Comment 1 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Robert
Last Name: Knight
Email Address: rknight@bki.com
Affiliation: Bevilacqua-Knight, Inc. (BKi)

Subject: Green Buildings and Energy Efficiency
Comment:

The aspect of "green building" that is of greatest relevance to AB32's goals is the reliably long-term minimization of energy use in the building. Energy use in California buildings is about evenly divided between residential and commercial buildings, with each around 20% of the state's total. Reducing that consumption is a crucial aspect of an effective AB32 strategy.

Particularly in the residential sector, traditional construction, remodeling, and repairs tend to be undertaken without adequate consideration of the building's design and operation as an integrated system. The design or modification of one component, such as the insulation, can have unanticipated effects on other components, such as the optimal sizing of the space conditioning equipment...with long-term consequences for energy efficiency and consumption in addition to comfort, health, safety, and the building's operating costs and value.

We therefore suggest that AB32 should support the widespread use of "whole-building" approaches to assure maximum long-term energy savings in construction, remodeling, and major repairs. This recommendation is included in the recent California Energy Efficiency Strategic Plan. This approach goes well beyond the latest version of the state's Title 24 energy code and can deliver far deeper reliable energy savings per home than any conventional approach. It is embodied in the federal "Home Performance with Energy Star" program sponsored by DOE and EPA but is still small both nationally and in California. In this state, initial implementation programs are delivered primarily through the California Building Performance Contractors Association (an Energy Star Partner) and are being sponsored by the major electric and gas utilities.

In coming years, greater emphasis on such innovative efficiency program strategies will be needed but are currently hampered by the CPUC's narrow interpretation of cost-effectiveness. Greater recognition of the full range of benefits will be essential.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-06-26 16:12:35

No Duplicates.

Comment 2 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Peggy
Last Name: White
Email Address: pwhite@countyofglenn.net
Affiliation:

Subject: Green buildings section
Comment:

```
There was no reference to use of wind turbines for energy uses.
The use of wind turbines, instead of roof solar equipment, is
aviable alternative.  Normally, wind apparatuses are not installed
on a roof, thereby lessening the need for additional support
structure of the roof.  Wind turbines cost recovery is a
significantly shorter time period than solar panels.
```

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-02 14:43:08

No Duplicates.

Comment 3 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: James
Last Name: Miller
Email Address: jrusmiller@yahoo.com
Affiliation:

Subject: Million Solar Roofs
Comment:

To make this more attractive to home owners, the PUC needs to mandate that everyone residential or commercial can have TOU time of use, metering of their electricity. Solar electricity is generated at the time of day when electric prices are highest because demand is highest. Individuals should be allowed to capture this value as can large companies. The PUC rules should also require utilities to conduct net metering which the utility must pay for electricity generated by a homeowner above home use and is sent back into the grid.

Similarly, the PUC should allow plug in hybrid cars to discharge their battery to the grid through a homeowner meter for such metering. The homeowner would then be incentivized to reduce peak power for the utility.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-07 17:06:41

No Duplicates.

Comment 4 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Alexander
Last Name: Clayton
Email Address: AlexRClayton@gmail.com
Affiliation:

Subject: Solar and Efficiency
Comment:

It is estimated that by 2030, half of all buildings in the US will have been built after the year 2000, so there is a challenge to ensure sustainable principles are incorporated into their designs, as well as to existing buildings.

The Million Solar Roofs plan is a very good start towards greening of buildings, but Coop America research indicates that the solar contribution can realistically reach 10 percent of total U.S. electricity generation by 2025 by deploying a combination of solar photovoltaics (PV) and concentrating solar power (CSP). Japan is looking to go to 30% of households w/solar installed by 2030.

A comprehensive plan needs to be put into place to inform and encourage (through effective communications and financially) individuals and businesses to install solar collectors on roofs and even the sides of buildings, as well as other energy efficiency measures (e.g., triple-paned, argon-filled windows and increasing insulation with recycled materials). This needs to include a state law trumping heavy-handed HOA restrictions that limit what homeowners can do with regard to improving energy efficiency.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-17 18:00:32

No Duplicates.

