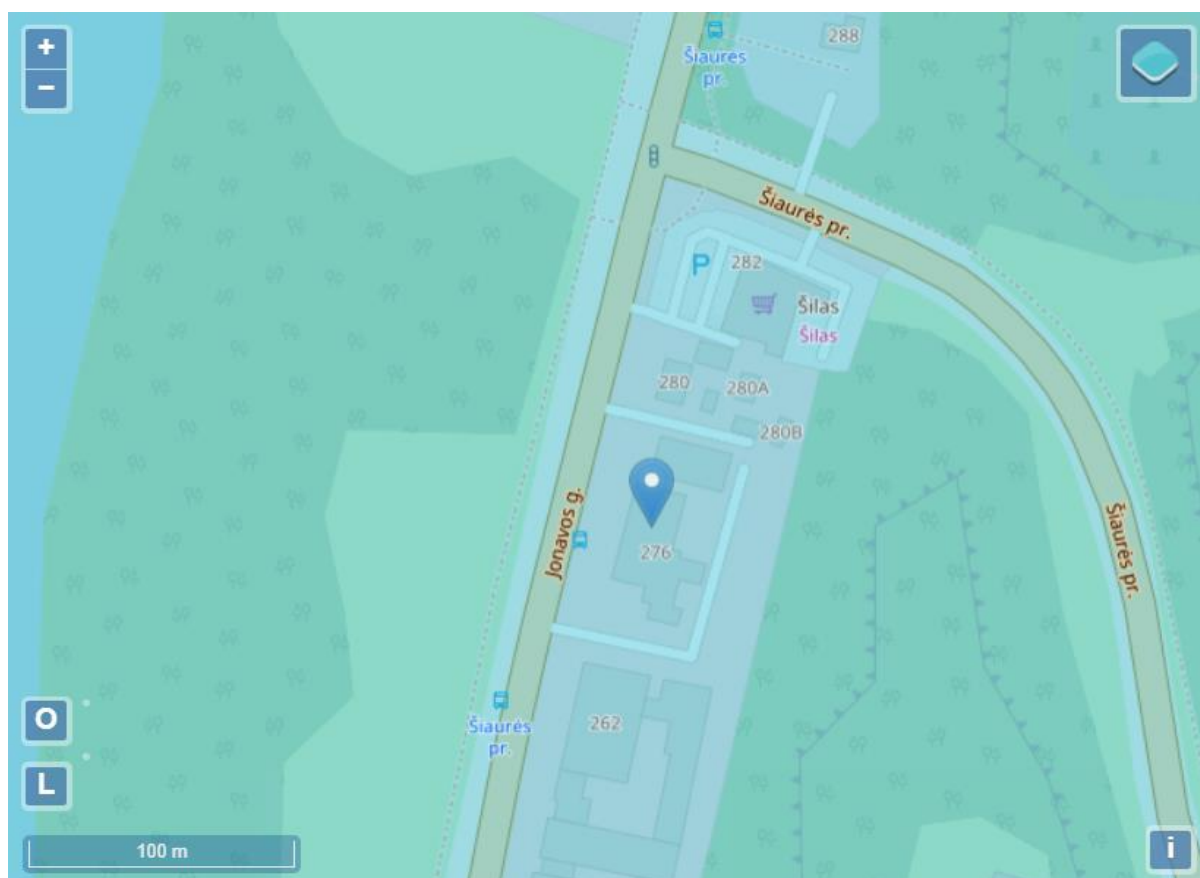


## SAULĒS ELEKTRINĒS ADRESU JONAVOS G. 276

### MODELIAVIMO ATASKAITA

ElektrinĒs numatyta galia	64	kWp
Vieno modulio galia	0,395	kWp
Moduliu skaiĉius	162	vnt.
FaktinĒ elektrinĒs galia	63,99	kWp
Skaiĉiuojamujų metų bendroji saulĒs spinduliuotĒ	1029,06	kWh/m <sup>2</sup>



