

Final Design Ost-West ganze Fläche Deponie Rheine, Schüttorfer Damm , Rheine

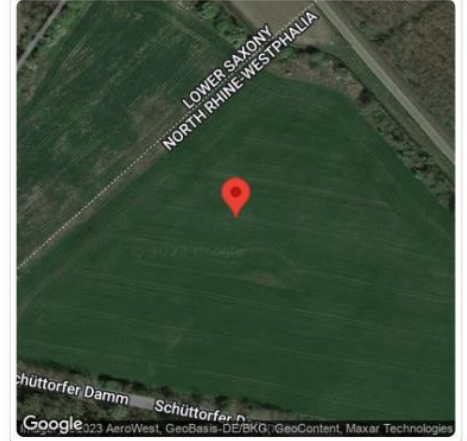
Report

Project Name	Deponie Rheine
Project Address	Schüttorfer Damm , Rheine
Prepared By	

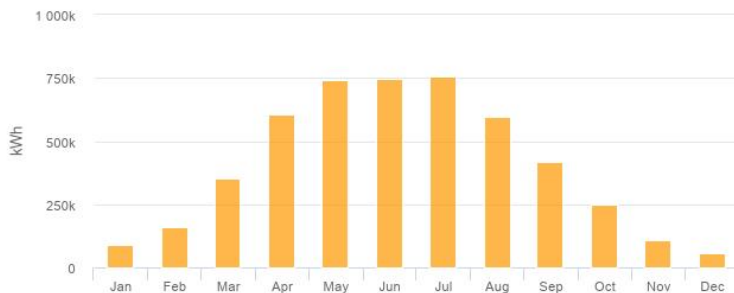
System Metrics

Design	Final Design Ost-West ganze Fläche
Module DC Nameplate	6.19 MW
Inverter AC Nameplate	5.50 MW Load Ratio: 1.13
Annual Production	4.876 GWh
Performance Ratio	82.7%
kWh/kWp	787.5
Weather Dataset	TMY, 10km Grid, meteonorm (meteonorm)
Simulator Version	bdfbb39b97-df99a9b0f7-7e9e7c48d3-a6c709dd6e

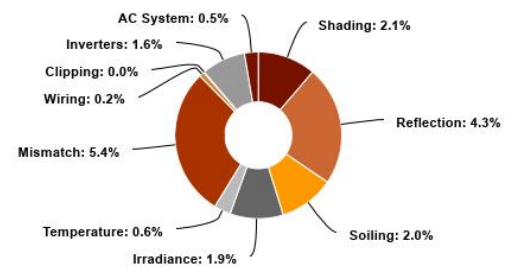
Project Location



Monthly Production



Sources of System Loss



⚡ Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	957.2	
	POA Irradiance	952.0	-0.5%
	Shaded Irradiance	931.9	-2.1%
	Irradiance after Reflection	891.5	-4.3%
	Irradiance after Soiling	873.7	-2.0%
	Total Collector Irradiance	873.7	0.0%
Energy (kWh)	Nameplate	5,411,380.5	
	Output at Irradiance Levels	5,307,089.4	-1.9%
	Output at Cell Temperature Derate	5,274,823.2	-0.6%
	Output After Mismatch	4,990,296.1	-5.4%
	Optimal DC Output	4,980,772.2	-0.2%
	Constrained DC Output	4,979,770.5	0.0%
	Inverter Output	4,900,094.0	-1.6%
	Energy to Grid	4,875,593.7	-0.5%
Temperature Metrics			
Avg. Operating Ambient Temp			13.0 °C
Avg. Operating Cell Temp			17.9 °C
Simulation Metrics			
		Operating Hours	4594
		Solved Hours	4594

☁ Condition Set												
Description	Condition Set 1											
Weather Dataset	TMY, 10km Grid, meteonorm (meteonorm)											
Solar Angle Location	Meteo Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Sandia Model											
Temperature Model Parameters	Rack Type		a		b		Temperature Delta					
	Fixed Tilt		-3.56		-0.075		3°C					
	Flush Mount		-2.81		-0.0455		0°C					
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D
	2	2	2	2	2	2	2	2	2	2	2	2
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	0.50%											
Module Characterizations	Module						Uploaded By		Characterization			
	CS6R-405MS (1500V) (Canadian Solar)						HelioScope		Spec Sheet Characterization, PAN			
Component Characterizations	Device					Uploaded By			Characterization			
	STP 110-60 (SMA)					HelioScope			Spec Sheet			

📦 Components		
Component	Name	Count
Inverters	STP 110-60 (SMA)	50 (5.50 MW)
Strings	10 mm2 (Copper)	650 (52,493.6 m)
Module	Canadian Solar, CS6R-405MS (1500V) (405W)	15,287 (6.19 MW)

🔌 Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	18-24	Along Racking

🏠 Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Deponie Rheine	East-West	Portrait (Vertical)	12°	0°	3.0 m	2x6	637	15,287	6.19 MW

Detailed Layout

