

Wind farm Korita

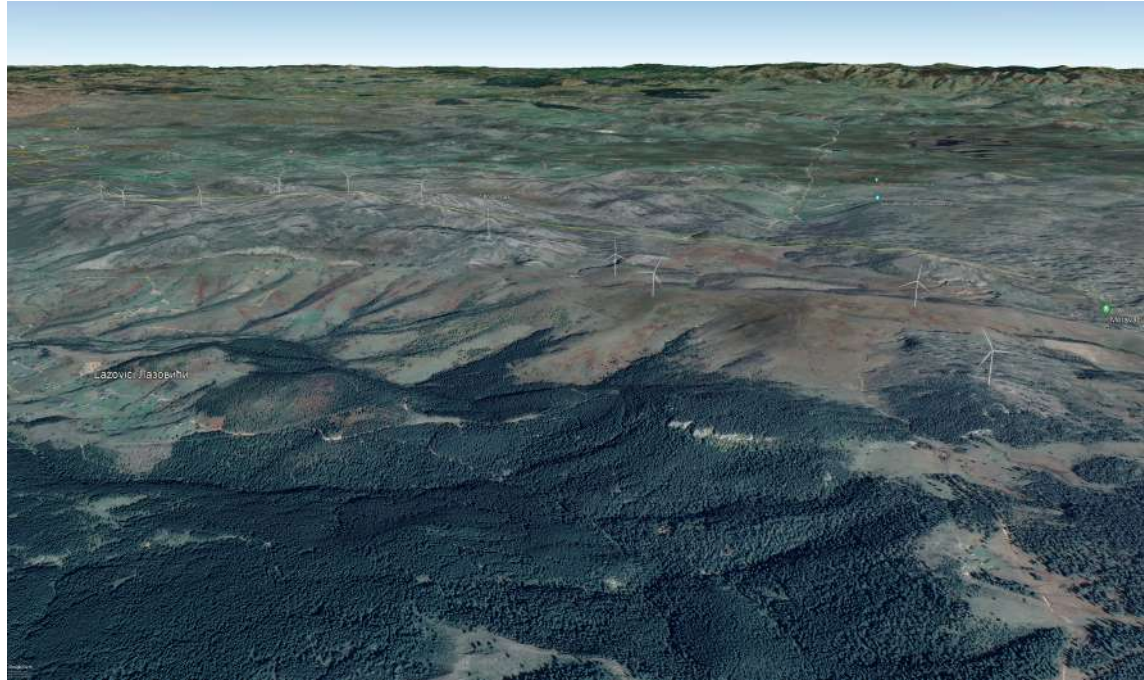


Location



Municipalities and largest cities and towns of Montenegro
Opštine i veći gradovi Crne Gore

