

Statistics report

Monthly OECD Electricity Statistics

Next release: 13 March 2021

Data up to November 2020



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MONTHLY ELECTRICITY STATISTICS

November 2020

HIGHLIGHTS

OECD

- In November 2020, total net production in the OECD was 838.7 TWh, down by 2.5% compared to November 2019 and up by 0.2% compared to October 2020.
- Renewable production was 263.6 TWh, up by 5.4% compared to November 2019 and down by 1.1% compared to October 2020. Wind and solar production increased respectively by 15.6% and 27.8% compared to November 2019, and by 12.4% and 19.4% in the first eleven months of 2020 compared to the same months in 2019, highlighting the dynamic growth of the renewable electricity sector. Solar production decreased by 20.1% compared to October 2020 following seasonal trends.
- Non-renewable electricity production was 575.1 TWh, down by 5.8% compared to November 2019 and up by 0.8% compared to October 2020. The decrease compared to November 2019 was mainly due to lower coal production, which was 171.4 TWh 11.5% lower than in November 2019. In the first eleven months of 2020, coal production decreased by 16.6% down to 1,796.9 TWh. Coal was responsible for 19.0% of total production from January to November 2020 compared to 22.1% during the same period in 2019.

OECD Americas

- Net production in OECD Americas was 398.3 TWh in November 2020, down by 3.9% compared to November 2019 and by 2.4% compared to October 2020. Renewables was 122.6 TWh, up by 11.5% compared to November 2019. This increase was driven by wind and solar production, which increased by respectively 30.2% and 36.5% compared to November 2019. Non-renewable power output was 275.8 TWh, down by 9.4% compared to November 2019. This decrease was caused mainly by lower coal production, which was 71.4 TWh, down by 18.2% compared to November 2019.
- In Canada, wind production was 4.2 TWh, up by 26.9% compared to November 2019 and by 29.8% compared to October 2020. The share of wind production in the electricity mix was 8.0% in November 2020, up from 6.0% in November 2019. From January to November 2020, wind production increased by 10.5% compared to the same period in 2019, illustrating the expansion of the wind power sector throughout 2020.
- In Chile, renewable production increased by 24.0% in November 2020 compared to November 2019 and up by 7.0% compared to October 2020. Solar production was 839.2 GWh, up by 24.0% compared to November 2019 and by 8.1% compared to October 2019. In November 2020, the share of solar power in the electricity mix was 12.9%, up from 10.4% in November 2019. From January to November 2020, solar power output has been higher consistently than during the same months in 2019.

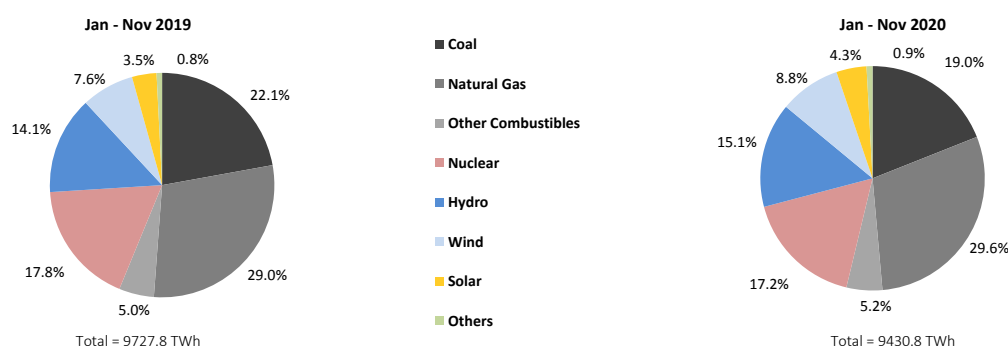
OECD Asia/Oceania

- In OECD Asia/Oceania, total net electricity production was 141.9 TWh in November 2020, 1.5% lower than in November 2019 and 1.6% higher than in October 2020. Non-renewable power production was 116.0 TWh, up by 3.4% compared to October 2020. In the first eleven months of 2020, renewable production was 317.2 TWh, up by 12.3% compared to the same period in 2019. Renewables produced more electricity in the first eleven of 2020 than in 2019, highlighting the growth in the renewable electricity sector in OECD Asia/Oceania.
- In Korea, nuclear production was 13.4 TWh in November 2020, up 37.4% compared to November 2019 and by 4.3% compared to October 2020, reaching high levels for the season. This was a result of maintenance periods ending for a number of nuclear reactors in October 2020. This higher nuclear output almost compensated for the drop in coal power production, which was 15.2 TWh in November 2020, down by 23.6% compared to November 2019 and by 1.0% compared to October 2020.

OECD Europe

- In November 2020, net electricity production in OECD Europe was 293.4 TWh, 2.8% lower than in November 2019 and 1.4% higher than in October 2020. Renewable power output was 115.1 TWh, down by 0.6% compared to November 2019 and by 8.6% compared to October 2020. Solar production was 6.2 TWh, 38.9% lower than in October 2020 as a result of seasonal lower solar radiation. solar power output was 28.3% higher than in November 2019 because lower than average cloud cover in most of Europe.
- Wind production was 928.9 GWh in Finland in November 2020, up by 128.3% compared to November 2019 and by 46.3% compared to October 2020. In November 2020, wind power generated 15.0% of total electricity compared to 7.0% in November 2019 and was the second source of renewable electricity after hydro production. From January to November 2020, wind power production has increased by 32.1%.
- Wind power output increased significantly in Greece in November 2020, reaching 996.6 GWh, 69.5% higher than in November 2019 and 62.9% higher than in October 2020. This was the second highest production level recorded and was a direct consequence of newly grid-connected wind farms, bringing total wind capacity close to 4 GW. In November 2020, wind power generated 26.8% of electricity up from 18.7% in November 2019.
- In the Netherlands, renewable production increased by 47.9% in November 2020 compared to November 2019, to reach 2.7 TWh. From January to November 2020, renewable power output increased by 48.0% compared to the same period last year. This increase was driven partly by combustible renewable production which increased by 67.0% in over these eleven months compared to the same period in 2019. In November 2020, combustible renewable production was the highest recorded, at 828.2 GWh, up by 14.0% compared to November 2019 and by 3.8% compared to October 2020, responsible for 8.2% of the total electricity production, up from 6.7% in November 2019.

OECD Electricity Production by Fuel Type Year-to-Date Comparison



OECD Total

	Nov 2020				Year-to-Date			2019	
	TWh	change ¹	change ²	share	2020	2019	change ³	TWh	share
CONVENTIONAL THERMAL	446.3	-7.4%	-1.2%	53.6%	5 069.1	5 468.1	-7.3%	5 965.7	56.1%
Coal ⁵	165.6	-14.7%	4.1%	19.9%	1 790.3	2 154.4	-16.9%	2 345.8	22.0%
Oil ⁵	13.0	-4.5%	11.5%	1.6%	147.4	169.5	-13.0%	185.1	1.7%
Natural Gas ⁵	235.8	-3.3%	-5.7%	28.3%	2 791.9	2 823.7	-1.1%	3 081.8	29.0%
Combustible Renewables ⁵	25.5	-1.1%	3.6%	3.1%	275.4	269.3	2.3%	296.7	2.8%
Other Combustibles ⁵	6.4	27.0%	3.3%	0.8%	64.1	51.2	25.2%	56.4	0.5%
Nuclear	146.3	-3.1%	4.0%	17.6%	1 617.9	1 731.3	-6.5%	1 898.4	17.8%
Hydro	121.1	-3.2%	0.7%	14.5%	1 423.0	1 369.3	3.9%	1 504.3	14.1%
Wind	86.6	15.6%	1.9%	10.4%	829.8	738.4	12.4%	826.5	7.8%
Solar	26.1	27.8%	-20.1%	3.1%	410.0	343.4	19.4%	361.1	3.4%
Geothermal	4.2	10.4%	2.6%	0.5%	45.8	46.1	-0.7%	50.3	0.5%
Other Renewables	0.1	30.9%	-0.1%	0.0%	1.0	0.9	15.6%	1.0	0.0%
Non-Specified	2.6	2.5%	-2.9%	0.3%	34.2	30.3	12.7%	33.1	0.3%
RENEWABLES	263.6	5.4%	-1.1%	31.6%	2 985.0	2 767.4	7.9%	3 039.9	28.6%
NON-RENEWABLES	569.7	-6.6%	-0.1%	68.4%	6 445.7	6 960.4	-7.4%	7 600.6	71.4%
TOTAL NET PRODUCTION	833.3	-3.1%	-0.5%		9 430.8	9 727.8	-3.1%	10 640.4	
+ Imports	41.3	6.2%	2.0%		442.5	448.3	-1.3%	491.8	
- Exports	43.4	12.3%	4.5%		460.7	440.2	4.6%	483.9	
= ELECTRICITY SUPPLIED	831.2	-3.4%	-0.6%		9 412.6	9 735.9	-3.3%	10 648.3	
- Used for pumped storage ⁴	5.9	-8.3%	-13.6%		80.1	75.5	6.1%	83.0	
- T&D Losses ⁴	50.8	-11.6%	15.7%		547.1	594.0	-7.9%	651.6	
= ELECTRICITY CONSUMED	774.5	-2.7%	-1.4%		8 785.4	9 066.4	-3.1%	9 913.7	

¹ current month to month of last year change

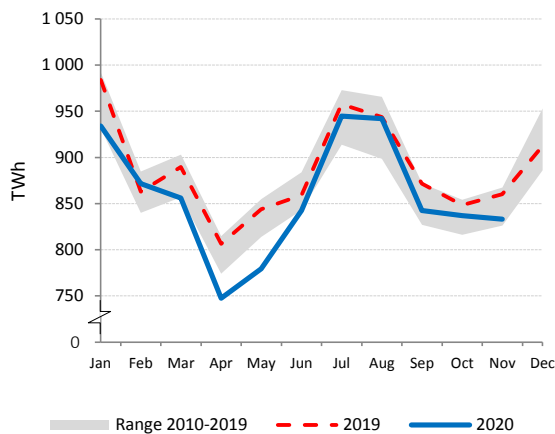
⁴ estimated for certain countries

² month-to-month change

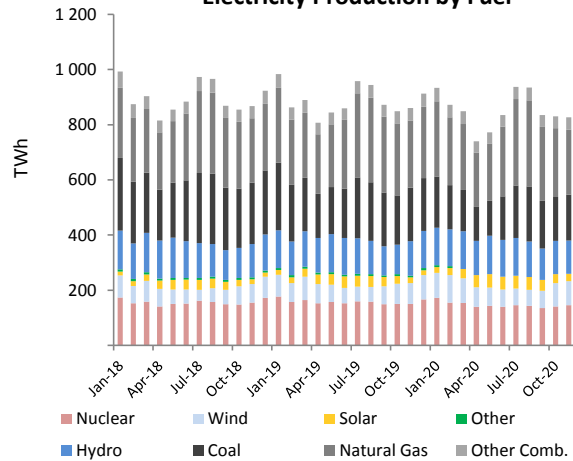
⁵ the breakdown of conventional thermal is estimated from annual data for Canada, Estonia and Italy

³ year-to-date compared to same period last year

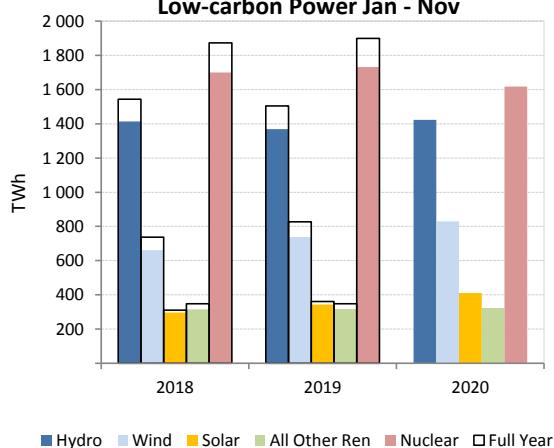
Electricity Production



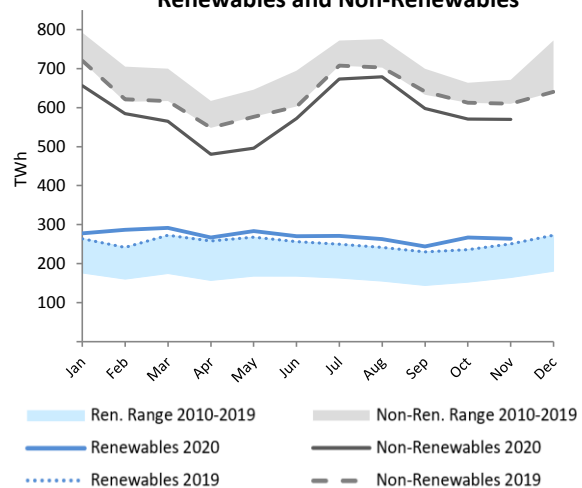
Electricity Production by Fuel



Low-carbon Power Jan - Nov



Renewables and Non-Renewables



OECD Americas

	Nov 2020				Year-to-Date			2019	
	TWh	change ¹	change ²	share	2020	2019	change ³	TWh	share
CONVENTIONAL THERMAL	211.8	-10.8%	-9.1%	53.2%	2 667.3	2 863.0	-6.8%	3 109.6	58.7%
Coal ⁵	71.4	-18.2%	2.3%	17.9%	812.3	1 033.4	-21.4%	1 118.3	21.1%
Oil ⁵	6.0	3.1%	4.2%	1.5%	71.8	71.0	1.2%	76.8	1.4%
Natural Gas ⁵	127.4	-7.1%	-15.4%	32.0%	1 706.5	1 678.1	1.7%	1 826.5	34.5%
Combustible Renewables ⁵	6.0	-0.3%	5.0%	1.5%	66.9	71.1	-5.8%	77.6	1.5%
Other Combustibles ⁵	0.9	-2.1%	1.0%	0.2%	9.8	9.5	3.2%	10.4	0.2%
Nuclear	69.6	-4.5%	3.4%	17.5%	816.1	833.3	-2.1%	916.0	17.3%
Hydro	65.2	0.8%	9.5%	16.4%	726.5	715.0	1.6%	784.8	14.8%
Wind	39.8	30.2%	15.8%	10.0%	355.4	318.1	11.7%	350.5	6.6%
Solar	9.8	36.5%	-17.2%	2.5%	132.3	107.3	23.3%	113.4	2.1%
Geothermal	1.8	21.5%	5.5%	0.4%	19.0	19.3	-1.6%	21.0	0.4%
Other Renewables	-	-	-	-	-	0.0	-	0.0	0.0%
Non-Specified	0.4	0.6%	0.2%	0.1%	4.0	4.5	-10.3%	4.9	0.1%
RENEWABLES	122.6	11.5%	8.3%	30.8%	1 300.2	1 230.8	5.6%	1 347.3	25.4%
NON-RENEWABLES	275.8	-9.4%	-6.5%	69.2%	3 420.5	3 629.8	-5.8%	3 952.9	74.6%
TOTAL NET PRODUCTION	398.3	-3.9%	-2.4%		4 720.7	4 860.6	-2.9%	5 300.2	
+ Imports	5.5	16.6%	6.8%		65.9	69.1	-4.6%	74.3	
- Exports	6.7	-1.2%	-4.9%		85.0	73.9	15.0%	81.3	
= ELECTRICITY SUPPLIED	397.1	-3.7%	-2.2%		4 701.7	4 855.8	-3.2%	5 293.2	
- Used for pumped storage ⁴	1.6	-3.2%	-11.7%		24.8	24.4	1.7%	26.2	
- T&D Losses ⁴	25.7	-15.5%	35.3%		277.6	305.5	-9.1%	333.1	
= ELECTRICITY CONSUMED	369.8	-2.8%	-4.0%		4 399.3	4 526.0	-2.8%	4 933.8	

¹ current month to month of last year change

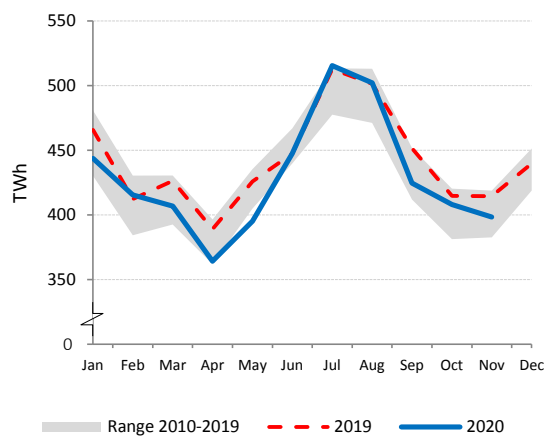
⁴ estimated for certain countries

² month-to-month change

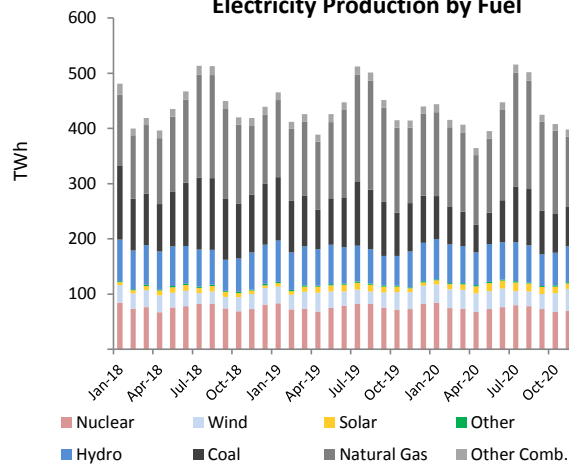
⁵ the breakdown of conventional thermal is estimated from annual data for Canada

³ year-to-date compared to same period last year

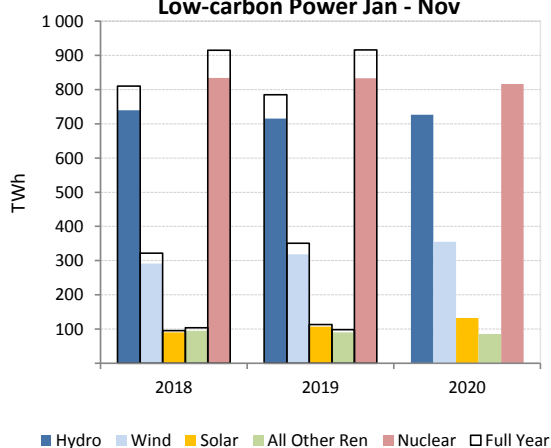
Electricity Production



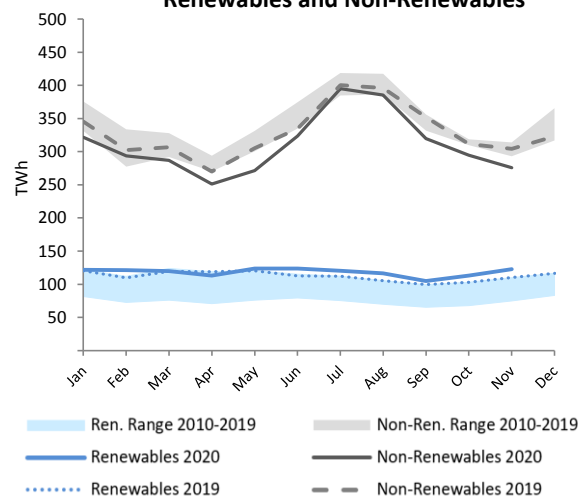
Electricity Production by Fuel



Low-carbon Power Jan - Nov



Renewables and Non-Renewables



OECD Asia Oceania

	Nov 2020				Year-to-Date			2019	
	TWh	change ¹	change ²	share	2020	2019	change ³	TWh	share
CONVENTIONAL THERMAL	101.9	-3.8%	3.0%	71.8%	1 151.1	1 223.0	-5.9%	1 346.2	72.9%
Coal	49.1	-11.7%	0.8%	34.6%	583.3	630.9	-7.5%	691.6	37.4%
Oil	3.7	-11.0%	40.8%	2.6%	39.5	57.2	-30.9%	63.2	3.4%
Natural Gas	43.2	4.2%	4.4%	30.4%	465.7	489.5	-4.9%	541.1	29.3%
Combustible Renewables	2.9	5.3%	-9.2%	2.1%	33.9	27.9	21.6%	30.7	1.7%
Other Combustibles	3.0	53.3%	-0.3%	2.1%	28.6	17.6	62.8%	19.5	1.1%
Nuclear	15.3	2.6%	4.6%	10.8%	178.8	187.7	-4.8%	203.5	11.0%
Hydro	8.6	-6.7%	-9.0%	6.1%	126.9	120.4	5.4%	129.8	7.0%
Wind	3.3	4.1%	0.1%	2.3%	33.1	28.9	14.4%	32.1	1.7%
Solar	10.2	20.2%	-3.9%	7.2%	113.3	95.5	18.7%	102.7	5.6%
Geothermal	0.8	10.1%	-4.5%	0.6%	9.4	9.2	1.8%	10.0	0.5%
Other Renewables	0.1	64.6%	-0.1%	0.0%	0.6	0.4	31.9%	0.5	0.0%
Non-Specified	1.8	6.8%	-4.5%	1.3%	25.8	20.7	24.4%	22.7	1.2%
RENEWABLES	25.9	6.0%	-5.8%	18.2%	317.2	282.3	12.3%	305.7	16.5%
NON-RENEWABLES	116.0	-3.1%	3.4%	81.8%	1 321.7	1 403.6	-5.8%	1 541.7	83.5%
TOTAL NET PRODUCTION	141.9	-1.5%	1.6%		1 638.9	1 685.9	-2.8%	1 847.4	
+ Imports	-	-	-		-	-	-	-	
- Exports	-	-	-		-	-	-	-	
= ELECTRICITY SUPPLIED	141.9	-1.5%	1.6%		1 638.9	1 685.9	-2.8%	1 847.4	
- Used for pumped storage ⁴	1.0	-17.7%	-11.2%		14.9	14.5	2.5%	15.7	
- T&D Losses ⁴	5.9	-5.6%	-2.0%		70.1	72.3	-3.0%	79.2	
= ELECTRICITY CONSUMED	135.0	-1.2%	1.9%		1 553.9	1 599.1	-2.8%	1 752.4	

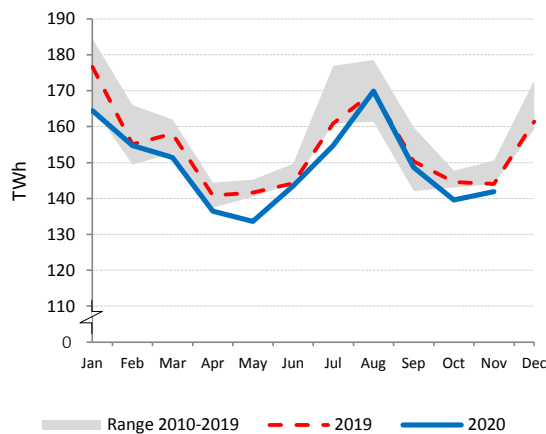
¹ current month to month of last year change

⁴ estimated for certain countries

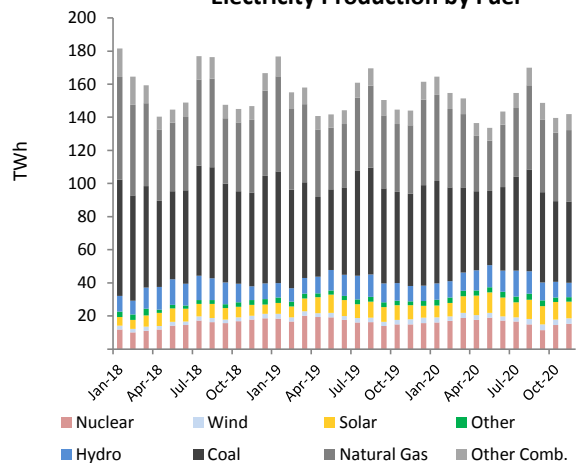
² month-to-month change

³ year-to-date compared to same period last year

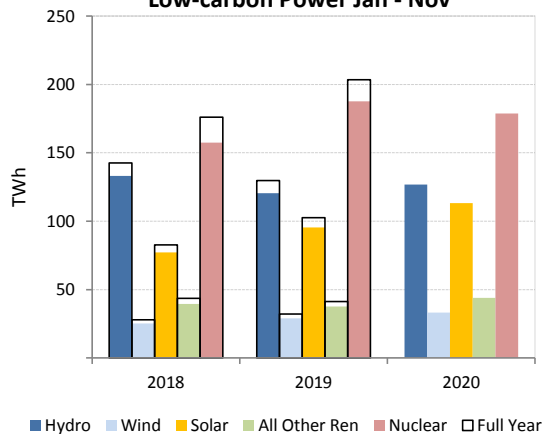
Electricity Production



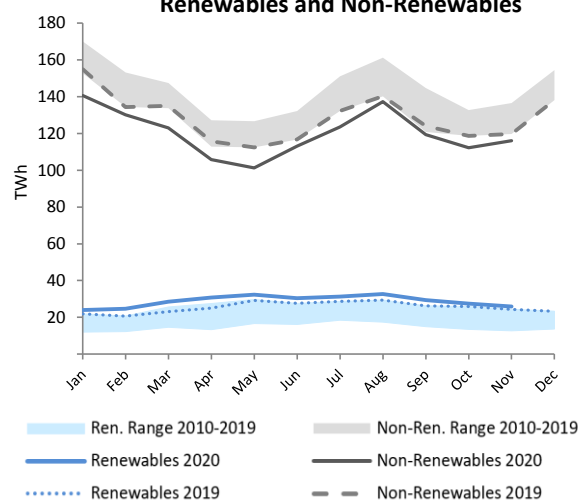
Electricity Production by Fuel



Low-carbon Power Jan - Nov



Renewables and Non-Renewables



OECD Europe

	Nov 2020				Year-to-Date			2019	
	TWh	change ¹	change ²	share	2020	2019	change ³	TWh	share
CONVENTIONAL THERMAL	132.6	-4.6%	10.6%	45.2%	1 250.7	1 382.0	-9.5%	1 509.9	43.2%
Coal ⁵	45.1	-11.7%	11.1%	15.4%	394.7	490.1	-19.5%	535.9	15.3%
Oil ⁵	3.3	-9.3%	1.0%	1.1%	36.1	41.3	-12.7%	45.1	1.3%
Natural Gas ⁵	65.3	0.1%	12.1%	22.3%	619.6	656.1	-5.6%	714.1	20.4%
Combustible Renewables ⁵	16.5	-2.5%	5.8%	5.6%	174.6	170.3	2.5%	188.4	5.4%
Other Combustibles ⁵	2.5	14.8%	9.0%	0.8%	25.7	24.1	6.5%	26.4	0.8%
Nuclear	61.4	-2.8%	4.5%	21.0%	623.1	710.3	-12.3%	778.9	22.3%
Hydro	47.2	-7.7%	-7.6%	16.1%	569.6	533.8	6.7%	589.8	16.9%
Wind	43.5	5.6%	-8.0%	14.9%	441.2	391.3	12.7%	443.8	12.7%
Solar	6.2	28.3%	-39.9%	2.1%	164.4	140.6	16.9%	145.0	4.2%
Geothermal	1.6	0.5%	3.5%	0.6%	17.4	17.6	-1.1%	19.3	0.6%
Other Renewables	0.0	-	-	0.0%	0.4	0.4	-	0.5	0.0%
Non-Specified	0.4	-11.7%	1.4%	0.1%	4.3	5.1	-14.5%	5.5	0.2%
RENEWABLES	115.1	-0.6%	-8.6%	39.3%	1 367.6	1 254.2	9.0%	1 386.8	39.7%
NON-RENEWABLES	178.0	-4.2%	8.8%	60.7%	1 703.5	1 927.0	-11.6%	2 106.0	60.3%
TOTAL NET PRODUCTION	293.1	-2.8%	1.2%		3 071.1	3 181.3	-3.5%	3 492.8	
+ Imports	35.9	4.8%	1.3%		376.5	379.2	-0.7%	417.5	
- Exports	36.8	15.1%	6.4%		375.7	366.3	2.6%	402.6	
= ELECTRICITY SUPPLIED	292.2	-3.8%	0.6%		3 072.0	3 194.1	-3.8%	3 507.7	
- Used for pumped storage ⁴	3.2	-7.6%	-15.2%		40.4	36.6	10.5%	41.0	
- T&D Losses ⁴	19.3	-7.6%	1.6%		199.4	216.2	-7.8%	239.2	
= ELECTRICITY CONSUMED	269.7	-3.5%	0.8%		2 832.2	2 941.3	-3.7%	3 227.5	

¹ current month to month of last year change

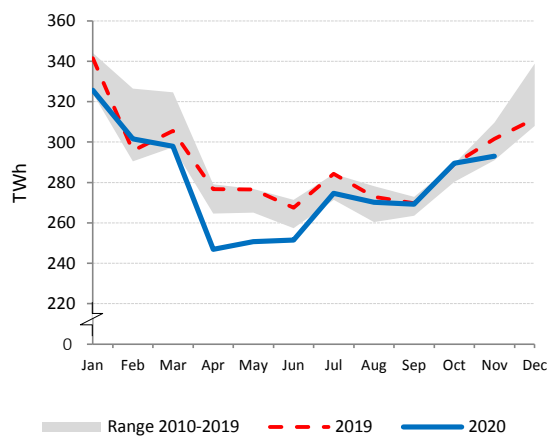
⁴ estimated for certain countries

² month-to-month change

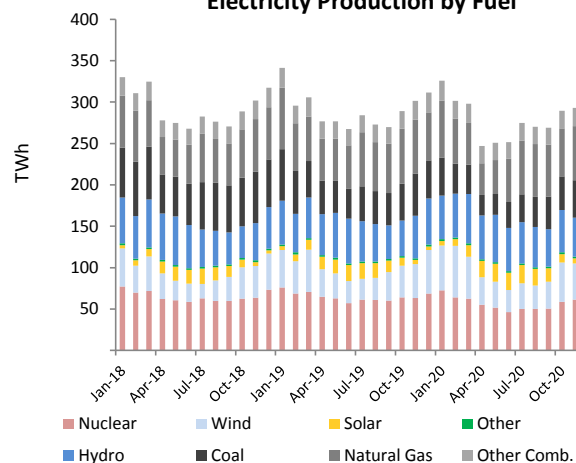
⁵ the breakdown of conventional thermal is estimated from annual data for Estonia and Italy

³ year-to-date compared to same period last year

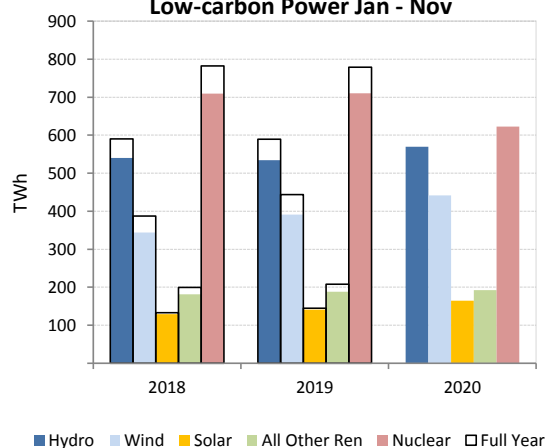
Electricity Production



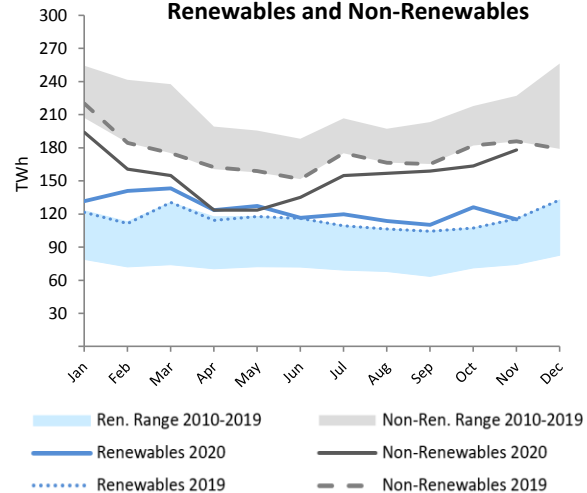
Electricity Production by Fuel



Low-carbon Power Jan - Nov



Renewables and Non-Renewables



IEA Total

	Nov 2020				Year-to-Date			2019	
	TWh	change ¹	change ²	share	2020	2019	change ³	TWh	share
CONVENTIONAL THERMAL	441.0	-7.4%	-1.2%	54.0%	4 995.4	5 397.4	-7.4%	5 888.4	56.4%
Coal ⁵	162.9	-14.7%	4.2%	20.0%	1 756.6	2 120.7	-17.2%	2 308.8	22.1%
Oil ⁵	12.7	-3.5%	11.9%	1.6%	142.1	165.2	-13.9%	180.3	1.7%
Natural Gas ⁵	234.2	-3.1%	-5.7%	28.7%	2 763.7	2 797.4	-1.2%	3 053.3	29.2%
Combustible Renewables ⁵	24.9	-1.4%	3.6%	3.0%	269.0	262.9	2.3%	289.7	2.8%
Other Combustibles ⁵	6.4	27.1%	3.4%	0.8%	64.0	51.1	25.2%	56.3	0.5%
Nuclear	145.8	-3.1%	4.0%	17.9%	1 612.4	1 726.3	-6.6%	1 892.9	18.1%
Hydro	112.0	-4.0%	0.6%	13.7%	1 340.2	1 281.7	4.6%	1 409.1	13.5%
Wind	85.9	15.6%	2.0%	10.5%	823.3	732.6	12.4%	820.0	7.9%
Solar	25.2	27.9%	-20.7%	3.1%	403.0	337.4	19.4%	354.4	3.4%
Geothermal	3.8	13.0%	2.6%	0.5%	40.4	40.7	-0.8%	44.3	0.4%
Other Renewables	0.1	30.9%	-0.1%	0.0%	1.0	0.9	15.6%	1.0	0.0%
Non-Specified	2.6	2.6%	-2.8%	0.3%	34.0	30.1	12.9%	32.9	0.3%
RENEWABLES	251.9	5.2%	-1.3%	30.9%	2 876.7	2 656.2	8.3%	2 918.5	27.9%
NON-RENEWABLES	564.5	-6.5%	-0.1%	69.1%	6 372.8	6 890.8	-7.5%	7 524.4	72.1%
TOTAL NET PRODUCTION	816.4	-3.2%	-0.4%		9 249.6	9 547.1	-3.1%	10 442.9	
+ Imports	39.5	6.8%	1.9%		419.8	423.3	-0.8%	464.6	
- Exports	42.3	13.4%	5.1%		446.2	424.8	5.0%	467.2	
= ELECTRICITY SUPPLIED	813.6	-3.5%	-0.6%		9 223.2	9 545.6	-3.4%	10 440.3	
- Used for pumped storage ⁴	5.7	-9.6%	-14.3%		78.8	74.5	5.7%	81.9	
- T&D Losses ⁴	50.3	-10.7%	15.9%		541.7	581.1	-6.8%	637.5	
= ELECTRICITY CONSUMED	757.6	-2.9%	-1.4%		8 602.7	8 889.9	-3.2%	9 720.9	

¹ current month to month of last year change

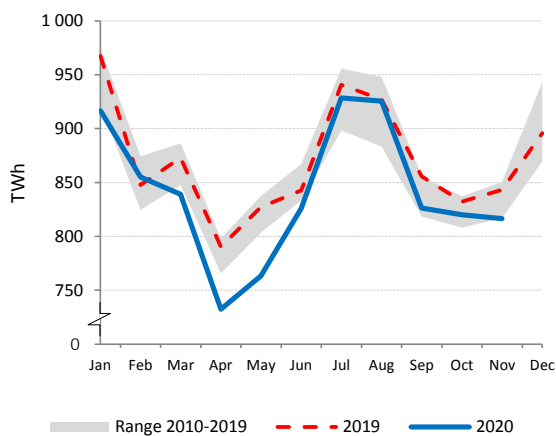
⁴ estimated for certain countries

² month-to-month change

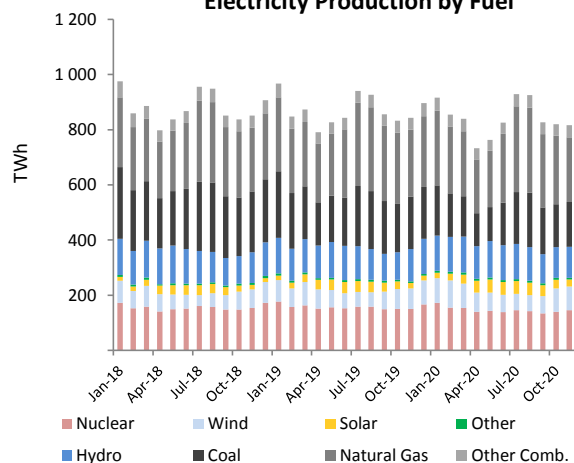
⁵ the breakdown of conventional thermal is estimated from annual data for Canada, Estonia, and Italy

