

Statistics report

Monthly OECD Electricity Statistics

Next release: 15 April 2021

Data up to December 2020



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MONTHLY ELECTRICITY STATISTICS

December 2020

HIGHLIGHTS

OECD

- Net production in OECD was 924.4 TWh in December 2020, 1.3% higher than in December 2019 and 11.0% higher than in November 2020. In 2020, total net production was 10,348.6 TWh, down by 2.7% compared to 2019. Total production was lower than average in April 2020 and May 2020 because of the lockdown measures implemented by countries in the context of the Covid-19 pandemic.
- Renewable production was 3,269.1 TWh in 2020, 7.5% higher than in 2019. The share of renewable electricity in the mix was 31.6% in 2020, up from 28.6% in 2019. Wind and solar production were mainly responsible for this increase in renewables, up by respectively 95.8 TWh, or 11.6%, and 73.0 TWh, or 20.2%, in 2020 compared to 2019. Since 2018, wind production has increased by 20.1% and solar production by 28.4 %, highlighting the dynamic growth of the wind and solar power sectors.
- Non-renewable production was 7,079.5 TWh in 2020, down by 7.6.8% compared to 2019. Conventional thermal production was 5,568.8 TWh in 2020, down by 6.6% compared to 2019. Coal was the main reason for this decrease with a power output of 1,983.3 TWh in 2020, down by 15.5% compared to 2019. Coal production was 37.0 % lower in 2020 compared to 2018, emphasizing the different coal phase-out plans implemented by countries to meet lower emissions standards.

OECD Americas

- Net production in OECD Americas was 449.6 TWh in December 2020, 2.3% higher than in December 2019 and 12.9% higher than in November 2020. In 2020, total production was 5,170.3 TWh, 2.5% lower than in 2019. In 2020, renewable power output was 1,429.4 TWh, up by 6.1% compared to 2019 and non-renewable production was 3,741.0 TWh, down by 5.4% compared to 2019.
- In the United States, total net production in 2020 was 4,079.2 TWh, 2.8% lower than in 2019. In December 2020, net production was 350.9 TWh, up by 2.5% compared to December 2019 and by 14.2% compared to November 2020. Renewables increased by 66.8 TWh, or 8.6% in 2020 compared to 2019 while non-renewable power production decreased by 183.2 TWh, or 5.4%. Renewable power increase was driven by wind and solar production, which increased by 36.3TWh or 12.3% and 22.5 TWh or 23.3% respectively. The decrease in non-renewable power output was driven by coal production which dropped by 200.3 TWh, or 19.8% in 2020 compared to 2019, as part of the coal capacity retirement strategy as coal-fired generation becomes less profitable compared to renewables and natural gas production and to comply with stricter emission standards.
- In Mexico, total net production in 2020 was 307.2 TWh, 2.9% lower than in 2019. Renewable power production was 64.4 TWh, up by 17.6% compared to 2019 and provided 21.0% of total electricity production, compared to 17.3% in 2019. The increase in renewable production was driven by solar power production, at 10.5 TWh in 2020 compared to 6.5 TWh in 2019. Solar power increased very quickly and dynamically since January 2018, increasing by 474.5 % in two years.

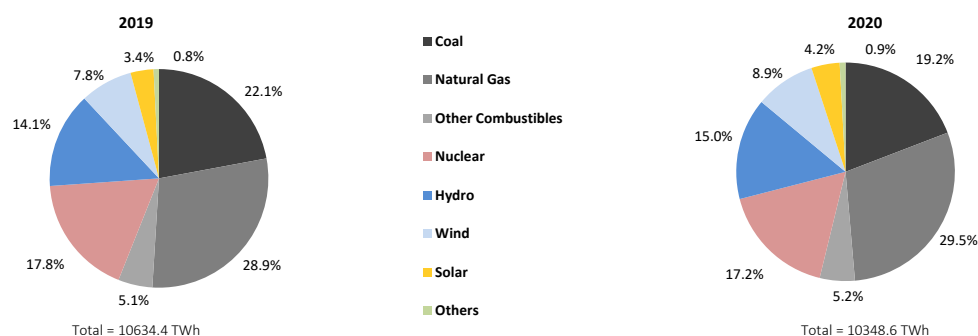
OECD Asia/Oceania

- In OECD Asia/Oceania, total net electricity production was 1,801.9 TWh in 2020, down by 2.5% compared to 2019. Renewable power production was 344.9 TWh in 2020, up by 12.9% compared to 2019. This increase was driven by solar production, which was 122.5 TWh, up by 19.3% compared to 2019. Conventional thermal output was 1,274.7 TWh, 5.3% lower than in 2019, because of lower coal and natural gas production, down respectively by 7.4% and 4.0% compared to 2019.
- In Australia, total production in 2020 was 246.5 TWh, down by 2.8% compared to 2019. Renewable power output was 63.0 TWh, up by 14.5% compared to 2019. It is estimated that a record of 7 GW of renewable capacity was installed in 2020. This increase is partly driven by solar power, which was 22.3 TWh, up by 23.5% or 4.2 TWh in 2020 compared to 2019. By the end of 2020, one in four Australia household was equipped with rooftop solar panels according to the Government. Investments in renewables will continue. Australia is projected to deploy an additional 24GW of rooftop solar by 2030, tripling the nation's small-scale solar generating capacity over the decade.

OECD Europe

- Total net production was 3,376.3 TWh in OECD Europe in 2020, down by 3.2% compared to 2019. Renewable production was 1,494.8 TWh in 2020, up by 7.7% compared to 2019 and amounted for 44.3% of total production in 2020. In the context of the Covid-19 pandemic, countries implemented lockdowns during the second quarter of 2020. As a result, electricity demand and production plummeted. This drop in demand pushed dispatchable power production down, specifically coal and natural gas. On the other hand, the renewable power sector is rapidly growing in Europe and favourable weather conditions in May 2020 drove renewable output up, overtaking non-renewable power production for the first time on record.
- In the United Kingdom, total production was 298.5 TWh in 2020, down by 3.8% compared to 2019. Renewable power production was 134.9 TWh, up by 11.7% in 2020 compared to 2019. This increase was driven by wind power, which produced 75.8 TWh in 2020, 17.8% higher than in 2019. Wind production was higher than average in the first quarter of 2020, due to powerful windstorms. In the second quarter of 2020, as demand dropped because of the Covid-19 pandemic and favourable weather conditions, coal power disappeared from the electricity mix for 67 consecutive days. In 2020, coal power output was 5.8 TWh, down by 20.7% compared to 2019 and by 65.2 % compared to 2018.
- In Norway, net production was 16.2 TWh in December 2020, up by 31.1% compared to December 2019 and by 20.8% compared to November 2020. In 2020, total production was 154.0 TWh, up by 14.3% compared to 2019. This increase in production was driven mainly by hydro production, at 141.7 TWh in 2020, up by 12.5% compared to 2019. Conditions were wetter than average over most of Scandinavia in 2020, driving hydro production upwards. As a result, electricity exports more than doubled in 2020 compared to 2019, reaching 25.0 TWh. In December 2020, Norway exported the highest amount of electricity on record, 3.1 TWh or 18.9% of total production.
- In Portugal, total production in 2020 was 52.5 TWh, up by 0.5% compared to 2019. Renewable power output was 31.6 TWh, up by 10.7% in 2020 compared to 2019. Non-renewable production was 20.8 TWh, down by 11.8% compared to 2019. The main driver of the decrease in non-renewables was coal power, which dropped by 57.0% in 2020 compared to 2019, down to 2.3 TWh. This is a consequence of the acceleration of the coal phase-out plan, in line with European carbon neutral targets and in a context of growing renewable production.

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



OECD Total

	Dec 20				Latest 2 years					
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share	
CONVENTIONAL THERMAL	505.8	1.8%	13.2%	54.7%	5 568.8	5 959.4	-6.6%	53.8%	56.0%	
Coal ⁵	190.5	-0.5%	14.2%	20.6%	1 983.3	2 347.6	-15.5%	19.2%	22.1%	
Oil ⁵	15.0	-4.6%	12.8%	1.6%	164.6	185.9	-11.5%	1.6%	1.7%	
Natural Gas ⁵	264.6	2.8%	12.5%	28.6%	3 048.3	3 073.0	-0.8%	29.5%	28.9%	
Combustible Renewables ⁵	29.1	6.5%	14.5%	3.2%	304.4	296.7	2.6%	2.9%	2.8%	
Other Combustibles ⁵	6.6	27.7%	8.2%	0.7%	68.2	56.2	21.4%	0.7%	0.5%	
Nuclear	160.6	-3.9%	10.3%	17.4%	1 777.4	1 898.0	-6.4%	17.2%	17.8%	
Hydro	135.5	0.2%	12.6%	14.7%	1 556.9	1 504.6	3.5%	15.0%	14.1%	
Wind	92.3	4.8%	6.3%	10.0%	922.4	826.7	11.6%	8.9%	7.8%	
Solar	22.7	28.4%	-13.8%	2.5%	433.9	361.0	20.2%	4.2%	3.4%	
Geothermal	4.4	6.3%	4.2%	0.5%	50.3	50.3	-0.1%	0.5%	0.5%	
Other Renewables	0.1	28.3%	2.4%	0.0%	1.1	1.0	16.4%	0.0%	0.0%	
Non-Specified	3.0	5.1%	15.9%	0.3%	37.7	33.5	12.7%	0.4%	0.3%	
RENEWABLES	284.2	4.2%	7.9%	30.7%	3 269.1	3 040.3	7.5%	31.6%	28.6%	
NON-RENEWABLES	640.2	0.1%	12.4%	69.3%	7 079.5	7 594.1	-6.8%	68.4%	71.4%	
TOTAL NET PRODUCTION	924.4	1.3%	11.0%		10 348.6	10 634.4	-2.7%			
+ Imports	46.0	5.8%	11.2%		488.4	491.8	-0.7%			
- Exports	45.9	5.0%	5.2%		507.0	484.0	4.8%			
= ELECTRICITY SUPPLIED	924.5	1.4%	11.3%		10 330.0	10 642.2	-2.9%			
- Used for pumped storage ⁴	7.1	-4.9%	20.2%		87.3	83.1	5.1%			
- T&D Losses ⁴	59.3	3.4%	13.4%		620.4	649.3	-4.5%			
= ELECTRICITY CONSUMED	858.0	1.3%	11.1%		9 622.4	9 909.8	-2.9%			

¹ current month to month of last year change

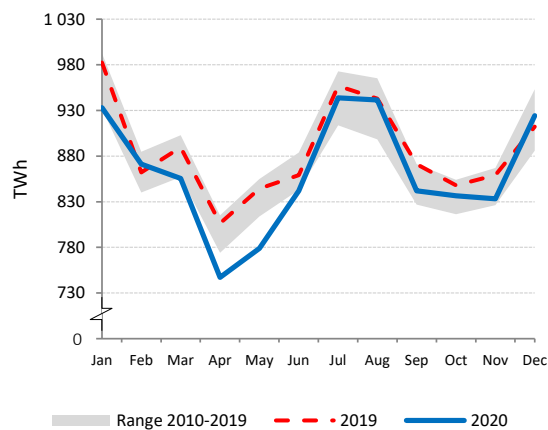
⁴ estimated for certain countries

² month-to-month change

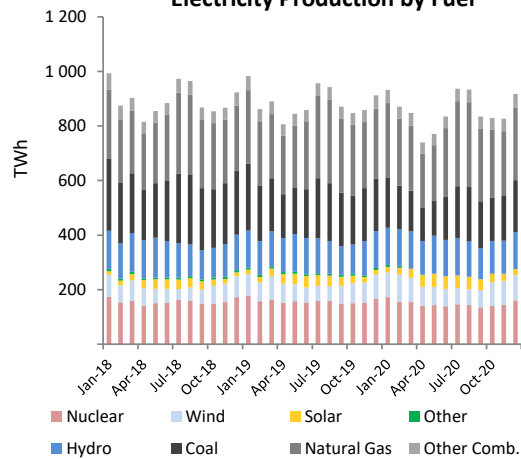
⁵ the breakdown of conventional thermal is estimated from annual data for Canada, Estonia and Italy

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

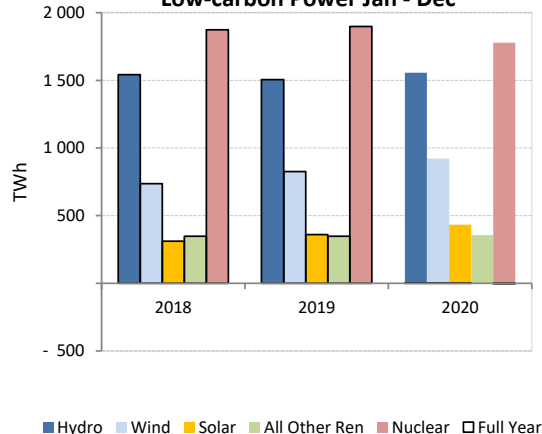
Electricity Production



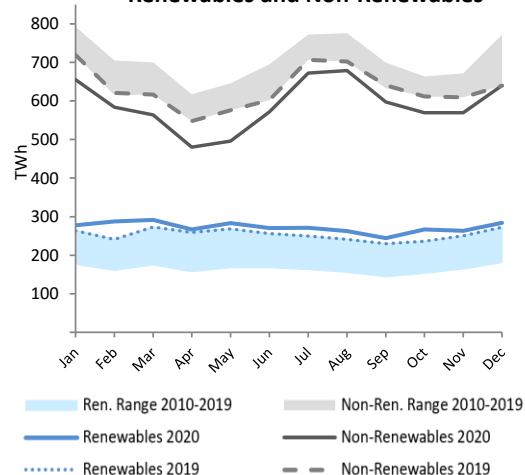
Electricity Production by Fuel



Low-carbon Power Jan - Dec



Renewables and Non-Renewables



OECD Americas

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	248.7	0.8%	17.4%	55.3%	2 916.0	3 109.6	-6.2%	56.4%	58.7%
Coal ⁵	89.8	5.8%	25.7%	20.0%	902.0	1 118.3	-19.3%	17.4%	21.1%
Oil ⁵	6.3	7.8%	5.2%	1.4%	78.2	76.8	1.7%	1.5%	1.4%
Natural Gas ⁵	145.2	-2.2%	13.9%	32.3%	1 851.7	1 826.5	1.4%	35.8%	34.5%
Combustible Renewables ⁵	6.4	-1.7%	6.6%	1.4%	73.3	77.6	-5.5%	1.4%	1.5%
Other Combustibles ⁵	0.9	0.9%	9.5%	0.2%	10.7	10.4	3.0%	0.2%	0.2%
Nuclear	77.8	-5.9%	11.7%	17.3%	893.9	916.0	-2.4%	17.3%	17.3%
Hydro	73.3	5.0%	12.3%	16.3%	799.9	784.8	1.9%	15.5%	14.8%
Wind	38.6	19.0%	-2.9%	8.6%	393.9	350.5	12.4%	7.6%	6.6%
Solar	9.0	49.0%	-7.6%	2.0%	141.4	113.4	24.7%	2.7%	2.1%
Geothermal	1.8	7.8%	1.6%	0.4%	20.8	21.0	-0.8%	0.4%	0.4%
Other Renewables	-	-	-	-	-	0.0	-	-	0.0%
Non-Specified	0.4	7.0%	9.5%	0.1%	4.5	4.9	-8.9%	0.1%	0.1%
RENEWABLES	129.1	10.9%	5.4%	28.7%	1 429.4	1 347.3	6.1%	27.6%	25.4%
NON-RENEWABLES	320.5	-0.8%	16.2%	71.3%	3 741.0	3 952.9	-5.4%	72.4%	74.6%
TOTAL NET PRODUCTION	449.6	2.3%	12.9%		5 170.3	5 300.2	-2.5%		
+ Imports	5.6	6.5%	1.8%		71.5	74.3	-3.8%		
- Exports	7.8	4.7%	17.3%		92.8	81.3	14.1%		
= ELECTRICITY SUPPLIED	447.3	2.3%	12.6%		5 149.1	5 293.2	-2.7%		
- Used for pumped storage ⁴	1.9	-0.1%	13.3%		26.7	26.2	1.6%		
- T&D Losses ⁴	29.0	4.8%	12.7%		306.5	333.1	-8.0%		
= ELECTRICITY CONSUMED	416.5	2.1%	12.6%		4 815.9	4 933.8	-2.4%		

¹ current month to month of last year change

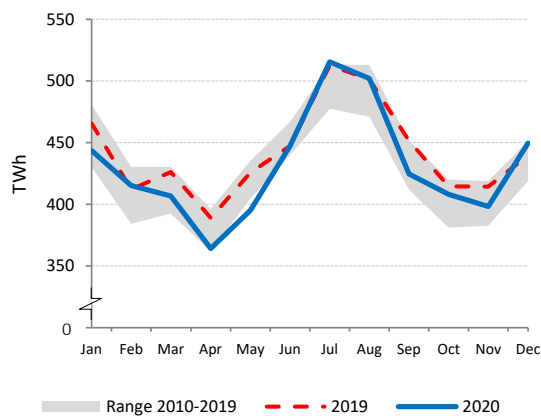
⁴ estimated for certain countries

² month-to-month change

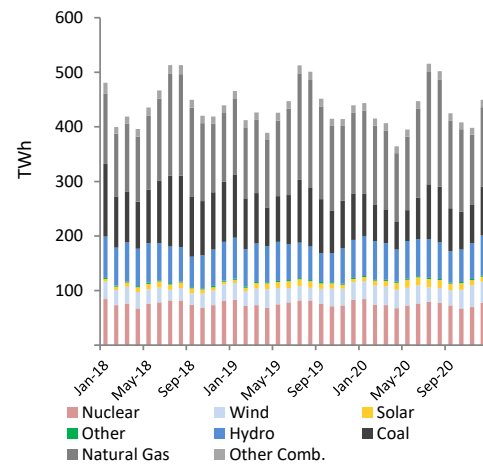
⁵ the breakdown of conventional thermal is estimated from annual data for Canada

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

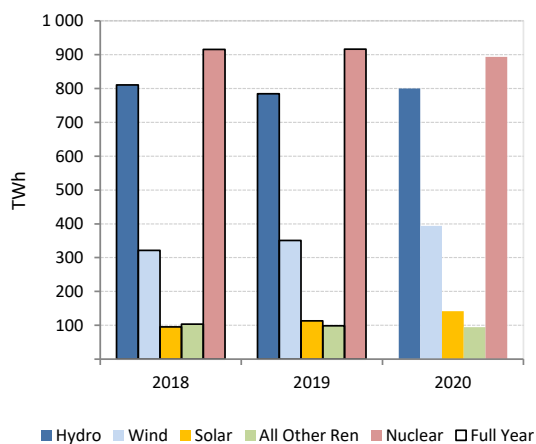
Electricity Production



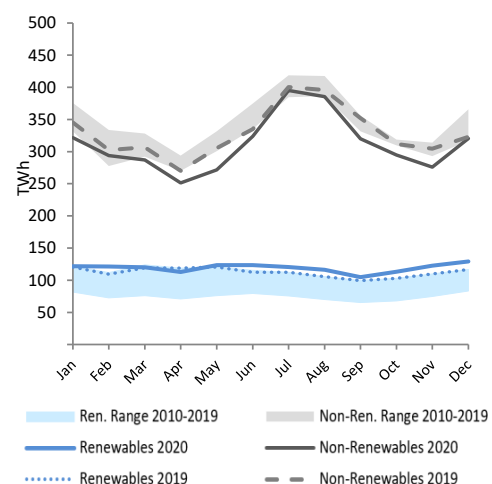
Electricity Production by Fuel



Low-carbon Power Jan - Dec



Renewables and Non-Renewables

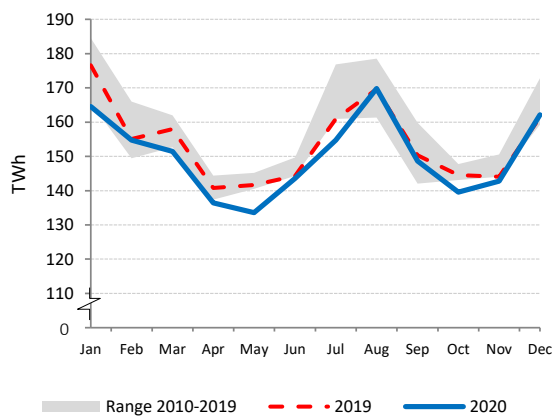


OECD Asia Oceania

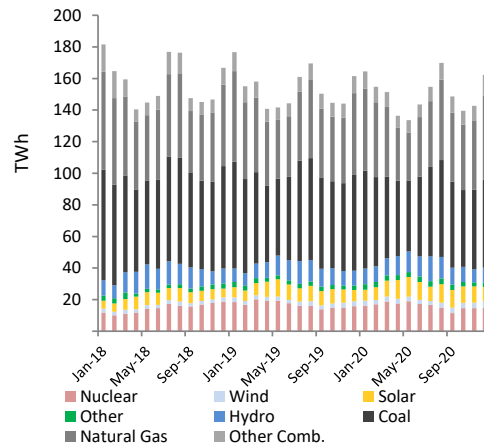
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	121.9	-1.0%	17.7%	75.2%	1 274.7	1 346.2	-5.3%	70.7%	72.9%
Coal	55.6	-8.3%	10.6%	34.3%	640.2	691.6	-7.4%	35.5%	37.4%
Oil	5.0	-17.6%	32.6%	3.1%	44.6	63.2	-29.5%	2.5%	3.4%
Natural Gas	53.3	3.1%	22.2%	32.9%	519.4	541.1	-4.0%	28.8%	29.3%
Combustible Renewables	4.6	67.6%	60.1%	2.8%	38.5	30.7	25.6%	2.1%	1.7%
Other Combustibles	3.4	72.5%	13.0%	2.1%	32.0	19.5	63.6%	1.8%	1.1%
Nuclear	15.0	-4.7%	3.3%	9.3%	193.1	203.5	-5.1%	10.7%	11.0%
Hydro	9.2	-1.1%	12.5%	5.7%	135.7	129.7	4.6%	7.5%	7.0%
Wind	4.0	24.8%	13.5%	2.4%	37.3	32.1	16.1%	2.1%	1.7%
Solar	9.0	24.8%	-12.8%	5.6%	122.5	102.7	19.3%	6.8%	5.6%
Geothermal	0.9	11.7%	8.7%	0.6%	10.3	10.0	2.8%	0.6%	0.5%
Other Renewables	0.1	57.7%	4.1%	0.0%	0.6	0.5	34.1%	0.0%	0.0%
Non-Specified	2.0	5.1%	19.3%	1.3%	27.7	22.7	22.4%	1.5%	1.2%
RENEWABLES	27.8	19.1%	7.7%	17.2%	344.9	305.6	12.9%	19.1%	16.5%
NON-RENEWABLES	134.3	-2.7%	14.9%	82.8%	1 457.0	1 541.7	-5.5%	80.9%	83.5%
TOTAL NET PRODUCTION	162.2	0.5%	13.6%		1 801.9	1 847.2	-2.5%		
+ Imports	-	-	-		-	-	-		
- Exports	-	-	-		-	-	-		
= ELECTRICITY SUPPLIED	162.2	0.5%	13.6%		1 801.9	1 847.2	-2.5%		
- Used for pumped storage ⁴	1.2	-0.9%	13.2%		16.1	15.7	2.3%		
- T&D Losses ⁴	6.9	-0.5%	12.9%		77.3	79.2	-2.4%		
= ELECTRICITY CONSUMED	154.1	0.5%	13.6%		1 708.6	1 752.3	-2.5%		

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

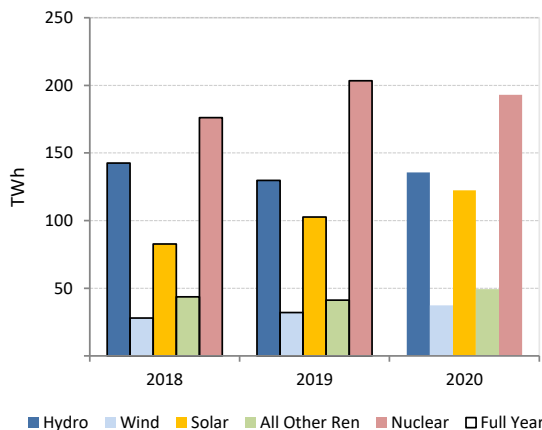
Electricity Production



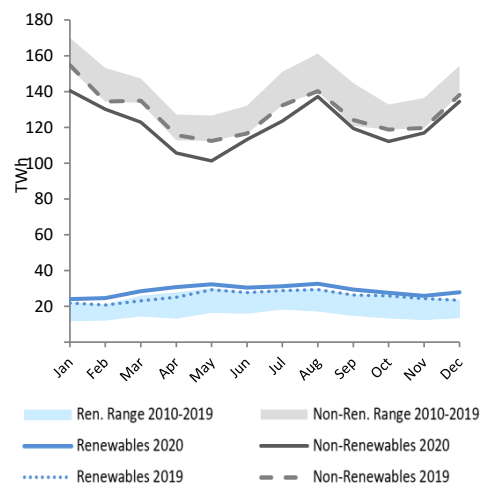
Electricity Production by Fuel



Low-carbon Power Jan - Dec



Renewables and Non-Renewables



OECD Europe

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	135.3	6.2%	2.7%	43.3%	1 378.1	1 503.6	-8.3%	40.8%	43.1%
Coal ⁵	45.1	-1.9%	0.0%	14.4%	441.1	537.8	-18.0%	13.1%	15.4%
Oil ⁵	3.7	-2.9%	4.6%	1.2%	41.9	45.9	-8.7%	1.2%	1.3%
Natural Gas ⁵	66.2	15.5%	2.9%	21.2%	677.1	705.3	-4.0%	20.1%	20.2%
Combustible Renewables ⁵	18.1	0.2%	9.3%	5.8%	192.6	188.5	2.2%	5.7%	5.4%
Other Combustibles ⁵	2.3	-0.1%	1.3%	0.7%	25.5	26.2	-2.7%	0.8%	0.8%
Nuclear	67.8	-1.2%	10.3%	21.7%	690.5	778.5	-11.3%	20.5%	22.3%
Hydro	53.0	-5.6%	12.8%	16.9%	621.3	590.2	5.3%	18.4%	16.9%
Wind	49.7	-5.3%	14.1%	15.9%	491.2	444.1	10.6%	14.5%	12.7%
Solar	4.7	6.0%	-25.3%	1.5%	170.1	144.9	17.4%	5.0%	4.2%
Geothermal	1.7	2.2%	4.7%	0.5%	19.1	19.3	-0.8%	0.6%	0.6%
Other Renewables	0.0	-	-	0.0%	0.5	0.5	0.0%	0.0%	0.0%
Non-Specified	0.5	3.3%	8.9%	0.2%	5.5	5.9	-6.7%	0.2%	0.2%
RENEWABLES	127.2	-4.2%	10.6%	40.7%	1 494.8	1 387.4	7.7%	44.3%	39.8%
NON-RENEWABLES	185.5	3.9%	4.8%	59.3%	1 881.6	2 099.6	-10.4%	55.7%	60.2%
TOTAL NET PRODUCTION	312.7	0.5%	7.1%		3 376.3	3 486.9	-3.2%		
+ Imports	40.4	5.7%	12.7%		416.9	417.5	-0.1%		
- Exports	38.1	5.1%	3.0%		414.2	402.6	2.9%		
= ELECTRICITY SUPPLIED	315.0	0.6%	8.3%		3 379.1	3 501.8	-3.5%		
- Used for pumped storage ⁴	4.1	-7.9%	26.0%		44.6	41.2	8.4%		
- T&D Losses ⁴	23.4	2.9%	14.4%		236.5	237.0	-0.2%		
= ELECTRICITY CONSUMED	287.5	0.5%	7.6%		3 097.9	3 223.6	-3.9%		

¹ current month to month of last year change

⁴ estimated for certain countries

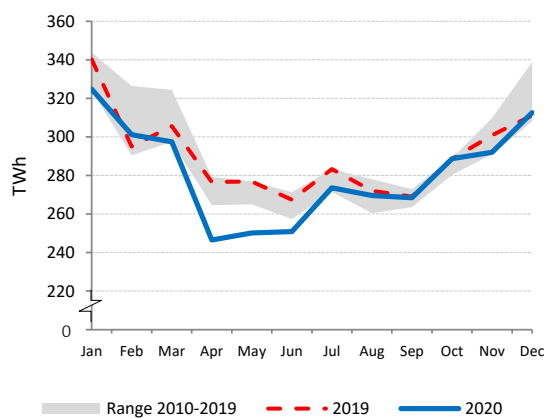
² month-to-month change

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

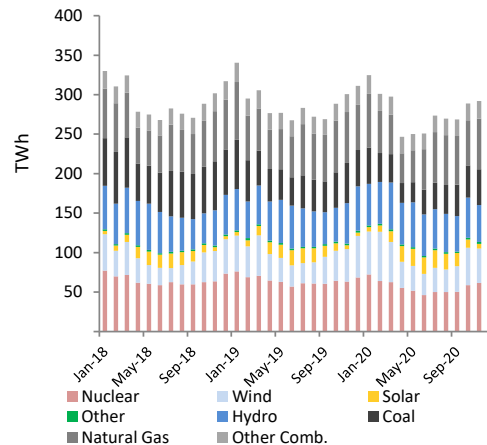
³ year-to-date compared to same period last year

Estonia and Italy

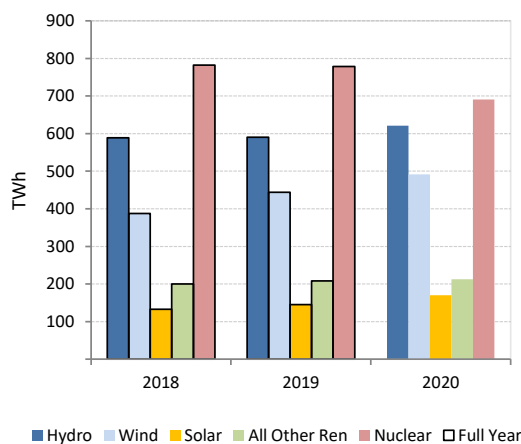
Electricity Production



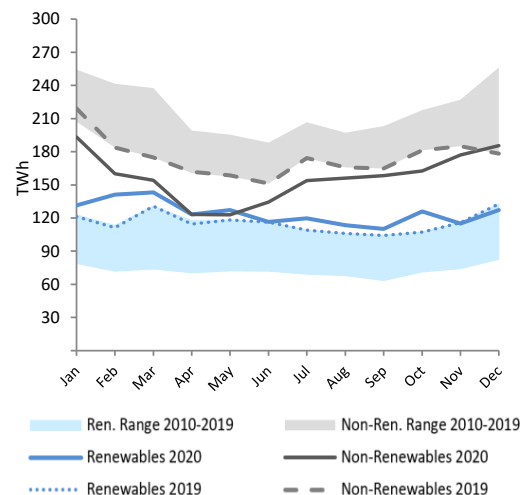
Electricity Production by Fuel



Low-carbon Power Jan - Dec



Renewables and Non-Renewables



IEA Total

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	500.0	1.9%	13.2%	55.1%	5 489.3	5 882.1	-6.7%	54.1%	56.4%
Coal ⁵	187.7	-0.2%	14.3%	20.7%	1 946.9	2 310.6	-15.7%	19.2%	22.1%
Oil ⁵	14.6	-4.5%	12.5%	1.6%	158.9	181.1	-12.3%	1.6%	1.7%
Natural Gas ⁵	262.6	2.9%	12.4%	29.0%	3 018.1	3 044.5	-0.9%	29.7%	29.2%
Combustible Renewables ⁵	28.5	6.5%	14.6%	3.1%	297.4	289.8	2.6%	2.9%	2.8%
Other Combustibles ⁵	6.6	27.7%	8.2%	0.7%	68.1	56.1	21.5%	0.7%	0.5%
Nuclear	160.1	-3.9%	10.3%	17.7%	1 771.4	1 892.5	-6.4%	17.5%	18.1%
Hydro	126.6	-0.8%	13.6%	14.0%	1 465.6	1 409.9	4.0%	14.4%	13.5%
Wind	91.6	4.8%	6.3%	10.1%	915.2	820.2	11.6%	9.0%	7.9%
Solar	21.8	28.4%	-14.6%	2.4%	425.9	354.3	20.2%	4.2%	3.4%
Geothermal	3.9	7.9%	4.1%	0.4%	44.3	44.3	-0.1%	0.4%	0.4%
Other Renewables	0.1	28.3%	2.4%	0.0%	1.1	1.0	16.4%	0.0%	0.0%
Non-Specified	2.9	5.1%	16.0%	0.3%	37.5	33.3	12.8%	0.4%	0.3%
RENEWABLES	272.5	3.8%	8.2%	30.0%	3 149.6	2 919.5	7.9%	31.0%	28.0%
NON-RENEWABLES	634.5	0.2%	12.4%	70.0%	7 000.9	7 518.0	-6.9%	69.0%	72.0%
TOTAL NET PRODUCTION	907.0	1.3%	11.1%		10 150.5	10 437.5	-2.7%		
+ Imports	44.1	6.9%	11.6%		463.8	464.6	-0.2%		
- Exports	44.7	5.6%	5.1%		491.3	467.2	5.2%		
= ELECTRICITY SUPPLIED	906.4	1.3%	11.5%		10 123.0	10 434.8	-3.0%		
- Used for pumped storage ⁴	7.0	-5.5%	20.8%		85.9	82.0	4.7%		
- T&D Losses ⁴	58.8	4.6%	13.5%		614.4	635.2	-3.3%		
= ELECTRICITY CONSUMED	840.6	1.2%	11.2%		9 422.7	9 717.6	-3.0%		

¹ current month to month of last year change

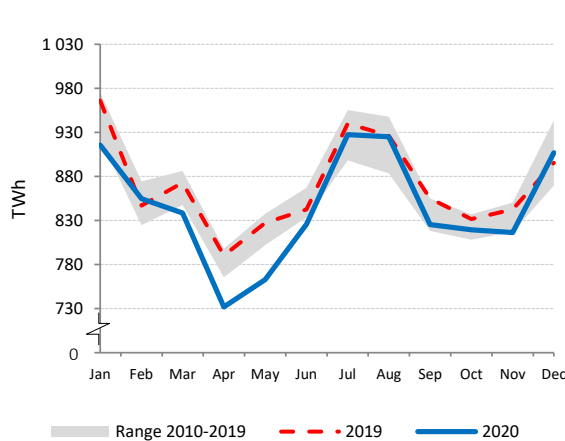
⁴ estimated for certain countries

² month-to-month change

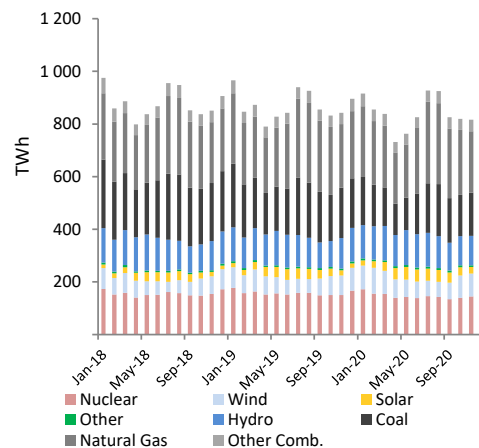
⁵ the breakdown of conventional thermal is estimated from annual data for Canada, Estonia, and Italy

