

Total	1414	1432	1465	1457	1468	1465	1447	1442	1408
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6) Total installed capacity of SHP by power categories, 2014 - 2022

Total Installed Capacity (MW)									
Installed Capacity (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022
0 – 0.035 incl.	11	10	11	10	11	11	10	10	10
0.035 – 0.05 incl.	7	7	8	8	8	8	8	8	8
0.05 – 0.1 incl.	20	20	20	20	20	21	20	20	20
0.1 – 0.5 incl.	75	78	80	80	80	80	81	82	82
0.5 - 1 incl.	39	38	37	38	38	39	39	39	39
1 - 5 incl.	117	118	118	119	120	120	120	120	120
5 - 10 incl.	69	74	74	75	75	75	75	75	75
Total	338	345	348	350	352	354	353	354	354

7) Hydroelectric power generation by power categories, 2014 - 2022

Gross Electricity Production (MWh)									
Installed Capacity (MW)	2014	2015	2016	2017	2018	2019	2020	2021	2022
0 – 0.035 incl.	32 373	28 504	30 154	28 969	22 770	26 252	29 932	31 230	25 380
0.035 – 0.05 incl.	23 150	20 966	24 003	24 146	18 941	21 414	23 877	26 228	22 563
0.05 – 0.1 incl.	61 902	57 123	61 722	62 771	47 855	56 156	65 421	69 130	57 642
0.1 – 0.5 incl.	236 199	227 103	252 317	267 224	203 856	245 534	272 928	295 654	258 261
0.5 - 1 incl.	120 575	118 195	114 367	128 216	95 370	112 677	131 581	146 117	120 747
1 - 5 incl.	415 054	418 958	403 872	408 621	353 472	403 160	465 271	471 645	413 311
5 - 10 incl.	169 580	191 173	226 937	202 446	183 596	213 524	238 699	253 139	231 132
Total	1 058 833	1 062 023	1 113 372	1 122 393	925 860	1 078 718	1 227 710	1 293 142	1 129 037

8) SHP 2022 –Number, installed capacity, production - narrowed categories

Installed Capacity	Number of Plants	Installed Capacity Total (MW)	Total Gross Production (MWh)	
0 – 0.1 MW	937	37	105 586	(Average 40 kW/SHP)
0.1 - 1 MW	411	121	379 009	(Average 295 kW/SHP)
1 - 5 MW	50	120	413 311	(Average 2390 kW/SHP)
5 - 10 MW	10	75	231 132	(Average 7540 kW/SHP)
Total	1408	353	1 129 037	(Average 251 kW/SHP)

9) SHP 0 - 2 MW and 2 - 10 MW for years 2018 - 2022

Number of Plants						
		2018	2019	2020	2021	2022
0 - 2 MW		1 427	1 424	1 405	1 400	1 366
2 - 10 MW		41	41	42	42	42
Installed Capacity MW						
		2018	2019	2020	2021	2022
0 - 2 MW		187	188	187	188	186
2 - 10 MW		165	165	167	166	167
Production MWh						
		2018	2019	2020	2021	2022
0 - 2 MW		479 213	568 243	647 059	684 431	587 359
2 - 10 MW		446 647	510 475	580 651	608 711	541 678

10) New Plants

SHP plants newly commissioned in 2021			
Name of Plant	River	Installed Generation Capacity (MWe)	
SHP Rosice - Bílá voda	Bílá voda		0.00750
SHP Petrovický mlýn	Losinský potok		0.00220
SHP Leděčko	Sázava		0.03700
SHP Karas	Blanický potok		0.02800
SHP Jesenice	Želivka		0.40000
SHP Dubí	Bystřice		0.20100
Total			0.676 MW

SHP Plants Newly Commissioned in 2022			
Name of Plant	River	Installed Generation Capacity (Mwe)	
SHP Kunovice 12	Ostružná, Kunkovický potok		0.02200
SHP Mostky (Květoňov) 181	Kamenice		0.02200
SHP Oslavany I	Oslava		0.07500
SHP Podhora	Teplá		0.02200
Total			0.141 MW



Comments on SPH Statistics

- 1) Two thirds (937) of all 1408 SHP have an installed capacity of up to 0.1 MW. The number of SHP plants with the lowest installed capacity of up to 35 kW has been steadily declining since 2018 and their operation no longer makes economic sense.
- 2) The total installed capacity of all 937 SHP plants up to 0.1 MW is only 38 MW, which is only 10.8% of the total small hydropower.
- 3) The generation of all SHP plants up to 0.1 MW is 105 585 MWh (year 2022), which is only 9.4% of the total small hydropower generation.
- 4) The largest share in the SHP sector is sovereignly held by state-owned or semi-state-owned entities: the state-owned enterprise Povodí and the semi-state-owned ČEZ group operate more than one third of small hydropower in terms of power and production (in total about 120 SHP plants with an installed capacity of about 123 MW).
In the case of the state-owned enterprises Povodí, revenues from the operation of a total of 106 operating SHP plants with a total installed capacity of 56 MW are an important part of their revenues and economic activities (CZK 618 million for 2022 - more than 10% of the total revenues of the Povodí enterprises).
- 5) In the highest power category of SHP (5-10 MW) there are only 10 SHP plants with a total installed capacity of 75 MW, but with an annual production of 202 446 MWh, which is almost double the production of the entire category of SHP up to 0.1 MW (115 886 MWh).
- 6) In the ownership structure of SHP in the power range up to 0.1 MW, natural persons predominate as owners, in the 0.1-1 MW category legal persons predominate, and in the 1-5 and 5-10 MW categories, SHP plants are owned exclusively by legal persons.
- 7) When it comes to natural persons in the ownership structure of SHP, a significant part is made up of original owners or new acquirers of historical sites where hydropower has been used for centuries, especially former grain mills.
In the ownership group of legal persons, the owners of the SHP plants include a variety of entities: Povodí enterprises, the ČEZ group, E.ON, various water supply and sewerage companies, a university, a number of fisheries, waterworks, water treatment plants, functional grain mills, a town and several municipalities, as well as the Cistercian Abbey in Vyšší Brod, which operates a SHP plant at its historic site (see Annex 2).
There are also several (up to ten) companies - legal entities made up of private investors - that own and operate SHP plants. They make up another major share of the entire SHP sector, both in terms of number and installed capacity, each operating on a scale of MW.