³ year-to-date compared to same period last year

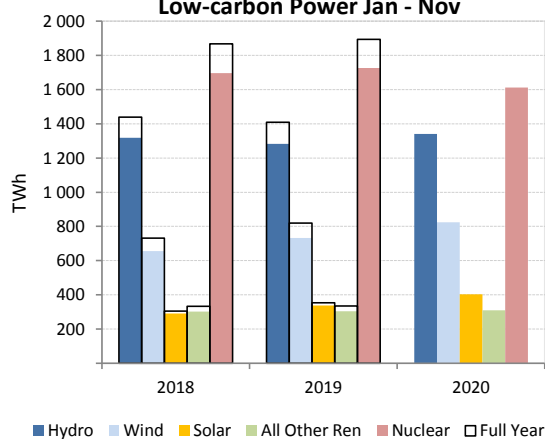
Electricity Production



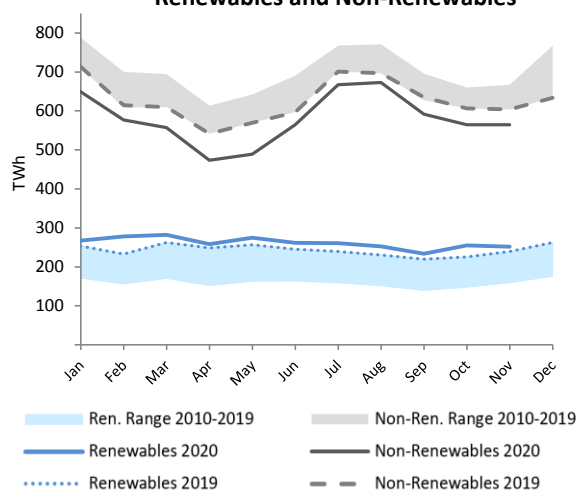
Electricity Production by Fuel



Low-carbon Power Jan - Nov



Renewables and Non-Renewables

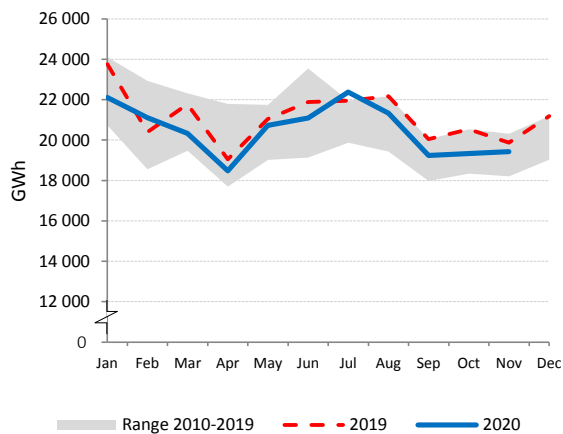


AUSTRALIA

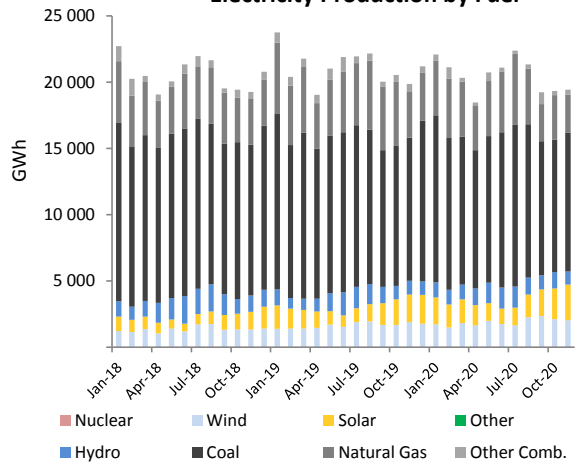
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	13 735	-7.7%	0.5%	70.7%	171 237	185 453	-7.7%	201 681	79.5%
Coal	10 480	-3.0%	4.6%	53.9%	122 864	128 266	-4.2%	140 408	55.4%
Oil	154	-53.5%	124.2%	0.8%	2 409	4 242	-43.2%	4 435	1.7%
Natural Gas	2 877	-17.7%	-14.1%	14.8%	43 458	50 168	-13.4%	53 819	21.2%
Combustible Renewables	225	-7.5%	-5.2%	1.2%	2 507	2 778	-9.8%	3 020	1.2%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	995	-2.8%	-19.6%	5.1%	13 927	13 259	5.0%	14 276	5.6%
Wind	2 035	7.5%	-3.3%	10.5%	20 829	17 942	16.1%	19 718	7.8%
Solar	2 670	28.3%	15.5%	13.7%	19 553	15 832	23.5%	17 996	7.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	5 925	13.0%	0.6%	30.5%	56 816	49 811	14.1%	55 009	21.7%
NON-RENEWABLES	13 511	-7.7%	0.6%	69.5%	168 730	182 675	-7.6%	198 661	78.3%
TOTAL NET PRODUCTION	19 436	-2.2%	0.6%		225 546	232 486	-3.0%	253 670	
+ Imports	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-
= ELECTRICITY SUPPLIED	19 436	-2.2%	0.6%		225 546	232 486	-3.0%	253 670	
- Used for pumped storage ⁴	39	-2.8%	-19.6%		542	516	5.0%	555	
- T&D Losses ⁴	1 007	-2.2%	0.6%		11 681	12 040	-3.0%	13 138	
= ELECTRICITY CONSUMED	18 390	-2.2%	0.6%		213 323	219 930	-3.0%	239 978	

¹ current month to month of last year change ⁴ estimated
² month-to-month change
³ year-to-date compared to same period last year

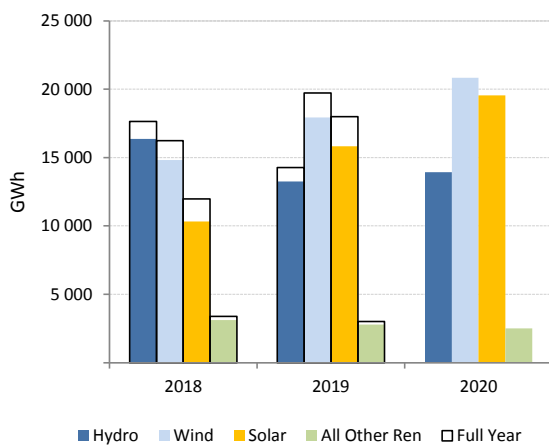
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



**Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020**



AUSTRIA

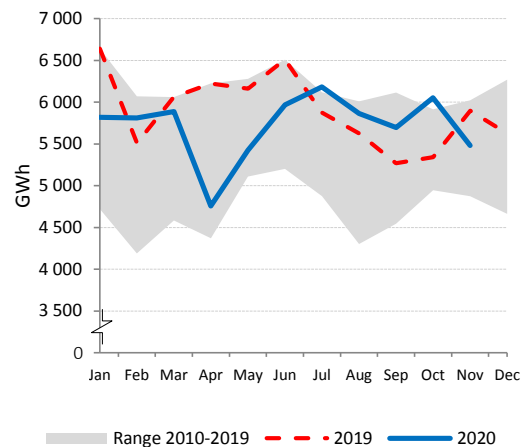
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	1 849	-7.8%	25.2%	33.7%	15 478	17 858	-13.3%	19 890	28.1%
Coal	178	-34.1%	-1.3%	3.2%	2 067	2 987	-30.8%	3 253	4.6%
Oil	55	5.3%	-10.2%	1.0%	598	612	-2.3%	661	0.9%
Natural Gas	1 188	-6.1%	51.2%	21.7%	7 905	9 500	-16.8%	10 787	15.3%
Combustible Renewables	376	7.6%	-6.3%	6.9%	4 404	4 078	8.0%	4 438	6.3%
Other Combustibles	53	-25.3%	7.7%	1.0%	504	681	-26.0%	751	1.1%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	3 211	2.8%	-14.9%	58.6%	39 906	39 393	1.3%	42 138	59.6%
Wind	361	-49.0%	-47.3%	6.6%	5 973	6 272	-4.8%	7 071	10.0%
Solar ⁴	59	-	-47.6%	1.1%	1 575	1 575	-	1 622	2.3%
Geothermal	0	-	-	0.0%	0	0	-	0	0.0%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	1	-1.9%	-25.1%	0.0%	13	11	14.3%	12	0.0%
RENEWABLES	4 007	-5.5%	-19.4%	73.1%	51 859	51 319	1.1%	55 270	78.1%
NON-RENEWABLES	1 474	-11.1%	36.9%	26.9%	11 087	13 792	-19.6%	15 464	21.9%
TOTAL NET PRODUCTION	5 481	-7.1%	-9.4%		62 945	65 110	-3.3%	70 734	
+ Imports	2 464	24.1%	28.7%		21 753	23 361	-6.9%	26 047	
- Exports	1 779	12.4%	-3.4%		20 616	21 350	-3.4%	22 918	
= ELECTRICITY SUPPLIED	6 167	-2.1%	0.7%		64 082	67 122	-4.5%	73 863	
- Used for pumped storage	290	-32.1%	-33.0%		4 402	4 283	2.8%	4 826	
- T&D Losses	290	3.4%	5.7%		2 953	3 067	-3.7%	3 378	
= ELECTRICITY CONSUMED	5 588	-0.1%	3.1%		56 727	59 771	-5.1%	65 659	

¹ current month to month of last year change ⁴ estimated by the IEA secretariat

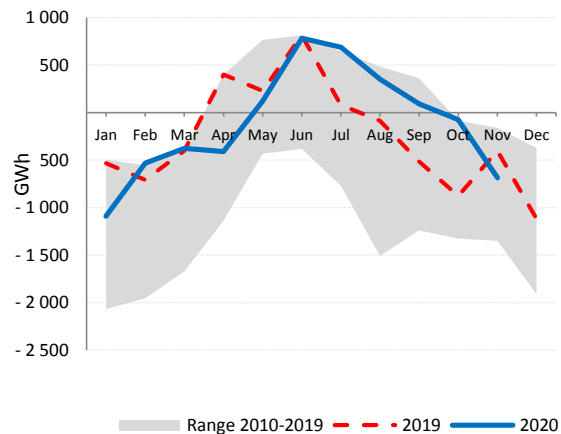
² month-to-month change

³ year-to-date compared to same period last year

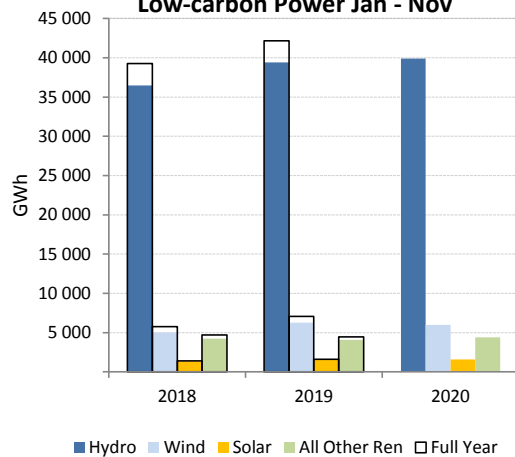
Electricity Production



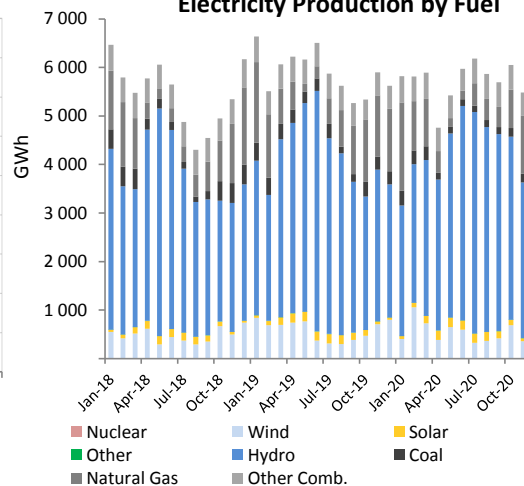
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



BELGIUM

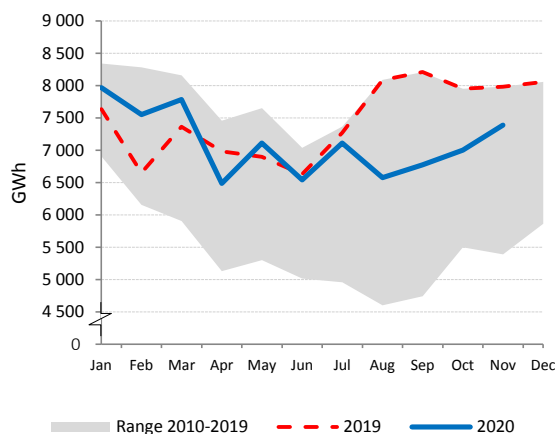
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	2 959	-17.1%	12.6%	40.0%	31 650	30 706	3.1%	33 508	37.4%
Coal	65	-66.8%	-38.7%	0.9%	1 687	2 259	-25.3%	2 434	2.7%
Oil	2	2.1%	-31.0%	0.0%	20	23	-12.8%	26	0.0%
Natural Gas	2 355	-16.0%	10.0%	31.9%	24 140	22 696	6.4%	24 729	27.6%
Combustible Renewables	427	-8.9%	61.8%	5.8%	4 610	4 520	2.0%	4 987	5.6%
Other Combustibles	110	9.6%	-3.7%	1.5%	1 192	1 208	-1.3%	1 332	1.5%
Nuclear	2 995	-7.7%	18.5%	40.5%	29 379	37 639	-21.9%	41 359	46.1%
Hydro	99	-10.2%	-6.1%	1.3%	1 159	1 010	14.7%	1 147	1.3%
Wind	1 179	31.6%	-22.7%	16.0%	11 154	8 084	38.0%	9 369	10.4%
Solar	139	6.8%	-30.3%	1.9%	4 657	3 839	21.3%	3 919	4.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	17	-44.2%	30.3%	0.2%	282	373	-24.3%	408	0.5%
RENEWABLES	1 845	14.9%	-11.9%	25.0%	21 580	17 454	23.6%	19 421	21.6%
NON-RENEWABLES	5 545	-13.0%	13.0%	75.0%	56 701	64 199	-11.7%	70 288	78.4%
TOTAL NET PRODUCTION	7 390	-7.4%	5.5%		78 281	81 653	-4.1%	89 709	
+ Imports	1 448	40.4%	-2.3%		12 284	11 411	7.7%	12 735	
- Exports	1 506	17.9%	33.1%		12 358	13 117	-5.8%	14 589	
= ELECTRICITY SUPPLIED	7 331	-5.2%	-0.3%		78 207	79 947	-2.2%	87 854	
- Used for pumped storage	108	6.4%	-6.1%		1 262	1 028	22.7%	1 162	
- T&D Losses	320	-5.2%	-0.3%		3 395	3 492	-2.8%	3 837	
= ELECTRICITY CONSUMED	6 903	-5.4%	-0.2%		73 549	75 427	-2.5%	82 855	

¹ current month to month of last year change

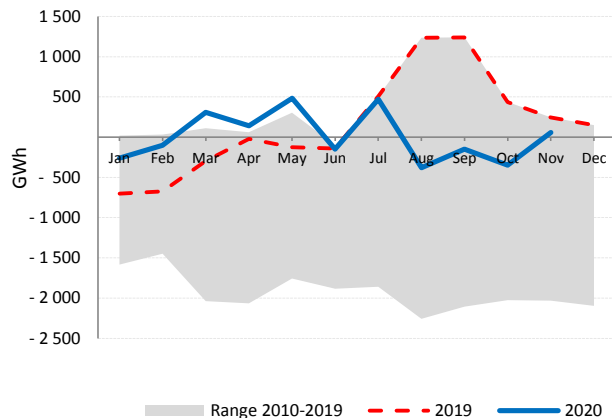
² month-to-month change

³ year-to-date compared to same period last year

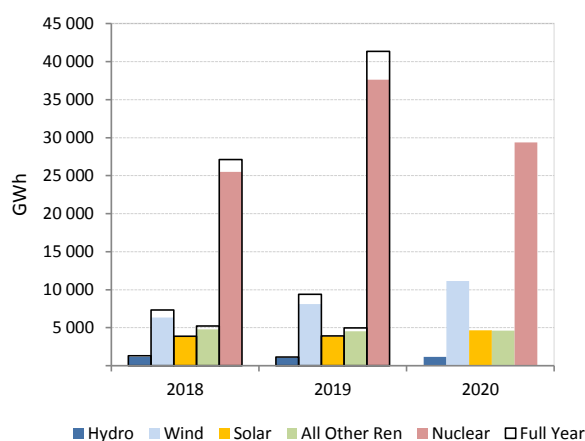
Electricity Production



Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020

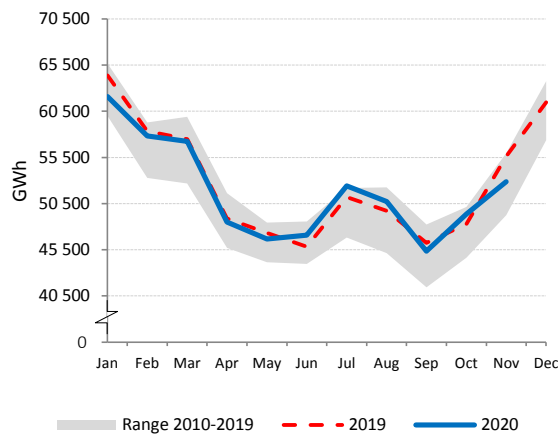
GWh

CANADA

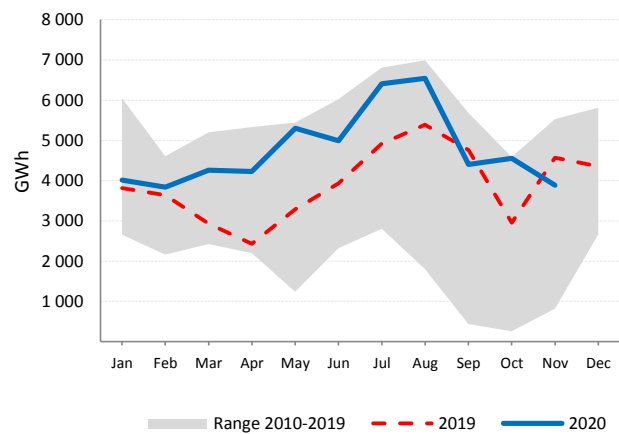
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	9 729	-7.6%	3.1%	18.4%	102 625	111 941	-8.3%	123 037	19.4%
Coal ⁴	3 603	-7.6%	3.1%	6.8%	38 009	41 460	-8.3%	45 570	7.2%
Oil ⁴	456	-7.6%	3.1%	0.9%	4 805	5 241	-8.3%	5 760	0.9%
Natural Gas ⁴	4 869	-7.6%	3.1%	9.2%	51 354	56 016	-8.3%	61 569	9.7%
Combustible Renewables ⁴	795	-7.6%	3.1%	1.5%	8 384	9 145	-8.3%	10 051	1.6%
Other Combustibles ⁴	7	-7.6%	3.0%	0.0%	73	80	-8.3%	88	0.0%
Nuclear	7 164	-6.1%	3.0%	13.5%	85 320	86 937	-1.9%	95 461	15.0%
Hydro	31 521	-7.2%	7.1%	59.6%	344 512	340 132	1.3%	378 127	59.6%
Wind	4 203	26.9%	29.8%	8.0%	33 297	30 129	10.5%	33 840	5.3%
Solar	239	45.9%	-17.5%	0.5%	4 251	4 056	4.8%	4 175	0.7%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	1	-	1	0.0%
Non-Specified	13	-17.9%	86.7%	0.0%	108	152	-29.1%	169	0.0%
RENEWABLES	36 758	-4.0%	9.0%	69.5%	390 445	383 463	1.8%	426 194	67.1%
NON-RENEWABLES	16 111	-7.0%	3.1%	30.5%	179 670	189 886	-5.4%	208 617	32.9%
TOTAL NET PRODUCTION	52 869	-4.9%	7.1%		570 114	573 348	-0.6%	634 811	
+ Imports	736	3.3%	21.5%		8 802	12 281	-28.3%	13 369	
- Exports	4 621	-12.5%	-10.4%		61 237	54 930	11.5%	60 376	
= ELECTRICITY SUPPLIED	48 984	-4.0%	9.3%		517 680	530 699	-2.5%	587 804	
- Used for pumped storage ⁴	18	-7.2%	7.1%		191	189	1.3%	210	
- T&D Losses ⁴	2 813	-4.8%	7.3%		30 380	30 733	-1.1%	34 015	
= ELECTRICITY CONSUMED	46 153	-4.0%	9.4%		487 108	499 778	-2.5%	553 579	

¹ current month to month of last year change ⁴ estimated from annual data
² month-to-month change
³ year-to-date compared to same period last year

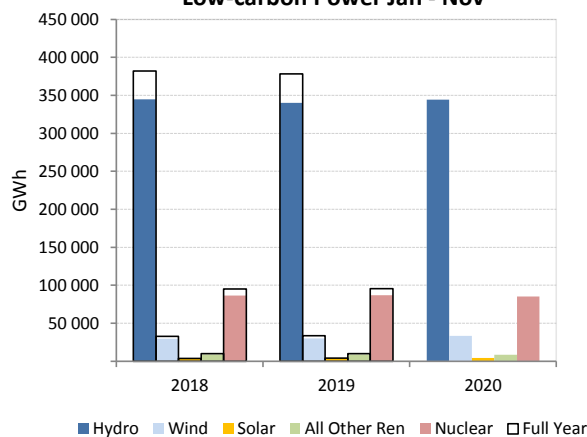
Electricity Production



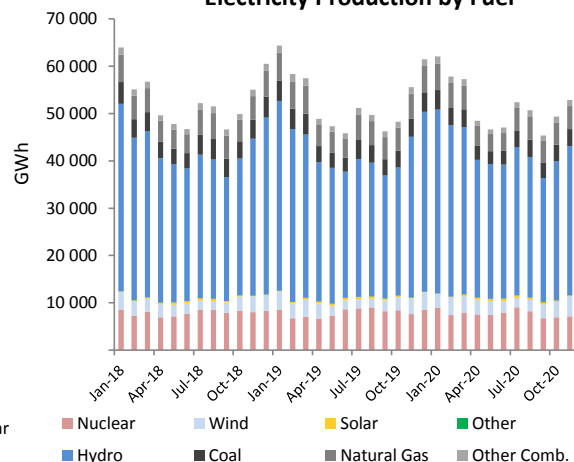
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



CHILE

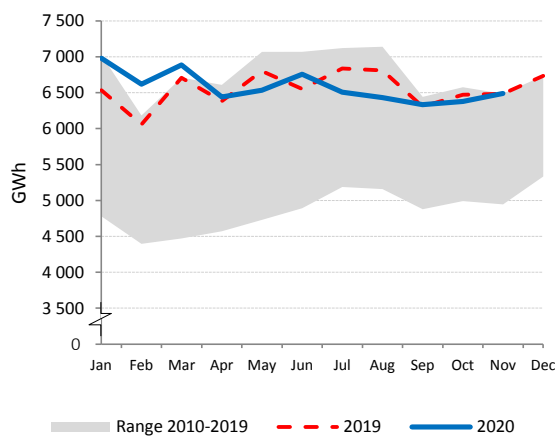
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	2 561	-22.6%	-5.6%	39.5%	42 628	43 331	-1.6%	47 041	59.8%
Coal	1 755	-6.9%	3.9%	27.0%	21 748	23 235	-6.4%	25 431	32.3%
Oil	168	-47.7%	-4.3%	2.6%	3 563	2 630	35.5%	2 911	3.7%
Natural Gas	304	-63.8%	-42.6%	4.7%	13 406	13 602	-1.4%	14 521	18.5%
Combustible Renewables	334	26.5%	5.1%	5.1%	3 910	3 865	1.2%	4 177	5.3%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	2 533	26.9%	13.4%	39.0%	18 091	18 642	-3.0%	20 456	26.0%
Wind	535	10.4%	-16.2%	8.2%	4 922	4 308	14.3%	4 802	6.1%
Solar	839	24.0%	8.1%	12.9%	6 496	5 488	18.4%	6 188	7.9%
Geothermal	21	21.4%	13.5%	0.3%	217	185	17.4%	202	0.3%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	4 261	24.0%	7.0%	65.7%	33 637	32 487	3.5%	35 825	45.5%
NON-RENEWABLES	2 227	-26.9%	-7.0%	34.3%	38 718	39 467	-1.9%	42 864	54.5%
TOTAL NET PRODUCTION	6 489	0.1%	1.7%		72 354	71 954	0.6%	78 689	
+ Imports	-	-	-		-	-	-	-	
- Exports	-	-	-		-	-	-	-	
= ELECTRICITY SUPPLIED	6 489	0.1%	1.7%		72 354	71 954	0.6%	78 689	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses	272	0.8%	1.9%		2 987	3 239	-7.8%	3 520	
= ELECTRICITY CONSUMED	6 217	0.0%	1.7%		69 367	68 715	0.9%	75 169	

¹ current month to month of last year change

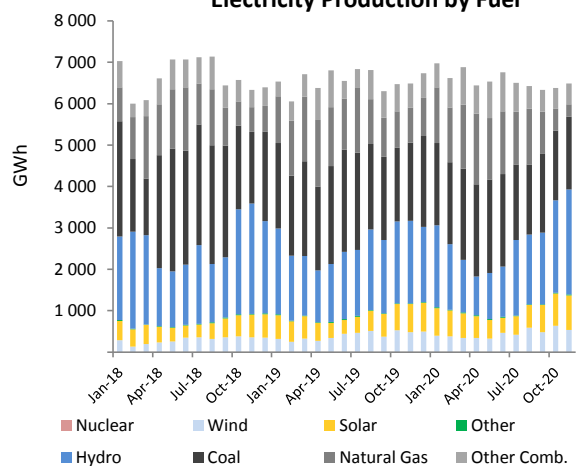
² month-to-month change

³ year-to-date compared to same period last year

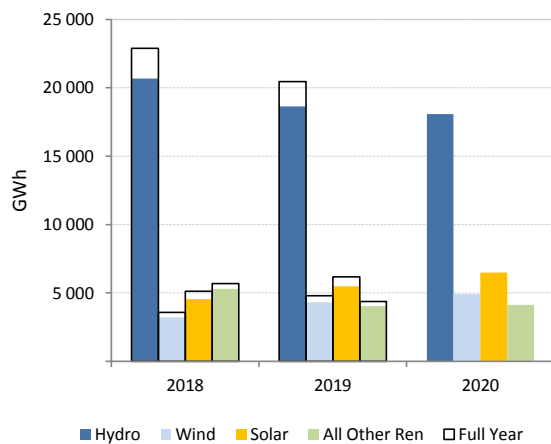
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



**Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020**

0

COLOMBIA

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL⁴	1 662	-9.8%	-11.5%	25.6%	22 434	18 640	20.4%	20 749	27.8%
Coal ⁴	511	-31.1%	-26.2%	7.9%	8 374	6 764	23.8%	7 615	10.2%
Oil ⁴	151	1.8%	0.5%	2.3%	1 658	1 653	0.3%	1 799	2.4%
Natural Gas ⁴	916	6.4%	-1.6%	14.1%	11 284	9 090	24.1%	10 098	13.5%
Combustible Renewables ⁵	84	-8.4%	-19.7%	1.3%	1 118	1 133	-1.3%	1 236	1.7%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	4 811	9.5%	3.7%	74.1%	44 761	49 939	-10.4%	53 825	72.0%
Wind	1	-61.9%	-8.5%	0.0%	6	55	-88.5%	59	0.1%
Solar	16	20.3%	-7.3%	0.2%	168	119	40.6%	131	0.2%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	4 912	9.1%	3.2%	75.7%	46 054	51 247	-10.1%	55 251	73.9%
NON-RENEWABLES	1 578	-9.9%	-11.1%	24.3%	21 316	17 507	21.8%	19 512	26.1%
TOTAL NET PRODUCTION	6 491	3.8%	-0.7%		67 370	68 753	-2.0%	74 764	
+ Imports	0	-94.8%	-82.0%		1 296	150	763.3%	312	
- Exports	-	-	-		-	0	-	0	
= ELECTRICITY SUPPLIED	6 491	3.7%	-0.7%		68 666	68 903	-0.3%	75 075	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses	-	-	-		-	7 156	-	7 872	
= ELECTRICITY CONSUMED	6 491	15.5%	-0.7%		68 666	61 747	11.2%	67 203	

¹ current month to month of last year change

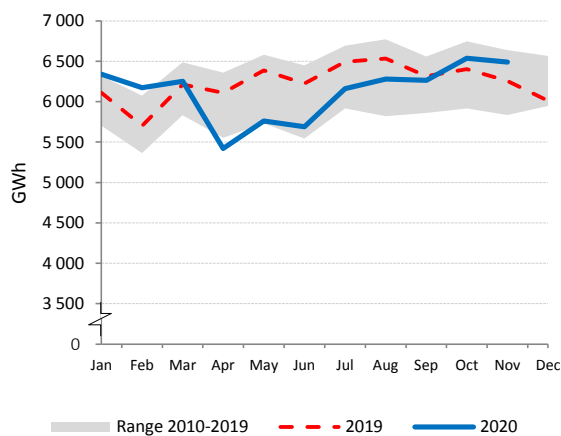
² month-to-month change

³ year-to-date compared to same period last year

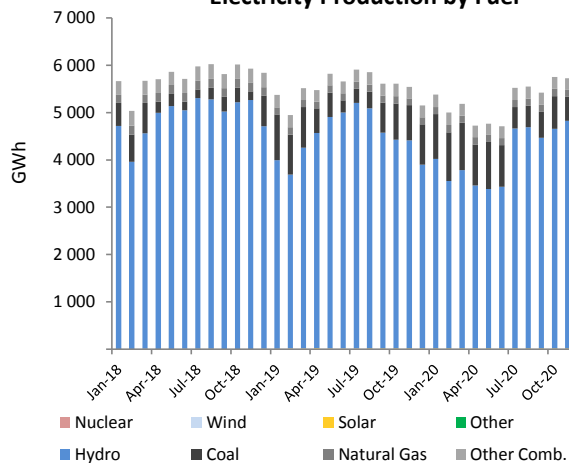
⁴ Distributed generation for conventional thermal is estimated by the IEA Secretariat

⁵ estimated based on annual data

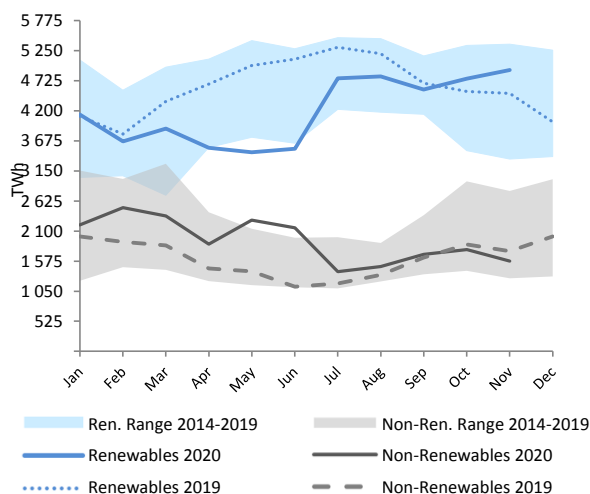
Electricity Production



Electricity Production by Fuel



Renewables and Non-Renewables



**Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020**

01

CZECH REPUBLIC

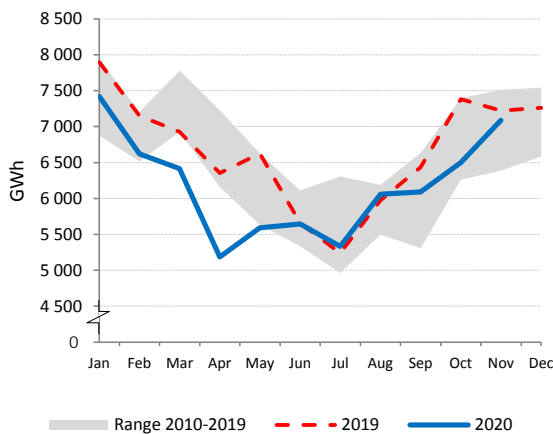
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	4 272	4.1%	25.5%	60.3%	36 136	41 027	-11.9%	45 301	56.5%
Coal	3 112	-1.8%	20.2%	43.9%	26 359	31 964	-17.5%	35 406	44.2%
Oil	6	-14.8%	-16.2%	0.1%	72	96	-25.2%	106	0.1%
Natural Gas	736	39.5%	74.3%	10.4%	5 375	4 805	11.9%	5 197	6.5%
Combustible Renewables	410	4.4%	7.7%	5.8%	4 254	4 094	3.9%	4 516	5.6%
Other Combustibles	7	16.9%	25.8%	0.1%	76	68	11.8%	76	0.1%
Nuclear	2 361	-15.1%	-8.5%	33.3%	25 786	25 992	-0.8%	28 579	35.7%
Hydro	339	67.6%	2.3%	4.8%	3 107	2 886	7.7%	3 143	3.9%
Wind	49	-31.3%	-27.5%	0.7%	620	608	2.0%	691	0.9%
Solar	60	7.2%	-44.6%	0.8%	2 207	2 240	-1.5%	2 291	2.9%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	8	-21.0%	15.0%	0.1%	94	100	-6.0%	110	0.1%
RENEWABLES	858	18.7%	-3.4%	12.1%	10 188	9 828	3.7%	10 642	13.3%
NON-RENEWABLES	6 231	-4.2%	11.0%	87.9%	57 762	63 025	-8.4%	69 475	86.7%
TOTAL NET PRODUCTION	7 088	-1.9%	9.1%		67 950	72 853	-6.7%	80 116	
+ Imports	1 221	84.1%	4.8%		12 040	9 898	21.6%	11 026	
- Exports	2 440	20.8%	18.7%		21 131	21 765	-2.9%	24 123	
= ELECTRICITY SUPPLIED	5 869	0.0%	4.7%		58 859	60 986	-3.5%	67 020	
- Used for pumped storage	136	7.5%	2.6%		1 510	1 330	13.5%	1 508	
- T&D Losses	403	12.5%	14.2%		3 659	3 893	-6.0%	4 300	
= ELECTRICITY CONSUMED	5 330	-1.0%	4.1%		53 689	55 763	-3.7%	61 212	

¹ current month to month of last year change

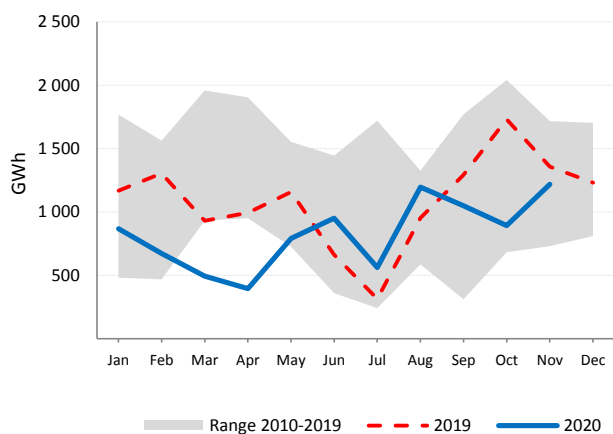
² month-to-month change

³ year-to-date compared to same period last year

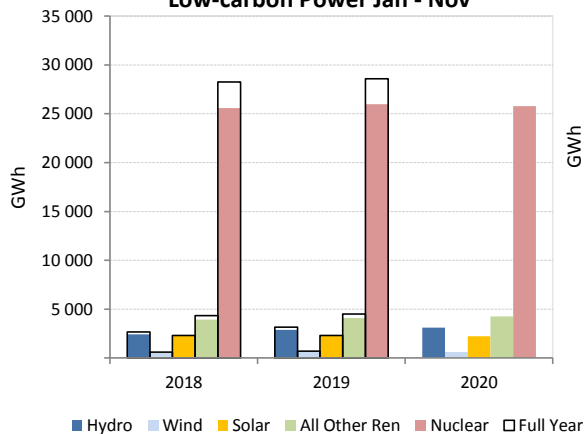
Electricity Production



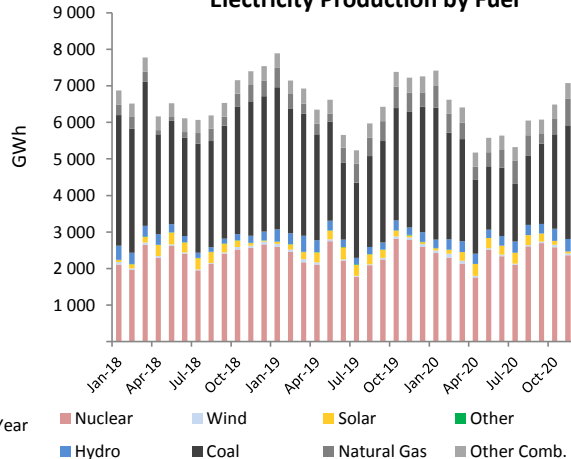
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



DENMARK

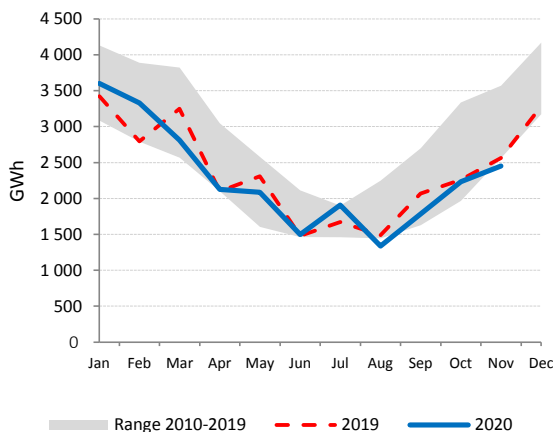
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	973	-24.7%	32.0%	39.7%	8 945	10 123	-11.6%	11 562	40.3%
Coal	274	-12.8%	27.4%	11.2%	2 772	2 680	3.4%	3 088	10.8%
Oil	25	-6.7%	2.3%	1.0%	190	199	-4.5%	226	0.8%
Natural Gas	120	-48.6%	28.6%	4.9%	1 001	1 745	-42.6%	1 961	6.8%
Combustible Renewables	499	-23.5%	42.9%	20.4%	4 332	4 834	-10.4%	5 552	19.4%
Other Combustibles	55	-16.8%	0.1%	2.2%	650	666	-2.4%	736	2.6%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1	-39.2%	15.6%	0.1%	16	15	7.5%	17	0.1%
Wind	1 451	15.7%	0.8%	59.2%	15 031	14 317	5.0%	16 150	56.3%
Solar	24	74.3%	-57.8%	1.0%	1 174	952	23.3%	963	3.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	1 976	2.8%	7.0%	80.7%	20 553	20 117	2.2%	22 683	79.1%
NON-RENEWABLES	474	-26.0%	22.2%	19.3%	4 613	5 290	-12.8%	6 010	20.9%
TOTAL NET PRODUCTION	2 449	-4.4%	9.6%		25 166	25 407	-0.9%	28 693	
+ Imports	1 488	32.1%	-11.1%		18 035	14 595	23.6%	15 982	
- Exports	779	13.8%	37.8%		11 973	8 813	35.8%	10 171	
= ELECTRICITY SUPPLIED	3 158	5.1%	-5.5%		31 228	31 189	0.1%	34 503	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses	123	-4.1%	-6.3%		1 574	1 447	8.8%	1 611	
= ELECTRICITY CONSUMED	3 035	5.5%	-5.5%		29 654	29 741	-0.3%	32 892	