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

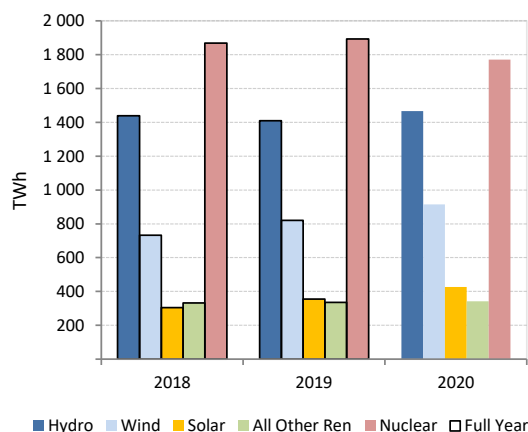
Electricity Production



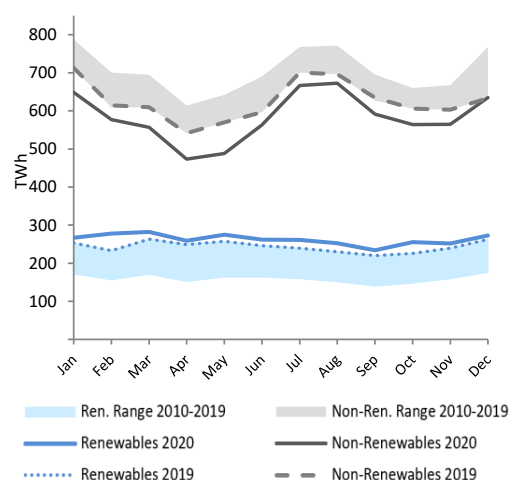
Electricity Production by Fuel



Low-carbon Power Jan - Dec



Renewables and Non-Renewables



AUSTRALIA

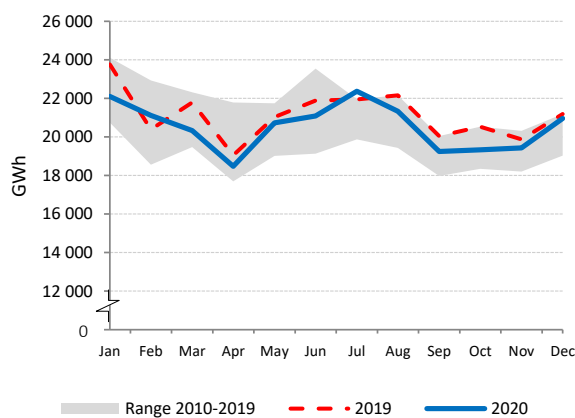
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	15 009	-7.5%	9.3%	71.6%	186 246	201 681	-7.7%	75.6%	79.5%
Coal	11 028	-9.2%	5.2%	52.6%	133 892	140 408	-4.6%	54.3%	55.4%
Oil	691	258.0%	348.9%	3.3%	3 100	4 435	-30.1%	1.3%	1.7%
Natural Gas	3 063	-16.1%	6.5%	14.6%	46 521	53 819	-13.6%	18.9%	21.2%
Combustible Renewables	226	-6.7%	0.7%	1.1%	2 733	3 020	-9.5%	1.1%	1.2%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	959	-5.6%	-3.6%	4.6%	14 887	14 276	4.3%	6.0%	5.6%
Wind	2 324	30.9%	14.2%	11.1%	23 153	19 718	17.4%	9.4%	7.8%
Solar	2 675	23.6%	0.2%	12.8%	22 227	17 996	23.5%	9.0%	7.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	6 184	19.0%	4.4%	29.5%	63 000	55 009	14.5%	25.6%	21.7%
NON-RENEWABLES	14 782	-7.5%	9.4%	70.5%	183 513	198 661	-7.6%	74.4%	78.3%
TOTAL NET PRODUCTION	20 967	-1.0%	7.9%		246 513	253 670	-2.8%		
+ Imports	-	-	-		-	-	-		
- Exports	-	-	-		-	-	-		
= ELECTRICITY SUPPLIED	20 967	-1.0%	7.9%		246 513	253 670	-2.8%		
- Used for pumped storage ⁴	37	-5.6%	-3.5%		579	555	4.3%		
- T&D Losses ⁴	1 086	-1.0%	7.9%		12 767	13 138	-2.8%		
= ELECTRICITY CONSUMED	19 844	-1.0%	7.9%		233 167	239 978	-2.8%		

¹ current month to month of last year change ⁴ estimated

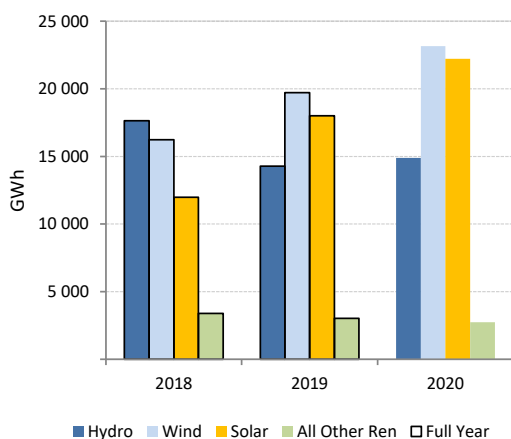
² month-to-month change

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

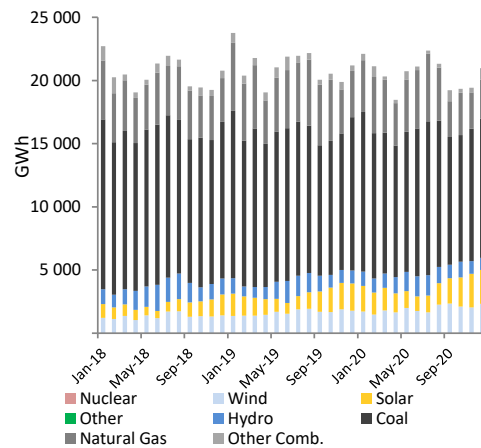
Electricity Production



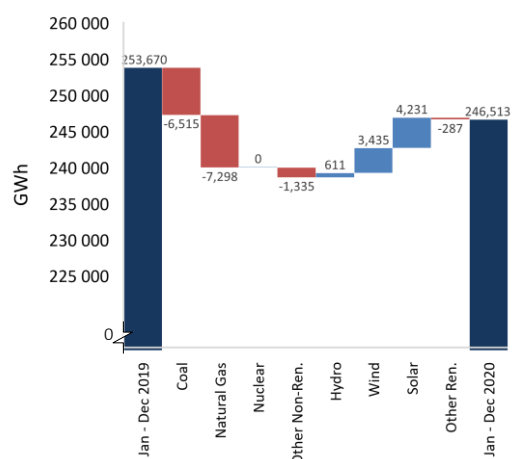
Low-carbon Power Jan - Dec



Electricity Production by Fuel



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



AUSTRIA

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	2 312	11.3%	22.4%	41.3%	18 123	20 313	-10.8%	26.3%	28.6%
Coal	175	-34.4%	13.6%	3.1%	2 228	3 270	-31.9%	3.2%	4.6%
Oil	56	13.7%	4.5%	1.0%	655	663	-1.3%	0.9%	0.9%
Natural Gas	1 524	15.3%	24.6%	27.3%	9 646	11 080	-12.9%	14.0%	15.6%
Combustible Renewables	503	36.4%	24.7%	9.0%	5 032	4 545	10.7%	7.3%	6.4%
Other Combustibles	53	-24.2%	-1.6%	0.9%	561	755	-25.7%	0.8%	1.1%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	2 624	-4.4%	-16.7%	46.9%	42 520	41 983	1.3%	61.7%	59.0%
Wind	611	-24.5%	66.3%	10.9%	6 662	7 162	-7.0%	9.7%	10.1%
Solar⁴	47	-	-21.4%	0.8%	1 630	1 630	0.0%	2.4%	2.3%
Geothermal	0	-	-	0.0%	0	0	0.0%	0.0%	0.0%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	1	-13.1%	-19.9%	0.0%	14	12	12.4%	0.0%	0.0%
RENEWABLES	3 785	-4.7%	-4.9%	67.7%	55 845	55 320	0.9%	81.0%	77.8%
NON-RENEWABLES	1 810	5.8%	21.8%	32.3%	13 104	15 781	-17.0%	19.0%	22.2%
TOTAL NET PRODUCTION	5 594	-1.5%	2.3%		68 949	71 101	-3.0%		
+ Imports	2 769	3.1%	12.4%		24 522	26 047	-5.9%		
- Exports	1 710	9.0%	-3.8%		22 327	22 918	-2.6%		
= ELECTRICITY SUPPLIED	6 653	-2.1%	8.1%		71 145	74 230	-4.2%		
- Used for pumped storage	381	-30.4%	30.6%		4 819	4 865	-1.0%		
- T&D Losses	304	0.1%	7.8%		3 192	3 305	-3.4%		
= ELECTRICITY CONSUMED	5 968	0.4%	7.0%		63 134	66 060	-4.4%		

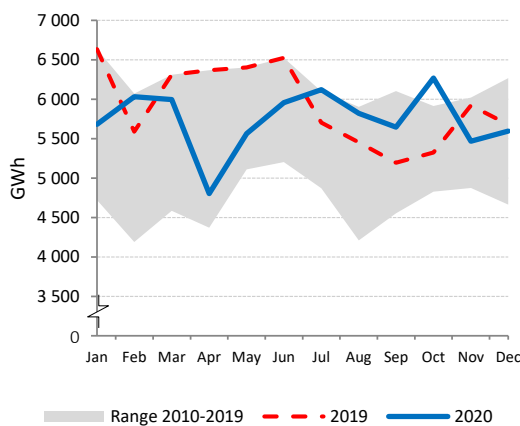
¹ current month to month of last year change

⁴ estimated by the IEA secretariat

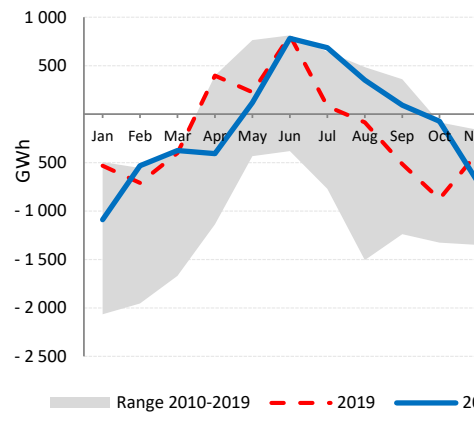
² month-to-month change

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

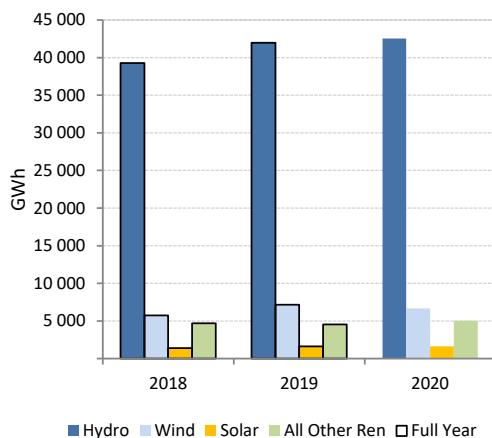
Electricity Production



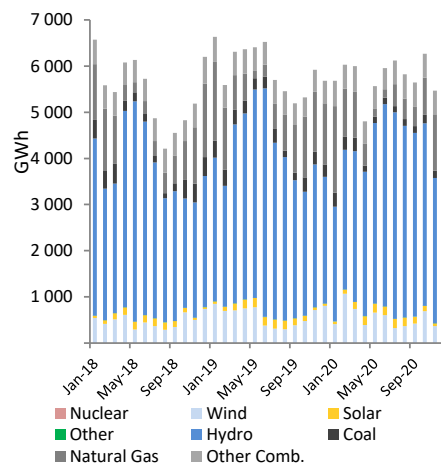
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



BELGIUM

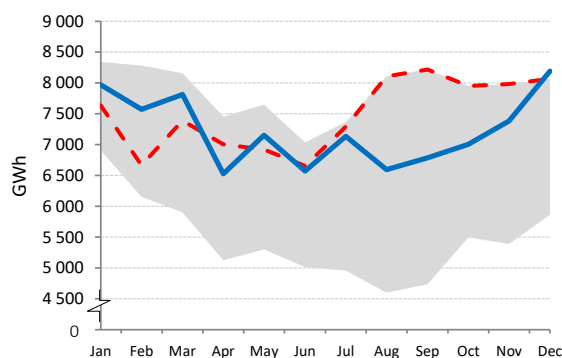
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	3 274	17.7%	11.5%	40.0%	34 688	33 264	4.3%	40.0%	37.0%
Coal	82	-52.5%	27.8%	1.0%	1 758	2 416	-27.3%	2.0%	2.7%
Oil	15	102.6%	138.7%	0.2%	68	68	-0.2%	0.1%	0.1%
Natural Gas	2 597	28.9%	11.3%	31.7%	26 520	24 506	8.2%	30.6%	27.3%
Combustible Renewables	468	-0.8%	8.5%	5.7%	5 121	5 034	1.7%	5.9%	5.6%
Other Combustibles	112	-2.7%	9.0%	1.4%	1 222	1 240	-1.5%	1.4%	1.4%
Nuclear	3 264	-12.1%	9.1%	39.8%	32 605	41 306	-21.1%	37.6%	46.0%
Hydro	134	-2.8%	36.6%	1.6%	1 285	1 151	11.7%	1.5%	1.3%
Wind	1 415	7.8%	18.6%	17.3%	12 736	9 550	33.4%	14.7%	10.6%
Solar	90	5.5%	-40.2%	1.1%	5 102	4 217	21.0%	5.9%	4.7%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	15	-55.5%	-9.3%	0.2%	294	403	-27.0%	0.3%	0.4%
RENEWABLES	2 106	5.0%	12.5%	25.7%	24 244	19 952	21.5%	28.0%	22.2%
NON-RENEWABLES	6 086	0.4%	10.3%	74.3%	62 466	69 939	-10.7%	72.0%	77.8%
TOTAL NET PRODUCTION	8 192	1.6%	10.9%		86 710	89 891	-3.5%		
+ Imports	1 438	8.6%	-0.7%		13 722	12 734	7.8%		
- Exports	1 696	15.2%	12.6%		14 055	14 589	-3.7%		
= ELECTRICITY SUPPLIED	7 933	0.2%	8.3%		86 377	88 036	-1.9%		
- Used for pumped storage	134	0.1%	24.2%		1 396	1 162	20.1%		
- T&D Losses	324	0.2%	8.0%		3 500	3 590	-2.5%		
= ELECTRICITY CONSUMED	7 476	0.2%	8.0%		81 481	83 284	-2.2%		

¹ current month to month of last year change

² month-to-month change

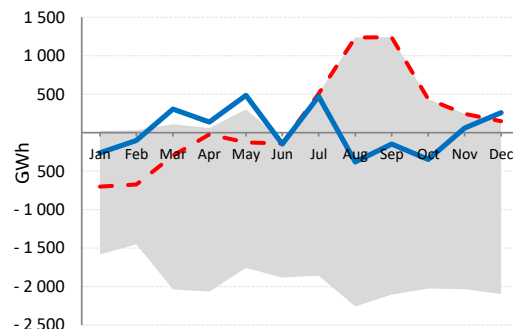
³ year-to-date compared to same period last year

Electricity Production



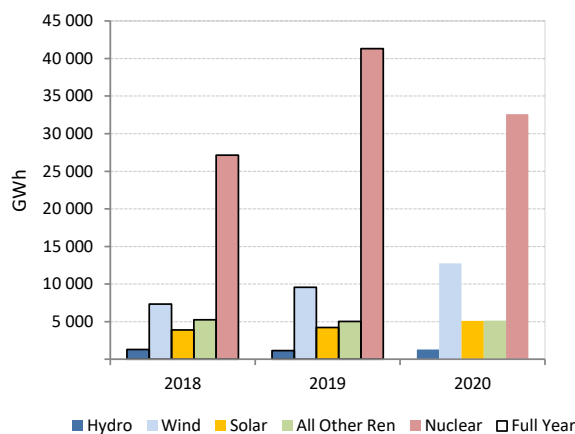
Range 2010-2019 - - - 2019 — 2020

Net Electricity Exports

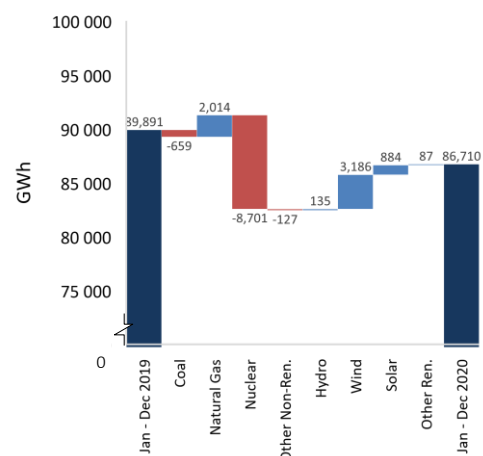


Range 2010-2019 - - - 2019 — 2020

Low-carbon Power Jan - Dec



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



CANADA

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	10 564	-4.8%	8.7%	17.4%	113 177	123 037	-8.0%	17.9%	19.4%
Coal	3 913	-4.8%	8.7%	6.4%	41 918	45 570	-8.0%	6.6%	7.2%
Oil	495	-4.8%	8.7%	0.8%	5 299	5 760	-8.0%	0.8%	0.9%
Natural Gas	5 286	-4.8%	8.7%	8.7%	56 634	61 569	-8.0%	9.0%	9.7%
Combustible Renewables	863	-4.8%	8.7%	1.4%	9 245	10 051	-8.0%	1.5%	1.6%
Other Combustibles	8	-4.8%	8.7%	0.0%	81	88	-8.0%	0.0%	0.0%
Nuclear	7 324	-14.1%	2.2%	12.1%	92 644	95 461	-3.0%	14.7%	15.0%
Hydro	38 540	1.4%	22.3%	63.5%	383 152	378 127	1.3%	60.7%	59.6%
Wind	4 143	11.6%	-1.8%	6.8%	37 401	33 840	10.5%	5.9%	5.3%
Solar	126	5.4%	-47.3%	0.2%	4 380	4 175	4.9%	0.7%	0.7%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	1	-	-	0.0%
Non-Specified	15	-13.4%	15.5%	0.0%	123	169	-27.5%	0.0%	0.0%
RENEWABLES	43 672	2.2%	18.8%	71.9%	434 179	426 194	1.9%	68.8%	67.1%
NON-RENEWABLES	17 040	-9.0%	5.8%	28.1%	196 698	208 617	-5.7%	31.2%	32.9%
TOTAL NET PRODUCTION	60 712	-1.2%	14.9%		630 877	634 811	-0.6%		
+ Imports	693	-36.3%	-5.8%		9 495	13 369	-29.0%		
- Exports	5 918	8.7%	28.1%		67 154	60 376	11.2%		
= ELECTRICITY SUPPLIED	55 488	-2.8%	13.3%		573 218	587 804	-2.5%		
- Used for pumped storage ⁴	21	1.4%	22.3%		213	210	1.3%		
- T&D Losses ⁴	3 222	-1.8%	14.6%		33 605	34 015	-1.2%		
= ELECTRICITY CONSUMED	52 244	-2.9%	13.2%		539 400	553 579	-2.6%		

¹ current month to month of last year change

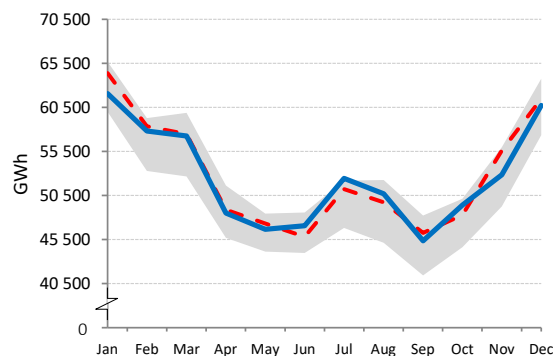
Conventional Thermal breakdown is estimated from annual data

² month-to-month change

⁴ estimated from annual data

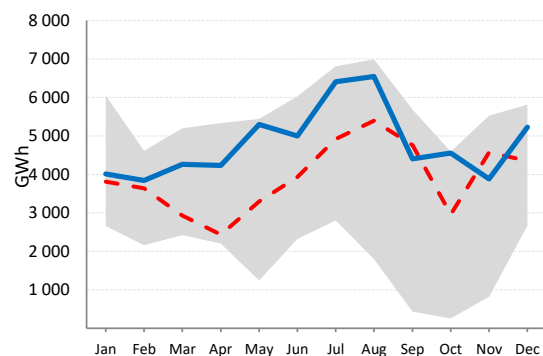
³ year-to-date compared to same period last year

Electricity Production



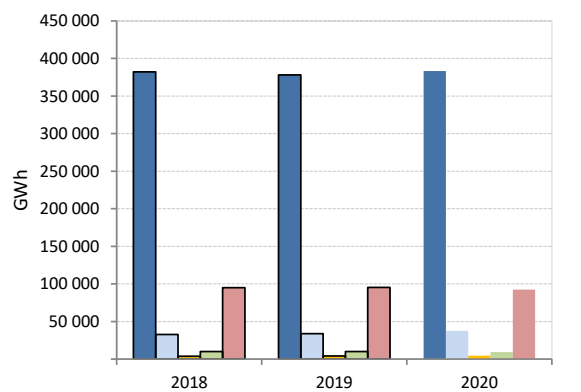
Range 2010-2019 2019 2020

Net Electricity Exports



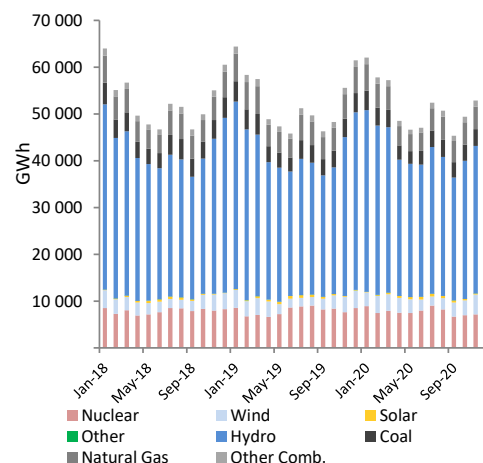
Range 2010-2019 2019 2020

Low-carbon Power Jan - Dec



Hydro Wind Solar All Other Ren Nuclear Full Year

Electricity Production by Fuel



Nuclear Wind Solar Hydro Coal Natural Gas Other Comb.

CHILE

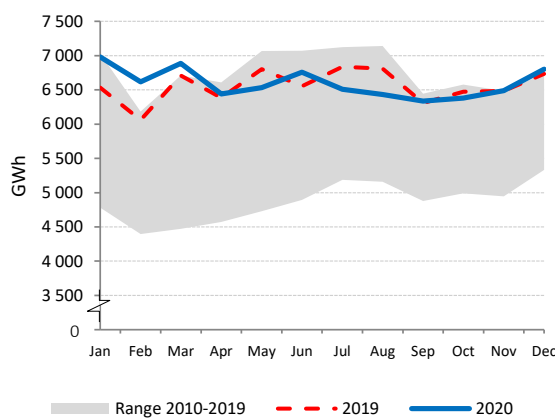
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	3 071	-17.2%	19.9%	45.2%	45 699	47 041	-2.9%	57.7%	59.8%
Coal	1 874	-14.7%	6.8%	27.6%	23 622	25 431	-7.1%	29.8%	32.3%
Oil	243	-13.9%	44.1%	3.6%	3 805	2 911	30.7%	4.8%	3.7%
Natural Gas	608	-33.9%	99.7%	8.9%	14 014	14 521	-3.5%	17.7%	18.5%
Combustible Renewables	347	11.1%	4.0%	5.1%	4 257	4 177	1.9%	5.4%	5.3%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	2 279	25.6%	-10.0%	33.5%	20 370	20 456	-0.4%	25.7%	26.0%
Wind	525	6.0%	-1.9%	7.7%	5 446	4 802	13.4%	6.9%	6.1%
Solar	899	28.5%	7.1%	13.2%	7 395	6 188	19.5%	9.3%	7.9%
Geothermal	26	57.1%	26.1%	0.4%	243	202	20.7%	0.3%	0.3%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	4 076	22.1%	-4.4%	59.9%	37 713	35 825	5.3%	47.6%	45.5%
NON-RENEWABLES	2 724	-19.8%	22.3%	40.1%	41 442	42 864	-3.3%	52.4%	54.5%
TOTAL NET PRODUCTION	6 800	1.0%	4.8%		79 154	78 689	0.6%		
+ Imports	-	-	-		-	-	-		
- Exports	-	-	-		-	-	-		
= ELECTRICITY SUPPLIED	6 800	1.0%	4.8%		79 154	78 689	0.6%		
- Used for pumped storage	-	-	-		-	-	-		
- T&D Losses	284	1.2%	4.4%		3 272	3 520	-7.1%		
= ELECTRICITY CONSUMED	6 516	1.0%	4.8%		75 883	75 169	1.0%		

¹ current month to month of last year change

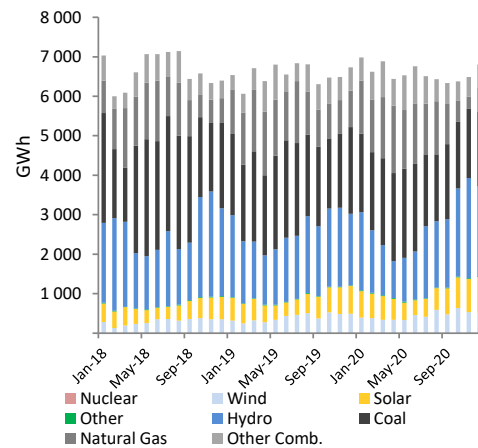
² month-to-month change

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

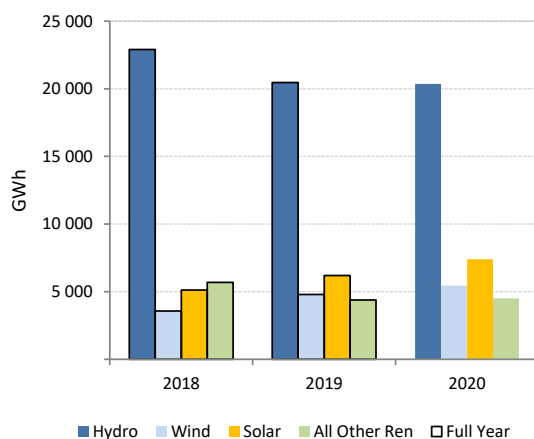
Electricity Production



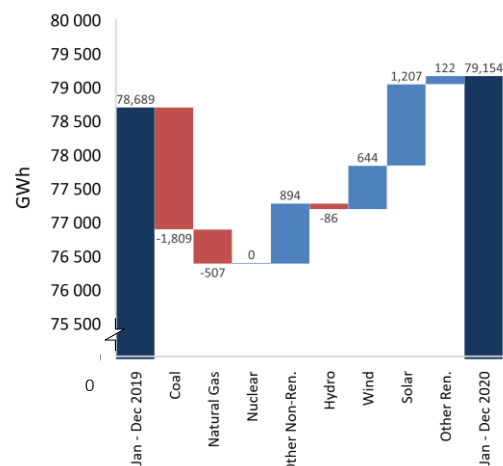
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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



COLOMBIA

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL⁴	1 740	-17.5%	4.7%	26.6%	24 174	20 749	16.5%	32.7%	27.8%
Coal ⁴	543	-36.2%	6.1%	8.3%	8 914	7 615	17.1%	12.1%	10.2%
Oil ⁴	151	3.2%	0.1%	2.3%	1 810	1 799	0.6%	2.4%	2.4%
Natural Gas ⁴	932	-7.6%	1.8%	14.2%	12 218	10 098	21.0%	16.5%	13.5%
Combustible Renewables ⁵	114	10.6%	35.3%	1.7%	1 232	1 236	-0.3%	1.7%	1.7%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	4 781	23.1%	-0.6%	73.0%	49 538	53 825	-8.0%	67.0%	72.0%
Wind	3	-27.5%	159.0%	0.0%	10	59	-83.9%	0.0%	0.1%
Solar	23	93.3%	47.2%	0.4%	191	131	45.4%	0.3%	0.2%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	4 921	22.9%	0.2%	75.2%	50 971	55 251	-7.7%	69.0%	73.9%
NON-RENEWABLES	1 626	-18.9%	3.0%	24.8%	22 942	19 512	17.6%	31.0%	26.1%
TOTAL NET PRODUCTION	6 547	8.9%	0.9%		73 912	74 764	-1.1%		
+ Imports	5	-96.8%	2850.0%		1 302	312	317.3%		
- Exports	-	-	-		-	0	-		
= ELECTRICITY SUPPLIED	6 553	6.2%	0.9%		75 214	75 075	0.2%		
- Used for pumped storage	-	-	-		-	-	-		
- T&D Losses	-	-	-		-	7 872	-		
= ELECTRICITY CONSUMED	6 553	20.1%	0.9%		75 214	67 203	11.9%		

¹ current month to month of last year change

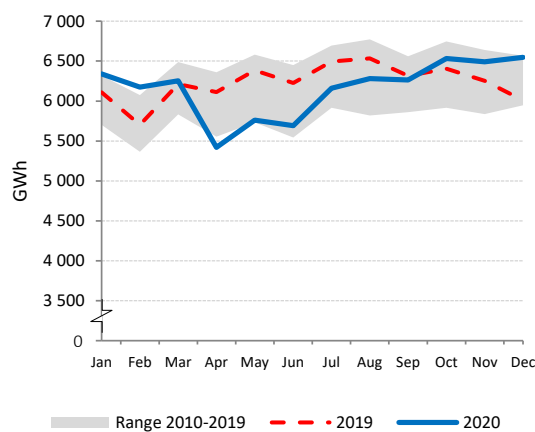
² month-to-month change

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

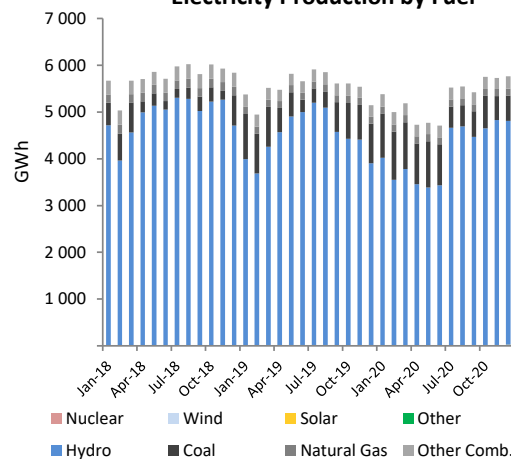
⁴ Distributed generation for conventional thermal is estimated by the IEA Secretariat

⁵ estimated based on annual data

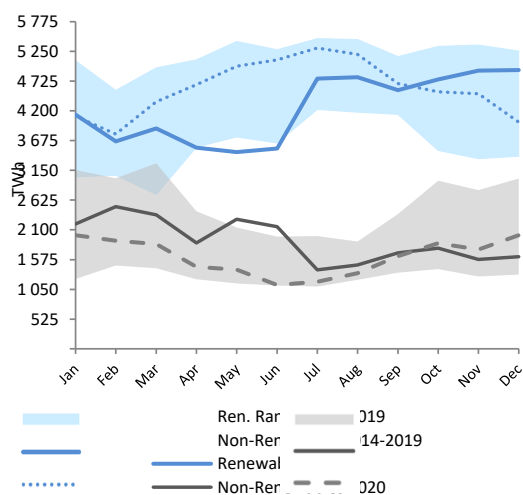
Electricity Production



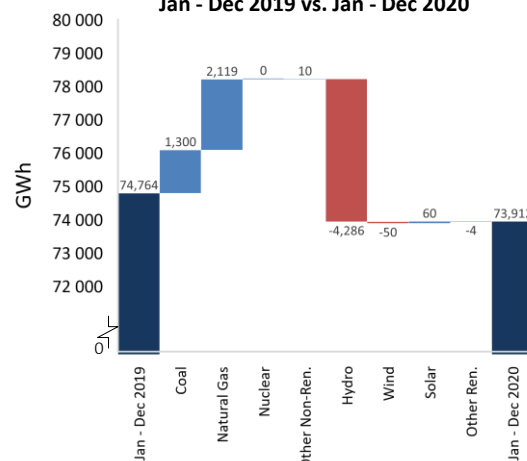
Electricity Production by Fuel



Renewables and Non-Renewables



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



CZECH REPUBLIC

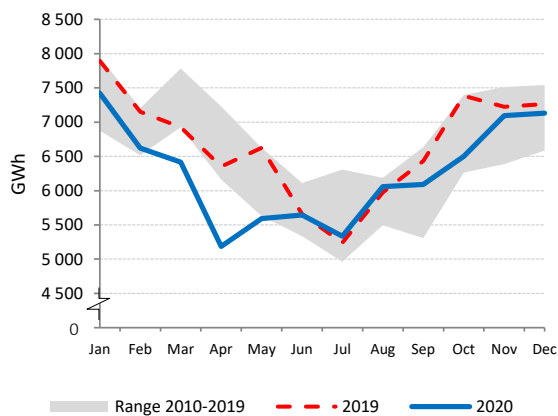
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	4 143	-3.1%	-3.0%	58.1%	40 279	45 301	-11.1%	53.6%	56.5%
Coal	2 934	-14.8%	-5.7%	41.2%	29 293	35 406	-17.3%	39.0%	44.2%
Oil	4	-62.1%	-41.9%	0.1%	76	106	-28.5%	0.1%	0.1%
Natural Gas	767	95.3%	4.1%	10.7%	6 141	5 197	18.2%	8.2%	6.5%
Combustible Renewables	429	1.6%	4.6%	6.0%	4 683	4 516	3.7%	6.2%	5.6%
Other Combustibles	10	20.7%	47.0%	0.1%	86	76	12.8%	0.1%	0.1%
Nuclear	2 583	-0.2%	9.4%	36.2%	28 369	28 579	-0.7%	37.8%	35.7%
Hydro	290	12.5%	-15.8%	4.1%	3 402	3 143	8.2%	4.5%	3.9%
Wind	71	-14.6%	43.5%	1.0%	691	691	0.0%	0.9%	0.9%
Solar	34	-33.2%	-43.2%	0.5%	2 242	2 291	-2.1%	3.0%	2.9%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	9	-5.0%	11.0%	0.1%	104	110	-5.9%	0.1%	0.1%
RENEWABLES	823	1.2%	-4.6%	11.5%	11 017	10 642	3.5%	14.7%	13.3%
NON-RENEWABLES	6 307	-2.2%	1.2%	88.5%	64 069	69 475	-7.8%	85.3%	86.7%
TOTAL NET PRODUCTION	7 130	-1.8%	0.5%		75 087	80 116	-6.3%		
+ Imports	1 328	17.7%	8.8%		13 368	11 026	21.2%		
- Exports	2 389	1.3%	-2.1%		23 521	24 123	-2.5%		
= ELECTRICITY SUPPLIED	6 069	0.6%	3.3%		64 934	67 020	-3.1%		
- Used for pumped storage	158	-10.8%	13.5%		1 671	1 508	10.8%		
- T&D Losses	406	-0.2%	0.6%		4 065	4 300	-5.5%		
= ELECTRICITY CONSUMED	5 505	1.0%	3.2%		59 198	61 212	-3.3%		

¹ current month to month of last year change

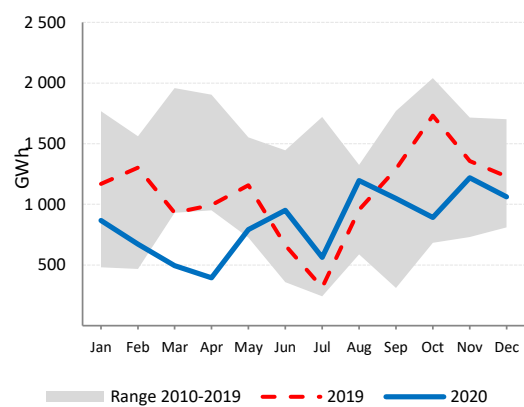
² month-to-month change

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

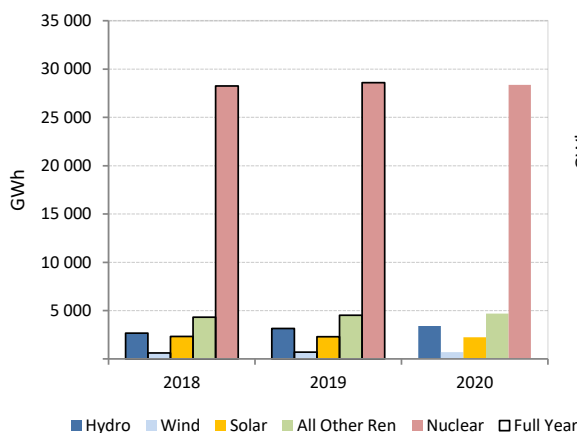
Electricity Production



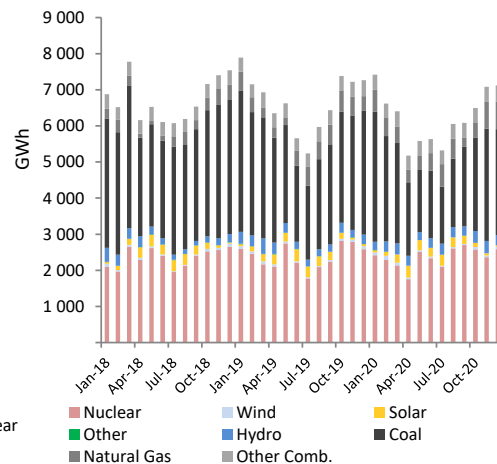
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



