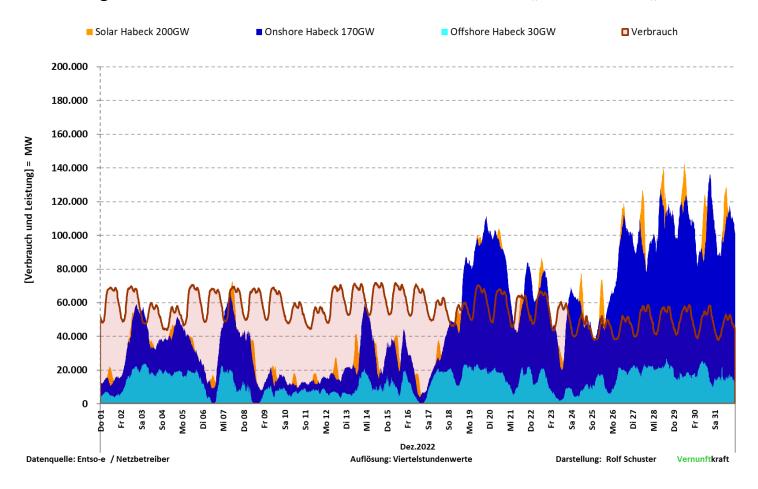
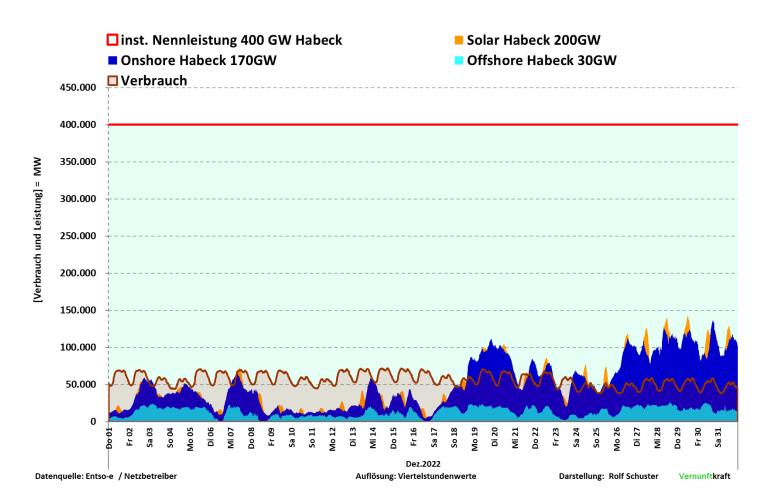
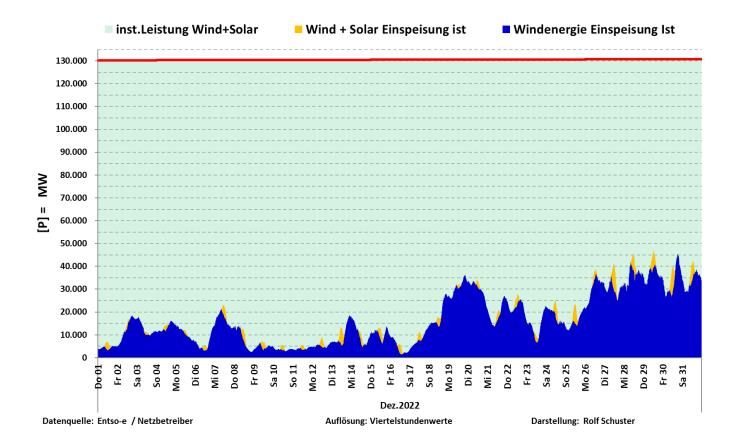


Dez 2022	Load D	Wind	Solar	Wind + Solar	Proz. der Nennleist.
inst. Nennleistung		65.740MW	65.024MW	130.764MW	
Max	71.858MW	45.458MW	11.760MW	47.003MW	35,95%
Mittelwert	56.247MW	16.563MW	829MW	17.392MW	13,30%
Min	37.859MW	1.313MW	0MW	1.834MW	1,40%
Summe Monat	41.848GWh	12.323GWh	617GWh	12.940GWh	13,30%

Darstellung der Visionen von Dr. Robert Habeck zum Ausbau der "Erneuerbaren "bis 2030"

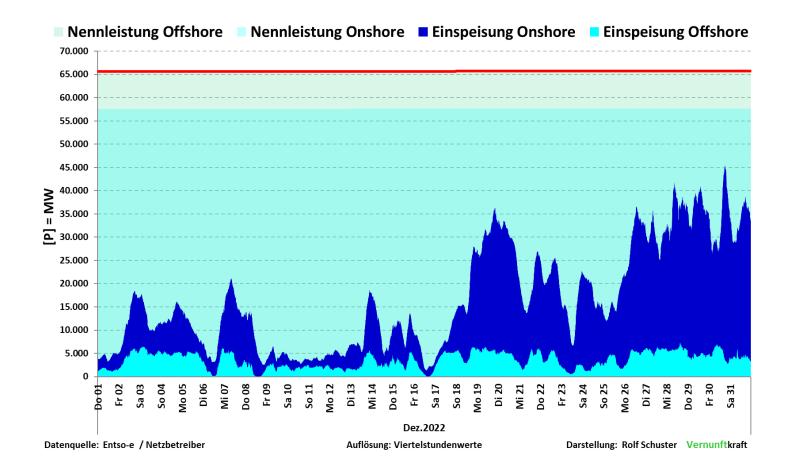






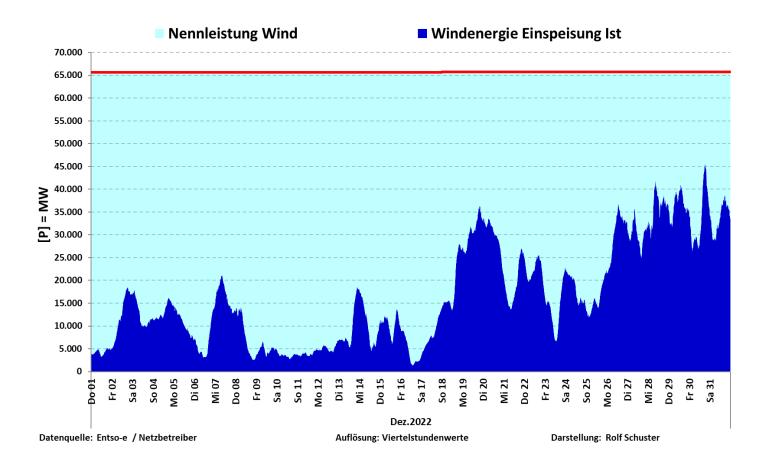
Dez 2022	Wind	Solar	Wind + Solar	Proz. der Nennleist.
inst. Nennleistung	65.740MW	65.024MW	130.764MW	100,0%
max. Einspeiseleistung	45.458MW	11.760MW	47.003MW	35,9%
Mittelwert	16.563MW	829MW	17.392MW	13,3%
min. Einspeiseleistung	1.313MW	0MW	1.834MW	1,40%
Summe	12.323GWh	617GWh	12.940GWh	

