

Growing the Grid:

A Plan to Accelerate California's Clean Energy Transition

February 20, 2024

Testimony before

<u>Assembly Utilities and Energy Committee</u>

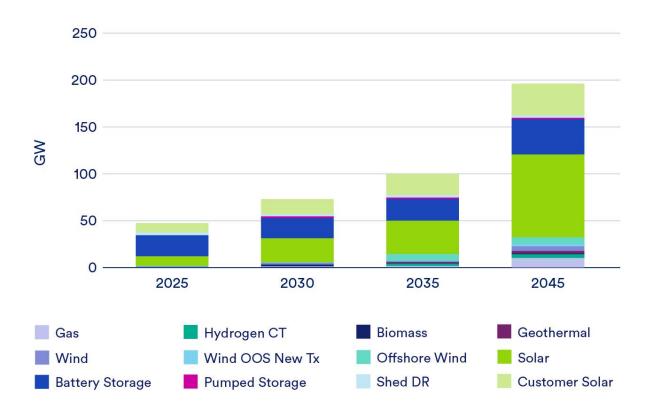
Achieving clean energy goals requires unprecedented action



Meeting California's clean energy targets will require a rapid expansion of the grid

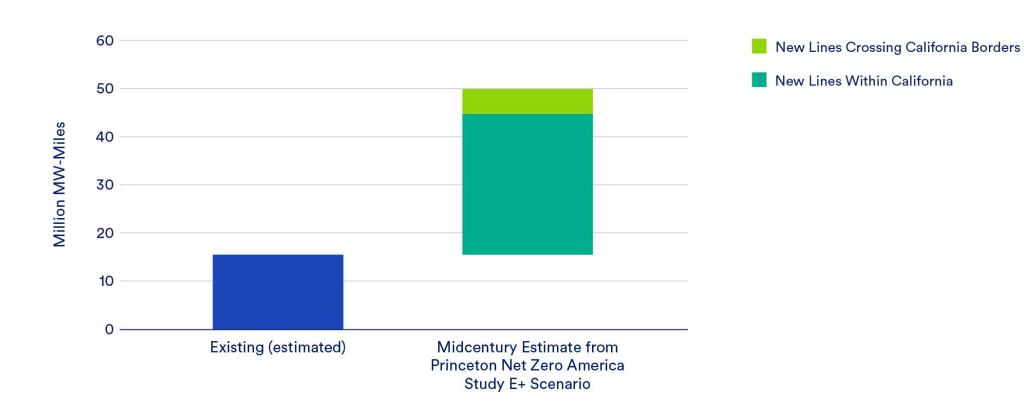
3.5x growth in total generation capacity in 20 years







Transmission capacity may need to triple



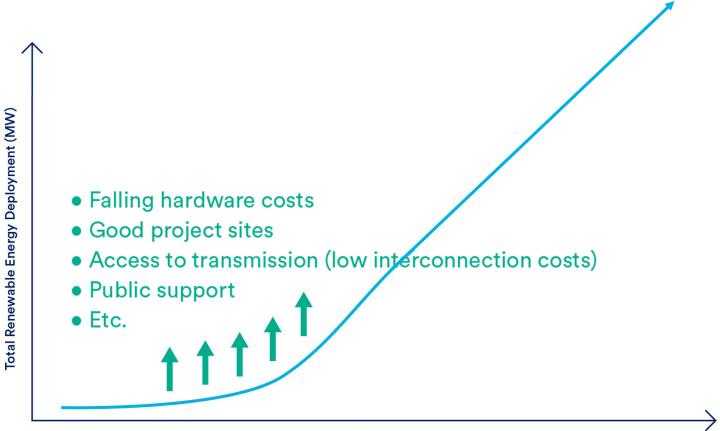




Headwinds to deployment are likely to increase



The real-world obstacles to clean energy deployment will likely grow if left unaddressed

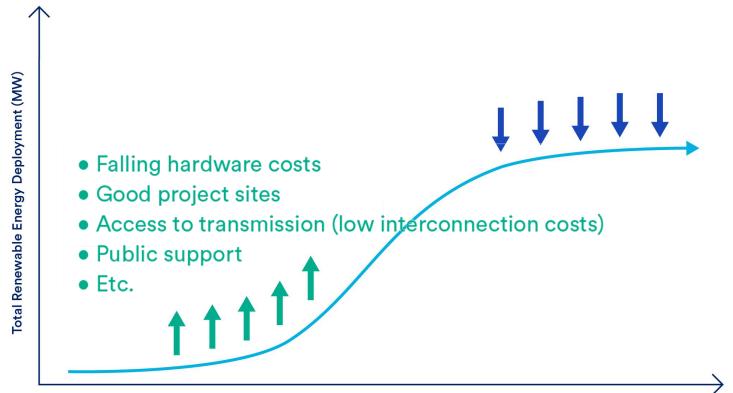


Derived from: Cherp et. al, "National growth dynamics of wind and solar power compared to the growth required for global climate targets," Nature Energy, Vol 6, July 2021.





