

2016

SEIA ANNUAL REPORT

10 COMPELLING STORIES ABOUT SOLAR



MESSAGE FROM THE BOARD CHAIRMAN

Dear Solar Industry,

There is a lot of cause for celebration and concern in the U.S. solar industry today.

We can all celebrate that solar is the largest source of new power generation in the U.S. and costs less than traditional fossil fuels in many parts of the country. Investors continue to highly value the secure long-term cash flows that solar systems provide, as well as the tax credits they receive. Consequently, solar installation growth continues at a rapid pace across the industry. Solar is no longer an 'alternative' energy source.

The negative by-products of this fast growth and improving competitiveness are shrinking margins and over-leverage for some solar companies, resulting in headline bankruptcies, corporate restructuring, and surprise mergers. Regrettably, over the last twelve months the solar public equity index fell more than 50 percent.

SEIA is working tirelessly to protect and advance government policies that make sure everyone investing their time, money, and trust in solar can do so confidently for decades to come.

Last year as we all enjoyed the long-term extension of the ITC – won by SEIA – our team at SEIA worked with allies to win

key state-level fights to keep open and expand markets for all solar companies, especially in Florida, Nevada, California, New York, Massachusetts, and Colorado. While the Clean Power Plan is mired in the courts and now improbable under a Trump Administration, sixteen states are adopting their own implementation plans and SEIA is working with them to make sure solar is a key element.

Despite important wins and good progress, uncertainty about government policy is hurting investment in solar's continued success. Major sources of this uncertainty include:

- a) Some utilities attacking PURPA and net metering, especially in Arizona, as well as looking to manipulate local regulations and voters to thwart solar development; and
- b) Whether warranted or not, expectations about what a Trump Administration means for clean energy.

As you can see, we have a lot of work to do in 2017. Your support of SEIA enables it to advocate for the policies that contribute to solar's success. Membership growth increases SEIA's political legitimacy and creates the revenues that fund advocacy. In 2016, SEIA grew its membership from all sectors of the industry and increased its total year-over-year revenue by more than 15 percent. In the past three years alone, SEIA's total annual revenue has grown by

more than 50 percent. SEIA's operating budget has never been stronger, and yet the policy challenges we face have never been greater.

New challenges call for new leadership, and we are excited to welcome Abigail Ross Hopper as CEO of SEIA. She has the unique and directly applicable experience of leading a federal energy agency, a state energy administration, and serving as the deputy general counsel of a state public utility commission. Abby has built coalitions to achieve policy success, crossing party lines, bringing together state and federal authorities, and working with diverse industry participants. Abby will lead us to more policy wins.

Independent of business model, technology type, position in the value chain, or customer served, the solar industry and our individual companies will grow faster and more profitably when we work together. Thank you for your support of SEIA.

Sincerely,

Nat Kreamer
*Chairman of the Board
of Directors*



MESSAGE FROM THE EXECUTIVE VICE PRESIDENT

SEIA Members,

In looking back across the many SEIA accomplishments of last year, our team decided to focus this annual report on ten, using primarily graphics to exemplify the spirit and breadth of SEIA's record-breaking year.

The full list of accomplishments of SEIA staff are too numerous to capture in one report, but this Top 10 showcases the expertise and firepower needed to move us further toward our goals during 2017. I am very confident that our incoming president and CEO Abigail Ross Hopper is ready to lead our industry into an era of increasing growth and maturity.

Our 2016 accomplishments run the gamut, from victory on Amendment 1 in Florida, to SEIA's Million Solar Strong campaign, from new codes and standards work, to innovative SEIA consumer protection initiatives. We are also proud of our commitment to sustainability and diversity, building an industry and trade association that delivers on environmental benefits for all communities and creates jobs for diverse Americans.

SEIA continued to expand its support for your business in 2016 and that will continue in 2017. For example, we enhanced our research reports to keep

you informed on market conditions and are continuing to make new data available to you in more usable forms. SEIA launched a new event series on women's empowerment and regional events to activate new markets. And we launched a new solar financing council right at the start of the new year.

The new year brings new questions and opportunities with leadership changes in the White House and tax reform on the agenda in Congress, as well as the dynamic business environment addressed by Chair Nat Kreamer in his note. Each year, I am increasingly confident that innovative, non-partisan, low-cost solar is the winning choice for our nation's energy infrastructure regardless of who is in power in Washington. SEIA is as active as ever here in the nation's capital, in statehouses across the country, and in truly national cross-cutting areas that impact your business.

Thank you for your continued support of SEIA. Your membership, your participation and your activism when we call upon you is the reason for our success. Let's celebrate 2016 while gearing up for 2017 to outshine all others.

