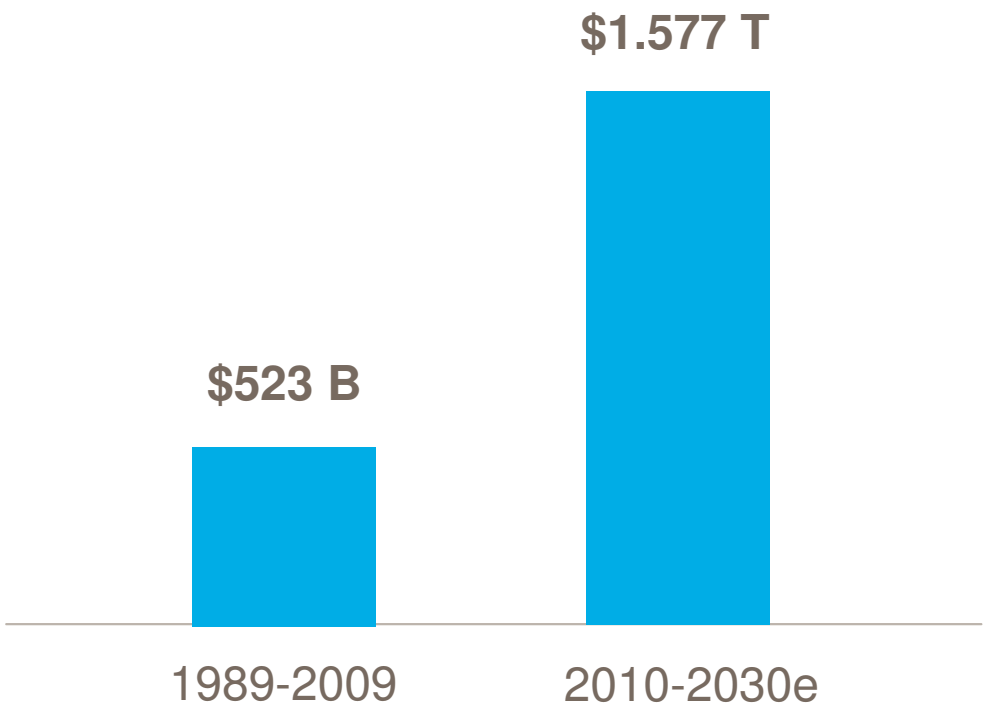
The Power Sector in the Age of Consumer Empowerment

Actual neighborhood of Sunrun customer homes in Stevenson Ranch, CA

Meet some energy industry movers and shakers:

Modern energy infrastructure is all of our business.

Historical and expected utility capital expenditure for generation, transmission and distribution



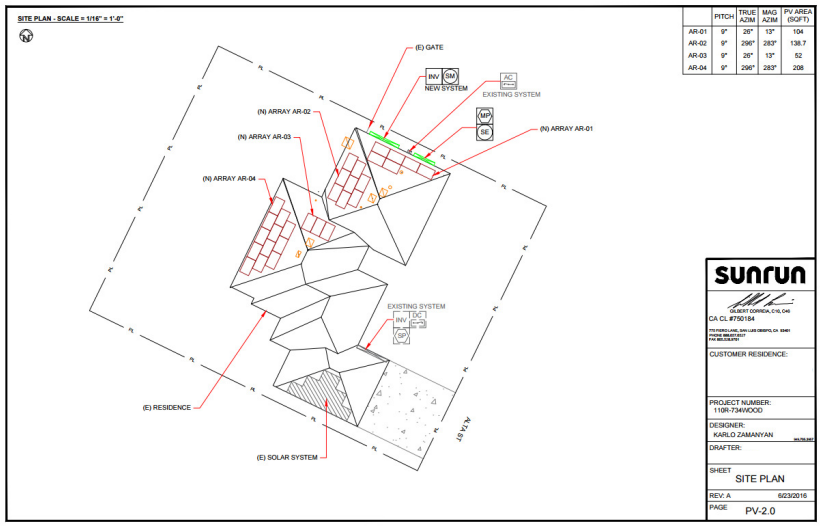
Source: Transforming America's Power Industry, The Brattle Group, 2008.

