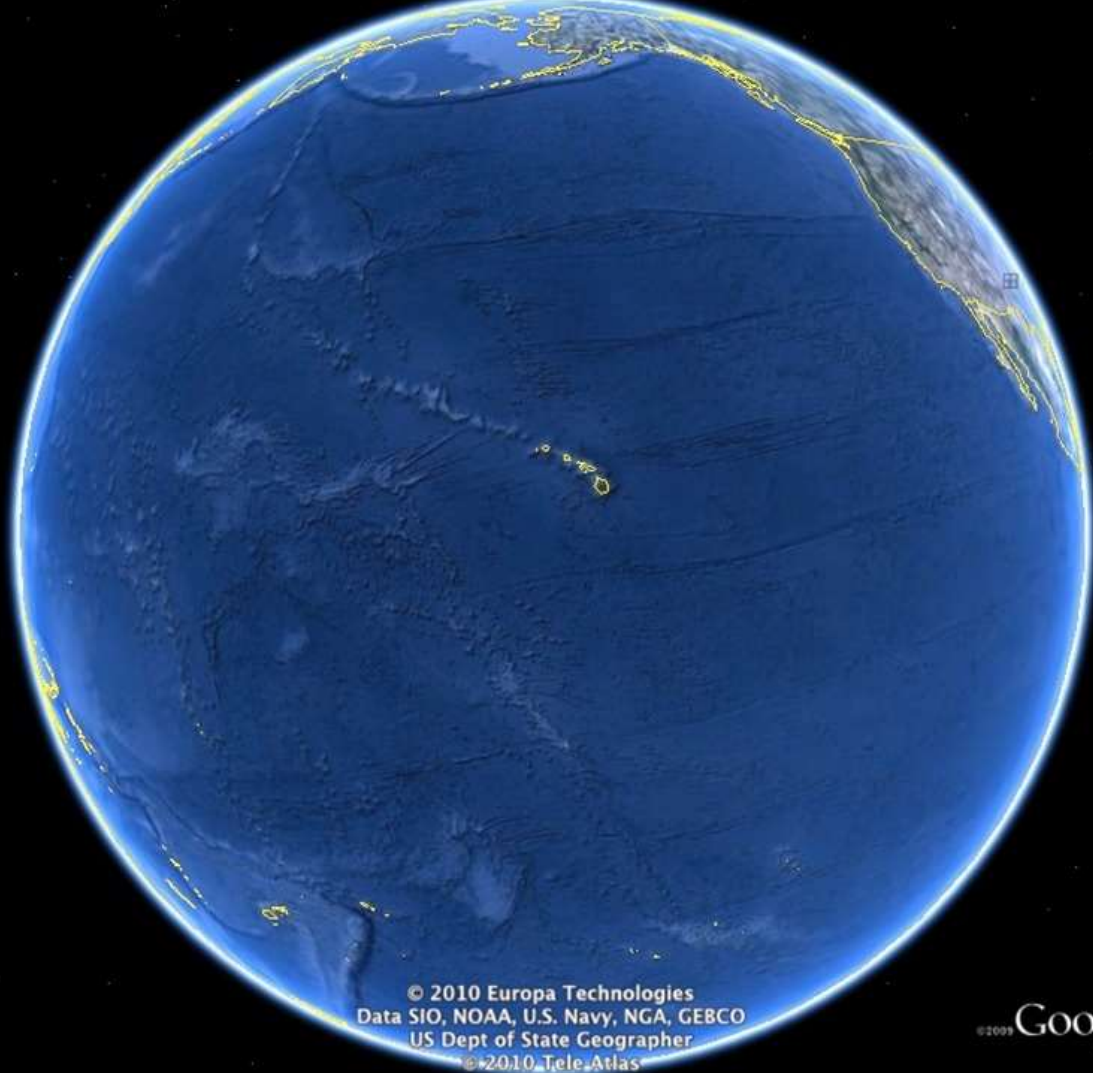


TOGETHER

BUILDING A STRONGER HAWAII



Hawaiian Electric
Maui Electric
Hawai'i Electric Light



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POST CARD
FROM YOUR FUTURE



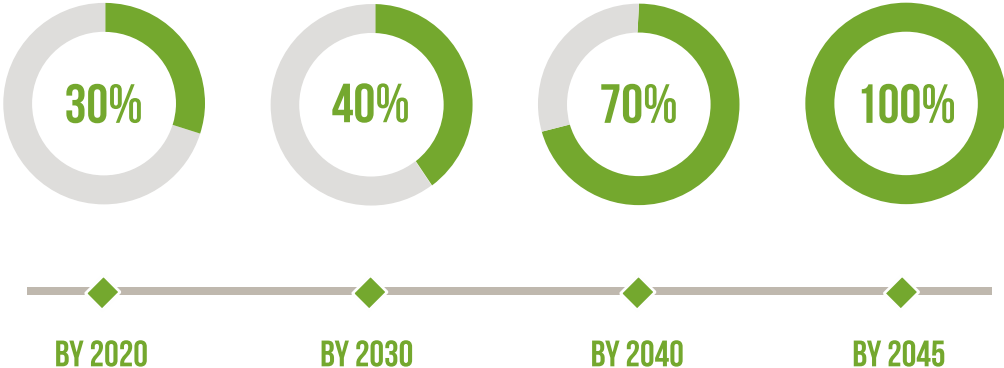
- Hawaii
- California
- New Mexico
- DC

- Illinois
- Michigan
- Wisconsin
- Maine
- Nevada
- 10 counties