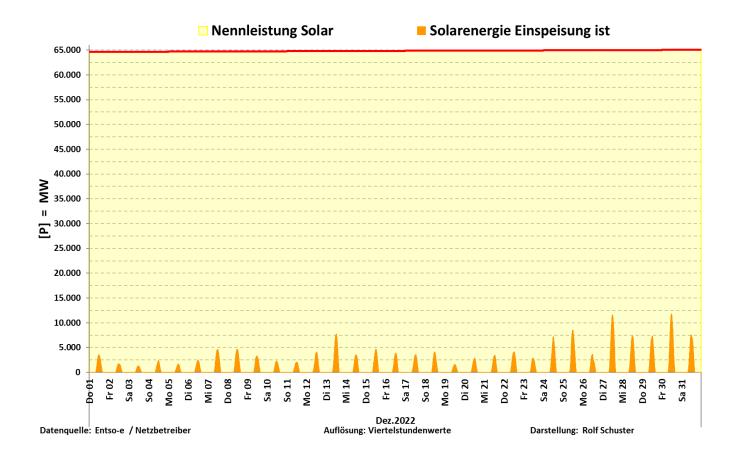
Summe der erzeugter	12.940GWh						
Verteilung der Einspeisung nach Klassen							
0% bis 10% NL	44,8%						
11% bis 20% NL	220,50 h	29,6%					
21% bis 30% NL	161,00 h	21,6%					
31% bis 40% NL	29,50 h	4,0%					
größer 40%	0,00 h	0,0%					
Summe	744,00 h	100,0%					



Dez 2022	Kennzahlen Wind	Kennzahlen Onshore	Kennzahlen Offshore	Proz. der Nennleist.	Proz. der Nennleist.	Proz. der Nennleist.
inst. Nennleistung	65.740MW	57.669MW	8.071MW	100,0%	100,0%	100,0%
max. Einspeiseleistung	45.458MW	41.892MW	7.250MW	69,1%	72,6%	89,8%
Mittelwert	16.563MW	12.966MW	3.597MW	25,2%	22,5%	44,6%
min. Einspeiseleistung	1.313MW	1.115MW	12MW	1,998%	1,934%	0,150%
Summe	12.322,8GWh	9.646,8GWh	2.676,0GWh			-

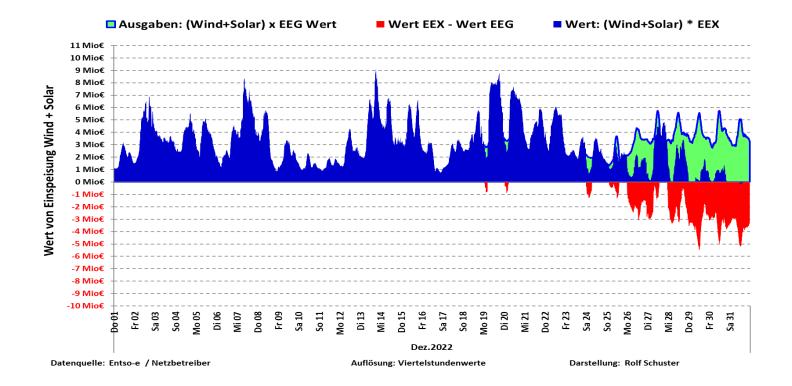
Summe der erzeugten Ene	12.323GWh					
Verteilung der Einspeisung nach Klassen						
0% bis 10% NL	25,1%					
11% bis 30% NL	40,9%					
31% bis 50% NL	22,2%					
51% bis 70% NL	11,8%					
größer 70%	0,00%					
Summe Stunden	744,00 h	100,0%				



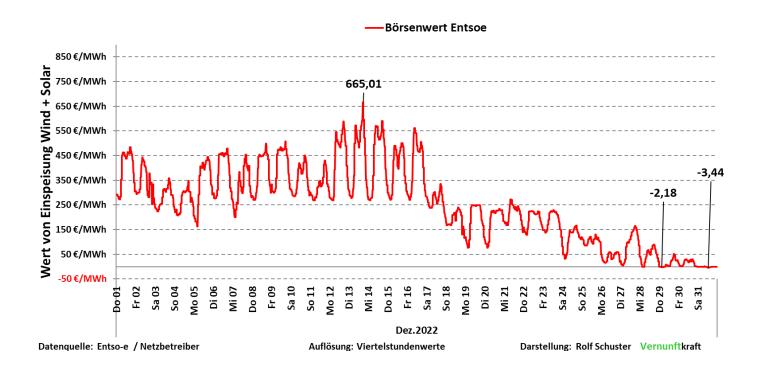


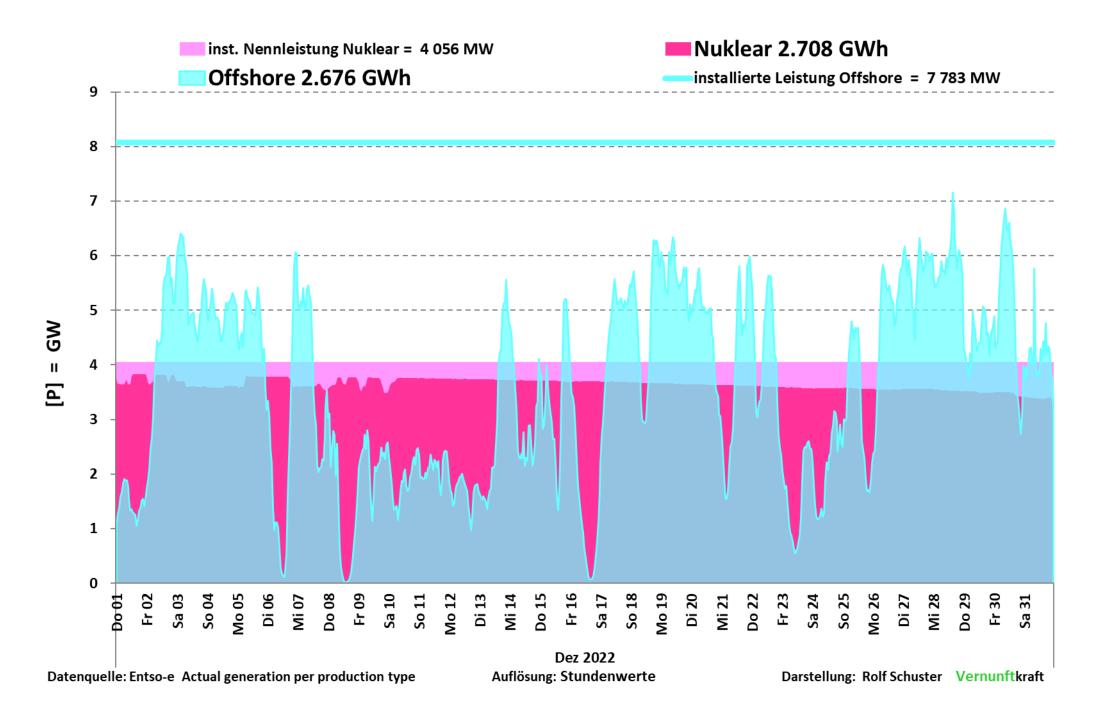
Dez 2022	Kennzahlen Solar	Proz. der Nennleist.
inst. Nennleistung	65.024MW	100,0%
max. Einspeiseleistung	11.760MW	18,1%
Mittelwert	829MW	1,3%
min. Einspeiseleistung	0MW	0,0%
Summe	617GWh	