Comment 5 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Nick
Last Name: Zigelbaum@nrdc.org
Email Address: nzigelbaum@nrdc.org
Affiliation: NRDC

Subject: NRDC Comments on Green Buildings
Comment:

```
We respectfully submit these comments on Green Buildings in the
Draft Scoping Plan.
```

Attachment: www.arb.ca.gov/lists/sp-greenbuild-ws/5-nrdc_comments_on_green_buildings_in_draft_scoping_plan.pdf

Original File Name: NRDC Comments on Green Buildings in Draft Scoping Plan.pdf

Date and Time Comment Was Submitted: 2008-07-21 17:18:05

No Duplicates.

Comment 6 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Serena
Last Name: Pancoast
Email Address: serenacattiva@yahoo.com
Affiliation: Sierra Club

Subject: data center technology and energy
Comment:

```
Support more energy effecient data centers for greener buildings by
regulating their energy usage and promoting energy-reducing
technology such as multi-core processing chips and smart cooling
systems.  Give initiatives for Sillicon Valley to lead in this
green technology.
```

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-29 08:30:05

No Duplicates.

Comment 7 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Chris
Last Name: Cone
Email Address: cone@sonic.net
Affiliation:

Subject: Building Performance Testing
Comment:

```
I am glad to see that environmental performance testing of new and
existing buildings is part of the Draft Scoping Plan (page 37, C-1
Other Measures Under Evaluation, Electricity and
Commercial/Residential Sector. Including building performance and
test-out criteria are the only way to ensure greenhouse gas
reduction goals have been realized. The adoption of a building
performance rating system means building owners/purchasers will be
able to assess the operating costs of a particular property and
account for that in the property value; this is a key step forward
toward a low carbon economy.
```

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-30 10:11:11

No Duplicates.

Comment 8 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Brent
Last Name: Eidson
Email Address: beidson@sandiego.gov
Affiliation: City of San Diego

Subject: Need for further information
Comment:

```
1) More information should be included regarding the proposed Green
Building Standards Code that the draft Scoping Plan indicates will
institute minimum environmental performance standards for all
buildings in 2010.  Will this new code apply to private
development projects?  How does it differ/compare with the
different LEED standards?
2) p. 22 - Green Buildings that comply with Title 24 updates are
already greatly increasing the energy efficiency of new buildings.
The Scoping Plan is silent on how guidance/ mandates to retrofit
older buildings that were not subject to Title 24, and which are
typically the largest stock of buildings in communities.
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Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-30 11:26:37

No Duplicates.

Comment 9 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Gordon
Last Name: Mann
Email Address: gordon@sactree.com
Affiliation:

Subject: urban forestry and green building
Comment:

The use of trees to shade buildings and reduce energy consumption is seriously overlooked in the LEED certifications. The space for planting trees in the best locations to shade buildings, improve air quality, and provide a natural element to the building is missing. The orientation of streets and buildings in new developments could be shifted to locate the street and common trees in the most advantageous shade locations.

The use of solar power on individual homes conflicts with the benefit of shading a home with trees. If solar is not the sole power source of a home, when a power failure occurs, the solar power is not viable, reducing the benefit of having solar energy on individual homes. Instead, solar farms or surrogate solar panels should be placed on the top floor of parking structures, large commercial building roofs, and public buildings. The panels can be invested in by individual homeowners or businesses who will receive the same benefits of energy investment in solar on their own building plus the shade benefits of trees reducing the need for solar energy.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-30 15:05:48

No Duplicates.

Comment 10 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Anna
Last Name: McPherson
Email Address: amcpherson@sandiego.gov
Affiliation: City of San Diego - Development Services

Subject: Green Buildings
Comment:

```
1) More information should be included regarding the proposed Green
Building Standards Code that the draft Scoping Plan indicates will
institute minimum environmental performance standards for all
buildings in 2010.  Will this new code apply to private
development projects?  How does it differ/compare with the
different LEED standards?
2) p. 22 - Green Buildings that comply with Title 24 updates are
already greatly increasing the energy efficiency of new buildings.
The Scoping Plan is silent on how guidance/ mandates to retrofit
older buildings that were not subject to Title 24, and which are
typically the largest stock of buildings in communities.
```

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-30 16:23:15

No Duplicates.

Comment 11 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Karen
Last Name: Smith
Email Address: ksmith@stopwaste.org
Affiliation: StopWaste.org

Subject: Green Building
Comment:

While it’s highly commendable that the Building Standards Commission recently approved the first set of statewide Green Building standards, contrary to the statement on page 23, the adopted standard will require 16 mandatory measures for the residential sector only by year 2011. The standards provide no more than voluntary measures for all other occupancies.

As stated in the intent section of the Green Building code, these standards are to be viewed as minimal Green Building Standards and that local government entities retain their discretion to exceed the standards established by this code. We recommend that the scoping plan include language to explicitly encourage local jurisdictions to implement green building standards, guidelines and rating systems that are more stringent than the state code and that the state address any obstacles for local jurisdictions to do so. We also recommend that the “green building standards, guidelines and rating systems” adopted by local jurisdictions be defined as a publicly available system, developed by a third-party, and includes a mechanism for evaluating and determining whether, and to what extent, a structure qualifies as a green building. This will assure a level of consistency and quality assurance throughout the state. This recommendation could be included in the Local Government Actions section of the report.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-30 16:51:27

No Duplicates.

Comment 12 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: David
Last Name: Assmann
Email Address: David.Assmann@sfgov.org
Affiliation: City and County of San Francisco

Subject: City of San Francisco Comments on Green Building
Comment:

In order to be effective, ARB must make explicit recommendations to utilize green building opportunities toward achievement of AB32 requirements. ARB's recommendations with relation to green building must be clear, and convey motive intent. The green building section has many ideas prefaced by "Group X could take Action Y." ARB has been tasked with recommending - and to a large degree implementing - solutions to the unprecedented challenge of reducing California's greenhouse gas emissions.

ARB is correct that the majority of individual measures capable of yielding significant greenhouse gas emissions reductions in the built environment are largely addressed in other issue areas within the Scoping Plan, and should not be double-counted under the heading of Green Building. However, the vast scope necessary to realize AB32 goals is very complex, and potentially unwieldy. Existing and upcoming Green Building ratings and metrics are essential tools to taking an integrated, comprehensive approach at the project level, and to convey the scope of opportunities for greenhouse gas reduction and sustainability. Accessible, intuitively understandable benchmarks, such as the Energy Star label for buildings and increasing levels of LEED certification, are tools that help spur the public, practitioners, and investors to incorporate many sustainability strategies into a given project. While the California Green Building Code and ongoing revisions to Title 24 Part 6 energy standards will be the primary tools for mandatory statewide increases in environmental performance of buildings, any AB32 related public outreach should encourage – and incentivize – green building commitments above and beyond any mandatory standards.

While ARB has made substantive proposals for greenhouse gas emissions reduction through alternate fuels and supporting the efforts of CPUC and CEC to minimize emissions from the operation of buildings, the best opportunity to influence the future emissions associated with a building occur in land use planning and entitlement. Street layout, zoning, and other planning considerations heavily influence the vehicle miles travelled by future residents, long term needs to commute to and from a given site, and the opportunity for effective solar orientation of a building. With the expectation of 44 million Californians by 2020, ARB and the state must collaborate with local governments – not supercede them – to co-locate housing, essential services, and jobs in new development and redevelopment, to increase the density of the state's built environment in ways that will structurally reduce the transportation needs of the average Californian. San

Francisco, already one of the most dense cities in the western United States, recognizes that we need to go much further, and is participating in five separate major development projects under the USGBC's LEED for Neighborhood Developments Pilot program, which provides a benchmark and opportunity for recognition in the solution to not only greenhouse gas challenges, but opportunities to increase quality of life by reducing time wasted travelling for basic neighborhood services. ARB must devote significant resources to direct support of Smart Growth policies among California local governments, including provision of consulting dollars, and should explicitly recommend increased investment in transit in combination with increased density of existing California communities.

Additional significant opportunities not yet addressed in the draft Scoping Plan include:

• Overcome the distinction between capital and operating expenses in public facilities by establishing and applying a life cycle costing methodology for state facilities. State adoption of such a methodology would allow local jurisdictions to employ it as well.

• California should provide a statewide bond pool to minimize financing costs for cities establishing energy financing districts to finance renewable energy systems and energy efficiency improvements on property tax bills. AB811 now allows general law cities to establish such districts on the "Berkeley Model," which had previously been limited to charter cities.

• Work with CEC so that updates to Title 24 Part 6 energy efficiency standards are targeted at absolute greenhouse gas minimization. The Base Case in Title 24 energy efficiency compliance calculations generally utilizes the same systems and building orientation as the proposed design. This can inadvertently penalize some significant design opportunities, including designing for effective natural ventilation. Removing an HVAC system entirely from a proposed design also removes the HVAC load from the base case. To cost-effectively move design toward zero-net energy, it will be necessary to instead propose an energy budget based on the building size and use type, and give credit for savings in comparison to a baseline energy budget. The building energy budget should be based on percentage reductions from standard practice, such as the Energy Star Target Finder or its source data, the US Department of Energy's Commercial Buildings Energy Consumption Survey (CBECS.)

Last, in order for the ambitious complementary statewide efforts underway across multiple California state agencies to be successful, agencies must increase coordination. One helpful mechanism would be development of a statement and intent of shared goals – and agreement to defer across jurisdictions – in areas related to energy efficiency and green buildings. While it's clear the California Public Utilities Commission, Energy Commission, Building Standards Commission, and Air Resources Board are all obviously aware of one another, it is clear to the outside observer that there is insufficient communication among state agencies to effectively align their goals, powers, and outcomes to realize the state's ambitious goals. ARB should provide state-government-wide benchmarks under AB32, and convene regular public inter-agency workshops and meetings, as well as less formal exchanges, to keep the state on track to achieve the desired economy-wide improvements in resource efficiency.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-30 18:25:15

No Duplicates.

Comment 13 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Linda
Last Name: Villatore
Email Address: villatore@comcast.net
Affiliation:

Subject: Green Roofs
Comment:

```
Montie Zoughet a retired UN Arid Plant Ecologist who designed an
built green roofs overseas, conducted a four month cost benefit
analysis of green roofs for the central valley and found Green
Roofs to be 25% LESS effective than planting trees near the
structure. We were asked to make 5 minute presentation to the
Sacramento Chapter of the USGBC. This is a summary of our
findings.

Problems:

Currently, materials costs are prohibitively high in the US, as
compared to overseas
Green roofs are currently being over designed & over built in the
US for practical, large scale application here.
These Designs are not easily applied to existing construction,
many are heavy.
Green Roofs need and will retain moisture and may damage the
structural integrity of the roof over time.
In a side by side cost benefit analysis, planting large trees near
the house to
shade the roof is more energy efficient by a factor of 25%.
All green roofs require maintenance, a hidden cost.
The US lacks incentives for retrofit-construction to existing
buildings.

Solutions:

Montie selected and tested the proper green roof plants for this
region.
He has an idea for a modular solution, but we lack sufficient
funds to privately underwrite the manufacture, installation and
testing of this concept on a large enough scale.
Montie believes that a low intensity, modified version of a green
roof may be possible by planting selected plants at the corners of
a roof and allowing them to grow across the roof.
```

Attachment: www.arb.ca.gov/lists/sp-greenbuild-ws/13-the_green_roof_consultants_one_sheet3.doc

Original File Name: The Green Roof Consultants One sheet3.doc

Date and Time Comment Was Submitted: 2008-08-01 08:37:19

No Duplicates.

Comment 14 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Carol
Last Name: Misseldine
Email Address: cmisseldine@comcast.net
Affiliation: Green Cities California

Subject: Comments on Green Buildings sector
Comment:

```
Green Cities California (GCC) comments on the Green Buildings
sector of CARB's AB 32 Draft Scoping plan, attached.

