sup>&</sup>lt;sup>15</sup> Berman-Kowalewski, Michelle et al. 2010. Association Between Blue Whale (Balaenoptera musculus) Mortality and Ship Strikes Along the California Coast. Aquatic Mammals 2010, 36(1), 59-66, DOI 10.1578/AM.36.1.2010.59.

<sup>&</sup>lt;sup>16</sup> Abramson, L., Polefka, S., Hastings, S., Bor, K. 2009. Reducing the Threat of Ship Strikes on Large Cetaceans in the Santa Barbara Channel Region and Channel Islands National Marine Sanctuary. Prepared and adopted by the Channel Islands National Marine Sanctuary Advisory Council. September 17, 2009. 73 pgs. Online at <u>http://channelislands.noaa.gov/sac/pdf/sscs10-2-09.pdf.</u>

<sup>&</sup>lt;sup>17</sup> Abramson L. 2012. Vessel Strikes and Acoustic Impacts- Report of a Joint Working Group of the Gulf of the Farallones and Cordell Banks National Marine Sanctuary Advisory Councils.

<sup>&</sup>lt;sup>18</sup> SBCAPCD Marine Shipping Solutions Group Meeting Presentation. February, 2012. Lee Kindberg, Director of Environment and Sustainability Maersk Shipping Company.

<sup>&</sup>lt;sup>19</sup> Rosenthal, E. Feb. 17, 2010. "Slow Trip Across Sea Aids Profit and Environment." New York Times. Vidal, John. July 25, 2010. Modern cargo ships show to the speed of the sailing clippers. The Guardian. White, Ronald D., July 31, 2010. Ocean shipping lines cut speed to save fuel costs. Los Angeles Times.

<sup>&</sup>lt;sup>20</sup> See footnote 17 above

# 6. Creating Opportunities for Collaboration Between Businesses, Public Agencies, Non-profits and Others

The VSR Initiative is a unique program that finds common ground and pursues diverse partnership. Staff at the SBCAPCD, Channel Islands National Marine Sanctuary (CINMS), and EDC has been working in partnership to develop and implement the VSR Initiative.

This proposal also has the support and backing of a number of stakeholders, including members of a Marine Shipping Solutions Group that has participation from federal agencies (National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), CINMS, U.S. Coast Guard, and CINMS Advisory Council), NGO groups (EDC, Ocean Conservancy (OC), and Community Environmental Council (CEC)), leading scientists, and local elected leaders. We have also made efforts to reach out to the Ports and the shipping industry which are aware and supportive of the VSR Initiative concept.

Additionally, the VSR Initiative would build upon the existing successful Ports of Los Angeles and Long Beach VSR program. The Ports program provides incentives for ships to remain at or below a speed of 12 knots/hour up to 40 nautical miles from the Ports. Participation rates are over 90%, and have resulted in significant reductions in ship emissions.<sup>21</sup> In 2007, the Ports estimated that the vessel speed reduction program resulted in the following reductions: 1,345 tons of nitrogen oxides, 832 tons of sulfur oxides, 112 tons of particulate matter, and 55,502 tons of carbon dioxide.<sup>22</sup> This data only further illustrates the point that reducing vessel speed has many co-benefits beyond GHG reductions. Thus, this initiative supports the Ports' current clean-air goals while extending the benefits further along the California coast.

### 7. Measurable and Verifiable Reductions

Currently there is an existing network of monitors along the coast of California known as the Automated Identification System (AIS) that is used to track ship position and speed. Ships over 300 gross tons are required to carry AIS, so data on vessel speeds can be obtained. The existing state wide AIS system can serve as a platform for data collection on a daily basis to track compliance with the incentive program. Furthermore, ship fuel consumption data could also be reviewed to verify AIS data and track GHG and other emission reductions.

Locally, the CINMS monitors ship traffic around the Channel Islands and Santa Barbara Channel using the AIS system to track ships' compliance and behavior with a

<sup>&</sup>lt;sup>21</sup> Port of Long Beach.2008. Green Flag Incentive Program Monthly Report, (1/1/10 to 12/31/10), Operator Compliance at 20 nm. Available www.polb.com/civica/filebank/blobdload.asp?BlobID=8182 (accessed June 19, 2012). (page 6)

<sup>&</sup>lt;sup>22</sup> See http://www.cleanairactionplan.org/strategies/vessels/vsr.asp

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voluntary seasonal speed limit of 10-knots/hour. Unfortunately, compliance is very low; hence the potential role for an effective incentive based program.

#### Conclusion

The Cap-and-Trade auction revenue stream provides a unique opportunity to develop a VSR incentive program to reduce the speed of large marine cargo ships along the California coast. It is rare when one policy can address multiple environmental concerns. The VSR Initiative fulfills multiple objectives identified in the Implementation Plan, AB 32, AB 1532 and SB 535. Slowing down large marine ships significantly reduces GHG emissions but also has the co-benefits of reducing air pollutants, improving air quality for human health specifically in disadvantage communities, and providing better protection for marine wildlife like blue, gray, humpback, and other whales.

A diverse partnership of stakeholders has been established, and there is a concerted effort to reach out to all affected parties, including the shipping industry, ports, and decision makers. We know that if this program is funded there will be significant resources and effort to ensure its success. Thank you for your consideration of these comments. Please do not hesitate to contact me at (805) 963-1622 should you have further questions or concerns.

Sincerely,

YB

Kristi Birney Marine Conservation Analyst

Ms. Nichols and Board Members Re: Use of Cap-and-Trade Auction Funds to Reduce GHG Emissions from Ships March 8, 2013

Appendix- Fact Sheet & Implementation Plan



Our Vision 👋 Clean Air





## Vessel Speed Reduction Initiative Fact Sheet

#### GOAL

Advance California's clean-transportation goals and sustainable freight strategy by implementing a voluntary vessel speed reduction incentive program to cut greenhouse gas (GHG) emissions and other air pollutants, with the ancillary benefit of potentially protecting endangered whale species along the California coast.

### APPROACH

The initiative would use California Cap-and-Trade auction funds to expand the existing vessel speed reduction incentive programs at the Ports of Los Angeles and Long Beach. The Ports of Los Angeles and

Long Beach speed reduction incentive programs have been successfully implemented with participation rates over 90%, and have achieved significant air pollutant reductions by limiting vessel speeds to 12 knots or less.

Participation in an expanded program using Capand-Trade funds would be contingent on participation in the existing Ports programs, so the initiative would support the Ports' current clean-air goals while extending the benefits through the Santa Barbara Channel and possibly along the California coast.



Photo courtesy of John Calambokidis, Cascadia Research Collective

### PHASE ONE: DEVELOPMENT AND PILOT (1-2 years)

Working with the Ports, stakeholders, and shipping companies the Santa Barbara County Air Pollution Control District (SBCAPCD) will take the lead, determining incentive structure, costs, emission reductions, and emissions verification systems, and implement a pilot program from the slow speed zone boundary at the Los Angeles ports through the Santa Barbara Channel.

### PHASE TWO: PROGRAM ROLL-OUT (2<sup>nd</sup>-3<sup>rd</sup> year out)

Program roll-out to larger portion of California coast, or entire coast.

#### **BENEFITS**

This is a prime and unique opportunity to fulfill multiple objectives of AB 32 (Global Warming Solutions Act of 2006) and AB 1532 (Greenhouse Gas Reduction Fund). Through a single policy mechanism, the project can cut shipping emissions of greenhouse gases, nitrogen oxides, and other air pollutants by up to 50 percent. The initiative supports the existing Port programs and helps ensure ships reduce speeds even during favorable economic conditions when it has been shown that they increase speeds. The

initiative would complement clean-air efforts, and is in line with clean-transportation and sustainablefreight strategies. In addition, reduced ship speeds could reduce the severity of injury to whales should a ship-whale collision occur.