Who wins a race to 1 GW?

Photo credit: Duke Energy

1 x 1,000 MW Combined Cycle Gas Plant

~4 years

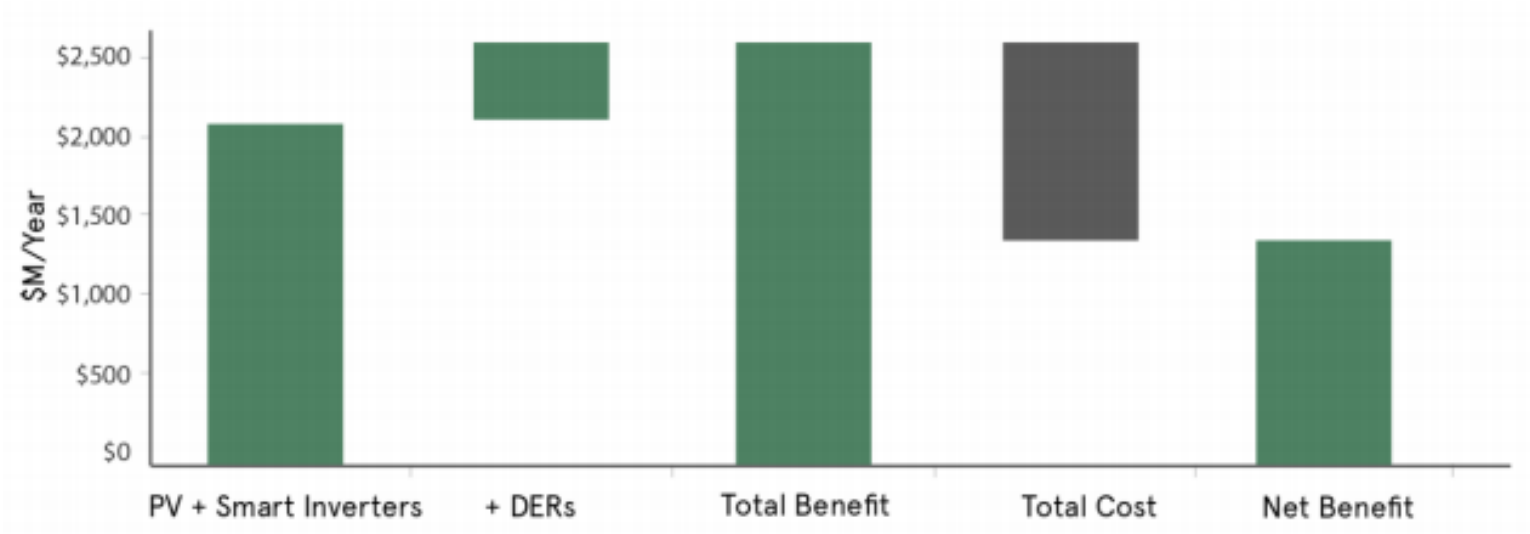


142,857 x 7 kW Rooftop Solar Array

~4 months

Based on Greentech Media Solar Market Insights 2015 projection for residential solar installations in 2016.

$1.4B in annual net benefits to Californians by 2020 from incorporating distributed energy resources



Source: Pathways to a Distributed Grid, SolarCity, 2016

Photo Credit: Wikipedia.com

Phonograph intended for listening to “spoken letters.”

Photo Credit: Wikipedia.com

Telephone intended for listening to concerts remotely.

Portion of U.S. load that can be served by rooftop solar at current module efficiency:

39%

Source: Rooftop Solar Photovoltaic Technical Potential in the United States: A Detailed Assessment, National Renewable Energy Laboratory, 2016.

