



Savosolar

Changing the game – field by field

**Annual General Meeting
Savosolar Oyj**

April 27, 2020

Income statement

	2019		2018		Diff. EUR	Diff.%
TURNOVER	3 415	100,0 %	5 428	100,0 %	-2 013	-37 %
Other operating income	0	0,0 %	9	0,2 %	-9	-100 %
Materials and services	-3 355	-98,2 %	-5 788	-106,6 %	2 433	-42 %
Personnel expenses	-1 881	-55,1 %	-1 932	-35,6 %	50	-3 %
Depreciation, amortisation and reduction in value	-624	-18,3 %	-719	-13,2 %	95	-13 %
Other operating expenses	-2 554	-74,8 %	-2 585	-47,6 %	31	-1 %
OPERATING PROFIT/LOSS	-4 999	-146,4 %	-5 586	-102,9 %	587	-11 %
Financial income and expenses	-1 761	-51,6 %	-1 049	-19,3 %	-712	68 %
PROFIT (LOSS) FOR THE FINANCIAL YEAR	-6 760	-197,9 %	-6 635	-122,2 %	-125	2 %

- Turnover for the full-year 2019 fell short of expectations, because the decisions on new projects were postponed.
- Profitability improved but not as much as was planned. This was caused especially by the lower than expected volume and the imbalance of the workload during the year.
- The company's order backlog, however, stood at EUR 3.2 million at the end of 2019 (2018: EUR 1.6 million).

Balance sheet, Assets

	2019	2018	Diff. EUR	Diff. %
BALANCE SHEET ASSETS				
Intangible assets	992	1 348	-356	-26 %
Tangible assets	708	854	-146	-17 %
Investments	162	162	0	0 %
NON-CURRENT ASSETS	1 861	2 364	-502	-21 %
Stocks	1 789	982	807	82 %
Cash in hand and at banks	2 133	747	1 386	185 %
Long term	803	504	299	59 %
Short term	706	1 593	-888	-56 %
CURRENT ASSETS	5 431	3 827	1 604	42 %
BALANCE SHEET ASSETS	7 292	6 190	1 102	18 %

- Amount of inventories were exceptionally high at end 2019 due to Issoudun project collectors stocked at Mikkeli factory as very limited storage area in the project site in Issoudun
- Cash and cash equivalents increased by EUR 1.4 million to EUR 2.1 (0.7) million at the end of the financial year.

Balance sheet, Liabilities

	2019	2018	Diff. EUR	Diff. %
BALANCE SHEET LIABILITIES				
Share capital	470	470	0	0 %
Share issue	1 537	0	1 537	0 %
Unrestricted equity fund	36 715	29 273	7 442	25 %
Retained earnings / loss	-28 371	-21 736	-6 635	31 %
Profit / loss for the financial year	-6 760	-6 635	-125	2 %
EQUITY	3 592	1 372	2 219	162 %
PROVISIONS	393	326	67	21 %
Long term liabilities	545	314	231	73 %
Short term liabilities	2 763	4 178	-1 415	-34 %
LIABILITIES	3 307	4 492	-1 185	-26 %
BALANCE SHEET LIABILITIES	7 292	6 190	1 102	18 %

- Equity ratio at the end of the 2019 was strong 61.8 % (45.3%)
- Short term loans were reduced by 1,4 mEUR during 2019
- The company is actively arranging a cash flow efficient project financing to increase its capacity to deliver large-scale solar thermal systems in line with its strategy and growing market demand toward clean energy.



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CEO's review

Savosolar Oyj

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Jelling Varmeværk, Jelling, Denmark – 15,300 m² + 4,835 m²





Suur-Savon Sähkö, Puumala, Finland - 400 m²





Savosolar's efficient collectors with sun tracker the best solution for small installation area

