
CPS Energy's Generation Strategy

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December 20, 2016*

ABOUT CPS ENERGY

- The nation's largest municipally-owned natural gas and electric utility
- Serve 786k electric and 339k natural gas customers in a 1,515 square-mile service area
- Customers' combined energy bills rank among the lowest nationwide
- Solar leader in Texas; TX 10th in nation for solar capacity
- \$11B in assets; \$2.5B in annual revenue



VISION 2020

Vision 2020 transitions CPS Energy from a company that is highly dependent on traditional generation power sources to a company that provides **competitively priced power based on a diverse generation portfolio.**

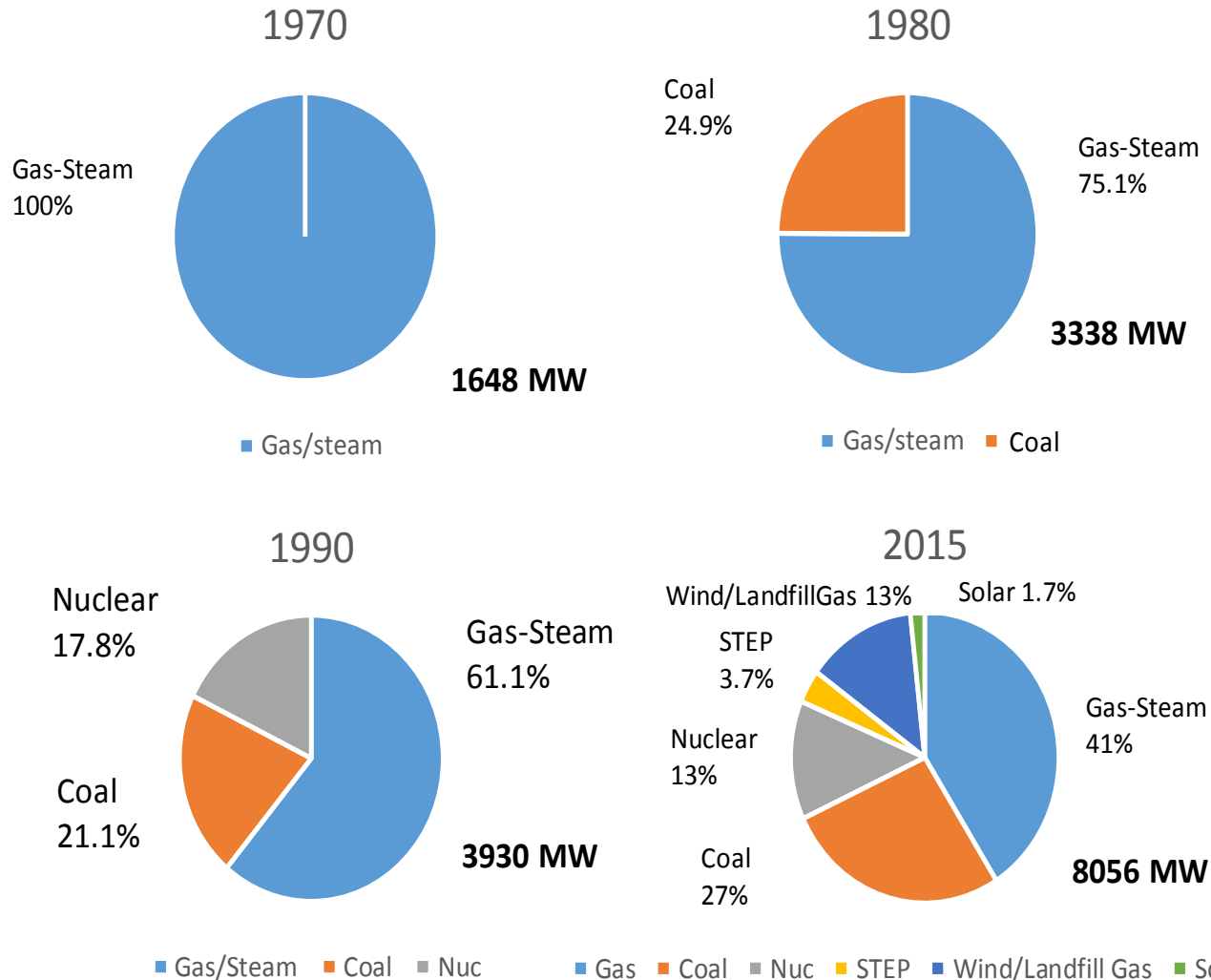
20% renewable energy capacity in power generation mix

