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Urban Environmentalists Comments

See attachment.

Additional submitted attachment is included below.

April 3, 2020

California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Docket 19-ERDD-01

Comments on the CEC *Draft Solicitation Concept for The Next EPIC Challenge*
Submitted by Urban Environmentalists

Thank you for the opportunity to submit comments. Because this is our first time submitting comments, we'd like to briefly introduce ourselves. Urban Environmentalists' mission is to address the climate and inequality crises by transforming cities and towns into inclusive communities designed around people rather than cars. We value:

- Environmentalism: Healthy communities and environments supportive of all life
- Building for People: Vibrant, diverse, and nurturing urban communities with abundant housing and opportunities for all
- Sharing Space: Efficient, equitable use of our planet's resources, especially land

We have organized our comments around the questions posed by staff, and provided additional general comments.

1. **Which proposed minimum site requirements are important for this project, and which requirements are too restrictive?**

The proposed requirements are not entirely clear, as those in the CEC Draft Solicitation Concept for The Next EPIC Challenge ("PDF") do not entirely match those included in the March 27 presentation, *The Next EPIC Challenge: Reimagining Affordable Mixed-Use Development in a Carbon-Constrained Future* ("presentation").

Density

The PDF and presentation differ in their density requirements. Of the two, we recommend the PDF's minimum of 50 housing units with a minimum density of 100 residential units per acre. 30 units per acre is insufficient to ensure beyond-business-as-usual benefits of per-household energy efficiency and conservation, reduced car VMT and increased transit ridership, and density to support local small businesses.

This can be seen in a recent UC Berkeley study, which found that gasoline consumption per capita drops dramatically with increasing density, but only does so reliably at density levels over 30 people per acre.[1] Given that the study considered overall population density - including streets, freeways, commercial and industrial areas, parks, and so on - a much higher density is needed for mixed-use development in order to achieve an overall density that yields car VMT reductions.

[1] *Environ. Sci. Technol.* 2014, 48, 2, 895-902. Publication Date: December 13, 2013. https://doi.org/10.1021/es403436. See Figure S-1b.

Another UC Berkeley study looks at household carbon emissions as a function of population density, and finds that emissions strongly converges and drops in census tracts with a density of about 80 people/acre and above; increased density beyond that point results in even more reduced household emissions.[2] The CEC should thus require much higher levels of density, in order to achieve savings beyond business as usual.

Non-residential Space

The CEC should specify that non-residential space should be designed to support diverse business types, including local small businesses. Thoughtful development of non-residential space can provide more diverse community benefits and yield more successful financial outcomes.[3]

Placement in a low-income or disadvantaged community

While we appreciate the focus on affordable housing and benefits for low-income individuals and communities, we believe that the requirement/preference for projects to be located in a low-income or disadvantaged community is not aligned with EPIC goals and has unintended consequences.[4] California needs more housing everywhere, and not just in disadvantaged communities.

Indeed, it is particularly incumbent upon higher-income communities to create more affordable housing. Living in a higher income location is associated with numerous benefits, including for individual residents who are lower income. For example, low-income children who move to higher-income areas are more likely to graduate from college and earn more.[5] Moreover, in a study of low-income families, 54% chose to move to higher upward mobility areas when they were provided with customized search assistance, landlord engagement, and short-term financial assistance - as compared to 14% in a control group that did not receive this assistance; those who received search assistance also reported being more satisfied with their new housing.[6]

This does not mean that affordable housing should not be built in disadvantaged communities. But it does mean that those low-income families who *wish* to live in a higher-income community should have the opportunity to do so - which requires building affordable housing in both high- and low-income locations. The opportunity to live in the neighborhood we choose is also a reflection of California's values of desegregation and integration across diverse demographics.

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[2] *Carbon Footprint Planning: Quantifying Local and State Mitigation Opportunities for 700 California Cities*, Christopher M. Jones, Stephen M. Wheeler, Daniel M. Kammen. Urban Planning (ISSN: 2183–7635) 2018, Volume 3, Issue 2, Pages 35–51. DOI: 10.17645/up.v3i2.12. See Figure 4. https://www.cogitatiopress.com/urbanplanning/article/view/1218/1218

[3] https://www.strongtowns.org/journal/2018/6/5/whats-up-with-all-those-empty-commercial-storefronts-in-new-mixed-use-developments.

[4] The PDF and presentation differ as to whether this is a preference or a requirement.

[5] Raj Chetty & Nathaniel Hendren & Lawrence F. Katz, 2016. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment," American Economic Review, American Economic Association, vol. 106(4), pages 855-902, April. https://www.nber.org/papers/w21156

[6] https://opportunityinsights.org/wp-content/uploads/2019/08/cmto_summary.pdf

To support the ability of low-income individuals and families to live in new mixed-use housing the CEC should, however, require grant recipients to conduct outreach and reduce barriers to low-income residents as described in the study referenced above. The CEC could consider additional incentives to encourage grant recipients to recruit diverse tenants. It could also consider a higher minimum percentage of the units be designated affordable housing if the development is located in a top 25% *least*-disadvantaged community.