#### MEASURABLE BENEFITS

- **Reduces GHG Air Pollution**: Reducing vessel speed to 12 knots will reduce shipping GHG emissions by 50%.
  - In California up to 2,580,000 tonnes/year<sup>1</sup>
  - In the Santa Barbara Channel up to 369,762 tonnes/year<sup>1</sup>
- Reduces Nitrogen Oxides Air Pollution (NOx is a precursor to ozone): Reducing vessel speeds to 12 knots will reduce NOx by 56%.
  - In California up to 43,108 tons/year<sup>1</sup>
  - In the Santa Barbara Channel up to 6,760 tons/year<sup>1</sup>
- Improving Air Quality for Human Health: Additional particulate matter reductions beyond CARB marine vessel fuel regulation<sup>2</sup>
- Improving Whale Protection: Ships traveling 12 knots or less could help reduce the chance of a lethal ship strike of a whale.<sup>3</sup>



Photo courtesy of NOAA

#### **COORDINATED SOLUTION STRATEGY**

The SBCAPCD proposes this unique program that finds common ground and pursues diverse partnership. The District and its Board, which is made up the five Santa Barbara County Supervisors and representatives from each incorporated city in the County, have been pursuing reducing emissions from cargo ships since 1994.

This proposal also has the support and backing of a number of stakeholders, including members of a *Marine Shipping Solutions Group* that has been meeting regularly. This group includes federal agencies (National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), Channel Islands National Marine Sanctuary (CINMS), U.S. Coast Guard, and CINMS Advisory Council), NGO groups (Environmental Defense Center (EDC), Ocean Conservancy (OC), and Community Environmental Council (CEC), leading scientists (John Calambokidis, Cascadia Research Collective, Inc.), and local elected leaders.

#### CONCLUSION

This innovative program expands a successful program already in place and offers a unique opportunity to reduce GHG and other air pollution emissions. It also protects human health and marine wildlife, complies with the requirements of AB 32 and AB 1532, and can achieve shared goals across a broad range of stakeholders.

<sup>&</sup>lt;sup>1</sup> Santa Barbara County Air Pollution Control District calculations.

<sup>&</sup>lt;sup>2</sup> Yusuf Khan et al. 2012. Greenhouse Gas and Criteria Emission Benefits through Reduction of Vessel Speed at Sea. Environmental Science & Technology. 46 (22) pp 12600-12607.

<sup>&</sup>lt;sup>3</sup> Vanderlaan, A.S.M. and Taggart, C.T. 2007. Vessel Collisions with Whales: The probability of lethal injury based on vessel speed. Marine Mammal Science 23(1): 144-156.

## Vessel Speed Reduction (VSR) Initiative Compatibility with AB 1532

The VSR initiative builds on and expands the existing Ports of Long Beach and Los Angeles vessel speed reduction incentive programs. It fulfills funding requirements for investing in "low-carbon transportation" as outlined in newly-enacted statutory requirements<sup>4</sup> directing how AB 32 Cap-and-Trade auction funds are allocated while furthering the California Air Resources Board's Sustainable Freight Strategy.<sup>5</sup> In addition to reducing GHG emissions, the proposal fulfills funding goals required by legislation including: (1) maximizing economic, environmental, and public health benefits; (2) complementing efforts to improve air quality, (3) providing opportunities for businesses, public agencies, nonprofits, and others to participate in efforts to reduce GHG emissions, and (4) lessening impacts and effects of climate change. The following table outlines how the VSR initiative meets specific legal requirements outlined in AB 1532.

AB 1532	Vessel Speed Reduction Initiative
<ul> <li>(b) Moneys shall be used to facilitate the achievement of reductions of greenhouse gas emissions in this state consistent with this division and, where applicable and to the extent feasible:</li> <li>(1) Maximize economic, environmental, and public health benefits to the state.</li> </ul>	GHG reductions up to 50% from shipping <u>Economic</u> : supports ports by avoiding regulatory approach that could discourage ships from CA port calls; enhances ability of coastal areas to meet air standards <u>Environmental</u> : whale and other species protection <u>Public health</u> : reductions in criteria pollutants, particulate and air toxics
(3) Complement efforts to improve air quality.	Reductions in criteria pollutants, particulate and air toxics.
(5) Provide opportunities for businesses, public agencies, nonprofits, and other community institutions to participate in and benefit from statewide efforts to reduce greenhouse gas emissions.	Public agencies: SBCAPCD, NOAA, potentially other air districts, County and City of Santa Barbara Nonprofits: stakeholder organizations (EDC, CEC,OC) Other community (CINMS Advisory Council) Shipping Representatives: Marine Exchange, PMSA Ports: Ports of Long Beach and Los Angeles
(6) Lessen the impacts and effects of climate change on the state's communities, economy, and environment.	Reducing GHG emissions

<sup>&</sup>lt;sup>4</sup> AB 1532, SB 535, and SB 1018

<sup>&</sup>lt;sup>5</sup> California Environmental Protection Agency - Air Resources Board, January 2013. Annual Report to the Joint Legislative Budget Committee on Assembly Bill 32 (Chapter 488, Statutes of 2006) The California Global Warming Solutions Act of 2006. This report can be viewed at: http://www.arb.ca.gov/mandrpts/mandrpts.htm.

<ul> <li>(c) Moneys appropriated from the fund may be allocated, consistent with subdivision (a), for the purpose of reducing greenhouse gas emissions in this state through investments that may include, but are not limited to, any of the following:</li> <li>(2) Funding to reduce greenhouse gas emissions through the development of state-of-the-art systems to move goods and freight</li> </ul>	Improving efficiencies of moving goods and freight and consistent with ARB's Sustainable Freight Strategy
(6) Funding to reduce greenhouse gas emissions through investments in programs implemented by local and regional agencies, local and regional collaboratives, and nonprofit organizations coordinating with local governments	Regional collaborative; partnership with nonprofits and government
(7) Funding in research, development, and deployment of innovative technologies, measures, and practices related to programs and projects funded pursuant to this part.	Research and development of innovative measures and practices to reduce ship speeds.
The investment plan, consistent with the requirements of Section 39712, shall do all of the following: (1) Identify the state's short-term and long-term greenhouse gas emissions reduction goals and targets by sector. (2) Analyze gaps, where applicable, in current state strategies to meeting the state's greenhouse gas emissions reduction goals by sector.	CARB identified that it would assess a ship speed reduction rule as part of GHG measures in AB 32 scoping plan: <u>http://www.arb.ca.gov/ports/marinevess/vsr/vsr.htm</u> This assessment has yet to be completed, and regulatory measure uncertain, so this approach could fill gap.



## **Implementation Plan** Vessel Speed Reduction Incentive Program

## Proposal

To implement a Vessel Speed Reduction Incentive Program along the California coast to reduce emissions of greenhouse gases, and realize additional public health, economic, and environmental benefits.

Our Vessel Speed Reduction Incentive (VSR) program will be modeled after the successful VSR programs operated since 2001 by the Port of Los Angeles (POLA) and Port of Long Beach (POLB).

Implementation will occur in two phases. Phase 1 will be development of the program structure, and implementation of a demonstration program from the POLA and POLB through the Santa Barbara Channel. Phase 2 will be roll-out of the program to a larger portion of the California coast, or the entire California coast. Since Phase 2 will be based on the foundation of information and practices developed in Phase 1, this Plan will focus on Phase 1. The duration of Phase 1 is expected to be one to two years.

## Phase 1

Working with shipping companies, ports, shipping industry experts, and stakeholders, in Phase 1 we will complete the following tasks.

- 1) Conduct data analysis and work with shipping companies, ports and other stakeholders to identify optimal program structure, participation rate, incentive pricing. Develop the incentive approach and overall costs for VSR, including a tracking mechanism to ensure emission reductions are real and verifiable. Prepare report with detailed findings.
- 2) Prepare implementation plan for demonstration project based on the findings of the report.
- 3) Implement demonstration program to identify any adjustments needed for larger scale program. Ensure tracking mechanisms are effective. Prepare implementation plan for expanded program, making recommendations for Phase 2.

### Task 1

A contractor with shipping industry experience and expertise will assist in data analysis and design of the program. The primary data set we will utilize for the analysis is the marine vessel Automated Identification System  $(AIS)^1$ . This data coupled with Marine Exchange of Southern California port

<sup>&</sup>lt;sup>1</sup> Along the entire California coast line the AIS collects dynamic (real time) information, such as vessel's position, speed, current status and course and static information, including vessel's name, International Maritime Organization number, dimensions and voyage-specific information (destination and Estimate Time of Arrival).

call data will allow us to identify existing average speeds by vessel type, shipping operator, and routes, and research best candidates for early adoption in the demonstration program. Data could also be obtained from the Lloyd's Registry to determine vessel specific engine power ratings and thus further refine emissions calculations. California Air Resources Board shipping inventory forecasts and the Port of Los Angeles and the Port of Long Beach port call forecasts will be used to estimate future year potential emission reductions from VSR.

