

GLOBAL SOLAR ATLAS

BY WORLD BANK GROUP

Кишинёв

46.982755°, 028.876596°

Strada Burebista, Chişinău, Moldova

Time zone: UTC+03, Europe/Chisinau [EEST]

🕒 Report generated: 25 Apr 2023

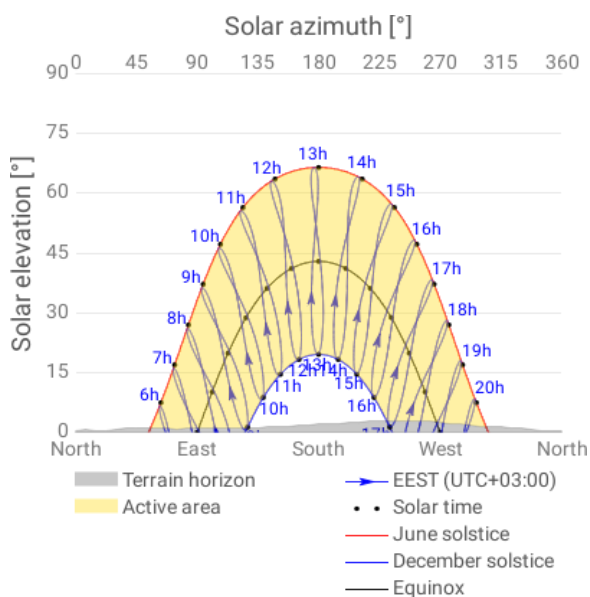
SITE INFO

Map data

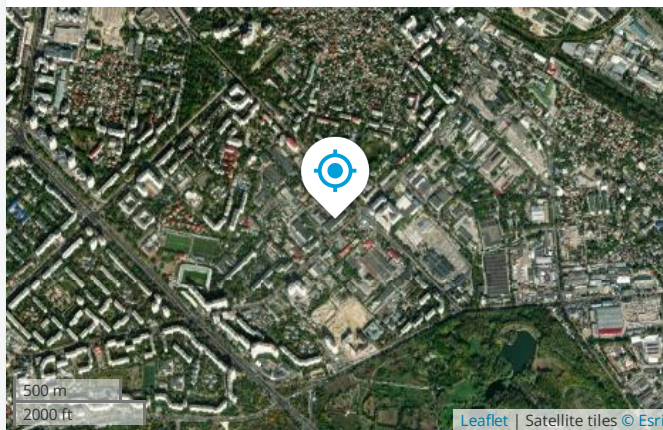
Per year

Direct normal irradiation	DNI	1269.8	kWh/m ²
Global horizontal irradiation	GHI	1313.4	kWh/m ²
Diffuse horizontal irradiation	DIF	595.1	kWh/m ²
Global tilted irradiation at optimum angle	GTI opta	1538.7	kWh/m ²
Optimum tilt of PV modules	OPTA	36 / 180	°
Air temperature	TEMP	10.8	°C
Terrain elevation	ELE	81	m