«Retrofit» concept – no need to touch customer process

1 078 tonnes of CO² emission reduction / year



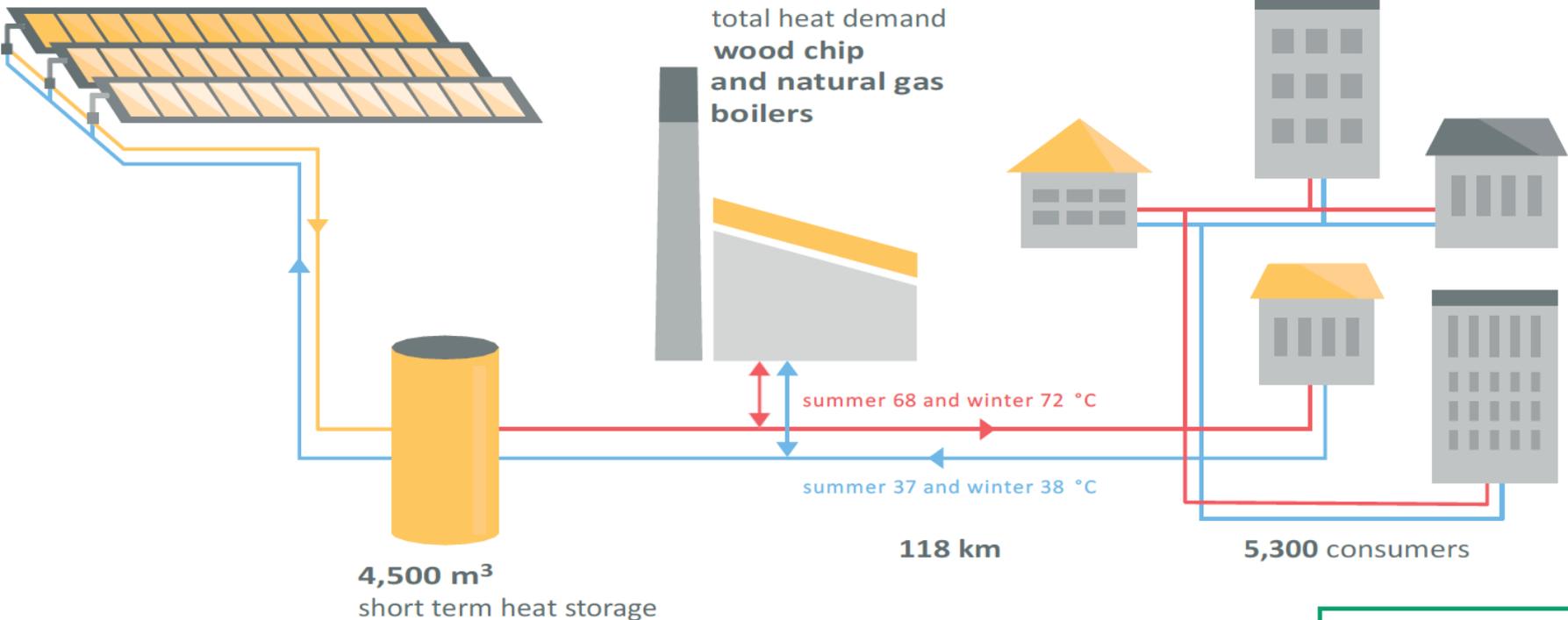
Grenaa Varmeværk, Denmark - 20,673 m²



Grenaa: Economics of 15.6 MW plant

- Capital costs 4.7 MEUR / 227 EUR/m²
- O&M costs 12,500 EUR / year
- Specific annual solar heat production 419 kWh/m² gross collector area
- Solar heat generation cost 21 EUR / MWh
- Saving of biomass 3,800 tons / year
- Solar fraction over the year 6.5%

FLAT PLATE
20,673 m², 15.6 MW
Savosolar, Finland

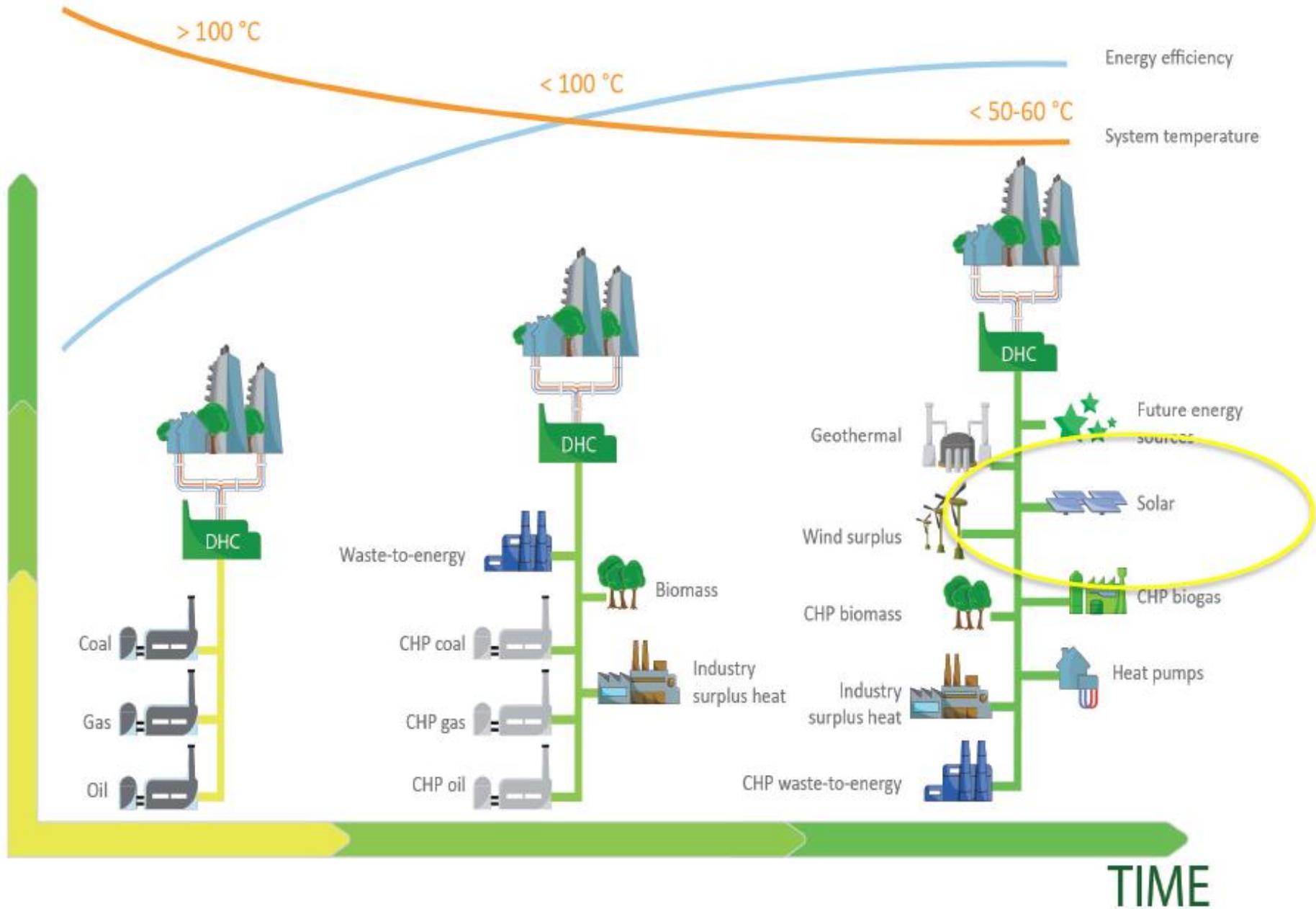


Summary of year 2019

- Full year turnover 3.4 MEUR, fell short of expectations
 - First half of the year low activity – waiting for customer decisions
 - Second half of the year very high activity
 - Profitability was improved, but not as planned, mainly due to the lower volume than expected and imbalance of workload
 - End of the year order backlog was 3.2 MEUR, best ever
 - Strengthening management team: new CFO, China local presence
- Savosolar established market leader position in France
- New markets activating – with existing credible references
 - Germany market finally started to ramp up, Uniper agreement being one sign of that
 - In China many activities – first project expected in 2020
 - Existing customers promote Savosolar's performance and quality



