# **Statistics report**

# Monthly OECD Electricity Statistics

Next release: 14 August 2020



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#### MONTHLY ELECTRICITY STATISTICS

#### **April 2020**

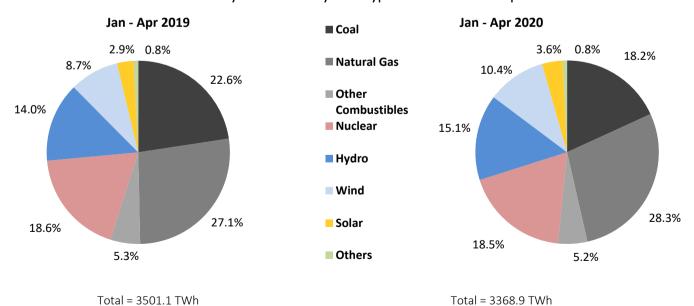
#### **HIGHLIGHTS**

In April 2020, the impacts of country confinement measures due to Covid-19 can be seen on the monthly electricity production figures. A more detailed analysis by the IEA secretariat of the impacts can be found at: www.iea.org/reports/covid-19-impact-on-electricity

#### **OECD**

- In April 2020, total net production in the OECD was 738.3 TWh, 7.2% lower than in April 2019 and 12.6% lower than in March 2020, reaching the lowest production level recorded since January 2006. This lower production was a direct result of the different lockdown measures implemented by countries as a result of the Covid-19 pandemic. Production levels decreased to match general lower electricity demand.
- The decrease in total production was driven by lower non-renewable production, which was 478.2 TWh or 12.0% lower than in April 2019 and 14.7% lower than in March 2020. Renewables on the other hand, increased by 3.2% compared to April 2019 and produced 260.1 TWh of electricity. Unlike renewables, conventional thermal and nuclear productions are controllable, the electricity output depends on the fuel input.
- Conventional thermal production in the OECD was the lowest in April 2020 on record, with an output of 358.8 TWh, down by 12.8% compared to April 2019 and 16.5% compared to March 2020. Coal production was 121.6 TWh, 23.0% lower than in April 2019 and 17.5% than in March 2020 and produced only 16.5% of the total electricity compared to 19.9% in April 2019.
- Renewables produced 35.2% of the total electricity in the OECD in April 2020, the highest share on record. In April 2020, solar production was 43.0 TWh, 21.9% higher than in April 2019 and 28.3% higher than in March 2020. Solar production was the highest on record, highlighting the rapid expansion of the solar sector in the OECD.

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



#### **OECD Americas**

- Net production in OECD Americas was 356.4 TWh in April 2020, 5.8% lower than in April 2019 and 10.6% lower than in March 2020. Renewable production was 108.5 TWh, 4.3% lower than in April 2019 and 5.7% lower than in March 2020. Conventional thermal production was 185.5 TWh, 8.4% lower than in April 2019 and 14.3% lower than in March 2020. This sharp decrease was a result of lower coal production, which was 49.4 TWh, down by 28.9% compared to April 2019 and produced 13.9% of the total electricity.
- In Canada, electricity demand was lower in April 2020, the amount of electricity consumed was 41.5 TWh, 5.1% lower than in April 2019 and 17.8% lower than in March 2020, even though temperatures were much below season average. Total production was 48.5 TWh, only 0.9% lower than in April 2019. As a result, electricity exports increased by 30.6% compared to April 2019 to reach 5.0 TWh;
- In the United States, total net production was 278.6 TWh, down by 6.8% compared to April 2019 and by 9.8% compared to March 2020. The production level was the lowest recorded for a month of April. Unlike in Canada, where electricity exports increased to match lower demand, in the United States, conventional thermal production decreased, by 8.7% compared to April 2019, down to 155.7 TWh. Coal production was 42.3 TWh in April 2019, 19.9 TWh or 31.9% lower than in April 2019. Although coal power production has been following a decreasing trend since 2018, the Covid-19 crisis has also had an impact on coal power production. Coal production decreased by 32.9% in the first four months of 2020 compared to the same period in 2019.

#### **OECD Asia/Oceania**

- Net electricity production in OECD Asia/Oceania was 136.0 TWh in April 2020, down by 3.1% compared to April 2019 and by 9.1% compared to March 2020. Renewable production was 29.7 TWh and was 18.7% higher than in April 2019 and 7.2% higher than in March 2020. This increase in renewable production was driven by higher hydro production which was 12.2 TWh in April 2020, 22.8% higher than in April 2019 and 12.3% higher than in March 2020.
- In Korea, net electricity production was 41.2 TWh in April 2020, 4.8% lower than in April 2019 and 8.6% lower than in March 2020. This decrease was a result of lower conventional thermal production, which was 25.1 TWh, down by 9.6% compared to April 2019. The main driver of this drop was natural gas production which decreased by 19.5% compared to April 2019 and 30.2% compared to March 2020, down to 9.5 TWh. In contrast, coal power production which was historically low in the first quarter of 2020 increased by 1.7% compared to April 2019 and 6.9% compared to March 2020, to reach 14.6 TWh, after having decreased since September 2019.

#### **OECD Europe**

- In April 2020, most OECD Europe countries had undertaken lockdown measure, and the impacts on the electricity sector can be seen. Total net production in OECD Europe was 245.9 TWh, down by 11.1% compared to April 2019 and by 17.0% compared to March 2020. This decrease in production is unprecedented and electricity production levels in April 2020 are the lowest on record. In comparison with other OECD aggregates, the biggest impact on electricity production was in OECD Europe because more countries were under strict lockdown measures. In OECD Europe, there were two trends seen across countries to adapt to lower demand: the first one was to reduce domestic production while the second one was to reduce electricity imports significantly in order for the electricity supply to match the demand.
- Renewables in April 2020 produced 49.6% of total electricity, or 121.9 TWh. Renewable production was 7.1% higher than in April 2019 and 13.7% lower than in March 2020. On the other hand, due to lower demand, non-renewable production declined by 23.8% compared to April 2019 and by 20.0% compared to March 2020, down to 124.0 TWh, the lowest level on record. Both conventional thermal and nuclear production fell, respectively by 25.4% and 14.9% compared to April 2019. Coal production was just 25.0 TWh, down by 38.9% compared to April 2019 and by 29.9% compared to March 2020. Coal production levels were the lowest since January 2006.

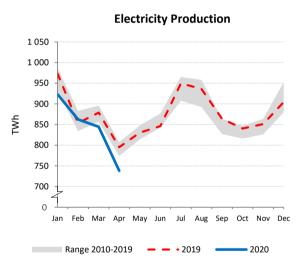
- In France, where strict lockdown measures were applied on 17 March 2020, electricity supply was 32.6 TWh in April 2020, down by 16.4% compared to April 2019 and by 24.5% compared to March 2020. Lockdown measures combined with warmer than average temperatures drove electricity demand down. To match demand levels, nuclear production decreased significantly, by 15.5% compared to April 2019 and 12.4% compared to March 2020, down to 26.9 TWh. Nuclear reactors that were shut down for maintenance will remain offline throughout summer and autumn as a result of the drop in electricity consumption. In April 2020, the electricity consumed in France decreased by 17.4% compared to April 2019 and was 29.4 TWh.
- In Germany, net production was 39.4 TWh, down by 18.5% compared to April 2019 and by 20.0% compared to March 2020. Because of the sanitary crisis and high renewables generation, representing 55.6% of the total mix, demand for conventional thermal electricity was lower. As a result, coal production more than halved compared to April 2019 and produced 17.0% of the total electricity, or 6.7 TWh in April 2020 compared to an output of 14.4 TWh in April 2019. On the hand, solar production increased significantly in April 2020 and was 7.3 TWh, up by 24.9% compared to April 2019 and 57.5% compared to March 2020 as new capacity of 1.5 GW was connected in the first 4 months of 2020.
- In Italy, where strict lockdown measures were implemented on 9 March 2020, total net production fell by 10.9% compared to April 2019, down to 19.2 TWh, as a result of decreased conventional thermal production which was 21.4% lower than in April 2019 and was 11.2 TWh. Lower electricity demand impacted electricity trade. Italy was the biggest electricity importer in OECD Europe in 2019, and on average, reduced imports enabled the decrease of the amount of electricity supplied in April 2020. Import were 1.8 TWh in April 2020, 41.0% lower than in April 2019. Exports nearly doubled, up by 92.5% compared to April 2019, to reach 0.98 TWh. Trade levels were adapted to lower electricity consumption, which was 18.5 TWh in April 2020, 17.5% lower than in April 2019.
- In Poland, coal power plants produced 7.0 TWh of electricity, 16.8% less than in April 2019 and 15.8% less than in March 2020. The share of coal in the electricity mix dropped to 66.0% compared to 70.5% in April 2019. Although net electricity production decreased as a result of lower coal production, solar production in April 2020 was 250.0 GWh, up by 246.5% compared to April 2019. In 2019, Poland quadrupled its solar capacity and consequently in the first four months of 2020, solar production increased by 357.9 GWh compared to the same period last year.
- In Turkey, electricity consumption dropped by 14.5% compared to April 2019 and was 17.0 TWh in April 2020 as a result of the Covid-19 crisis. While renewable production progressed by 0.5% compared to April 2019 to reach 13.0 TWh, non-renewable production fell by 35.8% compared to April 2019 and 37.9% compared to March 2019. Sharp decreases in productions from coal and natural gas were responsible for this drop. Coal production was 4.8 TWh, 28.5% lower than in April 2019 while natural gas production was 1.4 TWh, down by 53.3% compared to April 2019.
- In the UK, as a result of the pandemic and warmer than average conditions, electricity consumption decreased significantly, by 16.9% compared to April 2019. Net production adapted to the demand levels and was 20.8 TWh, 17.6% lower than in April 2019 and 21.4% lower than in March 2020. The drop in production was mainly due to lower natural gas production, which was 7.2 TWh, 33.5% lower than in April 2019 and 22.1% lower than in March 2020. It should be noted that on 9 April, the last coal generator was put offline as demand dropped and no coal powered electricity was produced for the rest of April 2020. While non-renewable production dropped by 28.3% compared to April 2019, down to 11.4 TWh, renewable electricity production increased by 0.6% and was 9.4 TWh.

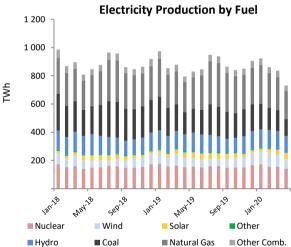
# **OECD Total**

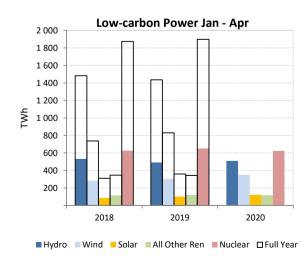
		Apr 2	2020		Ye	ar-to-Dat	e	2019		
	TWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	TWh	share	
CONVENTIONAL THERMAL	358.8	-12.8%	-16.5%	48.6%	1 738.2	1 923.6	-9.6%	5 915.7	56.2%	
Coal <sup>5</sup>	121.6	-23.0%	-17.5%	16.5%	612.4	791.1	-22.6%	2 310.2	22.0%	
Oil <sup>5</sup>	10.7	-22.3%	-14.3%	1.5%	53.5	63.4	-15.7%	188.9	1.8%	
Natural Gas <sup>5</sup>	198.7	-6.4%	-16.2%	26.9%	951.9	947.9	0.4%	3 065.2	29.1%	
Combustible Renewables <sup>5</sup>	23.3	2.5%	-10.4%	3.2%	99.9	101.4	-1.5%	291.5	2.8%	
Other Combustibles <sup>5</sup>	4.5	-2.2%	-13.8%	0.6%	20.6	19.9	3.9%	59.8	0.6%	
Nuclear	140.9	-7.5%	-8.7%	19.1%	623.7	651.4	-4.3%	1 898.2	18.0%	
Hydro	119.6	0.1%	-9.1%	16.2%	509.5	491.1	3.8%	1 435.8	13.6%	
Wind	69.9	-0.9%	-21.0%	9.5%	349.1	304.2	14.8%	830.5	7.9%	
Solar	43.0	21.9%	28.3%	5.8%	121.5	101.3	19.9%	359.8	3.4%	
Geothermal	4.2	3.3%	-5.1%	0.6%	16.9	17.5	-3.4%	50.2	0.5%	
Other Renewables	0.1	9.4%	2.1%	0.0%	0.3	0.3	3.6%	1.0	0.0%	
Non-Specified	1.8	-23.7%	-30.2%	0.2%	9.6	11.7	-18.0%	32.8	0.3%	
RENEWABLES	260.1	3.2%	-8.5%	35.2%	1 097.2	1 015.8	8.0%	2 968.7	28.2%	
NON-RENEWABLES	478.2	-12.0%	-14.7%	64.8%	2 271.7	2 485.4	-8.6%	7 555.1	71.8%	
TOTAL NET PRODUCTION	738.3	-7.2%	-12.6%		3 368.9	3 501.1	-3.8%	10 523.8		
+ Imports	37.1	-3.0%	-13.8%		168.5	168.1	0.3%	491.4		
- Exports	39.0	5.7%	-10.0%		172.4	163.2	5.7%	484.0		
= ELECTRICITY SUPPLIED	736.4	-7.6%	-12.8%		3 364.9	3 506.0	-4.0%	10 531.2		
- Used for pumped storage <sup>4</sup>	7.5	21.5%	8.1%		27.8	25.3	9.6%	83.0		
- T&D Losses <sup>4</sup>	41.1	-14.5%	-13.4%		196.8	206.9	-4.9%	633.4		
= ELECTRICITY CONSUMED	687.8	-7.4%	-12.9%		3 140.4	3 273.8	-4.1%	9 814.8		

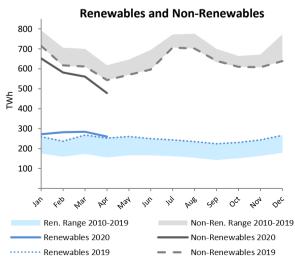
<sup>&</sup>lt;sup>1</sup> current month to month of last year change

 $<sup>^{\</sup>rm 5}$  the breakdown of conventional thermal is estimated from annual data for Canada, Estonia and Italy









<sup>&</sup>lt;sup>2</sup> month-to-month change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year

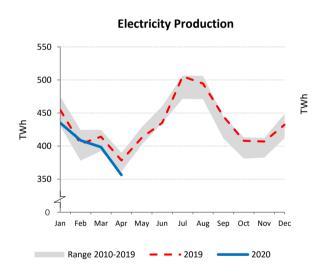
<sup>&</sup>lt;sup>4</sup> estimated for certain countries

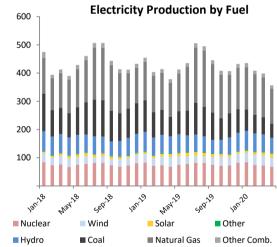
# **OECD Americas**

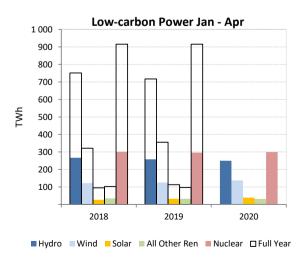
		Apr 2	.020		Ye	ear-to-Dat	e	2019		
	TWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	TWh	share	
CONVENTIONAL THERMAL	185.5	-8.4%	-14.3%	52.0%	864.6	930.4	-7.1%	3 064.6	59.0%	
Coal <sup>5</sup>	49.5	-28.9%	-19.1%	13.9%	253.4	362.6	-30.1%	1 097.1	21.1%	
Oil <sup>5</sup>	5.5	-2.3%	-14.2%	1.5%	24.2	23.0	4.9%	75.1	1.4%	
Natural Gas <sup>5</sup>	123.9	2.7%	-12.5%	34.8%	559.0	516.3	8.3%	1 806.5	34.8%	
Combustible Renewables <sup>5</sup>	5.8	-2.7%	-8.8%	1.6%	24.6	25.3	-2.7%	75.6	1.5%	
Other Combustibles <sup>5</sup>	0.9	15.2%	-5.2%	0.2%	3.6	3.2	11.8%	10.4	0.2%	
Nuclear	67.8	-0.4%	-7.2%	19.0%	299.6	296.3	1.1%	915.6	17.6%	
Hydro	54.6	-9.3%	-12.0%	15.3%	250.0	258.1	-3.2%	716.8	13.8%	
Wind	34.0	-3.0%	-2.4%	9.5%	137.3	125.0	9.8%	355.5	6.8%	
Solar	12.5	18.6%	23.0%	3.5%	39.0	31.9	22.2%	113.1	2.2%	
Geothermal	1.7	1.1%	-7.4%	0.5%	6.7	7.1	-5.9%	20.8	0.4%	
Other Renewables	-	-	-	-	-	0.0	-	0.0	0.0%	
Non-Specified	0.4	1.3%	14.8%	0.1%	1.3	1.5	-13.7%	4.7	0.1%	
RENEWABLES	108.5	-4.3%	-5.7%	30.4%	457.6	447.5	2.3%	1 281.8	24.7%	
NON-RENEWABLES	247.9	-6.5%	-12.5%	69.6%	1 141.0	1 203.0	-5.2%	3 909.3	75.3%	
TOTAL NET PRODUCTION	356.4	-5.8%	-10.6%		1 598.6	1 650.5	-3.1%	5 191.1		
+ Imports	5.3	-13.3%	-10.5%		22.7	24.6	-7.9%	74.0		
- Exports	7.1	18.5%	-5.2%		28.1	25.6	9.6%	81.3		
= ELECTRICITY SUPPLIED	354.6	-6.3%	-10.7%		1 593.2	1 649.5	-3.4%	5 183.8		
- Used for pumped storage <sup>4</sup>	1.7	-5.3%	-1.8%		7.1	7.3	-3.7%	26.2		
- T&D Losses <sup>4</sup>	17.6	-23.4%	-6.5%		83.2	91.6	-9.2%	306.9		
= ELECTRICITY CONSUMED	335.3	-5.2%	-10.9%		1 502.9	1 550.5	-3.1%	4 850.6		

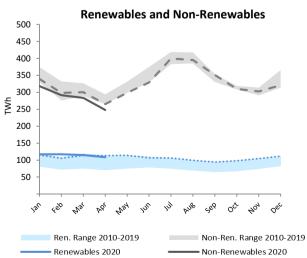
<sup>&</sup>lt;sup>1</sup> current month to month of last year change

 $<sup>^{\</sup>rm 5}$  the breakdown of conventional thermal is estimated from annual data for Canada









Non-Renewables 2019

····· Renewables 2019

<sup>&</sup>lt;sup>2</sup> month-to-month change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year

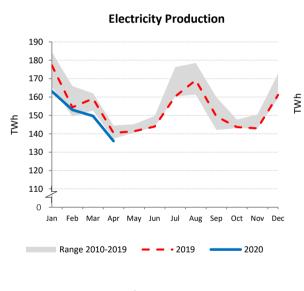
<sup>&</sup>lt;sup>4</sup> estimated for certain countries

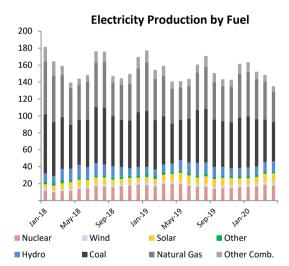
# **OECD Asia Oceania**

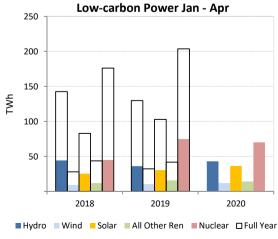
		Apr 2	2020		Ye	ar-to-Dat	e	2019		
	TWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	TWh	share	
CONVENTIONAL THERMAL	89.7	-7.3%	-14.1%	66.0%	430.8	468.2	-8.0%	1 341.8	72.8%	
Coal	47.1	-0.5%	-6.9%	34.6%	215.9	228.7	-5.7%	676.0	36.7%	
Oil	2.5	-47.2%	-13.8%	1.8%	16.0	25.0	-35.9%	68.3	3.7%	
Natural Gas	36.3	-11.5%	-19.0%	26.7%	181.1	195.2	-7.2%	544.7	29.6%	
Combustible Renewables	2.3	7.0%	-22.6%	1.7%	10.4	12.2	-14.9%	31.3	1.7%	
Other Combustibles	1.5	-5.7%	-16.2%	1.1%	7.5	7.0	5.8%	21.6	1.2%	
Nuclear	17.9	-7.3%	-4.6%	13.2%	70.0	74.7	-6.3%	203.7	11.1%	
Hydro	12.2	22.8%	12.3%	9.0%	42.9	36.0	19.1%	129.7	7.0%	
Wind	2.8	17.2%	-11.8%	2.0%	11.8	10.4	12.7%	32.1	1.7%	
Solar	11.5	19.1%	17.9%	8.4%	36.2	30.3	19.6%	102.8	5.6%	
Geothermal	0.8	0.7%	-3.3%	0.6%	3.4	3.2	5.4%	10.0	0.5%	
Other Renewables	0.0	18.9%	4.0%	0.0%	0.2	0.2	7.8%	0.5	0.0%	
Non-Specified	1.0	-33.2%	-44.7%	0.7%	6.6	8.3	-20.9%	22.7	1.2%	
RENEWABLES	29.7	18.7%	7.2%	21.8%	104.8	92.3	13.6%	306.2	16.6%	
NON-RENEWABLES	106.3	-7.9%	-12.8%	78.2%	497.0	539.0	-7.8%	1 536.9	83.4%	
TOTAL NET PRODUCTION	136.0	-3.1%	-9.1%		601.8	631.3	-4.7%	1 843.1		
+ Imports	-	-	-		-	-	-	-		
- Exports	-	-	-		-	-	-	-		
= ELECTRICITY SUPPLIED	136.0	-3.1%	-9.1%		601.8	631.3	-4.7%	1 843.1		
- Used for pumped storage <sup>4</sup>	1.4	12.1%	26.1%		4.9	4.7	3.4%	15.6		
- T&D Losses <sup>4</sup>	5.8	-3.2%	-11.4%		26.2	27.1	-3.6%	78.5		
= ELECTRICITY CONSUMED	128.8	-3.3%	-9.3%		570.8	599.5	-4.8%	1 749.0		

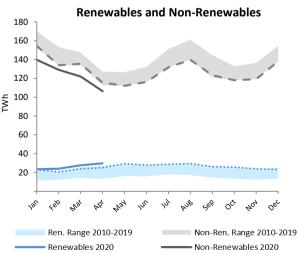
 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year









Non-Renewables 2019

····· Renewables 2019

<sup>&</sup>lt;sup>4</sup> estimated for certain countries

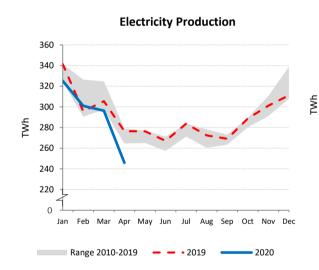
<sup>&</sup>lt;sup>2</sup> month-to-month change