Sincerely,

Tom Kimbis
*Executive Vice President
& General Counsel*

TABLE OF CONTENTS

06

#1 SOLAR MARKET INSIGHT AND SOLAR MEANS BUSINESS

SEIA-sponsored reports continue to reflect record industry growth and widespread adoption of solar

08

#2 MILLION SOLAR STRONG

The solar industry marks a huge accomplishment and becomes Million Solar Strong

10

#3 SEIA PREPARES FOR THE TRUMP ERA

SEIA assures strong communication with the Trump Transition team and the public for the inevitable growth of U.S. solar

13

#4 SEIA ACHIEVEMENTS IN THE STATES

SEIA continues to fight for strong solar policies across the U.S.

14

#5 CONSUMER PROTECTION MAKES BIG STRIDES

SEIA spoke about consumer protection at the Federal Trade Commission Workshop and publishes significant responsibility

15

#6 PV RECYCLING PROGRAM

The new PV Recycling Program demonstrates the industry's commitment to corporate sustainability and responsibility

16

#7 MEMBERSHIP ON THE RISE

SEIA eclipses ambitious membership growth projections

18

#8 18,000 DESCEND ON LAS VEGAS FOR SPI

General Sessions addressed controversial topics and pushed the boundaries of what solar can achieve

20

#9 RECORD MEDIA HITS IN 2016

SEIA's media hits increase by more than 45% from 2015 and prominent features in the Washington Post and the Wall Street Journal

22

#10 SEIA'S ALL ABOUT SUSTAINABILITY, DIVERSITY, EMPOWERMENT

SEIA launches sustainability initiative and leads solar diversity efforts with Women's Empowerment Series and Diversity Guidelines

1 SOLAR MARKET INSIGHT AND SOLAR MEANS BUSINESS

SEIA-Sponsored Reports Continue to Reflect Record Industry Growth and Widespread Adoption of Solar

Every year, it seems the solar industry is breaking new records and while the final results are not in, we will easily have exceeded 10 gigawatts of new solar energy in 2016 for the first year ever. And solar also means business. Our Solar Means Business report tracking corporate retail installations saw Target take the top spot in a year in which more American businesses were installing solar than ever before. SEIA's commitment to research is highlighted in the news dozens of times each month and helps tell the great story about solar energy.

SOLAR'S
BIGGEST
QUARTER
IN
HISTORY...

WHICH LEAD TO INSTALLING NEARLY

2MW  PER HOUR

SOLAR ACCOUNTED FOR

39% OF ALL NEW
ELECTRIC CAPACITY
ADDED TO THE GRID
IN Q3 2016

2016
Q3

NOW ENOUGH
CAPACITY TO POWER
6.5 MILLION
HOMES



THE INDUSTRY IS
ON PACE TO GROW

88%

YEAR-OVER-YEAR IN 2016

SOLAR MEANS BUSINESS

#1

 **TARGET**

147.5 Megawatts Installed

300 Installations

Target has added nearly 70 MW of solar so far in 2016 - more than any other U.S. retailer and all but 10 states

#6

 **KOHL'S**
expect great things

50.2 Megawatts Installed

158 Installations

Nearly 19,000 Americans work at a solar-powered Kohl's

#2

 **Walmart**
Save money. Live better.

145.0 Megawatts Installed

364 Installations

Every week, 7.3 million people, or roughly 2% of the U.S. population, visits a solar-powered WalMart

#7

 **IKEA**

44.0 Megawatts Installed

44 Installations

91% of IKEA's U.S. stores are powered by the sun

#3

 **PROLOGIS**

107.8 Megawatts Installed

49 Installations

Prologis has installed more solar capacity than 27 different U.S. states

#8

 **★macy's**

38.9 Megawatts Installed

71 Installations

Macy's has installed enough solar panels to completely cover the footprint of 17 of their stores

#4

 **Apple**

93.9 Megawatts Installed

4 Installations

Apple's solar facilities produce enough electricity to fully charge more than 39 million iPhones every day for a year

#9

 **GGP**

30.2 Megawatts Installed

33 Installations

Nearly two thirds of General Growth Properties' solar capacity has been installed in 2016

#5

 **COSTCO**
WHOLESALE

50.7 Megawatts Installed

85 Installations

Every year, more than 9 million rotisserie chickens are sold at solar-powered Costcos

