

The polysilicon market in 2020

Photovoltaics

10.02.2017



*Johannes Bernreuter's encouragement for the industry is scant: "We see no signs of a positive change in the low-price segment by 2020."
(Photo: Bernreuter)*

Johannes Bernreuter from the market research company [Bernreuter Research](#) has published a new study. Like previous studies, it examines the polysilicon market, this time providing an overview through the year 2020. The data that was used for the study – and there is quite a lot of it – is from November 2016. This means the data is very current. It is unlikely that anyone has a more up-to-date study. A more thorough market study probably does not exist either.

The market is still in flux, even if developments are less spectacular now than they were a few years ago. Nevertheless, the numbers tell a different story. Polysilicon production rose from 228,000 tonnes in 2013 by 37% to 313,000 tonnes in the following year, and it rose by a further 16% to 363,000 tonnes in 2015. The figures for 2016 were not available in time for the editorial deadline. However, the demand from the PV industry, which accounts for approximately 90% of the polysilicon that is produced, did not keep pace with this sharp increase. The number of newly installed PV systems 'only' increased by 9% in 2014 and 28% in 2015.

Competition is getting tougher

This naturally has an impact on the price. The average spot price was a record-breaking 12.93 USD/kg in January 2016. This is far below the level that was anticipated some years ago. The polysilicon industry is expecting demand to remain modest during the next few years. Bernreuter Research predicts that the annual PV expansion rate will fall below 10%. This will lead to increased competition in the coming years. Some market participants are expected to throw in the towel by 2018.

Johannes Bernreuter's encouragement for the industry is scant: "We see no signs of a positive change in the low-price segment by 2020." This does not necessarily apply to electronic-grade silicon for the semiconductor industry, which is raised to a higher level of purity. Electronic-grade silicon benefits from a much higher price, but it only accounts for approximately one-tenth of the polysilicon produced. Bernreuter Research predicts a market volume of 38,000 tonnes for 2020, and even this relatively small volume is attracting competitors. Bernreuter Research sees a number of Chinese companies trying to establish themselves as suppliers of electronic-grade silicon. However, the market research firm is not convinced that these companies will be able to fulfil the high purity requirements of the semiconductor industry. Considerations such as these account for a significant part of the study.

Detailed scenarios

Who needs to know all of this and for what purpose? The 70-page analysis does not indulge in speculation. It sticks to the data, which is presented using rich tables and illustrations. Unlike previous studies, the current analysis does not focus on technology. The bulk of the study analyses the economic background that shapes an industry that is indeed driven by technology, but where decisions are based on economic considerations. It includes four remarkable scenarios that depict possible future developments in the industry in incredible detail.

This increases the usefulness of the study. Decision-makers will certainly appreciate the comprehensive analysis. The study, which is written in easy-to-understand English, is a worthwhile read for anyone who works in the industry. It costs € 1590 and can be ordered online at www.bernreuter.com. This is approximately the same amount as some seminars cost per participant. The price of the polysilicon market study is definitely money well spent.