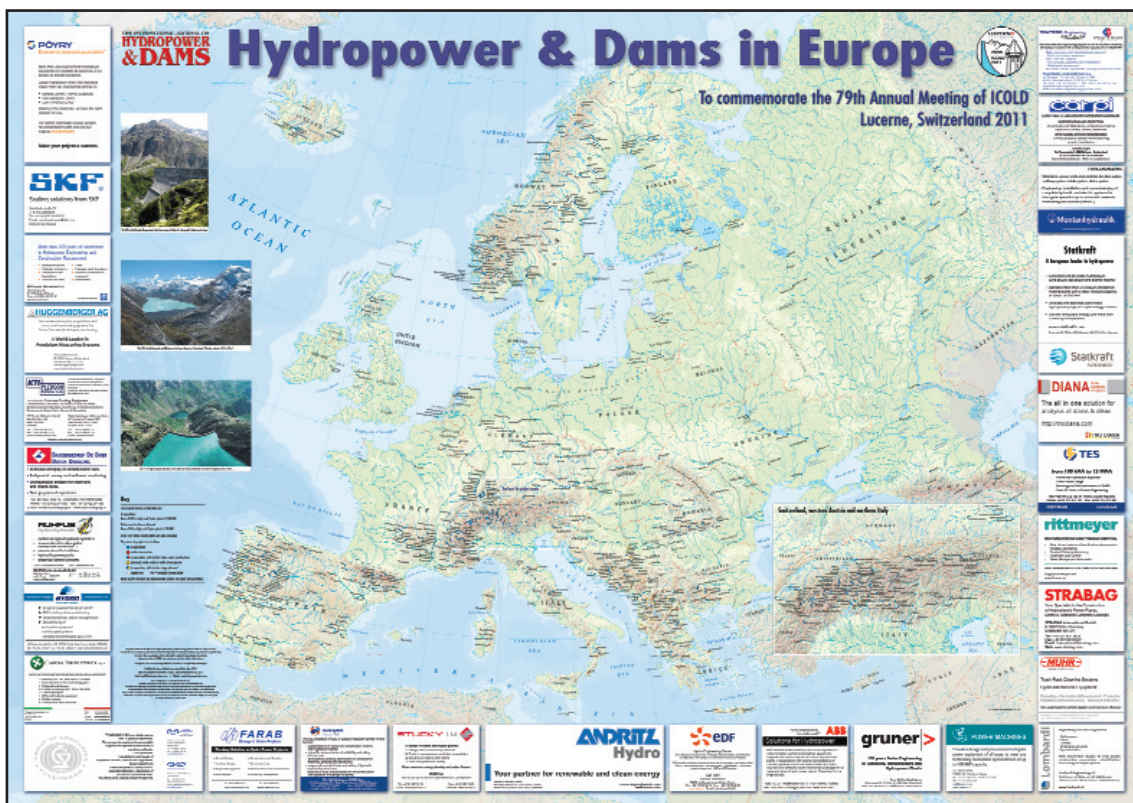


Data for Schemes shown on the Map

# Hydropower & Dams in Europe

Published to commemorate the 79th Annual Meeting of ICOLD  
Lucerne, Switzerland, 2011



The projects shown on our recently published Map are the largest hydro plants, pumped-storage plants and dams in Europe (see Key on map for details). They include projects in operation, under construction and planned, including under study or investigation. As a complement to the Map, basic data about the projects are given here.

We gratefully acknowledge the help of those organizations that provided data and project locations :  
in particular, national committees of ICOLD, government water and energy ministries, consultants, power  
companies, utilities and other developers.

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**HYDROPOWER  
& DAMS**

# Hydropower & Dams in Europe

These Tables complement the Map **Hydropower & Dams in Europe** published recently (May 2011). The Map shows the locations of the following schemes in operation: hydro plants (including pumped-storage plants) of capacity 100 MW or larger, and dams 100 m or higher. For projects under construction and planned, dams 60 m or higher, and hydro plants 50 MW or larger are included. Abbreviations are explained at the end of the Tables. In cases where it was not possible to locate some projects known to meet these criteria, an asterisk in the left hand column indicates that they do not appear on the Map. In these tables, normal type indicates schemes in operation; bold type indicates schemes under construction; and bold-italic type indicates projects that are planned, including under study or under investigation. On the Map, blue, red or yellow dots indicate the status of each project (see Key on the Map).

Dam name (Complex)	Hydro plant or project name (if different)/ PSP dam/ Note	River	Dam height (m)	Dam type	Dam purpose	Year dam complete	Hydro capacity in operation (MW)	Hydro capacity u/c or planned (MW)	Year of initial hydro generation
<b>ALBANIA</b>									
Fierza	Fierza	Tropoja (Drin)	167/ 152	ER	H	1978	500		1978
Koman	Koman	Puke (Drin)	133	ER	H		600		1985
Qyrsaq main dam	Vau Dejës	Shkodra (Drin)	46	TE	H		250		1971
Shkopet	Shkopet	Mat	53	VA/PG	H		24		
Ulza	Ulza	Mat	64	PG	H		25		1958
<b>Ashta</b>	<b>Ashta</b>	<b>Drin</b>						~50	<b>c2012-13</b>
<b>Banje</b>	<b>Banje</b>	<b>Devoll</b>	<b>90-100</b>	<b>ER</b>	<b>M</b>	<b>n/a</b>		<b>60-80</b>	<b>2015</b>
<i>Skavica</i>	<i>Skavica</i>	<i>Drin (Upper)</i>						~350	
<i>Lozhan</i>	<i>Grabovë</i>	<i>Devoll</i>							<i>2017-18</i>
<i>Skenderbegas</i>	<i>Çekin</i>	<i>Devoll</i>							<i>2017-18</i>
	<i>Kaludh</i>	<i>Vjosa</i>						75	
	<i>Dragot</i>	<i>Vjosa</i>						130	
	<i>Kalivaç</i>	<i>Vjosa</i>						90	
	<i>Poçem</i>	<i>Vjosa</i>						50	
	<i>Selenice</i>	<i>Vjosa</i>						60	
*	<i>Bushati</i>	<i>n/a</i>						30-84	
*	<i>(6 HPPs)</i>	<i>Shala</i>						~127.5 total	
*	<i>(for investment)</i>	<i>Osumi catchment</i>						n/a	
<b>AUSTRIA</b>									
<b>Kaunertal</b>									
Gepatsch	Prutz	Faggenbach Kaunertal	153	ER	H	1965	392 180	n/a	
<b>Malta</b>									
Kölnbrein		Malta	200	VA		1977			
Galgenbichl	Galgenbichl PSP Rottau PSP	Malta Lieser, Malta trib's.	50	TE/PG	H	1974	120(T)/ 116(P) 730(T)/ 290(P)		
<b>Reisseck-Kreuzeck</b>									
		Kolbnitz (Reisseck I) <b>Reisseck II PSP</b>					138	<b>430</b>	<b>2014</b>
<b>Sellrain-Silz/Kühtai</b>									
Kühtai	Kühtai 1						287(T)/ 247(P)		
Finstertal		Finstertalbach	149	ER		1980			
Längental	Silz	Inn trib's.	45	TE			500		
		<b>Kühtai 2 PSP</b>					<b>180</b>		
<b>Zemm-Ziller PSP</b>									
Schlegeis	Rosshag	Zemm Bach	131	VA		1971	230(T)/ 240(P)		
Zillergründl	Häusling	Ziller	186	VA		1986	360(T)/ 360(P)		
Eberlaste	Mayrhofen	(Stillup res'r)	28	TE			345		
	Altenwörth	Danube	37	PG	H,N,R		335		
	Greifenstein	Danube	31	PG	H,N,I,R		293		
	Kops	Zufluss III	122	VA/PG	H	1965	247		1969
	Kops II PSP	(upper res Kopsee)			H		450		2009
				VA			135		2007
		<b>Gerlos II (Stage 2) PSP</b>						<b>600 upgrade</b>	
		<b>Hieflau</b>						<b>63 ext'n</b>	<b>n/a</b>
<b>Fragrant group</b>									
		<b>Feldsee II</b>					<b>140</b>	<b>75 ext'n</b>	<b>2009</b>
		<b>Malfontal</b>						<b>65 extension</b>	
		<b>Obervermunt II</b>						<b>160</b>	
		<b>Raneburg</b>						<b>100</b>	
		<b>Koralpe</b>					<i>n/a</i>	<i>pumping</i>	
<b>Kaprun-Salzach</b>									
	Kaprun Hauptstufe Kaprun Oberstufe <b>Limberg II PSP</b>					1955	880 240		1944
Mooser		Kapruner Ache	107	PG	H	1955		<b>480</b>	<b>2011</b>
Drossen		Kapruner Ache	112	VA	H	1955	113		

