

SunLion – Teaser



SunLion – A Belgian initiative for local solar PV manufacturing

Jan 2024

A sound value proposition

We want to be a European leader in solar photovoltaics panel production, differentiating from low-cost imports with **best-in-class energy conversion efficiency** leveraging Belgian IP, **better aesthetics and lower carbon footprint** while ensuring **high security of supply and traceability** for its customers.



Why SunLion ?



Ethic, local and sustainable

Contributing to the reindustrialization of Belgium, SunLion's operations are by design low carbon, with a clear emphasis on circularity/recycling, traceability and full adherence to European work ethics standards



Resilient

Taking advantage of SunLion's increasingly locally anchored supply chain, SunLion's clients will be better protected against arbitrary customer cherry-picking, shortage, geopolitical disruptions, variations of transportation cost, trade barriers and CO2 import taxes.



High quality & service oriented

Leveraging geographic proximity with its main clients, SunLion will provide a differentiated qualitative offering, "solar panels as a service (SPASS)", with a distinctive quality of service and high level of accountability.



Innovative

Introducing in SunLion's solar panels, proprietary licensed Belgian patents, providing best-in-class efficiency, improved quality/long term reliability and decreasing dependance to key materials.

2| The solar PV market

Key contributor to net zero CO2 target, solar PV is expected to grow exponentially in the next 25 years, in Belgium and elsewhere

1 hour

**Of sunlight is
sufficient to cover
one year of earth's
energy need**

160 Watt of solar radiation per square meter of ground surface of planet earth.

+100-200%

**Electricity production
increase in Europe by
2050**

Net zero CO2 objectives imply massive electrification of the whole economy from transportation, heating to industry

> x10

**Expected growth of
Solar PV installed
capacity for 2020-50
period in Europe**

Solar PV is expected to increasingly contribute to the energy mix, with an extra 100 GW per year

> 50%

**Reduction of LCOE
for solar PV between
2018 and 2050**

Levelized cost of Energy (LCOE) integrates capital expense and gives the true cost of energy. Reduction of LCOE was made possible by the scale up of the solar PV industry and the optimization of production methods.

80-100 GW

**Belgian potential of
solar PV installed
capacity by 2050**

Representing ~70% of the 2050 Belgian installed capacity according to EnergyVille (clean molecule scenario). Current Belgian Solar PV cumulated capacity is ~8GW.