65% of generation low-carbon

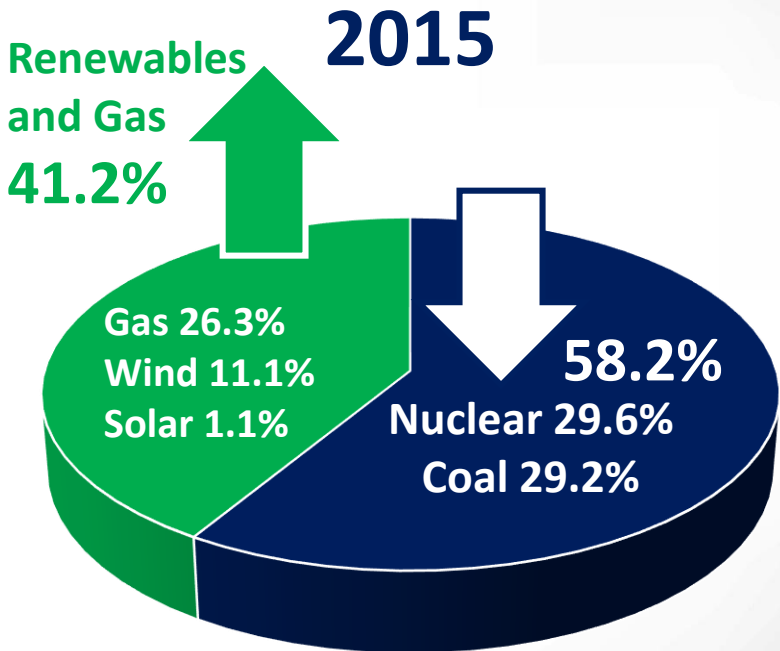
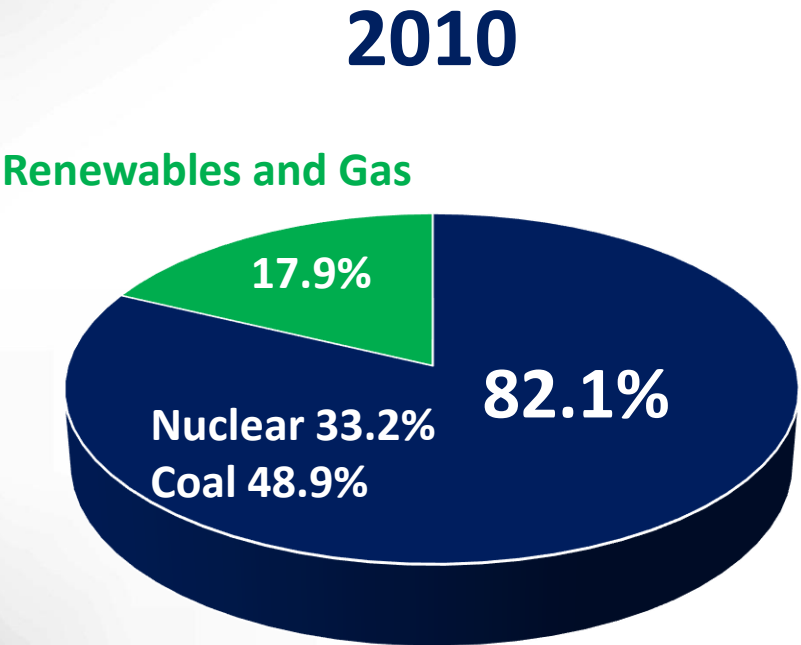


Diversification

Fuel and Technology Diversification - Installed Capacity



Generation Mix



■ Coal & Nuclear ■ Renewables & Gas

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CPS Energy Approach

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Reduce carbon intensity/transition to a cleaner fleet

- Early retirement of coal, Additional natural gas, Nuclear, Affordable renewables

Save For Tomorrow Energy Plan (STEP)