Dam name (Complex)	Hydro plant or project name (if different)/ PSP dam/ Note	River	Dam height (m)	Dam type	Dam purpose	Year dam complete	Hydro capacity in operation (MW)	Hydro capacity u/c or planned (MW)	Year of initial hydro generation
Limberg		Kapruner Ache	120	VA	H	1951	220		
	Oschenik	Zufluss Fragant	116	ER++	H	1979	108		
	Abwinden-Asten	Danube	36	gated barrage	H		168		
	Aschach	Danube	34	gated barrage	H		287		
	Brandstatt						120		
binational w/Germany	Braunau-Simbach	Inn	32	gated barrage			100		
	Enzingerboden	Stubach trib.	29	PG			128		
	Freudenua	Danube	35	gated barrage	H		172		
binational w/Germany	Jochenstein	Danube	20	gated barrage	H		132		
	Latschau	Trib. III	50				276		
	Luenersee		30	PG	H		232		
	Melk	Danube	29	gated barrage	H		187		
	Ottensheim-Wilhering	Danube	31	gated barrage	H		179		
	Vermunt		53			1931	156		
	Wallsee-Mitterkirchen	Danube	32	gated barrage	H		210		
	Ybbs-Persenbeug	Danube	32	gated barrage	H		237		
	Rodund I						41/198		
	Rodund II						276		19 u/upg'g
	Schwarzach	Salzach					137.6		
*	Kaurnetal						n/a		
*	Imst						n/a		
*	Achensee						n/a		
*	Kirchbichl	Inn	17	gated barrage	H		n/a		
*	Langkampfen	Inn	29	gated barrage	H		n/a		
*	Amlach						n/a		
*	Innsbruck						n/a		
<b>BELGIUM</b>									
Upper, lower dams <i>Eau d'Heure</i>	Coo PSP Plate Taille PSP	Ambliève Plate Taille	51, 52 70	ER PG	H H,N	1972, 1980 1980	1164 136		1972, 1980 1981
<b>BOSNIA-HERZOGOVINA</b>									
Grančarevo	Capljina PSP	Trebišnjica	123	VA	H,C,S,Reg.	1965	432(T)/ 420(P)		1965
	Salakovac	Neretva	70	PG	M		210		
	Jablanica	Neretva	85		M		181.2		
	Grabovica	Neretva					117?		
	Rama	Rama (Neretva)	100	TE	M		160		u/rehab
	Višegrad	Drina	67	PG	M		345		1968
	Trebinje				H		200		~1968
	Bočac						100		2010
	<b>Konjic</b>	<b>Neretva</b>	<b>87</b>	<b>VA</b>	<b>M</b>		<b>114</b>		<b>(delayed)</b>
	<i>Foča</i>	<i>Drina (Upper)</i>						55.5	
	<i>Ustikolina</i>	<i>Drina (Upper)</i>						63	
binational w/ Serbia	<i>Drina cascade</i>	<i>Drina</i>						n/a	
	<i>Glavatičevo</i>	Neretva <sup>(u)</sup>							172
<b>BULGARIA</b>									
<i>Belmeken-Sestrino-Chaira</i>									
	Belmeken PSP	Kriva	98	ER	H		375(T)/ 105(P)		
Stankovi baraki	Sestrino	Kriva	40	ER	H		260		
	Momina Klisura	Kriva			H		120		
Chaira (lower dam)	Chaira PSP	Yadenitsa	85	PG	H		864		
Yadenitsa			100			const'n stopped			
<i>Dospat-Vacha</i>									
	Zankov kamak	Vacha	130	VA	H	2010	85		
Vacha (upper dam)	Orfei PSP	Vacha	144.5	PG	H	1975	160(T)/ 40 (P)		u/comm'g
Krichim/Kritshim (lower)		Vacha	104.5	CB/PG	H	1972	80		
<i>Batak</i>									
Batak dam	Peshtera	Stara Reka	35	TE	H		128		
<i>Arda</i>									
Ivailovgrad					H		108		
Kardzhali	(Kirdjali/ Kardjali)	Arda	103.5	VA	H	1976	106		
Madan		Arda	101	CFRD	H	const'n stopped		46	
Kyustendil		Klokoshnitza	78	ER	S	const'n stopped	0		
<b>CROATIA</b>									
<i>Kosinj</i>	<i>Kosinj</i>	<i>Lika</i>	<b>68</b>	<b>ER</b>	<b>H, reg</b>		<b>50</b>	<b>61.95</b>	
	Senj 1	Lika, Gacka	81	ER	H,C,S,Reg.	1965	216	158	1965
<i>Kosinj, Sedlo, Bakovac</i>	<i>Senj 2</i>	<i>Lika, Gacka</i>			<b>H</b>			<b>342</b>	
<i>Ombla</i>	<i>Ombla</i>	<i>Ombla</i>			<b>H</b>			<b>66.4</b>	
Peruća	Peruća	Cetina	67	ER	C,S,I,H,Reg	1961	486		1961
	Orlovac	Ricina, Mandak, Plovuca			H, C, Reg.	1974	237		1974
3 dams	Velebit PSP	Ričica, Otuča, Opsenica, Zrmanja			H	1984	276(T)/ 240(P)		1984

Dam name	Hydro plant or project name (if different)/ PSP dam/ Note	River	Dam height (m)	Dam type	Dam purpose	Year dam complete	Hydro capacity in operation (MW)	Hydro capacity u/c or planned (MW)	Year of initial hydro generation
Grančarevo (in Bosnia)	Dubrovnik	Trebišnjica	123	VA	H,C,S,Reg.	1965	216		1965
<b>CYPRUS</b>									
Kouris		Kouris	113	TE	I,S	1988	0		
<b>CZECH REPUBLIC</b>									
Dalešice (upper dam)	Dlouhé Stráně I PSP	Divoká Desná	57	ER	H	1995	650		1996c
	Dalešice PSP	Jihlava	100	ER	H,S,R	1979	480		1978c, 2007u
	Orlík	Vltava	91	PG	H	1963	364		1961-62c
	Slapy	Vltava	70	PG	H,R	1957	144		1954-55c
	Lipno I	Vltava	42	PG/TE	H	1960	120		1959c
<b>FINLAND</b>									
	Imatra	Vuoksi	24	PG	H		178		
	Pyhäkoski	Oulujoki	32.4	TE	H		129		
	Isohaara	Kemijoki	12.5	TE	H		106		
	Taivalkoski	Kemijoki	14.5	TE	H		133		
	Ossauskoski	Kemijoki			H		124		
	Petäjaskoski	Kemijoki	20.5	TE	H		172		
	Valajaskoski	Kemijoki			H		101		
	Pirttikoski	Kemijoki	26	TE	H		152		
	Seitakorva	Kemijoki	24-17	TE	H		130		
<b>FRANCE</b>									
Bort-les-Orgues	Bort-les-Orgues	Dordogne	119	PG			235		
Grand'Maison	Grand'Maison PSP	Eau d'Olle	140	TE/ER	H		1690		
Monteynard	Monteynard	Drac	135	VA			366		
Roselend	Bâthie, La	Doron de Roselend	150	VA/CB	H		546		
Sarrans	Sarrans	Truyère	113	PG	H		183		
Sautet, Le	Sautet, Le	Drac	126	PG/VA	H		76.5		
Serre-Ponçon	Serre-Ponçon	Durance	123.5	TE	H		370		
Tignes	Les Brévières	Isère	160	VA	H		96		
Vouglans	Vouglans	Ain	130	VA	H		285		
Marèges	Marèges	Dordogne	90	VA			150		1935
	Saint-Pierre de Marèges	Dordogne					122		1988
	Super-Bissorte PSP	Bissorte	65	PG	H		742.3		
	Aigle, L'	Dordogne	92	PG/VA	H		360		
	Aston	Aston					104		
Barthe, La	Brommat	Truyère	72	VA	H		406		
	Chastang, Le	Dordogne					293		
Flumet, Le	Cheylas, Le	Flumet	18	TE	H		485		
	Coche, La	Secheron	35	ER	H		320		
	Combe d'Avrieux	Arc					123		
	Couesque	Truyère					119		
Espinasses	Curban	Durance	23	TE	H		139		
	Fessenheim	Rhine side canal					175		
binational w/Germany	Gambsheim	Rhine side canal	15	TE/ER			96		
	Gerstheim	Rhine side canal					140.5		
	Hermillon	Longefan					115.6		
	Kembs	Rhine side canal	27	gated barrage	H		153.7		
	Malgovert	Isère					297		
	Marckolsheim	Rhine side canal	22	gated barrage	H		156.2		
	Montahut	Jour (Le)					103.4		
Monnes	Montéziec PSP	Plane	61	TE/ER	H		910		
Palisse, La	Montpezat	Fontolière	57	VA	H		131.8		
Escale, L'	Oraison	Durance	29	gated barrage	H		187		
	Ottmarsheim	Rhine side canal		gated barrage			156		
	Passy	Arve					104		
Villefort	Pied-de-Borne	Altier	70.5				109.4		
Villefranche de Panat	Pouget, Le	Alrance	17.1				446.9		
	Pragnières	Gave de Pau					188.9		
Cap de Long	Rance, La	Rance	85	gated barrage			240		
Aigueblanche	Randens	Arc	23				124.2		
Marquisades, Les and St. Nicolas	Revin PSP	Faux	40	TE/ER	H		808		
	Rhinau	Rhine side canal	18	gated barrage			167.8		
Pont des Chevres	Saussaz II, La	Arc	14.5				145.4		
Saulce	Sisteron	Durance	11.7				214		
	St-Chamas	Sea					159		
	Ste-Croix	Verdon	95	VA	H		132.3		
	St-Estève	Canal Durance					141		
	St-Etienne-Cantalès	Cere					106.5		
Chambon, Le	St-Guillaume II	Romanche	137	PG	H		116		
	St-Pierre-Cognet	Drac					101		