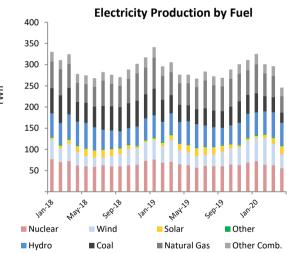
# **OECD** Europe

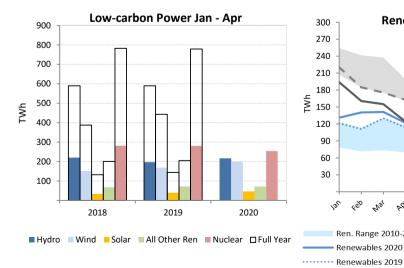
		Apr 2	2020		Yo	ear-to-Date	e	2019		
	TWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	TWh	share	
CONVENTIONAL THERMAL	83.7	-25.4%	-23.1%	34.0%	442.8	525.0	-15.7%	1 509.2	43.2%	
Coal <sup>5</sup>	25.0	-38.9%	-29.9%	10.2%	143.1	199.8	-28.4%	537.1	15.4%	
Oil <sup>5</sup>	2.8	-20.7%	-14.8%	1.1%	13.3	15.4	-13.7%	45.5	1.3%	
Natural Gas <sup>5</sup>	38.5	-24.0%	-23.9%	15.7%	211.8	236.3	-10.4%	714.1	20.5%	
Combustible Renewables <sup>5</sup>	15.2	3.9%	-8.8%	6.2%	64.9	63.9	1.6%	184.7	5.3%	
Other Combustibles <sup>5</sup>	2.1	-5.6%	-15.4%	0.8%	9.6	9.6	-0.2%	27.9	0.8%	
Nuclear	55.2	-14.9%	-11.8%	22.4%	254.2	280.4	-9.4%	778.8	22.3%	
Hydro	52.8	7.1%	-10.0%	21.5%	216.6	196.9	10.0%	589.3	16.9%	
Wind	33.1	0.0%	-34.4%	13.5%	200.1	168.8	18.6%	442.9	12.7%	
Solar	19.0	26.0%	39.8%	7.7%	46.3	39.1	18.3%	143.9	4.1%	
Geothermal	1.7	7.1%	-3.7%	0.7%	6.8	7.1	-4.8%	19.5	0.6%	
Other Renewables	0.0	-	-	0.0%	0.2	0.2	-	0.5	0.0%	
Non-Specified	0.4	-13.0%	-3.1%	0.2%	1.7	1.8	-8.5%	5.5	0.2%	
RENEWABLES	121.9	7.1%	-13.7%	49.6%	534.8	476.0	12.4%	1 380.7	39.6%	
NON-RENEWABLES	124.0	-23.8%	-20.0%	50.4%	633.7	743.4	-14.8%	2 108.9	60.4%	
TOTAL NET PRODUCTION	245.9	-11.1%	-17.0%		1 168.5	1 219.4	-4.2%	3 489.6		
+ Imports	31.8	-1.0%	-14.4%		145.8	143.4	1.6%	417.4		
- Exports	31.9	3.3%	-11.0%		144.3	137.5	4.9%	402.7		
= ELECTRICITY SUPPLIED	245.8	-11.5%	-17.4%		1 170.0	1 225.2	-4.5%	3 504.4		
- Used for pumped storage <sup>4</sup>	4.4	40.5%	7.3%		15.8	13.3	19.2%	41.2		
- T&D Losses <sup>4</sup>	17.7	-7.3%	-19.9%		87.5	88.1	-0.7%	247.9		
= ELECTRICITY CONSUMED	223.7	-12.5%	-17.6%		1 066.7	1 123.8	-5.1%	3 215.2		

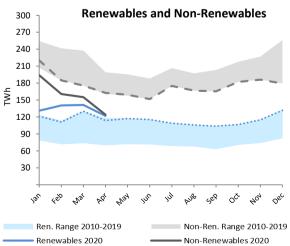
<sup>&</sup>lt;sup>1</sup> current month to month of last year change

 $<sup>^{\</sup>rm 5}$  the breakdown of conventional thermal is estimated from annual data for Estonia and Italy









Non-Renewables 2019

<sup>&</sup>lt;sup>2</sup> month-to-month change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year

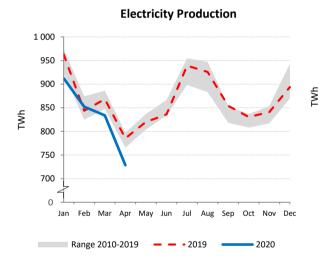
<sup>&</sup>lt;sup>4</sup> estimated for certain countries

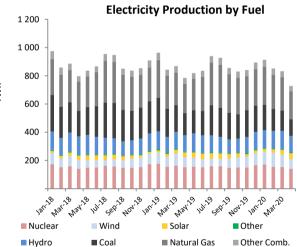
## **IEA Total**

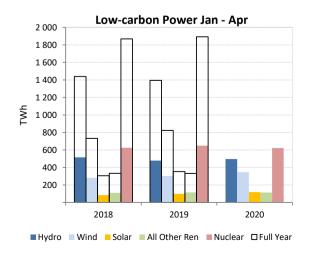
		Apr 2	2020			Year-to-Date		2019		
	TWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	TWh	share	
CONVENTIONAL THERMAL	353.7	-12.9%	-16.6%	48.6%	1 718.6	1 904.4	-9.8%	5 859.2	56.3%	
Coal <sup>5</sup>	119.2	-23.4%	-17.8%	16.4%	603.0	781.5	-22.9%	2 280.7	21.9%	
Oil <sup>5</sup>	10.5	-22.3%	-13.0%	1.4%	52.1	62.7	-16.9%	185.9	1.8%	
Natural Gas <sup>5</sup>	196.8	-6.5%	-16.3%	27.0%	945.2	941.0	0.4%	3 047.0	29.3%	
Combustible Renewables <sup>5</sup>	22.8	2.6%	-10.6%	3.1%	97.7	99.3	-1.6%	285.9	2.7%	
Other Combustibles <sup>5</sup>	4.5	-2.2%	-13.8%	0.6%	20.6	19.8	3.9%	59.7	0.6%	
Nuclear	140.4	-7.5%	-8.7%	19.3%	621.7	649.4	-4.3%	1 892.6	18.2%	
Hydro	117.0	0.6%	-8.7%	16.1%	496.2	477.8	3.9%	1 394.5	13.4%	
Wind	69.4	-1.0%	-21.2%	9.5%	346.9	302.4	14.7%	824.0	7.9%	
Solar	42.4	21.9%	29.1%	5.8%	119.0	99.2	19.9%	353.2	3.4%	
Geothermal	3.7	2.6%	-5.9%	0.5%	14.8	15.4	-4.3%	44.1	0.4%	
Other Renewables	0.1	9.4%	2.1%	0.0%	0.3	0.3	3.6%	1.0	0.0%	
Non-Specified	1.8	-23.0%	-30.2%	0.2%	9.6	11.6	-17.5%	32.6	0.3%	
RENEWABLES	255.3	3.3%	-8.3%	35.1%	1 074.9	994.4	8.1%	2 902.6	27.9%	
NON-RENEWABLES	473.1	-12.1%	-14.8%	64.9%	2 252.1	2 466.1	-8.7%	7 498.5	72.1%	
TOTAL NET PRODUCTION	728.5	-7.2%	-12.6%		3 327.1	3 460.5	-3.9%	10 401.2		
+ Imports	35.3	-1.9%	-13.7%		160.0	158.8	0.7%	464.5		
- Exports	37.9	7.2%	-9.6%		167.3	157.5	6.2%	467.2		
= ELECTRICITY SUPPLIED	725.9	-7.6%	-12.8%		3 319.8	3 461.9	-4.1%	10 398.5		
- Used for pumped storage <sup>4</sup>	7.4	20.7%	8.8%		27.3	25.2	8.4%	81.9		
- T&D Losses <sup>4</sup>	40.6	-14.5%	-13.3%		194.5	204.4	-4.8%	626.7		
= ELECTRICITY CONSUMED	677.8	-7.4%	-13.0%		3 098.0	3 232.3	-4.2%	9 689.8		

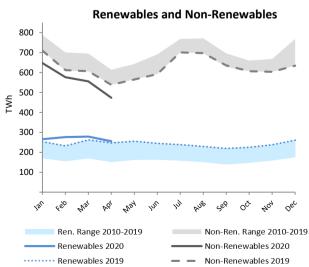
<sup>&</sup>lt;sup>1</sup> current month to month of last year change

 $<sup>^{\</sup>rm 5}$  the breakdown of conventional thermal is estimated from annual data for Canada, Estonia, and Italy









<sup>&</sup>lt;sup>2</sup> month-to-month change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year

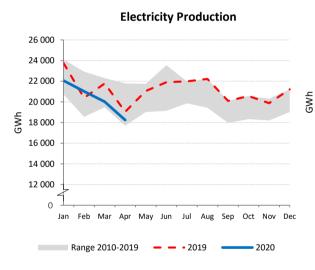
<sup>&</sup>lt;sup>4</sup> estimated for certain countries

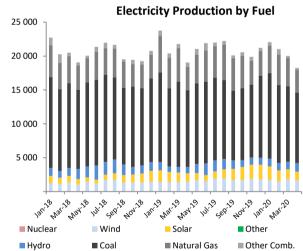
# **AUSTRALIA**

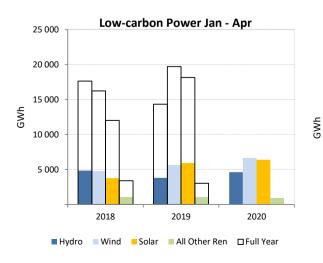
		Apr 2020				Year-to-Date		2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	14 048	-8.7%	-10.0%	77.0%	63 680	69 626	-8.5%	201 698	79.4%	
Coal	10 431	-7.9%	-6.5%	57.2%	45 722	48 662	-6.0%	140 416	55.3%	
Oil	36	-90.3%	-17.3%	0.2%	939	1 595	-41.1%	4 435	1.7%	
Natural Gas	3 351	-2.7%	-19.8%	18.4%	16 087	18 318	-12.2%	53 824	21.2%	
Combustible Renewables	229	-10.4%	-3.6%	1.3%	932	1 051	-11.3%	3 024	1.2%	
Other Combustibles	-	-	-	-	-	-	-	-	-	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	1 269	32.1%	13.3%	7.0%	4 623	3 801	21.6%	14 345	5.6%	
Wind	1 658	13.6%	-8.4%	9.1%	6 664	5 635	18.3%	19 718	7.8%	
Solar	1 269	2.9%	-14.0%	7.0%	6 385	5 915	8.0%	18 153	7.1%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	4 426	13.2%	-4.7%	24.3%	18 604	16 401	13.4%	55 239	21.8%	
NON-RENEWABLES	13 819	-8.7%	-10.1%	75.7%	62 748	68 575	-8.5%	198 674	78.2%	
TOTAL NET PRODUCTION	18 245	-4.2%	-8.9%		81 352	84 976	-4.3%	253 913		
+ Imports	-	-	-		-	-	-	-		
- Exports	-	-	-		-	-	-	-		
= ELECTRICITY SUPPLIED	18 245	-4.2%	-8.9%		81 352	84 976	-4.3%	253 913		
- Used for pumped storage <sup>4</sup>	37	32.1%	13.3%		134	110	21.6%	415		
- T&D Losses <sup>4</sup>	1 095	-2.6%	-7.1%		4 751	4 888	-2.8%	14 625		
= ELECTRICITY CONSUMED	17 113	-4.4%	-9.0%		76 467	79 979	-4.4%	238 873		

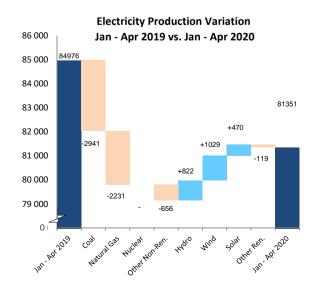
 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year









<sup>&</sup>lt;sup>4</sup> estimated

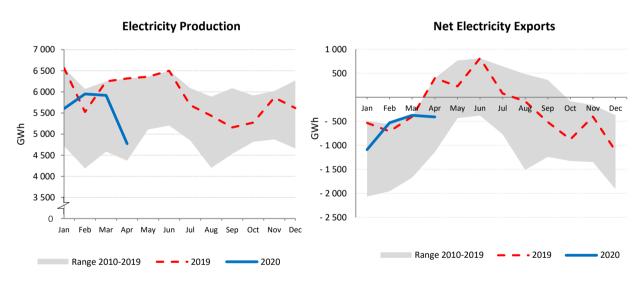
<sup>&</sup>lt;sup>2</sup> month-to-month change

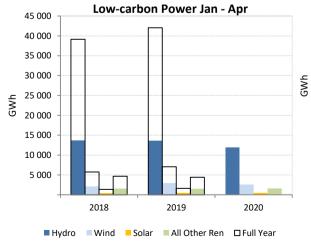
## **AUSTRIA**

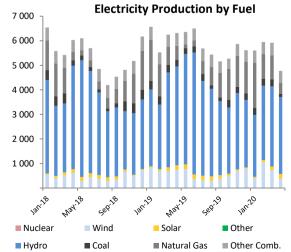
		Apr 2	2020		Ye	ear-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	1 067	-21.7%	-39.8%	22.4%	7 251	7 584	-4.4%	19 838	28.1%	
Coal	134	-50.7%	-53.3%	2.8%	990	1 306	-24.2%	3 244	4.6%	
Oil	35	-42.7%	-41.6%	0.7%	212	230	-8.2%	659	0.9%	
Natural Gas	453	-20.9%	-53.5%	9.5%	4 275	4 258	0.4%	10 759	15.3%	
Combustible Renewables	405	4.0%	-0.9%	8.5%	1 581	1 531	3.3%	4 426	6.3%	
Other Combustibles	40	-40.8%	-6.8%	0.8%	192	258	-25.6%	749	1.1%	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	3 128	-22.2%	-4.1%	65.5%	11 927	13 625	-12.5%	42 027	59.6%	
Wind	385	-47.9%	-47.0%	8.1%	2 574	2 954	-12.9%	7 053	10.0%	
Solar⁴	191	-	25.7%	4.0%	488	488	-	1 618	2.3%	
Geothermal	0	-	-	0.0%	0	0	-	0	0.0%	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	1	0.7%	21.1%	0.0%	4	4	2.6%	12	0.0%	
RENEWABLES	4 110	-23.1%	-9.7%	86.1%	16 571	18 598	-10.9%	55 124	78.1%	
NON-RENEWABLES	663	-31.9%	-51.4%	13.9%	5 673	6 056	-6.3%	15 424	21.9%	
TOTAL NET PRODUCTION	4 773	-24.4%	-19.3%		22 244	24 655	-9.8%	70 548		
+ Imports	1 856	6.1%	-13.1%		9 645	9 867	-2.3%	26 047		
- Exports	1 447	-32.6%	-17.8%		7 238	8 620	-16.0%	22 918		
= ELECTRICITY SUPPLIED	5 182	-12.4%	-17.6%		24 651	25 902	-4.8%	73 676		
- Used for pumped storage	474	24.6%	10.5%		1 691	1 582	6.9%	4 826		
- T&D Losses	258	-10.1%	-17.2%		1 298	1 331	-2.5%	3 767		
= ELECTRICITY CONSUMED	4 451	-15.3%	-19.8%		21 662	22 989	-5.8%	65 083		

 $<sup>^{\</sup>scriptsize 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







<sup>&</sup>lt;sup>4</sup> estimated by the IEA secretariat

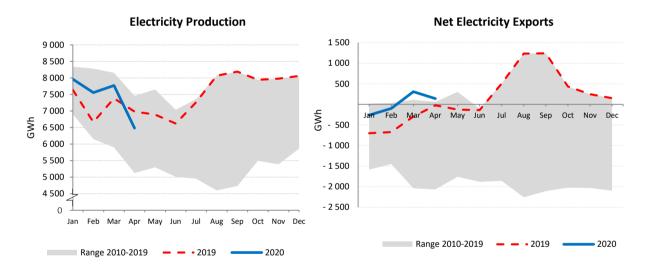
<sup>&</sup>lt;sup>2</sup> month-to-month change

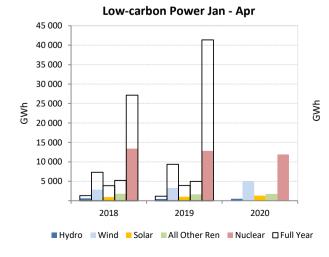
#### **BELGIUM**

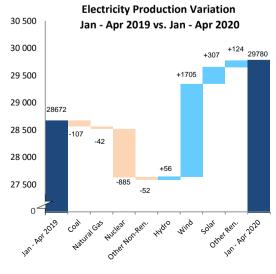
		Apr 2	2020		Ye	ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	2 080	-7.4%	-25.9%	32.1%	10 915	10 969	-0.5%	33 507	37.4%	
Coal	139	-29.3%	-25.3%	2.1%	705	813	-13.2%	2 434	2.7%	
Oil	1	-38.2%	-2.3%	0.0%	5	11	-58.8%	26	0.0%	
Natural Gas	1 364	-16.8%	-32.3%	21.0%	8 019	8 061	-0.5%	24 729	27.6%	
Combustible Renewables	457	53.5%	-6.5%	7.0%	1 743	1 619	7.7%	4 987	5.6%	
Other Combustibles	120	6.7%	1.7%	1.8%	443	466	-4.8%	1 332	1.5%	
Nuclear	2 947	-17.0%	-3.3%	45.5%	11 915	12 799	-6.9%	41 359	46.1%	
Hydro	114	17.8%	-9.4%	1.8%	507	451	12.5%	1 147	1.3%	
Wind	663	11.3%	-50.0%	10.2%	5 001	3 295	51.8%	9 369	10.4%	
Solar	645	40.3%	50.6%	9.9%	1 317	1 010	30.4%	3 919	4.4%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	34	-0.7%	-4.4%	0.5%	126	149	-15.3%	408	0.5%	
RENEWABLES	1 879	29.6%	-20.7%	29.0%	8 568	6 374	34.4%	19 421	21.6%	
NON-RENEWABLES	4 605	-16.8%	-14.8%	71.0%	21 212	22 298	-4.9%	70 288	78.4%	
TOTAL NET PRODUCTION	6 484	-7.2%	-16.6%		29 780	28 672	3.9%	89 709		
+ Imports	1 147	9.4%	21.9%		4 275	5 354	-20.2%	12 735		
- Exports	1 287	25.4%	3.0%		4 360	3 661	19.1%	14 589		
= ELECTRICITY SUPPLIED	6 344	-9.5%	-15.0%		29 694	30 365	-2.2%	87 855		
- Used for pumped storage	119	27.9%	-1.1%		487	412	18.0%	1 162		
- T&D Losses	319	-10.6%	-15.5%		1 506	1 546	-2.6%	4 472		
= ELECTRICITY CONSUMED	5 906	-9.9%	-15.2%		27 702	28 406	-2.5%	82 220		

<sup>&</sup>lt;sup>1</sup> current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







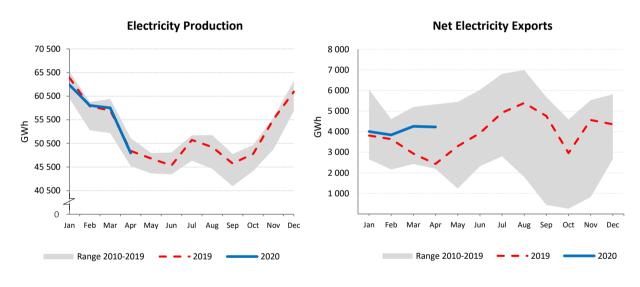
<sup>&</sup>lt;sup>2</sup> month-to-month change

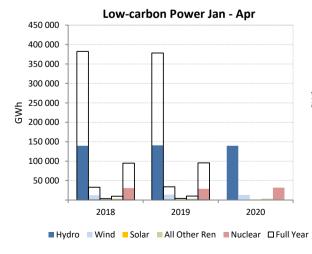
#### **CANADA**

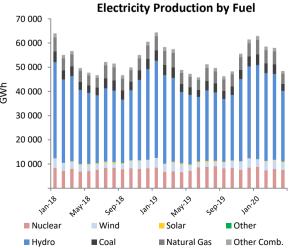
		Apr 2	.020		Y	ear-to-Date	•	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	8 293	-9.6%	-23.7%	17.1%	42 207	44 441	-5.0%	123 037	19.4%	
Coal <sup>4</sup>	3 072	-9.6%	-23.7%	6.3%	15 632	16 460	-5.0%	45 570	7.2%	
Oil <sup>4</sup>	388	-9.6%	-23.7%	0.8%	1 976	2 081	-5.0%	5 760	0.9%	
Natural Gas <sup>4</sup>	4 150	-9.6%	-23.7%	8.6%	21 121	22 239	-5.0%	61 569	9.7%	
Combustible Renewables <sup>4</sup>	677	-9.6%	-23.7%	1.4%	3 448	3 630	-5.0%	10 051	1.6%	
Other Combustibles <sup>4</sup>	6	-9.6%	-23.7%	0.0%	30	32	-5.0%	88	0.0%	
Nuclear	7 538	13.3%	-5.0%	15.6%	31 812	28 997	9.7%	95 461	15.0%	
Hydro	29 102	-1.0%	-17.7%	60.1%	139 516	140 560	-0.7%	378 127	59.6%	
Wind	3 106	-4.2%	-11.0%	6.4%	13 205	13 950	-5.3%	33 840	5.3%	
Solar	414	2.3%	12.8%	0.9%	1 106	1 088	1.6%	4 175	0.7%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	1	-	1	0.0%	
Non-Specified	10	-40.4%	-30.4%	0.0%	48	71	-32.3%	169	0.0%	
RENEWABLES	33 299	-1.5%	-16.9%	68.7%	157 275	159 230	-1.2%	426 194	67.1%	
NON-RENEWABLES	15 163	0.5%	-15.4%	31.3%	70 619	69 879	1.1%	208 617	32.9%	
TOTAL NET PRODUCTION	48 463	-0.9%	-16.5%		227 894	229 108	-0.5%	634 811		
+ Imports	784	-44.2%	-26.3%		3 973	4 945	-19.6%	13 369		
- Exports	5 015	30.6%	-5.8%		20 316	17 764	14.4%	60 376		
= ELECTRICITY SUPPLIED	44 232	-4.8%	-17.7%		211 552	216 289	-2.2%	587 804		
- Used for pumped storage <sup>4</sup>	16	-1.0%	-17.7%		77	78	-0.7%	210		
- T&D Losses <sup>4</sup>	2 685	0.0%	-16.7%		12 640	12 496	1.2%	34 606		
= ELECTRICITY CONSUMED	41 531	-5.1%	-17.8%		198 834	203 715	-2.4%	552 988		

<sup>&</sup>lt;sup>1</sup> current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







<sup>&</sup>lt;sup>4</sup> estimated from annual data

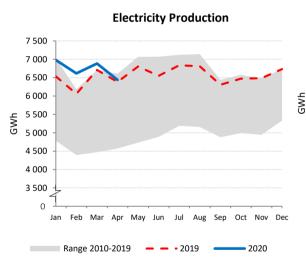
<sup>&</sup>lt;sup>2</sup> month-to-month change

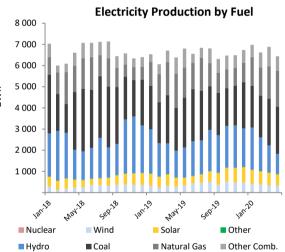
## **CHILE**

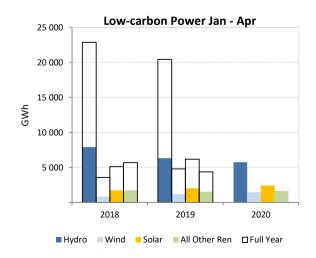
		Apr 2	2020		Ye	ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	4 616	4.7%	-0.9%	71.7%	17 200	16 080	7.0%	47 041	59.8%	
Coal	2 228	10.0%	1.0%	34.6%	8 398	8 315	1.0%	25 431	32.3%	
Oil	268	-21.1%	-45.0%	4.2%	1 305	662	97.2%	2 911	3.7%	
Natural Gas	1 707	5.9%	10.6%	26.5%	5 926	5 628	5.3%	14 521	18.5%	
Combustible Renewables	412	-4.7%	-1.8%	6.4%	1 570	1 476	6.4%	4 177	5.3%	
Other Combustibles	-	-	-	-	-	-	-	-	-	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	932	-25.6%	-26.4%	14.5%	5 759	6 330	-9.0%	20 456	26.0%	
Wind	341	24.4%	0.8%	5.3%	1 463	1 169	25.1%	4 800	6.1%	
Solar	526	22.3%	-12.2%	8.2%	2 413	2 041	18.2%	6 188	7.9%	
Geothermal	24	47.9%	3.2%	0.4%	86	67	29.0%	202	0.3%	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	2 236	-7.1%	-15.5%	34.7%	11 291	11 082	1.9%	35 823	45.5%	
NON-RENEWABLES	4 204	5.7%	-0.8%	65.3%	15 630	14 604	7.0%	42 864	54.5%	
TOTAL NET PRODUCTION	6 440	0.9%	-6.5%		26 921	25 687	4.8%	78 686		
+ Imports	-	-	-		-	-	-	-		
- Exports	-	-	-		-	-	-	-		
= ELECTRICITY SUPPLIED	6 440	0.9%	-6.5%		26 921	25 687	4.8%	78 686		
- Used for pumped storage	-	-	-		-	-	-	-		
- T&D Losses	268	-22.2%	-5.6%		1 121	1 331	-15.8%	3 560		
= ELECTRICITY CONSUMED	6 172	2.2%	-6.5%		25 800	24 356	5.9%	75 126		

