

# Solar Photovoltaic 3.0

*Corporate presentation*

Mega  Group  
SOLAR BUSINESS HOLDING

 MegaCell™  
NEXT SOLAR GENERATION

Mega  Engineering™  
AHEAD ENERGY PROJECTS

 MegaCivic™

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# About Mega Group

## MegaGroup at a glance

### The Founder

- *Traverso's milestones in PV*
- *Traverso's experience across the photovoltaic supply chain*
- *Traverso's Business Network*

### The Founder - Solar business

- *Gridco - Silfab structure*
- *Examples of Traverso's PV power plants owned through Silfab*
- *Mega Group Structure*



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MegaGroup is an holding company founded by Franco Traverso, a pioneer in the Italian photovoltaic industry, since 1981.



## Mission

Providing turn-key solutions of solar energy production and water desalination, as well as setting up locally and integrated manufacturing industries producing innovative and high efficiency photovoltaic products and components.

## Vision

Allowing all the emerging Countries to have full access to primary goods as energy and water, at competitive costs.

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## The Founder



Francisco Traverso

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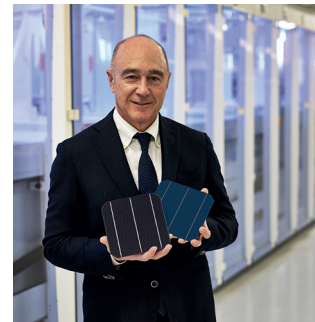
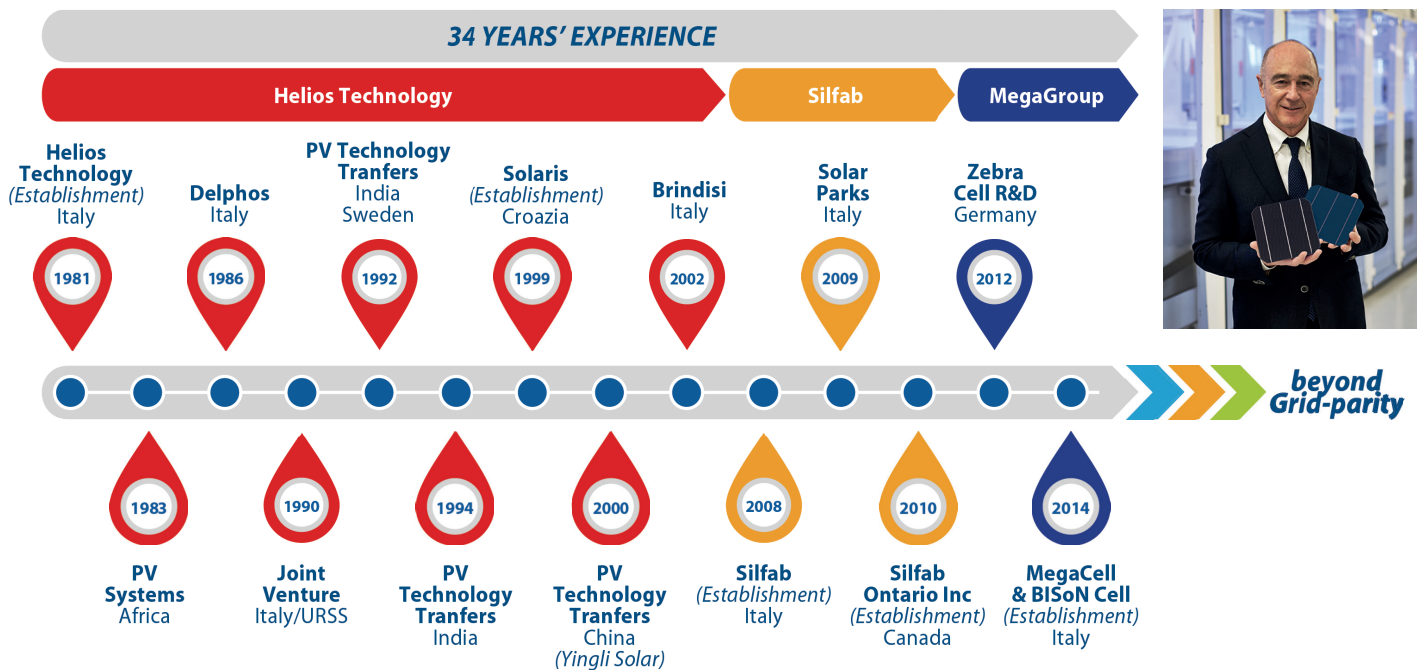
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## Traverso's milestones in PV