Taxi

Hotel

TV

Power Plant

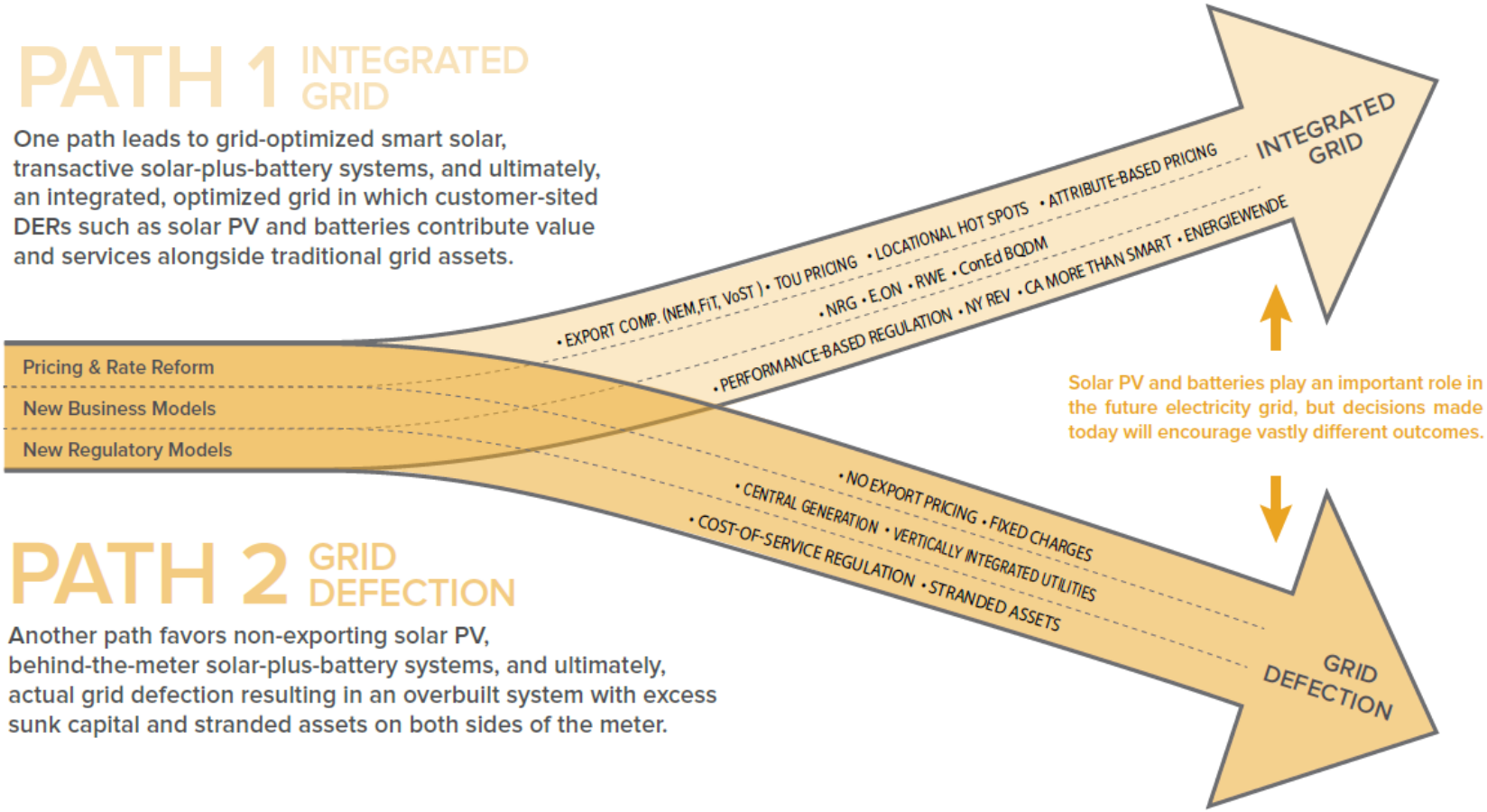
What will happen if energy providers don't work together?

Tens of millions of self-powered homes and businesses, operating in isolation from the grid.

+

Utility investment in stranded grid assets, leaving "ratepayers" to cover the costs.