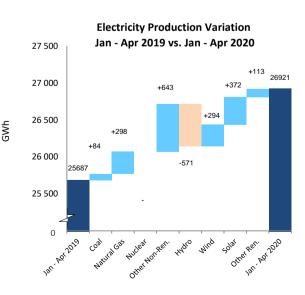
 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year









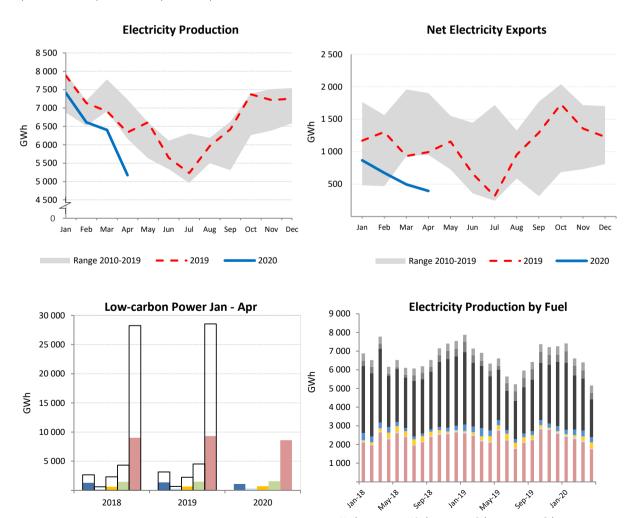
<sup>&</sup>lt;sup>2</sup> month-to-month change

#### **CZECH REPUBLIC**

		Apr 2	2020		Ye	ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	2 772	-22.5%	-24.1%	53.6%	14 859	16 602	-10.5%	45 231	56.5%	
Coal	2 037	-29.8%	-27.1%	39.4%	11 351	13 554	-16.3%	35 362	44.2%	
Oil	3	-71.7%	-55.2%	0.1%	26	34	-24.1%	104	0.1%	
Natural Gas	345	21.6%	-21.6%	6.7%	1 899	1 504	26.3%	5 180	6.5%	
Combustible Renewables	380	1.3%	-5.7%	7.3%	1 554	1 485	4.6%	4 509	5.6%	
Other Combustibles	6	33.1%	-20.0%	0.1%	30	25	19.0%	76	0.1%	
Nuclear	1 751	-16.7%	-18.0%	33.8%	8 590	9 316	-7.8%	28 555	35.7%	
Hydro	275	-12.8%	-9.6%	5.3%	1 094	1 371	-20.2%	3 142	3.9%	
Wind	48	-21.8%	-38.6%	0.9%	313	288	8.6%	689	0.9%	
Solar	318	16.3%	41.1%	6.1%	705	652	8.1%	2 257	2.8%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	9	-8.2%	-6.4%	0.2%	38	38	0.1%	112	0.1%	
RENEWABLES	1 021	-0.4%	1.0%	19.7%	3 665	3 796	-3.5%	10 597	13.2%	
NON-RENEWABLES	4 151	-21.9%	-23.0%	80.3%	21 934	24 471	-10.4%	69 388	86.8%	
TOTAL NET PRODUCTION	5 173	-18.4%	-19.2%		25 599	28 267	-9.4%	79 985		
+ Imports	1 106	25.8%	-9.3%		5 338	4 062	31.4%	11 026		
- Exports	1 501	-19.9%	-12.5%		7 768	8 460	-8.2%	24 123		
= ELECTRICITY SUPPLIED	4 778	-10.6%	-19.1%		23 170	23 869	-2.9%	66 888		
- Used for pumped storage	177	55.9%	23.2%		614	479	28.0%	1 508		
- T&D Losses	301	-10.7%	-20.5%		1 575	1 588	-0.8%	4 460		
= ELECTRICITY CONSUMED	4 300	-12.1%	-20.2%		20 981	21 801	-3.8%	60 921		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year



2018

2019

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

Nuclear

■ Hydro

Wind

■ Coal

Solar

■ Natural Gas

2020

Other

■ Other Comb.

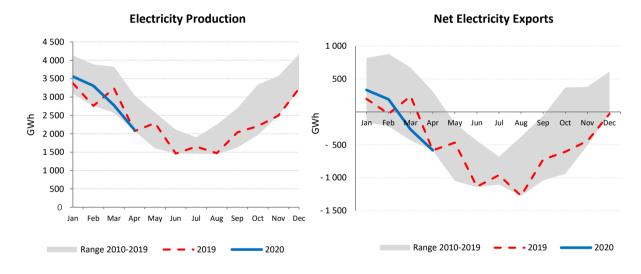
<sup>&</sup>lt;sup>2</sup> month-to-month change

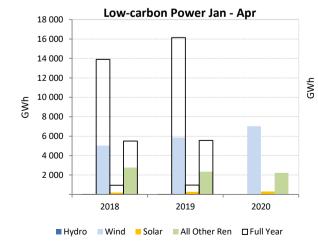
#### **DENMARK**

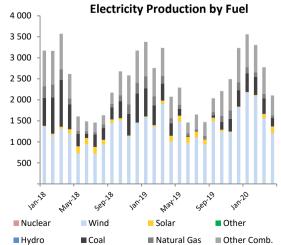
		Apr 2020				ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	736	-20.6%	-33.7%	35.0%	4 407	5 311	-17.0%	11 164	39.5%	
Coal	201	-33.2%	-46.1%	9.6%	1 463	1 847	-20.8%	2 983	10.5%	
Oil	13	-18.1%	5.4%	0.6%	64	78	-17.4%	218	0.8%	
Natural Gas	63	-44.4%	-41.4%	3.0%	413	798	-48.2%	1 702	6.0%	
Combustible Renewables	400	-7.7%	-27.7%	19.0%	2 226	2 339	-4.8%	5 550	19.6%	
Other Combustibles	58	-7.6%	-6.5%	2.8%	241	251	-3.9%	711	2.5%	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	1	5.1%	-49.5%	0.1%	8	6	31.8%	16	0.1%	
Wind	1 211	20.8%	-22.4%	57.6%	7 026	5 857	20.0%	16 150	57.1%	
Solar	155	9.2%	48.9%	7.4%	303	269	12.3%	963	3.4%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	1 768	11.9%	-20.4%	84.0%	9 563	8 472	12.9%	22 679	80.2%	
NON-RENEWABLES	336	-32.0%	-39.6%	16.0%	2 181	2 973	-26.6%	5 614	19.8%	
TOTAL NET PRODUCTION	2 103	1.5%	-24.2%		11 744	11 444	2.6%	28 293		
+ Imports	1 601	16.8%	2.0%		5 843	4 638	26.0%	15 982		
- Exports	1 018	29.4%	-21.8%		5 517	4 464	23.6%	10 171		
= ELECTRICITY SUPPLIED	2 686	1.1%	-11.8%		12 070	11 618	3.9%	34 105		
- Used for pumped storage	-	-	-		-	-	-	-		
- T&D Losses	183	18.2%	-9.4%		838	709	18.2%	2 042		
= ELECTRICITY CONSUMED	2 503	0.1%	-11.9%		11 232	10 909	3.0%	32 063		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







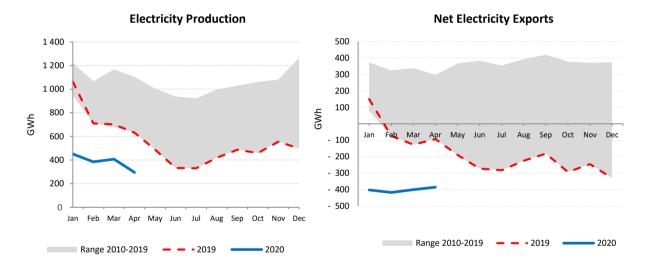
<sup>&</sup>lt;sup>2</sup> month-to-month change

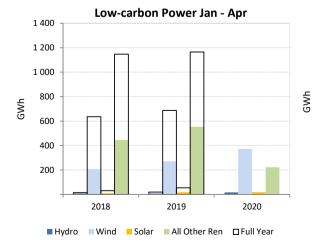
#### **ESTONIA**

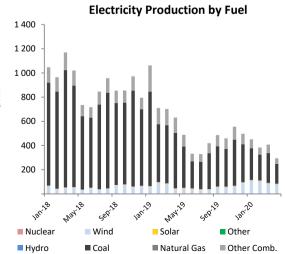
		Apr 2	2020		Ye	ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	209	-64.2%	-33.4%	71.0%	1 129	2 809	-59.8%	5 916	88.6%	
Coal <sup>4</sup>	164	-64.2%	-33.4%	55.5%	881	2 193	-59.8%	4 619	69.2%	
Oil <sup>4</sup>	1	-64.2%	-33.4%	0.3%	4	11	-59.8%	23	0.3%	
Natural Gas <sup>4</sup>	1	-64.2%	-33.4%	0.4%	6	16	-59.8%	33	0.5%	
Combustible Renewables <sup>4</sup>	41	-64.2%	-33.4%	14.0%	222	553	-59.8%	1 165	17.4%	
Other Combustibles <sup>4</sup>	3	-64.2%	-33.4%	0.9%	14	36	-59.8%	76	1.1%	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	4	53.8%	-	1.4%	17	8	115.2%	19	0.3%	
Wind	77	92.5%	-8.3%	26.1%	373	272	37.1%	687	10.3%	
Solar	5	-	-	1.5%	18	18	-	54	0.8%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	127	-21.9%	-17.9%	43.0%	630	851	-25.9%	1 925	28.8%	
NON-RENEWABLES	168	-64.2%	-33.4%	57.0%	907	2 256	-59.8%	4 751	71.2%	
TOTAL NET PRODUCTION	295	-53.3%	-27.6%		1 537	3 107	-50.5%	6 676		
+ Imports	646	97.0%	4.0%		2 560	1 138	124.9%	4 862		
- Exports	261	11.1%	18.1%		956	995	-3.9%	2 703		
= ELECTRICITY SUPPLIED	680	-6.2%	-15.8%		3 141	3 250	-3.4%	8 835		
- Used for pumped storage	-	-	-		-	-	-	-		
- T&D Losses <sup>4</sup>	51	-2.0%	-8.5%		224	232	-3.5%	631		
= ELECTRICITY CONSUMED	628	-6.5%	-16.3%		2 917	3 018	-3.4%	8 204		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







<sup>&</sup>lt;sup>4</sup> estimated from annual data

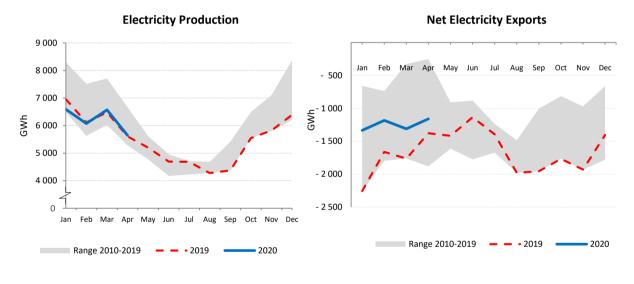
<sup>&</sup>lt;sup>2</sup> month-to-month change

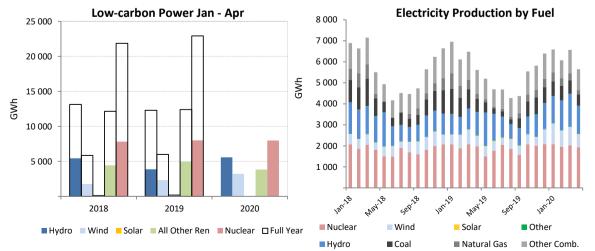
#### **FINLAND**

		Apr 2020				ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	1 736	-12.9%	-17.0%	30.7%	7 950	10 860	-26.8%	24 506	37.0%	
Coal	532	-13.5%	-17.8%	9.4%	2 577	3 622	-28.8%	7 607	11.5%	
Oil	14	-23.5%	-23.5%	0.3%	68	93	-27.1%	242	0.4%	
Natural Gas	215	-9.8%	-35.8%	3.8%	1 323	2 019	-34.5%	3 769	5.7%	
Combustible Renewables	935	-13.3%	-10.8%	16.6%	3 824	4 939	-22.6%	12 393	18.7%	
Other Combustibles <sup>4</sup>	40	-8.4%	-5.8%	0.7%	157	187	-16.0%	496	0.7%	
Nuclear	1 927	-2.8%	-5.1%	34.1%	7 990	8 006	-0.2%	22 927	34.7%	
Hydro	1 324	19.5%	-15.0%	23.4%	5 582	3 871	44.2%	12 299	18.6%	
Wind	611	25.7%	-28.4%	10.8%	3 225	2 311	39.5%	5 985	9.0%	
Solar	29	43.8%	75.9%	0.5%	52	31	69.6%	178	0.3%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	21	-	-	0.4%	83	83	-	249	0.4%	
RENEWABLES	2 898	7.7%	-16.6%	51.3%	12 683	11 153	13.7%	30 855	46.6%	
NON-RENEWABLES	2 749	-5.8%	-11.2%	48.7%	12 199	14 010	-12.9%	35 290	53.4%	
TOTAL NET PRODUCTION	5 647	0.6%	-14.0%		24 882	25 163	-1.1%	66 144		
+ Imports	1 755	5.4%	-5.3%		7 260	7 930	-8.4%	23 938		
- Exports	595	107.2%	9.6%		2 273	872	160.7%	3 896		
= ELECTRICITY SUPPLIED	6 807	-2.6%	-13.6%		29 869	32 221	-7.3%	86 186		
- Used for pumped storage	-	-	-		-	-	-	-		
- T&D Losses	230	-2.6%	-13.7%		1 010	1 091	-7.4%	2 913		
= ELECTRICITY CONSUMED	6 577	-2.6%	-13.6%		28 859	31 130	-7.3%	83 273		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year





<sup>&</sup>lt;sup>4</sup>includes generation from peat

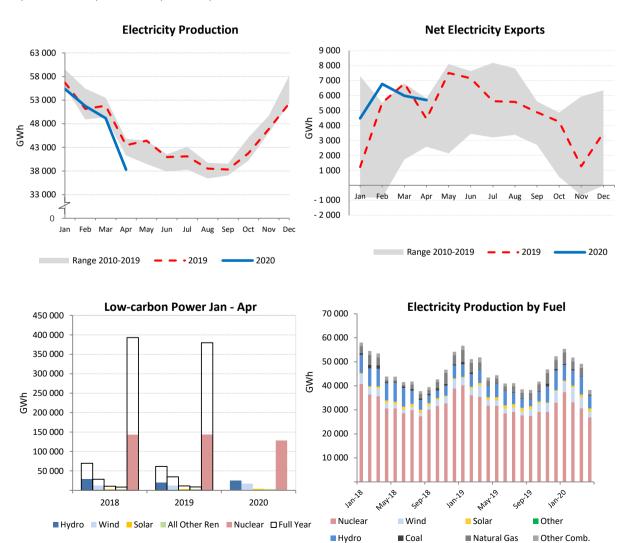
<sup>&</sup>lt;sup>2</sup> month-to-month change

#### **FRANCE**

		Apr 2020				ear-to-Date	•	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	2 491	-29.4%	-53.2%	6.5%	19 869	23 010	-13.7%	58 888	10.8%	
Coal	202	-22.5%	-23.6%	0.5%	1 429	2 437	-41.4%	6 101	1.1%	
Oil	502	1.2%	-7.9%	1.3%	2 115	2 045	3.4%	6 133	1.1%	
Natural Gas	702	-65.6%	-79.4%	1.8%	12 272	14 302	-14.2%	36 078	6.6%	
Combustible Renewables	1 014	69.7%	14.8%	2.6%	3 252	3 288	-1.1%	8 188	1.5%	
Other Combustibles	72	-48.1%	-66.9%	0.2%	801	937	-14.6%	2 388	0.4%	
Nuclear	26 852	-15.5%	-12.4%	70.1%	128 116	143 656	-10.8%	379 870	69.4%	
Hydro	5 149	11.2%	-30.6%	13.4%	25 294	20 201	25.2%	61 376	11.2%	
Wind	2 312	-2.8%	-49.3%	6.0%	17 082	12 595	35.6%	34 648	6.3%	
Solar	1 386	36.9%	23.7%	3.6%	3 830	3 250	17.8%	11 357	2.1%	
Geothermal <sup>4</sup>	9	-2.7%	-	0.0%	38	39	-2.7%	117	0.0%	
Other Renewables	40	-	-	0.1%	158	158	-	474	0.1%	
Non-Specified	55	-	-	0.1%	220	220	-	659	0.1%	
RENEWABLES	9 909	14.3%	-29.4%	25.9%	49 653	39 532	25.6%	116 159	21.2%	
NON-RENEWABLES	28 385	-18.4%	-19.2%	74.1%	144 953	163 598	-11.4%	431 229	78.8%	
TOTAL NET PRODUCTION	38 294	-11.9%	-22.1%		194 607	203 129	-4.2%	547 388		
+ Imports	775	-29.8%	-24.6%		3 891	5 674	-31.4%	15 593		
- Exports	6 471	16.7%	-7.8%		26 826	23 664	13.4%	73 352		
= ELECTRICITY SUPPLIED	32 598	-16.4%	-24.5%		171 672	185 140	-7.3%	489 629		
- Used for pumped storage	573	46.0%	-0.1%		2 327	1 923	21.0%	6 327		
- T&D Losses	2 650	-12.9%	-29.0%		14 988	15 751	-4.8%	39 849		
= ELECTRICITY CONSUMED	29 375	-17.4%	-24.5%		154 357	167 466	-7.8%	443 452		

<sup>&</sup>lt;sup>1</sup> current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year



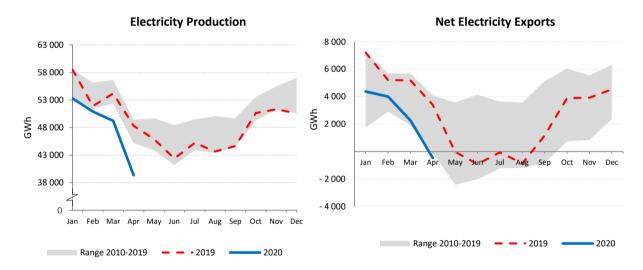
<sup>&</sup>lt;sup>2</sup> month-to-month change

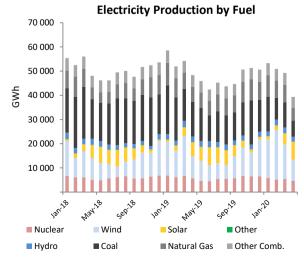
## **GERMANY**

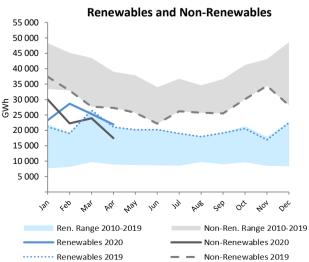
		Apr 2	2020		Y	ear-to-Date	•	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	16 490	-34.9%	-26.6%	41.9%	88 216	115 367	-23.5%	318 151	54.2%	
Coal	6 710	-53.3%	-35.2%	17.0%	40 439	65 795	-38.5%	172 439	29.4%	
Oil	291	-22.4%	-20.4%	0.7%	1 417	1 604	-11.7%	4 725	0.8%	
Natural Gas	5 263	-15.6%	-27.4%	13.4%	28 548	30 079	-5.1%	87 812	15.0%	
Combustible Renewables	3 813	-0.4%	-5.0%	9.7%	15 917	15 800	0.7%	46 897	8.0%	
Other Combustibles	413	-20.9%	-15.5%	1.0%	1 895	2 089	-9.3%	6 277	1.1%	
Nuclear	4 724	-16.9%	-12.5%	12.0%	21 100	25 399	-16.9%	70 983	12.1%	
Hydro	1 991	-11.2%	-17.8%	5.1%	8 594	8 961	-4.1%	25 901	4.4%	
Wind	8 745	-3.7%	-38.3%	22.2%	59 345	50 549	17.4%	123 606	21.0%	
Solar	7 335	24.9%	57.5%	18.6%	15 175	12 292	23.5%	47 517	8.1%	
Geothermal	18	11.1%	5.3%	0.0%	72	64	13.2%	170	0.0%	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	56	-37.3%	-23.4%	0.1%	281	312	-10.1%	992	0.2%	
RENEWABLES	21 902	4.1%	-13.4%	55.6%	99 104	87 666	13.0%	244 092	41.6%	
NON-RENEWABLES	17 457	-36.0%	-27.1%	44.4%	93 679	125 278	-25.2%	343 228	58.4%	
TOTAL NET PRODUCTION	39 359	-18.5%	-20.0%		192 783	212 944	-9.5%	587 320		
+ Imports	4 929	92.3%	31.7%		15 252	8 522	79.0%	40 123		
- Exports	4 466	-25.2%	-25.7%		25 439	29 549	-13.9%	72 792		
= ELECTRICITY SUPPLIED	39 823	-11.3%	-15.2%		182 596	191 918	-4.9%	554 651		
- Used for pumped storage	908	34.4%	17.2%		3 214	2 881	11.6%	8 178		
- T&D Losses	1 906	-3.9%	-21.5%		9 897	9 728	1.7%	26 548		
= ELECTRICITY CONSUMED	37 009	-12.4%	-15.4%		169 484	179 308	-5.5%	519 925		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







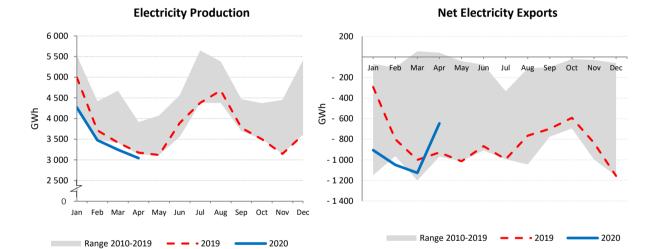
<sup>&</sup>lt;sup>2</sup> month-to-month change

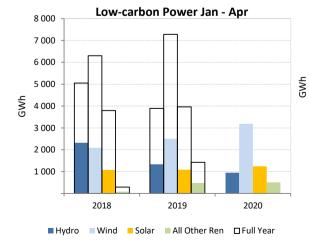
#### **GREECE**

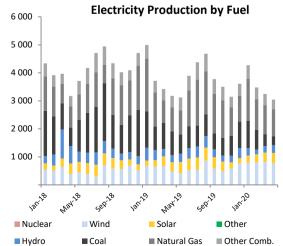
		Apr 2	2020		Ye	ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	1 627	-23.0%	-12.6%	53.4%	8 659	10 383	-16.6%	30 286	66.7%	
Coal	318	-62.7%	-26.0%	10.4%	2 425	3 914	-38.0%	9 782	21.5%	
Oil	211	-22.2%	-17.1%	6.9%	1 064	1 154	-7.8%	4 047	8.9%	
Natural Gas	964	11.7%	-6.8%	31.7%	4 599	4 765	-3.5%	14 759	32.5%	
Combustible Renewables	123	3.1%	-5.0%	4.0%	506	483	4.7%	1 429	3.1%	
Other Combustibles <sup>4</sup>	11	21.4%	-16.2%	0.4%	65	68	-4.1%	267	0.6%	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	275	9.5%	17.2%	9.0%	950	1 337	-28.9%	3 892	8.6%	
Wind	773	60.3%	-5.6%	25.4%	3 184	2 501	27.3%	7 278	16.0%	
Solar	369	11.8%	10.7%	12.1%	1 244	1 085	14.6%	3 961	8.7%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	1 540	30.2%	1.5%	50.6%	5 885	5 406	8.8%	16 561	36.5%	
NON-RENEWABLES	1 504	-24.6%	-13.1%	49.4%	8 153	9 900	-17.6%	28 856	63.5%	
TOTAL NET PRODUCTION	3 043	-4.2%	-6.3%		14 037	15 306	-8.3%	45 417		
+ Imports	705	-31.1%	-37.7%		3 825	3 617	5.8%	11 067		
- Exports	59	-38.4%	1018.3%		98	597	-83.5%	1 123		
= ELECTRICITY SUPPLIED	3 690	-10.1%	-15.6%		17 764	18 326	-3.1%	55 361		
- Used for pumped storage	12	83.3%	-65.0%		63	16	284.4%	56		
- T&D Losses	228	-3.6%	-10.2%		1 020	1 106	-7.8%	3 260		
= ELECTRICITY CONSUMED	3 450	-10.7%	-15.6%		16 681	17 203	-3.0%	52 045		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