DEVELOPMENT





POLICY FRAMEWORK IN EUROPE

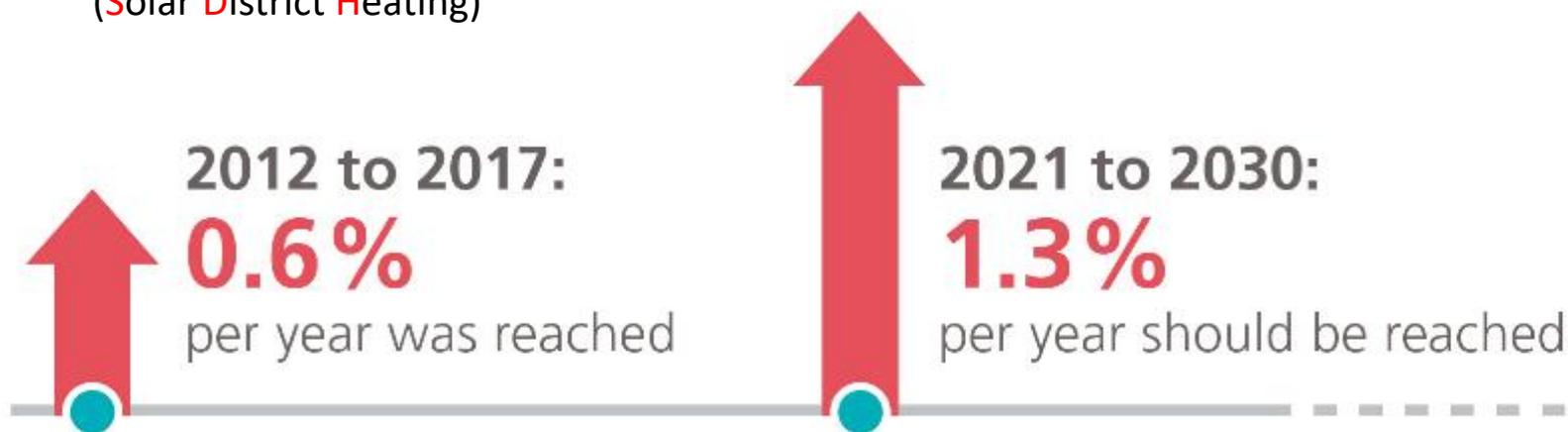
EU Member States should increase the share of renewable **HEAT** by **1.3%** points each year until 2030.