Carol Misseldine
Coordinator
```

Attachment: www.arb.ca.gov/lists/sp-greenbuild-ws/14-gcc_green_building_sector_comments.ab_32_draft_scoping_plan.doc

Original File Name: GCC Green Building Sector Comments.AB 32 Draft Scoping Plan.doc

Date and Time Comment Was Submitted: 2008-08-01 15:24:28

No Duplicates.

Comment 15 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Steven
Last Name: Goetz
Email Address: sgoet@cd.cccounty.us
Affiliation: Contra Costa County

Subject: Green Buildings
Comment:

```
The strategies for green building focus solely on the direct impact
of structures on GHG emissions.  There should be some
acknowledgement of their indirect impact on GHG emissions by the
provision of support facilities such as parking and their function
in the community as a destination that generates vehicle trips.
The Green Buildings sector of the Scoping Plan can refer to
specific strategies in the “Land Use and Local Government” and
“State Government” sectors of the Scoping Plan that address these
indirect GHG impacts.
```

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-01 16:22:35

No Duplicates.

Comment 16 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Bruce
Last Name: Ray
Email Address: bruce.ray@jm.com
Affiliation: Johns Manville

Subject: Energy Efficiency and Indoor Air Quality
Comment:

Johns Manville strongly agrees with the proposal in the draft Scoping Plan to use Green Building principles and standards to help achieve the greenhouse gas (GHG) emissions reduction goals in AB-32. Many studies have confirmed that constructing new and retrofitting older buildings to achieve levels of energy efficiency to beyond what is required by current code is a cost effective way to achieve significant GHG emissions reductions in the short term. In fact, the attached article from the March 2007 The McKinsey Quarterly demonstrates that greater levels of insulation installed in existing and new homes and buildings are among the most cost effective ways to fight climate change. (See graph on article page 38, pdf page 4.) Insulation can actually have a net negative cost, i.e., extra insulation may not cost money but instead can save it.

But CARB should be careful to avoid poor indoor air quality as an unintended consequence of increased energy efficiency. The vast majority of older homes do not have continuous mechanical ventilation and instead may depend largely on outside air infiltration as a principal source of fresh air. But retrofitting older homes to achieve a higher level of energy efficiency is all about making them tighter and reducing air infiltration. The same holds true for new homes. The Offerman ventilation study being performed for CARB will note that even new homes with ventilation systems can have an unacceptably low rate of actual air changes per hour. The result can be that indoor air pollutants from building materials, including formaldehyde, may tend to build up to unacceptable levels in an energy efficient home.

This means that great care must be taken to select non-emitting building materials, including insulation, for use in new residential construction and in residential retrofit applications. There is an increasing number of no-added formaldehyde alternative products commercially available today. This includes Johns Manville's full line of Formaldehyde-freeTM fiber glass building insulation.

As part of the AB-32 energy efficiency measures, we urge CARB to maintain its previous guidelines on formaldehyde:

- CARB Indoor Air Quality Guideline: "Formaldehyde in the Home" (Aug. 2004)
http://www.arb.ca.gov/research/indoor/formaldGL08-04.pdf
[recommends formaldehyde-free building materials generally]
- CARB Fact Sheet: "Reducing Your Exposure to Formaldehyde" (Aug.

2004) http://www.arb.ca.gov/research/indoor/formaldfs08-04.pdf
[recommends formaldehyde-free insulation]

Johns Manville, a Berkshire Hathaway company (NYSE: BRK.A, BRK.B), is a leading manufacturer and marketer of premium-quality building and specialty products. In business since 1858, the Denver-based company in 2002 converted its entire line of fiber glass building insulation to a no-added formaldehyde formulation. Johns Manville's fiber glass building insulation plants are the only ones in the industry exempted by US EPA from Clean Air Act hazardous air pollutant regulations. Additional information can be found at www.jmhomeowner.com.

Thank you.

Attachment: www.arb.ca.gov/lists/sp-greenbuild-ws/16-mckinsey_study_-_cost_curve_for_ghg_emission_reductions_-_march_2007.pdf

Original File Name: McKinsey study - cost curve for GHG emission reductions - March 2007.pdf

Date and Time Comment Was Submitted: 2008-08-01 17:28:21

No Duplicates.

Comment 17 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Joyce M
Last Name: Eden
Email Address: comment@sonic.net
Affiliation: West Valley Citizens Air Watch

Subject: Greenhouse Gas Sector 5. Green Buildings
Comment:

GHG 5. Green Buildings
West Valley Citizens Air Watch Comments:

a. Passive solar siting of buildings is most often overlooked. Yet when southern access to the sun is possible, it should be utilized for maximum heat gain in winter, and for shade/cooling in the summer. Easily accomplished with the correctly angled window overhang. A small greenhouse can also be incorporated into the initial building with this siting. Already existing buildings with southern light access and fortunate window siting can also be retrofitted with awnings.

b. Concrete, which is produced from Cement, contains a huge amount of embodied energy from the production of the cement and is the result of a process which creates copious amounts of CO2 as well as toxic air contaminants such as mercury, dioxin and small particulates. Therefore it is not a green material and should not be awarded any LEED points whether or not it is made from local materials or contains “recycled materials”. (While the use of fly ash in cement might be considered a recycled material, it is highly toxic as it concentrates heavy metals and other toxins. In addition it needs to be shipped into California. There are other options (see WVCAW comments in GHG Section 6. Industry, h. Solutions and Alternatives.)

However, we support recycling of used concrete.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-04 12:00:41

No Duplicates.

Comment 18 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Elizabeth
Last Name: Gavric
Email Address: elizabethg@car.org
Affiliation: California Association of REALTORS

Subject: ARB Draft Scoping Plan - C.A.R. Comments
Comment:

```
Please see attached document for comments.
Thank you,
Elizabeth Gavric
Legislative Advocate
California Association of REALTORS
```

Attachment:

Original File Name: ARB Draft Scoping Plan - CAR Comments.pdf

Date and Time Comment Was Submitted: 2008-08-04 17:24:00

No Duplicates.

Comment 19 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Elizabeth
Last Name: Gavric
Email Address: elizabethg@car.org
Affiliation: California Association of REALTORS

Subject: ARB Draft Scoping Plan - C.A.R. Comments
Comment:

```
Please see attached document for comments.
Thank you,
Elizabeth Gavric
Legislative Advocate
California Association of REALTORS
```

Attachment: www.arb.ca.gov/lists/sp-greenbuild-ws/20-arb_draft_scoping_plan_-_car_comments.pdf

Original File Name: ARB Draft Scoping Plan - CAR Comments.pdf

Date and Time Comment Was Submitted: 2008-08-04 17:26:56

No Duplicates.

Comment 20 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: John
Last Name: Walser
Email Address: john@usgbc-ncc.org
Affiliation: USGBC-Northern California Chapter

Subject: Green Buildings
Comment:

Appendic C, Section 6 of the Climate Change Draft Scoping Plan refers to LEED rating systems. It is important to note that the existing LEED Rating Systems are undergoing a continuous improvement process that will include a reorganization of the rating systems and several key advancements. The new Rating Systems, called LEED 2009 (formerly known as LEED V3), consists of prerequisite and credit alignment and harmonization, transparent environmental and human impact credit weighting, regionalization and a predictable development cycle. At present, LEED 2009 is available for public comment and not final. Therefore, the Draft Scoping Plan should acknowledge that reduction strategies should be based upon the LEED 2009 Rating Systems (e.g., LEED for New Construction, LEED for Existing Buildings, LEED for Commercial Interiors, LEED for Core and Shell, LEED for Schools), or the most current version of LEED.

Section 6 of Appendix C should reference that the California Building Standards Commission adopted the initial version of the green building standards code on July 17, 2008. The initial version of the code is voluntary and is scheduled to become effective on July 1, 2009. The mandatory verion of the code is under development as part of the 2010 code development cycle, and will become effective in 2011 and not 2010 as stated in Section 6 of Appendix C. At this time, it is not clear whether all, or only a subset of, the measures in the voluntary version of the code will in fact become mandatory in the next version. GHG reduction strategies and the assumptions they are based upon should reflect this uncertainty.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-06 16:08:59

No Duplicates.

Comment 21 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Nick
Last Name: Zigelbaum
Email Address: nzigelbaum@nrdc.org
Affiliation: NRDC

Subject: NRDC Comments on Green Buildings in Appendices
Comment:

```
NRDC respectfully submits these comments on Green Buildings in the
Appendices to the Draft Scoping Plan.
```

Attachment: www.arb.ca.gov/lists/sp-greenbuild-ws/22-nrdc_comments_on_green_buildings_in_appendices_to_draft_scoping_plan.pdf

Original File Name: NRDC Comments on Green Buildings in Appendices to Draft Scoping Plan.pdf

Date and Time Comment Was Submitted: 2008-08-07 14:45:29

No Duplicates.

Comment 22 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Heather
Last Name: Larson
Email Address: hlarson@stopwaste.org
Affiliation: Green Building Program Manager

Subject: Green Building and Energy Efficiency measures
Comment:

1) We support that in the appendices the plan identifies green building as a measure under consideration to achieve emissions reductions across sectors. We would like to see clarification around the assumption that the CBSC adopted green building code will be mandatory by 2011, beyond the 17 residential measures currently identified in the standards by HCD. We don't see how other measures will become mandatory, particularly some of the prescriptive measures, especially since the green building code has been adopted for publication. We are not clear on the proposed public process for these measures to be included as mandatory provisions in the 2010 edition of the California Green Building Standards Code.

2) As the plan states, even if the green building code is mandatory, the state will need to set targets for buildings to go far beyond the green building code in order to reach the reduction goals. The methods for doing so are relatively well defined for government facilities and schools but are less defined for the commercial and residential sectors. We recommend the state promote commercial and residential green building programs (Utility and third party) that contain performance standards for energy efficiency to remedy this discrepancy, particularly since they provide a solution to the legal barriers of prescriptively requiring higher efficiency appliances and equipment. It is unclear how the state will promote or provide incentives to local governments, building industry or the consumers to encourage the use of these green building programs.

3) Language around the % above code requirements/ recommendations/ targets is not entirely clear; the CEC T-24 part 6 2008 energy code update is referred to as a green building measure and assumed to be 15%-20% better than current code (T-24 2005). This causes confusion when using similar language for Utility, green building and NSHP energy efficiency program requirements that are referring to exceeding the 2008 code. Also, as the code becomes more stringent the % better than code definition will change and we recommend tying building energy efficiency criteria to a fixed scale (HERS Index).

4) The appendices acknowledge that we would need to leverage the Utility programs to meet efficiency targets, and to meet the goals set forth would require unprecedented success of Utility programs. Towards this unprecedented success, we would like the plan to further identify how green building programs (which include energy efficiency credit/requirements) and their adoption at the local

government level will enable the success of utility programs.

Attachment: www.arb.ca.gov/lists/sp-greenbuild-ws/23-ab_32_scoping_plan_comments_gb_stopwaste.org.doc

Original File Name: ab 32 scoping plan comments_GB_stopwaste.org.doc

Date and Time Comment Was Submitted: 2008-08-11 18:11:23

No Duplicates.

Comment 23 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Wes
Last Name: Sullens
Email Address: wsullens@stopwaste.org
Affiliation: StopWaste.Org

Subject: Include the cross-cutting benefits of green building
Comment:

The cross-cutting benefits of green building include the reduction of energy use, waste generation, water use, and transportation demands due to the location of projects. While the energy benefits of building green are well known, only recently have the cross-cutting benefits of green building been calculated with any certainty. In a recently released report by our agency and Build It Green, we estimate the avoided emissions of building green homes in California are substantial, especially when non-energy benefits are included in savings projections. Our study found that savings are greatest from buildings that result in less vehicle miles traveled per resident, as in transit oriented developments. The next greatest source of savings come from energy: conservation, efficiency, and renewable energy generation. Large, one-time emissions reductions from construction and demolition waste recycling, as calculated using the EPA WARM model, are also substantial and can equal energy savings for the first 1-3 years of occupancy per new home.

