

Statistics report

# Monthly OECD Electricity Statistics

Next release: 15 February 2020

Data up to October 2020



# TABLE OF CONTENTS

	Page #
<b>HIGHLIGHTS</b>	i
<b>ORGANISATIONAL AND REGIONAL TABLES</b>	
OECD Total	1
OECD Americas	2
OECD Asia Oceania	3
OECD Europe	4
IEA Total	5
<b>COUNTRY TABLES</b>	
Australia	6
Austria	7
Belgium	8
Canada	9
Chile	10
Colombia	11
Czech Republic	12
Denmark	13
Estonia	14
Finland	15
France	16
Germany	17
Greece	18
Hungary	19
Iceland	20
Ireland	21
Italy	22
Japan	23
Korea	24
Latvia	25
Lithuania	26
Luxembourg	27
Mexico	28
Netherlands	29
New Zealand	30
Norway	31
Poland	32
Portugal	33
Slovak Republic	34
Slovenia	35
Spain	36
Sweden	37
Switzerland	38
Turkey	39
United Kingdom	40
United States	41

**NET TRADE MAPS**

OECD Europe

42 - 43

**ANNEX 1 - SELECTED IEA ASSOCIATION COUNTRIES AND OTHER ECONOMIES TABLES**

Highlights	44
Argentina	45
Brazil	46
Bulgaria	47
China	48
Croatia	49
Cyprus	50
India	51
Malta	52
North Macedonia	53
Romania	54
Serbia	55
<b>PRINCIPLES AND DEFINITIONS</b>	56-57
<b>NOTES ON CHARTS AND MAPS</b>	58
<b>COUNTRY NOTES</b>	59-63

# MONTHLY ELECTRICITY STATISTICS

## October 2020

### HIGHLIGHTS

#### OECD

- In October 2020, total net electricity production in the OECD was 835.6 TWh, down by 1.1% compared to October 2019 and down by 0.5% compared to September 2020.
- Renewable electricity production was 262.8 TWh, up by 12.4% compared to October 2019 and by 8.7% compared to September 2020. Renewables produced 31.4% of total electricity in October 2020 up from 29.0% in September 2020, mainly due to increased storm activity. This resulted in higher wind and hydro productions. Wind output was 84.8 TWh, up by 16.7% compared to October 2019 and by 34.3% compared to September 2020. Hydro production was 119.4 TWh, up by 11.7% compared to October 2019 and by 5.3% compared to September 2020.
- Non-renewable electricity production amounted to 68.6% of the total electricity output in October 2020, down by 6.3% compared to October 2019 and by 4.2% compared to September 2020. Nuclear production was 141.2 TWh in October 2020, 6.3% lower than in October 2019 and 4.7% higher than in September 2020. Conventional thermal production was responsible for 54.2% of the total electricity production in October 2020, or 453.1 TWh. Conventional thermal output was 6.0% lower than in October 2019 and 6.3% lower than in September 2020.

#### OECD Americas

- In OECD Americas, total net production was 405.5 TWh, 1.7% lower than in October 2019 and 3.9% lower than in September 2020. The 2020 Atlantic hurricane season was the most active on record, with Hurricane Delta forming early in the month. As a result, renewable electricity production increased in October 2020 and was 110.7 TWh, 9.7% higher than in October 2019. This active hurricane season resulted in wetter than average conditions, hydro production was 59.6 TWh, 11.1% higher than in October 2019. Strong wind conditions drove wind electricity production up to 34.3 TWh, up by 25.5% compared to September 2020.
- In Mexico, renewable production was 5.7 TWh, 46.7% higher than in October 2019 and 1.7% higher than in September 2020. Wind production was 1.7 TWh, up by 51.3% compared to October 2019 and by 38.4% compared to September 2020. In the first ten months of 2020, wind production was 15.6 TWh, up by 16.1% compared to the same period in 2019.
- In the United States, wind production was 28.7 TWh, up by 4.5% compared to October 2019 and by 26.9% compared to September 2020. Wind production was the highest recorded for the month of October. Hydro production was 20.8 TWh, up by 11.8% compared to October 2019 and down by 6.2% compared to September 2020. Although heavy rainfall was observed in the western part of the United States as a consequence of hurricane Delta, conditions were much drier than average in the western part of the country where most of the hydro capacity is installed, resulting in lower hydro power output in October 2020.

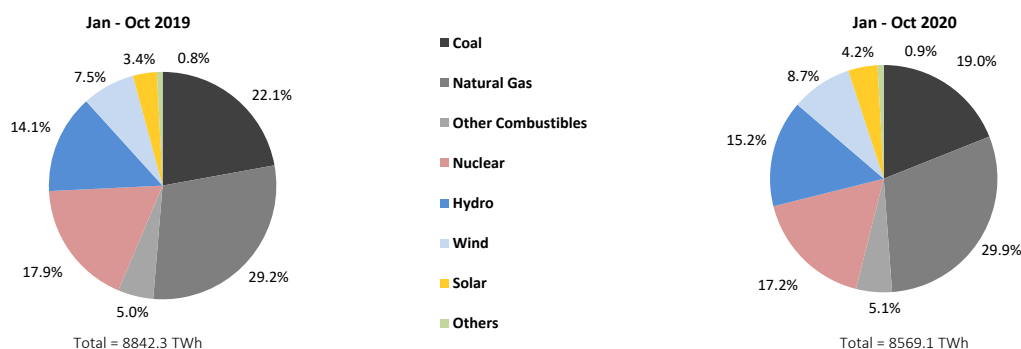
#### OECD Asia/Oceania

- Net electricity production in OECD Asia/Oceania was 142.6 TWh, down by 0.4% compared to October 2019 and by 4.1% compared to September 2020. Non-renewable production was 114.6 TWh, down by 2.5% compared to October 2019 and by 3.9% compared to September 2020. This lower output was caused by lower conventional thermal production, which decreased by 7.3% compared to September 2020 and was 100.6 TWh.
- In Korea, nuclear power production was 12.8 TWh, up by 27.1% compared to October 2019 and by 44.9% compared to September 2020. In October 2020, nuclear power plants produced 29.8% of the total electricity output. Nuclear production increased significantly after 9 reactors were restarted over the course of September and October after being shut down for maintenance.

#### OECD Europe

- In OECD Europe, total production was 287.5 TWh, down by 0.6% compared to October 2019 and up by 6.9% compared to September 2020. Renewable production was 124.2 TWh, 15.8% higher than in October 2019 and 12.7% higher than in September 2020. Higher renewable output was driven by higher hydro and wind productions. The 2020-21 European storm season began in late September 2020 and two storms hit Europe in October 2020. As a result, wetter and windier than average conditions were observed all across Europe. Hydro production was 49.9 TWh, up by 17.2% compared to October 2019 and 11.1% compared to September 2020 and wind production was 47.2 TWh, up by 24.5% compared to October 2019 and by 45.9% compared to September 2020.
- Storm Alex made landfall in the western part of France in early October, causing strong wind currents and heavy rainfall all over the country and for an extended period of time. As a result, wind production was 4.3 TWh in October 2020, 24.1% higher than in October 2019 and 99.3% higher than in September 2020. Hydro production was 5.2 TWh, 33.3% higher than in October 2019 and 49.9% higher than in September 2020. Overall, electricity production increased by 28.3% in October 2020 compared to September 2020. With this increase, production has returned to expected seasonally-adjusted levels after being historically low for six months following the onset of the Covid-19 pandemic.
- Portugal was affected by Storm Barbara and as result, hydro production increased significantly due to heavy rainfall. Hydro output was 995.1 GWh, 81.6% higher than in October 2019 and 49.2% higher than in September 2020. Over the first ten months of 2020, hydro production increased by 64.9% compared to the same period in 2019, during which a severe drought was observed on the Iberian Peninsula.
- Spain was also affected by Storms Alex and Barbara in October 2020. Wind production was 5.7 TWh, up by 51.4% compared to October 2019 and by 45.8% compared to September 2020, reaching a seasonal maximum. Hydro production was 2.1 TWh, up by 71.5% compared to October 2019 and 13.8% compared to September 2020. During the first ten months of 2020, hydro production increased by 46.1% compared to the same period last year, during which a long lasting drought was observed.

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

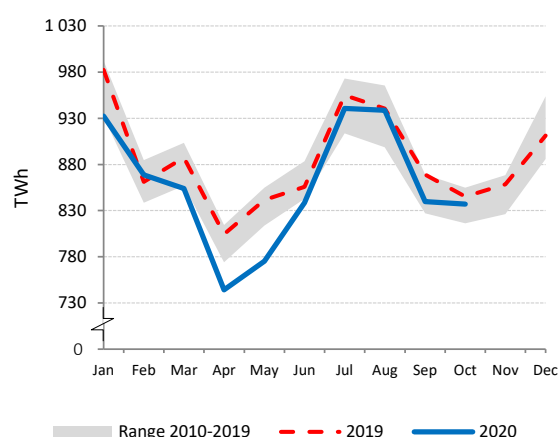


## OECD Total

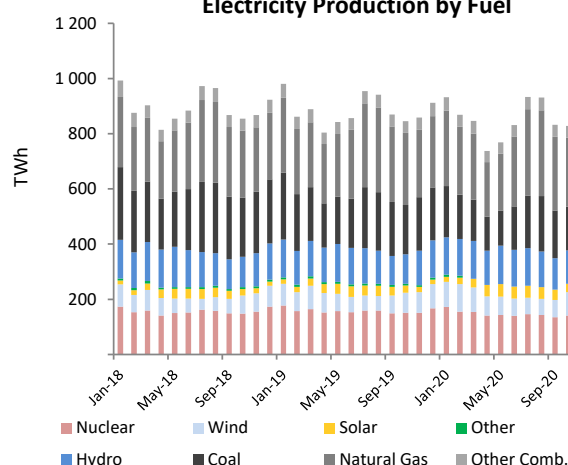
	Oct 2020				Year-to-Date			2019	
	TWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	TWh	share
<b>CONVENTIONAL THERMAL</b>	<b>453.1</b>	<b>-6.0%</b>	<b>-6.3%</b>	<b>54.1%</b>	<b>4 620.6</b>	<b>4 983.5</b>	<b>-7.3%</b>	<b>5 963.2</b>	<b>56.2%</b>
Coal <sup>5</sup>	160.7	-9.9%	-6.9%	19.2%	1 625.2	1 957.9	-17.1%	2 343.4	22.1%
Oil <sup>5</sup>	11.6	-17.0%	-15.5%	1.4%	133.7	155.8	-14.2%	185.1	1.7%
Natural Gas <sup>5</sup>	250.4	-4.1%	-6.5%	29.9%	2 558.5	2 579.4	-0.8%	3 081.7	29.0%
Combustible Renewables <sup>5</sup>	24.4	2.4%	3.1%	2.9%	246.5	244.3	0.9%	296.7	2.8%
Other Combustibles <sup>5</sup>	6.0	16.4%	-0.6%	0.7%	56.7	46.0	23.2%	56.4	0.5%
<b>Nuclear</b>	<b>141.2</b>	<b>-6.3%</b>	<b>4.7%</b>	<b>16.9%</b>	<b>1 472.1</b>	<b>1 580.3</b>	<b>-6.9%</b>	<b>1 898.4</b>	<b>17.9%</b>
<b>Hydro</b>	<b>120.5</b>	<b>12.8%</b>	<b>6.2%</b>	<b>14.4%</b>	<b>1 301.4</b>	<b>1 242.9</b>	<b>4.7%</b>	<b>1 502.9</b>	<b>14.2%</b>
<b>Wind</b>	<b>84.8</b>	<b>16.7%</b>	<b>34.4%</b>	<b>10.1%</b>	<b>743.0</b>	<b>663.4</b>	<b>12.0%</b>	<b>826.4</b>	<b>7.8%</b>
<b>Solar</b>	<b>30.5</b>	<b>15.9%</b>	<b>-18.5%</b>	<b>3.6%</b>	<b>357.9</b>	<b>301.5</b>	<b>18.7%</b>	<b>336.9</b>	<b>3.2%</b>
<b>Geothermal</b>	<b>4.1</b>	<b>0.1%</b>	<b>2.5%</b>	<b>0.5%</b>	<b>41.5</b>	<b>42.3</b>	<b>-1.8%</b>	<b>50.3</b>	<b>0.5%</b>
<b>Other Renewables</b>	<b>0.1</b>	<b>27.3%</b>	<b>3.3%</b>	<b>0.0%</b>	<b>0.9</b>	<b>0.8</b>	<b>14.1%</b>	<b>1.0</b>	<b>0.0%</b>
<b>Non-Specified</b>	<b>2.9</b>	<b>12.4%</b>	<b>-9.1%</b>	<b>0.3%</b>	<b>31.7</b>	<b>27.6</b>	<b>14.7%</b>	<b>32.9</b>	<b>0.3%</b>
<b>RENEWABLES</b>	<b>264.3</b>	<b>13.1%</b>	<b>9.4%</b>	<b>31.6%</b>	<b>2 691.3</b>	<b>2 495.2</b>	<b>7.9%</b>	<b>3 014.1</b>	<b>28.4%</b>
<b>NON-RENEWABLES</b>	<b>572.8</b>	<b>-6.3%</b>	<b>-4.2%</b>	<b>68.4%</b>	<b>5 877.8</b>	<b>6 347.1</b>	<b>-7.4%</b>	<b>7 597.8</b>	<b>71.6%</b>
<b>TOTAL NET PRODUCTION</b>	<b>837.2</b>	<b>-0.9%</b>	<b>-0.3%</b>		<b>8 569.1</b>	<b>8 842.3</b>	<b>-3.1%</b>	<b>10 612.0</b>	
+ Imports	40.6	2.1%	9.9%		401.2	409.4	-2.0%	491.8	
- Exports	41.5	4.4%	11.0%		417.2	401.5	3.9%	483.9	
<b>= ELECTRICITY SUPPLIED</b>	<b>836.2</b>	<b>-1.0%</b>	<b>-0.4%</b>		<b>8 553.1</b>	<b>8 850.2</b>	<b>-3.4%</b>	<b>10 619.8</b>	
- Used for pumped storage <sup>4</sup>	6.9	3.6%	-1.5%		74.3	69.0	7.7%	82.8	
- T&D Losses <sup>4</sup>	44.1	-2.7%	8.7%		496.7	536.5	-7.4%	651.7	
<b>= ELECTRICITY CONSUMED</b>	<b>785.2</b>	<b>-1.0%</b>	<b>-0.8%</b>		<b>7 982.2</b>	<b>8 244.6</b>	<b>-3.2%</b>	<b>9 885.3</b>	