¹ current month to month of last year change

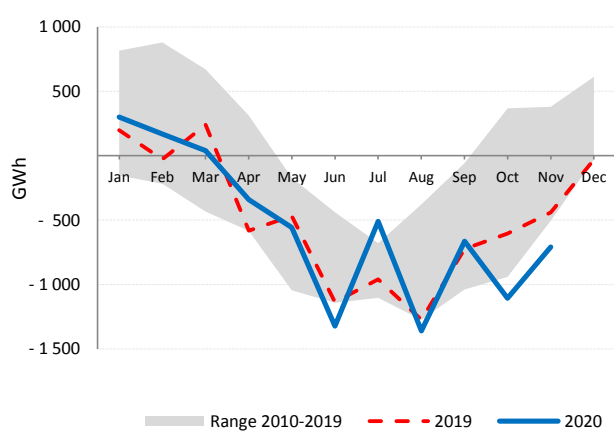
² month-to-month change

³ year-to-date compared to same period last year

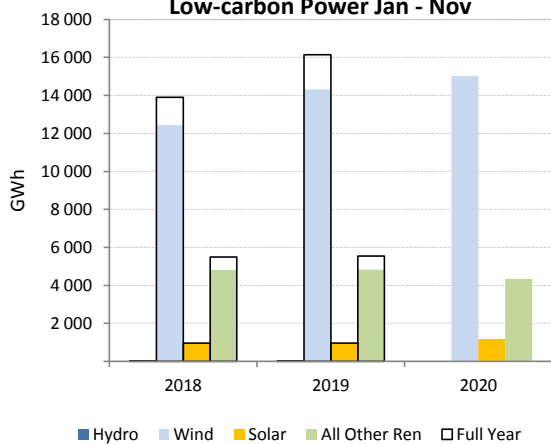
Electricity Production



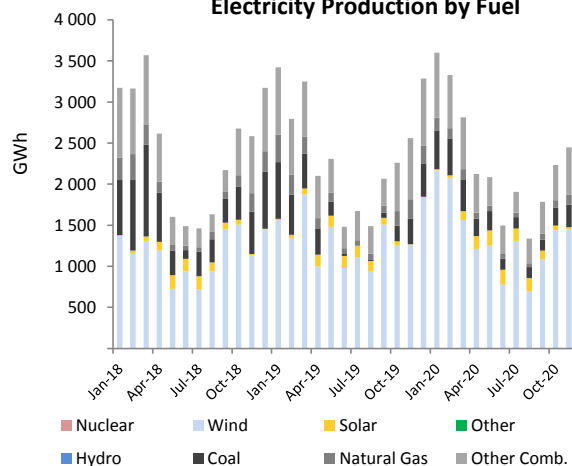
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



ESTONIA

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	454	-5.4%	-1.7%	84.3%	3 747	5 427	-31.0%	5 821	88.2%
Coal ⁴	355	-5.4%	-1.7%	65.9%	2 929	4 242	-31.0%	4 549	68.9%
Oil ⁴	2	-5.4%	-1.7%	0.3%	15	22	-31.0%	24	0.4%
Natural Gas ⁴	3	-5.4%	-1.7%	0.5%	21	30	-31.0%	32	0.5%
Combustible Renewables ⁴	90	-5.4%	-1.7%	16.8%	747	1 082	-31.0%	1 161	17.6%
Other Combustibles ⁴	4	-5.4%	-1.7%	0.8%	35	51	-31.0%	55	0.8%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	3	25.0%	-	0.6%	33	16	109.5%	19	0.3%
Wind	80	31.1%	25.0%	14.9%	746	597	24.9%	687	10.4%
Solar	1	-	-64.7%	0.2%	73	73	-	74	1.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	175	9.0%	7.4%	32.5%	1 599	1 768	-9.6%	1 940	29.4%
NON-RENEWABLES	363	-5.4%	-1.7%	67.5%	3 000	4 345	-31.0%	4 660	70.6%
TOTAL NET PRODUCTION	538	-1.2%	1.1%		4 599	6 113	-24.8%	6 600	
+ Imports	660	85.9%	13.4%		6 700	4 376	53.1%	4 861	
- Exports	353	220.9%	9.0%		3 430	2 549	34.5%	2 704	
= ELECTRICITY SUPPLIED	845	7.0%	7.0%		7 870	7 940	-0.9%	8 757	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses ⁴	52	33.2%	7.5%		493	458	7.7%	500	
= ELECTRICITY CONSUMED	792	5.7%	6.9%		7 377	7 482	-1.4%	8 257	

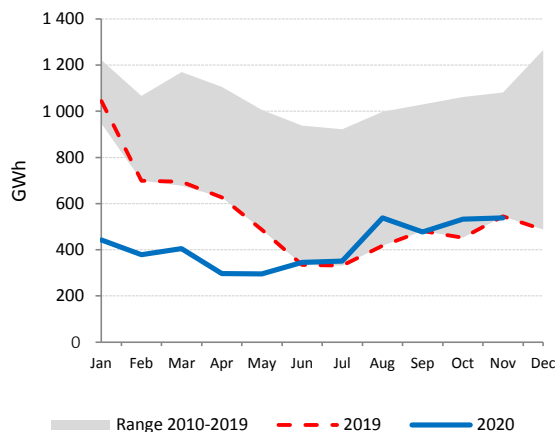
¹ current month to month of last year change

⁴ estimated from annual data

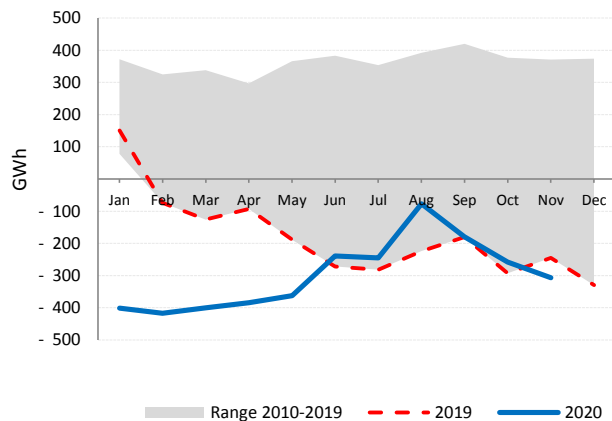
² month-to-month change

³ year-to-date compared to same period last year

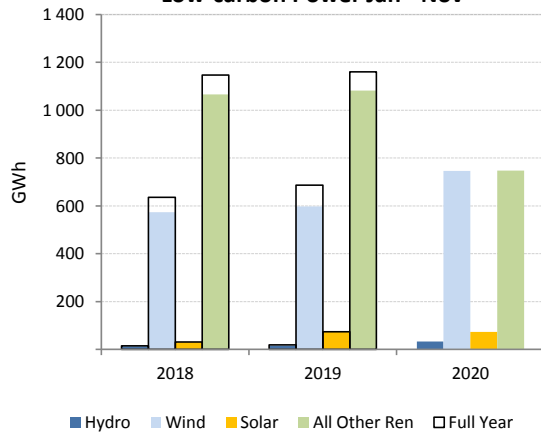
Electricity Production



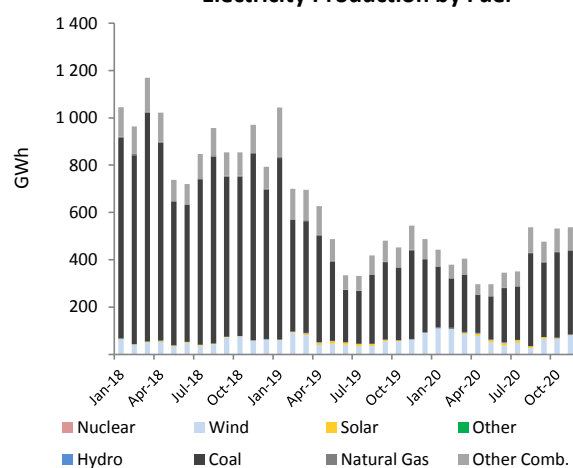
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



FINLAND

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	1 715	-26.0%	4.3%	27.7%	17 358	22 163	-21.7%	24 506	37.0%
Coal	466	-42.0%	13.8%	7.5%	4 436	6 857	-35.3%	7 607	11.5%
Oil	23	10.5%	23.5%	0.4%	177	221	-19.9%	242	0.4%
Natural Gas	306	-15.7%	-28.5%	4.9%	3 381	3 367	0.4%	3 769	5.7%
Combustible Renewables	886	-18.4%	16.8%	14.3%	8 982	11 266	-20.3%	12 393	18.7%
Other Combustibles ⁴	34	-22.2%	12.0%	0.6%	381	453	-15.7%	496	0.7%
Nuclear	2 001	-0.6%	11.7%	32.3%	20 505	20 844	-1.6%	22 927	34.7%
Hydro	1 542	45.7%	25.0%	24.9%	14 192	11 063	28.3%	12 299	18.6%
Wind	929	128.3%	46.3%	15.0%	6 976	5 280	32.1%	5 985	9.0%
Solar	3	50.0%	-69.7%	0.0%	307	177	73.3%	178	0.3%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	229	-	249	0.4%
RENEWABLES	3 360	31.6%	27.4%	54.3%	30 456	27 786	9.6%	30 855	46.6%
NON-RENEWABLES	2 830	-13.3%	5.6%	45.7%	28 881	31 969	-9.7%	35 290	53.4%
TOTAL NET PRODUCTION	6 190	6.4%	16.4%		59 337	59 756	-0.7%	66 145	
+ Imports	1 613	-25.2%	-18.0%		19 596	22 183	-11.7%	23 938	
- Exports	644	183.7%	19.3%		6 088	3 545	71.7%	3 896	
= ELECTRICITY SUPPLIED	7 160	-7.6%	6.2%		72 845	78 394	-7.1%	86 187	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses	233	-7.4%	6.2%		2 361	2 540	-7.1%	2 793	
= ELECTRICITY CONSUMED	6 927	-7.6%	6.2%		70 484	75 853	-7.1%	83 394	

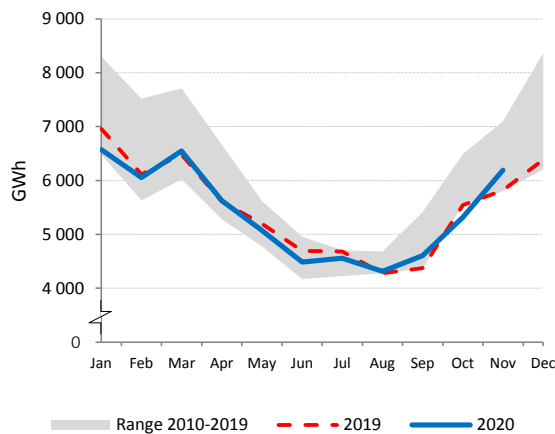
¹ current month to month of last year change

⁴ includes generation from peat

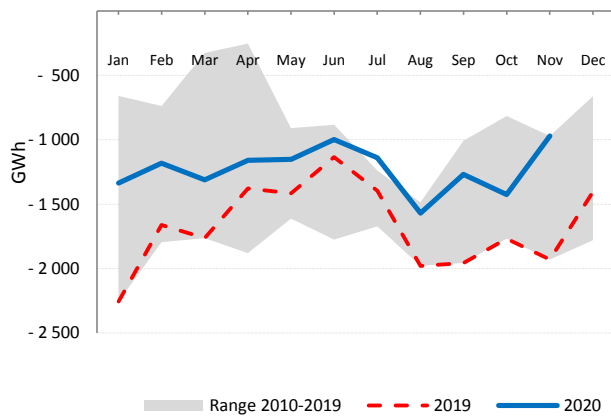
² month-to-month change

³ year-to-date compared to same period last year

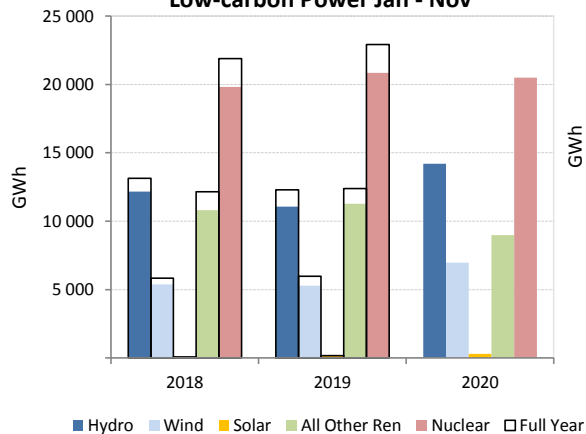
Electricity Production



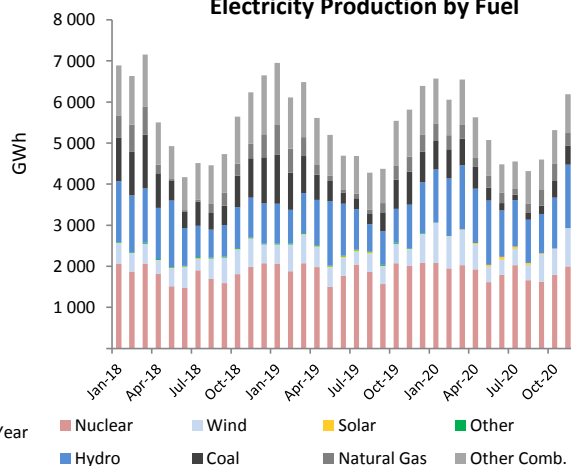
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



FRANCE

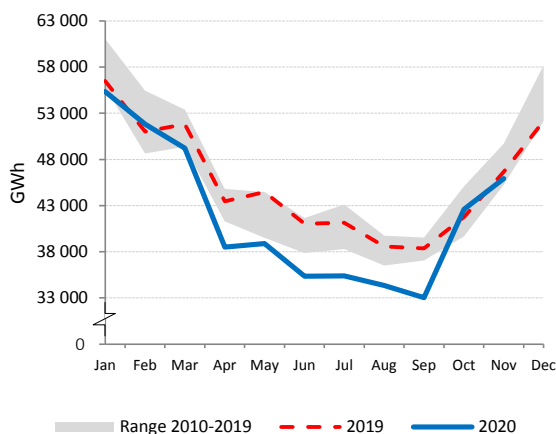
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	5 689	-18.4%	53.3%	12.4%	47 791	52 722	-9.4%	58 630	10.7%
Coal	425	-62.1%	25.8%	0.9%	3 805	4 762	-20.1%	5 540	1.0%
Oil	457	-9.3%	-2.1%	1.0%	5 266	5 053	4.2%	5 580	1.0%
Natural Gas	4 047	-11.7%	77.5%	8.8%	30 003	33 395	-10.2%	37 088	6.8%
Combustible Renewables	572	-1.3%	30.9%	1.2%	6 639	7 434	-10.7%	8 155	1.5%
Other Combustibles	189	-	-	0.4%	2 078	2 078	-	2 267	0.4%
Nuclear	31 566	8.3%	11.7%	68.8%	300 982	346 478	-13.1%	379 464	69.4%
Hydro	4 579	-30.2%	-12.3%	10.0%	60 241	52 892	13.9%	60 819	11.1%
Wind	3 207	-7.3%	-27.0%	7.0%	35 927	29 962	19.9%	34 722	6.3%
Solar	772	79.7%	-13.6%	1.7%	14 411	11 746	22.7%	12 225	2.2%
Geothermal	9	-2.7%	-	0.0%	103	106	-2.7%	116	0.0%
Other Renewables	39	-	-	0.1%	434	434	-	473	0.1%
Non-Specified	44	-	-	0.1%	483	483	-	527	0.1%
RENEWABLES	9 178	-17.1%	-16.5%	20.0%	117 755	102 574	14.8%	116 509	21.3%
NON-RENEWABLES	36 727	3.3%	16.3%	80.0%	342 617	392 249	-12.7%	430 466	78.7%
TOTAL NET PRODUCTION	45 906	-1.6%	7.8%		460 372	494 823	-7.0%	546 975	
+ Imports	1 492	-49.6%	-23.7%		17 166	13 519	27.0%	15 632	
- Exports	6 230	47.4%	31.9%		59 414	67 691	-12.2%	73 299	
= ELECTRICITY SUPPLIED	41 167	-9.3%	3.4%		418 124	440 651	-5.1%	489 308	
- Used for pumped storage	555	-8.5%	-1.8%		5 589	5 675	-1.5%	6 397	
- T&D Losses	3 598	-2.6%	17.4%		32 804	33 837	-3.1%	38 112	
= ELECTRICITY CONSUMED	37 014	-9.9%	2.3%		379 730	401 139	-5.3%	444 799	

¹ current month to month of last year change

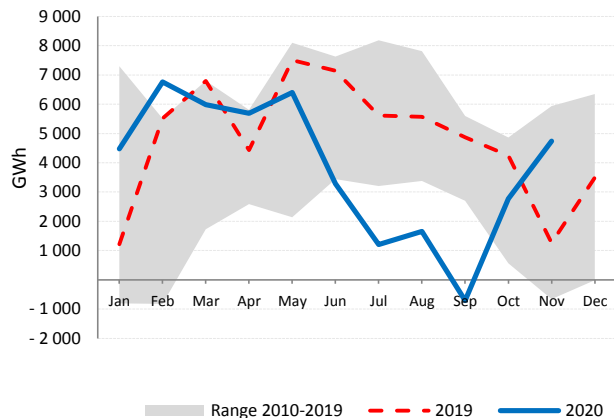
² month-to-month change

³ year-to-date compared to same period last year

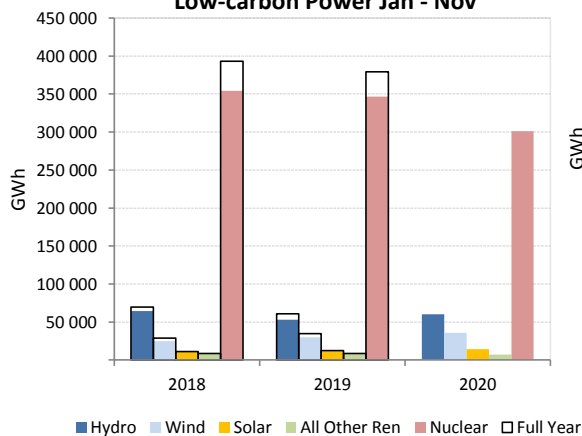
Electricity Production



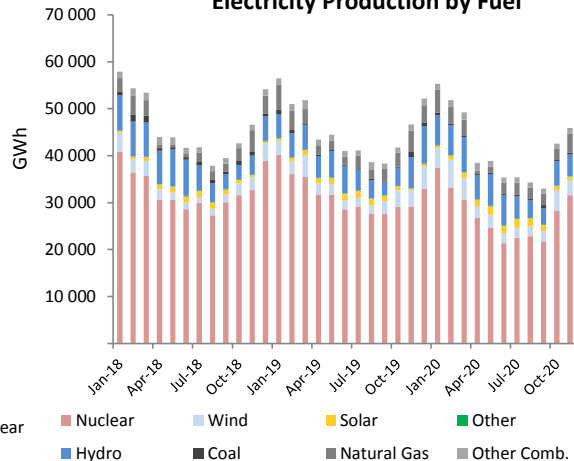
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



GERMANY

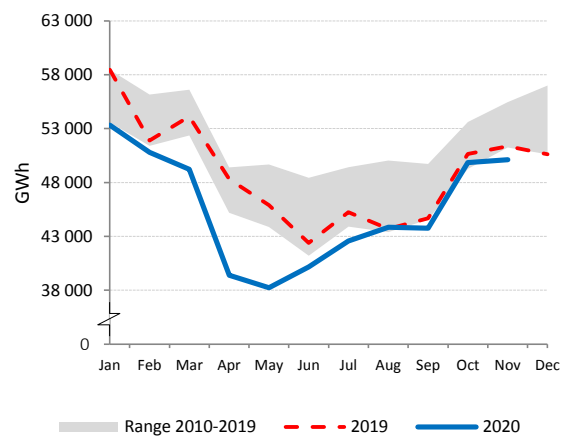
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	30 314	-4.5%	15.9%	60.5%	251 371	292 485	-14.1%	318 145	54.2%
Coal	16 458	-10.6%	17.5%	32.8%	119 624	159 131	-24.8%	172 436	29.4%
Oil	371	-6.6%	7.5%	0.7%	3 729	4 340	-14.1%	4 725	0.8%
Natural Gas	8 976	4.5%	21.5%	17.9%	79 552	80 488	-1.2%	87 811	15.0%
Combustible Renewables	4 012	4.2%	1.3%	8.0%	43 276	42 749	1.2%	46 896	8.0%
Other Combustibles	496	0.8%	7.5%	1.0%	5 189	5 778	-10.2%	6 277	1.1%
Nuclear	4 787	-25.8%	-6.7%	9.6%	55 067	64 462	-14.6%	70 983	12.1%
Hydro	1 897	-0.3%	-22.1%	3.8%	23 407	23 816	-1.7%	25 899	4.4%
Wind	11 243	11.6%	-16.6%	22.4%	118 166	108 418	9.0%	123 606	21.0%
Solar	1 766	59.3%	-31.0%	3.5%	52 261	46 451	12.5%	47 517	8.1%
Geothermal	11	-25.0%	-	0.0%	159	157	1.3%	170	0.0%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	85	29.4%	20.3%	0.2%	842	909	-7.3%	992	0.2%
RENEWABLES	18 929	11.7%	-15.7%	37.8%	237 269	221 591	7.1%	244 089	41.6%
NON-RENEWABLES	31 174	-9.4%	13.8%	62.2%	264 004	315 107	-16.2%	343 224	58.4%
TOTAL NET PRODUCTION	50 103	-2.4%	0.5%		501 273	536 698	-6.6%	587 313	
+ Imports	3 164	23.7%	13.3%		44 220	37 224	18.8%	40 123	
- Exports	6 499	0.3%	6.3%		59 706	65 357	-8.6%	72 792	
= ELECTRICITY SUPPLIED	46 768	-1.4%	0.5%		485 787	508 565	-4.5%	554 644	
- Used for pumped storage	685	9.2%	-3.7%		8 131	7 426	9.5%	8 178	
- T&D Losses	2 470	11.8%	-1.3%		24 382	23 903	2.0%	26 481	
= ELECTRICITY CONSUMED	43 613	-2.2%	0.7%		453 274	477 235	-5.0%	519 985	

¹ current month to month of last year change

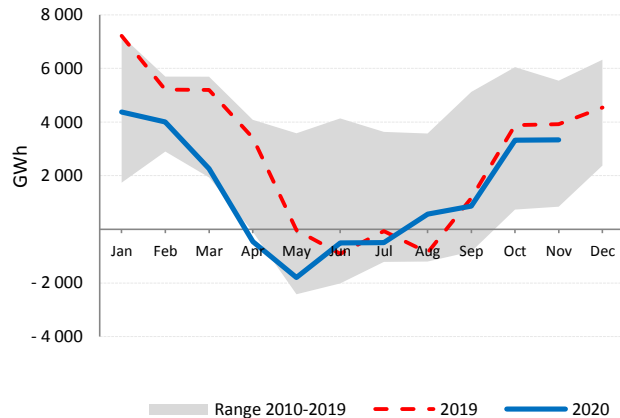
² month-to-month change

³ year-to-date compared to same period last year

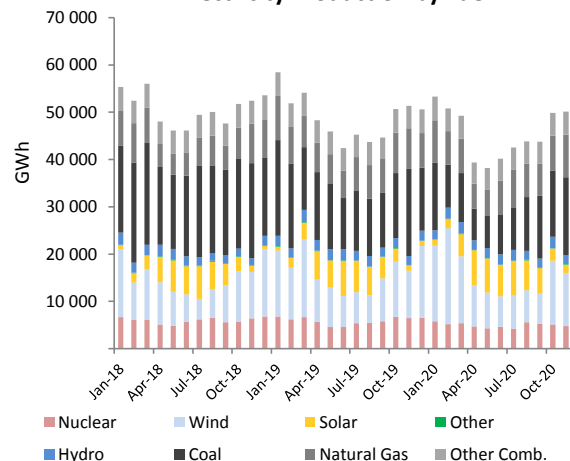
Electricity Production



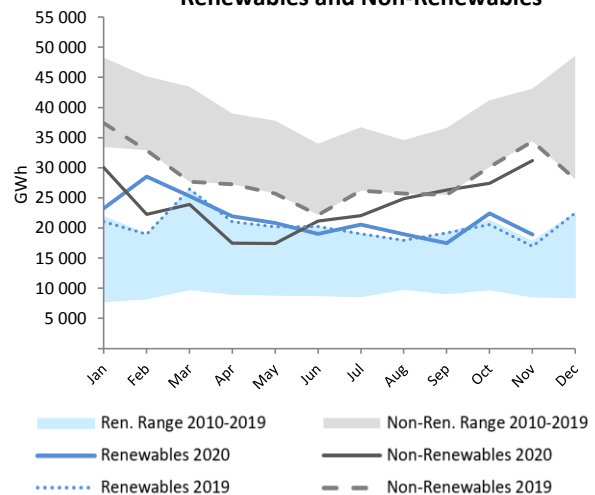
Net Electricity Exports



Electricity Production by Fuel



Renewables and Non-Renewables



GREECE

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	2 245	6.5%	8.8%	60.3%	23 929	27 992	-14.5%	30 286	66.8%
Coal	579	-19.1%	82.2%	15.6%	4 594	8 837	-48.0%	9 782	21.6%
Oil	236	-3.6%	-22.5%	6.3%	3 096	3 757	-17.6%	4 047	8.9%
Natural Gas	1 348	33.6%	4.4%	36.2%	14 684	13 837	6.1%	14 759	32.6%
Combustible Renewables ⁴	46	-63.4%	-63.0%	1.2%	1 279	1 302	-1.8%	1 429	3.2%
Other Combustibles ⁴	35	221.7%	40.1%	0.9%	277	258	7.4%	267	0.6%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	213	-6.0%	5.1%	5.7%	2 990	3 459	-13.6%	3 809	8.4%
Wind	997	69.5%	62.9%	26.8%	8 357	6 513	28.3%	7 278	16.1%
Solar	270	22.7%	-28.5%	7.2%	4 198	3 770	11.3%	3 961	8.7%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	1 526	31.5%	15.9%	41.0%	16 824	15 044	11.8%	16 478	36.3%
NON-RENEWABLES	2 199	11.0%	13.4%	59.0%	22 650	26 690	-15.1%	28 856	63.7%
TOTAL NET PRODUCTION	3 725	18.5%	14.4%		39 474	41 734	-5.4%	45 334	
+ Imports	502	-42.1%	-32.0%		9 297	9 904	-6.1%	11 067	
- Exports	169	435.0%	724.1%		694	1 117	-37.9%	1 123	
= ELECTRICITY SUPPLIED	4 058	2.0%	2.1%		48 077	50 521	-4.8%	55 278	
- Used for pumped storage	16	61.1%	127.2%		102	42	142.5%	56	
- T&D Losses	329	19.2%	23.2%		3 065	3 104	-1.3%	3 434	
= ELECTRICITY CONSUMED	3 714	0.6%	0.4%		44 911	47 375	-5.2%	51 788	

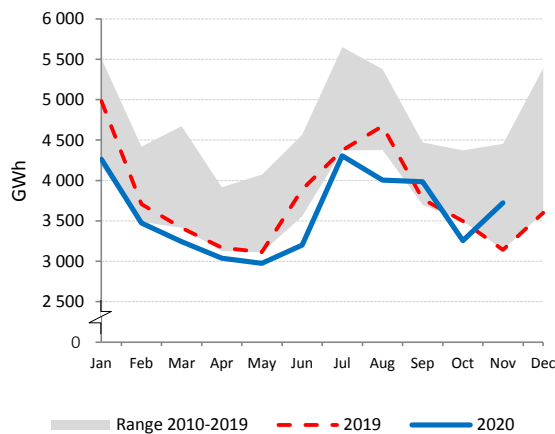
¹ current month to month of last year change

⁴ estimated from annual data

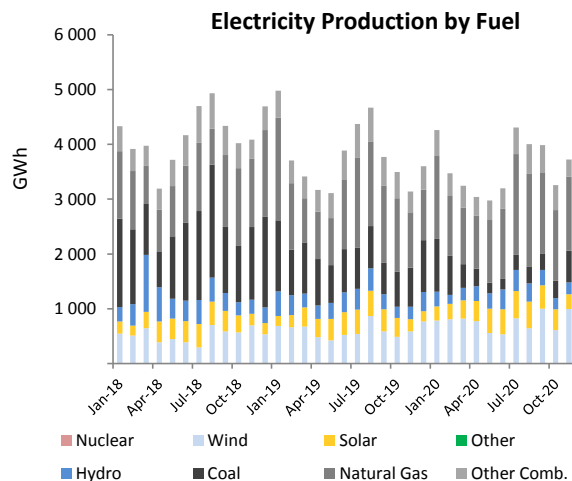
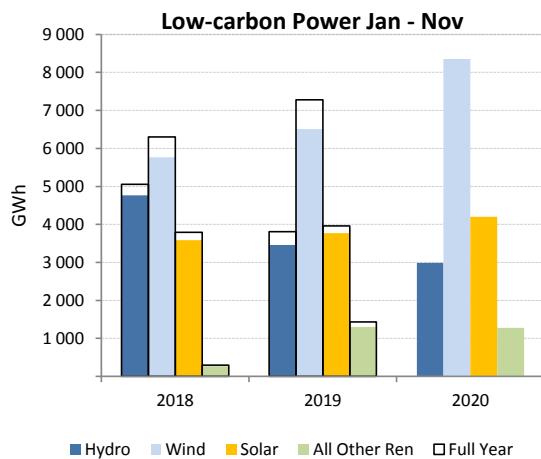
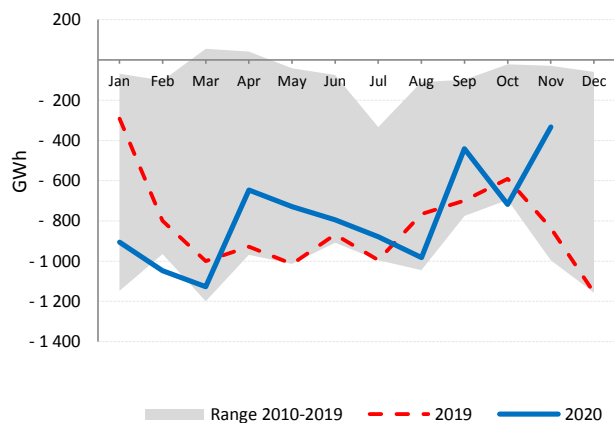
² month-to-month change

³ year-to-date compared to same period last year

Electricity Production



Net Electricity Exports



HUNGARY

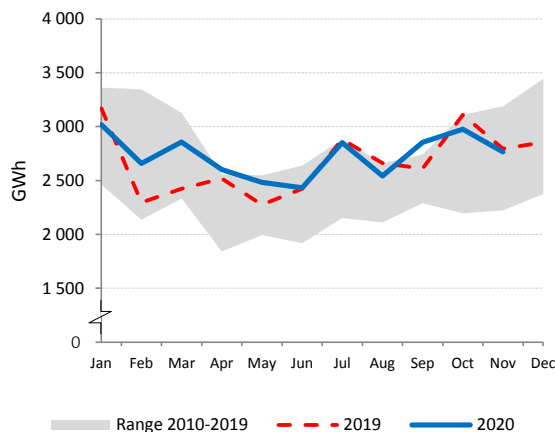
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	1 453	15.6%	14.0%	52.5%	12 787	12 844	-0.4%	14 092	44.0%
Coal	304	0.4%	-2.4%	11.0%	3 231	3 578	-9.7%	3 856	12.0%
Oil	4	14.3%	-7.6%	0.1%	44	60	-27.2%	65	0.2%
Natural Gas	923	20.9%	26.0%	33.4%	7 540	7 118	5.9%	7 894	24.7%
Combustible Renewables	206	24.4%	-2.1%	7.4%	1 806	1 882	-4.1%	2 049	6.4%
Other Combustibles	17	-24.7%	4.2%	0.6%	166	206	-19.5%	229	0.7%
Nuclear	1 164	-15.9%	-18.8%	42.1%	13 864	13 965	-0.7%	15 403	48.1%
Hydro	22	3.2%	1.4%	0.8%	217	189	15.1%	213	0.7%
Wind	34	-47.4%	-48.4%	1.2%	574	625	-8.1%	709	2.2%
Solar	85	41.7%	-50.8%	3.1%	2 493	1 434	73.8%	1 485	4.6%
Geothermal	1	-12.8%	1734.2%	0.0%	7	8	-11.3%	9	0.0%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	9	-	-	0.3%	94	94	-	102	0.3%
RENEWABLES	347	11.4%	-26.0%	12.5%	5 097	4 138	23.2%	4 465	13.9%
NON-RENEWABLES	2 420	-2.6%	-3.5%	87.5%	24 939	25 021	-0.3%	27 548	86.1%
TOTAL NET PRODUCTION	2 766	-1.0%	-7.0%		30 036	29 159	3.0%	32 013	
+ Imports	1 757	28.1%	14.1%		17 367	18 326	-5.2%	19 853	
- Exports	570	30.0%	-11.7%		6 909	6 720	2.8%	7 269	
= ELECTRICITY SUPPLIED	3 953	6.0%	2.2%		40 494	40 766	-0.7%	44 597	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses	280	0.8%	5.6%		2 821	2 963	-4.8%	3 292	
= ELECTRICITY CONSUMED	3 673	6.4%	1.9%		37 673	37 803	-0.3%	41 305	

¹ current month to month of last year change

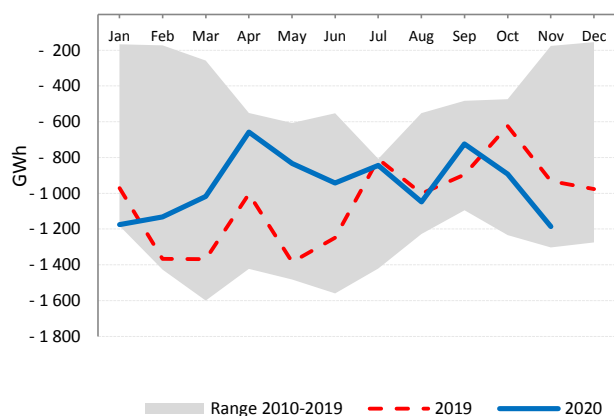
² month-to-month change

³ year-to-date compared to same period last year

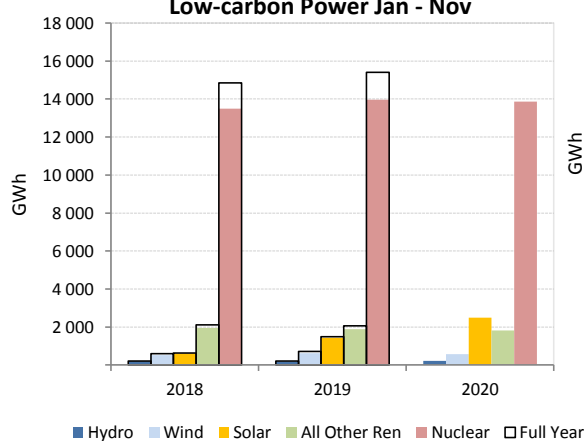
Electricity Production



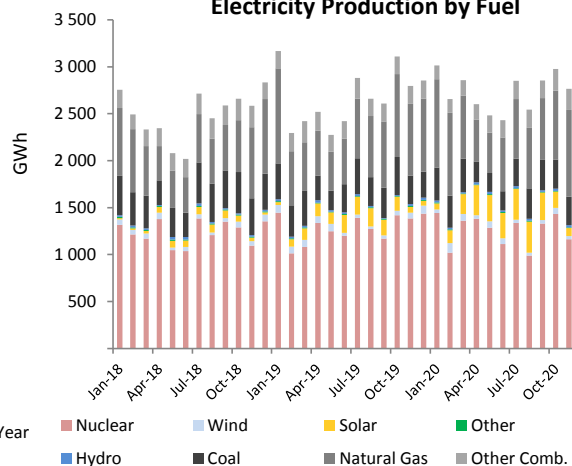
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