From a carbon perspective, it is also important to build new housing in middle and higher income neighborhoods. According to one of the previously-mentioned UC Berkeley studies,[7] higher-income but less dense cities like Berkeley can have much higher carbon abatement potential from urban infill. Lower-income urban locations already have lower carbon footprints per household. More far-flung locations such as Tracy can also benefit significantly from urban infill, but their carbon footprints can be offset most with electric/efficient cars.

All-electric

This is an appropriate requirement. The CEC may wish to provide a higher score to any grant recipients that demonstrate innovative all-electric applications in the non-residential portion of their developments (e.g., an all-electric restaurant or other end use with few existing all-electric examples).

Peak Load and Peak Demand

It might be more appropriate to refer not to the building's peak load but to the building's load at coincident peak, or from 4-9pm. If a building has a high off-peak load due to the load profile of an anchor tenant, that is not necessarily a problem.

Relatedly, it is unclear what the benefit is of having peak demand met entirely via onsite resources. It might be very expensive to achieve 100% compliance. A more flexible approach that nevertheless achieves the goals of reduced strain on the grid could be to require that demand from 4-9pm be a certain percentage of average demand the rest of the day.

Electric Vehicle Parking

Submissions should be encouraged to include the minimum amount of required car parking, and to designate some or all of the car parking for shared vehicles (e.g., Zipcar, Maven, Gig).

Submissions should also be required to include secure bicycle and other micromobility vehicle parking, in quantities sufficient for all residents to securely store micromobility vehicles. Parking should include charging infrastructure for these vehicle types, and should be accessible (e.g., it should be possible to park a bicycle without having to lift it). The parking area should also include basic tools for bicycle maintenance (e.g., a pump and set of allen wrenches). Developers with a shared micromobility docking station onsite (e.g., a BayWheels docking station or scooter docking station) should also receive extra points.

[7] Figure 5, https://www.cogitatiopress.com/urbanplanning/article/view/1218/1218.

While electric cars are important, micromobility is far more energy efficient and should be promoted at least as much. A bicycle uses no electricity, and an electric scooter or e-bike is much more efficient than a car.[8] All are much more affordable than a car.

Climate Adaptation

There is no requirement relating to climate adaptation. There should be a requirement that the development be designed to be adaptable to the climate expected in its location for the next 50 years according to the CEC's own Cal-Adapt tool. Measures that address both mitigation and adaptation in an integrated manner should be encouraged.

2. Do the proposed project terms and solicitation timeline align adequately with mixed-use development and affordable housing timelines?

The program does not require a location to be determined during the first, conceptual phase of the project. However, a thoughtful development should involve the local community from the earliest stages. And that means having a planned location, even if it is not fully secured.

3. How can the CEC further engage key stakeholder groups to facilitate the formation of successful partnerships?

No comments.

4. What else can the CEC do to facilitate the development of successful projects?

No comments.

5. Additional comments:

The presentation includes some informal elements that are concerning. We address the relevant slides below, underlining the slide numbers for ease of reference.

Slide 11 suggests that climate adaptation measures are causing higher housing costs and gentrification. Evidence is not provided to show that adaptation is a primary driver exacerbating gentrification. Other research, including that conducted by California's own Legislative Analyst's Office, has shown that the primary reason housing costs are increasing is that we have not built enough of it in the past several decades.[9]

Regardless of the causes of gentrification, policies and approaches that are generally effective in supporting housing equity can also mitigate any gentrification impacts caused by climate adaptation.These include strong tenant protections, meaningful community engagement, and sufficient production of housing. Climate adaptation and mitigation are not inherently at odds, either with one another or with building new housing - they are all key goals for California,[10] and they are best accomplished in an integrated manner.

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[8] See Figure 3, https://www.agora-verkehrswende.de/fileadmin/Projekte/2019/E-Tretroller_im_Stadtverkehr/Agora-Verkehrswende_Shared-E-Scooters-Paving-the-Road-Ahead_WEB.pdf.

[9] https://lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.pdf

[10] For example, climate adaptation is required by Executive Order B-30-15.

The presentation also shows a concept image on slide 13 that is only four stories tall. We should aim higher. In Berlin, a typical building is 6 stories tall. The historic buildings of Paris are 7-8 stories tall. Surely we can do similarly in California. Every additional multifamily dwelling provides massive energy savings relative to a new single-family home, so we should encourage building higher than just four stories. Even neglecting transportation energy savings, the CEC Residential Appliance Saturation Survey finds that a new multifamily home uses roughly half as much energy as a new single family home - making building a new multifamily dwelling one of the most effective energy efficiency measures available.[11]

Slide 18 discusses pathways to affordable, equitable, zero-emission development. It neglects to mention unlocking the value of dense housing.

Respectfully Submitted,

Joanna Gubman

Co-lead, Urban Environmentalists

April 3, 2020

[11] See figures ES-31 and ES-33: https://ww2.energy.ca.gov/2010publications/CEC-200-2010-004/CEC-200-2010-004-ES.PDF.