The power sector faces a choice:



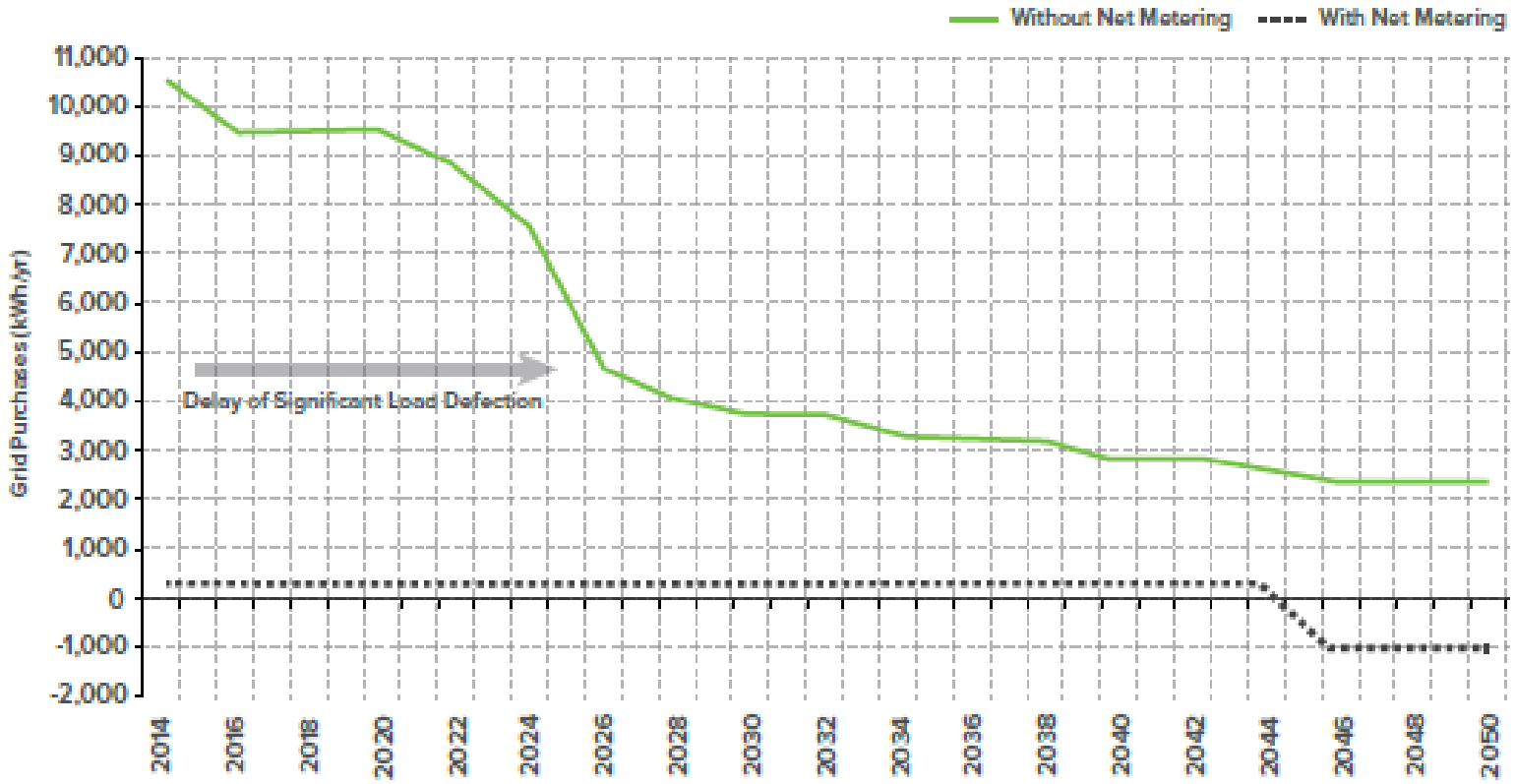
Sunrun BrightBox

Non-exporting PV+storage cheaper than utility rates

Rooftop solar will play a central role in modern energy infrastructure.

Eliminating net metering delays, but does not prevent, a shift to behind-the-meter generation.