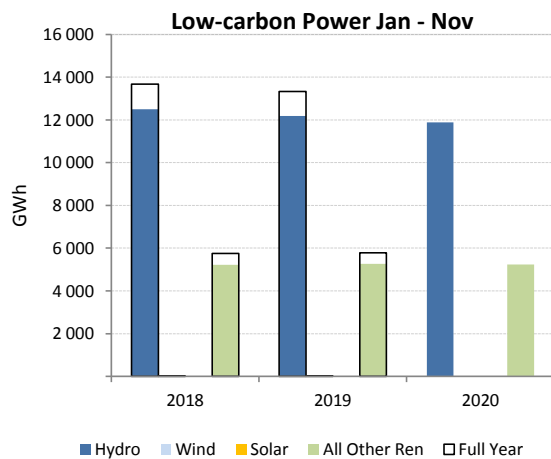
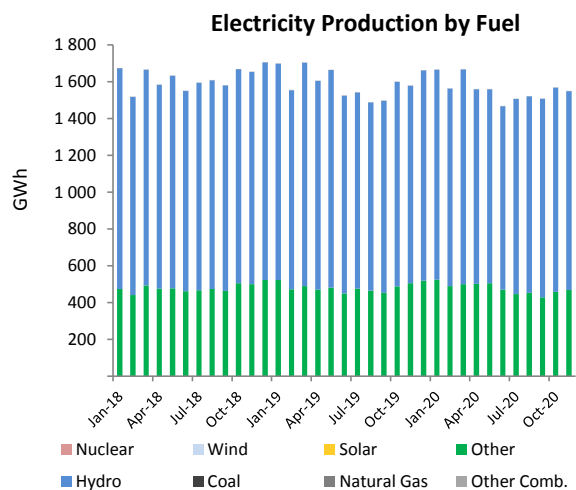
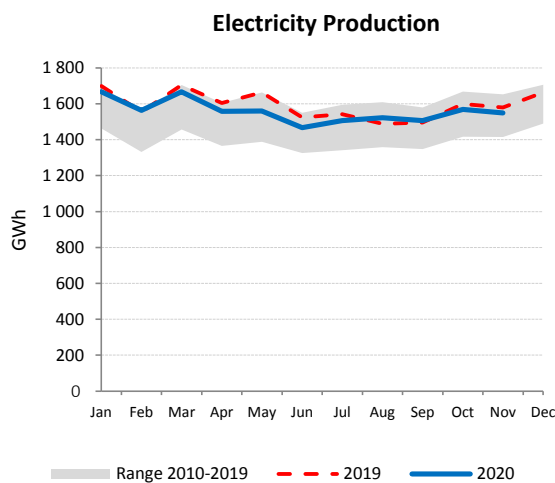
ICELAND

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	0	25.2%	-56.1%	0.0%	3	1	110.3%	3	0.0%
Coal	-	-	-	-	-	-	-	-	-
Oil	0	25.2%	-56.1%	0.0%	3	1	110.3%	3	0.0%
Natural Gas	-	-	-	-	-	-	-	-	-
Combustible Renewables	-	-	-	-	-	-	-	-	-
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1 080	0.6%	-2.7%	69.7%	11 890	12 185	-2.4%	13 329	69.7%
Wind	1	9.1%	42.7%	0.0%	6	6	-1.6%	7	0.0%
Solar	-	-	-	-	-	-	-	-	-
Geothermal	468	-7.3%	2.3%	30.2%	5 238	5 264	-0.5%	5 781	30.2%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	1 549	-1.9%	-1.3%	100.0%	17 133	17 455	-1.8%	19 117	100.0%
NON-RENEWABLES	0	25.2%	-56.1%	0.0%	3	1	110.5%	3	0.0%
TOTAL NET PRODUCTION	1 549	-1.9%	-1.3%		17 136	17 456	-1.8%	19 120	
+ Imports	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-
= ELECTRICITY SUPPLIED	1 549	-1.9%	-1.3%		17 136	17 456	-1.8%	19 120	
- Used for pumped storage	-	-	-	-	-	-	-	-	-
- T&D Losses	43	-3.1%	-	-	475	486	-2.4%	531	-
= ELECTRICITY CONSUMED	1 506	-1.9%	-1.3%		16 661	16 970	-1.8%	18 589	

¹ current month to month of last year change

² month-to-month change

³ year-to-date compared to same period last year



Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020

0

IRELAND

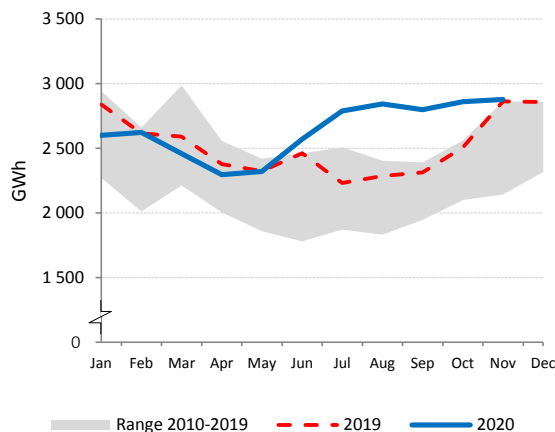
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	1 659	-9.0%	5.5%	57.7%	18 431	17 561	5.0%	19 094	63.1%
Coal	366	15.9%	14.1%	12.7%	2 683	2 066	29.9%	2 352	7.8%
Oil	30	13.5%	-22.7%	1.0%	426	256	66.2%	271	0.9%
Natural Gas	1 179	-13.4%	4.2%	41.0%	14 316	14 233	0.6%	15 364	50.8%
Combustible Renewables	60	-34.4%	0.4%	2.1%	838	747	12.1%	823	2.7%
Other Combustibles	24	-17.2%	12.6%	0.8%	169	259	-34.8%	285	0.9%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	153	12.7%	40.6%	5.3%	1 048	971	8.0%	1 120	3.7%
Wind	1 065	18.0%	-9.4%	37.0%	9 530	8 846	7.7%	10 019	33.1%
Solar	1	-	-42.7%	0.0%	21	21	-	21	0.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	1 278	13.2%	-5.0%	44.4%	11 437	10 584	8.1%	11 984	39.6%
NON-RENEWABLES	1 600	-7.7%	5.7%	55.6%	17 593	16 814	4.6%	18 271	60.4%
TOTAL NET PRODUCTION	2 878	0.6%	0.7%		29 030	27 398	6.0%	30 255	
+ Imports	151	-2.5%	-15.1%		1 621	1 981	-18.2%	2 180	
- Exports	186	20.7%	10.6%		1 748	1 368	27.8%	1 535	
= ELECTRICITY SUPPLIED	2 842	-0.7%	-0.9%		28 903	28 011	3.2%	30 900	
- Used for pumped storage	29	-35.6%	-37.3%		491	432	13.6%	478	
- T&D Losses	200	-2.9%	-1.3%		2 037	2 064	-1.3%	2 274	
= ELECTRICITY CONSUMED	2 613	0.1%	-0.2%		26 376	25 515	3.4%	28 148	

¹ current month to month of last year change

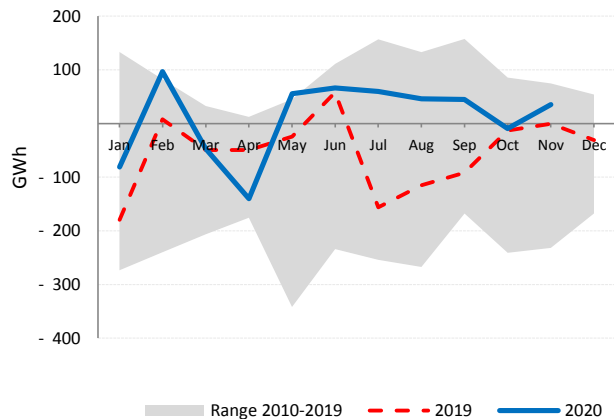
² month-to-month change

³ year-to-date compared to same period last year

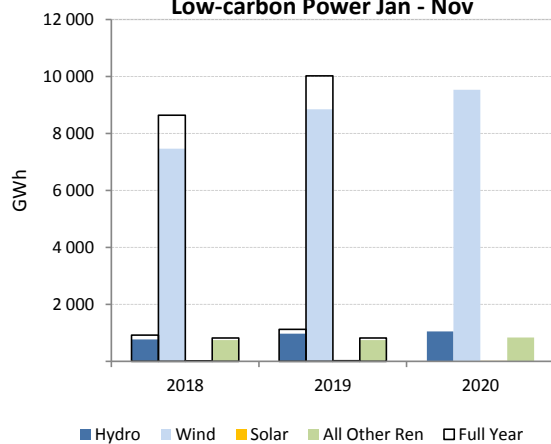
Electricity Production



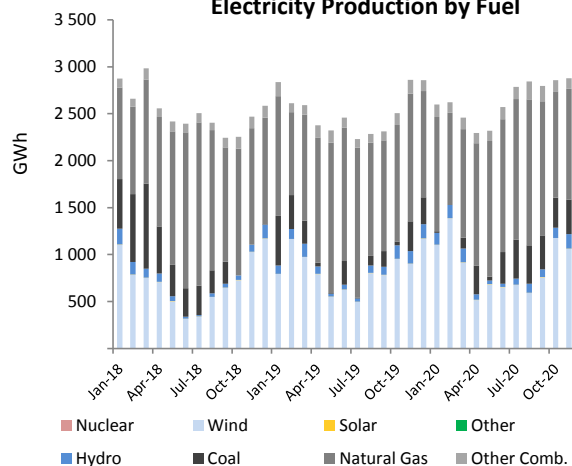
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



ITALY

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	15 218	4.3%	10.1%	71.2%	157 892	171 091	-7.7%	185 146	65.7%
Coal ⁴	1 401	4.2%	11.3%	6.6%	14 441	15 853	-8.9%	17 134	6.1%
Oil ⁴	849	4.2%	11.3%	4.0%	8 749	9 605	-8.9%	10 381	3.7%
Natural Gas ⁴	11 203	4.2%	11.3%	52.4%	115 463	126 753	-8.9%	136 990	48.6%
Combustible Renewables	1 571	5.1%	0.3%	7.3%	17 238	16 685	3.3%	18 269	6.5%
Other Combustibles ⁴	194	4.2%	11.3%	0.9%	2 000	2 196	-8.9%	2 373	0.8%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	3 444	-25.5%	-23.1%	16.1%	44 381	42 498	4.4%	46 955	16.7%
Wind	1 057	-51.9%	-34.1%	4.9%	16 530	17 598	-6.1%	20 054	7.1%
Solar	1 150	37.0%	-34.5%	5.4%	23 778	22 428	6.0%	23 313	8.3%
Geothermal	460	-0.6%	-3.1%	2.2%	5 145	5 200	-1.1%	5 658	2.0%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	51	-	-	0.2%	561	561	-	612	0.2%
RENEWABLES	7 681	-20.1%	-22.2%	35.9%	107 071	104 408	2.6%	114 249	40.6%
NON-RENEWABLES	13 699	4.1%	11.3%	64.1%	141 215	154 968	-8.9%	167 490	59.4%
TOTAL NET PRODUCTION	21 379	-6.1%	-3.6%		248 287	259 376	-4.3%	281 738	
+ Imports	4 560	26.7%	5.9%		35 923	40 026	-10.2%	43 980	
- Exports	369	-18.4%	110.9%		7 024	5 262	33.5%	5 817	
= ELECTRICITY SUPPLIED	25 571	-1.3%	-2.8%		277 186	294 139	-5.8%	319 901	
- Used for pumped storage	193	-1.0%	-30.3%		2 302	2 135	7.8%	2 412	
- T&D Losses ⁵	-	-	-		-	16 977	-	18 470	
= ELECTRICITY CONSUMED	25 378	4.8%	-2.6%		274 884	275 027	-0.1%	299 020	

¹ current month to month of last year change

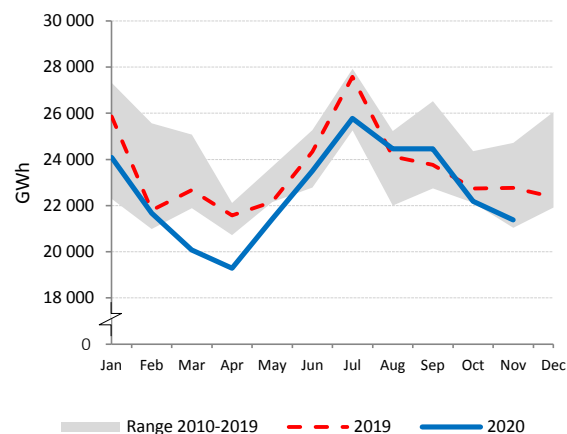
⁴ estimated from annual data

² month-to-month change

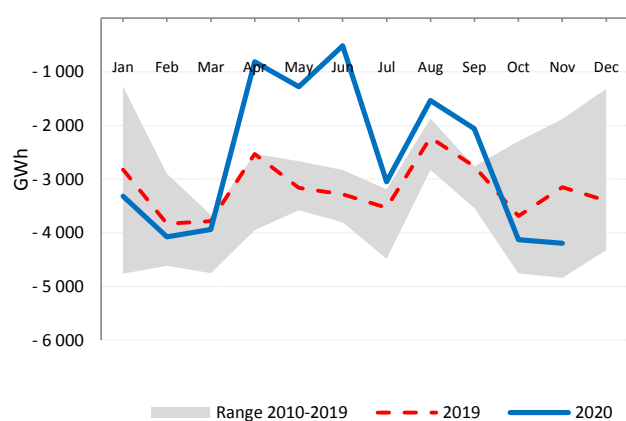
⁵ estimated

³ year-to-date compared to same period last year

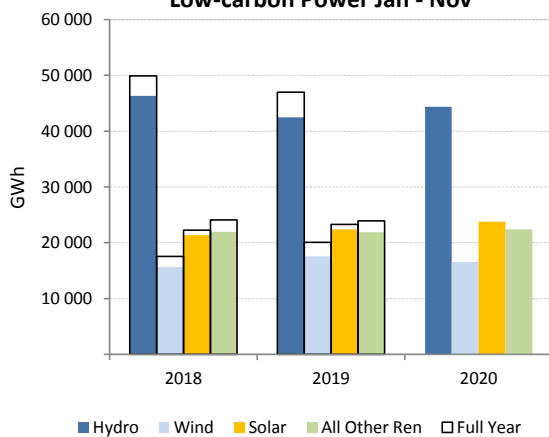
Electricity Production



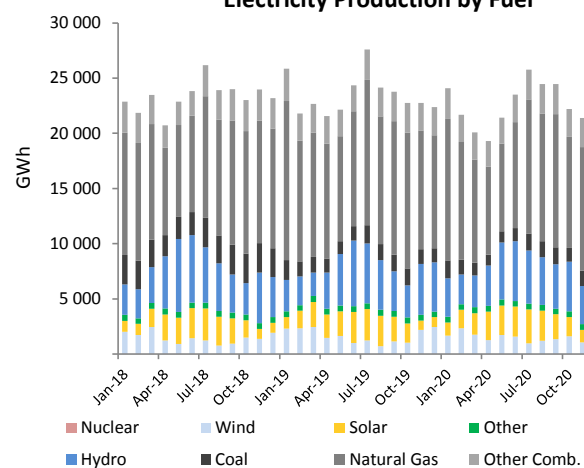
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



JAPAN

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	58 138	2.4%	2.3%	78.7%	638 889	668 172	-4.4%	736 442	74.6%
Coal	23 226	-6.1%	-0.7%	31.4%	268 042	281 050	-4.6%	309 566	31.4%
Oil	2 461	-26.7%	10.5%	3.3%	31 696	45 169	-29.8%	49 739	5.0%
Natural Gas	27 324	8.5%	4.4%	37.0%	289 135	308 049	-6.1%	339 604	34.4%
Combustible Renewables	2 142	34.2%	2.0%	2.9%	22 148	16 976	30.5%	18 703	1.9%
Other Combustibles	2 984	57.3%	0.7%	4.0%	27 868	16 927	64.6%	18 829	1.9%
Nuclear	1 899	-63.1%	6.6%	2.6%	40 791	59 534	-31.5%	64 805	6.6%
Hydro	5 170	-7.2%	-11.1%	7.0%	84 494	78 355	7.8%	83 965	8.5%
Wind	706	-11.0%	-0.2%	1.0%	7 422	6 631	11.9%	7 481	0.8%
Solar	6 116	13.5%	-5.5%	8.3%	76 720	67 378	13.9%	71 534	7.2%
Geothermal	220	3.1%	-3.3%	0.3%	2 332	2 222	5.0%	2 445	0.2%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	1 643	12.5%	2.7%	2.2%	18 015	18 519	-2.7%	20 245	2.1%
RENEWABLES	14 354	5.8%	-6.3%	19.4%	193 116	171 561	12.6%	184 128	18.7%
NON-RENEWABLES	59 537	-3.6%	2.4%	80.6%	675 547	729 249	-7.4%	802 788	81.3%
TOTAL NET PRODUCTION	73 891	-1.9%	0.6%		868 663	900 810	-3.6%	986 916	
+ Imports	-	-	-		-	-	-	-	
- Exports	-	-	-		-	-	-	-	
= ELECTRICITY SUPPLIED	73 891	-1.9%	0.6%		868 663	900 810	-3.6%	986 916	
- Used for pumped storage ⁴	680	-18.9%	-11.9%		10 441	9 827	6.3%	10 554	
- T&D Losses ⁴	3 329	-1.9%	0.6%		39 135	40 255	-2.8%	44 134	
= ELECTRICITY CONSUMED	69 882	-1.7%	0.7%		819 087	850 728	-3.7%	932 228	

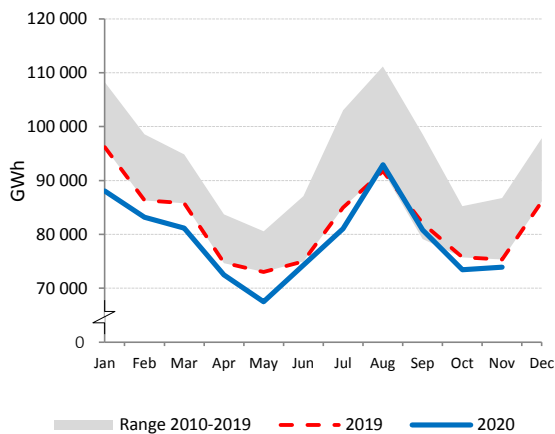
¹ current month to month of last year change

November 2020 is estimated by the IEA Secretariat

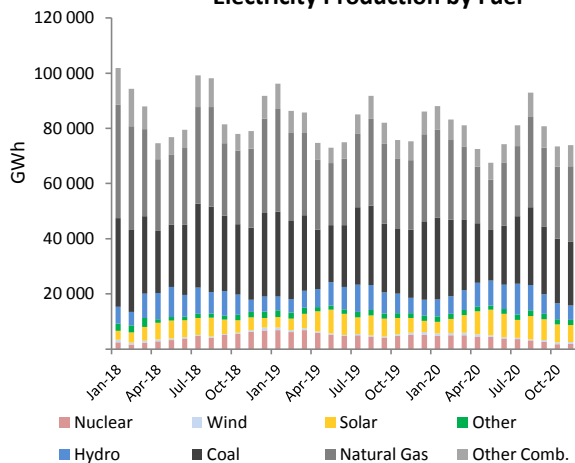
² month-to-month change

³ year-to-date compared to same period last year

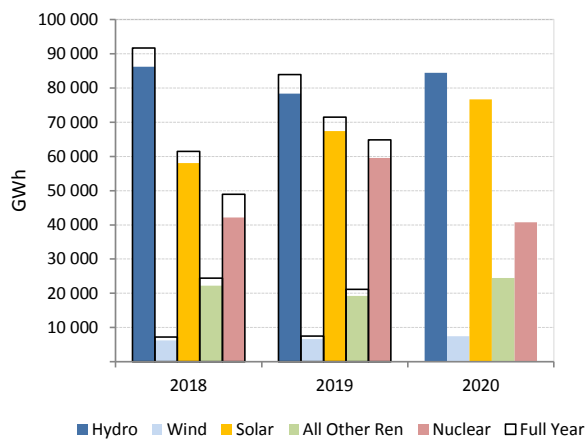
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



Electricity Production Variation Jan - Nov 2019 vs. Jan - Nov 2020

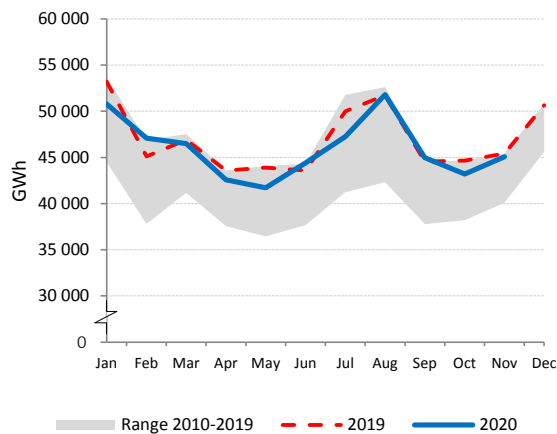


KOREA

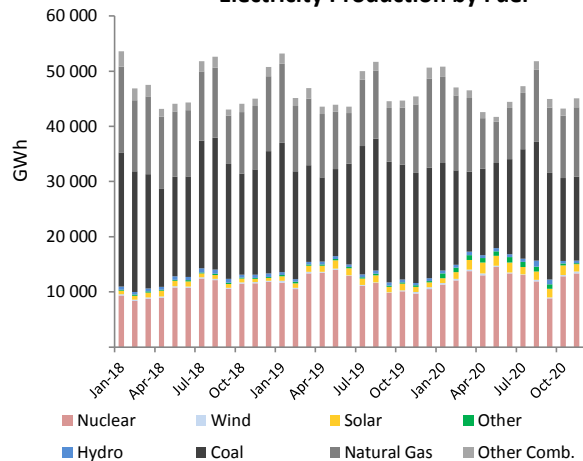
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	29 430	-12.9%	6.6%	65.3%	332 612	361 674	-8.0%	399 842	71.0%
Coal	15 202	-23.6%	1.0%	33.7%	190 316	219 515	-13.3%	239 517	42.5%
Oil	1 064	137.6%	237.5%	2.4%	5 408	7 790	-30.6%	9 054	1.6%
Natural Gas	12 595	1.1%	11.2%	27.9%	127 405	126 097	1.0%	142 204	25.2%
Combustible Renewables	525	-42.6%	-38.2%	1.2%	8 738	7 622	14.6%	8 354	1.5%
Other Combustibles	45	-42.6%	-38.2%	0.1%	745	650	14.6%	713	0.1%
Nuclear	13 357	37.4%	4.3%	29.6%	137 985	128 164	7.7%	138 679	24.6%
Hydro	423	-5.6%	-10.3%	0.9%	6 739	5 707	18.1%	6 204	1.1%
Wind	325	28.1%	40.0%	0.7%	2 759	2 337	18.1%	2 679	0.5%
Solar	1 352	39.9%	-23.6%	3.0%	16 904	12 128	39.4%	13 017	2.3%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	61	64.6%	-0.1%	0.1%	572	434	31.9%	474	0.1%
Non-Specified	130	-34.8%	-49.6%	0.3%	7 743	2 186	254.1%	2 385	0.4%
RENEWABLES	2 686	2.5%	-20.6%	6.0%	35 713	28 228	26.5%	30 729	5.5%
NON-RENEWABLES	42 392	-1.0%	6.5%	94.0%	469 602	484 402	-3.1%	532 552	94.5%
TOTAL NET PRODUCTION	45 078	-0.8%	4.3%		505 315	512 630	-1.4%	563 281	
+ Imports	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-
= ELECTRICITY SUPPLIED	45 078	-0.8%	4.3%		505 315	512 630	-1.4%	563 281	
- Used for pumped storage ⁴	294	-16.7%	-8.4%		3 915	4 190	-6.6%	4 588	
- T&D Losses ⁴	1 521	-0.8%	4.3%		17 045	17 292	-1.4%	19 001	
= ELECTRICITY CONSUMED	43 263	-0.7%	4.4%		484 354	491 148	-1.4%	539 693	

¹ current month to month of last year change ⁴ estimated
² month-to-month change
³ year-to-date compared to same period last year

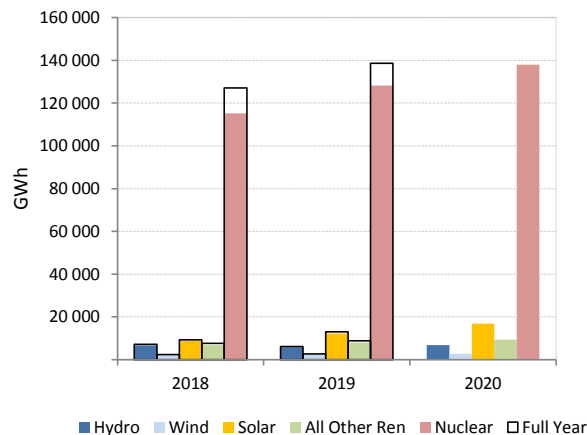
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



**Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020**

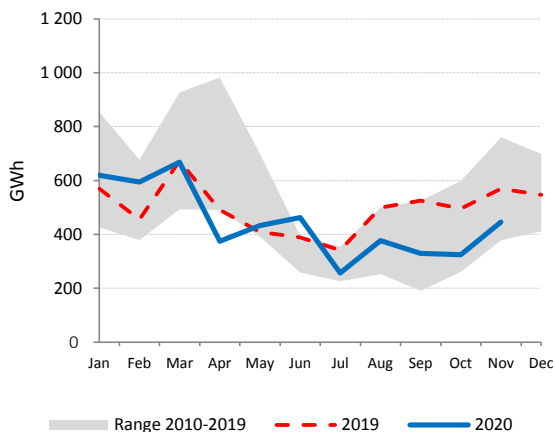


LATVIA

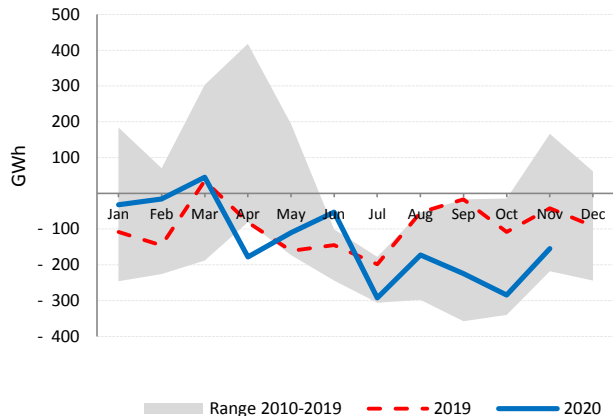
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	280	-2.6%	44.4%	62.9%	2 310	3 459	-33.2%	3 711	62.2%
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural Gas	210	-3.4%	56.9%	47.1%	1 594	2 709	-41.2%	2 886	48.4%
Combustible Renewables	70	-	16.7%	15.8%	716	750	-4.5%	825	13.8%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	148	-45.4%	27.6%	33.2%	2 409	1 821	32.3%	2 096	35.2%
Wind	17	54.6%	21.4%	3.8%	162	132	22.0%	152	2.6%
Solar	0	-	-67.4%	0.0%	3	3	-	3	0.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	235	-33.2%	23.6%	52.9%	3 290	2 707	21.5%	3 076	51.6%
NON-RENEWABLES	210	-3.4%	56.9%	47.1%	1 594	2 709	-41.2%	2 886	48.4%
TOTAL NET PRODUCTION	445	-21.8%	37.4%		4 883	5 416	-9.8%	5 962	
+ Imports	275	10.0%	-32.8%		3 867	4 278	-9.6%	4 611	
- Exports	120	-42.3%	-3.2%		2 392	3 252	-26.4%	3 493	
= ELECTRICITY SUPPLIED	600	-1.9%	-1.5%		6 358	6 442	-1.3%	7 080	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses ⁴	29	-12.1%	-1.8%		354	392	-9.7%	427	
= ELECTRICITY CONSUMED	571	-1.3%	-1.4%		6 004	6 050	-0.8%	6 653	

¹ current month to month of last year change ⁴ estimated
² month-to-month change
³ year-to-date compared to same period last year

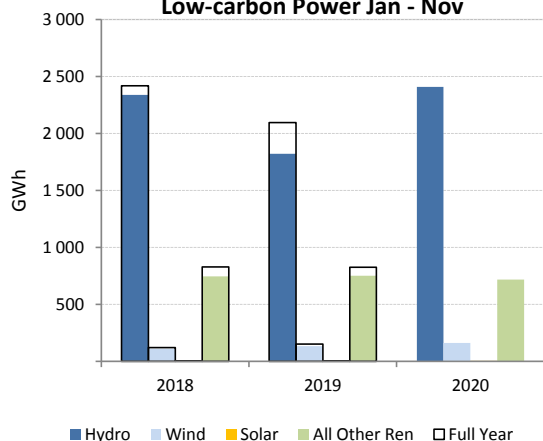
Electricity Production



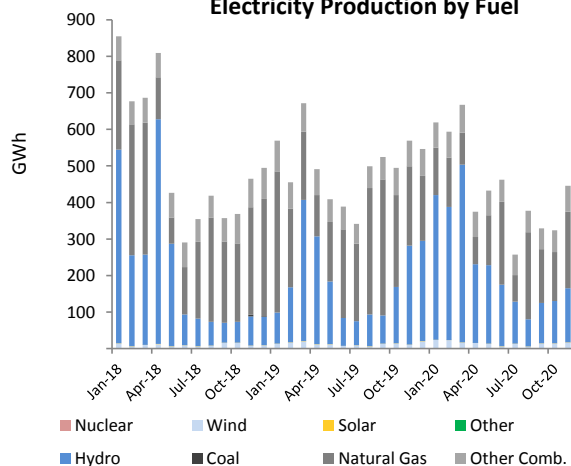
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



LITHUANIA

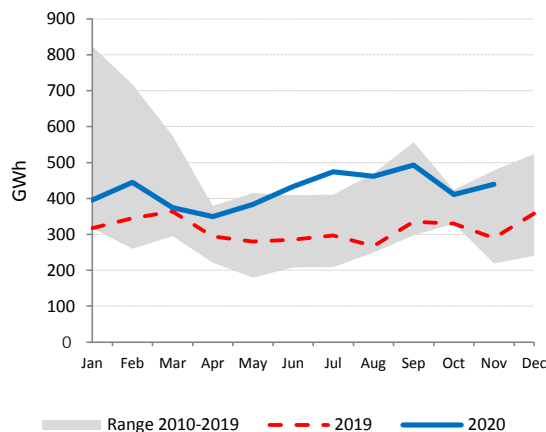
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	190	112.6%	-1.7%	-	2 043	953	114.4%	1 050	-
Coal	#VALUE!	-	-	-	- 1 519	592	-	#VALUE!	-
Oil	8	53.4%	81.5%	-	76	50	50.5%	59	-
Natural Gas	125	319.9%	-12.0%	-	1 420	424	235.0%	455	-
Combustible Renewables	52	9.2%	34.9%	-	478	412	16.2%	463	-
Other Combustibles	5	-21.9%	-37.2%	-	69	67	2.7%	74	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	95	96.7%	39.7%	-	970	856	13.3%	927	-
Wind	139	3.0%	7.8%	-	1 383	1 315	5.2%	1 490	-
Solar	1	23.0%	-62.4%	-	82	83	-1.4%	84	-
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	14	-13.9%	-17.2%	-	183	199	-8.3%	213	-
RENEWABLES	288	23.9%	20.2%	-	2 913	2 666	9.3%	2 964	-
NON-RENEWABLES	#VALUE!	-	-	-	228	1 332	-69.2%	#VALUE!	-
TOTAL NET PRODUCTION	#VALUE!	-	-	-	3 141	3 998	-7.8%	#VALUE!	-
+ Imports	1 014	-11.1%	10.4%	-	10 944	12 126	-9.7%	13 268	-
- Exports	288	-12.6%	29.3%	-	3 768	3 586	5.1%	3 924	-
= ELECTRICITY SUPPLIED	#VALUE!	-	-	-	10 318	12 537	-13.6%	#VALUE!	-
- Used for pumped storage	103	203.4%	48.6%	-	958	747	28.3%	810	-
- T&D Losses	79	-13.4%	-11.0%	-	858	854	0.4%	886	-
= ELECTRICITY CONSUMED	#VALUE!	-	-	-	8 501	10 936	-17.8%	#VALUE!	-

¹ current month to month of last year change

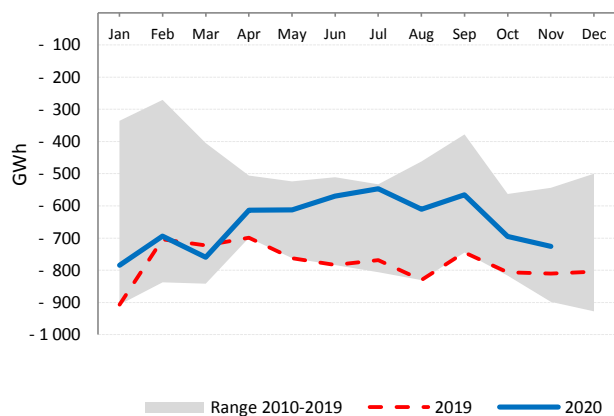
² month-to-month change

³ year-to-date compared to same period last year

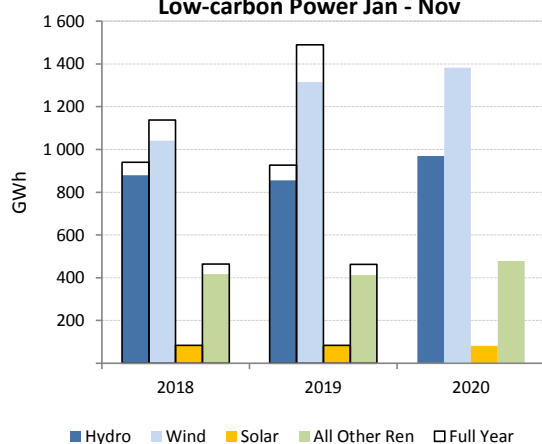
Electricity Production



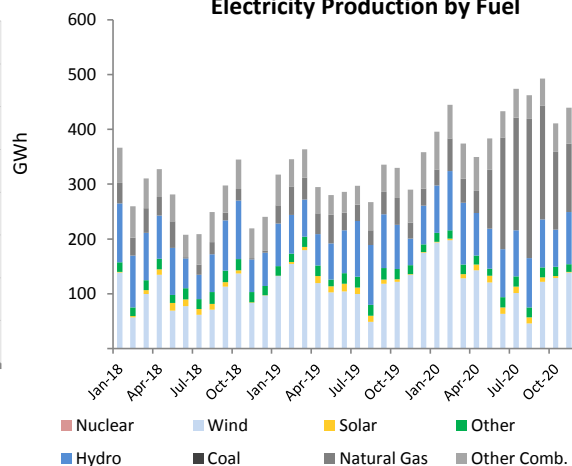
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



LUXEMBOURG

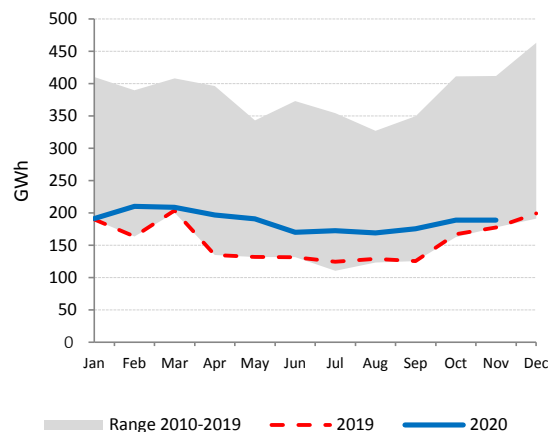
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	62	9.9%	23.8%	-	547	473	15.8%	528	-
Coal	#VALUE!	-	-	-	1 869	1 854	-	#VALUE!	-
Oil	-	-	-	-	-	-	-	-	-
Natural Gas	24	31.4%	88.5%	-	151	165	-9.0%	185	-
Combustible Renewables	30	-2.0%	-10.0%	-	337	239	41.1%	268	-
Other Combustibles	7	6.9%	118.6%	-	60	69	-12.3%	75	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	76	-19.5%	-25.8%	-	998	831	20.2%	938	-
Wind	47	90.8%	87.1%	-	314	246	27.4%	281	-
Solar	4	68.0%	-61.6%	-	201	128	57.1%	130	-
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	158	3.4%	-8.6%	-	1 850	1 444	28.1%	1 617	-
NON-RENEWABLES	#VALUE!	-	-	-	2 080	2 088	788.7%	#VALUE!	-
TOTAL NET PRODUCTION	#VALUE!	-	-	-	3 930	3 531	134.3%	#VALUE!	-
+ Imports	569	-3.2%	-5.7%	-	6 002	6 287	-4.5%	6 818	-
- Exports	81	-2.5%	-30.5%	-	992	847	17.2%	939	-
= ELECTRICITY SUPPLIED	#VALUE!	-	-	-	8 939	8 971	25.6%	#VALUE!	-
- Used for pumped storage	92	-20.9%	-33.2%	-	1 299	1 077	20.6%	1 203	-
- T&D Losses	14	3.2%	8.6%	-	137	144	-4.7%	156	-
= ELECTRICITY CONSUMED	#VALUE!	-	-	-	7 504	7 751	27.2%	#VALUE!	-

¹ current month to month of last year change

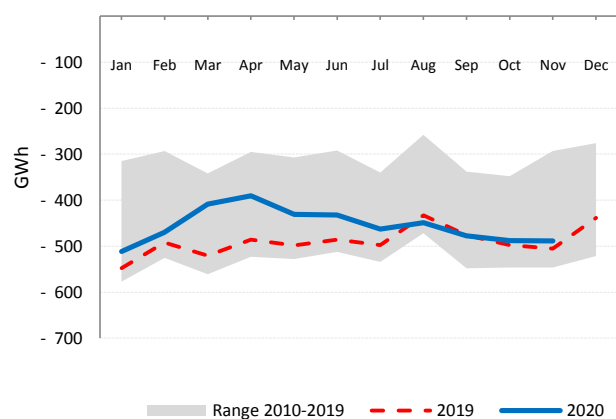
² month-to-month change

³ year-to-date compared to same period last year

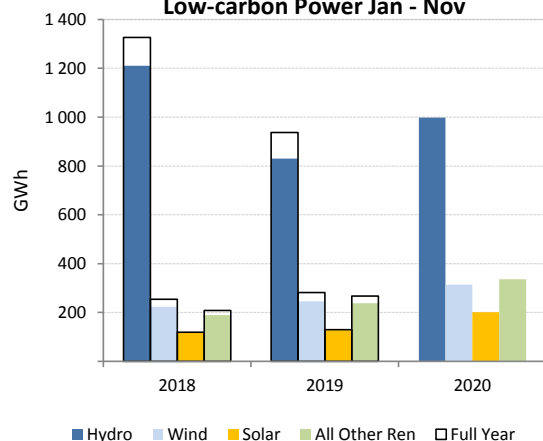
Electricity Production



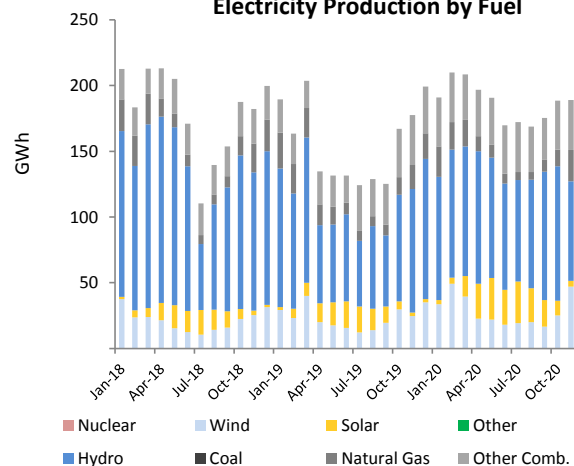
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



