

ISOFOTON S.A.



1981-2006

Prepared to adapt to growth.
Prepared to evolve.

Isofotón believes in economic and social improvement through models of sustainable growth. The current transformation of its institutions is solid proof.

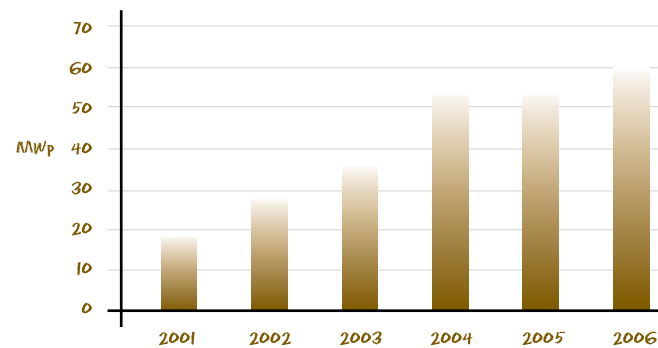




5.5 PRODUCTIVE ACTIVITY AND PRODUCTS

5.5.1 Production

PHOTOVOLTAIC PRODUCTION

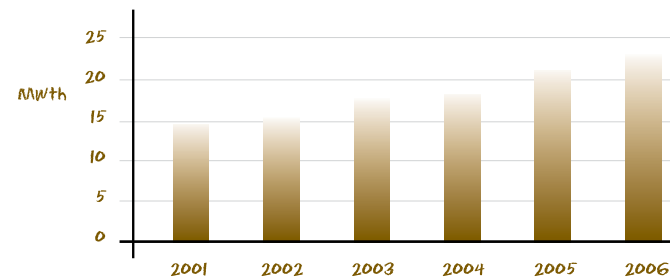


After a year marked by the move and adaptation to Isofoton's new factory, production has solidified, counteracting the problems of polysilicon supply and increasing production of photovoltaic cells and modules by 15% compared to 2005, reaching 61 MW.

On the other hand, Isofoton's investment is clearly illustrated by the increase of 31% in its production capacity, of both modules and cells.

This year has been characterized by the solidifying of the production of **125 mm photovoltaic cells**, the beginning of the production of **156 mm cells**, and the gradual diminishing of the production of 103 mm cells. Also, the launch of the **IS module** range with **5 inch diameter cells** has been an important highlight in the improvement of Isofoton's offerings and its adaptation to the market.

THERMAL PRODUCTION



With respect to the production of **thermal collectors**, 2006 was a year of adaptation to the new products with views of a significant increase in production for 2007.

On the other hand, in August of 2006, the new **high ultrasound technology collector manufacturing production process** went into effect, which meant the application of maximum automation in this process. The factory in the PTA will allow the production capacity to increase at the rhythm of the foreseen demand.

The new factory has permitted the company's productive activity to experience an organized

growth with respect to the organization and quantity of its production lines. Isofoton now has an extremely modern factory, into which it has put all of its experience, which places it among the most advanced and automated in the world.

2006 Production highlights

- Start-up of the new robotized production line of Isotherm Plus collectors.
- Installation and start-up of the 156 cells production line (25 MWp/year).
- Launch of the range of IS modules with 5 inch cells.
- Implementation of MES system of managing traceability and control of processes in the cell area, which permit the control of production results in real time.
- Start-up of high capacity IR stringers with the aim of increasing welding capacity, and also the possibility of welding cells of up to 180 microns of thickness and reducing the breakage rates to under 0.5%.
- New installations: 10000 Class Clean Room to undertake the process of cutting solar concentration cells.
- Start-up of the 2007-2012 road map.

Strategic production 5.5.2 agreements

The growing demand of the photovoltaic market, around 41% in 2006 reaching between 1.9 and 2.2 GW of production, means that it is currently experiencing a shortage of its raw material, silicon, and trend of rising prices. Until five years ago, the photovoltaic market consisted of only 15% of the total polysilicon consumption. The large amount of growth in the industry made this figure reach 45% in 2006. If we add to this the 5-10% increase in the microelectronic industry, the traditional consumer of polysilicon, we can paint a picture of this material's market.

