

Overview of global solar process heat market and trends

What ProSolNetz offers

Research project: Process and district heating with concentrating solar collectors

- Development of **cost-efficient components** for parabolic trough collector arrays
> Reduction of heat production costs
- **Evaluation** of existing systems
- Further development of **standard design tools** for planners and industry
- Development of **concepts for the integration** of concentrating collector fields into heating networks and process heat systems
- Planning and cost finding of **heat storage** systems
- Organization of workshops, on-site inspections of systems, training courses, etc.

Supported by:



Federal Ministry
for Economic Affairs
and Climate Action

on the basis of a decision
by the German Bundestag

The logo for pti, consisting of the lowercase letters "pti" in a bold, black, sans-serif font.

Who is ProSolNetz

Project partners:



Subcontractors:

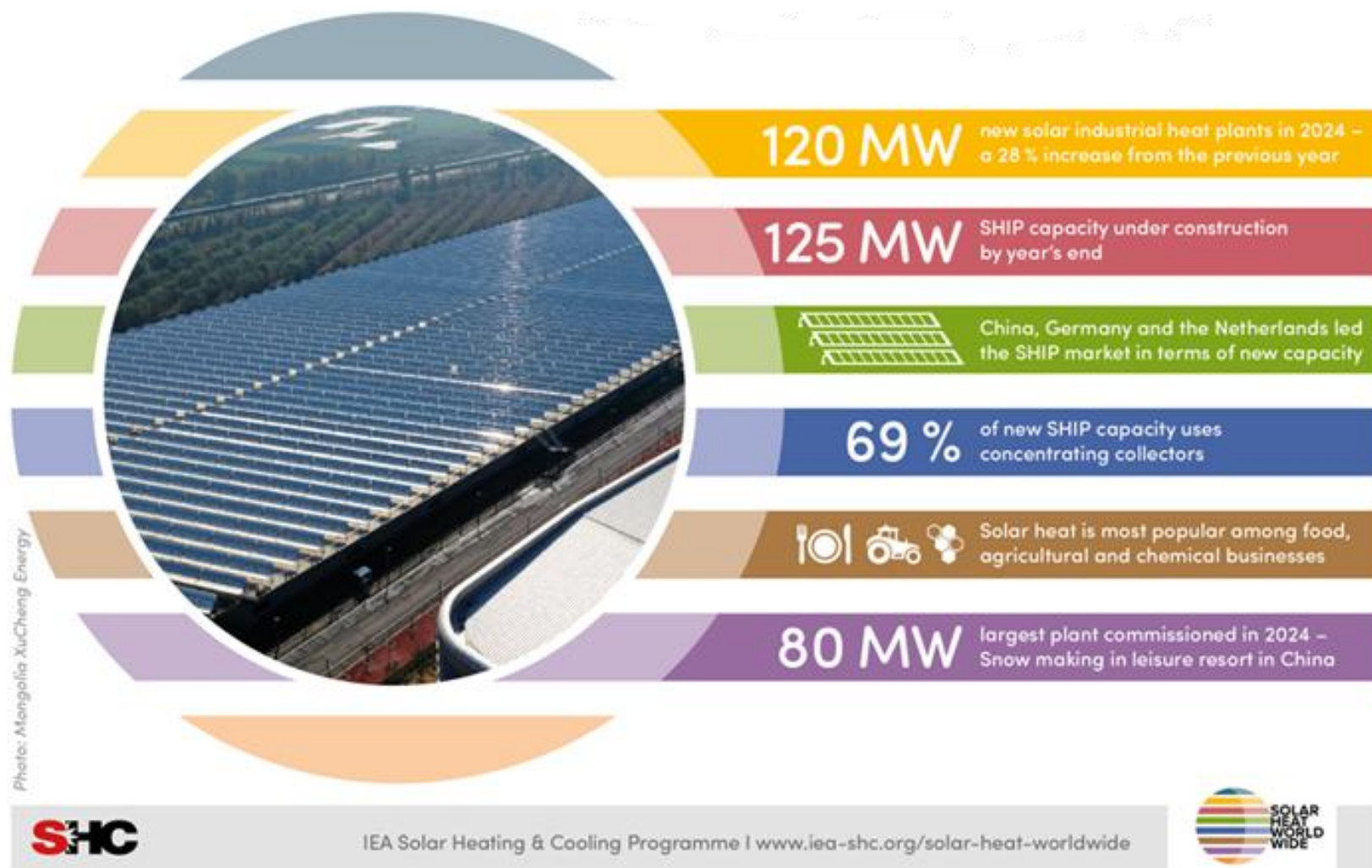


Advisory Board:

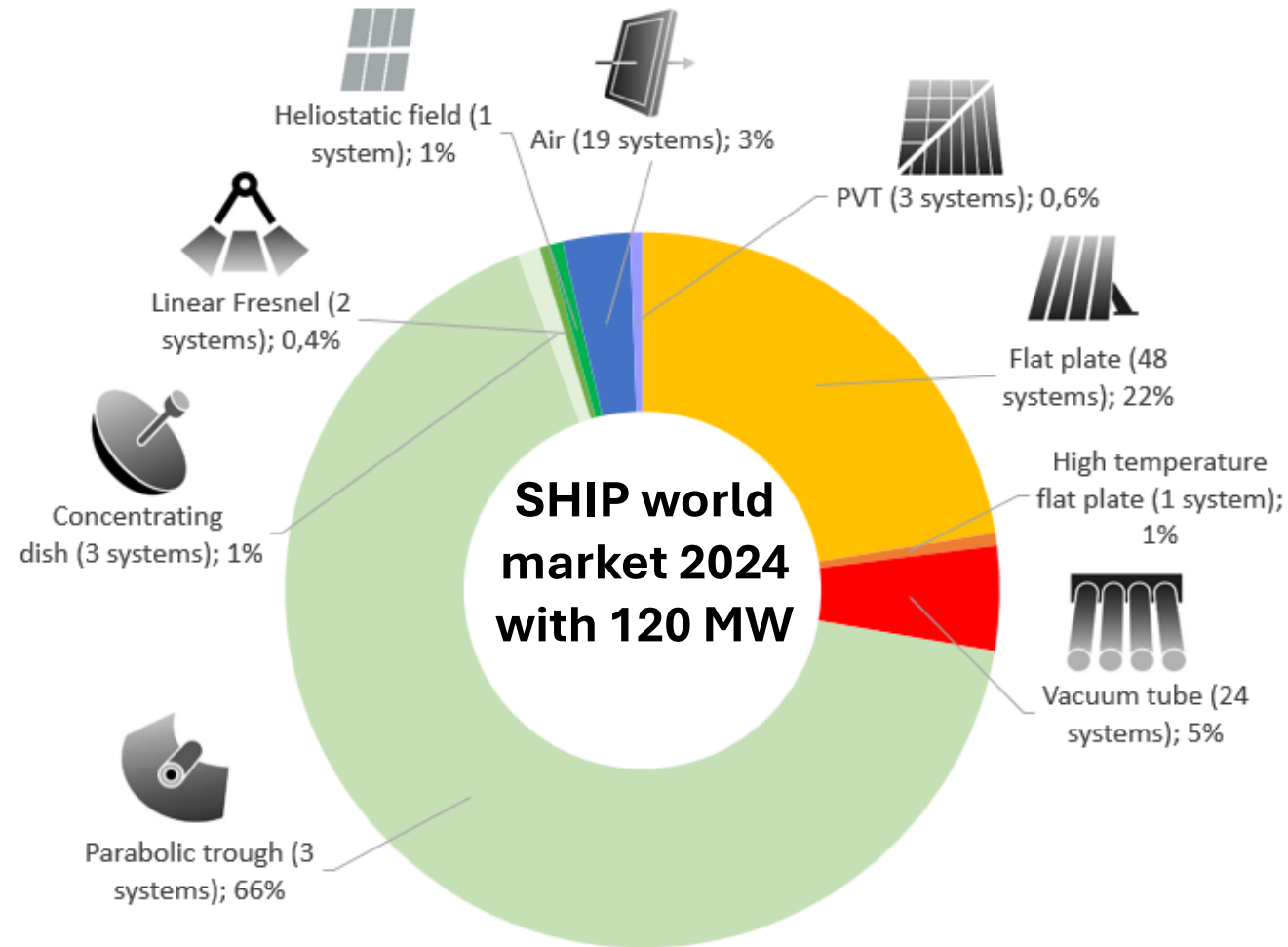


Highlights of SHIP Market 2024

SHIP = Solar Heat for Industrial Processes



Wide Variety of Collector Technologies 2024



New Lighthouse Systems with Concentrating Collectors



Photo: Solarlite/Azteq

- Heineken brewery in Sevilla, Spain
- 30 MW parabolic trough collector field
- 8 pressurised water tanks à around 100 m³
- 53 % solar fraction
- Heat delivery contract by Engie

