



To: CARB Staff
From: Nick Zigelbaum, NRDC (nzigelbaum@nrdc.org)
Re: Comments on Green Buildings in Appendices to Draft Scoping Plan
Date: August 7, 2008
Via: Electronic submission at <http://www.arb.ca.gov/cc/scopingplan/spcomment.htm>

NRDC commends CARB for including a detailed and thoughtful section on green buildings in the Appendices to the Draft Scoping Plan. We share in the belief that “green buildings are a vital tool for meeting the objectives of AB 32.” (p. C-89) Overall we are supportive of CARB’s approach and of the individual measures and we praise the aggressive path CARB is forging to increase the environmental performance of buildings throughout the state. We offer the following comments on specific green building measures suggested in the Appendices. Please also refer to our comments on Electricity and Natural Gas, submitted concurrently.

A. *Measure: Greening New and Existing State Buildings*

We agree with CARB that the State should continue to lead by example and ratchet up the requirement for state buildings to meet LEED Gold criteria. Also, requiring existing state buildings to meet LEED-EB Silver is a very important step considering the large amount of GHG reductions available in existing State buildings. While NRDC supports the concept of zero-net energy buildings, we would caution against inflexible mandates requiring such a goal for all buildings of a certain type, including State owned. Such mandates could produce unintended consequences resulting in potentially adverse environmental outcomes.

For example, some buildings, such as urban infill projects shaded from the sun and wind, may not be able to achieve zero-net energy without costly improvements. In addition, other buildings may be able to achieve better than zero-net status by producing more energy than consumed, in which case a zero-net energy mandate would not be aggressive enough. Instead of zero-net mandates, we would suggest supporting tougher

criteria by which the Building Standards Commission and Energy Commission develop the green building code and energy code, respectively.

B. Measure: Greening Public Schools

Conceptually we support CARB's suggestions for increasing energy efficiency of public schools. However, consistent with our comment on State Buildings, we would again caution against inflexible mandates for zero-net energy buildings for public schools.

C. Measure: Greening New Residential and Commercial Construction

NRDC fully supports CARB's suggestion for California to work with local jurisdictions to exceed the green building code. We agree that although the green building code will set a solid floor for all jurisdictions, new buildings need to be "as energy efficient as possible," meaning that achieving green building status above code will be necessary. (p. C-96) We further support the suggestion that the "requirements contained within the new CGBSC [California Green Building Standards Code] would 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." (p. C-96) The new version of the CGBSC will need to be more stringent and align itself with programs like LEED and Green Point Rated to take full advantage of the reductions available through green building.

CARB suggests that some buildings will exceed the CGBSC standard by a certain percentage, (p. C-97). We would like CARB to clarify what that would mean. Would that take the form of achieving green buildings levels set forth by third-party rating systems? Would this percentage apply to energy only? To energy and water, weighted by the greenhouse consequences of water use? To energy and water and construction materials/re-use, requiring some quantification of the GHG consequences of the latter?

This distinction is important: it is possible to meet LEED Platinum without saving energy beyond the minimum LEED requirement. While on average most Platinum buildings do achieve energy and GHG savings, this result is not currently assured. In fact, one Platinum building surveyed was in the worst 5 percentile of all buildings on energy use per square foot (Cathy Turner and Mark Frankel, *Energy Performance of LEED for*

New Construction Buildings, New Buildings Institute, 2008). We would also like to see what carbon reductions are achievable by *only* complying with the CGBSC in its current form and what changes would be necessary to reach the reductions desired. Echoing our comment for State buildings, it may be advantageous to strengthen the criteria for developing the green building code and thus achieve wider GHG reductions across the state in lieu of local action.

D. Measure: Greening Existing Homes and Commercial Buildings

NRDC fully supports CARB's intent to increase the energy and resource efficiency of existing buildings. We suggest that the "environmental performance rating system" take account of all potentially GHG emitting elements of green building in addition to water and energy, including: site selection and development and environmentally preferable products and materials. An energy performance rating would be an important first-step to begin establishing market transparency in existing buildings and support the development of an environmental performance rating. In concert with our comments on the Electricity and Natural Gas sector, NRDC strongly recommends that CARB work with the CEC to establish time-of-sale information disclosure requirements, followed by time-of-sale efficiency requirements.

We would like clarification of what exactly the "goals" are under this measure. What level of environmental performance does CARB assume some, or all, of the building stock would meet to achieve these reductions?