- 90 cities



Hawaiian Electric
Maui Electric
Hawai'i Electric Light

2045 GOAL: 100% Renewable Energy



Hawai'i has one of the most ambitious energy goals in the nation
– 100 percent of electricity sales will come from renewable
resources by 2045

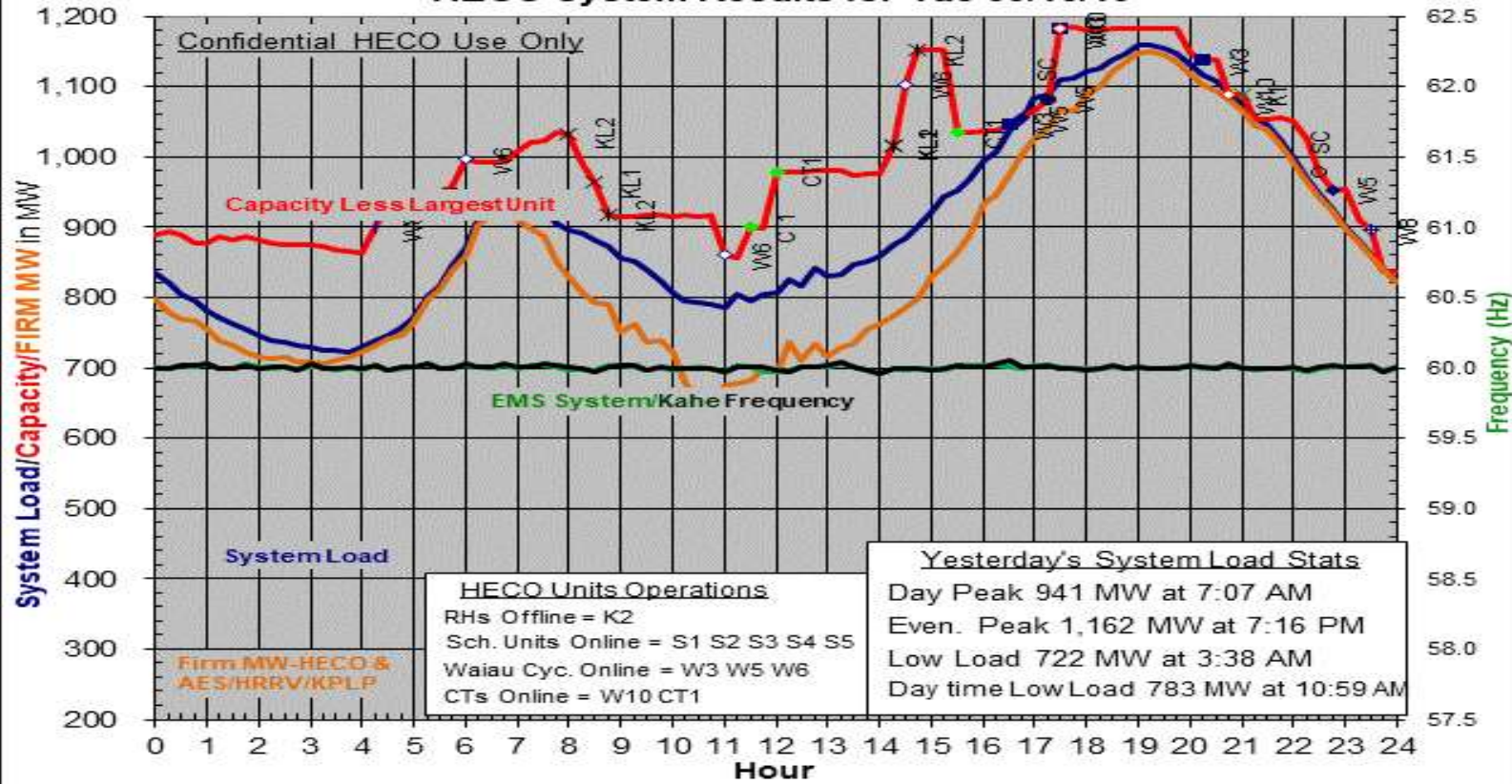
A comprehensive policy, regulatory and technology shift in Hawai`i

