



Climate Change

C3S ENERGY STAKEHOLDER WORKSHOP: CONSULTATION ON DATA INDICATORS

Topic 1 - Global Energy Data

20/03/2023



PROGRAMME OF
THE EUROPEAN UNION





Climate
Change

Data sources

Data gathered so far*:

INSTALLATION (WIND, SOLAR, HYDRO):
WRI, The Wind Power, JRC, EHA, Data Platform**

GENERATION (WIND, SOLAR, HYDRO):
IRENA, DTU, IEA, ENTSO-E, Our World in Data, Data Platform, NREL, JRC, EHA

ELECTRICITY DEMAND:
AEMO (Australia), Our World in Data



Very good coverage in Europe
and neighbouring countries

Good coverage in United States



Still poor coverage

*C3S2 412 lot 1 > Common resources > 01_Available_data > Energy_data_availability.docx

**Still to acquire

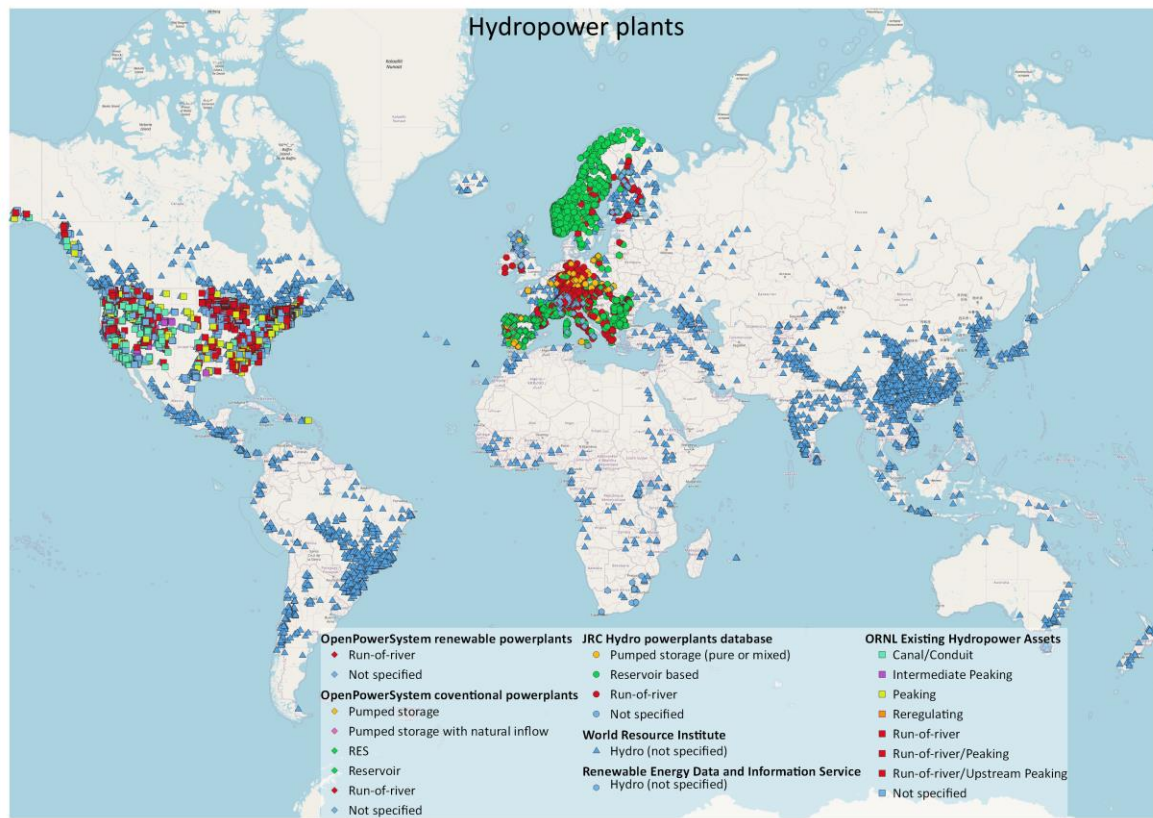


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Next steps

In progress:

creation of a **unique dataset** for each of the installation sources





Next steps

Climate Change

Uniformity of the column headers: keeping as much information as possible (30-35 columns)

Location attributes:

Country, city, name, coordinates, ...

Physical/technical attributes:

Primary fuel (hydro, wind, solar), capacity, height, total power, ...

Status and ownership attributes:

owner, commissioning date, status, decommissioning date, ...