#### $^{\mathrm{4}}$ estimated from annual data







<sup>&</sup>lt;sup>2</sup> month-to-month change

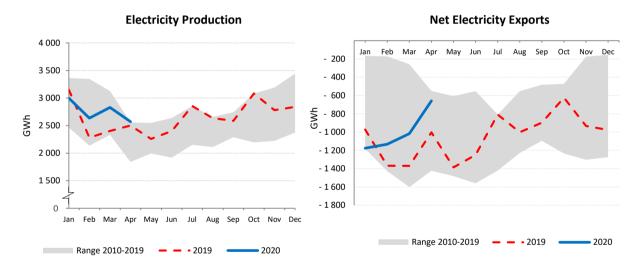
<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year

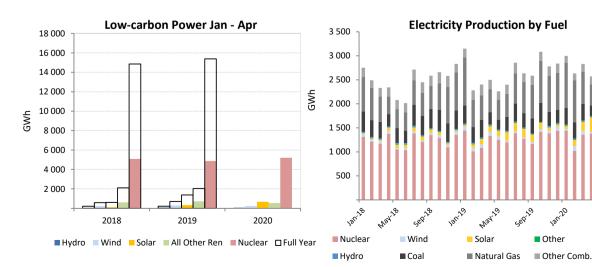
## **HUNGARY**

		Apr 2020				ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	824	-11.5%	-30.0%	32.1%	4 783	4 692	1.9%	13 947	43.9%	
Coal	218	-15.8%	-38.0%	8.5%	1 254	1 336	-6.2%	3 813	12.0%	
Oil	4	-17.9%	20.1%	0.2%	14	20	-30.2%	62	0.2%	
Natural Gas	445	-5.9%	-33.2%	17.3%	2 919	2 557	14.2%	7 815	24.6%	
Combustible Renewables	137	-20.6%	-2.9%	5.3%	531	708	-24.9%	2 029	6.4%	
Other Combustibles	19	-6.6%	30.7%	0.7%	65	71	-8.8%	228	0.7%	
Nuclear	1 380	3.3%	1.5%	53.7%	5 201	4 873	6.8%	15 386	48.4%	
Hydro	22	-13.8%	54.2%	0.8%	74	82	-10.2%	213	0.7%	
Wind	37	-49.4%	-47.8%	1.4%	248	304	-18.4%	708	2.2%	
Solar	295	139.4%	51.6%	11.5%	677	336	101.3%	1 373	4.3%	
Geothermal	1	-0.2%	-16.5%	0.0%	5	5	13.5%	14	0.0%	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	11	-	-	0.4%	43	43	-	130	0.4%	
RENEWABLES	492	24.6%	16.6%	19.1%	1 536	1 436	7.0%	4 337	13.7%	
NON-RENEWABLES	2 078	-1.3%	-13.7%	80.9%	9 497	8 900	6.7%	27 434	86.3%	
TOTAL NET PRODUCTION	2 571	2.8%	-9.2%		11 032	10 335	6.7%	31 771		
+ Imports	1 245	-27.0%	-23.0%		6 697	7 254	-7.7%	19 854		
- Exports	587	-16.6%	-2.3%		2 712	2 543	6.6%	7 269		
= ELECTRICITY SUPPLIED	3 229	-7.8%	-16.1%		15 017	15 046	-0.2%	44 356		
- Used for pumped storage	-	-	-		-	-	-	-		
- T&D Losses	267	-9.6%	-18.3%		1 332	1 465	-9.1%	3 906		
= ELECTRICITY CONSUMED	2 962	-7.7%	-15.9%		13 685	13 581	0.8%	40 450		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year





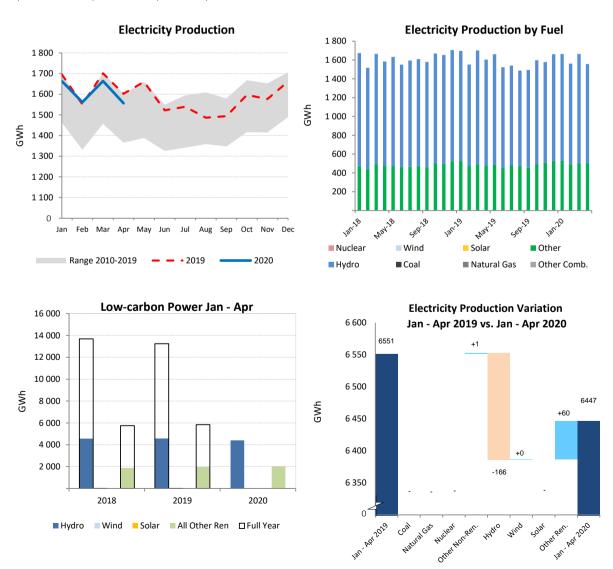
<sup>&</sup>lt;sup>2</sup> month-to-month change

#### **ICELAND**

	Apr 2020				Ye	ar-to-Dat	е	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	0	7.2%	-46.7%	0.0%	2	1	271.8%	3	0.0%	
Coal	-	-	=	=	-	=	-	-	-	
Oil	0	7.2%	-46.7%	0.0%	2	1	271.8%	3	0.0%	
Natural Gas	-	-	-	-	-	-	-	-	-	
Combustible Renewables	-	-	-	-	-	-	-	-	-	
Other Combustibles	-	-	-	-	-	-	-	-	-	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	1 050	-6.9%	-9.5%	67.4%	4 409	4 576	-3.6%	13 236	69.3%	
Wind	1	-14.9%	-30.3%	0.0%	3	2	13.7%	7	0.0%	
Solar	-	-	-	-	-	-	-	-	-	
Geothermal	506	6.6%	0.6%	32.5%	2 032	1 973	3.0%	5 843	30.6%	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	1 557	-2.9%	-6.4%	100.0%	6 445	6 551	-1.6%	19 086	100.0%	
NON-RENEWABLES	0	7.2%	-46.4%	0.0%	2	1	273.3%	3	0.0%	
TOTAL NET PRODUCTION	1 557	-2.9%	-6.5%		6 447	6 551	-1.6%	19 089		
+ Imports	-	-	-		-	-	-	-		
- Exports	-	-	-		-	-	-	-		
= ELECTRICITY SUPPLIED	1 557	-2.9%	-6.5%		6 447	6 551	-1.6%	19 089		
- Used for pumped storage	-	-	-		-	-	-	-		
- T&D Losses	45	-3.1%	-4.0%		183	186	-1.5%	552		
= ELECTRICITY CONSUMED	1 512	-2.9%	-6.5%		6 264	6 366	-1.6%	18 537		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year



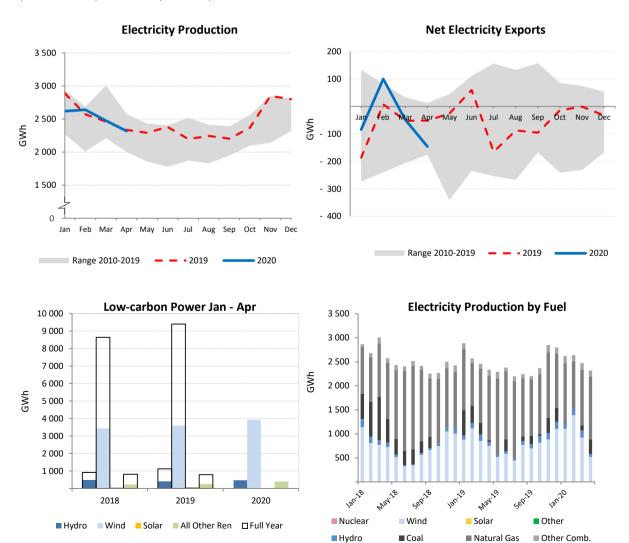
<sup>&</sup>lt;sup>2</sup> month-to-month change

## **IRELAND**

		Apr 2	2020		Ye	ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	1 736	15.1%	23.3%	74.9%	5 639	6 250	-9.8%	19 050	64.4%	
Coal	302	617.8%	163.0%	13.0%	433	1 175	-63.2%	2 350	7.9%	
Oil	14	-56.1%	-31.4%	0.6%	69	98	-29.5%	270	0.9%	
Natural Gas	1 309	-1.9%	13.2%	56.5%	4 667	4 628	0.8%	15 382	52.0%	
Combustible Renewables	100	35.4%	3.7%	4.3%	395	251	57.1%	786	2.7%	
Other Combustibles	11	-55.5%	-43.3%	0.5%	76	97	-22.2%	262	0.9%	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	62	-21.5%	-57.7%	2.7%	475	406	17.1%	1 120	3.8%	
Wind	517	-30.7%	-43.7%	22.3%	3 932	3 594	9.4%	9 400	31.8%	
Solar	3	-	50.4%	0.1%	6	6	-	21	0.1%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	681	-24.4%	-41.4%	29.4%	4 808	4 257	13.0%	11 328	38.3%	
NON-RENEWABLES	1 637	14.1%	24.7%	70.6%	5 244	5 999	-12.6%	18 264	61.7%	
TOTAL NET PRODUCTION	2 318	-0.8%	-6.3%		10 052	10 255	-2.0%	29 591		
+ Imports	225	19.5%	17.3%		769	815	-5.6%	2 180		
- Exports	79	-42.0%	-44.5%		590	533	10.7%	1 535		
= ELECTRICITY SUPPLIED	2 464	3.2%	-2.4%		10 232	10 538	-2.9%	30 236		
- Used for pumped storage	47	3.8%	-2.7%		190	172	10.7%	478		
- T&D Losses	179	0.7%	-4.6%		760	778	-2.2%	2 232		
= ELECTRICITY CONSUMED	2 239	3.4%	-2.2%		9 281	9 588	-3.2%	27 525		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year



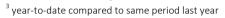
<sup>&</sup>lt;sup>2</sup> month-to-month change

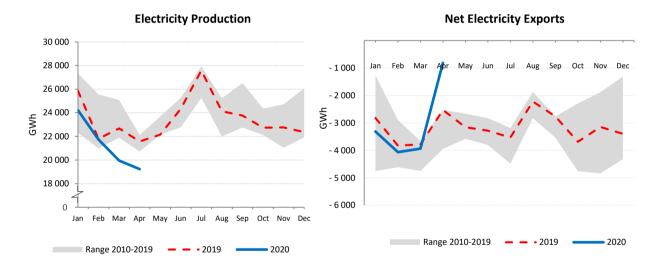
## **ITALY**

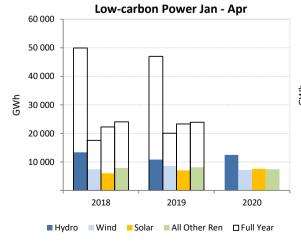
		Apr 2020				ear-to-Date	:	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	11 155	-21.4%	-13.1%	58.0%	55 738	63 404	-12.1%	185 146	65.7%	
Coal <sup>5</sup>	1 032	-21.4%	-13.1%	5.4%	5 158	5 867	-12.1%	17 134	6.1%	
Oil <sup>5</sup>	625	-21.4%	-13.1%	3.3%	3 125	3 555	-12.1%	10 381	3.7%	
Natural Gas <sup>5</sup>	8 253	-21.4%	-13.1%	42.9%	41 240	46 913	-12.1%	136 990	48.6%	
Combustible Renewables <sup>5</sup>	1 101	-21.4%	-13.1%	5.7%	5 500	6 256	-12.1%	18 269	6.5%	
Other Combustibles <sup>5</sup>	143	-21.4%	-13.1%	0.7%	714	813	-12.1%	2 373	0.8%	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	3 607	10.4%	27.8%	18.8%	12 490	10 829	15.3%	46 955	16.7%	
Wind	1 262	-14.3%	-28.3%	6.6%	7 195	8 579	-16.1%	20 054	7.1%	
Solar	2 679	26.9%	35.0%	13.9%	7 585	7 008	8.2%	23 313	8.3%	
Geothermal	475	1.1%	-4.2%	2.5%	1 914	1 879	1.9%	5 658	2.0%	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	51	-	-	0.3%	204	204	-	612	0.2%	
RENEWABLES	9 123	4.6%	9.5%	47.4%	34 684	34 551	0.4%	114 249	40.6%	
NON-RENEWABLES	10 105	-21.4%	-13.0%	52.6%	50 442	57 352	-12.0%	167 490	59.4%	
TOTAL NET PRODUCTION	19 228	-10.9%	-3.6%		85 126	91 903	-7.4%	281 738		
+ Imports	1 794	-41.0%	-59.6%		14 906	14 746	1.1%	43 980		
- Exports	979	92.5%	96.4%		2 772	1 781	55.7%	5 817		
= ELECTRICITY SUPPLIED	20 042	-16.8%	-16.1%		97 260	104 868	-7.3%	319 901		
- Used for pumped storage	301	32.6%	-1.0%		962	884	8.8%	2 412		
- T&D Losses <sup>4</sup>	1 199	-14.6%	-13.8%		5 706	6 083	-6.2%	18 578		
= ELECTRICITY CONSUMED	18 542	-17.5%	-16.4%		90 592	97 901	-7.5%	298 911		

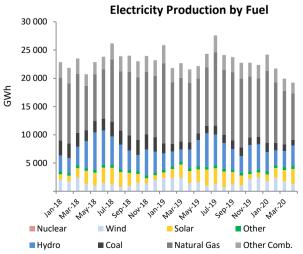
 $<sup>^{\</sup>rm 1}\,{\rm current}$  month to month of last year change

 $<sup>^{\</sup>rm 5}\,{\rm estimated}$  from annual data









<sup>&</sup>lt;sup>2</sup> month-to-month change

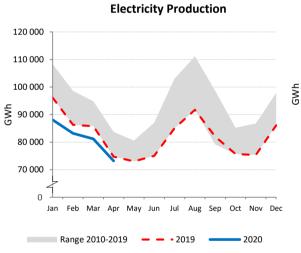
<sup>&</sup>lt;sup>4</sup> estimated

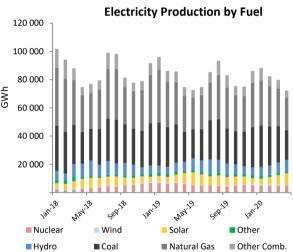
#### **JAPAN**

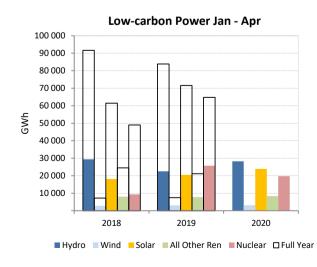
	Apr 2020				Υ	ear-to-Date	2	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	50 015	-5.5%	-16.3%	68.3%	243 894	262 854	-7.2%	736 442	74.6%	
Coal	21 965	1.9%	-14.2%	30.0%	106 765	107 843	-1.1%	307 690	31.2%	
Oil	2 014	-42.9%	-13.0%	2.8%	12 236	17 063	-28.3%	49 739	5.0%	
Natural Gas	22 977	-9.0%	-13.3%	31.4%	110 259	124 175	-11.2%	339 604	34.4%	
Combustible Renewables	1 586	34.9%	-29.8%	2.2%	7 447	7 022	6.0%	18 703	1.9%	
Other Combustibles <sup>4</sup>	1 474	-5.5%	-16.3%	2.0%	7 187	6 750	6.5%	20 706	2.1%	
Nuclear	4 914	-16.7%	-2.4%	6.7%	19 766	25 684	-23.0%	64 805	6.6%	
Hydro	8 477	30.0%	17.6%	11.6%	28 217	22 512	25.3%	83 849	8.5%	
Wind	604	6.3%	-29.4%	0.8%	3 158	3 101	1.8%	7 481	0.8%	
Solar	8 169	12.4%	26.0%	11.2%	23 937	20 457	17.0%	71 534	7.2%	
Geothermal	206	2.6%	-6.1%	0.3%	877	777	12.9%	2 445	0.2%	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	795	-38.3%	-50.3%	1.1%	5 775	7 513	-23.1%	20 245	2.1%	
RENEWABLES	19 041	21.0%	11.8%	26.0%	63 636	53 870	18.1%	184 012	18.6%	
NON-RENEWABLES	54 138	-8.2%	-15.6%	74.0%	261 988	289 028	-9.4%	802 788	81.4%	
TOTAL NET PRODUCTION	73 180	-2.0%	-9.9%		325 624	342 898	-5.0%	986 800		
+ Imports	-	-	-		-	-	-	-		
- Exports	-	-	-		-	-	-	-		
= ELECTRICITY SUPPLIED	73 180	-2.0%	-9.9%		325 624	342 898	-5.0%	986 800		
- Used for pumped storage 4	1 020	14.8%	42.0%		3 096	2 976	4.0%	10 554		
- T&D Losses <sup>4</sup>	3 101	-2.0%	-12.8%		14 166	14 921	-5.1%	42 209		
= ELECTRICITY CONSUMED	69 058	-2.2%	-10.2%		308 363	325 001	-5.1%	934 037		

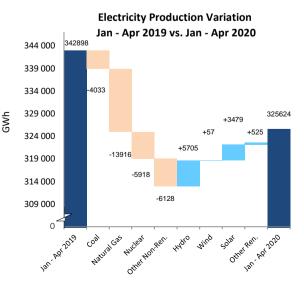
 $<sup>^{\</sup>rm 1}\,{\rm current}$  month to month of last year change

April 2020 is estimated by the IEA Secretariat using usual monthly patterns









<sup>&</sup>lt;sup>2</sup> month-to-month change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year

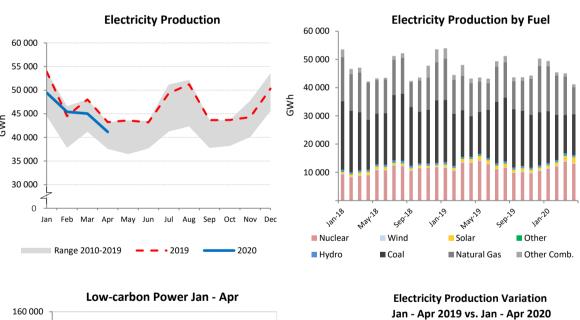
<sup>&</sup>lt;sup>4</sup> estimated from annual data

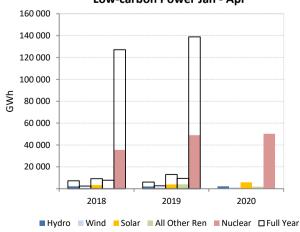
#### **KOREA**

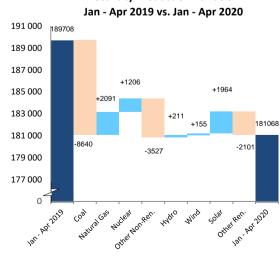
		Apr 2020				ear-to-Date	:	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	25 071	-9.6%	-11.6%	60.9%	120 679	132 868	-9.2%	395 505	70.8%	
Coal	14 598	1.7%	6.9%	35.5%	62 751	71 391	-12.1%	225 750	40.4%	
Oil	433	-46.0%	-16.8%	1.1%	2 858	6 358	-55.0%	14 101	2.5%	
Natural Gas	9 5 1 5	-19.5%	-30.2%	23.1%	53 031	50 939	4.1%	145 812	26.1%	
Combustible Renewables	470	-32.6%	-1.9%	1.1%	1 772	3 886	-54.4%	8 968	1.6%	
Other Combustibles	55	-9.6%	-11.6%	0.1%	267	294	-9.2%	874	0.2%	
Nuclear	13 030	-3.3%	-5.4%	31.7%	50 201	48 995	2.5%	138 884	24.8%	
Hydro	504	-2.8%	-20.8%	1.2%	2 190	1 979	10.7%	6 139	1.1%	
Wind	311	72.5%	2.5%	0.8%	1 218	1 063	14.6%	2 665	0.5%	
Solar	2 005	81.6%	14.9%	4.9%	5 821	3 857	50.9%	12 974	2.3%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	48	18.9%	4.0%	0.1%	174	161	7.8%	474	0.1%	
Non-Specified	196	-	-	0.5%	785	785	-	2 355	0.4%	
RENEWABLES	3 337	31.4%	4.0%	8.1%	11 175	10 946	2.1%	31 220	5.6%	
NON-RENEWABLES	37 828	-7.1%	-9.6%	91.9%	169 893	178 762	-5.0%	527 776	94.4%	
TOTAL NET PRODUCTION	41 164	-4.8%	-8.6%		181 068	189 708	-4.6%	558 996		
+ Imports	-	-	-		-	-	-	-		
- Exports	-	-	-		-	-	-	-		
= ELECTRICITY SUPPLIED	41 164	-4.8%	-8.6%		181 068	189 708	-4.6%	558 996		
- Used for pumped storage <sup>4</sup>	392	4.4%	-1.6%		1 625	1 607	1.1%	4 588		
- T&D Losses <sup>4</sup>	1 378	-4.8%	-8.6%		6 061	6 350	-4.6%	18 711		
= ELECTRICITY CONSUMED	39 395	-4.9%	-8.7%		173 383	181 752	-4.6%	535 698		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







<sup>&</sup>lt;sup>4</sup> estimated

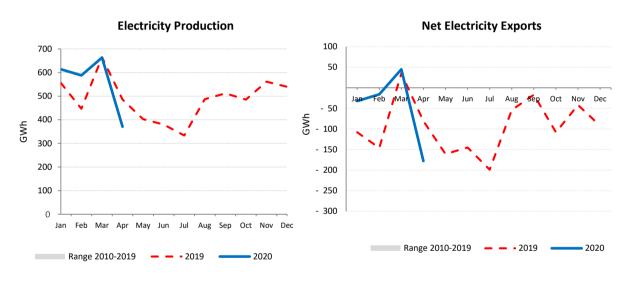
<sup>&</sup>lt;sup>2</sup> month-to-month change

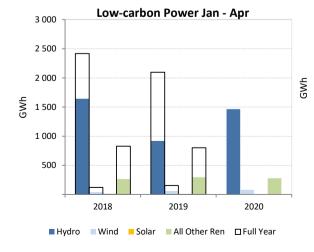
## **LATVIA**

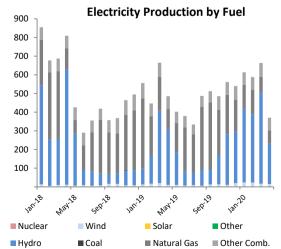
	Apr 2020				Ye	ar-to-Dat	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
CONVENTIONAL THERMAL	140	-21.3%	-12.2%	37.8%	693	1 171	-40.8%	3 601	61.5%
Coal	0	-	-	=	0	0	-	0	0.0%
Oil	-	-	-	-	-	-	-	-	-
Natural Gas	73	-33.1%	-14.7%	19.7%	415	875	-52.5%	2 801	47.8%
Combustible Renewables	67	-2.8%	-9.2%	18.1%	277	296	-6.2%	800	13.7%
Other Combustibles	-	-	-	-	-	-	-	-	=
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	215	-27.4%	-55.8%	58.0%	1 463	920	59.1%	2 097	35.8%
Wind	15	36.4%	-11.8%	4.1%	79	61	29.5%	153	2.6%
Solar	0	-	46.2%	0.1%	1	1	-	3	0.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	298	-21.0%	-48.5%	80.3%	1 821	1 278	42.5%	3 053	52.2%
NON-RENEWABLES	73	-33.1%	-14.7%	19.7%	415	875	-52.5%	2 801	47.8%
TOTAL NET PRODUCTION	371	-23.7%	-44.1%		2 236	2 153	3.9%	5 854	
+ Imports	332	-18.4%	38.3%		1 247	1 571	-20.6%	4 611	
- Exports	154	-52.8%	-46.0%		1 066	1 271	-16.1%	3 493	
= ELECTRICITY SUPPLIED	549	-3.2%	-11.3%		2 417	2 453	-1.5%	6 972	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses <sup>4</sup>	32	-21.3%	-22.2%		161	172	-6.5%	484	
= ELECTRICITY CONSUMED	516	-1.8%	-10.5%		2 256	2 281	-1.1%	6 488	

