

## RENA and SoLayTec ship their 10<sup>th</sup> InPassion<sup>®</sup> system to a Chinese Tier One fully integrated solar manufacturer

In January the combination of RENA and SoLayTec have received an order for the turnkey InPERC technology. The customer will convert one of its current mono production lines to PERC technology. By applying this technology the average efficiency conversion will be over 0.8% higher compared to its standard efficiency conversion rate.

Last year RENA and SoLayTec have published results together with two well-known research institutes in Europe, imec (Belgium) and ISFH (Germany) of cell efficiencies well over 20% by PERC cells incorporating spatial ALD Al<sub>2</sub>O<sub>3</sub>.<sup>®</sup> In parallel other Chinese cell manufacturers who are also users of the InPassion<sup>®</sup> ALD Al<sub>2</sub>O<sub>3</sub> from RENA and SoLayTec also announced pilot results of PERC cells achieving > 20% conversion efficiency.

“RENA and SoLayTec are proud that this new customer is ordering our proven InPERC technology for mono crystalline solar cells. SoLayTec’s installed base of ALD tools now reaches the 2 digit number and this will be the 4<sup>th</sup> mass production machine”, concludes Roger Görtzen, co-founder of SoLayTec and manager marketing and sales. The InPERC turnkey package consists of a complete solution; rear-side smoothing, passivation, capping SiN<sub>x</sub>, laser ablation, and overall process integration.

“It is clear that several PECVD and ALD solutions are available for deposition of Al<sub>2</sub>O<sub>3</sub>. SoLayTec believes that its modular ALD concept has the potential to win the game from PECVD, due to a few important factors. A higher uptime because of less periodic maintenance, 5 times lower usage of TMA precursor material and most important a very high stability of the ALD process. This results into a more narrow efficiency distribution of the cells and a higher average efficiency, leading to a better margin for our customer”, adds Roger Görtzen.

Next week RENA and SoLayTec will participate at the international SNEC PV Power Expo 2014 in Shanghai. During this event RENA and SoLayTec will present the results of their InPERC technology: Industrial production of multi crystalline solar cells with efficiencies above 18%.

### SoLayTec

SoLayTec is a spin-off company of the Dutch research organisation TNO and established in 2010. The company develops, delivers and services machines for atomic layer deposition (ALD) on solar cells worldwide. The SoLayTec ALD machines are intended for research and industrial mass production in the solar market. SoLayTec high volume production equipment will be exclusively sold by RENA GmbH on the market. For more information, please visit [www.solaytec.com](http://www.solaytec.com).

### RENA GmbH

RENA is a leading production equipment supplier for the application fields Green Energy, Medical Technology and Electronics. Around 50 % of the solar cells worldwide are produced on RENA wet processing equipment. In close cooperation with chosen partners, RENA further provides turnkey systems and technology transfer for the photovoltaic industry. RENA is also the majority shareholder of SoLayTec. For more information, please visit [www.rena.com](http://www.rena.com).

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