

## Cap and Auction Design Position Paper

February 25, 2008

**A package of policies is needed to meet AB 32's 2020 emissions limit and the state's 2050 goal.** Meeting the Global Warming Solutions Act's 2020 pollution limit, and the Governor's deeper reduction target by 2050, will require many different policy tools to reduce emissions in many parts of the economy. We firmly believe that continuing and expanding the state's regulatory policies that reduce global warming pollution and provide air pollution reduction co-benefits should be the foundation of the AB 32 implementation plan. This includes multiple regulatory and market-based policy tools, including the energy efficiency standards and programs, renewables portfolio standard, emissions performance standard for generation investments, clean car standards and incentives, and low-carbon fuel standard. We urge CARB to deploy tools to assess the potential cumulative impacts of this package of policies.

We support CARB's consideration of several types of market mechanisms, as discussed at the January 16<sup>th</sup> workshop, including a cap and trade program, incentives, fees, and rebates. We recognize that every policy tool has strengths and weaknesses, and we urge CARB to adopt a package of multiple policy tools that takes advantage of the relative strengths of each of the different policies to meet the multiple requirements of AB 32. This document focuses on only one of these tools - a cap and trade program - without pre-judging whether any of our organizations will ultimately support any particular cap and trade program.

**Process and requirements in AB 32 must be met.** We support CARB's plan to hold workgroup meetings to hear perspectives from all interested stakeholders on cap and trade as a policy tool and how to best design a program. This process must include, at a minimum, meeting the requirements of Health and Safety Code Section 38570 to consider the impact on criteria and toxic air pollutants,<sup>1</sup> and providing opportunities for the Environmental Justice and Economic and Technology Advancement Advisory Committees and all stakeholders to provide input.

**Any cap and trade program must meet the objectives of AB 32.** A cap and trade program is a regulatory and market-based policy tool in which a limited number of allowances to emit greenhouse gases would be created and regulated entities would be required to hold enough allowances to match their emissions. AB 32 makes clear that CARB must seek to achieve at least the following objectives when adopting any cap and trade program:

- ◆ Distribute allowances in an equitable manner
- ◆ Seek to minimize costs and maximize total benefits to California
- ◆ Encourage early action to reduce GHG emissions
- ◆ Not disproportionately impact low-income communities
- ◆ Provide appropriate credit for voluntary early action

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1. Health and Safety Code Section 38570(b) requires that CARB do all of the following before including a market-based compliance mechanism in its regulations: "(1) Consider the potential for direct, indirect, and cumulative emission impacts from these mechanisms, including localized impacts in communities that are already adversely impacted by air pollution. (2) Design any market-based compliance mechanism to prevent any increase in the emissions of toxic air contaminants or criteria air pollutants. (3) Maximize additional environmental and economic benefits for California, as appropriate."

- ◆ Design the program to prevent any increase in emissions of toxic or criteria air pollutants
- ◆ Minimize administrative burden and leakage

### **Elements of a Well-Designed Cap and Trade Program**

Any cap and trade program is comprised of many inter-dependent design elements that ultimately must be evaluated as a package. We offer our general views on each individual design element below.

- ◆ **Tight Declining Cap.** A tight cap that declines over time and provides real emission reductions is the most important design element, as it determines the program’s environmental impact and contribution to AB 32’s 2020 limit and the state’s 2050 reduction goal. The cap should eventually cover, at a minimum, the main sectors that burn fossil fuels, including the electricity, large industrial, natural gas, and transportation sectors; other sectors should also be considered for inclusion where capable of being effectively monitored and verified. A tight cap is essential in order to ensure real emission reductions are achieved. In addition, a tight cap will ensure that the cap and trade program drives innovation and thereby contributes to the transition to a low carbon economy and in particular supports California’s rapidly growing clean tech industries.
- ◆ **Auctions and Using Allowances in Public Interest.** Allowances should be seen as a public asset, since they represent permission to use the atmosphere, which belongs to all of us, to dispose of pollution. Therefore, the value of allowances should accrue to, and be used in, the public interest and to further the goals of AB32. Auctioning allowances and using the auction revenue to provide consumer and emission reduction benefits is the preferred method of distributing the value of allowances. Allowances should not be grandfathered (i.e. freely distributed to covered emitters based on historical emissions). Objectives for distributing the value of allowances should include the following, and we urge CARB to provide a detailed description (and take further public input on) how the value of allowances would be distributed.
  - Prevent the creation of large profits (or “windfall profits”) for businesses that are unrelated to actions to reduce GHG emissions;
  - Reduce the cost and maximize the benefits of the program to consumers, especially in low-income communities, primarily through programs to help permanently reduce energy costs, such as energy efficiency and weatherization programs, as well as through direct payments such as per capita rebates, and through job skills training programs that can help transform the state’s economy into a low-carbon economy and help transition affected workers;
  - Support additional investments in, and deployment of, technologies and strategies to reduce GHG emissions, such as energy efficiency, renewable energy and transit, as well as research, development and demonstration of innovative technologies to reduce emissions;
  - Encourage action that will reduce emissions prior to the start of the overall AB32 program in 2012 and ensure fair treatment for “early actors” that have proactively reduced GHG emissions;
  - Direct investments to disadvantaged communities to support air pollution reduction efforts and enforcement programs, enhance their adaptive capacity, green community