<10%

**Current share of
Europe made solar
PV panel in Europe**

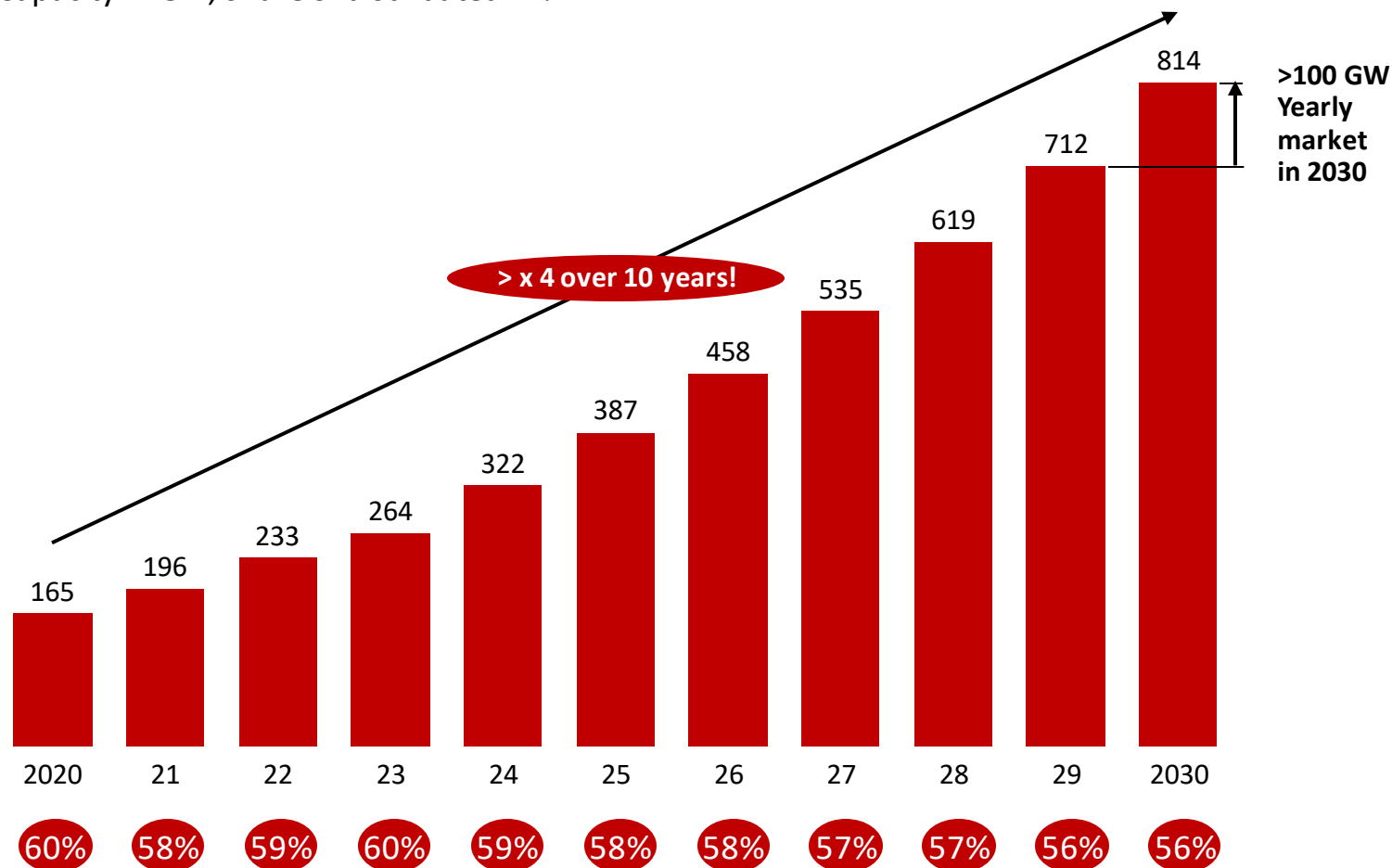
While Europe pioneered the photovoltaic technology in the beginning of the century, China has massively invested and now reached a quasi-monopolistic market position.