Discussions with shipping operators, ports, and other agencies in California will be conducted to assist in designing program structure, and identifying key elements, for example whether the incentive should be fleet-based or individual ship-based; or whether there should be different considerations for northbound or southbound transits.

As mentioned above, our VSR program will be modeled after the successful Ports' VSR programs. These programs were initially configured to span a distance of 20 nautical miles (nm) from the Point Fermin Light. In 2009 the areal extent was expanded to include a 40 nm zone. To increase program participation, POLB (in 2005) and POLA (in 2008) began offering financial incentives to vessel operators.

Using the information gathered in data analysis and stakeholder discussions, we will adapt the Ports' programs to a larger scale program. Our initial focus will be on a 12 knot target, as used at the POLA and POLB. Our initial calculations for a 12 knot California–wide VSR program indicate in 2020 up to 2.5 million tonnes of CO2e could be eliminated with a 90% participation rate of ocean-going vessels traversing within 100 nm of the coastline (see the section "Potential Emission Reductions" for a more detailed discussion).

The Ports' programs are fleet-based, and operators who achieve 90% compliance in a calendar year (in the applicable VSR zone) are either eligible for a future dockage rate reduction, or receive a rebate. Operators are eligible for either the 20nm or the 40nm incentive, but not both. Compliance is based on actual vessel speeds (AIS data) as collected by the Marine Exchange of Southern California (Marine Exchange) and includes both arrivals and departures to/from the two ports. The Ports have developed an automated vessel registration and tracking system that uses AIS data to verify vessel compliance. This system could potentially be used in an expanded program. AIS data identify individual vessels and their speeds on a continuous basis and are available up and down the California coast. As part of this task, we will review the data available for tracking compliance over the areal extent of the proposed VSR program, and identify gaps and needed additional AIS receivers. Appropriate AIS datasets will be selected and tested. We will evaluate which existing elements of the port VSR program structure can be directly adapted for an extended VSR program, and identify additional provisions for consideration.

The Environmental Shipping Index (ESI) and Energy Efficiency Operational Indicator (EEOI) will be evaluated to determine how they can be integrated into the VSR incentive program structure. The ESI is a separate incentive program currently in effect at POLA and various ports around the world. The ESI awards points to the score for a particular ship when steps have been taken to reduce emissions in advance of regulations, for example by using cleaner engines before required to. Ships registered in the POLA ESI program are rewarded per port call based on their ESI scores.

Currently ships receive GHG points as carbon dioxide (CO2) points under the ESI for having a Ship Energy Efficiency Management Plan (SEEMP) in place. In July 2011, the International Maritime

Organization (IMO) made a SEEMP mandatory for all ships<sup>2</sup>. To receive CO2 points under the ESI in the future, shipping operators will have to go beyond simply having an energy efficiency plan in place to demonstrating operational fuel efficiency. The EEOI is a monitoring tool that enables operators to measure the fuel efficiency of the ship in operation and to gauge the effect of changes in operation. The EEOI will provide additional data to track GHG emissions and supplement compliance tracking based on speed. Linking these indices to a VSR program could make the program more attractive to shippers since the monetary rewards compound as rewards are obtained at each successive port for an index oriented program.

Task 1 will culminate in preparation of a report detailing the optimal VSR approach and tracking mechanisms. The report will include the projected participation rate, updated estimates of yearly costs for incentive pay-outs, and the resulting GHG and criteria pollutant reductions.

### Task 2

Using the foundation of the report, a detailed plan will be developed for implementing the demonstration project. The plan will address:

- Geographic bounds of program
- Number of expected participants
- Alternative time periods for speed reduction (full year, half year, etc.)
- Payment structure (trip basis, fleet basis, etc.)
- Registration Procedures
- Ship speed tracking
- Fuel use tracking
- Logging requirements
- Data averaging procedures
- Incentive payment procedures

### Task 3

A VSR incentive demonstration program will be implemented from the Ports of Los Angeles and Long Beach northern boundary through the Santa Barbara Channel. Incentive payments will be paid out to VSR participants in accordance with the procedures specified in the implementation plan. Changes to the implementation strategy will be made if necessary to ensure the program is operating smoothly and desired outcomes are met. As this demonstration program continues, recommendations will be made about expansion of the program, and optimal timing for the expansion. Phase 1 will culminate in development of an implementation plan for Phase 2.

## Phase 2

In Phase 2, we would implement a program for a much larger portion of the California coast, or the entire California coast. The elements and parameters would be similar to those identified in Phase 1, adjusted with the information that would be developed in Phase 1.

<sup>&</sup>lt;sup>2</sup> See IMO website at (<u>http://www.imo.org/ourwork/environment/pollutionprevention/airpollution/pages/technical-and-operational-measures.aspx</u>) for additional information.

## **Potential Emission Reductions**

We have estimated the CO2e and NOx emission reductions that could be achieved in 2020 should a 12 knot VSR program be instituted for the Santa Barbara Channel as well as for entire state coastline. The 2020 statewide and Santa Barbara County marine shipping NOx and CO2e emission estimates were generated utilizing the California Air Resources Board Marine Emissions Model and their California Emissions Projection Analysis Model (CEPAMS). The emissions are associated with shipping activity from the shoreline out to 100 nautical miles.

Emission projections take into account both anticipated shipping growth and federal and international fuel and engine control standards. ARB projected growth is based on trends in net registered tonnage (NRT). Controls include IMO fuel and engine standards that are expected to yield significant particulate matter and NOx reductions in the future.

The reductions estimates are based on assuming ships operate at an engine load of 50 percent in the open waters off California. This is a conservative estimate as a starting point for computing reductions as some ships cruise at 80% to 90% of rated load. This load translates to a cruise speed of 18 knots for container ships. The engine load at 12 knots for each ship type was calculated using the propeller law with the average maximum speed by ship type obtained from the ARB. The ratio of the engine load calculated at 12 knots to a 50 percent load was then applied to CO2e and NOx emissions to yield the reductions

Potential 2020 VSR emission reductions with and without a 12 knot VSR were calculated for participation rates of 90 percent. Statewide and Santa Barbara County emission estimates are displayed in Tables 1 and 2 respectively.

Statewide	Emissions with No	Emissions with VSR	Percent Reduction in
	VSR	(90% participation)	Emissions
CO2e (tonnes)	5,104,917	2,521,345	51%
NOx (tons)	84,586	41,478	51%

Table 1: 2020 Statewide Emission Estimates with and without a 12 knot VSR

Table 2: 2020 Santa Barbara County Emission Estimates with and without a 12 knot VSR

Santa Barbara County	Emissions with No VSR	Emissions with VSR (90% participation)	Percent Reduction in Emissions
CO2e (tonnes)	1,315,113	649,541	51%
NOx (tons)	24,044	11,875	51%

At a 90 percent participation rate, it is estimated that CO2e emissions on a statewide basis could be reduced by over 2,580,000 tonnes. Projected statewide NOx reductions would be 43,108 tons. For

Santa Barbara County CO2e emission decreases would be 665,000 tonnes at 90 percent participation. NOx emissions could be reduced by 12,169 tons at 90 percent participation.

### Costs

#### Phase 1

Phase 1 program development and demonstration will be performed by a contractor selected and managed by the District. This contractor will be required to have prior experience in calculating marine shipping emissions, working with ports, and designing vessel speed reduction programs.