Municipality of Bijelo Polje
Montenegro

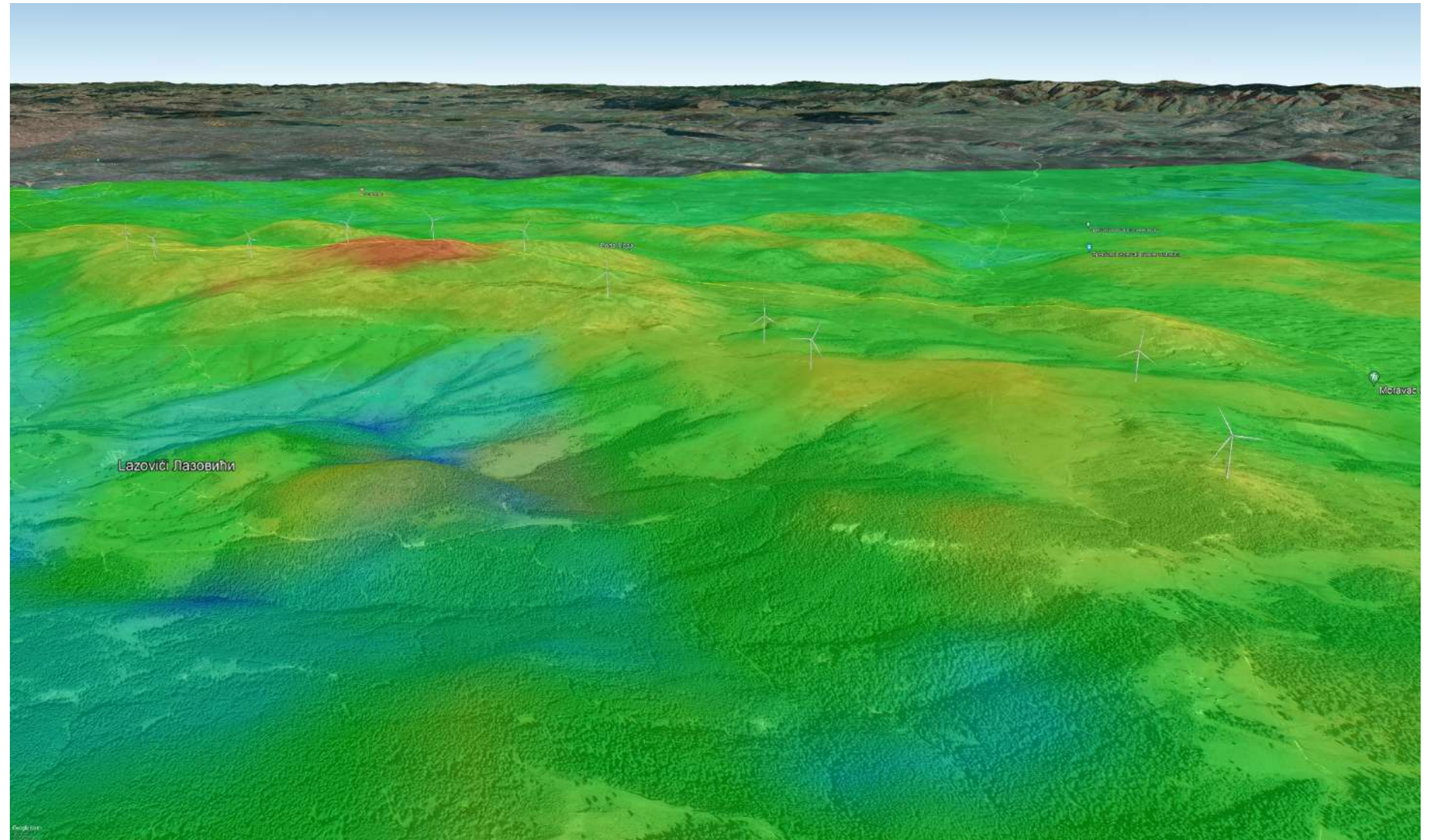
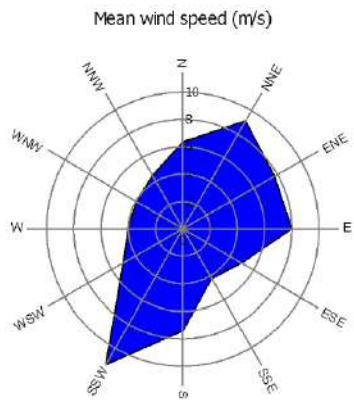
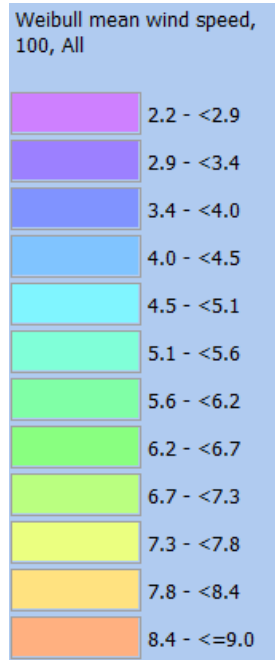