DENMARK

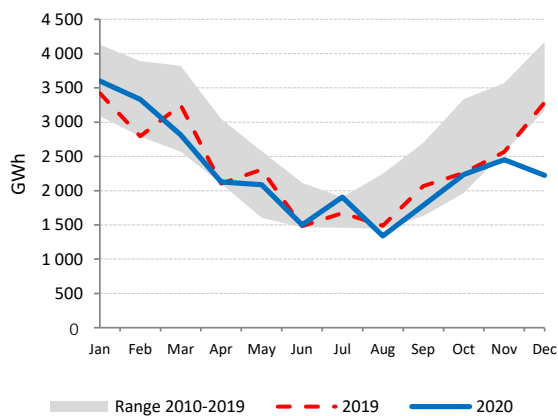
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	893	-37.9%	-8.2%	40.2%	9 839	11 562	-14.9%	35.9%	40.3%
Coal	103	-74.7%	-62.3%	4.6%	2 875	3 088	-6.9%	10.5%	10.8%
Oil	20	-25.7%	-20.0%	0.9%	210	226	-7.0%	0.8%	0.8%
Natural Gas	125	-42.1%	4.3%	5.6%	1 126	1 961	-42.6%	4.1%	6.8%
Combustible Renewables	591	-17.8%	18.4%	26.6%	4 923	5 552	-11.3%	18.0%	19.4%
Other Combustibles	54	-22.2%	-1.6%	2.4%	704	736	-4.3%	2.6%	2.6%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1	-77.1%	-58.4%	0.0%	17	17	-3.8%	0.1%	0.1%
Wind	1 321	-27.9%	-9.0%	59.5%	16 353	16 150	1.3%	59.7%	56.3%
Solar	7	-36.1%	-69.5%	0.3%	1 181	963	22.6%	4.3%	3.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	1 920	-25.2%	-2.9%	86.4%	22 474	22 683	-0.9%	82.1%	79.1%
NON-RENEWABLES	302	-58.0%	-36.2%	13.6%	4 916	6 010	-18.2%	17.9%	20.9%
TOTAL NET PRODUCTION	2 223	-32.4%	-9.3%		27 390	28 693	-4.5%		
+ Imports	1 753	26.4%	16.3%		19 699	15 982	23.3%		
- Exports	1 210	-10.9%	18.9%		13 541	10 171	33.1%		
= ELECTRICITY SUPPLIED	2 765	-16.6%	-6.0%		33 548	34 503	-2.8%		
- Used for pumped storage	-	-	-		-	-	-		
- T&D Losses	137	-16.5%	1.5%		1 723	1 611	7.0%		
= ELECTRICITY CONSUMED	2 628	-16.6%	-6.3%		31 825	32 892	-3.2%		

¹ current month to month of last year change

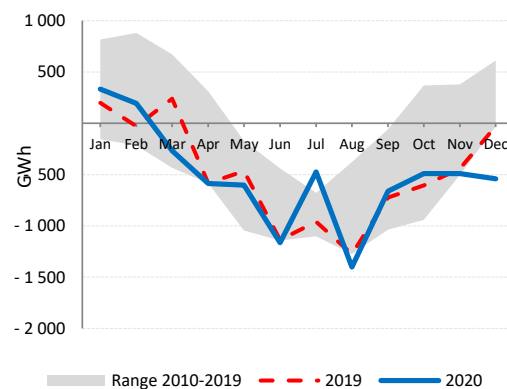
² month-to-month change

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

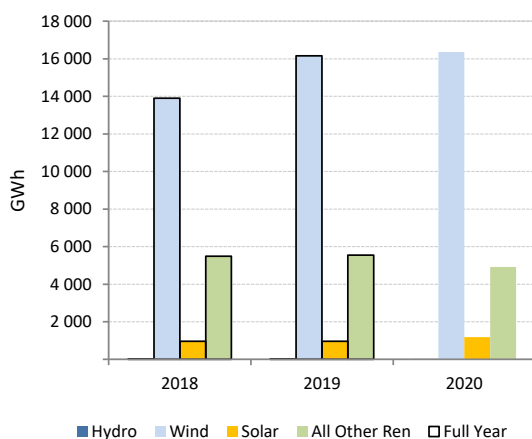
Electricity Production



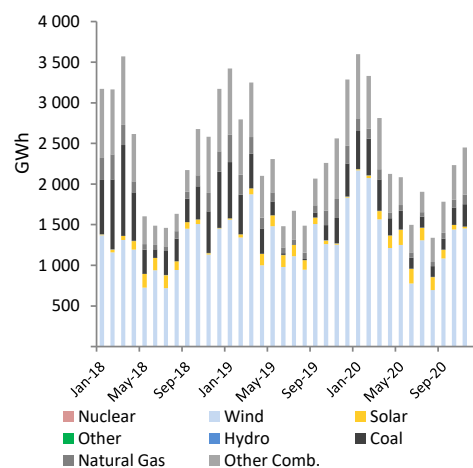
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



ESTONIA

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	416	5.7%	-8.3%	82.9%	4 163	5 821	-28.5%	81.6%	88.2%
Coal	325	5.7%	-8.3%	64.8%	3 254	4 549	-28.5%	63.8%	68.9%
Oil	2	5.6%	-8.3%	0.3%	17	24	-28.5%	0.3%	0.4%
Natural Gas	2	5.7%	-8.3%	0.5%	23	32	-28.5%	0.5%	0.5%
Combustible Renewables	83	5.7%	-8.3%	16.5%	830	1 161	-28.5%	16.3%	17.6%
Other Combustibles	4	5.7%	-8.3%	0.8%	39	55	-28.5%	0.8%	0.8%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	5	70.0%	70.0%	1.0%	39	19	103.2%	0.8%	0.3%
Wind	79	-11.7%	-0.6%	15.8%	825	687	20.1%	16.2%	10.4%
Solar	1	-	-25.8%	0.2%	74	74	0.0%	1.4%	1.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	168	-2.3%	-3.6%	33.6%	1 767	1 940	-8.9%	34.7%	29.4%
NON-RENEWABLES	333	5.7%	-8.3%	66.4%	3 333	4 660	-28.5%	65.3%	70.6%
TOTAL NET PRODUCTION	501	2.9%	-6.8%		5 100	6 600	-22.7%		
+ Imports	665	37.1%	0.8%		7 365	4 861	51.5%		
- Exports	294	89.7%	-16.7%		3 724	2 704	37.7%		
= ELECTRICITY SUPPLIED	872	6.7%	3.3%		8 742	8 757	-0.2%		
- Used for pumped storage	-	-	-		-	-	-		
- T&D Losses	51	20.0%	-2.6%		544	500	8.8%		
= ELECTRICITY CONSUMED	821	6.0%	3.6%		8 198	8 257	-0.7%		

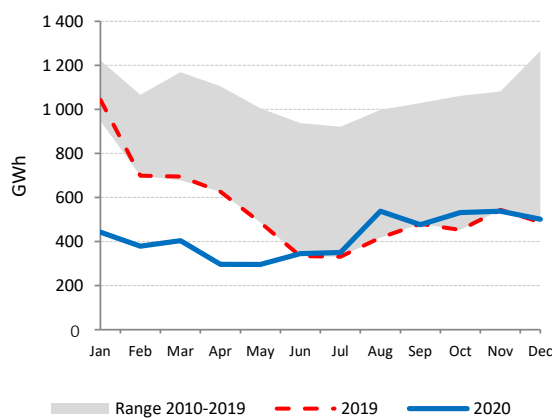
¹ current month to month of last year change

Conventional Thermal breakdown is estimated from annual data

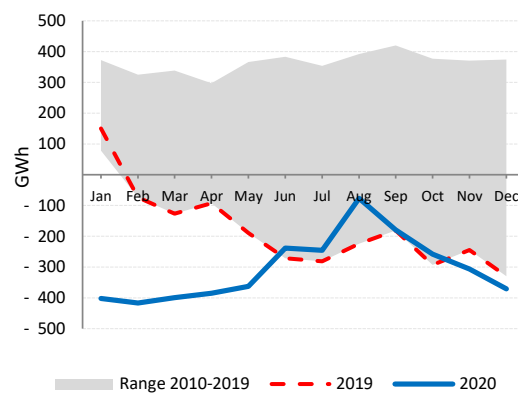
² month-to-month change

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

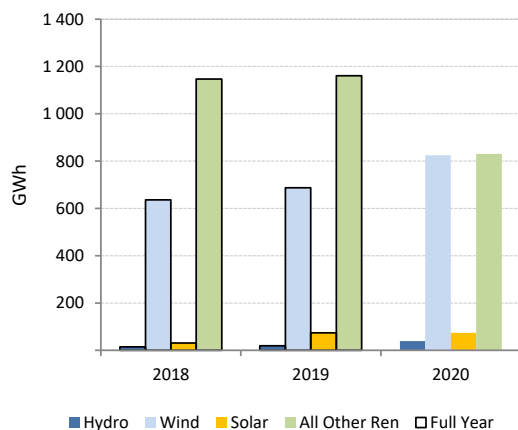
Electricity Production



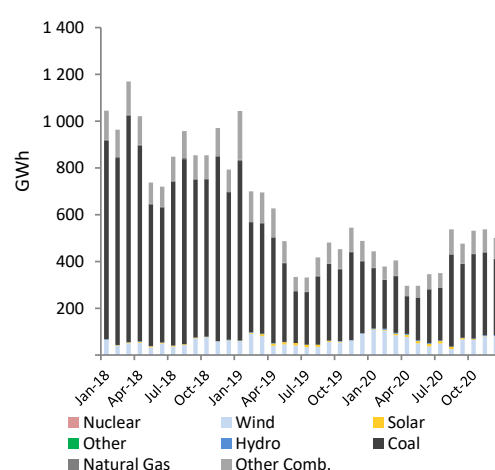
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



FINLAND

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	2 289	-2.2%	33.5%	36.1%	19 628	24 496	-19.9%	29.8%	37.1%
Coal	610	-17.8%	32.4%	9.6%	5 000	7 527	-33.6%	7.6%	11.4%
Oil	32	26.3%	14.3%	0.5%	243	289	-15.9%	0.4%	0.4%
Natural Gas	473	21.9%	60.1%	7.5%	3 738	3 639	2.7%	5.7%	5.5%
Combustible Renewables	1 132	-0.8%	26.1%	17.8%	10 235	12 559	-18.5%	15.6%	19.0%
Other Combustibles ⁴	41	-1.4%	25.0%	0.7%	411	481	-14.5%	0.6%	0.7%
Nuclear	1 863	-10.5%	-6.8%	29.4%	22 358	22 915	-2.4%	34.0%	34.7%
Hydro	1 434	16.6%	-6.6%	22.6%	15 555	12 238	27.1%	23.6%	18.5%
Wind	740	4.2%	-20.9%	11.7%	7 760	6 025	28.8%	11.8%	9.1%
Solar	1	-	-66.7%	0.0%	255	147	72.9%	0.4%	0.2%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	19	-	-	0.3%	224	224	0.0%	0.3%	0.3%
RENEWABLES	3 307	7.3%	-1.9%	52.1%	33 804	30 969	9.2%	51.4%	46.9%
NON-RENEWABLES	3 038	-7.9%	7.1%	47.9%	31 975	35 076	-8.8%	48.6%	53.1%
TOTAL NET PRODUCTION	6 345	-0.5%	2.2%		65 779	66 045	-0.4%		
+ Imports	2 019	15.0%	25.2%		21 615	23 938	-9.7%		
- Exports	577	64.4%	-10.4%		6 665	3 896	71.1%		
= ELECTRICITY SUPPLIED	7 787	0.0%	8.5%		80 729	86 087	-6.2%		
- Used for pumped storage	-	-	-		-	-	-		
- T&D Losses	245	-	8.4%		2 542	2 716	-6.4%		
= ELECTRICITY CONSUMED	7 542	0.0%	8.5%		78 187	83 371	-6.2%		

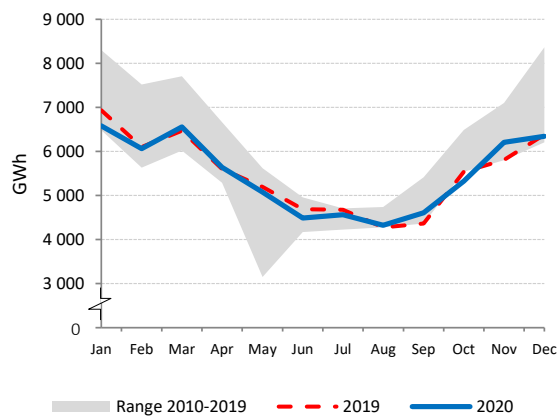
¹ current month to month of last year change

⁴ includes generation from peat

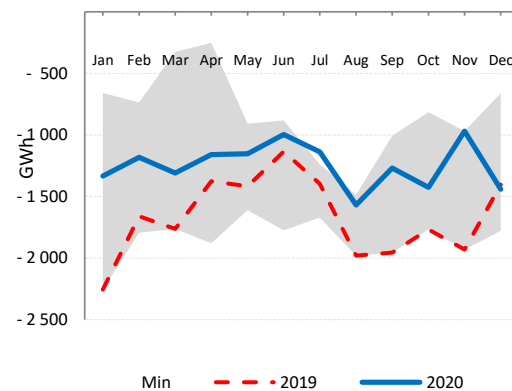
² month-to-month change

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

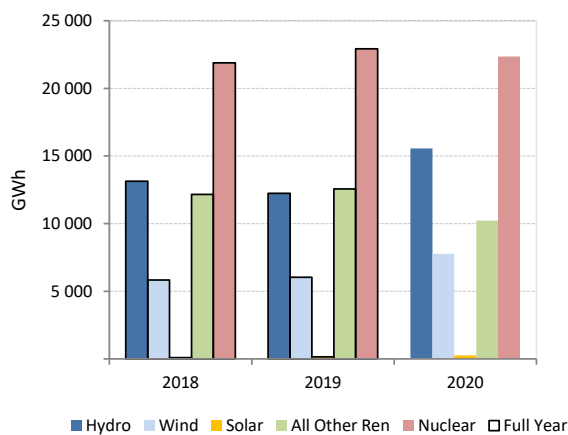
Electricity Production



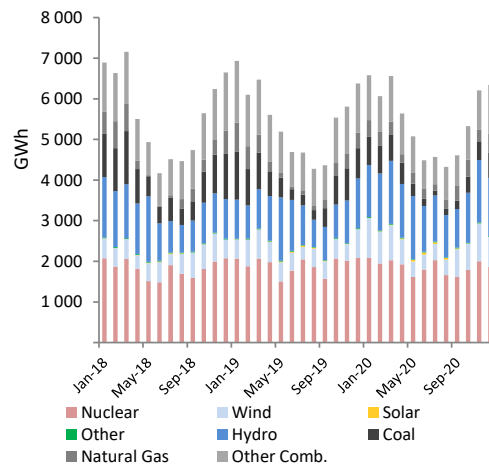
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel

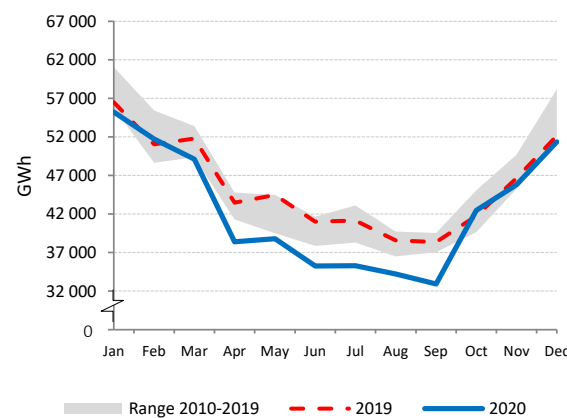


FRANCE

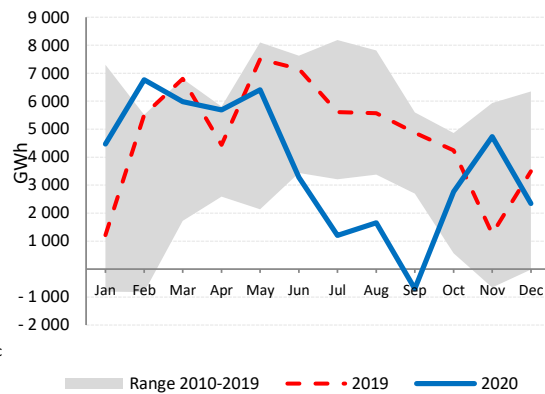
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	6 301	6.6%	10.7%	12.3%	54 092	58 630	-7.7%	10.6%	10.7%
Coal	872	12.0%	105.3%	1.7%	4 677	5 540	-15.6%	0.9%	1.0%
Oil	525	-0.4%	14.8%	1.0%	5 791	5 580	3.8%	1.1%	1.0%
Natural Gas	4 083	10.5%	0.9%	7.9%	34 085	37 088	-8.1%	6.7%	6.8%
Combustible Renewables	633	-12.2%	10.7%	1.2%	7 272	8 155	-10.8%	1.4%	1.5%
Other Combustibles ⁴	189	-	-	0.4%	2 267	2 267	0.0%	0.4%	0.4%
Nuclear	34 432	4.4%	9.1%	67.0%	335 415	379 464	-11.6%	65.7%	69.4%
Hydro	5 685	-28.3%	26.9%	11.1%	64 840	60 818	6.6%	12.7%	11.1%
Wind	4 455	-6.4%	38.9%	8.7%	40 382	34 722	16.3%	7.9%	6.3%
Solar	410	-14.4%	-46.9%	0.8%	14 821	12 225	21.2%	2.9%	2.2%
Geothermal	9	-2.7%	-	0.0%	113	116	-2.7%	0.0%	0.0%
Other Renewables	39	-	-	0.1%	473	473	0.0%	0.1%	0.1%
Non-Specified	44	-	-	0.1%	527	527	0.0%	0.1%	0.1%
RENEWABLES	11 231	-19.4%	23.7%	21.9%	127 901	116 509	9.8%	25.0%	21.3%
NON-RENEWABLES	40 144	5.0%	9.3%	78.1%	382 761	430 466	-11.1%	75.0%	78.7%
TOTAL NET PRODUCTION	51 376	-1.5%	12.2%		510 662	546 975	-6.6%		
+ Imports	2 654	25.6%	77.9%		19 821	15 632	26.8%		
- Exports	4 994	-10.9%	-19.8%		64 409	73 299	-12.1%		
= ELECTRICITY SUPPLIED	49 036	0.8%	19.4%		466 074	489 308	-4.7%		
- Used for pumped storage	641	-11.2%	15.5%		6 230	6 397	-2.6%		
- T&D Losses	4 485	4.9%	24.6%		37 289	38 112	-2.2%		
= ELECTRICITY CONSUMED	43 910	0.6%	18.9%		422 555	444 799	-5.0%		

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

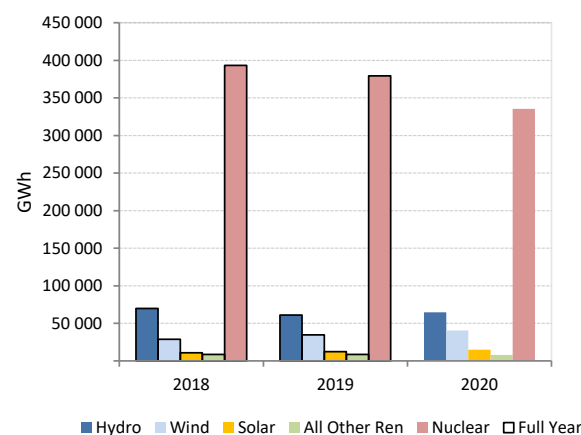
Electricity Production



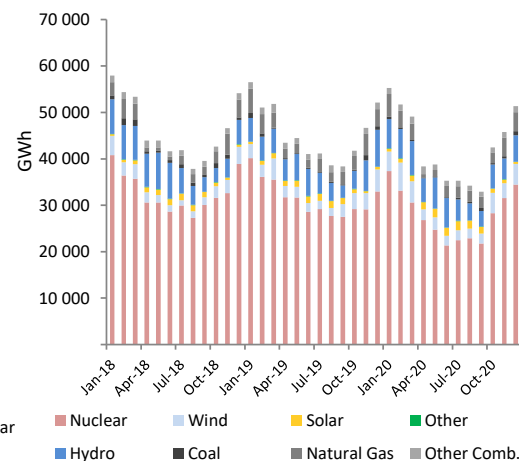
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



GERMANY

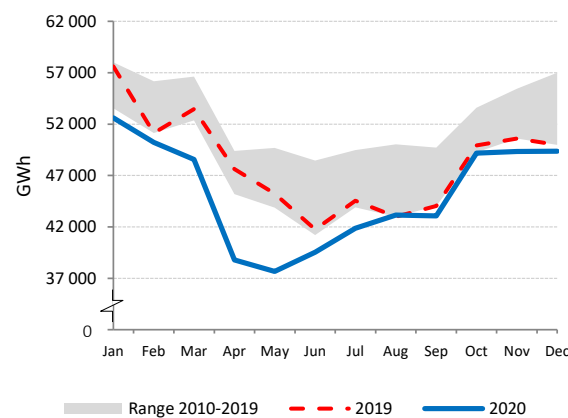
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	29 104	16.1%	-1.7%	59.0%	274 635	310 870	-11.7%	50.5%	53.7%
Coal	15 223	16.7%	-5.6%	30.8%	132 489	169 038	-21.6%	24.4%	29.2%
Oil	321	-11.4%	-8.0%	0.7%	3 826	4 441	-13.8%	0.7%	0.8%
Natural Gas	8 868	26.0%	2.8%	18.0%	85 349	84 421	1.1%	15.7%	14.6%
Combustible Renewables	4 241	2.7%	6.2%	8.6%	47 329	46 694	1.4%	8.7%	8.1%
Other Combustibles	452	-9.4%	-8.9%	0.9%	5 641	6 277	-10.1%	1.0%	1.1%
Nuclear	5 842	-10.4%	22.0%	11.8%	60 917	70 992	-14.2%	11.2%	12.3%
Hydro	1 803	-11.3%	-2.8%	3.7%	24 749	25 507	-3.0%	4.6%	4.4%
Wind	11 654	-23.2%	3.7%	23.6%	129 769	123 545	5.0%	23.9%	21.3%
Solar	778	-25.2%	-54.9%	1.6%	51 802	46 392	11.7%	9.5%	8.0%
Geothermal	15	26.7%	58.3%	0.0%	149	144	3.3%	0.0%	0.0%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	164	37.7%	34.9%	0.3%	1 363	1 413	-3.5%	0.3%	0.2%
RENEWABLES	18 490	-17.4%	-1.8%	37.5%	253 798	242 282	4.8%	46.7%	41.9%
NON-RENEWABLES	30 870	11.9%	1.2%	62.5%	289 585	336 581	-14.0%	53.3%	58.1%
TOTAL NET PRODUCTION	49 360	-1.2%	0.0%		543 383	578 863	-6.1%		
+ Imports	3 814	31.5%	20.5%		48 037	40 126	19.7%		
- Exports	7 209	-3.0%	10.9%		66 915	72 793	-8.1%		
= ELECTRICITY SUPPLIED	45 965	1.1%	-0.1%		524 505	546 196	-4.0%		
- Used for pumped storage	754	0.2%	10.0%		8 887	8 180	8.6%		
- T&D Losses	2 726	1.9%	6.4%		28 022	27 474	2.0%		
= ELECTRICITY CONSUMED	42 485	1.1%	-0.6%		487 596	510 542	-4.5%		

¹ current month to month of last year change

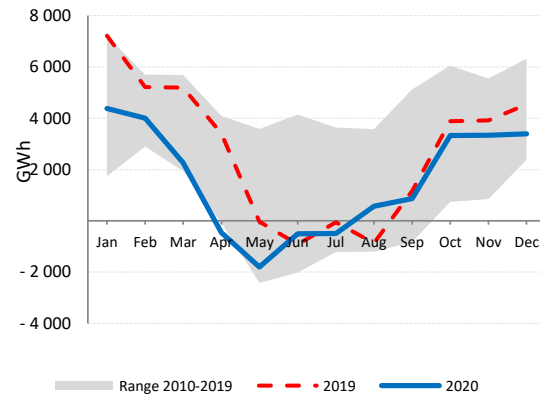
² month-to-month change

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

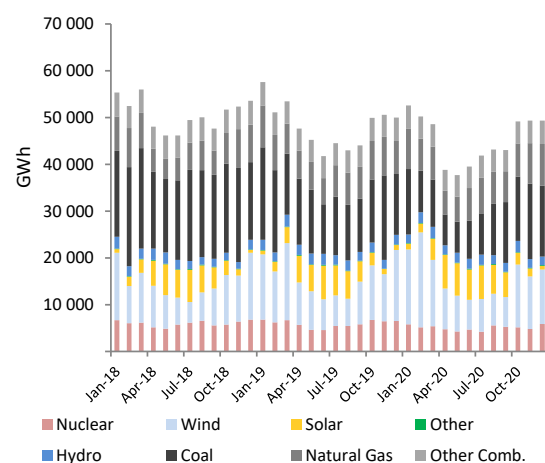
Electricity Production



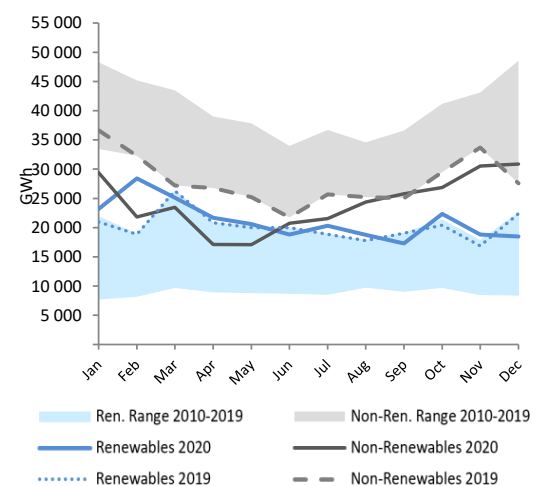
Net Electricity Exports



Electricity Production by Fuel



Renewables and Non-Renewables



GREECE

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	2 552	13.5%	25.4%	64.6%	23 572	28 579	-17.5%	57.3%	64.5%
Coal	928	-17.5%	34.5%	23.5%	6 400	11 654	-45.1%	15.6%	26.3%
Oil	370	-3.6%	18.3%	9.4%	4 465	5 353	-16.6%	10.9%	12.1%
Natural Gas	1 218	78.7%	22.3%	30.8%	12 069	10 907	10.7%	29.3%	24.6%
Combustible Renewables ⁴	13	-62.9%	3.0%	0.3%	359	387	-7.2%	0.9%	0.9%
Other Combustibles ⁴	23	-	-	0.6%	279	279	0.0%	0.7%	0.6%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	260	-30.1%	14.6%	6.6%	3 434	4 044	-15.1%	8.3%	9.1%
Wind	958	25.9%	-3.3%	24.3%	9 263	7 233	28.1%	22.5%	16.3%
Solar	179	-16.1%	-40.7%	4.5%	4 872	4 429	10.0%	11.8%	10.0%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	1 409	2.1%	-8.0%	35.7%	17 928	16 093	11.4%	43.6%	36.3%
NON-RENEWABLES	2 539	14.7%	25.6%	64.3%	23 213	28 193	-17.7%	56.4%	63.7%
TOTAL NET PRODUCTION	3 948	9.9%	11.1%		41 141	44 285	-7.1%		
+ Imports	531	-54.3%	5.7%		9 829	11 067	-11.2%		
- Exports	273	4741.9%	61.6%		967	1 123	-13.9%		
= ELECTRICITY SUPPLIED	4 206	-11.5%	8.2%		50 003	54 229	-7.8%		
- Used for pumped storage	47	151.2%	131.0%		179	73	144.8%		
- T&D Losses	249	7.3%	7.6%		2 410	2 421	-0.4%		
= ELECTRICITY CONSUMED	3 910	-13.1%	7.6%		47 414	51 735	-8.4%		

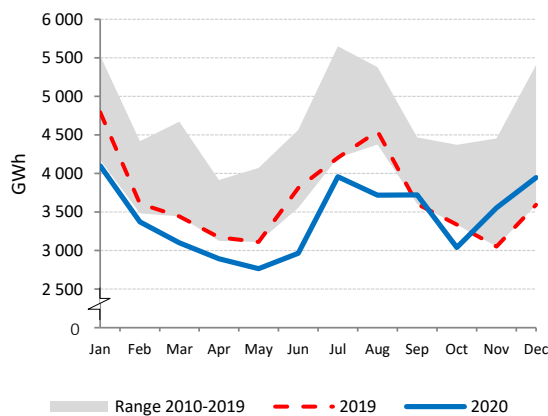
¹ current month to month of last year change

⁴ estimated from annual data

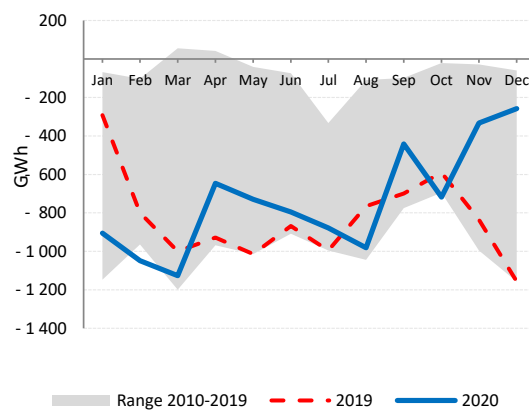
² month-to-month change

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

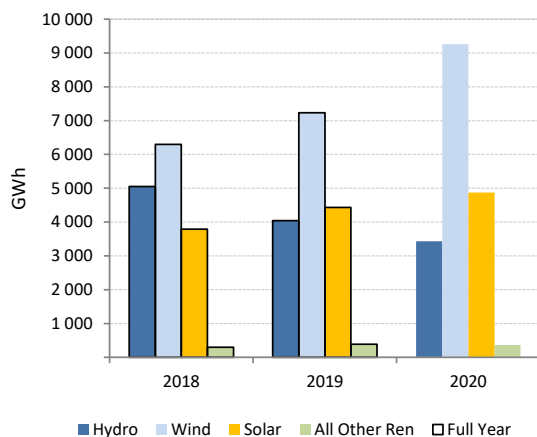
Electricity Production



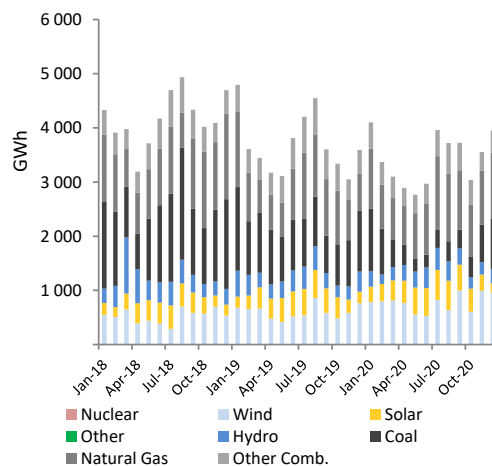
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



HUNGARY

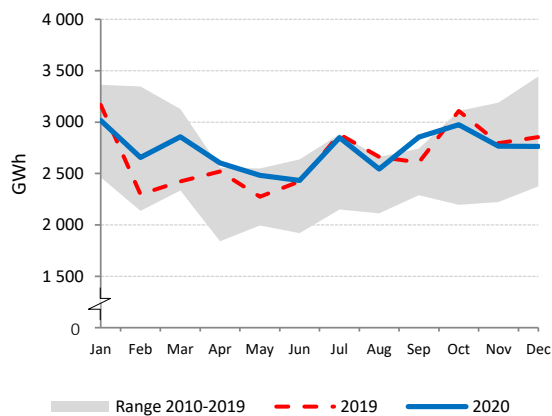
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	1 315	5.4%	-9.5%	47.6%	14 102	14 092	0.1%	43.0%	44.0%
Coal	317	14.1%	4.2%	11.5%	3 548	3 856	-8.0%	10.8%	12.0%
Oil	5	16.0%	41.9%	0.2%	49	65	-24.1%	0.1%	0.2%
Natural Gas	772	-0.5%	-16.3%	28.0%	8 313	7 894	5.3%	25.3%	24.7%
Combustible Renewables	202	20.8%	-1.9%	7.3%	2 007	2 049	-2.1%	6.1%	6.4%
Other Combustibles	19	-13.1%	14.2%	0.7%	185	229	-18.8%	0.6%	0.7%
Nuclear	1 309	-9.0%	12.5%	47.4%	15 173	15 403	-1.5%	46.3%	48.1%
Hydro	20	-16.8%	-8.9%	0.7%	237	213	11.5%	0.7%	0.7%
Wind	54	-35.4%	62.1%	2.0%	629	709	-11.3%	1.9%	2.2%
Solar	54	5.7%	-36.7%	1.9%	2 546	1 485	71.5%	7.8%	4.6%
Geothermal	1	-2.4%	41.0%	0.0%	8	9	-10.3%	0.0%	0.0%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	9	-	-	0.3%	102	102	0.0%	0.3%	0.3%
RENEWABLES	331	1.1%	-4.5%	12.0%	5 428	4 465	21.6%	16.5%	13.9%
NON-RENEWABLES	2 431	-3.8%	0.5%	88.0%	27 370	27 548	-0.6%	83.5%	86.1%
TOTAL NET PRODUCTION	2 762	-3.2%	-0.2%		32 798	32 013	2.5%		
+ Imports	1 808	18.4%	2.9%		19 175	19 853	-3.4%		
- Exports	589	7.2%	3.3%		7 499	7 269	3.2%		
= ELECTRICITY SUPPLIED	3 981	3.9%	0.7%		44 475	44 597	-0.3%		
- Used for pumped storage	-	-	-		-	-	-		
- T&D Losses	304	-7.5%	8.6%		3 125	3 292	-5.1%		
= ELECTRICITY CONSUMED	3 677	5.0%	0.1%		41 350	41 305	0.1%		

¹ current month to month of last year change

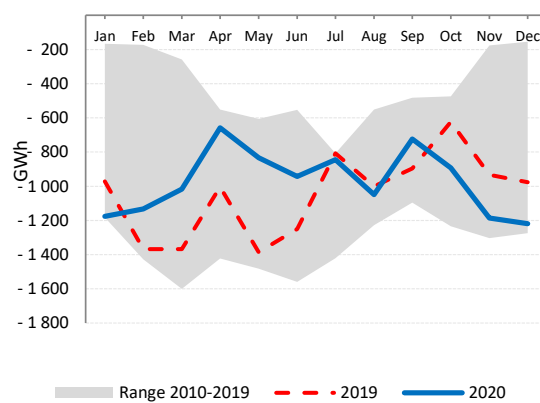
² month-to-month change

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

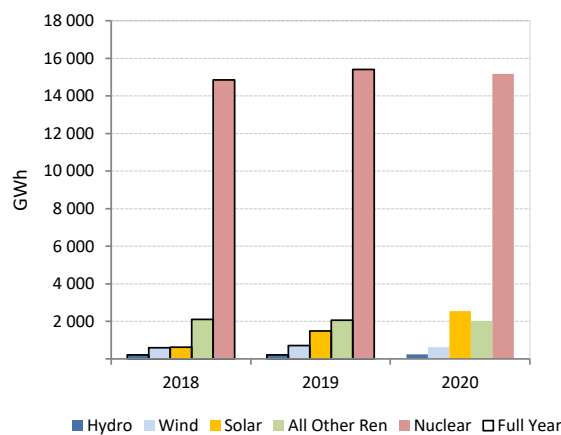
Electricity Production



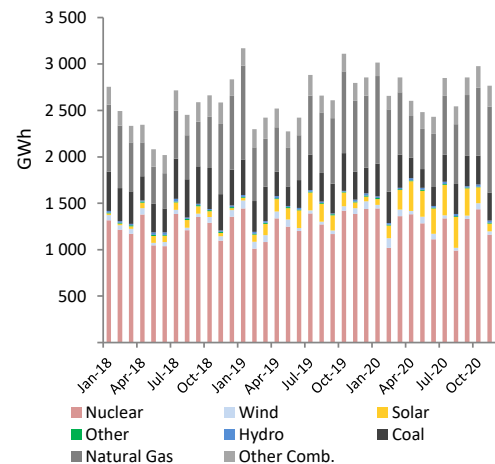
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



ICELAND

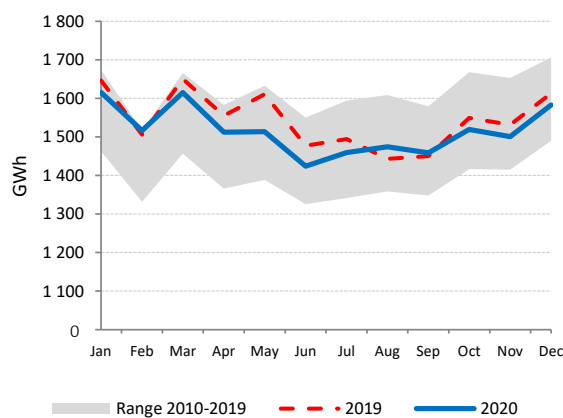
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	0	-86.3%	31.3%	0.0%	3	3	15.2%	0.0%	0.0%
Coal	-	-	-	-	-	-	-	-	-
Oil	0	-86.3%	31.3%	0.0%	3	3	15.2%	0.0%	0.0%
Natural Gas	-	-	-	-	-	-	-	-	-
Combustible Renewables	-	-	-	-	-	-	-	-	-
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1 095	0.2%	6.1%	69.2%	12 456	12 736	-2.2%	68.5%	68.7%
Wind	1	25.5%	40.4%	0.1%	7	7	1.4%	0.0%	0.0%
Solar	-	-	-	-	-	-	-	-	-
Geothermal	487	-6.1%	3.9%	30.7%	5 726	5 781	-1.0%	31.5%	31.2%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	1 583	-1.8%	5.5%	100.0%	18 189	18 524	-1.8%	100.0%	100.0%
NON-RENEWABLES	0	-86.3%	31.3%	0.0%	3	3	15.2%	0.0%	0.0%
TOTAL NET PRODUCTION	1 583	-1.9%	5.5%		18 192	18 527	-1.8%		
+ Imports	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-
= ELECTRICITY SUPPLIED	1 583	-1.9%	5.5%		18 192	18 527	-1.8%		
- Used for pumped storage	-	-	-	-	-	-	-	-	-
- T&D Losses	44	-1.0%	3.2%		519	531	-2.3%		
= ELECTRICITY CONSUMED	1 538	-1.9%	5.5%		17 673	17 996	-1.8%		