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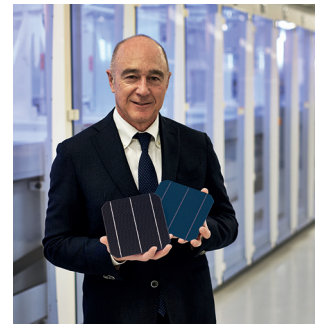
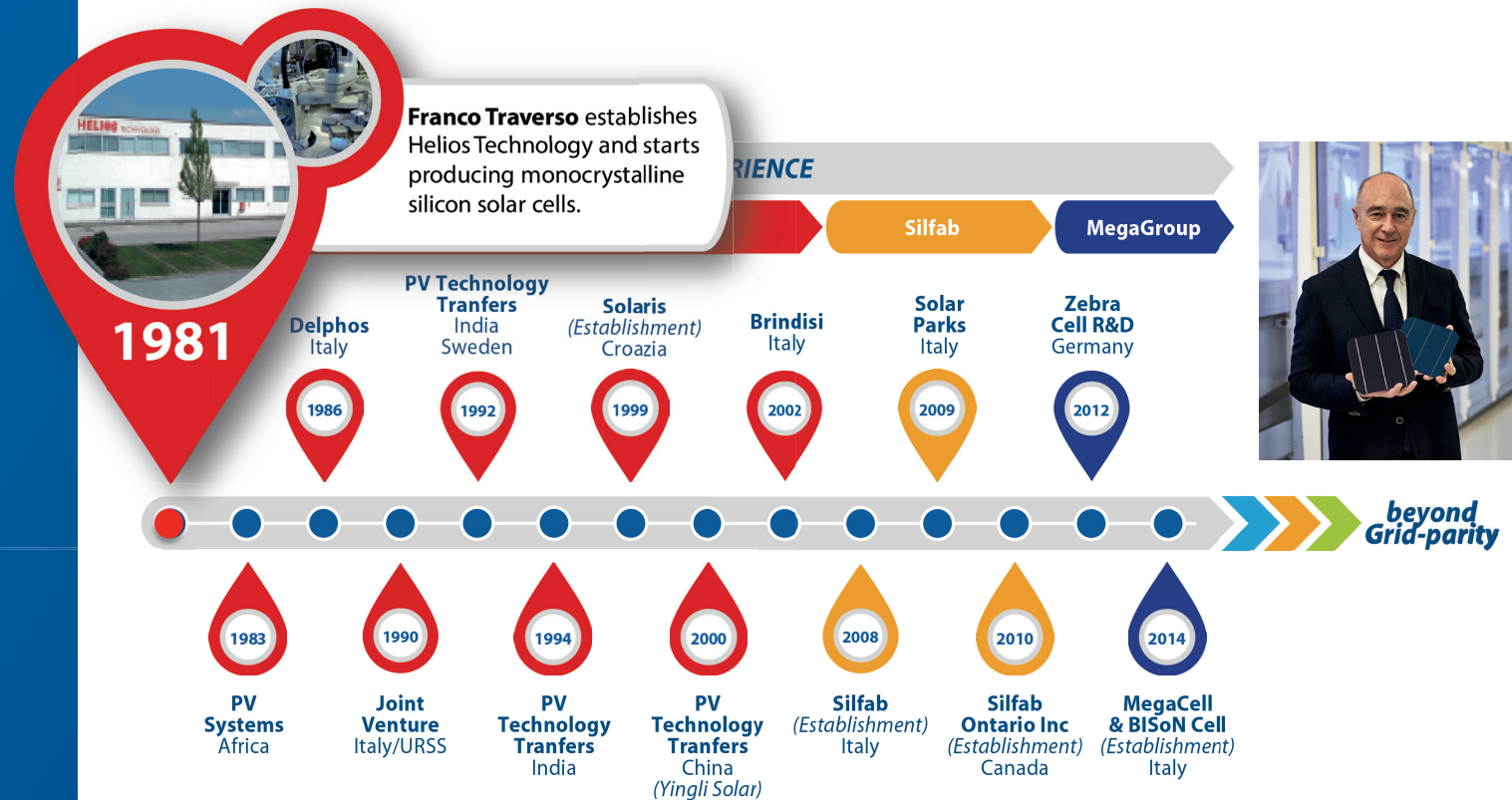
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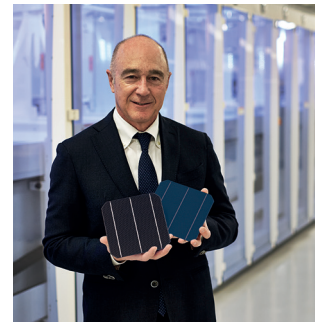
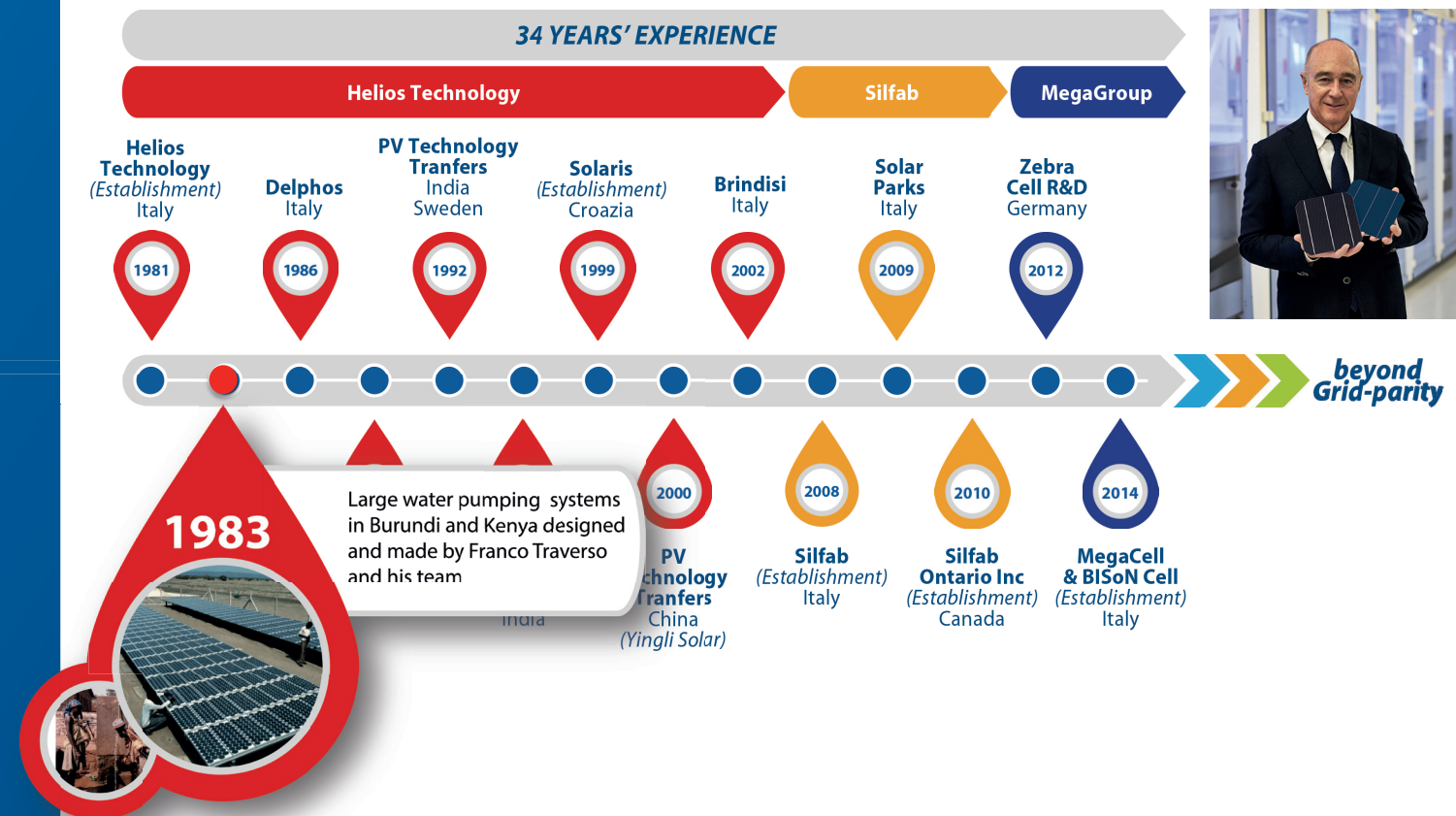
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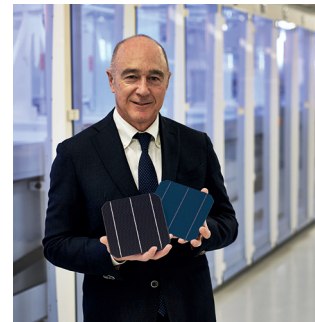
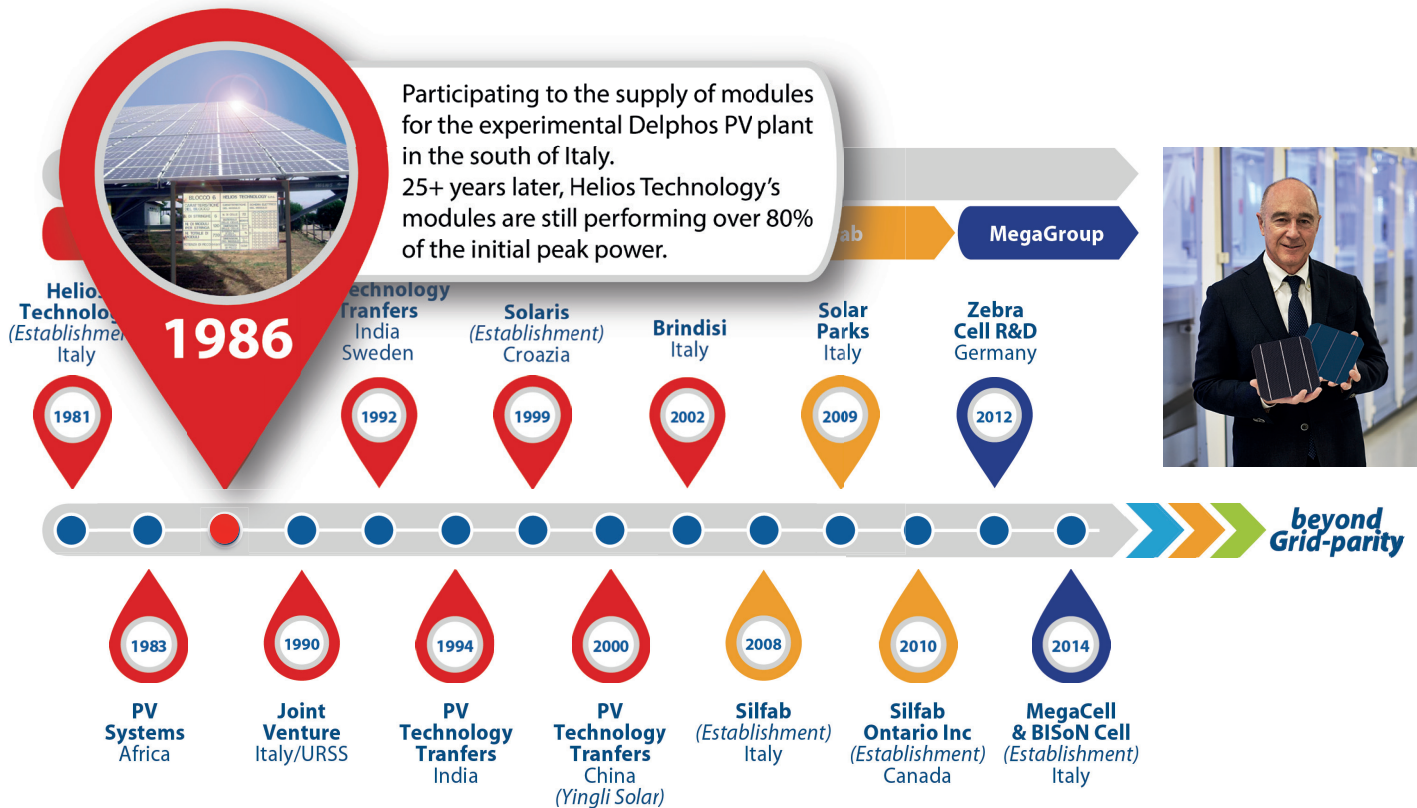
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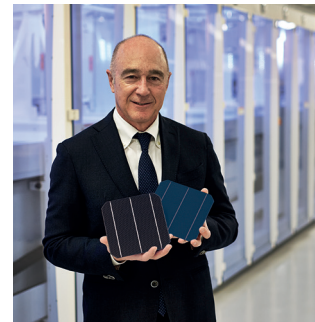
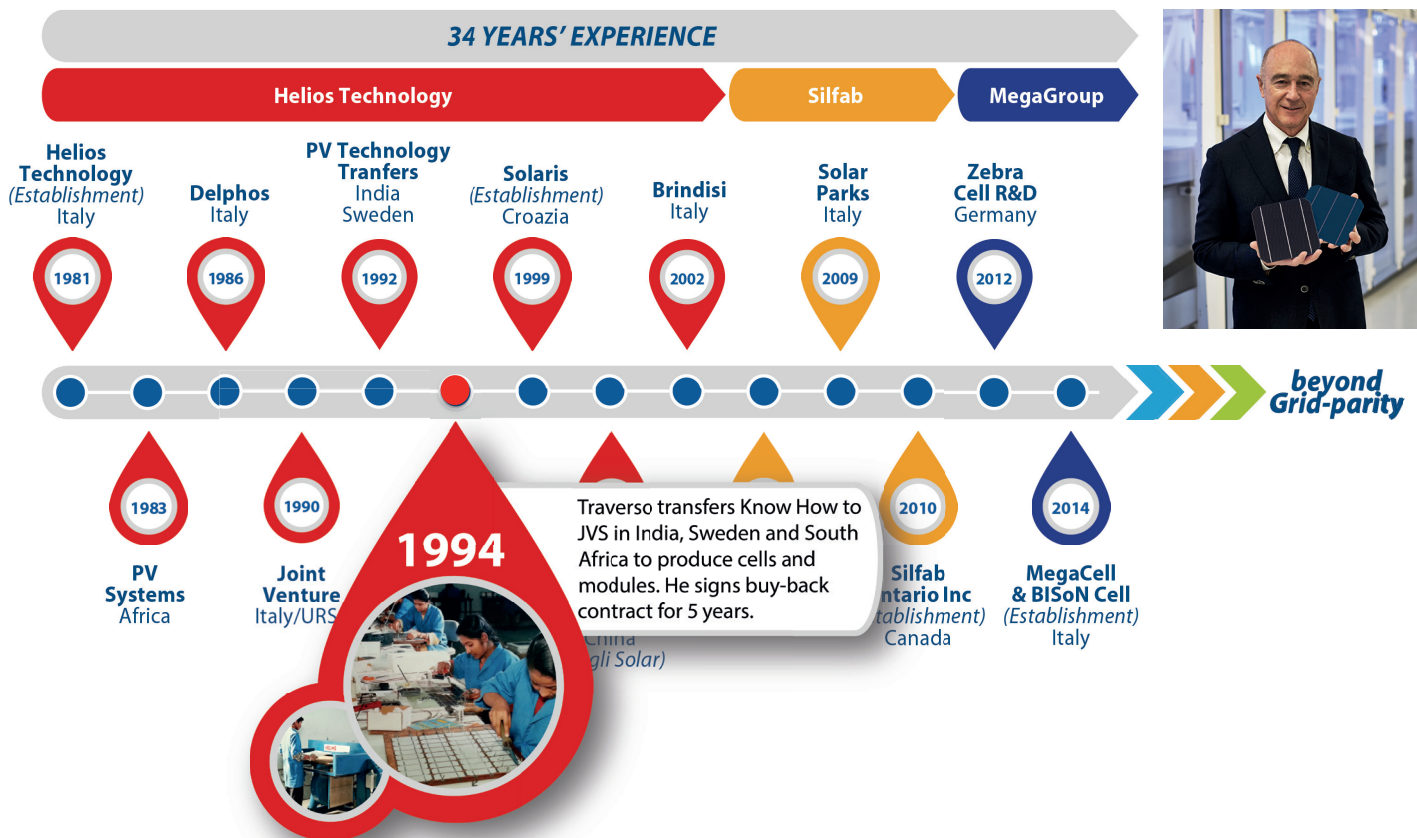
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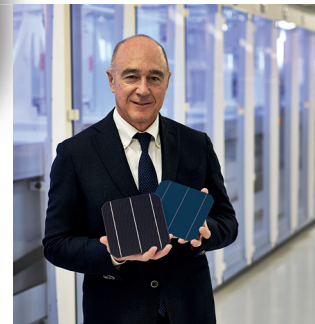
