The Role of DG in Nevada's Clean Energy Economy

NV Legislature, Interim Energy Committee, April 7, 2014

EXHIBIT H – ENERGY
Document consists of 18 pages.
Entire Exhibit provided.
Meeting Date: 04-07-14

Agenda

- About SolarCity
- SolarCity in Nevada
- Benefits of Solar, Water Savings
- Where Is the Market Today
- Questions

Virtual Tour of SolarCity Las Vegas

- http://vimeo.com/83521572

Who We Are

Our Vision

- Clean energy for less than your monthly utility bill

Full Service Clean Energy Company

- Design, installation, financing, monitoring, energy efficiency services and ongoing support

Our Experience

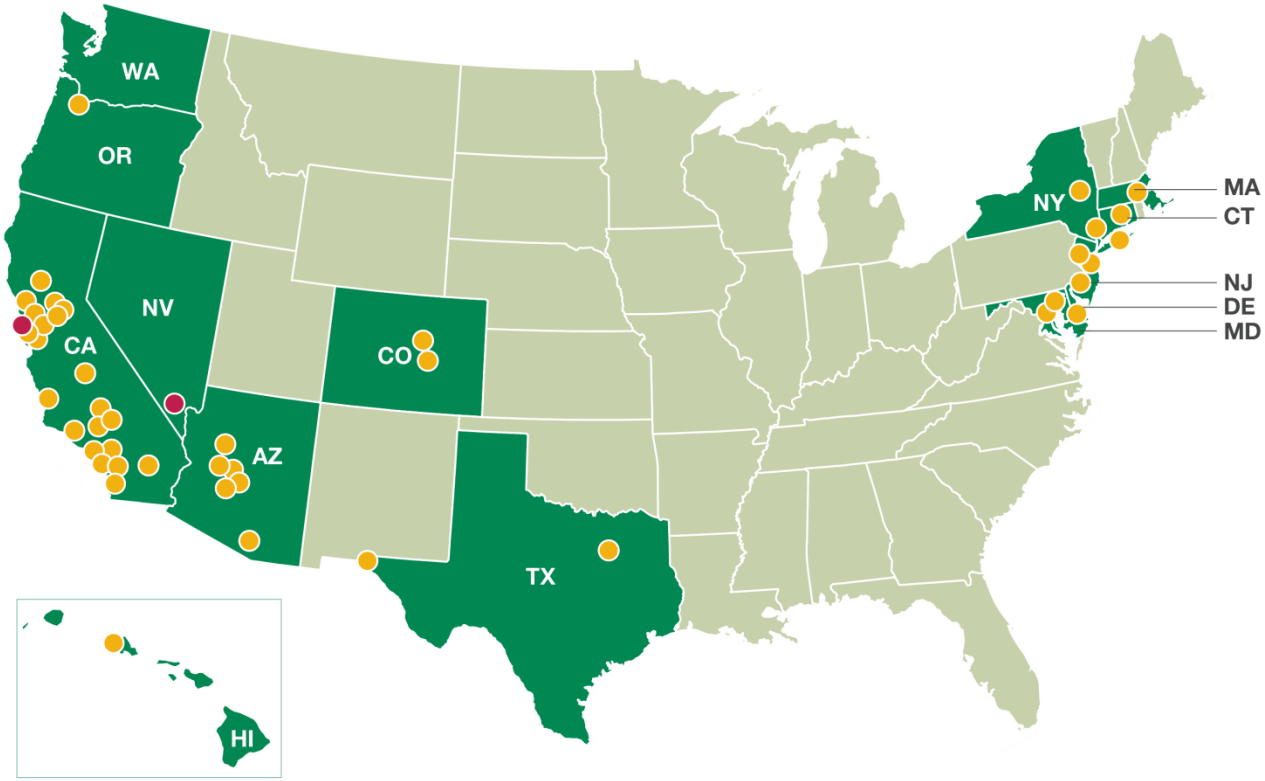
- #1 Residential solar installer in the US
- Serving 2,000+ communities
- More than 100,000 customers
- Currently providing approximately 1 in every 4 solar electricity systems nationwide