MEXICO

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	19 407	4.6%	1.8%	77.4%	215 246	234 919	-8.4%	252 920	79.9%
Coal	1 194	-16.9%	5.9%	4.8%	15 179	26 615	-43.0%	28 131	8.9%
Oil ⁴	2 634	6.4%	1.6%	10.5%	28 929	30 120	-4.0%	32 503	10.3%
Natural Gas ⁴	15 349	6.4%	1.6%	61.2%	168 606	175 549	-4.0%	189 440	59.9%
Combustible Renewables ⁴	192	6.4%	1.6%	0.8%	2 110	2 197	-4.0%	2 371	0.7%
Other Combustibles ⁴	38	6.4%	1.6%	0.2%	422	440	-4.0%	474	0.1%
Nuclear	701	-37.8%	-30.6%	2.8%	10 507	10 053	4.5%	11 111	3.5%
Hydro	1 816	21.3%	-26.6%	7.2%	25 121	22 409	12.1%	23 713	7.5%
Wind	1 944	15.9%	13.9%	7.8%	17 532	15 100	16.1%	16 763	5.3%
Solar	868	71.8%	-14.7%	3.5%	9 723	5 965	63.0%	6 544	2.1%
Geothermal	350	-11.4%	-3.4%	1.4%	4 437	4 904	-9.5%	5 330	1.7%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	5 170	21.5%	-10.1%	20.6%	58 923	50 575	16.5%	54 720	17.3%
NON-RENEWABLES	19 916	2.1%	0.2%	79.4%	223 643	242 775	-7.9%	261 660	82.7%
TOTAL NET PRODUCTION	25 086	5.6%	-2.1%		282 566	293 350	-3.7%	316 381	
+ Imports	77	106.1%	-12.7%		511	1 552	-67.1%	1 590	
- Exports	37	42.9%	-27.4%		386	929	-58.5%	963	
= ELECTRICITY SUPPLIED	25 126	5.7%	-2.1%		282 691	293 972	-3.8%	317 008	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses ⁵	3 452	5.8%	-2.2%		38 832	40 454	-4.0%	43 619	
= ELECTRICITY CONSUMED	21 674	5.7%	-2.1%		243 859	253 518	-3.8%	273 389	

¹ current month to month of last year change

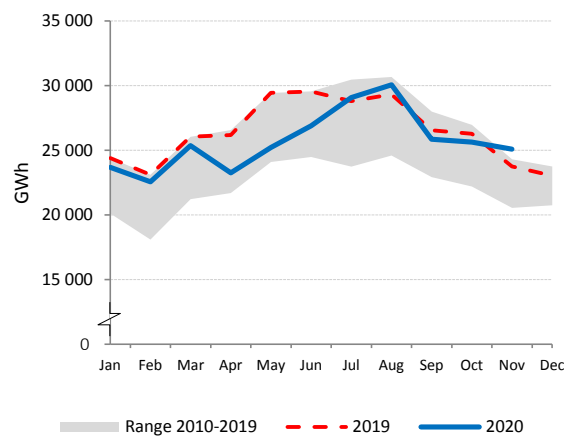
⁴ estimated from annual data

² month-to-month change

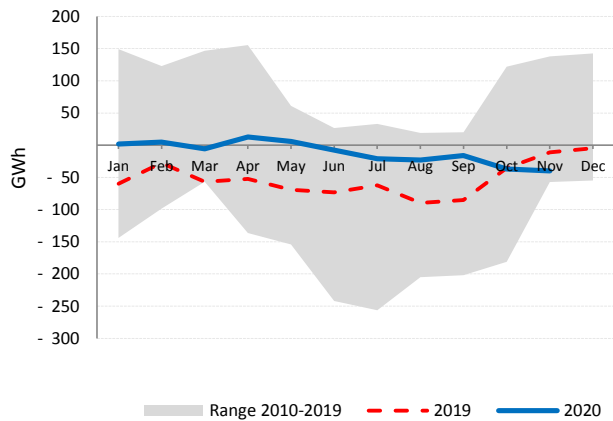
⁵ estimated

³ year-to-date compared to same period last year

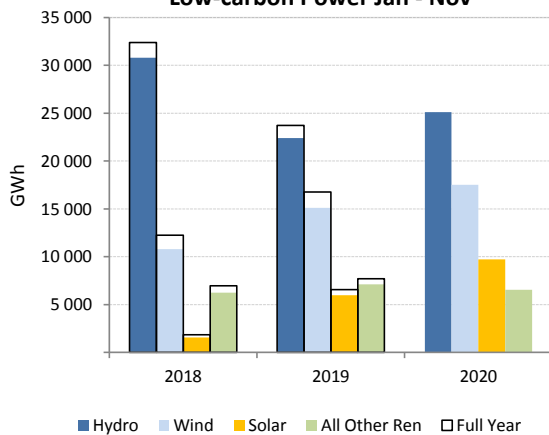
Electricity Production



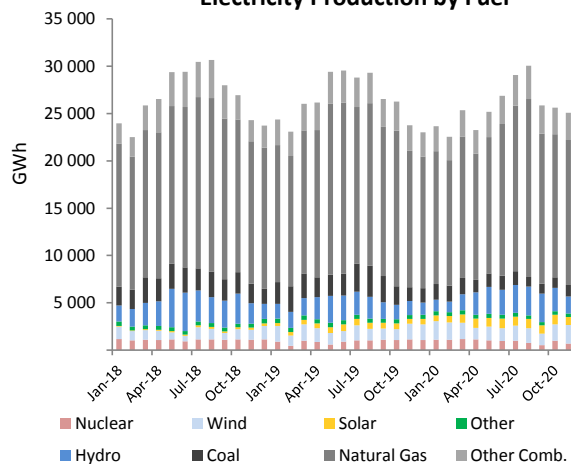
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel

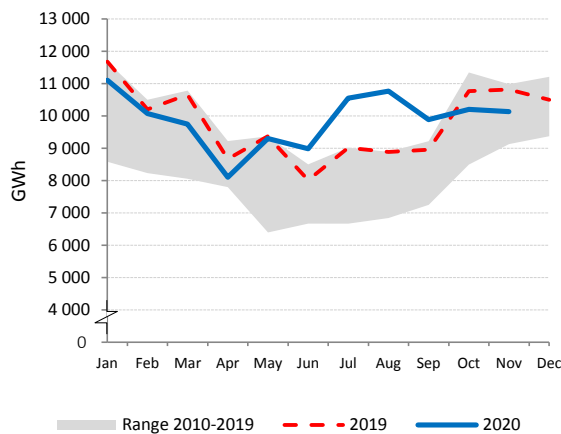


NETHERLANDS

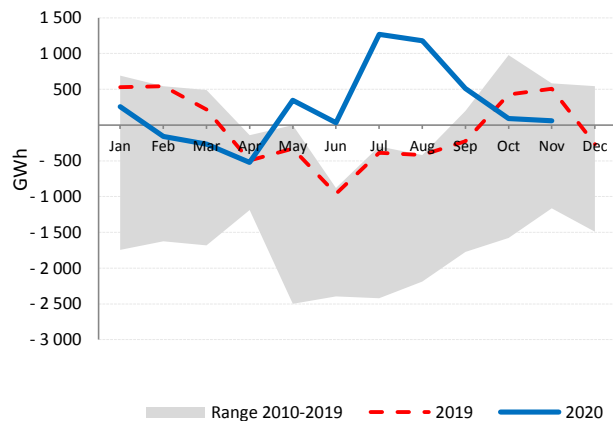
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	7 936	-15.0%	5.5%	78.3%	83 225	87 962	-5.4%	96 483	82.1%
Coal	1 072	-52.8%	-2.1%	10.6%	8 500	17 285	-50.8%	19 273	16.4%
Oil	70	-46.3%	-17.1%	0.7%	1 068	1 247	-14.3%	1 353	1.2%
Natural Gas	5 790	-4.3%	7.8%	57.1%	63 923	63 156	1.2%	68 630	58.4%
Combustible Renewables	828	14.0%	3.8%	8.2%	7 745	4 637	67.0%	5 413	4.6%
Other Combustibles	176	9.4%	1.3%	1.7%	1 987	1 637	21.4%	1 815	1.5%
Nuclear	305	-13.3%	-14.9%	3.0%	3 553	3 384	5.0%	3 748	3.2%
Hydro	3	-65.7%	4.1%	0.0%	39	66	-40.9%	74	0.1%
Wind	1 617	72.9%	-16.6%	16.0%	13 547	10 060	34.7%	11 508	9.8%
Solar	230	64.0%	-31.7%	2.3%	7 986	5 052	58.1%	5 159	4.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	44	-	-	0.4%	487	487	-	531	0.5%
RENEWABLES	2 678	47.9%	-12.9%	26.4%	29 316	19 815	48.0%	22 154	18.9%
NON-RENEWABLES	7 457	-17.2%	4.6%	73.6%	79 520	87 196	-8.8%	95 350	81.1%
TOTAL NET PRODUCTION	10 135	-6.3%	-0.7%		108 836	107 011	1.7%	117 504	
+ Imports	1 791	23.2%	-2.7%		18 046	18 425	-2.1%	20 403	
- Exports	1 849	-5.8%	-4.2%		20 836	17 836	16.8%	19 548	
= ELECTRICITY SUPPLIED	10 077	-2.3%	-0.4%		106 046	107 600	-1.4%	118 359	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses ⁴	447	-5.2%	2.6%		4 638	4 902	-5.4%	5 394	
= ELECTRICITY CONSUMED	9 630	-2.1%	-0.5%		101 407	102 697	-1.3%	112 965	

¹ current month to month of last year change ⁴ estimated
² month-to-month change
³ year-to-date compared to same period last year

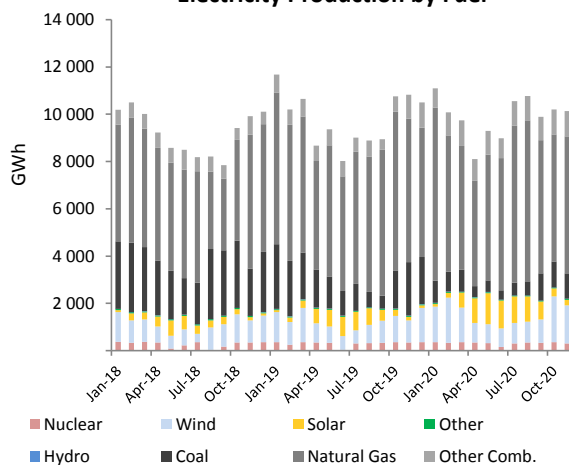
Electricity Production



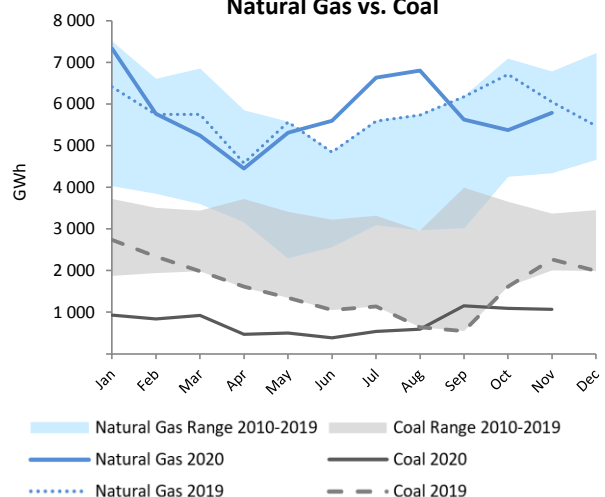
Net Electricity Exports



Electricity Production by Fuel



Natural Gas vs. Coal



NEW ZEALAND

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	585	29.5%	-24.5%	16.9%	8 361	7 746	7.9%	8 192	18.8%
Coal	186	15.3%	-26.6%	5.4%	2 101	2 066	1.6%	2 118	4.9%
Oil	1	176.2%	-37.7%	0.0%	15	4	312.5%	4	0.0%
Natural Gas	355	37.7%	-24.9%	10.3%	5 706	5 157	10.7%	5 495	12.6%
Combustible Renewables	44	33.7%	-9.7%	1.3%	539	519	3.8%	575	1.3%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	2 034	-7.5%	4.4%	58.8%	21 720	23 086	-5.9%	25 321	58.2%
Wind	215	0.9%	-8.0%	6.2%	2 113	2 035	3.9%	2 232	5.1%
Solar	13	13.3%	1.0%	0.4%	123	114	7.7%	126	0.3%
Geothermal	608	12.8%	-4.9%	17.6%	7 045	6 986	0.8%	7 586	17.4%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	4	-	-	0.1%	42	42	-	45	0.1%
RENEWABLES	2 914	-2.7%	1.1%	84.2%	31 540	32 741	-3.7%	35 840	82.4%
NON-RENEWABLES	545	28.9%	-25.4%	15.8%	7 863	7 268	8.2%	7 663	17.6%
TOTAL NET PRODUCTION	3 459	1.2%	-4.3%		39 404	40 010	-1.5%	43 503	
+ Imports	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-
= ELECTRICITY SUPPLIED	3 459	1.2%	-4.3%		39 404	40 010	-1.5%	43 503	
- Used for pumped storage	-	-	-	-	-	-	-	-	-
- T&D Losses	-	-	-	-	2 285	2 704	-15.5%	2 951	
= ELECTRICITY CONSUMED	3 459	9.1%	1.6%		37 119	37 305	-0.5%	40 552	

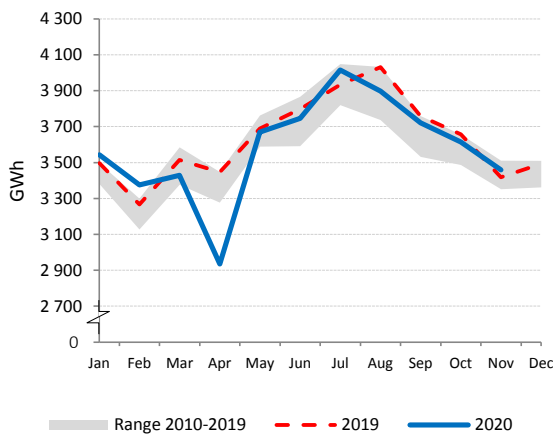
¹ current month to month of last year change

November 2020 is estimated by the IEA Secretariat

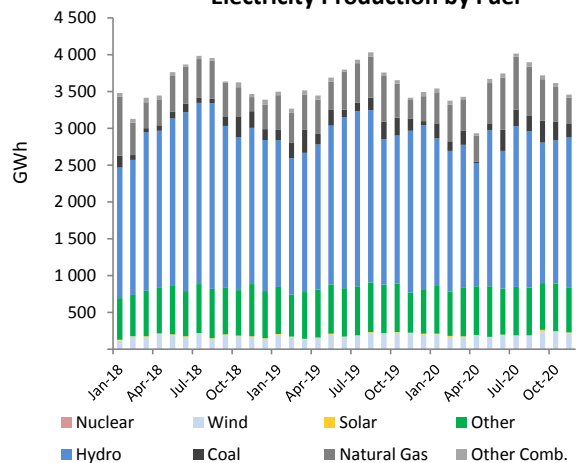
² month-to-month change

³ year-to-date compared to same period last year

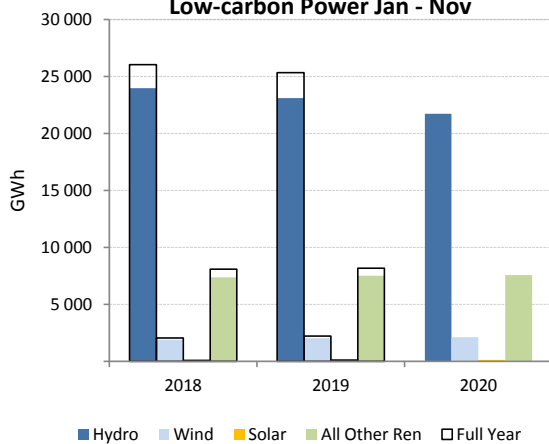
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



**Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020**



NORWAY

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	129	-47.0%	68.1%	1.0%	2 287	2 686	-14.9%	2 943	2.2%
Coal ⁴	15	48.3%	-19.3%	0.1%	160	147	8.7%	162	0.1%
Oil ⁴	2	48.3%	-19.2%	0.0%	17	16	8.7%	17	0.0%
Natural Gas	-	-	-	-	1 625	2 117	-23.2%	2 317	1.7%
Combustible Renewables	20	10.3%	3.5%	0.1%	229	220	4.2%	241	0.2%
Other Combustibles	92	503.3%	625.8%	0.7%	256	186	37.3%	205	0.2%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	11 912	-2.2%	-7.4%	89.0%	126 126	113 910	10.7%	125 243	93.4%
Wind	1 338	157.9%	45.0%	10.0%	8 549	4 744	80.2%	5 535	4.1%
Solar	0	-	-52.3%	0.0%	13	13	-	13	0.0%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	301	-	328	0.2%
RENEWABLES	13 270	4.4%	-3.8%	99.2%	134 917	118 887	13.5%	131 033	97.7%
NON-RENEWABLES	109	-56.9%	89.8%	0.8%	2 057	2 767	-25.6%	3 030	2.3%
TOTAL NET PRODUCTION	13 379	3.2%	-3.5%		136 975	121 654	12.6%	134 062	
+ Imports	504	-56.1%	206.4%		4 127	10 508	-60.7%	12 353	
- Exports	1 958	100.8%	-32.1%		21 905	11 673	87.7%	12 309	
= ELECTRICITY SUPPLIED	11 926	-9.2%	7.1%		119 197	120 490	-1.1%	134 106	
- Used for pumped storage	53	725.1%	23.6%		1 109	1 242	-10.7%	1 262	
- T&D Losses	909	4.4%	-3.5%		9 336	8 273	12.9%	9 109	
= ELECTRICITY CONSUMED	10 964	-10.6%	8.0%		108 752	110 975	-2.0%	123 734	

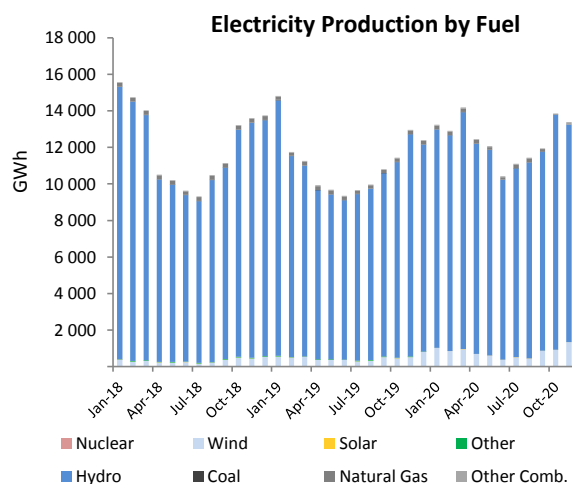
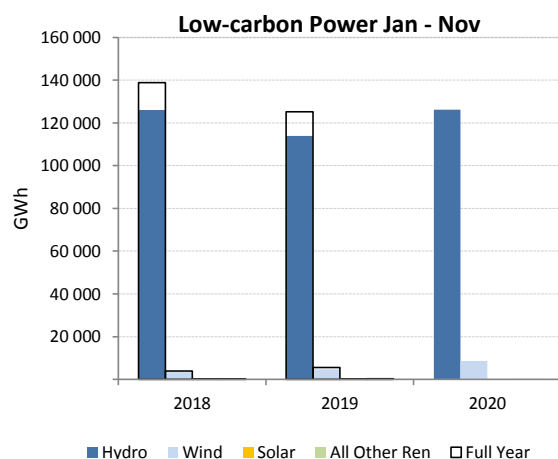
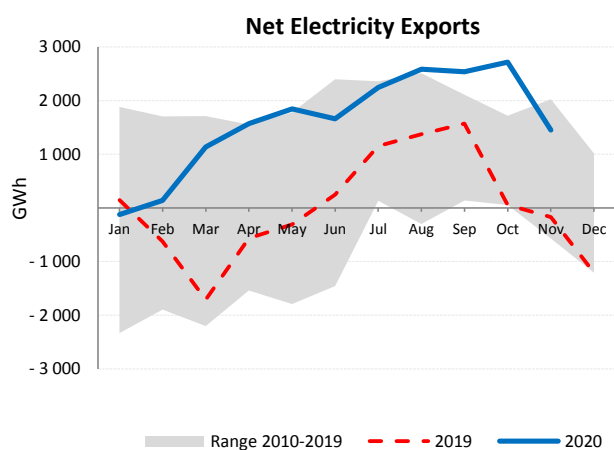
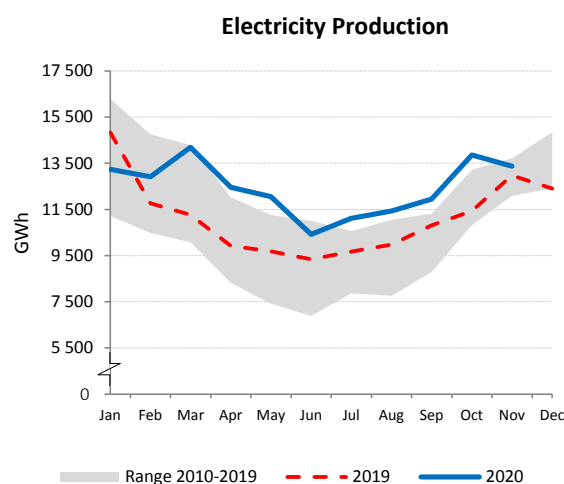
¹ current month to month of last year change

⁴ estimated from annual data

² month-to-month change

Natural gas figures are confidential for November 2020

³ year-to-date compared to same period last year



POLAND

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	11 352	3.8%	2.0%	87.6%	113 768	121 727	-6.5%	133 026	87.9%
Coal	8 931	0.3%	-0.2%	68.9%	90 882	101 451	-10.4%	110 300	72.9%
Oil ⁴	-	-	-	-	-	-	-	1 620	1.1%
Natural Gas	1 467	18.8%	15.3%	11.3%	13 232	12 028	10.0%	13 550	9.0%
Combustible Renewables	690	10.8%	1.7%	5.3%	6 950	6 337	9.7%	7 035	4.6%
Other Combustibles	263	569.9%	15.2%	2.0%	2 704	481	461.8%	520	0.3%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	268	44.1%	-6.8%	2.1%	2 645	2 418	9.4%	2 637	1.7%
Wind	1 266	-4.9%	-3.3%	9.8%	13 615	12 994	4.8%	14 761	9.8%
Solar	61	140.4%	-46.2%	0.5%	1 885	685	175.1%	711	0.5%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	19	-	-	0.1%	210	210	-	229	0.2%
RENEWABLES	2 285	5.5%	-4.4%	17.6%	25 095	22 434	11.9%	25 144	16.6%
NON-RENEWABLES	10 681	3.3%	2.0%	82.4%	107 027	114 170	-7.4%	126 219	83.4%
TOTAL NET PRODUCTION	12 966	3.7%	0.9%		132 122	136 604	-4.3%	151 363	
+ Imports	1 703	9.9%	-0.6%		18 945	16 282	16.4%	17 868	
- Exports	736	71.3%	62.5%		6 454	6 533	-1.2%	7 245	
= ELECTRICITY SUPPLIED	13 933	2.3%	-1.3%		144 613	146 354	-2.1%	161 986	
- Used for pumped storage	120	17.2%	14.0%		1 012	902	12.2%	1 033	
- T&D Losses	928	-2.0%	-8.4%		9 849	8 031	22.6%	8 951	
= ELECTRICITY CONSUMED	12 885	2.5%	-0.9%		133 752	137 421	-3.7%	152 002	

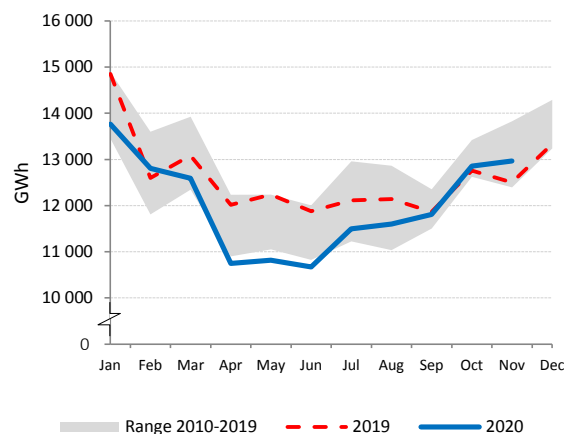
¹ current month to month of last year change

⁴ monthly figures are confidential

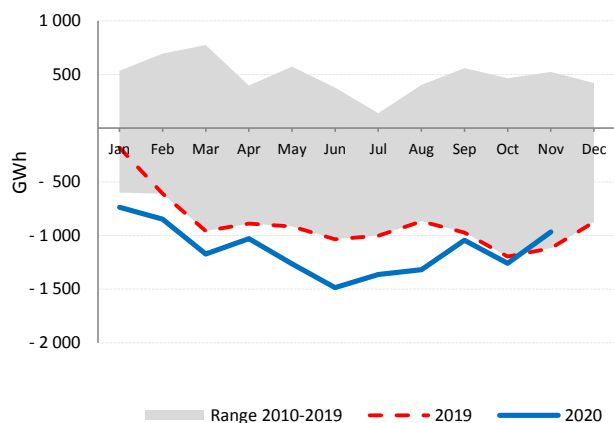
² month-to-month change

³ year-to-date compared to same period last year

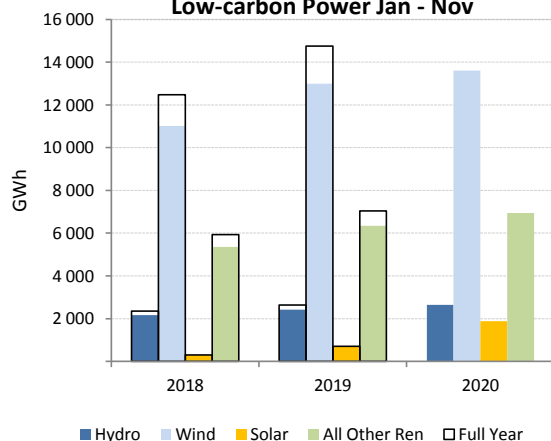
Electricity Production



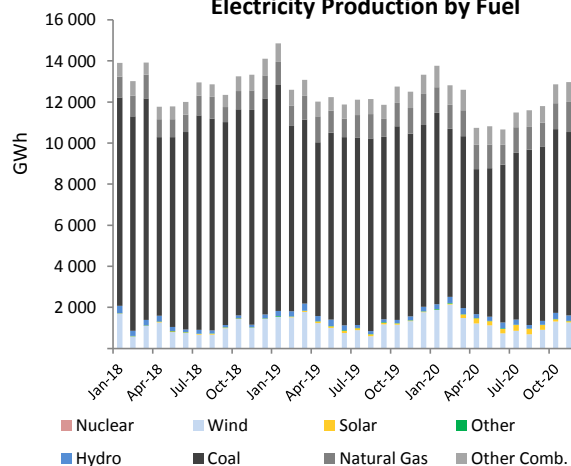
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



PORTUGAL

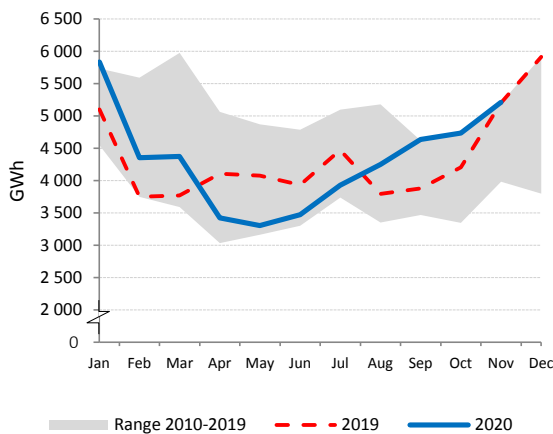
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	2 621	21.1%	10.7%	50.3%	22 751	25 065	-9.2%	26 902	51.6%
Coal	700	202.4%	187.4%	13.4%	2 145	5 232	-59.0%	5 376	10.3%
Oil	95	-16.9%	-23.5%	1.8%	1 113	1 112	0.0%	1 218	2.3%
Natural Gas	1 501	-2.3%	-9.9%	28.8%	16 028	15 507	3.4%	16 774	32.1%
Combustible Renewables	312	15.9%	-2.1%	6.0%	3 238	2 967	9.1%	3 268	6.3%
Other Combustibles	13	-6.8%	-12.6%	0.3%	228	247	-7.8%	267	0.5%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1 319	30.7%	32.6%	25.3%	12 357	7 701	60.5%	10 175	19.5%
Wind	1 157	-40.7%	-5.2%	22.2%	10 604	12 058	-12.1%	13 576	26.0%
Solar	93	46.5%	-33.7%	1.8%	1 619	1 275	27.0%	1 341	2.6%
Geothermal	17	39.7%	43.0%	0.3%	178	175	1.8%	192	0.4%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	2 899	-12.3%	7.9%	55.7%	27 996	24 176	15.8%	28 551	54.7%
NON-RENEWABLES	2 309	21.8%	12.7%	44.3%	19 513	22 098	-11.7%	23 634	45.3%
TOTAL NET PRODUCTION	5 208	0.1%	10.0%		47 509	46 275	2.7%	52 185	
+ Imports	248	-52.0%	-45.1%		6 895	7 739	-10.9%	8 099	
- Exports	950	32.5%	43.6%		5 537	3 496	58.4%	4 700	
= ELECTRICITY SUPPLIED	4 506	-9.9%	-0.4%		48 867	50 518	-3.3%	55 584	
- Used for pumped storage	110	-59.7%	-35.1%		1 772	1 630	8.7%	1 827	
- T&D Losses	438	0.5%	0.5%		4 716	4 497	4.9%	4 948	
= ELECTRICITY CONSUMED	3 958	-7.8%	1.0%		42 379	44 390	-4.5%	48 810	

¹ current month to month of last year change

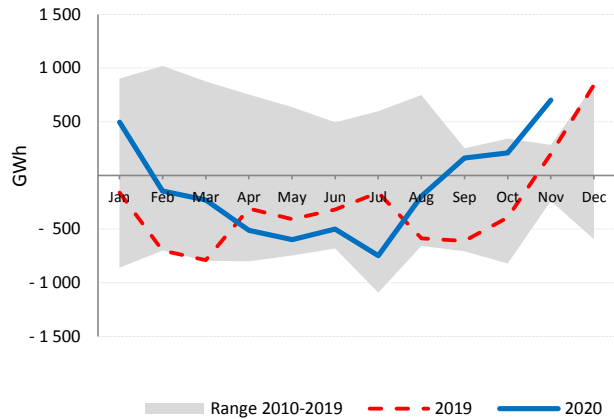
² month-to-month change

³ year-to-date compared to same period last year

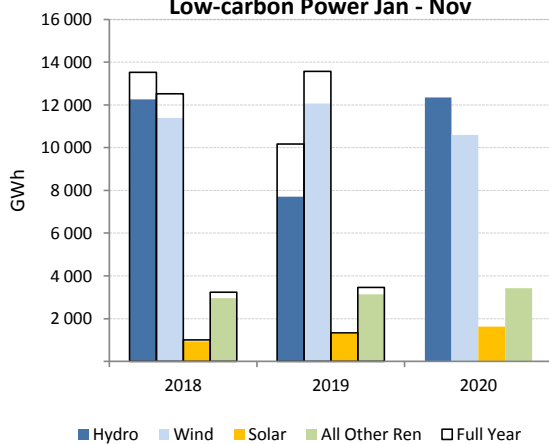
Electricity Production



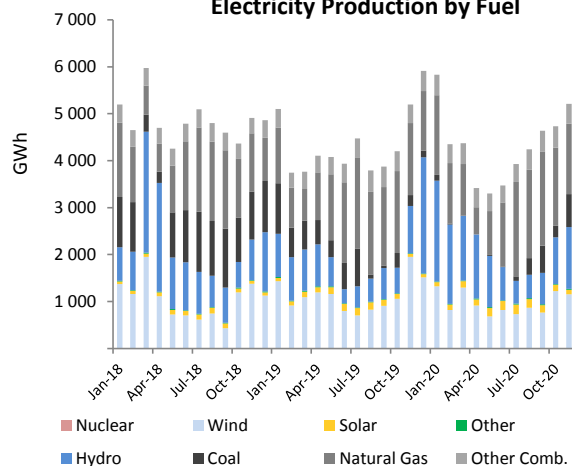
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel

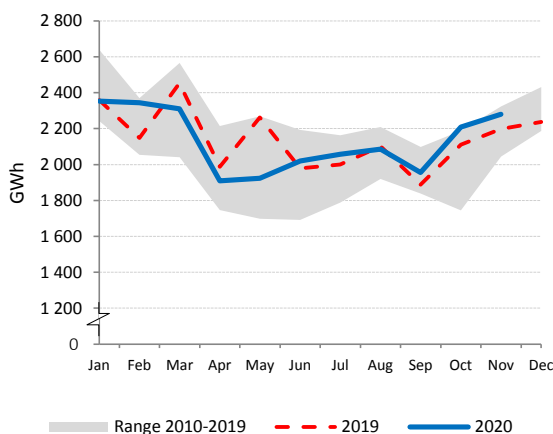


SLOVAK REPUBLIC

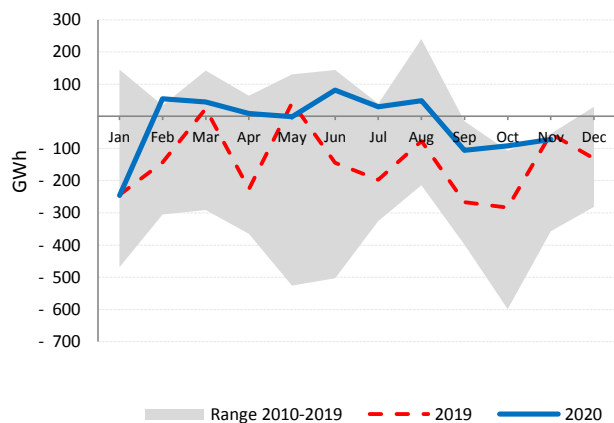
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	562	3.2%	8.3%	24.7%	5 427	5 626	-3.5%	6 174	24.0%
Coal	154	-19.6%	36.9%	6.7%	1 333	2 014	-33.8%	2 233	8.7%
Oil	29	-27.5%	3.6%	1.3%	334	368	-9.3%	399	1.6%
Natural Gas	292	24.5%	4.2%	12.8%	2 826	2 249	25.6%	2 478	9.6%
Combustible Renewables	86	10.9%	-11.6%	3.8%	922	984	-6.3%	1 052	4.1%
Other Combustibles	1	7.7%	-2.3%	0.0%	12	10	16.0%	11	0.0%
Nuclear	1 307	1.1%	15.8%	57.3%	12 930	13 065	-1.0%	14 407	56.0%
Hydro	387	15.6%	-25.8%	17.0%	4 395	4 165	5.5%	4 489	17.5%
Wind	-	-	-	-	-	3	-	5	0.0%
Solar	18	12.5%	-45.5%	0.8%	646	573	12.7%	589	2.3%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	6	-16.7%	-	0.3%	53	54	-2.2%	59	0.2%
RENEWABLES	491	14.2%	-24.6%	21.5%	5 963	5 726	4.1%	6 135	23.9%
NON-RENEWABLES	1 789	1.2%	14.9%	78.5%	17 487	17 761	-1.5%	19 588	76.1%
TOTAL NET PRODUCTION	2 281	3.8%	3.2%		23 451	23 487	-0.2%	25 723	
+ Imports	1 323	66.8%	24.0%		11 939	12 316	-3.1%	13 538	
- Exports	1 251	69.3%	28.3%		11 691	10 747	8.8%	11 838	
= ELECTRICITY SUPPLIED	2 353	4.5%	2.2%		23 698	25 056	-5.4%	27 423	
- Used for pumped storage	38	52.0%	-		349	270	29.3%	295	
- T&D Losses ⁴	-	-	-		-	1 164	-	1 277	
= ELECTRICITY CONSUMED	2 315	8.7%	2.3%		23 349	23 622	-1.2%	25 852	

¹ current month to month of last year change ⁴ estimated
² month-to-month change
³ year-to-date compared to same period last year