<sup>1</sup> current month to month of last year change<sup>4</sup> estimated for certain countries<sup>2</sup> month-to-month change<sup>5</sup> the breakdown of conventional thermal is estimated from annual data for Canada, Estonia and Italy<sup>3</sup> year-to-date compared to same period last year

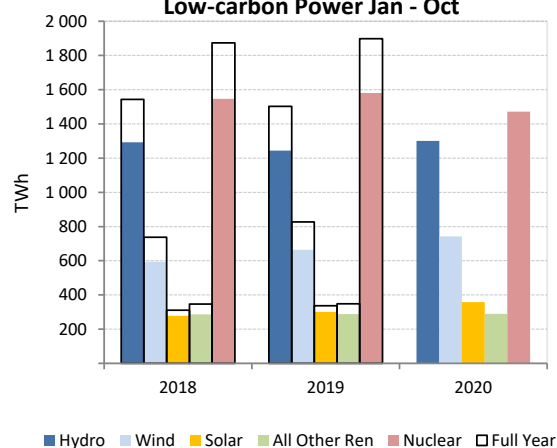
Electricity Production



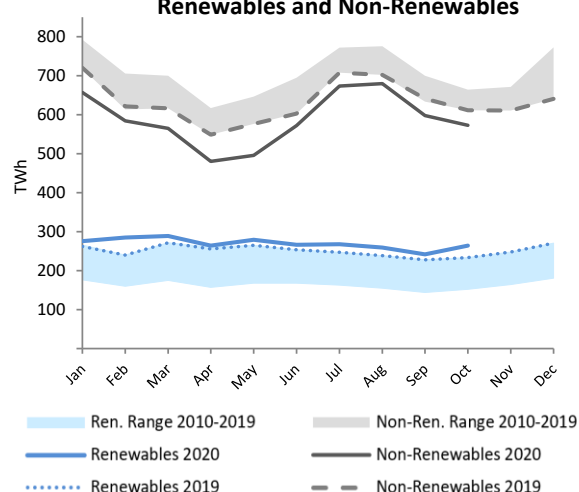
Electricity Production by Fuel



Low-carbon Power Jan - Oct

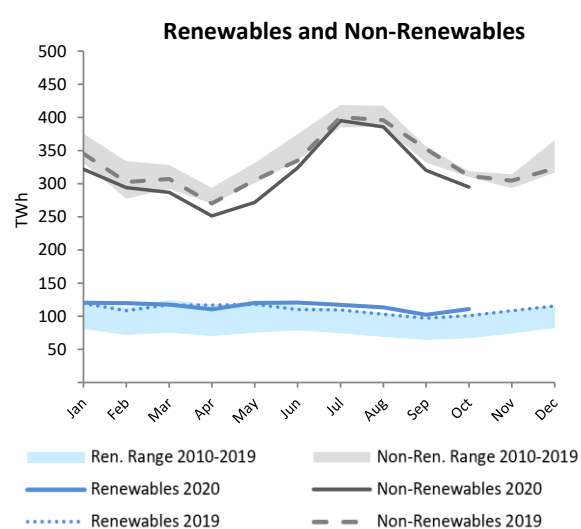
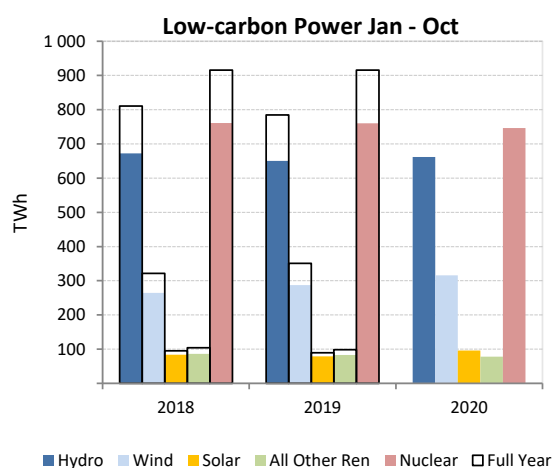
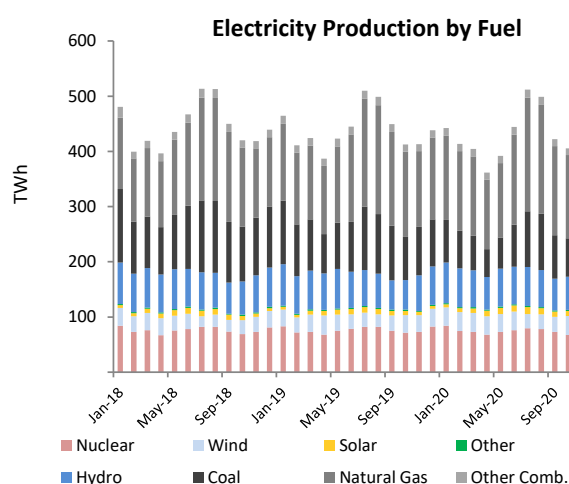
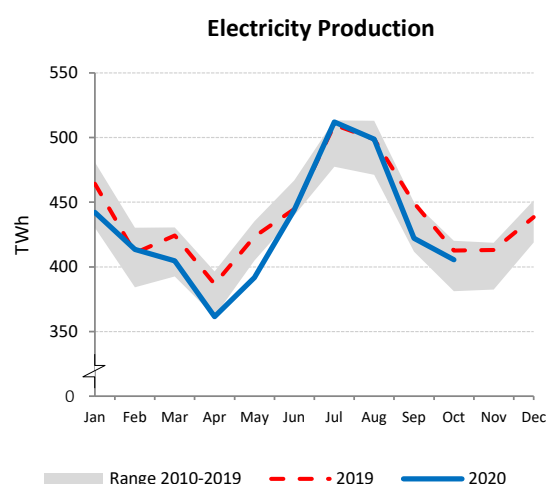


Renewables and Non-Renewables



## OECD Americas

	Oct 2020				Year-to-Date			2019	
	TWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	TWh	share
<b>CONVENTIONAL THERMAL</b>	<b>232.9</b>	<b>-5.3%</b>	<b>-7.8%</b>	<b>57.4%</b>	<b>2 455.6</b>	<b>2 625.7</b>	<b>-6.5%</b>	<b>3 109.6</b>	<b>58.9%</b>
Coal <sup>5</sup>	69.8	-10.8%	-11.0%	17.2%	740.8	946.1	-21.7%	1 118.3	21.2%
Oil <sup>5</sup>	5.8	-6.7%	-3.5%	1.4%	65.8	65.1	1.1%	76.8	1.5%
Natural Gas <sup>5</sup>	150.7	-2.4%	-6.6%	37.2%	1 579.1	1 540.9	2.5%	1 826.5	34.6%
Combustible Renewables <sup>5</sup>	5.7	-6.0%	-1.8%	1.4%	60.9	65.0	-6.4%	77.6	1.5%
Other Combustibles <sup>5</sup>	0.9	-3.6%	-1.2%	0.2%	8.9	8.6	3.8%	10.4	0.2%
<b>Nuclear</b>	<b>67.3</b>	<b>-5.8%</b>	<b>-7.7%</b>	<b>16.6%</b>	<b>746.4</b>	<b>760.4</b>	<b>-1.8%</b>	<b>916.0</b>	<b>17.4%</b>
<b>Hydro</b>	<b>59.6</b>	<b>11.1%</b>	<b>3.5%</b>	<b>14.7%</b>	<b>661.3</b>	<b>650.3</b>	<b>1.7%</b>	<b>784.8</b>	<b>14.9%</b>
<b>Wind</b>	<b>34.3</b>	<b>7.3%</b>	<b>25.5%</b>	<b>8.5%</b>	<b>315.6</b>	<b>287.6</b>	<b>9.8%</b>	<b>350.5</b>	<b>6.6%</b>
<b>Solar</b>	<b>9.3</b>	<b>23.0%</b>	<b>-3.4%</b>	<b>2.3%</b>	<b>96.4</b>	<b>78.7</b>	<b>22.5%</b>	<b>89.2</b>	<b>1.7%</b>
<b>Geothermal</b>	<b>1.7</b>	<b>2.5%</b>	<b>-0.2%</b>	<b>0.4%</b>	<b>17.2</b>	<b>17.9</b>	<b>-3.5%</b>	<b>21.0</b>	<b>0.4%</b>
<b>Other Renewables</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.0</b>	<b>-</b>	<b>0.0</b>	<b>0.0%</b>
<b>Non-Specified</b>	<b>0.4</b>	<b>-3.5%</b>	<b>17.8%</b>	<b>0.1%</b>	<b>3.5</b>	<b>3.9</b>	<b>-11.4%</b>	<b>4.7</b>	<b>0.1%</b>
<b>RENEWABLES</b>	<b>110.7</b>	<b>9.7%</b>	<b>8.4%</b>	<b>27.3%</b>	<b>1 151.4</b>	<b>1 099.4</b>	<b>4.7%</b>	<b>1 323.1</b>	<b>25.1%</b>
<b>NON-RENEWABLES</b>	<b>294.8</b>	<b>-5.4%</b>	<b>-7.8%</b>	<b>72.7%</b>	<b>3 144.6</b>	<b>3 325.1</b>	<b>-5.4%</b>	<b>3 952.7</b>	<b>74.9%</b>
<b>TOTAL NET PRODUCTION</b>	<b>405.5</b>	<b>-1.7%</b>	<b>-3.9%</b>		<b>4 296.0</b>	<b>4 424.5</b>	<b>-2.9%</b>	<b>5 275.8</b>	
+ Imports	5.1	0.5%	-9.1%		60.5	64.4	-6.1%	74.3	
- Exports	7.0	32.0%	1.3%		78.3	67.2	16.6%	81.3	
<b>= ELECTRICITY SUPPLIED</b>	<b>403.6</b>	<b>-2.1%</b>	<b>-4.1%</b>		<b>4 278.2</b>	<b>4 421.7</b>	<b>-3.2%</b>	<b>5 268.8</b>	
- Used for pumped storage <sup>4</sup>	1.9	4.5%	-24.0%		23.1	22.7	2.0%	26.2	
- T&D Losses <sup>4</sup>	19.0	-0.8%	8.7%		251.8	275.0	-8.4%	333.1	
<b>= ELECTRICITY CONSUMED</b>	<b>382.8</b>	<b>-2.2%</b>	<b>-4.5%</b>		<b>4 003.2</b>	<b>4 124.0</b>	<b>-2.9%</b>	<b>4 909.4</b>	

