

Evolving energy system needs storage









DecentralizationPower produced
anywhere

DemocratizationPower produced by anyone

DemandEver-increasing global need

DecarbonizationProtecting the environment

2 million

total U.S. installed solar systems, = 1 year demand in California

1 in 5 homes

in California installing new solar equipped with storage, **3X 2019**

770 million

people lack electricity, ~2X USA

64% global electricity

from fossil fuels **4X USA**

25% increase

in microgrid installation, 2X 2008

11 gigawatt hours

global energy storage installed in 2020, **2X 2019**

3% growth

in global electricity demand (YOY) = 13 NYCs

90% worldwide

renewable new capacity additions, ~2X 2019¹



But market rules prevent storage from its most effective use



MA SMART only requires 52 cycles per year -> no guidance on how best to dispatch



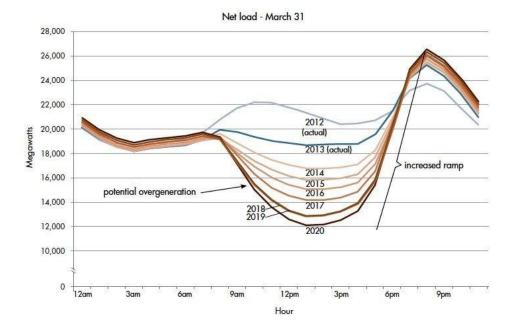
Interconnection rules create long timelines/high costs -> projects might be delayed or cancelled



Also need storage that is safe and can fulfill rising long duration needs



Source: Financial Times Source: CPUC





Storage can create a more affordable, sustainable system for all

News Release - 29 September 2020

GMP's Energy Storage Programs Deliver \$3 Million In Savings for All Customers During 2020 Energy Peaks

Stem, Inc. Successfully Transitions 345MWh Southern California Energy Storage Portfolio to its Athena™ Software

Athena™ Smart Energy Software Increases Customer Savings by More Than 30%



Regarding Grid Modernization, to achieve Greater Boston's 2050 Carbon & Equity goals, the most critical obstacle to overcome is safe, sustainable, equitable storage solutions.



