ENVIRONMENTAL DEFENSE FUND
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August 11, 2008

Mary D. Nichols, Chairman
California Air Resources Board
1001 I Street
Sacramento, CA 95812
(916) 445-5025 (Fax)

RE: Draft Scoping Plan Comments – Green Buildings

Dear Chairman Nichols,

Environmental Defense Fund (EDF) applauds the California Air Resources Board (CARB) on the release of the *Climate Change Draft Scoping Plan: A Framework for Change*. The draft Scoping Plan represents an important milestone in California's implementation of the landmark Global Warming Solutions Act of 2006 (AB 32), the first state-level cap on the greenhouse gas pollution that causes global warming.

EDF respectfully submits the following comments in response to the draft Scoping Plan, and looks forward to collaborating with CARB and other stakeholders in the coming months as further materials, including the evaluation supplements, are made available.

Sincerely,

Derek Walker
Director, California Climate Initiative
Environmental Defense Fund

Green Buildings and Energy Efficiency Sector

California has led the country in promoting energy efficiency in buildings. The state's efforts have allowed per-capita energy use to remain stable and lowered energy costs for consumers. Despite this success, the draft Scoping Plan recognizes building energy use from electricity, natural gas, and water constituted one-quarter of the state's greenhouse gas emissions in 2004. The Scoping Plan Appendices state that meeting California's aggressive climate change goals will require that new buildings be built as energy efficient as possible and with the least environmental footprint.

To meet this challenge, the Scoping Plan Appendices discuss strong potential measures to reduce GHGs from new and existing buildings, but not all of these measures appear to be recommended for adoption. To ensure that "new buildings be built as energy efficient as possible and with the least environmental footprint," measures to both maximize the energy efficiency of new buildings and retrofit existing buildings need to be included in the final Scoping Plan. These measures should include plans to address the energy and resource efficiency of existing buildings through incentives and other measures proposed in the Scoping Plan Appendices. CARB should commit to working with the CEC to develop new building standards that mandate net-zero energy efficiency and reflect the transportation energy use that results from the location of the building; the GHG reductions from these measures should be counted in the scoping plan towards meeting AB 32 goals. Funding mechanisms, such as those discussed in the Scoping Plan Appendices, should be explored and adopted to support these policies.

"Climate for Communities" is an innovative funding mechanism conceived by San Francisco Community Power and EDF that was not discussed in the Scoping Plan Appendices but should be included in the final Scoping Plan. This mechanism, described in an attached document (see Appendix C), enables small businesses and low-income households to aggregate emissions reductions for the purposes of carbon market crediting. This tool can achieve reductions and provide economic benefits to low-income households and small businesses by providing ongoing incentives for reductions in these sectors. In this way, populations who have previously suffered from pollution and who are at greatest risk of harm from global warming would be able to benefit environmentally and economically. Several cap-and-trade design approaches might be used to avoid double counting of reductions with the utility sector's compliance obligation, such as allowance "carve-outs" or a bidding system whereby third party community aggregators make commitments to achieve a portion of an electric utility's compliance obligation at a fixed fee paid to the aggregator by the regulated entity.

Additionally, Environmental Defense Fund and other stakeholders have expressed concern that the green buildings standards recently released by the Buildings Standards Commission may fail to establish strong expectations for environmental performance and may create confusion over how the new standards will interact with existing energy efficiency codes and local standards. As stated in the Scoping Plan Appendices, the requirements contained within the green buildings code need to be well-aligned and supportive of existing green building standards to achieve any meaningful improvement beyond those already offered by the energy standards. To address

potential shortcomings, CARB should work with the Buildings Standards Commission to ensure that their green buildings standards maximize greenhouse gas reduction opportunities and complement the CEC's standards for energy efficiency.