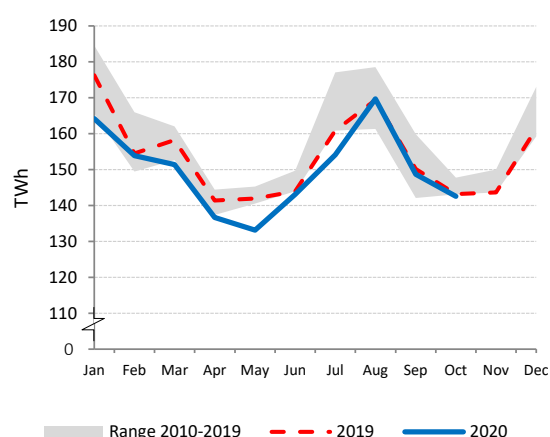
<sup>1</sup> current month to month of last year change<sup>4</sup> estimated for certain countries<sup>2</sup> month-to-month change<sup>5</sup> the breakdown of conventional thermal is estimated from annual data for Canada<sup>3</sup> year-to-date compared to same period last year

## OECD Asia Oceania

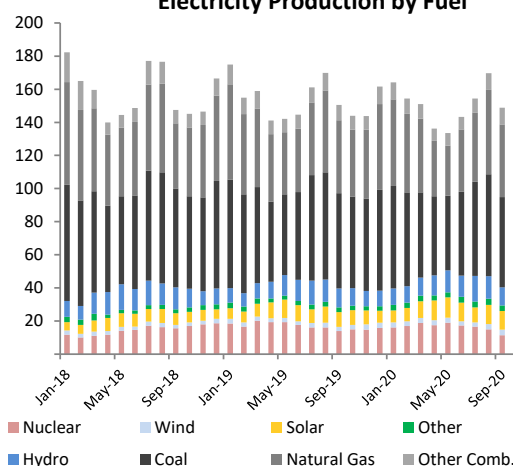
	Oct 2020				Year-to-Date			2019	
	TWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	TWh	share
<b>CONVENTIONAL THERMAL</b>	<b>100.5</b>	<b>-2.8%</b>	<b>-7.3%</b>	<b>70.5%</b>	<b>1 048.2</b>	<b>1 115.1</b>	<b>-6.0%</b>	<b>1 343.7</b>	<b>72.8%</b>
Coal	50.5	-8.7%	-7.3%	35.4%	536.5	572.7	-6.7%	689.1	37.4%
Oil	2.6	-34.0%	-37.4%	1.8%	35.0	53.0	-34.0%	63.2	3.4%
Natural Gas	41.4	2.3%	-5.8%	29.0%	423.8	447.8	-5.4%	541.1	29.3%
Combustible Renewables	3.1	27.6%	0.8%	2.2%	27.5	25.9	6.3%	30.7	1.7%
Other Combustibles	2.9	44.8%	-2.3%	2.1%	25.3	15.6	62.3%	19.5	1.1%
<b>Nuclear</b>	<b>15.1</b>	<b>1.4%</b>	<b>31.4%</b>	<b>10.6%</b>	<b>164.0</b>	<b>172.8</b>	<b>-5.1%</b>	<b>203.5</b>	<b>11.0%</b>
<b>Hydro</b>	<b>9.9</b>	<b>-7.1%</b>	<b>-9.3%</b>	<b>6.9%</b>	<b>118.7</b>	<b>111.2</b>	<b>6.8%</b>	<b>129.8</b>	<b>7.0%</b>
<b>Wind</b>	<b>3.2</b>	<b>19.0%</b>	<b>-4.3%</b>	<b>2.3%</b>	<b>29.8</b>	<b>25.8</b>	<b>15.6%</b>	<b>32.1</b>	<b>1.7%</b>
<b>Solar</b>	<b>10.8</b>	<b>21.0%</b>	<b>-2.8%</b>	<b>7.6%</b>	<b>103.4</b>	<b>87.0</b>	<b>18.9%</b>	<b>102.7</b>	<b>5.6%</b>
<b>Geothermal</b>	<b>0.8</b>	<b>-4.3%</b>	<b>-1.5%</b>	<b>0.6%</b>	<b>8.5</b>	<b>8.5</b>	<b>0.7%</b>	<b>10.0</b>	<b>0.5%</b>
<b>Other Renewables</b>	<b>0.1</b>	<b>55.3%</b>	<b>5.5%</b>	<b>0.0%</b>	<b>0.5</b>	<b>0.4</b>	<b>28.8%</b>	<b>0.5</b>	<b>0.0%</b>
<b>Non-Specified</b>	<b>2.1</b>	<b>24.3%</b>	<b>-13.6%</b>	<b>1.5%</b>	<b>24.3</b>	<b>19.1</b>	<b>27.2%</b>	<b>22.7</b>	<b>1.2%</b>
<b>RENEWABLES</b>	<b>27.9</b>	<b>9.0%</b>	<b>-5.0%</b>	<b>19.6%</b>	<b>288.5</b>	<b>258.7</b>	<b>11.5%</b>	<b>305.7</b>	<b>16.6%</b>
<b>NON-RENEWABLES</b>	<b>114.6</b>	<b>-2.5%</b>	<b>-3.9%</b>	<b>80.4%</b>	<b>1 208.9</b>	<b>1 281.1</b>	<b>-5.6%</b>	<b>1 539.2</b>	<b>83.4%</b>
<b>TOTAL NET PRODUCTION</b>	<b>142.6</b>	<b>-0.4%</b>	<b>-4.1%</b>		<b>1 497.4</b>	<b>1 539.9</b>	<b>-2.8%</b>	<b>1 844.9</b>	
+ Imports	-	-	-		-	-	-	-	
- Exports	-	-	-		-	-	-	-	
<b>= ELECTRICITY SUPPLIED</b>	<b>142.6</b>	<b>-0.4%</b>	<b>-4.1%</b>		<b>1 497.4</b>	<b>1 539.9</b>	<b>-2.8%</b>	<b>1 844.9</b>	
- Used for pumped storage <sup>4</sup>	1.3	-5.0%	-5.2%		13.9	13.2	5.5%	15.6	
- T&D Losses <sup>4</sup>	6.1	-0.6%	-3.8%		64.5	66.1	-2.4%	79.3	
<b>= ELECTRICITY CONSUMED</b>	<b>135.1</b>	<b>-0.4%</b>	<b>-4.1%</b>		<b>1 419.0</b>	<b>1 460.6</b>	<b>-2.8%</b>	<b>1 750.1</b>	

<sup>1</sup> current month to month of last year change<sup>4</sup> estimated for certain countries<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