Dam name	Hydro plant or project name (if different)	River	Dam height (m)	Dam type	Dam purpose	Year dam complete	Hydro capacity in operation (MW)	Hydro capacity u/c or planned (MW)	Year of initial hydro generation
	Strasbourg	Rhine side canal		gated barrage			148		
	Villardin						357		
	Vogelgrün	Rhine side canal		gated barrage			140.5		
<i>binational w/ Switz'd in Switzerland</i>	Vallorcine						190		
<i>binational w/Germany</i>	La Bataiaz						170		
	Iffezheim		25	TE/ER			108		
	Mont Cenis, Le	(serves 2 HPPs) Cenise	120	TE/ER		1969			
	Avignon	Avignon+Sauveterre	22	gated barrage			178		
	Logis-Neuf	Logis-Neuf					215		
	Beauchastel	Beauchastel	23	gated barrage			198		
	Bourg-lès-Valence	Bourg-lès-Valence	25	gated barrage			180		
	Caderousse	Caderousse	25	gated barrage			156		
	Donzère-Mondragon	Bollène	32	gated barrage			348		
	Génissiat	Upper Rhône	104	PG			420		
	Montélimar	Châteauneuf-du-Rhône	26	gated barrage			295		
	Péage de Roussillon	Sablons	26	gated barrage			160		
	Saint-Vallier	Gervans	22	gated barrage			120		
	Vallabrègues	Beaucaire	26	gated barrage			210		
	Castillon	Verdon	100	VA	H.I.R.	1948	<100		
	Laparan	Aston	106	VA	H	1985	39		
<b>Rizzanese</b>				<b>RCC</b>				<b>54</b>	<b>2011</b>
	<i>Romanche-Gavet</i>							<b>92</b>	
<b>GERMANY</b>									
	Leibis-Lichte	Lichte	102	PG	S,C,H	2005	0.8		
	Rappbode	Rappbode	106	PG		1959	6		
	Schluchsee	Schwarza	64	PG		1932	100		
	Lower dam	Markersbach PSP	Great Mittweida	ER++	H	1979	1050(T)/ 1140(P)		
	Hornberg (upper dam)	Wehr PSP	Wehra	ER++	H	1974	980(T)/ 990(P)		
		(Hotzenwald/Hornbergstufe)							
		Waldeck I PSP	Eder				146(T)		
upper dam	Waldeck II PSP	Eder	56.5	ER++	H	1974	480(T)/ 476(P)	<b>u/refurb</b>	
upper dam	Säckingen PSP	Rhine	35	ER++	H		370(T)/ 298(P)		
		<i>(binational w/Switz'd)</i>							
upper dam	Hohenwarte II PSP	Saale	30	PG	H	1963	320(T)/ 336(P)		
lower dam	Goldisthal PSP	Schwarza	69	ER++	H		1060(T)/ 1100(P)		
	Erzhausen PSP						220(T)/ 230(P)		
	Geesthacht PSP						120(T)/ 96(P)		
	Happurg PSP	Danube					160(T)/ 126(P)		
	Häusern PSP						145(T)/ 116(P)		
	Koepchenwerk Herdecke PSP						153(T)/ 154(P)		
	Langenprozelten						164(T)/ 154(P)		
	Rönkhausen PSP						140(T)/ 140(P)		
	Waldshut PSP						176(T)/ 88(P)		
	Witznau						240(T)/ 140(P)		
Eggbergbecken (upper dam of PSP)			30	ER	H	1966	360		
upper dam	Niederwartha PSP	Silberbach	42	TE	H	1930	120(T)/ 120(P)		
	Schwarza	Schwarza	43	PG	H	1931	220		
	Witznau PSP	Albbecken PSP	Schwarza	49	PG	1943	150		
<i>binational w/ France</i>	Iffezheim	Rhein	25	TE/ER	H		109.2		
<i>binational w/ France</i>	Gamsheim	Rhein	15	TE/ER	H		100		
<i>binational w/ Switz'd</i>	Ryburg-Schwörstadt	Rhein			H		144		
<i>binational w/ Austria</i>	Jochenstein	Donau			H	1956	145		
	Jettenbach-Töging	Inn			H		102.2		
<i>binational w/ Austria</i>	Simbach-Braunau	Inn			H		100		
	Walchensee	Isar			H		124.5		
<i>binational w/ Switz'd</i>	Laufenburg	Rhein			H		110		
	Wendefurth PSP				H		80		
	Reisach PSP (part of Jansen group)						99(T)		
	<b>Atdorf PSP</b>	(upper res Hongbergbecken II)			<b>H</b>		<b>1400</b>		
	<b>Waldeck III PSP</b>	<b>Eder</b>						<b>300</b>	<b>2016</b>
<b>GREECE</b>									
	Kremasta	Acheloos	165	TE	H,C	1965	437.2		1966
	Polyphyto	Aliakmon	112	ER	H,I,S,C	1974	375		1974
	Kastraki	Acheloos	96	TE	H,I,S	1969	320		1969
	Sfikia PSP	Aliakmon	82	ER	H	1985	315		1985
	Thissavros PSP	Nestos	170	ER	H,I,C	1996	381		1998
	Ilarion	Aliakmon	130	TE	H,S,I	2007		<b>157.5</b>	n/a
	Messochora	Acheloos	150	CFRD	H	1996		<b>161.6</b>	n/a
	Evinos	Evinos	124	TE	S	2001	0.82		
	Mornos	Mornos	139	TE	S	1979	0		
	Smokovo	Sofaditis	109	ER	I,H	1996	10		1996?
	Pighai Aouu	Piges Aouu/ Pigai Aouos	Aoos	78	ER	H	1989	210	1991
	Tavropos	Plastira	Tavropos	83	VA	H,I,S,R	1959	130	1962
	Pournari	Arachthos	87	TE	H	1981	300		1981
	Platanovrissi	Nestos	95	RCC (PG)	H,I	1998	116		1999



Dam name	Hydro plant or project name (if different)	River	Dam height (m)	Dam type	Dam purpose	Year dam complete	Hydro capacity in operation (MW)	Hydro capacity u/c or planned (MW)	Year of initial hydro generation
Assomata		Aliakmon	52	TE	H,I	1985	108		1985
<b>Setta-Manikia</b>		<b>Manikia</b>	<b>60</b>	<b>ER</b>	<b>S</b>	<b>n/a</b>		<b>n/a</b>	
<b>Sykia</b>		<b>Acheloos</b>	<b>145</b>	<b>ER</b>	<b>H,I</b>			<b>126.5</b>	
<b>Asteriou (Peiros-Parapeiros)</b>		<b>Peiros</b>	<b>75</b>	<b>TE</b>	<b>S</b>			<b>0</b>	
<b>Triantafyllia</b>		<b>Triantafyllia</b>	<b>75</b>	<b>ER</b>	<b>S,I</b>				
<b>Valsamiotis</b>		<b>Valsamiotis</b>	<b>66</b>	<b>RCC (PG)</b>	<b>S,I</b>	<b>2011</b>	-		
<b>Aposelemis</b>		<b>Aposelemis</b>	<b>62</b>	<b>TE</b>	<b>S</b>		-		
<b>ICELAND</b>									
Búrfell	Búrfell	Thjórsá	33	ER	H		270		
Hrauneyjafoss	Hrauneyjafoss	Tungnaá	15	ER	H		210		
Sigalda	Sigalda	Tungnaá	42	ER	H		150		
Blanda	Blanda	Blanda	44	TE	H		150		
Sultartangi	Sultartangi	Thjórsá	23	TE	H		120		
Kárahnjúkar	Fljótsdalur	Jökulsá á Brú	198	CFRD	H		690		2007
<b>Spordalda</b>	<b>Búdarháls</b>	<b>Tungnaá</b>	<b>24</b>	<b>ER</b>	<b>H</b>			<b>100</b>	<b>2013</b>
	<b>Hvammur</b>	<b>Thjórsá</b>			<b>H</b>			<b>~80</b>	
	<b>Holt</b>	<b>Thjórsá</b>			<b>H</b>			<b>~50</b>	
<i>Heidartangi</i>	<i>Urriðafoss</i>	<i>Thjórsá</i>	<i>n/a</i>	<i>n/a</i>	<i>H</i>			<i>130</i>	
<b>IRELAND, Rep. of</b>									
	Turlough Hill PSP	n/a	34	TE	H	1973	292		
<b>ITALY</b>									
Alpe-Gera		Cormor	160			1964			
Anapo PSP							600		
Ancipa		Troina	104			1952			
Cancano (Cancano II)		Adda	125						
Chiotas	Entrácque-Chiotas PSP	Bucera	120					1184	
	Edolo PSP							1016	
Forte Buso	Paneveggio	Travignolo	105						
Frera		Belviso	138						
Lago Delio	Roncovalgrande PSP							1040	
Lumiei (Maina di Sauris)		Lumiei	128						
Nuraghe Arrubiu		Flumendosa	112						
Pieve di Cadore	Soverzène	Piave	108					210	
Place Moulin	Valpelline	Buthier/Valpelline	143					130	
Ponte Cola		Toscolano	122					137	
	Presezano PSP							1000	
Ridracoli		Bidente	101			1982			
	San Fiorano PSP							600	
Santa Giustina		Noce	147						2008
Speccheri		Leno Vallarsa	103						
Val Noana		Noana	126						
Beauregard	Avisè	Dora di Valgrisenche	132		H			126?	
	Venaus							240	
	Mese							167.5	1927, 2006-08
*	Lauzada							188	
	Sondrio							144	
	Gargnano							137	
	Lana							120	
*	Cardano							126	
	Malga Boazza <sup>(u)</sup>	Chiese <sup>(u)</sup>						220	
	Sta. Massenza I							350	
	Torbole							124	
	S. Floriano Egna							135	
	Fadalto							210	2008
*	Complago							156	
	Bargi							330	
*	Taloro <sup>(u)</sup>	Taloro						240	
	Galletto							210	
	Vomano	Provvidenza						141	
	Vomano	San Giacomo sul Vomano						183	
	Vomano	Montorio						110	
*	Capriati							113	
	Cecita dam	Mucrone I		Mucrone				101	
*		Timpagrande						160	2007
	Orichella dam	Orichella		Ampollino				160	2007
*		Taio						105	
*		Giorenza						105	
	Lago Venina	Venina		Venina				150	
*		Rosone						200	2008
*		Calicano						612	2005
*	Cà Selva	Caseiva/ Ca'selva	111		H				
*	Canontiera	Tirso	100.		S,I,H			0	
*	Pertusillo	Agri	101		S,I				
*	Salto	Salto	108		H				