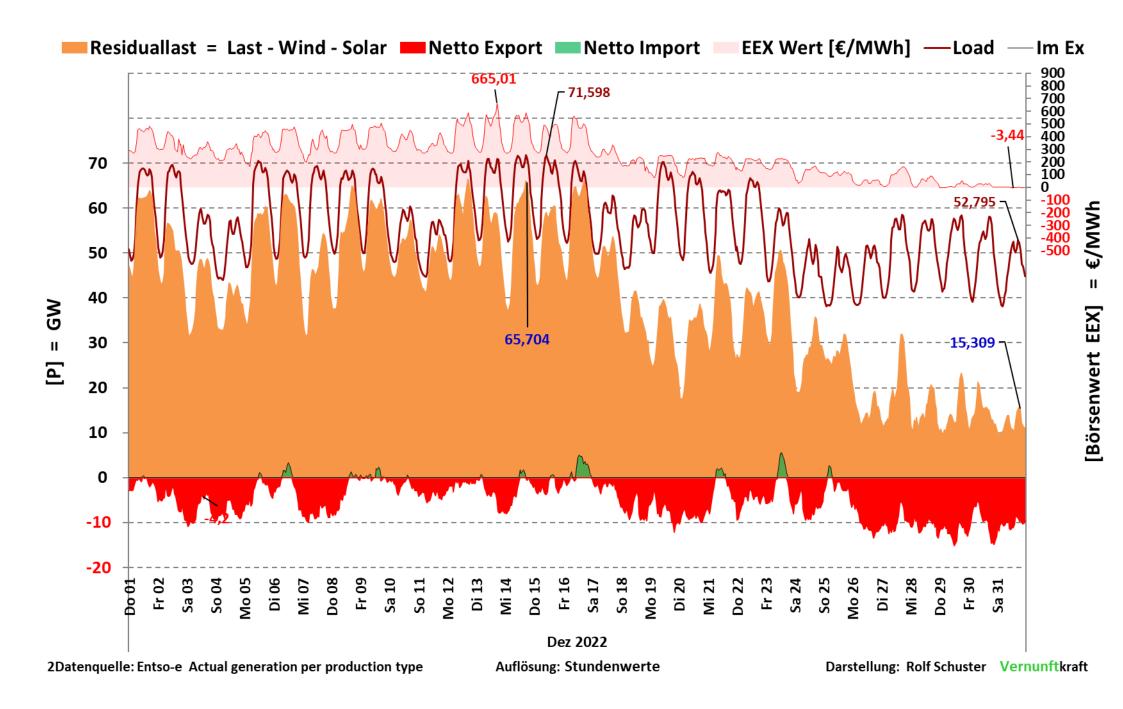
Summe der erzeugten En	617GWh						
Verteilung der Einspeisung nach Klassen							
Einsp. = 0 MW	62,5%						
1% bis 20% NL	278,75 h	37,5%					
21% bis 40% NL	0,00 h	0,0%					
größer 40%	0,0%						
Summe	744,00 h	100,0%					

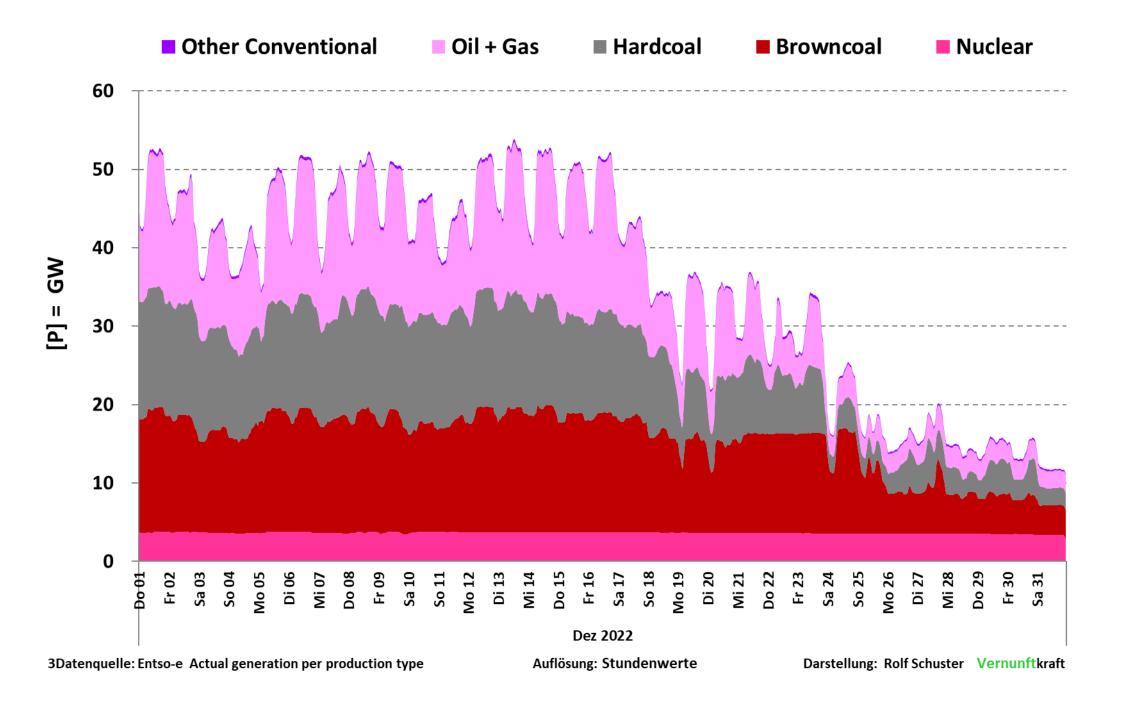


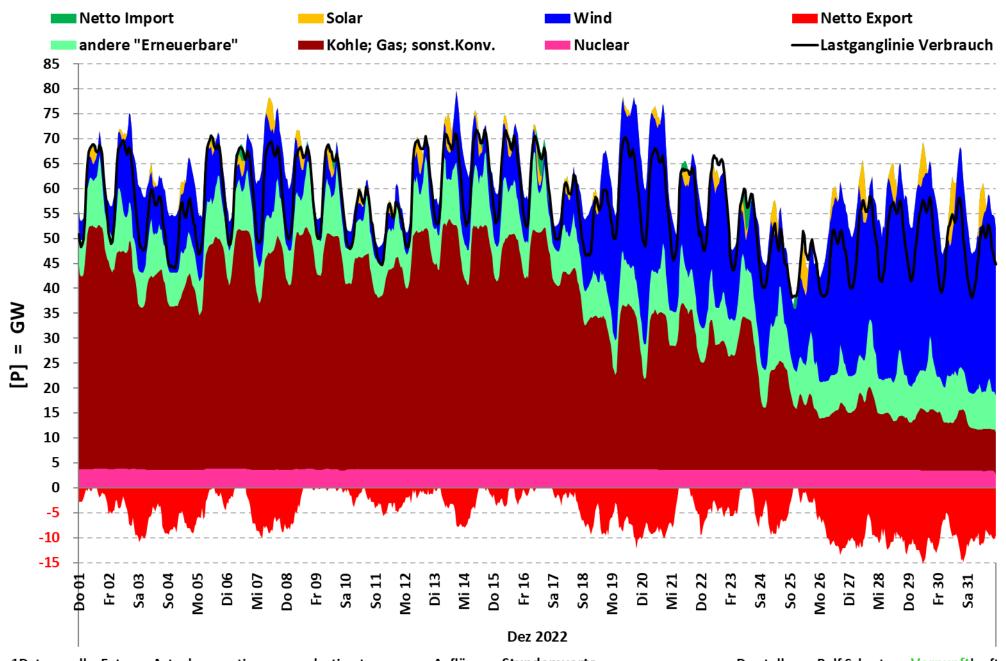
Dez.2022	Wind + Solar EEG-Wert	Wind + Solar Börsenwert EEX	Differenz EEX-Wert - EEG-Wert	EEX Preis
Max / h	5.764.477,0 €	9.105.449,9 €		665,01 €/MWh
Mittel / h	1.995.433,5 €	2.976.237,1 €		251,62 €/MWh
Min /h	173.672,0 €	-158.814,4 €		-3,78 €/MWh
Summe Mon.	1.484.602.528,3 €	2.214.320.425,9€	729.717.897,6€	