Appendix C

Climate for Community:
A Proposal to Allow Small, Dispersed Emission Sources to Participate in Assembly Bill (AB) 32 Carbon Cap and Trade Markets

Aggregation of Households' and Small Businesses' Emissions Would Provide Economic Benefits to Hard-Pressed Communities and Retire Hard-to-Reach Greenhouse Gases

Developed by Environmental Defense Fund (EDF) and San Francisco Community Power (SF Power)[1]

AB 32 requires that the framework adopted to reduce greenhouse gas emissions not disproportionately impact low-income communities; and, where possible, produce overall societal benefits, including reductions in other air pollutants, as well as economic and public health benefits. One powerful approach to meeting these objectives – and to gaining access to a large, hard-to-reach emissions pool – would be to enable small, dispersed, emission reductions by low-income households and small businesses to be aggregated together and placed on available carbon markets. By so doing a dynamic, ongoing incentive would be created to reduce emissions in vulnerable communities, with concomitant economic and equity benefits.

This approach would require that communities be invested with ownership rights of the emissions that occur in their neighborhoods. That is, homes and businesses located in areas that have historically been subjected to high polluting air and greenhouse gas emissions would be given the opportunity to reduce and sell their emissions. In this way populations who have previously suffered from pollution and who are at greatest risk of harm from global warming would be able to benefit economically and environmentally from reducing those harms, while achieving significant greenhouse gas emission reductions.

How this cap and trade element would be constructed would depend on the AB 32 framework that's ultimately adopted. For example, a "first-seller" allocation would allow for direct transactions between a community and an electric power wholesaler; a "load-based" allocation would require transactions between the community and the load-serving entity (LSE) to whom the emission responsibility has been assigned. Auctioning versus free allocation of allowances may have different implications related to what entity owns the rights to emission reductions. These issues will be addressed as the proposed market design solidifies; and a pilot project is being implemented by SF Power to demonstrate this concept. [2]

While this initiative focuses on homes and small businesses in low-income neighborhoods, community-based reductions may be achieved in the transportation, electric utility, and land use sectors as well and in most any neighborhood. The figure below shows that these four categories were responsible for nearly 60 percent of California's estimated 2007 greenhouse gas emissions.

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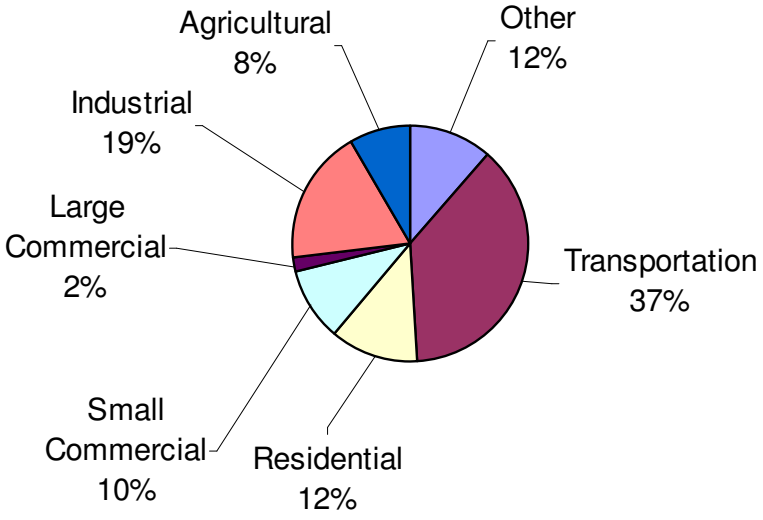
[1] Contacts: Jamie Fine, EDF, jfine@ed.org, 916-492-4698, www.environmentaldefense.org; Steven Moss, SF Power, steven@moss.net, 415-643-9578, www.sfpower.org.

[2] See "Community for Climate: Carbon Emissions Crediting for Environmental Justice," by James Fine and Steven Moss [publication date and access?].