The real-world obstacles to clean energy deployment will likely grow if left unaddressed



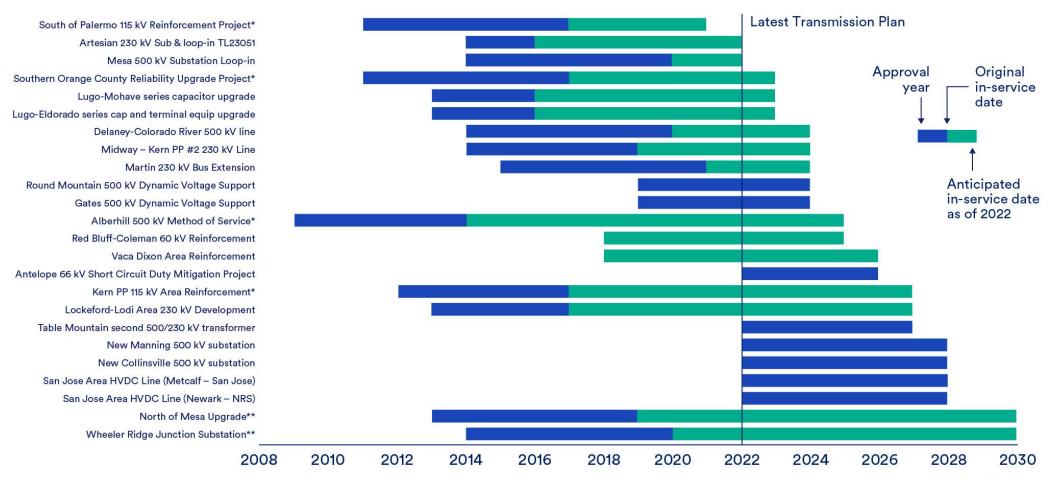
- Increasing land costs & competing needs
- Fewer amendable landowners
- Further from transmission
- Lower capacity factors/poorer resource
- Public opposition
- Diminishing available transmission capacity
- Etc.

Derived from: Cherp et. al, "National growth dynamics of wind and solar power compared to the growth required for global climate targets," Nature Energy, Vol 6, July 2021.





Transmission development often takes longer than anticipated



^{*} Approval years and Original in-service date for projects approved prior to 2012 were taken from the 2011-2012 Transmission Plan, the oldest available on the California ISO's website As of the 2021-2022 Transmission Plan, these projects were listed as "on hold" with no definite completion date.







Not all *potentially suitable* land for clean energy is *practicably developable* land



Project
Development
Considerations

Legal and

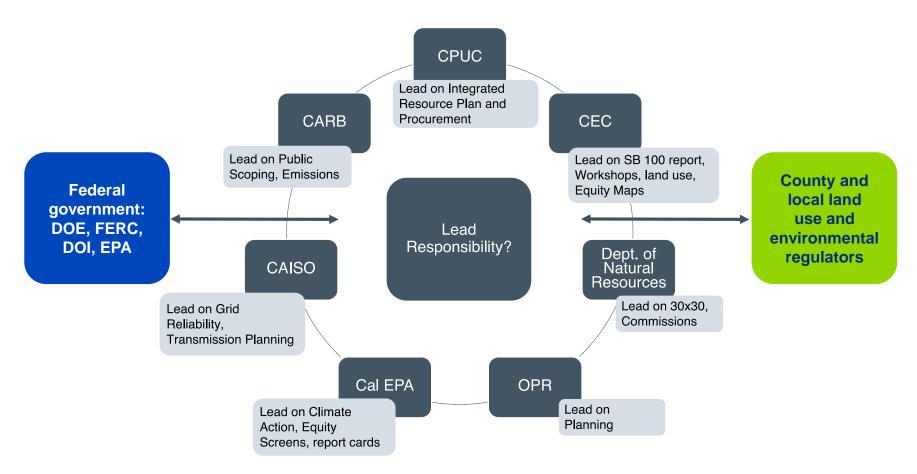
Geographic

Considerations





There is no designated authority on clean energy deployment







Recommendations



The following RECOMMENDATIONS offer a path to accelerate California's clean energy transition

- Develop a Clean Energy Deployment Plan with specific quantities, locations, and timing of new resource development and infrastructure expansion.
- Assign a lead agency the responsibility for achieving the state's clean energy goals.
- Develop a dashboard to publicly track progress.
- Advance supportive policy for planning, permitting, financing, and building clean energy infrastructure.
- Engage the public by continuing and strengthening California's current public engagement efforts.



Thank you! Cotnact: mcolvin@edf.org