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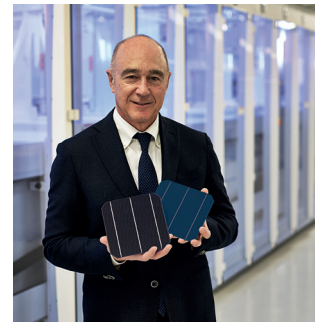
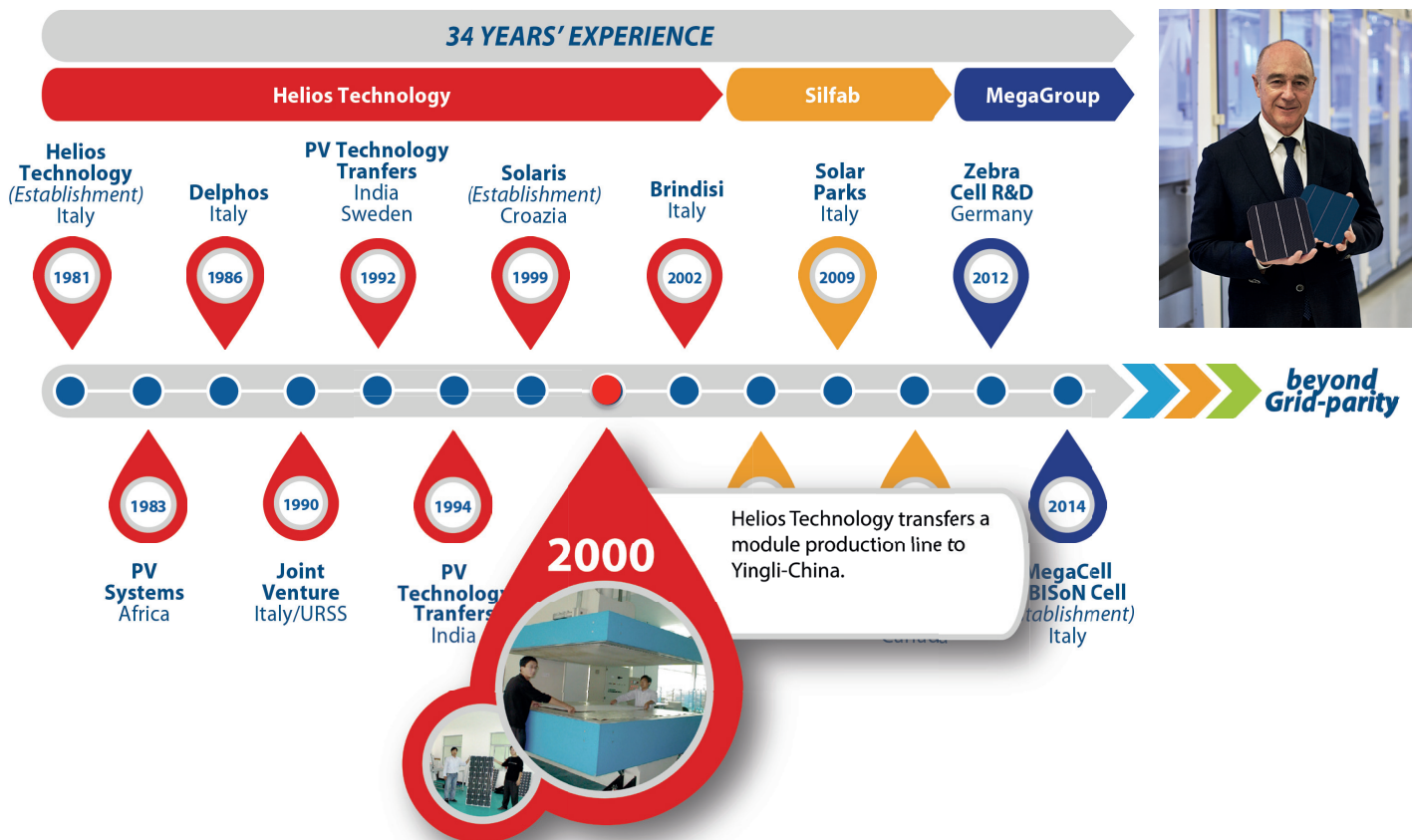
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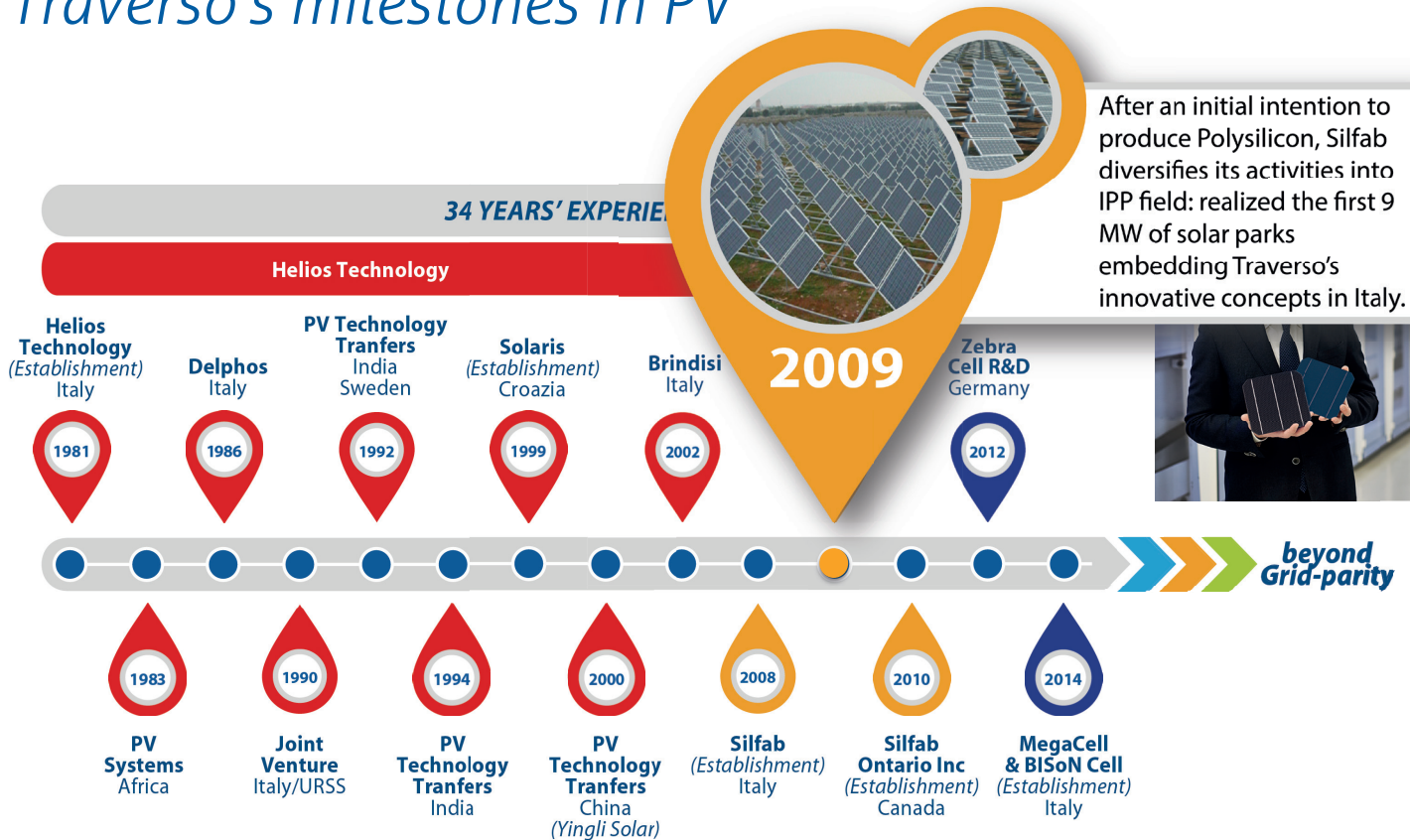
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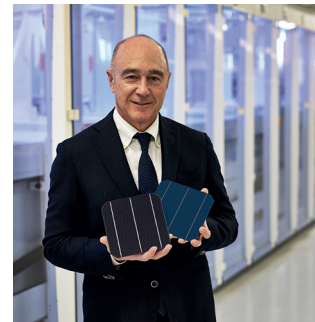
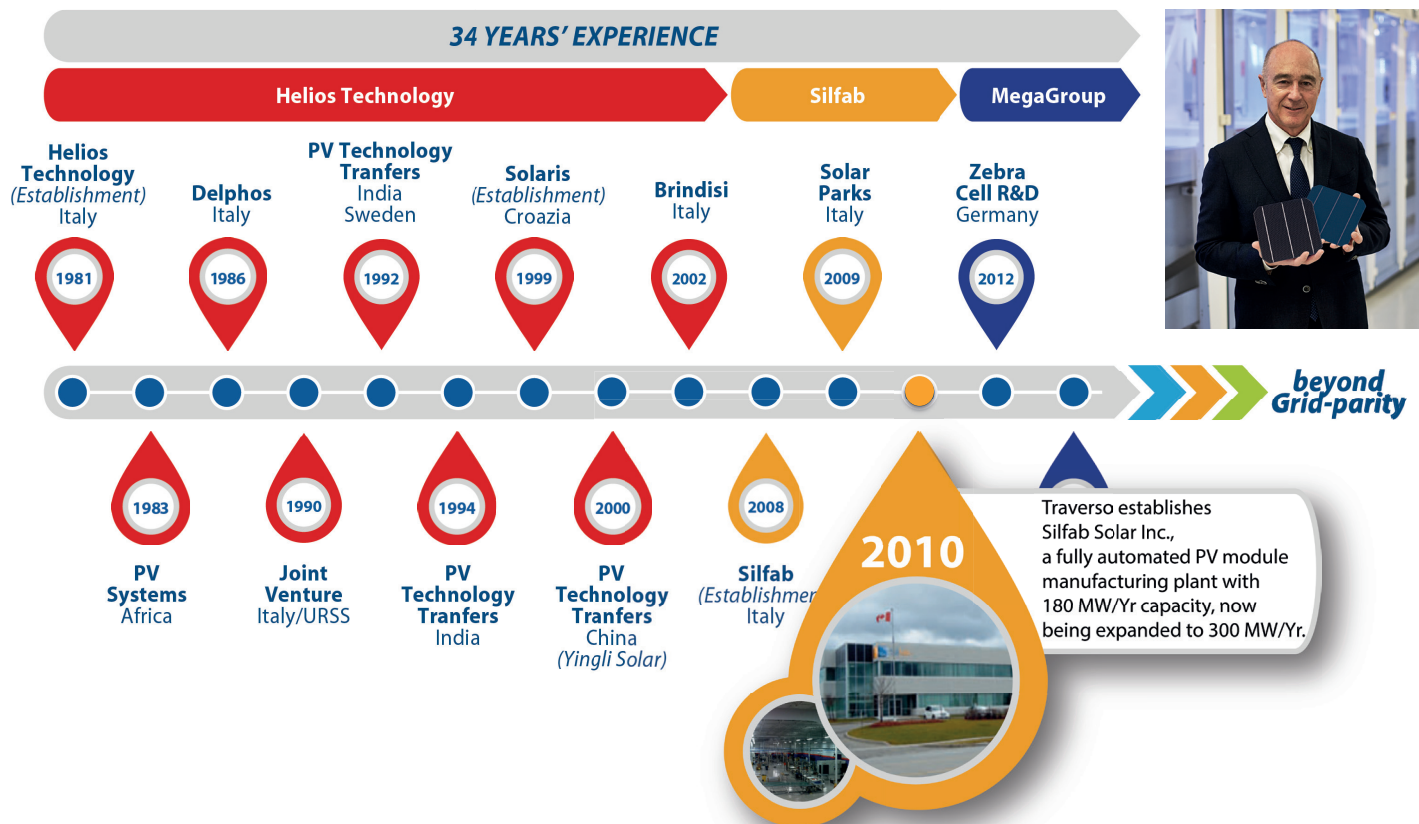
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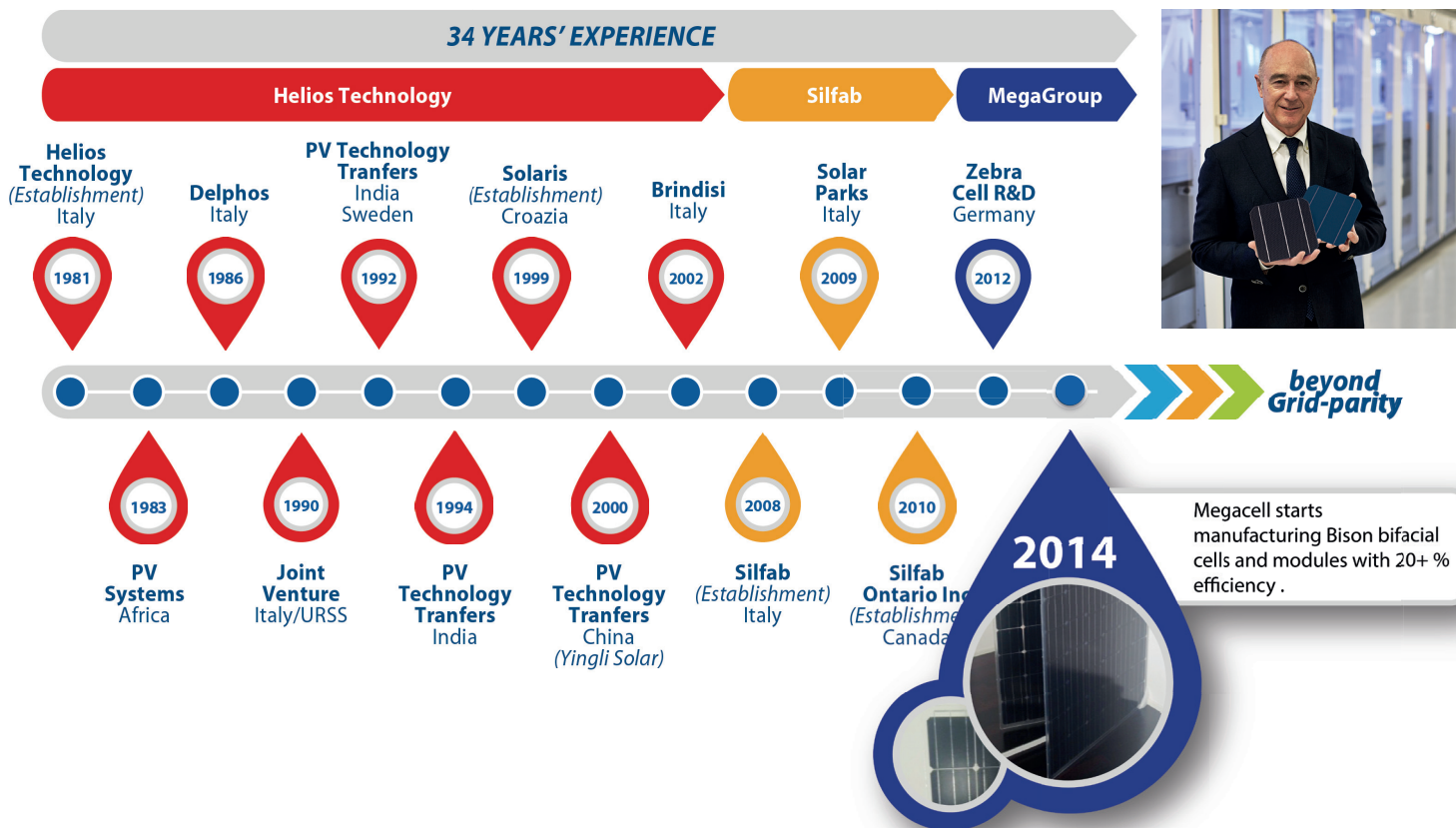
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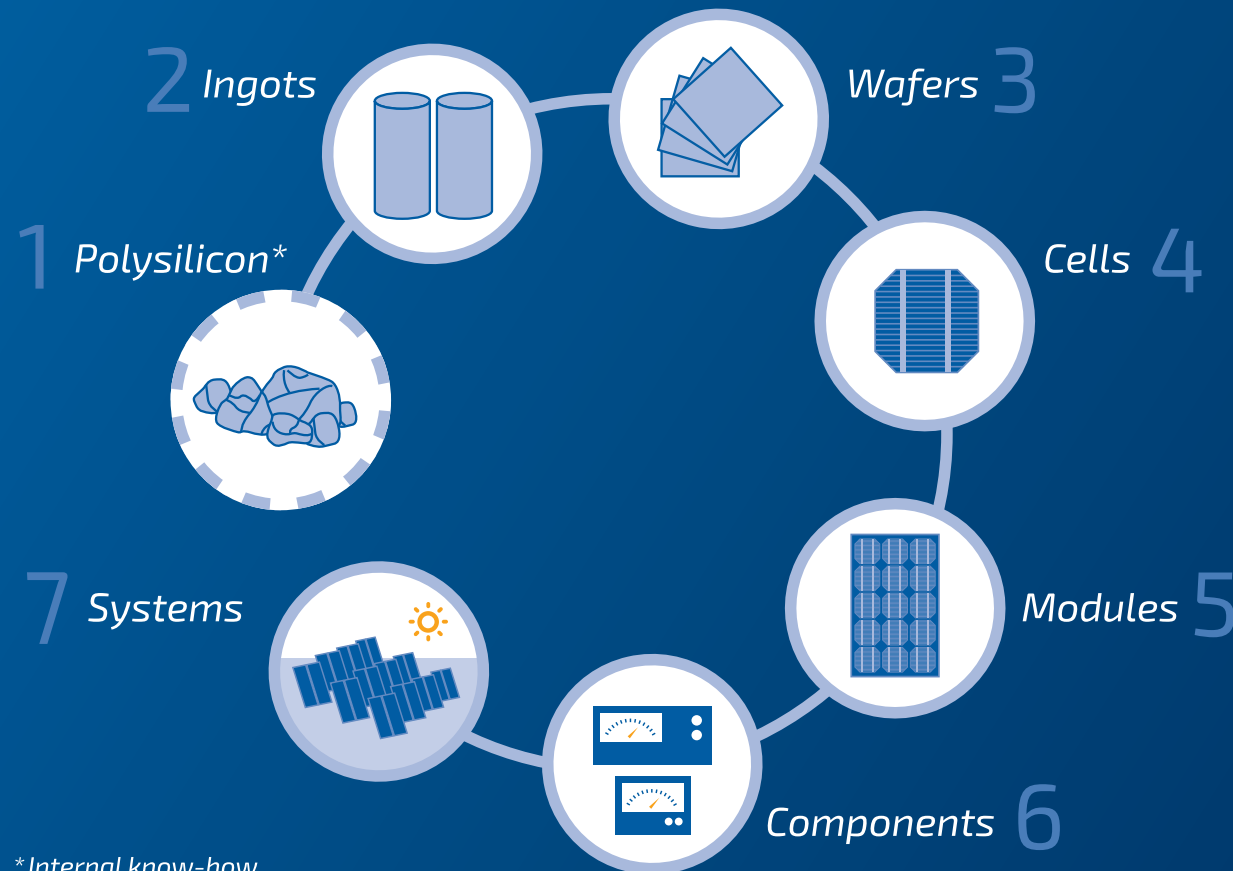
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# The Founder