#10

 **HARTZ**

22.7 Megawatts Installed

24 Installations

Hartz Mountain is the largest commercial rooftop solar owner in New Jersey

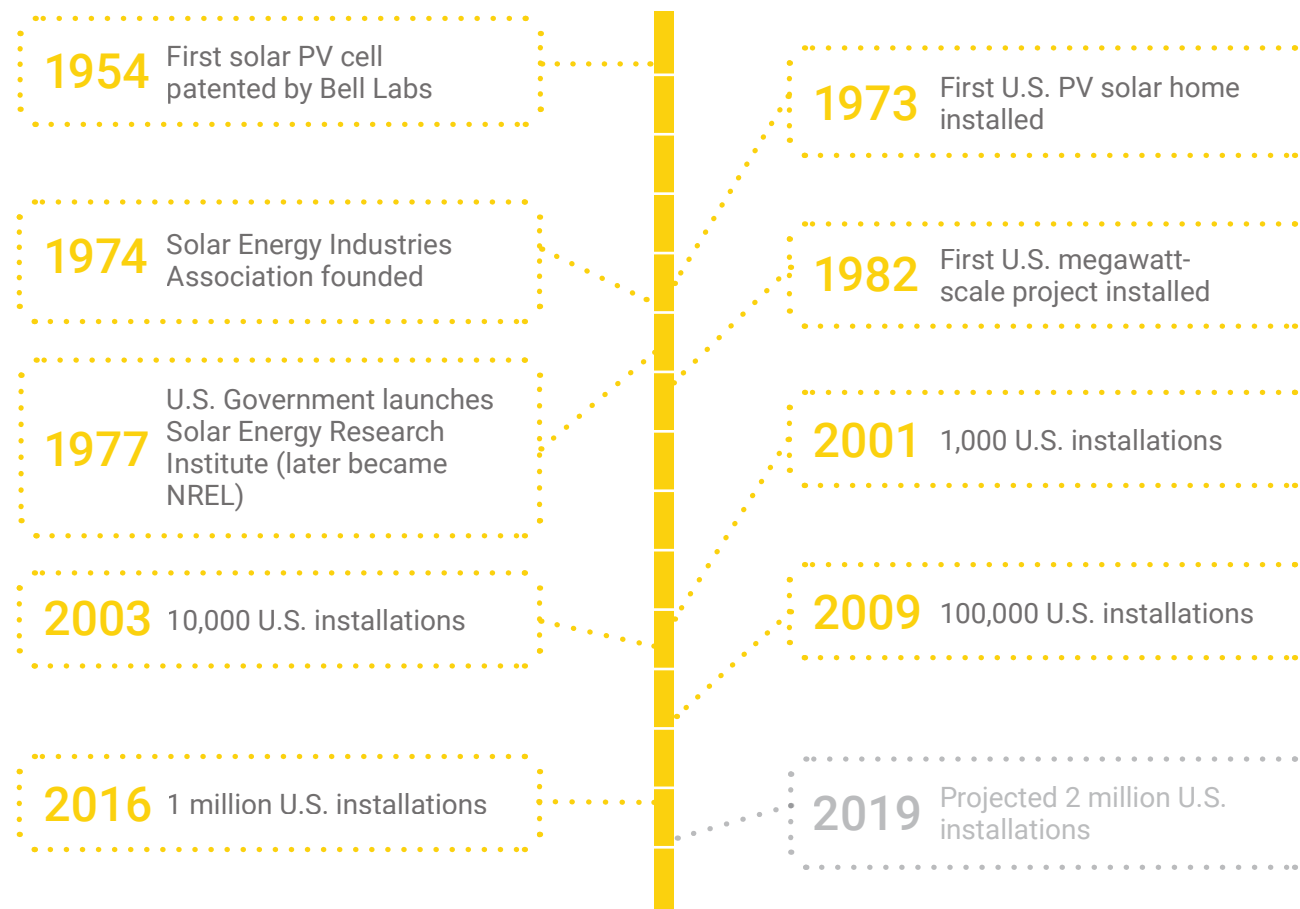
2 MILLION SOLAR STRONG

Early in 2016, the solar industry reached an incredible milestone: installing the 1 millionth solar system in the United States.

This achievement seems like a lifetime ago since we are now sprinting toward 2 million installations, but it was a product of American ingenuity and innovation, and demonstrated not only how far we've come as an industry, but also what lies ahead. It took more than 40 years to reach 1 million installations, but it will take just 2 more years to hit 2 million.

To celebrate this historic accomplishment, SEIA brought together a diverse coalition of allies and advocates to mark the 1 millionth installation with

an expansive outreach campaign. We utilized social and traditional media to get the word out, encouraging people to share photos and videos. We drafted a Million Solar Strong declaration that received the support of more than 80 companies and organizations. In the end, we reached more than 100 million people on social media and garnered lots of positive attention in the press. Thanks to help from our coalition partners, it was an extremely successful campaign that demonstrated the incredible growth of solar in the U.S.



#millionsolarstrong

1 MILLION INSTALLATIONS:

942,000

RESIDENTIAL



56,500

COMMERCIAL



1,500

UTILITY-SCALE



70%

INSTALLATION COST DROP IN
THE LAST 10 YEARS

209,000
**SOLAR
JOBS**



14,000,000
TONS OF CO₂
SAVED ANNUALLY

=  9 COAL
POWER
PLANTS'
EMISSIONS

1 in 83
NEW U.S.
JOBS IS A
**SOLAR
JOB**

30%

FEDERAL INVESTMENT
TAX CREDIT

3 SEIA PREPARES FOR THE TRUMP ERA

In the months leading up to the November election, SEIA met with both campaigns to make sure they understood the value of solar energy in today's economy. Following Trump's election, SEIA conducted additional outreach with the transition team to reiterate our message. SEIA remains well-positioned to engage with the Trump administration because ours is a story of job creation, investment and American innovation. The solar industry is in a period of healthy growth, and the jobs and economic activity it is creating is something our new president

can take pride in and support. Additionally, because of our strategic communications, this message was the one that made it into the nation's leading news outlets following the election.