New Lighthouse Systems with Concentrating Collectors

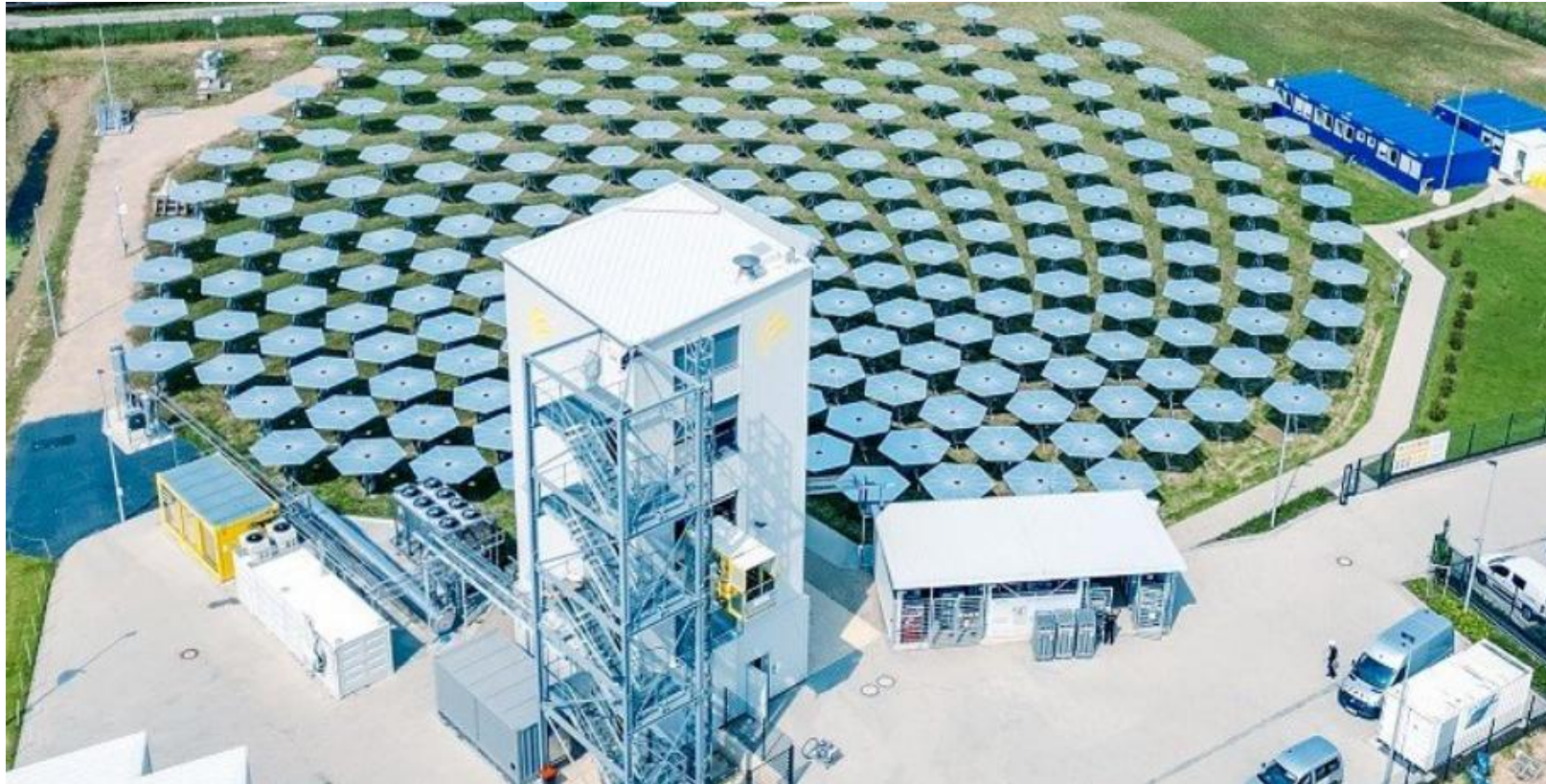


- Unilever factory in Cuernavaca, Mexico
- 300 kW Linear Fresnel collector field
- 180 °C steam supply
- Turnkey delivery by Solatom, Spain

Photos: Solatom



New Lighthouse Systems with Concentrating Collectors



- Aviation Fuel production from biomass in Jülich, Germany
- 1.1 MW heliostatic field
- 1,200 °C heat used in reactor
- Demonstration plant of German startup Synhelion