¹ current month to month of last year change

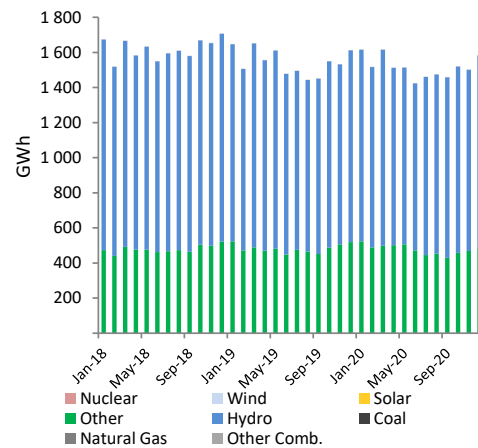
² month-to-month change

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

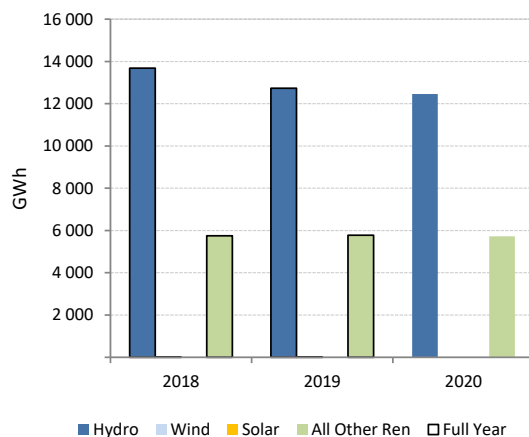
Electricity Production



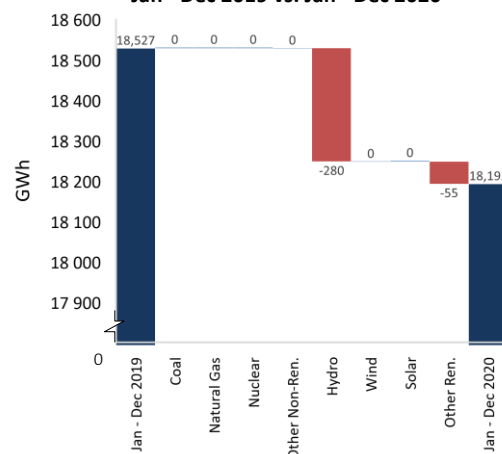
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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



IRELAND

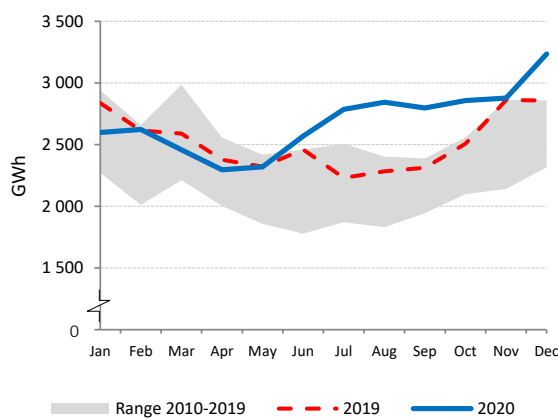
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	1 822	18.8%	9.8%	56.3%	20 253	19 094	6.1%	62.8%	63.1%
Coal	430	50.3%	17.5%	13.3%	3 113	2 352	32.4%	9.6%	7.8%
Oil	36	147.7%	21.4%	1.1%	462	271	70.6%	1.4%	0.9%
Natural Gas	1 278	13.1%	8.4%	39.5%	15 595	15 364	1.5%	48.3%	50.8%
Combustible Renewables	61	-19.3%	3.0%	1.9%	899	823	9.2%	2.8%	2.7%
Other Combustibles	15	-41.5%	-36.9%	0.5%	184	285	-35.4%	0.6%	0.9%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	158	5.5%	3.5%	4.9%	1 206	1 120	7.6%	3.7%	3.7%
Wind	1 255	6.9%	17.8%	38.8%	10 785	10 019	7.6%	33.4%	33.1%
Solar	0	-	-44.3%	0.0%	21	21	0.0%	0.1%	0.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	1 475	5.3%	15.4%	45.6%	12 911	11 984	7.7%	40.0%	39.6%
NON-RENEWABLES	1 761	20.8%	10.1%	54.4%	19 354	18 271	5.9%	60.0%	60.4%
TOTAL NET PRODUCTION	3 235	13.2%	12.4%		32 265	30 255	6.6%		
+ Imports	144	-27.2%	-4.2%		1 765	2 180	-19.0%		
- Exports	180	7.6%	-3.3%		1 928	1 535	25.6%		
= ELECTRICITY SUPPLIED	3 199	10.8%	12.6%		32 102	30 900	3.9%		
- Used for pumped storage	45	-2.9%	55.1%		536	478	12.0%		
- T&D Losses	218	4.0%	8.9%		2 255	2 274	-0.8%		
= ELECTRICITY CONSUMED	2 936	11.5%	12.4%		29 312	28 148	4.1%		

¹ current month to month of last year change

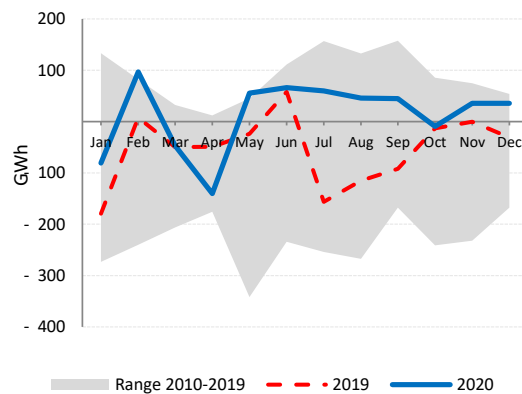
² month-to-month change

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

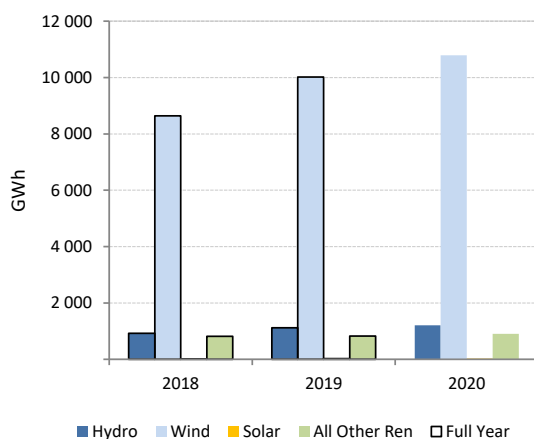
Electricity Production



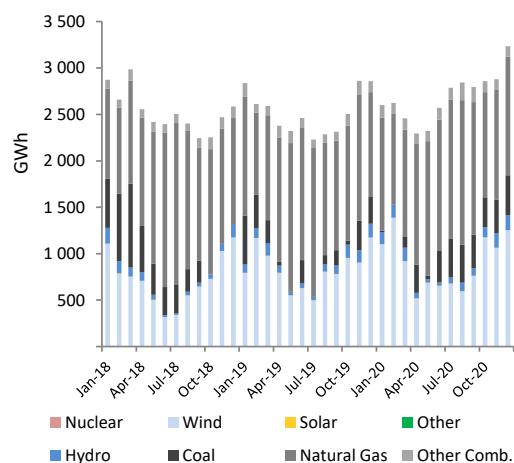
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



ITALY

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	14 669	4.4%	-4.2%	69.6%	173 497	186 748	-7.1%	63.9%	65.8%
Coal	1 586	5.4%	-4.5%	7.5%	18 707	20 345	-8.1%	6.9%	7.2%
Oil	758	5.4%	-4.5%	3.6%	8 937	9 719	-8.1%	3.3%	3.4%
Natural Gas	10 573	5.4%	-4.5%	50.2%	124 712	135 632	-8.1%	46.0%	47.8%
Combustible Renewables	1 571	-2.8%	-1.1%	7.5%	19 004	18 727	1.5%	7.0%	6.6%
Other Combustibles	181	5.4%	-4.5%	0.9%	2 138	2 325	-8.1%	0.8%	0.8%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	3 332	-29.1%	-3.2%	15.8%	47 716	47 590	0.3%	17.6%	16.8%
Wind	1 408	-41.9%	33.2%	6.7%	17 946	20 034	-10.4%	6.6%	7.1%
Solar	1 141	29.6%	-4.9%	5.4%	25 952	23 320	11.3%	9.6%	8.2%
Geothermal	477	3.5%	3.3%	2.3%	5 648	5 689	-0.7%	2.1%	2.0%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	47	-	-	0.2%	569	569	0.0%	0.2%	0.2%
RENEWABLES	7 930	-21.3%	2.3%	37.6%	116 267	115 360	0.8%	42.9%	40.6%
NON-RENEWABLES	13 145	5.4%	-4.5%	62.4%	155 062	168 590	-8.0%	57.1%	59.4%
TOTAL NET PRODUCTION	21 075	-6.6%	-2.1%		271 328	283 950	-4.4%		
+ Imports	5 707	44.3%	25.1%		41 635	43 975	-5.3%		
- Exports	443	-20.1%	20.0%		7 471	5 834	28.1%		
= ELECTRICITY SUPPLIED	26 340	1.5%	2.4%		305 492	322 091	-5.2%		
- Used for pumped storage	266	-6.5%	37.6%		2 568	2 469	4.0%		
- T&D Losses ⁵	1 455	1.0%	2.7%		17 005	17 818	-4.6%		
= ELECTRICITY CONSUMED	24 619	1.6%	2.1%		285 919	301 804	-5.3%		

¹ current month to month of last year change

Conventional Thermal breakdown is estimated from annual data

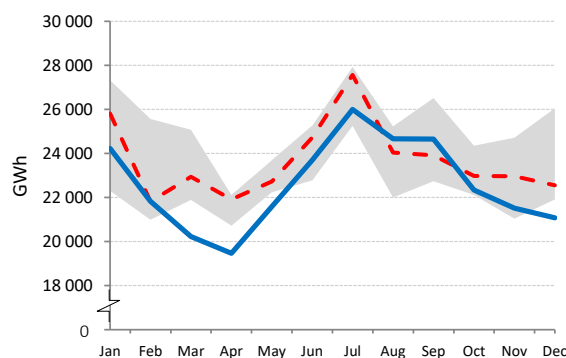
² month-to-month change

December 2020 is estimated by the IEA Secretariat

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

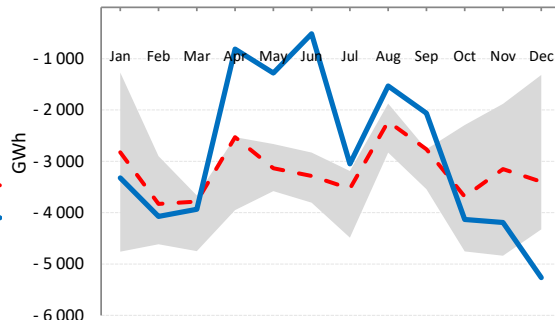
⁵ estimated

Electricity Production



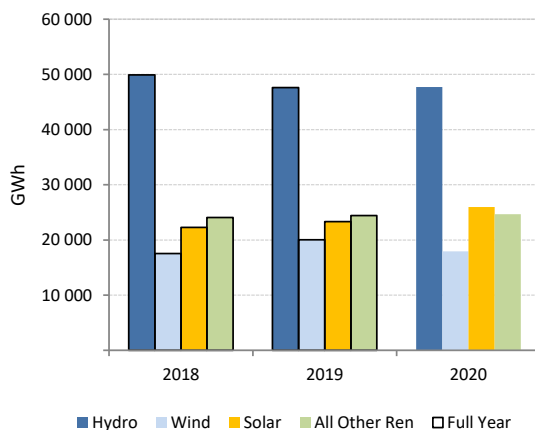
Range 2010-2019 - - - 2019 — 2020

Net Electricity Exports



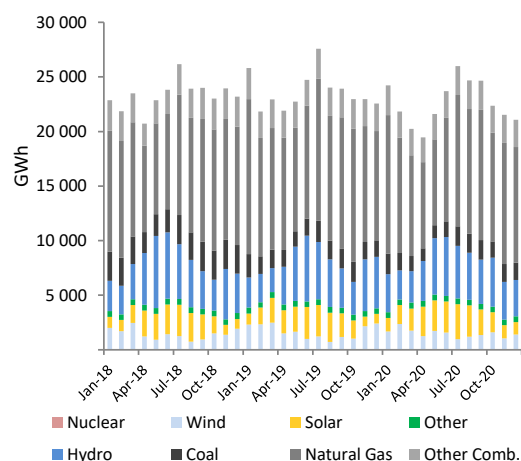
Range 2010-2019 - - - 2019 — 2020

Low-carbon Power Jan - Dec



Hydro Wind Solar All Other Ren Full Year

Electricity Production by Fuel



Nuclear Wind Solar Other
Hydro Coal Natural Gas Other Comb.

JAPAN

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	69 973	2.5%	17.0%	82.7%	710 541	736 442	-3.5%	74.5%	74.6%
Coal	27 825	-2.4%	13.7%	32.9%	297 106	309 566	-4.0%	31.1%	31.4%
Oil	3 405	-25.5%	34.8%	4.0%	35 166	49 739	-29.3%	3.7%	5.0%
Natural Gas	33 266	5.4%	19.7%	39.3%	322 857	339 604	-4.9%	33.8%	34.4%
Combustible Renewables	2 267	31.3%	8.3%	2.7%	24 365	18 703	30.3%	2.6%	1.9%
Other Combustibles	3 211	68.8%	8.7%	3.8%	31 048	18 829	64.9%	3.3%	1.9%
Nuclear	722	-86.3%	-39.7%	0.9%	40 812	64 805	-37.0%	4.3%	6.6%
Hydro	5 785	3.4%	21.4%	6.8%	89 819	83 849	7.1%	9.4%	8.5%
Wind	1 037	21.9%	14.4%	1.2%	8 659	7 466	16.0%	0.9%	0.8%
Solar	5 039	21.2%	-20.1%	6.0%	81 947	71 534	14.6%	8.6%	7.2%
Geothermal	244	9.5%	2.8%	0.3%	2 594	2 445	6.1%	0.3%	0.2%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	1 791	3.8%	14.4%	2.1%	19 728	20 245	-2.5%	2.1%	2.1%
RENEWABLES	14 372	14.5%	0.5%	17.0%	207 383	183 997	12.7%	21.7%	18.6%
NON-RENEWABLES	70 220	-4.5%	16.1%	83.0%	746 717	802 788	-7.0%	78.3%	81.4%
TOTAL NET PRODUCTION	84 592	-1.7%	13.1%		954 100	986 785	-3.3%		
+ Imports	-	-	-		-	-	-		
- Exports	-	-	-		-	-	-		
= ELECTRICITY SUPPLIED	84 592	-1.7%	13.1%		954 100	986 785	-3.3%		
- Used for pumped storage	716	-1.4%	4.4%		11 163	10 554	5.8%		
- T&D Losses	3 811	-1.7%	13.1%		42 984	44 129	-2.6%		
= ELECTRICITY CONSUMED	80 064	-1.7%	13.2%		899 953	932 102	-3.4%		

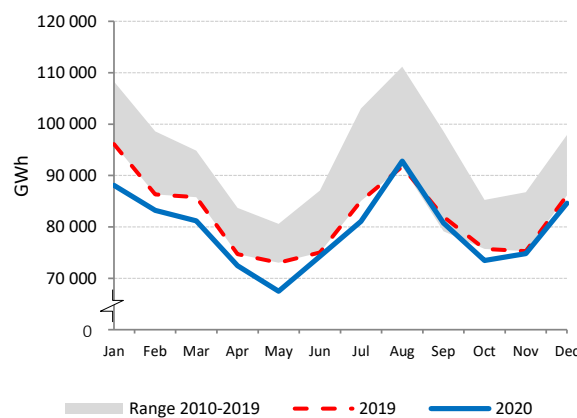
¹ current month to month of last year change

December 2020 is estimated by the IEA Secretariat

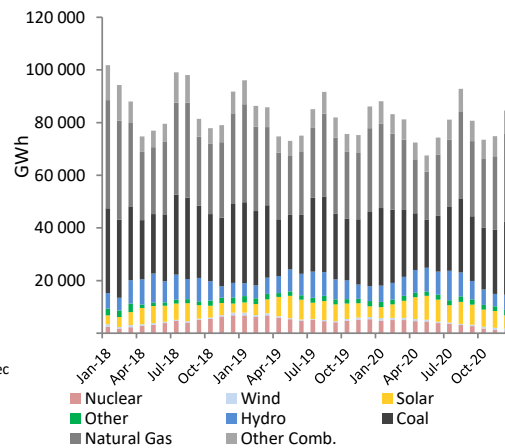
² month-to-month change

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

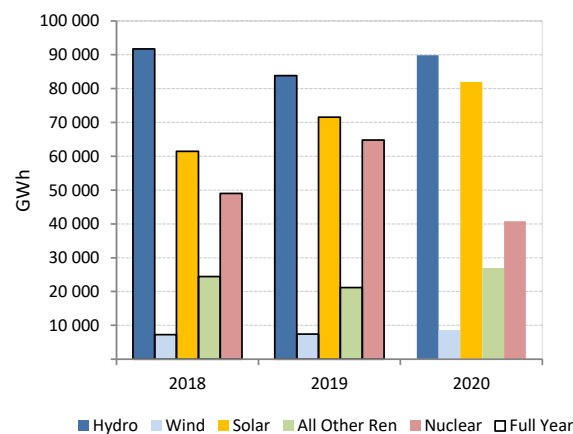
Electricity Production



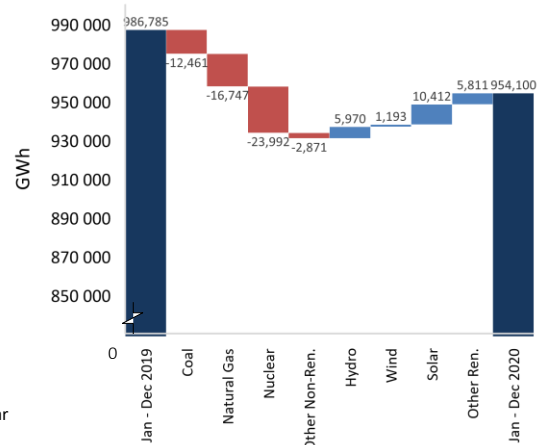
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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



KOREA

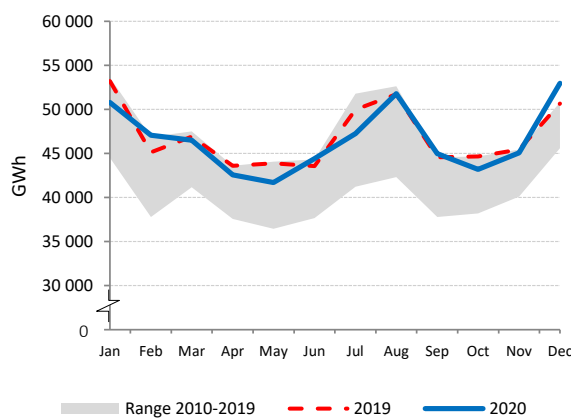
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	36 167	-5.2%	22.9%	68.3%	368 780	399 842	-7.8%	66.1%	71.0%
Coal	16 658	-16.7%	9.6%	31.5%	206 974	239 517	-13.6%	37.1%	42.5%
Oil	869	-31.3%	-18.3%	1.6%	6 277	9 054	-30.7%	1.1%	1.6%
Natural Gas	16 386	1.7%	30.1%	30.9%	143 791	142 204	1.1%	25.8%	25.2%
Combustible Renewables	2 077	183.9%	295.7%	3.9%	10 815	8 354	29.5%	1.9%	1.5%
Other Combustibles	177	183.9%	295.7%	0.3%	923	713	29.5%	0.2%	0.1%
Nuclear	14 319	36.2%	7.2%	27.0%	152 304	138 679	9.8%	27.3%	24.6%
Hydro	493	-0.7%	16.6%	0.9%	7 233	6 204	16.6%	1.3%	1.1%
Wind	403	17.7%	24.1%	0.8%	3 162	2 679	18.0%	0.6%	0.5%
Solar	1 286	44.6%	-4.8%	2.4%	18 190	13 017	39.7%	3.3%	2.3%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	64	57.7%	4.1%	0.1%	636	474	34.1%	0.1%	0.1%
Non-Specified	233	17.0%	79.4%	0.4%	7 975	2 385	234.4%	1.4%	0.4%
RENEWABLES	4 324	72.9%	61.0%	8.2%	40 037	30 729	30.3%	7.2%	5.5%
NON-RENEWABLES	48 642	1.0%	14.7%	91.8%	518 244	532 552	-2.7%	92.8%	94.5%
TOTAL NET PRODUCTION	52 965	4.6%	17.5%		558 280	563 281	-0.9%		
+ Imports	-	-	-		-	-	-		
- Exports	-	-	-		-	-	-		
= ELECTRICITY SUPPLIED	52 965	4.6%	17.5%		558 280	563 281	-0.9%		
- Used for pumped storage ⁴	399	0.5%	36.0%		4 315	4 588	-5.9%		
- T&D Losses ⁴	1 787	4.6%	17.5%		18 832	19 001	-0.9%		
= ELECTRICITY CONSUMED	50 779	4.6%	17.4%		535 134	539 693	-0.8%		

¹ current month to month of last year change ⁴ estimated

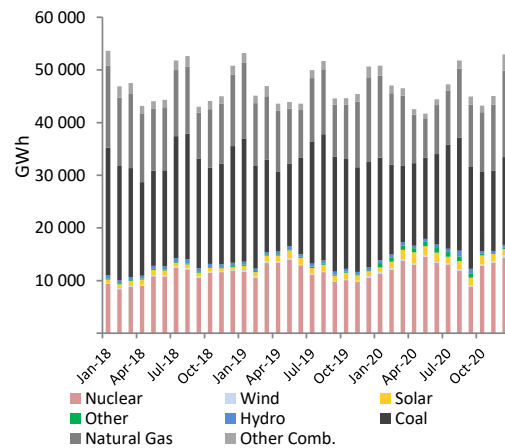
² month-to-month change

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

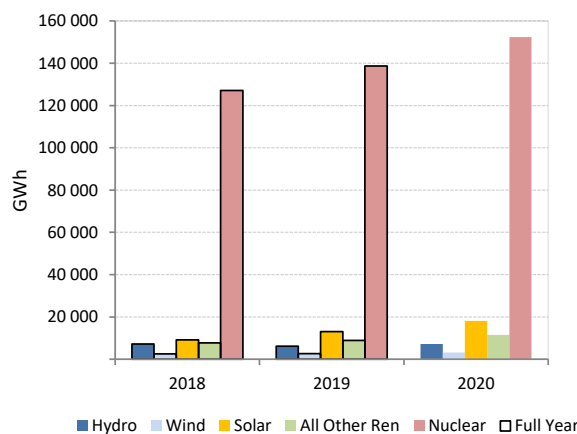
Electricity Production



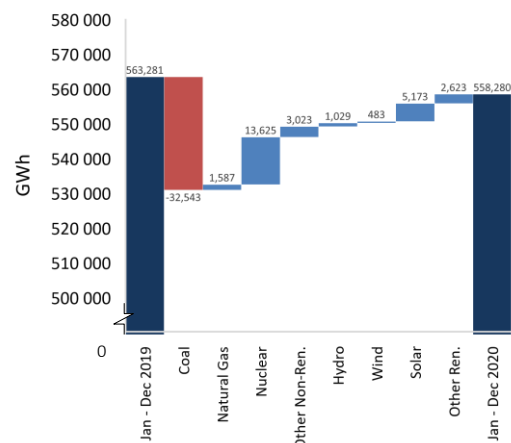
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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



LATVIA

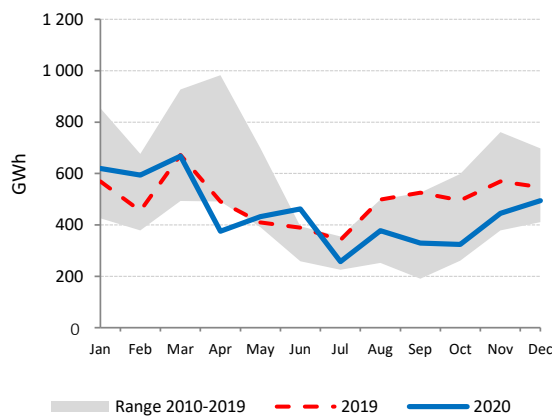
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	302	19.9%	7.7%	61.1%	2 612	3 711	-29.6%	48.6%	62.2%
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural Gas	228	28.3%	8.4%	46.1%	1 821	2 886	-36.9%	33.9%	48.4%
Combustible Renewables	74	-	5.7%	15.0%	791	825	-4.1%	14.7%	13.8%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	177	-35.6%	19.6%	35.8%	2 586	2 096	23.4%	48.1%	35.2%
Wind	15	-25.0%	-11.8%	3.0%	177	152	15.8%	3.3%	2.6%
Solar	0	-	-10.2%	0.0%	3	3	0.0%	0.1%	0.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	266	-27.9%	13.2%	53.9%	3 556	3 076	15.6%	66.1%	51.6%
NON-RENEWABLES	228	28.3%	8.4%	46.1%	1 821	2 886	-36.9%	33.9%	48.4%
TOTAL NET PRODUCTION	494	-9.7%	10.9%		5 377	5 962	-9.8%		
+ Imports	305	-8.4%	10.9%		4 172	4 611	-9.5%		
- Exports	153	-36.5%	27.5%		2 545	3 493	-27.1%		
= ELECTRICITY SUPPLIED	646	1.1%	7.6%		7 004	7 080	-1.1%		
- Used for pumped storage	-	-	-		-	-	-		
- T&D Losses ⁴	32	-9.2%	10.9%		386	427	-9.7%		
= ELECTRICITY CONSUMED	614	1.7%	7.4%		6 618	6 653	-0.5%		

¹ current month to month of last year change ⁴ estimated

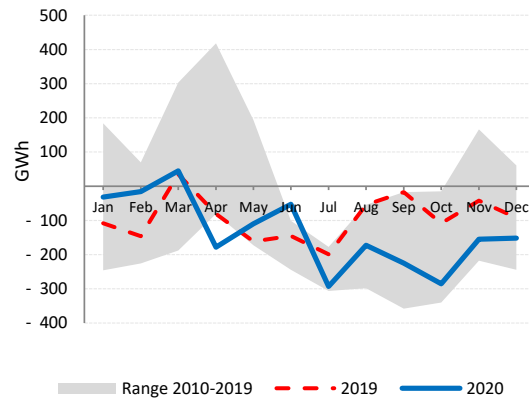
² month-to-month change

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

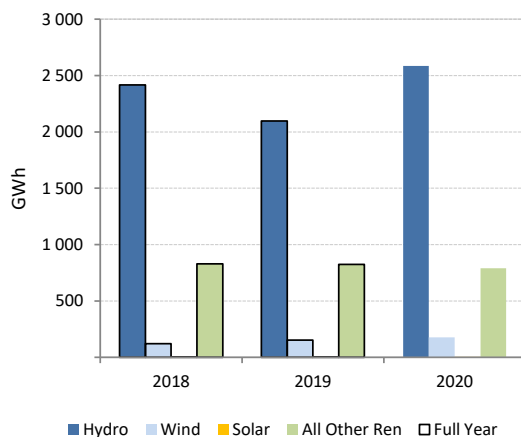
Electricity Production



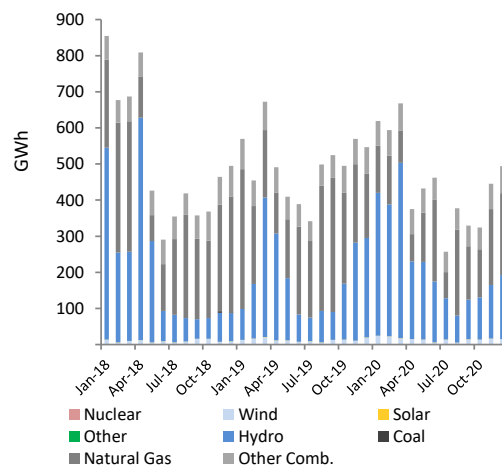
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



LITHUANIA

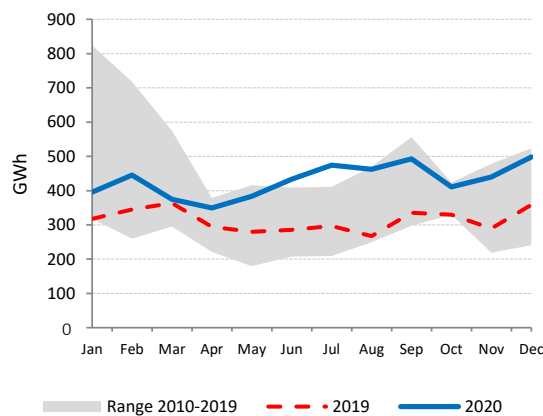
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	223	128.9%	17.4%	44.8%	2 266	1 050	115.8%	43.9%	27.9%
Coal	-	-	-	-	-	-	-	-	-
Oil	9	10.5%	21.8%	1.8%	85	59	44.9%	1.6%	1.6%
Natural Gas	155	404.8%	23.9%	31.1%	1 575	455	246.5%	30.5%	12.1%
Combustible Renewables	52	2.4%	-0.1%	10.5%	531	463	14.7%	10.3%	12.3%
Other Combustibles	7	-7.2%	29.9%	1.4%	76	74	1.7%	1.5%	2.0%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	91	28.4%	-4.3%	18.3%	1 061	927	14.5%	20.6%	24.6%
Wind	170	-3.2%	22.1%	34.0%	1 552	1 490	4.2%	30.1%	39.6%
Solar	1	-9.3%	-47.4%	0.1%	83	84	-1.5%	1.6%	2.2%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	14	-3.8%	-1.6%	2.7%	196	213	-8.0%	3.8%	5.7%
RENEWABLES	314	5.3%	9.0%	62.9%	3 227	2 964	8.9%	62.5%	78.7%
NON-RENEWABLES	185	204.1%	21.7%	37.1%	1 932	801	141.2%	37.5%	21.3%
TOTAL NET PRODUCTION	498	39.0%	13.4%		5 159	3 765	37.0%		
+ Imports	1 069	-6.4%	5.4%		12 013	13 268	-9.5%		
- Exports	337	-0.2%	17.1%		4 105	3 924	4.6%		
= ELECTRICITY SUPPLIED	1 230	5.8%	5.6%		13 067	13 108	-0.3%		
- Used for pumped storage	103	63.0%	-0.6%		1 061	810	31.0%		
- T&D Losses	67	111.8%	-15.3%		925	886	4.4%		
= ELECTRICITY CONSUMED	1 060	-0.7%	7.9%		11 081	11 412	-2.9%		

¹ current month to month of last year change

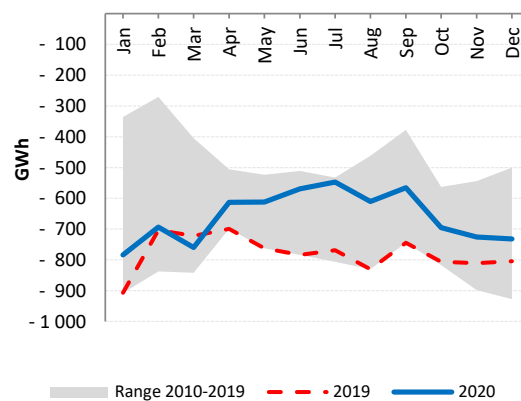
² month-to-month change

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

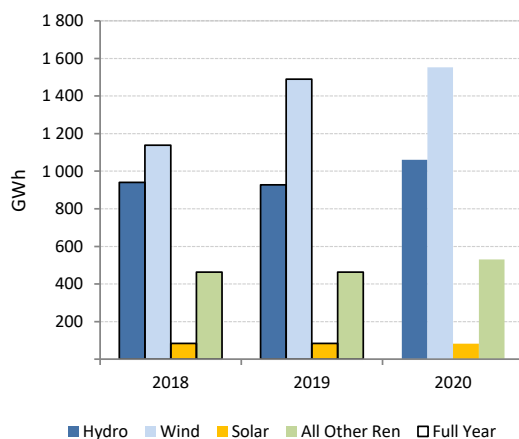
Electricity Production



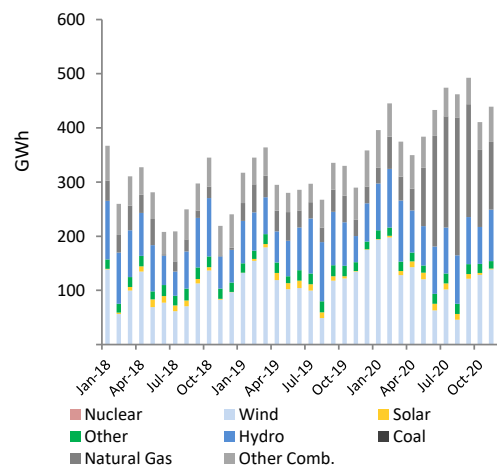
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



LUXEMBOURG

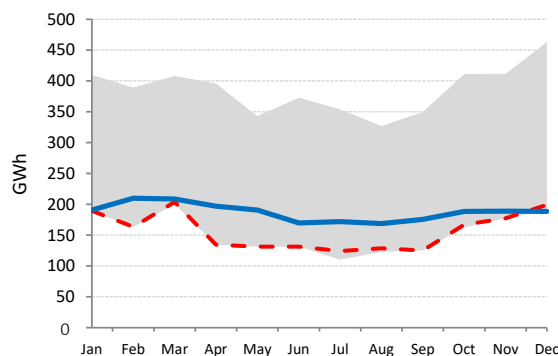
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	60	8.2%	-3.6%	31.5%	607	528	15.0%	27.0%	28.1%
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural Gas	19	-3.3%	-22.2%	9.9%	169	185	-8.4%	7.5%	9.8%
Combustible Renewables	35	19.1%	14.5%	18.5%	372	268	38.7%	16.5%	14.3%
Other Combustibles	6	-6.5%	-18.4%	3.2%	66	75	-11.8%	2.9%	4.0%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	89	-17.0%	17.0%	46.9%	1 087	938	15.9%	48.3%	50.0%
Wind	35	0.4%	-25.0%	18.7%	349	281	24.0%	15.5%	15.0%
Solar	5	123.6%	22.1%	2.8%	206	130	58.4%	9.2%	6.9%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	164	-5.5%	4.1%	87.0%	2 014	1 617	24.5%	89.5%	86.2%
NON-RENEWABLES	25	-4.1%	-21.3%	13.0%	235	260	-9.4%	10.5%	13.8%
TOTAL NET PRODUCTION	189	-5.3%	-0.1%		2 249	1 877	19.8%		
+ Imports	542	2.1%	-4.8%		6 543	6 818	-4.0%		
- Exports	86	-6.3%	7.1%		1 079	939	14.9%		
= ELECTRICITY SUPPLIED	644	1.0%	-4.9%		7 714	7 756	-0.5%		
- Used for pumped storage	108	-14.8%	17.3%		1 406	1 203	16.9%		
- T&D Losses	13	4.9%	-8.4%		150	156	-3.9%		
= ELECTRICITY CONSUMED	524	4.9%	-8.4%		6 158	6 396	-3.7%		

¹ current month to month of last year change

² month-to-month change

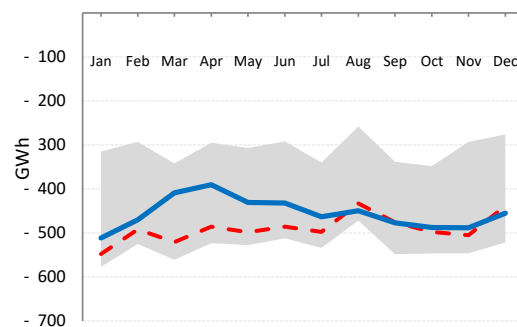
³ year-to-date compared to same period last year

Electricity Production



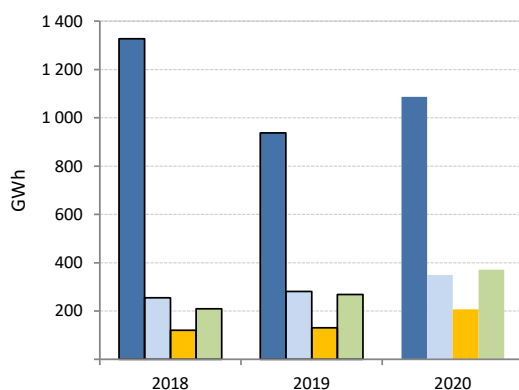
Range 2010-2019 - - - 2019 — 2020

Net Electricity Exports



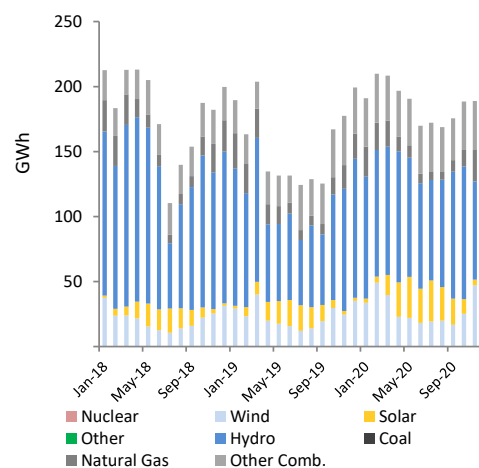
Range 2010-2019 - - - 2019 — 2020

Low-carbon Power Jan - Dec



Hydro Wind Solar All Other Ren Full Year

Electricity Production by Fuel



Nuclear Wind Solar
Other Hydro Coal
Natural Gas Other Comb.

