



Unlocking the Promises of Distributed Energy Resources

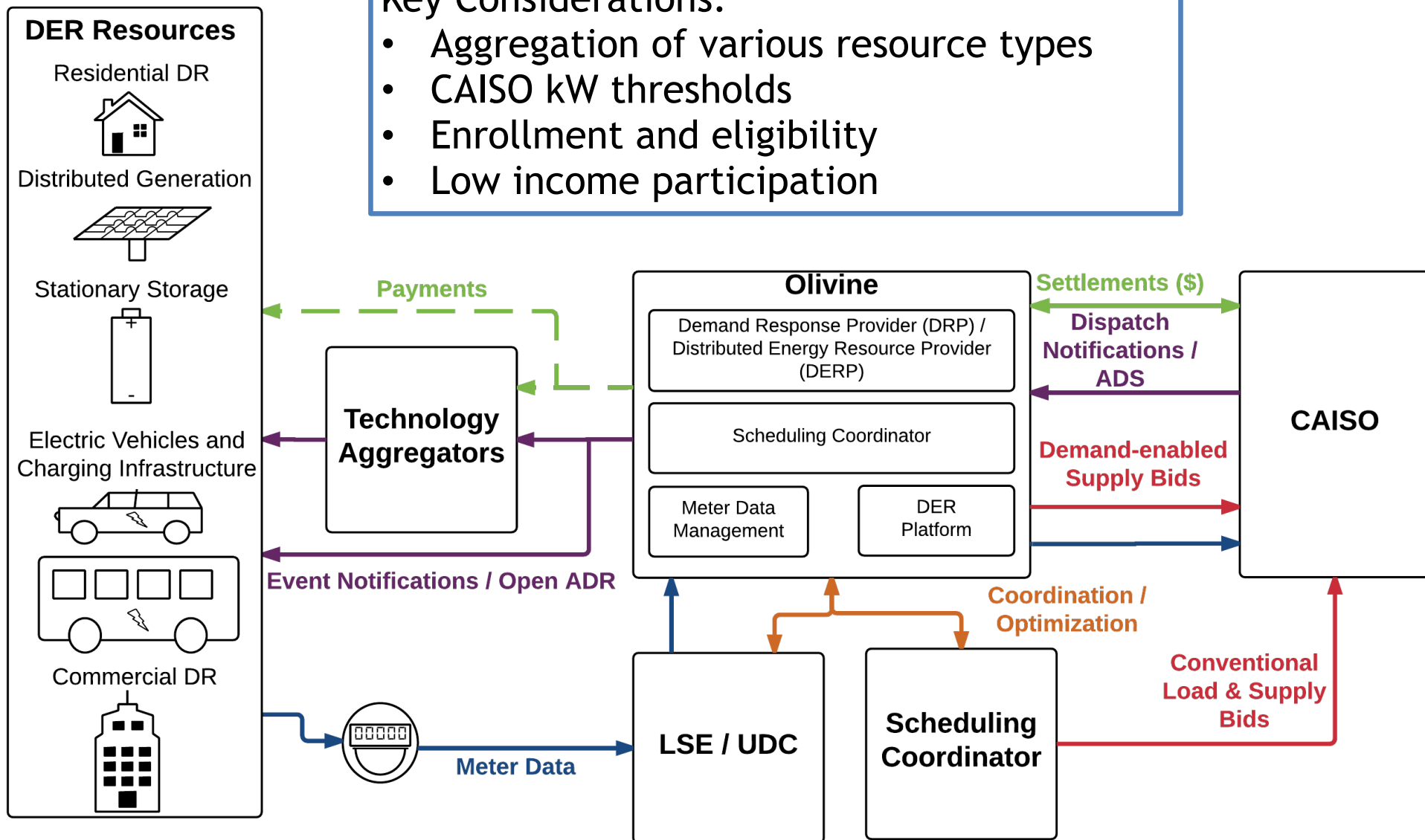
The Business of Local Energy
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Implementation and Aggregation Framework



Key Considerations:

