California Energy Storage Permitting Guidebook

Improving Energy Storage Permitting Together

California Energy Commission Grant EPC-19-026



Agenda

- 1. Introductions
- 2. Project Summary
- 3. Review of Guidebook Sections
- 4. Discussion





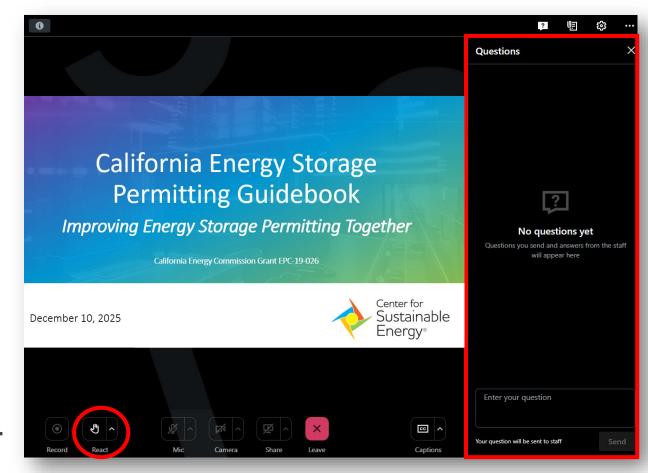
Two Ways to Participate

1. Questions:

• Click the question-mark icon in the upper-right corner to open the chat and type your question.

2. Hand Raising:

- If you have a question, click the hand icon on the lower-left side of your screen.
- You will be prompted to unmute yourself to ask your question live.





Introductions

About CSE

Mission-driven national nonprofit

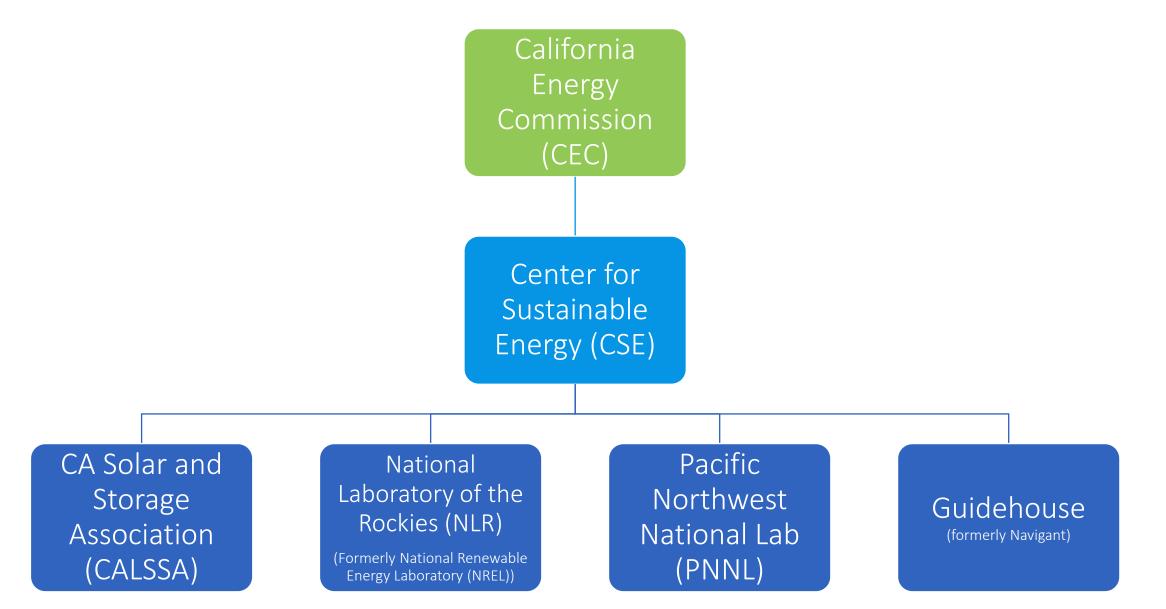
Center for Sustainable Energy® (CSE) is a national nonprofit that accelerates adoption of clean transportation and distributed energy through effective and equitable program design and administration.

- Headquartered in San Diego with more than 200 employees across the nation
- Administers cutting-edge programs valued at over \$4 billion for governments, utilities and the private sector across the U.S.
- Leader in data-driven incentive program design and administration for:
 - Electric vehicle and EV charging incentive programs
 - Renewable energy incentive programs (solar and storage)

One mission — DECARBONIZE.®

Our vision is a future with sustainable, equitable and resilient transportation, buildings and communities.







Guidebook Project Background

Project Summary

Identify key permitting issues that act as barriers to success for cost-effective installation of energy storage on the customer side of the meter and provide a comprehensive set of guidelines in an electronic format to address those key permitting issues for storage systems less than 1MW in capacity.



Project Goals



Greater reliability

Increased deployment of BTM energy storage reduces system peak.



Lower costs

Simplified permitting procedures can reduce soft costs & schedule delays.



Environmental benefits

Increased adoption of energy storage reduces dependence on peaker plants and reduces GHG emissions.