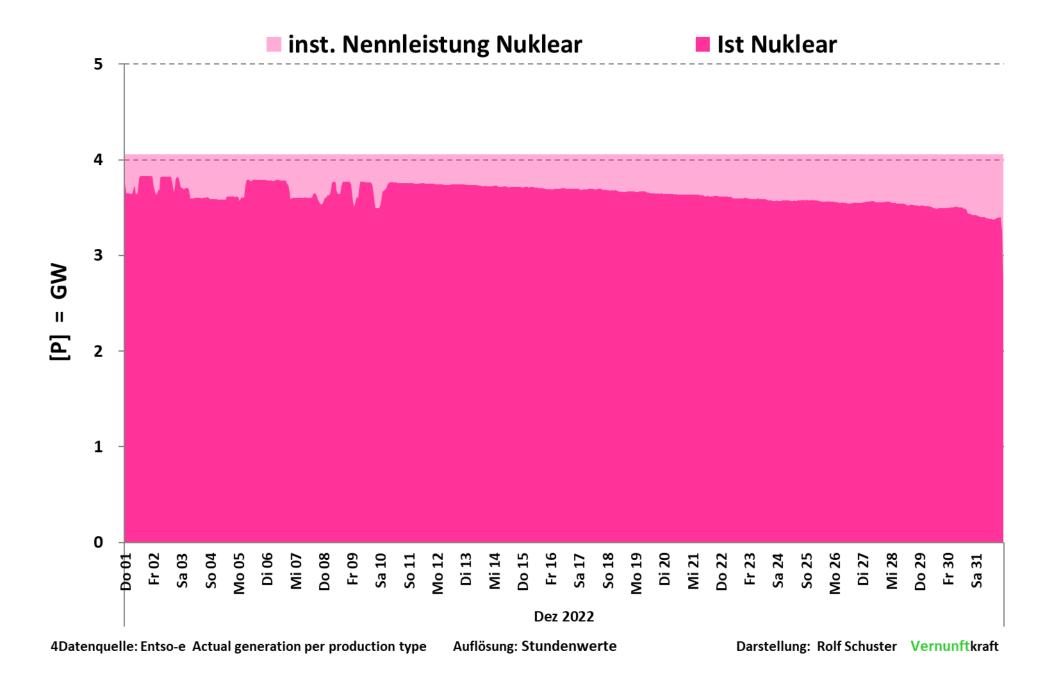


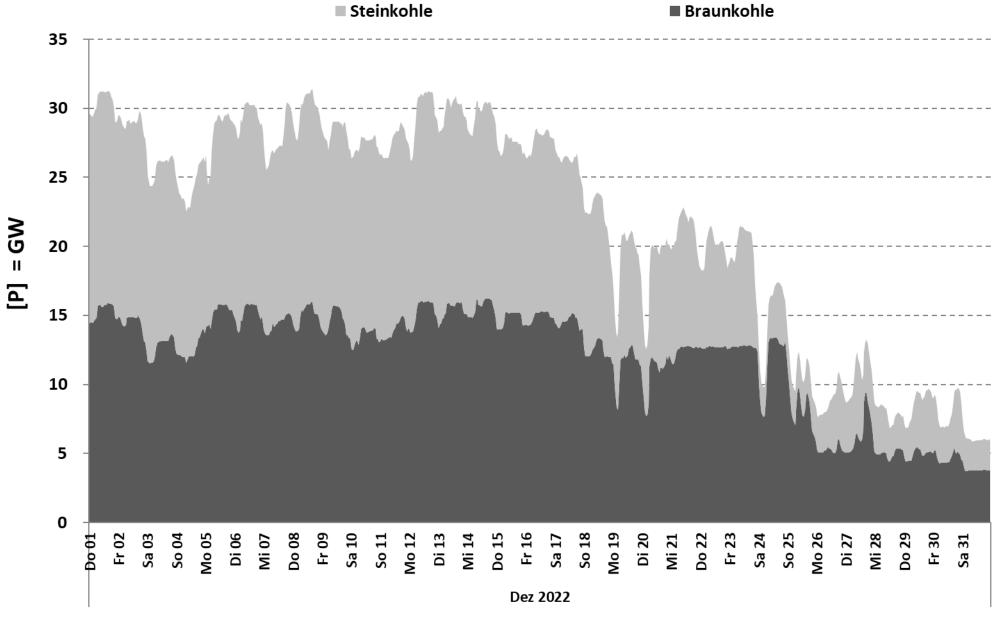


1Datenquelle: Entso-e Actual generation per production type

Auflösung: Stundenwerte

Darstellung: Rolf Schuster Vernunftkraft

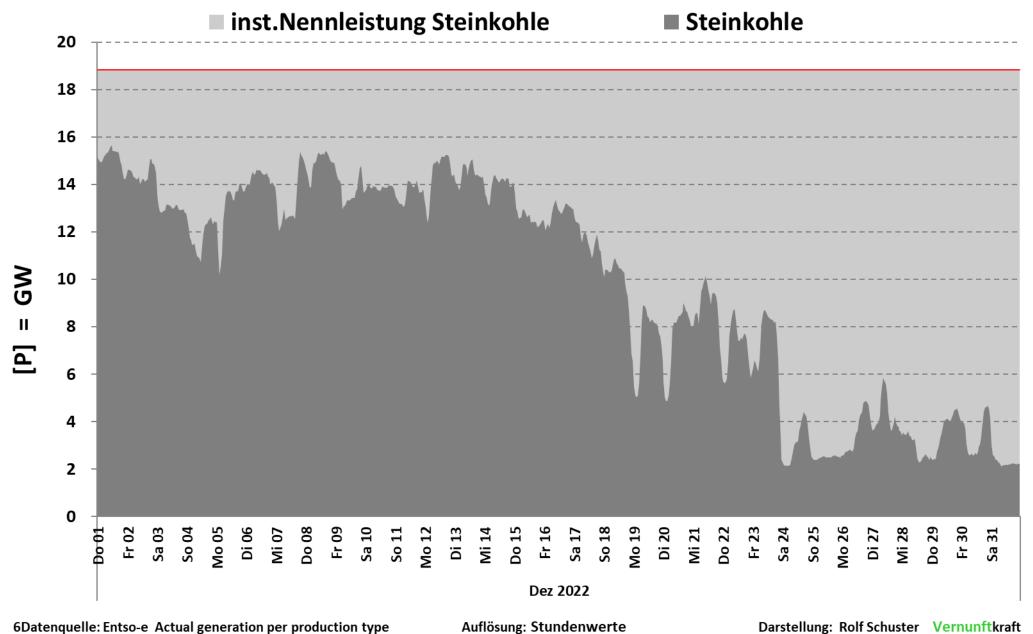




5Datenquelle: Entso-e Actual generation per production type

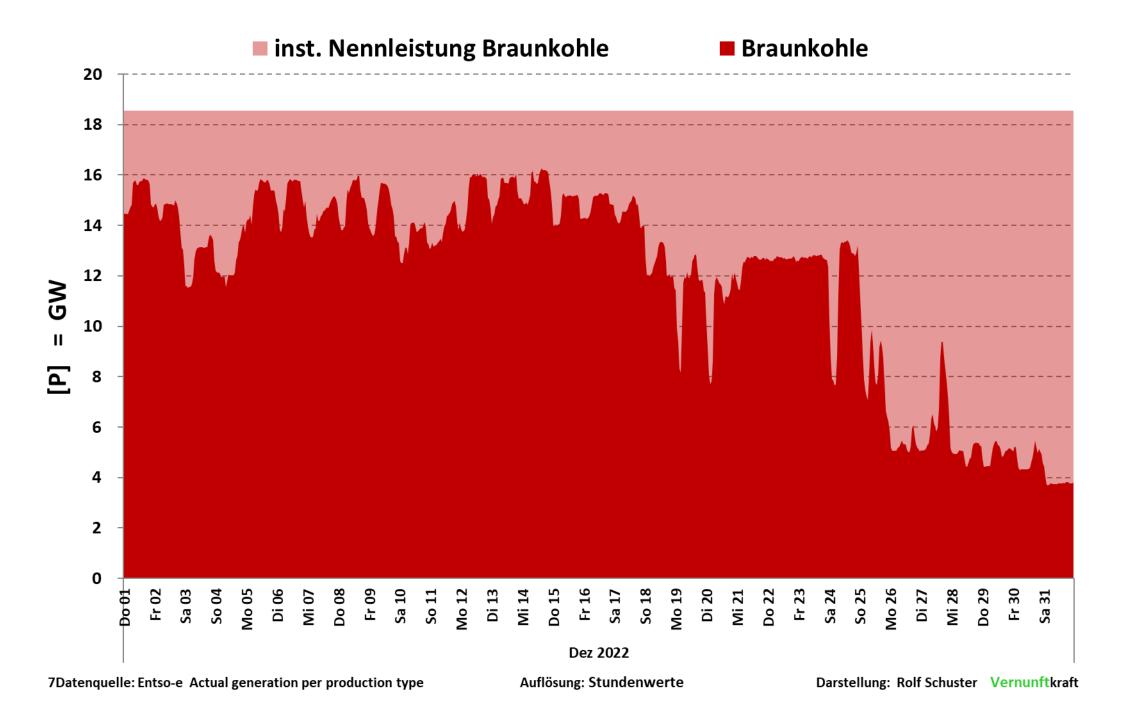
Auflösung: Stundenwerte

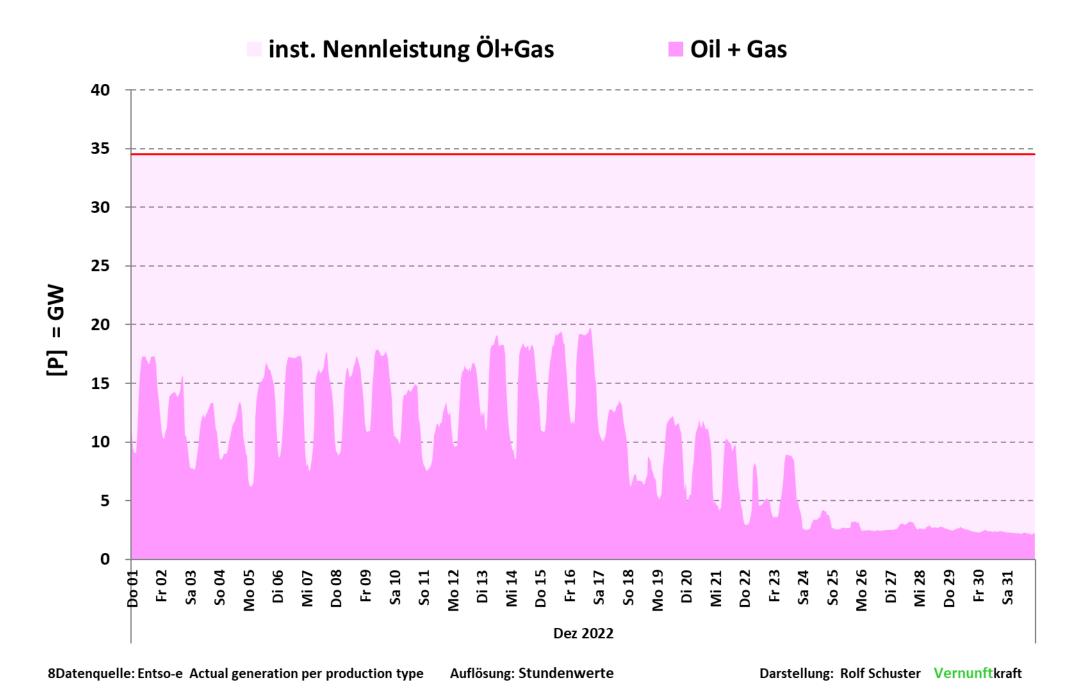
Darstellung: Rolf Schuster Vernunftkraft