Photo: Synhelion's website

The World's Largest Solar Heat Plants

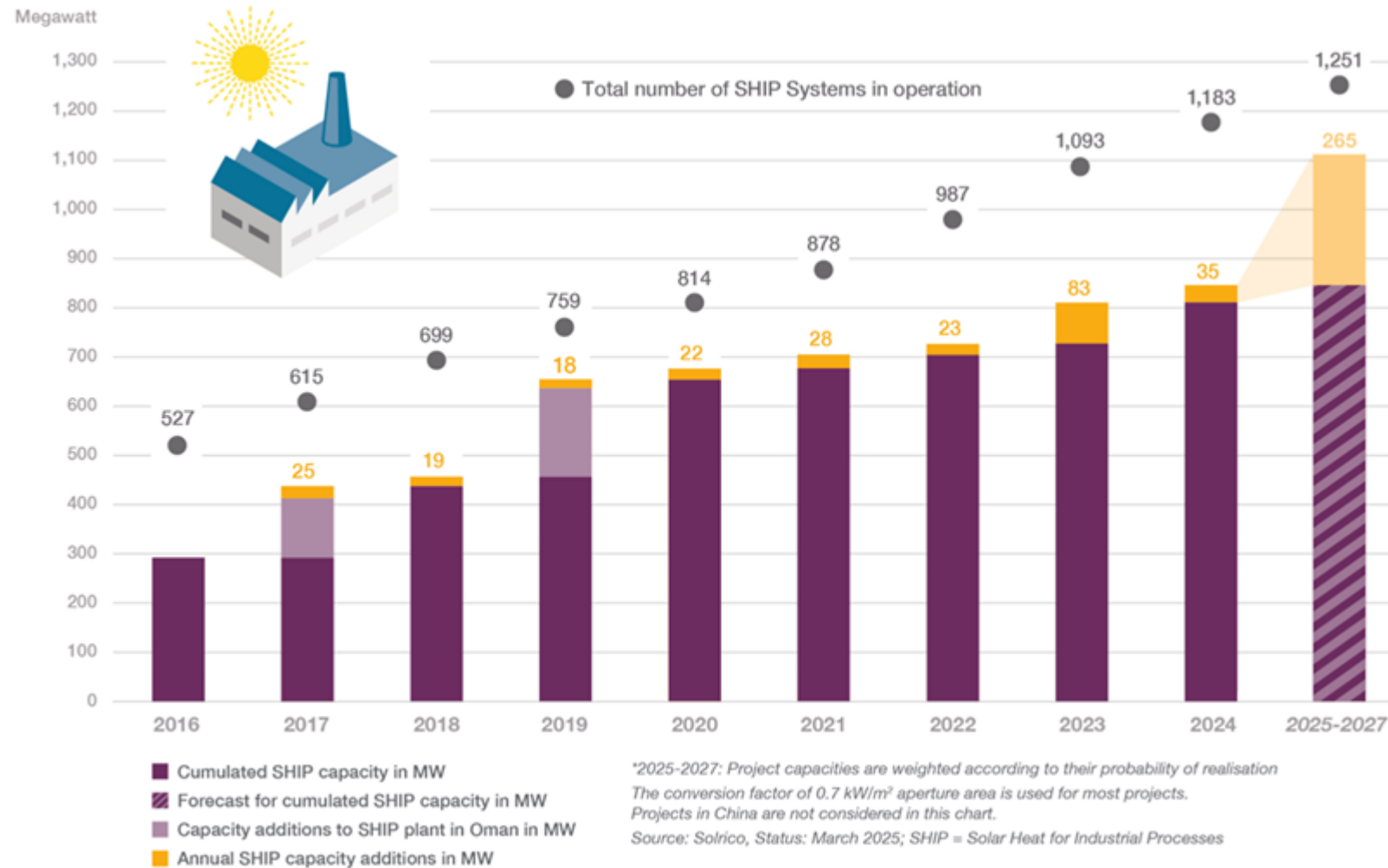
5 out of 8 are concentrating systems



Photos: Aalborg CSP, Arcon Sunmark, China Solar Thermal Alliance, AEE INTEC/Wolfgang Gruber-Glatzi, GlassPoint, Mongolia XuCheng Energy, SolarEast Group