development, energy efficiency improvements and renewable energy technologies;<sup>2</sup>  
and

- Protect natural resources that can help sequester carbon dioxide and enhance the adaptive capacity of those resources to climate change.
- ◆ **Limited Offsets.** AB 32 sets an economy-wide limit on global warming pollution, so reductions will be needed from every major sector of the state's economy. Offsets do not provide additional reductions towards the 2020 limit, but rather provide emission reductions in a sector outside the cap and trade program *instead of* emission reductions in a capped sector. Therefore, CARB should use regulatory programs and other policies to achieve emission reductions in sectors outside the scope of the cap and trade program, so that they can contribute to meeting the statewide 2020 limit, and the further reductions necessary to meet the state's 2050 reduction goal. A necessary precondition to including offsets in a cap-and-trade program is a tight cap; *if* offsets are allowed, they should be subject to at least the following conditions:
  - Represent a limited portion of covered entities' compliance obligation, to ensure that offsets are a limited fraction of the reductions the overall program would achieve;
  - Discounted where appropriate to compensate for loss of local or in-state environmental benefits and for the uncertainty of the emission reductions;
  - Limited to specific project types that have stringent protocols to ensure the emission reductions are real, quantifiable, additional (beyond business as usual), permanent, subject to independent third-party verification and enforceable by CARB; and
  - Priority should be given to projects that will provide environmental co-benefits to California, especially in communities suffering from excessive levels of pollution.
- ◆ **Complementing Air Quality and Toxic Reduction Goals.** Any program should be designed to explicitly consider the impact on air quality and toxic emissions, both in local communities and statewide, and to complement state efforts to reduce these emissions, as AB 32 requires. CARB must design any cap and trade program to prevent any increase in toxic and criteria air pollutant emissions. In addition, CARB should strive to achieve additional air quality co-benefits from greenhouse gas emission reductions measures to provide near-term public health benefits, especially in communities that have traditionally been impacted by multiple sources of air pollution.
- ◆ **Strong Monitoring and Enforcement.** Vigorous monitoring and enforcement of emissions, trades, and regulatory compliance is of paramount importance. The program will only limit emissions and provide an environmental benefit if enforcement is strong, consistent, and prompt. Every regulated entity within the cap and trade system must be subject to mandatory annual reporting. Enforcement against an entity whose emissions exceed its allowances should include fines, a requirement to surrender a multiple of the allowances not surrendered, and the other legal remedies (including civil and criminal penalties) contained in AB 32. In particular, there should be a clear penalty up-front for any excess emissions that is large enough that that no rational covered entity would choose to pollute and accept the penalty.
- ◆ **Benefit environmental justice communities.** CARB should ensure that any cap and trade program carefully follows all the guidelines in AB 32 for evaluation and prevention of

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<sup>2</sup> Health and Safety Code Section 38565.

environmental justice impacts. CARB should also design the program to provide benefits to the communities that suffer the greatest cumulative impacts from air pollution. Potential approaches that should be considered include: (i) directing auction revenues to benefit these communities, (ii) limiting the geographical or sectoral scope of the program; (iii) requiring entities purchasing allowances contribute to a community benefits fund.

- ◆ **Flexibility and Cost-Containment.** Trading of allowances, banking, and a multi-year compliance period are preferred methods to provide flexibility and lower the costs of the program. (This document does not make specific recommendations about whether trading should be allowed among capped sectors, or be limited to specific geographical areas based on cumulative impact assessments.) *A price cap on allowances (a “safety valve”) should not be included, because it would break the program’s cap and allow emissions to increase.*
- ◆ **Transparency.** The program should make data on emissions, allowances, trades, prices, and evaluations of compatibility with air quality and toxic reduction efforts transparent and publicly available by source and sector in a timely manner to establish a well-functioning program.
- ◆ **Linkage with Comparable Programs.** Linkage (i.e. allowing covered entities to surrender allowances issued by another jurisdiction) can provide benefits such as reducing leakage and lowering costs, but should only be considered if the other jurisdictions’ programs meet stringent criteria (e.g., comparably stringent caps, comparable mandatory reporting, strong enforcement, limited offsets, etc.) in order to maintain the integrity of the program.



