



Photos: Stephan Röhl

Award winners at the recent Ecosummit 2016 in Berlin pose with their plaques while also receiving the plaudits from those in attendance.

Pitch the future

Ecosummit 2016: Now is time for open innovations in the energy market. As consumers become prosumers and begin demanding smarter products and services, big companies are forced to modernize their business and seek support from younger, more dynamic and innovative market players. In April, **pV magazine** attended Ecosummit 2016 in Berlin to discover what products and business models cleantech startups have in mind for our energy future.

This year, Ecosummit Berlin demonstrated that more and more utilities are interested in investing in cleantech startups. “It is a big trend that utilities are looking for external innovations outside of their companies, and are open to new solutions that can be supplied by startups,” Ecosummit Founder and CEO Jan Michael Hess told **pV magazine**.

Six European utilities participated in the Berlin event as sponsors and hosts. “We are open to any ideas,” said Inken Braunschmidt, Head of Innovation of German energy giant RWE, presenting the company’s open innovation and co-

investing strategy. For RWE, open innovation is hardly a new trend. In 2014, the company created its Innovation Hub with teams in Silicon Valley, Israel, Berlin, and Birmingham to attract prospective entrepreneurs and develop new business solutions.

E.ON is another German utility with an appetite for cleantech startup investment. One of the companies E.ON is investing in is Thermondo – a Berlin-based startup that sells heating systems online. Inven Capital, a VC of a Czech energy company CEZ, also attended the conference. On the stage the company

announced a \$20 million investment in Tado, the Germany-based green startup that provides climate control services to households. At the two day event **pV magazine** spoke to representatives of other energy companies, and all of them admitted that the growing trend for open innovations is something that utilities cannot ignore. “It is expected from us today,” said EWE’s Christina Heilmann. But merging two different corporate cultures is not always easy – unlike large businesses, young companies can react more quickly to the new challenges and opportunities of the rapidly changing energy market.

Storage startups on the rise

Storage is among the main technology trends that inspire clean-tech startups today. Some of the Ecosummit presenters have already established themselves in the growing global storage market. Sonnen, a late-stage German startup, is now competing with Tesla in this field. In fact, in the first quarter of 2016, Sonnen sold more products than its more famous rival. At Ecosummit the company's CEO Christoph Ostermann presented SonnenCommunity, a new business model that enables prosumers to sell generated renewable energy to each other.

"Sonnen came to Ecosummit 2012 in Düsseldorf. It was there that they did their first pitch, even before they closed their first funding round," said Jan Michael Hess. "Since then, they have been very successful in VC fundraising. Last year, Inven Capital also invested into Sonnen. And I know that they first discovered the company at Ecosummit 2014." Today, Sonnen is one of the most successful European startups, with corresponding investment appetites: As Christoph Ostermann revealed at the conference, Sonnen is seeking to raise €50 million to accelerate its growth. Fifty million euros seems like a fair expectation for certain energy startups today. The companies that have managed to catch the wave of the booming storage market can now demand investors' attention. Berlin-based grid-scale storage provider Younicos proved as much last year by raising €50 million from Panasonic, First Solar, and Grupo Ecos. This late-stage startup has some 100 MW of installed storage capacity to date. Qinous is another German energy storage provider, and also boasts a rather sleek project portfolio.

Dresden-based Sunfire presented its PowerCore reversible electrolysis system that converts electricity to hydrogen, which can then be stored in a highly compressed form. Early-stage startup Electrochaea is developing a similar power-to-gas solution. Ultracapacitors, famous for their high energy and power density, are another promising storage product offered by Estonia-based Skeleton Technologies. German startup Mobility House is linking storage with electric mobility, another hot trend in the global energy market. The company is already looking to the future; a future in which everyone is driving an e-car, and offering a smart way to use "second-life" EV batteries for energy storage.

Reinvent a solar cell

It is tough for a young company to enter the highly competitive PV market, said Hess, explaining why not that many solar startups made it on stage. However, those that pitched at Ecosummit boasted some startlingly impressive solutions and business strategies.

Klaus Maier of Mobisol demonstrated how the German startup is changing life in remote African villages. Mobisol has installed more than 50,000 PV home systems in Rwanda, Kenya, and Tanzania. Thanks to the company, more than 250,000 people now have access to electricity. "On average, we sell 120 units per day," Klaus Maier told *pv magazine*. Mobisol is not the only startup aiming to make use of enormous business opportunities for off-grid solar in Africa. Berlin-based SolarKiosk is already offering its service in the rural areas in seven African countries.

Startup-reneurs are also looking for new business models that help people go solar, even if they can't install a private PV system. Sven Pluut, CEO of Netherlands-based We Share Solar, said that the crowdfunding platform for collective solar energy

ECOSUMMIT AWARD

Ecosummit Berlin is the largest among the Ecosummit conferences – two others are held in Amsterdam and London. This year, the conference presented 83 speakers including 60 startups. The Ecosummit Award is part of the two day event. This year, 11 companies were nominated in the late stage category, and 47 were competing to be named the best early stage startup in Europe. The international jury named Kiwigrid, Mobisol and Kenoby the best among the late stage startups. In the early stage category, the winners were Lumenaza, Ben Energy and Electrochaea.

projects is seeking to raise more than €1 million to grow internationally. Meanwhile, new startup Prosumergy is planning to bring solar energy to apartment buildings and sell it to tenants.

There is obviously a space for new ideas and out-of-the-box solutions in the solar market, but VCs are not really motivated to invest in PV manufacturing, said Hess: "I don't think that solar startups today should try to reinvent a solar cell. Instead, they should use the concept of open innovation, talk to the big companies and see if there is an opportunity for cooperation."

Late-stage startup Greenergetic is one example of such cooperation. The German firm is offering utilities an online platform where they can sell PV systems to their customers. CEO of Greenergetic, Florian Meyer-Delpho, said on stage that last year the startup sold about 4 MW of residential and small commercial PV systems, and is planning to triple this in 2016. **S**

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