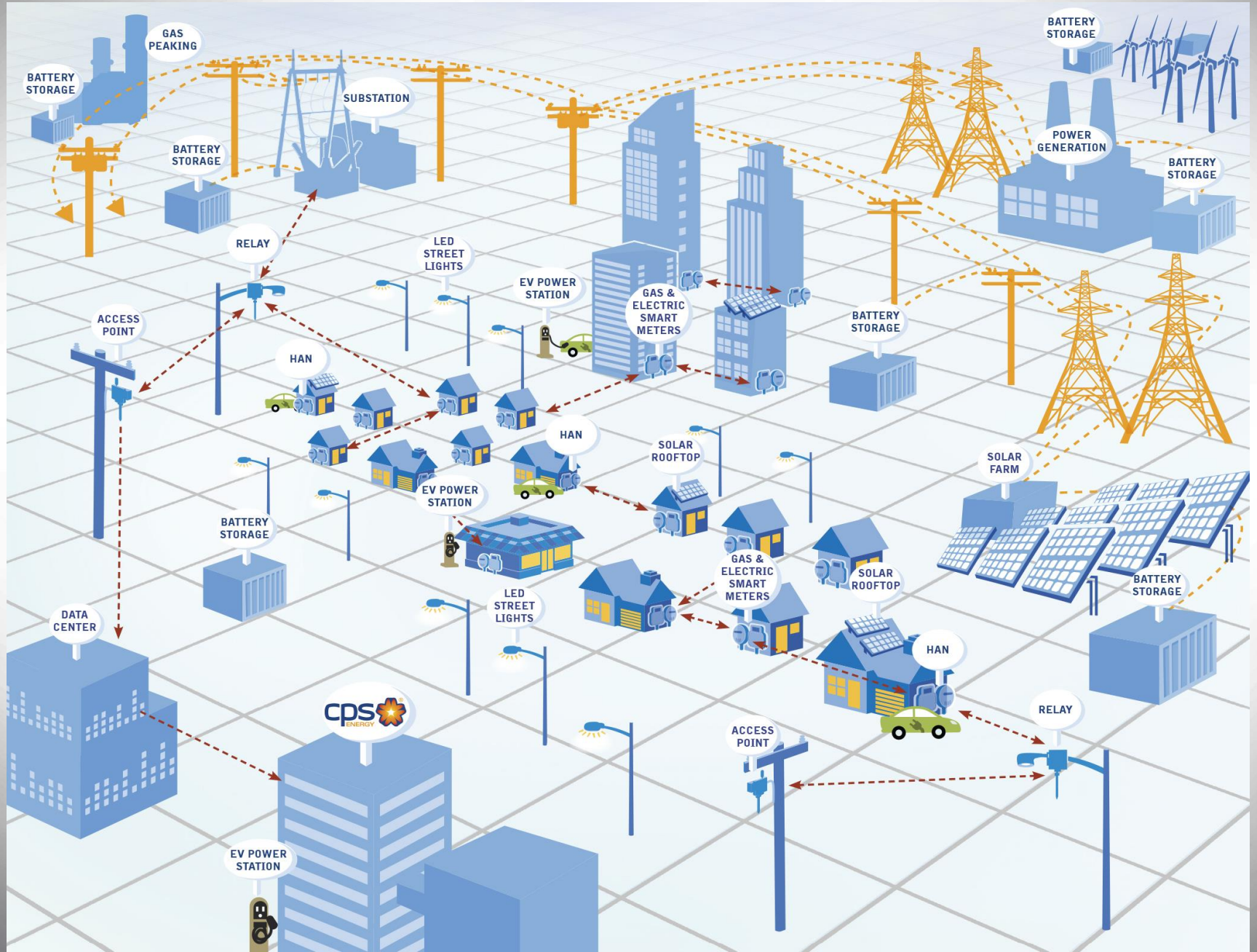
- Energy Efficiency
- Demand Response- Residential and C&I

Invest in innovative technologies

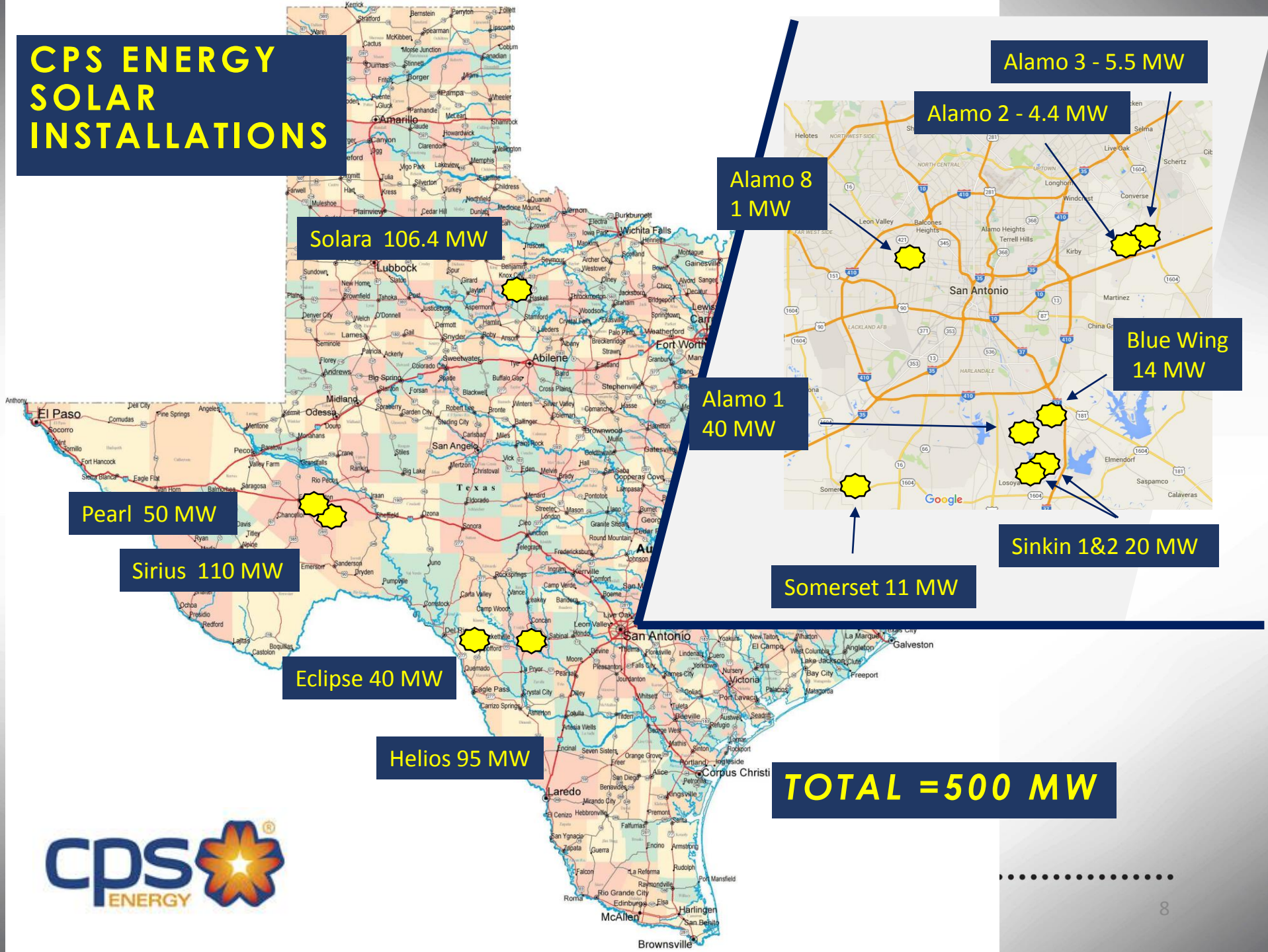
- LED lighting
- Smart grid/Smart meters
- Energy storage technologies