SolarCity Overview

- **America's #1 full-service solar provider**
  - 100,000+ customers
  - 1,000+ commercial solar projects
  - 500+ MW deployed (Q4 2013)
  - Serving 14 states nationwide—AZ, CA, CO, CT, DE, HI, MA, MD, NJ, NM, NY, OR, PA, TX, WA and DC

- **5,000+ Employees**
- **Project SolarStrong: targeting up to 120K military housing units nationwide**

Locations & Regional Operations Centers



Headquarters

San Mateo, CA
Las Vegas, NV

Regional Operations Centers

Dewey, AZ
Glendale, AZ
Deer Valley, AZ
Phoenix, AZ
Prescott Valley, AZ
Tucson, AZ
Bakersfield, CA
Berkeley, CA
Chatsworth, CA
Chico, CA
Concord, CA
Foster City, CA
Fresno, CA
Lancaster, CA
Livermore, CA
Los Angeles, CA
Morgan Hill, CA
Palm Springs, CA
Petaluma, CA
Riverside, CA
Sacramento, CA
San Diego, CA
San Luis Obispo, CA
Santa Ana, CA
Stockton, CA
Ventura, CA
Victorville, CA
Denver, CO
Parker, CO
Hartford, CT
Washington, DC
Seaford, DE
Mililani, HI
Marlborough, MA
Beltsville, MD
Blackwood, NJ
Cranbury, NJ
Albany, NY
Elmsford, NY
Long Island, NY
Portland, OR
El Paso, TX
Dallas, TX