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







<sup>&</sup>lt;sup>4</sup> estimated

<sup>&</sup>lt;sup>2</sup> month-to-month change

#### **LITHUANIA**

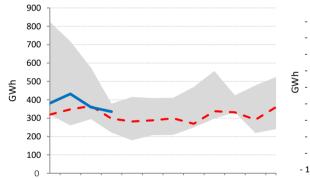
	Apr 2020				Ye	ear-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	103	18.9%	-6.1%	30.7%	434	372	16.7%	1 060	28.0%	
Coal	-	-	=	=	-	-	-	-	-	
Oil	7	85.5%	18.7%	2.2%	32	14	120.1%	59	1.6%	
Natural Gas	40	4.7%	-9.5%	12.0%	175	164	6.4%	459	12.1%	
Combustible Renewables	49	33.3%	-4.5%	14.6%	200	167	20.0%	467	12.3%	
Other Combustibles	6	-15.8%	-17.6%	1.8%	27	26	4.0%	75	2.0%	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	78	34.6%	-31.1%	23.3%	387	276	40.0%	932	24.6%	
Wind	143	19.8%	11.4%	42.6%	663	586	13.2%	1 491	39.4%	
Solar	11	-18.7%	35.4%	3.4%	24	24	-2.2%	90	2.4%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	72	-	216	5.7%	
RENEWABLES	281	23.4%	-6.6%	83.9%	1 274	1 053	21.0%	2 980	78.6%	
NON-RENEWABLES	54	-22.1%	-7.5%	16.1%	234	277	-15.5%	809	21.4%	
TOTAL NET PRODUCTION	335	12.8%	-6.8%		1 508	1 330	13.4%	3 789		
+ Imports	950	-8.1%	-14.6%		4 315	4 331	-0.4%	13 268		
- Exports	337	0.7%	-4.7%		1 464	1 299	12.8%	3 924		
= ELECTRICITY SUPPLIED	948	-4.8%	-15.3%		4 358	4 363	-0.1%	13 133		
- Used for pumped storage	69	127.3%	-31.5%		330	130	154.3%	810		
- T&D Losses	85	13.7%	-34.8%		482	408	18.1%	1 068		
= ELECTRICITY CONSUMED	794	-10.9%	-10.6%		3 547	3 825	-7.3%	11 254		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

Jan Feb Mar Apr May

Range 2010-2019

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year



Jun Jul

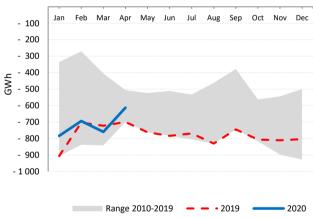
- 2019

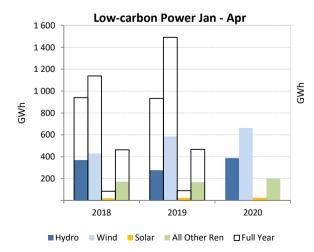
Oct Nov Dec

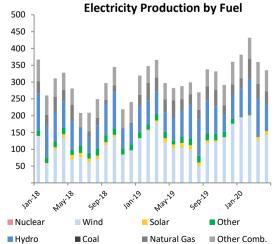
2020

**Electricity Production** 

#### **Net Electricity Exports**







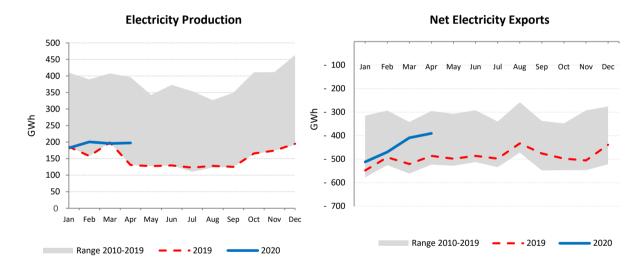
<sup>&</sup>lt;sup>2</sup> month-to-month change

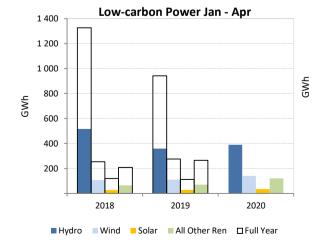
## **LUXEMBOURG**

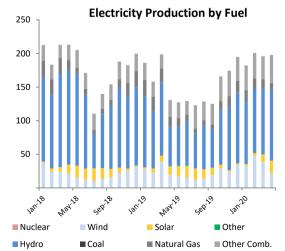
	Apr 2020				Y	ear-to-Dat	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
CONVENTIONAL THERMAL	51	30.0%	4.2%	26.0%	209	175	19.5%	510	27.7%
Coal	-	-	=	=	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural Gas	10	-32.8%	-35.0%	4.9%	58	81	-28.1%	170	9.2%
Combustible Renewables	30	68.0%	5.0%	15.2%	121	71	70.5%	266	14.4%
Other Combustibles	12	62.8%	104.0%	5.9%	29	23	29.8%	75	4.1%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	106	79.2%	9.2%	53.5%	390	359	8.6%	942	51.2%
Wind	23	15.7%	-41.0%	11.5%	142	111	28.2%	276	15.0%
Solar	18	41.9%	58.0%	8.9%	36	29	23.1%	112	6.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	176	61.7%	0.6%	89.2%	689	570	20.9%	1 597	86.7%
NON-RENEWABLES	21	-1.4%	3.1%	10.8%	88	104	-15.4%	244	13.3%
TOTAL NET PRODUCTION	198	51.2%	0.8%		776	673	15.3%	1 841	
+ Imports	485	-13.1%	-1.6%		2 124	2 449	-13.2%	6 818	
- Exports	95	30.9%	12.4%		344	402	-14.5%	939	
= ELECTRICITY SUPPLIED	588	-4.6%	-2.8%		2 557	2 720	-6.0%	7 720	
- Used for pumped storage	134	80.8%	11.2%		485	447	8.5%	1 203	
- T&D Losses	9	-16.7%	-7.1%		42	46	-8.9%	132	
= ELECTRICITY CONSUMED	445	-16.3%	-6.2%		2 030	2 227	-8.8%	6 385	

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







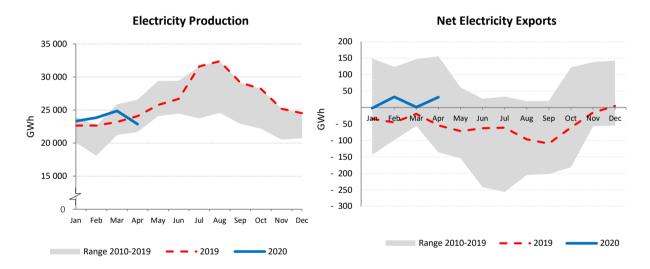
<sup>&</sup>lt;sup>2</sup> month-to-month change

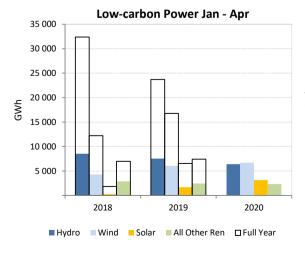
## **MEXICO**

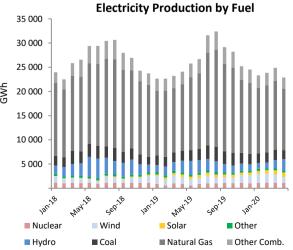
		Apr 2	.020		Ye	ar-to-Dat	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
CONVENTIONAL THERMAL	16 857	-8.5%	-11.6%	73.7%	72 559	72 210	0.5%	252 920	80.0%
Coal <sup>5</sup>	1 875	-8.5%	-11.6%	8.2%	8 070	8 032	0.5%	28 131	8.9%
Oil <sup>5</sup>	2 166	-8.5%	-11.6%	9.5%	9 325	9 280	0.5%	32 503	10.3%
Natural Gas <sup>5</sup>	12 626	-8.5%	-11.6%	55.2%	54 348	54 086	0.5%	189 440	59.9%
Combustible Renewables <sup>5</sup>	158	-8.5%	-11.6%	0.7%	680	677	0.5%	2 371	0.7%
Other Combustibles <sup>5</sup>	32	-8.5%	-11.6%	0.1%	136	135	0.5%	474	0.2%
Nuclear	1 108	25.7%	-3.4%	4.8%	4 510	3 317	36.0%	11 111	3.5%
Hydro	2 349	-0.9%	39.3%	10.3%	6 389	7 535	-15.2%	23 713	7.5%
Wind	1 187	-19.5%	-30.3%	5.2%	6 683	6 056	10.3%	16 763	5.3%
Solar <sup>5</sup>	970	88.8%	14.4%	4.2%	3 128	1 691	85.0%	6 544	2.1%
Geothermal	399	-6.8%	-2.3%	1.7%	1 647	1 773	-7.1%	5 060	1.6%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	5 064	2.1%	5.0%	22.1%	18 528	17 733	4.5%	54 450	17.2%
NON-RENEWABLES	17 808	-6.9%	-11.2%	77.9%	76 389	74 850	2.1%	261 660	82.8%
TOTAL NET PRODUCTION	22 872	-5.0%	-8.0%		94 917	92 583	2.5%	316 111	
+ Imports	39	-62.8%	-33.0%		178	589	-69.7%	1 590	
- Exports	70	40.8%	19.0%		241	436	-44.7%	963	
= ELECTRICITY SUPPLIED	22 840	-5.4%	-8.2%		94 854	92 736	2.3%	316 738	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses <sup>4</sup>	3 176	-5.3%	-8.1%		13 183	12 917	2.1%	44 044	
= ELECTRICITY CONSUMED	19 664	-5.4%	-8.2%		81 671	79 820	2.3%	272 694	

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

 $<sup>^{\</sup>rm 5}$  estimated from annual data







<sup>&</sup>lt;sup>2</sup> month-to-month change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year

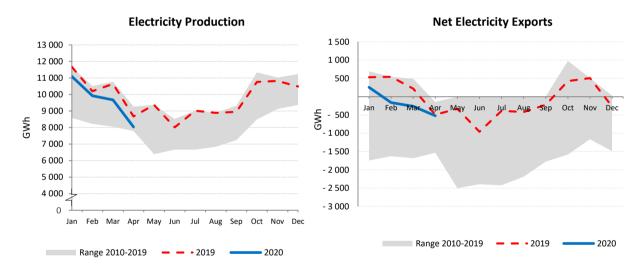
 $<sup>^{4}</sup>$  estimated

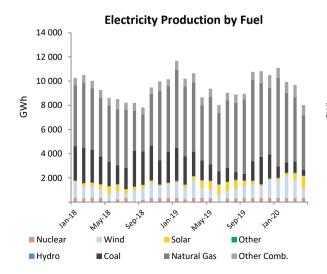
## **NETHERLANDS**

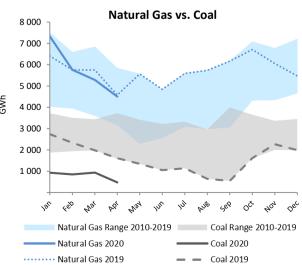
		Apr 2	2020		Ye	ar-to-Dat	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
CONVENTIONAL THERMAL	5 832	-14.8%	-19.5%	72.6%	29 655	33 982	-12.7%	96 489	82.1%
Coal	476	-70.5%	-49.1%	5.9%	3 194	8 675	-63.2%	19 274	16.4%
Oil	108	-2.7%	-24.5%	1.3%	520	459	13.3%	1 353	1.2%
Natural Gas	4 502	-1.7%	-14.9%	56.0%	22 881	22 495	1.7%	68 634	58.4%
Combustible Renewables	575	46.0%	-22.4%	7.2%	2 446	1 660	47.3%	5 413	4.6%
Other Combustibles	170	15.3%	24.8%	2.1%	614	693	-11.4%	1 815	1.5%
Nuclear	351	-0.1%	-3.5%	4.4%	1 415	1 332	6.3%	3 749	3.2%
Hydro	7	-21.7%	15.1%	0.1%	25	35	-28.2%	74	0.1%
Wind	798	-2.1%	-43.1%	9.9%	5 528	4 480	23.4%	11 508	9.8%
Solar	1 003	66.4%	63.8%	12.5%	1 927	1 180	63.3%	5 159	4.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	46	-	-	0.6%	182	182	-	547	0.5%
RENEWABLES	2 384	30.9%	-13.7%	29.7%	9 926	7 356	34.9%	22 155	18.9%
NON-RENEWABLES	5 653	-17.5%	-18.2%	70.3%	28 807	33 836	-14.9%	95 371	81.1%
TOTAL NET PRODUCTION	8 037	-7.3%	-16.9%		38 733	41 192	-6.0%	117 526	
+ Imports	2 029	21.5%	0.0%		7 474	6 307	18.5%	20 403	
- Exports	1 508	28.3%	-14.5%		6 781	7 105	-4.6%	19 548	
= ELECTRICITY SUPPLIED	8 559	-6.6%	-13.9%		39 425	40 394	-2.4%	118 381	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses <sup>4</sup>	449	-1.5%	-8.3%		1 943	1 973	-1.5%	5 731	
= ELECTRICITY CONSUMED	8 110	-6.9%	-14.2%		37 482	38 422	-2.4%	112 650	

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







<sup>&</sup>lt;sup>4</sup> estimated

<sup>&</sup>lt;sup>2</sup> month-to-month change

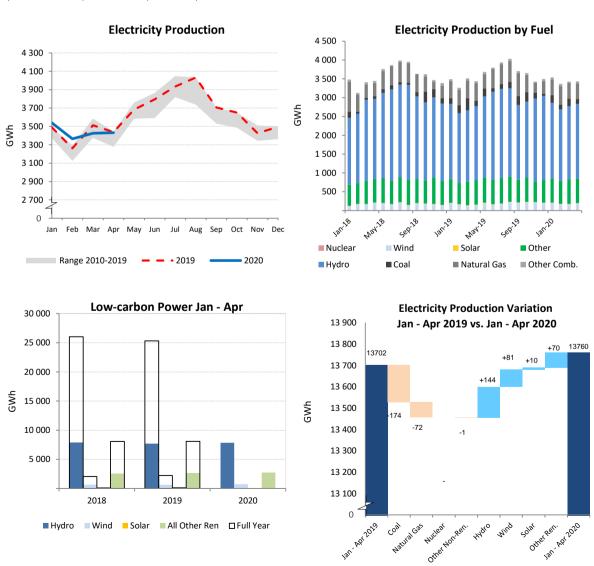
## **NEW ZEALAND**

	Apr 2020				Ye	ar-to-Dat	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
CONVENTIONAL THERMAL	592	-10.7%	-8.9%	17.3%	2 597	2 847	-8.8%	8 175	18.8%
Coal	129	-11.4%	-34.5%	3.8%	662	836	-20.8%	2 159	5.0%
Oil	-	-	-	-	0	1	-69.7%	4	0.0%
Natural Gas	412	-10.8%	-0.1%	12.0%	1 733	1 805	-4.0%	5 445	12.5%
Combustible Renewables	51	-8.2%	24.0%	1.5%	202	204	-1.2%	567	1.3%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1 992	1.1%	2.8%	58.0%	7 849	7 704	1.9%	25 330	58.3%
Wind	188	27.3%	15.6%	5.5%	718	637	12.6%	2 233	5.1%
Solar	12	23.5%	-1.0%	0.4%	48	38	25.9%	125	0.3%
Geothermal	642	0.1%	-2.4%	18.7%	2 532	2 459	3.0%	7 509	17.3%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	4	-	-	0.1%	17	17	-	51	0.1%
RENEWABLES	2 885	2.1%	2.6%	84.1%	11 347	11 042	2.8%	35 763	82.4%
NON-RENEWABLES	546	-10.9%	-11.1%	15.9%	2 412	2 660	-9.3%	7 659	17.6%
TOTAL NET PRODUCTION	3 431	-0.2%	0.2%		13 760	13 702	0.4%	43 421	
+ Imports	-	-	-		-	-	-	-	
- Exports	-	-	-		-	-	-	-	
= ELECTRICITY SUPPLIED	3 431	-0.2%	0.2%		13 760	13 702	0.4%	43 421	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses	237	-10.5%	-24.8%		1 181	981	20.3%	2 995	
= ELECTRICITY CONSUMED	3 194	0.7%	2.7%		12 579	12 721	-1.1%	40 426	

<sup>&</sup>lt;sup>1</sup> current month to month of last year change

April 2020 is estimated by the IEA Secretariat

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year



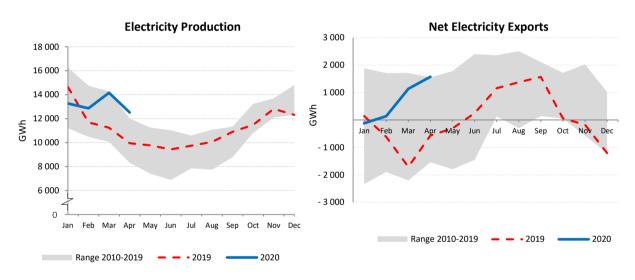
<sup>&</sup>lt;sup>2</sup> month-to-month change

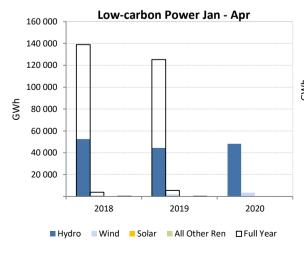
## **NORWAY**

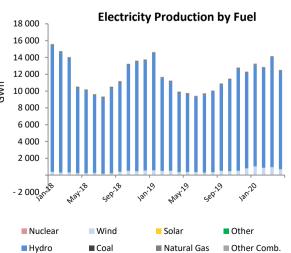
	Apr 2020				Ye	ar-to-Dat	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
CONVENTIONAL THERMAL	240	-9.0%	1.2%	1.9%	950	995	-4.6%	2 943	2.2%
Coal <sup>4</sup>	0	-100.0%	=	=	-	56	-	162	0.1%
Oil <sup>4</sup>	-	-	-	-	-	6	-	17	0.0%
Natural Gas	198	-4.4%	-0.7%	1.6%	796	778	2.3%	2 317	1.7%
Combustible Renewables	24	16.4%	20.2%	0.2%	83	79	5.6%	241	0.2%
Other Combustibles	18	-8.9%	0.8%	0.1%	71	77	-8.0%	205	0.2%
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	11 566	24.3%	-10.7%	92.4%	48 240	44 495	8.4%	125 243	93.4%
Wind	686	93.1%	-27.2%	5.5%	3 506	1 926	82.1%	5 535	4.1%
Solar	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	27	-	-	0.2%	109	109	-	328	0.2%
RENEWABLES	12 276	26.9%	-11.8%	98.1%	51 829	46 500	11.5%	131 020	97.7%
NON-RENEWABLES	243	-10.0%	-0.5%	1.9%	976	1 026	-4.9%	3 030	2.3%
TOTAL NET PRODUCTION	12 519	25.9%	-11.6%		52 805	47 526	11.1%	134 049	
+ Imports	402	-66.2%	-32.8%		3 016	5 624	-46.4%	12 353	
- Exports	1 975	217.3%	13.8%		5 746	2 868	100.3%	12 309	
= ELECTRICITY SUPPLIED	10 946	4.1%	-15.9%		50 075	50 282	-0.4%	134 093	
- Used for pumped storage	17	-73.8%	36.9%		163	100	63.2%	1 262	
- T&D Losses	807	25.9%	-11.6%		3 403	3 061	11.2%	8 630	
= ELECTRICITY CONSUMED	10 122	3.2%	-16.3%		46 509	47 122	-1.3%	124 201	

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







<sup>&</sup>lt;sup>4</sup> estimated from annual data

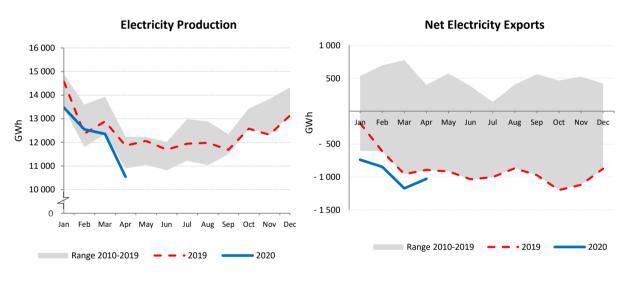
<sup>&</sup>lt;sup>2</sup> month-to-month change

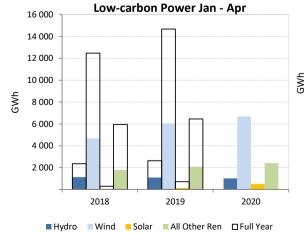
## **POLAND**

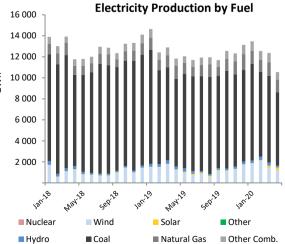
		Apr 2	2020		Ye	ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	8 885	-13.8%	-14.6%	84.3%	40 700	44 385	-8.3%	131 012	87.9%	
Coal	6 961	-16.8%	-15.8%	66.0%	32 506	37 629	-12.1%	108 915	73.0%	
Oil <sup>4</sup>	-	-	-	-	-	-	-	1 617	1.1%	
Natural Gas	1 186	-5.6%	-6.6%	11.3%	4 876	4 535	7.5%	13 566	9.1%	
Combustible Renewables	538	5.1%	-16.8%	5.1%	2 408	2 073	16.2%	6 453	4.3%	
Other Combustibles	200	413.1%	-12.1%	1.9%	910	148	516.2%	461	0.3%	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	184	-26.0%	-36.7%	1.7%	1 016	1 098	-7.4%	2 633	1.8%	
Wind	1 217	-1.0%	-17.3%	11.5%	6 683	6 051	10.4%	14 677	9.8%	
Solar	250	246.5%	39.7%	2.4%	500	142	252.1%	712	0.5%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	7	-	-	0.1%	28	28	-	85	0.1%	
RENEWABLES	2 188	6.2%	-15.4%	20.8%	10 607	9 364	13.3%	24 475	16.4%	
NON-RENEWABLES	8 355	-14.8%	-14.5%	79.2%	38 320	42 340	-9.5%	124 643	83.6%	
TOTAL NET PRODUCTION	10 543	-11.1%	-14.7%		48 927	51 704	-5.4%	149 118		
+ Imports	1 586	14.2%	-20.3%		7 016	5 331	31.6%	17 868		
- Exports	558	11.9%	-31.8%		3 231	2 689	20.1%	7 245		
= ELECTRICITY SUPPLIED	11 571	-9.3%	-14.5%		52 712	54 346	-3.0%	159 741		
- Used for pumped storage	79	-18.4%	-20.6%		426	357	19.3%	1 033		
- T&D Losses	804	20.9%	-27.2%		3 449	2 706	27.5%	9 463		
= ELECTRICITY CONSUMED	10 688	-10.9%	-13.3%		48 837	51 283	-4.8%	149 246		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







<sup>&</sup>lt;sup>4</sup>monthly figures are confidential

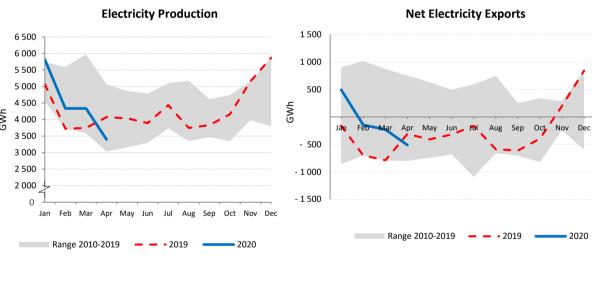
<sup>&</sup>lt;sup>2</sup> month-to-month change

