U.S. SOLAR INDUSTRY: SETTING THE STAGE
The Grid Has Never Been More Diverse

U.S. Electricity Generation, 1950 - 2016

Source: EIA
Grid Already Accommodates Large Penetration of Renewables

- 15 U.S. States already see solar & wind penetrations of 10% or above, with no reduction in reliability.

- Nationally, Solar & Wind represented 7% of total generation in 2016
Solar’s Share of New Capacity Has Grown

Annual Additions of New Electric Capacity

- Solar
- Natural Gas
- Coal
- Wind
- Other

### Yearwise Share of New Capacity Additions (%)

- **2010**: 4% Solar, 24% Other
- **2011**: 2% Solar, 29% Other
- **2012**: 41% Solar, 36% Wind
- **2013**: 9% Solar, 7% Other
- **2014**: 4% Solar, 25% Other
- **2015**: 2% Solar, 39% Other
- **2016**: 6% Solar, 26% Other

### Years
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
The Solar Industry Today

49.3 GW of solar installed through Q3 2017

Enough to power 9.5 million American homes

68% 10-year average annual growth rate

Workers employed in the solar industry: 260,000

1.6 million individual installations nationwide
• Total solar deployment will more than double over the next 5 years, reaching 100 GW by 2021
Prices have fallen by 10 – 18% over last 12 months

Installed Solar PV Prices

- Residential
- Non-Residential
- Utility-Scale (Fixed Tilt)
- Utility-Scale (Tracker)
Continuing to Create Jobs

In 2016...

- 260,077 solar workers, a 25% increase over 2015
- Solar jobs have increased at least 20% per year for the past four years
- One in 50 new U.S. jobs were in the solar industry
Solar Growth Coast to Coast

TOP 10 STATES (MW)

1. California – 20,163
2. North Carolina – 3,785
3. Arizona – 3,336
4. Nevada – 2,585
5. New Jersey – 2,234
6. Massachusetts – 1,898
7. Texas – 1,847
8. Utah – 1,566
9. Georgia – 1,505
10. New York – 1,176

Cumulative Solar Capacity by State, through Q3 2017

Source: SEIA/GTM Research
OPPORTUNITIES FOR STATES
Solar and Wind are Price Competitive With All Other Energy Technologies

- Map shows the cheapest electricity technology for each county in the United States.
- Utility-scale solar (purple) is the cheapest source of electricity in large portions of the Southwest, West Coast and Southeast.
- Wind (light green) is cheapest throughout Midwest, Great Plains, Northeast.
• 5,500 K-12 schools have gone solar, more than twice as many as there were three years ago
Fortune 100 Companies are Going Solar

- Top 25 Corporate users, led by Target, have installed more than 1 GW of total solar capacity
- They are choosing solar because it saves them money
- Clear and consistent financing options are critical to grow this market: C-PACE can help
RISKS & THREATS TO SOLAR GROWTH
• At the end of 2017, 36 states will be at grid parity for rooftop solar. If Net Metering export rate compensation is cut in half, only a handful will remain at grid parity

• We are committed to working with utilities to develop the next generation of net metering and rate design; consumers’ freedom to choose their energy is paramount
Reforming State Electricity Markets

**TX:** Advocate against demand charges and interconnection fees in the El Paso Electric rate case, and efforts at the PUCT and ERCOT to maintain fair treatment of USP.

**MA:** Fighting to get the NEM caps raised once again in the Commonwealth to align with the new incentive program.

**NV:** Enacted new NEM policies that will reopen the state’s residential market. But, challenges remain: Gov. Sandoval vetoed important community solar and RPS bills

**NC:** Second largest solar state is jeopardized by harmful PURPA proposals, rooftop solar will continue to face strong headwinds

**CA:** Working toward sensible next-generation solar policies in the nation’s leading solar market.

**NY:** Continuing to engage with REV process to maintain solar support and develop successor tariffs for net metering

**FL:** Looking ahead to 2018 now that legislation has opened up the market
• The proposed remedies will lead to job losses of 48,000 – 63,000 in 2018 and 60,000 – 84,000 in 2020, relative to baseline.
Federal Tax Reform

- Preserving the solar Investment Tax Credit (ITC) is critical

- Also working to fight poison pill ‘BEAT’ tax provision, which would severely limit the viability of tax equity financing
Federal Electricity Market Manipulation

- Federal Energy Regulatory Commission working to respond to DOE proposal regarding pricing for “grid resiliency”, which would essentially subsidize coal and nuclear power generation.

- This would stifle healthy competition in the energy industry
THANK YOU