February 28, 2008

California Air Resources Board  
1001 "I" Street  
Sacramento, CA 95812

**Re: Economic and Technology Advancement Advisory Committee Report**

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

On behalf of the Natural Resources Defense Council (NRDC), we offer these comments on the Economic and Technology Advancement Advisory Committee (ETAAC) report. ETAAC has been a productive committee, and this report is evidence of much hard work, creativity, and thoughtfulness. We commend the committee for its work to help inform the California Air Resources Board's (CARB) public process to implement AB 32.

AB 32 requires CARB to adopt a "scoping plan" to implement AB 32 by the end of this year. NRDC has provided written recommendations to CARB staff on numerous policies that we urge the Board to adopt as part of the scoping plan, and we continue to participate in CARB's public process. In this letter, we focus our comments only on the ETAAC report's recommendations, and therefore this letter does not represent a complete description of the package of policies we believe CARB will need to adopt in the scoping plan to successfully implement AB 32.

We strongly support the ETAAC report's overarching recommendation that it is important to place a price on greenhouse gas (GHG) emissions, *and* that complementary policies, particularly performance-based programs, will be needed "to spur innovation, overcome traditional market barriers . . . and address distributional impacts."<sup>1</sup> We firmly believe that CARB will need to adopt a package of multiple policy tools that takes advantage of the relative strengths of each of the different tools in order to meet the multiple objectives of AB 32.

These comments are organized by the ETAAC report's sections. We briefly highlight a limited number of ETAAC's most promising recommendations, and identify several recommendations that NRDC does not support.

**Financial Sector**

Many of ETAAC's recommendations in the Financial Sector are worth pursuing. In particular, NRDC supports the Promotion of California Carbon Trust (2.A), and Clean Energy Innovation and Commercialization (2.B).

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<sup>1</sup> ETAAC Report, p. 1-4

## **Transportation Sector**

NRDC strongly supports all of the policy recommendations for smart growth and reducing vehicle miles traveled. As the ETAAC report observes in its recommendation for Smart Growth and Transit Villages (3.A), a regional planning framework with strong incentives for infill and transit oriented development would be effective in reducing vehicle miles traveled. Considering ETAAC's market expertise, the committee's support for Pay-As-You-Drive Insurance (3.B), Congestion Charges (3.C), and Employer-Based Commute Trip Reductions (3.D) is particularly noteworthy.

## **Industrial, Commercial & Residential Energy Use**

NRDC strongly agrees with the ETAAC report that the state must strengthen and expand policies to increase energy efficiency and the use of renewable energy. We do not, however, support Customer Choice of Electric Service Provider (4.E) as a policy tool that will increase renewable energy supply or use. NRDC is unaware of any evidence that direct access will result in reduced GHG emissions, or specifically, achieve the 33% or 50% renewables targets claimed. In fact, NRDC is quite concerned that direct access *could increase* GHG emissions or at least make it more difficult to achieve targeted levels.

NRDC strongly supports ETAAC's recommendations for recycling and composting, including recommendations 4.J through 4.N. Recycling and composting have the potential to significantly reduce California's greenhouse gas emissions. ETAAC's recommendation to Evaluate and Improve Policies for Qualified Waste Conversion Technologies (4.O), however, is problematic. "Waste conversion" technologies range from traditional incineration to gasification and other non-combustion technologies to anaerobic composting. Many of these technologies are largely unproven and frequently compete with or undermine recycling efforts for paper and other combustible materials. While we are open to the possibility of a specific technology developing that may help deal with non-recyclable or non-compostable wastes, recycling, composting, and waste reduction are strongly preferable methods of handling waste.

## **Electricity and Natural Gas Sector**

NRDC strongly supports measures aimed toward increasing energy efficiency and increasing the Renewable Portfolio Standard to 33 percent by 2020. We also support a coordinated review and permitting process, Competitive Renewable Energy Zones (5.D), but would oppose such a process if it imposed a foreshortened timeframe for the completion of environmental reviews and issuance of permits.

