

climate action of sw WA (Don Steinke)

Need

California has been able to avoid burning fossil fuels for evening production of electricity by storing excess solar in batteries for evening use.

We absolutely need short term battery energy storage systems to store daytime solar for evening use.

We absolutely need solar plus batteries to reduce emissions.

Without short term batteries, wind and solar energy is often curtailed and goes to waste.

Alternatives

Consider including sodium-ion batteries in your study in addition to lithium-ion. See sodium-ion-batteries

Sodium ions are plentiful. Sodium ion batteries are cooled passively. They have fewer failure modes. They can operate in hotter and colder ambient temperatures. Although Lithium-ion batteries are best for light weight or mobile applications, sodium ion batteries may be preferable for stationary uses.

Consult

Consult with Minnesota, California, Texas, Portland General Electric and Arizona for lessons learned. See <https://www.volts.wtf/p/sooner-than-you-think-electricity>

Locations

Consider the implications of Trump's executive order (around Aug 31, 2026) seeking to protect high voltage long distance transmission systems from cyber threats. The concern is related to the components within batteries made by foreign entities of concern. Locating batteries downstream from substations might isolate a cyberattack to a neighborhood.

Instead of envisioning a dozen or more clustered grid scale batteries, broaden your scope to include single distributed grid scale batteries located in neighborhoods, in church parking lots and on top of commercial buildings. See <https://www.volts.wtf/p/sooner-than-you-think-electricity>