ID	Continent	ISO code	Country	State code	Area	City	Name	2nd name	Latitude	Longitude	Altitude/Depth	Location accuracy	Offshore Shore distance	Manufacturer	Turbine	Hub height	Number of turbines	Total power	Developer	Operator	Owner	Commissioning date	Status	Decommissioning date	Link	Update
#ND =	Code ISO	3166.1							WGS84	WGS84	m	Yes = accurate location	km			m		kW				Format: yyyy or yyyy/mm		Format: yyyy or yyyy/mm		
27	Oceania	AU	Australia	QLD	Queensland	Ravenshoe	Windy Hill	#ND	-17.590	145.532	#ND	Yes	No	Enercon	E44/600	46	20	12000	Stanwell Corp	Stanwell Corp	Ratch Australia Co	2000/08	Production		Link	25-Oct-22
13	Europe	BE	Belgium	#ND	Brabant wal	Villers-la-Ville	Marbais	#ND	50.537	4.515	#ND	Yes	No	Enercon	E82/2000	78	8	16000	Eneco	Electratar SA	Eneco	2007	Production		Link	20-Oct-22
12	Europe	BE	Belgium	#ND	Liège (Wall)	Villers le Bouil	Villers le Bouil	#ND	50.580	5.240	#ND	Yes	No	Repower	MD77	85	6	9000	EDF renewables	EDF renewables	EDF Luminus	2005/02	Production		Link	20-May-22
16	Europe	BE	Belgium	#ND	Namur (Wal)	Floreffe	Floreffe	#ND	50.423	4.718	#ND	Yes	No	Enercon	E62/2350	108	1	2350	EDF renewables	EDF renewables	EDF Luminus	2010	Production		Link	20-May-22
11	Europe	BE	Belgium	#ND	Namur (Wal)	Walcourt	Tarcienne	Walcourt	50.303	4.504	#ND	Yes	No	Repower	MD77	85	6	9000	EDF renewables	EDF renewables	EDF Luminus	2005/11	Production		Link	20-May-22
14	North Ameri	CA	Canada	ON	Ontario	Shelburne	Melanchon	Phase 1	44.090	-80.308	#ND	Yes	No	GE Energy	1.5sle	80	45	67500	TransAlta	TransAlta	TransAlta	2006/03	Production		Link	25-Oct-22
15	North Ameri	CA	Canada	QC	Québec	Baie-des-Sabl	Baie-des-Sable	#ND	48.710	-67.870	#ND	Yes	No	GE Energy	1.5sle	80	73	109500	Cartier Wind Energy	Innergex	Innergex/#ND	2006/11	Production		Link	25-Oct-22
20	Europe	FR	France	#ND	11 (Occitani)	Rouquetailade	Rouquetailade	#ND	43.001	2.233	595/645	Yes	No	Gamesa	G47/660	47	8	5280	Compagnie du Vent	Engie	Engie	2001/10	Production		Link	17-Aug-22
22	Europe	FR	France	#ND	19 (Nouvelle)	Peyrelevalde	Peyrelevalde	#ND	45.760	2.060	870/888	Yes	No	GE Energy	1.5s	85	6	9000	EED/Gelelec	MC3/Cohérence En	MC3	2005/01	Production		Link	16-Aug-22
9	Europe	FR	France	#ND	26 (Auvergn)	Donzère	Donzère	#ND	44.450	4.750	117/118	Yes	No	Nordex	N43/600	50	5	3000	Adelis/Valeco	Powr Valeco/Neo	Electra Valeco	1999/09	Production		Link	01-Aug-22
17	Europe	FR	France	#ND	28 (Centre\)	Poinville, Sant	Janville (28)	Voie Blériot Est	48.152	1.896	#ND	Yes	No	Nordex	N90/2300	80	5	11500	Nordex	Eurowatt	Eurowatt	2005/12	Production		Link	04-Aug-22
6	Europe	FR	France	#ND	31 (Occitani)	Aignognon	Aignognon	#ND	43.373	1.798	240/270	Yes	No	Nordex	N50/800	50	10	8000	Poweo/Boralax/EEI	Boralax	Boralax	2002/11	Production		Link	17-Aug-22
24	Europe	FR	France	#ND	43 (Auvergn)	Ally	Moulins de Bes	45.130	3.300	1045/1088	Yes	No	GE Energy	1.5s	85	7	10500	Sofna/GE Wind	En Boralax	Boralax	2005/12	Production		Link	01-Aug-22	
21	Europe	FR	France	#ND	50 (Norman)	Sottosville-en-	Cotentin	#ND	49.419	-1.711	#ND	Yes	No	GE Energy	1.5s	90	5	7500	RES/H2ion	St Laurent	CEPE du Cotentin	2004/07	Production		Link	05-Sep-22
5	Europe	FR	France	#ND	51 (Grand E)	Saint-Amand-	Côtes de Chan	#ND	48.836	4.661	#ND	Yes	No	Gamesa	G58/850	44	12	10200	SFE Française d'E	Renmico	Remnico	2005/07	Production		Link	16-Sep-21
8	Europe	FR	France	#ND	51 (Grand E)	Pogny	Le Quaron	Le Mont Faverg	48.862	4.521	#ND	Yes	No	Repower	MM82	80	2	4000	Hervé Huet/Quadra	Hervé Huet/Quadra	Hervé Huet	2005/01	Production		Link	09-Aug-22
29	Europe	FR	France	#ND	56 (Bretagn)	Séglién	Ar Tri Milin	Séglién	48.098	-3.114	#ND	Yes	No	Repower	MD70	80	6	9000	Eole Generation	Futuren	EDF renewables	2006/12	Production		Link	03-Aug-22
23	Europe	FR	France	#ND	62 (Hauts-d)	Vincly	Haute-Lys	#ND	50.556	2.190	171/182	Yes	No	GE Energy	1.5s	64	6	9000	Poweo/Erelia	FEIH/Predica	FEIH/Predica	2004/10	Production		Link	11-Aug-22
1	Europe	FR	France	#ND	85 (Pays de)	Bouin	Bouin	La Côte de Jade	46.958	-2.042	3	Yes	No	Nordex	N80/2400	60	5	12000	EDF renewables/AI	EDF renewables/N	GEV renewables	2003/07	Production		Link	17-Aug-22
2	Europe	FR	France	#ND	85 (Pays de)	Bouin	Bouin	Les Polders du	46.947	-2.052	3	Yes	No	Nordex	N80/2500	60	2	5000	EDF renewables/S	EDF renewables/S	SyDEV	2003/06	Production		Link	17-Aug-22

Figure: sample data from thewindpower.net

Type-specific columns will be added for each technology



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Discussion

