

## IEPR ZNE definition comments

Dear Commissioners,

I would respectfully like to submit a few comments related to the definition of ZNE buildings as a part of the IEPR 2013 proceedings.

1. While considering a definition for ZNE it would be important to reflect on the policy backdrop that motivates the need for ZNE.

*Achieving ZNE is not the end goal, but a means to achieving the policy goals.*

Some of the salient policies in California that motivate the need for ZNE buildings:

- Reduction of GHG – Assembly Bill No. 32 (Pavley, 2006)
- Peak reduction - avoid dirty peak plants from coming online
- Overall load reduction – avoid building new power plants
- Few of the other policy end goals that ZNE could support
- 33% RPS goal – make contributions towards achieving the state’s RPS goal by 2017
- AB 1109 – Huffman – Lighting

These are important to keep in perspective during any discussion on ZNE and as such prioritized.

2. Policy definition - The proposal to use TDV metric along with the HERS/Title 24 compliance calculation methodologies appears to be the most prudent and tangible means available to define ZNE in the policy setting; granted that it does not translate to an easily comprehensible definition for the market.
3. TDV - The current values of TDV may not be most aligned with addressing the policy goals listed above; however there is opportunity to update them in the upcoming 2016 Title24 code cycle. It is requested that the re-evaluation and update of TDV be an open and reasonably transparent process with in-depth analysis and public vetting of analysis results. Each policy goal should be assessed and prioritized during this exercise, which may need some resolution between policy goals that may be at odds with each other. That said, if appropriately designed the TDV has potential to bring much better alignment not just between addressing the policy goals but also the market motivations for achieving ZNE. All these multi facets should be laid out and thoroughly examined during the revision of TDV.
4. Market definition - While the term “zero” has a zing and market attractiveness, the state agencies could consider the EU adopted NZEB – Nearly Zero Energy Buildings “‘nearly zero-energy building’ means a building that has a very high energy performance. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or

nearby<sup>1</sup>".

This has the allure of zero and yet not the implication of absolute zero. The near zero can easily resonate with home builders and owners as almost zero energy bills, but not the expectation of absolute zero. It may also reduce any false claims and thus related litigations, which can taint the brand and market with false claims.

5. Distinction between policy and market definition - The distinction between the policy and market definition should be motivated by the respective goals and hence change flavor while trying to stay aligned at the higher level. The policy goals by nature are for societal benefit, whereas market motivation tends to be more individual gain oriented. Recognizing and acknowledging this and keeping the policy definition as asset based and market definition to be more adaptive (operational with near zero utility bills) yet with a consistent messaging approach.
6. ZNE Community definition – A community definition for ZNE should also be considered and made part of the proceeding. A mechanism to calculate that should also be defined and adopted for standardization purposes.

Thank you for the opportunity to provide comments.

Regards,

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<sup>1</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:153:0013:0035:EN:PDF>

[http://www.rehva.eu/fileadmin/Old\\_website\\_content/technology-and-research-committee/nzeb-rehva-proposal\\_final.pdf](http://www.rehva.eu/fileadmin/Old_website_content/technology-and-research-committee/nzeb-rehva-proposal_final.pdf)