2| The solar PV Market

The EU PV market will continue its growth with a market above 100 GW¹ per year by 2030, with equal contributions of distributed and centralized segments

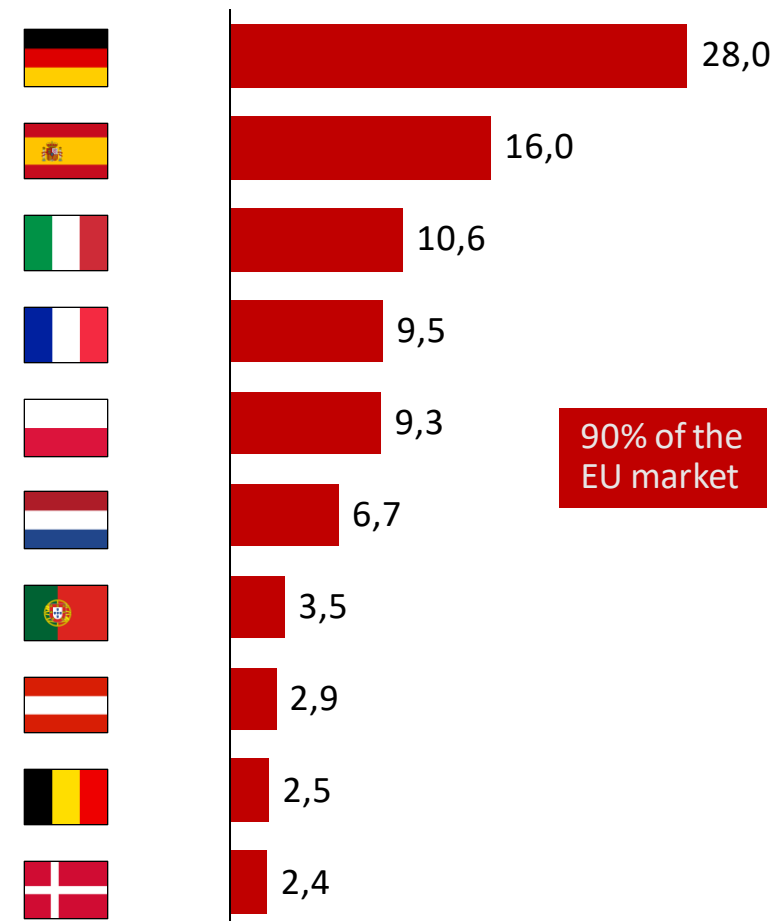
Solar PV installed capacity in EU, centralized / distributed