RENEWABLE HEAT SOURCES

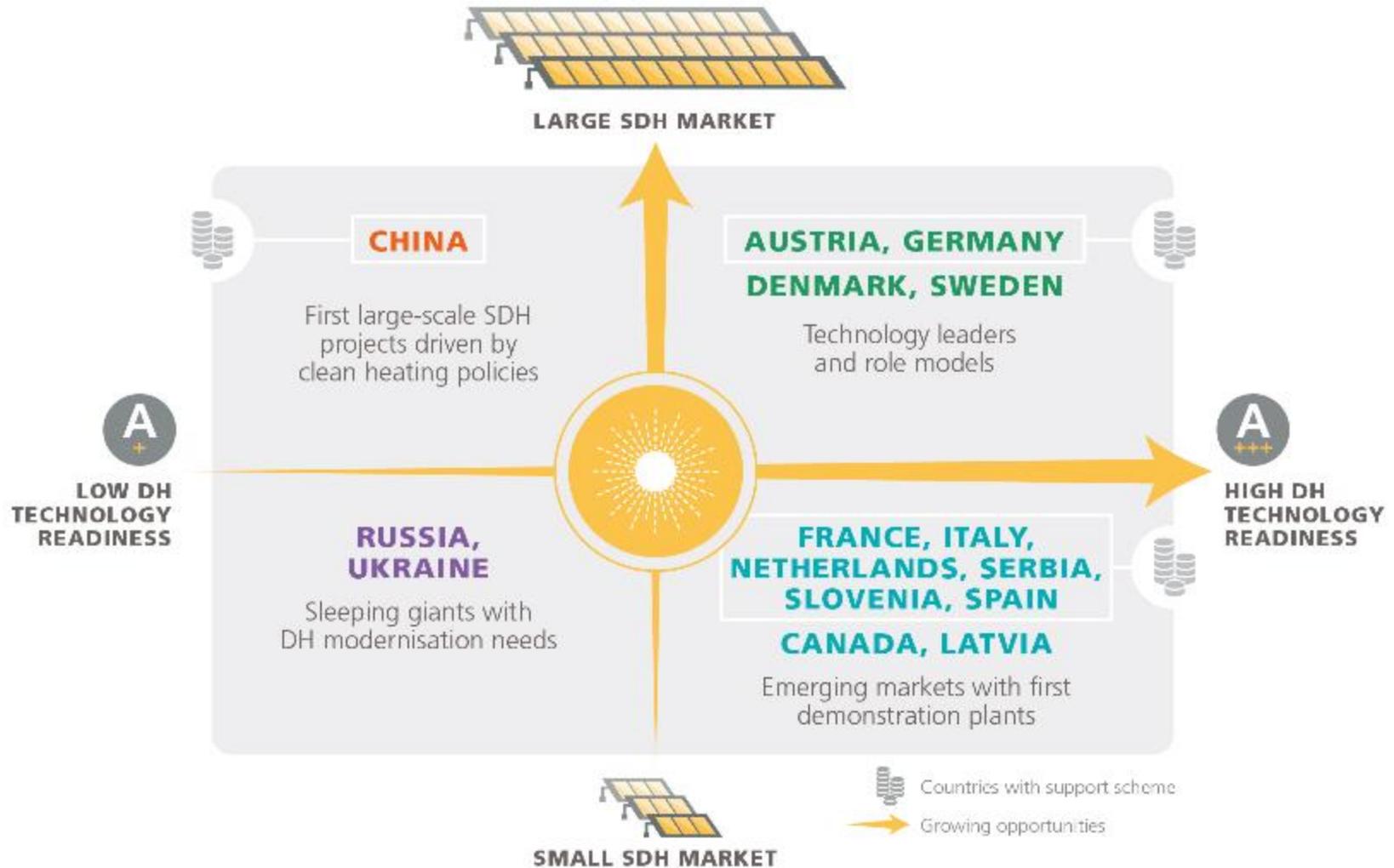
► **SDH CAN HELP MEET THAT TARGET.**

(Solar District Heating)