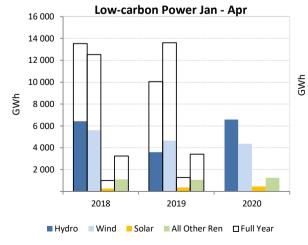
## **PORTUGAL**

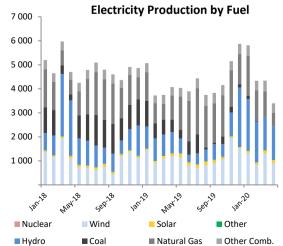
		Apr 2020				ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	974	-48.0%	-36.3%	28.6%	6 425	7 940	-19.1%	26 621	51.4%	
Coal	0	-100.0%	-100.0%	0.0%	149	2 842	-94.8%	5 378	10.4%	
Oil	94	24.9%	-7.4%	2.8%	391	324	20.9%	1 163	2.2%	
Natural Gas	572	-43.1%	-47.2%	16.8%	4 609	3 684	25.1%	16 582	32.0%	
Combustible Renewables	287	14.8%	-7.2%	8.4%	1 183	996	18.8%	3 222	6.2%	
Other Combustibles	21	-11.6%	-19.5%	0.6%	93	94	-1.9%	276	0.5%	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	1 366	55.3%	0.1%	40.2%	6 586	3 591	83.4%	10 054	19.4%	
Wind	917	-23.4%	-29.3%	27.0%	4 362	4 652	-6.2%	13 605	26.3%	
Solar	127	19.4%	-3.0%	3.7%	449	362	24.1%	1 274	2.5%	
Geothermal	16	-11.5%	-10.2%	0.5%	68	69	-1.7%	192	0.4%	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	2 713	10.7%	-13.1%	79.8%	12 649	9 670	30.8%	28 346	54.8%	
NON-RENEWABLES	687	-57.6%	-43.7%	20.2%	5 242	6 944	-24.5%	23 399	45.2%	
TOTAL NET PRODUCTION	3 400	-16.5%	-21.7%		17 891	16 614	7.7%	51 745		
+ Imports	806	23.2%	15.4%		2 606	3 134	-16.8%	8 099		
- Exports	294	-14.5%	-37.4%		2 217	1 173	88.9%	4 700		
= ELECTRICITY SUPPLIED	3 911	-10.8%	-14.4%		18 280	18 575	-1.6%	55 144		
- Used for pumped storage	202	8.7%	2.5%		738	611	20.7%	1 827		
- T&D Losses	356	-3.3%	-14.9%		1 672	1 568	6.6%	4 668		
= ELECTRICITY CONSUMED	3 353	-12.4%	-15.2%		15 871	16 396	-3.2%	48 649		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







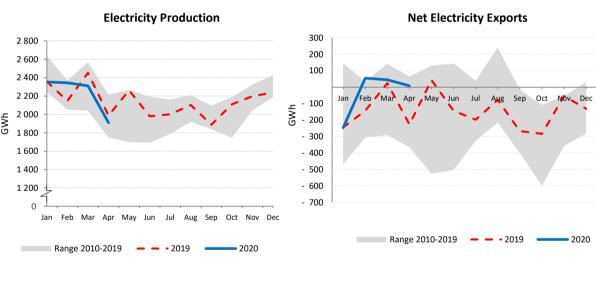
<sup>&</sup>lt;sup>2</sup> month-to-month change

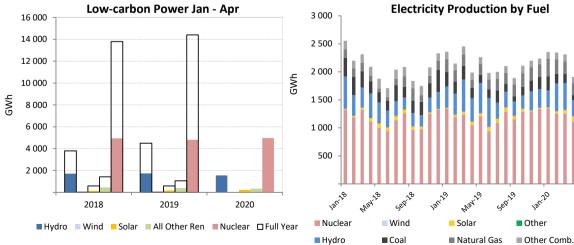
## **SLOVAK REPUBLIC**

		Apr 2	2020		Ye	ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	416	-9.8%	-19.0%	21.8%	2 164	2 210	-2.1%	6 174	24.0%	
Coal	92	-50.3%	-44.2%	4.8%	680	910	-25.4%	2 233	8.7%	
Oil	29	11.5%	-21.6%	1.5%	128	128	-	399	1.6%	
Natural Gas	213	46.3%	-6.7%	11.2%	1 014	780	30.0%	2 478	9.6%	
Combustible Renewables	80	-21.9%	-1.7%	4.2%	338	387	-12.7%	1 052	4.1%	
Other Combustibles	1	-	5.6%	0.1%	4	4	7.3%	11	0.0%	
Nuclear	1 111	6.2%	-11.5%	58.2%	4 967	4 811	3.2%	14 407	56.0%	
Hydro	285	-30.8%	-40.0%	14.9%	1 553	1 735	-10.5%	4 489	17.5%	
Wind	-	-	-	-	-	2	-	5	0.0%	
Solar	94	51.6%	49.2%	4.9%	217	171	26.9%	589	2.3%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	4	-25.0%	-	0.2%	17	17	0.0%	59	0.2%	
RENEWABLES	459	-20.6%	-25.9%	24.1%	2 108	2 295	-8.2%	6 135	23.9%	
NON-RENEWABLES	1 450	2.9%	-14.2%	75.9%	6 810	6 651	2.4%	19 588	76.1%	
TOTAL NET PRODUCTION	1 910	-3.9%	-17.3%		8 918	8 946	-0.3%	25 723		
+ Imports	896	-16.4%	-10.0%		5 080	4 805	5.7%	13 538		
- Exports	905	7.0%	-13.1%		4 942	4 215	17.2%	11 838		
= ELECTRICITY SUPPLIED	1 901	-14.1%	-16.1%		9 055	9 535	-5.0%	27 423		
- Used for pumped storage	33	57.1%	26.9%		122	104	17.3%	295		
- T&D Losses <sup>4</sup>	103	-8.3%	-15.1%		515	506	1.8%	1 445		
= ELECTRICITY CONSUMED	1 764	-15.2%	-16.7%		8 418	8 925	-5.7%	25 683		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year





<sup>&</sup>lt;sup>4</sup> estimated

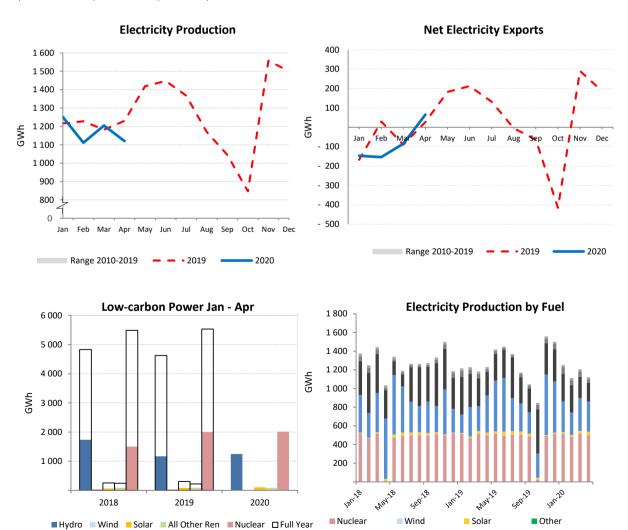
<sup>&</sup>lt;sup>2</sup> month-to-month change

## **SLOVENIA**

		Apr 2	2020		Ye	ear-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	257	-15.6%	-16.2%	22.9%	1 321	1 602	-17.5%	4 747	31.2%	
Coal	199	-20.8%	-13.3%	17.8%	1 018	1 313	-22.5%	4 028	26.5%	
Oil	0	-77.4%	208.3%	0.0%	1	4	-72.7%	7	0.0%	
Natural Gas	36	18.3%	-33.7%	3.2%	211	193	9.2%	482	3.2%	
Combustible Renewables	21	-2.1%	-4.1%	1.9%	87	88	-1.6%	221	1.5%	
Other Combustibles	1	33.4%	-9.5%	0.1%	4	3	11.1%	9	0.1%	
Nuclear	497	-0.7%	-4.0%	44.3%	2 015	1 998	0.9%	5 531	36.4%	
Hydro	325	-18.2%	-7.8%	29.0%	1 248	1 169	6.7%	4 622	30.4%	
Wind	1	32.6%	-30.1%	0.1%	2	2	-3.6%	6	0.0%	
Solar	41	46.4%	50.6%	3.7%	101	85	19.8%	303	2.0%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	387	-13.3%	-3.7%	34.6%	1 439	1 345	7.0%	5 152	33.9%	
NON-RENEWABLES	733	-6.4%	-8.7%	65.4%	3 249	3 511	-7.5%	10 056	66.1%	
TOTAL NET PRODUCTION	1 120	-8.9%	-7.0%		4 687	4 856	-3.5%	15 208		
+ Imports	549	-35.2%	-34.2%		2 925	3 351	-12.7%	9 021		
- Exports	614	-29.7%	-18.1%		2 604	3 150	-17.3%	9 340		
= ELECTRICITY SUPPLIED	1 055	-12.3%	-18.2%		5 008	5 057	-1.0%	14 889		
- Used for pumped storage	36	133.0%	-8.0%		143	15	830.1%	272		
- T&D Losses	56	-23.8%	-42.9%		372	391	-5.0%	987		
= ELECTRICITY CONSUMED	963	-13.5%	-16.4%		4 493	4 651	-3.4%	13 630		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year



■ Hydro

■ Coal

■ Natural Gas

■ Other Comb.

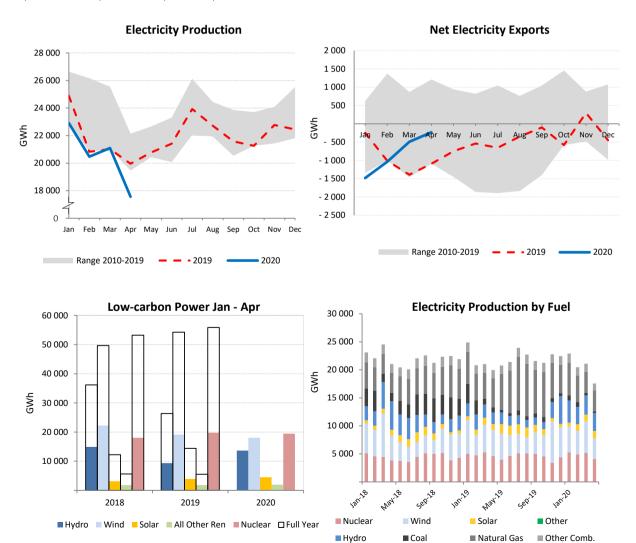
<sup>&</sup>lt;sup>2</sup> month-to-month change

## **SPAIN**

		Apr 2020				ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	5 294	-30.0%	-6.5%	30.1%	26 399	34 501	-23.5%	112 593	42.7%	
Coal	327	-64.1%	-35.7%	1.9%	2 641	8 046	-67.2%	13 562	5.1%	
Oil	740	-24.1%	-15.6%	4.2%	3 557	3 984	-10.7%	12 056	4.6%	
Natural Gas	3 718	-27.9%	0.6%	21.2%	17 975	20 308	-11.5%	80 466	30.5%	
Combustible Renewables	448	3.4%	-10.4%	2.5%	1 937	1 809	7.1%	5 523	2.1%	
Other Combustibles	62	-26.5%	-21.4%	0.4%	289	353	-18.0%	985	0.4%	
Nuclear	4 090	-11.6%	-21.1%	23.3%	19 456	19 725	-1.4%	55 883	21.2%	
Hydro	3 174	54.6%	-7.0%	18.1%	13 608	9 336	45.8%	26 349	10.0%	
Wind	3 665	-20.8%	-34.0%	20.9%	18 046	19 170	-5.9%	54 235	20.6%	
Solar	1 331	23.2%	4.7%	7.6%	4 479	3 923	14.2%	14 399	5.5%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	9	-	-	0.1%	37	37	-	112	0.0%	
RENEWABLES	8 618	5.1%	-19.8%	49.1%	38 070	34 237	11.2%	100 507	38.1%	
NON-RENEWABLES	8 945	-23.9%	-13.6%	50.9%	43 955	52 454	-16.2%	163 064	61.9%	
TOTAL NET PRODUCTION	17 563	-12.0%	-16.7%		82 025	86 692	-5.4%	263 571		
+ Imports	1 384	-24.1%	-18.3%		7 243	7 890	-8.2%	18 720		
- Exports	1 151	57.4%	-4.0%		3 998	4 149	-3.6%	11 858		
= ELECTRICITY SUPPLIED	17 795	-15.5%	-17.5%		85 269	90 433	-5.7%	270 433		
- Used for pumped storage	661	192.2%	10.9%		2 006	1 183	69.6%	3 025		
- T&D Losses	1 605	-17.7%	-18.5%		7 802	8 337	-6.4%	24 991		
= ELECTRICITY CONSUMED	15 529	-17.7%	-18.3%		75 461	80 914	-6.7%	242 417		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year



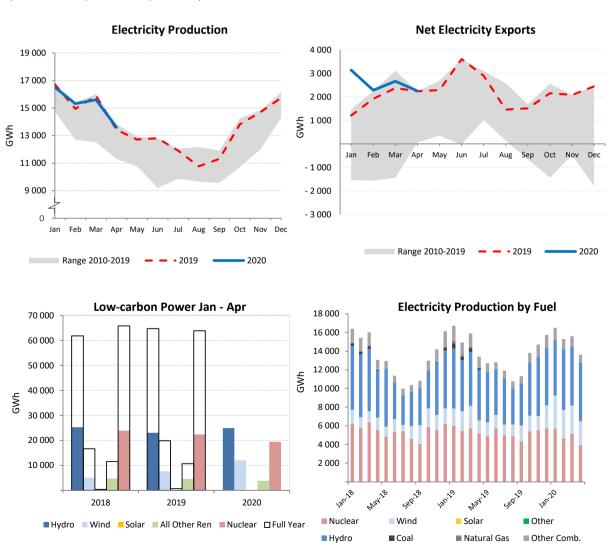
<sup>&</sup>lt;sup>2</sup> month-to-month change

## **SWEDEN**

		Apr 2020				ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	867	-40.5%	-22.0%	6.4%	4 459	7 776	-42.7%	15 640	9.5%	
Coal	1	-99.3%	730.4%	0.0%	7	1 558	-99.5%	1 579	1.0%	
Oil	12	35.1%	45.0%	0.1%	35	153	-76.9%	265	0.2%	
Natural Gas	0	-99.3%	-87.1%	0.0%	39	640	-93.9%	728	0.4%	
Combustible Renewables	731	-26.0%	-24.0%	5.4%	3 830	4 552	-15.9%	10 640	6.5%	
Other Combustibles	123	-34.5%	-11.1%	0.9%	548	873	-37.3%	2 427	1.5%	
Nuclear	3 925	-24.1%	-23.7%	28.9%	19 440	22 360	-13.1%	63 881	38.8%	
Hydro	6 225	15.6%	-1.3%	45.8%	24 919	23 036	8.2%	64 698	39.3%	
Wind	2 496	88.8%	-15.9%	18.4%	12 009	7 605	57.9%	19 846	12.0%	
Solar <sup>4</sup>	83	-	20.3%	0.6%	191	191	-	663	0.4%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	9 535	22.6%	-7.5%	70.1%	40 949	35 384	15.7%	95 847	58.2%	
NON-RENEWABLES	4 061	-28.0%	-23.3%	29.9%	20 069	25 584	-21.6%	68 880	41.8%	
TOTAL NET PRODUCTION	13 597	1.3%	-12.8%		61 019	60 968	0.1%	164 728		
+ Imports	547	-12.7%	5.2%		1 996	3 230	-38.2%	9 070		
- Exports	2 799	-2.3%	-12.1%		12 333	10 958	12.6%	35 231		
= ELECTRICITY SUPPLIED	11 345	1.4%	-12.3%		50 682	53 240	-4.8%	138 567		
- Used for pumped storage	-	-	-		13	9	40.9%	32		
- T&D Losses	839	9.2%	-20.5%		4 083	4 197	-2.7%	10 477		
= ELECTRICITY CONSUMED	10 506	0.9%	-11.5%		46 586	49 034	-5.0%	128 058		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year



<sup>&</sup>lt;sup>4</sup> estimated by the IEA secretariat

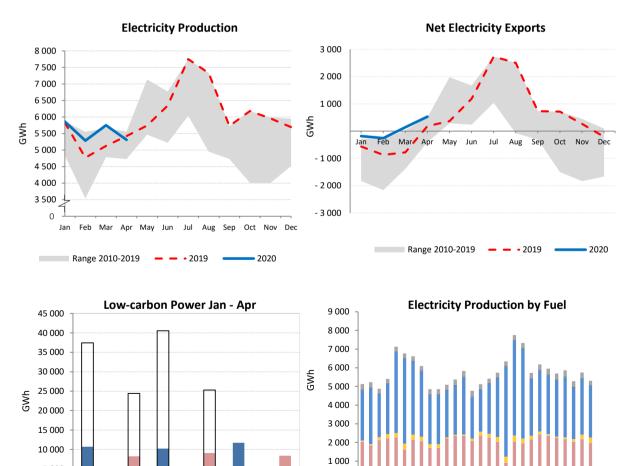
<sup>&</sup>lt;sup>2</sup> month-to-month change

## **SWITZERLAND**

		Apr 2	2020		Ye	ar-to-Dat	е	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	264	4.0%	-18.2%	5.0%	1 313	1 240	5.8%	3 791	5.3%	
Coal	-	-	-	-	-	-	-	-	-	
Oil	1	-66.7%	-50.0%	0.0%	4	8	-53.4%	24	0.0%	
Natural Gas	38	-10.3%	-17.5%	0.7%	188	207	-9.2%	632	0.9%	
Combustible Renewables	131	5.5%	-18.1%	2.5%	653	608	7.4%	1 859	2.6%	
Other Combustibles	94	10.3%	-18.3%	1.8%	468	418	12.0%	1 277	1.8%	
Nuclear	1 974	-12.6%	-9.7%	37.2%	8 393	9 095	-7.7%	25 280	35.2%	
Hydro	2 775	2.8%	-7.7%	52.3%	11 737	10 215	14.9%	40 556	56.4%	
Wind	7	-12.5%	-56.3%	0.1%	63	55	14.5%	146	0.2%	
Solar	290	43.8%	29.9%	5.5%	708	545	29.9%	2 111	2.9%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	3 203	5.6%	-5.9%	60.3%	13 161	11 422	15.2%	44 672	62.1%	
NON-RENEWABLES	2 107	-11.8%	-10.3%	39.7%	9 052	9 727	-6.9%	27 212	37.9%	
TOTAL NET PRODUCTION	5 310	-2.1%	-7.7%		22 213	21 149	5.0%	71 884		
+ Imports	1 765	-21.5%	-31.3%		10 826	12 512	-13.5%	29 505		
- Exports	2 295	-5.6%	-15.3%		11 053	10 475	5.5%	35 765		
= ELECTRICITY SUPPLIED	4 780	-8.8%	-14.8%		21 985	23 186	-5.2%	65 624		
- Used for pumped storage	429	37.1%	43.0%		1 167	1 067	9.4%	4 133		
- T&D Losses	391	-12.4%	-10.9%		1 725	1 839	-6.2%	5 153		
= ELECTRICITY CONSUMED	3 960	-11.6%	-18.7%		19 093	20 280	-5.9%	56 338		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year



5 000

2018

2019

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

2020

Jan-18

Nuclear

■ Hydro

May 18

sept 9

Sep. 18

Wind

■ Coal

Jan-19

May 19

■ Natural Gas

Solar

Jan-20

■ Other Comb.

Other

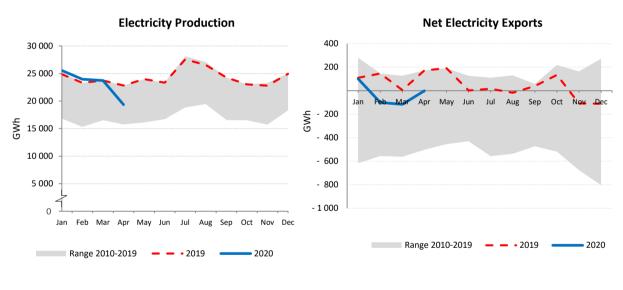
<sup>&</sup>lt;sup>2</sup> month-to-month change

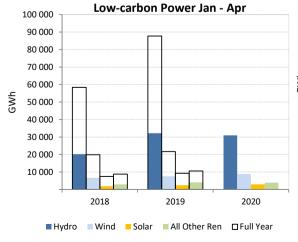
## **TURKEY**

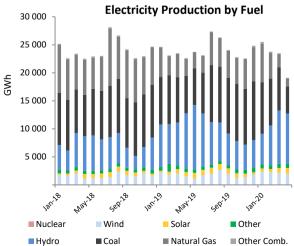
	Apr 2020				Ye	ar-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	6 584	-34.4%	-37.1%	34.0%	46 852	49 190	-4.8%	164 146	56.4%	
Coal	4 801	-28.5%	-38.1%	24.8%	30 183	32 022	-5.7%	106 744	36.7%	
Oil	54	-23.3%	15.8%	0.3%	195	306	-36.3%	692	0.2%	
Natural Gas	1 410	-53.3%	-39.8%	7.3%	15 217	15 880	-4.2%	53 615	18.4%	
Combustible Renewables	316	37.2%	-2.3%	1.6%	1 243	972	27.9%	3 069	1.1%	
Other Combustibles	3	6.0%	-7.1%	0.0%	13	9	44.6%	26	0.0%	
Nuclear	-	-	-	-	-	-	-	-	-	
Hydro	9 022	-8.6%	-4.9%	46.6%	30 983	32 171	-3.7%	87 697	30.1%	
Wind	2 008	34.0%	-7.5%	10.4%	8 855	7 582	16.8%	21 630	7.4%	
Solar	1 014	31.7%	20.7%	5.2%	2 959	2 401	23.2%	9 286	3.2%	
Geothermal	638	13.1%	-6.6%	3.3%	2 625	3 067	-14.4%	7 475	2.6%	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	81	-7.2%	8.2%	0.4%	297	327	-9.1%	929	0.3%	
RENEWABLES	12 997	0.5%	-3.7%	67.2%	46 666	46 193	1.0%	129 157	44.4%	
NON-RENEWABLES	6 349	-35.8%	-37.9%	32.8%	45 906	48 544	-5.4%	162 007	55.6%	
TOTAL NET PRODUCTION	19 346	-15.3%	-18.5%		92 572	94 737	-2.3%	291 164		
+ Imports	164	36.1%	-46.7%		882	698	26.4%	2 212		
- Exports	163	-44.3%	-14.5%		766	1 131	-32.3%	2 789		
= ELECTRICITY SUPPLIED	19 347	-14.6%	-18.9%		92 688	94 304	-1.7%	290 587		
- Used for pumped storage	-	-	-		-	-	-	-		
- T&D Losses <sup>4</sup>	2 357	-15.0%	-18.8%		11 289	11 528	-2.1%	35 439		
= ELECTRICITY CONSUMED	16 990	-14.5%	-18.9%		81 399	82 776	-1.7%	255 148		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year







<sup>&</sup>lt;sup>4</sup> estimated

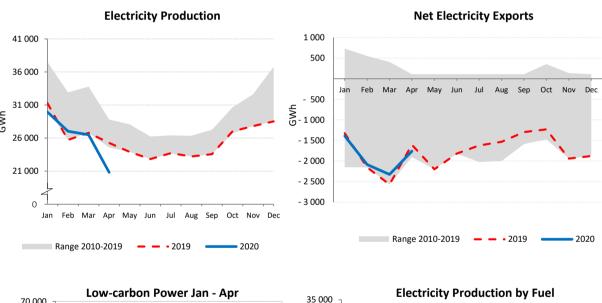
<sup>&</sup>lt;sup>2</sup> month-to-month change

