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Life cycle analysis and climate adaptation

I am resubmitting my comments of Feb. 21, 2018 and would appreciate a response (see attached). I believe supporting comments were also submitted around that time from Build It Green and the Public Health Institute.

In addition, additional supporting information is supplied below.

Many homes and schools are already overheating during warmer weather, and adding more (or any) air conditioning will exacerbate climate change rather than providing a long term, holistic, sustainable solution. Regarding energy burdens for vulnerable populations, as of 2014 there were nearly 500,000 homes in just the Southern California Edison territory with August energy bills over $300, and over 73,000 of those households were low income households or disadvantaged areas (SB 350 Tracking Progress report - Energy Equity Indicators). In the future, annual Cooling Degree Days in much of California are predicted to increase by about 1,000 to 2,000 days by mid- or late-century, and extreme heat days would increase several-fold, based onÂ Cal-Adapt.Â This would increase energy costs, equipment costs, urban heat impacts, and carbon emissions, and exacerbate base and peak loads on the grid as soon as the next few decades. In addition, many buildings will also be more vulnerable to flooding, wildfires, and power outages as our climate becomes more extreme. Obviously, it is much more affordable to build in or prepare for climate adapted features now, rather than performing expensive retrofits later.

There is an urgent need by local and regional government to adapt California's buildings to climate change. SB 379 calls on cities and counties starting Jan. 1, 2017 to incorporate adaptation and resilience strategies into local hazard mitigation plans and the safety element of general plans (http://www.adaptationclearinghouse.org/resources/california-sb-379-land-use-general-plan-safety-element-climate-adaptation.html.)
Cal-Adapt is mentioned as one of the info resources. Also, AB 97 (2007) requires OPR to provide CEQA guidance on addressing climate change.

Several examples of climate adapted, cost effective building design are available in the U.S. and Europe (see my previous comments). Â At least one Federal building has already conducted climate vulnerably assessments and implemented resilient design measures. Private firms are already helping building designers implement such measures. Another example of resilient design is theÂ 2015 Enterprise Green Communities Criteria,Â which includes several resilient design measures under the Integrative Design and Energy Efficiency categories.

In summary, adding resilient, climate adaptation measures to building standards would greatly help meet Californiaâ€™s climate action, air quality, health, and environmental justice goals. Even voluntary measures in CalGreen would encourage State government, local government, and universities to adopt climate adapted, resilient design measures as an example of good leadership and more realistic energy demand assessments. Â Also, local and regional planning efforts could at least assess and plan for implementing such measures.

Thank you for your consideration. Â Please contact me if you have any questions.