Dam name (Complex)	Hydro plant or project name (if different)/ PSP dam/ Note	River	Dam height (m)	Dam type	Dam purpose	Year dam complete	Hydro capacity in operation (MW)	Hydro capacity u/c or planned (MW)	Year of initial hydro generation
* Torre Bianca	Dam in Switzerland	Reno di Lei	24	TE	I,S	1997	0		
Valle di Lei			141	VA		1961	133		
* Vajont		Vajont	was 262 (destroyed)		H		0		
Cameli		Esaro	118				0		
Chiáuci		Trigno	78						
Cumbidanovu		Cedrino-Alto Cadrino		60				0	
Melito	Gimigliano	Melito	108		S,I		0		
Menta		Menta	86	ER++					
Monte Nieddu		Flumendosa	78	PG(RCC)					
* Lago Venina	Laives PSP							300	
<b>KOSOVO</b>									
Gazivode		Ibar	107	ER	H	1981	35		
<b>LATVIA</b>									
Riga		Daugava		TE	H		402		1978
Kegums 1		Daugava			H		75		1939
Kegums 2		Daugava			H		192		1979
Plavinas		Daugava		TE/PG	H		870		1965
<b>LITHUANIA</b>									
Lower dam	Kruonis PSP	Nemunas	20	TE	H		800		
	Kaunas	Nemunas	20	TE	H		101		
<b>LUXEMBOURG</b>									
Mont St.Nicolas (upper)	Vianden PSP	Our	35	ER	H	1964	1096(T)/ 850(P)	~200	
<b>MACEDONIA, FYR</b>									
Kozjak (Kozyak)		Treska	126	TE/ER	H,S,Ret.	2003	80		
Mavrovo	Vrutok	Mavrovska	62	TE	H,I	1952	172		
Tikves		Crna Reka	113.5	TE/ER	H,I	1968	116		
Shpilje		Crn Drim	112	TE/ER	H	1969	84		
Knezhevo		Zletovica	82	ER+	S,I,H	2010	n/a		
Sveta Petka	Sveta Petka	Treska	66	VA	H	2012	36.4		
Tresonche	Boskov Most	Jadovska Reka	>33	ER	H	2016		68	
Vardar Valley	Veles	Vardar	>70	PG	H	~2020		93	
Vardar Valley	Gradec	Vardar	>29	PG/emb.	H	~2020		54.6	
Chebren	Chebren PSP	Crna Reka	192.5	VA	H,I	2018		333(T)/ 347(P)	
Galishte		Crna Reka	141.5	ER	H,I	2018		193.5	
Lukovo Pole		Mavrovska	78.5	ER	H	2015		n/a	
Rechani		Orizarska Reka	75	ER	S,H	2015		n/a	
Konjsko		Konjska Reka	75	ER	H,I	2015		n/a	
<b>MONTENEGRO</b>									
Mratinje	Piva	Piva	220	VA	H	1975	342		
* Komarnica		Komarnica						168 <sup>(a)</sup>	
Morača cascade									
Andrijevo		Morača	150	VA				127.4	
Raslovici		Morača	59	PG				37	
Milunovici		Morača	61.8	PG				37	
Zlatica		Morača	62.5	PG				37	
<b>NETHERLANDS</b>									
Afsluitdijk	(very large volume dam)		19	TE	C,S	1932	0		
Brouwersdam	(very large volume dam)		36	TE	C,S	1972	0		
Haringvlietdam	(very large volume dam)		24	TE	C,S	1970	0		
Lauwerszee	(very large volume dam)		23	TE	C	1969	0		
Oosterscheldekering	(very large volume dam)		50	TE	C	1986	0		
<b>NORWAY</b>									
Totak-Vågi	Vinje		13	concrete	H	1958	300		1964c
Songa Sperredam	Songa		47	ER	H	1962	120		1964c
Vinjevatn	Tokke		22	concrete	H	1960	430		1961c
Manddøla Fyllingsdam	Sundsborn		26.5	ER	H	1969	111		1970c
Breivatn Betongdam	Hartdøla		14	concrete	H	1959	104		1958c
Grottevatn	Mår		14	concrete	H	1918	165		1948c
	Mår				H			460	n/a
Solbergfoss	Solbergfoss II				H		100		1985c
Rånåsfoss	Rånåsfoss		17.5	concrete	H	1900	100		1921c
Vinsteren	Øvre Vinstra		12.2	concrete	H	1951	140		1959c
Øyangen Hoveddam	Nedre Vinstra		9.5	concrete	H	1960	308		1953c
Tunhovd Fyllingsdam	Nore I		37	ER	H	1920	204		1928c