Capacity in GW, share of distributed in %



TOP 10 EU markets in 2030

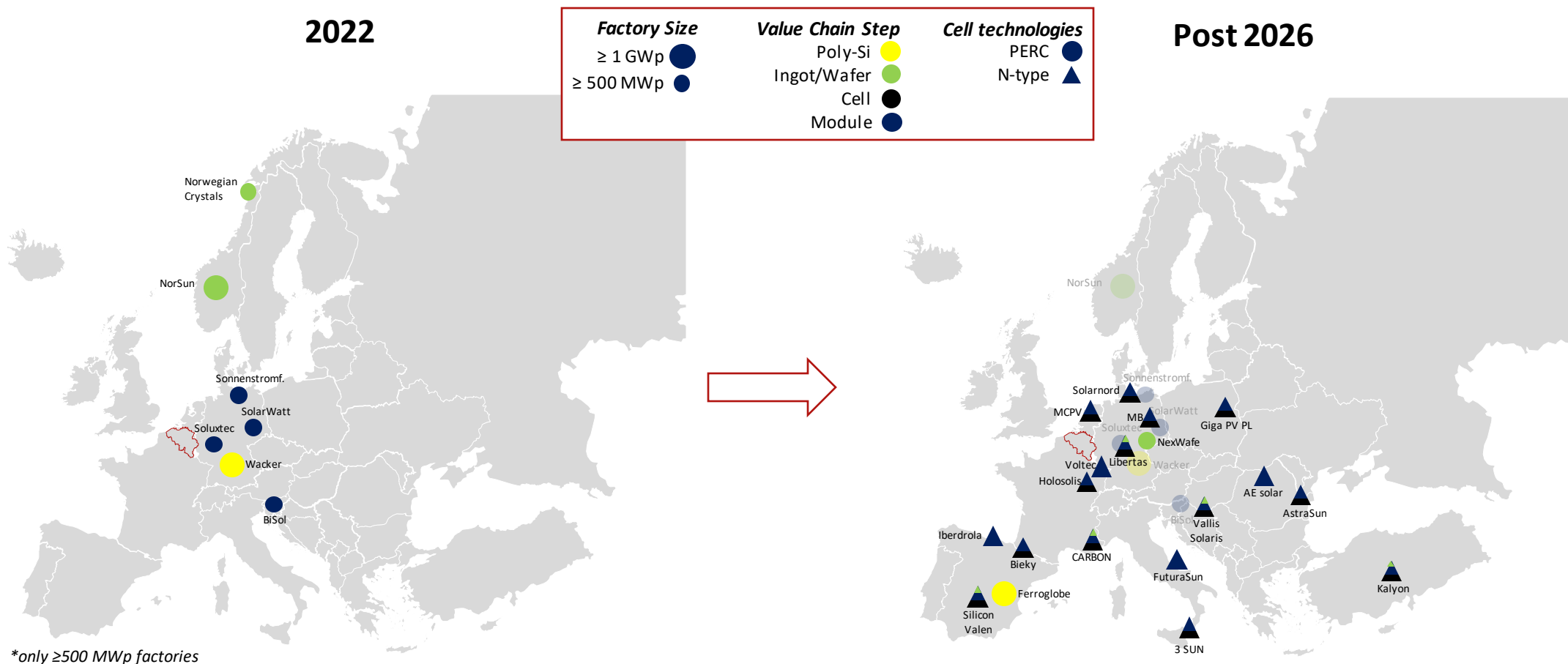
Yearly gross adds in GW



1. Solar PV capacity metrics are expressed in GWp DC or MWp DC, GW and MW are commonly accepted abbreviations

2 | The solar PV market

New solar PV projects have been announced all around Europe, targeting GW-scale and innovative technologies, but Belgium remains a blank point on the map



Considering exponential market growth, there is room for a solar PV manufacturer in Belgium

3 | The regulatory context

There is a strong push towards re-industrialization of Europe , with emphasis on strategic sectors like (clean) Energy, leading to Solar PV market protection initiatives



European Union initiatives

UPSTREAM

Green Deal Industrial Plan

Net-Zero Industry Act	Forced Labor Regulation	DOWNSTREAM
Critical Raw Materials Act	Carbon Border Adjustment Mechanism (CBAM)	European Solar Rooftops Initiative
Temporary Crisis & Transition Framework (TCTF)	Recovery and Resilience Plan (RRP)	Possible EU trade defense mechanism
		Electricity Market Design Reform



What it means for the solar PV industry

- 1 Up to 40 % of the market potentially protected for European producers, representing up to ~30 GW in 2030
- 2 Special clauses for local content in tenders for state sponsored large utility scale solar farms projects and for public procurements

Generic constraining framework to be issued by the EU in Q1 2024, specific implementation measures at EU member level expected to follow shortly, with France and Germany leading.

4 | The products & the industrial approach

Getting started in Wallonia: in partnership with WallGlass, the Fleurus site will host one module assembly line by 2025, leveraging synergies to accelerate rampup

Fleurus WallGlass site



- Ex AGC, taken over by Splifar group in 2023
- Expertise in high value glass product (eg automotive wind shield with integrated electronics)
- Free space available for the first production line, extension for next lines planned



