

Welcome to Solar Weekly Insight, presenting the most important developments in the global solar industry, ranging from significant industry trends, policies, research, and new technologies to markets and pricing.

This week's edition focuses on global and national PV markets, and features three exclusive stories on solar power in the U.S., provided by Solar Server's media partner Intersolar North America.

Global renewable energy investment set to surge by 2030; Solar PV and onshore wind to dominate deployment



Bloomberg's 2030 energy market outlook forecasts that Asia-Pacific will invest USD 2.5 trillion, the Americas USD 816bn, and Europe USD 967bn in renewable technologies by 2030

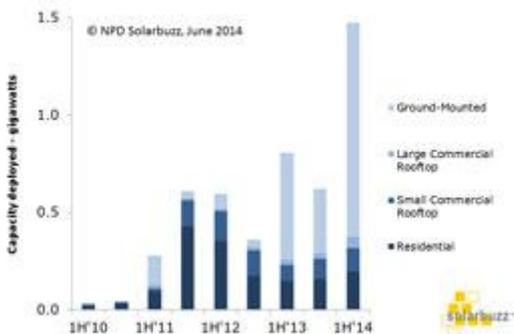
The next decade and a half will see renewable energy raise its share of European electricity generation capacity from 40% in 2012, to 60% in 2030, while the share of fossil-fuel sources such as coal and gas falls from 48% to 27%, according to a major report from research company Bloomberg New Energy Finance.

USD 5.1 trillion to be spent globally on renewables

Globally, Bloomberg New Energy Finance expects USD 7.7 trillion to be invested in new generating capacity by 2030, with 66% of that going on renewable technologies including hydro. Out of the USD 5.1 trillion to be spent on renewables, Asia-Pacific will account for USD 2.5 trillion, the Americas USD 816bn, Europe USD 967bn and the rest of the world including Middle East and Africa USD 818bn. [More](#)

New Solarbuzz report: U.K. PV deployment in the first half of 2014 exceeds full-year 2013

Six-Monthly Solar PV Capacity Deployed in the UK

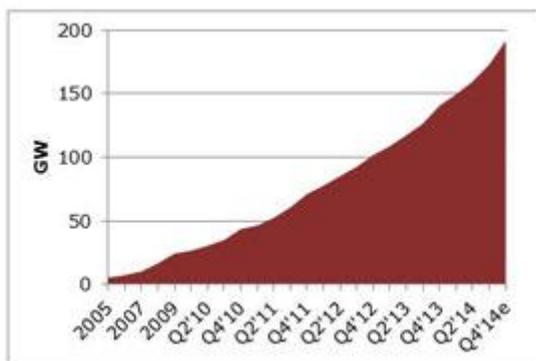


During the first half of 2014 (1H'14), the U.K. solar photovoltaic (PV) industry deployed 1.47 gigawatts (GW) of new capacity, which exceeds the amount of new PV capacity added during 2013.

The U.K. is now firmly established as the leading solar PV market in Europe, and the country is expected to become the fourth largest global market for new solar PV deployment in 2014. [More](#)

Picture left: 2014 is a record year for the U.K. solar PV industry

Cumulative global solar PV demand surpasses 150 GW in 1H'14



The global solar photovoltaic (PV) industry continues to show strong growth, with over 150 GW of solar PV installed across the world, NPD Solarbuzz Inc. (Santa Clara, California, U.S.) announces.

The industry has steadily grown over the past several years, increasing from an installed base of only 5 GW in 2005 to almost 200 GW forecast by the end of 2014. [More](#)

Intersolar North America Special

New Financing Models Are Driving U.S. Solar Market Growth

No other sector in the U.S. solar industry has seen as much innovation recently as project financing, due in part to financing being a make-or-break project consideration across all U.S. market segments. Building on the early success of power purchase agreements for utility-scale solar projects and third-party ownership for distributed systems, new financing models that expand access to PV systems are sustaining North American solar market growth.

Additionally, crowd-funding, revamped power purchase agreements and Real Estate Investment Trusts (REITs) are being explored as improved funding structures for PV projects. Mosaic, SolarCity, and others, are on the forefront of models.

Of course, no one financing model is a cure-all solution. This July, Intersolar North America will feature several conference panels dedicated to the topic. Of particular interest is the "PV Financing" panel, which focuses on current financial models, and "Breakthroughs in Financing: California's Latest Efforts to Bring Solar Home," which provides insight into the state's efforts to introduce new funding models to bring more solar online. More information on these sessions is available [online](#).



The Agua Caliente PV plant in Yuma County, Arizona is the largest solar photovoltaic power plant in the world

In tackling the issue of financing, the U.S. solar market has borrowed from a wide range of industries. Yieldco, an ownership structure borrowed from conventional energy industries where assets are pooled into an investment vehicle that pays dividends to shareholders, has emerged as an attractive option to fund utility-scale solar installations. Securitization, pioneered in the mortgage industry, pools various types of debts to sell as securities to investors, and is especially attractive for financing residential and small commercial PV installations.

