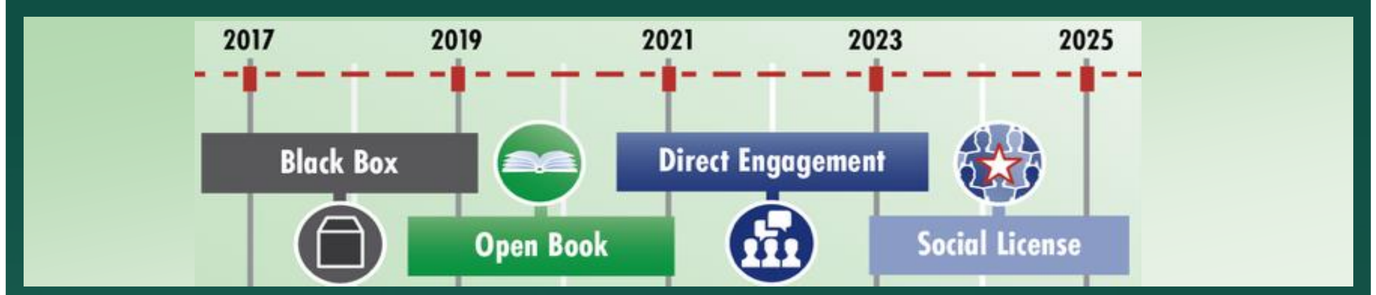
# Grid-scale Battery Siting and Permitting: Community Engagement and Social License

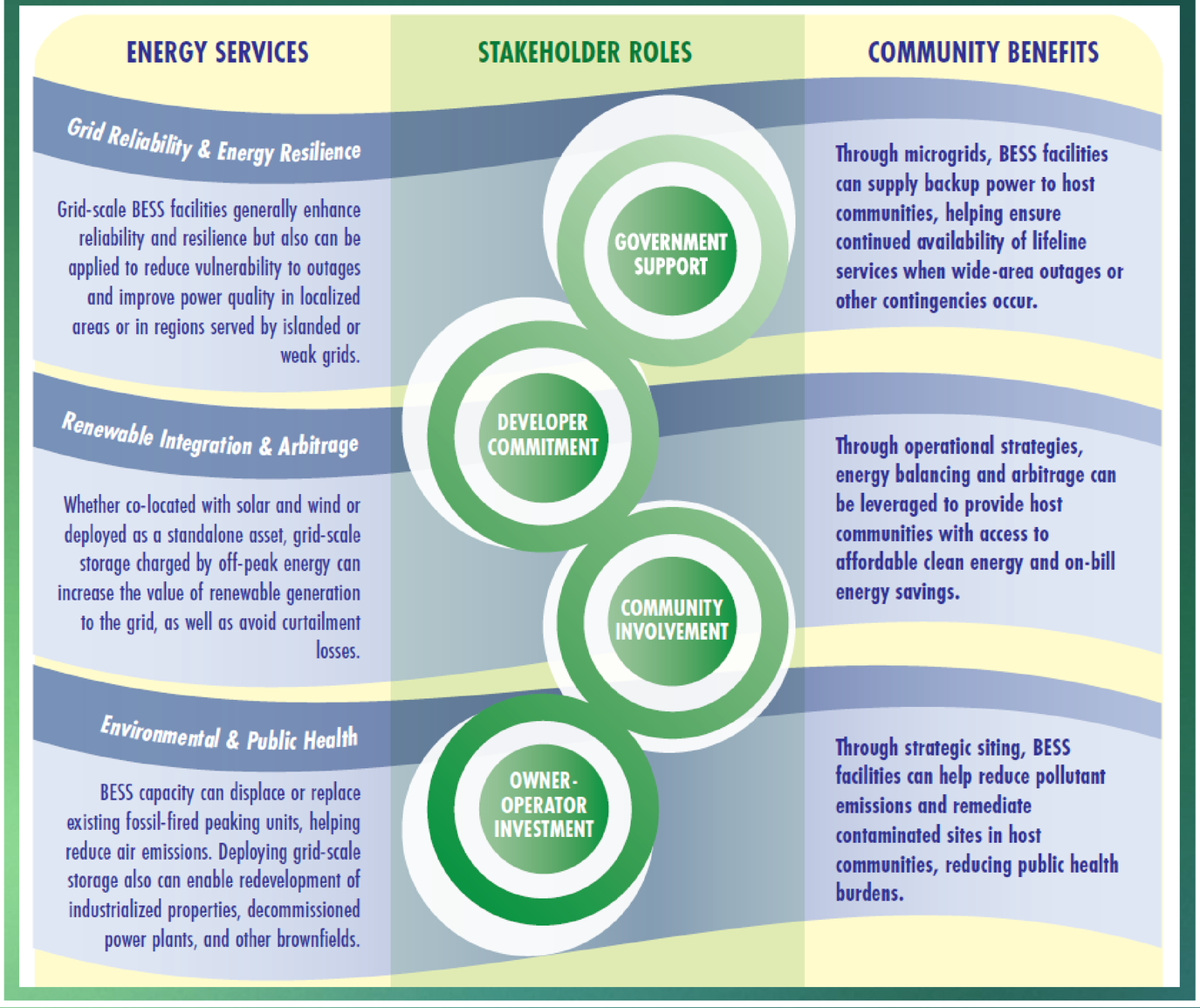
What is a **social license?**

A social license to operate requires **public acceptance** for energy storage projects built in a community. It is contingent on beliefs, opinions, and perceptions of how energy storage projects could impact people's lives and the environment.[1]