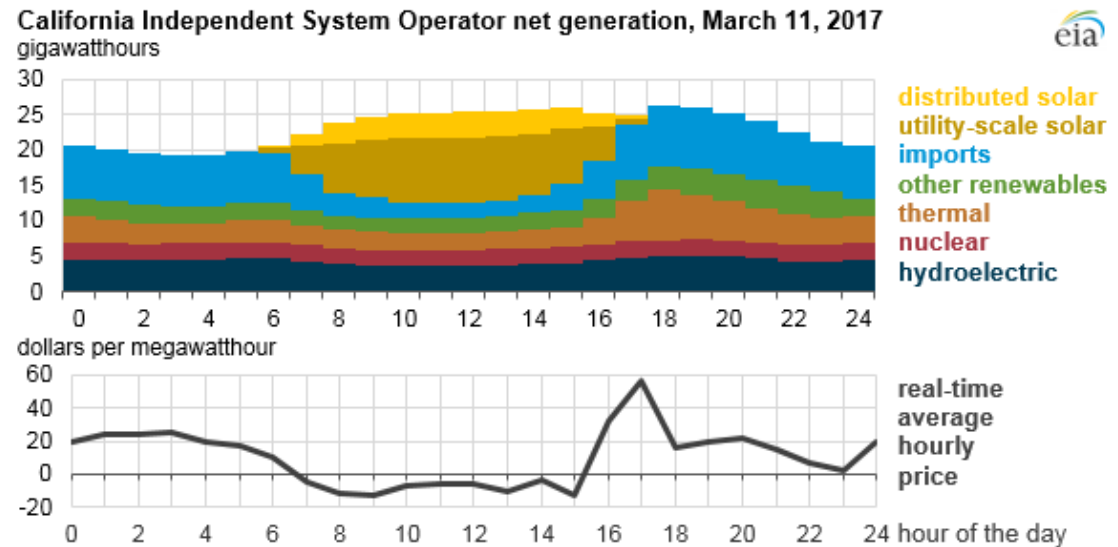
- Aggregation of various resource types
- CAISO kW thresholds
- Enrollment and eligibility
- Low income participation



Over Generation Program Opportunities



- Balancing over generation is a critical grid need to reduce negative pricing and renewable curtailment

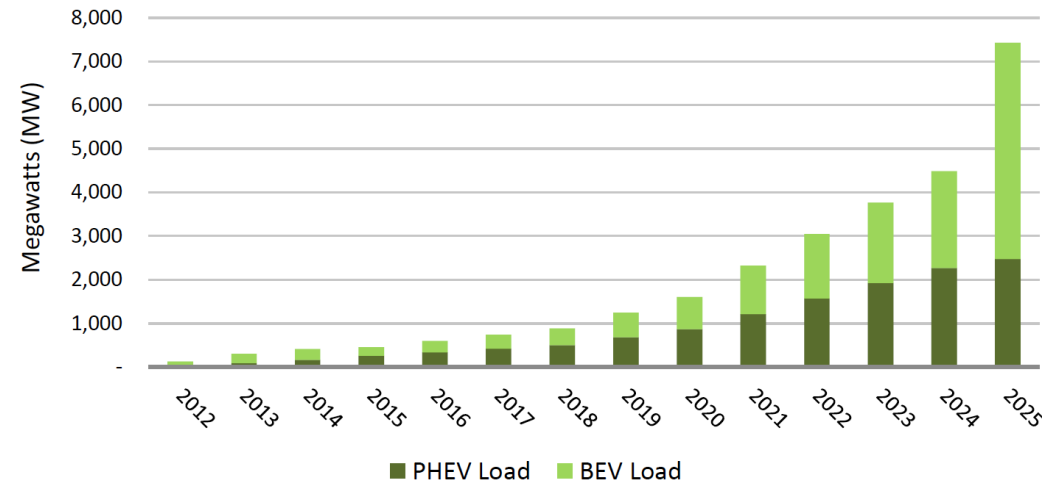


- Building off PG&E's Supply Side Pilot (SSP) and Extra Supply Pilot (XSP)
 - DERs and DR can be used to shift demand to over-generation periods
 - “Pay to consume” models are being explored to reduce energy costs for low income residents

Vehicle Electrification Opportunities



The wider deployment of electric vehicles create challenges and opportunities for grid services