## **Agricultural Sector**

With respect to ETAAC's recommendation on Manure-to-Energy Facilities (6.A), we agree that the use of digesters to reduce GHGs is appropriate and should be encouraged. However, care must be taken to avoid inadvertently creating incentives for the proliferation of large concentrated animal feeding operations. Specifically, if digesters are found not to be cost effective for smaller dairies, CARB policies should not encourage the consolidation or expansion of small facilities in order to improve cost-effectiveness. For example, allowing the use of digesters as an offset could create additional incentives to build larger facilities or to concentrate smaller facilities

which could more cost-effectively install digesters. CARB policies should protect and encourage sustainable livestock facilities instead of creating incentives for moving away from sustainable practices.

### **Forestry Sector**

Reforestation and Forest Management for Enhanced Carbon Storage (7.B) is a critical aspect of reducing California's greenhouse gas emissions, and we strongly endorse this recommendation. The recommendation to Link Forest Fuels Management and Biomass Utilization (7.A), however, is flawed. The notion that forest thinning, as practiced over the past decades, reduces net GHG emissions is not supported by the evidence. Until and unless emissions reductions from forest thinning can be scientifically demonstrated and the impacts measured using credible protocols, forest thinning and/or fuels reduction should not be considered an acceptable emissions reduction measure for AB32.

### **Water Sector**

NRDC strongly supports ETAAC's recommendations to make more efficient use of water. Policies to improve water efficiency present significant untapped opportunities to reduce emissions, save consumers money, and conserve valuable water resources.

### **ETAAC Review of Market Advisory Committee Report**

We support many of the ETAAC's comments on the Market Advisory Committee's report. We agree that limits on offsets would help encourage action and innovation within the capped sectors (p. 9-5). Complementary regulatory policies, not offsets, should be used to achieve emission reductions in sectors not covered by any cap and trade program, in order to contribute additional reductions towards the 2020 limit.

We support ETAAC's suggestions that a cap should include as many sectors of the economy as is practical (p. 9-2), that grandfathering is a bad method of allocation to promote early action, innovation, and clear price signals (p. 9-3), that auction revenues should benefit disadvantaged communities (p. 9-4), that banking should be allowed (p. 9-6), and that borrowing should be limited (p. 9-7).

We oppose a price-based safety valve because it would undermine the environmental integrity of the cap. We agree with the Report's analysis of the shortcomings of a price-based safety valve, and agree that an entity like the Carbon Trust that can help smooth out any price volatility is far preferable (p. 9-8.)

Thank you for considering our input as you review the ETAAC Report.

Sincerely,

Leah Fletcher  
Project Attorney  
Program

Devra Wang  
Director, California Energy



Edie Chang, Chief  
Planning and Management Branch, Office of Climate Change  
California Air Resources Board  
1001 "I" Street  
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October 1, 2007

**Re: NRDC Recommendations for Policies to Reduce Global Warming  
Pollution for the AB 32 Scoping Plan**

Dear Ms. Chang,

On behalf of the Natural Resources Defense Council (NRDC), we offer the enclosed recommendations for policies to reduce global warming pollution to contribute to the California Air Resources Board's (CARB) "scoping plan" pursuant to Assembly Bill (AB) 32. We appreciate CARB's invitation for all stakeholders to provide input as you begin the process of developing the scoping plan.

As you know, AB 32 establishes a limit on statewide greenhouse gas (GHG) emissions in 2020. Since every major sector contributes to the problem of global warming, we believe that every sector must be part of the solution. The vast majority of California's global warming pollution comes from burning fossil fuels in the transportation, electricity, natural gas, and industrial sectors. As a result, we believe that a large portion of the GHG emission reductions to meet AB 32 should come from these sectors.

NRDC supports the use of a *package* of policy tools, including first early action measures, and then both regulatory and market-based approaches, to meet AB 32's emissions limit. While the state will need to implement dozens of policies to meet the 2020 limit, we believe that most of these strategies will fall into the following broad categories:

- **energy efficiency, renewable energy, and cleaner power plants** to reduce emissions from the electricity and natural gas sectors;
- **cleaner cars, low-carbon fuels, and smart growth** to reduce emissions from the transportation sector;
- **water efficiency and recycling;** and
- **afforestation, conservation,** and limited forest conservation management practices on private lands.



Thanks to decades of leadership by the Legislature and numerous state agencies, California has a solid foundation of policies that provide significant GHG emission reductions to build on, including energy efficiency programs, building and appliance efficiency standards, a renewable portfolio standard, a generation emissions performance standard, and vehicle emissions standards. Ongoing attention to fully implement these policies is essential.

