



Santa Barbara County  
**Air Pollution Control District**

April 23, 2013

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

Re: Comments on Draft Greenhouse Gas Investment Plan to be discussed at April 25, 2013  
California Air Resources Board meeting

Dear Chair Nichols and California Air Resources Board Members:

I am writing to urge that the Santa Barbara County Air Pollution Control District's proposal for a voluntary Vessel Speed Reduction (VSR) Incentive Program along the California coast to reduce greenhouse gas (GHG) emissions be included in the final GHG Investment Plan.

The VSR program has received support from a range of organizations, agencies, and businesses, including the National Oceanic and Atmospheric Administration (NOAA) Channel Islands National Marine Sanctuary, the Environmental Defense Center, the California Coastal Commission, the California Air Pollution Control Officers Association, the Bay Area Air Quality Management District, and more. I have attached the support letters; based on these, plus additional support from individual California citizens, the GHG Investment Plan should certainly include the VSR program in a discussion of initiatives that have received broad-based support. In addition, since we and our partners attended and spoke at two of the February hearings, our VSR proposal should be included in the summary of comments section in the draft Plan.

As discussed in our previous letter, the program would be modeled after the existing successful program at the Ports of Los Angeles and Long Beach. A detailed implementation plan was attached to the letter. The VSR program aligns with investment plan objectives to reduce GHG emissions from transportation, and would achieve reductions within the three-year plan horizon. The program would have 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 towards meeting air quality standards, and enhanced protection for endangered whale species.

I urge you to include the VSR program in your final Investment Plan.

Sincerely,



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

Attachment

**CALIFORNIA COASTAL COMMISSION**

45 FREMONT, SUITE 2000  
SAN FRANCISCO, CA 94105-2219  
VOICE (415) 904-5200  
FAX (415) 904-5400  
TDD (415) 597-5885



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,

A handwritten signature in black ink, appearing to read "Charles F. Lester".

CHARLES F. LESTER  
Executive Director

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 co-benefits 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



**B.E.A.C.O.N.**

**Beach Erosion Authority for  
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

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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 CO<sub>2</sub> 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<sub>2</sub> and SO<sub>x</sub>/NO<sub>x</sub>/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 at [www.maerskline.com](http://www.maerskline.com). Our 2013 progress update will be published on March 18, and the AP Moller-Maersk Sustainability annual report is available at [www.maersk.com](http://www.maersk.com).

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,

A handwritten signature in cursive script that reads "B. Lee Kindberg".

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

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March 21, 2013

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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

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 GHG-reduction targets under AB 32 and AB 1532 and at the same time produce a number of other significant benefits.

Thank you for your consideration.



---

Chair, Air Pollution Control District Board



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www.capcoa.org**

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**EXECUTIVE DIRECTOR**

Kenneth Koyama  
*ken@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

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.

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:

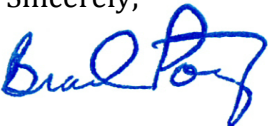
- Funding for urban tree planting and reforestation. In addition to directly sequestering carbon, urban tree planting can promote walkable communities, with the added benefit of reduced reliance on fuel dependent modes of travel. These projects can be targeted to use labor through programs that serve 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](mailto:HSchneider@SantaBarbaraCA.gov)

[www.SantaBarbaraCA.gov](http://www.SantaBarbaraCA.gov)

March 18, 2013

Helene Schneider  
**Mayor**

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

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93102-1990

Tel: 805.564.5323  
Fax: 805.564.5475

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 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.