## Traverso's experience across the PV supply chain





## About Mega Group

### MegaGroup at a glance

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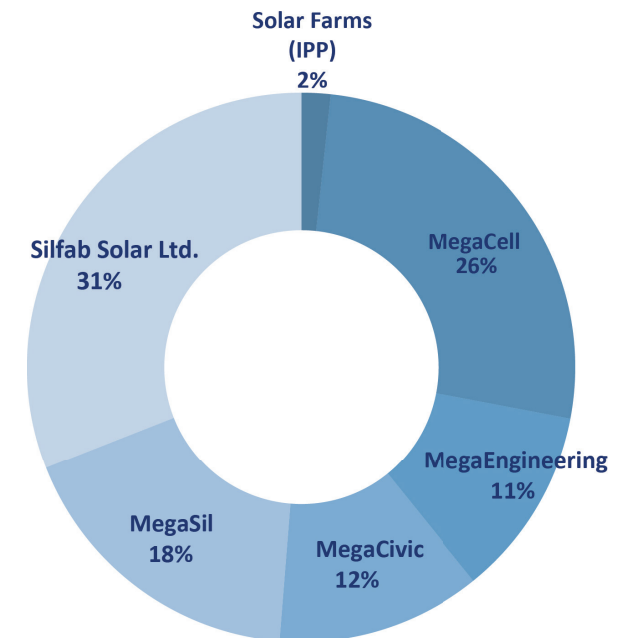
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# The Founder

## Traverso's Business Network

Franco Traverso is an entrepreneur with a business portfolio which covers several sectors like:

- 1. Solar Photovoltaic**  
(Vertical Production)
- 2. Plastic textiles**
- 3. Food Industry**  
(Italian Gelato & Pastries)
- 4. Fashion Design**  
(Luxury Sportswear for Women)
- 5. Real Estate & Tourism**
- 6. ICT - Information Communication Technology**  
(Products/Services for energy recharging of smart phones)



Exp. Solar Business turnover at 2017: > **495 Mil. Euro**

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# The Founder - Solar Business

## Gridco - Silfab structure

### Silfab Group was established in 2007

and incorporated in GridCo Srl, an holding with a capitalization of € 84 million, and having Franco Traverso as a majority shareholder with a 60% stake.

Silfab's business includes IPP activity in Italy producing green energy by solar farms, and Silfab Solar Inc. (incorporated in 2010 in Ontario - Canada, has a production capacity of 300 MW/Yr.

