



October 29, 2015

Distributed Technologies Create Questions

Many Technologies

Regulators



Why and what should I buy?

How will the grid be affected?

goals met?

Customers

Utilities

Distributed Energy Resource (DER) Lifecycle

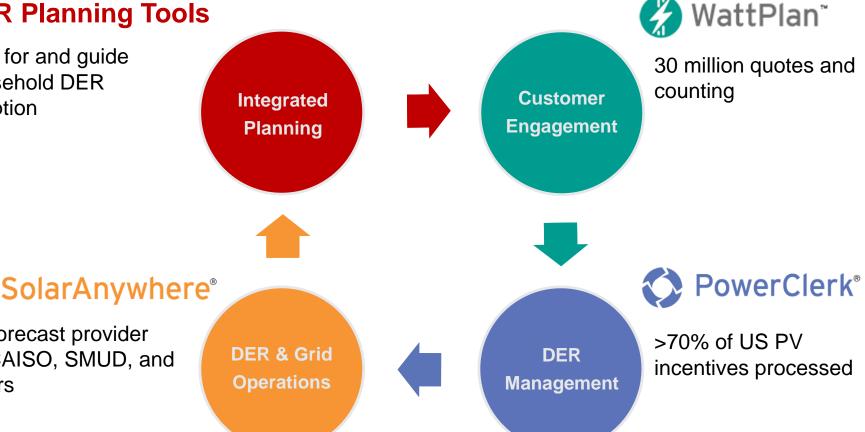
DER Planning Tools

Plan for and guide household DER adoption

PV forecast provider

others

for CAISO, SMUD, and





Case Study for 35 Year Old, 3000 ft² House



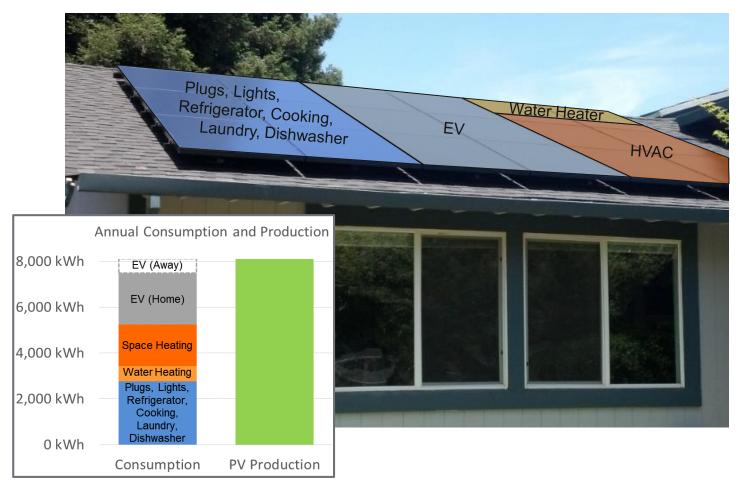
Add 6 kW of PV



Implement Efficiency and Fuel Switching to Convert to ZNET

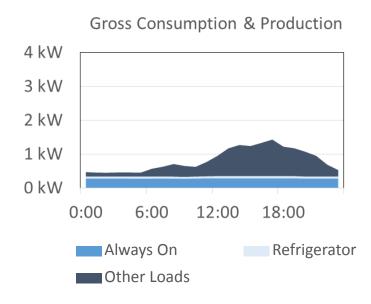


One Year of Measured Results Demonstrate Feasibility





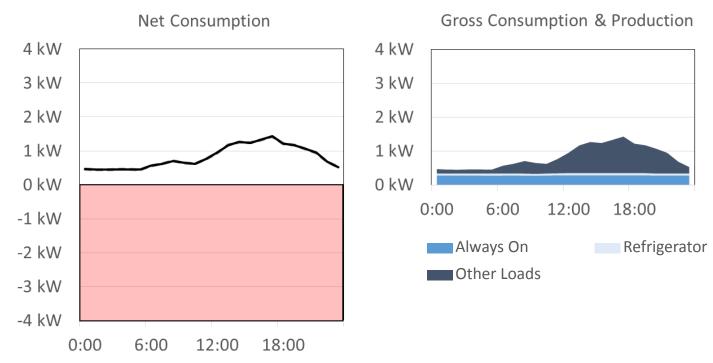
Consumption Prior to ZNET Investments on Average Summer Day



Natural gas and gasoline consumption are not included



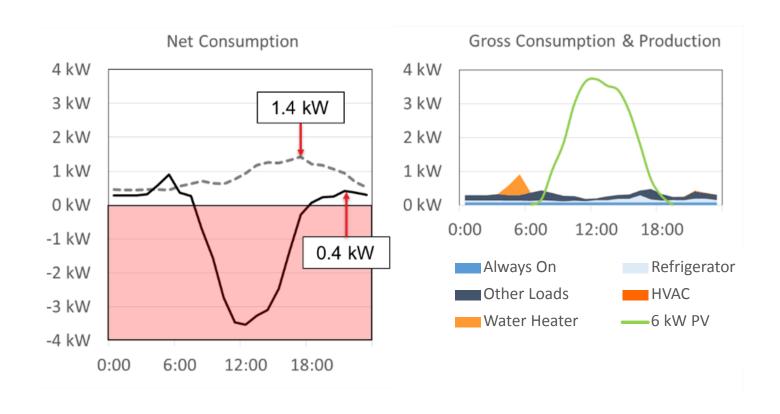
Consumption Prior to ZNET Investments on Average Summer Day



Natural gas and gasoline consumption are not included



Consumption After ZNET Investments on Hottest Day of Year





Conclusions

 ZNET is technically and economically feasible in California

 Individuals can take cost-effective personal actions to achieve renewable energy future

 Plug load reductions represent an important component of the ZNET investments



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