As we look forward to 2017, we have repeatedly emphasized in our discussions with policymakers in both parties that solar is a natural fit with those who want to make our country stronger, more robust and more energy independent.

WE'VE BEEN ACTIVE IN THE PRESS GARNERING...

381
MENTIONS



IN STORIES THAT ALSO NAME

DONALD
TRUMP

AND

HAVING A
SEIA

OFFICIAL QUOTED BY
NAME IN...

285



OF THOSE  STORIES
BETWEEN ELECTION DAY AND
DECEMBER 22



4 SEIA ACHIEVEMENTS IN THE STATES

CALIFORNIA

California's January 2016 decision extending NEM through at least 2019 drew on SEIA's expert witness testimony and advocacy. With this important victory, we have been pushing to make sure we reach the 50% RPS won in 2015 through continued work on implementation, rate design and grid integration. In 2016 and into 2017 we will be working to support workable time-of-use rates, prevent fixed charges and demand changes and retain solar-friendly rate schedules. SEIA has engaged in a number of other proceedings, including on grid modernization and the creation of a new carbon-based Integrated Resource Planning process.

COLORADO

SEIA helped engineer a settlement across three key regulatory proceedings that rejected a proposed increased monthly fixed charge, doubled the market for residential and C&I solar, and ensured that member companies can compete in Xcel's new community solar program.

TEXAS

SEIA's work led to a settlement in the El Paso Electric rate case, which defeated the utility's proposal to put solar customers into a separate rate class and impose residential demand charges. We are also actively engaged in dockets at the Public Utilities Commission and ERCOT that affect how utility-scale solar is treated in the Texas electric market.

FLORIDA

SEIA worked with a variety of local and regional partners to defeat the deceptive anti-solar Amendment 1, despite a \$26 million campaign by Florida utilities. Polling in early October showed 72 percent of residents in favor of Amendment 1. By late October, we had begun to change the narrative. The race was tightening significantly, generating coverage in and out of the state. We conducted targeted advertising, highlighted the issue in social media, leveraged the good work of allies, and activated our 1,800-person Solar Power Advocacy Network in Florida. Just before the election, SEIA deployed a team to barnstorm the state on a 3-day media tour, which generated coverage on major stations, including Tampa Fox 13, ABC Action News, and others.

NEW YORK

SEIA leads a coalition to maintain net metering for residential and small commercial rooftop customers until 2020, establish fair, value-based compensation for larger solar projects, and establish a community solar market in New York. We continue to engage with state regulators on the state's regulatory overhaul, known as Reforming the Energy Vision (REV). Our areas of focus for REV include designing successor tariffs to net metering under the new compensation framework; ensuring that procurement guidelines for the 50% CES take into account factors beyond price to provide opportunities for utility-scale solar; and advocating for fair treatment of solar in overhauling the utility business model.

MASSACHUSETTS

The Massachusetts legislature had been stalled for two years on negotiations to raise the state's cap on Net Metering. SEIA implemented a 5-point plan (direct lobbying, PAC fundraising, grassroots, communications and research) to pressure the legislature. We helped to recruit 100 House members to sign onto a Dear Colleague letter urging leadership to raise the cap. Using earned and paid media, we targeted constituents in Massachusetts to build pressure on state policymakers. On March 29th, we worked with local allies to execute a lobby day, backed up by new research on stalled investment in projects, that coincided with a paid advertising blitz. Days later, legislation was introduced and was signed by Governor Baker in early April.

INDUSTRY LEADERSHIP

NARUC: SEIA sponsored all three conferences of the National Association of Regulatory Commissioners (NARUC) this year to further our relationships with state regulators and energy professionals both in and beyond our high priority states. SEIA held three Solar breakfasts on topics ranging from low income solar to community solar to grid modernization. The breakfasts attracted the participation of nearly 200 attendees, including 30 State Commissioners from 22 States and U.S. Territories. States are increasingly looking to SEIA for leadership and information about solar policy and deployment.

Net Metering: SEIA is providing thought leadership on NEM 1.0 defense, criteria for consideration of NEM 2.0/3.0, and long

term valuation of DERs. Sean Gallagher assembled a nationwide group of DG advocates at SPI, and a follow-on discussion was held in San Francisco in October, intended to lead to updated SEIA NEM principles that have national support.