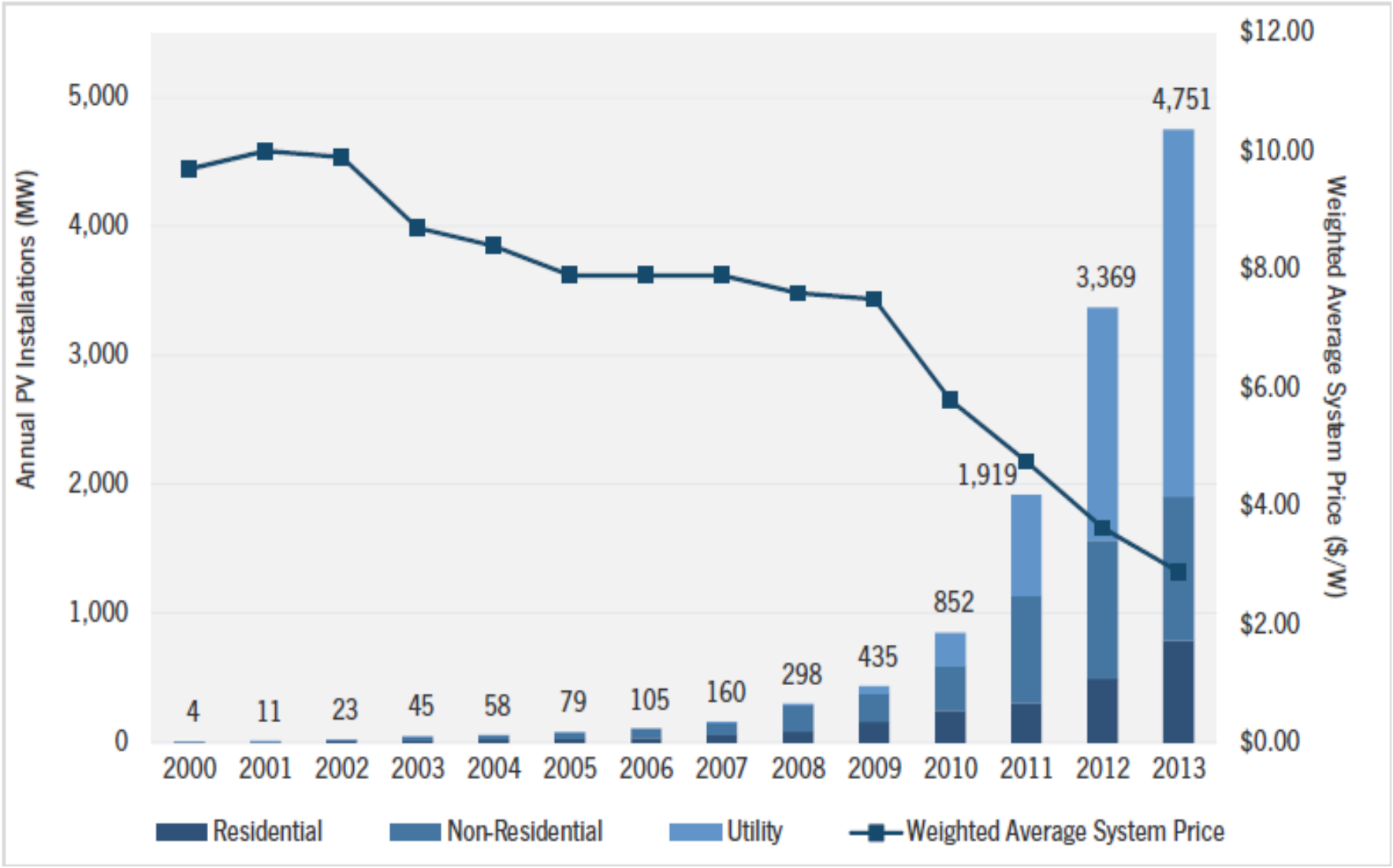
SolarCity in Nevada

- Opened Las Vegas Office March 2013
- Sales, customer care, administrative operations servicing markets outside of NV
- Over 350 employees
- Town Square: 28K square feet; new lease for additional 48K
- Over 250 new home projects installed or underway
- Mineral and Nye County School Districts projects

SolarCity in Nevada = Job Creation

FY hiring goals	2013 50	2014 250	2015 500
Actual/Predicted	**300**	**>700**	**>1,000**
Installation Jobs		Typical warehouse 4 crews: ~20 jobs 10 crews: >100 jobs	