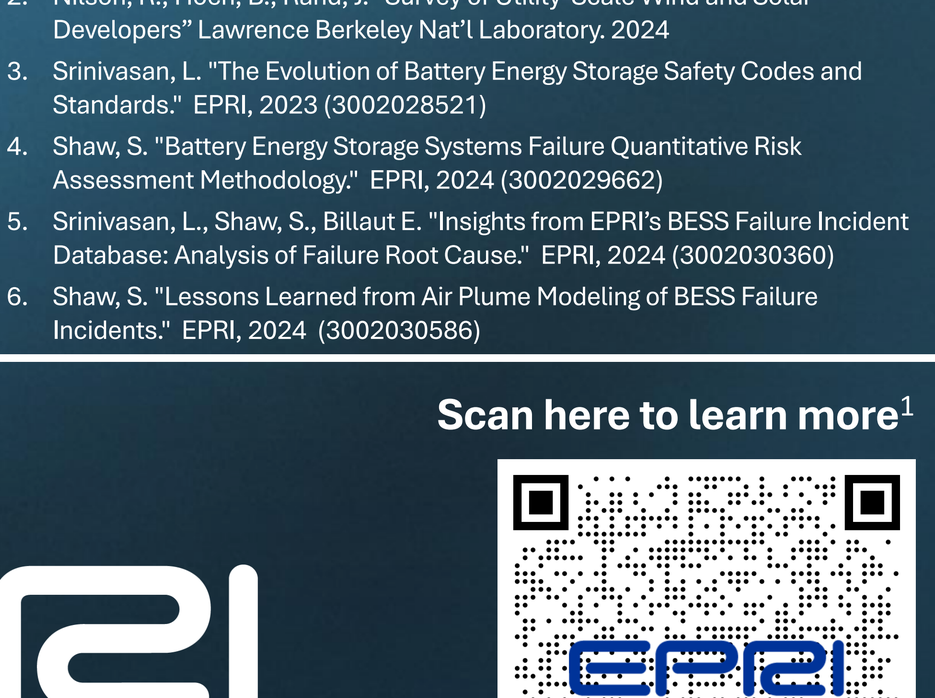

**How can a social license to operate be achieved?**

Start a **two-way dialogue,** focusing on **localized community benefits and grid benefits** of energy storage. Non-profit partners providing this information may be more effective and perceived as more trustworthy than a developer or utility.[2]



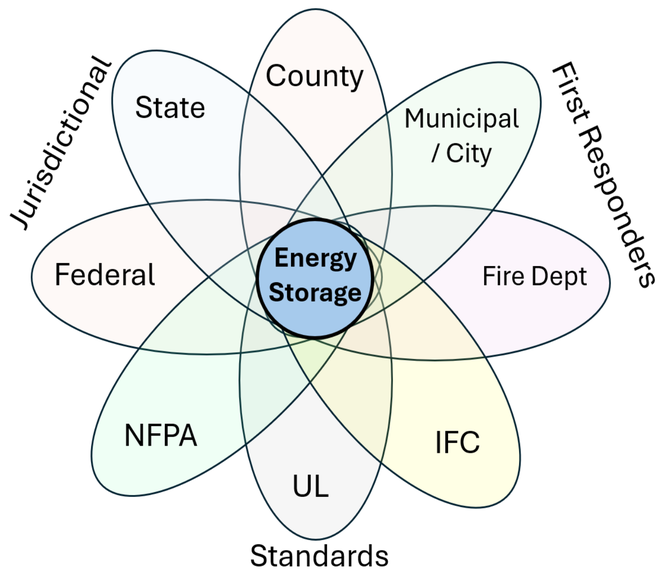

## Effective Strategies

- ✓ Know your AHJ: which governmental agencies, safety and regulatory bodies govern the location?
- ✓ Plan early community outreach **before** site selection
- ✓ Most effective community engagement approaches: in-person meetings with local stakeholders, participation in local government meetings, local hiring, and community-based donations and volunteerism [1]
- ✓ Stay up-to-date with the evolution of BESS safety codes and standards[3]
- ✓ Use a quantitative risk assessment methodology for site safety planning[4]
- ✓ Leverage plume modeling to assess local impacts of failures[6]. Plan to collect model input data.
- ✓ Know the energy storage failure rates, and learn from recent events to implement safe design and identify safety focus areas[5]




Sources: (1) EPRI Failure Incident Database, (2) Wood Mackenzie. Data as of 12/31/23.

**Authorities and Standards with Requirements**




Even as regulatory oversight has grown in complexity, it is often community pushback that impedes energy storage development.

EPRI recommends compliance with all latest standards and codes, pursuing state-of-the-art BESS design, even when not required by jurisdictional authorities.

It is **not enough** to simply satisfy local laws and regulations. **Building trust with local communities is vital**.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**References**


1. Shaw, S. "Community-Based Siting and Permitting for Grid-Scale Lithium Ion Battery Storage." EPRI, 2024 (3002031624)
2. Nilson, R., Hoen, B., Rand, J. "Survey of Utility-Scale Wind and Solar Developers" Lawrence Berkeley Nat'l Laboratory. 2024
3. Srinivasan, L. "The Evolution of Battery Energy Storage Safety Codes and Standards." EPRI, 2023 (3002028521)
4. Shaw, S. "Battery Energy Storage Systems Failure Quantitative Risk Assessment Methodology." EPRI, 2024 (3002029662)
5. Srinivasan, L., Shaw, S., Billaut E. "Insights from EPRI's BESS Failure Incident Database: Analysis of Failure Root Cause." EPRI, 2024 (3002030360)
6. Shaw, S. "Lessons Learned from Air Plume Modeling of BESS Failure Incidents." EPRI, 2024 (3002030586)


**Scan here to learn more**[1]

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