In addition, the Climate Action Team's (CAT) 2006 report provides a good start that CARB can build from in developing the scoping plan. The CAT report presents dozens of strategies to reduce GHG emissions. NRDC supports many of those strategies, as well as the early action measures (EAM) that CARB has proposed; our enclosed recommendations seek to avoid duplicating those recommendations. (Of course, full implementation of those CAT and EAM strategies remains critical.) Instead, NRDC's recommendations seek to both strengthen some of the CAT's recommendations and to provide new ideas to reduce GHG emissions that CARB and other agencies can pursue.

Our enclosed recommendations are summarized in Table 1. These strategies yield approximately 39 MMTCO<sub>2</sub>e by 2020, although we have yet to quantify emission reductions from some of the most significant strategies, particularly in the transportation sector. We commit to working with CARB to determine the emission reductions from all of these strategies. While time constraints prevented us from full coordination with our colleagues at other environmental organizations, we expect to support many of the additional recommendations they will be submitting on strategies including renewable energy and recycling.

In addition, we understand that CARB plans to consider through a parallel process whether the scoping plan should include a "cap and trade" (or "cap and auction") program. We believe that a well-designed program can provide a useful supplement to the other policies discussed here and in the CAT and EAM reports, to provide an enforceable limit on polluters and to push emissions lower than can be achieved by the other programs alone, and we plan to participate in CARB's process to evaluate that policy tool.

Thank you for considering NRDC's input as you begin development of the AB 32 scoping plan. We look forward to working with you to develop a comprehensive plan that will meet or beat AB 32's emissions limit, provide economic and air quality benefits to California, and position the state to achieve the Governor's goal for deeper pollution cuts by 2050.

Sincerely,



Devra Wang  
Director, California Energy Program

**Table 1: Summary of NRDC Recommendations for Additional Policies to Reduce GHG Emissions**

(October 26, 2007 update)

Strategy	Emission Reduction in 2020 (MMTCO <sub>2</sub> e)	Cost-effectiveness (\$/metric ton CO <sub>2</sub> e)	Air Quality and Toxic Pollutant Benefits?	Sectors	Agencies
Low-carbon Cement Standard	3.5	\$78	Air & toxic pollution reductions	Cement	California Air Resources Board
Forest sector public goods charge and incentive-based regulatory framework	13.9	\$33	Small	Forest (Sequestration)	California Air Resources Board, California Department of Fire and Forestry, California Integrated Waste Management Board
Renewable Fuel (i.e. Biomethane) in the Natural Gas Sector	7.2	\$4 to \$17	Air pollution reductions	Natural gas, Agriculture	California Public Utilities Commission, California Energy Commission
Energy Efficiency Standards for Buildings at Time-of-Sale	3.1	\$0	Air pollution reductions	Electricity, Natural gas	California Energy Commission, California Air Resources Board, Department of Real Estate
Urban Water Use Efficiency	Up to 4.8	-\$145	Air pollution reductions	Electricity, Water	State Water Resources Control Board, Department of Water Resources, California Energy Commission, California Public Utilities Commission
Low Impact Development	TBD	<\$0	Air pollution reductions	Electricity, Water	State Water Resources Control Board, Regional Water Quality Control Boards, local governments
Water Recycling	TBD	TBD	Air pollution reductions	Electricity, Water	State Water Resources Control Board
Electrification and Efficiency Improvements of Freight Transport	6.2	TBD	Air and toxic pollution reductions	Transportation	California Air Resources Board, California Transportation Commission, Business, Transportation and Housing Agency
Land Use and Smart Growth Policies	TBD	TBD	Air and toxic pollution reductions	Transportation	Office of Planning and Research, local governments, California Air Resources Board, California Transportation Commission, Business, Transportation and Housing Agency, Department of Housing and Community Development
Transit and Related Transportation Measures	TBD	TBD	Air and toxic pollution reductions	Transportation	California Transportation Commission, Legislature, Caltrans, Office of Planning and Research, Business, Transportation and Housing Agency
Improving Transportation System Equity	TBD	TBD	Air and toxic pollution reductions	Transportation	California Air Resources Board, Caltrans, Department of Insurance,
Local Sourcing of Government Purchases	TBD	TBD	Air and toxic pollution reductions	Transportation	Legislature, California Department of Education, California Department of Corrections and Rehabilitation

Chuck Shulock, Assistant Executive Officer  
California Air Resources Board  
1001 "I" Street  
Sacramento, CA 95812

February 15, 2008

**Re: Comments on the Proposed Policy Statement on Voluntary Early Actions**

Dear Mr. Shulock,

On behalf of the Natural Resources Defense Council (NRDC), Sierra Club California, American Lung Association of California, and Environmental Defense, we commend the California Air Resources Board (CARB) staff for the proposed policy statement to encourage voluntary early actions to reduce greenhouse gas emissions.

