

## Press Release



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### **VDMA Photovoltaic Equipment:**

#### **Asia orders are processed**

- **Investments by the solar industry in thin film technology contribute disproportionately to success**
- **Record export rate of 93 percent**
- **Incoming orders declined after a strong start in 2017**

Frankfurt, 24 April 2018 - The market for solar equipment has calmed down further towards the end of 2017 after the start of the year was characterized by strong investments. These led to a further strong increase in sales of solar equipment manufacturers in the fourth quarter: by 117 percent compared to the third quarter of 2017. The order books of the solar equipment manufacturers are still filled, in the fourth quarter 2017 a ratio of orders to delivered systems ("book-to-bill") of 0,4 was reached. "The so far high investment activity of the solar cell manufacturers in the expansion of existing and new production capacities is decreasing, the production is still busy. We also observe a reduction in equipment prices. New orders came increasingly from PERC and Black Silicon equipment of the crystalline Silicon as well as from the thin film technology sector. The trend towards implementing new production techniques in the form of upgrades of existing production lines is still unabated", Dr. Peter Fath, Managing Director of RCT Solutions GmbH and Chairman of VDMA Photovoltaic Equipment explained.

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## **Asia is the largest business**

The export ratio of German photovoltaic equipment suppliers reached the record level of 93 percent between October and December. The core business continued to be in east Asia, the share of total turnover originating from there amounted to 72 percent in the fourth quarter of 2017. Asia's sales were as follows: the largest share was made with China (62 percent), followed by Taiwan (1 percent) as well as India (1 percent). The rest of Asia which includes Malaysia and Vietnam recorded 8 percent. America remained second behind Asia with a sales volume of 18 percent while Germany accounted 7 percent of sales. Europe achieved only 5 percent of sales. The strongest sales segment in the fourth quarter 2017 for German PV manufacturers was the production solutions for thin-film PV (53 percent), followed by production equipment for cells (44 percent). Although the production of modules on thin-film technology, including the CIGS (Copper-Indium-Gallium-Selenide) technology and CdTe technology (cadmium telluride), is less than 10 percent on the world market, the high share shows that especially in this segment many production solutions are purchased from Germany. Machinery for polysilicon, Ingot and wafer production accounted for 3 percent of sales.

## **Order intake decreased**

Order intake declined strongly by 41 percent in the fourth quarter of 2017 compared to the third quarter, however, compared to the previous year still increased by 9 percent. The regional allocation again had an Asian focus with 44 percent of all orders, followed by Europe with 22 percent and Germany with 19 percent as well as America with 15 percent. "The order books are still filled. The future expansion plans of the PV industry in China give reason to hope for continuous contract awards in the coming years. Especially the high proportion of equipment for production of thin-film modules shows that German production equipment is in demand", emphasized Dr. Jutta Trube, Division Manager of VDMA Photovoltaic Equipment.

