

Solar Industrial Heat – UAE



Ocean Rubber Factory – *Ras al Khaimah*

Commissioning Date	November 2018
# TVP Panels	120
Panel Area	240 m ²
Mounting	ground-mount
Application	rubber belt manuf.
Thermal Peak Power	150 kW _{th}
TVP Production	152 MWh/yr
Delivery Temp	180°C
Return Temp	173°C
Savings: diesel	18'512 litre/yr
Savings: CO₂	54 ton/yr
Cost of Heat	47 USD/MWh



Sunlight (GHI)	2'045 kWh/m ² /yr
TVP Performance	633 kWh/m²/yr
Avg. Efficiency	31 %
Operating Hours	Daytime
Storage	none
Client Motivation	CO2 reduction energy cost saving

Solar Industrial Heat – Italy



Martini & Rossi - *Pessione*

Commissioning Date	December 2020
# TVP Panels	300
Panel Area	600 m ²
Mounting	roof-mount
Application	indirect seam gen.
Thermal Peak Power	400 kW _{th}
TVP Production	400 MWh/yr
Delivery Temp	170°C
Return Temp	160°C
Savings: natural gas	49'070 m³/yr
Savings: CO₂	97 ton/yr
Cost of Heat	36 EUR/MWh



Sunlight (GHI)	1'356 kWh/m ² /yr
TVP Performance	400 kWh/m²/yr
Avg. Efficiency	50 %
Operating Hours	Daytime
Storage	none
Client Motivation	CO2 reduction energy cost saving

Solar Industrial Heat – Brazil



PepsiCo – *Sete Lagoas*

Commissioning Date	November 2021
# TVP Panels	200
Panel Area	400 m ²
Mounting	roof-mount
Application	snack line washing
Thermal Peak Power	250 kW _{th}
TVP Production	450 MWh/yr
Delivery Temp	80°C
Return Temp	65°C
Savings: Fuel	55'200 m³/yr nat. gas
Savings: CO₂	103 ton/yr
Cost of Heat	19 USD/MWh



Sunlight (GHI)	1'934 kWh/m ² /yr
TVP Performance	1'125 kWh/m²/yr
Avg. Efficiency	57 %
Operating Hours	Daytime
Storage	none
Client Motivation	CO2 reduction energy cost saving

Solar Industrial Heat – USA



California Dairies (CDI) – Visalia, CA

Commissioning Date	Aug 2022
# TVP Panels	1'095
Panel Area	2'190 m ²
Mounting	roof-mount
Application	process hot water
Thermal Peak Power	1.4 MW _{th}
TVP Production	2'690 MWh/yr
Delivery Temp	80°C
Return Temp	65°C
Savings: natural gas	330'000 m³/yr
Savings: CO₂	619 ton/yr
Cost of Heat	46 USD/MWh



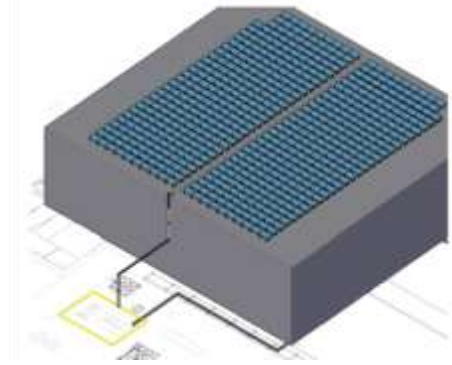
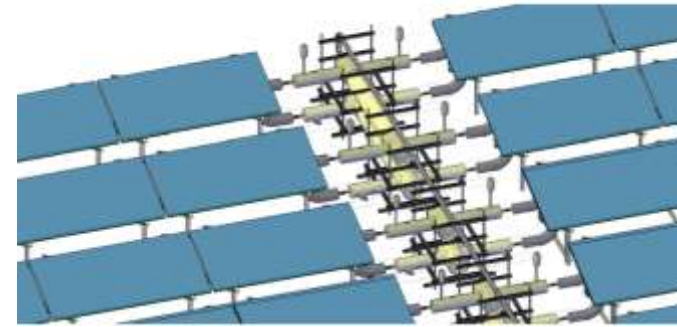
Sunlight (GHI)	1'878 kWh/m ² /yr
TVP Performance	400 kWh/m²/yr
Avg. Efficiency	58 %
Operating Hours	Daytime
Storage	none
Client Motivation	CO2 reduction energy cost saving

Solar Industrial Heat – Brazil



PepsiCo – Feira de Santana – Under Construction

Commissioning Date	May 2023
# TVP Panels	575
Panel Area	1'150 m ²
Mounting	roof-mount
Application	choc. milk production
Thermal Peak Power	750 kW _{th}
TVP Production*	1'211 MWh/yr
Delivery Temp	95°C
Return Temp	35°C
Savings: Fuel	148'560 m³/yr nat. gas
Savings: CO₂	295 ton/yr
Cost of Heat	37 USD/MWh



Sunlight (GHI)	1'809 kWh/m ² /yr
TVP Performance	1'053 kWh/m²/yr
Avg. Efficiency	58 %
Operating Hours	Daytime
Storage	none
Client Motivation	CO2 reduction
	energy cost saving

-- UNDER CONSTRUCTION --
*Expected Production