Solar Industrial Heat Outlook 2025-2027

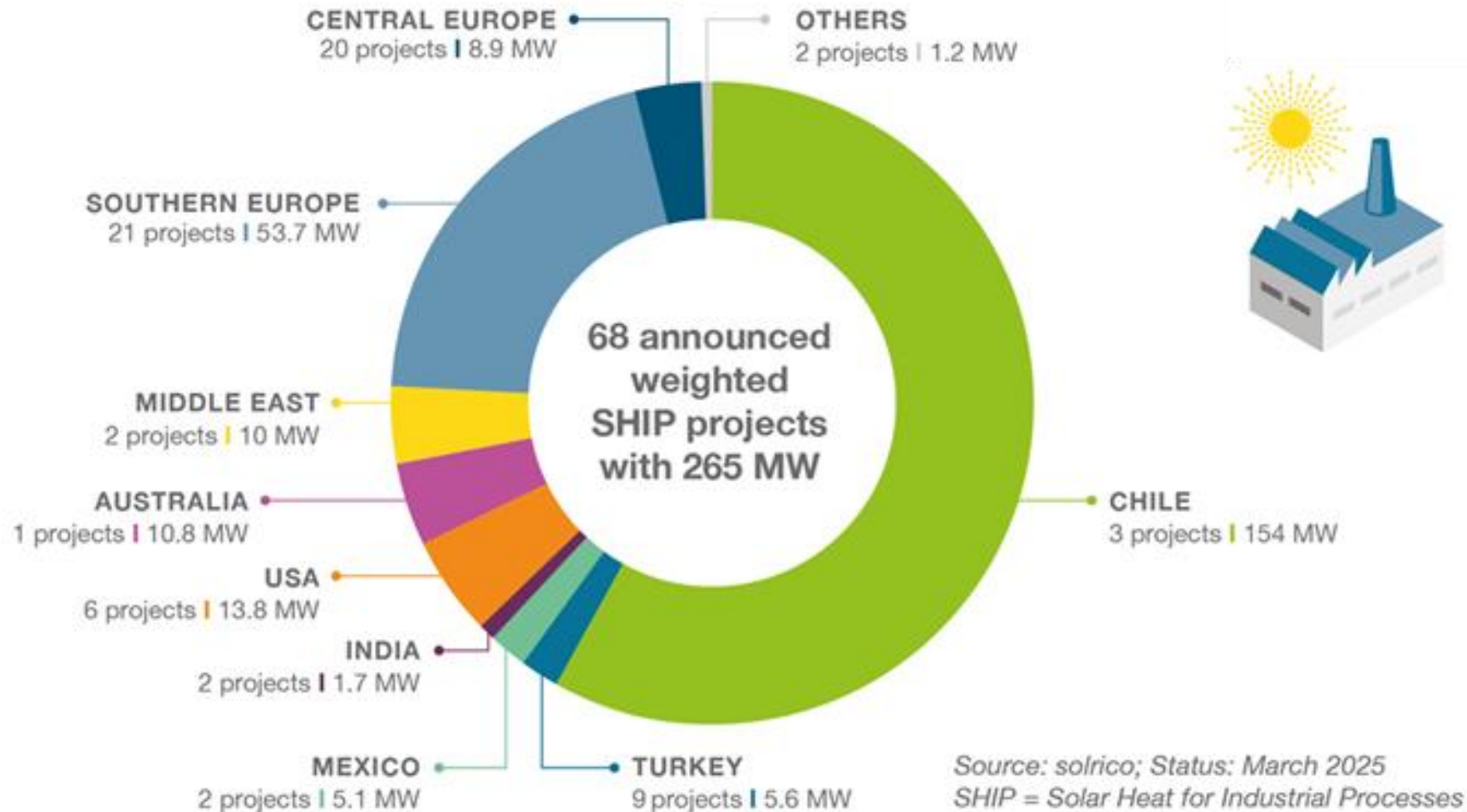
World Market without China



Preliminary Data,
final data available on
solarthermalworld.org
in the coming weeks