Dam name	Hydro plant or project name (if different)/ PSP dam/ Note	River	Dam height (m)	Dam type	Dam purpose	Year dam complete	Hydro capacity in operation (MW)	Hydro capacity u/c or planned (MW)	Year of initial hydro generation
Øvre Kalvvatn	Hove'm	Kolsik	70	ER	H	1979	128		1979c
Røssvatn	Øvre Røssåga		20	ER	H	1957	160		1961c
Fallfordsdammen	Nedre Røssåga		19	concrete	H	1956	250		1955c
Akersvatn	Rana		53	ER	H	1968	500		1968c
Strandavatn	Fyllingsd'm	Hol I (Urunda)	40	ER	H	1955	97		1954c
Varaldsetvatn	Hol I (Votna)		8.6	concrete	H	1942	90		1949c
Ustevatn	Nes		5.5	concrete	H	1965	250		1967c
Nygardsvatn	Usta		10	concrete	H	1965	184		1965c
Slæddovagjavri	Kobbelv		5	concrete	H	1987	300		1987c
Grønndalsdammen,	Tunnsjødal		18	ER	H	1962	176		1963c
	Tunnsjødal								
Riskallsvatn	Naddvik		44	ER	H	1986	112		1987c
Storglomvatn	Svartisen		125	ER	H	1997	350		1993c
	<b>Svartisen</b>				<b>H</b>			<b>250</b>	<b>2010c</b>
Låmivatn	Sperredam 3	Lomi	5.3	masonry	H	1981	120		1979c
Tunsbergdalsvatn	Leirdøla		43	ER	H	1978	110		1978c
Styggevatn	Jostedal		56	ER	H	1990	288		1989c
Sisovatn	Dam Sør	Siso	15	ER	H	1972	170		1968c
Hyttfossdammen	Bratsberg		18	concrete	H		110		1977c
Vessingsjø	Hoveddam	Nea	26	concrete	H	1959	175		1960c
Iptovatn	Hoveddam	Skjomen	7.5	concrete	H	1974	300		1973c
Vatndalsvatn	Holen I+II		123	ER	H	1984	230		1981c
Botsvatn	Hoveddam	Brokke	47	ER	H	1976	330		1964c
Urevatn	Holen III		40	ER	H	1997	160		1987c
Oddatjørn	Saurdal	PSP	142	ER	H	1986	640		1985c
Storvatn			100	ER	H				n/a
Gausvatn	Finndøla		2.6	concrete	H	1971	108		1972c
Homstølvatn	Hoveddam	Tonstad	36.1	ER	H	1968	960		1968c
	<b>Tonstad PSP</b>				<b>H</b>			<b>960</b>	<b>n/a</b>
Nesjen	Hoveddam	Solhom	50	ER	H	1968	200		1974c
Lundevatn	Åna-Sira		12	concrete	H	1970	150		1971c
Deg	Hoveddam	Tjørhom	92	ER	H	1970	120		1973c
	<b>Tjørhom</b>				<b>H</b>			<b>100</b>	<b>n/a</b>
Svartevatn	Duge	PSP	129	ER	H	1976	200		1979c
Stølsvatn,	Matre	M	19	ER	H	1971	150		1962c
Blådalsvatn	Hoveddam	Blåfalli III	52	ER	H	1963	100		1968c
Fjellhaugvatn	Blåfalli	Vik	52	ER	H	1960	230		2007c
Viddalsvatn	Fyllingsd'm	Aurland I	96	ER	H	1971	840		1973c
Nyhellerivatn	Hoveddam	Aurland III	84	ER	H	1979	270		1979c
Eldrevatn	dam 1	Borgund	5.5	concrete	H	1973	212		1974c
Torolmen	Hoveddam	Tyin	8	concrete	H	1935	374		2004c
Skålavatn	Hoveddam	Skagen	12.5	concrete	H	1959	270		1959c
Litle Tjodanvatn	Tjodan		19	concrete	H	1984	110		1985c
Strandavatn	Lysebotn		9	TE	H	1954	210		1953c
	<b>Lysebotn II</b>				<b>H</b>			<b>400</b>	<b>n/a</b>
Mysevatn	Hoveddam	Mauranger	58	ER	H	1973	250		1974c
Sandsavatn	Kvilldal		9	concrete	H	1981	1240		1981c
Suldalsvatn	Hysten		10	concrete	H	1980	160		1980c
Røldalsvatn	Suldal I		10	concrete	H	1964	160		1965c
Valldalsvatn	Røldal		93	ER	H	1965	160		1966c
Ringedalsvatn	Oksla		34	masonry	H	1918	200		1980c
Øvre Tyssevatn	dam 1	Tysso II	7	wood	H	1974	224		1967c
Rembesdalsvatn	Hove.	Sy-Sima	43	ER	H	1980	620		1981c
Langvatn	Hoveddam	Lang-Sima	57	ER	H	1981	500		1980c
Zakariasvatn	Tafjord 4		90	concrete	H	1969	110		1968c
Grøttavassdammen	Grytten		14	ER	H	1974	140		1975c
Storlivatn	Sønnå	H	30	concrete	H	1930	212.4		2008c
Askjelldalsvatn	Evanger		34	ER	H	1975	330		1969c
Gjevilvatn	Løsmasseterskel	Driva	1	ER	H	1973	140		1973c
Reinsvatn	Aura		23.5	ER	H	1964	290		1953c
	<b>Aura II A2</b>				<b>H</b>			<b>420</b>	<b>n/a</b>
Stølsvatn	Hoveddam,	Steinsland	50	ER	H	1980	150		1981c
	Modalen								
Follsjø	Trollheim		74	ER	H	1969	130		1968c
Virdnejavri	Alta		145	concrete	H	1987	150		1987c
Altevatn	Innset		35	ER	H	1960	102		1960c
Innsetvatn	Straumsmo		16	concrete	H	1960	130		1966c
Dokkfløyvatn	Torpa		86	ER	H	1989	150		1989c
Storefossen	Dale		19.1	masonry	H	1927	150		1927c
Skardfoss	Vemork		17	concrete	H	1961	204		1971c
Vamma	Vamma		38	concrete	H	1918	212		1915c
Inlet in tailrace tunnel	Suldal II				H		150		1967c
Beiholen	Steinsfoss		18	concrete	H	1958	110		1957c
Solbergfoss	Solbergfoss I		45	concrete	H	1905	108		1924c
Inlet in tailrace tunnel	Såheim				H		189		1915c
	Myster				H		107		1987c
Hunderfoss	Hunderfossen		16	concrete	H	1905	112		1963c
Fellesanlegget	Fellesanlegget	Kykkelsrud-	23	concrete	H	1905c	190		1963c
	Kykkelsrud-Fossumfoss	Fossumfoss							



Dam name	Hydro plant or project name (if different)/ PSP dam/ Note	River	Dam height (m)	Dam type	Dam purpose	Year dam complete	Hydro capacity in operation (MW)	Hydro capacity u/c or planned (MW)	Year of initial hydro generation
Kvernevatn Hoveddam	Rendalen I				H		94		1971c
	<b>Rendalen II</b>				<b>H</b>			<b>100</b>	<b>2012c</b>
	Skjerka		15	concrete	H	1953	96		1997c
	Kjøsnestford				H		83		2010c
	<b>Hemsil III</b>				<b>H</b>			<b>90</b>	<b>n/a</b>
	<b>Skjerka</b>				<b>H</b>			<b>100</b>	
	<b>Hol IV-Rud PSP</b>				<b>H</b>			<b>270</b>	
	<b>Sjoa</b>				<b>H</b>			<b>50</b>	
	<b>Sauland II, Skogsåa</b>				<b>H</b>			<b>51</b>	
	<b>Rosten</b>				<b>H</b>			<b>86</b>	
	<b>Øyane</b>				<b>H</b>			<b>64</b>	
<b>Nedre Otta (Pillarguri)</b>				<b>H</b>			<b>94,8</b>		
<b>Leikanger</b>				<b>H</b>			<b>77</b>		
<b>Hyen</b>				<b>H</b>			<b>60</b>		
<b>POLAND</b>									
Zarnowiec PSP	upper	Piasnice	18	TE	H		716(T)		
Porabka-Zar PSP	lower	Sola	37	PG	H,R		550(T)		
Wloclawek		Vistula	24	TE	H,R,N		162		
Zydowo PSP	lower	Radew, natural lake	8	weir	H,R		152(T)		n/a
Solina PSP		San	82	PG	H,C,R		137		
<b>PORTUGAL</b>									
Cabril		Zêzere	132	VA	H	1954	108		
Castelo do Bode		Zêzere	119	VA/PG	S,H,C	1951	159		
Paradela		Cávado	112	ER	H	1956			
Alto Lindoso		Lima	110	VA	H	1992	630		
Picote	binational	Douro	100	VA	H	1958	195		
Venda Nova dam	Venda Nova PSP	Rabagão	97	VA	H	1951			
	Vila Nova (Venda Nova I)					1951	144		
	Venda Nova II PSP				2005	192(T)/ 192(P)			
Alqueva I		Guadiana	96	VA	I,S,H	2004	256(T)/ 214(P)		
Alto Rabagão PSP		Rabagão	94	VA/PG	H	1964	68(T)/ 68(P)		
Vilarinho das Furnas PSP		Homem	94	VA	H	1972	125(T)/ 79(P)		
Agueira PSP		Mondego	89	VA	H	1981	336(T)/ 336(P)		
Bemposta	binational	Douro	87	PG	H	1964	240		
Miranda (Miranda I)	binational	Douro	80	CB	H	1960	180		
Miranda II	binational					1995	189		
Varosa		Varosa	76	VA	H	1976	25		
Caniçada		Cávado	76	VA	H	1954	62		
Salamonde		Cávado	75	VA	H	1953	42		
Torrão PSP		Tâmega	69	PG	H	1988	140(T)/ 140(P)		
Odeleite		Odeleite	65	CFRD	S,I	1997	0		
Pracana		Ocreza	65	CB	H	1951	41		
Fronhas		Alva	62	VA	H,C	1985	0		small
Tabuaço	(fed by Vilar dam)	Távora	58	ER	H	1965	58		
Carrapatelo		Douro	57	PG	H	1971	201		
Pocinho		Douro	49	PG	H	1983	186		
Valeira		Douro	48	PG	H	1976	240		
Fratel		Tejo	43	PG	H	1974	132		
Régua		Douro	42	PG	H	1973	180		
Crestuma-Lever		Douro	25	gate barraage	H	1985	117		
<b>Alqueva II</b>		<b>Guadiana</b>						<b>256(T)/ 220(P)</b>	<b>2012</b>
<b>Baixo Sabor</b>		<b>Sabor</b>	<b>123</b>	<b>VA</b>	<b>H, div.</b>			<b>170</b>	
<b>Bemposta II</b>	binational							<b>191</b>	
<b>Odelouca</b>		<b>Odelouca</b>	<b>76</b>	<b>TE</b>	<b>S</b>		<b>0</b>		
<b>Picote II</b>	binational	Douro						<b>248</b>	
<b>Ribeiradio</b>	<b>Ribeiradio+Ermida</b>	<b>Vouga</b>	<b>75</b>		<b>H,M</b>			<b>77+7.6</b>	<b>2014</b>
<b>Salamonde II</b>		<b>Cávado</b>						<b>231(T)/ 204(P)</b>	<b>2016</b>
<b>Venda Nova III PSP</b>	<b>Rabagão</b>						<b>736(P)</b>	<b>2015</b>	
<b>Foz Tua</b>		<b>Tua</b>	<b>108</b>	<b>VA</b>				<b>324</b>	<b>2015</b>
<b>Pinhosão PSP</b>		<b>Vouga</b>	<i>n/a</i>					<b>77</b>	
<b>Girabolhos PSP</b>		<b>Mondego</b>	<i>n/a</i>					<b>72</b>	
<b>Alvito</b>		<b>Ocreza</b>	<i>n/a</i>					<b>48</b>	
<b>Almourol</b>		<b>Tejo</b>	<i>n/a</i>					<b>78</b>	
<b>Alto Tâmega PSP</b>									
<b>Paradela II</b>		<b>Cávado</b>						<b>318(P)</b>	<b>2016</b>
<b>Tâmega</b>		<b>Tâmega</b>	<i>n/a</i>	<b>VA</b>				<b>160</b>	
<b>Gouvães</b>		<b>trib. Tâmega</b>	<i>n/a</i>					<b>880 (T/P)</b>	
<b>Daivões</b>		<b>Tâmega</b>	<i>n/a</i>					<b>114</b>	
<b>Vidago</b>		<b>Tâmega</b>	<i>n/a</i>					<b>90</b>	
<b>ROMANIA</b>									
Vidraru	Corbeni	Arges	166	VA	H	1965	220		
Bradisor	Bradisor	Lotru	62	VA	H		115		
Oasa	Galceag	Sebes	91	ER	H,C,R	1979	150		
Vidra	Lotru Ciunget	Lotru, Sad, Oltet, Sebes	121	ER	H	1973	510		