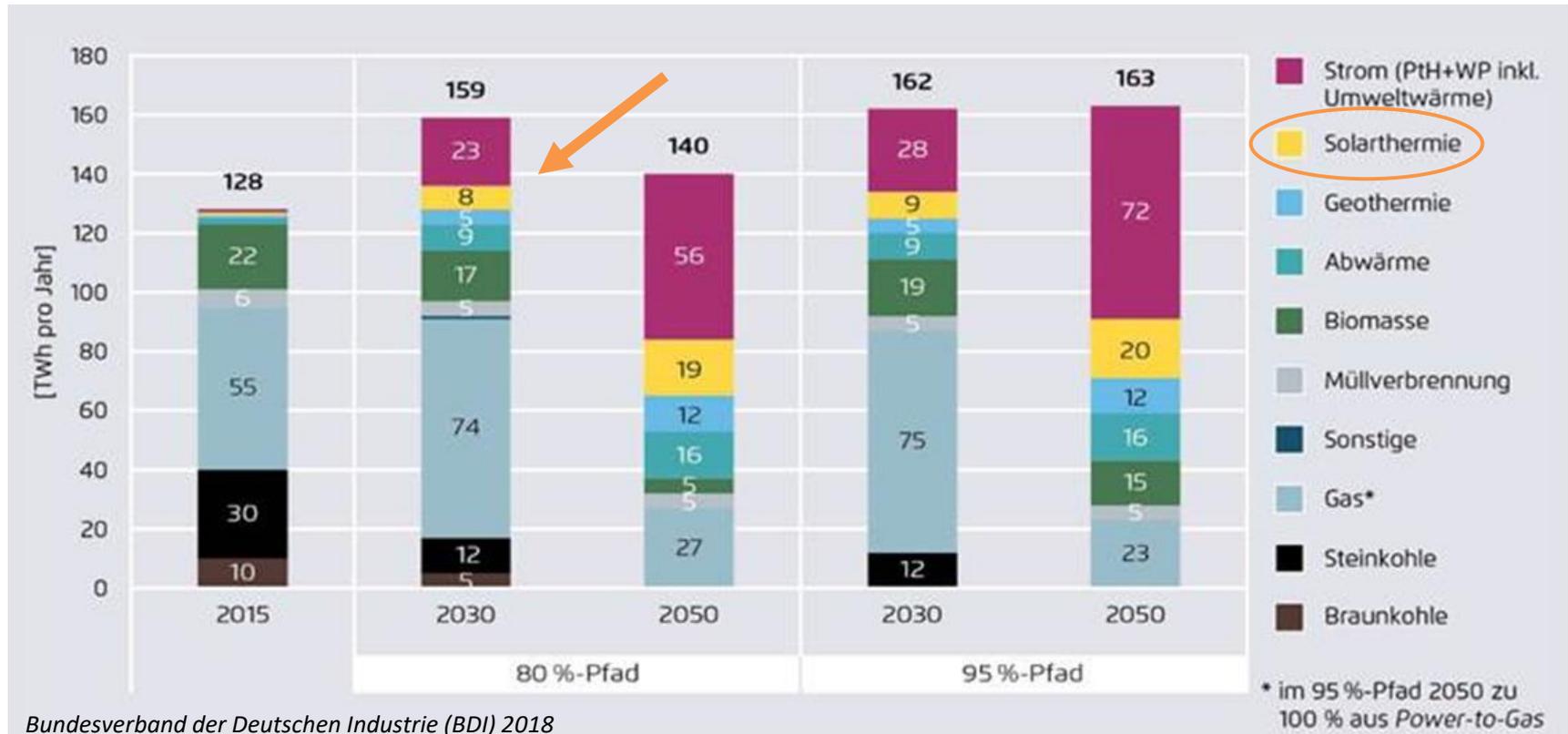


IEA SHC TASK 55

ATTRACTIVENESS OF SDH MARKETS



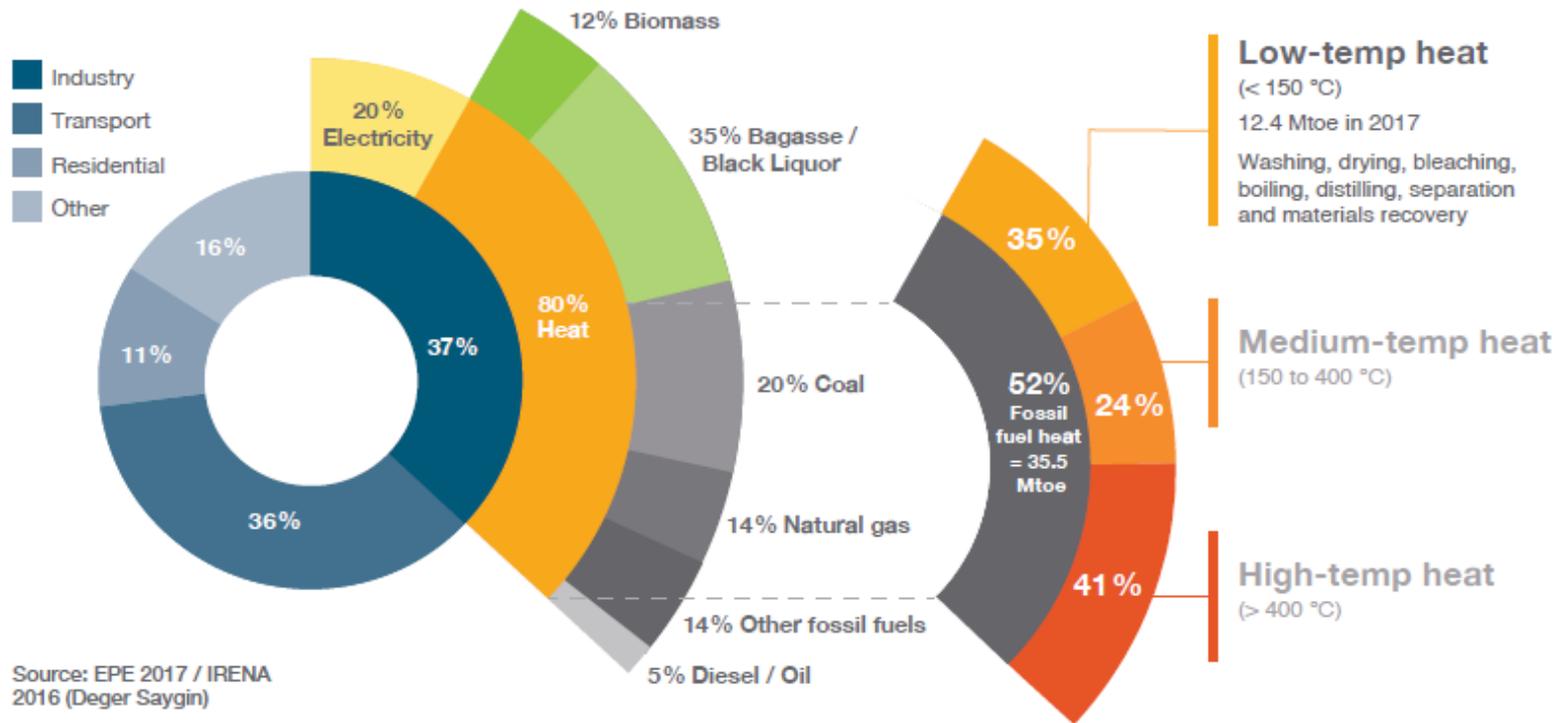
Transformation of district heating generation in the 80% and 95% climate path of the BDI



- In 2030 the minimum target of 8 TWh district heating generated by solar thermal means building over 1 million m² annually