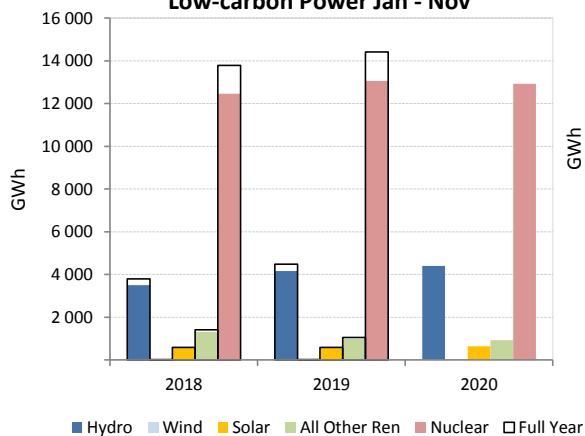
Electricity Production



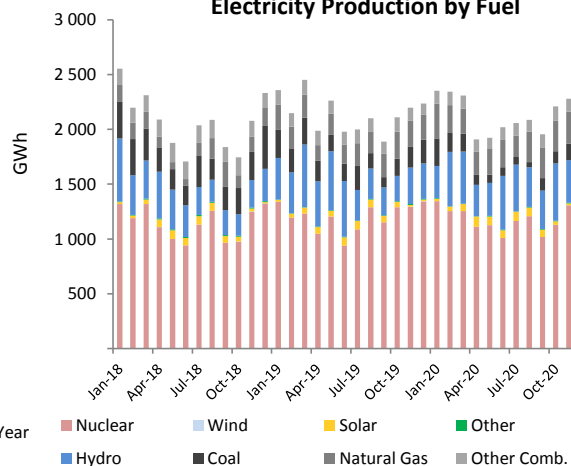
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



SLOVENIA

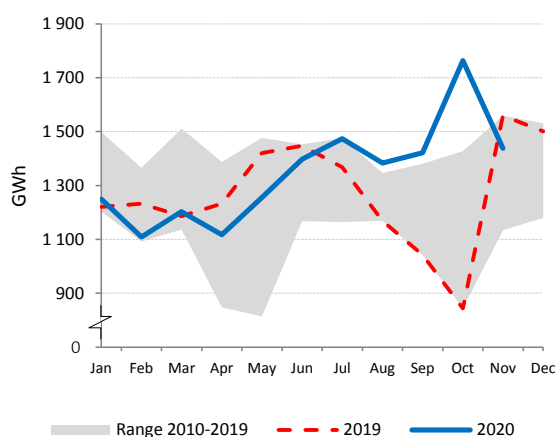
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	526	28.2%	-2.9%	36.6%	4 218	4 336	-2.7%	4 761	31.3%
Coal	443	31.5%	-8.5%	30.8%	3 530	3 691	-4.4%	4 037	26.5%
Oil	0	-2.4%	67.4%	0.0%	6	9	-33.0%	9	0.1%
Natural Gas	62	20.0%	66.6%	4.3%	468	423	10.6%	480	3.1%
Combustible Renewables	20	-3.4%	-1.9%	1.4%	205	204	0.6%	226	1.5%
Other Combustibles	1	-4.9%	442.2%	0.1%	8	8	2.1%	9	0.1%
Nuclear	501	1.3%	-3.2%	34.8%	5 553	5 019	10.6%	5 533	36.3%
Hydro	398	-38.4%	-42.0%	27.7%	4 721	4 074	15.9%	4 622	30.4%
Wind	1	23.9%	83.7%	0.0%	5	6	-1.5%	6	0.0%
Solar	13	47.9%	-33.6%	0.9%	313	289	8.3%	302	2.0%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	431	-36.2%	-40.6%	30.0%	5 245	4 573	14.7%	5 157	33.9%
NON-RENEWABLES	1 007	13.9%	-3.1%	70.0%	9 566	9 151	4.5%	10 068	66.1%
TOTAL NET PRODUCTION	1 438	-7.8%	-18.5%		14 811	13 724	7.9%	15 224	
+ Imports	569	4.0%	19.1%		6 567	8 395	-21.8%	9 021	
- Exports	744	-11.3%	-24.9%		8 305	8 527	-2.6%	9 340	
= ELECTRICITY SUPPLIED	1 264	-0.4%	0.9%		13 072	13 592	-3.8%	14 906	
- Used for pumped storage	40	14.2%	9.9%		352	235	49.7%	272	
- T&D Losses	91	5.4%	10.1%		734	751	-2.3%	858	
= ELECTRICITY CONSUMED	1 132	-1.3%	0.0%		11 986	12 605	-4.9%	13 776	

¹ current month to month of last year change

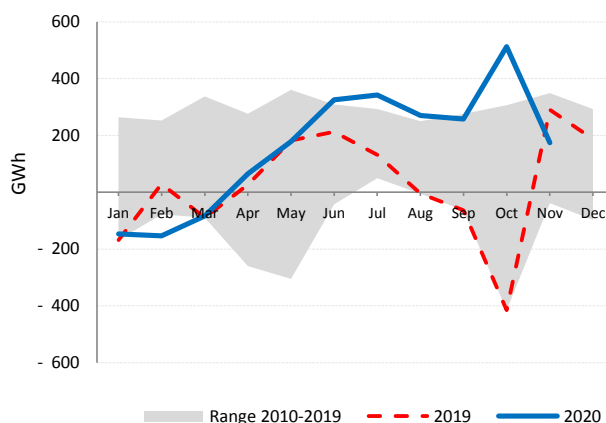
² month-to-month change

³ year-to-date compared to same period last year

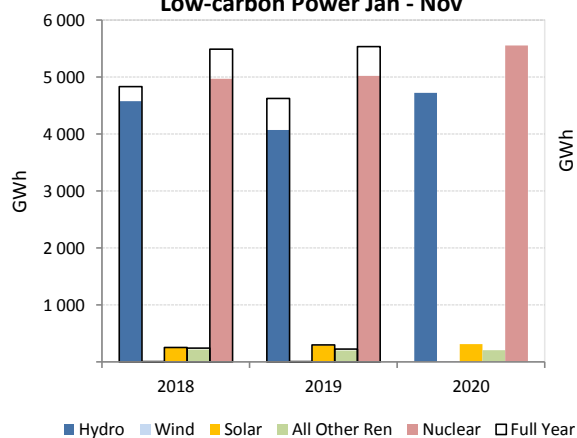
Electricity Production



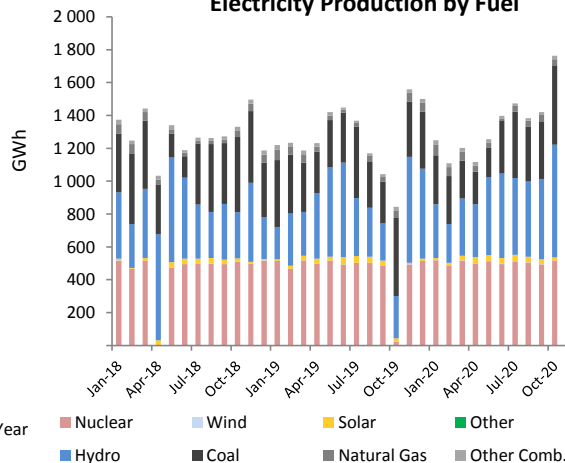
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



SPAIN

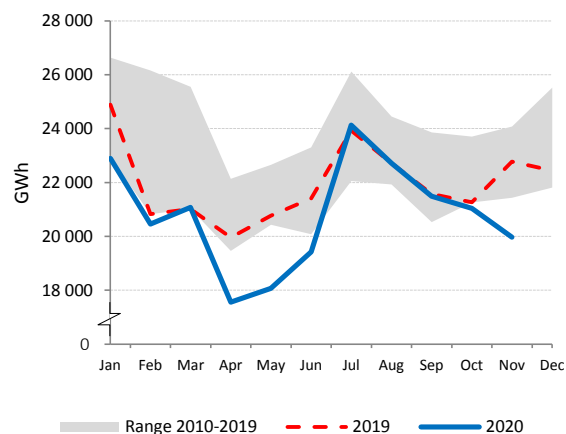
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	7 629	-10.5%	8.6%	38.2%	82 726	105 451	-21.6%	112 593	42.7%
Coal	380	-47.5%	16.6%	1.9%	5 054	13 014	-61.2%	13 562	5.1%
Oil	905	-4.9%	3.6%	4.5%	9 547	11 061	-13.7%	12 056	4.6%
Natural Gas	5 676	-10.1%	10.0%	28.4%	61 563	75 403	-18.4%	80 466	30.5%
Combustible Renewables	582	23.7%	-2.4%	2.9%	5 753	5 063	13.6%	5 523	2.1%
Other Combustibles	86	22.1%	18.8%	0.4%	809	910	-11.1%	985	0.4%
Nuclear	4 645	35.4%	2.5%	23.3%	50 539	51 528	-1.9%	55 883	21.2%
Hydro	2 616	-7.5%	23.4%	13.1%	29 764	21 406	39.0%	26 349	10.0%
Wind	4 179	-43.5%	-27.0%	20.9%	46 997	48 810	-3.7%	54 235	20.6%
Solar	898	54.3%	-44.9%	4.5%	18 796	13 830	35.9%	14 400	5.5%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	102	-	112	0.0%
RENEWABLES	8 275	-26.6%	-17.8%	41.4%	101 309	89 109	13.7%	100 507	38.1%
NON-RENEWABLES	11 692	1.7%	6.6%	58.6%	127 512	152 018	-16.1%	163 064	61.9%
TOTAL NET PRODUCTION	19 966	-12.3%	-5.1%		228 821	241 127	-5.1%	263 571	
+ Imports	1 971	72.9%	41.3%		16 765	16 975	-1.2%	18 720	
- Exports	880	-38.8%	-31.6%		12 685	10 562	20.1%	11 858	
= ELECTRICITY SUPPLIED	21 057	-6.3%	-0.4%		232 901	247 540	-5.9%	270 433	
- Used for pumped storage	280	-15.3%	-17.7%		4 109	2 363	73.9%	3 025	
- T&D Losses	1 964	-6.1%	-0.1%		21 604	23 087	-6.4%	25 187	
= ELECTRICITY CONSUMED	18 814	-6.2%	-0.1%		207 187	222 090	-6.7%	242 221	

¹ current month to month of last year change

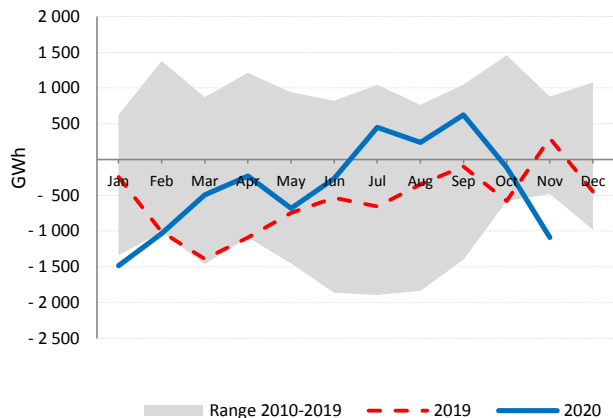
² month-to-month change

³ year-to-date compared to same period last year

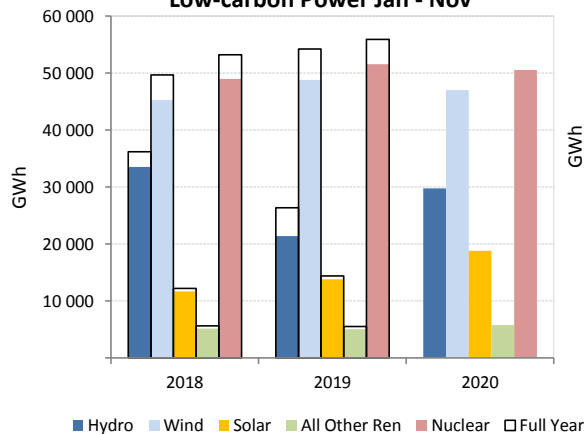
Electricity Production



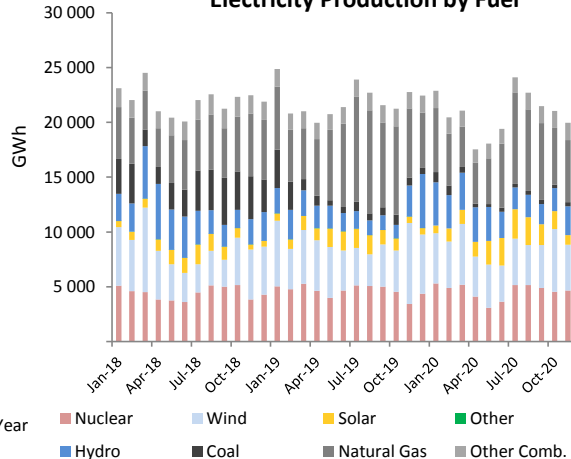
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



SWEDEN

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	1 080	-23.8%	8.2%	7.7%	10 956	14 304	-23.4%	15 816	9.5%
Coal	1	-90.6%	-	0.0%	6	1 140	-99.5%	1 142	0.7%
Oil	7	-48.9%	-50.0%	0.1%	95	200	-52.5%	209	0.1%
Natural Gas	5	-45.7%	11.7%	0.0%	47	261	-82.1%	274	0.2%
Combustible Renewables	934	-25.5%	11.6%	6.7%	9 446	11 240	-16.0%	12 579	7.6%
Other Combustibles	133	-1.4%	-6.8%	1.0%	1 363	1 462	-6.8%	1 612	1.0%
Nuclear	3 590	-35.7%	-8.2%	25.6%	42 735	58 579	-27.0%	64 334	38.8%
Hydro	6 223	-2.3%	8.6%	44.4%	64 444	58 814	9.6%	64 969	39.2%
Wind	3 111	110.2%	40.1%	22.2%	25 482	17 376	46.7%	19 847	12.0%
Solar ⁴	16	-	-57.3%	0.1%	667	667	-	679	0.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	10 285	12.8%	16.5%	73.4%	100 039	88 097	13.6%	98 074	59.2%
NON-RENEWABLES	3 735	-35.0%	-8.3%	26.6%	44 246	61 643	-28.2%	67 571	40.8%
TOTAL NET PRODUCTION	14 020	-5.7%	8.7%		144 285	149 740	-3.6%	165 645	
+ Imports	290	-65.8%	-80.8%		10 379	8 368	24.0%	9 070	
- Exports	2 898	-0.2%	-10.0%		33 616	32 050	4.9%	35 231	
= ELECTRICITY SUPPLIED	11 412	-10.9%	2.0%		121 048	126 058	-4.0%	139 484	
- Used for pumped storage	0	-99.7%	-99.2%		21	29	-29.1%	32	
- T&D Losses	926	-13.2%	0.1%		9 660	9 681	-0.2%	10 842	
= ELECTRICITY CONSUMED	10 486	-10.7%	2.1%		111 368	116 348	-4.3%	128 610	

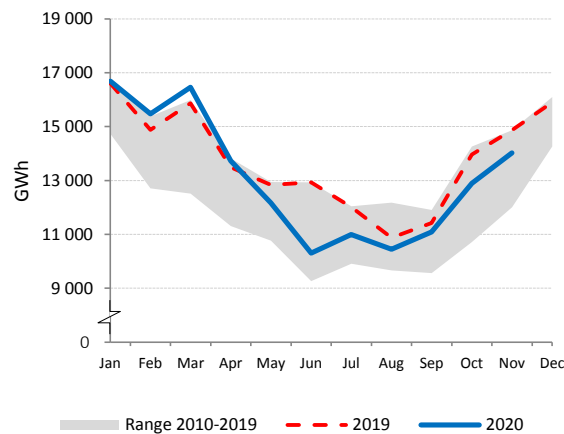
¹ current month to month of last year change

⁴ estimated by the IEA secretariat

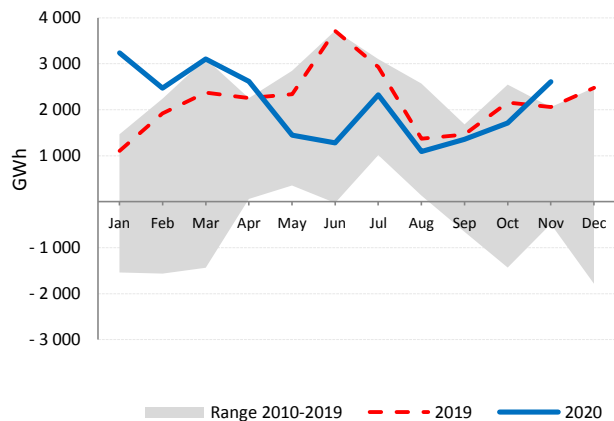
² month-to-month change

³ year-to-date compared to same period last year

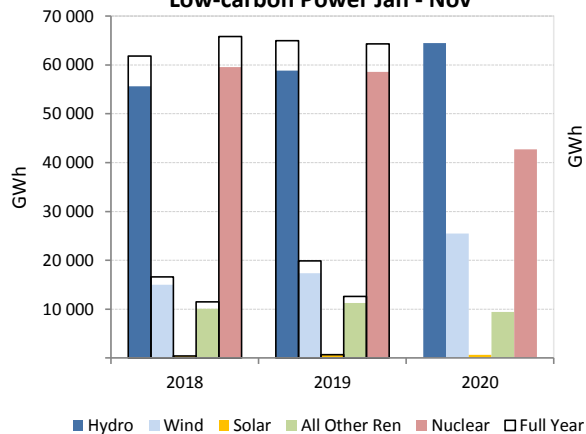
Electricity Production



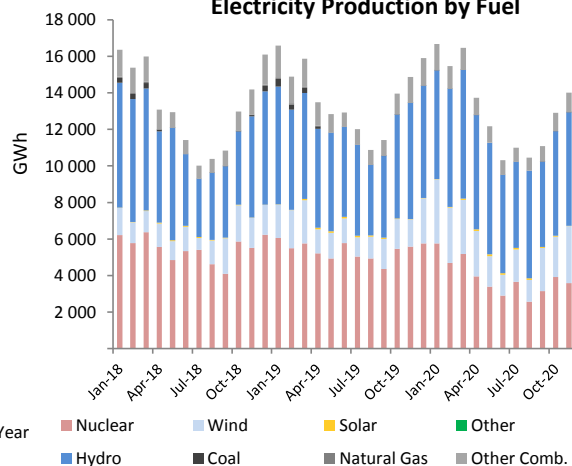
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



SWITZERLAND

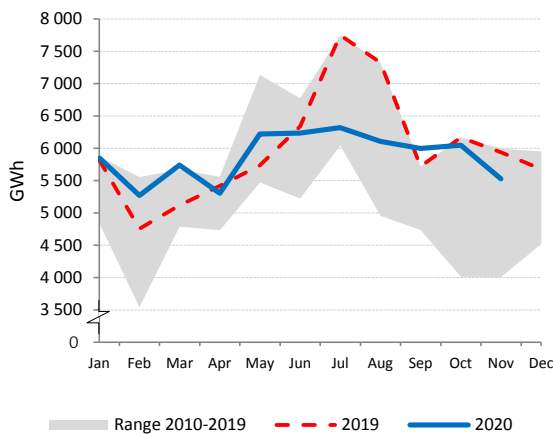
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	336	0.9%	13.4%	-	3 333	3 233	3.1%	3 580	-
Coal	#VALUE!	-	-	-	- 1 787	- 1 760	-	#VALUE!	-
Oil	1	-50.0%	-	-	14	27	-50.0%	30	-
Natural Gas	47	-13.6%	12.9%	-	461	519	-11.3%	575	-
Combustible Renewables	170	2.5%	13.7%	-	1 682	1 607	4.7%	1 779	-
Other Combustibles	119	6.7%	13.4%	-	1 177	1 079	9.0%	1 196	-
Nuclear	2 103	-11.4%	-2.8%	-	21 023	23 030	-8.7%	25 280	-
Hydro	3 011	-4.5%	-12.2%	-	37 683	37 543	0.4%	40 556	-
Wind	10	-23.1%	-33.3%	-	127	125	1.6%	146	-
Solar	67	2.4%	-52.3%	-	2 440	2 133	14.4%	2 178	-
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	3 258	-4.1%	-12.8%	-	41 932	41 408	1.3%	44 659	-
NON-RENEWABLES	#VALUE!	-	-	-	20 887	22 896	-15.3%	#VALUE!	-
TOTAL NET PRODUCTION	#VALUE!	-	-	-	62 819	64 303	-4.9%	#VALUE!	-
+ Imports	2 875	0.0%	18.8%	-	23 633	26 480	-10.8%	29 505	-
- Exports	2 840	-9.7%	0.2%	-	30 058	32 950	-8.8%	35 765	-
= ELECTRICITY SUPPLIED	#VALUE!	-	-	-	56 394	57 833	-5.4%	#VALUE!	-
- Used for pumped storage	203	-18.1%	-52.2%	-	4 189	3 846	8.9%	4 133	-
- T&D Losses	352	-1.1%	-3.9%	-	3 657	3 782	-3.3%	4 149	-
= ELECTRICITY CONSUMED	#VALUE!	-	-	-	48 548	50 205	-6.6%	#VALUE!	-

¹ current month to month of last year change

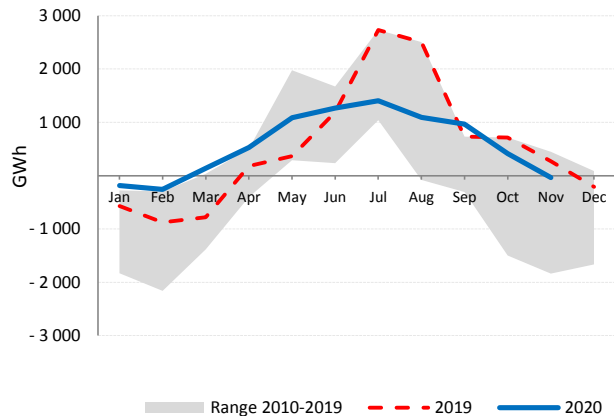
² month-to-month change

³ year-to-date compared to same period last year

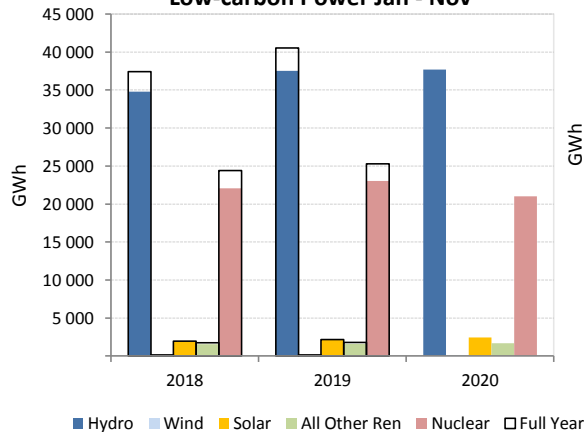
Electricity Production



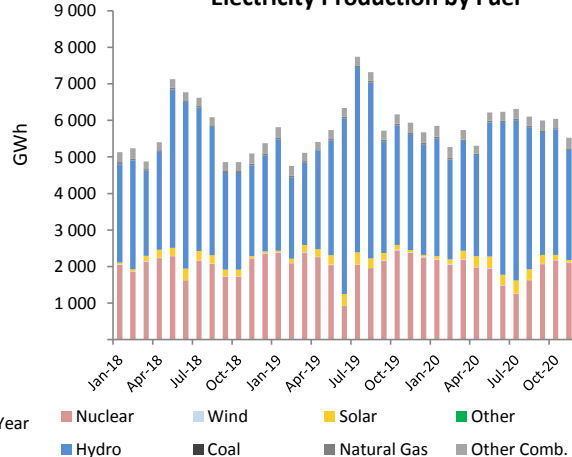
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel

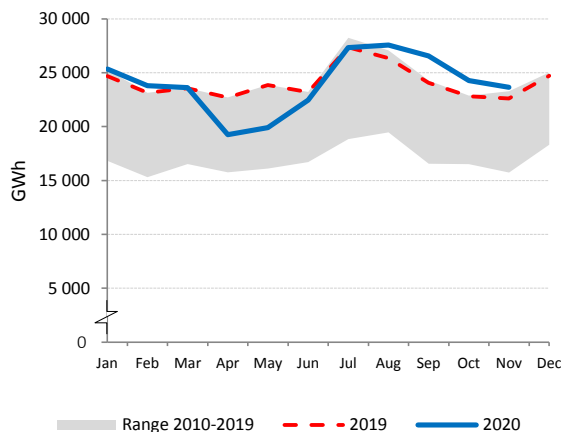


TURKEY

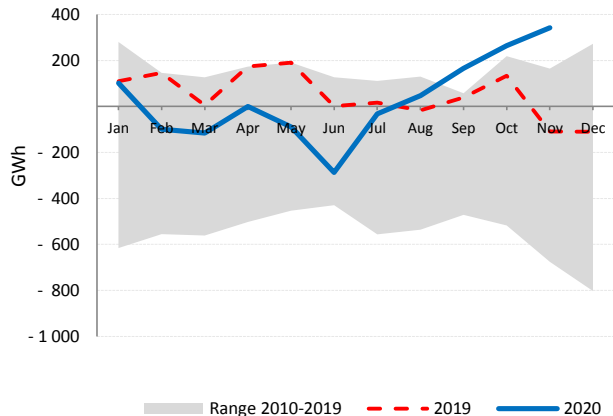
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	17 269	11.8%	1.2%	73.0%	150 870	145 277	3.8%	161 975	56.0%
Coal	8 957	-8.9%	2.7%	37.9%	89 366	94 747	-5.7%	105 067	36.3%
Oil	25	23.4%	-8.8%	0.1%	461	292	58.1%	313	0.1%
Natural Gas	7 924	49.8%	-0.3%	33.5%	57 234	47 275	21.1%	53 317	18.4%
Combustible Renewables	362	22.4%	-3.7%	1.5%	3 790	2 949	28.5%	3 263	1.1%
Other Combustibles	1	-6.6%	-21.7%	0.0%	19	14	34.1%	16	0.0%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	3 257	-27.3%	-26.7%	13.8%	73 470	83 164	-11.7%	88 209	30.5%
Wind	2 316	70.7%	103.5%	9.8%	22 323	19 750	13.0%	21 613	7.5%
Solar	35	-94.2%	-96.1%	0.1%	9 574	8 561	11.8%	8 946	3.1%
Geothermal	669	7.5%	8.9%	2.8%	6 585	6 694	-1.6%	7 352	2.5%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	99	4.6%	-10.0%	0.4%	1 036	958	8.1%	1 040	0.4%
RENEWABLES	6 639	-9.8%	-11.3%	28.1%	115 742	121 118	-4.4%	129 383	44.7%
NON-RENEWABLES	17 006	11.6%	1.2%	71.9%	148 116	143 286	3.4%	159 752	55.3%
TOTAL NET PRODUCTION	23 645	4.6%	-2.7%		263 857	264 404	-0.2%	289 136	
+ Imports	31	-90.1%	-45.2%		1 853	1 912	-3.1%	2 212	
- Exports	372	85.6%	16.3%		2 146	2 599	-17.4%	2 789	
= ELECTRICITY SUPPLIED	23 303	2.6%	-3.0%		263 565	263 717	-0.1%	288 559	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses ⁴	2 542	3.4%	-2.8%		28 533	28 598	-0.2%	31 285	
= ELECTRICITY CONSUMED	20 761	2.5%	-3.0%		235 032	235 119	0.0%	257 273	

¹ current month to month of last year change ⁴ estimated
² month-to-month change
³ year-to-date compared to same period last year

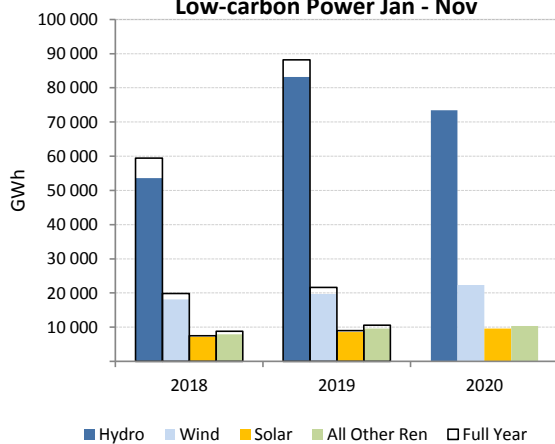
Electricity Production



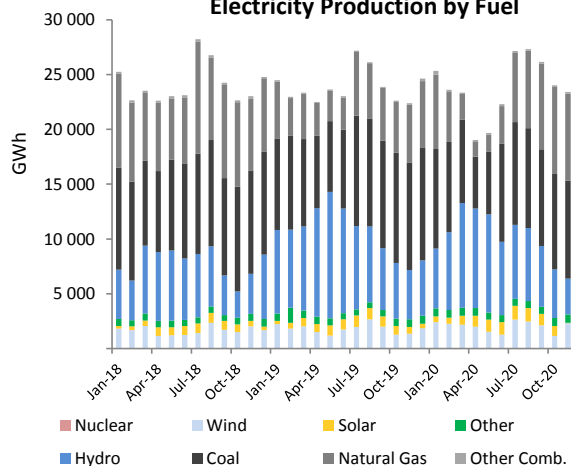
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel



UNITED KINGDOM

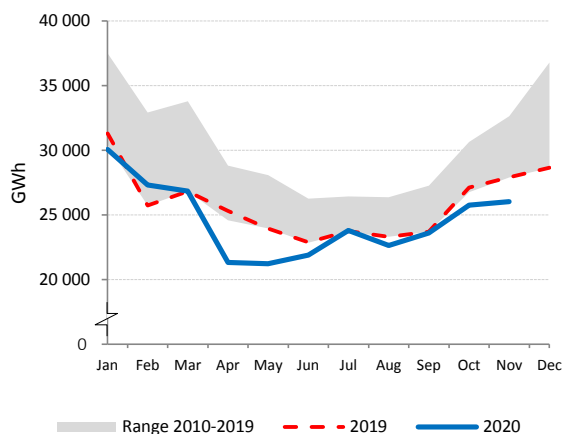
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	13 845	-18.2%	6.7%	53.2%	140 675	159 478	-11.8%	174 422	56.2%
Coal	432	-64.7%	109.0%	1.7%	5 098	6 180	-17.5%	7 359	2.4%
Oil	122	-15.4%	31.8%	0.5%	940	1 267	-25.8%	1 418	0.5%
Natural Gas	9 748	-16.6%	4.3%	37.5%	95 663	115 899	-17.5%	125 353	40.4%
Combustible Renewables	3 176	-9.1%	7.4%	12.2%	34 676	32 063	8.1%	35 809	11.5%
Other Combustibles	368	-3.1%	-0.5%	1.4%	4 297	4 068	5.6%	4 483	1.4%
Nuclear	4 120	-11.6%	-6.8%	15.8%	41 155	46 308	-11.1%	51 032	16.4%
Hydro	946	72.1%	26.2%	3.6%	6 971	6 671	4.5%	7 618	2.5%
Wind	6 693	24.2%	-3.7%	25.7%	68 548	56 605	21.1%	64 335	20.7%
Solar	416	12.1%	-37.6%	1.6%	13 009	12 626	3.0%	12 918	4.2%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	1	-	-	0.0%	13	13	-	14	0.0%
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	11 231	14.6%	-0.8%	43.2%	123 217	107 978	14.1%	120 693	38.9%
NON-RENEWABLES	14 790	-18.2%	2.4%	56.8%	147 154	173 723	-15.3%	189 645	61.1%
TOTAL NET PRODUCTION	26 021	-6.7%	1.0%		270 371	281 700	-4.0%	310 339	
+ Imports	2 201	-2.0%	4.4%		20 574	22 303	-7.7%	24 556	
- Exports	305	-0.3%	18.6%		4 206	3 009	39.8%	3 385	
= ELECTRICITY SUPPLIED	27 918	-6.4%	1.1%		286 739	300 994	-4.7%	331 509	
- Used for pumped storage	174	-1.1%	16.7%		1 483	1 917	-22.7%	2 115	
- T&D Losses	2 200	-1.6%	-6.6%		25 272	23 836	6.0%	26 732	
= ELECTRICITY CONSUMED	25 544	-6.8%	1.7%		259 984	275 241	-5.5%	302 662	

¹ current month to month of last year change

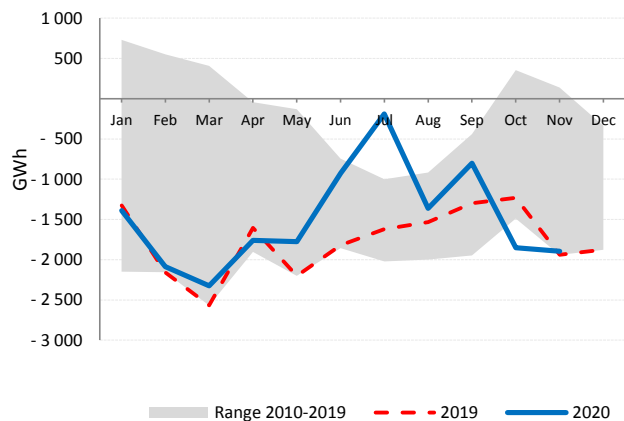
² month-to-month change

³ year-to-date compared to same period last year

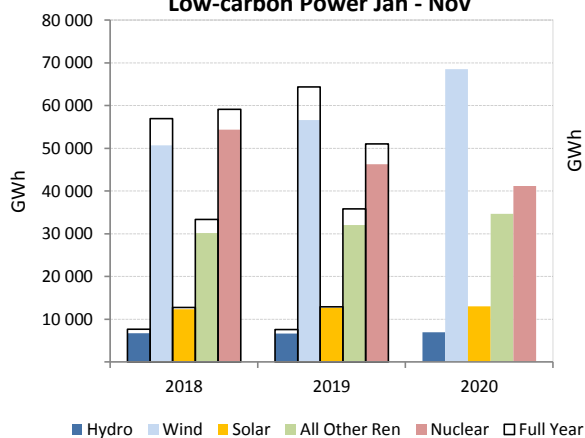
Electricity Production



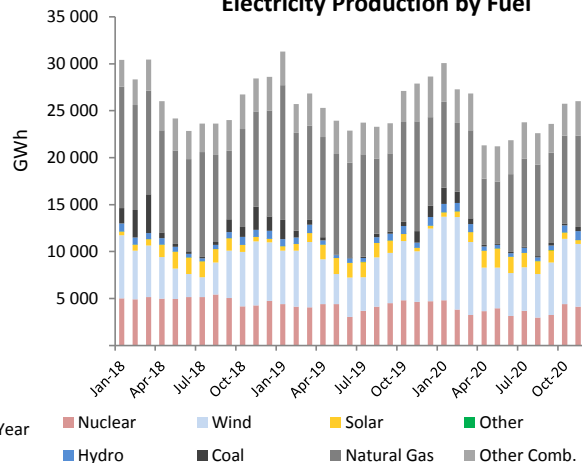
Net Electricity Exports



Low-carbon Power Jan - Nov



Electricity Production by Fuel

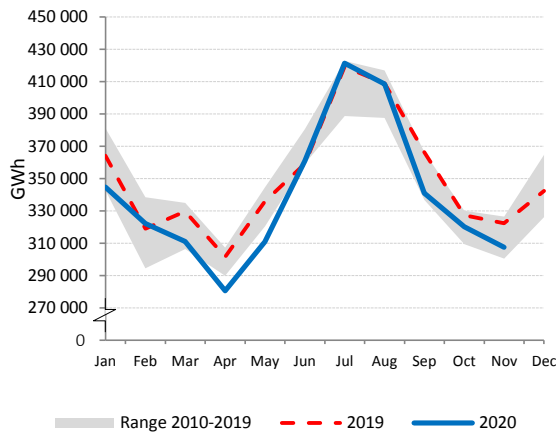


UNITED STATES

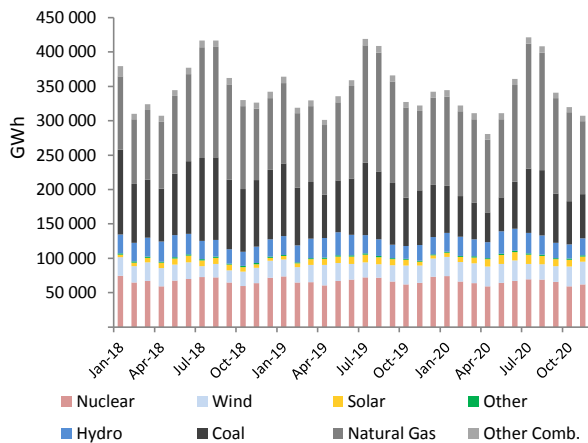
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	178 401	-12.1%	-10.7%	58.0%	2 284 400	2 454 186	-6.9%	2 665 893	63.5%
Coal	64 367	-18.9%	2.4%	20.9%	728 958	935 346	-22.1%	1 011 531	24.1%
Oil	2 595	8.9%	8.1%	0.8%	32 893	31 323	5.0%	33 849	0.8%
Natural Gas	105 993	-8.5%	-18.1%	34.5%	1 461 881	1 423 849	2.7%	1 550 904	37.0%
Combustible Renewables	4 629	-0.5%	6.1%	1.5%	51 391	54 719	-6.1%	59 766	1.4%
Other Combustibles	817	-2.4%	0.9%	0.3%	9 278	8 949	3.7%	9 843	0.2%
Nuclear	61 773	-3.7%	4.0%	20.1%	720 235	736 320	-2.2%	809 409	19.3%
Hydro	24 540	7.4%	18.0%	8.0%	294 048	283 893	3.6%	308 646	7.4%
Wind	33 067	31.9%	15.0%	10.8%	299 631	268 511	11.6%	295 062	7.0%
Solar	7 814	34.6%	-19.5%	2.5%	111 691	91 705	21.8%	96 357	2.3%
Geothermal	1 410	33.8%	7.8%	0.5%	14 370	14 239	0.9%	15 473	0.4%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	384	1.4%	-1.3%	0.1%	3 926	4 344	-9.6%	4 733	0.1%
RENEWABLES	71 460	20.3%	10.1%	23.2%	771 131	713 067	8.1%	775 305	18.5%
NON-RENEWABLES	235 929	-10.3%	-7.5%	76.8%	2 957 170	3 140 131	-5.8%	3 420 269	81.5%
TOTAL NET PRODUCTION	307 388	-4.6%	-4.0%		3 728 302	3 853 198	-3.2%	4 195 573	
+ Imports	4 652	18.3%	5.2%		55 332	55 114	0.4%	59 052	
- Exports	1 994	40.3%	11.8%		23 360	18 032	29.5%	20 008	
= ELECTRICITY SUPPLIED	310 047	-4.6%	-3.9%		3 760 274	3 890 280	-3.3%	4 234 618	
- Used for pumped storage	1 632	-3.1%	-11.9%		24 590	24 184	1.7%	26 033	
- T&D Losses	19 184	-17.7%	52.3%		205 351	223 887	-8.3%	244 112	
= ELECTRICITY CONSUMED	289 230	-3.5%	-6.2%		3 530 333	3 642 209	-3.1%	3 964 473	