Promotion

Solar & Off-Grid Renewables West Africa, Accra, Ghana, 16-17 September 2014



**SOLAR
& OFF-GRID
RENEWABLES
WEST AFRICA**

**BOOK
NOW**

**EARLYBIRD TICKETS
SAVE UP TO £149
EXPIRES 1 AUGUST**

16 - 17 SEPTEMBER, ACCRA, GHANA

With a 5 GW utility scale solar pipeline and a huge off-grid opportunity, this event is a must-attend if you want to meet policy-makers, developers, financiers and other experts building a strong West African Solar Industry. Speakers include Ministry of Energy of Ghana, Energy Commission of Nigeria, Ministry of Mines and Energy of Benin, Blue Energy, Developer of 155 MW Nzema plant, International Solar Utilities, Ghana Capital Partners, Standard Chartered, IFC, AfDB and many more. [More](#)

Energy Storage

U.S. Poised to Become Top Three Market for Energy Storage by 2019

Energy storage is positioned for strong growth in 2014 and beyond, with solar playing a crucial role in its early market success. According to market research firm IHS, the U.S. storage market is expected to grow to 1.7 GW by the end of 2017 - of this, more than 300 MW will come from systems paired with solar installations. Analysts expect the United States to become one of the top three markets for solar and storage over the next five years, along with Germany and Japan.



This growth is due to higher penetrations of solar in states such as Hawaii and California, which have made storage an important component of systems in order to smooth out the mismatch between solar electricity production and daily peak demand.

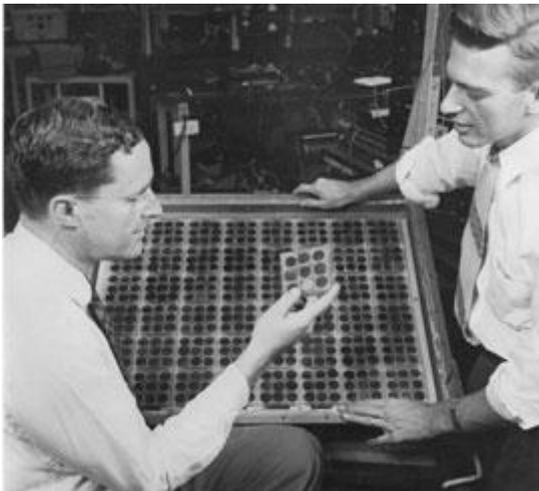
Driven by energy storage-supporting legislation, California leads the U.S. in storage project volume. Of the 330 storage projects planned or completed across the nation, California is home to 119.

As energy storage becomes key to bringing more large-scale solar projects online, Intersolar North America expanded its focus on the topic, and will host a special program on storage, new to this year's exhibition. The electrical energy storage (ees) Forum will include presentations that highlight technology solutions, market developments, new incentives and project case studies deployed in the field. A full schedule is available [online](#). Additionally, through its partnership with the National Alliance for the Advanced Technology Batteries (NAATBatt), Intersolar North America will present a [workshop](#) on energy storage. Solar developers can learn how to maximize project revenue and enhance electricity quality with electricity storage technology.

60th Anniversary of the Modern Solar Cell

PV60 Exhibit Explores Solar PV History

It's been 60 years since the most significant breakthrough in the history of solar was made - the development of a solar cell capable of directly converting enough sunlight into useful amounts of electricity.



A team of scientists at Bell Laboratory – Gerald Pearson, Daryl Chapin and Calvin Fuller – successfully powered a 21-inch Ferris Wheel with a silicon-based “solar battery” and thus the modern solar industry was born. The Bell Laboratory's PV cell had an impressive efficiency (at the time) of six percent and today the world's most efficient cell was recorded at 44.7 percent.

SolarBuzz predicts at the close of 2014 we will have approximately 200 GW of solar installed worldwide – a testament to the impact their achievement has on our energy supply.

Intersolar North America is excited to celebrate this milestone and highlight the pioneers who brought significant innovations to the solar industry along the road to commercialization over the last few decades. Intersolar will host a [special exhibit](#), co-designed by the [Renewables 100 Policy Institute](#) and solar historian and book author [John Perlin](#), that brings to life the remarkable story of modern solar technology. It includes a rare collection of archival material that chronicles the story of solar PV's remarkable first 60 years.

Intersolar North America: Moscone Center, Semicon West, San Francisco, CA; July 8th to 10th, 2014.

Further information: www.intersolar.us

Promotion

Next Generation Solar Finance, New York, 29 September 2014



Solar YieldCos could be the most significant catalyst in the US solar market, according to market expert and analyst, Vishal Shah of Deutsche Bank Securities. Currently, the US industry is leading the pack but, as the march towards grid parity continues, YieldCos could emerge in new markets outside of the States. Shah joins a powerhouse selection of solar experts who will speak at the event, including Jigar Shah, Department of Energy, Greenbacker Group, State Street Global Advisors, Reznick Capital Markets Securities, SolarCity, J.P. Morgan Capital, Deutsche Bank and many more. [More](#)

Thanks for your interest in the Solar Weekly Insight. Stay posted for the next industry highlights.

For free subscription, registration and recommendation please visit: www.solarserver.com/registration

Follow Solar Server on twitter like over 4,900 solar stakeholders do: <http://twitter.com/solarserver>

Solar Server: The Gateway to Solar Power around the world:
www.solarserver.com.

Solar Daily Insight: Breaking news at:
<http://www.solarserver.com/solar-magazine/solar-news.html>

Publisher:

Heindl Server GmbH
Kaiserstraße 137
D - 72764 Reutlingen

Tel.: +49 (0)7121-69681-30
Fax: +49 (0)7121-69681-38

Register of corporations-Nr:
HRB 382398 Handelsregister des Amtsgerichts Stuttgart

CEO / Editor in Chief: Rolf Hug; rolf.hug@solarserver.de

Solarserver North America Representation
One Embarcadero Center, Suite 1060
San Francisco, CA 94111

Toll-Free: + 1 877 SUN 7077
or +1 877 786 7077
Fax: +1 415 627 9169

For recommendation / registration please visit
www.solarserver.com/registration

We respect your privacy. If you do not like to receive future e-mails from us, please opt-out by sending an e-mail with re "no newsletter" to: info@solarserver.de