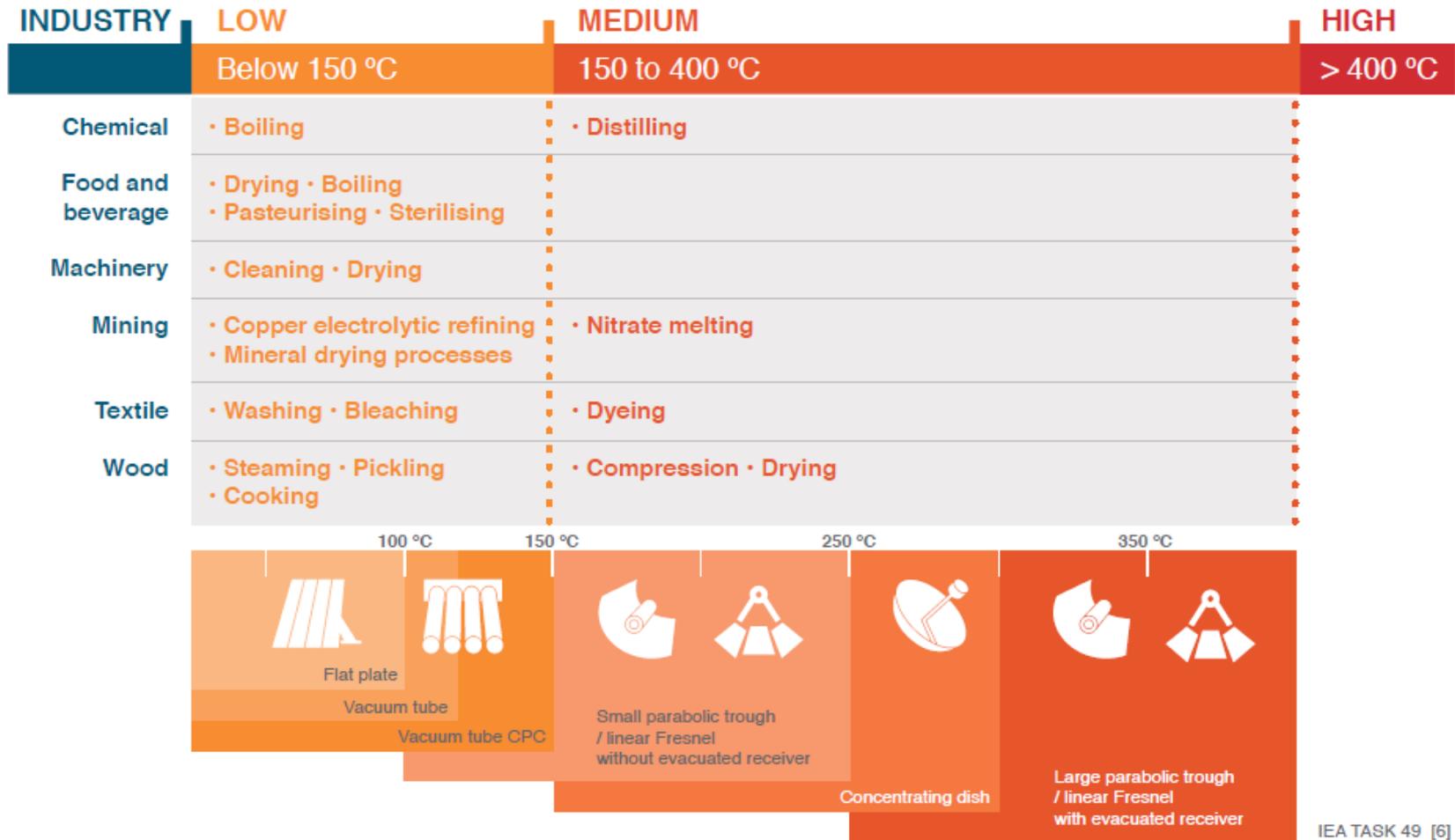
SHIP – Solar Heat for Industries

Fast growing industrial heat demand drives emissions up



Fossil fuel-based industrial heat demand grew by 33%, from 26.7 Mtoe in 1990 to 35.5 Mtoe in 2016. Hence, climate protection measures have to focus on the industrial sector. In all, 35% of industrial demand is for heat at temperatures of less than 150 °C and could be supplied efficiently by tried-and-tested solar thermal technologies.

Market segments for SHIP

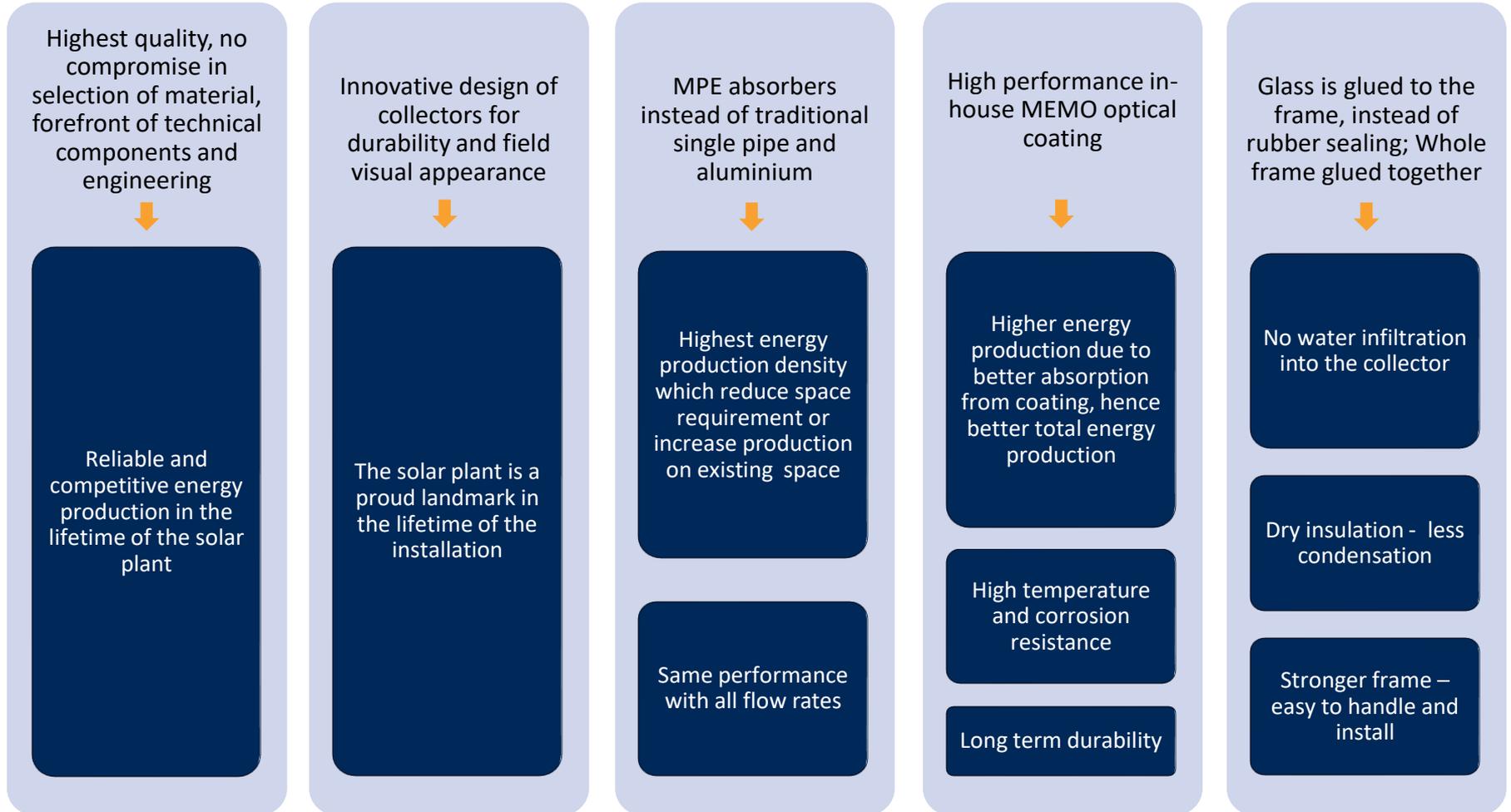


IEA TASK 49 [6]

Savosolar winning market concept



Technical features & Customer benefits



Designed to perform. Built to last.