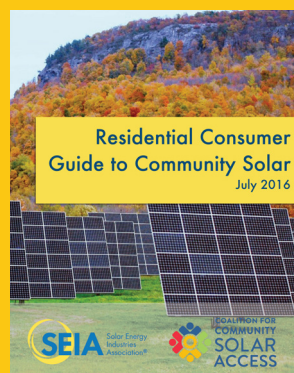
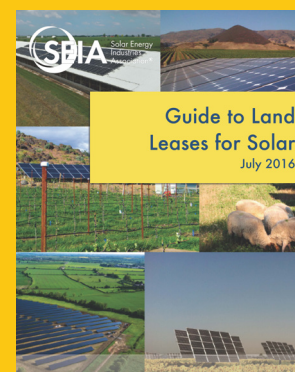
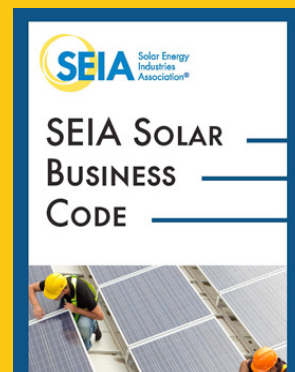
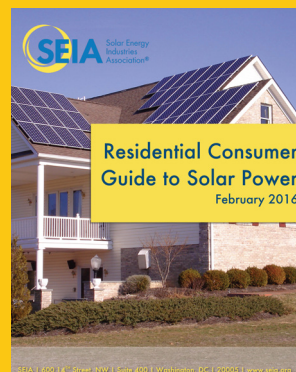
PURPA: SEIA's Katherine Gensler brought together member companies and advocates at SPI to scope out PURPA defense work in Congress and the states. SEIA's PURPA Working Group has filed comments at FERC on PURPA implementation.

Low Income: SEIA is developing principles for expanding low income solar access issues, and has begun a webinar series on low income solar access.

5 CONSUMER PROTECTION MAKES BIG STRIDES

At the Federal Trade Commission Workshop, Publishes Significant Resources

As an association that represents a fast-growing industry, it is imperative that SEIA continue finding ways to foster healthy competition and make consumer protection a top priority. In 2016, SEIA developed a variety of resources to assist in this effort, including our Residential Consumer Guide to Solar Power, which provides clear information to potential customers and standardized disclosure forms, which increase transparency. In June, the Federal Trade Commission hosted a workshop focused on competition and best practices in the industry. SEIA and our members and allies participated at a high level to educate the FTC on our consumer protection efforts and demonstrate that the industry is taking proactive steps to self-regulate.



6 NEW PV RECYCLING PROGRAM

Demonstrates the Industry's Commitment to Corporate Sustainability and Responsibility

As the national trade association for solar, SEIA is dedicated to leading by example when it comes to best practices for sustainable growth in the industry. With an exponential rise in the adoption of solar energy worldwide, managing the waste stream for PV panels is critical to ensuring the long-term health of our industry.

To facilitate this important work, SEIA established a first-of-its-kind platform to make it easier for companies and consumers to select a cost-effective and environmentally responsible solution for recycling PV panels. The SEIA National PV Recycling Program chooses preferred vendors that offer specific pricing benefits to our member companies. This program will create added incentives for responsible end-of-life management of PV panels.

Furthermore, SEIA is planning proactive waste management strategies to make the entire industry landfill-free. This includes providing a portal for system owners and consumers to know how to responsibly recycle their PV systems and investing in research and development for recycling technologies.

We're not just thinking about how to take back and recycle PV – we're thinking about how to repurpose a panel's components into new products for a better future.