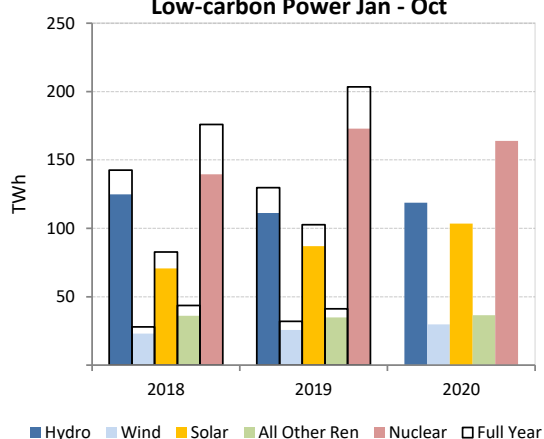
### Electricity Production



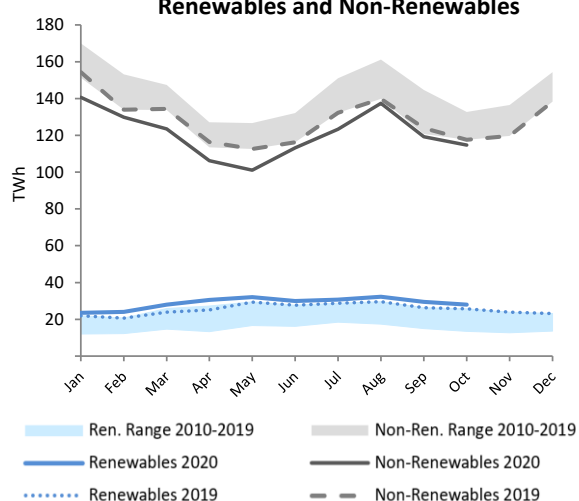
### Electricity Production by Fuel



### Low-carbon Power Jan - Oct



### Renewables and Non-Renewables

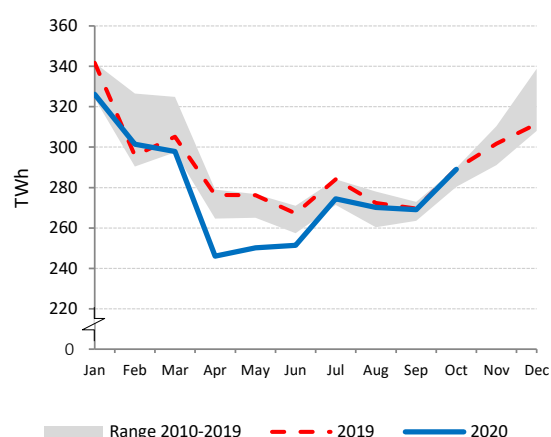


## OECD Europe

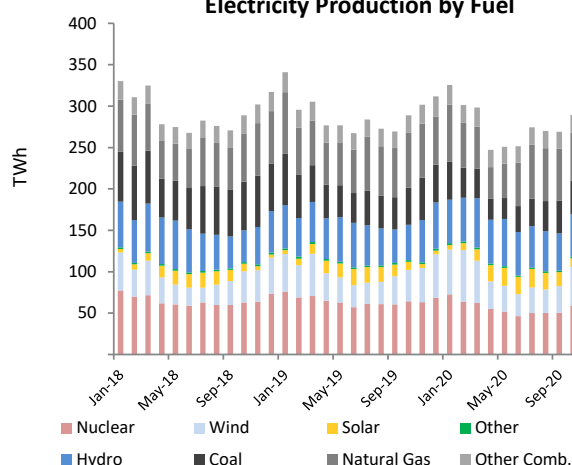
	Oct 2020				Year-to-Date			2019	
	TWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	TWh	share
<b>CONVENTIONAL THERMAL</b>	<b>119.8</b>	<b>-9.7%</b>	<b>-2.4%</b>	<b>41.4%</b>	<b>1 116.9</b>	<b>1 242.6</b>	<b>-10.1%</b>	<b>1 509.9</b>	<b>43.2%</b>
Coal <sup>5</sup>	40.4	-9.9%	1.8%	14.0%	347.9	439.0	-20.8%	535.9	15.4%
Oil <sup>5</sup>	3.3	-16.5%	-10.8%	1.1%	32.9	37.6	-12.7%	45.1	1.3%
Natural Gas <sup>5</sup>	58.3	-11.8%	-6.6%	20.2%	555.6	590.7	-5.9%	714.1	20.5%
Combustible Renewables <sup>5</sup>	15.6	1.8%	5.5%	5.4%	158.1	153.4	3.1%	188.4	5.4%
Other Combustibles <sup>5</sup>	2.2	-1.6%	2.2%	0.8%	22.4	21.8	2.8%	26.4	0.8%
<b>Nuclear</b>	<b>58.8</b>	<b>-8.6%</b>	<b>16.5%</b>	<b>20.3%</b>	<b>561.6</b>	<b>647.1</b>	<b>-13.2%</b>	<b>778.9</b>	<b>22.3%</b>
<b>Hydro</b>	<b>51.0</b>	<b>19.8%</b>	<b>13.5%</b>	<b>17.6%</b>	<b>521.4</b>	<b>481.4</b>	<b>8.3%</b>	<b>588.3</b>	<b>16.9%</b>
<b>Wind</b>	<b>47.2</b>	<b>24.5%</b>	<b>45.9%</b>	<b>16.3%</b>	<b>397.6</b>	<b>350.1</b>	<b>13.6%</b>	<b>443.8</b>	<b>12.7%</b>
<b>Solar</b>	<b>10.3</b>	<b>5.8%</b>	<b>-37.9%</b>	<b>3.6%</b>	<b>158.1</b>	<b>135.8</b>	<b>16.4%</b>	<b>145.0</b>	<b>4.2%</b>
<b>Geothermal</b>	<b>1.6</b>	<b>-0.1%</b>	<b>8.0%</b>	<b>0.5%</b>	<b>15.8</b>	<b>16.0</b>	<b>-1.2%</b>	<b>19.3</b>	<b>0.6%</b>
<b>Other Renewables</b>	<b>0.0</b>	<b>-</b>	<b>-</b>	<b>0.0%</b>	<b>0.4</b>	<b>0.4</b>	<b>-</b>	<b>0.5</b>	<b>0.0%</b>
<b>Non-Specified</b>	<b>0.4</b>	<b>-17.5%</b>	<b>-2.8%</b>	<b>0.1%</b>	<b>4.0</b>	<b>4.6</b>	<b>-14.7%</b>	<b>5.5</b>	<b>0.2%</b>
<b>RENEWABLES</b>	<b>125.7</b>	<b>17.3%</b>	<b>14.2%</b>	<b>43.5%</b>	<b>1 251.4</b>	<b>1 137.1</b>	<b>10.1%</b>	<b>1 385.3</b>	<b>39.7%</b>
<b>NON-RENEWABLES</b>	<b>163.4</b>	<b>-10.3%</b>	<b>2.8%</b>	<b>56.5%</b>	<b>1 524.3</b>	<b>1 740.9</b>	<b>-12.4%</b>	<b>2 106.0</b>	<b>60.3%</b>
<b>TOTAL NET PRODUCTION</b>	<b>289.1</b>	<b>-0.1%</b>	<b>7.5%</b>		<b>2 775.7</b>	<b>2 878.0</b>	<b>-3.6%</b>	<b>3 491.2</b>	
+ Imports	35.5	2.3%	13.3%		340.7	345.0	-1.2%	417.5	
- Exports	34.5	0.1%	13.2%		338.8	334.4	1.3%	402.6	
<b>= ELECTRICITY SUPPLIED</b>	<b>290.0</b>	<b>0.2%</b>	<b>7.5%</b>		<b>2 777.6</b>	<b>2 888.6</b>	<b>-3.8%</b>	<b>3 506.1</b>	
- Used for pumped storage <sup>4</sup>	3.8	6.4%	17.0%		37.2	33.1	12.4%	41.0	
- T&D Losses <sup>4</sup>	19.0	-5.0%	13.5%		180.4	195.4	-7.7%	239.3	
<b>= ELECTRICITY CONSUMED</b>	<b>267.2</b>	<b>0.5%</b>	<b>7.0%</b>		<b>2 560.0</b>	<b>2 660.1</b>	<b>-3.8%</b>	<b>3 225.8</b>	

<sup>1</sup> current month to month of last year change<sup>4</sup> estimated for certain countries<sup>2</sup> month-to-month change<sup>5</sup> the breakdown of conventional thermal is estimated from annual data for Estonia and Italy<sup>3</sup> year-to-date compared to same period last year

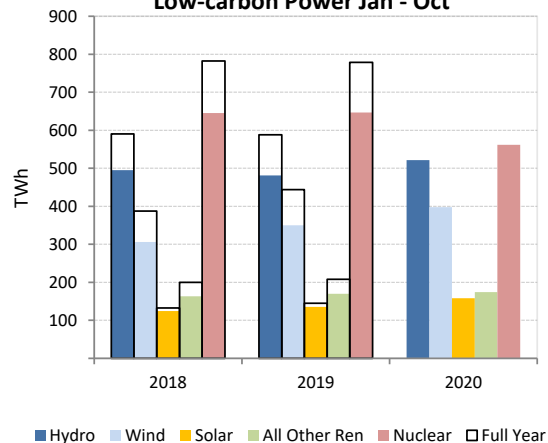
### Electricity Production



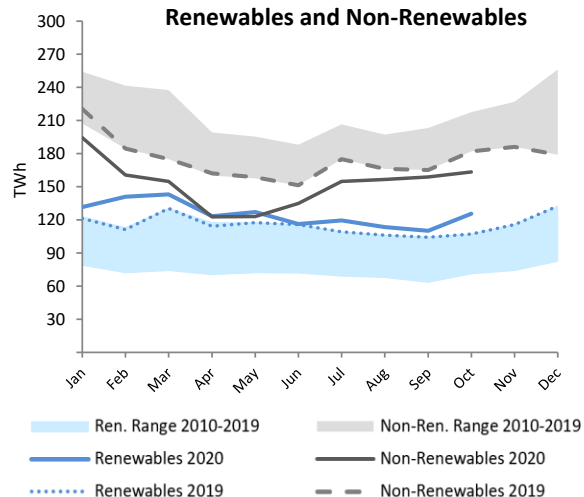
### Electricity Production by Fuel



### Low-carbon Power Jan - Oct



### Renewables and Non-Renewables

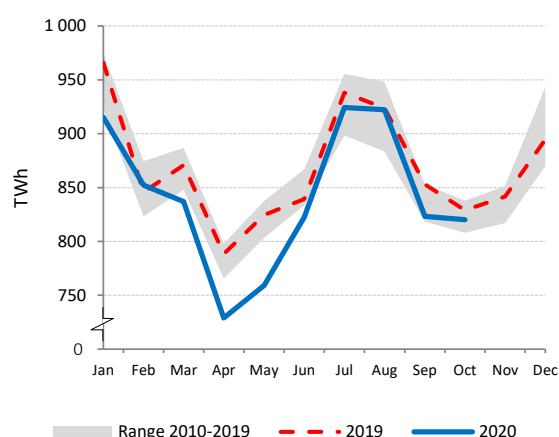


## IEA Total

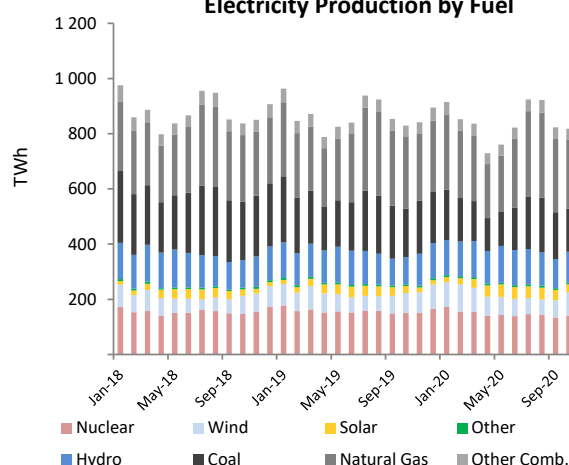
	Oct 2020				Year-to-Date			2019	
	TWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	TWh	share
<b>CONVENTIONAL THERMAL</b>	<b>447.6</b>	<b>-5.9%</b>	<b>-6.3%</b>	<b>54.6%</b>	<b>4 552.2</b>	<b>4 918.7</b>	<b>-7.5%</b>	<b>5 885.9</b>	<b>56.5%</b>
Coal <sup>5</sup>	157.9	-10.0%	-7.1%	19.2%	1 594.2	1 927.1	-17.4%	2 306.3	22.1%
Oil <sup>5</sup>	11.3	-16.3%	-15.7%	1.4%	128.7	152.0	-15.3%	180.3	1.7%
Natural Gas <sup>5</sup>	248.6	-4.0%	-6.3%	30.3%	2 531.9	2 555.2	-0.9%	3 053.3	29.3%
Combustible Renewables <sup>5</sup>	23.9	2.5%	3.1%	2.9%	240.7	238.5	0.9%	289.7	2.8%
Other Combustibles <sup>5</sup>	6.0	16.3%	-0.6%	0.7%	56.6	46.0	23.2%	56.3	0.5%
<b>Nuclear</b>	<b>140.7</b>	<b>-6.6%</b>	<b>4.7%</b>	<b>17.2%</b>	<b>1 467.0</b>	<b>1 575.8</b>	<b>-6.9%</b>	<b>1 892.9</b>	<b>18.2%</b>
<b>Hydro</b>	<b>111.6</b>	<b>12.9%</b>	<b>5.8%</b>	<b>13.6%</b>	<b>1 227.6</b>	<b>1 163.8</b>	<b>5.5%</b>	<b>1 407.6</b>	<b>13.5%</b>
<b>Wind</b>	<b>84.0</b>	<b>16.7%</b>	<b>34.4%</b>	<b>10.2%</b>	<b>737.2</b>	<b>658.2</b>	<b>12.0%</b>	<b>819.9</b>	<b>7.9%</b>
<b>Solar</b>	<b>29.7</b>	<b>15.8%</b>	<b>-19.1%</b>	<b>3.6%</b>	<b>351.7</b>	<b>296.2</b>	<b>18.8%</b>	<b>330.2</b>	<b>3.2%</b>
<b>Geothermal</b>	<b>3.6</b>	<b>0.8%</b>	<b>2.0%</b>	<b>0.4%</b>	<b>36.6</b>	<b>37.4</b>	<b>-2.1%</b>	<b>44.3</b>	<b>0.4%</b>
<b>Other Renewables</b>	<b>0.1</b>	<b>27.3%</b>	<b>3.3%</b>	<b>0.0%</b>	<b>0.9</b>	<b>0.8</b>	<b>14.1%</b>	<b>1.0</b>	<b>0.0%</b>
<b>Non-Specified</b>	<b>2.9</b>	<b>12.6%</b>	<b>-9.1%</b>	<b>0.4%</b>	<b>31.5</b>	<b>27.5</b>	<b>14.8%</b>	<b>32.7</b>	<b>0.3%</b>
<b>RENEWABLES</b>	<b>252.9</b>	<b>13.2%</b>	<b>9.3%</b>	<b>30.8%</b>	<b>2 594.7</b>	<b>2 394.9</b>	<b>8.3%</b>	<b>2 892.7</b>	<b>27.8%</b>
<b>NON-RENEWABLES</b>	<b>567.3</b>	<b>-6.3%</b>	<b>-4.2%</b>	<b>69.2%</b>	<b>5 810.1</b>	<b>6 283.5</b>	<b>-7.5%</b>	<b>7 521.7</b>	<b>72.2%</b>
<b>TOTAL NET PRODUCTION</b>	<b>820.2</b>	<b>-1.1%</b>	<b>-0.4%</b>		<b>8 404.8</b>	<b>8 678.3</b>	<b>-3.2%</b>	<b>10 414.4</b>	
+ Imports	38.8	3.6%	10.8%		380.3	386.4	-1.6%	464.6	
- Exports	40.2	3.6%	11.5%		403.8	387.5	4.2%	467.2	
<b>= ELECTRICITY SUPPLIED</b>	<b>818.8</b>	<b>-1.1%</b>	<b>-0.4%</b>		<b>8 381.3</b>	<b>8 677.2</b>	<b>-3.4%</b>	<b>10 411.8</b>	
- Used for pumped storage <sup>4</sup>	6.8	3.7%	-1.2%		73.1	68.1	7.4%	81.7	
- T&D Losses <sup>4</sup>	43.6	-1.3%	8.6%		491.8	524.8	-6.3%	637.6	
<b>= ELECTRICITY CONSUMED</b>	<b>768.3</b>	<b>-1.1%</b>	<b>-0.9%</b>		<b>7 816.4</b>	<b>8 084.3</b>	<b>-3.3%</b>	<b>9 692.5</b>	