Figure 2.1 U.S. PV Installations and Average System Price, 2000-2013



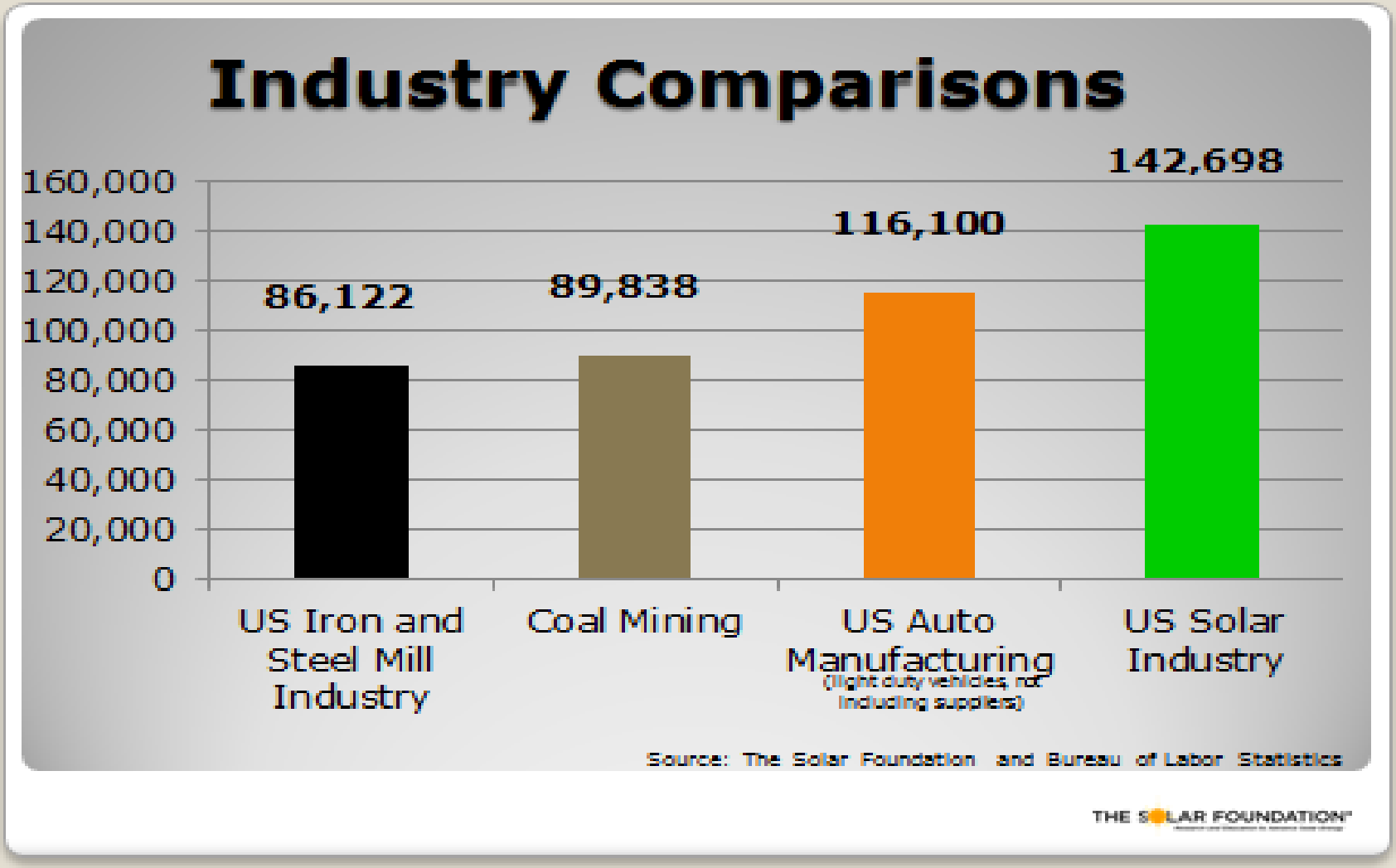
U.S. Solar Market Insight, 2013, GTM and SEIA

2013 US Industry Highlights

- Solar accounted for 29% of all new generation; 2nd largest source behind gas
- 4,751 MW of solar PV installed, up 41% over 2012 (15x growth 5 years earlier)
- 140,000 individual PV systems installed--market value of $13.7 B; 440,000 total
- 792 MW of resi; 259 MW in Q4 2013 alone (largest quarter ever)
- 47% and 40% growth in residential and non-resi market in 2014