We estimate Phase 1 costs to be:

First Year - Program Development Estimated Costs

Contractor	\$ 380,000
District labor and other direct costs	\$ 110,000
(e.g. AIS upgrades, etc.)	
TOTAL	\$ 490,000

Second Year - Demonstration Estimated Costs

Incentives	\$4,000,000-\$6,000,000
Ongoing – contractor	\$ 120,000
District program implementation	100,000

\$4,220,000-\$6,220,000

Note: For reference, in its 2012/2013 budget, POLA dedicated \$2 million to its incentive program. For fiscal year 2013, POLB anticipates that its incentive program will cost \$2.4 million

TOTAL

#### Phase 2

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The majority of the Phase 2 costs will be for the incentives awarded. This depends on the incentive price for the extended program area, the number of participants, and additional factors that will be identified in Phase 1. It is expected that the annual cost would be greater than \$6 million annually to expand the program along the entire California coast.

April 19th, 2013

Mary Nichols, Chair California Air Resources Board 1001 I Street, PO Box 2815 Sacramento, CA 95812

Re: Support for Use of Cap-and-Trade Auction Funds for a Vessel Speed Reduction Incentive Program along the California Coast

Dear Chair Nichols and California Air Resources Board Members:

The Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) Board of Directors supports the use of Cap-and-Trade auction revenues for development and implementation of a Vessel Speed Reduction Incentive Program along the California coast to reduce greenhouse gas (GHG) emissions. BEACON is a JOINT Powers Agency made up of the coastal cities of Santa Barbara and Ventura County, along with the two counties as members.

The program would be modeled after the existing successful program at the Ports of Los Angeles and Long Beach. It aligns with investment plan objectives to reduce GHG emissions from transportation, and would achieve reductions within the three-year plan horizon. Vessel speed reduction would also result in significant air quality and public health cobenefits by reducing particulates, air toxics, and smog-forming pollutants. In addition, there would be reduced deposition of toxic air pollutants into the ocean and enhanced protection for endangered whale species, both critically important for improving the health of the marine environment.

We believe you have a unique opportunity here to meet GHG-reduction targets under AB 32 and AB 1532 and at the same time produce significant benefits for air quality and the ocean environment.

Thank you for your consideration.

Brian Brennan

**BEACON Executive Director** 



Clean Oceans and Nourishment

A California Joint Powers Agency

#### Member Agencies

City of Carpinteria City of Goleta City of Oxnard City of Port Hueneme City of San Buenaventura City of Santa Barbara County of Santa Barbara County of Ventura

#### Santa Barbara Address:

105 East Anapamu, Suite 201 Santa Barbara, CA 93101

#### Ventura Address:

501 Poli St. Ventura, CA 93001

#### Telephone:

(805) 654-7740

Facsimile:

(805) 652-0865

#### Email:

Office@beacon.ca.gov

#### Internet:

http://www.beacon.ca.gov



Maersk Line 9300 Arrowpoint Boulevard Charlotte, NC 28273

Phone: +1 (800) 321-8807 maerskline.com

March 8, 2013

Mary Nichols, Chair California Air Resources Board 1001 I Street, PO Box 2815 Sacramento, CA 95812

Re: Support for Santa Barbara County Air Pollution Control District Proposal to Use Cap-and-Trade Auction Funds for a Vessel Speed Reduction Incentive Program

Dear Chair Nichols, and Members of the California Air Resources Board:

Maersk Line is pleased to express support for the proposal by the Santa Barbara County Air Pollution Control District ("the District")to establish a Vessel Speed Reduction ("VSR") incentive program using cap-and-trade auction funds.

Maersk Line is the world's largest container shipping line. We are committed to reducing our environmental footprint, and since 2007 have reduced our CO2 emissions by 25% on a per container per kilometer basis. In 2006 Maersk Line pioneered the use of cleaner fuels in California ports to reduce criteria air emissions, and we still use fuels significantly cleaner than required by the OGV Fuel Rule. We have also implemented similar programs in Hong Kong, Singapore and Gothenburg Sweden.

Vessel speeds have very significant impacts on vessel fuel consumption and the resulting emissions. Since 2008, Maersk Line has led the move to "slow steaming" globally in order to reduce fuel consumption and the resulting  $CO_2$  and SOx/NOx/PM emissions. We have been participating in the successful Vessel Speed Reduction incentive programs at the Ports of LA and Long Beach, and would anticipate participating in such a program (depending on final requirements).

More details on our environmental performance are covered in our annual sustainability progress reports which can be downloaded atwww.maerskline.com. Our 2013 progress update will be published on March 18, and the AP Moller-Maersk Sustainability annual report is available at <u>www.maersk.com</u>.

I first met with the District and other stakeholders in Santa Barbara in February 2012 to share information from the shipping industry perspective and learn more about their concerns on greenhouse gas emissions, criteria pollutants and protecting whales. Since then I have spoken with District staff several times to assist them in development of a workable program. We will continue to work with the District to provide insights and input as this program develops.

I will be happy to discuss vessel operations or answer other questions. Please feel free to contact me.

Sincerely,

Boter Kindburg

B. Lee Kindberg, Ph.D. Director, Environment and Sustainability MAERSK LINE/Maersk Agency USA Lee.Kindberg@maersk.com tel: (704) 571-2693

## **Board of Directors**

Salud Carbajal, First District Janet Wolf, Second District Doreen Farr, Third District Peter Adam, Fourth District

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Clerk of the APCD Board:

Louis D. Van Mullem, Jr.

Mary Nichols, Chair California Air Resources Board 1001 I Street, PO Box 2815 Sacramento, CA 95812

March 21, 2013

Re: Support for Use of Cap-and-Trade Auction Funds for a Vessel Speed Reduction Incentive Program along the California Coast

Dear Chair Nichols and California Air Resources Board Members:

The Santa Barbara County Air Pollution Control District (District) Board of Directors supports the use of Cap-and-Trade auction revenues for development and implementation of a Vessel Speed Reduction Incentive Program along the California coast to reduce greenhouse gas (GHG) emissions.

The program would be modeled after the existing successful program at the Ports of Los Angeles and Long Beach. It aligns with investment plan objectives to reduce GHG emissions from transportation, and would achieve reductions within the three-year plan horizon. The program would also result in significant air quality and public health co-benefits by reducing particulates, air toxics, and smog-forming pollutants. Additional benefits include economic benefits from furthering progress of coastal air districts like ours towards meeting air quality standards, and enhanced protection for endangered whale species.

We believe you have a unique opportunity here to meet GHGreduction targets under AB 32 and AB 1532 and at the same time produce a number of other significant benefits.

Thank you for your consideration.

Pollution Control District Board



Our Vision 觉 Clean Air



PRESIDENT Brad Poiriez Imperial County APCD

VICE PRESIDENT Jack Broadbent Bay Area AQMD

SECRETARY/CHIEF FINANCIAL OFFICER

Alan Abbs *Tehama County APCD* 

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Barry Wallerstein South Coast AQMD

**EXECUTIVE DIRECTOR** Kenneth Koyama *kenk@capcoa.org* 

### 1107 Ninth Street, Suite 210 Sacramento, CA 95814 (916) 441-5700 (916) 441-5708 FAX www.capcoa.org

March 14, 2013

Mary Nichols, Chair California Air Resources Board 1001 I Street, P.O. Box 2815 Sacramento, CA 95812

Regarding: Recommendations for the Investment Plan for Cap and Trade Auction Proceeds

Dear Chairman Nichols,

The California Air Pollution Control Officers Association (CAPCOA) appreciates the opportunity to comment on the Air Resources Board's (ARB's) Draft Concept Paper for a Cap-and-Trade Auction Proceeds Investment Plan (Draft Plan). We especially appreciate the additional time to finalize our comments.

CAPCOA recognizes that ARB and the Department of Finance face considerable challenges as you develop an investment plan that will ensure auction revenues are deployed in an equitable, efficient, and effective way. California has many funding needs and the auction proceeds will not be sufficient to satisfy all of them, not even when the needs are limited to those that will reduce greenhouse gas emissions. CAPCOA believes the best plan will articulate strategic priorities and a transparent process, and will also provide a clear mechanism to adjust both as needs evolve.

#### **Recommendations on Broad Elements of the Draft Plan**

CAPCOA supports the general concepts and approaches set forth in the Draft Plan. We believe there are three key improvements that ARB should incorporate into the Plan, to ensure that funds are strategically deployed in a manner that will best achieve the goals of AB 32 and further the mission of ARB.