MEXICO

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	18 767	4.3%	-3.3%	76.3%	234 013	252 920	-7.5%	76.2%	79.9%
Coal	1 127	-25.7%	-5.6%	4.6%	16 306	28 131	-42.0%	5.3%	8.9%
Oil	2 551	7.0%	-3.1%	10.4%	31 479	32 503	-3.2%	10.2%	10.3%
Natural Gas	14 866	7.0%	-3.1%	60.4%	183 472	189 440	-3.2%	59.7%	59.9%
Combustible Renewables	186	7.0%	-3.1%	0.8%	2 296	2 371	-3.2%	0.7%	0.7%
Other Combustibles	37	7.0%	-3.1%	0.2%	459	474	-3.2%	0.1%	0.1%
Nuclear	586	-44.6%	-16.4%	2.4%	11 093	11 111	-0.2%	3.6%	3.5%
Hydro	1 835	40.7%	1.0%	7.5%	26 956	23 713	13.7%	8.8%	7.5%
Wind	2 217	33.3%	14.0%	9.0%	19 749	16 763	17.8%	6.4%	5.3%
Solar	825	42.4%	-5.0%	3.4%	10 547	6 544	61.2%	3.4%	2.1%
Geothermal	381	-10.6%	8.9%	1.5%	4 818	5 330	-9.6%	1.6%	1.7%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	5 443	31.3%	5.3%	22.1%	64 366	54 720	17.6%	21.0%	17.3%
NON-RENEWABLES	19 167	1.5%	-3.8%	77.9%	242 810	261 660	-7.2%	79.0%	82.7%
TOTAL NET PRODUCTION	24 611	6.9%	-1.9%		307 177	316 381	-2.9%		
+ Imports	59	54.0%	-22.9%		570	1 590	-64.2%		
- Exports	34	-1.0%	-9.3%		419	963	-56.4%		
= ELECTRICITY SUPPLIED	24 636	6.9%	-1.9%		307 327	317 008	-3.1%		
- Used for pumped storage	-	-	-		-	-	-		
- T&D Losses ⁴	3 384	6.9%	-2.0%		42 216	43 619	-3.2%		
= ELECTRICITY CONSUMED	21 252	7.0%	-1.9%		265 111	273 389	-3.0%		

¹ current month to month of last year change

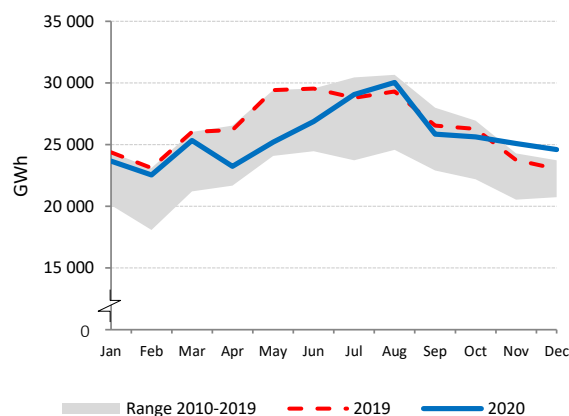
Conventional Thermal breakdown is estimated from annual data

² month-to-month change

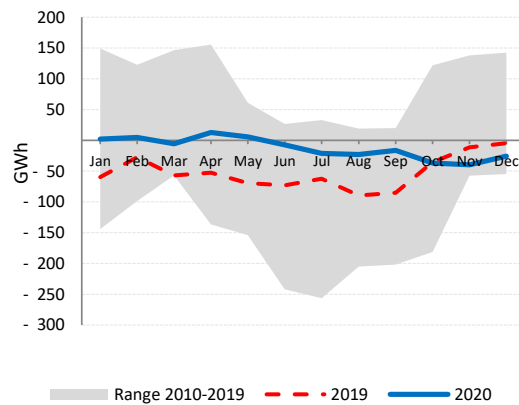
⁴ estimated

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

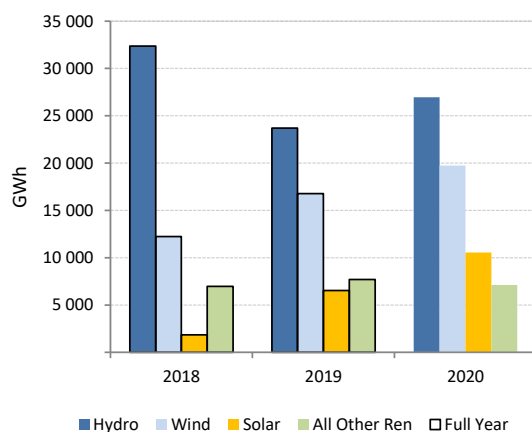
Electricity Production



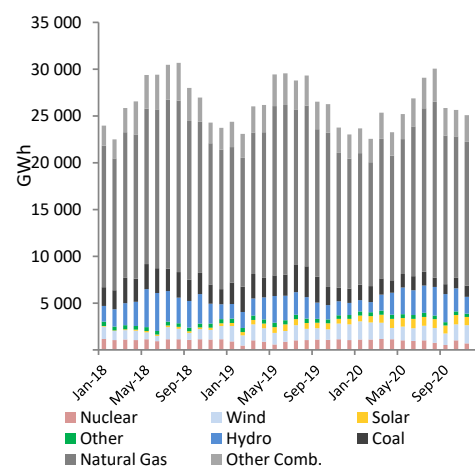
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel

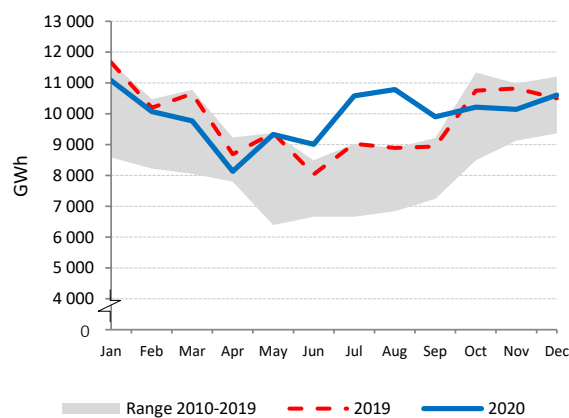


NETHERLANDS

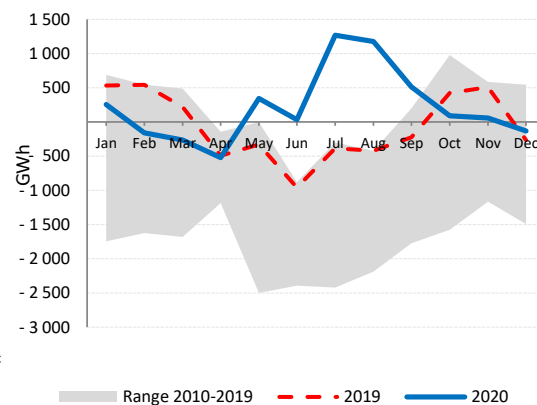
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	8 265	-3.1%	4.2%	77.9%	91 405	96 358	-5.1%	76.4%	82.0%
Coal	1 085	-45.8%	0.5%	10.2%	9 645	19 409	-50.3%	8.1%	16.5%
Oil	84	-21.1%	19.2%	0.8%	1 161	1 364	-14.9%	1.0%	1.2%
Natural Gas	5 966	9.7%	3.7%	56.2%	69 466	68 175	1.9%	58.1%	58.0%
Combustible Renewables	943	16.9%	9.6%	8.9%	8 990	5 624	59.9%	7.5%	4.8%
Other Combustibles	188	7.7%	8.5%	1.8%	2 144	1 785	20.1%	1.8%	1.5%
Nuclear	357	-0.8%	18.6%	3.4%	3 865	3 700	4.4%	3.2%	3.1%
Hydro	7	-11.5%	162.6%	0.1%	46	74	-37.6%	0.0%	0.1%
Wind	1 796	24.0%	11.2%	16.9%	15 339	11 508	33.3%	12.8%	9.8%
Solar	133	20.3%	-44.1%	1.3%	8 392	5 335	57.3%	7.0%	4.5%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	50	-	-	0.5%	596	596	0.0%	0.5%	0.5%
RENEWABLES	2 879	21.3%	6.0%	27.1%	32 767	22 541	45.4%	27.4%	19.2%
NON-RENEWABLES	7 729	-4.9%	4.1%	72.9%	86 876	95 030	-8.6%	72.6%	80.8%
TOTAL NET PRODUCTION	10 608	1.0%	4.6%		119 643	117 572	1.8%		
+ Imports	1 727	-12.7%	-3.5%		19 774	20 403	-3.1%		
- Exports	1 597	-6.7%	-13.7%		22 433	19 548	14.8%		
= ELECTRICITY SUPPLIED	10 739	-0.3%	6.5%		116 984	118 427	-1.2%		
- Used for pumped storage	-	-	-		-	-	-		
- T&D Losses	438	-4.9%	4.7%		4 789	5 059	-5.3%		
= ELECTRICITY CONSUMED	10 301	-0.1%	6.6%		112 196	113 368	-1.0%		

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

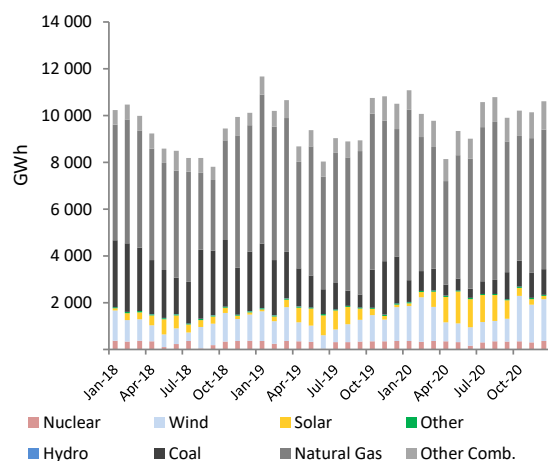
Electricity Production



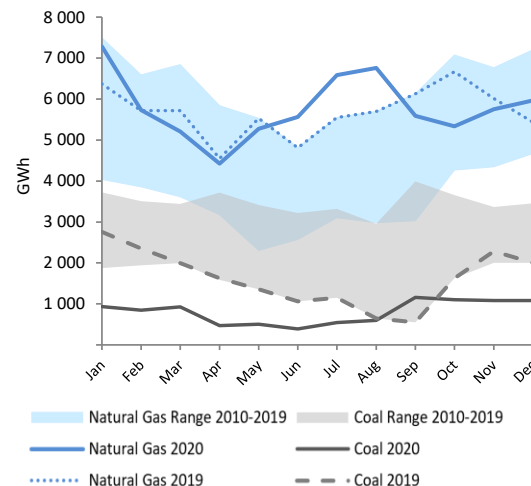
Net Electricity Exports



Electricity Production by Fuel



Natural Gas vs. Coal



NEW ZEALAND

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	740	66.1%	26.5%	20.4%	9 101	8 192	11.1%	21.1%	18.8%
Coal	137	164.8%	-26.4%	3.8%	2 237	2 118	5.6%	5.2%	4.9%
Oil	1	80.2%	-2.6%	0.0%	16	4	295.4%	0.0%	0.0%
Natural Gas	552	63.2%	55.5%	15.2%	6 258	5 495	13.9%	14.5%	12.6%
Combustible Renewables	51	-8.2%	16.0%	1.4%	590	575	2.6%	1.4%	1.3%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	2 008	-10.1%	-1.3%	55.3%	23 728	25 321	-6.3%	55.1%	58.2%
Wind	188	-4.7%	-12.6%	5.2%	2 301	2 232	3.1%	5.3%	5.1%
Solar	13	12.4%	3.9%	0.4%	137	126	8.2%	0.3%	0.3%
Geothermal	674	12.5%	11.0%	18.6%	7 719	7 586	1.8%	17.9%	17.4%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	4	-	-	0.1%	45	45	0.0%	0.1%	0.1%
RENEWABLES	2 935	-5.3%	0.7%	80.9%	34 475	35 840	-3.8%	80.1%	82.4%
NON-RENEWABLES	693	75.9%	27.2%	19.1%	8 557	7 663	11.7%	19.9%	17.6%
TOTAL NET PRODUCTION	3 628	3.9%	4.9%		43 032	43 503	-1.1%		
+ Imports	-	-	-		-	-	-		
- Exports	-	-	-		-	-	-		
= ELECTRICITY SUPPLIED	3 628	3.9%	4.9%		43 032	43 503	-1.1%		
- Used for pumped storage	-	-	-		-	-	-		
- T&D Losses	210	-15.1%	-		2 704	2 951	-8.4%		
= ELECTRICITY CONSUMED	3 419	5.3%	5.2%		40 328	40 552	-0.6%		

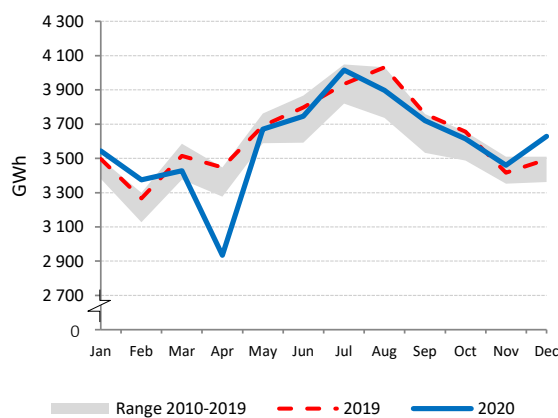
¹ current month to month of last year change

December 2020 is estimated by the IEA Secretariat

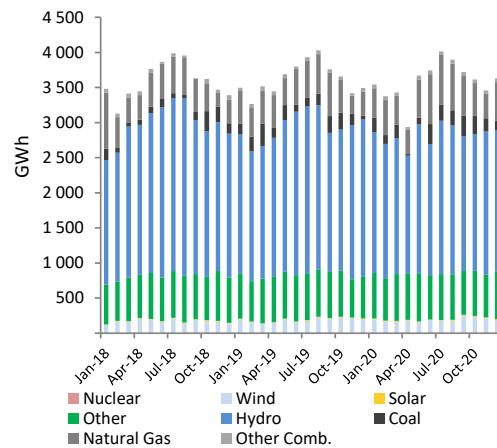
² month-to-month change

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

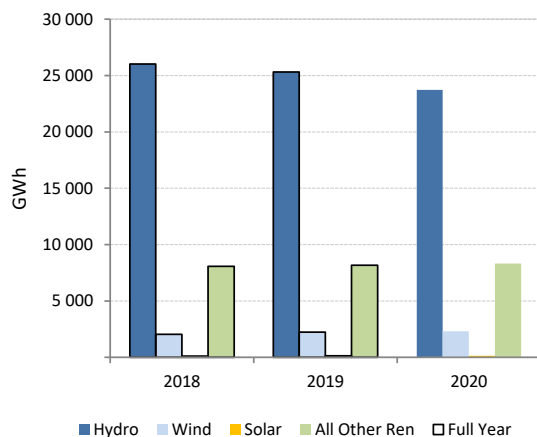
Electricity Production



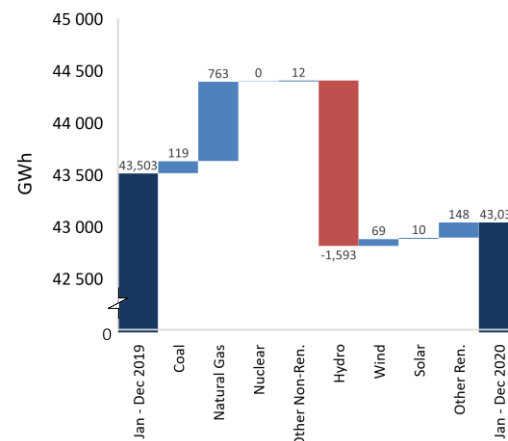
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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



NORWAY

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	124	-51.6%	-3.5%	0.8%	2 409	2 940	-18.1%	1.6%	2.2%
Coal ⁴	21	38.4%	-2.2%	0.1%	185	159	15.9%	0.1%	0.1%
Oil ⁴	2	38.5%	-2.1%	0.0%	20	17	15.9%	0.0%	0.0%
Natural Gas	-	-	-	-	1 629	2 324	-29.9%	1.1%	1.7%
Combustible Renewables	19	-13.1%	-7.4%	0.1%	254	247	2.7%	0.2%	0.2%
Other Combustibles	82	375.2%	-2.9%	0.5%	322	193	66.5%	0.2%	0.1%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	14 737	30.4%	23.2%	90.9%	141 687	125 889	12.5%	92.0%	93.5%
Wind	1 354	71.9%	1.6%	8.3%	9 871	5 514	79.0%	6.4%	4.1%
Solar	0	-	-30.8%	0.0%	13	13	0.0%	0.0%	0.0%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	310	-	-	0.2%
RENEWABLES	16 110	33.0%	21.0%	99.4%	151 824	131 663	15.3%	98.6%	97.8%
NON-RENEWABLES	105	-59.6%	-2.8%	0.6%	2 155	3 003	-28.2%	1.4%	2.2%
TOTAL NET PRODUCTION	16 215	31.1%	20.8%	-	153 979	134 666	14.3%	-	-
+ Imports	369	-80.0%	-26.9%	-	4 496	12 353	-63.6%	-	-
- Exports	3 063	381.3%	56.5%	-	24 968	12 309	102.8%	-	-
= ELECTRICITY SUPPLIED	13 520	-0.4%	13.0%	-	133 507	134 710	-0.9%	-	-
- Used for pumped storage	23	14.1%	-55.7%	-	1 132	1 262	-10.3%	-	-
- T&D Losses	995	31.1%	20.8%	-	9 457	8 257	14.5%	-	-
= ELECTRICITY CONSUMED	12 502	-2.3%	12.7%	-	122 918	125 191	-1.8%	-	-

¹ current month to month of last year change

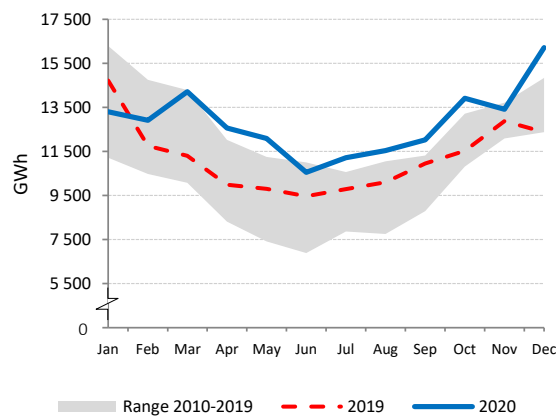
⁴ estimated from annual data

² month-to-month change

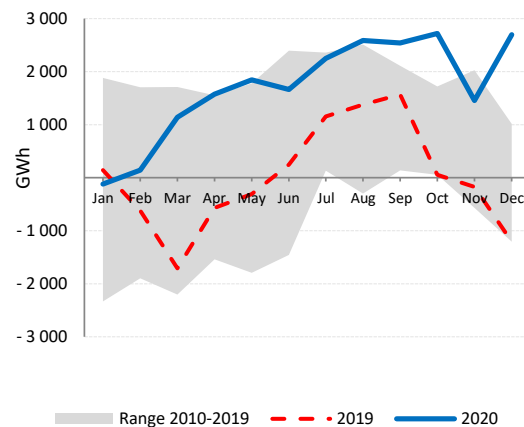
Natural gas monthly figures are confidential in Dec 20 and are included in Other Combustibles

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

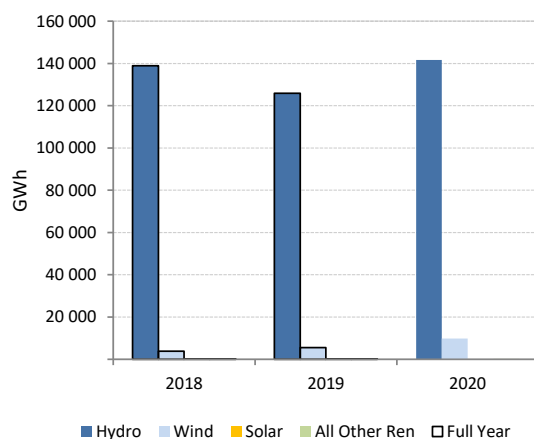
Electricity Production



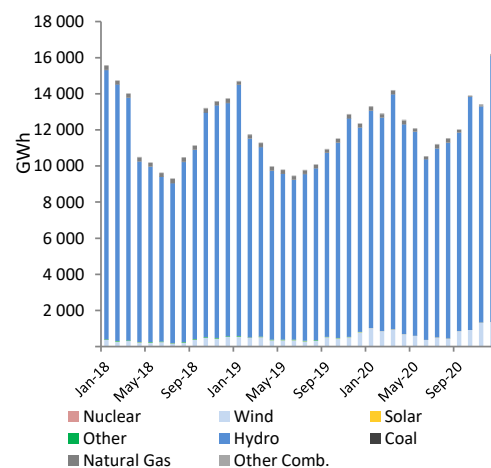
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



POLAND

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	11 743	3.9%	4.0%	85.3%	124 892	133 026	-6.1%	86.0%	87.9%
Coal	9 257	4.6%	3.6%	67.2%	100 138	110 300	-9.2%	68.9%	72.9%
Oil ⁴	-	-	-	-	1 798	1 620	11.0%	1.2%	1.1%
Natural Gas	1 549	1.8%	5.6%	11.2%	14 781	13 550	9.1%	10.2%	9.0%
Combustible Renewables	696	-0.3%	0.9%	5.1%	7 647	7 035	8.7%	5.3%	4.6%
Other Combustibles	49	27.1%	7.3%	0.4%	528	520	1.5%	0.4%	0.3%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	266	21.3%	-0.3%	1.9%	2 927	2 637	11.0%	2.0%	1.7%
Wind	1 699	-3.8%	34.2%	12.3%	15 314	14 761	3.7%	10.5%	9.8%
Solar	47	86.2%	-22.4%	0.3%	1 932	711	171.9%	1.3%	0.5%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	19	-	-	0.1%	229	229	0.0%	0.2%	0.2%
RENEWABLES	2 709	0.0%	18.6%	19.7%	27 820	25 144	10.6%	19.1%	16.6%
NON-RENEWABLES	11 066	4.2%	4.2%	80.3%	117 474	126 219	-6.9%	80.9%	83.4%
TOTAL NET PRODUCTION	13 774	3.3%	6.7%		145 293	151 363	-4.0%		
+ Imports	1 679	5.9%	-1.4%		20 624	17 868	15.4%		
- Exports	903	26.7%	22.7%		7 357	7 245	1.5%		
= ELECTRICITY SUPPLIED	14 550	2.4%	4.9%		158 560	161 986	-2.1%		
- Used for pumped storage	169	29.3%	40.4%		1 181	1 033	14.4%		
- T&D Losses	957	4.0%	3.1%		10 806	8 951	20.7%		
= ELECTRICITY CONSUMED	13 425	2.1%	4.7%		146 574	152 002	-3.6%		

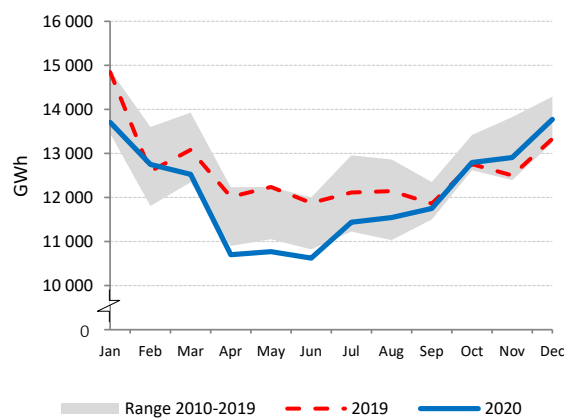
¹ current month to month of last year change

⁴ monthly figures are confidential

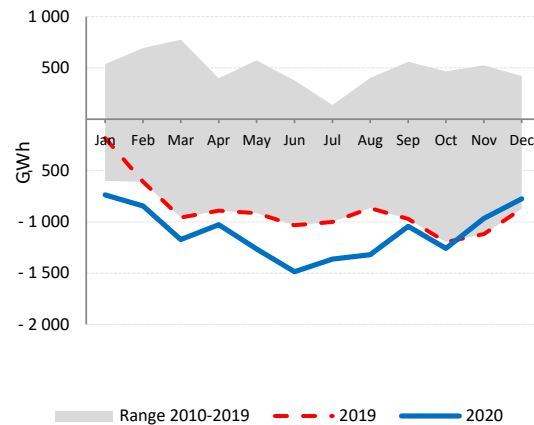
² month-to-month change

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

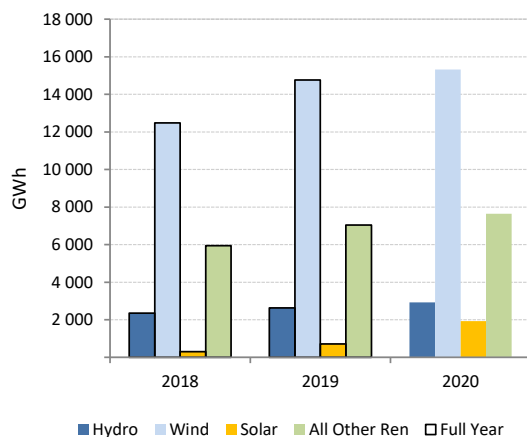
Electricity Production



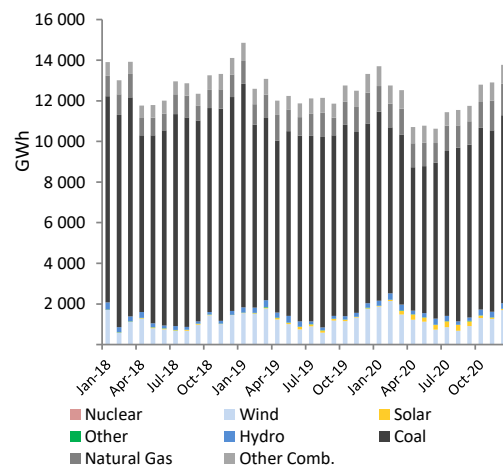
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



PORTUGAL

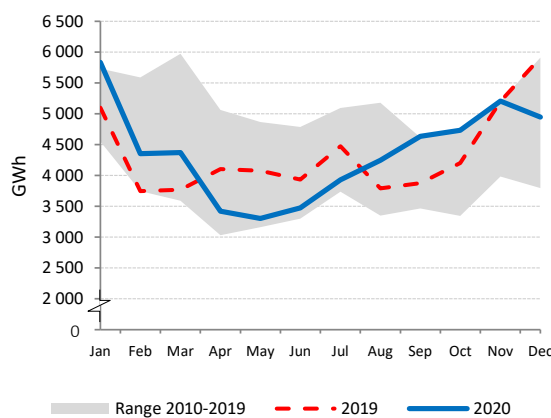
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	1 658	-9.8%	-36.8%	33.5%	24 409	26 902	-9.3%	46.5%	51.6%
Coal	164	13.6%	-76.6%	3.3%	2 309	5 376	-57.0%	4.4%	10.3%
Oil	85	-19.0%	-9.8%	1.7%	1 198	1 218	-1.6%	2.3%	2.3%
Natural Gas	1 054	-16.8%	-29.8%	21.3%	17 082	16 774	1.8%	32.6%	32.1%
Combustible Renewables	331	10.0%	6.2%	6.7%	3 569	3 268	9.2%	6.8%	6.3%
Other Combustibles	23	17.6%	73.8%	0.5%	251	267	-5.9%	0.5%	0.5%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1 606	-35.1%	21.7%	32.5%	13 962	10 175	37.2%	26.6%	19.5%
Wind	1 569	3.4%	35.6%	31.7%	12 172	13 576	-10.3%	23.2%	26.0%
Solar	90	37.1%	-3.6%	1.8%	1 709	1 341	27.5%	3.3%	2.6%
Geothermal	25	53.3%	43.3%	0.5%	203	192	6.2%	0.4%	0.4%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	3 620	-17.2%	24.9%	73.2%	31 616	28 551	10.7%	60.3%	54.7%
NON-RENEWABLES	1 327	-13.6%	-42.6%	26.8%	20 840	23 634	-11.8%	39.7%	45.3%
TOTAL NET PRODUCTION	4 947	-16.3%	-5.0%		52 456	52 185	0.5%		
+ Imports	659	82.8%	165.9%		7 553	8 099	-6.7%		
- Exports	561	-53.4%	-40.9%		6 098	4 700	29.7%		
= ELECTRICITY SUPPLIED	5 044	-0.4%	12.0%		53 911	55 584	-3.0%		
- Used for pumped storage	214	9.0%	94.7%		1 987	1 827	8.8%		
- T&D Losses	486	7.9%	11.0%		5 201	4 948	5.1%		
= ELECTRICITY CONSUMED	4 344	-1.7%	9.8%		46 723	48 810	-4.3%		

¹ current month to month of last year change

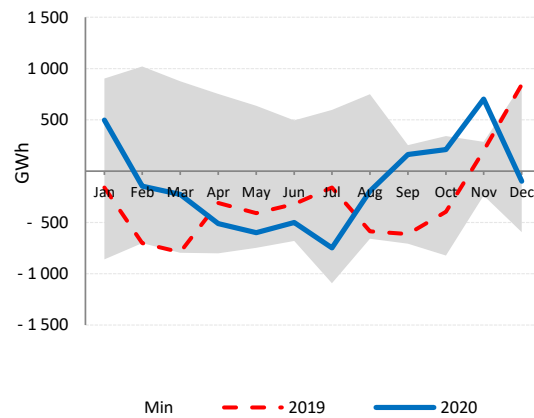
² month-to-month change

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

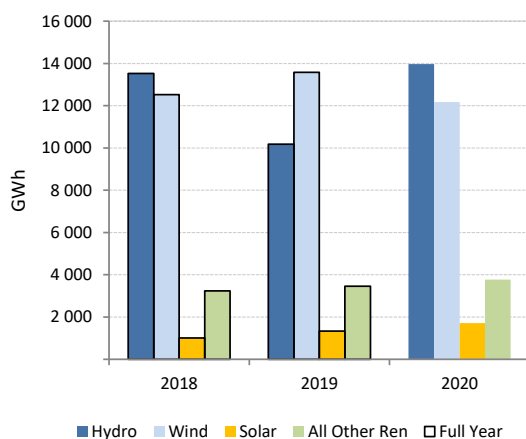
Electricity Production



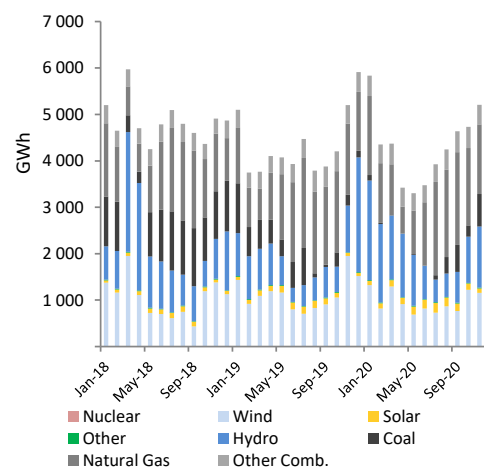
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



SLOVAK REPUBLIC

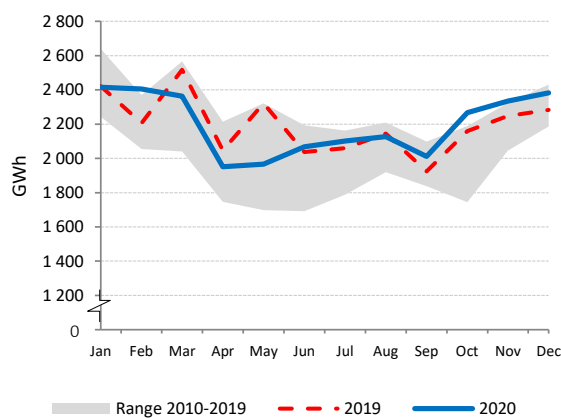
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	720	15.9%	11.7%	30.2%	6 979	7 100	-1.7%	26.4%	26.9%
Coal	189	-19.9%	13.8%	8.0%	1 631	2 415	-32.5%	6.2%	9.2%
Oil	33	3.2%	10.3%	1.4%	374	408	-8.3%	1.4%	1.5%
Natural Gas	358	41.2%	10.8%	15.0%	3 483	2 741	27.1%	13.2%	10.4%
Combustible Renewables	138	41.7%	11.5%	5.8%	1 463	1 511	-3.2%	5.5%	5.7%
Other Combustibles	3	4.7%	7.1%	0.1%	29	25	14.8%	0.1%	0.1%
Nuclear	1 338	1.3%	4.1%	56.1%	14 053	14 168	-0.8%	53.2%	53.7%
Hydro	311	-3.2%	-18.6%	13.1%	4 674	4 473	4.5%	17.7%	17.0%
Wind	-	-	-	-	-	6	-	-	0.0%
Solar	10	-37.5%	-44.4%	0.4%	656	589	11.4%	2.5%	2.2%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	3	25.0%	-	0.1%	30	30	0.0%	0.1%	0.1%
RENEWABLES	459	5.1%	-12.4%	19.3%	6 793	6 579	3.2%	25.7%	25.0%
NON-RENEWABLES	1 923	4.2%	6.3%	80.7%	19 599	19 787	-0.9%	74.3%	75.0%
TOTAL NET PRODUCTION	2 382	4.3%	2.1%		26 392	26 366	0.1%		
+ Imports	858	-29.8%	-35.1%		12 797	13 538	-5.5%		
- Exports	894	-18.1%	-28.5%		12 585	11 838	6.3%		
= ELECTRICITY SUPPLIED	2 346	-2.8%	-2.5%		26 604	28 066	-5.2%		
- Used for pumped storage	41	52.0%	-		415	316	31.2%		
- T&D Losses ⁴	149	-7.6%	11.4%		1 669	1 699	-1.8%		
= ELECTRICITY CONSUMED	2 305	3.0%	-2.5%		26 189	26 051	0.5%		

¹ current month to month of last year change ⁴ estimated

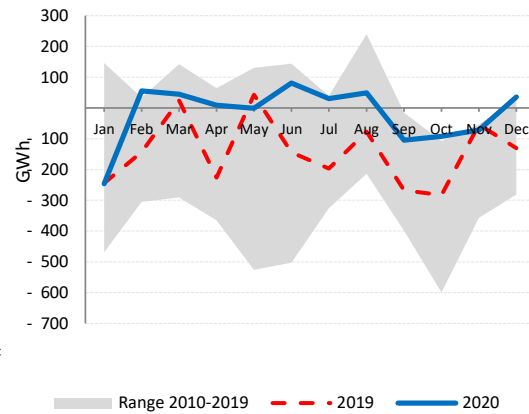
² month-to-month change

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

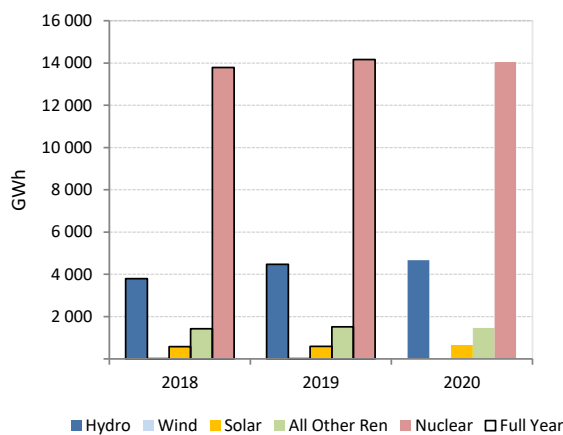
Electricity Production



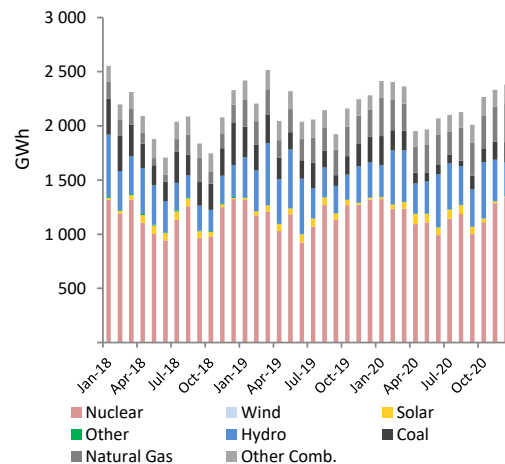
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