We strongly support a CARB policy statement that encourages voluntary early actions to achieve greenhouse gas reductions as well as co-benefits, such as air quality and public health improvement, and states the Board's intent to develop the AB 32 scoping plan and implementing regulations in a manner that rewards and does not disadvantage entities that take voluntary early action.

One of the primary sources of uncertainty that may be hindering voluntary early action is the uncertainty over how allowances will be distributed if a cap and trade program is adopted as one policy tool in the scoping plan's package of policies. We believe that an early statement that CARB will not grandfather allowances (i.e., distribute them to regulated entities on the basis of historical emissions) would be the most effective way to encourage voluntary early action by sending a clear signal to emitters that they will benefit from lower emissions.

We support the staff's proposed policy statement, with two important modifications. First, the statement should encourage voluntary *early* actions, not simply voluntary actions. The statement does a good job throughout most of the document emphasizing voluntary early actions, however, we urge CARB to revise the bullet providing the Board's direction to staff to read: "Encourage and reward voluntary early reductions of greenhouse gas emissions."

In addition, we are pleased that the proposed policy statement does not prejudice whether any "credits or offsets" will be provided for voluntary early actions. We support the proposed direction from the Board to staff to ensure that any credits or offsets are "real, permanent, quantifiable, verifiable, and enforceable," however, we urge CARB to add the important requirement that they also be "additional" or "surplus." This is required by Health and Safety Code Section 38562(d)(2), which requires that reductions be "in addition to any greenhouse gas emission reduction otherwise required by law or

regulation, and any other greenhouse gas emission reduction that otherwise would occur.”

Thank you for considering these suggestions.

Sincerely,

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Natural Resources Defense Council

Bill Magavern  
Sierra Club California

Bonnie Holmes-Gen  
American Lung Association of California

Derek Walker  
Environmental Defense

December 3, 2007

California Air Resources Board  
1001 "T" Street  
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**Re: Support for proposed AB 32 global warming pollution cap in 2020**

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

The undersigned organizations offer this letter in support of the proposed 2020 greenhouse gas (GHG) emissions limit of 427 million metric tons of carbon dioxide equivalent. This pollution limit is a critical foundation of AB 32, and will guide the California Air Resources Board's (CARB) development of the package of policies necessary to effectively implement AB 32.

We commend the California Air Resources Board (CARB) staff for conducting a thorough review of the state's existing GHG inventories to develop the proposed 2020 cap through an open public process under significant time constraints this year. Further, we applaud the California Energy Commission for its leadership over many years in developing California's GHG inventory.

Many of the undersigned organizations have previously submitted comments on the draft inventory, and we appreciate CARB staff's efforts to address many of our comments. Each of our organizations continues to support its previous remaining comments. We generally support the methodological approaches CARB used in developing the 1990 emission inventory, and our comments here focus on the process going forward.

First, we urge CARB to provide as much certainty as possible about the 2020 emissions cap. Since all of the policies to implement AB 32 will be based on meeting the 2020 cap, and certainty in the design of those programs is essential to enable long-term investments in emission reduction technologies, it is imperative that the 2020 cap remain stable. The November 16th staff report states that "If additional information becomes available that would significantly alter the total emissions for 1990, staff will bring a revised 1990 emissions level back to the Board for consideration." We agree that revisions to the cap should only be made if they are significant, and **we urge CARB to provide further definition around what would constitute a "significant" change to provide added certainty about the 2020 cap.** In particular, we urge CARB to clearly state that it will not revise the 2020 cap if changes would be less than 5 or 10 million metric tons of carbon dioxide equivalent (i.e., one or two percent), and that CARB will aim to keep any changes to an absolute minimum in order to provide certainty.

In addition, we urge CARB to primarily focus its staff's efforts on designing programs to reduce emissions going forward, rather than expending further significant effort trying to increase its understanding of emissions seventeen years ago. There will always be limitations on the state's knowledge of what emissions were long ago, and our focus should be on the future. Importantly, the fact that the state's data on the past is imperfect should not in any way constrain the state's ability to improve the inventory or reporting methodologies going forward. **We urge CARB to explicitly state that the design of regulatory programs will not be constrained by the methodology used to develop the 2020 cap, and that future inventory methods will be continually improved and not constrained by those methods available to set the 2020 cap.**

Finally, we understand that although the staff report provides a preliminary estimate of the "business as usual" (BAU) emissions forecast in 2020, CARB staff plans to refine the estimate as part of the scoping plan process. The BAU forecast is essential because it determines the approximate level of emission reductions the state must achieve in order to meet the 2020 limit. **We urge CARB to release a draft of a detailed BAU forecast for public comment as soon as possible**, and to conduct a sensitivity analysis around key input assumptions (e.g. population and economic growth) to determine the range of emission reductions that will be needed to ensure the 2020 cap is met. We look forward to continuing to work with CARB staff throughout the scoping plan process.