**GRIDCO S.r.l.**  
(Italy)  
**60%**

**Silfab S.r.l.**  
(Italy)  
**85%**

**Silfab Solar Inc.**  
(Canada)  
**100%**

**Solar Farms SPVs**  
(Italy)  
**100%**

300 MW / yr  
Photovoltaic Modules  
production for  
Canada and USA mar-  
kets

IPP with a nominal  
power capacity of  
about 16MWp

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# The Founder - Solar Business

## Examples of Traverso's PV power plants owned through Silfab

### Losacco Power PV plant

Nominal power: 998,8 KW  
Installed on : 2010  
Place: Bari (Italy)



### Geko Energia PV plant

Nominal power: 998,8 KW  
Installed on : 2010  
Place: Bari (Italy)



Tot. Peak Power connected and running: > **16 MWp**

## About Mega Group

### MegaGroup at a glance

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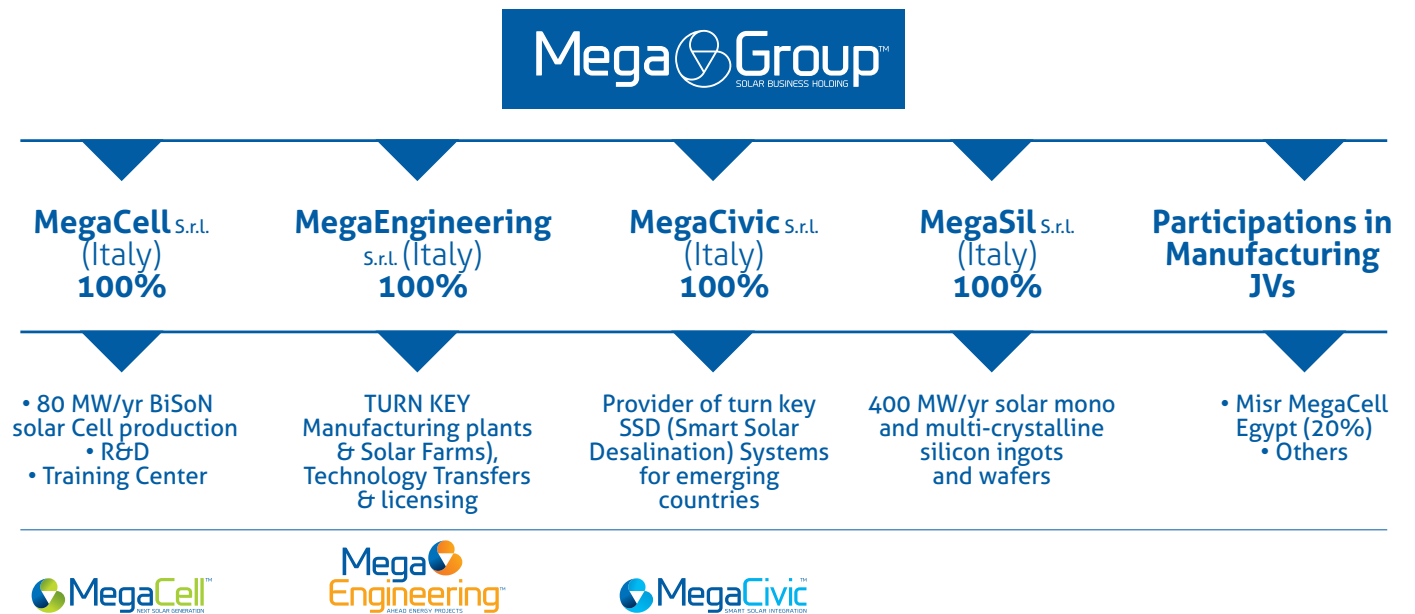
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# The Founder - Solar Business

## Mega Group Structure



## Business Model

### Sales strategy

#### Solar business: innovative products

BISoN / ViPER - Bi-facial solar cells

#### Innovative solar product: BISoN

- Bi-facial Multi-crystalline solar cells and modules
- Strengths and lower LCOE
- Installation mode

#### Water business: Smart Solar Desalination

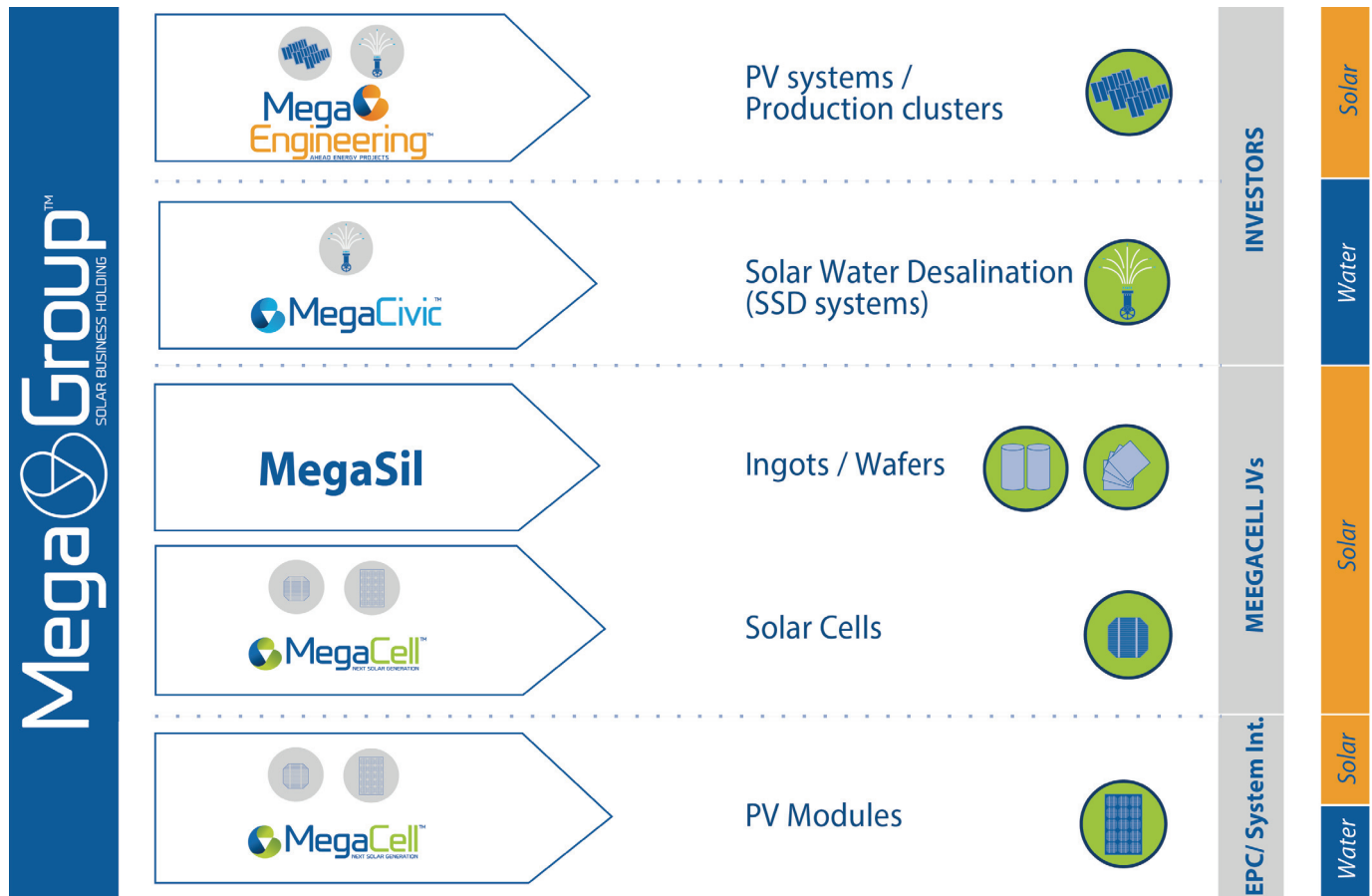
- SSD systems by MegaCivic

#### Other solar applications: Smart Town

Smart Grid applications

## Business Model

### Sales strategy



Strategic control of the Up-stream Value Chain as strategic approach of Mega Group

## Business Model

### Sales strategy

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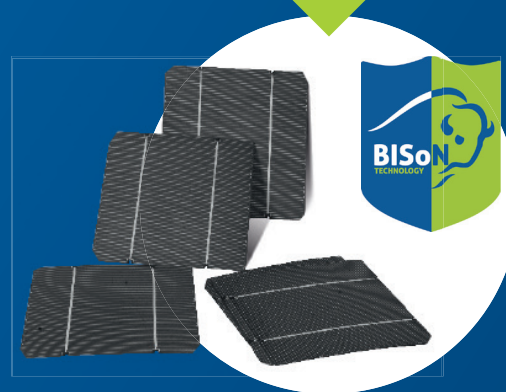
Smart Grid applications

# Solar business: innovative products

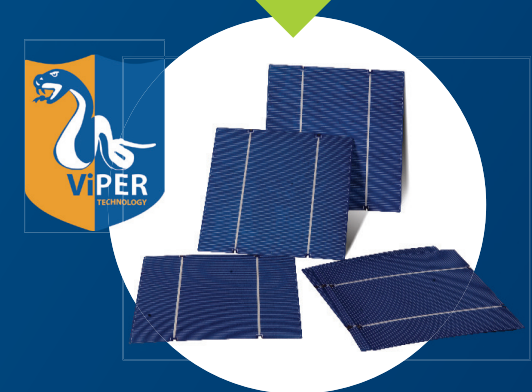
## BISoN / ViPER - Bi-facial solar cells

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NEXT SOLAR GENERATION



**Mono-crystalline  
Bi-facial solar cell**  
(20,4+ % front-side Cell Efficiency =  
**25,5+ % of Total Cell Efficiency**)



**Multi-crystalline  
Bi-facial solar cell**  
(18,5+ % front-side Cell Efficiency =  
**23,1+ % of Total Cell Efficiency**)