<sup>1</sup> current month to month of last year change<sup>4</sup> estimated for certain countries<sup>2</sup> month-to-month change<sup>5</sup> the breakdown of conventional thermal is estimated from annual data for Canada, Estonia, and Italy<sup>3</sup> year-to-date compared to same period last year

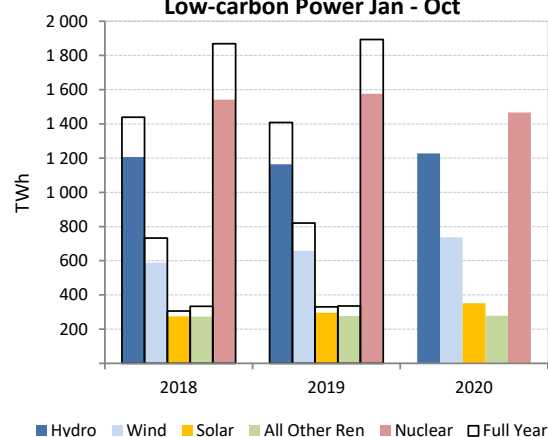
Electricity Production



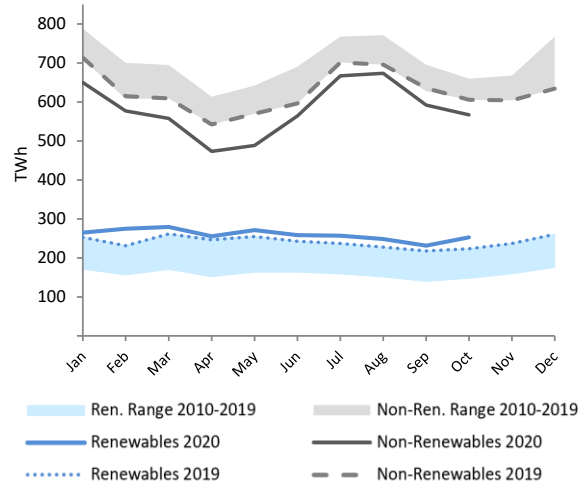
Electricity Production by Fuel



Low-carbon Power Jan - Oct



Renewables and Non-Renewables

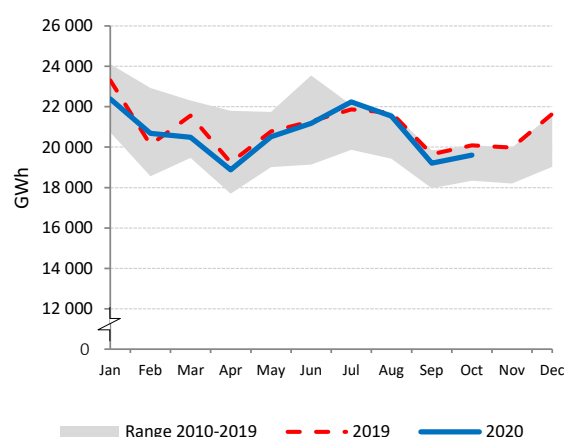


# AUSTRALIA

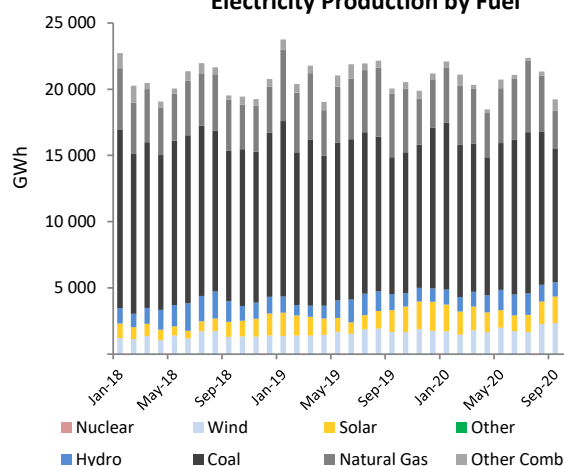
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>13 949</b>	<b>-9.9%</b>	<b>1.2%</b>	<b>71.2%</b>	<b>158 090</b>	<b>167 542</b>	<b>-5.6%</b>	<b>199 210</b>	<b>79.3%</b>
Coal	10 295	-3.1%	1.8%	52.5%	112 972	114 424	-3.8%	137 937	54.9%
Oil	69	-70.0%	-89.6%	0.4%	2 255	3 911	-42.3%	4 435	1.8%
Natural Gas	3 349	-30.6%	18.6%	17.1%	40 581	46 672	-13.1%	53 819	21.4%
Combustible Renewables	237	-5.8%	7.0%	1.2%	2 282	2 535	-10.0%	3 020	1.2%
Other Combustibles	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>1 237</b>	<b>22.6%</b>	<b>15.3%</b>	<b>6.3%</b>	<b>12 933</b>	<b>12 236</b>	<b>5.7%</b>	<b>14 276</b>	<b>5.7%</b>
<b>Wind</b>	<b>2 106</b>	<b>26.3%</b>	<b>-10.7%</b>	<b>10.7%</b>	<b>18 794</b>	<b>16 048</b>	<b>17.1%</b>	<b>19 718</b>	<b>7.8%</b>
<b>Solar</b>	<b>2 311</b>	<b>19.4%</b>	<b>16.1%</b>	<b>11.8%</b>	<b>16 872</b>	<b>13 747</b>	<b>22.7%</b>	<b>17 997</b>	<b>7.2%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>5 891</b>	<b>21.1%</b>	<b>4.4%</b>	<b>30.1%</b>	<b>50 881</b>	<b>44 566</b>	<b>14.2%</b>	<b>55 010</b>	<b>21.9%</b>
<b>NON-RENEWABLES</b>	<b>13 712</b>	<b>-9.9%</b>	<b>1.1%</b>	<b>69.9%</b>	<b>155 807</b>	<b>165 007</b>	<b>-5.6%</b>	<b>196 190</b>	<b>78.1%</b>
<b>TOTAL NET PRODUCTION</b>	<b>19 603</b>	<b>-2.4%</b>	<b>2.1%</b>		<b>206 688</b>	<b>209 573</b>	<b>-1.4%</b>	<b>251 200</b>	
+ Imports	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-
<b>= ELECTRICITY SUPPLIED</b>	<b>19 603</b>	<b>-2.4%</b>	<b>2.1%</b>		<b>206 688</b>	<b>209 573</b>	<b>-1.4%</b>	<b>251 200</b>	
- Used for pumped storage <sup>4</sup>	36	22.6%	15.3%		374	354	5.7%	413	
- T&D Losses <sup>4</sup>	1 028	-2.4%	2.1%		10 836	10 987	-1.4%	13 169	
<b>= ELECTRICITY CONSUMED</b>	<b>18 539</b>	<b>-2.4%</b>	<b>2.1%</b>		<b>195 478</b>	<b>198 232</b>	<b>-1.4%</b>	<b>237 618</b>	

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

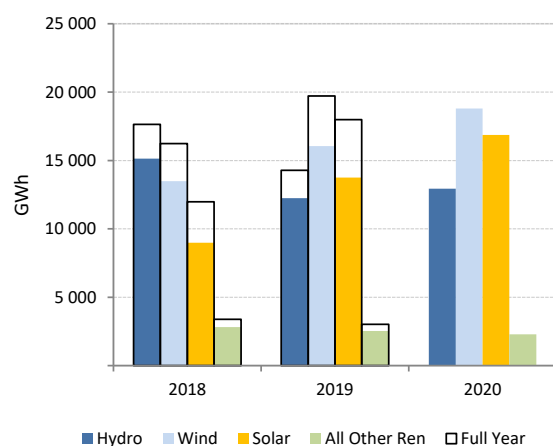
### Electricity Production



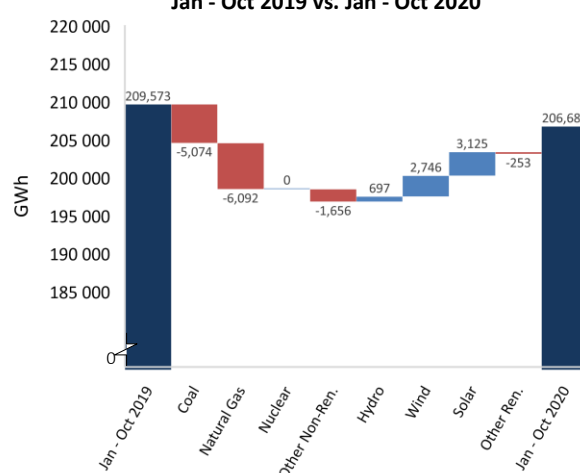
### Electricity Production by Fuel



### Low-carbon Power Jan - Oct



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



## AUSTRIA

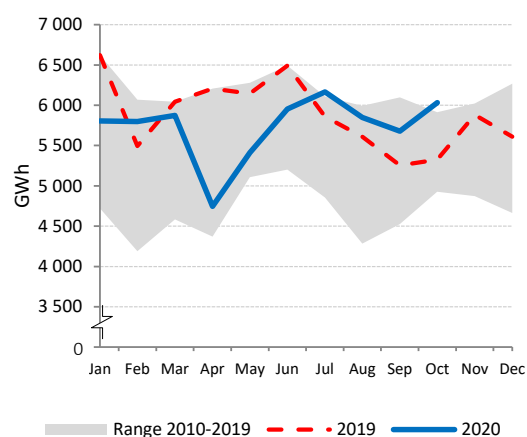
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>1 473</b>	<b>-26.3%</b>	<b>37.7%</b>	<b>24.4%</b>	<b>13 593</b>	<b>15 810</b>	<b>-14.0%</b>	<b>19 838</b>	<b>28.1%</b>
Coal	180	-42.5%	23.4%	3.0%	1 884	2 710	-30.5%	3 244	4.6%
Oil	61	3.1%	8.3%	1.0%	542	558	-3.0%	659	0.9%
Natural Gas	784	-38.5%	87.1%	13.0%	6 698	8 213	-18.4%	10 759	15.3%
Combustible Renewables	400	36.2%	-2.7%	6.6%	4 018	3 719	8.0%	4 426	6.3%
Other Combustibles	49	-15.0%	29.2%	0.8%	451	609	-26.0%	749	1.1%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>3 765</b>	<b>37.2%</b>	<b>-7.0%</b>	<b>62.4%</b>	<b>36 599</b>	<b>36 175</b>	<b>1.2%</b>	<b>42 028</b>	<b>59.6%</b>
<b>Wind</b>	<b>683</b>	<b>44.7%</b>	<b>65.0%</b>	<b>11.3%</b>	<b>5 597</b>	<b>5 550</b>	<b>0.9%</b>	<b>7 053</b>	<b>10.0%</b>
<b>Solar<sup>4</sup></b>	<b>113</b>	<b>-</b>	<b>-24.5%</b>	<b>1.9%</b>	<b>1 512</b>	<b>1 512</b>	<b>-</b>	<b>1 618</b>	<b>2.3%</b>
<b>Geothermal</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>0.0%</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>0</b>	<b>0.0%</b>
<b>Other Renewables</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Non-Specified</b>	<b>1</b>	<b>40.9%</b>	<b>-0.2%</b>	<b>0.0%</b>	<b>12</b>	<b>10</b>	<b>15.8%</b>	<b>12</b>	<b>0.0%</b>
<b>RENEWABLES</b>	<b>4 960</b>	<b>37.0%</b>	<b>-1.2%</b>	<b>82.2%</b>	<b>47 726</b>	<b>46 956</b>	<b>1.6%</b>	<b>55 125</b>	<b>78.1%</b>
<b>NON-RENEWABLES</b>	<b>1 075</b>	<b>-37.0%</b>	<b>62.9%</b>	<b>17.8%</b>	<b>9 587</b>	<b>12 101</b>	<b>-20.8%</b>	<b>15 424</b>	<b>21.9%</b>
<b>TOTAL NET PRODUCTION</b>	<b>6 035</b>	<b>13.3%</b>	<b>6.2%</b>		<b>57 313</b>	<b>59 056</b>	<b>-3.0%</b>	<b>70 549</b>	
+ Imports	1 915	-33.1%	15.4%		19 289	21 376	-9.8%	26 047	
- Exports	1 841	-7.2%	5.2%		18 838	19 768	-4.7%	22 918	
<b>= ELECTRICITY SUPPLIED</b>	<b>6 109</b>	<b>-1.5%</b>	<b>9.3%</b>		<b>57 764</b>	<b>60 665</b>	<b>-4.8%</b>	<b>73 677</b>	
- Used for pumped storage	432	-7.2%	11.6%		4 113	3 857	6.6%	4 826	
- T&D Losses	277	-4.0%	10.0%		2 696	2 821	-4.4%	3 419	
<b>= ELECTRICITY CONSUMED</b>	<b>5 399</b>	<b>-0.9%</b>	<b>9.1%</b>		<b>50 956</b>	<b>53 987</b>	<b>-5.6%</b>	<b>65 432</b>	