INTELLIGENCE & AUTOMATION OF GRID



CPS ENERGY SOLAR INSTALLATIONS



SOLAR TECHNOLOGY MIX



Fixed

Single Axis



Dual Axis

Photo courtesy of OCI Solar



ALAMO 5 SOLAR FARM



ALAMO 6 AND 7 SOLAR FARMS



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Photos courtesy of OCI Solar



3 SOLAR PROGRAMS

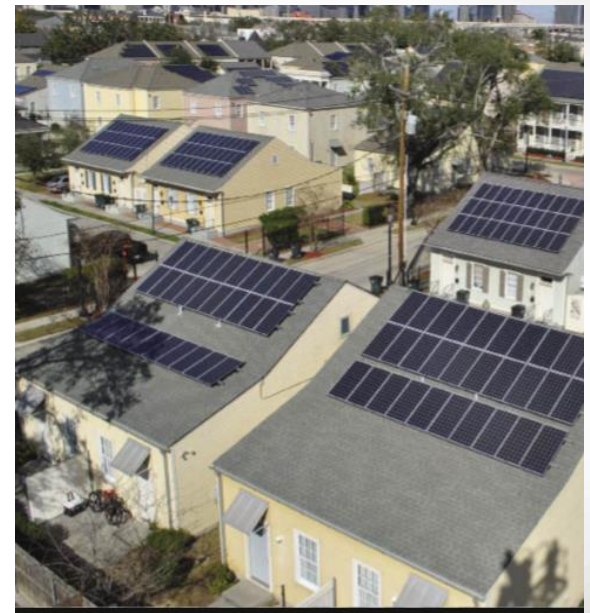