## Business Model

### Sales strategy

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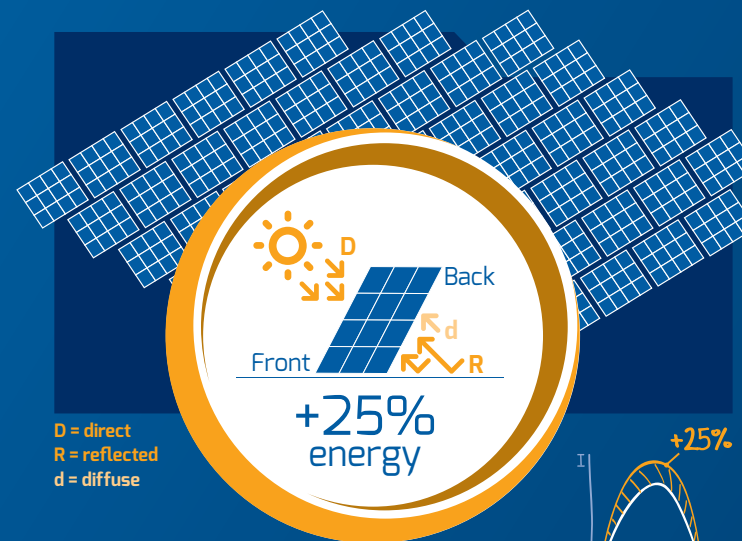
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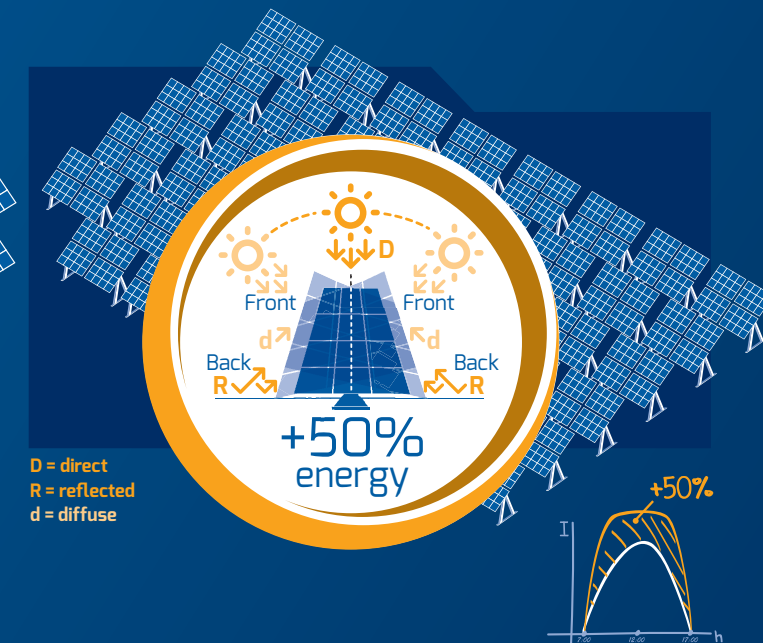
# Innovative solar product: BISoN

## Bi-facial Multi-crystalline solar cells and modules

### Bifacial fixed System



### Bifacial tracked System



## Business Model

### Sales strategy

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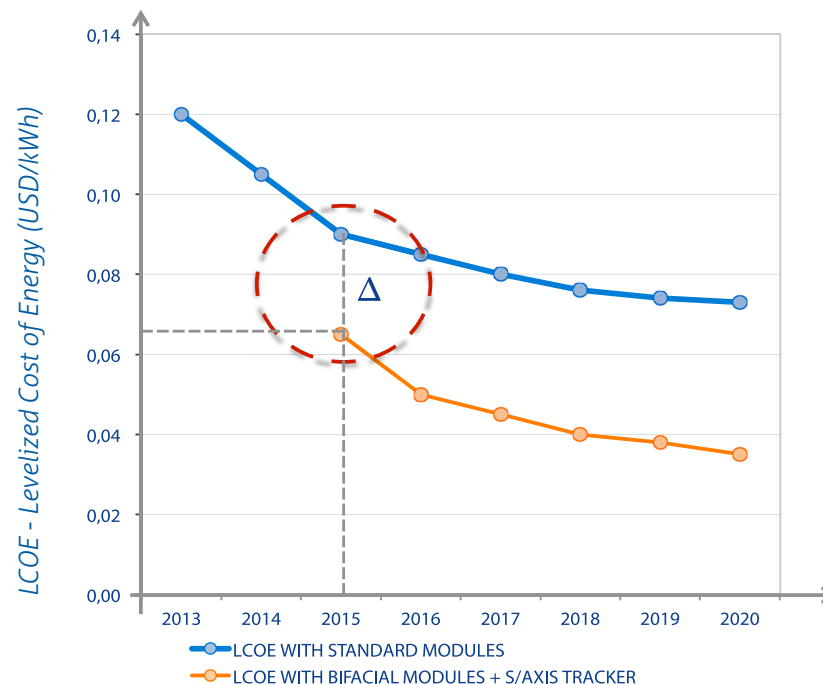
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*Smart Grid applications*

# Innovative solar product: BISoN

## Strenghts and lower LCOE

BISoN glass/glass modules made by MegaCell will have a typical lifetime of over 50 years, LID free as well as PID free, and over 25+ % of energy production when compared with standard monofacial modules and over 50+ % of energy production when installed on sun tracked system). This will allow to reach a much lower LCOE (Levelized Cost of Energy), competitive with the Grid





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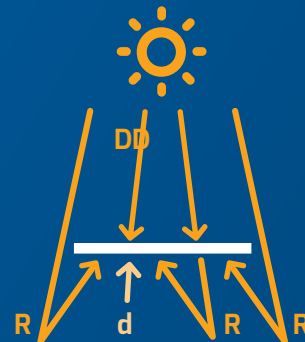
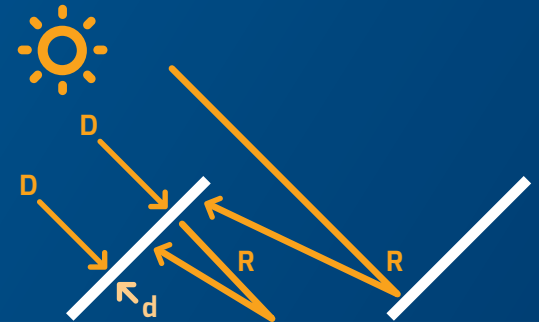
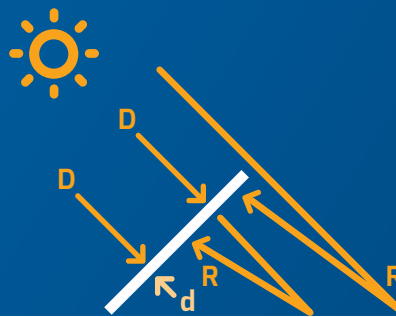
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Smart Grid applications

# Innovative solar product: BISoN

## Installation mode



Disclaimer	About Mega Group	<b>Business Model</b>	Priority markets
Know-how	Recent joint-ventures	Fact & Figures	R&D roadmap

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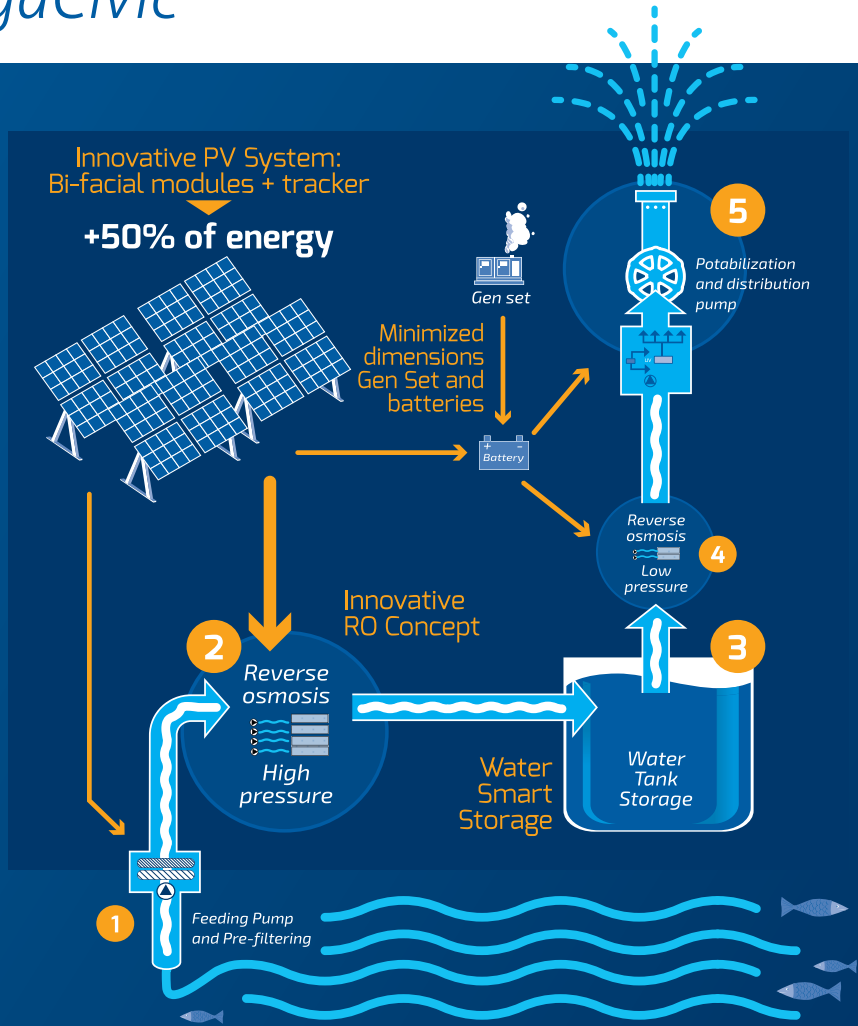
Smart Grid applications

# Water business: Smart Solar Desalination

## SSD systems by MegaCivic

MegaCivic has the purpose to promote innovative solar powered water desalination systems named: SSD (Smart Solar Desalination System) SSD is equipped with Bi-facial high-efficiency PV modules.

SSD is designed to provide about 1.100 m3/day of potable water, for domestic consumption and agriculture irrigation, particularly for emerging Countries.