Dam name	Hydro plant or project name (if different)/ PSP dam/ Note	River	Dam height (m)	Dam type	Dam purpose	Year dam complete (MW)	Hydro capacity in operation (MW)	Hydro capacity u/c or planned generation	Year of initial hydro
(Iron Gates I)	Portile de Fier I	Dunarea (Danube)	60	PG/TE	H,N		1166.4		
(Iron Gates II)	Portile de Fier II+Gogosu	Dunarea (Danube)	35	PG/TE	H,N		287.6		
Gura Apelor	Raul Mare/ Retezat	Raul Mare	168	ER	H		335		
	Ruieni						140		
Cerna	Motru	Cerna	110	ER	S,H,I	1979	50		
	Tismana (Cadere Motru)		48	TE			106		
Dragan	Remeti	Dragan	120	VA	H,C,I	1987	100		
Izvorul Muntelui	Stejaru (D. Leonida)	Bistrita	127	PG	H,S	1961	210		
		Doftana	108	VA	S,H,I	1971	10		
Pecineagu	Ciabucet	Dambovita	105	ER	S,H,I	1984	64		
Riusor	Leresti	Riul Targului	117	ER	S,H,I	1987	19		
Siriu	Nehoiasu (Cadere Siriu)	Buzau	122	ER	C,I,S,H,R	1994	42		
Surduc	Nehoiasu (Cadere Siriu)	Bisca Mare	22	ER			166		
Fintanele	Mariselu	Somesul Cald	92	ER	H,C	1978	220.5		
Scorilo	Poiana Marului	Sucu Olteana	125	VA	H			80	
Poiana Marului		Bistrita Marului	125	ER	H,S		0.6		
<b>Rastolita</b>	<b>Rastolita</b>	<b>Rastolita</b>	<b>105</b>	<b>CFRD</b>	<b>H,S</b>		<b>35</b>		
<b>Runcu</b>	<b>Runcu</b>	<b>Mara</b>	<b>91</b>	<b>ER</b>	<b>H,S</b>		<b>16.4</b>		
<b>RUSSIAN FEDERATION</b>									
*	Agvaliysk + Zirani	Agvaliysk + Zirani	n/a				n/a		
	Cheboksary	Cheboksary					1404		
	Chirkey	Chirkey	233	VA	H,I,C		1000		
	Irganai	Aivarsko ye Koysu	110	TE	H		400		
	Kama	Kama					522		
	Lower Kama	Nizhne-Kamskaya					1248		
	Miatlinsk	Miatly/ Miatli					220		
	Nizhne Novgorod	Lower Novgorod/ Gorky					520		
	Rybinsk	Rybinsk					346		
	Saratov	Saratovskaya	40	TE/PG	H,N,C		1360		
	Tsimlyansk	Tsimlyansk					209		
	Uglich	Uglich					110		
	Volgograd	Volgogradsk/ Volga	45	TE/PG	H,N,C,F		2673		
	Kuybishev dam	Zhigulev (Zhiguli/Samara/Volzskaya)			H		2320	~180 (u/refurb)	
		Votkinsk					1020		
		Zagorsk-1 PSP	35	TE	H		1200		
	Zaramag	Ardon	79	TE	H		374		2006
	Zelenchuk	Kuban	18	TE	H		320		2000
		Kuban-2					184		
		Lesogor (Lesogorsk)					106		
		Narva					125		
		Pavlovka					166		
		Svetogor (Svetogorsk)					118		
		Svir Upper					160		
		Svir Lower					103		
		Tuloma Upper (Verhne Tulomskaya)					268		
*		Krivoporozhskaya (Krivov Porog)	Kem				180		
*		Niva-3					156		
*		Serebryan-1					205		
*		Serebryan-2					150		
*		Teriberka Upper (Verhne Teriberskaya)					130		
*		Kizel-3					118		
*		Nizhne-Cherekskaya cascade					1200 total		
*		Raukhiala	Vuoksa				108		
*		Krasnogorsk Upper+Lower					100 total?		
	<b>St. Petersburg Barrier</b>				<b>C</b>				
		<b>Zagorsk-2 PSP</b>	<b>Kunya</b>	<b>16</b>	<b>TE</b>	<b>H</b>		<b>840</b>	
	<b>Leningradsk PSP</b>	<b>Shapsha River PSP</b>	<b>Shapsha</b>					<b>1560(T)/ 1760(P)</b>	
*		<b>Vladimirsk PSP</b>							
*		<b>Volokolam PSP</b>							
*		<b>Zelenchuk PSP</b>						<b>140</b>	
*		<b>Zentral PSP</b>						<b>n/a</b>	
<b>SERBIA</b>									
(Iron Gates I)	Djerdap I	Danube	70.7	PG	H,N		1050	90	
(Iron Gates II)	Djerdap II + Gogosu	Danube	42.3	PG/ER	H,N		270		
Lazici (upper dam)	Bajina Basta PSP	Beli Rzav (Drina)	131	ER	H	1983	614		
PSP lower dam	Bajina Basta	Drina (Middle)	90	CB	H		360	62	
<b>(Iron Gates III PSP)</b>	<b>Djerdap III PSP</b>	<b>Danube</b>			<b>H</b>			<b>2400</b>	
	<b>Rogacica</b>	<b>Drina (Middle)</b>		<b>PG</b>	<b>H,C</b>			<b>113</b>	
	<b>Tegare</b>	<b>Drina (Middle)</b>		<b>PG</b>	<b>H,C</b>			<b>121</b>	
	<b>Dubravica</b>	<b>Drina (Middle)</b>		<b>PG</b>	<b>H,C</b>			<b>87</b>	
Zvornik		Drina (Middle)	41	PG	H		96	24.4	
	<b>Kozluk</b>	<b>Drina (Middle)</b>	<b>17.5</b>	<b>PG</b>	<b>H,C</b>			<b>90.3</b>	
	<b>Drina I</b>	<b>Drina (Lower)</b>	<b>17</b>	<b>PG</b>	<b>H</b>			<b>93</b>	
	<b>Drina II</b>	<b>Drina (Lower)</b>	<b>17.5</b>	<b>PG</b>	<b>H</b>			<b>93</b>	

