



APOLLON SOLAR

📍 66, cours Charlemagne
69002 Lyon
France

☎ +33 (0)9 79 27 58 13

✉ info@apollonsolar.com

🌐 www.apollonsolar.com

Innovative Photovoltaic Processes

COMPANY

Apollon Solar was launched in July 2001 by a team with specialist experience of the photovoltaic industry, having worked for many years in a wide range of fields, from research to marketing, through development and industrial deployment along the entire PV value chain. Apollon Solar offers scientific, technical, technological and marketing solutions to substantially reduce the cost of photovoltaic solar energy for end-users. Apollon Solar establishes partnerships with industry and leading laboratories, not always necessarily directly involved in the PV industry, to take ground-breaking materials and processes through to market launch.

Apollon Solar has so far registered about 15 patents in France, extended on a global scale to cover the main markets for the PV industry, particularly silicon-based materials, high-performance cells and ultra-robust modules. Their validity and terms of use are covered by R&D and licensing agreements in partnership with laboratories and industry.

SERVICES

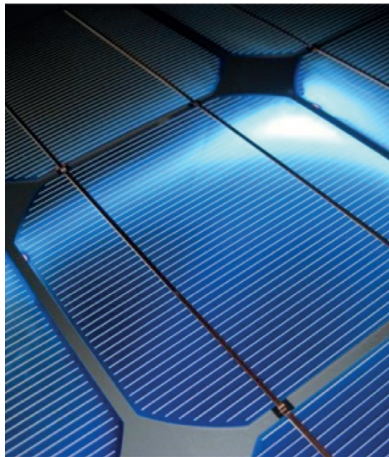
Apollon Solar is currently working in the following fields:

- Silicon, as a basic material, through streamlined production of solar quality silicon (PHOTOSIL), and its adaptation for photovoltaic use
Important results:
Solar-cell efficiency →17% on multi-crystalline silicon wafers and →19% on single-crystalline silicon wafers using 100% Photosil Silicon in both cases.
- Photovoltaic modules, perfecting a new industrial process for cell encapsulation (NICE)
Important results:
4 versions of NICE modules fully TÜV certified
NICE technology fully compatible with future generation high efficiency cell concepts (bifacial, busbar free metallization, IBC, HET)
1st industrial production line operational at Energie Industrie
- Photovoltaic cells, developing a high-performance industrial production line;
- Marketing, to identify new distribution channels and ways of deploying solar energy.

PRODUCTS



Cz ingot



Unsoldered cells assembling
(pressured contact)



NICE unframed module

REFERENCES

R&D – National (France):

CEA INES, CNRS SiMAP, INSA Lyon
INL laboratory, IM2NP

R&D – International:

Australian National University (ANU),
Australia ; FHG-ISE, Germany ;
ISC Konstanz, Germany ; National
Renewables Energy Laboratory
(NREL) Colorado, USA; University of
Konstanz, Germany ; University of
New South Wales (UNSW), Australia.

Industrial:

FerroPem (FR) – Long term
partnership agreement for the Deve-
lopment and Industrialization of UMG
Silicon for the PV Industry (PHOTSIL)

Vincent Industrie (FR) – Exclusive
License for NICE Module Technology

Semco Engineering (FR) and IrySolar
(FR) – Industrial Project Partners in
publicly funded project on N-type cell
production equipment.