Latitude: 42°

Longitude: 19°

Elevation ≈ 1450 mnm

Wind potential at location



Wind generator

Manufacturer	Siemens Gamesa	
Type/Version	SG 6.6-170	
Rated power	6,600.0	kW
Secondary generator		kW
Rotor diameter	170.0	m
Tower	!O! Tubular	
Grid connection	50/60 Hz	
Country (origin)	Denmark	
Blade type		
Generator type	Variable	
Rated	8.8	rpm
Initial	5.1	rpm
Default hub height	115.0	m
Alternative hub heights (m)	115.0 135.0 145.0	
	Add	Remove
Maximum blade width	4.50	m *)
Blade width for 90% radius	1.50	m *)



Map of Wind Power Plant

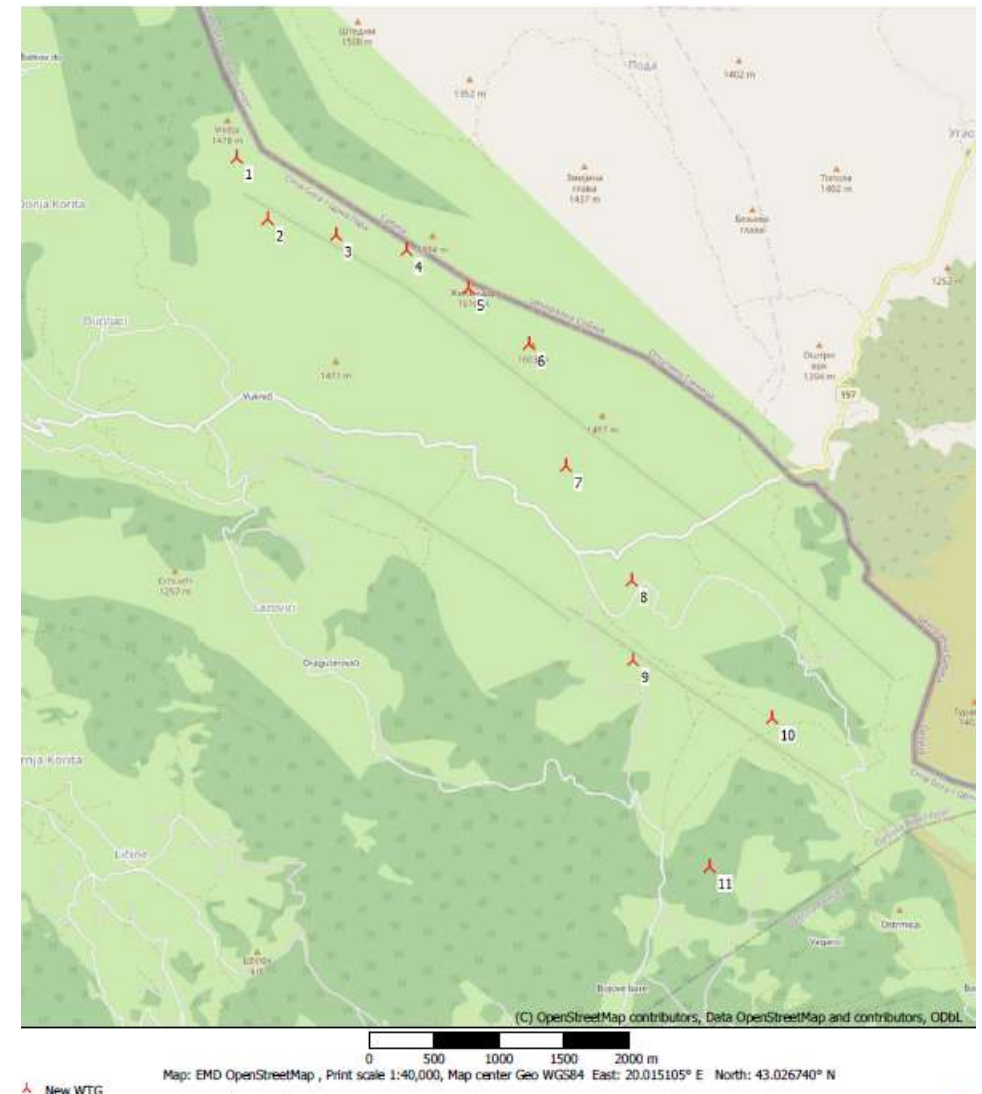
Number of wind generators : **11**

Unit power: **6.60 MW**

Total power: **72.60 MW**

Annual production: **198.851 GWh** (with 20% reduction)

The owner of the part of the land is the state of Montenegro, and part of the land is private property.