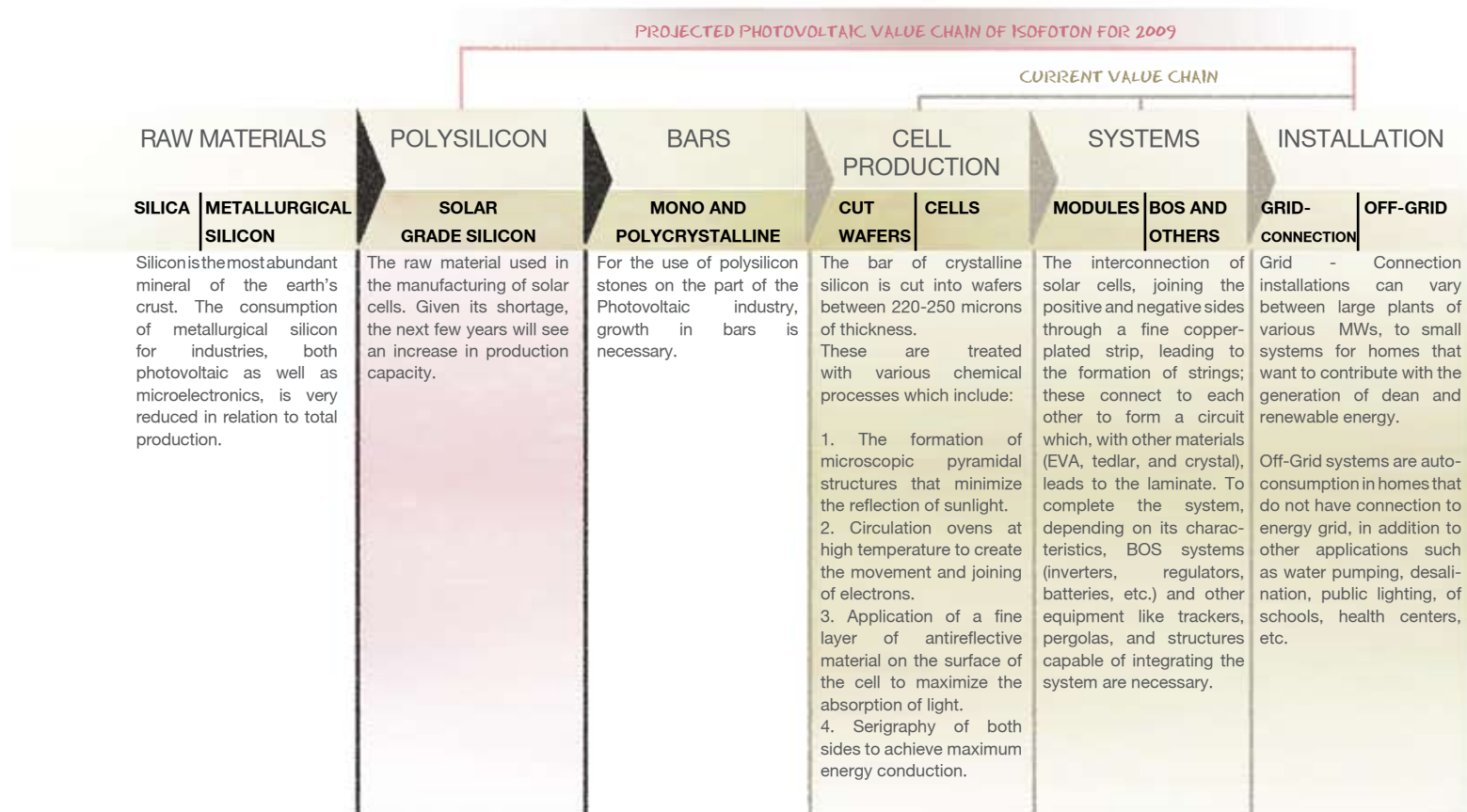
With the objective of producing polysilicon for the "Solar Sector", ensuring the supply of this raw material (polysilicon) at a competitive price on the market, Isofoton has driven the **construction of a factory which**, in its first phase, with an investment of 250 million euros, **will produce polysilicon for the photovoltaic industry in Spain** beginning in 2009. Isofoton contributes not only capital for the new factory, but technological leadership as experts in the sector. The factory will have a capacity to produce 2,500 tons of polysilicon annually, generating approximately 300 jobs.

The capital of the society formed is distributed between the following principal partners: Isofoton, which makes up 34% of the participation of the created society; Endesa, which makes up 17%; the Andalusian Government with 17%; the Banco Europeo de Finanzas with 20%, and Gea 21 with 12%.

For Isofoton, it means the empowerment of its business, a larger role from the beginning in its value chain, and a proximity, both physical and in the production of raw material, which will permit it to surpass the needs of the market and guarantee supply to its clients, ensuring its competitiveness on the world, and especially the Spanish, photovoltaic scene.