Dam name	Hydro plant or project name (if different)	River	Dam height (m)	Dam type	Dam purpose	Year dam complete	Hydro capacity in operation (MW)	Hydro capacity u/c or planned (MW)	Year of initial hydro generation
Radoinja Sjenica (or Uvac) Selova Lopatnica	<i>Drina III</i>	<i>Drina (Lower)</i>	<i>12.9</i>	<i>PG</i>	<i>H</i>			<i>93</i>	
	<i>Brodarevo I (upstream)</i>	<i>Lim (trib. Drina)</i>		<i>H</i>	<i>H</i>			<i>58.4</i>	
	Bistrica	Uvac (trib. Drina)	42	ER	H		102		
		Uvac (trib. Drina)	110	ER	H	1979	36		
		<b>Toplica</b>	<b>70</b>	<b>ER</b>	<b>S</b>	<b>2011</b>			
	<i>Lopatnica</i>	<i>Lopatnica</i>	<i>66</i>	<i>CFRD</i>	<i>S</i>				
<i>(98 in phase 2)</i>									
<b>(KOSOVO)</b>									
Gazivode		Ibar	107	ER	H	1981	35		
<b>SLOVAKIA</b>									
Upper dam	Gabčfkovo-Cunovo	Dunaj (Danube)	18	TE/PG	C,N,H,S,R	1992-95	746		1992, 1995
	Cierny Váh PSP	Cierny Váh	42	ER	H	1982	735		1982
	Liptovská Mara	Váh	53	TE	C,H,R,S	1975	198		
	Ruzín I	Hornád	63	ER	C,H,R,S	1968	134.6		1968
<b>SLOVENIA</b>									
Zlatoljce		Drava	53.5	PG	H		141		
Formin		Drava	49	PG	H		127		
Avče PSP		Soca					185(T)/ 180 (P)		2010
<i>Kozjak PSP</i>		<i>Drava</i>					<i>440(T)/ 352(P)</i>	<i>399</i>	
<b>SPAIN</b>									
Andévalo		Malagon-Cobica	78	ER	X				
Aguzadera, La		Aguzadera	104.5	ER	Ind'l	1999			
Aldeadávila (binational)	Aldeadávila I	Duero	139.5	VA/PG	H	1963	810		
	Aldeadávila II	Duero			H		433		
Almendra		Tormes	202	VA	H	1970			
Arenos		Mijares	105	ER	Reg.	1980			
Atazar, El		Lozoya	134	VA	S	1972			
Baells, La		Llobregat	102.35	VA	S	1976			
Bao		Bibey	107	PG	H	1960			
Barcena		Sil	109	PG	H	1960			
Belesar		Miño	129	VA	H	1963	255.2		
Benageber	(was Generalisimo)	Turia	110	PG	S	1955			
Beznar		Izbor	134	VA	S	1986			
Breña, La	La Breña II	Guadiato	125	PG(RCC)	H,I				
Camarasa		Noguera Pallaresa	103	PG	H	1920			
Canales		Genil	157.5	ER	S	1988			
Canelles		Noguera Ribagorzana	151	VA	H	1960	108		
El Cenajo		Segura	102	PG	C	1960			
La Cohilla		Nansa	116	VA	H	1950			
Contreras		Cabriel	129	PG	S	1974			
Cortes II	Cortes de Pallas	Jucar	116	VA/PG	H	1988	282	280	
Cuevas de Almanzora		Almanzora	116.8	ER	S	1986			
Escales		Noguera Ribagorzana	125	PG	H	1955			
Eume		Eume	103	VA	H	1960			
Grado I, El		Cinca	130	PG	H	1969			
Itoiz		Irati	122	PG	S	2003			
Iznajar		Genil	122	PG	S	1969			
José Mariá de Oriol	Alcantara II	Tajo	130	CB	H	1969	957		
Llosa del Cavall		Cardoner	122	VA	S	1999			
Malpartida de Plasencia III		Grande	117.5	TE	S	1981			
Matalavilla		Valseco	115	VA	H	1967			
Oliana		Segre	102	PG	S	1959			
Portas, Las		Camba	141	VA	H	1974			
Quentar		Aguas Blancas	133	VA	S	1975			
Riaño		Esla	100.5	VA	H	1988			
Rules		Guadalfeo	132	VA/PG	S	2003			
Salime		Navia	125	VA/PG	H,reg	1956	300		
San Esteban I		Sil	115	VA/PG	H	1955	265		
Soria (Soria-Chira)	(in Canary Islands)	Barranco Soria	132	VA	I	1972			
Susqueda		Ter	135	VA	S	1968			
Tous (Nueva Tous)		Jucar	135.5	ER	S	1996			
Yesa		Aragon	116.7	ER	S				
* Alsa	Torina	Torina	49	PG	H	1921/81	439		
* Bujeda, La			41	TE	IH	1976	208		
Campañana, La		Campañana	46	PG	H	1963	122		
Cenza		Cenza	49	PG	H	1993	175		
* Molinar, El		Jucar	28	TE	H	1951	125		
* Picadas		Alberche	59	PG	IH	1952	200		
Azután							200		
Bolarque 2							215		
Castrelo							125.7		
Castro I		Duero					79.8		

Dam name	Hydro plant or project name (if different)	River	Dam height (m)	Dam type	Dam purpose	Year dam complete	Hydro capacity in operation (MW)	Hydro capacity u/c or planned (MW)	Year of initial hydro generation
Castro II		Duero					113		
Cedillo		Tajo - Sever	66	PG	H	1978	500		
Cijara	Cijara Derecha	Guadiana	80.5	PG	S,H,I	1956	50.4		
	Cijara Izquierda						51.7		
Doiras		Navia	89	PG	H	1934			
Frieira							145.1		
Gabriel y Galan PSP		Alagón	73	PG	H,I	1961	111		
Guillena PSP							210		
Llauset		Llauset	89	VA	H	1983			
Mequinenza		Ebro	79	PG	H,I	1964	324		
Muela de Cortes (Bombeo)	Muela I, La Muela II PSP, La	Júcar					635		
		<b>Júcar</b>	<b>30</b>	<b>ER</b>	<b>H</b>	<b>1988</b>		<b>840</b>	
Peares, Los		Miño	94	PG	H	1955	181		
Ribarroja		Ebro	60	PG	S,H,I	1969	262.8		
Ricobayo	Ricobayo I	Esla	99.4	PG	H	1934	175		
	Ricobayo II	Esla					154		
Sallente PSP (Estany Gento-Sallente PSP)		Flamicell	89	ER	H	1985	415.2		
Saucelle	Saucelle I	Duero	83	PG	H	1956	251		
	Saucelle II	Duero					269		
Tajo de la Encantada PSP							360	<b>u/upgrading</b>	1977
Torrejón Tajo PSP		Tajo	62	PG	H	1966	132		
Valdecañas		Tajo	98	VA	H,I	1964	249		
Villalcampo I		Duero					96		
Villalcampo II		Duero					119		
Villarino PSP		Tormes					857		
Aguayo PSP							361.9		
Puente Bibey PSP							315		
Moralets PSP							246		
Edrada PSP	Conso	Conso					270		
Soutelo PSP		Cenza					215		
Tanes PSP		Nalon	95	PG	SH	1978	123(T)/ 114.5(P)		
Cofrentes		Jucar					123		
Cornatel							123		
Tavascán Superior							120.4		
Montamara PSP							88		
* <b>Albagés, L'</b>		<b>Aranyó</b>	<b>85</b>	<b>TE/ER</b>					
<b>Alcolea</b>		<b>Odiel</b>	<b>65</b>	<b>PG</b>					
<b>Castrovido</b>		<b>Arlanza</b>	<b>95</b>	<b>PG</b>	<b>C,H,I</b>				
<b>Cigudosa (Cigudosa-Valdeprado)</b>			<b>66</b>	<b>PG</b>					
<b>Enciso</b>		<b>Cidacos</b>	<b>103.5</b>	<b>PG(RCC)</b>	<b>I,S</b>				
<b>Montearagón</b>		<b>Flumen</b>	<b>78</b>	<b>VA/PG</b>	<b>I,S</b>				
* <b>Mularroya</b>			n/a						
* <b>Oliva</b>			n/a						
<b>San Esteban II</b>		<b>Mino</b>	<b>115</b>	<b>VA/PG</b>	<b>H</b>	<b>1955</b>		<b>177</b>	

## SWEDEN

Häckren		Storån (trib. Indals)	67		Reg.				
Harsprånget	Harsprånget	Lule	51	PG/ER	H		977		1952
Höljes			80				127		
Letsi	Letsi	Lule	85	ER	H		456	<b>u/upgrading</b>	1970
Messaure	Messaure	Lule	101	TE	H		442		1963
Porjus	Porjus	Lule	22	PG/ER	H		465		1949
Seitevare	Seitevare		106				225		
Stornorrfors	Stornorrfors	Ume	28	PG	H		590		1958
Suorva (3 dams)	Vietas		30				320		
Trängslet	Trängslet		122				300		
	Grundfors						100		2009
	Harrsele	Ume					223		2006
	Ritsem						320		
	Stalon						130		
	Alvkarleby						125		
	Långbjörn						100		
	Nämforsen						112		
	<b>Akkats</b>	<b>Lule</b>					<b>150</b>	<b>replacement plant</b>	<b>2011</b>
	Bastusel						107		
	Bergeforsen						160		
	Forsmo						160		
	Gallejaur						221		
	Hojum	Göta Älv					172		1941, 1992
	Hölleforsen						148		
Järpströmmens	Järpströmmens	Indals					114		
Kilforsen 1 Intag	Kilforsen						288		
Korssselbränna	Korssselbränna (Fjällsjö)	Ångerman					130		
	Krångede Krv	Indals					245		
	Krokströmmen						103		
	Kvistforsens Krv						140		
	Lasele						141		
	Laxede						200		