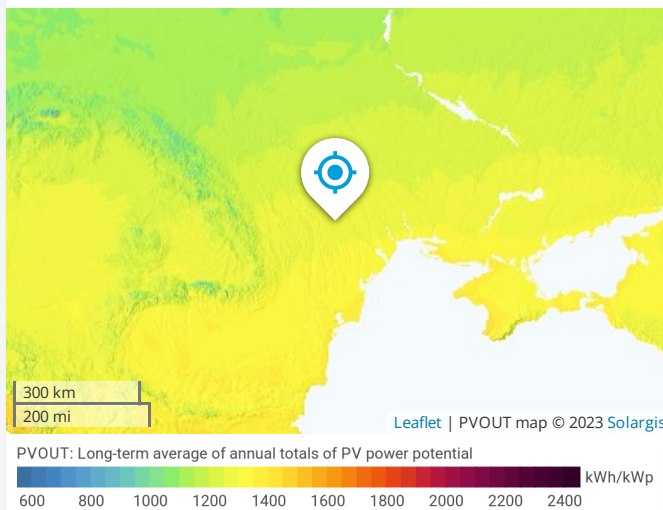
Horizon and sunpath



Map



PVOUT map



PV ELECTRICITY AND SOLAR RADIATION

PV system configuration



PV system: **Medium size comercial**

Azimuth of PV panels: **Default (180°)**

Tilt of PV panels: **30°**

Installed capacity: **850 kWp**

Annual averages

Total photovoltaic power output and Global tilted irradiation

1.039

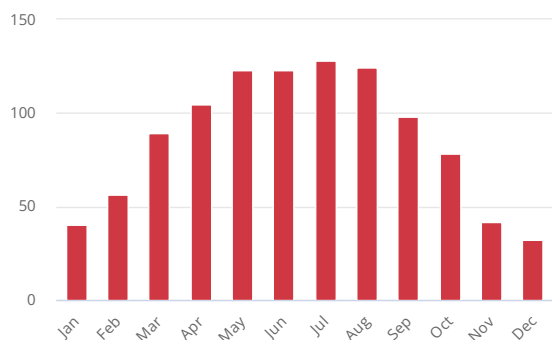
GWh per year

1528.7

kWh/m² per year

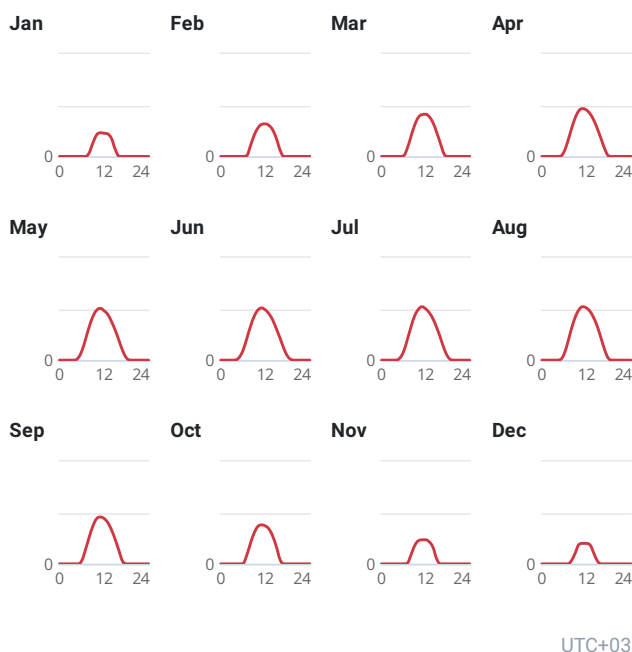
Monthly averages

Total photovoltaic power output



Average hourly profiles

Total photovoltaic power output [kWh]



Average hourly profiles

Total photovoltaic power output [kWh]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0 - 1												
1 - 2												
2 - 3												
3 - 4												
4 - 5					0	2	0					
5 - 6				3	20	29	21	7	0			
6 - 7			6	48	88	96	83	61	31	4		
7 - 8		8	79	149	202	209	197	176	138	84	7	
8 - 9	35	104	192	271	325	329	322	309	260	201	85	33
9 - 10	132	207	303	378	426	427	430	420	369	301	177	107
10 - 11	210	277	381	447	487	488	494	492	441	365	225	189
11 - 12	231	312	408	466	505	509	521	521	457	380	235	200
12 - 13	226	317	411	453	482	490	501	510	443	370	235	200
13 - 14	219	302	388	416	446	452	463	474	403	339	214	184
14 - 15	174	258	329	352	377	391	403	411	332	269	162	104
15 - 16	70	173	236	265	293	304	318	322	237	164	49	25
16 - 17	4	59	130	167	193	212	221	208	130	39	0	
17 - 18		1	25	68	93	113	115	92	25			
18 - 19				5	23	38	36	14	0			
19 - 20					1	6	3					
20 - 21												
21 - 22												
22 - 23												
23 - 24												
Sum	1,302	2,019	2,888	3,489	3,963	4,094	4,129	4,017	3,266	2,517	1,389	1,042

PV ELECTRICITY AND SOLAR RADIATION

Annual averages

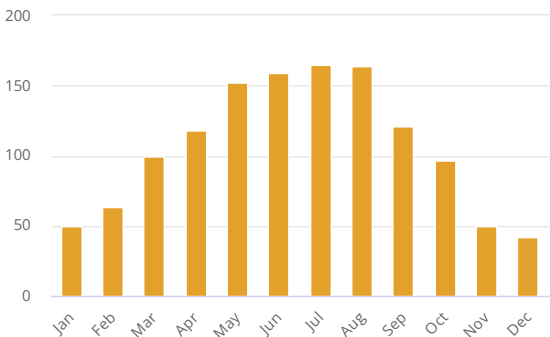
Direct normal irradiation

1279.9

kWh/m² per year

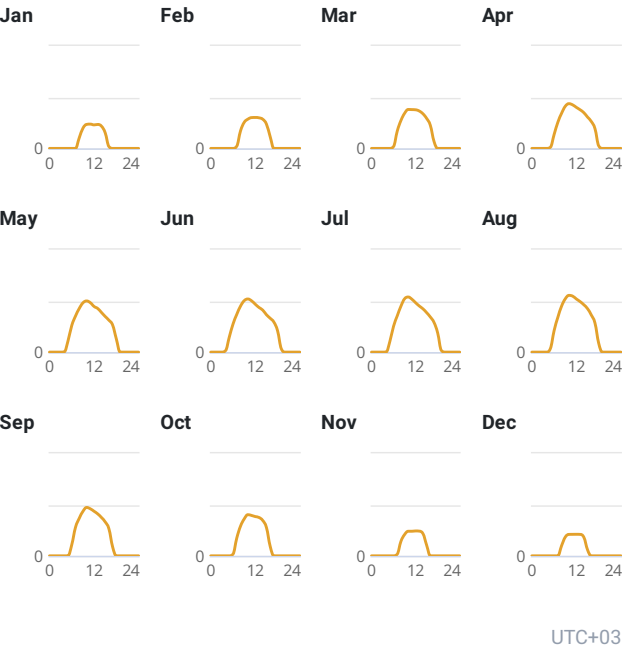
Monthly averages

Direct normal irradiation



Average hourly profiles

Direct normal irradiation [Wh/m²]