The "Climate for Community" approach could be implemented by including the following elements in the AB 32 emissions reduction framework:

(1) *Create Ongoing Incentives to Reduce Emissions*: A first step would be to create a market-based incentive to achieve reductions in low-income communities that are currently subjected to disproportionate emissions levels – termed "environmental justice" communities - or that may experience additional emissions burden as a result of emissions trading once a carbon market is established for California. This incentive could be created in several ways, including

(a) Emissions purchased from environmental justice communities[3] could fetch a higher value than standard emission reduction credits (e.g., preferred emission reductions); or
(b) Emitters located in environmental justice communities could be required to purchase a significant portion of their offsets from within communities that bear extra emissions burden as a result of local sources purchasing credits from elsewhere and continuing to emit at higher levels than if reductions occurred equally across all sources. In many cases, these credits will be the same as those defined by (1a) and (1c); or
(c) A portion of auction or tax revenues could be set aside and dedicated to being invested in emission reductions obtained from low-income households and small businesses.

[3] Program design needs to include a clear definition of the communities eligible for preferred emissions reductions. In this vein the California Air Resources Board (ARB) has engaged Manual Pastor, University of Southern California, and Jim Sadd, CalPoly, to develop a Cumulative Impact Screening Tool, which could form the basis to identify EJ communities. Similarly, the Bay Area Air Quality Management District's Communities at Risk Evaluation analysis, which estimates air toxic emissions on a two by two kilometer grid for the San Francisco Bay Area, along with other studies, could provide methodological guidance for characterizing these areas. And communities located nearby the 700 major green house gas point sources in California could be assumed to be EJ communities.

(2) *Establish a Clearinghouse to Facilitate Emission Reduction Measurement Development*. A clearinghouse for evaluating emission reduction measures and packages (see below) of emission reducing activities oriented towards households and small businesses would be established or integrated into an existing organization.[4] The clearinghouse would provide research resources, advice and protocols on verifying community-based reductions, specifically those oriented towards low-income households and small businesses. The clearinghouse would also facilitate program transparency and outreach to EJ communities by sponsoring public meetings, media communication, and technical support, and would be responsible for reviewing and approving third party verifiers and verification methods.

(3) *Package Reductions to Minimize Costs*: A combination of new technologies and behavioral modifications will be needed to achieve significant emission reductions in households and small business. Providing packages – education- and institutionally-based interventions and a full suite of appropriate technologies – will minimize programmatic costs and maximize cost-effectiveness. Possible packages, which could be developed by public or private sector entities, might include plug load management programs, in which schools or buildings reduce electricity consumption associated with devices that are not in active use;[5] transportation management programs, in which individuals or businesses tangibly reduce their vehicle use; and early adoption of emission-reducing technology.

Packages could include:

- Technology measures (e.g., refrigerator or streetlight replacement); or
- Technology measures with a behavioral component (e.g., automobile or general lighting replacement; land use changes); or
- Behavior-only measures (e.g., provision of localized or segmented transit services; reducing electricity use during peak periods through demand response programs).

The emission value of these packages would be determined by whether or not they are implemented in predefined communities; and the quality of the associated measurement and verification. For example, technology measures, or measures for which comprehensive outcome data can be provided, would receive full credit, with discounted credit provided for less reliable measurement and validation (e.g., statistical sampling). Estimates for measures that rely on behavioral changes would be based on existing data or supporting analyses created as part of package development. Actual outcomes could then be validated using parameters drawn from locally observable data (e.g., gasoline sales reported to the Board of Equalization for local service stations; ridership on specific transit routes; local circuit loads).

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[4] Possible models for this include the California Energy Commission's Public Interest Energy Research building program; see http://www.energy.ca.gov/pier/buildings/index.html.; and the Statewide Emerging Technology Coordinating Council; see http://www.etcc-ca.com. This Council coordinates among its members to facilitate the assessment of promising energy efficient emerging technologies.

[5] This concept may be similar to "White Tags," or "White Certificates," in which bundles of electricity use reductions are sold.

(4) *Aggregate Community-Scale Reductions*: Allow aggregators to propose packages to the clearinghouse, and implement packages.

(5) *Secure Ownership*: Ensure that ownership of the resulting emission reductions would devolve to the entity paying to obtain them. If multiple parties pay for package implementation, ownership would be allocated according to a mutually agreed upon shares. Defining ownership rights as distinct from other instruments or measures being implemented by other parties could be assigned using several methods, including "carve out" for community-based reductions within the utility sector cap, and/or by implementing offsets rules and requirements.