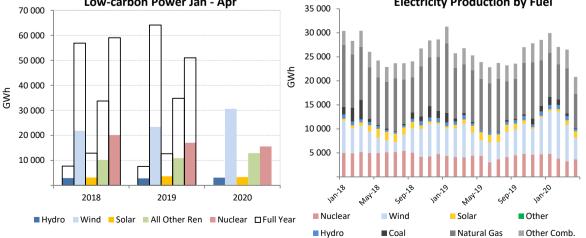
## **UNITED KINGDOM**

		Apr 2	2020		Υ	ear-to-Date	:	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	10 827	-23.3%	-22.0%	52.0%	51 775	62 257	-16.8%	174 277	56.3%	
Coal	169	-49.5%	-71.6%	0.8%	3 664	3 578	2.4%	7 326	2.4%	
Oil	42	-28.2%	-27.7%	0.2%	226	344	-34.4%	991	0.3%	
Natural Gas	7 161	-33.5%	-24.1%	34.4%	33 170	45 823	-27.6%	126 155	40.7%	
Combustible Renewables	3 038	17.6%	-8.0%	14.6%	12 867	10 903	18.0%	34 813	11.2%	
Other Combustibles	418	8.5%	-14.1%	2.0%	1 848	1 609	14.8%	4 992	1.6%	
Nuclear	3 653	-17.4%	12.2%	17.5%	15 558	17 054	-8.8%	51 032	16.5%	
Hydro	464	2.8%	-45.2%	2.2%	3 070	2 772	10.8%	7 576	2.4%	
Wind	4 513	-5.1%	-40.4%	21.7%	30 635	23 377	31.0%	64 134	20.7%	
Solar	1 362	-10.8%	42.4%	6.5%	3 281	3 630	-9.6%	12 677	4.1%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	1	-	-	0.0%	4	4	-	13	0.0%	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	9 379	0.6%	-26.0%	45.0%	49 858	40 685	22.5%	119 213	38.5%	
NON-RENEWABLES	11 443	-28.3%	-17.2%	55.0%	54 465	68 409	-20.4%	190 496	61.5%	
TOTAL NET PRODUCTION	20 822	-17.6%	-21.4%		104 323	109 094	-4.4%	309 709		
+ Imports	2 090	16.6%	-17.6%		8 770	8 571	2.3%	24 556		
- Exports	330	75.1%	55.7%		1 209	918	31.6%	3 385		
= ELECTRICITY SUPPLIED	22 581	-16.0%	-21.7%		111 884	116 747	-4.2%	330 880		
- Used for pumped storage	134	-19.7%	-28.8%		694	914	-24.1%	2 360		
- T&D Losses	1 966	-5.0%	-18.3%		10 191	9 788	4.1%	26 070		
= ELECTRICITY CONSUMED	20 482	-16.9%	-21.9%		101 000	106 044	-4.8%	302 449		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year





<sup>&</sup>lt;sup>2</sup> month-to-month change

## **UNITED STATES**

		Apr 2020				ear-to-Date		2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	155 689	-8.7%	-14.3%	55.9%	732 670	797 644	-8.1%	2 641 607	63.5%	
Coal	42 317	-31.9%	-19.9%	15.2%	221 258	329 769	-32.9%	997 975	24.0%	
Oil	2 632	7.5%	-9.6%	0.9%	11 550	11 004	5.0%	33 903	0.8%	
Natural Gas	105 390	4.8%	-12.4%	37.8%	477 574	434 352	10.0%	1 540 929	37.0%	
Combustible Renewables	4 513	-1.2%	-6.6%	1.6%	18 894	19 502	-3.1%	59 007	1.4%	
Other Combustibles	837	16.6%	-4.8%	0.3%	3 395	3 017	12.5%	9 793	0.2%	
Nuclear	59 158	-2.3%	-7.5%	21.2%	263 267	264 021	-0.3%	809 070	19.4%	
Hydro	22 175	-18.3%	-6.3%	8.0%	98 321	103 702	-5.2%	294 530	7.1%	
Wind	29 350	-2.3%	0.2%	10.5%	115 920	103 824	11.7%	300 089	7.2%	
Solar	10 574	15.2%	26.9%	3.8%	32 381	27 119	19.4%	96 195	2.3%	
Geothermal	1 288	3.2%	-9.0%	0.5%	4 992	5 307	-5.9%	15 492	0.4%	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	359	3.3%	16.8%	0.1%	1 283	1 471	-12.8%	4 497	0.1%	
RENEWABLES	67 900	-5.9%	0.5%	24.4%	270 508	259 453	4.3%	765 312	18.4%	
NON-RENEWABLES	210 693	-7.1%	-12.6%	75.6%	978 326	1 043 635	-6.3%	3 396 166	81.6%	
TOTAL NET PRODUCTION	278 593	-6.8%	-9.8%		1 248 834	1 303 088	-4.2%	4 161 478		
+ Imports	4 525	-2.9%	-6.8%		18 546	19 099	-2.9%	59 052		
- Exports	2 000	-4.2%	-4.2%		7 547	7 436	1.5%	20 008		
= ELECTRICITY SUPPLIED	281 118	-6.8%	-9.7%		1 259 833	1 314 751	-4.2%	4 200 523		
- Used for pumped storage	1 673	-5.3%	-1.6%		7 000	7 270	-3.7%	26 033		
- T&D Losses	11 491	-30.9%	-3.3%		56 226	64 854	-13.3%	224 697		
= ELECTRICITY CONSUMED	267 954	-5.4%	-10.1%		1 196 607	1 242 627	-3.7%	3 949 792		

450 000

400 000

350 000

300 000

200 000

150 000

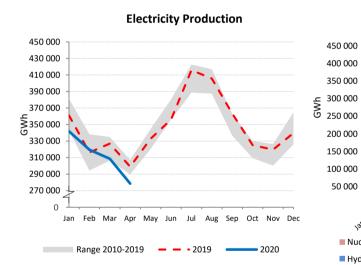
100 000

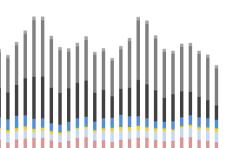
50 000

■ Nuclear

Hydro

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year





481.19 HAVE 111.19

■ Natural Gas

Solar

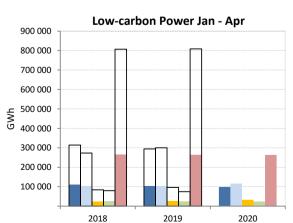
Sept. 19

3 Jan 20 Mar 20

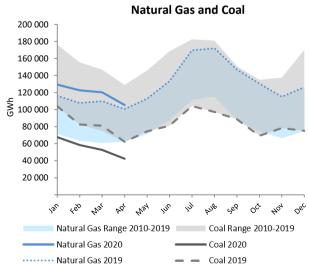
Other Comb.

Other

**Electricity Production by Fuel** 



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



Jan-19

111.18 SEP. 18 NOV.18

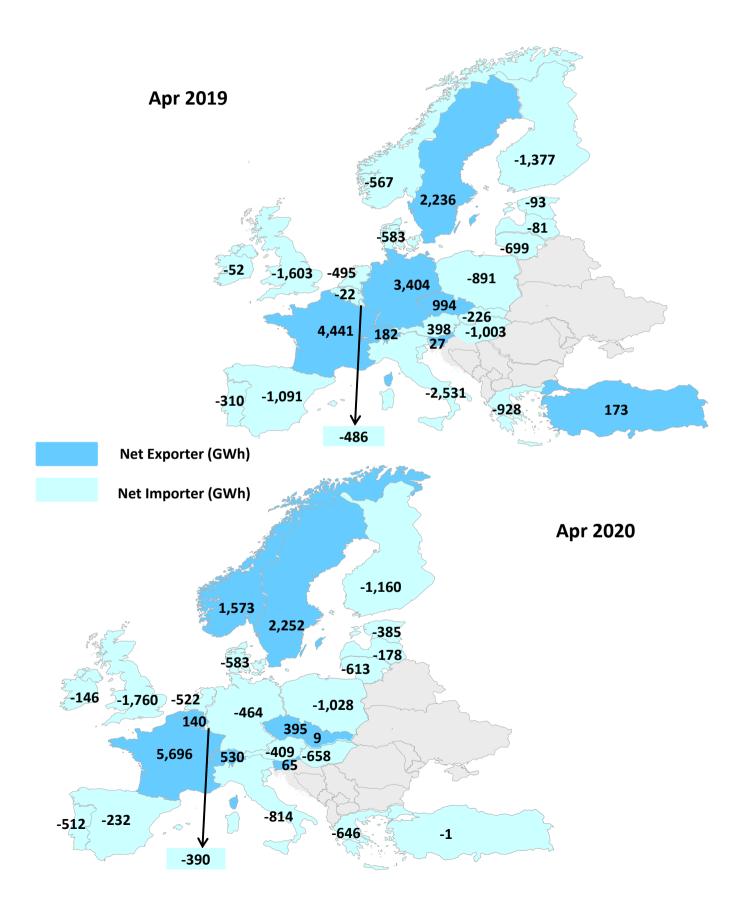
Wind

■ Coal

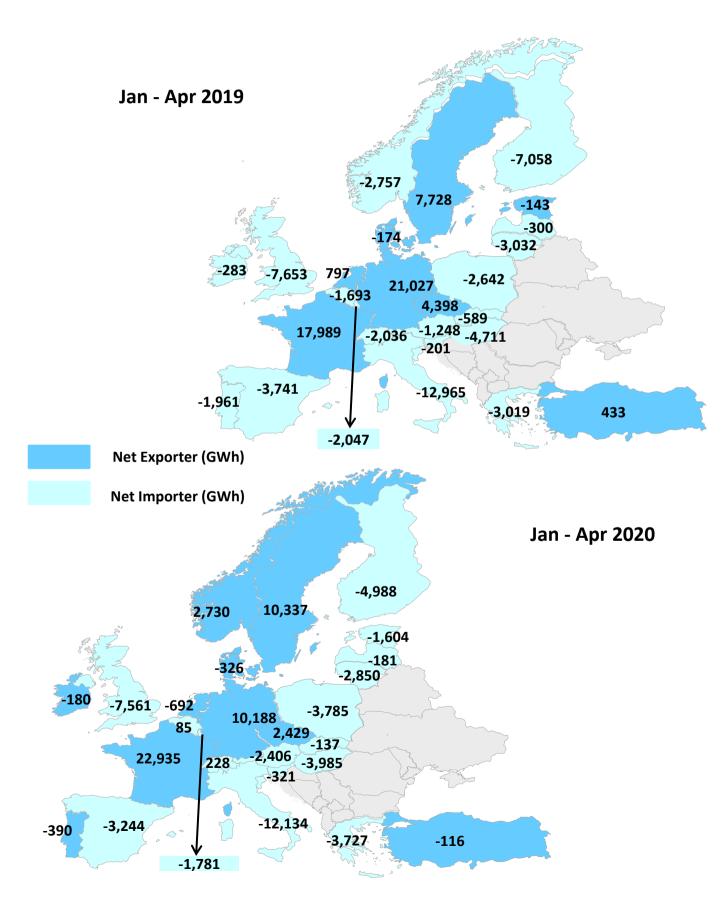
<sup>&</sup>lt;sup>1</sup> current month to month of last year change

<sup>&</sup>lt;sup>2</sup> month-to-month change

# NET ELECTRICITY EXPORTS OECD EUROPE MAP 1



# NET ELECTRICITY EXPORTS OECD EUROPE MAP 2







#### **HIGHLIGHTS**

- India was put under a strict nationwide lockdown on 24 March 2020. These lockdown measures had a significant impact on electricity production. In April 2020, total electricity production was 101.2 TWh, down by 22.7% compared to April 2019 and by 14.8% compared to March 2020. This drop in production is mainly driven by lower coal fired generation, which was 66.2 TWh in April 2020, down by 31.5% compared to April 2019. Coal power plants produced 65.4% of electricity in April 2020 compared to 74.3% in April 2019. On the other hand, renewable production decreased slightly by 2.0% compared to April 2019, down to 23.9 TWh, due to lower combustible renewable production. Solar production has continued increasing throughout the first four months of 2020, and was 20.9 TWh, 33.3% higher than over the same period in 2019, accentuating the rapid growth of the sector.
- In China, production levels in the first quarter of 2020 were lower than in the first quarter of 2018 and 2019 due to the Covid-19 crisis. In April 2020, total production levels surpassed April 2019 production levels. Total electricity production in April 2020 was 566.7 TWh, 3.1% higher than in April 2019 and 2.4% higher than in March 2020. Conventional thermal production was 388.1 TWh in April 2020, 3.7% higher than in April 2019.
- In Brazil, although no federal lockdown measure were implemented, total net production decreased by 12.1% compared to
  April 2019 and by 12.5% compared to March 2020, down to 43.6 TWh. This decrease in production was a result of lower
  conventional production which was 6,899.5 GWh, 22.1% lower than in April 2019. As a result, rewenable energy sources
  produced 90.1% of the total electricity in April 2020, which was the highest share in over five years.
- In Romania, strict lockdown measures were implemented on 29 March 2020. As a result, similarly to OECD Europe countries, electricity production decreased substantially and was 3.7 TWh in April 2020, 19.2% lower than in April 2019 and 19.6% lower than in March 2020. Conventional thermal declined by 44.0% compared to April 2019 down to 833.2 GWh. Coal production alone decreased by 61.5% compared to April 2019 and by 42.5% compared to March 2020, to 408.9 GWh. Hydro production also decreased as a result of low precipitation levels and was 1119.6 GWh, 20.6% lower than in April 2019, to the lowest monthly levels of production recorded in over five years.

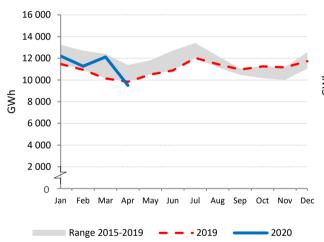
## **ARGENTINA**

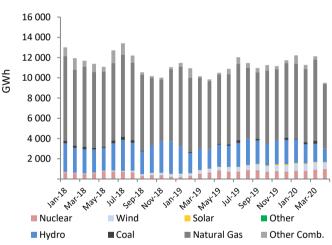
		Apr 2	2020		Yo	ear-to-Dat	e	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	6 489	-5.6%	-24.8%	68.3%	31 263	30 599	2.2%	91 369	69.0%	
Coal	-	-	-	-	600	134	348.5%	1 187	0.9%	
Oil	12	-71.8%	-94.7%	0.1%	1 223	1 196	2.3%	3 282	2.5%	
Natural Gas	6 358	-5.5%	-20.3%	67.0%	28 995	28 904	0.3%	85 282	64.4%	
Combustible Renewables	119	16.7%	3.9%	1.3%	445	366	21.7%	1 618	1.2%	
Other Combustibles	-	-	-	-	-	-	-	-	-	
Nuclear	985	52.4%	5.1%	10.4%	3 532	1 684	109.7%	8 002	6.0%	
Hydro	1 334	-31.3%	-25.6%	14.0%	7 333	8 776	-16.4%	27 253	20.6%	
Wind	608	85.2%	-7.9%	6.4%	2 591	1 152	124.9%	4 960	3.7%	
Solar	80	58.7%	-18.7%	0.8%	368	185	99.3%	795	0.6%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	2 140	-11.6%	-19.7%	22.5%	10 737	10 479	2.5%	34 625	26.2%	
NON-RENEWABLES	7 355	-0.8%	-22.2%	77.5%	34 350	31 918	7.6%	97 754	73.8%	
TOTAL NET PRODUCTION	9 495	-3.5%	-21.6%		45 087	42 397	6.3%	132 379		

 $<sup>^{\</sup>rm 1}$  current month to month of last year change

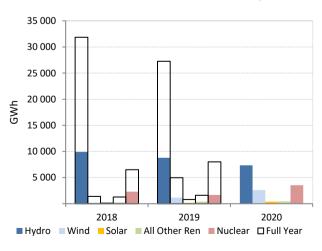
## **Electricity Production**

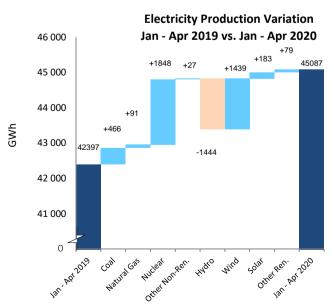
## **Electricity Production by Fuel**





#### Low-carbon Power Jan - Apr





<sup>&</sup>lt;sup>2</sup> month-to-month change

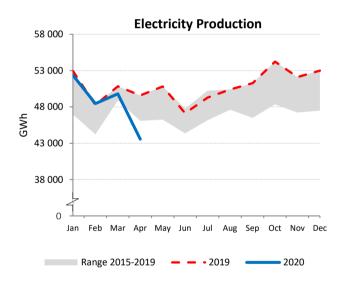
<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year

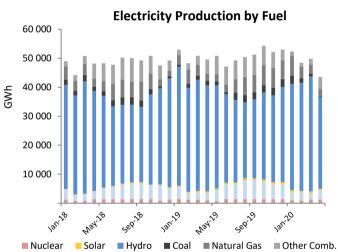
## **BRAZIL**

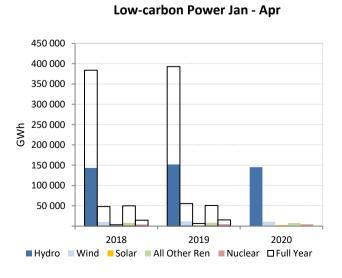
	Apr 2020				١	ear-to-Date		2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share	
CONVENTIONAL THERMAL	6 900	-22.1%	13.3%	15.8%	31 130	31 524	-1.2%	139 682	22.9%	
Coal	321	-79.2%	-68.7%	0.7%	5 842	5 259	11.1%	22 606	3.7%	
Oil	259	-77.4%	-14.1%	0.6%	1 256	3 433	-63.4%	9 595	1.6%	
Natural Gas	2 470	-1.4%	-20.1%	5.7%	16 218	14 445	12.3%	56 727	9.3%	
Combustible Renewables	3 849	5.1%	131.0%	8.8%	7 814	8 386	-6.8%	50 753	8.3%	
Other Combustibles	-	-	-	-	-	-	-	-	-	
Nuclear	1 267	26.7%	5.8%	2.9%	4 438	4 788	-7.3%	15 224	2.5%	
Hydro	31 666	-13.5%	-20.1%	72.7%	145 272	151 717	-4.2%	392 716	64.4%	
Wind	3 069	17.0%	37.1%	7.0%	10 862	11 724	-7.4%	55 571	9.1%	
Solar	660	39.9%	4.1%	1.5%	2 478	1 858	33.4%	6 615	1.1%	
Geothermal	-	-	-	-	-	-	-	-	-	
Other Renewables	-	-	-	-	-	-	-	-	-	
Non-Specified	-	-	-	-	-	-	-	-	-	
RENEWABLES	39 245	-9.5%	-11.2%	90.1%	166 425	173 685	-4.2%	505 656	82.9%	
NON-RENEWABLES	4 317	-30.3%	-23.2%	9.9%	27 754	27 926	-0.6%	104 153	17.1%	
TOTAL NET PRODUCTION	43 562	-12.1%	-12.5%		194 180	201 610	-3.7%	609 808		

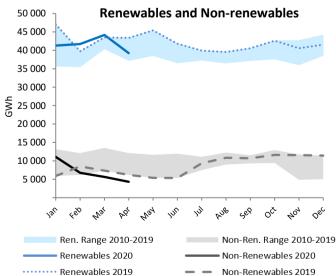
<sup>&</sup>lt;sup>1</sup> current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year









<sup>&</sup>lt;sup>2</sup> month-to-month change

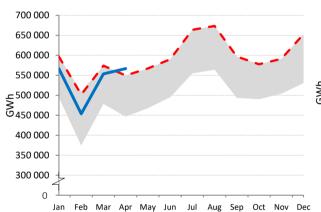
## **CHINA**

	Apr 2020				Y	'ear-to-Date	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
CONVENTIONAL THERMAL	388 058	3.7%	3.7%	68.5%	1 507 491	1 586 893	-5.0%	4 929 609	69.1%
Coal <sup>4</sup>	359 540	3.7%	2.2%	63.4%	1 411 922	1 470 277	-4.0%	4 567 347	64.0%
Oil <sup>4</sup>	804	3.7%	3.8%	0.1%	3 119	3 288	-5.1%	10 213	0.1%
Natural Gas <sup>4</sup>	18 934	3.7%	31.8%	3.3%	61 894	77 427	-20.1%	240 522	3.4%
Combustible Renewables <sup>4</sup>	7 646	3.7%	22.7%	1.3%	26 282	31 266	-15.9%	97 127	1.4%
Other Combustibles <sup>4</sup>	1 133	3.7%	7.9%	0.2%	4 274	4 635	-7.8%	14 399	0.2%
Nuclear	29 269	10.7%	0.1%	5.2%	103 661	99 711	4.0%	331 265	4.6%
Hydro	82 402	-8.6%	1.1%	14.5%	291 510	325 255	-10.4%	1 254 465	17.6%
Wind <sup>5</sup>	41 598	6.2%	-9.2%	7.3%	153 937	143 552	7.2%	401 643	5.6%
Solar <sup>5</sup>	25 402	29.6%	12.8%	4.5%	83 690	66 474	25.9%	217 377	3.0%
Geothermal	10	-	2.2%	0.0%	39	39	-1.6%	118	0.0%
Other Renewables	-	-	-	-	3	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	157 057	0.4%	0.6%	27.7%	555 461	566 587	-2.0%	1 970 730	27.6%
NON-RENEWABLES	409 680	4.1%	3.1%	72.3%	1 584 870	1 655 338	-4.3%	5 163 747	72.4%
TOTAL NET PRODUCTION	566 737	3.1%	2.4%		2 140 331	2 221 924	-3.7%	7 134 477	

 $<sup>^{\</sup>scriptsize 1}$  current month to month of last year change

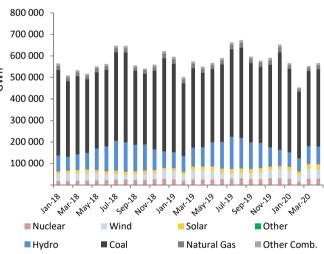
Range 2015-2019

#### <sup>4</sup> estimated from annual data



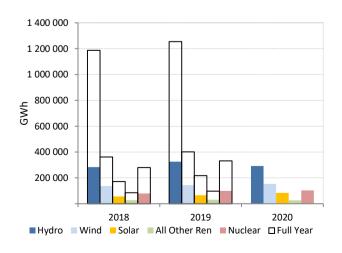
**Electricity Production** 

#### **Electricity Production by Fuel**

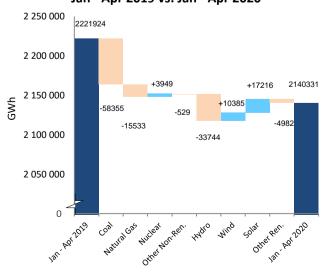


## Low-carbon Power Jan - Apr

**2019** 



## Electricity Production Variation Jan - Apr 2019 vs. Jan - Apr 2020



<sup>&</sup>lt;sup>2</sup> month-to-month change

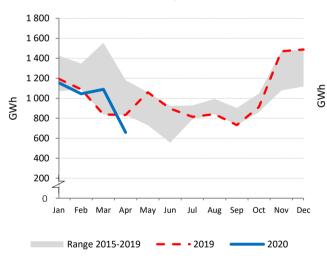
<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year

## **CROATIA**

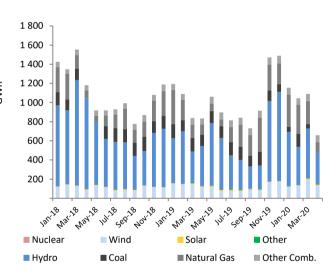
	Apr 2020				Y	'ear-to-Date	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
CONVENTIONAL THERMAL	177	-38.6%	-51.0%	26.9%	1 507	1 593	-5.4%	4 749	39.0%
Coal	-	-	-	-	238	523	-54.5%	1 507	12.4%
Oil	1	24.9%	-	0.2%	2	1	212.0%	32	0.3%
Natural Gas	104	-4.1%	-57.0%	15.7%	978	821	19.2%	2 405	19.8%
Combustible Renewables	72	19.7%	-2.2%	11.0%	288	248	16.1%	804	6.6%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	335	-19.0%	-35.4%	50.9%	1 816	1 756	3.4%	5 859	48.1%
Wind	131	10.5%	-33.9%	19.9%	580	566	2.3%	1 431	11.8%
Solar	11	34.6%	48.4%	1.6%	26	23	13.2%	83	0.7%
Geothermal	5	-0.9%	-6.7%	0.7%	19	16	16.8%	51	0.4%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	554	-8.5%	-31.0%	84.1%	2 729	2 610	4.6%	8 229	67.6%
NON-RENEWABLES	105	-54.1%	-63.6%	15.9%	1 219	1 345	-9.4%	3 944	32.4%
TOTAL NET PRODUCTION	658	-21.0%	-39.6%		3 948	3 955	-0.2%	12 173	