In conclusion, we appreciate CARB's time and hard work throughout the year in developing the proposed 2020 global warming pollution limit, and we urge you to adopt the limit on December 6.

Sincerely,

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Natural Resources Defense Council

Bonnie Holmes-Gen  
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Bill Magavern  
Sierra Club-California

Jason Barbose  
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Timothy O'Connor  
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cc: Linda Adams, Secretary, California Environmental Protection Agency  
Eileen Tutt, Deputy Secretary External Affairs, California Environmental Protection Agency  
James Goldstene, Executive Officer, CARB  
Chuck Shullock, Program Manager for GHG Reduction, CARB  
Richard Bode, Chief, Emissions Inventory Branch, CARB  
Jackalyne Pfannenstiel, Chair, California Energy Commission  
Gerry Bemis, California Energy Commission

November 26, 2007

California Air Resources Board  
1001 "I" Street  
Sacramento, CA 95812

**Re: Support for mandatory reporting regulations under AB 32**

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

The undersigned organizations offer this letter as public comment on the proposed mandatory reporting regulations for greenhouse gases (dated 10/19/07). The mandatory reporting regulations are a critical foundation for effective implementation of AB 32 and ultimately for meeting the state's 2020 global warming pollution limit. We commend the California Air Resources Board (CARB) staff for developing the proposed regulations through a transparent and productive public process under significant time constraints this year. We appreciate the opportunity to comment on this proposed regulation and look forward to continuing to work with CARB staff to implement and expand upon the regulations going forward.

In general, our organizations support most of what is contained in the proposed regulation. As described below, we urge you to make one important modification to the proposed regulation prior to adoption at the December 6, 2007 meeting. While there are additional areas we believe could be improved in the proposed regulation going forward, we believe that it represents an excellent starting point. We appreciate the staff's efforts to improve and refine the draft regulations in response to concerns of stakeholders. The draft regulation has been improved by a number of changes, including the clarification of de minimus reporting and allowance for voluntary entity and mobile source reporting.

Our only recommended change to the proposed regulation is to require entities subject to triennial verification to fully comply with the mandatory reporting requirements, including third party verification, in 2010 when reporting their 2009 emissions, rather than in 2011 as proposed. We accept the proposed phase-in period in 2009 as a reasonable accommodation given the significant reporting and verification infrastructure that will need to be developed. However, we are concerned that the proposed regulation would delay the submittal of fully compliant, verified data from all reporters until the end of 2011. Instead, we believe that it is both reasonable and feasible to require full compliance in 2010. We do not believe that this would impose an undue burden on either the affected entities or on the reporting and verification infrastructure. This will enable the state to have a complete set of verified data from all reporters at least a year prior to the start of 2012 enforcement of regulations to reduce emissions.

The following additional comments are focused on our recommendations for future refinements and expansions to the mandatory reporting requirements under AB 32. Many of the issues described below have been raised in comments previously submitted by the undersigned organizations. Each of our organizations continues to support its previous comments and urges CARB to consider and adopt those recommendations in future amendments to the regulation.

As noted in the staff report, the proposed regulation would require reporting from emission sources including electricity generators and providers, oil refineries, cement plants, cogeneration facilities, hydrogen plants, and other industrial sources that emit over 25,000 metric tons of carbon dioxide per year. This encompasses 94% of major statewide stationary source greenhouse gas emissions, and approximately 40% of total statewide emissions. Combined with existing inventory mechanisms for the 40% of statewide emissions from the transportation sector, this proposed regulation will improve the state's information on about 80% of statewide emissions. We believe that this represents an admirable accomplishment for the initial regulation.

However, there are still a number of important sources that would not yet be required to report under the proposed regulations. We recommend that over the coming year CARB develop and adopt regulations that would require reporting of emissions from at least the following sources:

- Natural gas providers' emissions associated with the natural gas used by customers that are not covered by the 25,000 ton per year stationary source reporting requirement;
- Landfills;
- Fugitive emissions from oil and gas exploration, transmission, and distribution;
- Large stationary sources below the 25,000 ton per year threshold;
- Mobile source emissions from large fleets; and
- Clarify whether existing reporting mechanisms for the transportation sector are adequate or whether those should be expanded. Since the Low Carbon Fuel Standard requires full lifecycle accounting, CARB should ensure that reporting mechanisms are sufficient to support implementation of the standard.