Dam name (Complex)	Hydro plant or project name (if different)/ PSP dam/ Note	River	Dam height (m)	Dam type	Dam purpose	Year dam complete	Hydro capacity in operation (MW)	Hydro capacity u/c or planned (MW)	Year of initial hydro generation
Vargfors (3 dams)	Ligga	Ångerman					324		
	Midskog						150		
	Moforsens						135		1968
	Porsi						280		
	Ramsele						157		1958
	Stadsforsen						139		
	Storfinnforsens						112		1953
	Torpshammar						117		
	Tuggen						110		
	Vargfors						120		
	Hjälta		Ångerman				178		1952
	Järnvägsforsen		Ljungan				100		
	Långå		Ljusnan				156		
Olden (Langan)	Långan (Indals)				112				
Sällsjö	Storån (trib. Indals)				152				
Juktan PSP						360(T)/ 335(P)			
<b>SWITZERLAND</b>									
<b>Vorderrhein</b>									
Cumera		Vorderrhein	153	VA		1966			
Nalps		Vorderrhein	127	VA		1962	330		
Santa Maria		Rhein da Medel	117	VA	H	1968	0		
Contra		res.Lago di Vogorno	220	VA		1965	137		
Tavanasa		Vorderrhein					176		
<b>Sedrun 1</b>		<b>Vorderrhein</b>						<b>147</b>	
<b>Emosson</b>									
Châtelard-Vallorcine	(in France)	Rhone					105		
La Bâtiâz		Rhone				1975	162		
Emosson			180	VA		1974	328		
<b>Nant de Drance PSP</b>		<b>Rhone</b>						<b>~600</b>	<b>2016</b>
<b>Nant de Drance Plus</b>		<b>Rhone</b>						<b>300</b>	
<b>Reusstal</b>									
Amsteg		Reuss				1997	120		
	Göschenen	Reuss					160		
	Göscheneralp		155	ER		1960			
<b>Cleuson-Dixence</b>									
Bieudron		Rhone				1998	1200		
Chandoline		Rhone				1934	142		
Cleuson		Rhone	87	PG		1950			
Fionnay (Dixence)	Dixence	Rhone				1957	312		
Grande Dixence	res. Lac des Dix	Rhone	285	PG		1961			
Nendaz		Rhone				1960	384		
<b>Mauvoisin</b>									
Fionnay (Mauvoisin)	Mauvoisin	Rhone				1958	128		
Mauvoisin			250	VA		1957	397		
Riddes		Rhone				1956	225		
<b>Zervreila</b>									
Rothenbrunnen		Rhein				1958	120		
Safien-Platz							135		
Zervreila			151	VA		1957			
<b>Rothenbrunnen</b>		<b>Rhein</b>						<b>127</b>	
<b>Maggia</b>									
Bavona		Tessin					124	<b>41 u/upg'g</b>	1966
Cavagnoli		Tessin	111	VA		1968	173		
Cavergno		Tessin					104		
Palagnedra		Tessin	72	PG/TE		1952	182		
Robiei		Tessin	68	PG		1967			
Robiei PSP		Tessin				1968	160	<b>24 u/refurb</b>	c2010-14
Sambuco		Tessin	130	VA		1956	111		
Verbano 1		Tessin				1953	110		
Zöt		Tessin	36	VA		1967			
<b>Blenio</b>									
Biasca		Tessin					324		
Luzzone			225	VA		1963	102		
	Val d'Ambra						141		
	Biaschina	Tessin					135		
	Gebidem	Massa	122	VA		1967	340		
	Bitsch (Biel)	Massa (Rhone)					331		
<b>Etzel</b>									
	Etzelwerk Altendorf PSP							121	
<b>Hinterrhein</b>									
	Bärenburg	Hinterrhein					220		
	Ferrera 1 PSP	Hinterrhein					126(T)/ 90(P)		
	Sils	Hinterrhein					247		
	Sufers	Hinterrhein	58	VA		1962	150		
	Valle di Lei	Reno di Lei	141	VA		1961	133		

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<b>Grimmel</b>									
Grimmel 2 PSP	Grimmel 2 Ost PSP	Aare			S,H		311		1981
Handeck 2		Aare					113		
Innertkirchen 1		Aare					239		
Oberaar		Aare	100	PG		1953	383		
Räterichsboden		Aare	94	PG	1950		430		
Spitallamm		Aare	114	VA	H	1932	7		
<b>Linth-Limmern</b>									
Limmernboden	Limmern	Linth	146	VA	H	1963			
	Tierfehd (Limmern)	Linth					261		
	Tierfehd (Hintersand) PSP	Linth	Linth					40(T)/ 34(P)	
<b>Lake Mutt dam</b>	<b>Linthal 2015 PSP</b>	<b>Linth</b>		<b>PG</b>				<b>1000</b>	<b>2015</b>
<b>Gougra</b>									
Moiry			148	VA		1958	119		
<b>Navisence</b>		<b>Rhone</b>					<b>50</b>	<b>20</b>	<b>2013</b>
<b>Engadinerwerke</b>									
Martina		Inn				1994			
Ova Spin		Spöl	73	VA		1968	385		
Pradella		Inn					288		
Punt dal Gall	binational w/ Italy	Spöl	130	VA	H	1968	54		
<b>Hongrin-Léman</b>									
Hongrin Nord		Sarine	125	VA		1969	240		
Hongrin Sud		Sarine	90	VA		1969			
Veytaux PSP						1972	255		
<b>FMHL+</b>		<b>Rhone</b>						<b>240</b>	
<b>Mattnark</b>									
Mattnark		Saaser Vispa	120	TE		1967	235		
Stalden		Rhone				1965	160		
Steg		Rhone				1976	122		
Albigna		Albigna	115	PG	H	1959	70		
Schräh		Wägitaler Aa	111	PG	H	1924	66		
Ferden							118		
La Luette							119		
Löbbia							100		
Malvaglia							316		
Runcahez							180		
Verbois							101		
Gigerwald			147	VA		1976	280		
Mapragg PSP		Rhein					274		
Gordola		Tessin					105		
Zeuzier			156	VA		1957			
binational w/Germany	Ryburg-Schwörstadt	Rhein			H		144		
binational w/Germany	Laufenburg				H				
binational w/Germany	Säckingen PSP				H				
<b>Lago Bianco Nord+Süd</b>	<b>Lago Bianco PSP</b>	<b>Poschiavino</b>	<b>15+26</b>	<b>PG</b>		<b>1912</b>		<b>100</b>	
<b>TURKEY (European part)</b>									
<b>Çokal</b>			<b>81</b>		<b>IS</b>				
<b>UKRAINE</b>									
Kaniv	Kanevsk/ Kanivska	Dnieper			H,N,S,F		444	upg'd by 2017	
Kyiv	Kievsk/ Kiev/ Kyivska	Dnieper			H,N,S,F		361	upg'd by 2017	
Kremenchut	Kremenchutska	Dnieper			H,N,S,F		625	upg'd by 2017	
Kakhovska	Kakhovskaya/ Kakhovka	Dnieper			H,N,S,F		300	upg'd by 2017	
Dnieper I	Dnipro I	Dnieper		PG	H,N,S,F		585	63, upg'd by 2017	
Dnieper II	Dnipro II	Dnieper		PG	H,N,S,F		876	24, upg'd by 2017	
Dnieprodzerzhinsk	Dnieprodzerzhinska	Dnieper			H,N,S,F		352	upg'd by 2017	
Kyiv PSP	Kievsk/ Kyivska PSP	Dnieper			H,N,S,F		n/a	upg'd by 2017	
Dniester 1	Dnistrov	Dniester			H,I,R,C		702		
<b>Dniester PSP</b>	<b>Dnestr PSP</b>	<b>Dniester</b>			<b>H</b>		<b>2268</b>	<b>u/comm'g</b>	<b>2010</b>
<b>Tashlyk PSP</b>	<b>Tashlytska PSP</b>	<b>South Boug</b>			<b>H</b>		<b>906</b>		
* <b>Kaniv PSP</b>	<b>Kanev/ Kanivska</b>	<b>Dnieper</b>			<b>H</b>		<b>1000</b>	<b>u/study</b>	
<b>UNITED KINGDOM</b>									
	Dinorwig PSP				H		1740		
	Ffestiniog PSP				H		360		
	Sloy				H		168		
	Cruachan PSP				H		400		
	Foyers PSP				H		300		
	Glendoe				H		100		
	<b>Sloy PSP</b>				<b>H</b>			<b>60</b>	
	<b>Pentland Firth Inner Sound (tidal power project)</b>				<b>Tidal</b>			<b>up to 400</b>	<b>~2020</b>



## Key to abbreviations

**Dam types:** The ICOLD abbreviations used are as follows:

CB = buttress; ER = rockfill; MV = multi-arch; PG = gravity; TE = earthfill; VA = arch.

Other abbreviations are: ER<sup>+</sup> = rockfill dam with asphaltic concrete core; ER<sup>++</sup> = rockfill dam with asphaltic concrete lining; CFED = concrete-faced earthfill dam; CFRD = concrete-faced rockfill dam; ECRD = earth-core rockfill dam; RCC = roller compacted concrete; emb. = embankment (TE or ER).

**Dam purposes:** C = flood control; I = irrigation; E = environmental; F = fisheries; H = hydropower; M = multipurpose; N = navigation; R = recreation/tourism; S = water supply; Ret = retention.

Reg. = regulation; X = other; div. = diversion of river(s); Ind'l = industrial

**Other abbreviations:** PSP = pumped-storage plant; res. = reservoir; u/c = under construction;

\*indicates projects not shown on the Map. <sup>(u)</sup> = data uncertain; c = completion/commissioning date; n/a = not available (for figures > 0); u/refurb = under refurbishment; u/study = under study; u/invest'n = under investigation; u/comm'g = under commissioning; u/upg'g = undergoing upgrading; trib. = tributary; ext'n = extension; PSP = pumped-storage plant; HPP = hydropower plant; res. = reservoir; (T) = turbinng mode; (P) = pumping mode; upr'g = uprating; const'n = construction; rehab = rehabilitation

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