WITH AN **EXPONENTIAL RISE** IN THE ADOPTION OF **SOLAR ENERGY WORLDWIDE**

MANAGING THE WASTE STREAM FOR **PV PANELS** IS CRITICAL

SOLAR PANELS CAN LAST FOR **DECADES...**
20-25 YEAR WARRANTIES

& **USEFUL LIFE ESTIMATES ADD ANOTHER 10-20 YEARS**

SEIA IS PLANNING **PROACTIVE WASTE MANAGEMENT STRATEGIES**

TO MAKE THE **ENTIRE INDUSTRY**

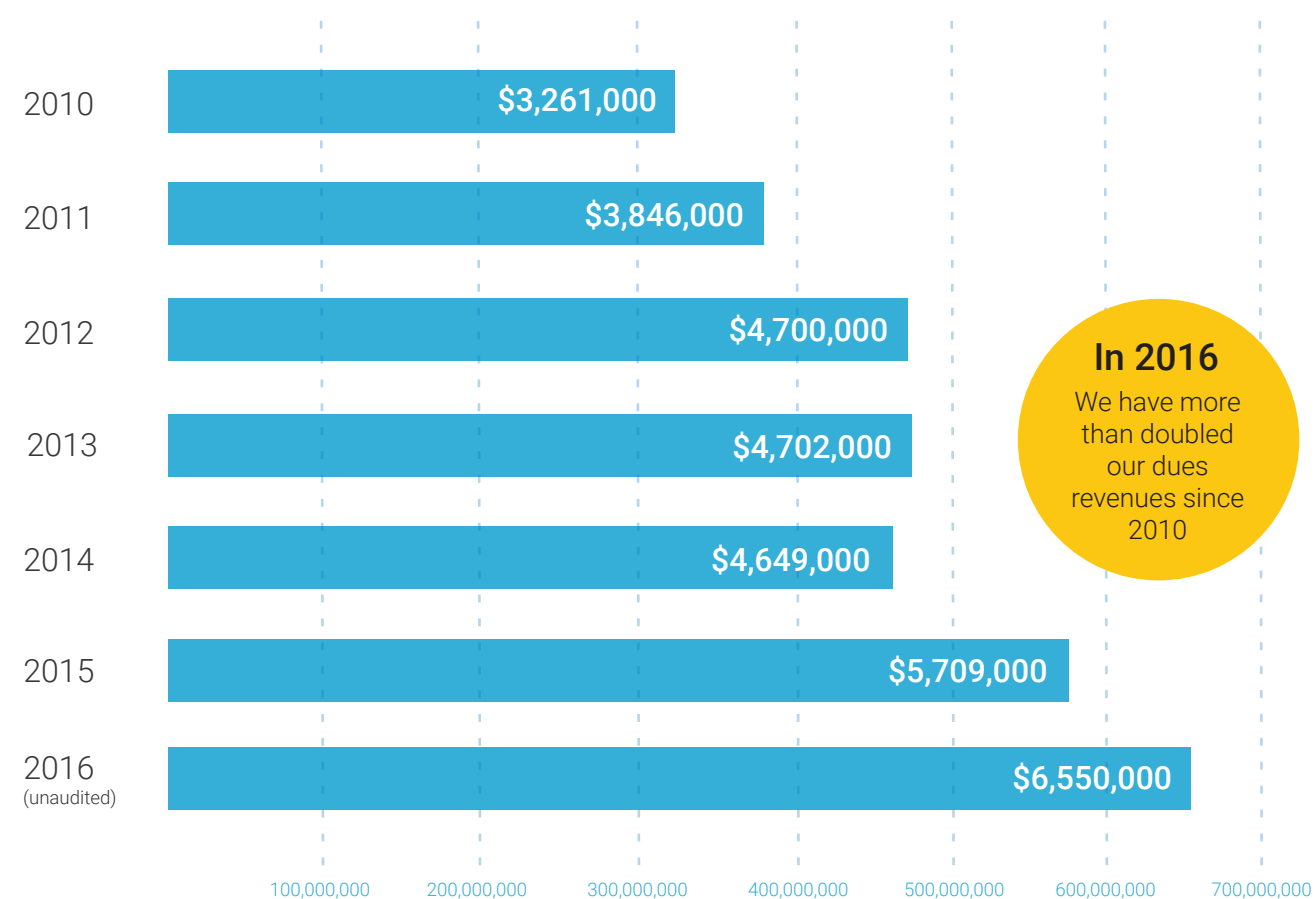
LANDFILL FREE



7 MEMBERSHIP ON THE RISE

WE ADDED
MORE THAN
285 MEMBERS
IN 2016

+285



THANKS TO OUR BOARD OF DIRECTORS

SEIA's consistent strength as an association and year-over-year growth is due in large part to continued support from our Board of Directors. Thanks to our Terawatt-level member companies for providing service, leadership and direction.

8minutenergy Renewables	SolarCity
Blattner Energy	sPower
Cypress Creek Renewables	Spruce
EDF Renewable Energy	Sunlink Corporation
E.ON North America	SunPower Corporation
First Solar Inc.	Sunrun Inc.
Hudson Clean Energy Partners	Sunstreet Energy Group
Mortenson Construction	Swinerton Renewable Energy
NEXTracker	Total New Energies USA
NRG Energy	Trina Solar
Recurrent Energy	US Bancorp
Rockwood Management Corporation	Vivint Solar

A special
thanks to our
newest at-large
board members
for joining us in
2016

CYPRESS CREEK
RENEWABLES

SUNSTREET™

NEXTracker
POWER ON.