**1.** *Maximize Co-benefits:* When AB 32 was approved, the legislation specifically directed ARB to ensure that its implementation complements efforts to attain air quality goals and protect public health from air pollution. ARB has consistently affirmed these basic tenets in implementing AB 32 requirements. CAPCOA believes ARB has an extraordinary opportunity in drafting this investment plan to ensure that Cap-and-Trade revenues advance

Mary Nichols Page 2 of 5

all three goals at the same time by giving highest priority to GHG reduction projects that also secure co-benefits in reducing air pollution and decreasing exposure to harmful air contaminants. We urge that you do this as an overarching element of your investment plan, and that you incorporate the principle into the criteria for evaluating individual strategies and projects. To address co-benefits in your plan, we recommend the following change to Draft Investment Principle #3 (see page 15):

3. Investments should be prioritized toward:

a) sectors with both the highest GHG emissions and the greatest need for future reductions to meet GHG goals; and

b) strategies and projects that maximize co-benefits for improving air quality and decreasing exposure to harmful air contaminants.

To address co-benefits when evaluating individual strategies and projects, we recommend a scoring system that awards additional points for co-benefits on a sliding scale, with greater co-benefits earning higher points.

**2.** *Maximize use of Existing Program Structures and Processes:* While some of the proceeds will be directed to centralized, statewide efforts, we believe the majority of the grants will be targeted to strategies and projects at the regional and local level. Rather than duplicating existing grant process, we recommend ARB adapt current processes to meet the specific program needs for GHG reduction efforts.

Over the last decade, ARB and the local air districts have collaboratively managed the investment of approximately 1.5 billion dollars in incentives to reduce emissions from goods movement, heavy-duty diesel engines, school buses, and other similar sources of pollution. In addition, local air districts have further provided nearly a billion dollars in incentive funds to reduce motor vehicle pollution since 1992.

We encourage ARB to rely on these existing pathways to allocate regional and local grant funds. The air districts' programs already have procedures in place with experienced staff to evaluate project proposals, administer and enforce contract performance, and accountably track funding streams and emission reductions. Air districts also have considerable expertise in identifying disproportionate impacts and working closely with communities to address those impacts. In addition, air districts are in the best position to "ground truth" the proposals based on specific local conditions, and to determine how complimentary or well-integrated the proposal is in consideration of other plans, projects, and efforts already underway. We believe this is consistent with Draft Investment Principle #6, but would recommend clarifying the wording as follows:

6. Investments should be coordinated with other local, State, and federal funding programs and avoid duplicative efforts. Funding targeted towards local or regional projects should be distributed in partnership with the local or regional air districts. The State should coordinate its clean energy, transportation, and climate change investments to maximize their impacts.

Mary Nichols Page 3 of 5

In addition, we recommend that the references to "state agenc[ies]" in the Draft Investment Principles and the Draft Implementation Principles (see pages 15 and 16 of the Draft Plan) be changed to "implementing agenc[ies]" to provide for the option of a local or regional agency partner. ARB already uses the term "implementing agency" on page 15.

3. Enhance Available Tools: In the Draft Plan, ARB identifies CalEnviroScreen as the tool on which it plans to rely to identify disadvantaged communities and ensure funds are distributed to them as required by law. CalEnviroScreen is the draft tool under development by the Office of Environmental Health Hazard Assessment (OEHHA) to assess pollution burden on communities throughout California. CAPCOA provided comments on the last release of the draft tool (see Feb. 1, 2013 letter to Dr. John Faust). CAPCOA supports OEHHA's efforts to better characterize the vulnerability of communities to environmental and socioeconomic burdens through the creation of this new tool, and also believe that the tool could be helpful in directing investment, especially pollution mitigation grant funds. While the draft tool is a good start towards this effort, great care must be exercised in using OEHHA's Tool for this purpose. As expressed in our February comments to OEHHA on the draft tool, we look forward to working with OEHHA to make additional refinements to the tool. We would be happy to work with ARB staff in the near term to define additional strategies that may provide additional value in this process. Longer term, we encourage staff to consider dovetailing this analysis with the reviews we will be undertaking together to address impacts as part of ARB's Adaptive Management Strategy for the Cap-and-Trade program.

### **Recommendations on Funding Categories in the Draft Plan**

In the Draft Plan, ARB presents four eligible funding areas, and provides examples of strategies or projects for each area. CAPCOA's recommendations on funding are organized around the four areas identified by ARB. We have also identified our recommendations as near term or long term, consistent with ARB's presentation of the concept.

**1. Low-Carbon Transportation and Infrastructure:** Reduce GHG emissions through the development of state-of-the-art systems to move goods and freight, advanced technology vehicles and vehicle infrastructure, advanced biofuels, and low-carbon and efficient public transportation.

CAPCOA recommends the following near term priority investments:

- Incentives for zero and near-zero transportation and associated infrastructure. These are near term steps that support an important element of California's larger vision for transformation of the transportation sector.
- Incentives for voluntary speed reduction in ocean-going vessels to reduce fuel consumption. This is an opportunity for very near term and substantial reductions in both GHGs and smog-forming pollutants, some of the last "low-hanging fruit".
- Incentives for accelerated vehicle turnover to cleaner technology. This strategy is critical to remove the gross polluting on- and off-road engines from use and hasten the penetration of the newest, cleanest alternatives. It also can be designed to directly benefit disadvantaged communities.

CAPCOA recommends the following long term priority investments:

- Demonstration and deployment of zero and near-zero emission technologies for goods movement.
- Funding for technology advancement efforts for direct research, development, and deployment of mobile source technologies that would simultaneously advance the state's goals for climate protection and air quality improvement.

**2. Strategic Planning for Sustainable Infrastructure:** Reduce GHG emissions through strategic planning and development of sustainable infrastructure projects, including, but not limited to, transportation and housing.

CAPCOA recommends the following near term priority investments:

- Funding to support the development and implementation of local climate action plans.
- Funding to support the development and implementation of Sustainable Community Strategies under SB 375.

CAPCOA recommends the following long term priority investments:

- Development of a universal transportation model to support consistency in planning throughout the state.
- Development of a clearinghouse of best practices in sustainably communities planning to allow local governments to share information.

**3. Energy Efficiency and Clean Energy:** Reduce GHG emissions through energy efficiency, clean and renewable energy generation, distributed renewable energy generation, transmission and storage, and other related actions, including, but not limited to, at public universities, state and local public buildings, and industrial and manufacturing facilities.

CAPCOA recommends the following near term priority investments:

- Incentives and seed support for other creative financing (such as PACE) for energy
  efficiency retrofits to the existing building stock. This is especially critical in multi-family
  dwelling units where the property owner does not directly benefit from the energy savings
  that result from the project, and can also be targeted specifically to assist disadvantaged
  communities, and to use labor through organizations that train at-risk use to develop
  employment skills.
- Incentives and seed support for other creative financing production and distributed generation of clean renewable energy, and technologies to recover waste-heat for productive use at the site.
- Incentives, loans or PACE-type programs for stationary industrial sources to promote modernization for energy efficiency in their operations.

CAPCOA recommends the following long term priority investments:

• Funding for development and demonstration of new energy storage techniques needed to support greater grid reliance on renewable energy. There is a real potential to maximize the benefits by aligning the effort with transportation infrastructure needs.

**4.** Natural Resources and Solid Waste Diversion: Reduce GHG emissions associated with water use and supply, land and natural resource conservation and management, forestry, and sustainable agriculture. Reduce greenhouse gas emissions through increased in-state diversion of municipal solid waste from disposal through waste reduction, diversion, and reuse.

CAPCOA recommends the following near term priority investments:

- Funding for urban tree planting and reforestation. In addition to directly sequestering carbon, urban tree planting can promote walkable communities, with the added benefit of reduced reliance on fuel dependent modes of travel. These projects can be targeted to use labor through programs that serve at-risk youth by teaching them job skills (such as JobCorps, CalGreen Jobs Corps, and numerous local and regional efforts).
- Funding for incentives for cleaner residential wood combustion programs, specifically including rebates or other funding to replace existing stock of inefficient, high-polluting wood burning devices or public education and enforcement programs that change behavior to stop unnecessary residential wood burning. This type of project could be targeted to reach disadvantaged rural communities.
- Incentives for the electrification of existing agricultural internal combustion engines to reduce the GHG emissions associated with on-site fuel combustion.