SHIP Projects Planned on Five Continents

Solar Industrial Heat Outlook 2025-2027, without China

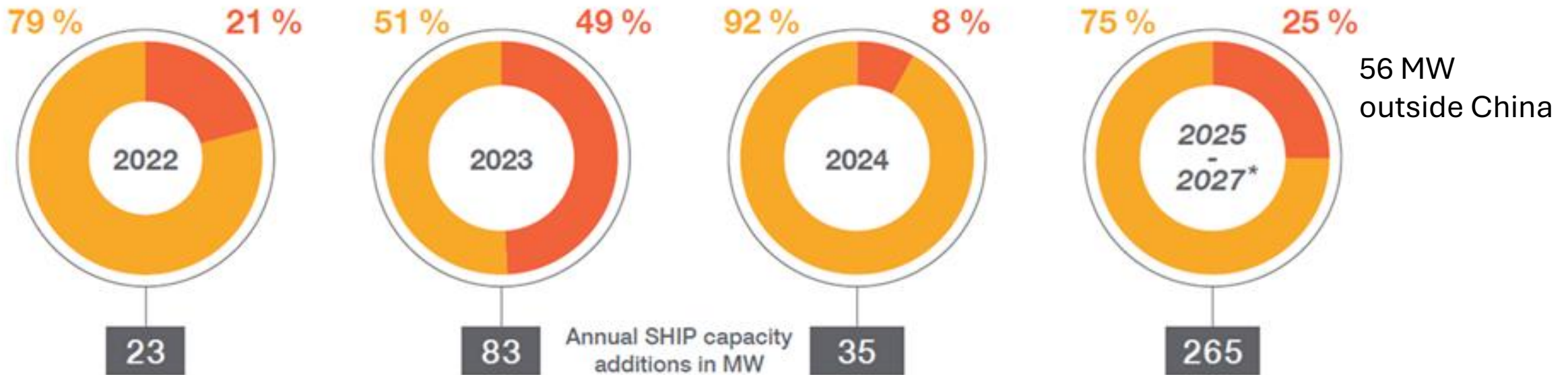


High fluctuations with concentrating systems

Solar Industrial Heat Outlook 2025-2027, without China

 Share of stationary collectors

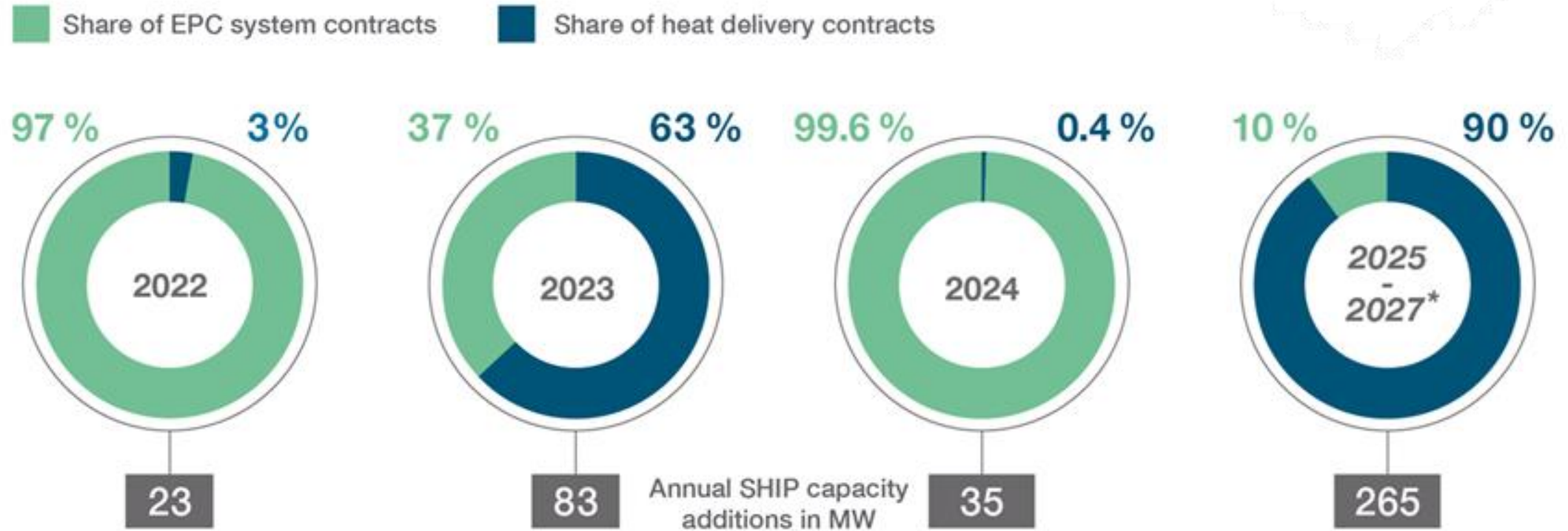
 Share of concentrating collectors



**2025-2027: project capacities are weighted according to their probability of realization. Projects in China are not considered in this chart.
Source: solrico, Status: March 2025; SHIP = Solar Heat for Industrial Processes*

Heat Delivery Contracts will Dominate in Future

Solar Industrial Heat Outlook 2025-2027, without China



**2025-2027: project capacities are weighted according to their probability of realization. Projects in China are not considered in this chart.
Source: solrico, Status: March 2025; SHIP = Solar Heat for Industrial Processes*

KEEP IN TOUCH!



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