SLOVENIA

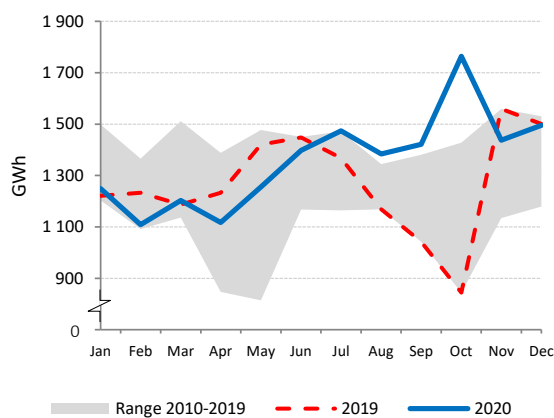
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	479	12.9%	-8.9%	32.1%	4 698	4 761	-1.3%	28.8%	31.3%
Coal	392	13.5%	-11.4%	26.2%	3 923	4 037	-2.8%	24.1%	26.5%
Oil	1	961.2%	7.9%	0.0%	7	9	-27.8%	0.0%	0.1%
Natural Gas	64	13.4%	2.6%	4.3%	532	480	10.9%	3.3%	3.1%
Combustible Renewables	22	-0.3%	10.4%	1.5%	227	226	0.5%	1.4%	1.5%
Other Combustibles	1	50.9%	-18.7%	0.0%	9	9	4.7%	0.1%	0.1%
Nuclear	488	-5.1%	-2.5%	32.6%	6 041	5 533	9.2%	37.0%	36.3%
Hydro	516	-6.0%	29.7%	34.5%	5 236	4 622	13.3%	32.1%	30.4%
Wind	1	26.0%	5.3%	0.0%	6	6	1.1%	0.0%	0.0%
Solar	11	-13.0%	-9.0%	0.8%	325	302	7.4%	2.0%	2.0%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	550	-5.9%	27.6%	36.8%	5 794	5 157	12.4%	35.5%	33.9%
NON-RENEWABLES	945	3.1%	-6.1%	63.2%	10 511	10 068	4.4%	64.5%	66.1%
TOTAL NET PRODUCTION	1 495	-0.4%	4.0%		16 306	15 224	7.1%		
+ Imports	553	-11.6%	-2.8%		7 120	9 021	-21.1%		
- Exports	740	-9.0%	-0.5%		9 045	9 340	-3.2%		
= ELECTRICITY SUPPLIED	1 309	-0.4%	3.6%		14 381	14 906	-3.5%		
- Used for pumped storage	39	5.9%	-3.2%		391	272	43.8%		
- T&D Losses	114	6.7%	25.0%		848	858	-1.2%		
= ELECTRICITY CONSUMED	1 156	-1.3%	2.1%		13 142	13 776	-4.6%		

¹ current month to month of last year change

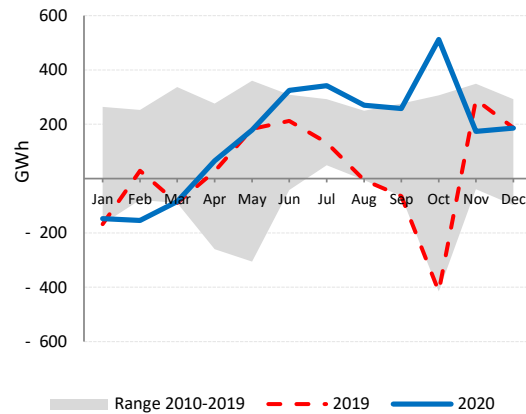
² month-to-month change

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

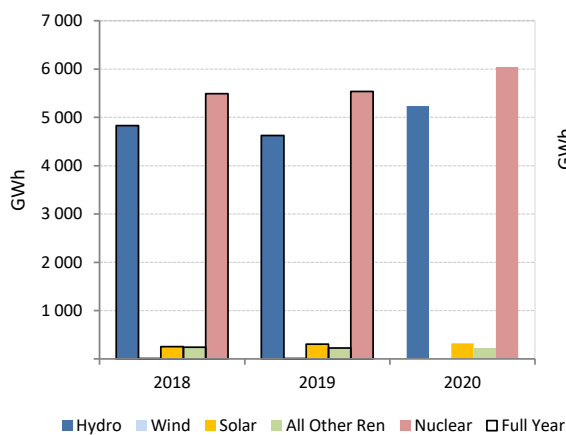
Electricity Production



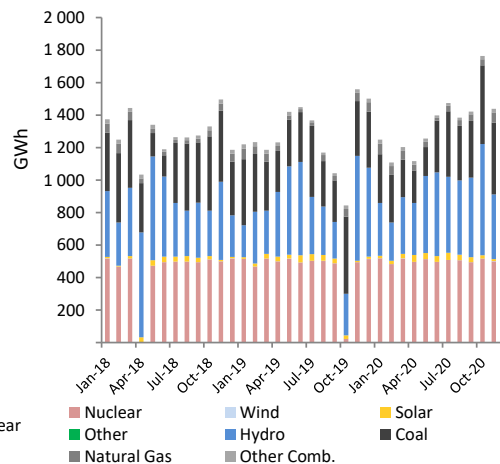
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



SPAIN

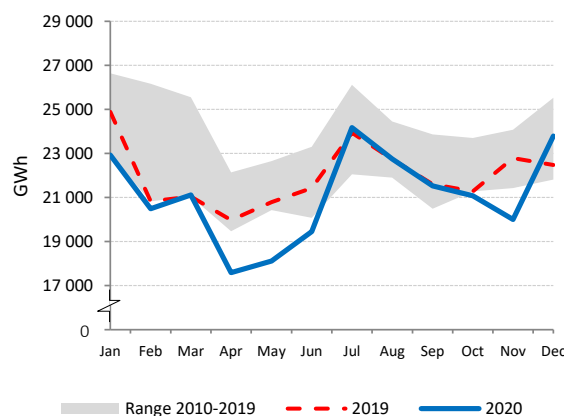
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	6 817	-4.7%	-10.7%	28.7%	89 581	112 635	-20.5%	35.4%	42.7%
Coal	319	-41.3%	-15.4%	1.3%	5 330	13 446	-60.4%	2.1%	5.1%
Oil	935	-8.6%	0.6%	3.9%	10 745	12 389	-13.3%	4.2%	4.7%
Natural Gas	4 890	-3.4%	-13.9%	20.6%	66 475	80 494	-17.4%	26.3%	30.5%
Combustible Renewables	592	32.8%	4.9%	2.5%	6 173	5 358	15.2%	2.4%	2.0%
Other Combustibles	80	11.0%	-2.8%	0.3%	858	947	-9.4%	0.3%	0.4%
Nuclear	5 271	21.2%	13.6%	22.2%	55 756	55 824	-0.1%	22.0%	21.2%
Hydro	3 507	-29.2%	33.7%	14.7%	33 340	26 411	26.2%	13.2%	10.0%
Wind	7 380	35.9%	76.4%	31.0%	54 424	54 289	0.2%	21.5%	20.6%
Solar	805	39.7%	-11.4%	3.4%	19 781	14 493	36.5%	7.8%	5.5%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	2	-	-	0.0%	19	19	0.0%	0.0%	0.0%
Non-Specified	10	-	-	0.0%	125	125	0.0%	0.0%	0.0%
RENEWABLES	12 286	7.7%	48.4%	51.6%	113 738	100 570	13.1%	45.0%	38.1%
NON-RENEWABLES	11 506	4.0%	-1.8%	48.4%	139 290	163 226	-14.7%	55.0%	61.9%
TOTAL NET PRODUCTION	23 791	5.9%	19.0%		253 027	263 796	-4.1%		
+ Imports	1 163	-33.4%	-41.0%		17 928	18 721	-4.2%		
- Exports	1 963	51.4%	123.1%		14 649	11 859	23.5%		
= ELECTRICITY SUPPLIED	22 991	0.3%	9.0%		256 307	270 658	-5.3%		
- Used for pumped storage	498	-24.8%	77.7%		4 607	3 025	52.3%		
- T&D Losses	2 092	1.2%	8.3%		23 355	24 790	-5.8%		
= ELECTRICITY CONSUMED	20 402	1.0%	8.1%		228 345	242 843	-6.0%		

¹ current month to month of last year change

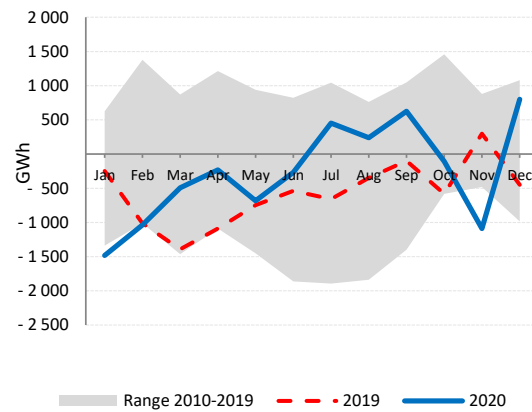
² month-to-month change

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

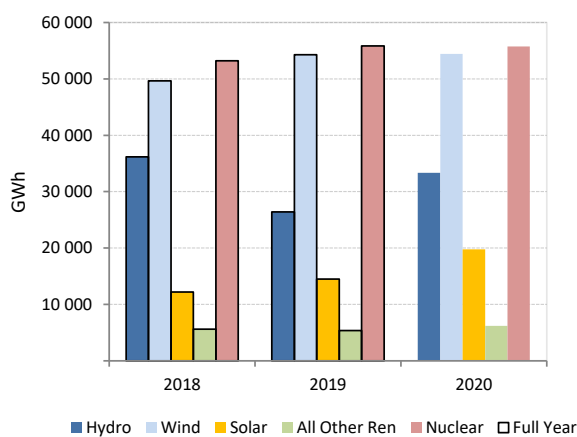
Electricity Production



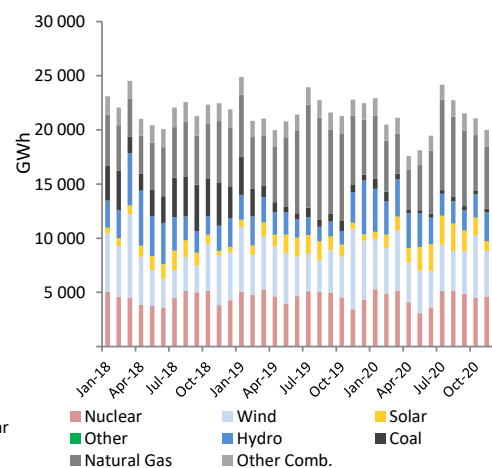
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



SWEDEN

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	1 344	-11.1%	24.5%	8.9%	12 300	15 816	-22.2%	7.7%	9.5%
Coal	3	111.5%	329.4%	0.0%	8	1 142	-99.3%	0.0%	0.7%
Oil	8	-9.7%	18.8%	0.1%	104	209	-50.6%	0.1%	0.1%
Natural Gas	8	-37.4%	74.3%	0.1%	55	274	-80.0%	0.0%	0.2%
Combustible Renewables	1 161	-13.3%	24.2%	7.7%	10 606	12 579	-15.7%	6.7%	7.6%
Other Combustibles	164	9.6%	23.1%	1.1%	1 527	1 612	-5.3%	1.0%	1.0%
Nuclear	4 527	-21.3%	26.1%	30.1%	47 263	64 334	-26.5%	29.7%	38.8%
Hydro	7 152	16.2%	14.9%	47.5%	71 597	64 969	10.2%	44.9%	39.2%
Wind	2 030	-17.9%	-34.7%	13.5%	27 512	19 847	38.6%	17.3%	12.0%
Solar ⁴	12	-	-27.1%	0.1%	679	679	0.0%	0.4%	0.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	10 355	3.8%	0.7%	68.7%	110 394	98 074	12.6%	69.3%	59.2%
NON-RENEWABLES	4 710	-20.5%	26.1%	31.3%	48 956	67 571	-27.5%	30.7%	40.8%
TOTAL NET PRODUCTION	15 065	-5.3%	7.5%		159 351	165 645	-3.8%		
+ Imports	1 448	106.4%	398.7%		11 826	9 070	30.4%		
- Exports	3 208	0.9%	10.7%		36 824	35 231	4.5%		
= ELECTRICITY SUPPLIED	13 305	-0.9%	16.6%		134 353	139 484	-3.7%		
- Used for pumped storage	2	-47.6%	17544.4%		22	32	-30.8%		
- T&D Losses	1 224	5.4%	32.1%		10 883	10 842	0.4%		
= ELECTRICITY CONSUMED	12 079	-1.5%	15.2%		123 448	128 610	-4.0%		

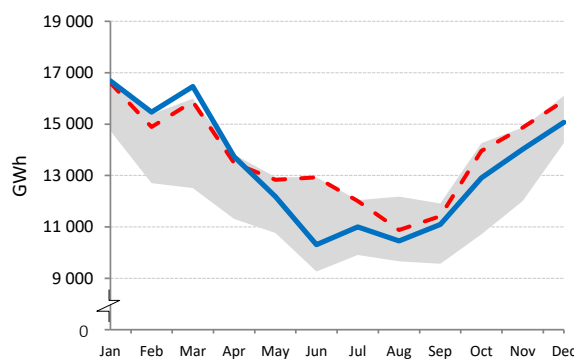
¹ current month to month of last year change

⁴ estimated by the IEA secretariat

² month-to-month change

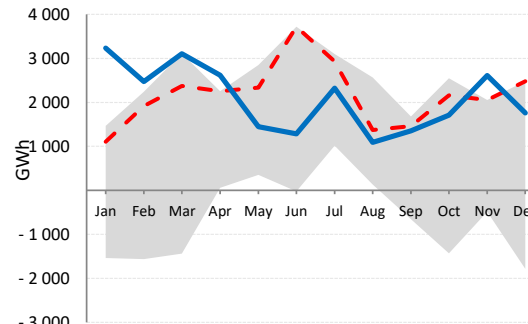
³ year-to-date compared to same period last year

Electricity Production



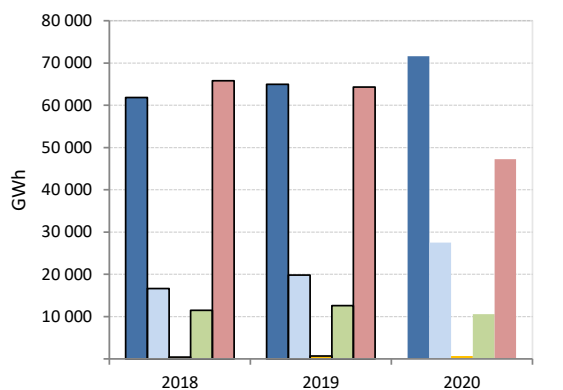
Range 2010-2019 2019 2020

Net Electricity Exports



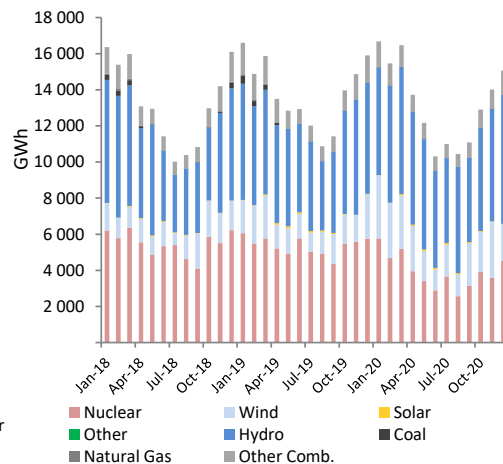
Range 2010-2019 2019 2020

Low-carbon Power Jan - Dec



Hydro Wind Solar All Other Ren Nuclear Full Year

Electricity Production by Fuel



Nuclear Wind Solar Hydro Natural Gas Other Comb.

SWITZERLAND

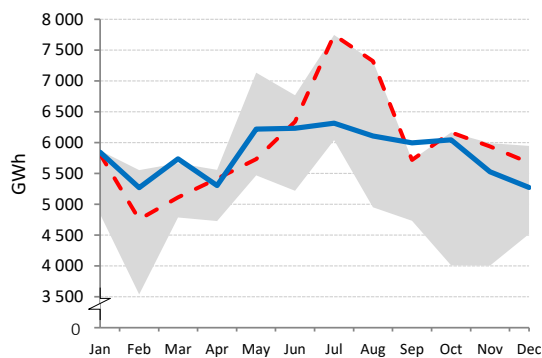
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	320	-7.6%	-3.1%	6.1%	3 648	3 580	1.9%	5.2%	5.0%
Coal	-	-	-	-	-	-	-	-	-
Oil	1	-50.0%	-	0.0%	15	30	-50.0%	0.0%	0.0%
Natural Gas	45	-20.2%	-2.9%	0.8%	505	575	-12.3%	0.7%	0.8%
Combustible Renewables	162	-6.2%	-2.9%	3.1%	1 840	1 779	3.4%	2.6%	2.5%
Other Combustibles	113	-2.8%	-3.5%	2.1%	1 288	1 196	7.7%	1.8%	1.7%
Nuclear	1 968	-12.5%	-6.4%	37.3%	22 991	25 280	-9.1%	32.9%	35.2%
Hydro	2 940	-2.4%	-2.4%	55.7%	40 621	40 554	0.2%	58.1%	56.5%
Wind	16	-23.8%	60.0%	0.3%	143	146	-2.0%	0.2%	0.2%
Solar	30	-32.1%	-58.7%	0.6%	2 477	2 178	13.7%	3.5%	3.0%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	3 148	-3.2%	-3.5%	59.7%	45 082	44 657	1.0%	64.5%	62.3%
NON-RENEWABLES	2 127	-12.3%	-6.2%	40.3%	24 798	27 080	-8.4%	35.5%	37.7%
TOTAL NET PRODUCTION	5 274	-7.1%	-4.6%		69 880	71 737	-2.6%		
+ Imports	3 350	10.7%	16.4%		26 985	29 505	-8.5%		
- Exports	2 500	-11.2%	-11.9%		32 557	35 765	-9.0%		
= ELECTRICITY SUPPLIED	6 124	4.1%	10.0%		64 308	65 477	-1.8%		
- Used for pumped storage	270	-5.9%	33.0%		4 459	4 133	7.9%		
- T&D Losses	383	4.5%	8.8%		4 040	4 149	-2.6%		
= ELECTRICITY CONSUMED	5 471	4.6%	9.2%		55 809	57 195	-2.4%		

¹ current month to month of last year change

² month-to-month change

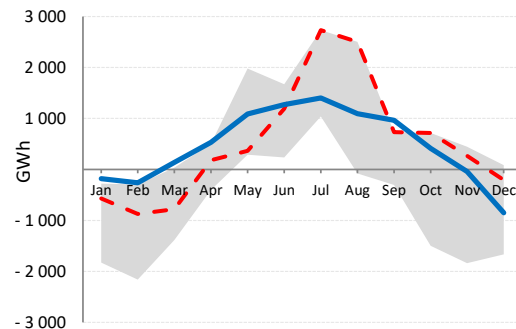
³ year-to-date compared to same period last year

Electricity Production



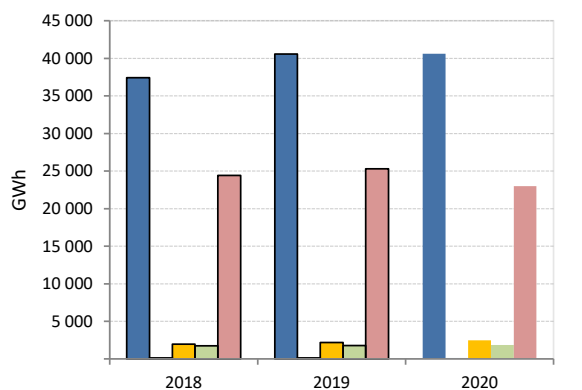
Range 2010-2019 - - - 2019 — 2020

Net Electricity Exports



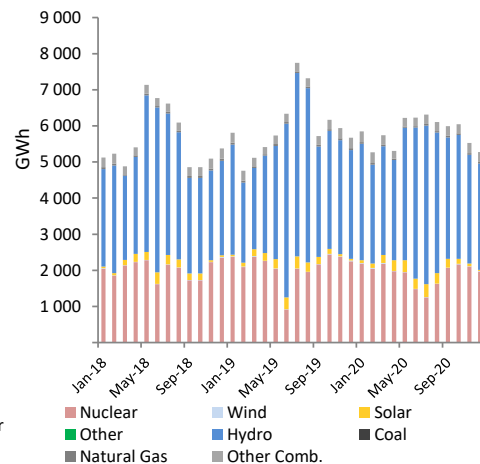
Range 2010-2019 - - - 2019 — 2020

Low-carbon Power Jan - Dec



Hydro Wind Solar All Other Ren Nuclear Full Year

Electricity Production by Fuel



Nuclear Wind Solar Coal
Other Hydro Other Comb.
Natural Gas

TURKEY

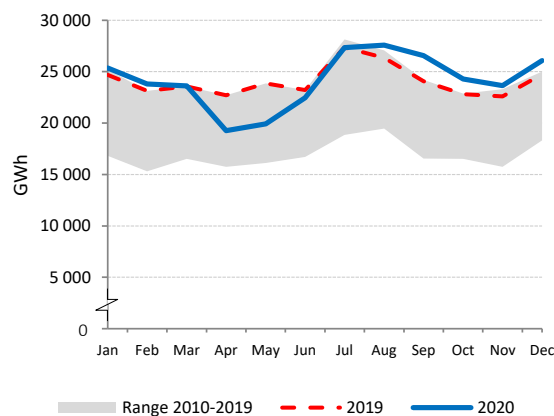
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	18 388	10.1%	6.5%	70.5%	169 258	161 975	4.5%	58.4%	56.0%
Coal	9 365	-9.3%	4.6%	35.9%	98 731	105 067	-6.0%	34.1%	36.3%
Oil	28	33.3%	13.2%	0.1%	489	313	56.5%	0.2%	0.1%
Natural Gas	8 590	42.2%	8.4%	32.9%	65 824	53 317	23.5%	22.7%	18.4%
Combustible Renewables	403	28.5%	11.3%	1.5%	4 192	3 263	28.5%	1.4%	1.1%
Other Combustibles	2	38.4%	140.2%	0.0%	21	16	34.5%	0.0%	0.0%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	3 915	-22.4%	20.2%	15.0%	77 385	88 209	-12.3%	26.7%	30.5%
Wind	2 445	31.2%	5.6%	9.4%	24 767	21 613	14.6%	8.5%	7.5%
Solar	532	38.3%	1408.9%	2.0%	10 106	8 946	13.0%	3.5%	3.1%
Geothermal	699	6.1%	4.4%	2.7%	7 284	7 352	-0.9%	2.5%	2.5%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	98	20.0%	-0.5%	0.4%	1 134	1 040	9.1%	0.4%	0.4%
RENEWABLES	7 993	-3.3%	20.4%	30.7%	123 735	129 383	-4.4%	42.7%	44.7%
NON-RENEWABLES	18 084	9.8%	6.3%	69.3%	166 200	159 752	4.0%	57.3%	55.3%
TOTAL NET PRODUCTION	26 077	5.4%	10.3%		289 935	289 136	0.3%		
+ Imports	35	-88.3%	14.6%		1 888	2 212	-14.6%		
- Exports	338	78.7%	-9.1%		2 484	2 789	-10.9%		
= ELECTRICITY SUPPLIED	25 774	3.8%	10.6%		289 339	288 559	0.3%		
- Used for pumped storage	-	-	-		-	-	-		
- T&D Losses ⁴	2 804	4.3%	10.3%		31 337	31 285	0.2%		
= ELECTRICITY CONSUMED	22 970	3.7%	10.6%		258 002	257 273	0.3%		

¹ current month to month of last year change ⁴ estimated

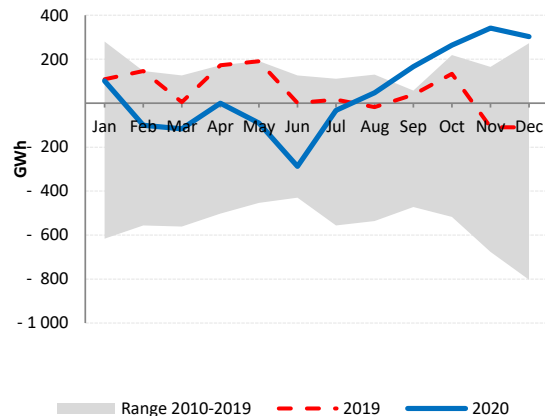
² month-to-month change

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

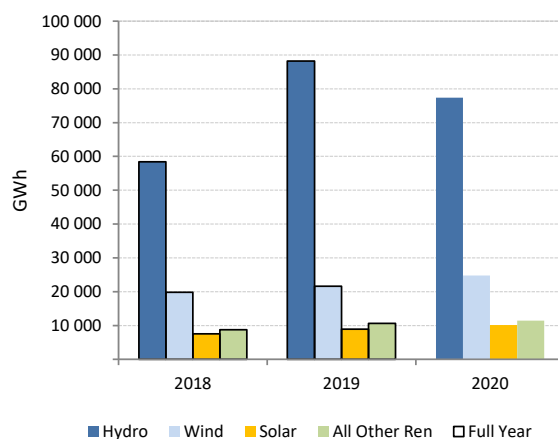
Electricity Production



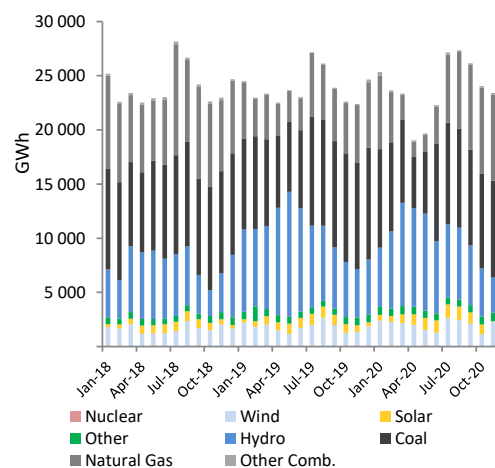
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



UNITED KINGDOM

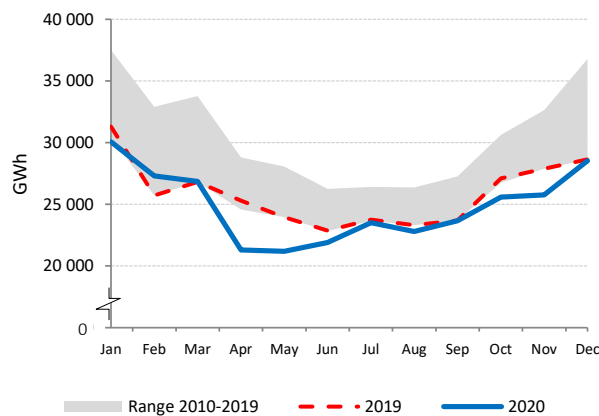
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	15 757	5.4%	15.1%	55.2%	156 200	174 422	-10.4%	52.3%	56.2%
Coal	725	-38.5%	67.9%	2.5%	5 837	7 359	-20.7%	2.0%	2.4%
Oil	153	1.5%	25.8%	0.5%	1 086	1 418	-23.4%	0.4%	0.5%
Natural Gas	10 954	15.9%	14.2%	38.4%	106 403	125 353	-15.1%	35.6%	40.4%
Combustible Renewables	3 538	-5.5%	11.4%	12.4%	38 208	35 809	6.7%	12.8%	11.5%
Other Combustibles	386	-7.0%	4.9%	1.4%	4 666	4 483	4.1%	1.6%	1.4%
Nuclear	4 510	-4.5%	9.5%	15.8%	45 670	51 032	-10.5%	15.3%	16.4%
Hydro	832	-12.2%	-2.5%	2.9%	7 643	7 618	0.3%	2.6%	2.5%
Wind	7 184	-7.1%	7.3%	25.2%	75 775	64 335	17.8%	25.4%	20.7%
Solar	250	-14.3%	-38.7%	0.9%	13 216	12 918	2.3%	4.4%	4.2%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	1	-	-	0.0%	14	14	0.0%	0.0%	0.0%
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	11 805	-7.2%	6.1%	41.4%	134 856	120 693	11.7%	45.2%	38.9%
NON-RENEWABLES	16 729	5.1%	14.3%	58.6%	163 662	189 645	-13.7%	54.8%	61.1%
TOTAL NET PRODUCTION	28 534	-0.4%	10.7%		298 517	310 339	-3.8%		
+ Imports	2 061	-8.5%	-6.4%		22 621	24 556	-7.9%		
- Exports	228	-39.4%	-25.2%		4 434	3 385	31.0%		
= ELECTRICITY SUPPLIED	30 367	-0.5%	9.8%		316 705	331 509	-4.5%		
- Used for pumped storage	188	-4.8%	8.1%		1 671	2 115	-21.0%		
- T&D Losses	2 895	-0.1%	32.5%		28 165	26 732	5.4%		
= ELECTRICITY CONSUMED	27 284	-0.5%	7.8%		286 868	302 662	-5.2%		

¹ current month to month of last year change

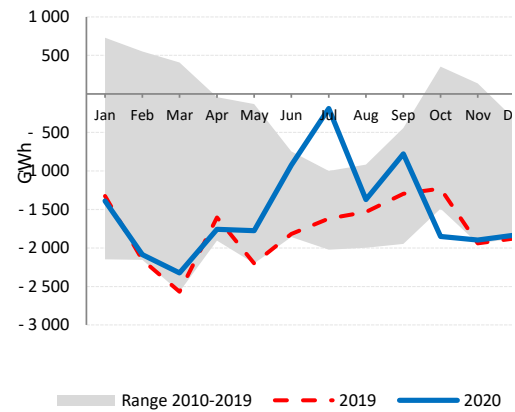
² month-to-month change

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

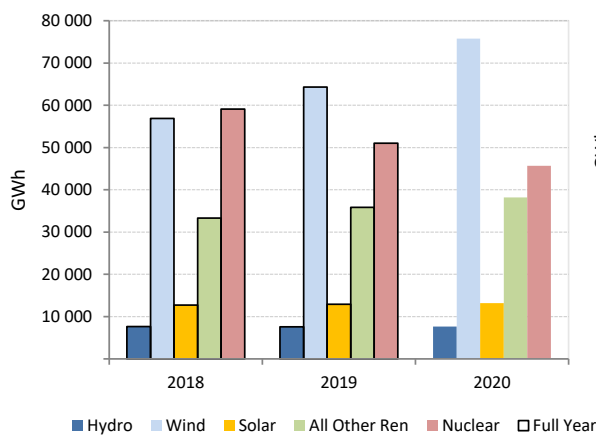
Electricity Production



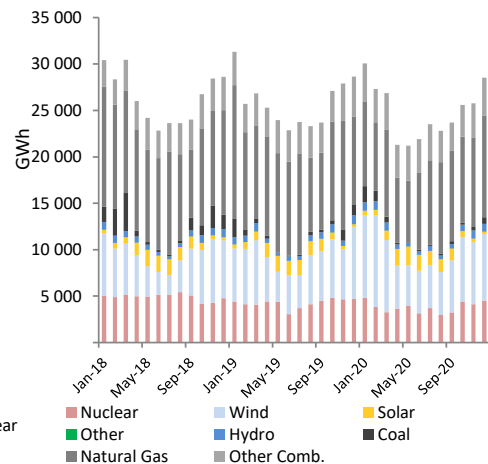
Net Electricity Exports



Low-carbon Power Jan - Dec



Electricity Production by Fuel



UNITED STATES

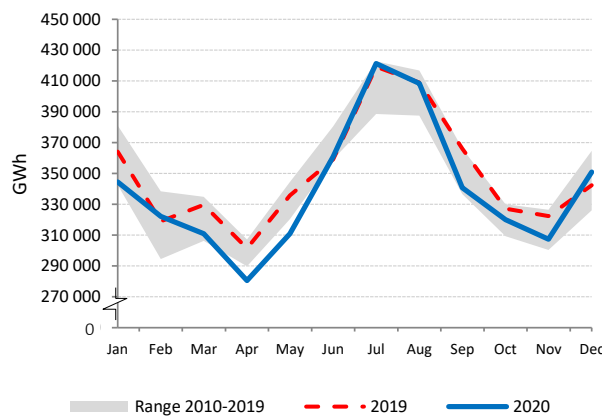
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	214 513	1.3%	20.2%	61.1%	2 498 914	2 665 893	-6.3%	61.3%	63.5%
Coal	82 312	8.0%	27.9%	23.5%	811 270	1 011 531	-19.8%	19.9%	24.1%
Oil	2 877	13.8%	10.8%	0.8%	35 769	33 849	5.7%	0.9%	0.8%
Natural Gas	123 501	-2.8%	16.5%	35.2%	1 585 383	1 550 904	2.2%	38.9%	37.0%
Combustible Renewables	4 923	-2.5%	6.3%	1.4%	56 313	59 766	-5.8%	1.4%	1.4%
Other Combustibles	900	0.7%	10.2%	0.3%	10 178	9 843	3.4%	0.2%	0.2%
Nuclear	69 886	-4.4%	13.1%	19.9%	790 120	809 409	-2.4%	19.4%	19.3%
Hydro	25 827	4.3%	5.2%	7.4%	319 875	308 646	3.6%	7.8%	7.4%
Wind	31 711	19.4%	-4.1%	9.0%	331 343	295 062	12.3%	8.1%	7.0%
Solar	7 157	53.9%	-8.4%	2.0%	118 849	96 357	23.3%	2.9%	2.3%
Geothermal	1 401	13.6%	-0.6%	0.4%	15 771	15 473	1.9%	0.4%	0.4%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	419	7.9%	9.3%	0.1%	4 345	4 733	-8.2%	0.1%	0.1%
RENEWABLES	71 020	14.1%	-0.6%	20.2%	842 152	775 305	8.6%	20.6%	18.5%
NON-RENEWABLES	279 896	-0.1%	18.6%	79.8%	3 237 066	3 420 269	-5.4%	79.4%	81.5%
TOTAL NET PRODUCTION	350 916	2.5%	14.2%		4 079 217	4 195 573	-2.8%		
+ Imports	4 806	22.0%	3.3%		60 138	59 052	1.8%		
- Exports	1 853	-6.2%	-7.1%		25 213	20 008	26.0%		
= ELECTRICITY SUPPLIED	353 869	2.8%	14.1%		4 114 143	4 234 618	-2.8%		
- Used for pumped storage	1 847	-0.1%	13.2%		26 438	26 033	1.6%		
- T&D Losses	22 103	9.3%	15.2%		227 454	244 112	-6.8%		
= ELECTRICITY CONSUMED	329 919	2.4%	14.1%		3 860 252	3 964 473	-2.6%		

