

Review of: "Successful Community Infrastructure Risk Management in a Decarbonized Future"

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The paper emphasizes the need to shift from an asset-level focus to a systems-level focus. It is generally well-written and presents a compelling argument for the benefits of this systems-level approach. The author notes three prerequisites for a successful decarbonization transition: (1) involvement of stakeholders, (2) an enterprise-wide approach involving operators, owners, and beneficiaries, and (3) a shared digital model for developmental information. The ideas presented are lofty, and there are limited details on how this shift should be implemented within communities. For example, it is noted that the basis of successful infrastructure risk management is all stakeholders having a shared understanding of risk and benefit, cost and outcome, but successfully communicating all these factors to a diverse set of stakeholders and eliciting their participation remains a major obstacle.

The figures are adopted from various literature but are missing contextual explanations and could be better tied in and referenced within the text. For example, in Figure 3, KPI, KRI, SSP are undefined. Without additional explanations, some of the figures feel out of place and confusing.

In general, the paper is highly conceptual and could benefit from a case study or example specifically around decarbonization. While a brief mention of Project 13 is made, a better description of how these ambitious goals can be realistically translated into actions at the community level toward the aim of decarbonization would strengthen the paper. The paper does a good job of stating the problem and the need to shift to a new systems-level of thinking; future efforts should work toward translating this high-level goal into practice for implementable solutions.