Source: U.S. Market Insight, 2013 Year in Review, GTM Research & SEIA

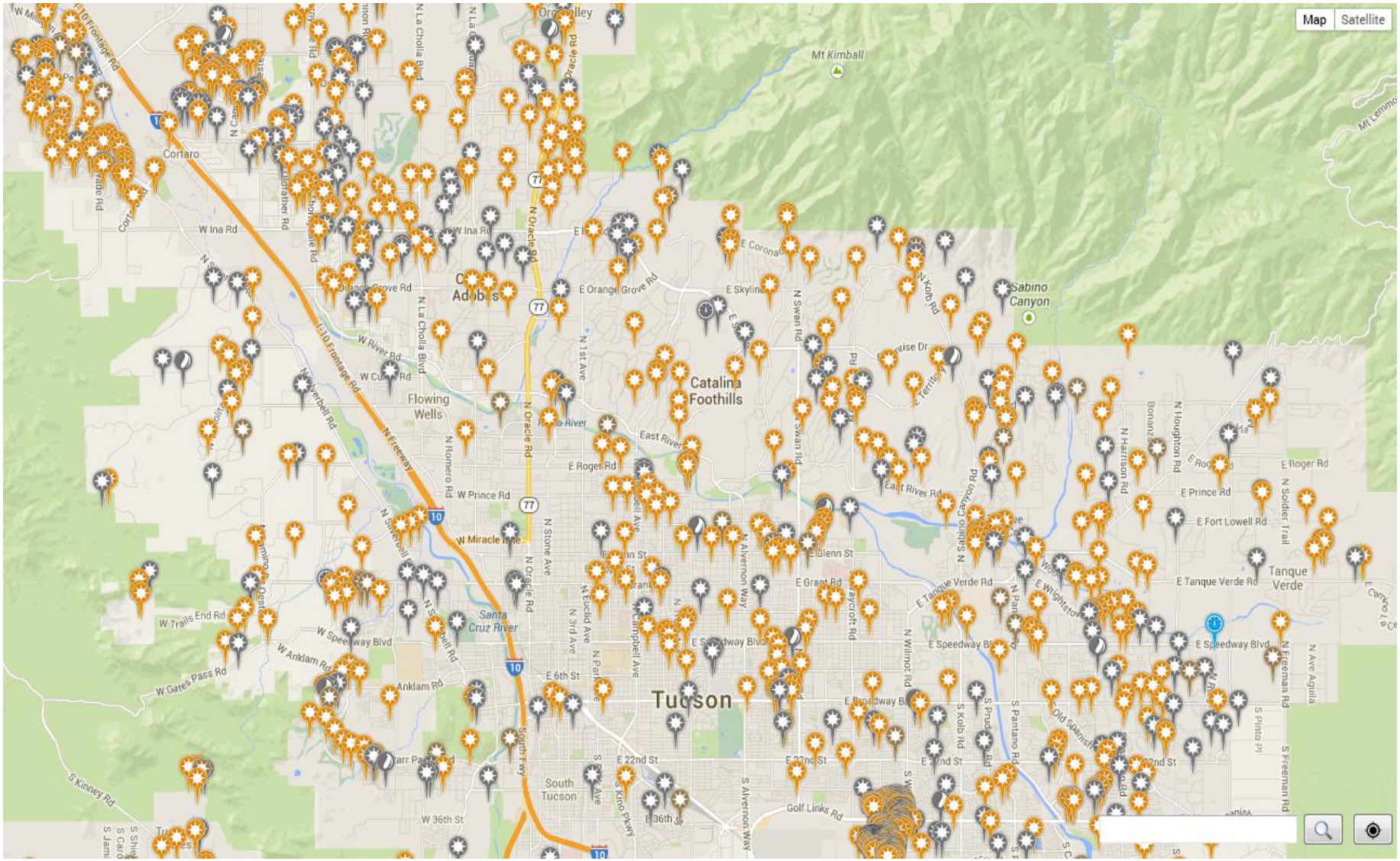
More Solar Jobs Than Coal, Auto Industry