Page C-93 of the Appendix states:
¡ÈAccounting only for potential GHG savings that arise from reductions in energy and water use and from the recycling of construction debris, preliminary estimates are that green building measures can reduce California GHG emissions by approximately 28.5 MMTCO2E in the year 2020.54 Of this, 25.5 MMTCO2E comes from energy savings, and the additional GHG savings come from reductions in water and solid waste. For purposes of the Draft Scoping Plan, we are considering green buildings to be a mechanism that enables GHG reductions in other sectors. For example, green building strategies are what make it possible to reach the targets set for electricity and natural gas reductions. In order to avoid double counting, the ARB is not counting any of the green building measures as 'additional' GHG reductions, but this may change as ARB staff gains a better understanding of the interactions between the sectors.¡É

We strongly encourage the ARB to include ¡Èadditional¡É GHG reductions from green buildings in the scoping plan. To this end, and to avoid double counting, we suggest the ARB develop protocols for addressing emissions reductions related to single buildings. We stand ready to assist in this endeavor. Thank you,

Wes Sullens
Program Manager
Green Building in Alameda County
A program of StopWaste.Org

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-11 22:06:37

No Duplicates.

Comment 24 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Derek
Last Name: Walker
Email Address: dbwalker@edf.org
Affiliation: Environmental Defense Fund

Subject: EDF - Green Buildings comments
Comment:

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Please accept the attached green building comments from
Environmental Defense Fund on the AB 32 draft Scoping Plan.
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Attachment: www.arb.ca.gov/lists/sp-greenbuild-ws/25-edf_-_green_building_comments.pdf

Original File Name: EDF - Green Building comments.pdf

Date and Time Comment Was Submitted: 2008-08-12 15:20:54

No Duplicates.

Comment 25 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Walter
Last Name: Vernon
Email Address: olgab@mazzetti.com
Affiliation: Mazzetti & Associates

Subject: Potential Healthcare Offsets
Comment:

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Please see the attachement.
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Attachment: www.arb.ca.gov/lists/sp-greenbuild-ws/26-public_comment-ab_32.pdf

Original File Name: Public Comment-AB 32.pdf

Date and Time Comment Was Submitted: 2008-08-12 15:46:52

No Duplicates.

Comment 26 for Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) - 1st Workshop.

First Name: Matthew
Last Name: Hargrove
Email Address: mhargrove@cbpa.com
Affiliation: CA Business Properties Assn (CBPA)

Subject: Green Building Carbon Credits
Comment:

The California Business Properties Association (CBPA) is pleased to have the opportunity to comment on the California Air Resources Board's (ARB) Appendices to the Draft Scoping Plan. As indicated in CBPA's comment letter, we are providing ARB the enclosed white paper prepared by CBPA's Special Legal Counsel, Donald Simon, entitled "Green Building Carbon Credits: A Structure for Promoting Greater Energy Efficiency in the Real Estate Sector to Address Climate Change."

Mr. Simon verbally presented this concept at the recent September 2, 2008 meeting of the Green Building Climate Action Team Advisory Committee meeting. It was warmly received by attending representatives from both the private real estate industry and the non-profit public interest environmental community.

We ask ARB to thoughtfully consider the concepts outlined in this white paper, and we hope to schedule a meeting in the near future with appropriate staff to continue dialogue on this important opportunity that we believe would empower the real estate sector to help achieve California's goals under AB 32.

CBPA thanks you for your consideration of our views and for your continued hard work on this important issue. We look forward to working with you further.

Matthew Hargrove
Senior Vice President of Governmental Affairs
California Business Properties Association
1121 L Street, Suite 809
Sacramento, CA 95814
916-443-4676 phone
916-443-0938 fax
mhargrove@cbpa.com

Attachment: www.arb.ca.gov/lists/sp-greenbuild-ws/28-ab_32_scoping_plan_comments_-_green_building_carbon_credits_cover_and_paper.pdf

Original File Name: AB 32 Scoping Plan Comments - Green Building Carbon Credits Cover and Paper.pdf

Date and Time Comment Was Submitted: 2008-10-03 13:08:34

No Duplicates.

There are no comments posted to Green Building Comments for the GHG Scoping Plan (sp-greenbuild-ws) that were presented during the Workshop at this time.