SOLIDIFYING THE PHOTOVOLTAIC VALUE CHAIN



5.5.3 Products and Services

Isofoton focuses its activity on the manufacturing and supply of:

	Products	Services
	Photovoltaic High performance cells Modules Inverters: Grid-Connection and Off-Grid Regulators Lighting Pumping Systems Batteries	Thermal Collectors: flat and vacuum tube Compact systems Special Formats Auxiliary Systems: - Storage tanks - Flow Stations - Controllers - Integrated Tanks - Mounting systems
		Consulting to professionals Engineering and Installations Architectural Integration Development / Training Financial Legal
		After-Sales Incidences Technical Support Maintenance



5.5.4 The quality of products and processes

Ten years ago the **Quality Management System** was implemented, based on the ISO 9001 regulation of 1994, which focuses on the manufacturing processes in order to obtain competitive products that satisfy the difficult demands of our clients' (public administrations) lists of technical conditions, or the agreements of quality that have been established with them.

Until now, the Quality Management System has been and continues to be a basic tool for reaching the guidelines established in Isofoton's quality policy, in which the most significant commitments are reflected. Both defining and following annual objectives, such as periodic revisions, which facilitate the operation of the system, are key elements for continued improvement with the aim of offering the market the most innovative energy solutions. In the past year, numerous technological changes have been produced and the production lines have become increasingly automated, significantly improving manufacturing technology. In this manner, great advances in efficiency of solar cells have been achieved; evolving to modules with 125 mm cells, up to 220 W, at the same time that the new 156 micron solar cell was released to the market.

In addition, in 2006, Isofoton reached the requirements for the **PV GAP (Global Approval Program for Photovoltaics) certification**, and its PV Quality Mark on 28 of its modules, from the IS-36 to the IS-207, which means having an IEC (IEC System for Conformity Testing and Certification of Electrical Equipment) certification.

On the other hand, in August of 2006, the trials of the **Isotherm Plus collector** were successfully completed according to the **European EN 12975 regulation** "Thermal Solar Energy Systems and Solar Collector

Components. General requirements and testing methods". These were carried out in the Fraunhofer ISE laboratories in Freiburg, and surpass, in terms of quality and typology, the trials carried out on our solar collectors up to this point. Thus, in addition to habitual performance testing, tests carried out consisted of: reliability, durability, and security of the collector, such as resistance to high temperatures, mechanical charge, rain water penetration, internal and external thermal collision, among others.

Certification Marks applicable to Corporate Management



Certification Marks applicable to Products



PV Gap



PRINCIPAL HIGHLIGHTS IN QUALITY MANAGEMENT

1995

- Creation of Quality Area.

1996

- Establishment of the Quality Policy.

1997

- Standardization of photovoltaic modules according to IEC 61215 and Safety Class II (TÜV Rheinland).

1999

- Creation of Environmental Area.
- Certification of Quality Management System version UNE EN ISO 9001:1994 (SGS ICS Iberica).
- Andalusian Environmental Prize. Environmental Protection.

2000

- Establishment of the Environmental Policy.

2001

- Certification of Environmental Management System version UNE EN ISO 14001:1996 (SGS ICS Iberica).

2002

- Beginning of Power Controlled Project (TÜV Rheinland).
- Certification of Quality Management System according to the UNE EN ISO 9001:2000 (SGS ICS Iberica) version.
- 2002 Prince Felipe Award for Business Excellence in the field of Renewable Energy and Energy Efficiency.

2003

- Certification of Isofoton as manufacturer by IEC, IECQ, LCIE.
- Standardization of photovoltaic modules according to UL 1703 (Underwriter Laboratories).
- Achievement of the PV Gap (EPIA).

2004

- “Power Controlled” Certificate for photovoltaic modules (TÜV Rheinland).
- Renewal of the ISO 14001:1996 (SGS ICS Iberica).
- Transition from the IECQ Certificate to the IEC-IECEE CB “Full certification scheme” LCIE (Laboratoire Central des Industries Electriques).

2005

- Certification of the Environmental Management System according to the version UNE EN ISO 14001: 2004 (SGS ICS Iberica).
- Performance of first self-evaluation according to the EFQM model.
- Extension of UNE EN ISO 9001 and ISO 14001 certificates to the new factory in the PTA.

2006

- Qualification of the EN 12975 regulation for thermal collectors.
- Regulatory Audit of the Prevention of Risks in the Workplace.
- Finalist for the 2006 Prince Felipe Award for Business Excellence in the field of Industrial Quality.