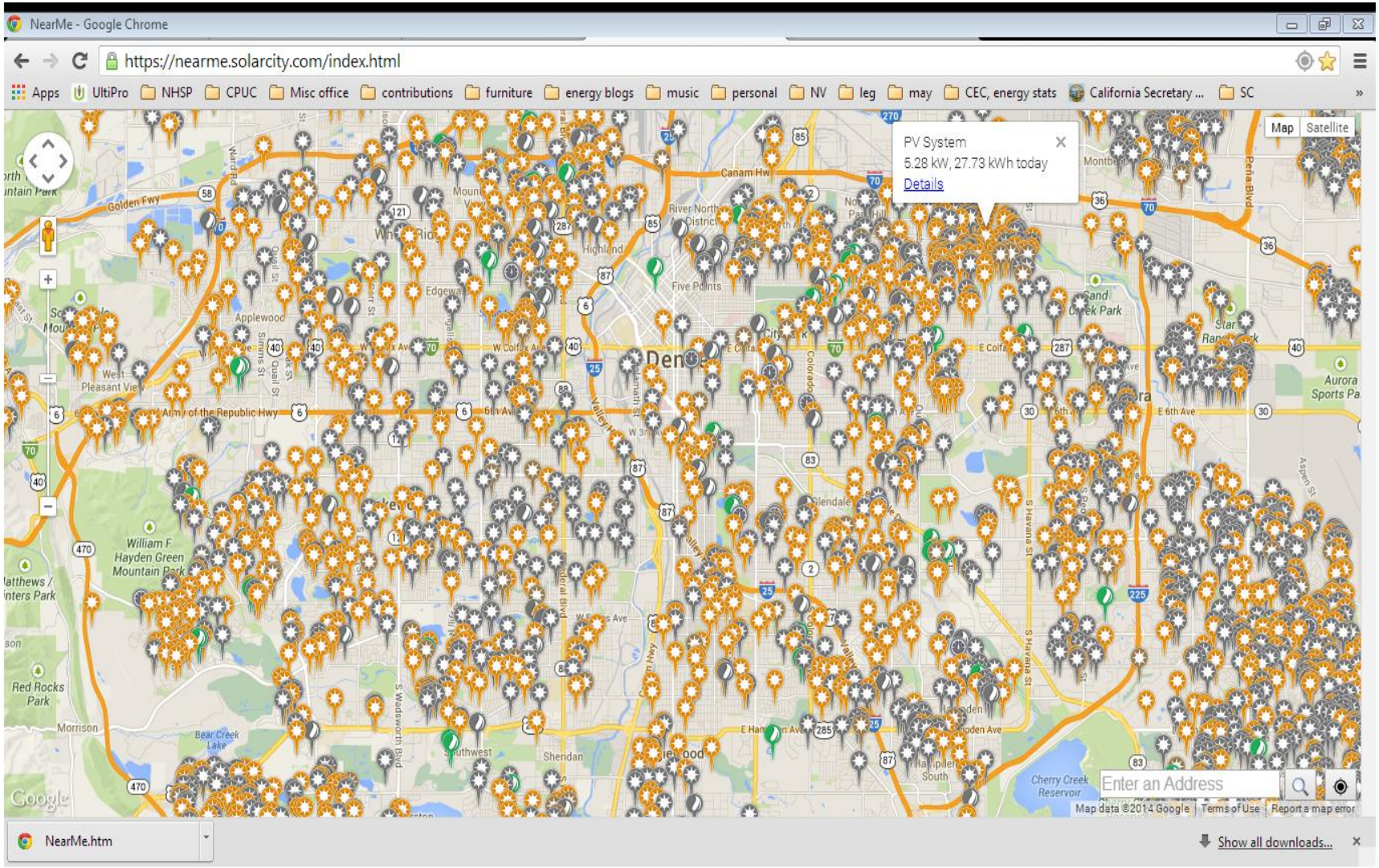
2013 State Comparison

State	MW Install	Solar Jobs	Rank	2013 PC Rank	2012 PC Rank
CA	2620	47,000	1	5	4
MA	237	6,400	4	6	8
AZ	421	8,600	2	4	1
CO	56	3,600	9	10	7
NV	47	2,400	18	8	5