USbancorp

HUDSON
CLEAN ENERGY

18,000 PEOPLE DESCEND ON LAS VEGAS FOR SPI

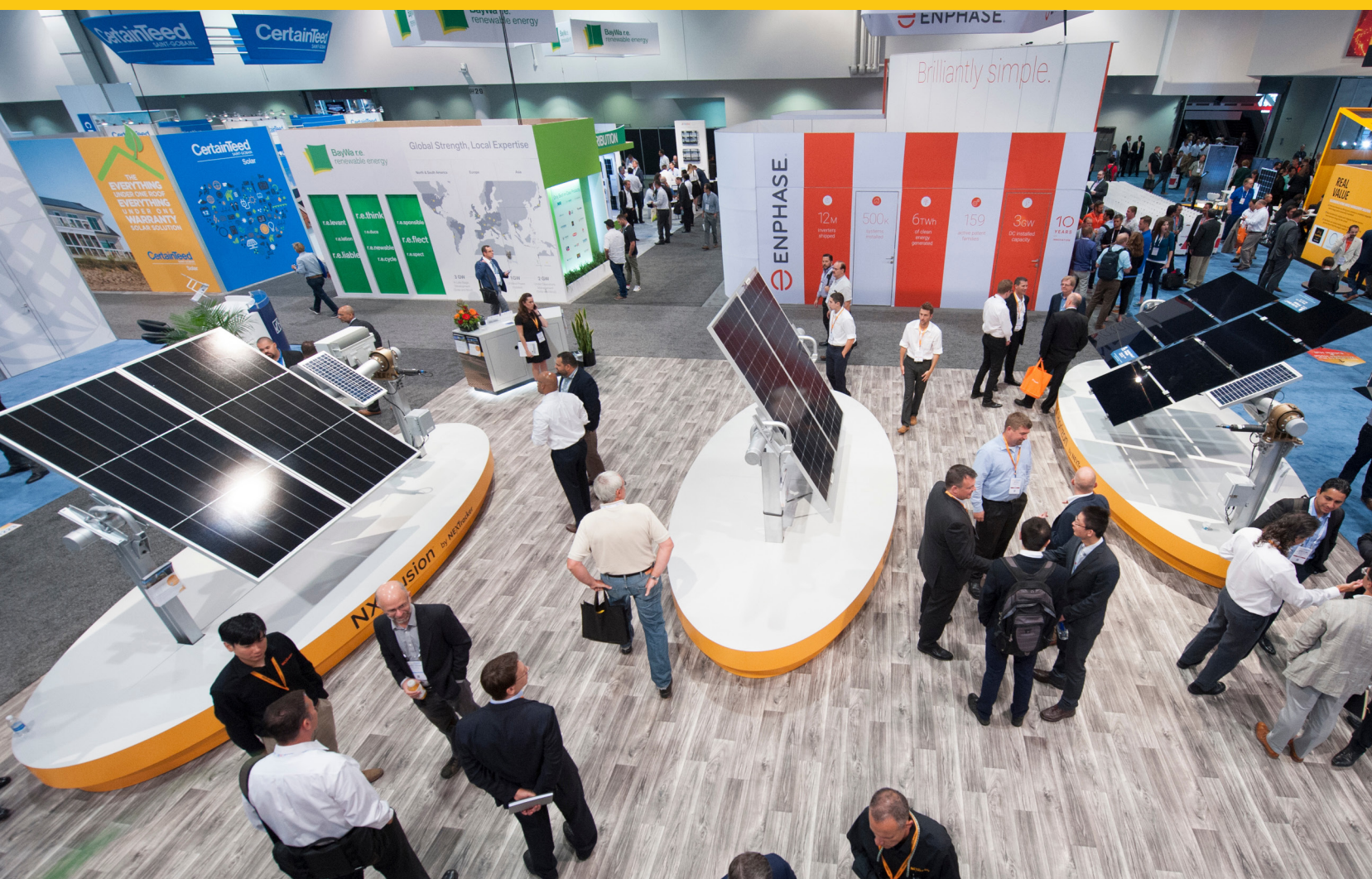


In addition to creating business opportunities for our members, Solar Power International was a major financial success for SEIA. The show floor was buzzing and panel discussions were packed.

General sessions addressed controversial topics and pushed the boundaries of what solar can achieve. The headline events included a wide array of voices that all agreed on one fundamental truth: solar is growing rapidly, and the industry needs smart, stable policies to continue providing clean affordable energy to the masses.

Panels covered a massive range of topics, including consumer protection, the net Metering battles, industry branding, challenges with customer acquisition and post ITC federal policy.

SEIA held two brand new pre-conference workshops that were extremely well received, building on our recent work with codes and standards and Property Assessed Clean Energy financing for the commercial solar sector.



“ALL AGREED
ON ONE
FUNDAMENTAL
TRUTH: SOLAR
IS GROWING
RAPIDLY”

9 RECORD MEDIA HITS IN 2016

ACCORDING TO MELTWATER NEWS, WE GARNERED MORE THAN...

15,000

NEWS HITS IN **2016**

THIS WAS IS THE MOST WE HAVE EVER HAD IN

1 CALENDAR YEAR

BY A WIDE MARGIN...

3,000

MORE HITS THAN PREVIOUS RECORD HOLDER, 2014

WE HAD PROMINENT STORIES PLACED IN

The Washington Post

THE WALL STREET JOURNAL.

Bloomberg POLITICO

Los Angeles Times

WE WERE ABLE TO USE THE NEWS MEDIA TO GET OUR MESSAGES ABOUT THE **STRENGTH OF SOLAR**



IN MORE THAN

600 STORIES

OF OUR

15,000+

MEDIA HITS IN 2016...