# Performance of grid-connected PV

PVGIS-5 estimates of solar electricity generation:

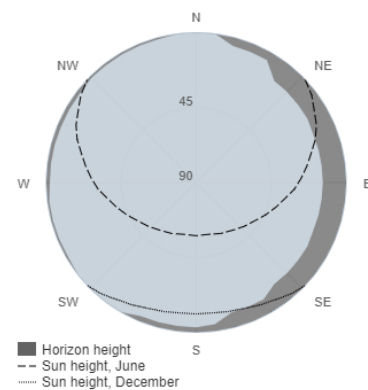
## Provided inputs:

Latitude/Longitude: 54.929,23.917  
Horizon: Calculated  
Database used: PVGIS-ERA5  
PV technology: Crystalline silicon  
PV installed: 63.99 kWp  
System loss: 10 %

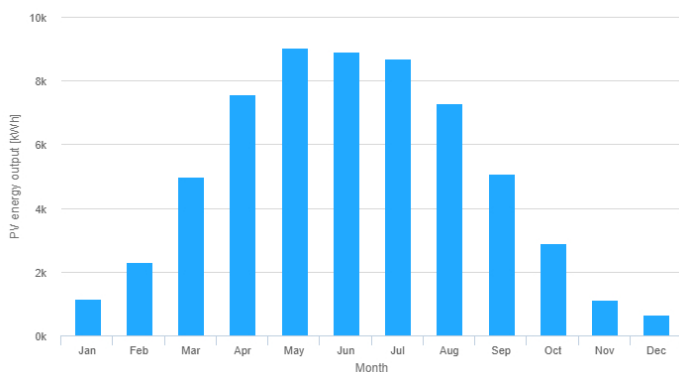
## Simulation outputs

Slope angle: 10 °  
Azimuth angle: 5 °  
Yearly PV energy production: 59720.39 kWh  
Yearly in-plane irradiation: 1117.76 kWh/m<sup>2</sup>  
Year-to-year variability: 2152.33 kWh  
Changes in output due to:  
Angle of incidence: -4.04 %  
Spectral effects: 1.54 %  
Temperature and low irradiance: -4.79 %  
Total loss: -16.5 %

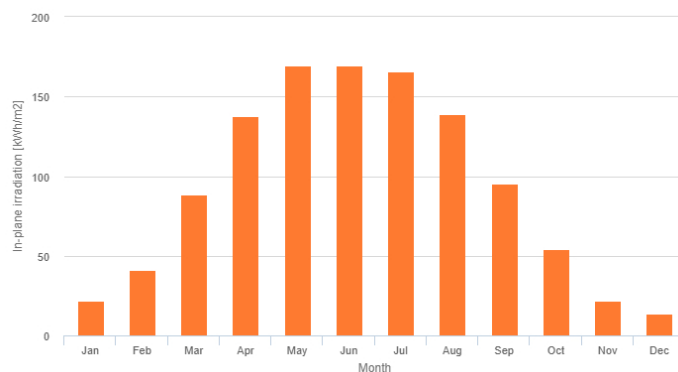
## Outline of horizon at chosen location:



## Monthly energy output from fix-angle PV system:



## Monthly in-plane irradiation for fixed-angle:



## Monthly PV energy and solar irradiation

Month	E_m	H(i)_m	SD_m
January	1167.0	21.8	123.3
February	2305.1	41.0	285.9
March	4995.3	88.8	647.7
April	7572.0	137.8	835.0
May	9043.5	169.3	735.0
June	8906.3	169.6	810.3
July	8697.7	165.9	706.9
August	7277.4	139.0	730.9
September	5085.0	95.2	554.8
October	2911.8	54.0	531.8
November	1109.8	21.6	181.5
December	649.5	13.8	91.8

E\_m: Average monthly electricity production from the defined system [kWh].

H(i)\_m: Average monthly sum of global irradiation per square meter received by the modules of the given system [kWh/m<sup>2</sup>].

SD\_m: Standard deviation of the monthly electricity production due to year-to-year variation [kWh].