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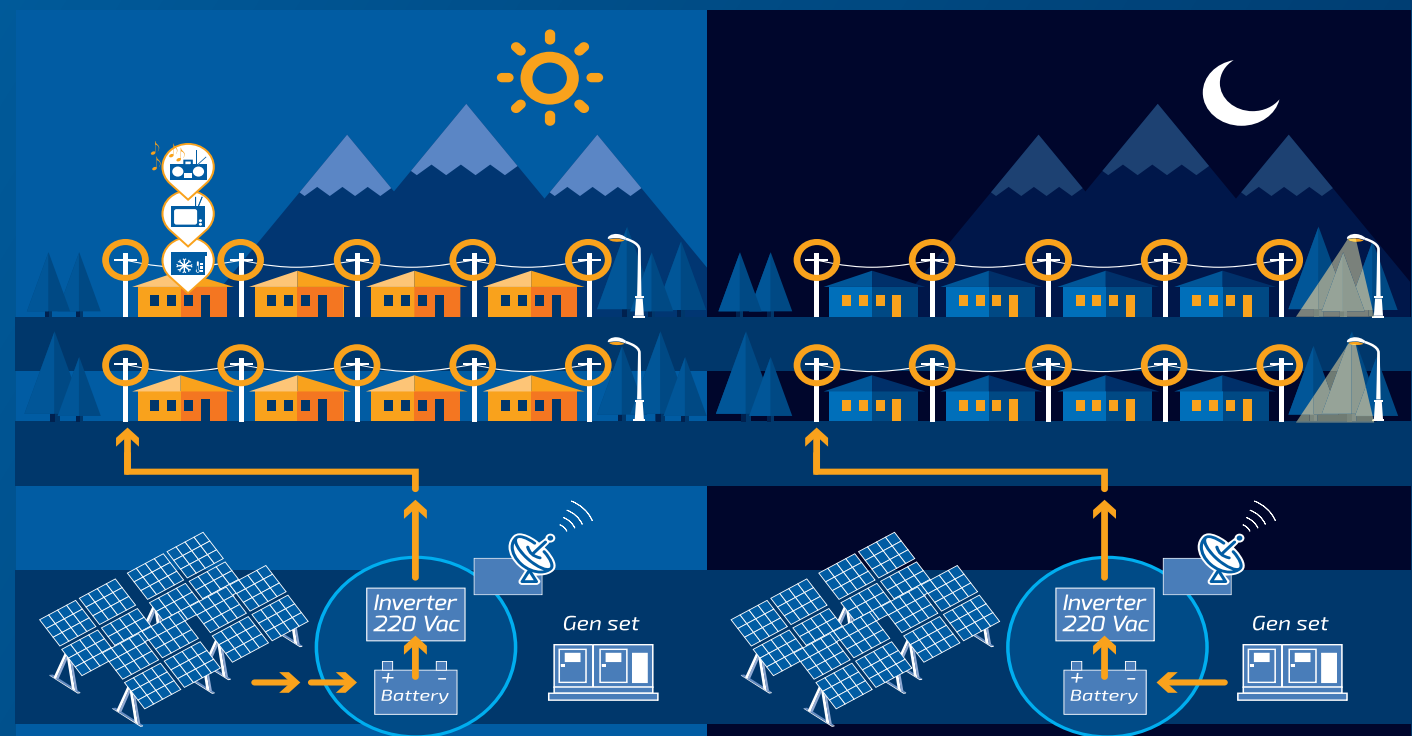
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### Other solar applications: Smart Town Smart Grid applications

# Other solar applications: Smart Town

## Smart Grid applications

The Smart Town system is specially designed for the emerging countries and able to feed hundreds or thousands of homes with an innovative hybrid photovoltaic system, capable of providing 24/7 electric power at a running cost close to zero. Furthermore, the Smart Town system can be equipped with SSD (Smart Solar Desalination System) in order to provide potable water to the town.



## Priority markets

# Priority markets



## Know-how

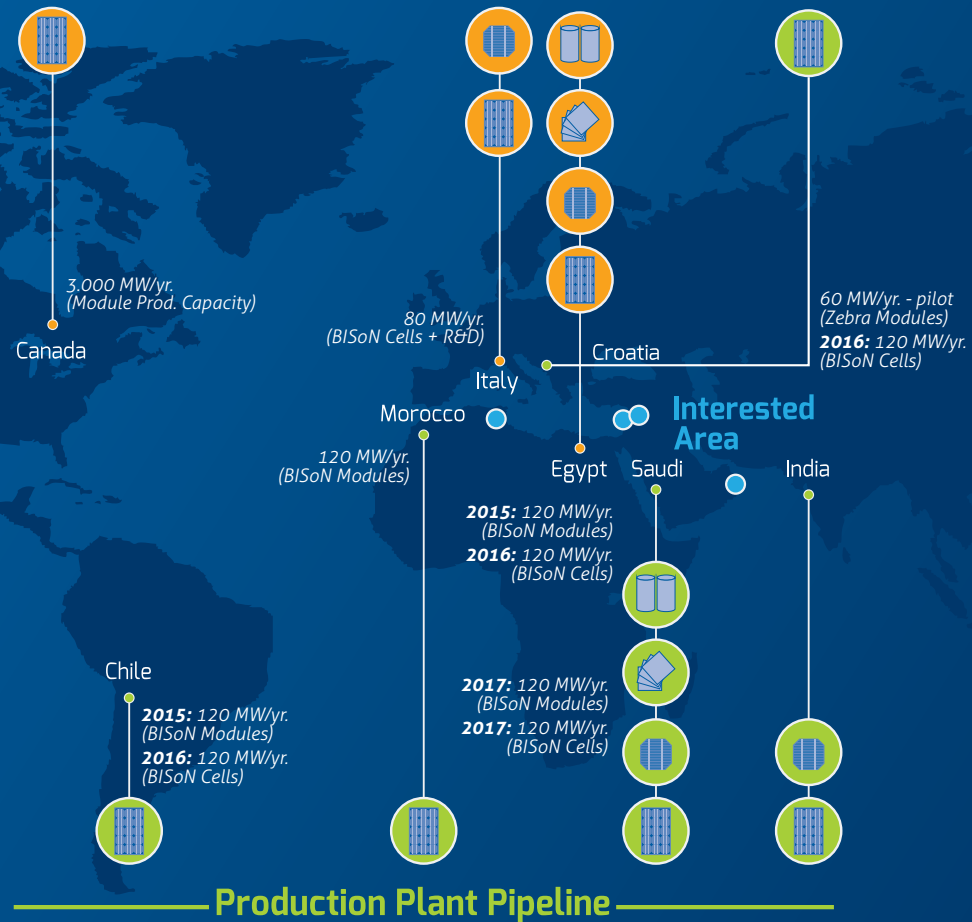
### Technology transfer

- Turn-key PV Bi-facial Production lines
- Track records
- Business Start-up owned by Traverso

# Technology transfer

## Turn-key PV Bi-facial Production lines

### Production Plant



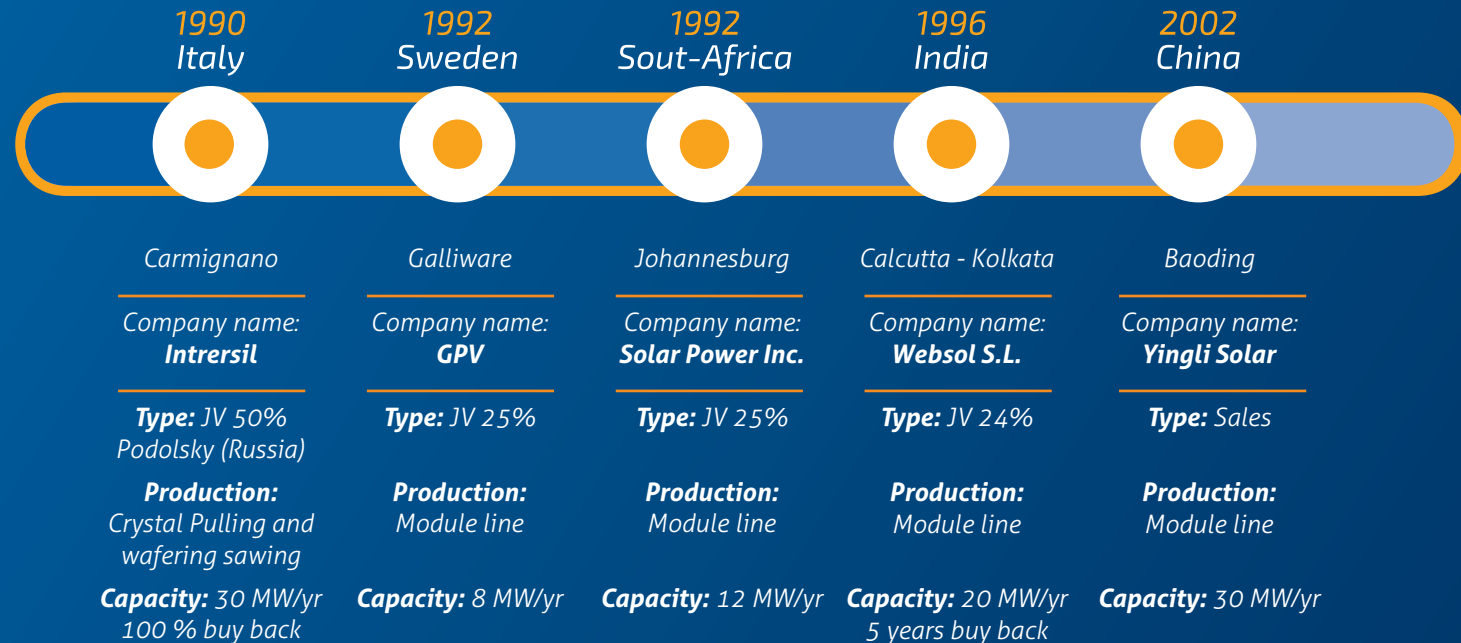
## Know-how

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# Technology transfer

## Track records



## Know-how

### Technology transfer

- Turn-key PV Bi-facial Production lines
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- **Business Start-up owned by Traverso**

# Technology transfer

- *Business Start-up owned by Traverso*

2000  
Croatia

2010  
Canada

*Silfab Ontario: installation of Utility Scale – Large FIT*

Novigrad

Toronto

Company name:  
**Solaris d.o.o**

Company name:  
**Silfab Ontario**

**Type:** JV 80%

**Type:** 100%  
Subsidiary

**Production:**  
Module line

**Production:**  
Module line

**Capacity:** 90 MW/yr  
buy back

**Capacity:** 300 MW/yr



## Recent joint-ventures

# Joint-Venture in Egypt

## PV Bi-facial Cells and Modules production

Press Release • 25 November 2014

**MegaCell** and **Misr Asset Management** jointly announce the common intent to build a 120MW/year production plant of bi-facial high efficiency solar cells and modules in Egypt within 2015.

**ROMA, Italy, Nov. 25, 2014** - MegaCell the leading Italian photovoltaic manufacturer, owned by Mega Group, and Misr Asset Management, the Cairo-based Investment Bank which provides fund management, investment advisory, portfolio management and private equity services and is owned by Egypt's leading insurer Misr Insurance Holding Company announce together the signature of a Memorandum of Understanding for the construction of a 120MW/Year production plant of bi-facial high efficiency solar cells and modules in Egypt within 2015.