<sup>1</sup> current month to month of last year change      <sup>4</sup> estimated by the IEA secretariat

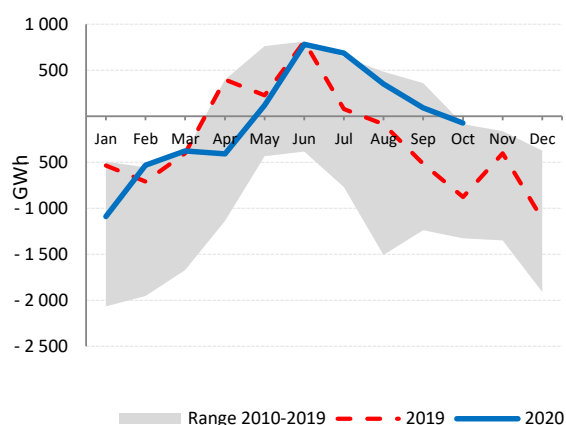
<sup>2</sup> month-to-month change

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

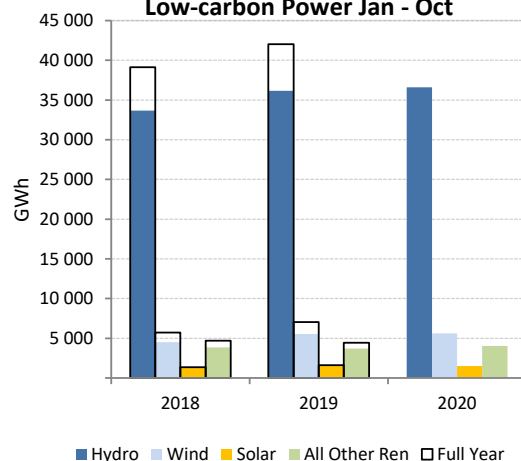
Electricity Production



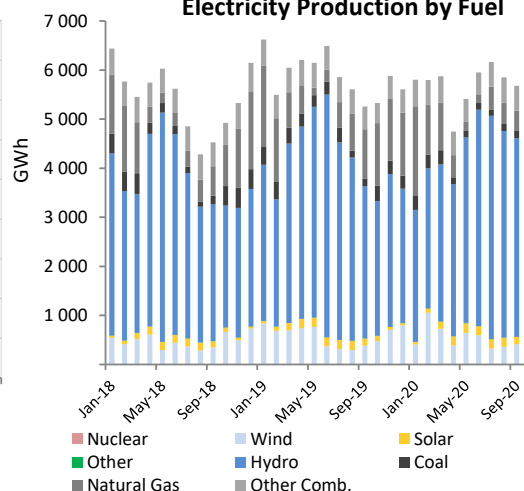
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

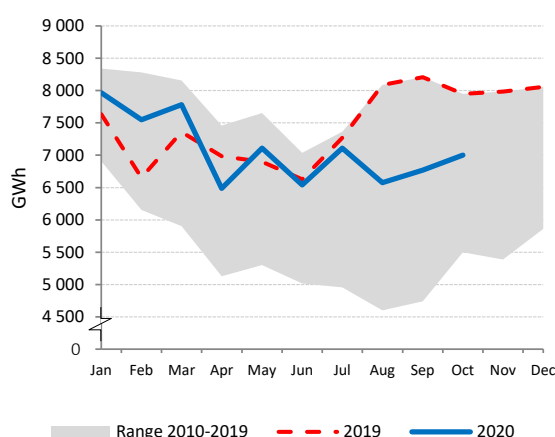


# BELGIUM

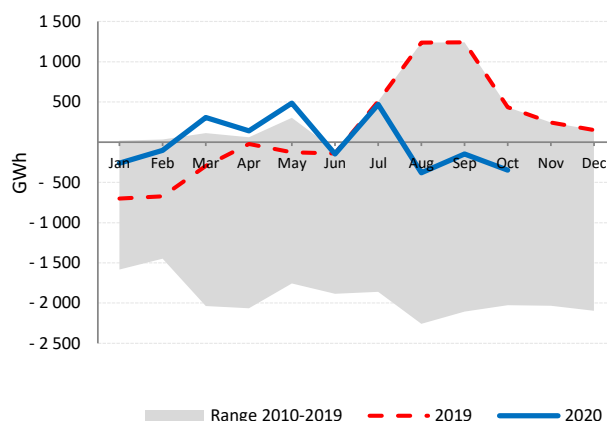
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>2 629</b>	<b>-23.6%</b>	<b>-8.8%</b>	<b>37.5%</b>	<b>28 690</b>	<b>27 135</b>	<b>5.7%</b>	<b>33 507</b>	<b>37.4%</b>
Coal	106	-52.9%	-11.1%	1.5%	1 622	2 063	-21.4%	2 434	2.7%
Oil	3	115.2%	5.4%	0.0%	18	21	-14.4%	26	0.0%
Natural Gas	2 141	-21.2%	-5.5%	30.6%	21 786	19 892	9.5%	24 729	27.6%
Combustible Renewables	264	-31.9%	-34.5%	3.8%	4 183	4 051	3.3%	4 987	5.6%
Other Combustibles	115	5.3%	22.9%	1.6%	1 082	1 107	-2.3%	1 332	1.5%
<b>Nuclear</b>	<b>2 529</b>	<b>-19.8%</b>	<b>-1.7%</b>	<b>36.1%</b>	<b>26 384</b>	<b>34 396</b>	<b>-23.3%</b>	<b>41 359</b>	<b>46.1%</b>
<b>Hydro</b>	<b>105</b>	<b>7.3%</b>	<b>4.7%</b>	<b>1.5%</b>	<b>1 060</b>	<b>900</b>	<b>17.8%</b>	<b>1 147</b>	<b>1.3%</b>
<b>Wind</b>	<b>1 525</b>	<b>51.1%</b>	<b>102.2%</b>	<b>21.8%</b>	<b>9 974</b>	<b>7 188</b>	<b>38.8%</b>	<b>9 369</b>	<b>10.4%</b>
<b>Solar</b>	<b>200</b>	<b>-8.3%</b>	<b>-54.6%</b>	<b>2.9%</b>	<b>4 517</b>	<b>3 709</b>	<b>21.8%</b>	<b>3 919</b>	<b>4.4%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
<b>Non-Specified</b>	<b>13</b>	<b>-60.4%</b>	<b>-32.7%</b>	<b>0.2%</b>	<b>265</b>	<b>342</b>	<b>-22.6%</b>	<b>408</b>	<b>0.5%</b>
<b>RENEWABLES</b>	<b>2 095</b>	<b>22.2%</b>	<b>23.3%</b>	<b>29.9%</b>	<b>19 735</b>	<b>15 848</b>	<b>24.5%</b>	<b>19 422</b>	<b>21.6%</b>
<b>NON-RENEWABLES</b>	<b>4 907</b>	<b>-21.3%</b>	<b>-3.3%</b>	<b>70.1%</b>	<b>51 156</b>	<b>57 821</b>	<b>-11.5%</b>	<b>70 288</b>	<b>78.4%</b>
<b>TOTAL NET PRODUCTION</b>	<b>7 001</b>	<b>-11.9%</b>	<b>3.4%</b>		<b>70 891</b>	<b>73 670</b>	<b>-3.8%</b>	<b>89 709</b>	
+ Imports	1 481	130.9%	22.3%		10 836	10 380	4.4%	12 735	
- Exports	1 132	5.1%	6.4%		10 852	11 839	-8.3%	14 589	
<b>= ELECTRICITY SUPPLIED</b>	<b>7 350</b>	<b>-2.2%</b>	<b>6.2%</b>		<b>70 876</b>	<b>72 210</b>	<b>-1.8%</b>	<b>87 855</b>	
- Used for pumped storage	115	6.2%	-8.4%		1 154	927	24.5%	1 162	
- T&D Losses	322	-1.8%	7.1%		3 079	3 159	-2.5%	3 843	
<b>= ELECTRICITY CONSUMED</b>	<b>6 914</b>	<b>-2.3%</b>	<b>6.5%</b>		<b>66 642</b>	<b>68 125</b>	<b>-2.2%</b>	<b>82 850</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

