



Zero Net Energy Buildings: Practice, Policies, and Performance

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Why does California need ZNE?



- Green building practices use energy, water, and materials efficiently throughout the building life cycle, enhance indoor air quality, improve the health, productivity, and working lives of [occupants], incorporate environmentally preferable products, and sustainably reduce the costs and environmental impacts associated with operating [our state's] buildings...

- Edited excerpt from Governor's Executive Order B-18-12



California's ZNE Policies



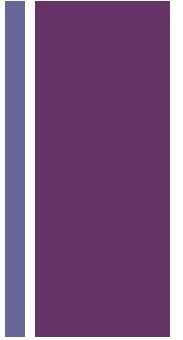
- California's Long-Term Energy Efficiency Strategic Plan
 - All new residential construction will be zero net energy by 2025
 - All new commercial construction will be zero net energy by 2030
 - 50% of existing buildings will be equivalent to zero net energy buildings by 2030 through achievement of deep levels of energy efficiency and clean distributed generation

- Governor Brown's Executive Order B-18-12 (April 2012)

- California Air Resource Board's Proposed First Update to the Climate Change Scoping Plan
 - Zero Net Carbon Buildings

- California Energy Commission's 2013 Integrated Energy Policy Report (IEPR)
 - Codes & Standards
 - ZNE Code Building

+ Utility ZNE Programs



- Design
- Procurement
- Financing
- Technical Assistance
- Monitoring and Engagement



Proposition 39 (Clean Energy Jobs Act): K-14 Schools



- Sustainable Schools Initiative – new effort
 - Focused on Deep Energy Savings (DES) and ZNE retrofits in K-12 Schools

 - Collaborators include:
 - New Buildings Institute (NBI)/CA PUC
 - Lawrence Berkeley National Laboratory (LBNL)
 - National Renewable Energy Laboratory (NREL)
 - Department of General Services (DGS)
 - California High Performance Schools (CHPS)
 - PG&E, SMUD, and other utilities
 - Others

+ Questions?



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