Future solar PV module assembly line



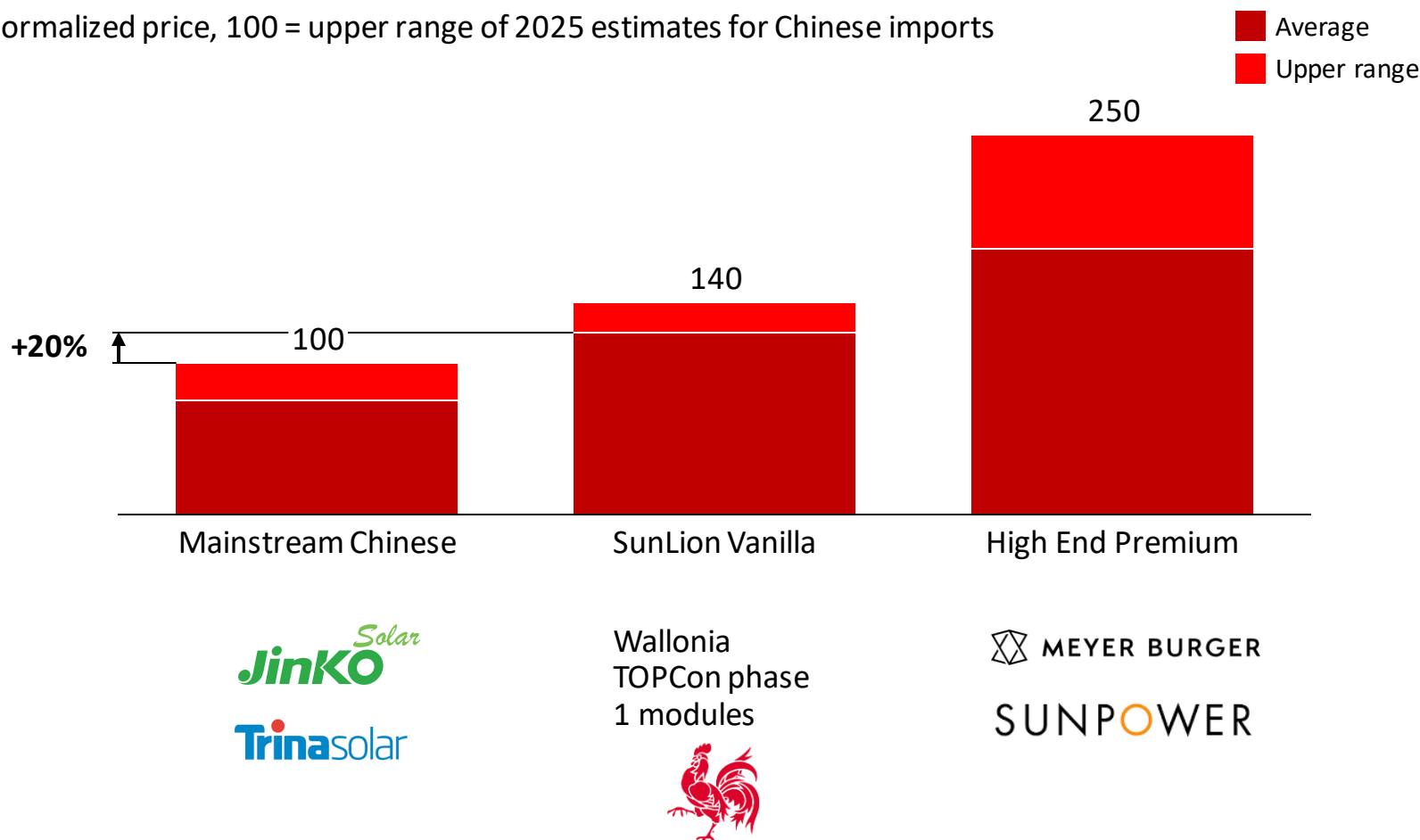
- First assembly line 500 MWp beg of 2025
- 75 jobs created onsite
- Potential for 2 additional lines in 2026/27 to reach a total production capacity of ~1,5 GWp, capturing more economies of scale

5 | The customers & the pricing

SunLion will propose a competitive market price, in between Chinese imports and high-end premium

Sunlion sales price positioning vs competitors

Normalized price, 100 = upper range of 2025 estimates for Chinese imports



- There is a niche in the market between low-cost Chinese imports and high-end low volumes Europe / US prod
- For a typical residential installation, the Solar PV module cost is between 10 and 20% of the total end customer cost¹
- Market studies confirm (1) appetite of installers to propose EU made panels and (2) acceptance of price increment by end consumers
- Solar PV module price increment vs Chinese imports can be offset by creating new direct sales channels

1. 1-3 €cents / Wp = estimated cost range of a typical 6kWc residential setup in neighbouring countries, Netherlands being the most competitive and France the less competitive markets

SunLion is an ambitious project in line with the net zero Belgium ambitions requiring 35 million € in phase 1, creating more 75 qualified jobs in 2025

Phase 1 key figures



35 M€
Total
project
scope



10.000 m²
Production plant
in Fleurus



~75 jobs
Created
in 2025



Up to 500 MW
Of solar PV
modules
per year



How to move fast ? What do we need now ?



5-6 M€
A-series funding



A few active
investors with
experience in PV
and/or
connected
industries

The project's team is made of experienced PV experts, supported by strong technical partners, willing to reinforce itself with additional local stakeholders

1. Experienced solar PV entrepreneurs

The main project's team is made of **4 entrepreneurs from Belgium**.

They combine an **extensive experience on solar PV** industry, markets, and technologies, as well as an **history at executives' position** in large international companies

2. Strong technical partners

The project's team is already supported by **technology providers, equipment suppliers and technical advisors** from Europe.

They have a long **track record of large-scale PV manufacturing projects** across the world.

3. A wide local network

The project's team is already **in touch with local stakeholders from various fields**, among which the interest in the project is real.