 $<sup>^{\</sup>scriptsize 1}$  current month to month of last year change

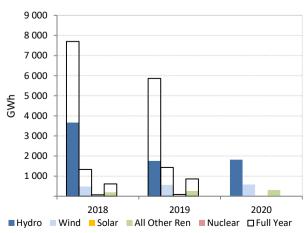
## **Electricity Production**

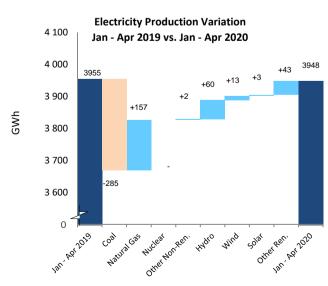


## **Electricity Production by Fuel**



## Low-carbon Power Jan - Apr





<sup>&</sup>lt;sup>2</sup> month-to-month change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year

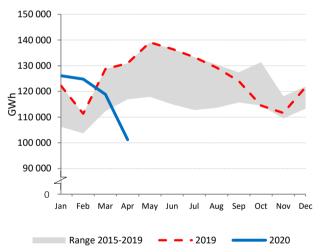
## **INDIA**

	Apr 2020				١	'ear-to-Date	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
CONVENTIONAL THERMAL	77 266	-28.2%	-19.2%	76.3%	381 250	415 213	-8.2%	1 183 019	78.7%
Coal	66 181	-31.5%	-21.1%	65.4%	334 978	369 910	-9.4%	1 066 480	70.9%
Oil <sup>4</sup>	708	-23.5%	-3.2%	0.7%	2 564	2 317	10.7%	6 900	0.5%
Natural Gas	6 739	15.5%	12.9%	6.7%	22 420	20 946	7.0%	66 588	4.4%
Combustible Renewables	3 580	-15.3%	-28.6%	3.5%	21 053	21 805	-3.5%	42 347	2.8%
Other Combustibles <sup>4</sup>	59	-	-	0.1%	234	234	-	703	0.0%
Nuclear	3 655	17.4%	-4.8%	3.6%	13 751	11 943	15.1%	42 599	2.8%
Hydro	11 167	-7.2%	11.5%	11.0%	40 305	37 464	7.6%	167 836	11.2%
Wind	3 720	-4.0%	1.5%	3.7%	14 762	12 934	14.1%	63 537	4.2%
Solar	5 407	28.1%	-4.8%	5.3%	20 910	15 692	33.3%	46 226	3.1%
Geothermal	-	-	-	-	-	=	-	-	=
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	=	-	-	-
RENEWABLES	23 873	-2.0%	-2.1%	23.6%	97 030	87 895	10.4%	319 945	21.3%
NON-RENEWABLES	77 341	-27.4%	-18.1%	76.4%	373 948	405 350	-7.7%	1 183 271	78.7%
TOTAL NET PRODUCTION	101 214	-22.7%	-14.8%		470 978	493 245	-4.5%	1 503 216	

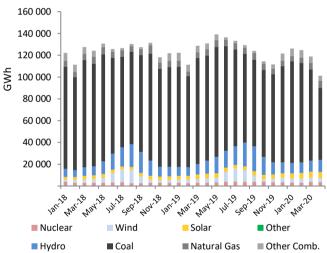
 $<sup>^{\</sup>scriptsize 1}$  current month to month of last year change

Distributed generation is estimated by the IEA Secretariat

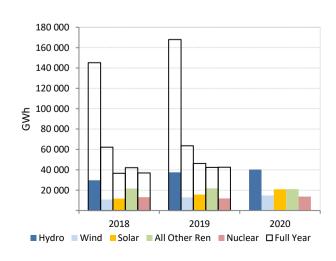




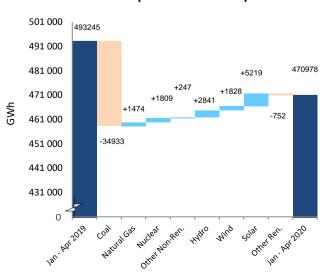
## **Electricity Production by Fuel**



## Low-carbon Power Jan - Apr



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



<sup>&</sup>lt;sup>2</sup> month-to-month change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year

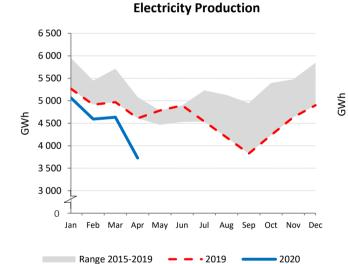
<sup>&</sup>lt;sup>4</sup> estimated from annual data

## **ROMANIA**

	Apr 2020				١	'ear-to-Date	2019		
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
CONVENTIONAL THERMAL	833	-44.0%	-40.7%	22.4%	6 262	8 023	-22.0%	21 307	38.2%
Coal	409	-61.5%	-42.5%	11.0%	2 757	4 305	-36.0%	12 303	22.1%
Oil	30	-42.9%	-20.0%	0.8%	120	306	-61.0%	508	0.9%
Natural Gas	357	5.0%	-41.3%	9.6%	3 203	3 261	-1.8%	8 089	14.5%
Combustible Renewables	37	9.1%	-20.0%	1.0%	183	152	20.4%	407	0.7%
Other Combustibles	-	-	-	-	-	-	-	-	-
Nuclear	936	2.4%	-3.6%	25.1%	3 784	3 657	3.5%	10 354	18.6%
Hydro	1 120	-20.6%	-11.6%	30.0%	4 526	4 844	-6.6%	15 619	28.0%
Wind	623	0.2%	-26.4%	16.7%	2 902	2 718	6.8%	6 705	12.0%
Solar	216	22.3%	47.6%	5.8%	546	517	5.7%	1 777	3.2%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
RENEWABLES	1 996	-11.0%	-13.4%	53.5%	8 157	8 230	-0.9%	24 508	44.0%
NON-RENEWABLES	1 732	-26.9%	-25.6%	46.5%	9 864	11 529	-14.4%	31 254	56.0%
TOTAL NET PRODUCTION	3 727	-19.2%	-19.6%		18 020	19 759	-8.8%	55 763	

 $<sup>^{\</sup>scriptsize 1}$  current month to month of last year change

<sup>&</sup>lt;sup>3</sup> year-to-date compared to same period last year



## 

Mar.19

Solar

May 19 Jul 19

■ Natural Gas

111.78 ap.18

Wind

■ Coal

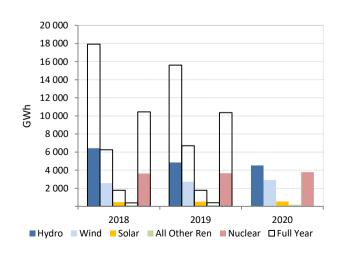
■ Nuclear

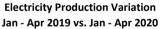
Hydro

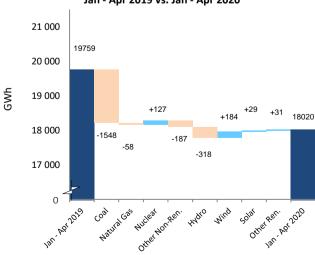
404.78

**Electricity Production by Fuel** 

Low-carbon Power Jan - Apr







Jan 20 nar 20

Other Comb.

Other

<sup>&</sup>lt;sup>2</sup> month-to-month change

## 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 recalcuations.
- Countries' submitted monthly data is adjusted proportionately to maintain consistency with the most recent annual data for each generation source.

## **Basic definitions**

Net Production	Net generation excludes power station own use.
Combustible Fuels/ Conventional Thermal	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).
Coal	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).
Oil	Production from crude oil, natural gas liquids, refinery feedstocks, and petroleum products (such as refinery gases and fuel oil).
Natural Gas	Production from natural gas (including gas distributed via the grid that may contain very little amounts of blended other gases).
Combustible Renewables	Production from combustible renewables (such as solid biofuels, biogases, liquid biofuels, municipal renewable waste).
Other Combustible Fuels (non-renewables)	Production from all other combustible fuels (such as industrial and non-renewable municipal solid waste).

Nuclear Electricity produced using heat generated from nuclear fission.

*Hydro* Net generation from hydro facilities including pumped storage production.

Wind Electricity generated in on-shore and off-shore wind turbines using kinetic energy of wind.

Solar Electricity generated using solar radiation. Icludes thermal and photovoltaic.

Geothermal Electricity generated using heat emitted from within the earth's crust, usually in the form

of hot water or steam.

Other Renewables Electricity generated from tide, wave, ocean and other non-combustible sources.

Non-Specified Not elsewhere reported electricity generation.

Renewables Includes electricity generation from Hydro, Wind, Solar, Geothermal, Other Renewables

and Combustible Renewables

Non-Renewables Includes electricity generation from Coal, Oil, Natural Gas, Other Combustibles, Nuclear

and Non-specified sources.

Total Net Production The sum of indingenous net electricity production by energy source.

Imports/ Exports Amounts of electricity that have crossed political boundaries of the country, a.k.a.

physical flows, whether customs clearance has taken place or not.

Net Exports Exports minus imports

Electricity supplied Indigenous production + Imports - Exports. It includes Transmission and Distribution losses

Used for Pumped Storage Electricity consumed by pumping water into a reservoir in mixed and pure pumped

storage hydro plants.

Transmission and Distribution

Losses/T&D Losses

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.

Electricity available (calculated as: Indigenous production + Imports - Exports - used for

pumped storage - Transmission and distribution losses)

Low-carbon Power Generation Renewables plus Nuclear electricity generation.

Year Calendar year (January to December) unless otherwise stated.

Year-to-Date The sum of all months from the start of the calendar year to the latest month.

#### **Regional Groupings**

- OECD Total includes Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Mexico, the Netherlands, New Zealand, Norway,

Poland, Portugal, Spain, Sweden, the Slovak Republic, Slovenia, Switzerland, Turkey, the United Kingdom and the United States.

- Israel is not included in this report.
- OECD Americas includes Canada, Chile, 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-oecd-electricity-statistics/
- Subscriptions to this publication are available at http://mailing.iea.org
- 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.

#### **COUNTRY NOTES**

Monthly Electricity Statistics is consistent with historical annual data

Please refer to Principles and Definitions.

For certain countries the most recent data may be estimated. See below for details.

Please note that all IEA data are subject to the following Terms and Conditions found on the IEA's website: http://www.iea.org/t&c/termsandconditions/

#### ΔΙΙSTRΑΙ ΙΔ

Excludes the overseas territories.

Monthly data are adjusted according to data submitted on a fiscal year basis beginning 1st of July and ending 31st of June.

Monthly reporting did not include production from other combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission since January 2009.

Monthly reporting did not include production from solar, therefore it is estimated by the IEA Secretariat based on annual submission since January 2004 until December 2015.

Monthly reporting did not include production from wind, therefore it was estimated by the IEA Secretariat based on annual submission from January until December 2004 until December 2015.

Annual data shown are the sum of months and may differ from publications referring to Australian fiscal year (July-June).

#### AUSTRIA

Monthly reporting does not include production from geothermal, therefore it is estimated by the IEA Secretariat based on annual submission since January 2003.

Monthly reporting does not include production from solar, therefore it is estimated by the IEA Secretariat based on annual submission since January 2003.

Monthly reporting does not include production from other non combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission since January 2003.

#### BELGIUM

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2005 until December 2005.

Monthly reporting did not include production from other non combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission from January 2005 to December 2013.

#### CANADA

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2000 until August 2011.

Monthly reporting did not include production from wind, therefore it was estimated by the IEA Secretariat based on annual submission from January 2000 until December 2007.

Monthly reporting did not include production from other non combustible fuels, therefore it was estimated by the IEA Secretariat based on annual submission from January 2000 until December 2007.

Continually increasing levels of wind and solar coverage since January 2017 until December 2018.

New methodology and higher coverage since April 2019 (starting with MES January 2019 publication). Reviewed data back to January 2016.

#### CHILE

Net production is estimated from monthly submission of gross production until December 2010.

Monthly reporting does not include trade data, therefore they are estimated by the IEA Secretariat based on annual submission.

Annual data for 2014 were estimated by the IEA Secretariat.

Chile was added to the MES report in February 2011. Historical data are available only from January 2006.

#### **CZECH REPUBLIC**

Monthly reporting did not include production from other non combustible fuels, therefore it was estimated by the IEA Secretariat based on annual submission from January 2004 until December 2008.

#### DENMARK

Excludes the Faroe Islands and Greenland.

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2003 until December 2010.

Monthly reporting did not include production from other non combustible fuels, therefore it was estimated by the IEA Secretariat based on annual submission from January 2003 until December 2004.

#### ESTONIA

Net production is estimated from monthly submission of gross production by the IEA Secretariat.

Estonia was added to the MES report in April 2011. Historical data are available only from January 2006.

#### FINLAND

Monthly reporting does not include production from solar, therefore it is estimated by the IEA Secretariat based on annual submission since January 2000.

Monthly reporting does not include production from other non combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission from January 2000.

#### FRANCE

Includes Monaco. Since January 2018 it includes the French overseas territories: French Polynesia, Guadeloupe, Guyane, Martinique, New Caledonia, Reunion, Saint Pierre and Miquelon.

Monthly reporting does not include production from solar, therefore it is estimated by the IEA Secretariat based on annual submission since January 2000.

Monthly reporting does not include production from other non combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission since January 2000.

Monthly reporting did not include production from wind, therefore it was estimated by the IEA Secretariat based on annual submission from January 2000 until December 2004.

#### GERMANY

Combustible Fuels production is estimated from monthly submissions of production from main electricity producers.

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2000 until December 2001.

Monthly reporting did not include production from wind, therefore it was estimated by the IEA Secretariat based on annual submission from January 2000 until December 2001.

Due to an increase in survey coverage since January 2017, the level of production and the growth rate shown may be different than actual.

#### GREECE

Monthly reporting did not include production from other combustible fuels, therefore it was estimated by the IEA Secretariat based on annual submission from January 2008 until December 2009.

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2004 until December 2010.

Monthly reporting did not include production from wind, therefore it was estimated by the IEA Secretariat based on annual submission from January 2003 until December 2007.

#### HUNGARY

Net production was estimated from monthly submission of gross production through December 2015.

Monthly reporting does not include production from oil, therefore it is estimated by the IEA Secretariat based on annual submission since January 2009.

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2008 until December 2010.

Monthly reporting did not include production from wind, therefore it was estimated by the IEA Secretariat based on annual submission from January 2003 until December 2005.

#### **ICELAND**

Net production has been estimated from monthly submission of gross production through December 2015 by the IEA Secretariat.

#### IRELAND

Monthly reporting did not include production from wind, therefore it was estimated by the IEA Secretariat based on annual submission from January until December 2001.

#### ITALY

Includes San Marino and the Vatican.

Monthly reporting does not include production from other non combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission since January 2005.

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2005 until December 2009.

Monthly reporting did not include production from wind, therefore it was estimated by the IEA Secretariat based on annual submission from January 2005 until December 2009.

#### JAPAN

Monthly data are adjusted according to data submitted on a fiscal year basis beginning 1 st of April and ending 31 st of March.

Net production is estimated from monthly submission of gross production of main electricity producers.

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2000 until December 2002.

Annual data shown are the sum of months and may differ from publications referring to Japanese fiscal year (April-March).

Since April 2017 electricity generation from biomass and was is reported in the coal category if it's co-fired with this fuel, and in combustible renewables if the combustion is mono-fuel.

Since April 2017 coal category included coal, bituminous mixture, natural gas (other than LNG), coke-oven gas and city gas.

Hydro generation includes plants with capacity of 1MW and over.

#### KOREA

Net production is estimated from monthly submission of gross production by the IEA Secretariat.

Monthly reporting of electricity production does not include autoproducers, therefore it is estimated by the IEA Secretariat based on annual submission.

Monthly reporting does not include production from wind, therefore it is estimated by the IEA Secretariat based on annual submission since January 2004.

Monthly reporting does not include production from solar, therefore it is estimated by the IEA Secretariat based on annual submission since January 2004.

Monthly reporting does not include production from other non combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission since January 2004.

#### LATVIA

Latvia was added to the MES report in January 2017. Historical data are available only from January 2010.

The strong hydro performance in 2017-2018 agrees with historical patterns and is due to environmental reasons, most notably the increased inflow in the Daugava River.

#### LITHUANIA

Monthly data available since January 2008.

#### LUXEMBOURG

Monthly reporting does not include production from solar, therefore it is estimated by the IEA Secretariat based on annual submission since January 2003

Production data for March 2018 are estimated by the IEA Secretariat.

The Twinerg CCGT plant has been idle since April 2016 and was decommissioned in October 2016. This has caused decreased production from combustible fuels and, consequently, a decrease in exports.

#### **MEXICO**

Monthly reporting of electricity production does not include autoproducers, therefore it is estimated by the IEA Secretariat based on annual submission.

Monthly reporting does not include production from solar, therefore it is estimated by the IEA Secretariat based on annual submission from January 2003 - December 2013.

Monthly reporting does not include production from wind, therefore it is estimated by the IEA Secretariat based on annual submission from January 2003 - December 2013. Since December 2018 the data submission includes wind data, so it is no longer estimated.

Installations under 500 kW are not included in the reporting data, therefore it is estimated by the IEA Secretariat based on annual submission.

Electricity trade data is estimated by Mexico administration. It may be inconsistent with US data flows. This data is currently under review.

In December 2018 a new data source was used by Mexico and some data are under review and improvement, therefore 2017 and 2018 data may be inconsistent with previous publications.

Monthly electricity production data does not include trade data and transmission and distribution losses which are is estimated by the IEA Secretariat.

#### NETHERLANDS

Excludes Suriname and the territory of the Former Netherlands Antilles.

Monthly reporting does not include production from other non combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission since January 2000.

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2000 until December 2009.

There was no nuclear production in May and June 2017 due to plant maintenance. The nuclear production resumed in July 2017.

#### NEW ZEALAND

Monthly submissions only include main electricity producers, which supposes a 95% coverage. The rest of the electricity generation is estimated by the IEA Secretariat based on the annual submissions.

Monthly reporting does not include production from other non combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission since January 2002.

#### NORWAY

Net production is estimated from monthly submission of gross production through December 2015 by the IEA Secretariat.

Monthly reporting does not include production from other non combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission since January 2003.

Natural gas figures for May and June 2018 are confidential.

#### POLAND

Monthly reporting does not include production from oil, therefore it is estimated by the IEA Secretariat based on annual submission since January 2009 until December 2016.

Oil figures are confidential since January 2017.

#### PORTUGAL

Includes the Açores and Madeira since January 2015.

Monthly reporting did not include production from geothermal, therefore it is estimated by the IEA Secretariat based on annual submission since January 2004 until December 2014.

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2004 until December 2008.

Monthly reporting did not include production from wind, therefore it was estimated by the IEA Secretariat based on annual submission from January 2004 until December 2008.

#### SLOVAK REPUBLIC

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission since January 2010 until December 2016.

Monthly reporting does not include production from wind, therefore it is estimated by the IEA Secretariat based on annual submission since January 2003.

Monthly reporting does not include production from other non combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission since January 2003.

#### SLOVENIA

Slovenia was added to the MES report in April 2011. Historical data are available only from January 2009.

#### SPAIN

Includes the Canary Islands, Balear Islands, Ceuta and Melilla.

Monthly reporting did not include production from other non combustible fuels, therefore it was estimated by the IEA Secretariat based on annual submission since January 2004 until December 2015.

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2004 until December 2008.

#### SWEDEN

Monthly reporting does not include production from solar, therefore it is estimated by the IEA Secretariat based on annual submission since January 2000.

#### SWITZERLAND

Excludes Liechtenstein

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2003 until December 2009.

Monthly reporting did not include production from wind, therefore it was estimated by the IEA Secretariat based on annual submission from January 2003 until December 2009.

In 2016 and 2017 a small nuclear power plant was out-of-order in the second half of the year, and restarted in March 2018. In addition, a big nuclear power plant had in the second half of 2016 and 2017 a longer revision period in contrast to the normal revision in 2018.

#### TURKEY

Monthly submission does not include production from other non combustible fuels, therefore it is estimated by the IEA Secretariat.

#### UNITED KINGDOM

Monthly reporting does not include production from other combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission since January 2001.

Monthly reporting did not include production from solar, therefore it is estimated by the IEA Secretariat based on annual submission from January 2001 until December 2009.

Monthly reporting did not include production from wind, therefore it was estimated by the IEA Secretariat based on annual submission from January 2001 until December 2006

Monthly reporting did not include exports, therefore they were estimated by the IEA Secretariat based on annual submission from January 2001 until December 2002.

#### **UNITED STATES**

Includes the 50 States, the District of Columbia and Puerto Rico.

Monthly reporting did not include production from geothermal, therefore it was estimated by the IEA Secretariat based on annual submission from January 2003 until December 2005.

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2003 until December 2005.

Monthly reporting did not include production from wind, therefore it was estimated by the IEA Secretariat based on annual submission from January 2003 until December 2005.

Monthly reporting did not include production from other non combustible fuels, therefore it was estimated by the IEA Secretariat based on annual submission from January 2003 until December 2005.

Electricity trade data has been estimated by the U.S. administration since July 2017. It may be inconsistent with the trade data from Mexico. This data is currently under review.

#### Selected Association countries and other non-OECD Economies

Monthly Electricity Statistics is consistent with historical annual data.

Monthly Electricity Statistics for this annex only cover production data, as trade data is not available for all considered countries

#### ARGENTINA

Monthly production data only include main electricity producers. The rest of the electricity generation is estimated by the IEA Secretariat based on the annual submissions.

Monthly reporting includes Paraguayan hydro production from the Yacyreta binational dam. The Paraguayan share is estimated by the IEA Secretariat then discounted from the total Argentinian hydro production.

#### **BRAZIL**

Monthly production data only include main electricity producers. The rest of the electricity generation is estimated by the IEA Secretariat based on the annual submissions.

Monthly reporting includes Paraguayan hydro production from the Itaipu binational dam. The Paraguayan share is estimated by the IEA Secretariat then discounted from the total Brazilian hydro production.

#### CHINA

Raw montly production data is collected from the National Bureau of Statistics in gross values. All the data in the MES Report is presented in net values, therefore Chinese net production data is calculated based on IFA Secretariat estimates.

Raw production data for the months of January and February is reported combined. The IEA Secretariat have estimated production data for these two months based on annual data and the FGE China Gas Monthly Report.

Monthly reporting did not include disaggregated production from combustible fuels, therefore it is estimated by the IEA Secretariat based on annual data.

Monthly reporting did not include production from geothermal, therefore it is estimated by the IEA Secretariat based on annual data

Monthly reporting did not include production from other renewables sources, therefore it is estimated by the IEA Secretariat based on annual data.

#### CROATIA

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2015 until December 2016.

From January 2016 onwards, solar production was included in the monthly reporting.

#### INDIA

Raw montly production data is collected from the Central Electricity Authority in gross values. All the data in the MES Report is presented in net values, therefore Indian net production data is calculated based on IEA Secretariat estimates.

Monthly data are adjusted according to data submitted on a fiscal year basis beginning 1 st of April and ending 31 st of March.

Monthly production data only include main electricity producers. The rest of the electricity generation is estimated by the IEA Secretariat based on the annual submissions.

Monthly reporting did not include production from other combustible fuels, therefore it is estimated by the IEA Secretariat based on annual data.

#### ROMANIA

Monthly reporting did not include production from solar, therefore it was estimated by the IEA Secretariat based on annual submission from January 2015 until December 2016.

From January 2016 onwards, solar production was included in the monthly reporting.

# **Statistics report**

## **Overall responsibility**

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