LESS THAN **1%**

WERE NEGATIVE IN SENTIMENT

POSITIVE
STORIES

2,940

NEUTRAL
STORIES

12,110

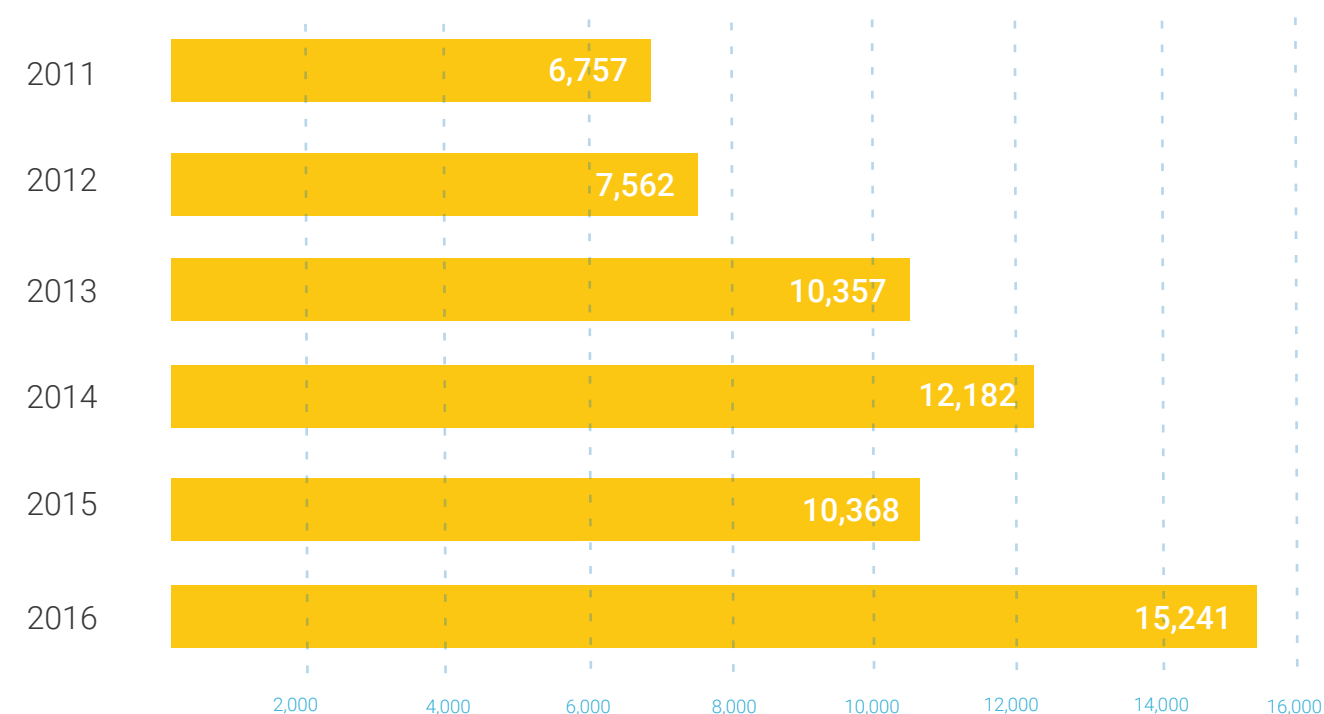
NEGATIVE
STORIES

147

MEDIA MENTIONS IN 2016

JAN 1,126	FEB 2,210	MAR 1,050	APR 969	MAY 665
JUN 1,807	JUL 970	AUG 1,122	SEP 1,871	OCT 1,100
NOV 1,103	DEC 1,248	TOTAL: 15,241		

MEDIA MENTIONS OVER THE YEARS



10 SEIA'S ALL ABOUT SUSTAINABILITY, DIVERSITY, EMPLOYMENT

SEIA Leads Solar Diversity Efforts with Women's Empowerment Series and Diversity Guidelines

SEIA is committed to building an organization and an industry that reflects the environmental stewardship of solar energy and the cultural diversity of the broader U.S. workforce. 2016 was a year of significant progress on these fronts, with the launch of several new programs and initiatives. SEIA launched our internal Sustainability Team to develop and implement organization-wide policies that improve upon our environmental, social and economic sustainability. The most notable of these accomplishments was the purchase of Solar Renewable Energy Credits (SRECs) from a facility in Georgia that match 100% of the energy usage of our Washington, DC office.

In addition, SEIA's Women's Empowerment Series began in earnest with events in San Francisco and Washington, DC. These events showcase the incredible work being done by female leaders in the solar industry, and position SEIA at the forefront of building a more inclusive workforce for solar. Working with member companies, SEIA also developed a *Best Practices Guide for Hiring Diversity in the Solar Industry*, which provides concrete steps that solar companies can take to ensure that they are expanding opportunities for communities of color, women, military veterans, and many more.

“ 2016 WAS A YEAR OF SIGNIFICANT PROGRESS ”





SOLAR ENERGY INDUSTRIES ASSOCIATION

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