Average hourly profiles

Direct normal irradiation [Wh/m²]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0 - 1												
1 - 2												
2 - 3												
3 - 4												
4 - 5					3	15	2					
5 - 6				11	111	148	105	35	2			
6 - 7			18	136	260	274	253	210	108	17		
7 - 8		21	168	255	352	368	354	339	278	172	16	
8 - 9	102	169	272	342	425	448	448	448	365	288	141	98
9 - 10	197	254	342	411	481	502	521	520	434	360	208	183
10 - 11	234	285	380	436	499	518	538	554	472	402	240	209
11 - 12	237	301	379	425	482	500	516	546	459	394	240	210
12 - 13	229	302	377	400	446	467	482	518	435	383	243	210
13 - 14	234	298	365	377	425	435	450	493	409	374	241	209
14 - 15	217	285	338	348	387	410	422	462	374	345	216	181
15 - 16	152	237	292	305	348	364	385	424	331	276	103	58
16 - 17	18	114	225	263	311	331	343	362	263	93		
17 - 18			68	192	264	293	290	283	87			
18 - 19				25	128	207	187	86				
19 - 20					1	32	16					
20 - 21												
21 - 22												
22 - 23												
23 - 24												
Sum	1619	2265	3224	3927	4923	5311	5309	5281	4017	3104	1648	1358

GLOBAL SOLAR ATLAS

BY WORLD BANK GROUP

GLOSSARY

Acronym	Full name	Unit	Type of use
DIF	Diffuse horizontal irradiation	kWh/m ² , MJ/m ²	Average yearly, monthly or daily sum of diffuse horizontal irradiation (© 2021 Solargis)
DNI	Direct normal irradiation	kWh/m ² , MJ/m ²	Average yearly, monthly or daily sum of direct normal irradiation (© 2021 Solargis)
ELE	Terrain elevation	m, ft	Elevation of terrain surface above/below sea level, processed and integrated from SRTM-3 data and related data products (SRTM v4.1 © 2004 - 2021, CGIAR-CSI)
GHI	Global horizontal irradiation	kWh/m ² , MJ/m ²	Average annual, monthly or daily sum of global horizontal irradiation (© 2021 Solargis)
GTI	Global tilted irradiation	kWh/m ² , MJ/m ²	Average annual, monthly or daily sum of global tilted irradiation (© 2021 Solargis)
GTI_opta	Global tilted irradiation at optimum angle	kWh/m ² , MJ/m ²	Average annual, monthly or daily sum of global tilted irradiation for PV modules fix-mounted at optimum angle (© 2021 Solargis)
OPTA	Optimum tilt of PV modules	°	Optimum tilt of fix-mounted PV modules facing towards Equator set for maximizing GTI input (© 2021 Solargis)
PVOUT_total	Total photovoltaic power output	kWh, MWh, GWh	Yearly and monthly average values of photovoltaic electricity (AC) delivered by the total installed capacity of a PV system (© 2021 Solargis)
PVOUT_specific	Specific photovoltaic power output	kWh/kWp	Yearly and monthly average values of photovoltaic electricity (AC) delivered by a PV system and normalized to 1 kWp of installed capacity (© 2021 Solargis)
TEMP	Air temperature	°C, °F	Average yearly, monthly and daily air temperature at 2 m above ground. Calculated from outputs of ERA5 model (© 2021 ECMWF, post-processed by Solargis)

ABOUT

This pdf report (the “Work”) is automatically generated from the Global Solar Atlas online app (<https://globalsolaratlas.info/>), prepared by Solargis under contract to The World Bank, based on a solar resource database that Solargis owns and maintains. It provides the estimated solar resource, air temperature data and potential solar power output for the selected location and input parameters of a photovoltaic (PV) power system.

Copyright © 2021 The World Bank
1818 H Street NW, Washington DC 20433, USA

The World Bank, comprising the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA), is the commissioning agent and copyright holder for this Work, acting on behalf of The World Bank Group. The Work is licensed by The World Bank under a Creative Commons Attribution license (CC BY 4.0 IGO) with a mandatory and binding addition (please refer to the GSA website for full terms and conditions of use <https://globalsolaratlas.info/support/terms-of-use>).

The World Bank Group disclaims all warranties of any kind related to the provision of the Work.

The Work is made available solely for general information purposes. Neither the World Bank, Solargis nor any of its partners and affiliates hold the responsibility for the accuracy and/or completeness of the data and shall not be liable for any errors, or omissions. It is strongly advised that the Work be limited to use in informing policy discussions on the subject, and/or in creating services that better educate relevant persons on the viability of solar development in areas of interest. As such, neither the World Bank nor any of its partners on the Global Solar Atlas project will be liable for any damages relating to the use of the Work for financial commitments or any similar use cases. Solargis has done its utmost to make an assessment of solar climate conditions based on the best available data, software, and knowledge.

Sources: Solar database and PV software © 2021 Solargis