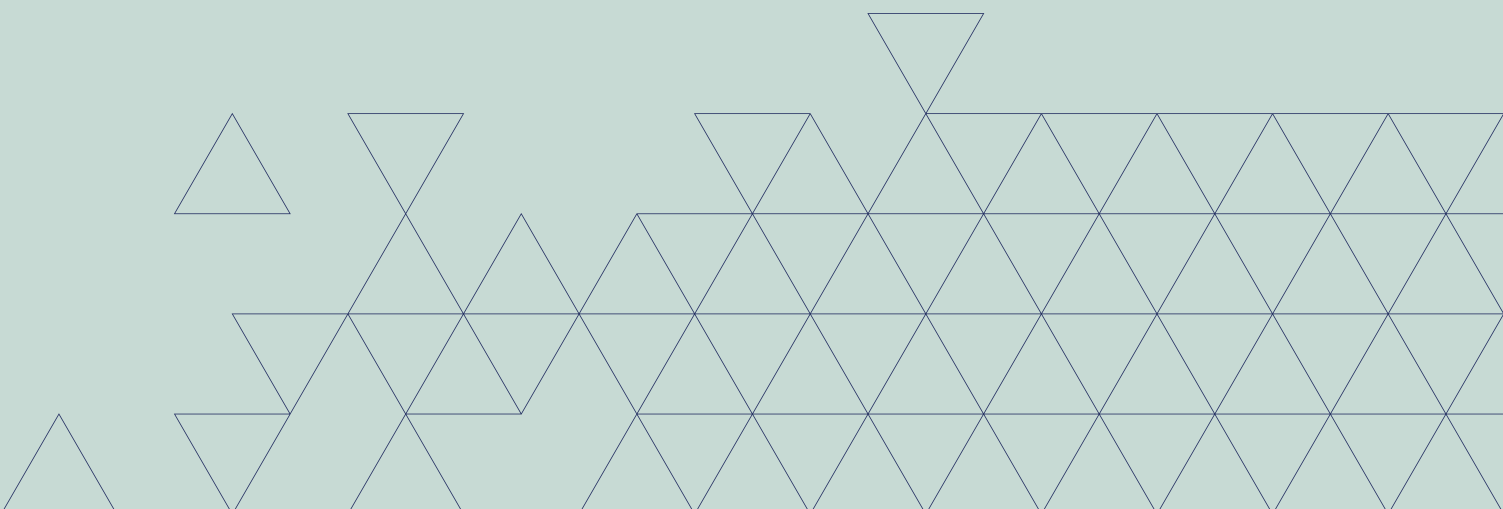





Community Energy Equation

Demonstrating the economic viability of the
Community Energy concept



Community Energy equation demonstrating the economic viability of the Community Energy concept

	Scenario 1: Individual approach	Scenario 2: Community Energy approach
 Average home(s)	1	100
 Solar capacity	5 kW	500 kW
 Storage capacity	8 kW	800 kW
 Relationship to the grid	<ul style="list-style-type: none"> • 7,870 kWh of solar production annually • Battery storage shaves over 100% of peak time of use charges with smart management • House-by-house installation and interconnection 	<ul style="list-style-type: none"> • 7,954,054 kWh of solar production annually • Battery storage shaves over 100% of peak time of use charges with smart management • Leverages project cost efficiencies and ability to aggregate solar production and battery storage
 Benefits	<ul style="list-style-type: none"> • Net present value over 25 years including battery replacement: USD 7,296 • Average electricity bill savings of USD 2,700 per year over 25 years • Hedges against future electricity price increases reaching upwards of 3% per year • Enhanced self-sufficiency and reduced environmental impact 	<ul style="list-style-type: none"> • Saves USD 3,900 in capital costs per household compared to scenario 1, a 17.5% discount, even factoring in land acquisition costs • Net present value over 25 years including battery replacement and land leasing costs: USD 10,485 per home • Average electricity bill savings of USD 2,700 per year over 25 years • Hedges against future electricity price increases reaching upwards of 3% per year • Provides those without ability to install solar an opportunity to take advantage of solar + storage benefits • Enhanced community engagement, self-sufficiency, and reduced environmental impact • Offers an aggregated resource that can be utilized for demand response and/or grid ancillary services

Source: Based on research and modelling using National Renewable Energy Laboratory's System Advisor Model (NREL SAM): <https://sam.nrel.gov> and its U.S. Photovoltaic Prices and Cost Breakdowns: Q1 2015 report: <http://www.nrel.gov/docs/fy15osti/64746.pdf> for the San Diego, California region.