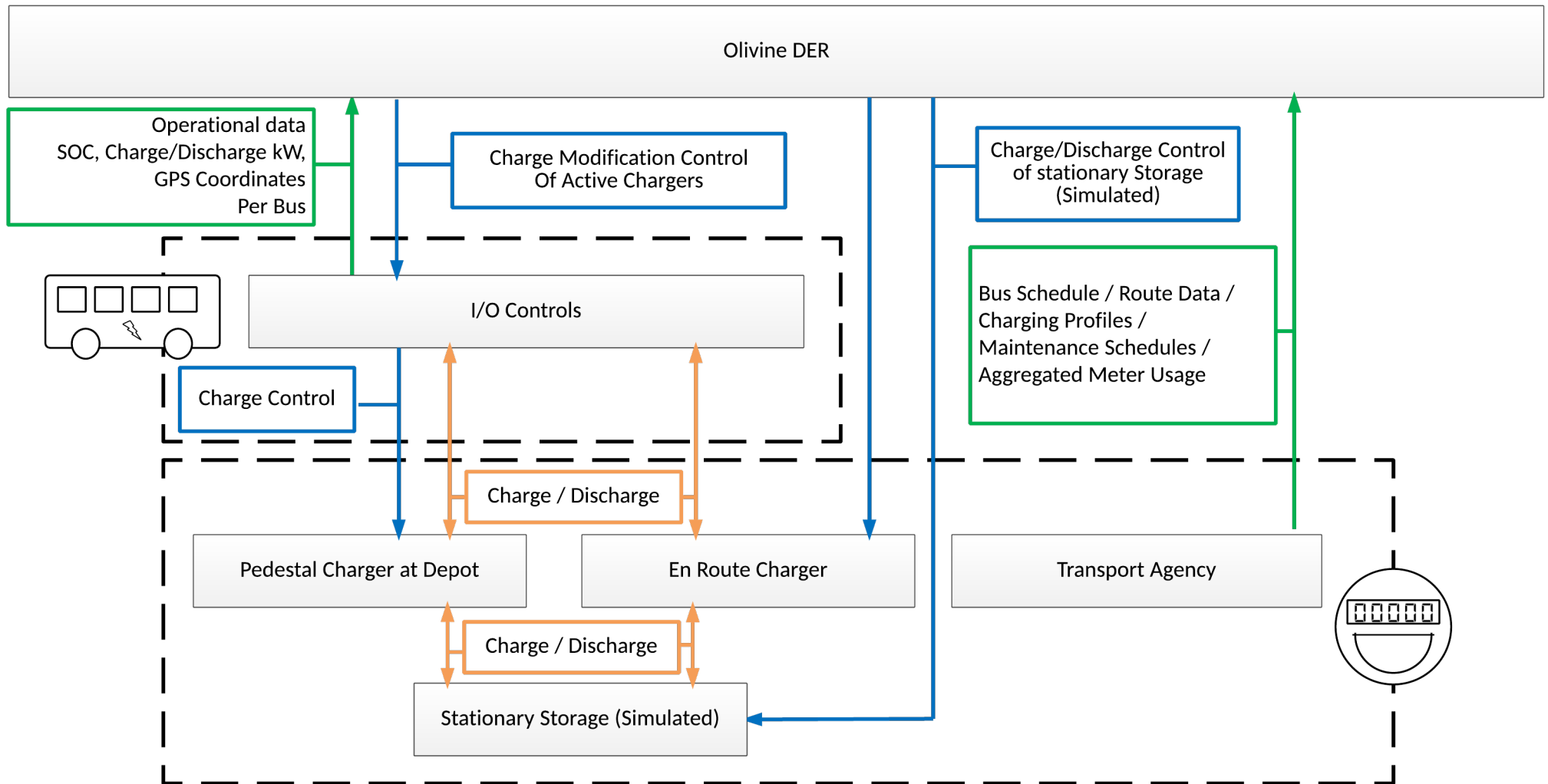
Opportunities

- Growing fleets and heavy duty vehicles (e.g., BEV buses)
- Movement from "smart charging" (V1G) to more complex optimizations
- Coupling EVs with second life battery storage

Challenges

- Requires massive scale for grid services; cars not charging at the 'right' times
- Measurement
- Proprietary systems

VGI Fleet Implementation



Contact



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