¹ current month to month of last year change

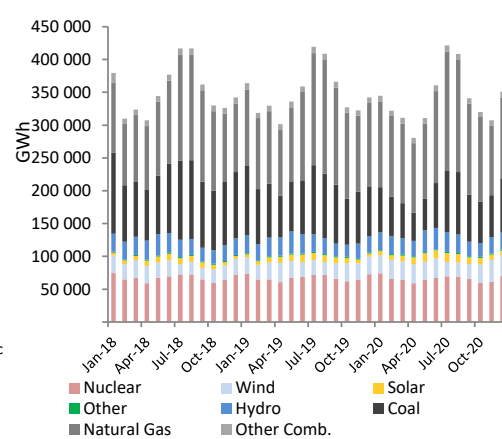
² month-to-month change

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

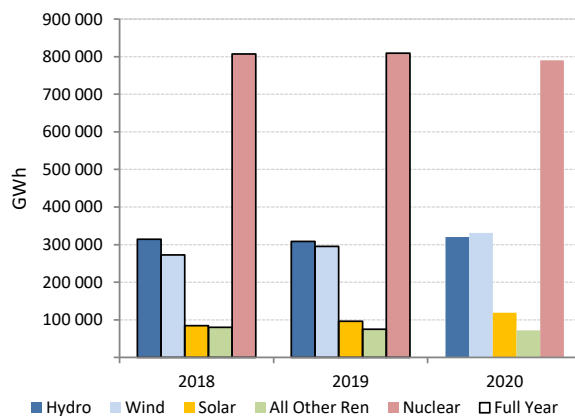
Electricity Production



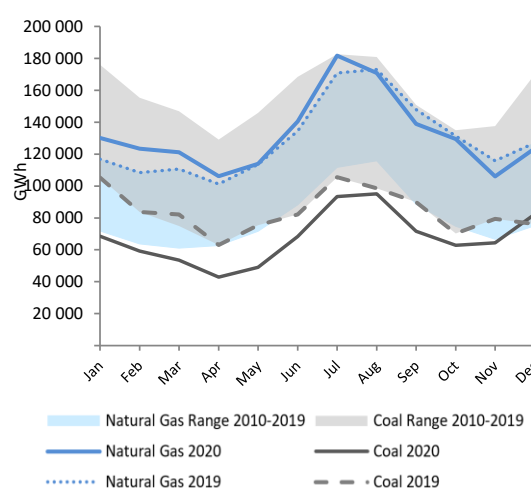
Electricity Production by Fuel



Low-carbon Power Jan - Dec

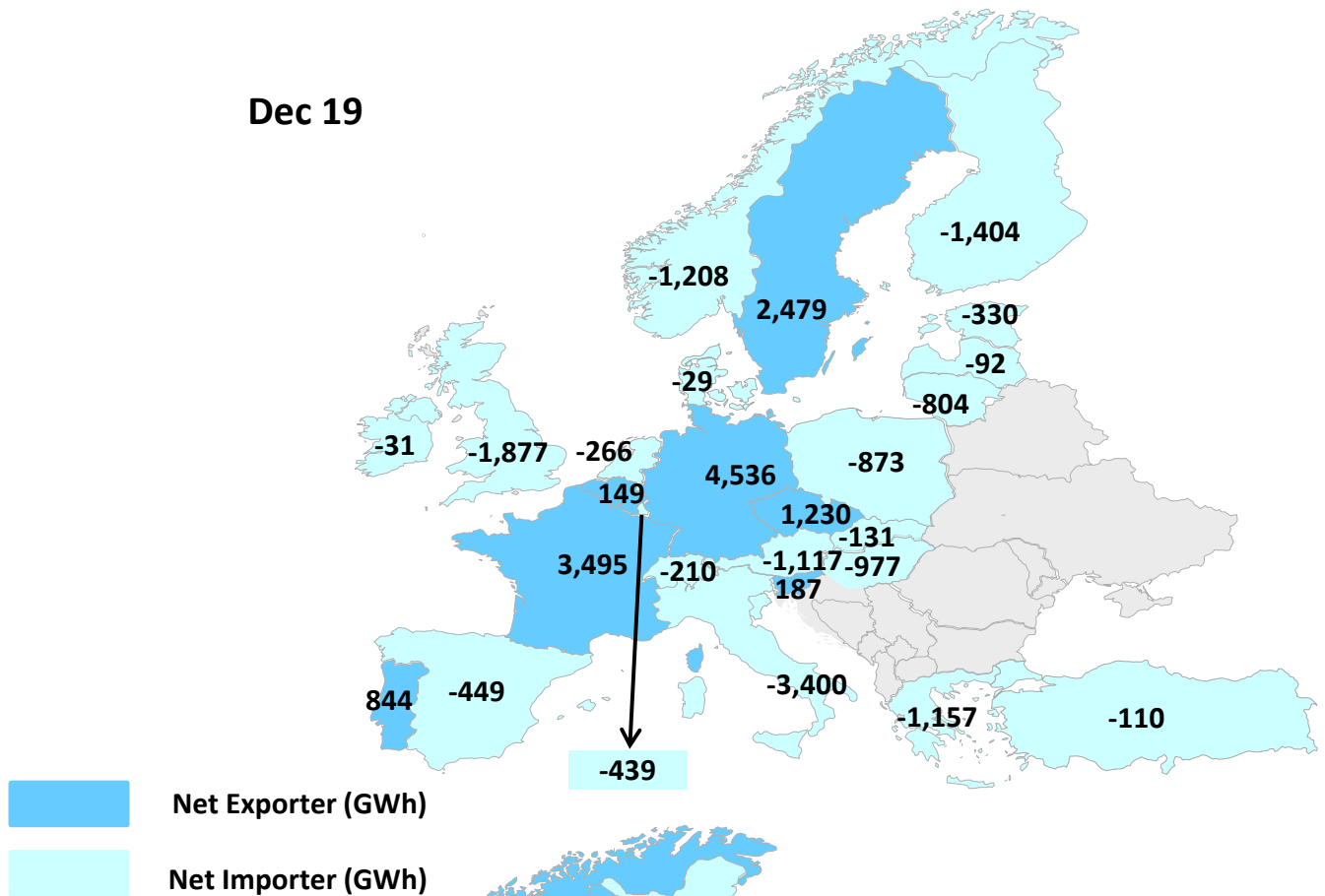


Natural Gas and Coal

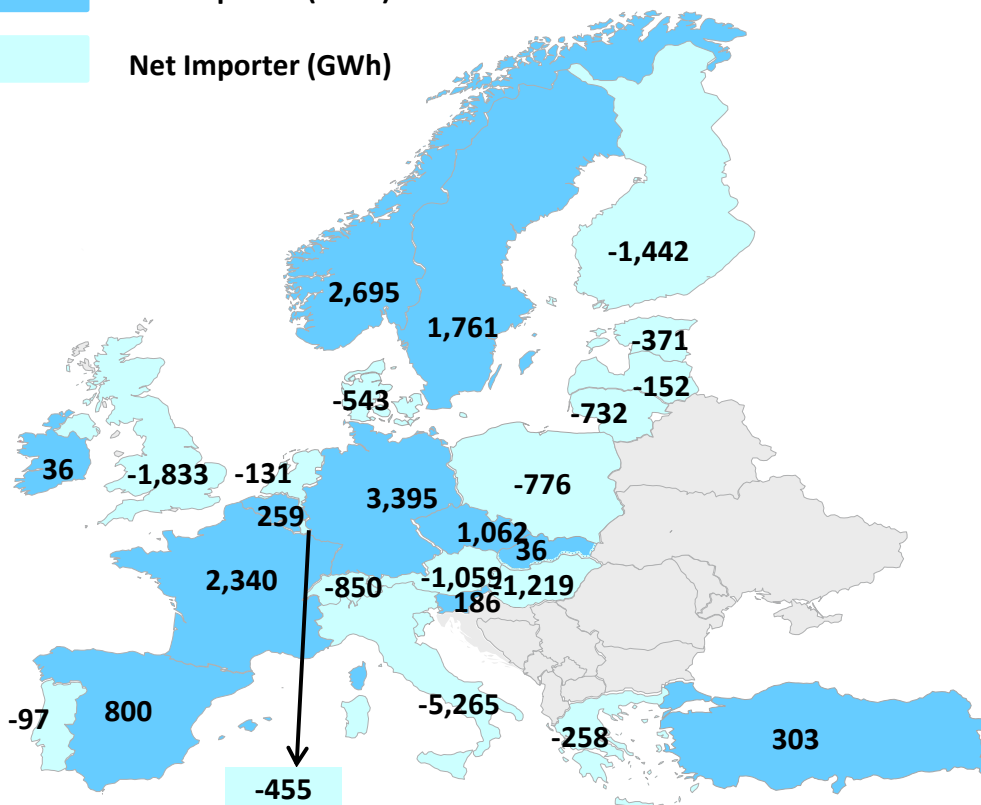


NET ELECTRICITY EXPORTS OECD EUROPE MAP 1

Dec 19

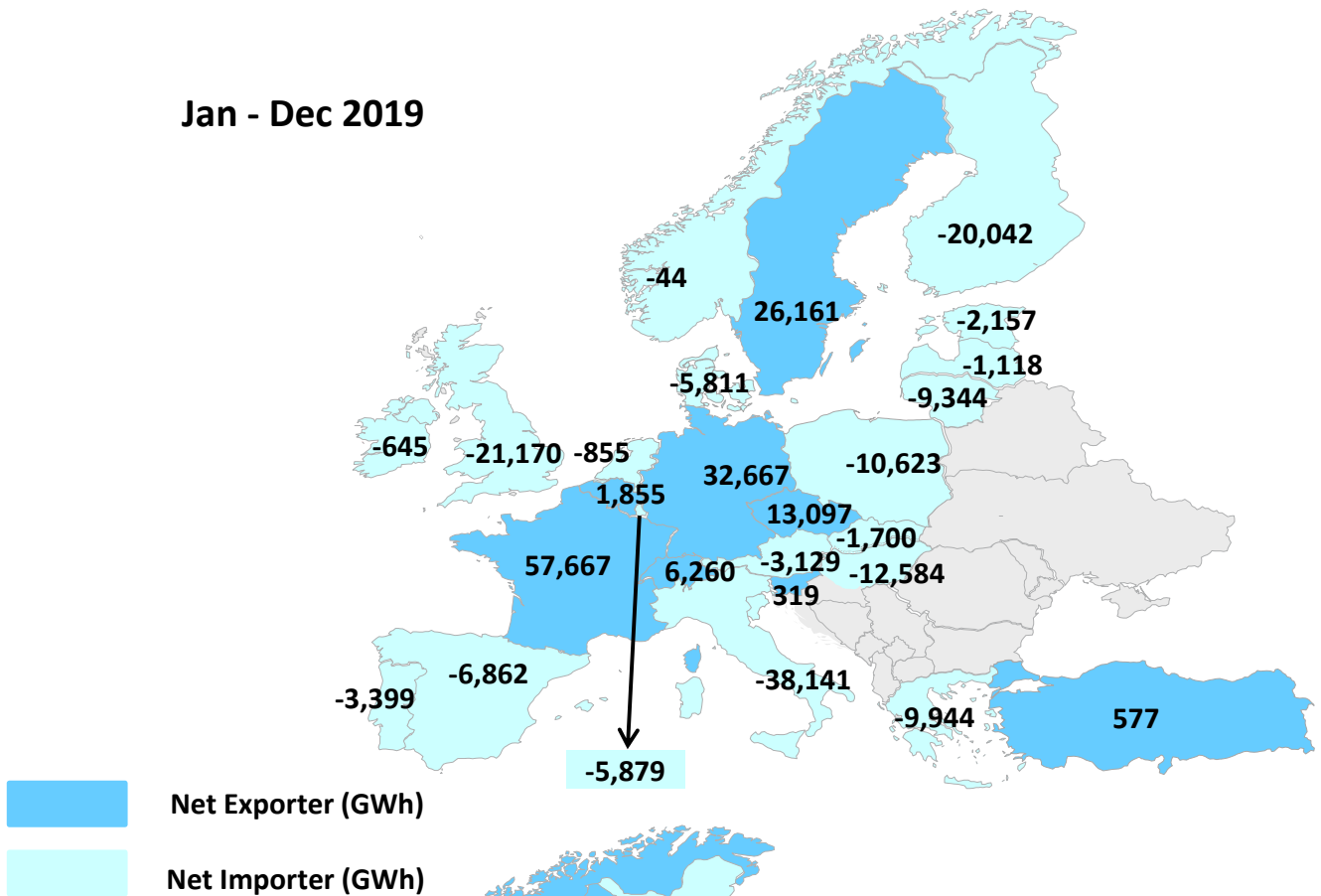


Dec 20

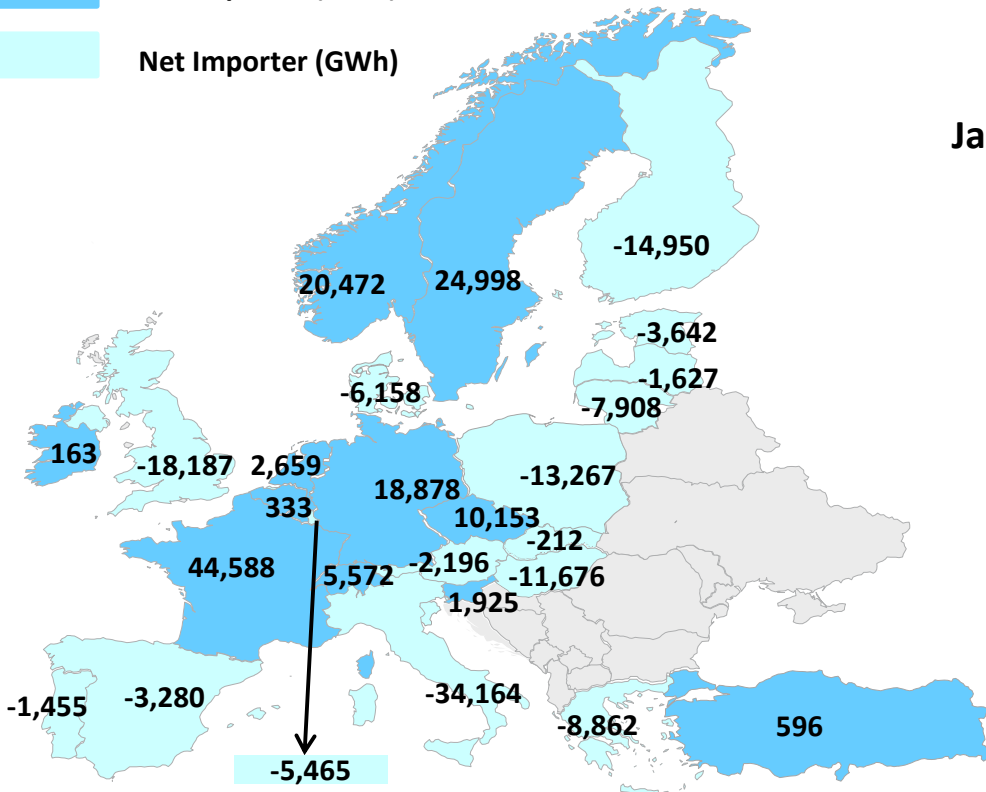


NET ELECTRICITY EXPORTS OECD EUROPE MAP 2

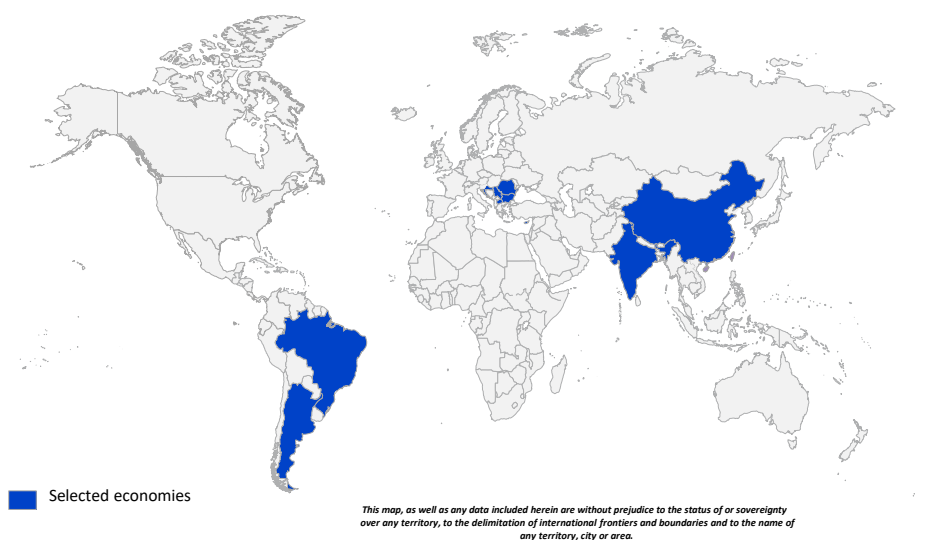
Jan - Dec 2019



Jan - Dec 2020



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



HIGHLIGHTS

- In Argentina, total production in 2020 was 136.4 TWh, up by 3.0% compared to 2019. Hydro production was 22.8 TWh in 2020, down by 16.2%, or 4.4 TWh compared to 2019. This is a result of a severe drought affecting most of South America. On the other hand, wind production increased by 4.4 TWh or 88.4% in 2020 compared to 2019 to reach 9.3 TWh. This almost compensated the drop in hydro production. Wind capacity increased significantly in 2020 as part of the strategy to increase non-hydro renewable production capacity to cover 20% of inland consumption by 2025.
- Total power production was 7,378.7 TWh in China in 2020, up by 5.6% compared to 2019. Renewable production was 2,112.5 TWh up by 13.6% in 2020 compared to 2019 and covered 28.6% of total production in 2020. Hydropower output was 1,311.6 TWh in 2020, 135.7 TWh higher than in 2019. Hydro was responsible for 17.8% of total electricity production, the second source of power production behind coal.
- In India, total power production was 129.7 TWh in December 2020, up by 6.4% compared to December 2019. Production in December 2020 was above seasonal average, as power demand peaked. This highlights an increase in economic activity towards the end of the year, after slowing down because of the Covid-19 pandemic. This lower economic activity drove demand for coal power down on average in 2020. Coal production was 1,017.5 TWh in 2020, down by 59.5 TWh or 5.5% compared to 2019.

ARGENTINA

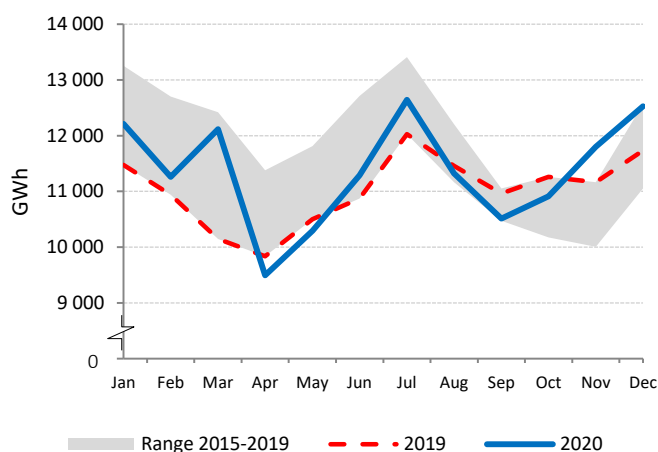
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	8 795	11.4%	4.2%	70.2%	92 750	91 369	1.5%	68.0%	69.0%
Coal	543	129.6%	70.3%	4.3%	2 927	1 187	146.7%	2.1%	0.9%
Oil	882	624.1%	6.6%	7.0%	4 925	3 282	50.1%	3.6%	2.5%
Natural Gas	7 135	-3.5%	1.0%	57.0%	82 782	85 282	-2.9%	60.7%	64.4%
Combustible Renewables	236	66.7%	4.0%	1.9%	2 115	1 618	30.7%	1.6%	1.2%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	701	-4.9%	2.4%	5.6%	10 106	8 002	26.3%	7.4%	6.0%
Hydro	1 799	-24.5%	10.7%	14.4%	22 849	27 253	-16.2%	16.8%	20.6%
Wind	1 017	69.5%	18.2%	8.1%	9 343	4 960	88.4%	6.9%	3.7%
Solar	215	82.6%	11.2%	1.7%	1 337	795	68.1%	1.0%	0.6%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	3 267	0.8%	12.4%	26.1%	35 643	34 625	2.9%	26.1%	26.2%
NON-RENEWABLES	9 260	9.1%	4.1%	73.9%	100 741	97 754	3.1%	73.9%	73.8%
TOTAL NET PRODUCTION	12 526	6.8%	6.1%		136 384	132 379	3.0%		

¹ current month to month of last year change

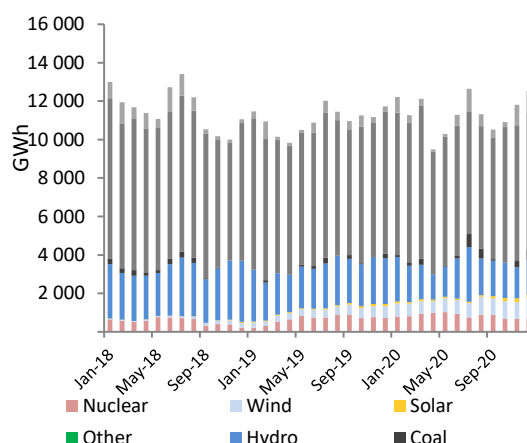
² month-to-month change

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

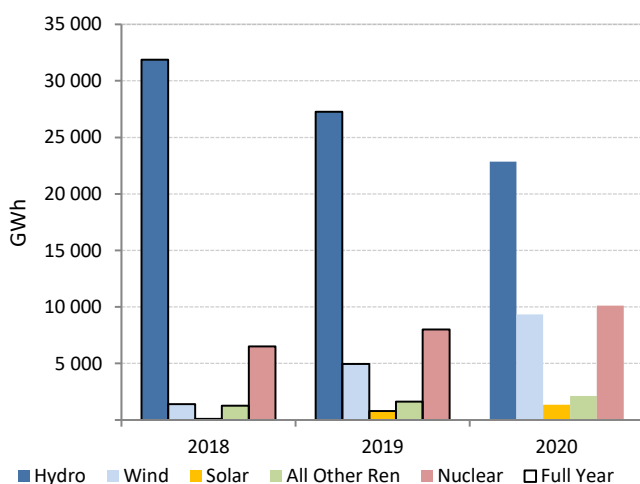
Electricity Production



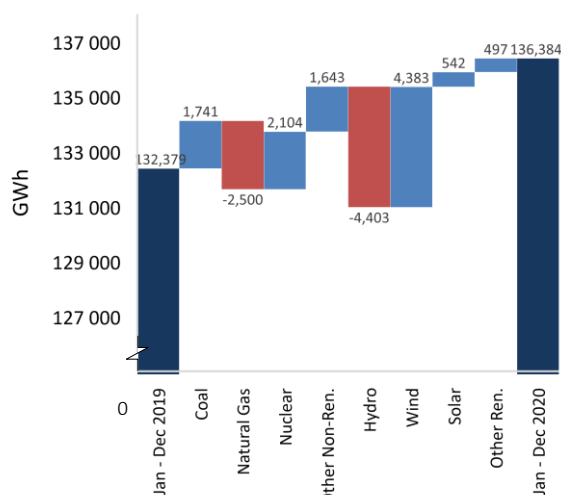
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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



BRAZIL

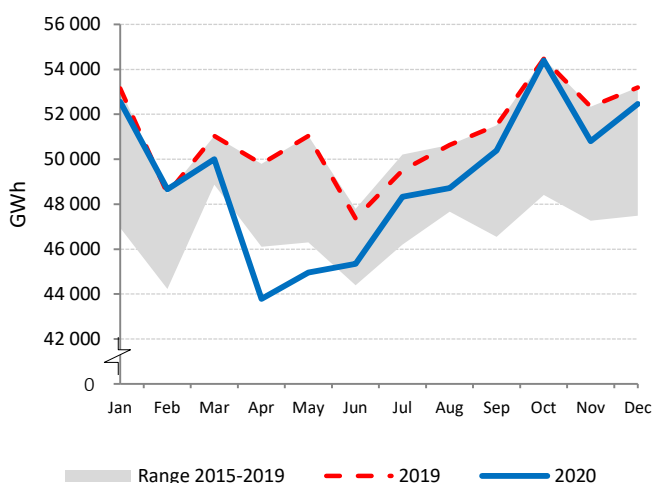
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	13 457	2.6%	-12.4%	25.6%	121 672	142 376	-14.5%	20.6%	23.2%
Coal	2 907	5.6%	19.6%	5.5%	17 718	22 606	-21.6%	3.0%	3.7%
Oil	691	-12.9%	-20.9%	1.3%	3 962	9 595	-58.7%	0.7%	1.6%
Natural Gas	7 675	18.1%	-0.3%	14.6%	51 622	56 727	-9.0%	8.7%	9.3%
Combustible Renewables	1 994	-30.8%	-52.2%	3.8%	46 081	51 158	-9.9%	7.8%	8.4%
Other Combustibles	191	-	-	0.4%	2 289	2 289	0.0%	0.4%	0.4%
Nuclear	1 294	-6.9%	2.7%	2.5%	13 180	15 224	-13.4%	2.2%	2.5%
Hydro	31 224	-4.9%	10.8%	59.5%	391 291	392 716	-0.4%	66.3%	64.1%
Wind	5 826	12.9%	9.0%	11.1%	56 181	55 571	1.1%	9.5%	9.1%
Solar	664	-2.0%	5.4%	1.3%	8 070	6 615	22.0%	1.4%	1.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	39 708	-4.5%	3.6%	75.7%	501 623	506 061	-0.9%	85.0%	82.6%
NON-RENEWABLES	12 756	9.7%	2.5%	24.3%	88 771	106 442	-16.6%	15.0%	17.4%
TOTAL NET PRODUCTION	52 465	-1.4%	3.3%		590 394	612 503	-3.6%		

¹ current month to month of last year change

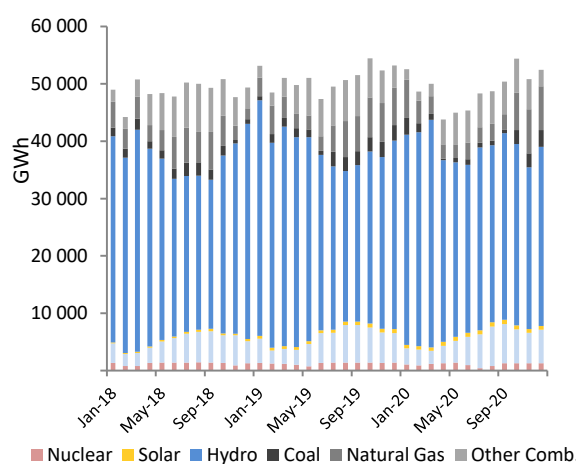
² month-to-month change

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

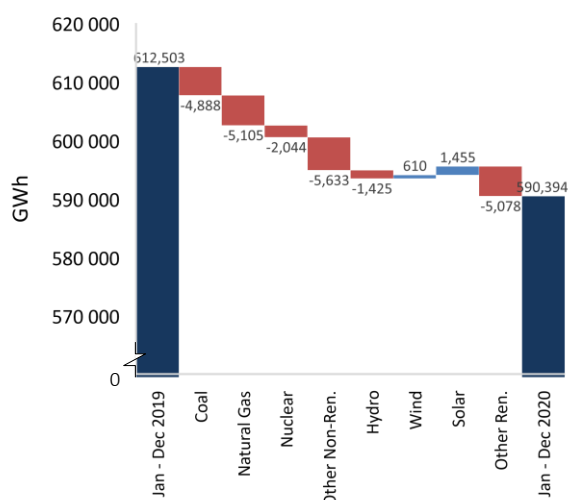
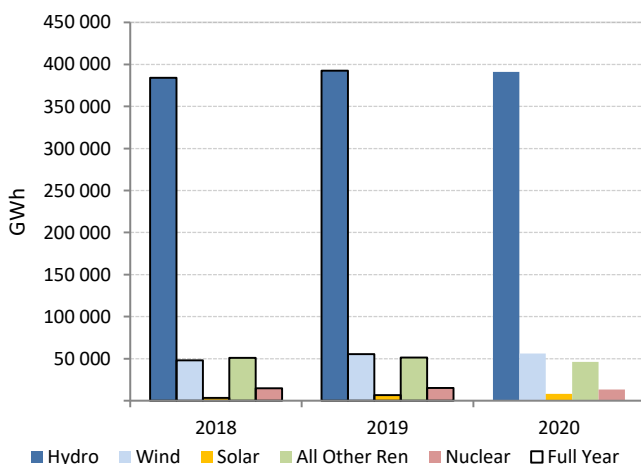
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Dec



BULGARIA

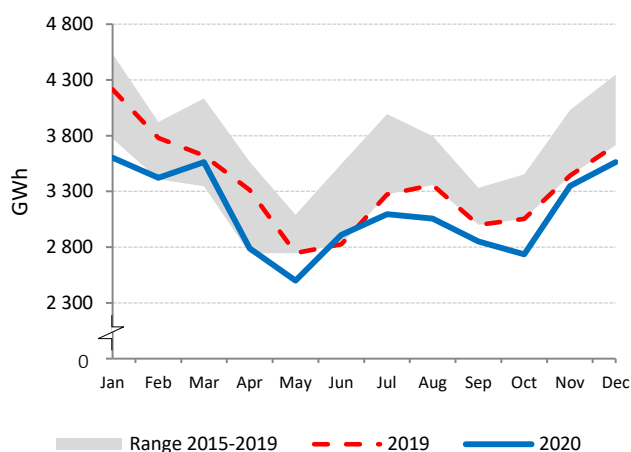
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	1 584	-7.0%	7.9%	44.5%	15 272	18 495	-17.4%	40.8%	45.8%
Coal	1 066	-18.3%	12.0%	29.9%	11 354	14 767	-23.1%	30.3%	36.6%
Oil	12	-55.5%	-38.4%	0.3%	271	318	-14.8%	0.7%	0.8%
Natural Gas	284	25.4%	10.9%	8.0%	1 972	1 840	7.2%	5.3%	4.6%
Combustible Renewables	223	53.5%	-7.7%	6.3%	1 674	1 561	7.3%	4.5%	3.9%
Other Combustibles	-	-	-	-	0	9	-97.1%	0.0%	0.0%
Nuclear	1 488	-2.9%	2.9%	41.8%	15 787	15 712	0.5%	42.2%	38.9%
Hydro	289	11.9%	21.1%	8.1%	3 365	3 346	0.6%	9.0%	8.3%
Wind	164	4.0%	45.4%	4.6%	1 477	1 317	12.2%	3.9%	3.3%
Solar	35	-40.6%	-55.9%	1.0%	1 497	1 442	3.8%	4.0%	3.6%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	3	6.4%	5.2%	0.1%	35	31	14.6%	0.1%	0.1%
RENEWABLES	711	14.7%	5.7%	19.9%	8 013	7 667	4.5%	21.4%	19.0%
NON-RENEWABLES	2 853	-7.8%	6.6%	80.1%	29 420	32 677	-10.0%	78.6%	81.0%
TOTAL NET PRODUCTION	3 563	-4.0%	6.4%		37 433	40 343	-7.2%		

¹ current month to month of last year change

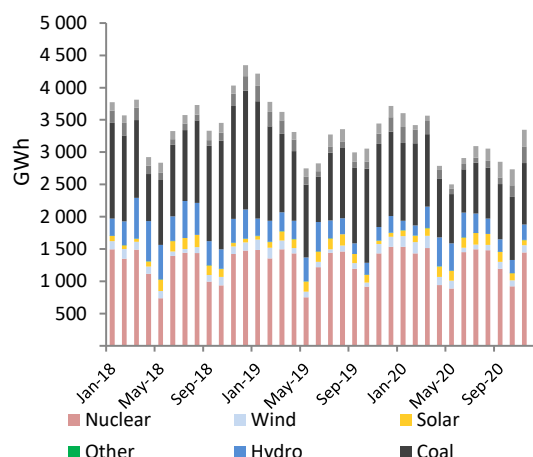
² month-to-month change

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

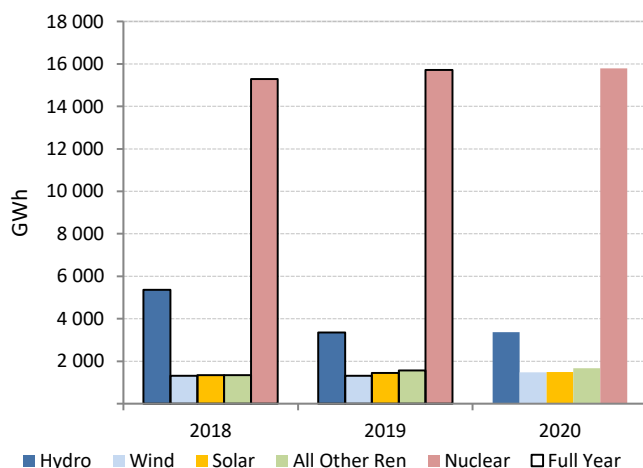
Electricity Production



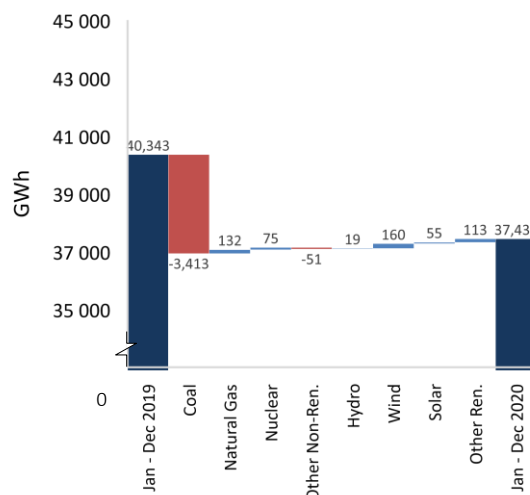
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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



CHINA

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	540 660	11.1%	20.1%	74.7%	5 025 802	4 899 644	2.6%	68.1%	70.1%
Coal	501 880	11.1%	20.1%	69.4%	4 665 316	4 548 208	2.6%	63.2%	65.1%
Oil	1 226	11.1%	20.1%	0.2%	11 400	11 114	2.6%	0.2%	0.2%
Natural Gas	24 534	11.1%	20.1%	3.4%	228 056	222 331	2.6%	3.1%	3.2%
Combustible Renewables	11 524	11.1%	20.1%	1.6%	107 123	104 434	2.6%	1.5%	1.5%
Other Combustibles	1 496	11.1%	20.1%	0.2%	13 907	13 558	2.6%	0.2%	0.2%
Nuclear	33 475	6.2%	9.3%	4.6%	347 520	330 545	5.1%	4.7%	4.7%
Hydro	82 859	-	-16.6%	11.5%	1 311 611	1 175 875	11.5%	17.8%	16.8%
Wind	46 908	-	8.4%	6.5%	430 990	361 754	19.1%	5.8%	5.2%
Solar	19 724	23.3%	4.1%	2.7%	262 672	218 148	20.4%	3.6%	3.1%
Geothermal	10	-	-	0.0%	118	118	0.0%	0.0%	0.0%
Other Renewables	1	-	-	0.0%	12	12	0.0%	0.0%	0.0%
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	161 026	510.4%	-6.0%	22.3%	2 112 525	1 860 341	13.6%	28.6%	26.6%
NON-RENEWABLES	562 611	10.8%	19.4%	77.7%	5 266 199	5 125 755	2.7%	71.4%	73.4%
TOTAL NET PRODUCTION	723 637	35.5%	12.6%		7 378 723	6 986 096	5.6%		

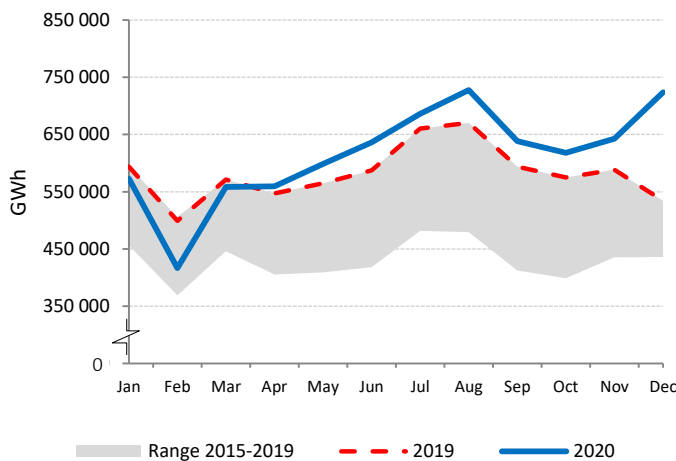
¹ current month to month of last year change

Conventional Thermal breakdown is estimated from annual data

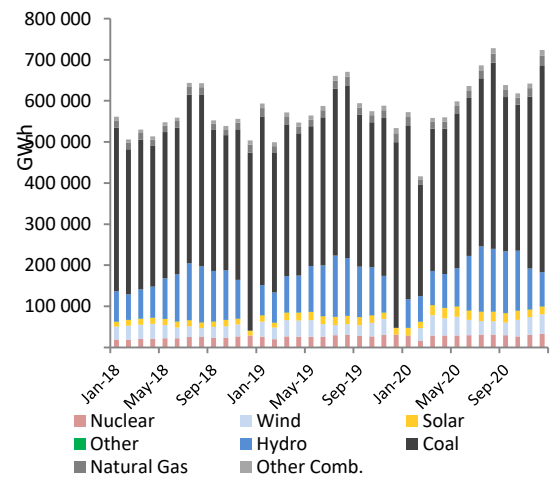
² month-to-month change

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

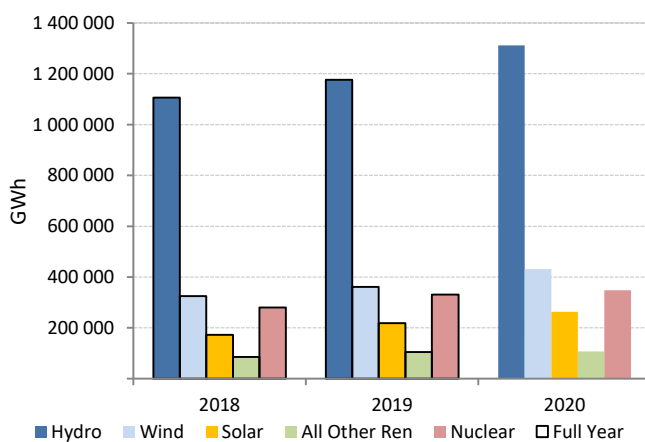
Electricity Production



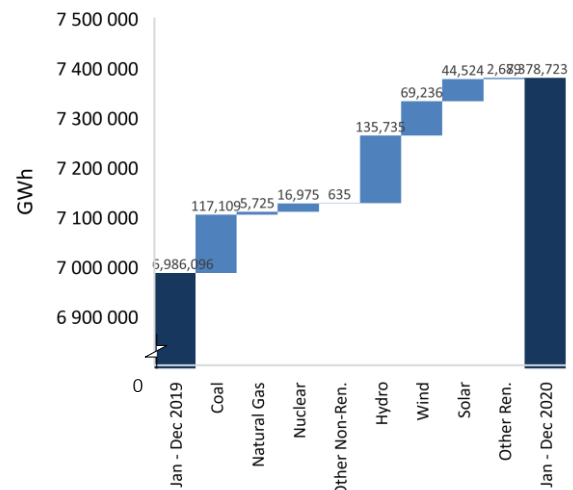
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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