Private Ownership



Roofless Solar



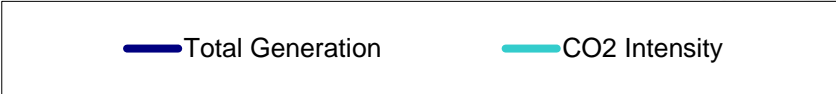
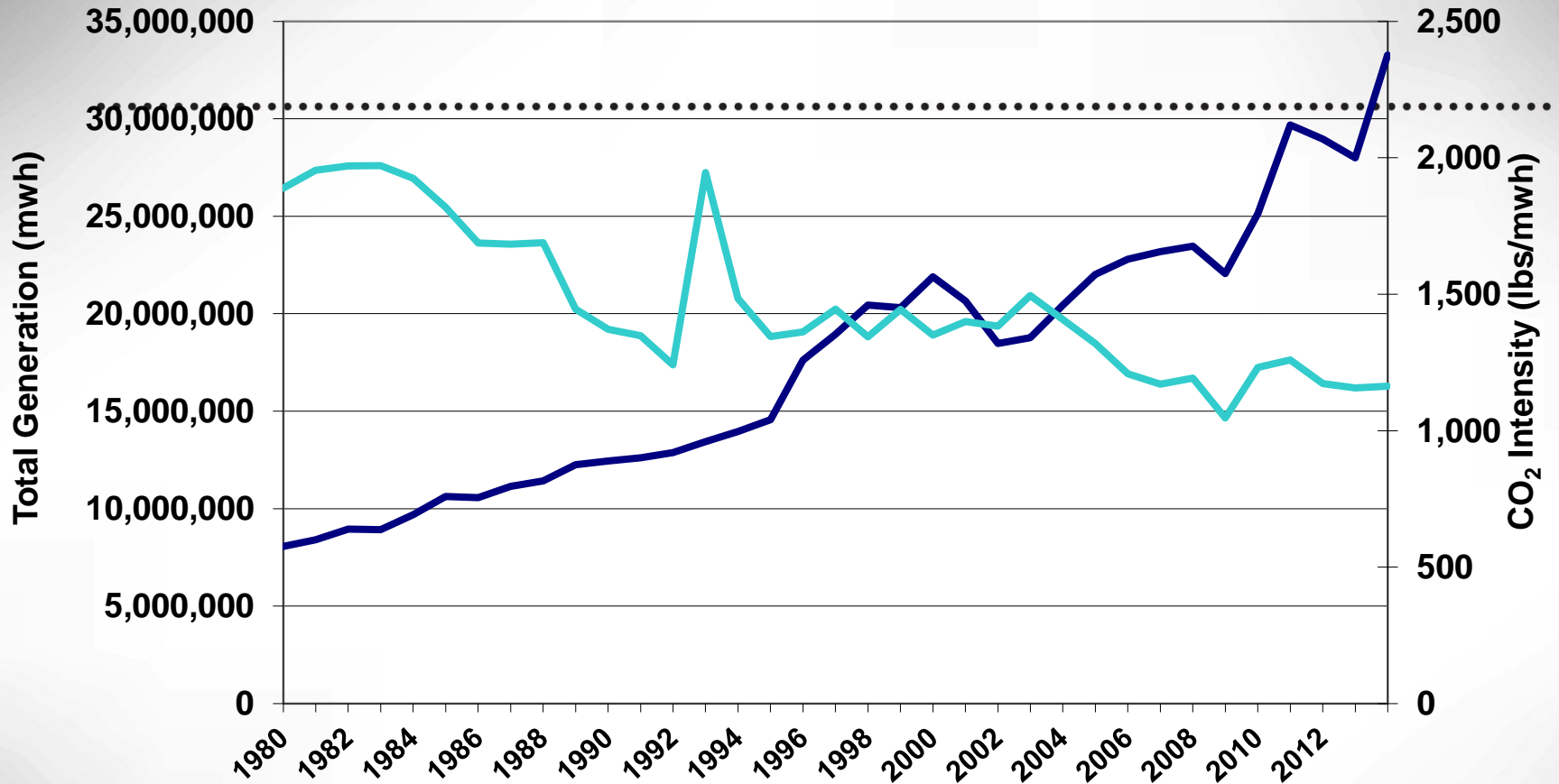
Solar Hosting



WIND



CPS Energy CO₂ Intensity

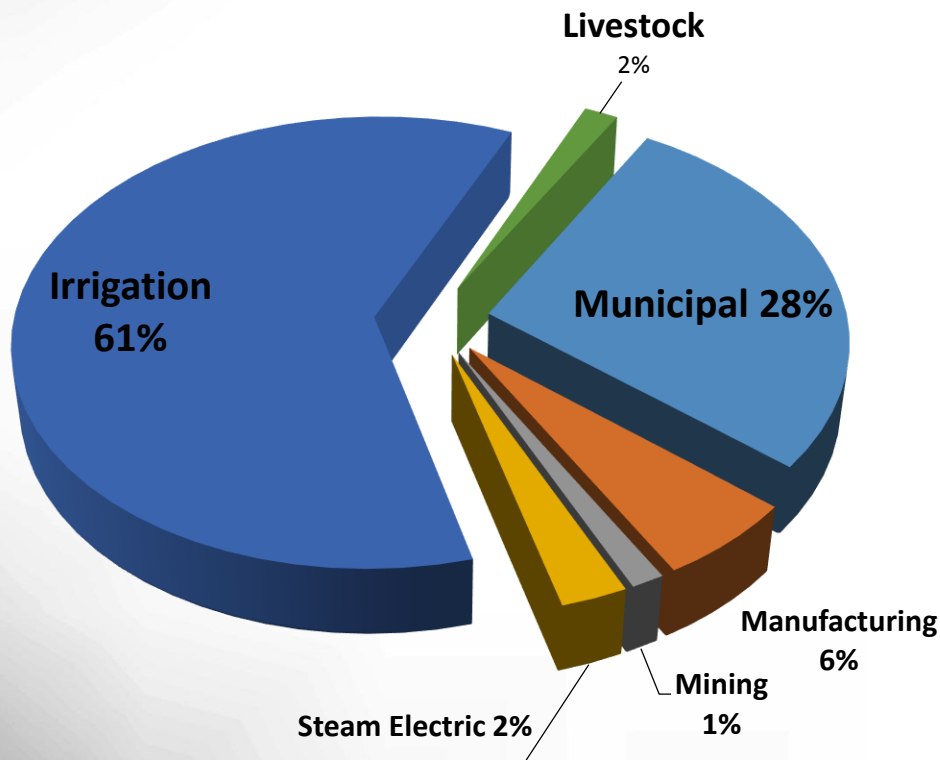


- 1988- STP 1 & 2 added to Generation mix
- 1993- STP shutdown for year
- 2005- Increase STP from 28% to 40% ownership
- 2010- Increase due to Spruce 2