Technical features & Customer benefits

High efficiency collectors without use of foil



Secure and reliable energy out-put in the life of the collector without risks of foil inconsistency

Minimized service and maintenance cost

Integrated flexible hoses instead of external hoses



Optimization of usage of space and reduced installation costs

Heat loss from hoses included in the performance test results

No shadow effect between collector rows

Installation system with 50% less mounting points



Quick, efficient and low cost installation

Easiness in taking care of the ground and vegetation on the field

Cleanable filters at the start of each row



To ensure optimal flow in the solar field all collector rows are equipped with a cleanable filter to prevent any blocking of dirt in the collectors

Automated cleaning system



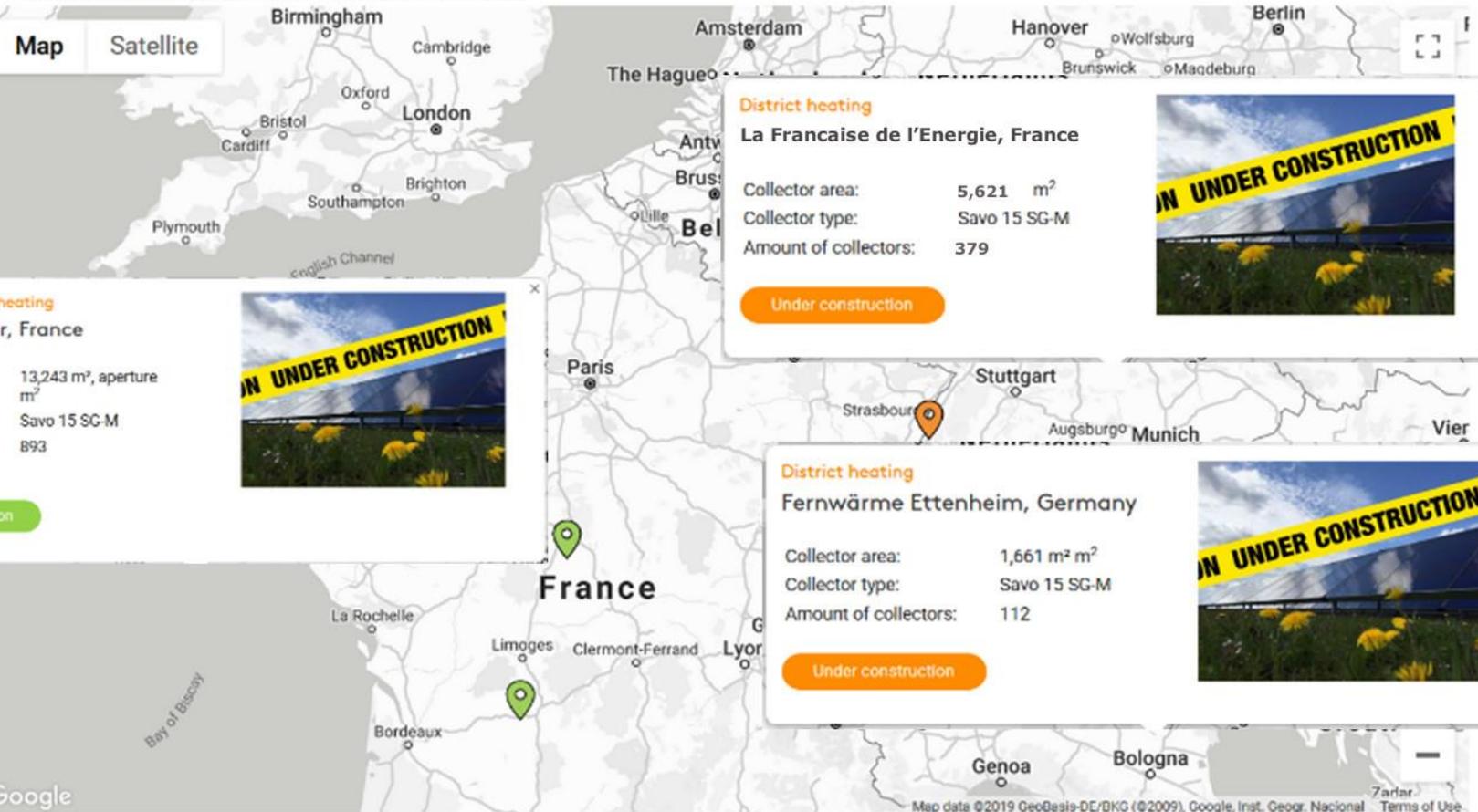
A cleaning robot can be mounted for easy and efficient cleaning of the solar field for maximum energy production in dusty areas

Designed to perform. Built to last.