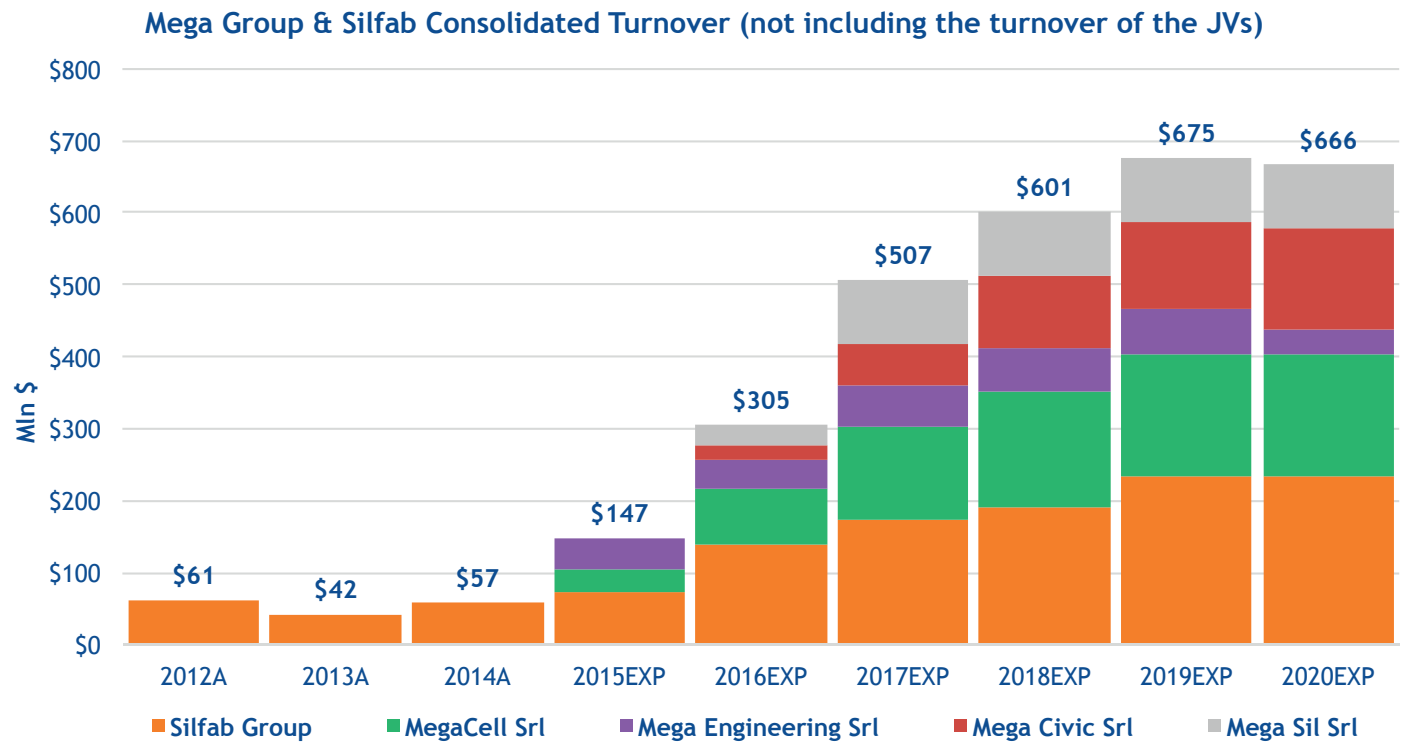
## Fact & Figures

### Key Financial Figures

### Production Capacity roadmap

# Key Financial Figures

## Forecast in Mio USD



Source: internal elaboration on actual figures and Previsional Business Plan, 2015

Fact & Figures

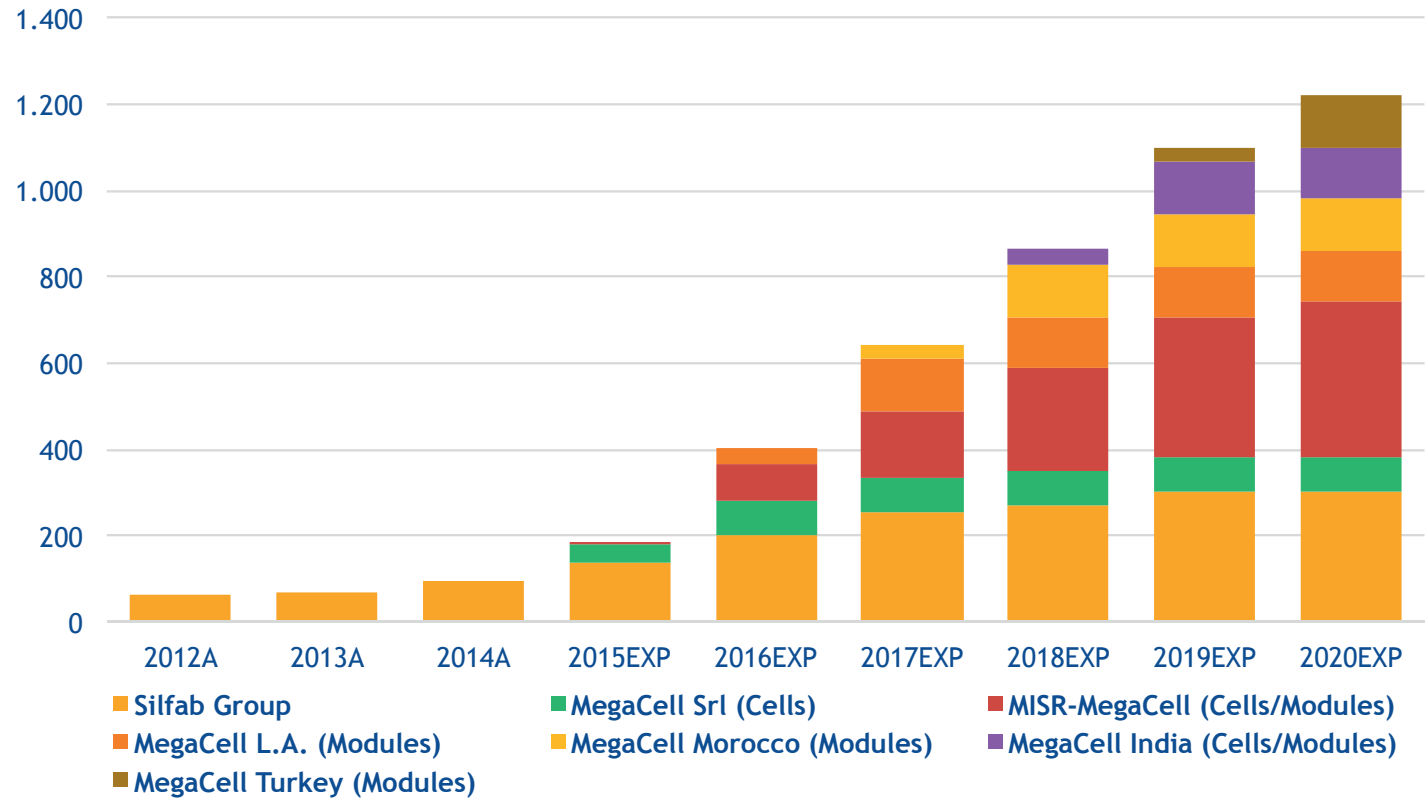
Key Financial Figures

Production Capacity roadmap

# Production Capacity roadmap

## Till 2020

Mega Group + JVs & Silfab Consolidated - MW/yr produced

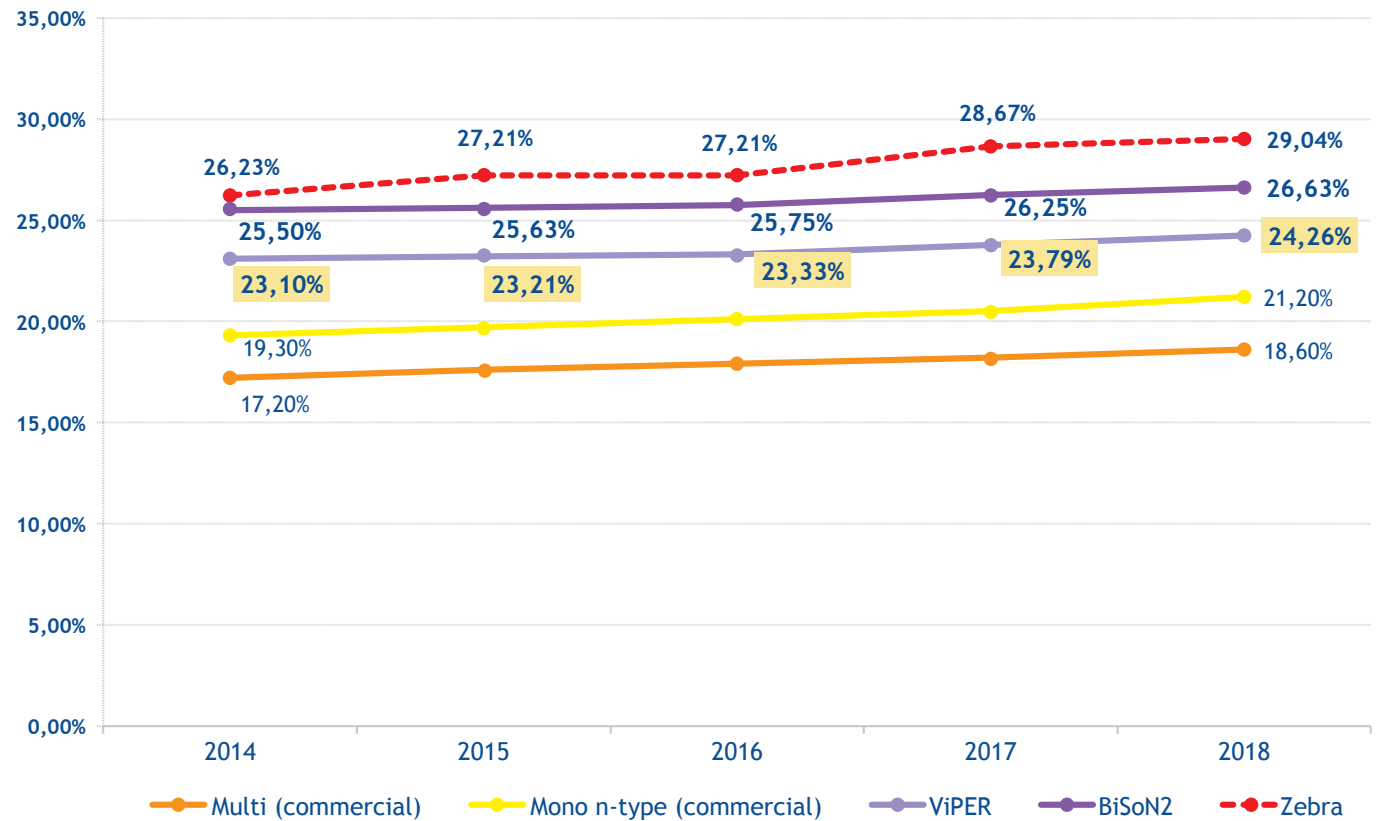


Source: internal elaboration on actual figures and Previsional Business Plan, 2015

R&D roadmap

# Cells efficiency roadmap

Expected at 2020



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# Thank you

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*Contact us at*

**MegaGroup S.r.l.**

Via Postumia 9/b - 35010  
Carmignano di Brenta (PD), Italy  
T. +39 049 8257949  
E. [info@megacell.it](mailto:info@megacell.it)

**Mega Group**  
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