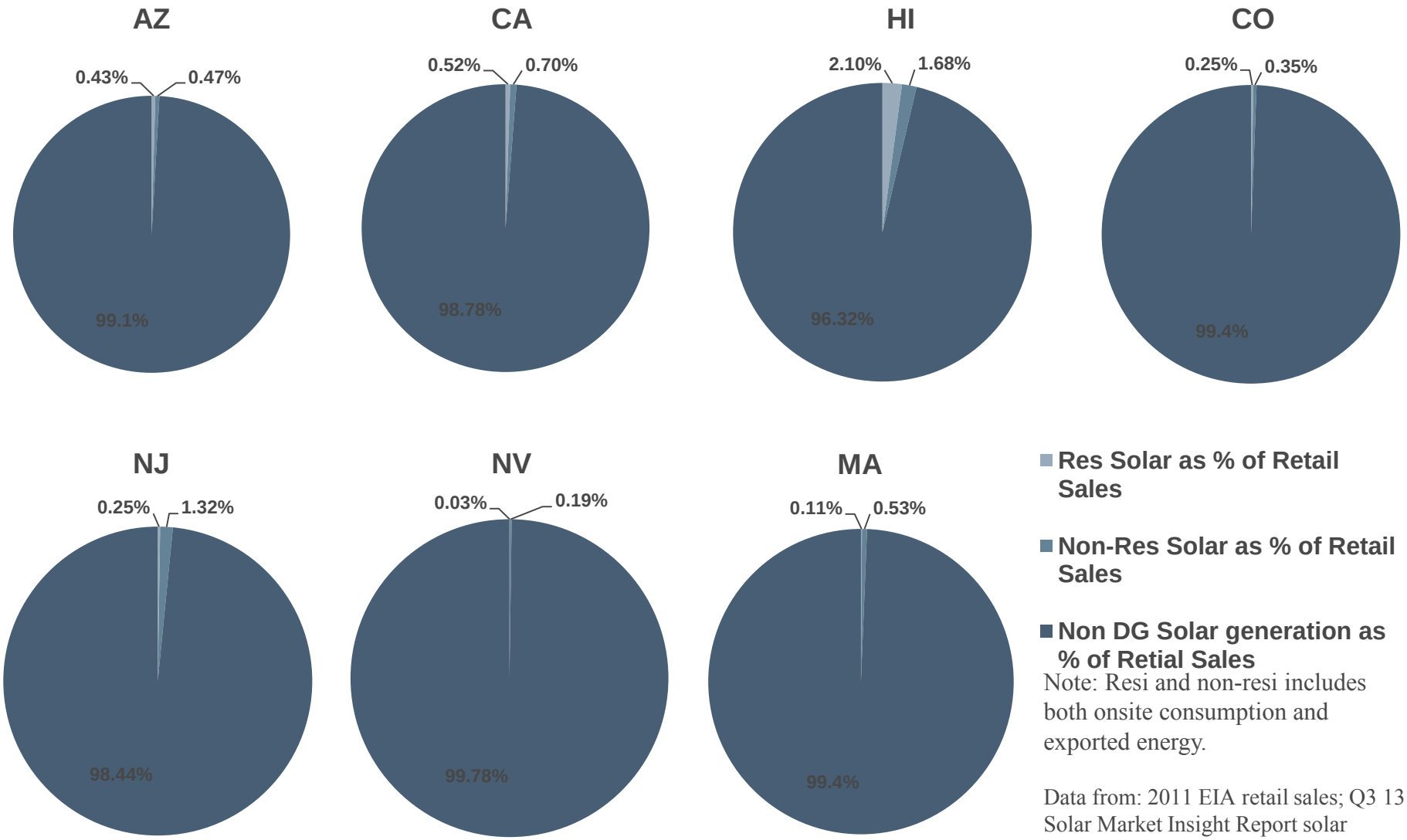
Solar is the New Normal in Arizona



Solar is the New Normal in Colorado



Solar DG Tiny Fraction of Retail Sales, Even in Top Solar States

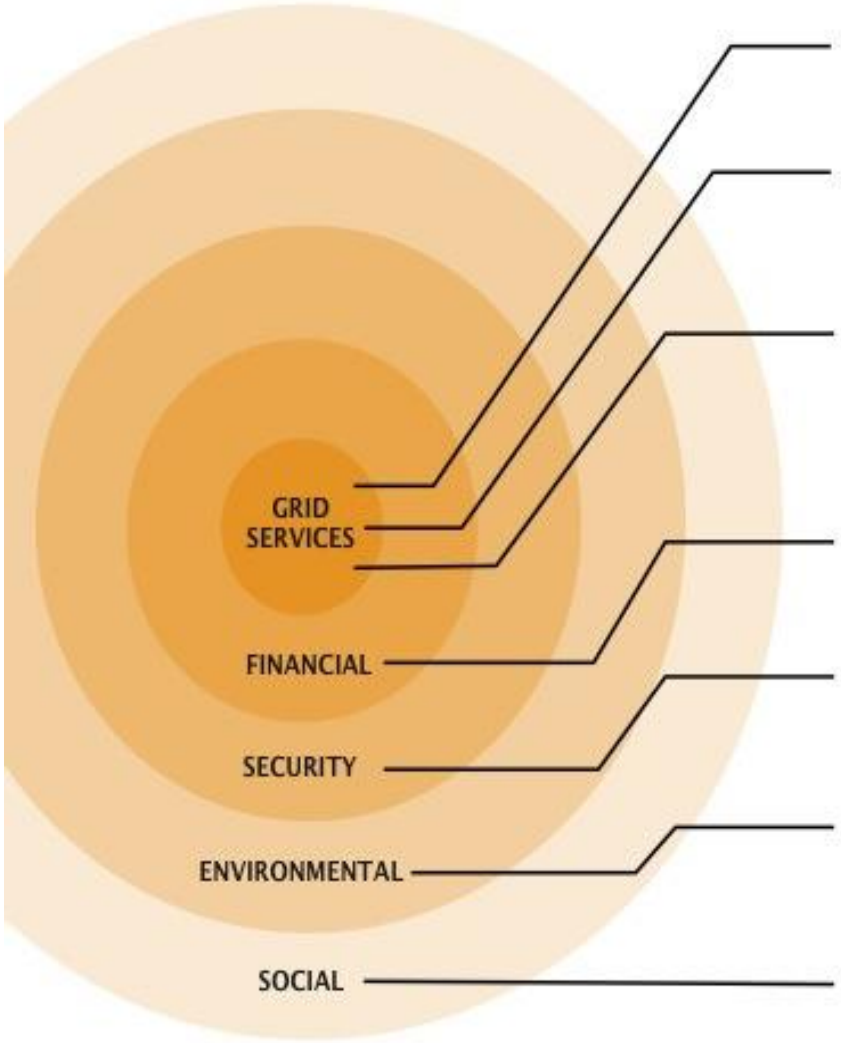


Note: Resi and non-resi includes both onsite consumption and exported energy.

Data from: 2011 EIA retail sales; Q3 13 Solar Market Insight Report solar deployment data.

BENEFIT & COST CATEGORIES

For the purposes of this report, **value is defined as net value, i.e. benefits minus costs.** Depending upon the size of the benefit and the size of the cost, value can be positive or negative. A variety of categories of benefits or costs of DPV have been considered or acknowledged in evaluating the value of DPV. Broadly, these categories are:



ENERGY energy
system losses

CAPACITY
•generation capacitytransmission & distribution capacityDPV installed capacity

GRID SUPPORT SERVICES
•reactive supply & voltage control
•regulation & frequency response
•energy & generator imbalance
•synchronized & supplemental operating reserves
•scheduling, forecasting, and system control & dispatch

FINANCIAL RISK
• fuel price hedge
• market price response

SECURITY RISK
• reliability & resilience

ENVIRONMENTAL
•carbon emissions (CO_2)
•criteria air pollutants (SO_2, NO_x, PM)
•water
•land

SOCIAL
•economic development (jobs and tax revenues)

Water savings and solar energy

Electricity used to power our homes consumes more water than all other household activities *combined*[1]

That's more than activitiessuch as washing dishes and clothes, showering, flushing toilets, and watering lawns

0 gallons

water needed to generate renewable solar energy

VS

.26 gallons[2]

water needed to generate 1 kWh of gas-fired electricity

250 MW SolarGenerations installation goal by 2021[3]

That means every year we save

108,375,000

gallons[4, 5]

That's the equivalent of

164 Olympic swimming pools[6]

The numbers speak for themselves. **Solar energy saves water.**

Thank You

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