

And the winner is ...

Array Changing Technologies 2017: A surprise runaway winner to 2017's Array Changing Technologies feature, Amber Kinetics' M32 flywheel storage system impressed the award jury with its potential to provide a practical, chemical-free alternative to lithium-ion storage.



Photos: Amber Kinetics

Array Changing Technologies is **pv magazine's** annual feature demonstrating the latest and greatest technologies in the downstream sector, and looking to reward those with the highest potential to solve a problem, improve performance, lower costs, and push solar forward.

This year, the feature was split into two parts. In June our first three jury members picked out the top 10 from a huge selection of new products and innovations appearing in the European market in the run up to Intersolar Europe, and

then one month later three more industry experts helped us to select the top products appearing in the USA market as Intersolar North America drew near.

Finally, the six jury members came together to pick an overall winner from the two parts. After plenty of deliberation, the field was narrowed and a winner began to emerge alongside some very close runners up. Amber Kinetics M32 Flywheel was chosen as the overall winner, as a tried and tested technology being brought to new scale and applica-

tions. "This is a great concept for energy storage, and combining it with solar PV generation is an innovative idea," says Rebecca Hott of the U.S. Department of Energy, summing up the jury's opinion of the product.

Flywheel storage is certainly not a new concept. However, the jury saw this product's four hour duration with unlimited cycling, as well as the specified lifetime of up to thirty years with little maintenance required, as something truly array changing in its potential.

The 2017 Award Jury



Paula Mints
Founder and Chief Analyst of SPV Market Research



Rebecca Hott
Science and Engineering Technical Advisor with the U.S. Department of Energy's SunShot Initiative.



Tor "Solar Fred" Valenza
Chief Marketing Officer of Solar at Kiterocket (formerly Impress Labs)



Dirk Morbitzer
Supply Chain Manager at Sunrun



Anika Giller
Senior Business Development Manager EMEA & APAC, Clean Energy Associates



Dominik Fröhler
Managing Director, renerco plan consult

Runners up

There was certainly no shortage of worthy innovations among this year's crop of entries. Picking one winner was no easy feat for the jury, who named two close runners up for the award. First, Hanwha Q Cells Q.PEAK RSF L-G4.2 module was recognized as a leading module for utility-scale and larger application, thanks to its potential for faster installation without gaps between modules. "Installation time is a game-changing factor," Tor Valenza, CMO for Solar at Kiterocket told the jury. "To be able to catch up by installing 60% faster would be huge. Second, the SolarEdge Smart Energy Management Solution made a strong impression on the jury members, who noted the product's versatility and use of just one inverter. "DC solutions are

very limited, most require conversion from DC to AC then back to DC for storage," explained Sunrun's Dirk Morbitzer. "SolarEdge bypasses this, and the potential for power loss."

Congratulations to all of this year's winners, these really are the products and technologies that will change the game for PV arrays large and small all over the world. **pV magazine** would like to thank all six of our jury members for their time and expertise, and all those who submitted an entry to this year's feature. Keep innovating and Array Changing Technologies will be back next year.

Photo: Hanwha Q Cells



Other finalists

Wavelabs Sinus 2100o Mobile Flasher



Trina Solar DUOMAX Twin Bifacial Module



Enphase IQ Series Microinverter