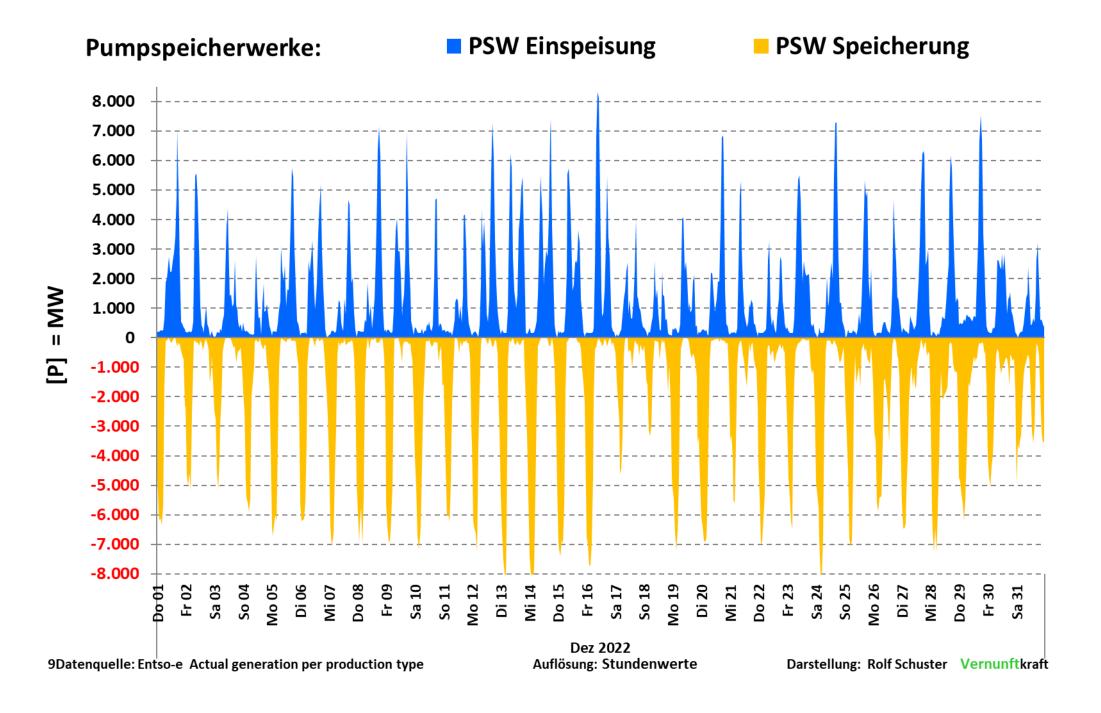


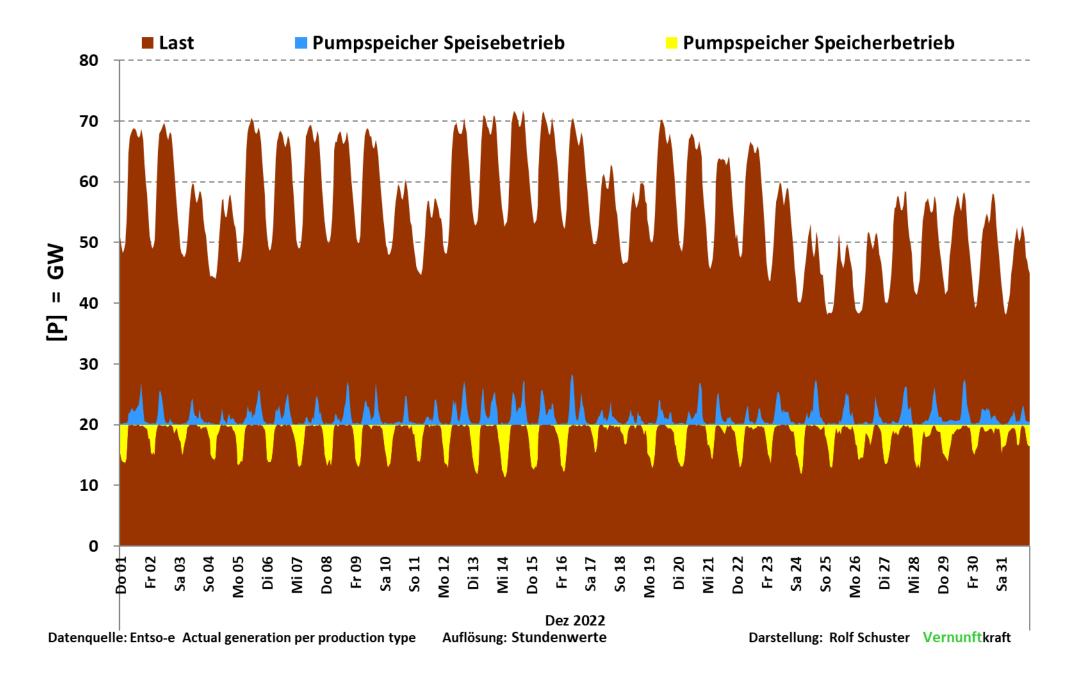
6Datenquelle: Entso-e Actual generation per production type

