

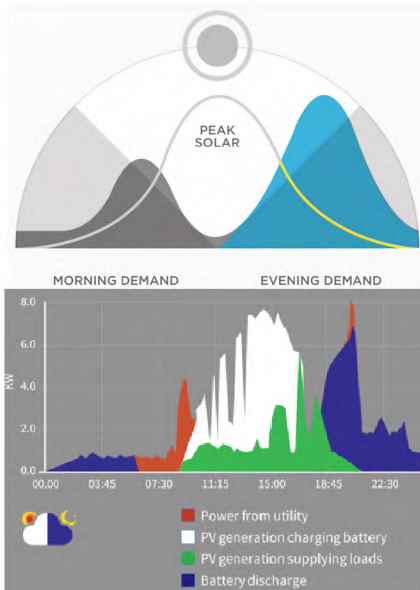


Residential Energy Storage System (RESS)

Battery Storage Time of Use and Capacity

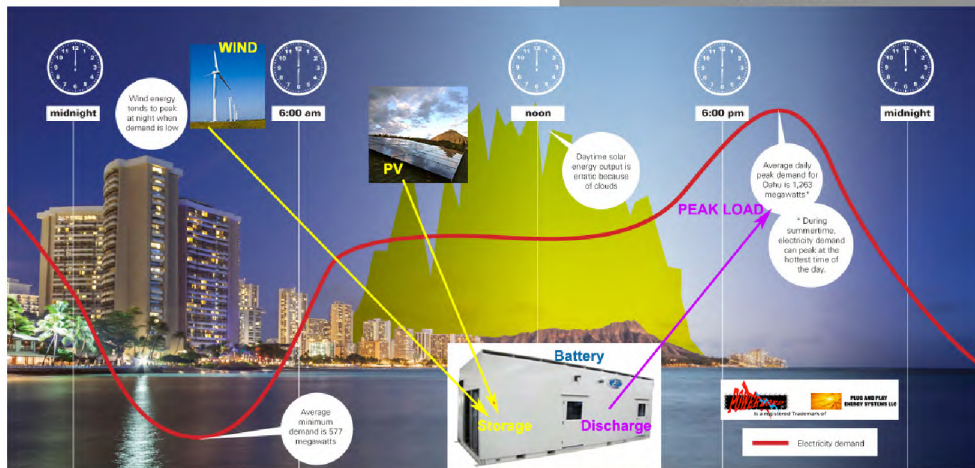
Almost every Battery Company has a graphic showing the relationship between PV, customer load, Battery charge/discharge and the Grid. These graphics are from Tesla and another Battery company.

Tesla depicts their undersized battery powering the world 24-7 and the other shows its under capacity battery needing the Grid for help in the morning and evening.



Neither is accurate. Residential and Commercial load profiles differ in demand and time of use.

Hawaiian Electric real time data shows a pattern combining the two load profiles in a more swag back profile.



Residential Peaking at around 6-8pm, Commercial peaking between 9am and 3pm.

This creates different scenarios for Battery Storage systems in Capacity, Power and Control to maximize Customer satisfaction. One size does NOT fit all. PPES High Battery Capacity and Efficient Inverter settings allow our batteries to operate under all load conditions and time of use.