- ◆ Started in 2008 with the Hawai`i Clean Energy Initiative, HCEI
- ◆ Revenue decoupling to eliminate EE and DER disincentives
- ◆ Evolution to PBR today
- ◆ Assistance from the US DOE
- ◆ Utility transformation
- ◆ 9.4% RPS in 2008 to 27% today
- ◆ 367 rooftop PV systems in 2001 to over 80,000 today
- ◆ Many days of 80% of generation from wind and solar
- ◆ Latest RFP to take utility up to 75% RPS in 2025

New innovative solutions needed to achieve goals

- ◆ Advanced Inverter work
- ◆ Award-winning grid modernization strategy
- ◆ Electrification of Transportation Roadmap
- ◆ Industry's second largest renewable + storage procurement
- ◆ Leading demand response programs
- ◆ Novel procurement vehicles:
 - Renewable Dispatchable Generation PPA
 - Grid Services Purchase Agreement

HECO System Results for Tue 09/10/19



Our most recent Stage 1 RE procurement exceeds our PSIP



Stage 1 RFP

**139.5 MW +
558 MWh storage**

**60 MW +
240 MWh storage**

**75 MW +
300 MWh storage**

**2022 Estimated
RPS**

42%

90%

78%

Stage 2 RE and Grid Services targets accelerate PSIP



**Stage 2
Renewable
RFP**

**1,300,000 MWh +
200 MW storage
50 MW Contingency
Storage**

**444,000 MWh +
18 MW Contingency
storage**

**295,000 MW +
40 MW storage**

**2025
Estimated
RPS**

61%

96%

109%

**Grid
Services
FFR1/FFR2**

50 MW / 39 MW

8 MW / 0 MW

**18 MW / 0
MW**

**Grid
Services
Capacity**

119 MW

21 MW

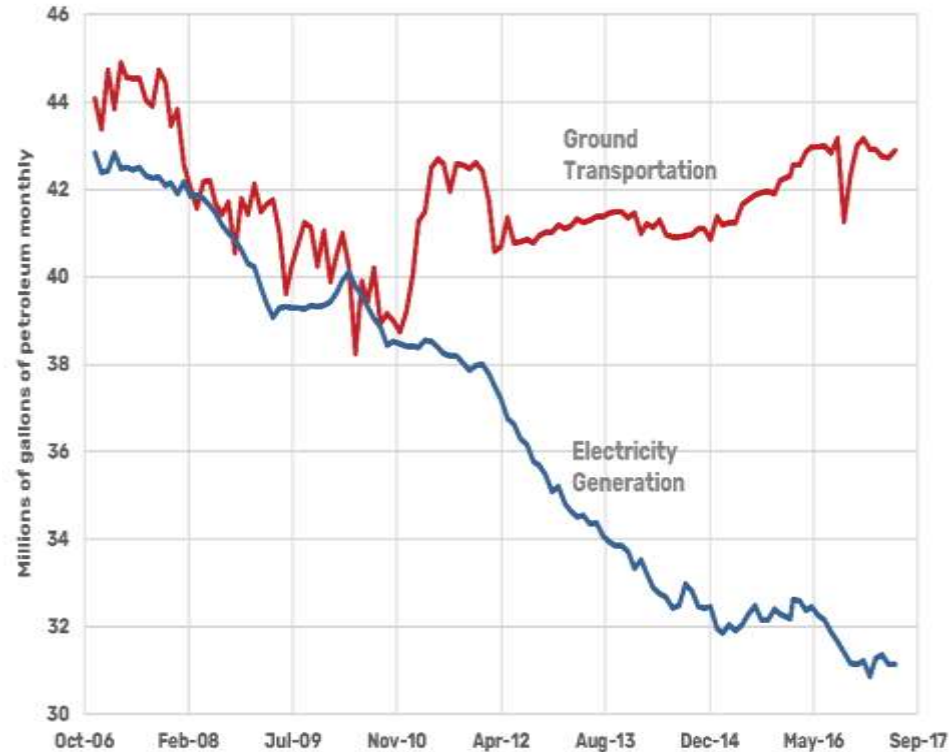
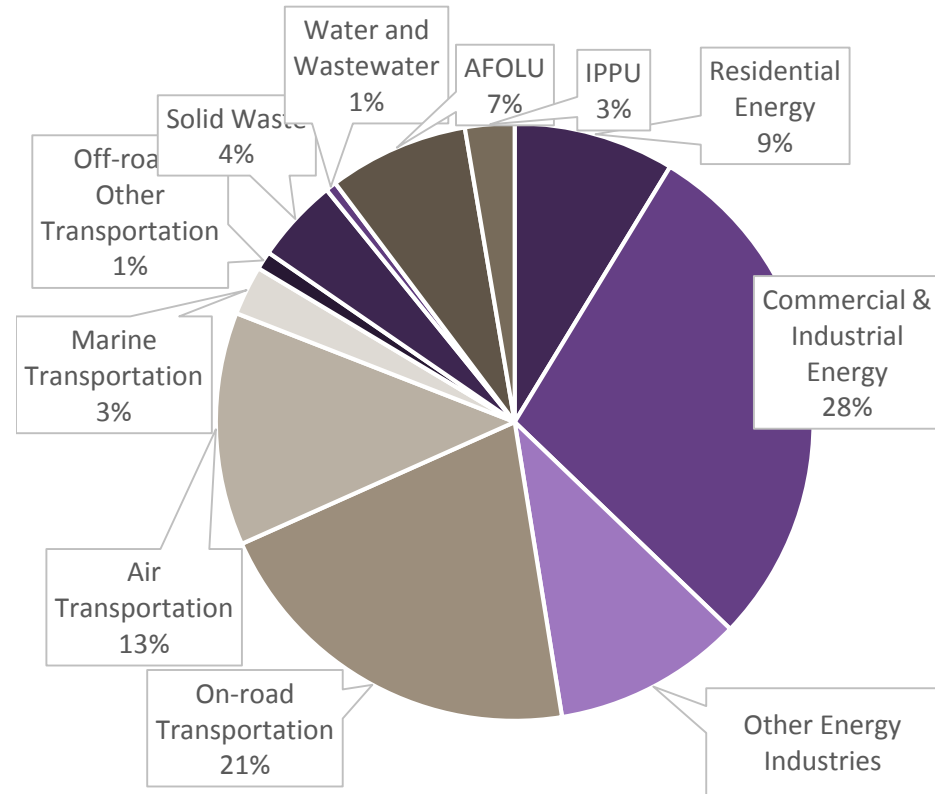
4 MW

Stage 2 RE and Grid Services targets accelerate PSIP



Proposed Stage 2 RFP	13,300 MWh to 20,800 MWh	8,500 MWh
2025 Estimated RPS	56-72%	108%

We've made a lot of progress, but we're still on our journey



Mahalo and Questions



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