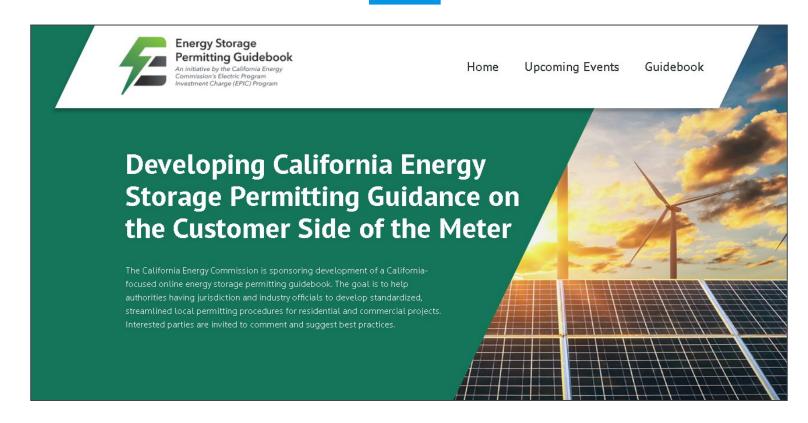
Senate Bill No. 379 and the Guidebook

- Senate Bill 379 (Wiener, 9/2022): Requires cities and counties in the state to adopt an "automated permitting platform", for solar and storage systems of less than 38.5 kW in nameplate capacity.
- Required for cities with populations of more than 5,000 and counties with more than 150,000 by September 30, 2023
- A city with a population of fewer than 5,000 and a county with a population of fewer than 150,000 are required to comply by September 30, 2024
- The Guidebook provides limited guidance on how to adopt electronic permitting software such as Symbium and SolarApp+



Review of Guidebook Sections

Guidebook Overview

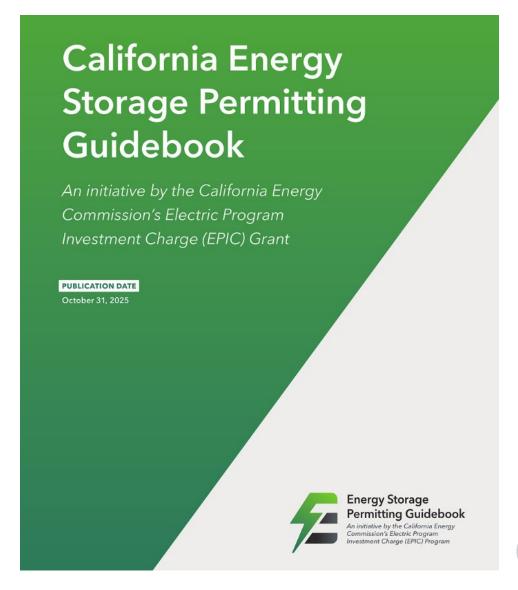


Energy Storage Permitting Guidebook is hosted on the <u>project website</u>, available at https://www.energystorageca.com/



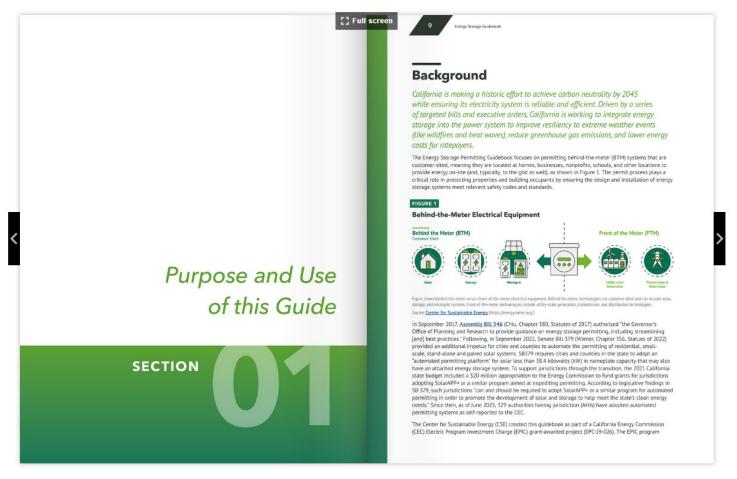
Energy Storage Guidebook Content

- Section 1: Introduction
- Section 2: Codes and Standards
- Section 3: Energy Storage Permit Process
- Section 4: Electronic and Automated Permitting
- Section 5: Permitting Resources