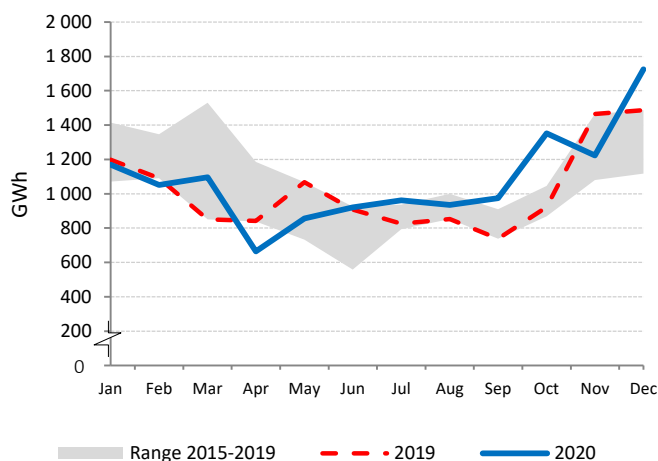


CROATIA

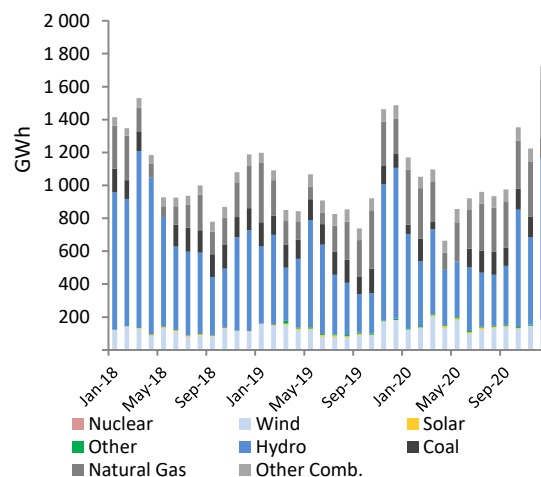
	Dec 20				Latest 2 years					
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share	
CONVENTIONAL THERMAL	561	47.7%	4.4%	32.5%	5 283	4 778	10.6%	40.9%	39.0%	
Coal	123	48.4%	-2.6%	7.1%	1 115	1 511	-26.2%	8.6%	12.3%	
Oil	-	-	-	-	7	35	-79.2%	0.1%	0.3%	
Natural Gas	354	62.7%	6.2%	20.5%	3 262	2 423	34.6%	25.2%	19.8%	
Combustible Renewables	85	11.5%	7.9%	4.9%	899	809	11.0%	7.0%	6.6%	
Other Combustibles	-	-	-	-	-	-	-	-	-	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	974	6.1%	82.8%	56.5%	5 761	5 852	-1.6%	44.6%	47.8%	
Wind	185	2.6%	28.7%	10.8%	1 725	1 461	18.1%	13.3%	11.9%	
Solar	1	-36.7%	-47.2%	0.1%	84	83	1.2%	0.6%	0.7%	
Geothermal	3	-51.6%	-57.8%	0.2%	75	74	1.5%	0.6%	0.6%	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	1 249	5.5%	63.2%	72.4%	8 544	8 280	3.2%	66.1%	67.6%	
NON-RENEWABLES	476	56.8%	3.8%	27.6%	4 384	3 969	10.5%	33.9%	32.4%	
TOTAL NET PRODUCTION	1 725	16.0%	40.9%		12 928	12 248	5.5%			

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

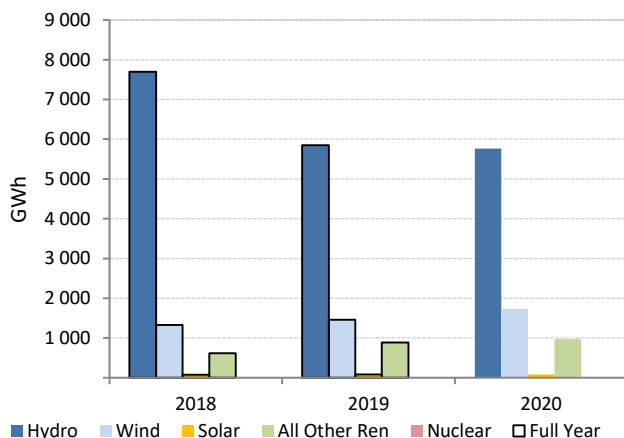
Electricity Production



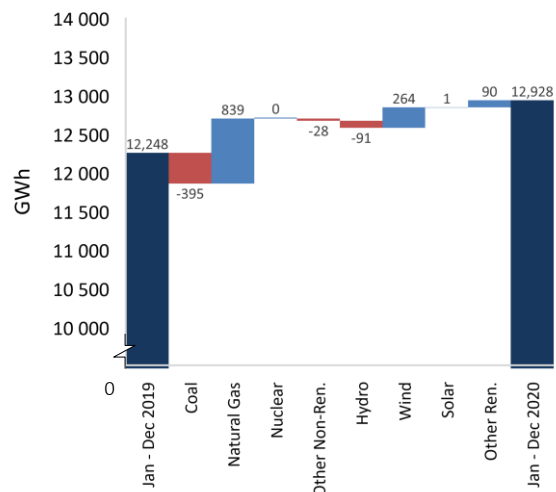
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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



CYPRUS

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	348	2.0%	13.1%	90.6%	4 166	4 457	-6.5%	88.0%	90.7%
Coal	-	-	-	-	-	-	-	-	-
Oil	343	2.1%	13.2%	89.3%	4 104	4 402	-6.8%	86.7%	89.6%
Natural Gas	-	-	-	-	-	-	-	-	-
Combustible Renewables	5	-9.0%	4.8%	1.3%	62	55	13.0%	1.3%	1.1%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
Wind	15	-20.8%	10.3%	3.9%	240	239	0.8%	5.1%	4.9%
Solar	21	54.5%	-6.5%	5.5%	329	218	50.7%	6.9%	4.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	41	8.0%	0.4%	10.7%	632	512	23.4%	13.3%	10.4%
NON-RENEWABLES	343	2.1%	13.2%	89.3%	4 104	4 402	-6.8%	86.7%	89.6%
TOTAL NET PRODUCTION	384	2.7%	11.7%		4 735	4 914	-3.6%		

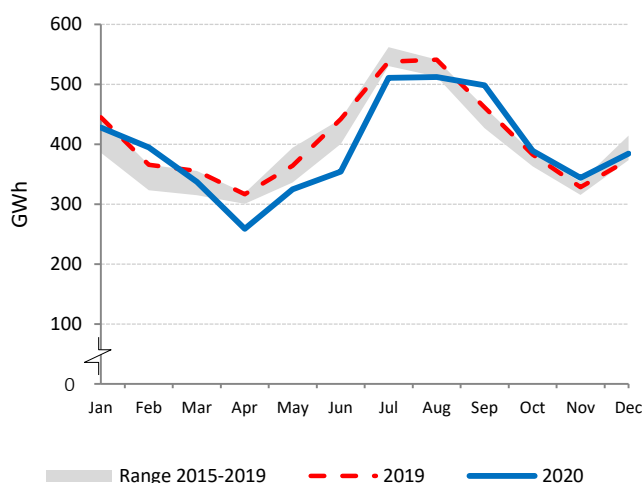
¹ current month to month of last year change

Please refer to country Notes

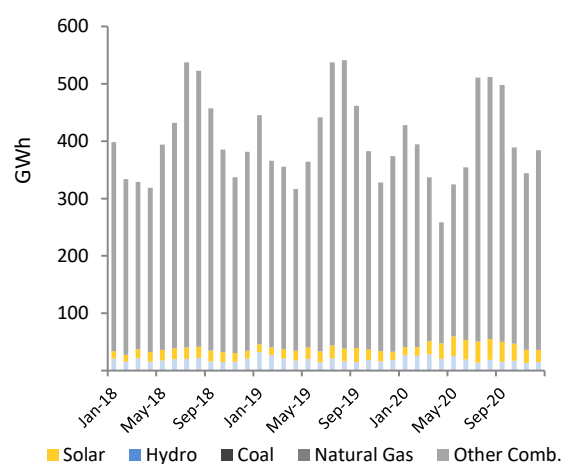
² month-to-month change

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

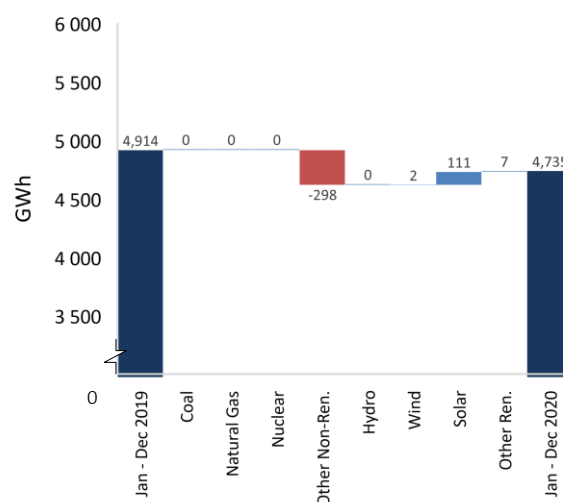
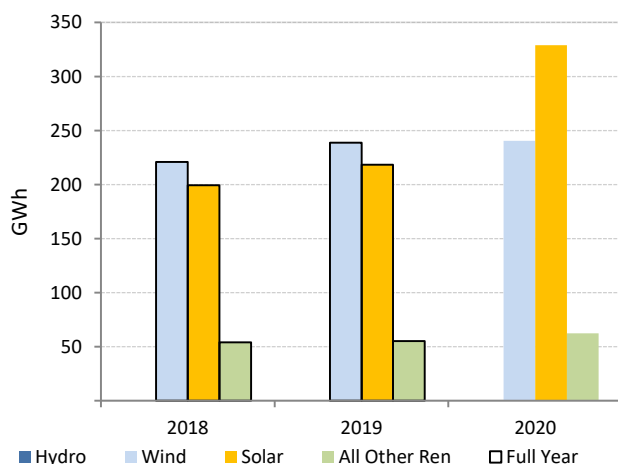
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Dec



INDIA

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	107 921	7.7%	10.4%	83.2%	1 152 484	1 192 778	-3.4%	77.5%	78.8%
Coal	93 009	5.2%	10.0%	71.7%	1 017 530	1 077 003	-5.5%	68.5%	71.2%
Oil	711	19.7%	-17.0%	0.5%	8 553	7 005	22.1%	0.6%	0.5%
Natural Gas	5 052	-1.7%	-5.4%	3.9%	70 375	65 696	7.1%	4.7%	4.3%
Combustible Renewables	9 086	51.4%	30.2%	7.0%	55 272	42 347	30.5%	3.7%	2.8%
Other Combustibles	63	3.6%	-	0.0%	754	726	3.8%	0.1%	0.0%
Nuclear	3 687	5.9%	1.7%	2.8%	42 238	42 599	-0.8%	2.8%	2.8%
Hydro	9 199	-8.0%	-4.5%	7.1%	168 909	167 865	0.6%	11.4%	11.1%
Wind	4 115	-3.2%	15.4%	3.2%	64 296	63 736	0.9%	4.3%	4.2%
Solar	4 809	20.7%	3.4%	3.7%	58 522	46 226	26.6%	3.9%	3.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	27 210	12.3%	9.6%	21.0%	346 999	320 174	8.4%	23.3%	21.2%
NON-RENEWABLES	102 523	4.9%	8.6%	79.0%	1 139 450	1 193 030	-4.5%	76.7%	78.8%
TOTAL NET PRODUCTION	129 733	6.4%	8.8%		1 486 449	1 513 204	-1.8%		

¹ current month to month of last year change

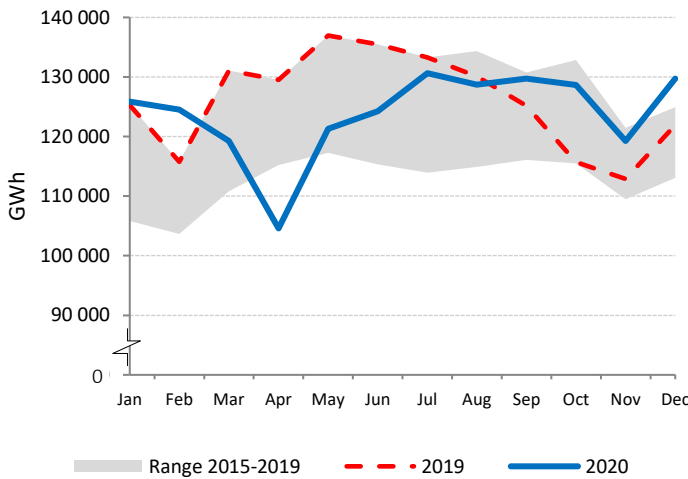
² month-to-month change

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

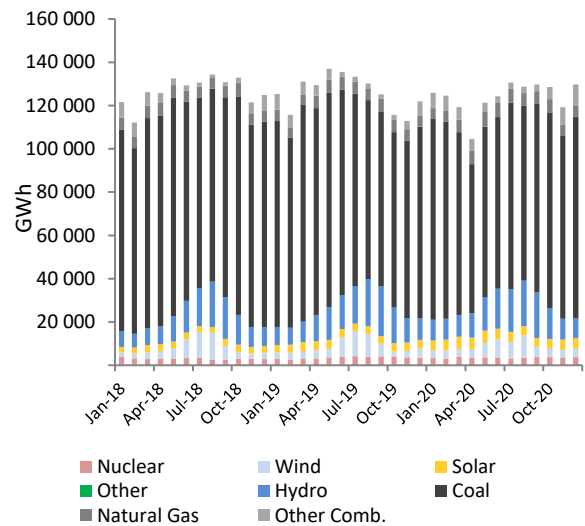
⁴ estimated from annual data

Distributed generation is estimated by the IEA Secretariat

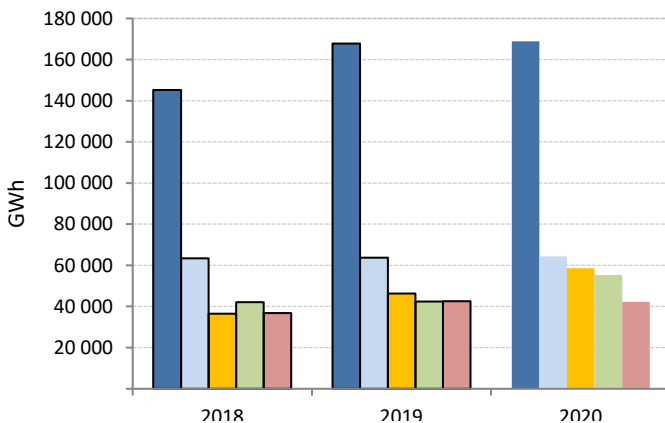
Electricity Production



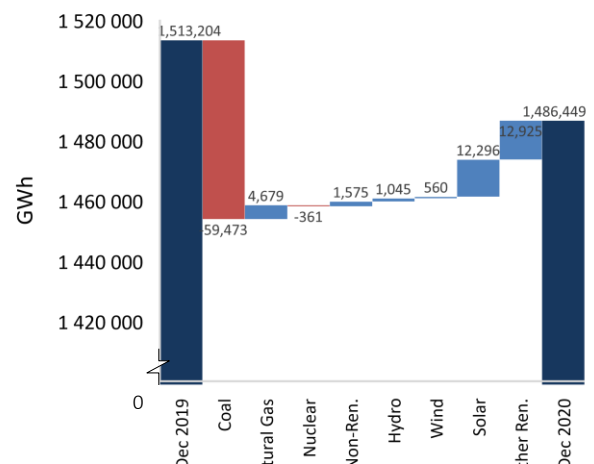
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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



■ Hydro ■ Wind ■ Solar ■ All Other Ren ■ Nuclear □ Full Year

Jan - C

Nat

Monthly Electricity Statistics

Other N

Ot

Jan - C

MALTA

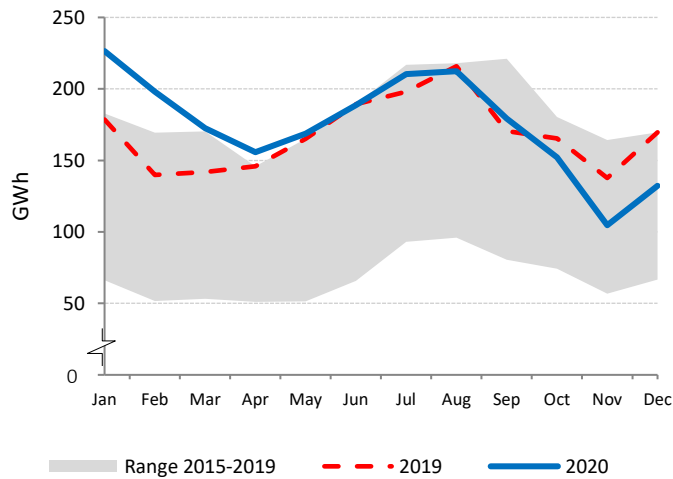
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	119	-24.9%	32.5%	90.3%	1 846	1 806	2.2%	87.9%	89.5%
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	67	29	130.9%	3.2%	1.4%
Natural Gas	119	-13.9%	38.0%	90.3%	1 779	1 770	0.5%	84.7%	87.8%
Combustible Renewables	-	-	-	-	-	6	-	-	0.3%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Solar	13	21.3%	-11.9%	9.7%	255	212	20.5%	12.1%	10.5%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	13	15.4%	-11.9%	9.7%	255	218	17.1%	12.1%	10.8%
NON-RENEWABLES	119	-24.6%	32.5%	90.3%	1 846	1 800	2.6%	87.9%	89.2%
TOTAL NET PRODUCTION	132	-22.0%	26.3%		2 101	2 017	4.2%		

¹ current month to month of last year change

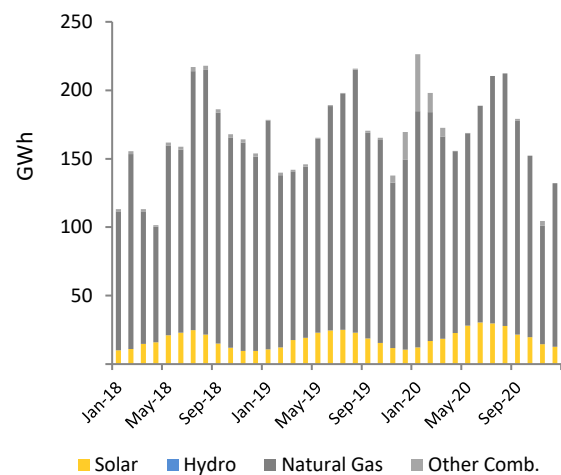
² month-to-month change

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

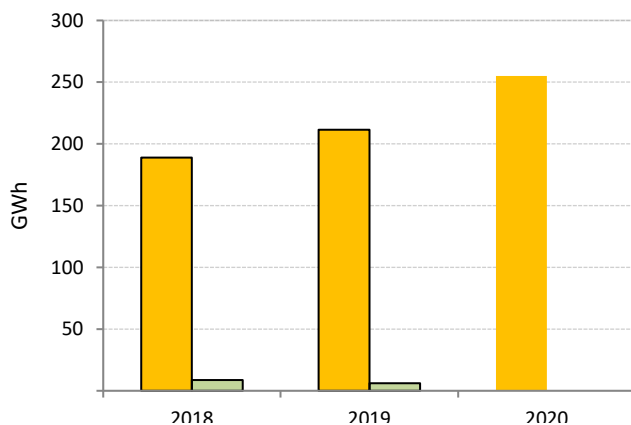
Electricity Production



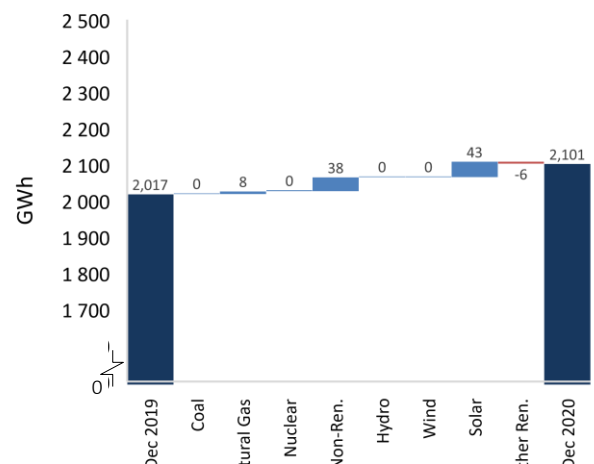
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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



2018 2019 2020

■ Solar ■ All Other Ren □ Full Year

Jan - C

Nat

Monthly Electricity Statistics

Other N

Ot

Jan - C

NORTH MACEDONIA

	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	414	13.9%	21.2%	87.7%	3 641	4 220	-13.7%	72.3%	76.7%
Coal	223	-20.7%	24.9%	47.2%	2 442	3 231	-24.4%	48.5%	58.7%
Oil	12	149.3%	36.3%	2.5%	67	56	19.9%	1.3%	1.0%
Natural Gas	175	138.4%	16.6%	37.1%	1 079	882	22.3%	21.4%	16.0%
Combustible Renewables	4	-4.2%	2.1%	0.9%	52	51	3.4%	1.0%	0.9%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	40	-66.2%	26.0%	8.4%	1 244	1 155	7.6%	24.7%	21.0%
Wind	17	52.4%	115.3%	3.6%	127	102	25.1%	2.5%	1.9%
Solar	1	75.9%	-10.1%	0.3%	24	23	4.0%	0.5%	0.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	62	-53.4%	38.5%	13.2%	1 448	1 331	8.8%	28.7%	24.2%
NON-RENEWABLES	409	14.1%	21.5%	86.8%	3 588	4 170	-13.9%	71.3%	75.8%
TOTAL NET PRODUCTION	472	-4.2%	23.5%		5 036	5 501	-8.5%		

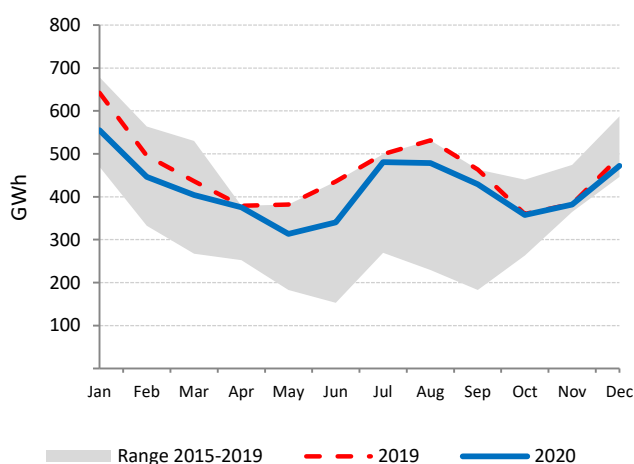
¹ current month to month of last year change

December 2020 is estimated by the IEA Secretariat

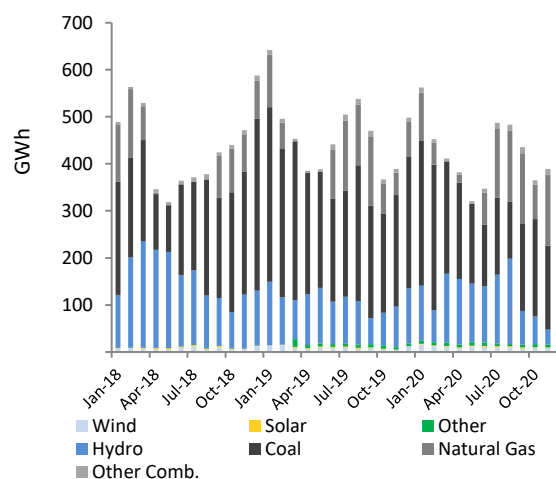
² month-to-month change

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

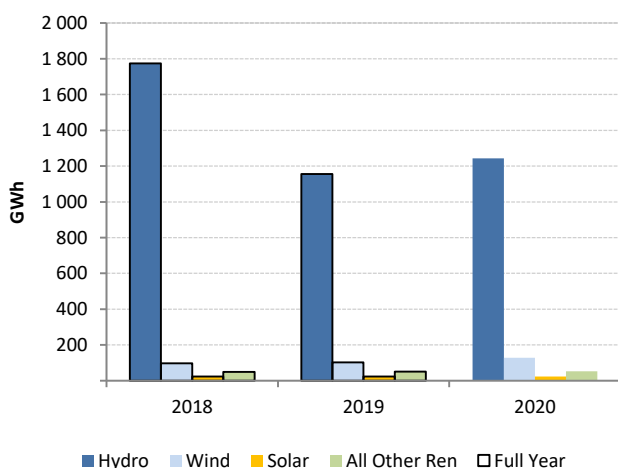
Electricity Production



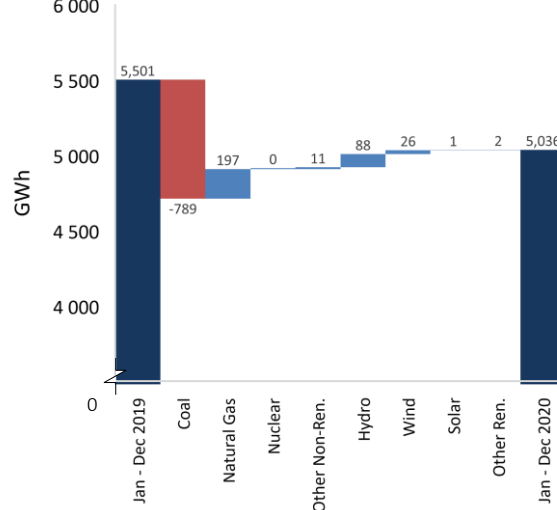
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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



ROMANIA

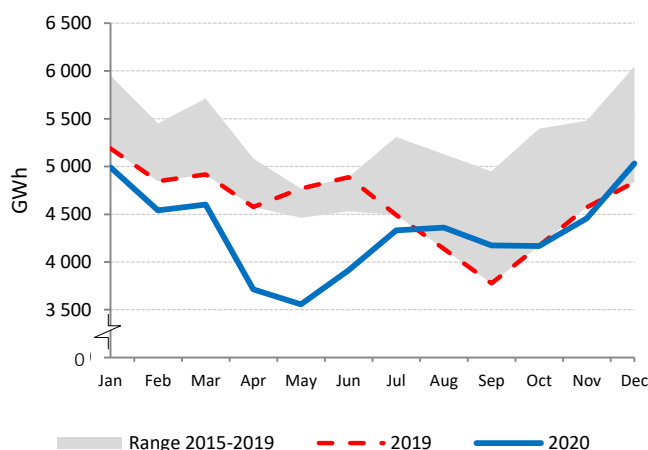
	Dec 20				Latest 2 years				
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share
CONVENTIONAL THERMAL	1 950	-0.9%	11.7%	38.8%	17 137	20 509	-16.4%	33.1%	37.2%
Coal	832	-14.7%	12.5%	16.5%	8 079	11 838	-31.8%	15.6%	21.5%
Oil	38	25.0%	25.0%	0.8%	364	516	-29.4%	0.7%	0.9%
Natural Gas	1 014	10.3%	9.6%	20.1%	8 198	7 720	6.2%	15.8%	14.0%
Combustible Renewables	66	53.8%	33.3%	1.3%	496	435	14.1%	1.0%	0.8%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	969	-0.2%	3.3%	19.3%	10 555	10 345	2.0%	20.4%	18.7%
Hydro	1 312	20.8%	0.1%	26.1%	15 533	15 842	-1.9%	30.0%	28.7%
Wind	767	2.5%	93.7%	15.2%	6 877	6 703	2.6%	13.3%	12.1%
Solar	34	-46.0%	-48.5%	0.7%	1 734	1 778	-2.4%	3.3%	3.2%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	2 179	12.3%	19.5%	43.3%	24 641	24 757	-0.5%	47.5%	44.9%
NON-RENEWABLES	2 853	-1.5%	8.3%	56.7%	27 197	30 420	-10.6%	52.5%	55.1%
TOTAL NET PRODUCTION	5 032	4.0%	12.9%		51 838	55 177	-6.1%		

¹ current month to month of last year change

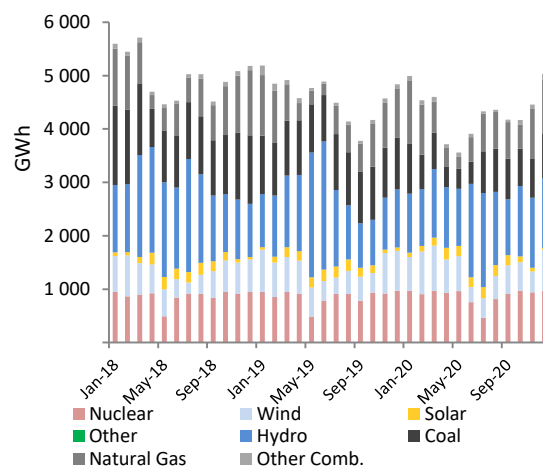
² month-to-month change

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

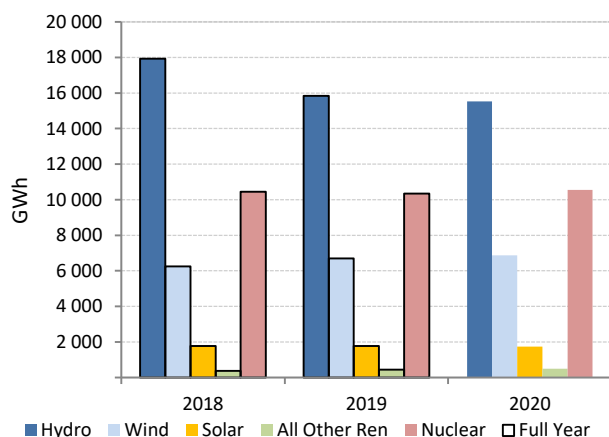
Electricity Production



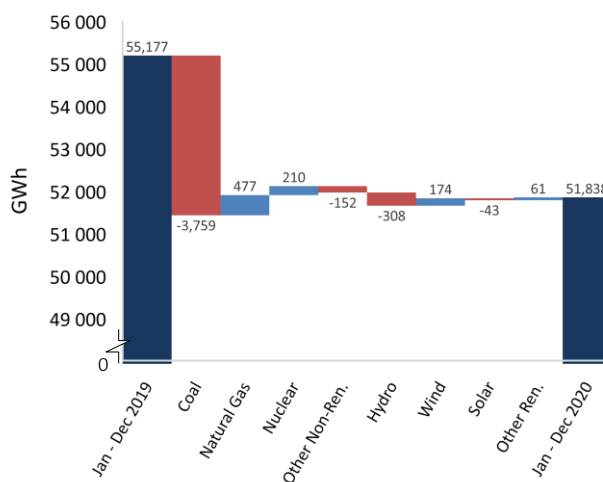
Electricity Production by Fuel



Low-carbon Power Jan - Dec



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



SERBIA

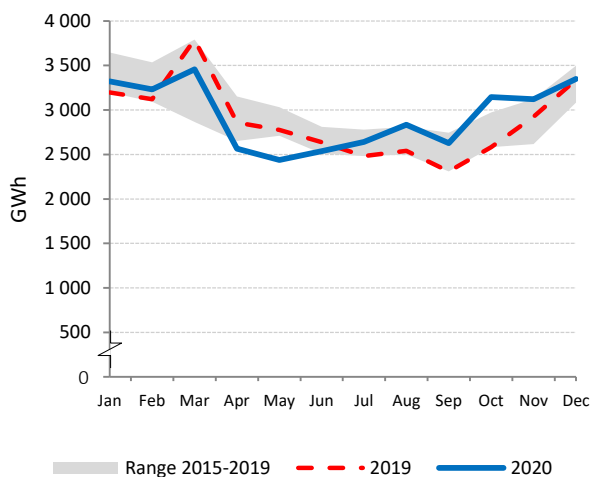
	Dec 20				Latest 2 years					
	GWh	Dec 20 vs. Dec 19 ¹	Dec 20 vs. Nov 20 ²	share	2020	2019	change ³	2020 share	2019 share	
CONVENTIONAL THERMAL	2 450	6.8%	8.4%	73.2%	24 621	23 547	4.6%	69.8%	68.1%	
Coal	2 359	6.2%	8.4%	70.5%	23 718	22 808	4.0%	67.3%	66.0%	
Oil	2	18.3%	8.4%	0.1%	23	20	15.9%	0.1%	0.1%	
Natural Gas	70	21.8%	8.4%	2.1%	705	591	19.3%	2.0%	1.7%	
Combustible Renewables	18	42.9%	3.3%	0.5%	170	123	38.1%	0.5%	0.4%	
Other Combustibles	0	-	-	0.0%	5	5	0.0%	0.0%	0.0%	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	759	-16.6%	-8.4%	22.7%	9 660	10 106	-4.4%	27.4%	29.2%	
Wind	139	3.9%	343.6%	4.2%	972	898	8.2%	2.8%	2.6%	
Solar	0	-21.8%	-38.1%	0.0%	13	14	-0.4%	0.0%	0.0%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	916	-13.3%	4.4%	27.4%	10 815	11 141	-2.9%	30.7%	32.2%	
NON-RENEWABLES	2 432	6.6%	8.4%	72.6%	24 451	23 424	4.4%	69.3%	67.8%	
TOTAL NET PRODUCTION	3 349	0.3%	7.3%		35 267	34 565	2.0%			

¹ current month to month of last year change

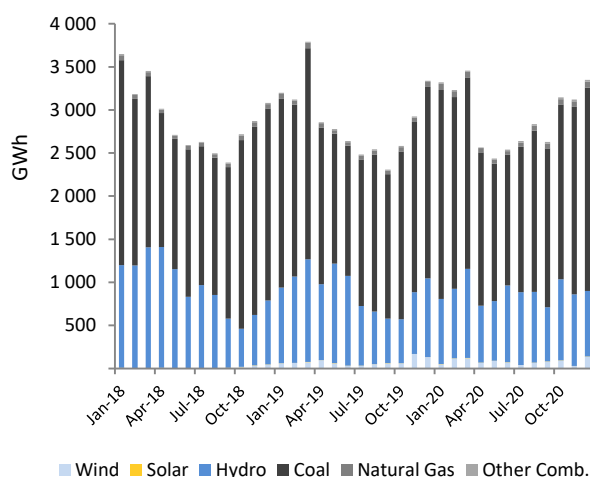
² month-to-month change

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

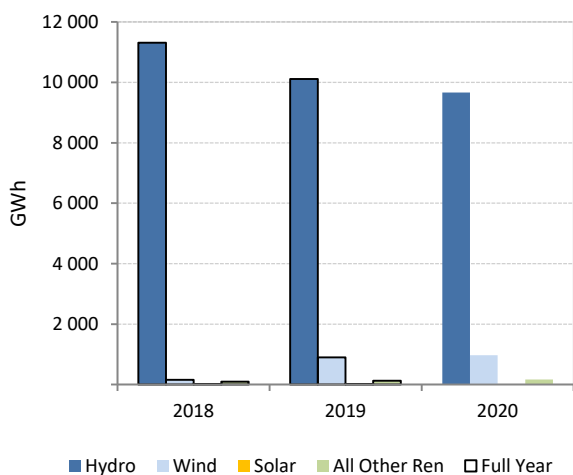
Electricity Production



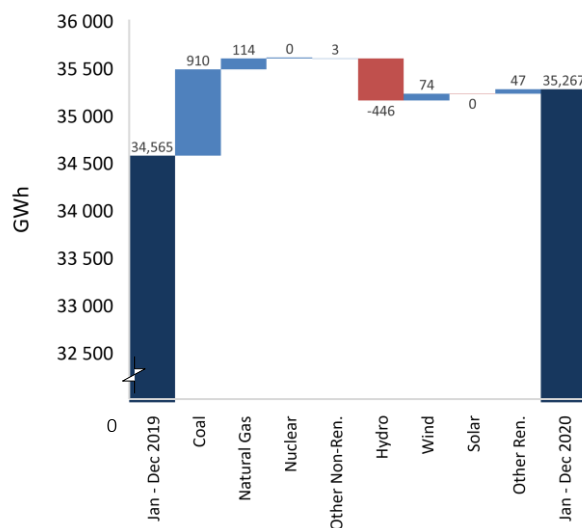
Electricity Production by Fuel



Low-carbon Power Jan - Dec



Electricity Production Variation Jan - Dec 2019 vs. Jan - Dec 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/</i>	
<i>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</i>	Indigenous production + Imports - Exports. It includes Transmission and Distribution losses
<i>Used for Pumped Storage</i>	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, Colombia, the Czech Republic, Denmark, Estonia, Finland, France, 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

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Published on the 15th of each month.

2021