CAPCOA recommends the following long term priority investments:

• Funding for demonstration and deployment of strategies that reduce agricultural and other organic wastes, particularly waste-to-energy and waste-to-fuel projects.

In sum, CAPCOA supports ARB's approach to establishing a framework for investing proceeds from the Cap-and-Trade auction. We encourage you to make key, strategic changes to the overall plan to specifically maximize co-benefits, to capitalize on existing pathways to grant funds at the regional and local level, and to enhance the analysis for identifying disadvantaged communities. We stand ready work with you, and support your efforts to achieve the state's climate protection goals, improve air quality, and protect public health.

Sincerely,

Brad Poiriez President

CC: James Goldstene, California Air Resources Board Cynthia Marvin, California Air Resources Board



# **City of Santa Barbara**

Office of Mayor

HSchneider@SantaBarbaraCA.gov www.SantaBarbaraCA.gov

March 18, 2013

Mary Nichols, Chair Helene Schneider California Air Resources Board Mayor 1001 I Street. PO Box 2815 Sacramento, CA 95812

Re: Support for Use of Cap-and-Trade Auction Funds for a Vessel Speed Reduction Incentive Program along the California Coast 735 Anacapa Street

Santa Barbara, CA Dear Chair Nichols and California Air Resources Board Members:

> The City of Santa Barbara supports the use of Cap-and-Trade auction revenues for development and implementation of a Vessel Speed Reduction Incentive Program along the California coast to reduce greenhouse gas (GHG) emissions, as proposed by the Santa Barbara County Air Pollution Control District.

> GHG reductions from the shipping sector align with AB1532 transportation objectives and with the City's Climate Action Plan (2012). A speed reduction incentive program would reduce large amounts of GHG emissions from freight transportation along the California coast, much of which is concentrated in the Santa Barbara Channel. Significant co-benefits to the City of Santa Barbara and to other coastal communities include:

- Public health benefits from the reductions of emissions of air toxics, particulate, nitrogen oxides and other pollutants.
- Improved ability to attain air quality standards. The proposed program will reduce emissions of ozone-forming pollutants (particularly nitrogen oxides). This will help the Santa Barbara area move towards attainment of the state ozone standard.
- Economic benefits through relieving pressure on business and industrial sources that have historically borne the brunt of regulations stemming from local ozone attainment plans.
- Enhanced protection for the endangered whale species that are precious to our City's residents, visitors, and tourist industry, and critically important to the health of marine environments off the California coast, especially the national marine sanctuaries.

We believe you have a unique opportunity here to reduce shipping emissions much to the benefit of our City and of coastal communities throughout California.

Thank you for your consideration.

Helene Schneider Mayor, City of Santa Barbara

cc: Representative Lois Capps Senator Hannah-Beth Jackson Assembly Member Das Williams Santa Barbara County Board of Supervisors

Please consider the environment before printing this letter.

Mailing Address: P.O. Box 1990 Santa Barbara, CA

City Hall

93101-1990

93102-1990

Tel: 805.564.5323 Fax: 805.564.5475 SALUD CARBAJAL First District, Chair

> JANET WOLF Second District

DOREEN FARR Third District

PETER ADAM Fourth District

**STEVE LAVAGNINO** Fifth District, Vice Chair

March 12, 2013

Mary Nichols, Chair California Air Resources Board 1001 I Street, PO Box 2815 Sacramento, CA 95812



BOARD OF SUPERVISORS County Administration Building 105 East Anapamu Street Santa Barbara, CA 93101 Telephone: (805) 568-2190 www.countyofsb.org

## COUNTY OF SANTA BARBARA

RE: Santa Barbara County Board of Supervisors Support for use of Cap-and-Trade Auction Funds for Marine Vessel Speed Reduction Incentive Program Plan

Dear Chair Nichols and California Resource Board Members:

Since 2011, the Santa Barbara County Board of Supervisor has adopted a position in support of marine vessel speed reduction through the Santa Barbara Channel as a part of the annual Legislative Platform. Current research, provided to the Board, indicates that vessel speed reduction will reduce the production of greenhouse gas emissions and particulates that will assist in meeting air quality standards.

Proceeds from the recently held Cap-and-Trade auctions present an opportunity for California to invest new resources in projects that will lead to the further reduction of greenhouse gasses and other forms of air pollution The Board supports the proposal of the Santa Barbara County Air Pollution Control District to plan for implementation of a marine vessel speed reduction incentive program that would provide a monetary incentive for traveling below 12 knots through the Santa Barbara Channel. This creative approach to funding the incentive program here locally will provide invaluable data that could be evaluated for implementation statewide. Please thoroughly consider the inclusion of the speed reduction incentive proposal of the Santa Barbara County Air Pollution Control District in the draft AB 1532 Investment Plan.

Sincerely,

Salud Carbajal, Chair Santa Barbara County Board of Supervisors



U.S DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL OCEAN SERVICE National Marine Sanctuary Program West Coast Region 99 Pacific Street, Bidg 200, Suite K Monterey, CA 93940 U.S DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, CA 90802-4213

June 21, 2012

Mary D. Nichols, Chair California Air Resources Board 1001 I Street, PO Box 2815 Sacramento, CA 95812

#### Re: Use of Cap-and-Trade Auction Funds to Incentivize Ships to Reduce Speed

Dear Chair Nichols and Board Members,

We understand that the State of California's Air Resources Board (CARB) will be developing an investment plan for the auction proceeds from the cap-and-trade program to meet the goals of Assembly Bill 32 to improve public health, develop a clean energy economy and provide additional environmental and public health benefits. The National Oceanic and Atmospheric Administration's (NOAA) Office of National Marine Sanctuaries, West Coast Region and National Marine Fisheries Service, Southwest Region support the use of these proceeds to create an incentive program that rewards large ocean-going ships for slowing down while transiting off California's coast. We believe this use of the funds could achieve multiple environmental benefits important to both of our agencies.

Research has shown that large ocean-going vessels traveling at slow speeds substantially reduce their greenhouse gas emissions and nitrogen oxide and sulfur dioxide pollution. Encouraging ships to travel at slower than normal speeds can also reduce the anthropogenic effects on marine mammals by reducing the risk of lethal strikes and noise pollution in the marine environment. Identifying and minimizing impacts to endangered blue, fin and humpback whales is a priority for NOAA. We believe that creating an incentive program to encourage vessels to travel at slow speeds could be a benefit to the people and the whales offshore of California.

To be successful, the development of an incentive based slow speed initiative will require collaboration with the shipping industry and other partners. We have been in discussion with the Santa Barbara Air Pollution Control District regarding the viability of this idea and look forward to working with them and CARB to develop the idea further. We have reached out to a number of partners, including the Marine Exchanges of California, the Pacific Merchant Shipping Association, and the Sanctuary Advisory Council of Channel Islands National Marine

Sanctuary<sup>i</sup>, and received general support for what we all believe is an idea worthy of further consideration (see attached letter of support).

Thank you for your consideration of using cap and trade auction proceeds to incentivize oceangoing vessels to reduce speed and greenhouse gas emissions, and to protect endangered whales. Please contact Sean Hastings, Channel Islands National Marine Sanctuary, <u>sean.hastings@noaa.gov</u> or (805) 884-1472 and/or Elizabeth Petras, National Marine Fisheries Services, Southwest Region, <u>Elizabeth.petras@noaa.gov</u> or (562)980-3238 if you have any questions.