POWER PLANT WATER USAGE

2011 Texas Water Use Survey*



State of Texas:

- Vast majority of water in electric generation process is cycled through power plant for cooling and returned to reservoir
- 2-4% of statewide water use; an important but relatively small amount on a statewide basis

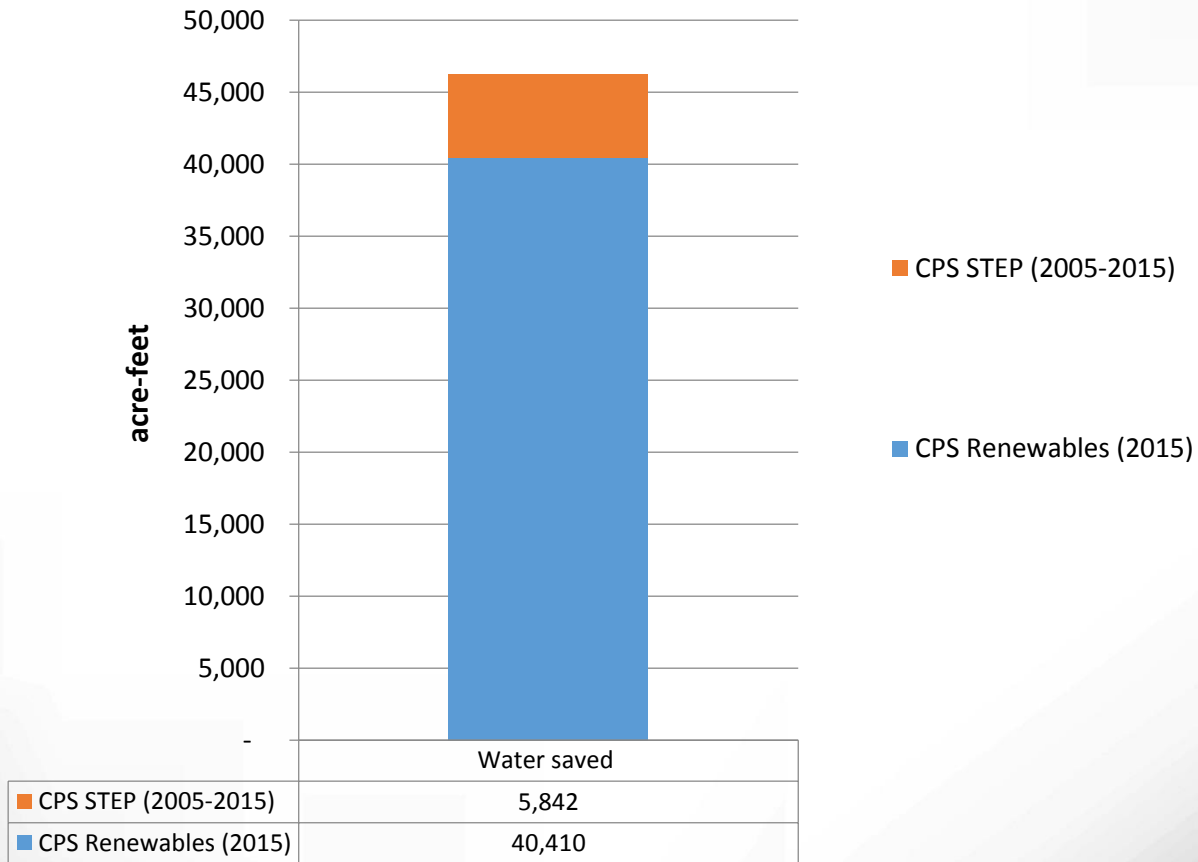
*Source: Texas Water Development Board

http://www2.twdb.texas.gov/ReportServerExt/Pages/ReportViewer.aspx?%2fWU%2fSumFinal_RegioReport&rs:Command=Render
Retrieved 12/4/2013