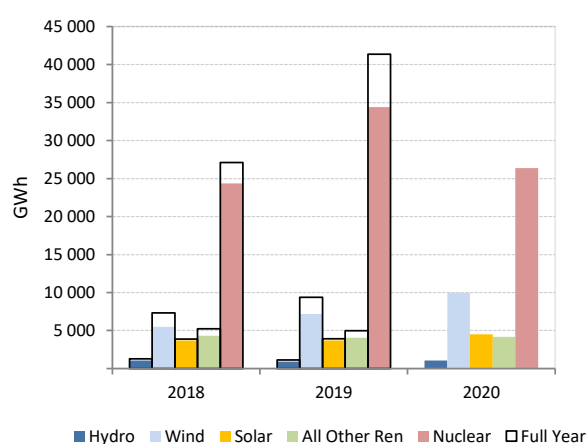
Electricity Production



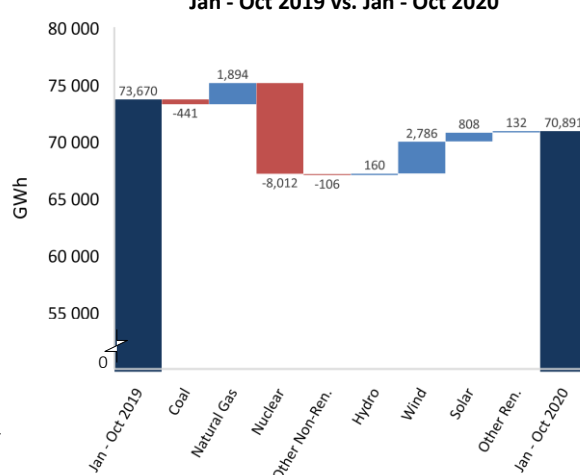
Net Electricity Exports



Low-carbon Power Jan - Oct



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

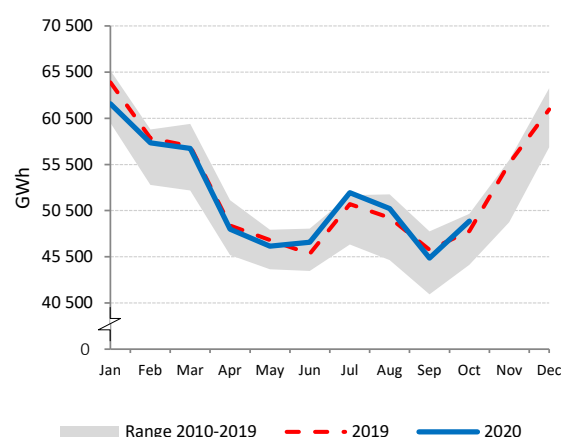


## CANADA

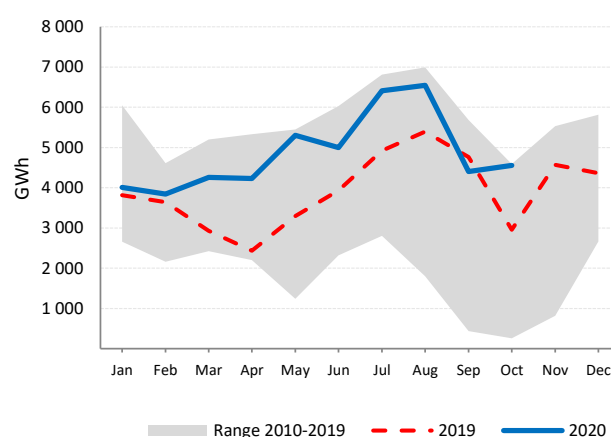
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>9 441</b>	<b>-2.7%</b>	<b>5.3%</b>	<b>19.1%</b>	<b>92 896</b>	<b>101 407</b>	<b>-8.4%</b>	<b>123 037</b>	<b>19.4%</b>
Coal <sup>4</sup>	3 497	-2.7%	5.3%	7.1%	34 406	37 558	-8.4%	45 570	7.2%
Oil <sup>4</sup>	442	-2.7%	5.3%	0.9%	4 349	4 748	-8.4%	5 760	0.9%
Natural Gas <sup>4</sup>	4 724	-2.7%	5.3%	9.6%	46 486	50 745	-8.4%	61 569	9.7%
Combustible Renewables <sup>4</sup>	771	-2.7%	5.3%	1.6%	7 589	8 284	-8.4%	10 051	1.6%
Other Combustibles <sup>4</sup>	7	-2.7%	5.3%	0.0%	66	72	-8.4%	88	0.0%
<b>Nuclear</b>	<b>6 955</b>	<b>-17.2%</b>	<b>3.8%</b>	<b>14.1%</b>	<b>78 157</b>	<b>79 311</b>	<b>-1.5%</b>	<b>95 461</b>	<b>15.0%</b>
<b>Hydro</b>	<b>29 437</b>	<b>8.7%</b>	<b>12.2%</b>	<b>59.6%</b>	<b>312 991</b>	<b>306 172</b>	<b>2.2%</b>	<b>378 127</b>	<b>59.6%</b>
<b>Wind</b>	<b>3 238</b>	<b>14.3%</b>	<b>8.2%</b>	<b>6.6%</b>	<b>29 094</b>	<b>26 817</b>	<b>8.5%</b>	<b>33 840</b>	<b>5.3%</b>
<b>Solar</b>	<b>289</b>	<b>10.6%</b>	<b>-37.1%</b>	<b>0.6%</b>	<b>4 013</b>	<b>3 892</b>	<b>3.1%</b>	<b>4 175</b>	<b>0.7%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	1	-	1	0.0%
Non-Specified	7	-46.9%	2.4%	0.0%	95	136	-30.4%	169	0.0%
<b>RENEWABLES</b>	<b>33 735</b>	<b>9.0%</b>	<b>10.9%</b>	<b>68.3%</b>	<b>353 686</b>	<b>345 167</b>	<b>2.5%</b>	<b>426 194</b>	<b>67.1%</b>
<b>NON-RENEWABLES</b>	<b>15 631</b>	<b>-9.7%</b>	<b>4.6%</b>	<b>31.7%</b>	<b>163 559</b>	<b>172 571</b>	<b>-5.2%</b>	<b>208 617</b>	<b>32.9%</b>
<b>TOTAL NET PRODUCTION</b>	<b>49 366</b>	<b>2.2%</b>	<b>8.8%</b>		<b>517 245</b>	<b>517 738</b>	<b>-0.1%</b>	<b>634 811</b>	
+ Imports	606	-28.7%	13.1%		8 066	11 569	-30.3%	13 369	
- Exports	5 157	35.4%	4.4%		56 616	49 648	14.0%	60 376	
<b>= ELECTRICITY SUPPLIED</b>	<b>44 815</b>	<b>-1.1%</b>	<b>9.4%</b>		<b>468 696</b>	<b>479 659</b>	<b>-2.3%</b>	<b>587 804</b>	
- Used for pumped storage <sup>4</sup>	16	8.7%	12.2%		174	170	2.2%	210	
- T&D Losses <sup>4</sup>	2 622	1.7%	8.9%		27 567	27 777	-0.8%	34 015	
<b>= ELECTRICITY CONSUMED</b>	<b>42 176</b>	<b>-1.3%</b>	<b>9.5%</b>		<b>440 955</b>	<b>451 712</b>	<b>-2.4%</b>	<b>553 579</b>	

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

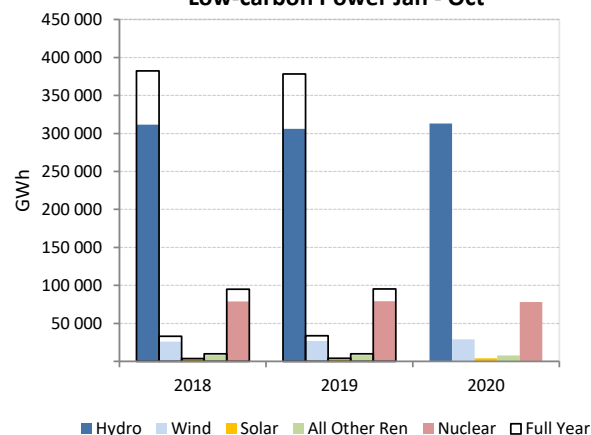
Electricity Production



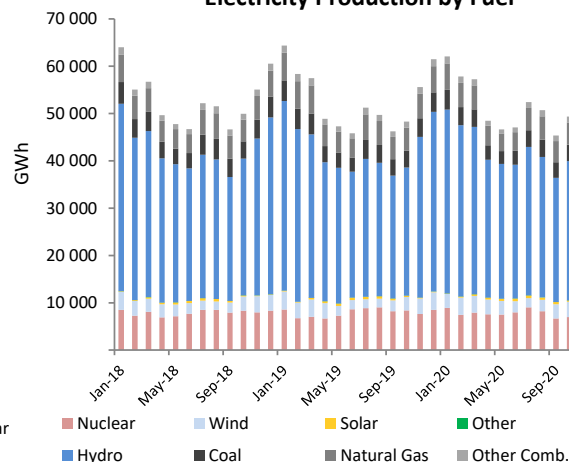
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

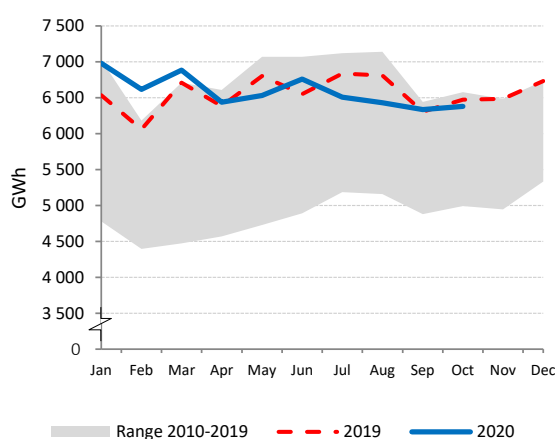


## CHILE

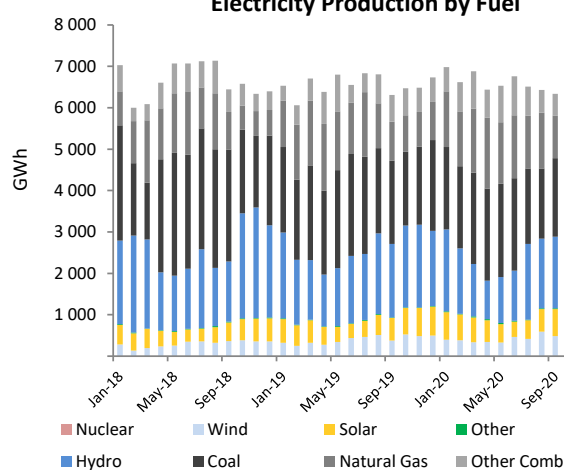
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>2 712</b>	<b>-18.3%</b>	<b>-21.4%</b>	<b>42.5%</b>	<b>40 067</b>	<b>40 020</b>	<b>0.1%</b>	<b>47 041</b>	<b>59.8%</b>
Coal	1 688	-5.3%	-11.1%	26.5%	19 994	21 351	-6.4%	25 431	32.3%
Oil	176	-50.1%	-15.7%	2.8%	3 395	2 308	47.1%	2 911	3.7%
Natural Gas	530	-39.8%	-48.0%	8.3%	13 102	12 761	2.7%	14 521	18.5%
Combustible Renewables	318	4.9%	-1.1%	5.0%	3 577	3 601	-0.7%	4 177	5.3%
Other Combustibles	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>2 234</b>	<b>13.0%</b>	<b>28.9%</b>	<b>35.0%</b>	<b>15 558</b>	<b>16 646</b>	<b>-6.5%</b>	<b>20 456</b>	<b>26.0%</b>
Wind	638	21.5%	32.3%	10.0%	4 387	3 823	14.7%	4 802	6.1%
Solar	776	21.7%	18.7%	12.2%	5 657	4 811	17.6%	6 188	7.9%
Geothermal	18	22.1%	-0.5%	0.3%	197	168	17.0%	202	0.3%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>3 984</b>	<b>15.2%</b>	<b>24.2%</b>	<b>62.5%</b>	<b>29 375</b>	<b>29 050</b>	<b>1.1%</b>	<b>35 825</b>	<b>45.5%</b>
<b>NON-RENEWABLES</b>	<b>2 394</b>	<b>-20.6%</b>	<b>-23.4%</b>	<b>37.5%</b>	<b>36 490</b>	<b>36 420</b>	<b>0.2%</b>	<b>42 864</b>	<b>54.5%</b>
<b>TOTAL NET PRODUCTION</b>	<b>6 379</b>	<b>-1.5%</b>	<b>0.7%</b>		<b>65 865</b>	<b>65 469</b>	<b>0.6%</b>	<b>78 689</b>	
+ Imports	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-
<b>= ELECTRICITY SUPPLIED</b>	<b>6 379</b>	<b>-1.5%</b>	<b>0.7%</b>		<b>65 865</b>	<b>65 469</b>	<b>0.6%</b>	<b>78 689</b>	
- Used for pumped storage	-	-	-	-	-	-	-	-	-
- T&D Losses	267	-0.3%	1.1%		2 715	2 969	-8.5%	3 520	
<b>= ELECTRICITY CONSUMED</b>	<b>6 112</b>	<b>-1.5%</b>	<b>0.7%</b>		<b>63 150</b>	<b>62 500</b>	<b>1.0%</b>	<b>75 169</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

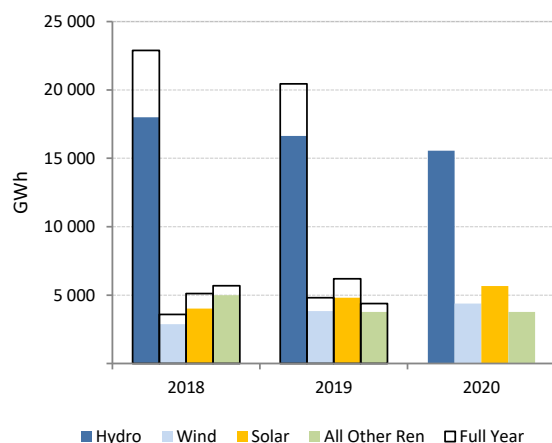
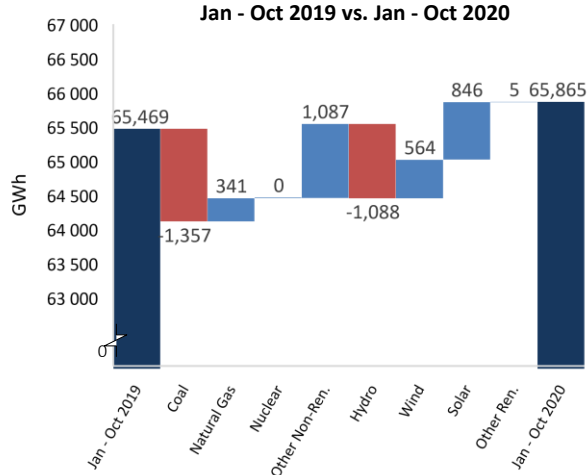
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Oct