June 24, 201

Sincerely,

Jor Rodney McInnis Regional Administrator Southwest Regional Office National Marine Fisheries Service

William Douros Regional Director West Coast Region Office of National Marine Sanctuaries

cc:

Channel Islands Sanctuary Advisory Council

Louis D. Van Mullem Jr., Air Pollution Control Officer, Santa Barbara Air Pollution Control District

Enclosure:

Channel Islands Sanctuary Advisory Council Support Letter

<sup>i</sup> In 2009, a report endorsed by the Sanctuary Advisory Council of Channel Islands National Marine Sanctuary recommended that incentive-based approaches to slow ships down be explored, specifically, to reduce ship strike risks on endangered whales. See: "Reducing the Threat of Ship Strikes on Large Cetaceans in the Santa Barbara Channel Region and Channel Islands National Marine Sanctuary: Recommendations and Case Studies" available online at: http://channelislands.noaa.gov/sac/pdf/sscs10-2-09.pdf.

to be indecessing the advelopment of an incentive based alow speed initiative will require collaboration with the adapping industry and other partners. We have been in discussion with the senta Barbara Air Pollution Control District regarding the vability of this idea and loo) down o working with them and CARB to develop the idea further. We have reached out to a fitamber of partners, including the Marine Exchanges of Chiffernia, the Pacific Merchant Shipping. Association, and the Statemery Advisory Council of Chiffernia, the Islamis National Marine and the statement of the Statemery Advisory Council of Chiffernia, the Islamis National Marine and the statement of the Statement of the Statement of Chiffernia (the statement of the statemen

## Sanctuary Advisory Council CHANNEL ISLANDS NATIONAL MARINE SANCTUARY

Member/Alternate

Tourism Andrea Mills / Capt. Mat Curto Business Capt. Richard McKenna / Michael Gould Non-Consumptive Recreation Debra Herring / Nicole Peters **Commercial Fishing** Bruce Steele / Stephanie Mutz **Recreational Fishing** Capt. David Bacon / Merit McCrea Education Maria Petueli / Amanda Hendrickson Research Dr. Robert Warner / Dr. Mark Steele Conservation Linda Krop / Greg Helms Public At-Large 1 Phyllis Grifman / Victor Cox Public At-Large 2 Eric Kett / <vacant> **Chumash Community** Luhui Isha Waiya / Vennise Miller Forte **National Marine Fisheries Service** Elizabeth Petras / Stephanie Koes **National Park Service** Russell Galipeau / David Ashe U.S. Coast Guard CDR Christina Davidson / LCDR Elisa Garrity

Bureau of Ocean Energy Management Donna Schroeder / Dr. Ann Bull U.S. Department of Defense

John Ugoretz / Walter Schobel

California Department of Fish and Game Marija Vojkovich / Kristine Barsky

California Resources Agency <vacant> / Amy Vierra

California Coastal Commission Dr. Jonna Engel / Steve Hudson

County of Santa Barbara Dianne Black / Susan Curtis

County of Ventura Lyn Krieger / <vacant> Channel Islands Nat'l Marine Sanctuary

Chris Mobley [non-voting] Montercy Bay Nat'l Marine Sanctuary

Paul Michel / Karen Grimmer [non-voting] Gulf of the Farallones Nat'l Marine Sanctuary

Maria Brown / Brian Johnson [non-voting] Chair: Eric Kett

Vice Chair: Bruce Steele Secretary: Phyllis Grifman June 13, 2012

Mary D. Nichols, Chair California Air Resources Board 1001 I Street, PO Box 2815 Sacramento, CA 95812

#### Re: Investment of Cap-and-Trade Auction Proceeds to Incentivize Large Ocean-Going Vessels to Reduce Speed

Dear Chair Nichols:

As chair of the Channel Islands National Marine Sanctuary Advisory Council, I am writing with regard to the development of an investment plan for the use of cap-and-trade auction proceeds to help reduce greenhouse gases that contribute to climate change. Specifically, the advisory council supports the use of auction proceeds to incentivize large ocean-going vessels to reduce speed.

The advisory council provides advice on management, use and protection of sanctuary waters. The council is comprised of 42 individuals representing the general public, tourism, business, recreational fishing, commercial fishing, non-consumptive recreation, education, research, conservation and Chumash community interests, as well as local, State and Federal government agencies.

At our May 2012 meeting, sanctuary and Santa Barbara Air Pollution Control District staff informed us of the California Air Resources Board (CARB) process to develop the investment plan. Staff further suggested that by allocating some of the auction proceeds to incentivize large ocean-going vessels to reduce their speed off the California coastline, there would be substantial reductions in greenhouse gas emissions and other environmental benefits from slower moving ships.

In a 2009 sanctuary report endorsed by the advisory council' we recommended that incentive-based approaches to slow ships down be explored, specifically, to reduce ship strike risks on endangered whales. We are familiar with the successful Vessel Speed Reduction Incentive Program at the ports of Long Beach and Los Angeles that offers monetary-based incentivizes to slow ships approaching and departing these ports, yielding significant air quality benefits.

113 Harbor Way • Santa Barbara, California 93109 • Phone 805-966-7101 www.channelislands.noaa.gov Slowing large ocean-going vessels offers a substantial reduction of greenhouse gas emissions as well as reducing nitrogen oxide and sulfur dioxide pollution. Slower ships also provide enhanced protection of marine mammals by reducing noise and ship strike impacts on endangered blue, fin and humpback whales. Therefore, the sanctuary advisory council supports allocating auction proceeds to incentivize large ocean-going vessels to reduce their speed off the California coastline.

A unique and compelling opportunity now arises to develop an incentive-based program focused on reducing ship speeds to address the state's goals under the cap-and-trade program, and help protect endangered whales off our coast. I hope the support of our sanctuary advisory council will be given due consideration as part of the California Air Resources Board's public consultation process.

Sincerely,

Eric Kett, Chair Sanctuary Advisory Council<sup>ii</sup>

cc: William J. Douros, Acting Deputy Director, NOAA Office of National Marine Sanctuaries

Chris Mobley, Superintendent, Channel Islands National Marine Sanctuary

Brian Shafritz, Manager, Technology and Environmental Assessment Division, Santa Barbara County Air Pollution Control District

enclosure: Channel Islands National Marine Sanctuary Advisory Council voting results, May 18, 2012.

<sup>i</sup> "Reducing the Threat of Ship Strikes on Large Cetaceans in the Santa Barbara Channel Region and Channel Islands National Marine Sanctuary: Recommendations and Case Studies." Available online at: http://channelislands.noaa.gov/sac/pdf/sscs10-2-09.pdf.

" The council is an advisory body to the sanctuary superintendent. The opinions and findings of this letter do not necessarily reflect the position of the sanctuary and the National Oceanic and Atmospheric Administration.

> 113 Harbor Way • Santa Barbara, California 93109 • Phone 805-966-7101 www.channelislands.noaa.gov

#### Voting Results: May 18, 2012 - Channel Islands National Marine Sanctuary Advisory Council

Voting results on a motion approving the Sanctuary Advisory Council's Executive Committee to prepare a letter to the California Air Resources Board (CARB) supporting CARB's consideration of allocating some of the cap-and-trade auction proceeds to an incentive program that would be designed to encourage reduced speeds from large ships; including a reference to a specific recommendation concerning exploring incentive programs within a ship strike report previously endorsed by the sanctuary advisory council; and supporting the council's views being mentioned at a May 24th CARB public meeting on the matter. May 18, 2012, Santa Barbara, California.

Name	Council Seat - position	Vote	
Capt. Mat Curto	Tourism – alternate	Yes	
Debra Herring	Non-Consumptive Recreation - member	Yes	
Capt. Richard McKenna	Business – member	Yes	
Linda Krop	Conservation – member	Yes	
Bruce Steele [Vice Chair]	Commercial Fishing – member	Yes	
Capt. David Bacon	Recreational Fishing – member	Yes	
Maria Petueli	Education – member	Yes	
Dr. Mark Steele	Research – alternate	Yes	
Phyllis Grifman [Secretary]	Public At Large #1 – member	Yes	
Eric Kett [Chair]	Public At Large #2 – member	Yes	
Luhui Isha Waiya	Chumash Community – member	Yes	
Elizabeth Petras	NOAA Fisheries – member	Yes	
David Ashe	National Park Service – alternate	Yes	
CDR Christina Davidson	US Coast Guard – member	Yes	
Donna Schroeder Dr. Ann Bull	Bureau of Ocean Energy Management – member Bureau of Ocean Energy Management – alternate	ABSENT	
John Ugoretz	Dept. of Defense – member	No	
Marija Vojkovich	California Department of Fish & Game - member	Yes	
<vacant></vacant>	California Natural Resources Agency - member	ADCENT	
Amy Vierra	California Natural Resources Agency - alternate	ADSENI	
Dr. Jonna Engel	California Coastal Commission - member	Yes	
Susan Curtis	Santa Barbara County – alternate	Yes	
Lyn Krieger <vacant></vacant>	Ventura County – member Ventura County – alternate	ABSENT	