¹ current month to month of last year change
² month-to-month change
³ year-to-date compared to same period last year

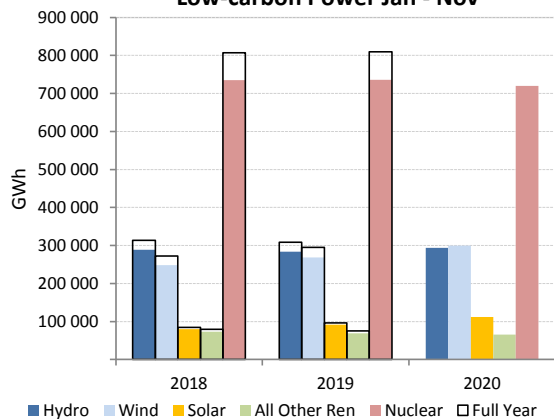
Electricity Production



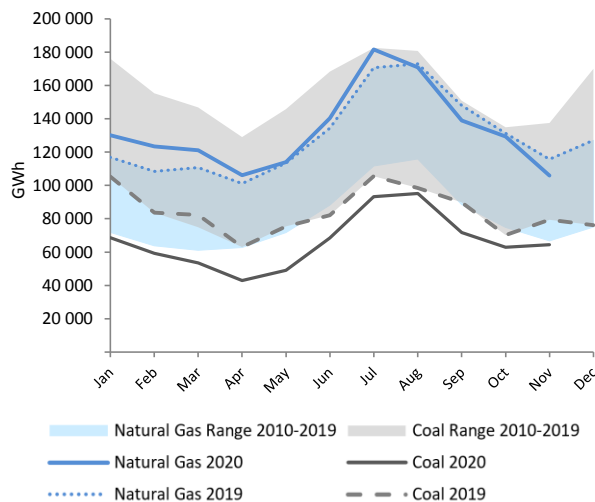
Electricity Production by Fuel



Low-carbon Power Jan - Nov

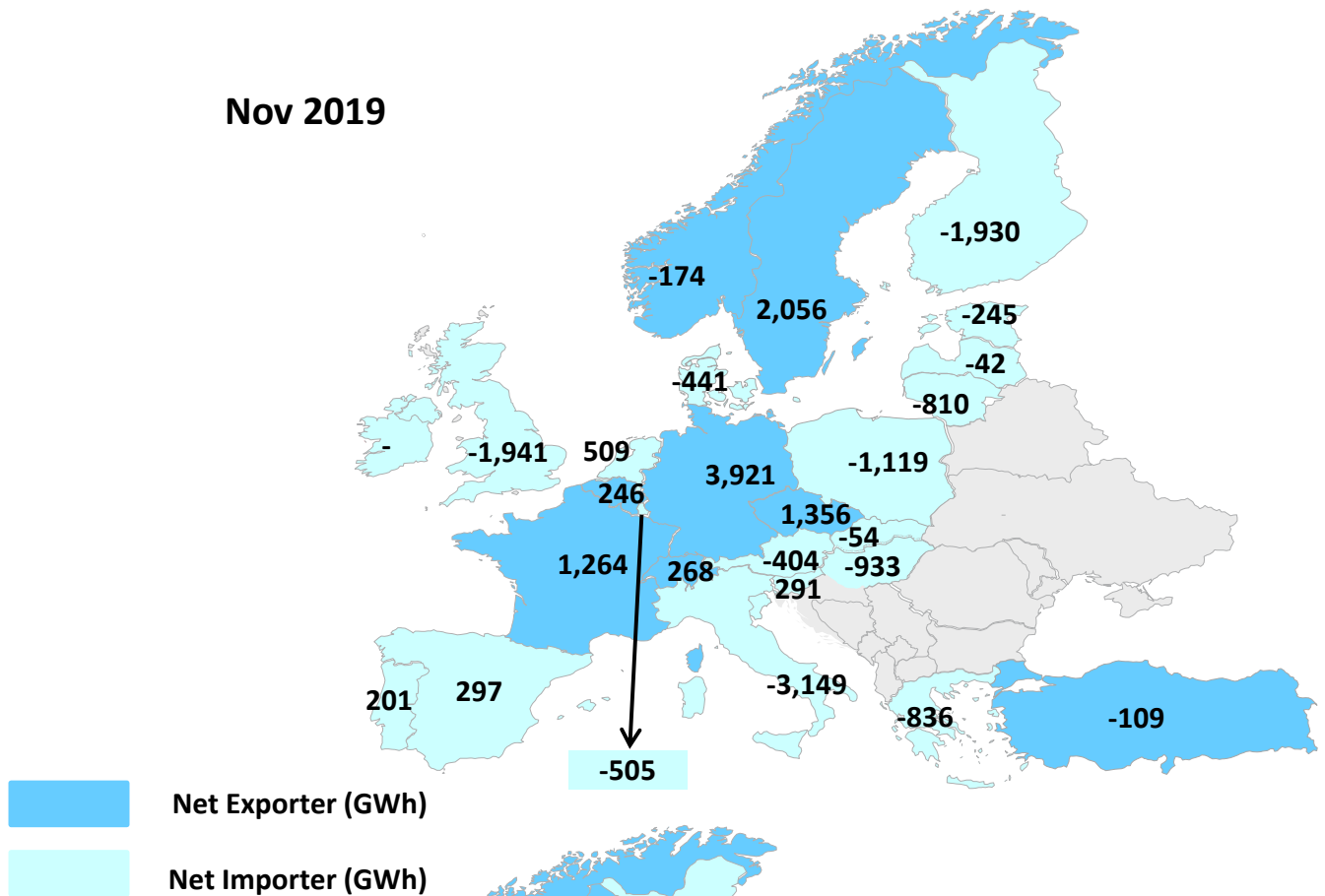


Natural Gas and Coal

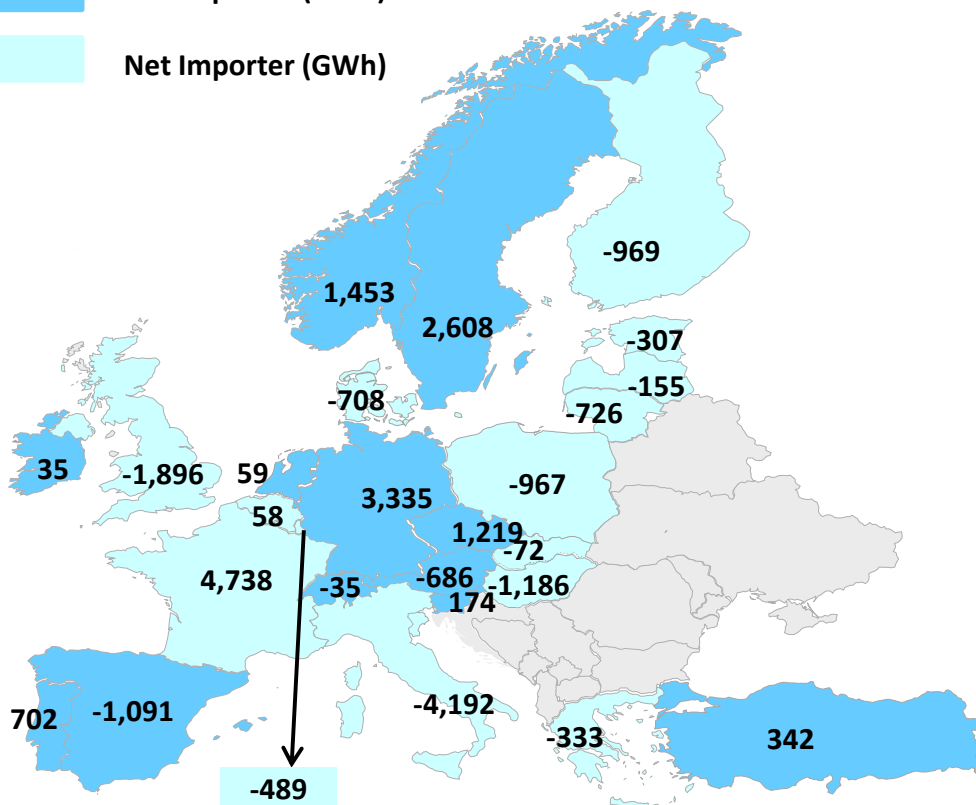


NET ELECTRICITY EXPORTS OECD EUROPE MAP 1

Nov 2019

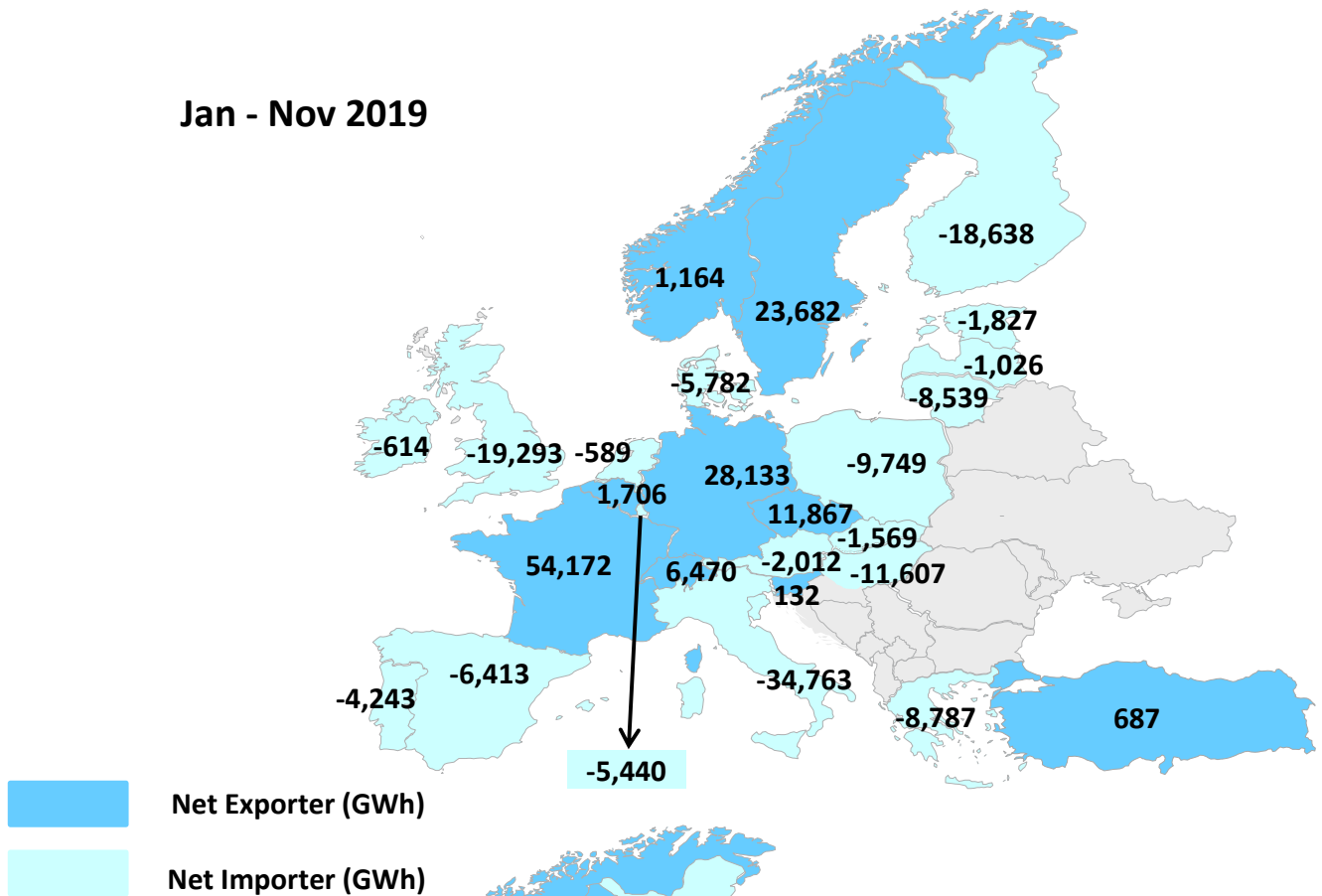


Nov 2020

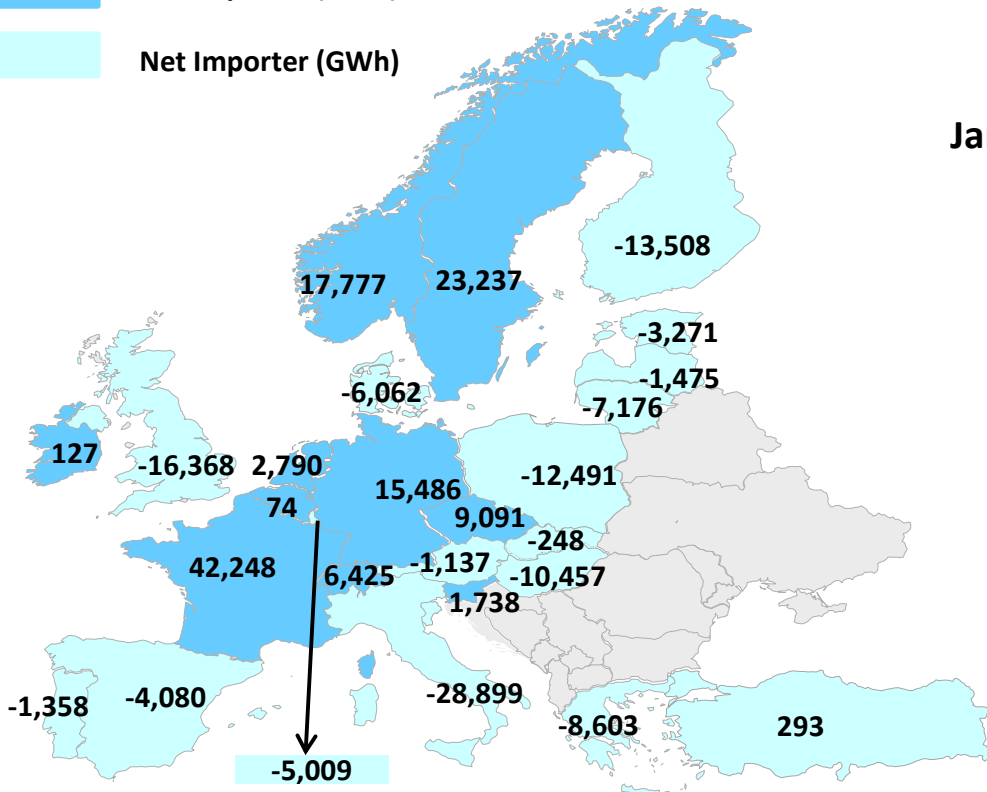


NET ELECTRICITY EXPORTS OECD EUROPE MAP 2

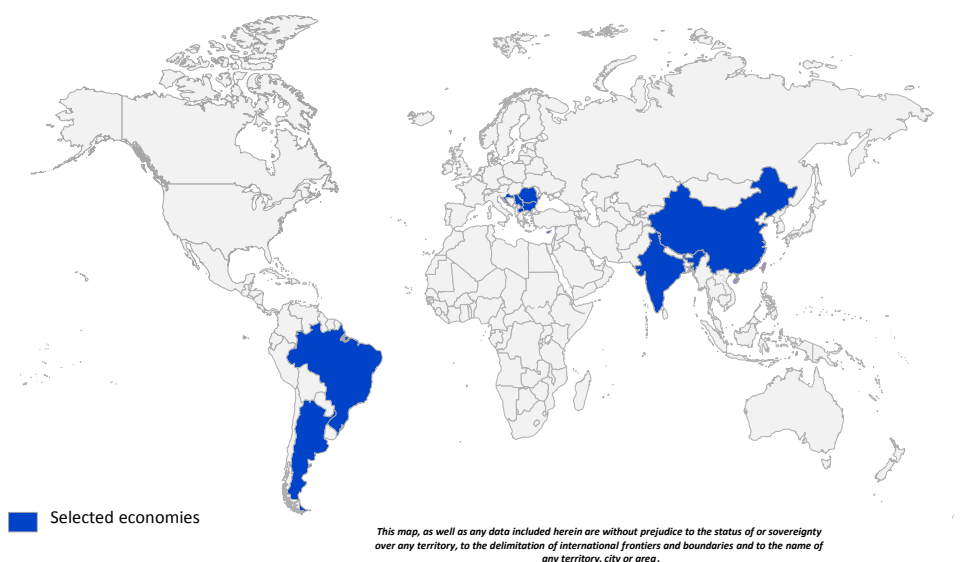
Jan - Nov 2019



Jan - Nov 2020



Annex 1 - Monthly Electricity Statistics for selected non-OECD economies



HIGHLIGHTS

- In Bulgaria, coal production in November 2020 was 951.5 GWh, down by 26.2% compared to November 2019 and by 2.3% compared to October 2020. Coal power generated 28.4% of total electricity in November 2020, down from 37.4% in November 2019.
- In India, renewable production was 27.0 TWh in November 2020, up by 26.8% compared to November 2019. This increase was driven by solar and wind production which were respectively 16.6% and 21.3% higher than in November 2019. Solar in particular, increased by 27.2% from January to November 2020 compared to the same period in 2019, illustrating the rapid expansion of the renewable power sector.
- Wind production in Argentina was 860.2 GWh, up by 52.4% compared to November 2019 and was responsible for 7.3% of total power production in November 2020, up from 5.1% in November 2019. From January to November 2020, wind production was 8.3 TWh, up by 91.0% compared to the same period in 2019, highlighting the increase of wind power capacity in Argentina.

ARGENTINA

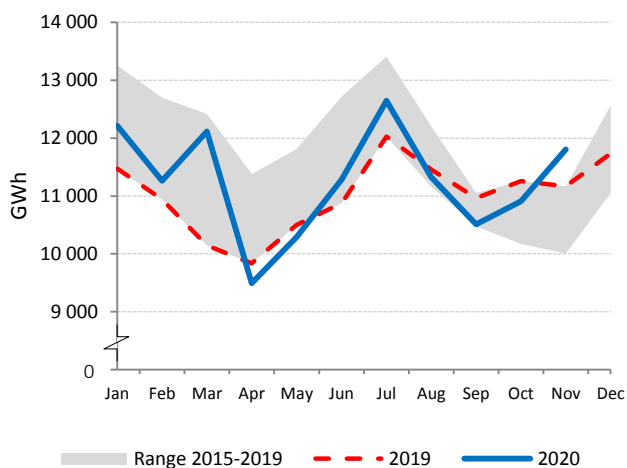
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	8 439	15.8%	15.4%	71.5%	83 955	83 474	0.6%	91 369	69.0%
Coal	319	(+)	-	2.7%	2 385	950	150.9%	1 187	0.9%
Oil	827	438.6%	(+)	7.0%	4 043	3 160	27.9%	3 282	2.5%
Natural Gas	7 067	1.5%	0.1%	59.9%	75 649	77 887	-2.9%	85 282	64.4%
Combustible Renewables	227	49.2%	2.2%	1.9%	1 879	1 476	27.3%	1 618	1.2%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	685	-10.9%	-1.8%	5.8%	9 405	7 265	29.4%	8 002	6.0%
Hydro	1 625	-33.4%	-11.8%	13.8%	21 050	24 870	-15.4%	27 253	20.6%
Wind	860	52.4%	-4.8%	7.3%	8 326	4 360	91.0%	4 960	3.7%
Solar	193	78.1%	28.6%	1.6%	1 122	677	65.6%	795	0.6%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	2 906	-11.0%	-6.9%	24.6%	32 377	31 383	3.2%	34 625	26.2%
NON-RENEWABLES	8 897	12.6%	14.2%	75.4%	91 482	89 263	2.5%	97 754	73.8%
TOTAL NET PRODUCTION	11 803	5.7%	8.2%		123 858	120 646	2.7%	132 379	

¹ current month to month of last year change

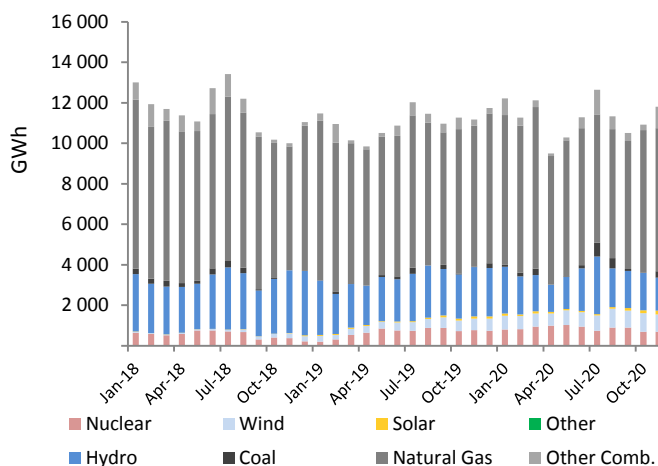
² month-to-month change

³ year-to-date compared to same period last year

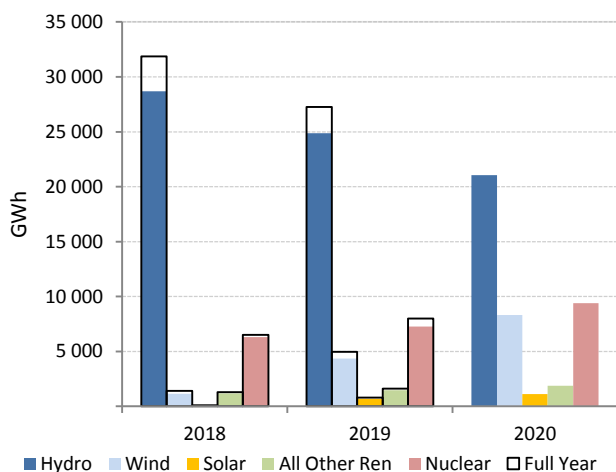
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



Electricity Production Variation Jan - Nov 2019 vs. Jan - Nov 2020

0

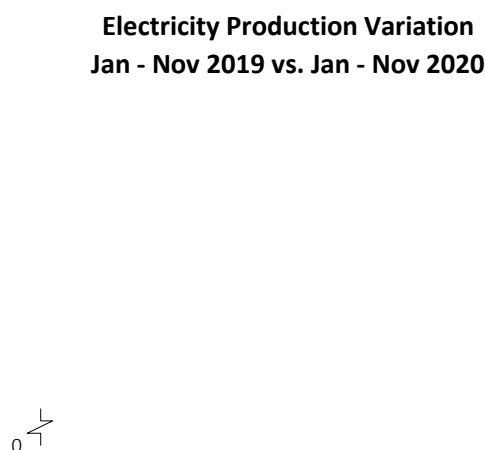
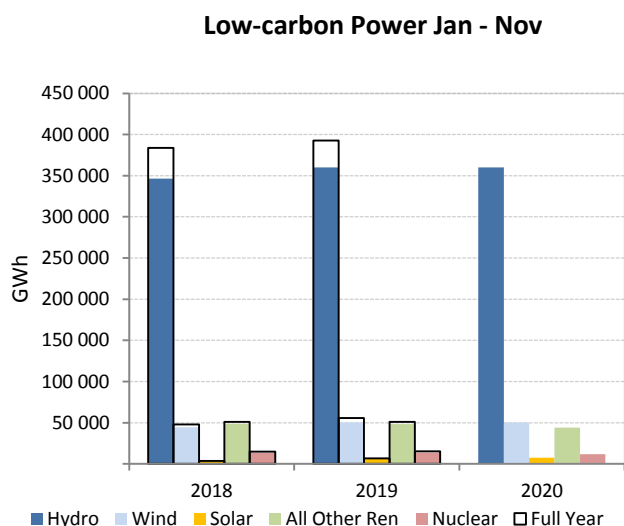
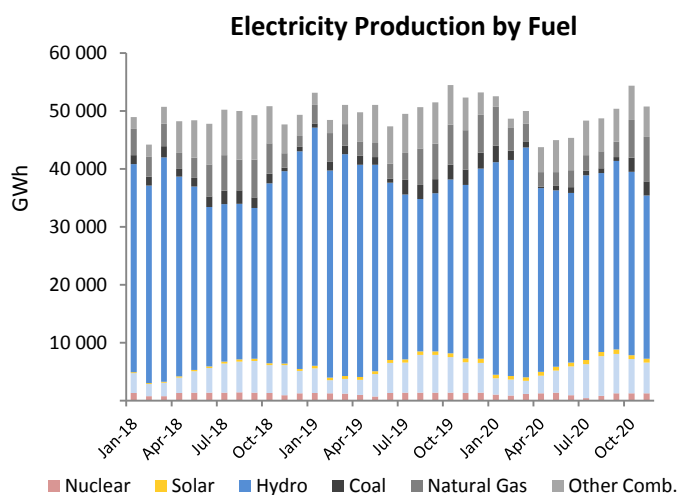
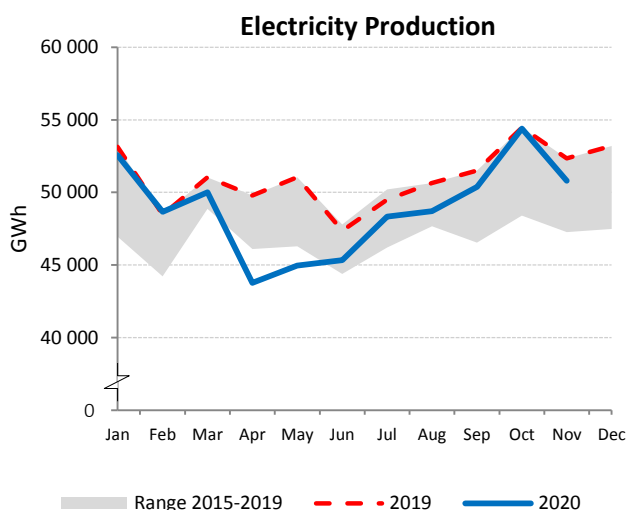
BRAZIL

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	15 367	1.7%	3.1%	30.3%	108 215	129 255	-16.3%	142 376	23.2%
Coal	2 430	-8.8%	-0.7%	4.8%	14 811	19 853	-25.4%	22 606	3.7%
Oil	873	15.6%	54.7%	1.7%	3 271	8 802	-62.8%	9 595	1.6%
Natural Gas	7 697	13.8%	17.9%	15.2%	43 948	50 227	-12.5%	56 727	9.3%
Combustible Renewables	4 176	-11.7%	-19.2%	8.2%	44 086	48 275	-8.7%	51 158	8.4%
Other Combustibles	191	-	-	0.4%	2 098	2 098	-	2 289	0.4%
Nuclear	1 260	-7.7%	-3.1%	2.5%	11 886	13 835	-14.1%	15 224	2.5%
Hydro	28 193	-5.9%	-10.8%	55.5%	360 067	359 869	0.1%	392 716	64.1%
Wind	5 346	1.7%	-9.0%	10.5%	50 355	50 410	-0.1%	55 571	9.1%
Solar	629	-3.7%	-10.2%	1.2%	7 407	5 939	24.7%	6 615	1.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	38 345	-5.6%	-11.6%	75.5%	461 915	464 492	-0.6%	506 061	82.6%
NON-RENEWABLES	12 450	6.0%	12.9%	24.5%	76 015	94 814	-19.8%	106 442	17.4%
TOTAL NET PRODUCTION	50 795	-3.0%	-6.6%		537 929	559 306	-3.8%	612 503	

¹ current month to month of last year change

² month-to-month change

³ year-to-date compared to same period last year



BULGARIA

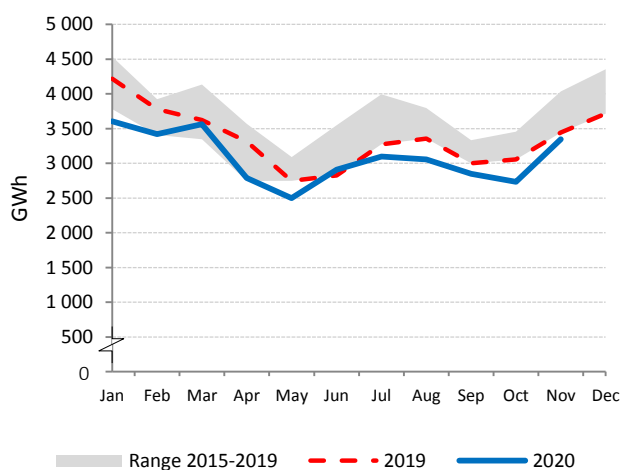
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	1 468	-8.3%	4.5%	43.8%	13 687	16 791	-18.5%	18 495	45.8%
Coal	951	-26.2%	-2.3%	28.4%	10 288	13 462	-23.6%	14 767	36.6%
Oil	19	-17.5%	-26.9%	0.6%	260	292	-11.2%	318	0.8%
Natural Gas	256	61.2%	41.1%	7.6%	1 688	1 613	4.6%	1 840	4.6%
Combustible Renewables	242	87.0%	8.1%	7.2%	1 451	1 416	2.5%	1 561	3.9%
Other Combustibles	-	-	-	-	0	8	-96.9%	9	0.0%
Nuclear	1 446	1.0%	57.2%	43.2%	14 299	14 180	0.8%	15 712	38.9%
Hydro	239	14.6%	17.9%	7.1%	3 079	3 090	-0.4%	3 349	8.3%
Wind	112	-22.5%	21.7%	3.4%	1 314	1 160	13.3%	1 317	3.3%
Solar	79	55.3%	-29.4%	2.4%	1 462	1 384	5.7%	1 442	3.6%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	3	-13.1%	-6.9%	0.1%	32	28	15.6%	31	0.1%
RENEWABLES	672	25.9%	6.5%	20.1%	7 306	7 049	3.6%	7 669	19.0%
NON-RENEWABLES	2 676	-8.0%	27.2%	79.9%	26 567	29 583	-10.2%	32 677	81.0%
TOTAL NET PRODUCTION	3 348	-2.7%	22.4%		33 873	36 632	-7.5%	40 346	

¹ current month to month of last year change

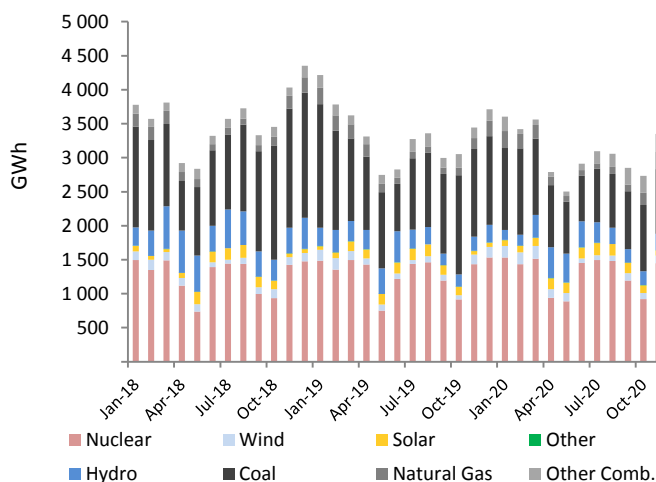
² month-to-month change

³ year-to-date compared to same period last year

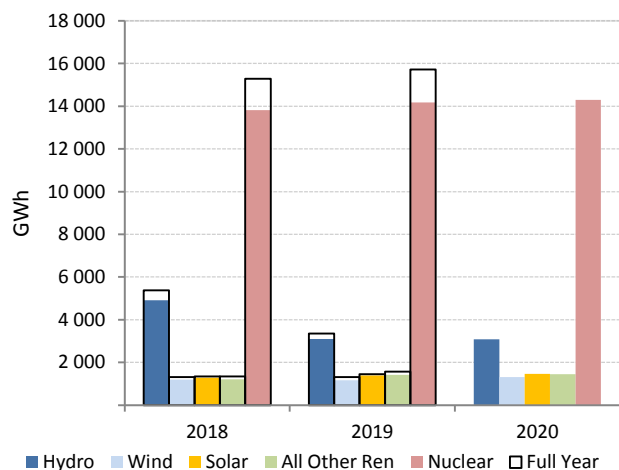
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



Electricity Production Variation Jan - Nov 2019 vs. Jan - Nov 2020

0.1

CHINA

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	450 150	8.7%	17.8%	70.0%	4 485 142	4 413 082	1.6%	4 899 644	69.0%
Coal ⁴	417 862	8.7%	17.8%	65.0%	4 163 436	4 096 545	1.6%	4 548 208	64.0%
Oil ⁴	1 021	8.7%	17.8%	0.2%	10 173	10 010	1.6%	11 114	0.2%
Natural Gas ⁴	20 426	8.7%	17.8%	3.2%	203 522	200 252	1.6%	222 331	3.1%
Combustible Renewables ⁴	9 595	8.7%	17.8%	1.5%	95 599	94 063	1.6%	104 434	1.5%
Other Combustibles ⁴	1 246	8.7%	17.8%	0.2%	12 411	12 211	1.6%	13 558	0.2%
Nuclear	30 638	-0.8%	12.6%	4.8%	314 045	299 034	5.0%	330 545	4.7%
Hydro	99 696	11.8%	-32.1%	15.5%	1 232 449	1 179 414	4.5%	1 254 137	17.7%
Wind	43 172	13.0%	7.5%	6.7%	419 514	360 808	16.3%	401 831	5.7%
Solar	18 949	18.0%	-13.7%	2.9%	242 948	202 149	20.2%	218 148	3.1%
Geothermal	10	-	-	0.0%	108	108	-	118	0.0%
Other Renewables	1	-	-	0.0%	11	11	-	12	0.0%
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	171 422	12.5%	-21.0%	26.7%	1 990 628	1 836 553	8.4%	1 978 679	27.9%
NON-RENEWABLES	471 193	8.0%	17.4%	73.3%	4 703 588	4 618 053	1.9%	5 125 755	72.1%
TOTAL NET PRODUCTION	642 615	9.2%	3.9%		6 694 216	6 454 606	3.7%	7 104 435	

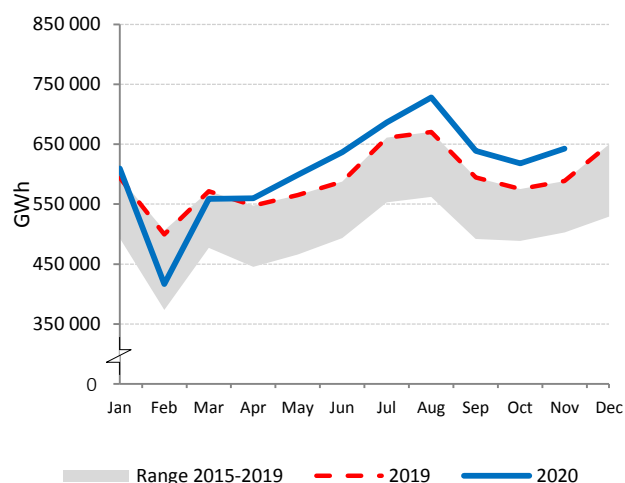
¹ current month to month of last year change

⁴ estimated from annual data

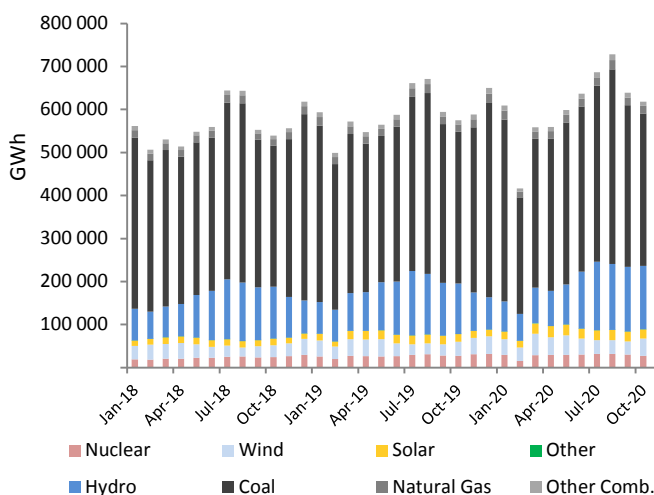
² month-to-month change

³ year-to-date compared to same period last year

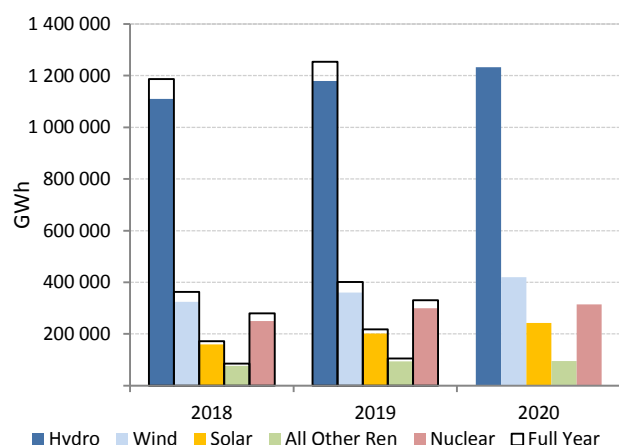
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



**Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020**

0.1%

CROATIA

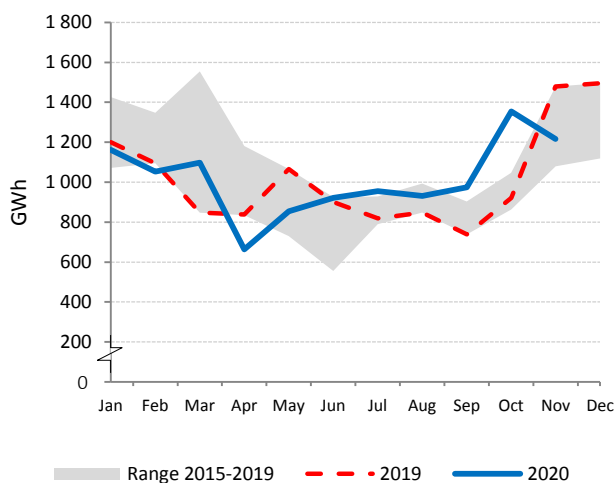
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	538	17.3%	7.7%	44.2%	4 722	4 398	7.4%	4 778	39.0%
Coal	126	13.1%	-0.7%	10.3%	993	1 428	-30.5%	1 511	12.3%
Oil	-	-	-	-	7	31	-76.7%	35	0.3%
Natural Gas	333	23.2%	13.9%	27.4%	2 908	2 206	31.9%	2 423	19.8%
Combustible Renewables	79	9.2%	-0.4%	6.5%	814	733	11.0%	809	6.6%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	526	-37.4%	-26.4%	43.2%	4 768	4 927	-3.2%	5 854	47.8%
Wind	144	-16.8%	12.5%	11.8%	1 540	1 281	20.2%	1 461	11.9%
Solar	3	8.0%	-48.6%	0.2%	82	81	2.2%	83	0.7%
Geothermal	7	28.7%	-1.7%	0.6%	72	68	6.2%	74	0.6%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	758	-30.6%	-18.8%	62.3%	7 276	7 089	2.6%	8 281	67.6%
NON-RENEWABLES	459	18.8%	9.3%	37.7%	3 908	3 665	6.6%	3 969	32.4%
TOTAL NET PRODUCTION	1 217	-17.7%	-10.1%		11 184	10 754	4.0%	12 250	

¹ current month to month of last year change

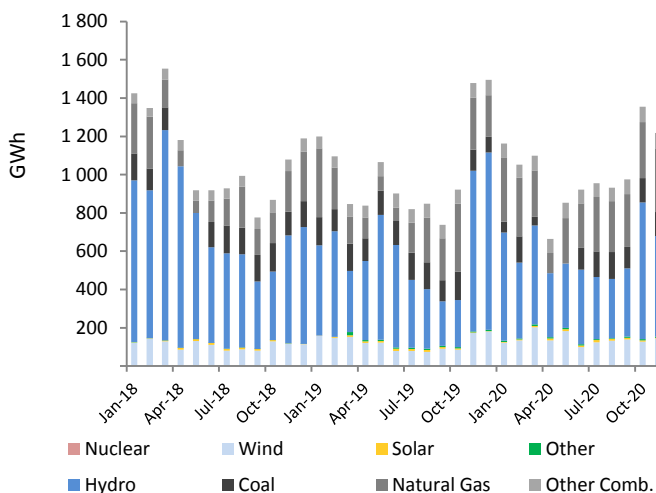
² month-to-month change

³ year-to-date compared to same period last year

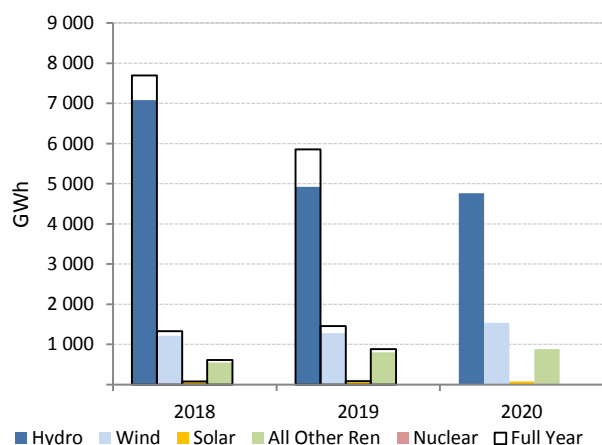
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



**Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020**

0.1

CYPRUS

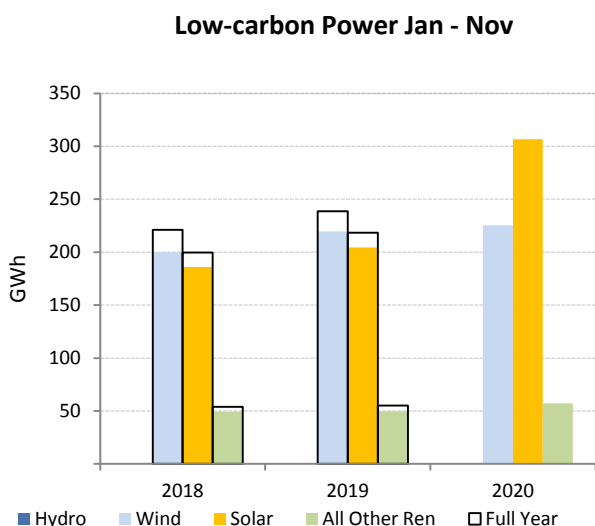
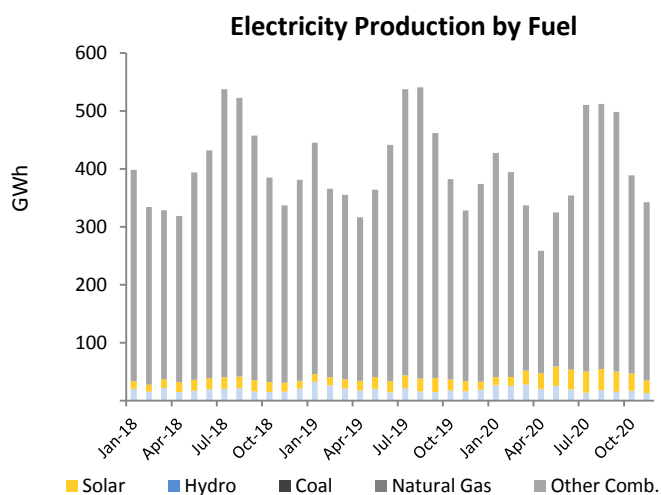
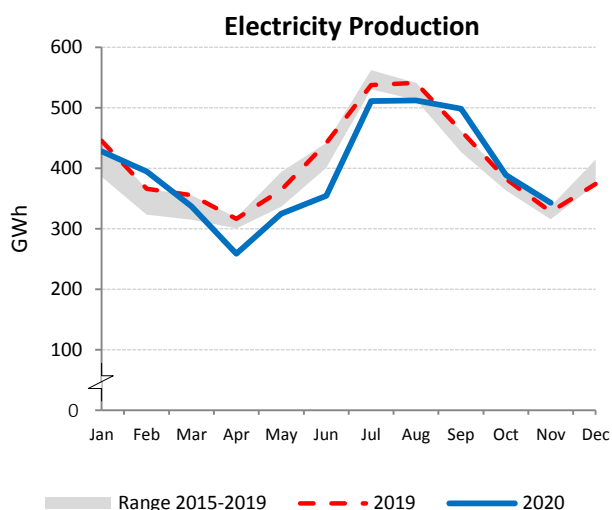
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	308	4.5%	-9.9%	89.8%	3 818	4 116	-7.2%	4 457	90.7%
Coal	-	-	-	-	-	-	-	-	-
Oil	303	4.8%	-10.0%	88.4%	3 761	4 066	-7.5%	4 402	89.6%
Natural Gas	-	-	-	-	-	-	-	-	-
Combustible Renewables	5	-8.9%	-7.2%	1.4%	57	50	15.4%	55	1.1%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
Wind	14	-15.2%	-21.4%	4.0%	225	220	2.6%	239	4.9%
Solar	21	21.2%	-28.0%	6.3%	307	205	49.9%	218	4.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	40	2.2%	-23.8%	11.6%	589	474	24.4%	512	10.4%
NON-RENEWABLES	303	4.8%	-10.0%	88.4%	3 761	4 066	-7.5%	4 402	89.6%
TOTAL NET PRODUCTION	343	4.5%	-11.8%		4 350	4 540	-4.2%	4 914	

¹ current month to month of last year change

Please refer to country Notes

² month-to-month change

³ year-to-date compared to same period last year



**Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020**



INDIA

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	99 966	9.7%	-3.7%	82.3%	1 053 649	1 092 531	-3.6%	1 192 778	78.8%
Coal	84 517	3.1%	-6.3%	69.6%	924 521	988 554	-6.5%	1 077 003	71.2%
Oil ⁴	856	45.1%	25.1%	0.7%	7 842	6 411	22.3%	7 005	0.5%
Natural Gas	5 343	-0.7%	-14.6%	4.4%	65 324	60 557	7.9%	65 696	4.3%
Combustible Renewables	9 187	194.6%	40.1%	7.6%	55 272	36 344	52.1%	42 347	2.8%
Other Combustibles ⁴	63	3.6%	-	0.1%	691	665	3.8%	726	0.0%
Nuclear	3 627	1.0%	-3.5%	3.0%	38 550	39 118	-1.5%	42 599	2.8%
Hydro	9 632	-14.6%	-32.6%	7.9%	159 710	157 863	1.2%	167 865	11.1%
Wind	3 565	21.3%	-7.3%	2.9%	60 181	59 484	1.2%	63 736	4.2%
Solar	4 651	16.6%	2.3%	3.8%	53 713	42 243	27.2%	46 226	3.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	27 034	26.8%	-7.5%	22.3%	328 875	295 934	11.1%	320 174	21.2%
NON-RENEWABLES	94 406	3.1%	-6.5%	77.7%	1 036 927	1 095 305	-5.3%	1 193 030	78.8%
TOTAL NET PRODUCTION	121 440	7.6%	-6.7%		1 365 803	1 391 239	-1.8%	1 513 204	

¹ current month to month of last year change

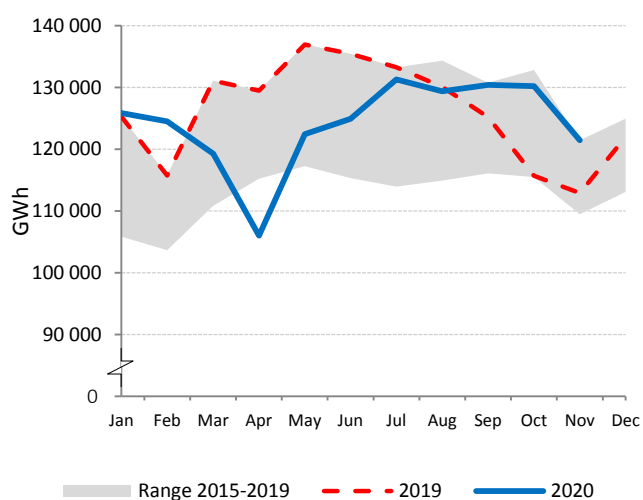
² month-to-month change

³ year-to-date compared to same period last year

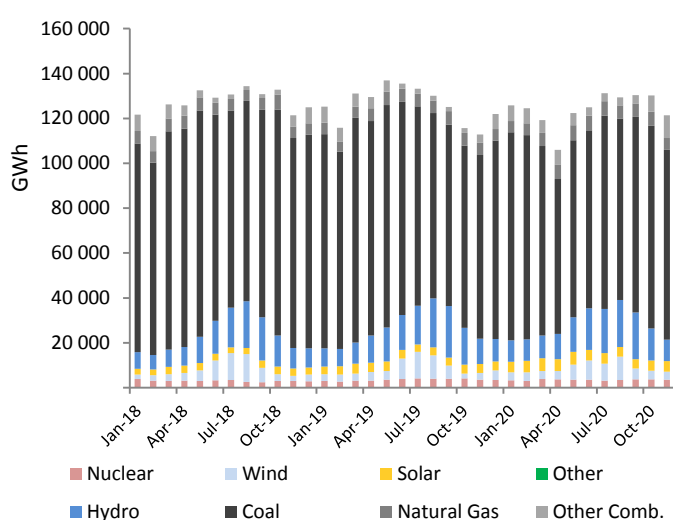
⁴ estimated from annual data

Distributed generation is estimated by the IEA Secretariat

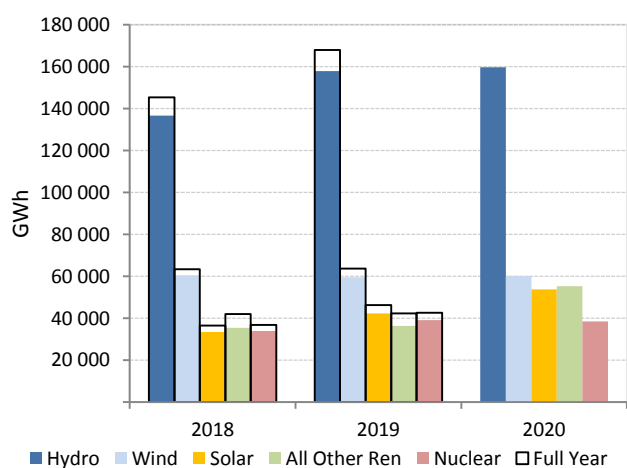
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



Electricity Production Variation Jan - Nov 2019 vs. Jan - Nov 2020



-



MALTA

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	90	-28.3%	-32.5%	86.0%	1 725	1 650	4.5%	1 806	89.5%
Coal ⁴	-	-	-	-	-	-	-	-	-
Oil ⁴	4	-20.7%	-	3.5%	67	9	620.1%	29	1.4%
Natural Gas ⁴	87	-28.5%	-34.7%	82.7%	1 659	1 632	1.7%	1 770	87.8%
Combustible Renewables ⁴	-	-	-	-	-	6	-	6	0.3%
Other Combustibles ⁴	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Solar	14	24.2%	-26.4%	13.8%	242	201	20.4%	212	10.5%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	14	19.8%	-26.4%	13.8%	242	207	17.1%	218	10.8%
NON-RENEWABLES	90	-27.9%	-32.4%	86.2%	1 727	1 641	5.0%	1 800	89.2%
TOTAL NET PRODUCTION	105	-23.7%	-31.7%		1 969	1 848	6.3%	2 017	

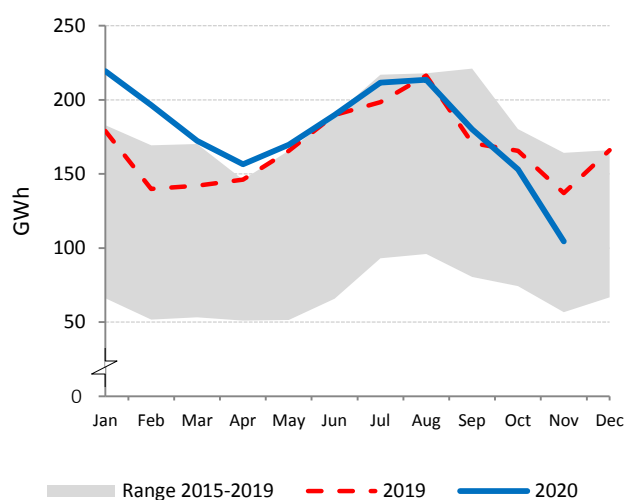
¹ current month to month of last year change

⁴ estimated from annual data

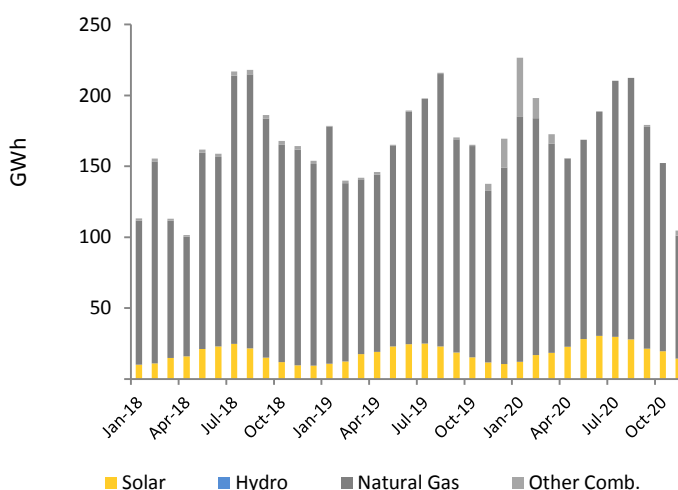
² month-to-month change

³ year-to-date compared to same period last year

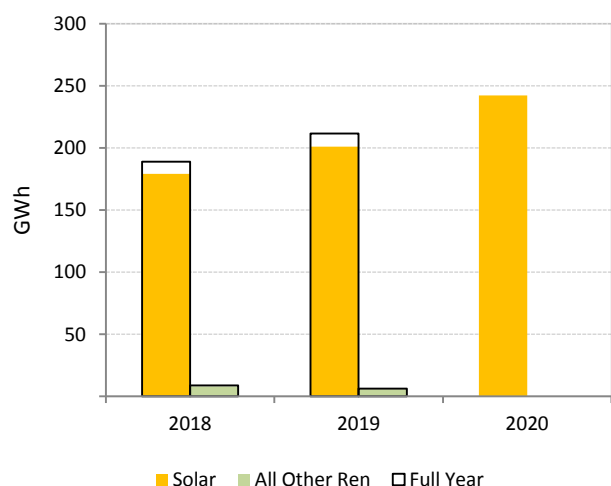
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



**Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020**

0%

-



NORTH MACEDONIA

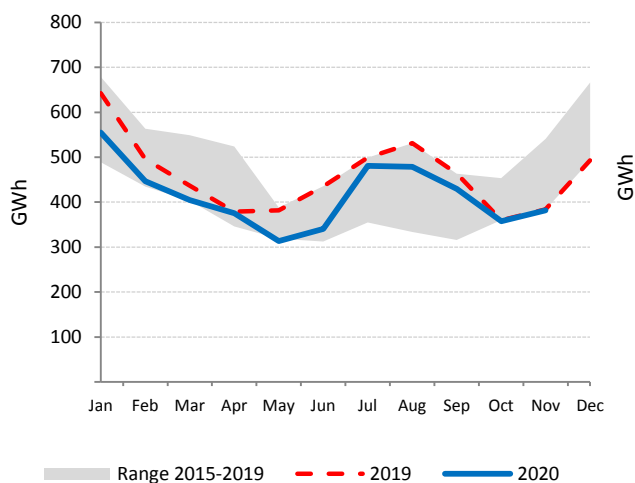
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	341	16.7%	18.0%	89.3%	3 227	3 857	-16.3%	4 220	76.7%
Coal	178	-24.8%	-13.9%	46.6%	2 219	2 951	-24.8%	3 231	58.7%
Oil	9	164.2%	88.3%	2.3%	56	52	8.1%	56	1.0%
Natural Gas	150	214.2%	106.0%	39.3%	904	808	11.8%	882	16.0%
Combustible Renewables	4	-1.3%	-7.6%	1.1%	48	46	4.1%	51	0.9%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	32	-63.4%	-46.3%	8.2%	1 204	1 038	16.0%	1 155	21.0%
Wind	8	91.0%	-1.1%	2.1%	110	91	21.7%	102	1.9%
Solar	1	57.3%	-26.3%	0.4%	23	23	1.7%	23	0.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	45	-52.8%	-38.4%	11.8%	1 385	1 197	15.7%	1 331	24.2%
NON-RENEWABLES	337	17.0%	18.4%	88.2%	3 179	3 811	-16.6%	4 170	75.8%
TOTAL NET PRODUCTION	382	-0.4%	6.8%		4 564	5 008	-8.9%	5 501	

¹ current month to month of last year change

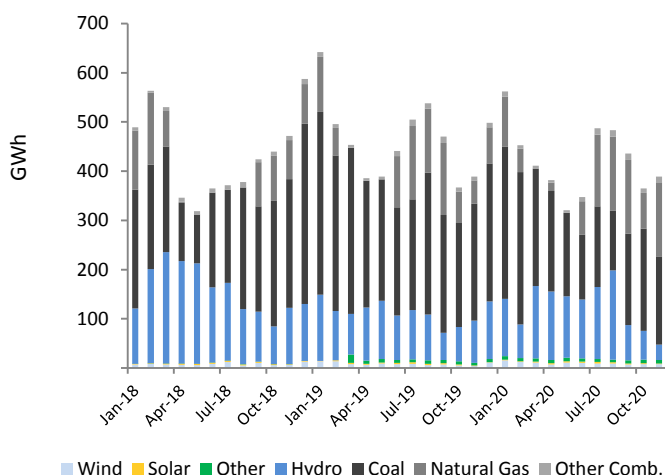
² month-to-month change

³ year-to-date compared to same period last year

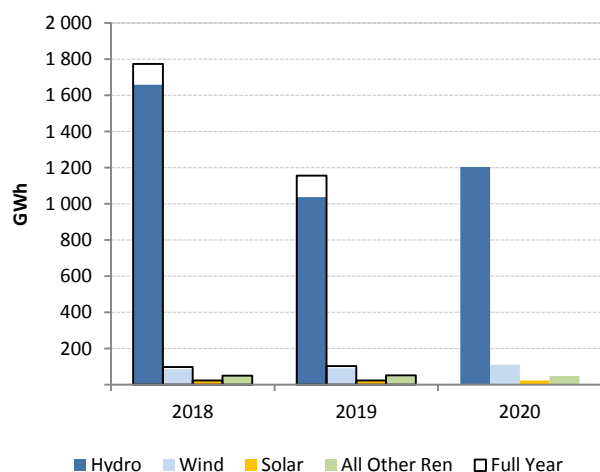
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



**Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020**

0.1

ROMANIA

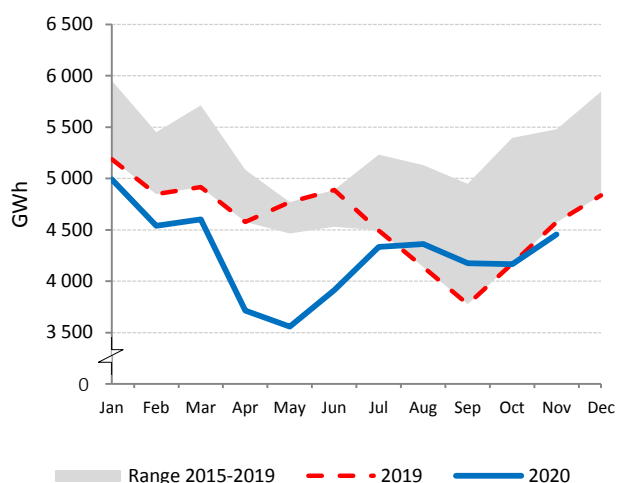
	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	1 745	-6.2%	41.4%	39.2%	15 187	18 540	-18.1%	20 509	37.2%
Coal	740	-21.3%	5.3%	16.6%	7 247	10 862	-33.3%	11 838	21.5%
Oil	30	-	-	0.7%	326	486	-32.8%	516	0.9%
Natural Gas	925	9.5%	108.0%	20.8%	7 184	6 801	5.6%	7 720	14.0%
Combustible Renewables	50	11.1%	-11.8%	1.1%	430	392	9.7%	435	0.8%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	938	2.3%	-3.0%	21.0%	9 587	9 375	2.3%	10 345	18.7%
Hydro	1 311	35.0%	-0.5%	29.4%	14 222	14 756	-3.6%	15 842	28.7%
Wind	396	-48.0%	-26.3%	8.9%	6 110	5 956	2.6%	6 703	12.1%
Solar	67	6.5%	-40.0%	1.5%	1 700	1 714	-0.8%	1 778	3.2%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	1 823	-0.9%	-9.9%	40.9%	22 462	22 817	-1.6%	24 757	44.9%
NON-RENEWABLES	2 634	-3.6%	22.8%	59.1%	24 344	27 523	-11.6%	30 420	55.1%
TOTAL NET PRODUCTION	4 456	-2.5%	7.0%		46 805	50 341	-7.0%	55 177	

¹ current month to month of last year change

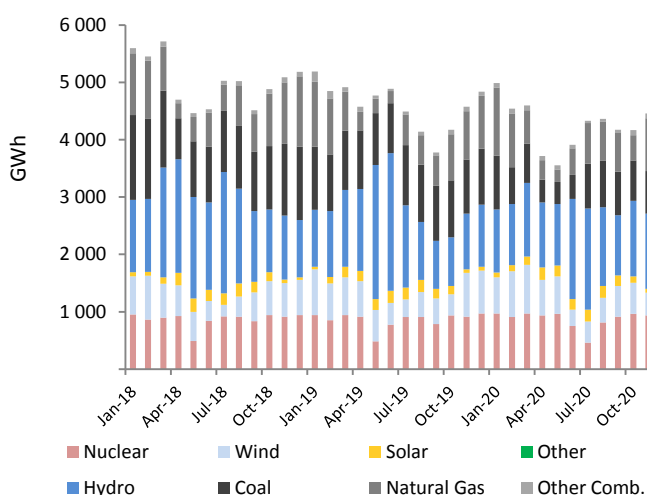
² month-to-month change

³ year-to-date compared to same period last year

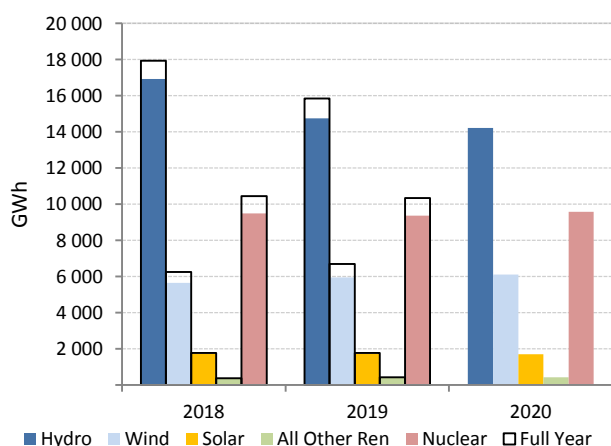
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



**Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020**

0
1

SERBIA

	Nov 2020				Year-to-Date			2019	
	GWh	change ¹	change ²	share	2020	2019	change ³	GWh	share
CONVENTIONAL THERMAL	2 260	10.8%	7.1%	72.4%	22 171	21 252	4.3%	23 547	68.1%
Coal	2 176	10.2%	7.2%	69.7%	21 359	20 586	3.8%	22 808	66.0%
Oil ⁴	2	22.9%	7.2%	0.1%	20	18	15.6%	20	0.1%
Natural Gas	65	26.5%	7.2%	2.1%	635	534	19.0%	591	1.7%
Combustible Renewables	17	38.9%	-2.3%	0.6%	152	110	37.5%	123	0.4%
Other Combustibles ⁴	0	-	-	0.0%	5	5	-	5	0.0%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	828	15.9%	-12.0%	26.5%	8 902	9 196	-3.2%	10 106	29.2%
Wind	31	-81.6%	-66.0%	1.0%	833	764	9.0%	898	2.6%
Solar	1	7.9%	-48.9%	0.0%	13	13	0.3%	14	0.0%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	878	-2.3%	-16.6%	28.1%	9 900	10 084	-1.8%	11 141	32.2%
NON-RENEWABLES	2 243	10.7%	7.2%	71.9%	22 019	21 142	4.1%	23 424	67.8%
TOTAL NET PRODUCTION	3 120	6.7%	-0.8%		31 919	31 225	2.2%	34 565	

¹ current month to month of last year change

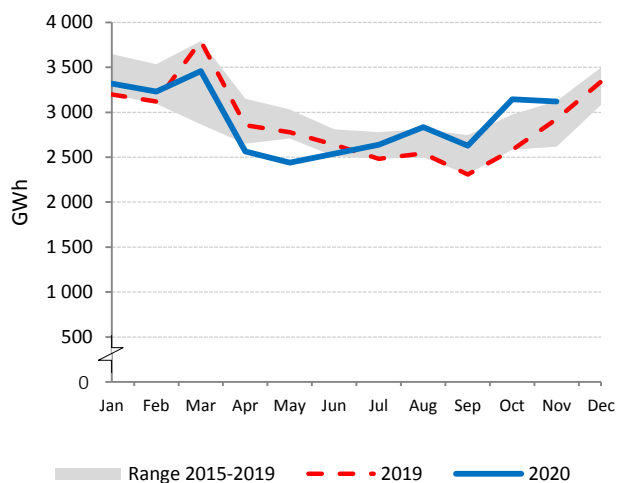
² month-to-month change

³ year-to-date compared to same period last year

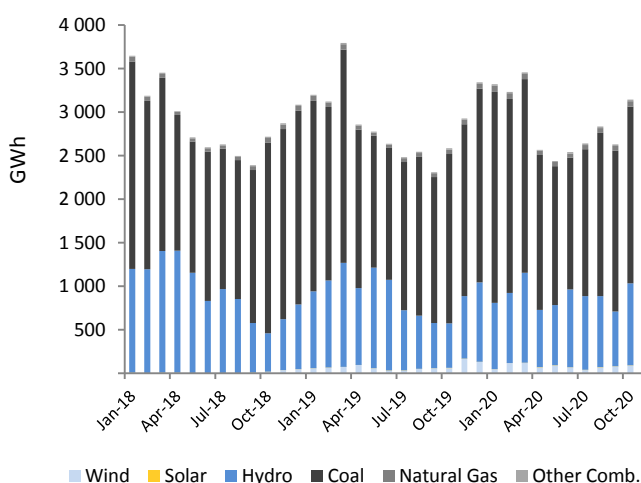
⁴ estimated from annual data

Distributed generation is estimated by the IEA Secretariat

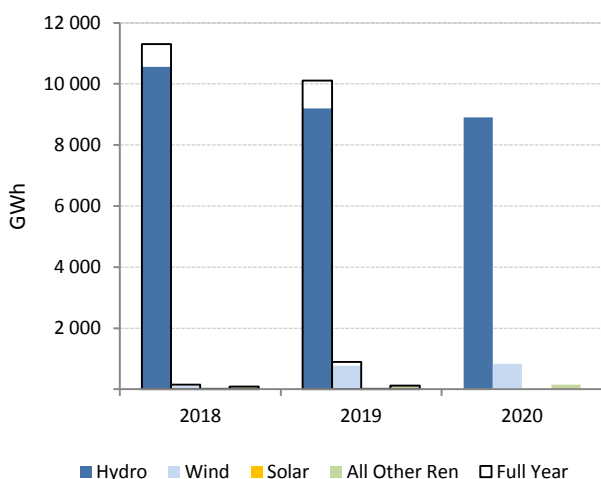
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Nov



**Electricity Production Variation
Jan - Nov 2019 vs. Jan - Nov 2020**



PRINCIPLES AND DEFINITIONS

The IEA's Monthly Electricity Statistics provides timely electricity production and trade data for member countries of the Organisation for Economic Co-operation and Development (OECD). It aims to report as up-to-date and consistent information as possible for the last three months. It also provides previous annual data and year-to-date indicators.

Starting in April 2020, the Monthly Electricity Statistics include a separate annex containing a selection of 6 additional economies, including 3 IEA Association countries. This addition provides production data for the selected countries with the same aim of reporting as up-to-date and consistent information as possible for the last three months. It also provides previous annual data and year-to-date indicators. The countries shown in this annex are not included in the aggregate totals in other

General notes

- Electricity production and trade data are reported at the individual country level as well as in organisational and regional groupings. These groupings include: OECD Total, OECD Americas, OECD Asia Oceania, OECD Europe and IEA Total.
- The units are terawatt hours (TWh) for the regional groupings and gigawatt hours (GWh) for the individual countries.
- The grouping of electricity generation by source reflects available monthly data and/or small individual quantities.
- Definitions are consistent with the IEA's "Electricity and Heat" annual questionnaire. Statistics are subject to revision on official receipt of the annual questionnaire from national administrations or on improved data becoming available.
- To enable timely publication, the IEA may supplement national statistics with data from other sources.
- Where adequate information is not available from external sources, estimates have been made by the IEA. Methodological notes are provided in individual country pages or the country notes section.
- All figures for individual countries are reported to the nearest whole number and totals may not equal the sum of components due to rounding.
- Note that historic data are often recalculated. Therefore, the latest publication should be considered the most accurate. Regional and organisational summaries may also change based on country recalculations.
- Countries' submitted monthly data is adjusted proportionately to maintain consistency with the most recent annual data for each generation source.

Basic definitions

<i>Net Production</i>	Net generation excludes power station own use.
<i>Combustible Fuels/ Conventional Thermal</i>	Production from fossil fuels (primary coal, coal products, peat and peat products, oil shale and oil sands, crude oil, NGL, oil products, natural gas) and combustible renewables and wastes (solid biofuels, biogases, liquid biofuels, industrial and municipal waste).
<i>Coal</i>	Production from primary coal, coal products, peat and peat products, oil shale and oil sands, and manufactured gas (such as coke-oven gas, blast-furnace gas and gas works gas).
<i>Oil</i>	Production from crude oil, natural gas liquids, refinery feedstocks, and petroleum products (such as refinery gases and fuel oil).
<i>Natural Gas</i>	Production from natural gas (including gas distributed via the grid that may contain very little amounts of blended other gases).
<i>Combustible Renewables</i>	Production from combustible renewables (such as solid biofuels, biogases, liquid biofuels, municipal renewable waste).
<i>Other Combustible Fuels (non-renewables)</i>	Production from all other combustible fuels (such as industrial and non-renewable municipal solid waste).

<i>Nuclear</i>	Electricity produced using heat generated from nuclear fission.
<i>Hydro</i>	Net generation from hydro facilities including pumped storage production.
<i>Wind</i>	Electricity generated in on-shore and off-shore wind turbines using kinetic energy of wind.
<i>Solar</i>	Electricity generated using solar radiation. Includes thermal and photovoltaic.
<i>Geothermal</i>	Electricity generated using heat emitted from within the earth's crust, usually in the form of hot water or steam.
<i>Other Renewables</i>	Electricity generated from tide, wave, ocean and other non-combustible sources.
<i>Non-Specified</i>	Not elsewhere reported electricity generation.

<i>Renewables</i>	Includes electricity generation from Hydro, Wind, Solar, Geothermal, Other Renewables and Combustible Renewables
<i>Non-Renewables</i>	Includes electricity generation from Coal, Oil, Natural Gas, Other Combustibles, Nuclear and Non-specified sources.
<i>Total Net Production</i>	The sum of indigenous net electricity production by energy source.
<i>Imports/ Exports</i>	Amounts of electricity that have crossed political boundaries of the country, a.k.a. physical flows, whether customs clearance has taken place or not.
<i>Net Exports</i>	Exports minus imports
<i>Electricity supplied Used for Pumped Storage</i>	Indigenous production + Imports - Exports. It includes Transmission and Distribution losses Electricity consumed by pumping water into a reservoir in mixed and pure pumped storage hydro plants.
<i>Transmission and Distribution Losses/ T&D Losses</i>	All losses due to transport and distribution of electrical energy. Losses in transformers which are not considered as integral parts of the power plants are also included.
<i>Electricity consumed</i>	Electricity available (calculated as: Indigenous production + Imports - Exports - used for pumped storage - Transmission and distribution losses)
<i>Low-carbon Power Generation</i>	Renewables plus Nuclear electricity generation.
<i>Year</i>	Calendar year (January to December) unless otherwise stated.
<i>Year-to-Date</i>	The sum of all months from the start of the calendar year to the latest month.

Regional Groupings

- OECD Total includes Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, the Slovak Republic, Slovenia, Switzerland, Turkey, the United Kingdom and the United States.
- Israel is not included in this report.
- OECD Americas includes Canada, Chile, Colombia Mexico and the United States.
- OECD Asia Oceania includes Australia, Japan, Korea and New Zealand.
- OECD Europe includes Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.
- IEA includes all countries included in OECD Total except Chile, Iceland, Latvia, Lithuania and Slovenia.

Publication details and further information

- This publication is released in the middle of each month onto the IEA's Website: <https://www.iea.org/reports/monthly-electricity-statistics/>
- Subscriptions to this publication are available at <https://www.iea.org/subscribe-to-data-services>
- Data should not be reproduced for publication without permission of the IEA.
- Please note that all IEA data are subject to the following Terms and Conditions found on the IEA's website: <http://www.iea.org/terms>

NOTES ON CHARTS AND MAPS

Tables

- The share of fuels in power generation for the previous year corresponds to the latest available year of annual data for the given granularity.

Chart Types

Electricity Production Chart

- Compares the evolution of total electricity production against the latest decade of historical data as well as the previous year.

Net Exports Chart

- Compares the evolution of net exports (exports - imports) of electricity against the latest decade of historical data as well as the previous year.

Electricity Production by Fuel Chart

- Shows the power fuel mix since January two years before the current year (25-36 months depending on the publication month).
- In this context, "Other Comb." includes Other Combustibles, Combustible Renewables and Oil.
- In this context, "Other" includes Geothermal, Other Renewables, Non Specified.
- Countries with an estimated combustibles' breakdown have a generic "Combustibles" category in this chart.

Low-carbon Power Chart

- Depicts low-carbon power generation for the year-to-date, the same period the last year as well as two years before. Also shows full year figures for the previous two years.
- When relevant, nuclear generation will be shown.
- In this context, "All Other Ren" includes Geothermal, Other Renewables and Combustible Renewables.

Electricity Production Variation Chart

- A waterfall chart showing how one can reach the electricity generation of the year-to-date having as a starting point the electricity generation of the same period in the previous year.
- In the case that coal and natural gas are only estimated, the waterfall chart for these categories will show no change and they will be aggregated under Other Non-Ren.

Fuel Switching Chart

- A chart comparing head-to-head two fuels (e.g. Natural Gas vs. Coal) or fuel categories (e.g. Renewables vs. Non-Renewables) and their 10 year ranges as well as the previous year.

Maps

- The maps in the main report are solely for illustrative purposes and currently cover trade in OECD Europe.
- No electricity trade takes place in OECD Asia Oceania countries.
- **Map 1:** Electricity Trade by country in the current month year versus the same month last year.
- **Map 2:** Electricity Trade by country Year-to-Date versus the same period last year.
- Iceland is not displayed in the OECD Europe maps as it does not trade electricity.

Statistics report

Overall responsibility

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