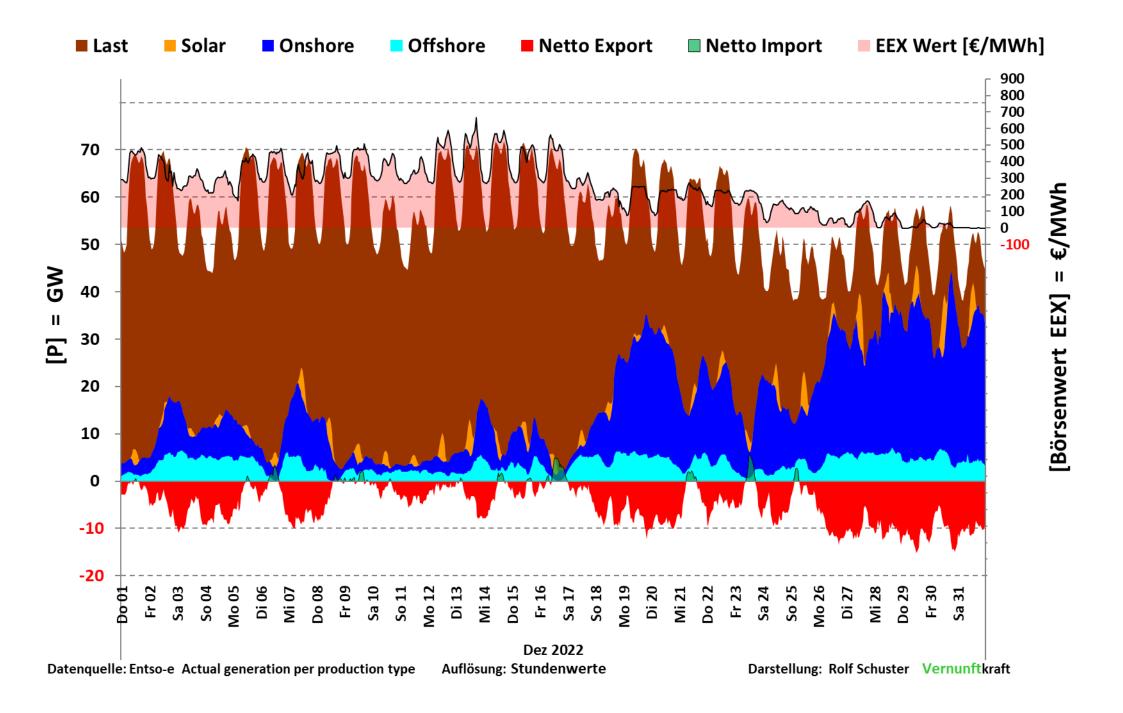
Auflösung: Stundenwerte

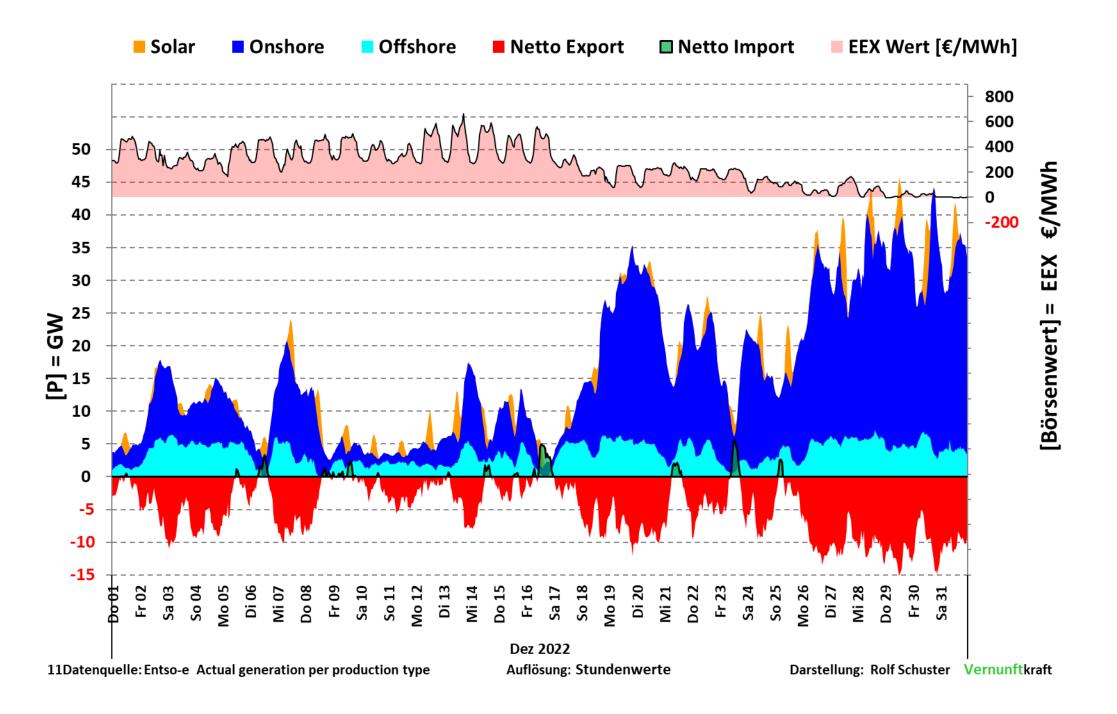


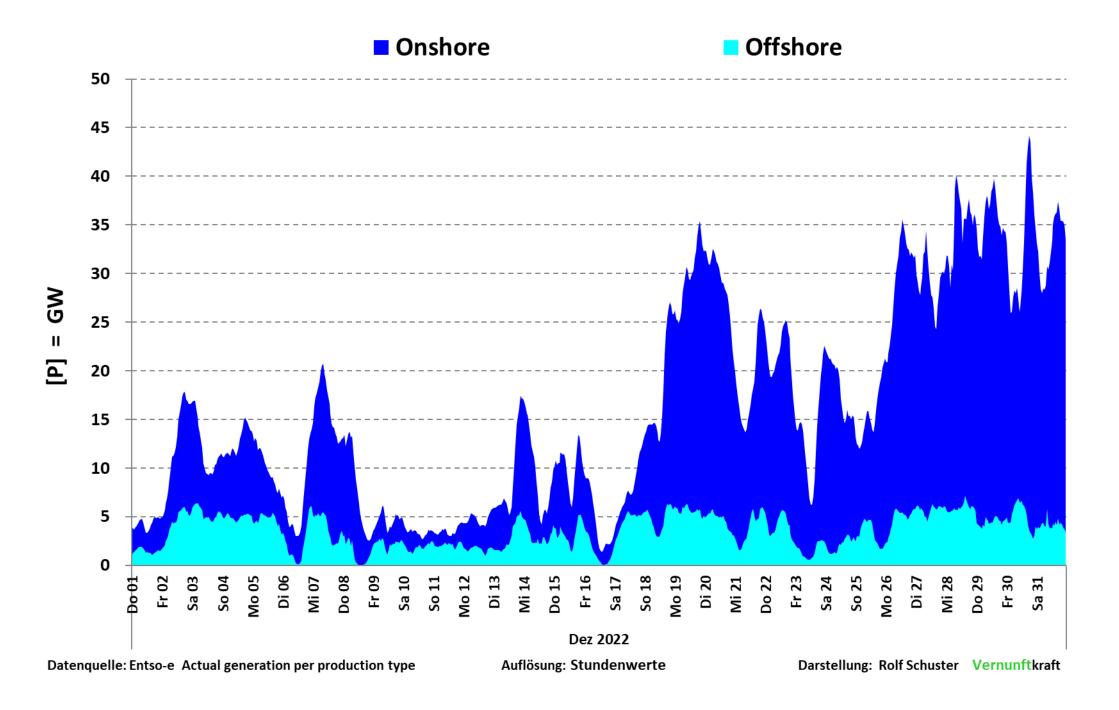




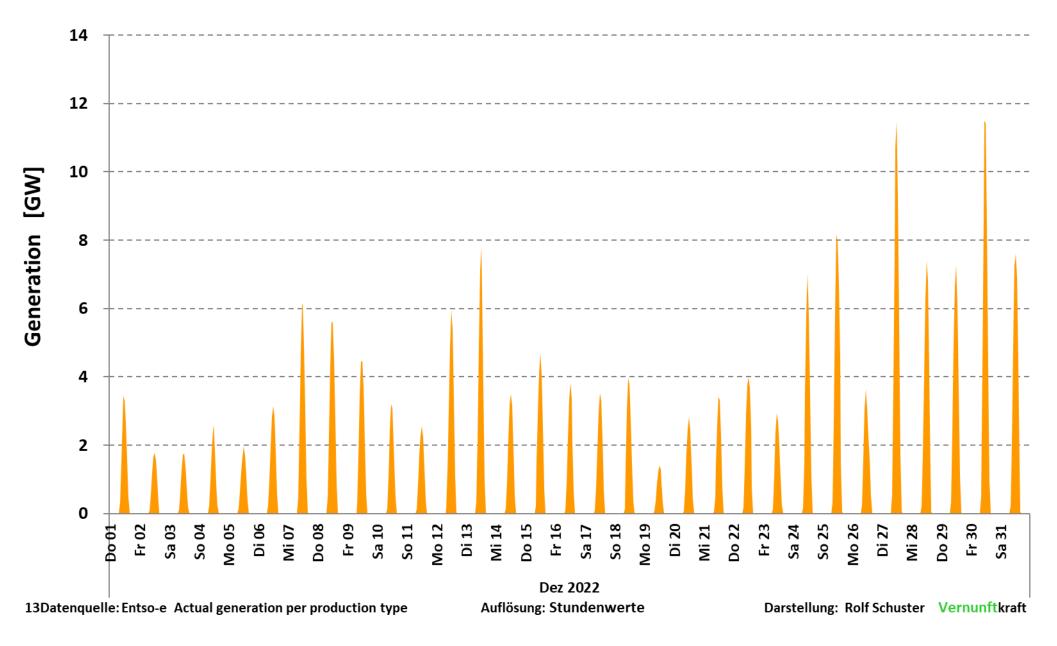


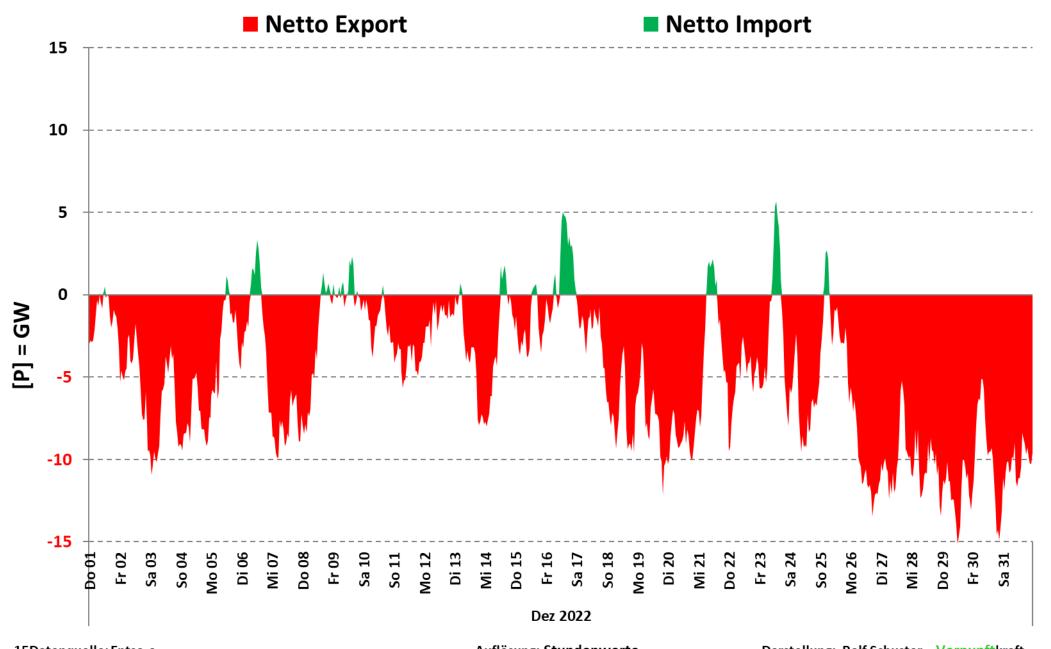




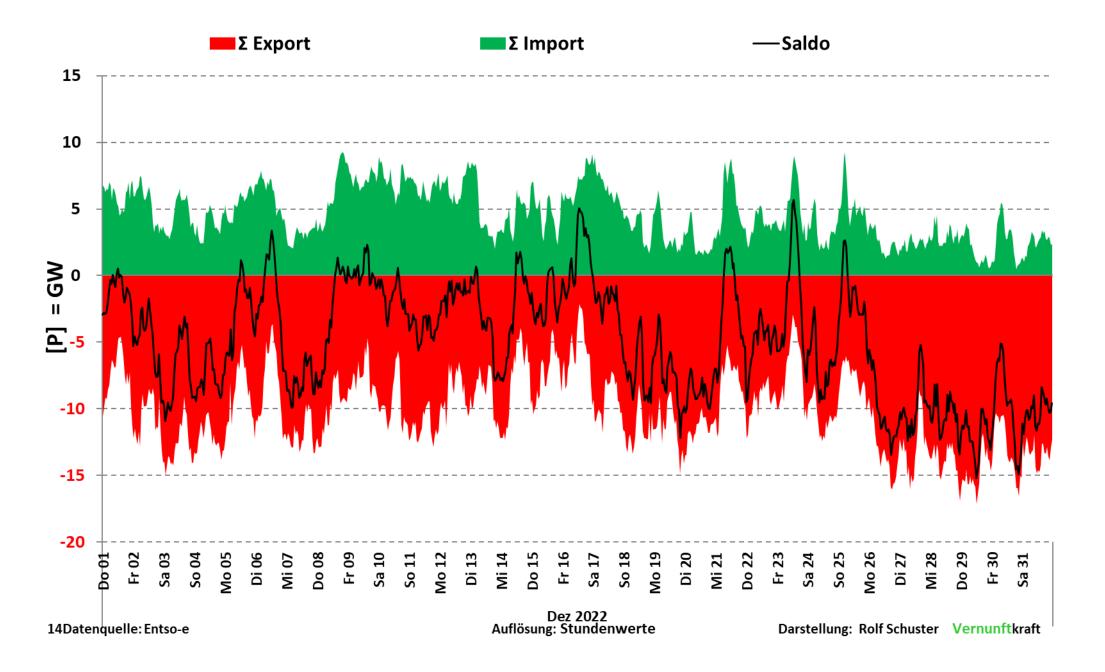


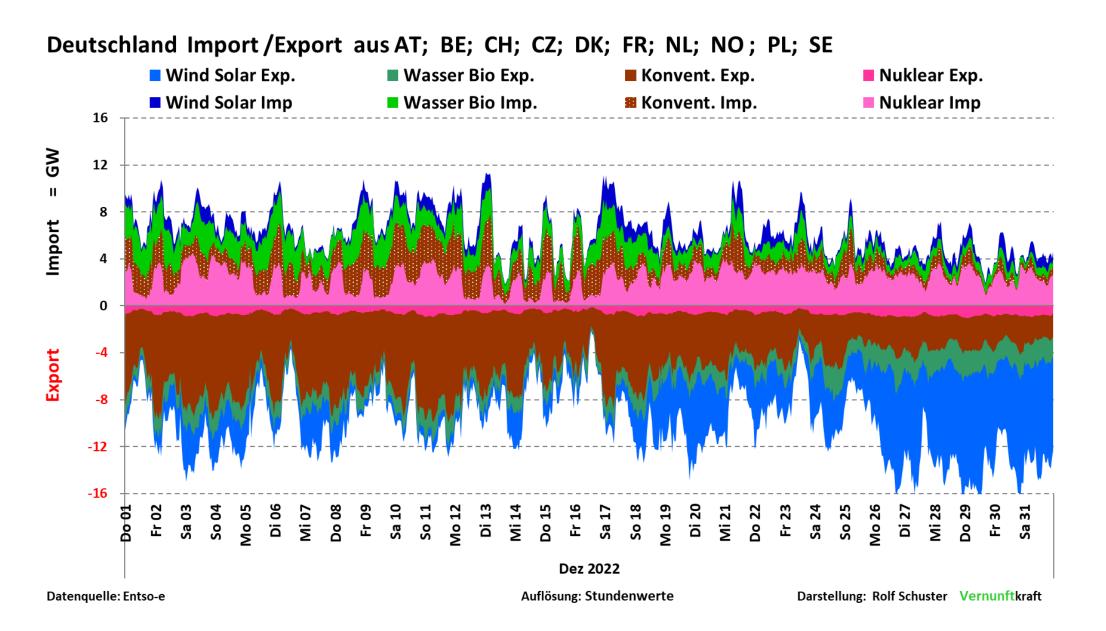




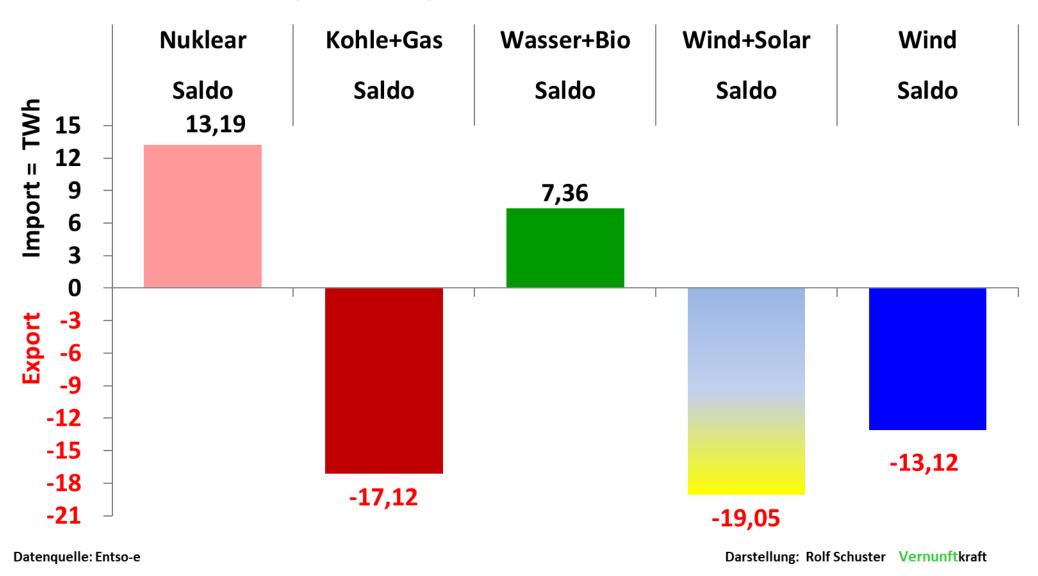


15Datenquelle: Entso-e Auflösung: Stundenwerte Darstellung: Rolf Schuster Vernunftkraft





Saldo = Import - Export Deutschland Jan-Dez 2022



	Negativstunden an der Strombörse bis zum 31.12.2022												
Jahr	Summe Jahr	Jan	Feb	Mrz	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
2010	12	2		3		2	3						2
2011	15	4	4				2						5
2012	56	19		1	1							2	33
2013	64	5		6		2	20			2	5		24
2014	64	1	3	13	3	10			6				28
2015	126	28	8	14	14	17		3		13		18	11
2016	97	5	14	6		21		2				14	35
2017	146	3	5		16	17		7	8	8	39	1	42
2018	133	44	5	21	3	31				3	6		20
2019	232	34	9	43	16	19	41	2	11	15	4		38
2020	309	3	77	41	49	41	12	24	4	6	18	9	25
2021	139		9	27	22	38	9	11	11		7		5
2022	69	4	4	6	5	16	3	2				•	29