The means to contribute more concretely to it are being discussed.



SunLion, an ambitious roadmap combining tech innovations and value-added business model

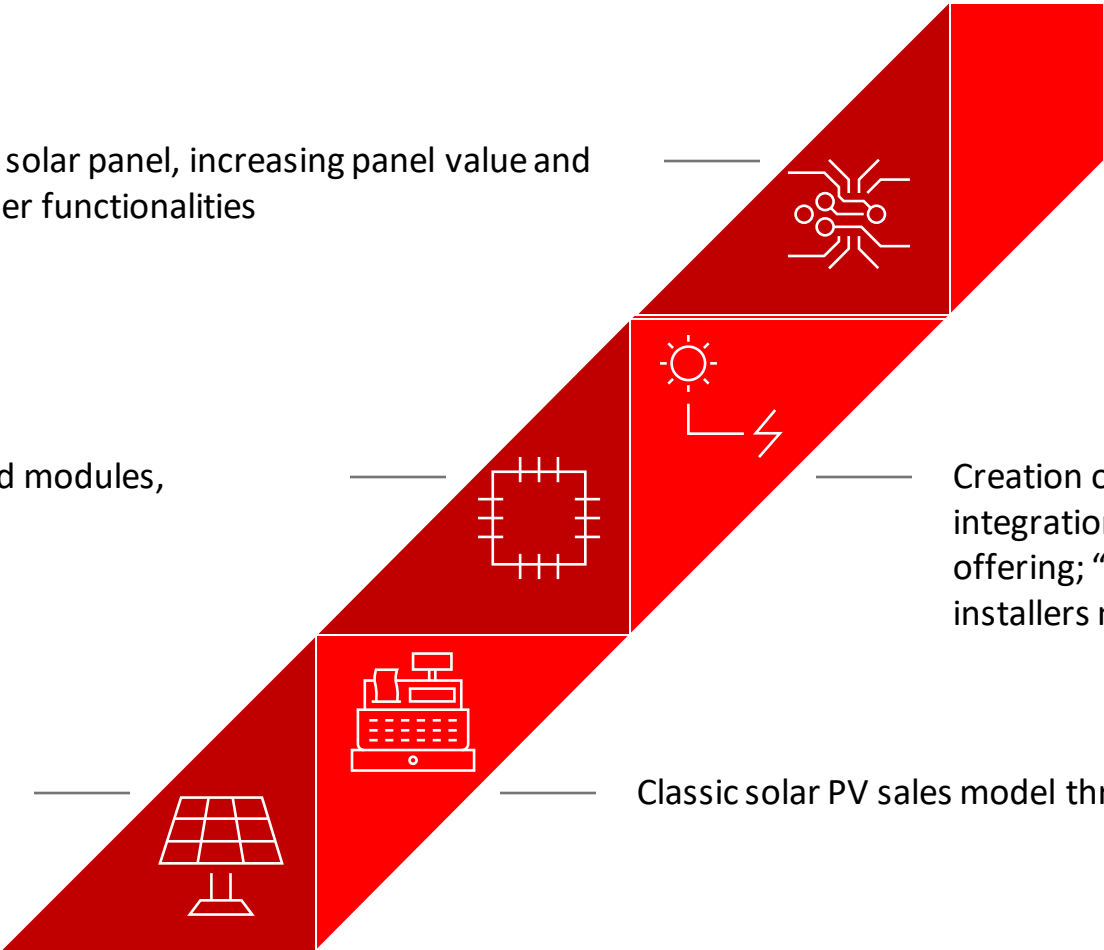
Product innovation

Value-added business model

Further integration of electronics on the solar panel, increasing panel value and enabling monitoring capabilities and other functionalities

Production of high-performance cells and modules, integration of IMEC and ISC Konstanz IP

Standard Solar Panel assembly in Wallonia, Chinese & European Topcon cells



Classic solar PV sales model through distributors (and installers locally)

Creation of ecosystem with SunLion at the core; integration of added value items, bundled offering; “disruption” of classic distributors, installers model