A-29

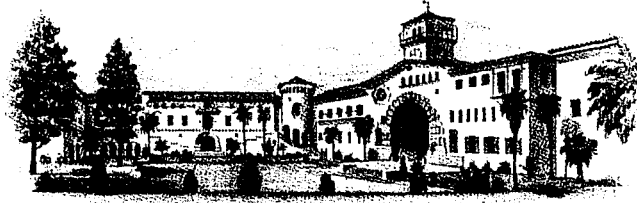
**SALUD CARBAJAL**  
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Second District

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Third District

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Fourth District

**STEVE LAVAGNINO**  
Fifth District, Vice Chair



**BOARD OF SUPERVISORS**  
County Administration Building  
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**COUNTY OF SANTA BARBARA**

March 12, 2013

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

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, Bldg 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 ocean-going vessels to reduce speed and greenhouse gas emissions, and to protect endangered whales. Please contact Sean Hastings, Channel Islands National Marine Sanctuary, [sean.hastings@noaa.gov](mailto:sean.hastings@noaa.gov) or (805) 884-1472 and/or Elizabeth Petras, National Marine Fisheries Services, Southwest Region, [Elizabeth.petras@noaa.gov](mailto:Elizabeth.petras@noaa.gov) or (562)980-3238 if you have any questions.

Sincerely,



for 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

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<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>.

# 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 Koos

#### 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 Ugoratz / 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]

#### Monterey 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.

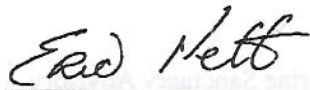
At our May 2012 meeting, sanctuary and Santa Barbara Air Pollution Control District staff informed us of the California Air Resources Board (CARB) process to develop the investment plan. Staff further suggested that by allocating some of the auction proceeds to incentivize large ocean-going vessels to 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<sup>1</sup> 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 incentives to slow ships approaching and departing these ports, yielding significant air quality benefits.

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.

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<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>.

<sup>ii</sup> *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.*



**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.

<i>Name</i>	<i>Council Seat - position</i>	<i>Vote</i>
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 Petuelli	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	Bureau of Ocean Energy Management – member	ABSENT
Dr. Ann Bull	Bureau of Ocean Energy Management – alternate	
John Ugoretz	Dept. of Defense – member	No
Marija Vojkovich	California Department of Fish & Game – member	Yes
<vacant>	California Natural Resources Agency – member	ABSENT
Amy Vierra	California Natural Resources Agency – alternate	
Dr. Jonna Engel	California Coastal Commission – member	Yes
Susan Curtis	Santa Barbara County – alternate	Yes
Lyn Krieger	Ventura County – member	ABSENT
<vacant>	Ventura County – alternate	

Yes –17      No –1      Abstain –0





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.

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<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](http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/workshops/concept_paper.pdf)

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,

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<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>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/imoghmain.pdf](http://unfccc.int/files/methods_and_science/emissions_from_intl_transport/application/pdf/imoghmain.pdf) (accessed June 19, 2012). (at pg 17, Table 1-5)

<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.

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 (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), and particulate matter (PM). Locally in Santa Barbara County, marine shipping contributes over 54% of the total daily NO<sub>x</sub> emissions. This is more than all other sources combined, including: stationary sources, on-road motor vehicles, other mobile sources, and area-wide sources. The SBCAPCD has estimated substantial emissions reductions over 50% for NO<sub>x</sub>, SO<sub>x</sub>, 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.

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<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](http://oceana.org/sites/default/files/o/fileadmin/oceana/uploads/Climate_Change/Oceana_Shipping_Report.pdf)

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

<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 whales 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.

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<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 <http://elq.typepad.com/currents/2010/08/currents37-07-segee-2010-0816.html> (2010).

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

<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.

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<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>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>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 <http://channelislands.noaa.gov/sac/pdf/sscs10-2-09.pdf>.

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

<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>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

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<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/blobload.asp?BlobID=8182](http://www.polb.com/civica/filebank/blobload.asp?BlobID=8182) (accessed June 19, 2012). (page 6)

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



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

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.

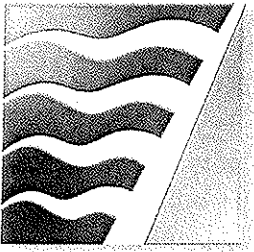
Sincerely,



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



**BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT**

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. Nichols:

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 consultation 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 transportation 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.

**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

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 rate 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 Moyer 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

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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, [bbateman@baaqmd.gov](mailto:bbateman@baaqmd.gov)).

With regards,



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Executive Officer/APCO

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