Polycrystalline Silicon Market Research

Executive summary (pdf) - 32 pages
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Report Description

The main objective of this research is to provide complex analysis of the Russian market of polycrystalline and single-crystalline silicon. The importance of this work is conditioned by development of solar energy and microelectronics industries, which determine major demand for silicon products (polycrystalline silicon serves as a raw material for production of single-crystalline and polycrystalline modifications of silicon — the main semiconductor materials).

Today's market is characterized by deficiency of polycrystalline. Despite the growing number of emerging productions, the existing capacities cannot fully satisfy the rising demand. At the same time, the situation is complicated by the fact that only a few countries in the world have the ability to produce polycrystalline silicon (raw quartz — polycrystalline silicon — single-crystalline silicon — silicon slab). Moreover, 90% of the output is controlled by 9 largest companies from the USA, Japan, Germany and Italy.

Currently there is next to none polycrystalline silicon production in Russia, despite the existing manufacturing base. Single-crystalline silicon is grown in Russia from foreign high-purity raw materials. At the same time demand for this production in our country stays at high level and doubles every year, leave alone defense industry.

This polycrystalline silicon market research report contains information on the global silicon market, producers, suppliers and consumers, as well as Russian consumption: import, production projects, demand, investment, distribution, perspectives, influence of crisis on the industry.

The report consists of main 8 parts, excluding introduction and conclusion.

The first section consists basic notions, definitions and information on polycrystalline and single-crystalline silicon application.

The second section is dedicated to description of production technologies and difficulties connected to production output.

The third section contains analysis of the Russian and global polycrystalline silicon market.

The fourth part describes the existing projects of polysilicon production plants, compares them, contains information on market players and analysis possible competition.

The fifth part represents the analysis of polycrystalline silicon shipments to Russian plants: description of volume, structure and import peculiarities.

The sixth part contains the analysis of demand for polycrystalline and single-crystalline silicon and studies the situation in consuming industries: solar energy and electronics.
The seventh part represents price analysis.

The final part contains the analysis of market development perspectives.

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