

Notes from Environmental Forum of Marin
Education for Environmental Action
Building to Cool the Planet—beyond “Green Building”
Feb. 27, 2019
<https://marinefm.org>

Handout

Agenda Item 7.8

Date March 14, 2019

Speakers: Bruce King, Architect; David Arkin, Arkin/Tilt Architects; Alice Zanmiller, Marin CDA Planning/Sustainability Team.

Carbon sequestering structures, or at least Net Zero buildings. 40% of emissions worldwide from buildings. Embodied emissions vs operations emissions curve; have been concentrating on reducing operations carbon but now need to switch. **New CA Law requiring all new construction to be net zero.** But we need to retrofit as well; most important. In the next 20 years, $\frac{3}{4}$ of the climate impact will be from the materials we use (embodied emissions): foundations, structure, skin and refrigerants are primary targets. Foam can be made w/C02, otherwise chemicals involved are 1400x more bad than C02.

Concrete is 8% of emissions globally. Using industrial waste (fly ash, etc) in concrete to recapture C02 from waste and embed it. Making gravel out of smokestack C02 emissions (Blue Planet; Oregon?)

Embodied carbon network.org for carbon resource efficiency; carbon smart building materials palette. CASBA: CA Straw Building Association. Strawbale homes (coated w/stucco, etc) survived the NorthBay fires. Great insulator; burns poorly due to compaction of materials.

Alice Zanmiller—County CDA planner working with building think tank group on Bay Area Low Carbon Concrete Project. Working on Marin’s Low Carbon Building Code; grant funding from Bay Area Air Quality Control Board as model for rest of state. CA Association of Environmental Planners as part of Sustainability Team for project. Looking for 4 pilot projects to work through this process; have funds for technical support. Working to CALGreen standards. Looking for large scale pouring cement projects, to be completed by 2020.

Judy’s Comments: LGVSD’s Treatment upgrade plant OR Admin building could perhaps qualify for this. The Tech Support funded by the grant is to supply experts to help work through the bugs, find proper source materials, etc. for the pilot projects.

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