Section 1: Purpose and Use of this Guide





Scope

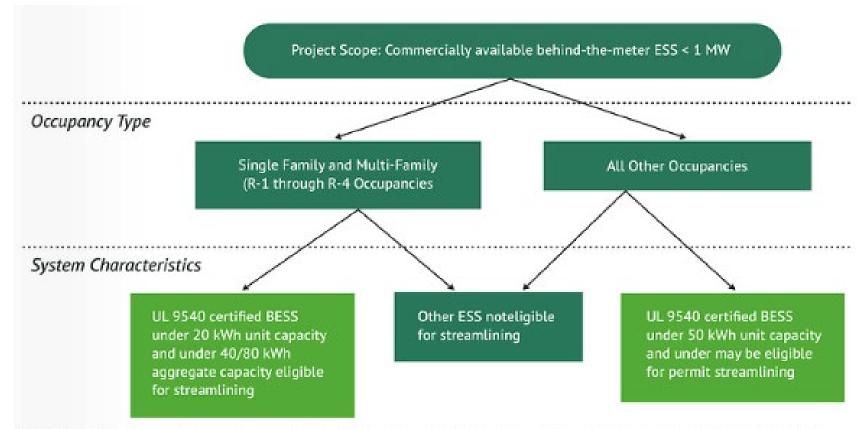


Figure shows the segmentation approach used to identify which energy storage technologies would be covered by the contents of the guidebook. The guidebook focuses on commercially available, behind-the-meter, electrochemical energy storage systems.

Source: Center for Sustainable Energy (https://energycenter.org/)



Section 2: Codes and Standards





Relevant Building Codes

Parts of CBSC That Apply to ESS by Building Type

Building Type	Part 2.5 CA Residential Code	Part 3 CA Electrical Code	Part 6 CA Energy Code ¹	Part 9 CA Fire Code
One- & Two-Family Residential	4	4	4	
Multifamily Residential		#	#	4
Commercial		4	#	#



Key Considerations for Fire Safety



Location and Installation



Battery Chemistry



Thermal Management



Fire Detection and Suppression



Emergency Response Plans





Compliance and Certification

Section 3: Energy Storage Permit Process





Best Practices Across California



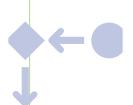
Develop Public Data Dashboards

 Improve transparency with a live dashboard illustrating current volumes of building inspections and a daily list of planned inspections



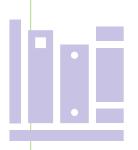
Streamline Communication Channels

 Provide a single point of contact from each party involved in the permitting process (e.g., AHJ and ESS installer) to facilitate effective and efficient communication



Clearly Publish Processes and Requirements

- Post comprehensive guidance on accessible public websites regarding permitting requirements that is vetted by all relevant departments (e.g., building and fire departments, etc.).
- Develop an eligibility checklist to reduce incomplete permit applications

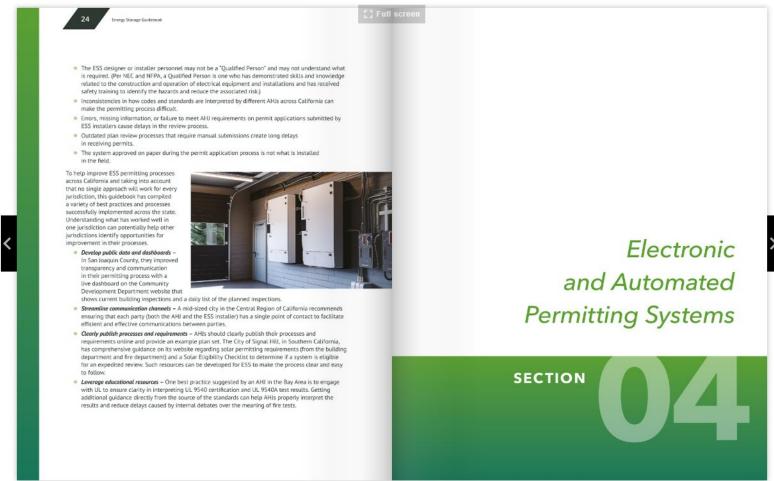


Leverage Educational Resources

 AHJs can engage with code and standard organizations to leverage guidance materials and provide resources to help their own staff and the installers in their jurisdictions navigate the relevant codes and standards.

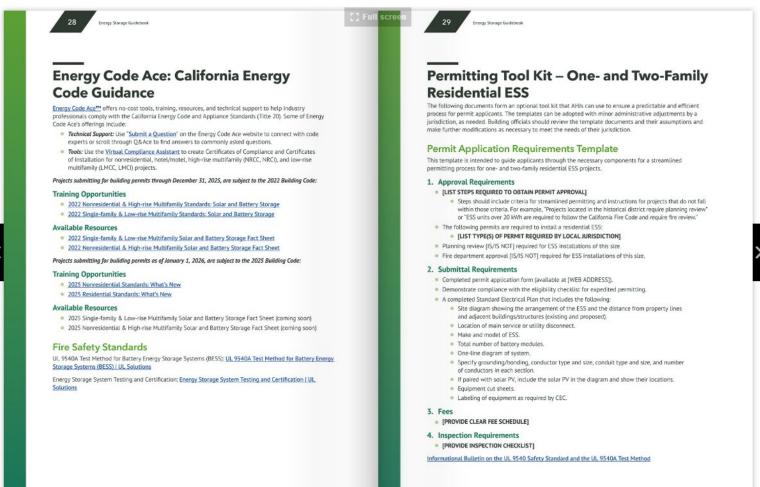


Section 4: Electronic and Automated Permitting





Section 5: Resources





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