The staff report also notes that CARB staff plans to develop proposed expansions to the mandatory reporting regulations for the Board's consideration going forward. We generally concur with the staff's recommendations and believe that there are a number of areas where the proposed regulations should be further refined and improved to ensure that emissions reports are complete, reliable, and provide adequate information to support progress toward the statewide emissions limit. In particular, we recommend that:

- Efficiency metrics should be developed wherever feasible.
- Annual third party verification should be considered for all emissions reports.

In conclusion, we appreciate CARB's time and hard work throughout the year in



developing the proposed regulations. Thank you for considering our comments and suggestions to further improve the proposed mandatory emissions reporting regulation, and we urge you to adopt the proposed regulations on December 6.

Sincerely,

Peter Miller & Devra Wang  
Natural Resources Defense Council

Bonnie Holmes-Gen  
American Lung Association of California

Tim O'Connor  
Environmental Defense

Bill Magavern  
Sierra Club-California

Gary Patton  
Planning and Conservation League

Tim Carmichael  
Coalition for Clean Air

Tam Hunt  
Community Environmental Council

John Shears  
Center for Energy Efficiency and  
Renewable Technologies

Mary Luevano  
Global Green

Patricia Monahan  
Union of Concerned Scientists

cc: Linda Adams, Secretary, California Environmental Protection Agency  
Eileen Tutt, Deputy Secretary External Affairs, California Environmental Protection Agency  
James Goldstene, Executive Officer, CARB  
Chuck Shulock, Program Manager for GHG Reduction, CARB  
Richard Bode, Chief, Emissions Inventory Branch, CARB

Mary D. Nichols  
Chairman  
California Air Resources Board  
1001 "I" Street  
Sacramento, CA 95812

October 24, 2007

**Re: Support for Expanded List of Early Action Measures**

Dear Chairman Nichols,

We commend the California Air Resources Board (ARB) staff for its proposal to expand the list of early action measures under the Global Warming Solutions Act (AB 32.) These measures will be essential to begin emission reductions as quickly as possible, while the state works toward developing the broader 2009 scoping plan to meet the 2020 emission limit.

We strongly support the measures included on the proposed expanded early action measure list. In particular, we commend ARB staff for including measures that will reduce global warming pollution, cut toxics pollution and improve air quality at the same time. For example, we strongly support the Green Ports measure (that will require container ships at ports to turn off their dirty engines) and the SmartWay Truck measure (that will reduce fuel used by trucks); these measures will reduce global warming pollution, smog-forming pollutants and toxic diesel soot and result in immediate public health benefits. We also strongly support the Cement Energy Efficiency measure on the "Group 2" list. This measure will result in less global warming pollution as well as lower emissions of toxic mercury.

We were very pleased to see the diesel anti-idling enforcement measure included, and firmly agree with staff's conclusion that enhanced enforcement is needed to assure a high level of compliance with existing law. We also strongly support the inclusion of the forest protocol measure as a first step for reducing emissions from the forest sector on private lands, and believing that it will be strengthened with time and implementation, support its adoption at the October board hearing. Additionally, we are encouraged to see the focus on high global warming potential sources, including the measure to undertake collaborative research to better understand how the state can reduce greenhouse gas emissions from nitrogen land application.

We commend CARB staff on the detailed analysis of each of the recommended measures presented in the Appendices of the draft report, and appreciate the hard work that has gone into this effort to date. We look forward to continuing to work with you to cut global warming pollution and meet or exceed AB 32's emissions limit.

Sincerely,

Bonnie Holmes-Gen  
American Lung Association of California

Scott Smithline  
Californians Against Waste

V. John White  
Center for Energy Efficiency and Renewable Technologies

Tam Hunt  
Community Environmental Council

Jason Barbose  
Environment California

Karen Douglas  
Environmental Defense

Danielle Fugere  
Friends of the Earth

Devra Wang  
Natural Resources Defense Council

Michelle Passero  
Pacific Forest Trust

Bill Magavern  
Sierra Club-California

Louis Blumberg  
The Nature Conservancy

Rachel Dinno  
Trust for Public Land

Don Anair  
Union of Concerned Scientists

cc: Sec. Linda Adams  
ARB Board Members  
Tom Cackette, ARB  
Chuck Shulock, ARB  
Deputy Sec. Eileen Tutt