Production - WindPro 3.6



Calculated Annual Energy for Wind Farm

WTG combination	Result		GROSS (no loss)		Specific results«)			
	PARK	Result-20.0%	Free WTGs	Wake loss	Capacity factor	Mean WTG result	Full load hours	Mean wind speed @hub height
	[MWh/y]	[MWh/y]	[MWh/y]	[%]	[%]	[MWh/y]	[Hours/year]	[m/s]
Wind farm	248,563.8	198,851.0	253,182.6	1.8	31.2	18,077.4	2,739	7.9

«) Based on Result-20.0%

Calculated Annual Energy for each of 11 new WTGs with total 72.6 MW rated power

WTG type			Type-generator	Power, rated	Rotor diameter	Hub height	Power curve		Annual Energy			
Links	Valid	Manufact.					Creator	Name	Result	Result-20.0%	Wake loss	Free mean wind speed
				[kW]	[m]	[m]			[MWh/y]	[MWh/y]	[%]	[m/s]
1 A	Yes	Siemens Gamesa	SG 6.6-170-6,600	6,600	170.0	115.0	EMD	(AM 0, 6.6MW) - 1.225 kg/m3	22,862.9	18,290	0.7	7.89
2 A	Yes	Siemens Gamesa	SG 6.6-170-6,600	6,600	170.0	115.0	EMD	(AM 0, 6.6MW) - 1.225 kg/m3	22,933.1	18,346	3.2	8.18
3 A	Yes	Siemens Gamesa	SG 6.6-170-6,600	6,600	170.0	115.0	EMD	(AM 0, 6.6MW) - 1.225 kg/m3	21,772.9	17,418	3.2	7.86
4 A	Yes	Siemens Gamesa	SG 6.6-170-6,600	6,600	170.0	115.0	EMD	(AM 0, 6.6MW) - 1.225 kg/m3	24,375.3	19,500	2.0	8.70
5 A	Yes	Siemens Gamesa	SG 6.6-170-6,600	6,600	170.0	115.0	EMD	(AM 0, 6.6MW) - 1.225 kg/m3	24,300.7	19,441	1.4	8.67
6 A	Yes	Siemens Gamesa	SG 6.6-170-6,600	6,600	170.0	115.0	EMD	(AM 0, 6.6MW) - 1.225 kg/m3	23,443.4	18,755	1.4	8.15
7 A	Yes	Siemens Gamesa	SG 6.6-170-6,600	6,600	170.0	115.0	EMD	(AM 0, 6.6MW) - 1.225 kg/m3	23,998.2	19,199	0.8	8.09
8 A	Yes	Siemens Gamesa	SG 6.6-170-6,600	6,600	170.0	115.0	EMD	(AM 0, 6.6MW) - 1.225 kg/m3	20,763.4	16,611	1.2	7.22
9 A	Yes	Siemens Gamesa	SG 6.6-170-6,600	6,600	170.0	115.0	EMD	(AM 0, 6.6MW) - 1.225 kg/m3	22,117.4	17,694	1.9	7.61
10 A	Yes	Siemens Gamesa	SG 6.6-170-6,600	6,600	170.0	115.0	EMD	(AM 0, 6.6MW) - 1.225 kg/m3	20,679.7	16,544	2.8	7.30
11 A	Yes	Siemens Gamesa	SG 6.6-170-6,600	6,600	170.0	115.0	EMD	(AM 0, 6.6MW) - 1.225 kg/m3	21,316.8	17,053	1.6	7.34