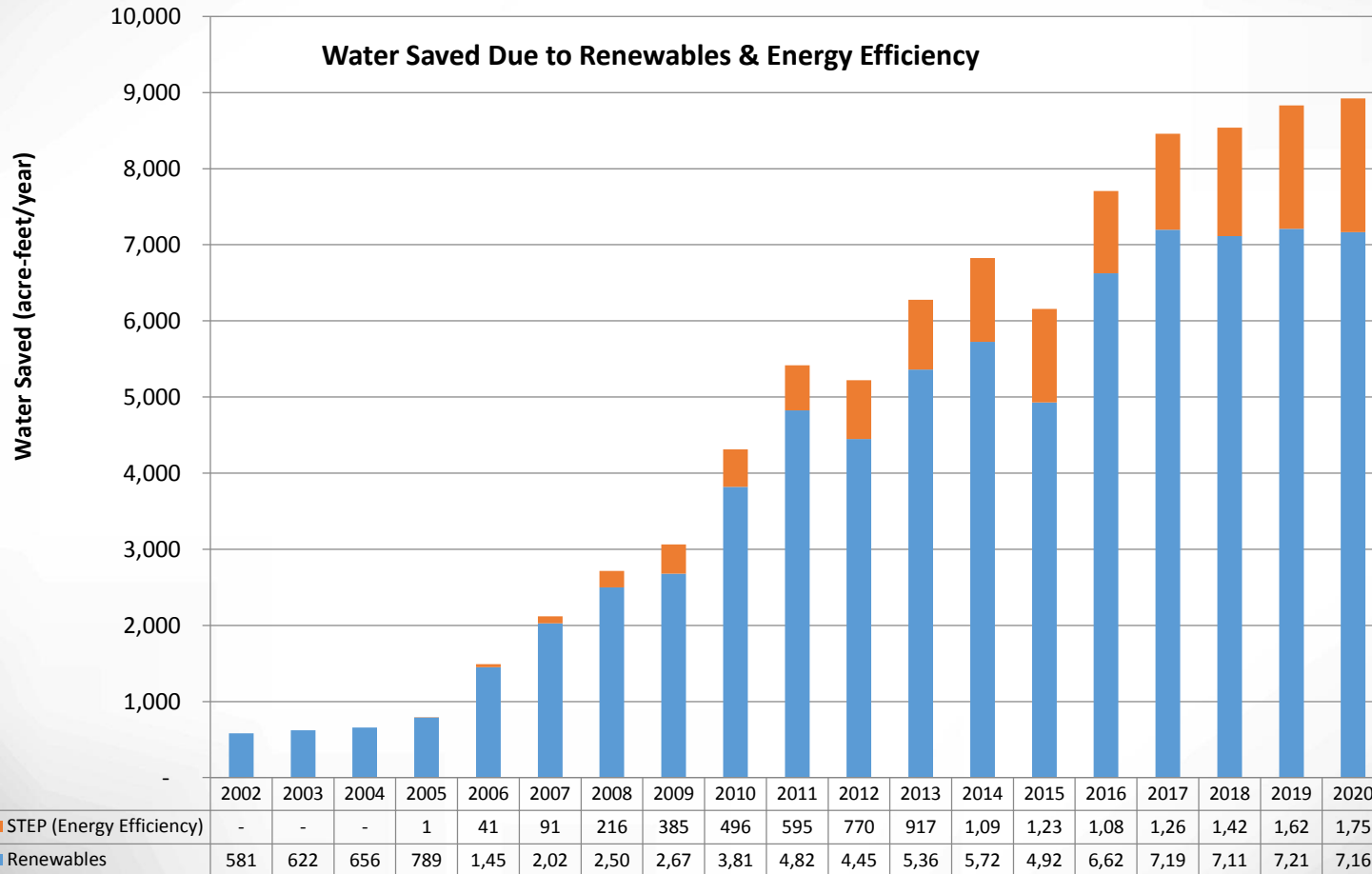
WATER USE

Water Sources	Water Requirements
Edwards Aquifer (Lee West Plant)	Cooling, process (NOx control)
Surface Water-Braunig Power Station	Cooling water, natural evaporation
Recycled Water from SAWS –Calaveras Power Station (San Antonio River beds and banks diversion) into Calaveras Lake	Cooling water, natural evaporation, process (FGD), and irrigation
Potable Water from San Antonio Water System (SAWS)/East Central Water	Boiler feed, process, sanitary and drinking
Reuse Water- Rio Nogales	Cooling tower
Potable Water - Rio Nogales	Cooling tower, boiler, sanitary and drinking