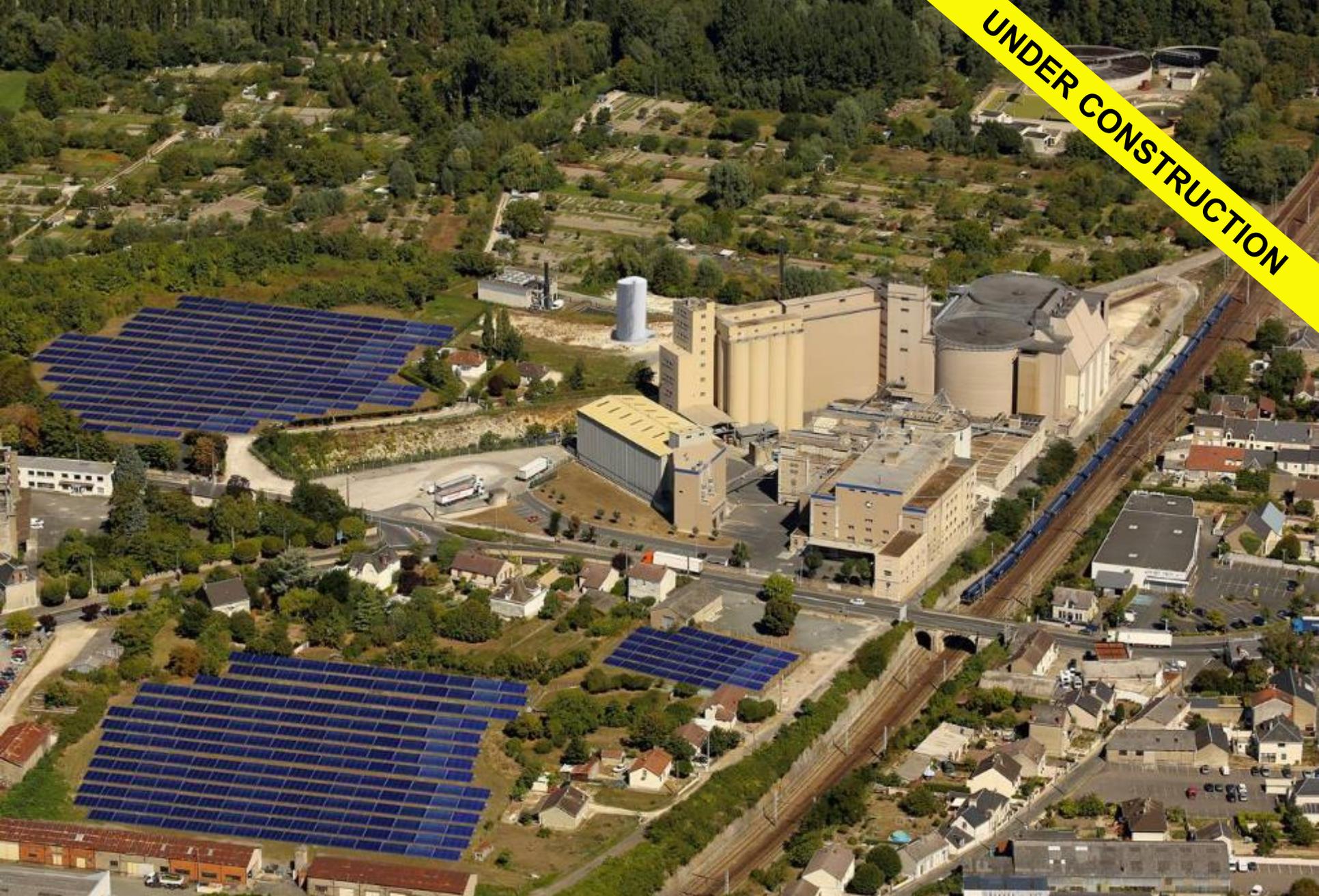
Projects in delivery

 District heating  Hot water and space heating  Solar cooling  Industrial process heating

Click the markers to read more about the references



UNDER CONSTRUCTION



MFS-Issoudun, France 14,000 m²



Savosolar large systems

Customer	Size (m ²)	Delivery year	Country	Status 12/2019
Løgumkloster 1 + 2	15,300	2014-2016	Denmark	Operational in DH network
Jelling Varmeværk Extension	15,300 4,836	2016 2019	Denmark	Operational in DH Operational
Fors A/S / Jyderup DH	9,200	2016	Denmark	Operational in DH
Lolland Varme A/S / Søllested DH	4,700	2016	Denmark	Operational in DH
Véolia ECHM / Voreppe DH	176	2018	France	Operational in DH
Ystad Energi, Ystad sporting hall	530	2017	Sweden	Operational
Oulun Seudun Sähkö / Ankkurilahti	356	2018	Finland	Operational in DH
newHeat SAS / Condat-sur-Vézère	4,000	2018	France	Operational, process heat for paper mill. Largest ST system in France. Full turn-key, collectors on one axis tracker
Grenaa Varmeværk	20,673	2019	Denmark	Operational in DH
Kyotherm / MFS-Issoudun	14,000	2020	France	Process heat for a malt drying factory, system start end of summer 2020
Suur-Savon Sähkö / Puumala district heating	400	2019	Finland	District heating plant combined with heat pump, operational
Fernwärme Ettenheim	1,667	2020	Germany	System start up planned in June 2020, DH
LFDE / Creutzwald	5,953	2020	France	Hand over in autumn 2020, DH

Market summary

- Market is more active than ever before
 - Both SDH and SHIP are advancing
- Many countries very determined to accomplish the climate targets – in some of those large solar heating will play important role
 - Germany, China, France – potentially also Poland, Sweden, Denmark
 - In some countries low oil & coal price effects on overall decisions more
- Biggest player Arcon-Sunmark out of business
 - Also often the lowest price player especially in Denmark
 - Arcon's market share has been over 70% , and this will be now shared by other players, for example by Savosolar, in a growing market
 - Chinese Sunrain takes over Arcon's share of their JV in China
 - Viessmann is investing in EPC capability, too
- Corona virus seems not to slow down the project preparation, but restrictions have negative impact in realization of the deliveries
 - Recovery from corona economic depression may speed up the investments in climate actions – at least now in China

Year 2020 - many positive elements in place - 1

- Most active market ever - projects in quotation or design phase approximately 94 MEUR, known projects approximately 265
 - Currently 9 projects in final tender or negotiation phase, more than half in GER and FRA
- Market leader in France - currently the most active market in Europe
 - Received two new orders in 2020; Creutzwald and AbSOLAR – 1.6 MEUR
- New markets accelerating - Germany and China in first wave
- References in place - Savosolar performance and quality recognised
- Highly competent partners in different markets bring new project requests

Year 2020 - many positive elements in place - 2

- Huge window of opportunity due to the reshaping of competition
- Corona restrictions have negative impact - fast actions have generated savings to go over the situation
 - Additional demand on technical coatings going for healthcare companies
- Profitability is moving to the right direction Q1/2020 shows positive indications of the work done so far
- Rights issue 80% guaranteed with warrant programs – allows the management focus in conquering the market and improving the profitability

The sun rises in the North!

SAVOSOLAR – Changing the game – field by field

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Thank you!