Yes -17 No -1 Abstain -0



# BAY AREA AIR QUALITY MANAGEMENT

DISTRICT

ALAMEDA COUNTY Tom Bates Scott Haggerty Nate Miley (Vice-Chair) Tim Sbranti

CONTRA COSTA COUNTY John Gioia David Hudson Mary Piepho Mark Ross

> MARIN COUNTY Susan Adams

NAPA COUNTY Brad Wagenknecht

SAN FRANCISCO COUNTY John Avalos Edwin M. Lee Eric Mar

SAN MATEO COUNTY Carole Groom (Secretary) Carol Klatt

SANTA CLARA COUNTY Ash Kalra (Chair) Liz Kniss Ken Yeager

> SOLANO COUNTY James Spering

SONOMA COUNTY Susan Gorin Shirlee Zane

Jack P. Broadbent EXECUTIVE OFFICER/APCO March 6, 2013

Mary D. Nichols, Chair California Air Resources Board 1001 "I" Street Sacramento, CA 95814

Re: Development of an Investment Plan for the Auction Proceeds from the Cap-and-Trade Program

Dear Ms. Michals:

I am writing to provide input on behalf of the Bay Area Air Quality Management District (District) in the development of the investment plan for use of proceeds from the auction of allowances under the ARB's Cap-and-Trade Regulation. The investment plan will identify the priority programs for investment of proceeds to support achievement of the State's greenhouse gas (GHG) emission reduction goals. The framework for the development of the investment plan has been established in AB 1532 (Pérez) and SB 535 (De León). The Department of Finance, in consulation with the ARB and other state agencies, will develop and submit the plan to the Legislature, and funding will subsequently be appropriated through the annual Budget Act consistent with the plan.

We have the following comments for your consideration:

- (1) The Governor's proposed Fiscal Year 2013-14 budget identified the transporation sector as his top priority for the investment of auction proceeds. We agree with this position because transportation is the single greatest contributor to GHG emissions in the State, and substantial investments are needed in transportation projects involving mass transit, electrification of vehicles (and the associated infrastructure), and sustainable communities. Implementing these projects will also result in significant co-benefits in terms of reducing emissions and health risks from other types of air pollutants. In the transportation sector, investments in new technologies should focus on electric vehicles (EV) and EV infrastructure. Programs to buy-down the cost of EVs and EV charging infrastructure should be given a high priority, particularly in communities highly impacted by vehicle emissions.
- (2) The distribution of funding in the most impacted communities must consider the number of vulnerable individuals that live in these communities.

The State's draft Concept Paper indicates that the new CalEnviroScreen tool developed by Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) is to be used to meet the investment directives of SB 535 in terms of disadvantaged communities. As was pointed out in our recent comment letter to OEHHA on CalEnviroScreen (copy enclosed), Population Characteristics in the tool are based entirely on the <u>rate</u> of occurrence (i.e., the percent) of various indicators of vulnerability within an area, without consideration given to the number of vulnerable individuals that reside in the area. This approach would be less problematic if the tool scored areas based on census tracts, which have similar population totals, rather than zip codes, which have population totals that may vary substantially. OEHHA has indicated that future updates to CalEnviroScreen may use a census tract approach to identify impacted communities, but until this occurs additional demographic information will need to be applied to the CalEnviroScreen results to distribute available funding in an equitable manner to benefit the greatest number of vulnerable residents.

(3) The State should make use of the District's existing grant program resources to fund projects using auction proceeds that are allocated to the Bay Area.

District grant programs have provided in excess of \$345 million over the last six years via competitive grant processes to private and public entities to reduce emissions of air pollutants (including GHGs) from mobile sources in the Bay Area. Successful projects include the repower, retrofit and replacement of heavy duty diesel engines (trucks, off-road equipment, marine vessels and locomotives, etc.), and bicycle, alternative fuels, advanced technology, and shuttle and ridesharing projects.

The District has operated grant programs for over 14 years during its administration of the Carl Moyer Program, and more recently the California Goods Movement Bond Program (I-Bond) and various AB 118 programs. Among the requirements of these programs are the AB 1390 mandate to expend at least 50 percent of Carl Mover Program funding in disadvantaged communities, and a 2009 District Board of Directors' mandate to expend at least 25 percent of I-Bond funding in disadvantaged communities. The District has successfully exceeded these requirements in every year since their establishment, with annual expenditures of available funding in impacted communities exceeding 60 percent. The clearest example of the District's ability to target and administer this funding to immediate benefit in disadvantaged communities has been in the West Oakland Community, an area identified in a joint health risk assessment between our agencies as having cancer health risk attributable to air pollution of up to three times higher than the Bay Area average. Independent studies performed by UC Berkeley have demonstrated that emissions from drayage trucks serving the Port of Oakland (a main driver of air pollution-related health risk in the West Oakland Community) have been reduced by over 50 percent as a direct result of District grant funding and regulatory enforcement efforts.

In addition to these State programs, the District has also successfully administered numerous federal (e.g., Diesel Emission Reductions Act) and local grant programs which have reduced air pollutant emissions for over a decade. Included in the local grant programs are two that specifically targeted GHG emission reductions across a broad range of project types as follows.

- (a) In 2007, the Air District's Board of Directors appropriated \$3 million for Climate Protection Grants to Bay Area local governments and nonprofits for implementation of innovative projects to reduce GHG emissions. Over 50 separate projects were funded covering a wide variety of projects including developing local climate action plans, integration of climate considerations into general plans, educational programs on climate change, and support for solar and renewable energy programs (e.g., Berkeley Financing Initiative for Renewable and Solar Technology, and Marin County's Community Choice Aggregation).
- (b) In 2007, the Attorney General of California (AG) entered into a Settlement Agreement with ConocoPhillips Company (Conoco) to resolve a dispute regarding the environmental impact of GHG emissions from the Clean Fuels Expansion Project at Conoco's refinery in Rodeo, California. On November 24, 2008, the AG and the District entered into a Memorandum of Understanding (MOU) delineating the District's authority to administer a GHG emission reduction grant program using funds from the Settlement Agreement. Under the terms of the MOU, the District conducted a successful grant program for GHG emission reductions that resulted in the allocation of \$4 million for 55 separate energy efficiency and renewable energy projects in the cities of Rodeo, Hercules, Crockett, and Pinole.

The District believes that our extensive grant program experience uniquely positions our agency to administer Cap-and-Trade auction proceeds in a proven and accountable manner that achieves rapid, quantifiable, cost-effective and verified reductions of GHGs and other air pollutants, especially in disadvantaged communities.

(4) Provide funding to assist the implementation of local climate action plans

Over 30 Bay Area jurisdictions have adopted local climate action plans to reduce GHG emissions in their communities. These plans will support the region's sustainable communities strategy and will improve local air quality. Financial support from auction proceeds could greatly facilitate implementation of these plans.

(5) Support energy efficiency measures

Approximately one-fourth of the State's GHG emissions are from building energy use. While stringent energy efficiency standards for new buildings are important, it is also important to reduce energy use in existing buildings (e.g., two thirds of all buildings that will exist in 2050 have already been built). Auction proceeds should target investments in technologies, policies, and programs that increase the energy efficiency, and use of renewable energy, in the statewide stock of existing buildings (e.g., residential insulation and other energy efficiency rebates).

(6) Consider adopting incentive program to reduce marine vessel speeds

Marine vessel fuel consumption and GHG emissions can be significantly reduced by reducing ship speeds. The Ports of Long Beach and Los Angeles have implemented successful programs that reward shipping operators with incentives for voluntarily reducing ship speeds when approaching the ports. A statewide program of this type could be funded with auction proceeds.

Thank you for your consideration of these comments. If you have any questions regarding this letter, or would like to discuss, please contact Brian Bateman, Health & Science Officer (415-749-4653, <u>bbateman@baaqmd.gov</u>).

With regards,

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Jack P. Broadbent Executive Officer/APCO

Enclosure: Jan. 23, 2013 BAAQMD Comment Letter on CalEnviroScreen