Projected residential customer grid electricity purchase without net metering.
Westchester, NY

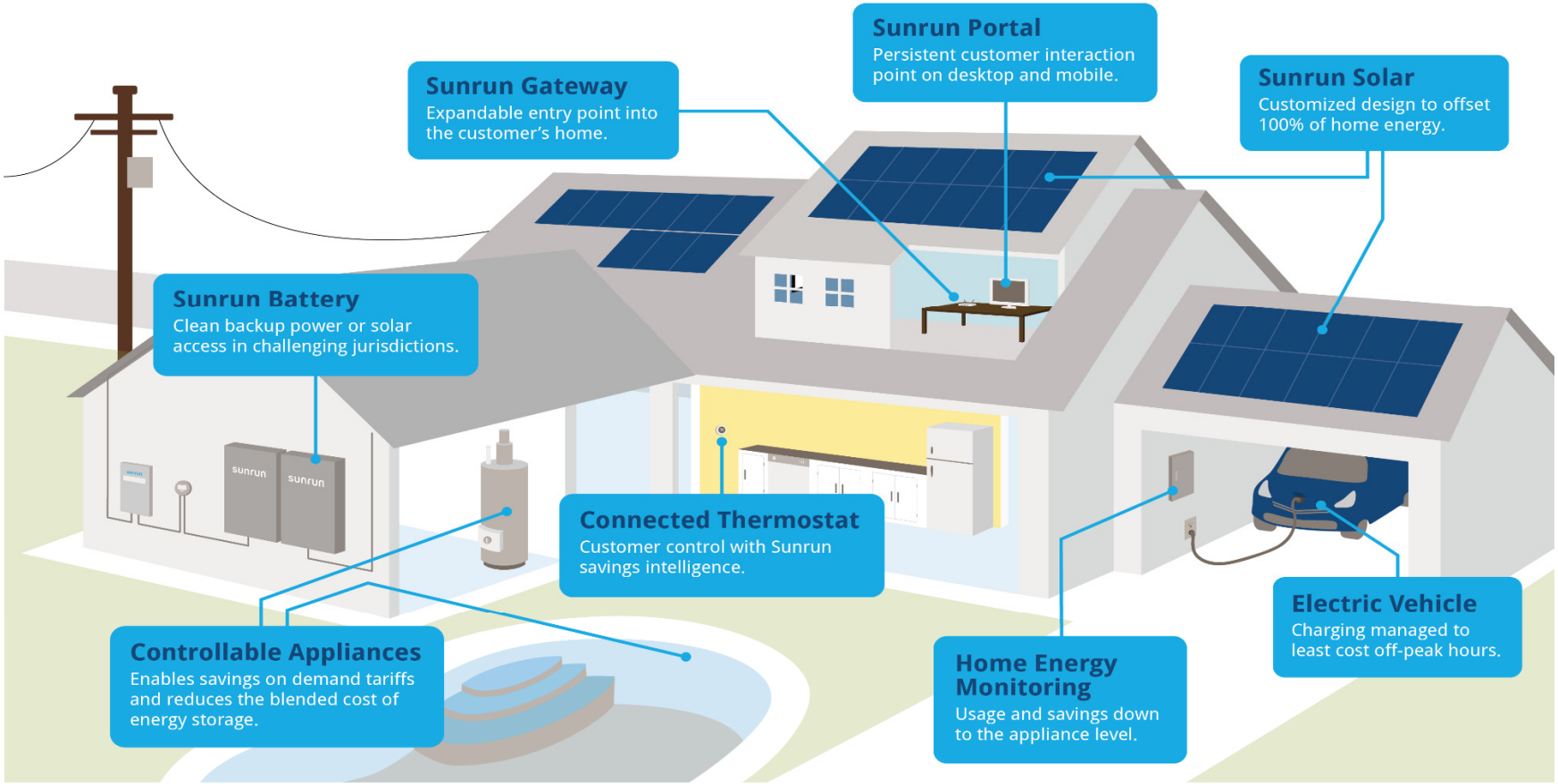


Coordinated infrastructure investment unlocks opportunity.

Photo Credit: Wikipedia.com

Home isn’t at the edge – home is at the center.

Comprehensive home energy management



All home energy assets participate to offer:

1. Consumer control – Dispatchable through the Sunrun Portal
2. Local smart response – Management of the ecosystem to reduce consumption or move consumption into off-peak hours
3. Network smart response – Enables 3rd party revenue streams through DR and beyond

If we can do it here, we can do it everywhere.