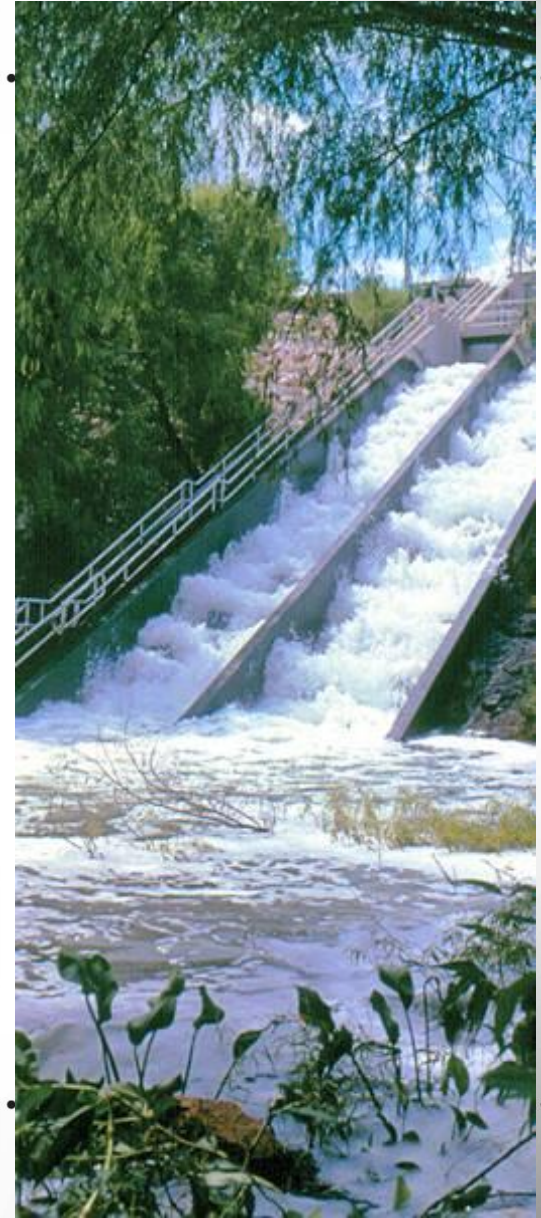
Cumulative Historical Water Savings



ANNUAL WATER SAVINGS



WATER REUSE



Edwards Aquifer Savings CY1962-2015

Total Edwards Aquifer Water Saved 1.1 million acre ft

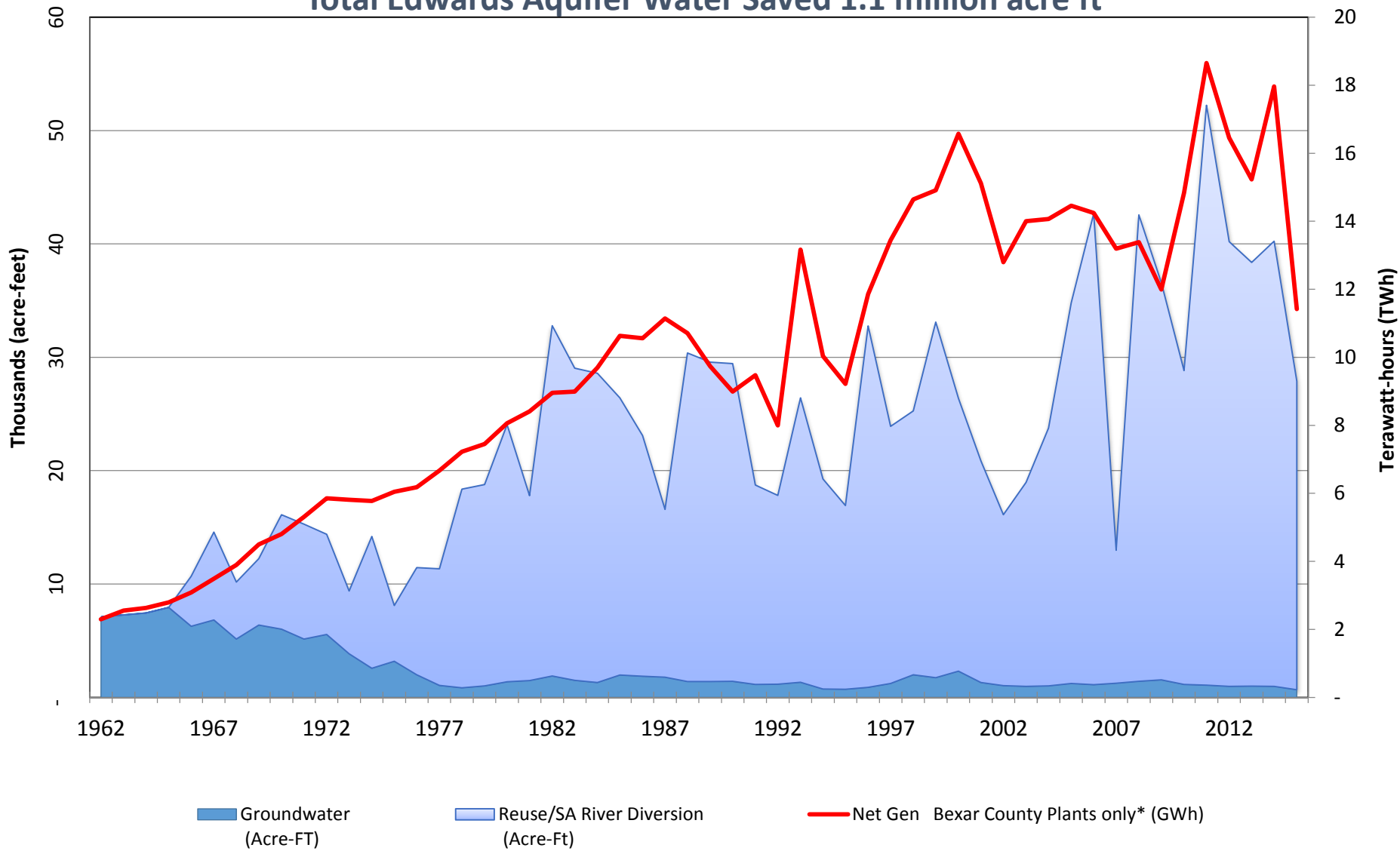




Photo courtesy of OCI Solar

QUESTIONS?