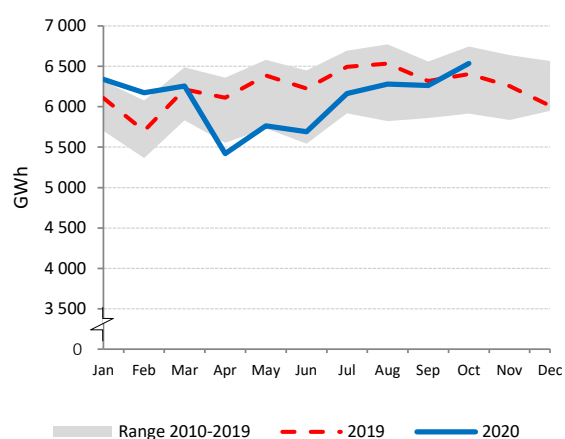
Electricity Production Variation  
Jan - Oct 2019 vs. Jan - Oct 2020

## COLOMBIA

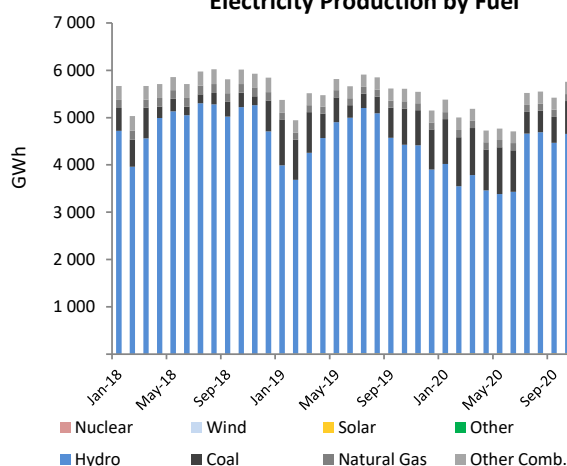
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL <sup>4</sup></b>	<b>1 879</b>	<b>-4.9%</b>	<b>4.6%</b>	<b>28.8%</b>	<b>20 772</b>	<b>16 797</b>	<b>23.7%</b>	<b>20 749</b>	<b>27.8%</b>
Coal <sup>4</sup>	693	-9.2%	26.6%	10.6%	7 862	6 022	30.6%	7 615	10.2%
Oil <sup>4</sup>	150	-2.8%	-0.9%	2.3%	1 507	1 504	0.2%	1 799	2.4%
Natural Gas <sup>4</sup>	931	-1.8%	-6.4%	14.2%	10 368	8 229	26.0%	10 098	13.5%
Combustible Renewables <sup>5</sup>	105	-5.2%	2.2%	1.6%	1 034	1 041	-0.7%	1 236	1.7%
Other Combustibles	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>4 638</b>	<b>5.1%</b>	<b>4.3%</b>	<b>71.0%</b>	<b>39 950</b>	<b>45 544</b>	<b>-12.3%</b>	<b>53 825</b>	<b>72.0%</b>
Wind	1	-38.2%	-0.4%	0.0%	5	51	-90.1%	59	0.1%
Solar	17	39.7%	2.4%	0.3%	152	106	43.1%	131	0.2%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>4 761</b>	<b>4.9%</b>	<b>4.2%</b>	<b>72.8%</b>	<b>41 141</b>	<b>46 743</b>	<b>-12.0%</b>	<b>55 251</b>	<b>73.9%</b>
<b>NON-RENEWABLES</b>	<b>1 774</b>	<b>-4.9%</b>	<b>4.8%</b>	<b>27.2%</b>	<b>19 738</b>	<b>15 756</b>	<b>25.3%</b>	<b>19 512</b>	<b>26.1%</b>
<b>TOTAL NET PRODUCTION</b>	<b>6 536</b>	<b>2.1%</b>	<b>4.4%</b>		<b>60 879</b>	<b>62 499</b>	<b>-2.6%</b>	<b>74 764</b>	
+ Imports	1	-86.0%	-90.4%		1 296	147	783.2%	312	
- Exports	-	-	-		-	0	-	0	
<b>= ELECTRICITY SUPPLIED</b>	<b>6 537</b>	<b>2.0%</b>	<b>4.2%</b>		<b>62 175</b>	<b>62 646</b>	<b>-0.8%</b>	<b>75 075</b>	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses	-	-	-		-	6 517	-	7 872	
<b>= ELECTRICITY CONSUMED</b>	<b>6 537</b>	<b>13.6%</b>	<b>4.2%</b>		<b>62 175</b>	<b>56 129</b>	<b>10.8%</b>	<b>67 203</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year<sup>4</sup> Distributed generation for conventional thermal is estimated by the IEA Secretariat<sup>5</sup> estimated based on annual data

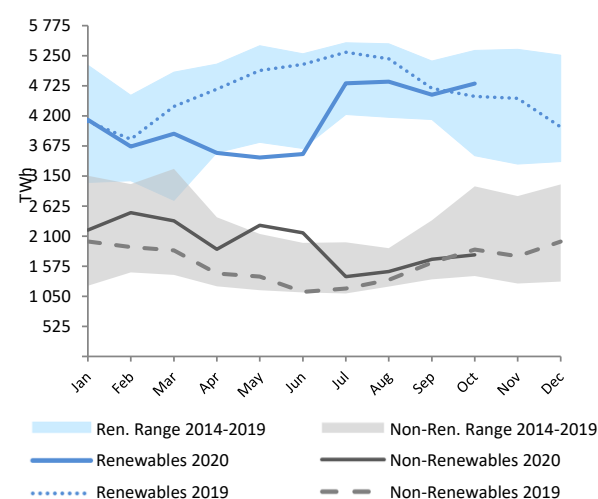
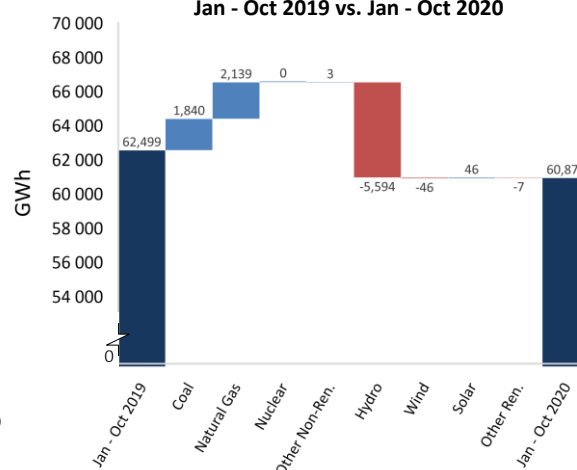
Electricity Production



Electricity Production by Fuel



Renewables and Non-Renewables

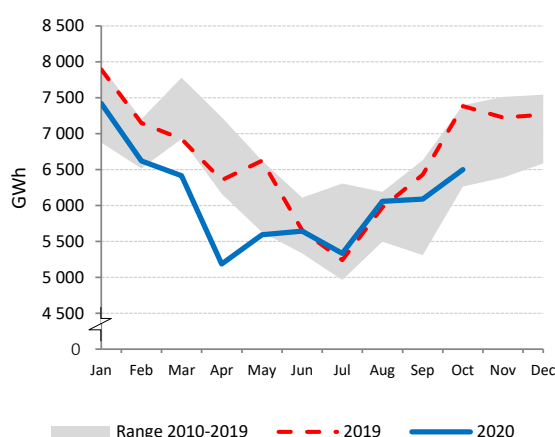
Electricity Production Variation  
Jan - Oct 2019 vs. Jan - Oct 2020

## CZECH REPUBLIC

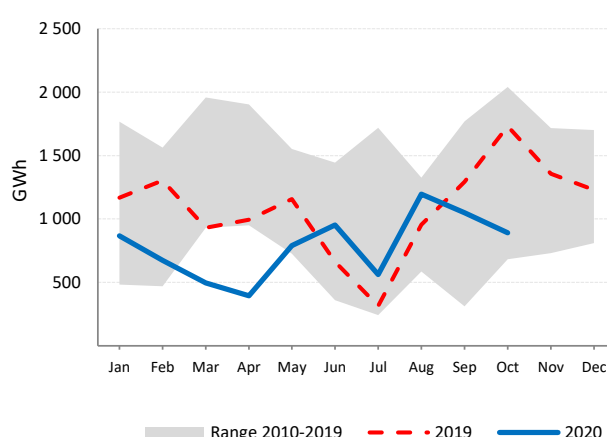
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>3 404</b>	<b>-16.3%</b>	<b>18.8%</b>	<b>52.4%</b>	<b>31 864</b>	<b>36 924</b>	<b>-13.7%</b>	<b>45 301</b>	<b>56.5%</b>
Coal	2 588	-15.9%	17.2%	39.8%	23 247	28 795	-19.3%	35 406	44.2%
Oil	7	-29.7%	10.2%	0.1%	66	89	-26.0%	106	0.1%
Natural Gas	423	-28.4%	63.1%	6.5%	4 639	4 277	8.5%	5 197	6.5%
Combustible Renewables	380	-0.7%	-1.5%	5.9%	3 844	3 701	3.9%	4 516	5.6%
Other Combustibles	5	-4.2%	2.5%	0.1%	69	62	11.4%	76	0.1%
<b>Nuclear</b>	<b>2 581</b>	<b>-8.3%</b>	<b>-4.3%</b>	<b>39.7%</b>	<b>23 426</b>	<b>23 211</b>	<b>0.9%</b>	<b>28 579</b>	<b>35.7%</b>
<b>Hydro</b>	<b>331</b>	<b>23.0%</b>	<b>27.4%</b>	<b>5.1%</b>	<b>2 768</b>	<b>2 684</b>	<b>3.1%</b>	<b>3 143</b>	<b>3.9%</b>
<b>Wind</b>	<b>68</b>	<b>10.6%</b>	<b>86.3%</b>	<b>1.0%</b>	<b>571</b>	<b>536</b>	<b>6.4%</b>	<b>691</b>	<b>0.9%</b>
<b>Solar</b>	<b>107</b>	<b>-34.0%</b>	<b>-51.9%</b>	<b>1.7%</b>	<b>2 144</b>	<b>2 184</b>	<b>-1.8%</b>	<b>2 291</b>	<b>2.9%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
<b>Non-Specified</b>	<b>7</b>	<b>-12.1%</b>	<b>-16.6%</b>	<b>0.1%</b>	<b>86</b>	<b>90</b>	<b>-4.2%</b>	<b>110</b>	<b>0.1%</b>
<b>RENEWABLES</b>	<b>887</b>	<b>1.2%</b>	<b>-2.1%</b>	<b>13.6%</b>	<b>9 327</b>	<b>9 106</b>	<b>2.4%</b>	<b>10 642</b>	<b>13.3%</b>
<b>NON-RENEWABLES</b>	<b>5 612</b>	<b>-13.8%</b>	<b>8.2%</b>	<b>86.4%</b>	<b>51 531</b>	<b>56 524</b>	<b>-8.8%</b>	<b>69 475</b>	<b>86.7%</b>
<b>TOTAL NET PRODUCTION</b>	<b>6 499</b>	<b>-12.0%</b>	<b>6.7%</b>		<b>60 858</b>	<b>65 630</b>	<b>-7.3%</b>	<b>80 116</b>	
+ Imports	1 165	37.6%	50.8%		10 819	9 235	17.2%	11 026	
- Exports	2 056	-20.2%	12.8%		18 691	19 745	-5.3%	24 123	
<b>= ELECTRICITY SUPPLIED</b>	<b>5 607</b>	<b>-0.8%</b>	<b>11.2%</b>		<b>52 986</b>	<b>55 119</b>	<b>-3.9%</b>	<b>67 020</b>	
- Used for pumped storage	132	-9.0%	-1.3%		1 374	1 204	14.1%	1 508	
- T&D Losses	353	-7.8%	20.8%		3 256	3 535	-7.9%	4 300	
<b>= ELECTRICITY CONSUMED</b>	<b>5 122</b>	<b>0.0%</b>	<b>11.0%</b>		<b>48 356</b>	<b>50 380</b>	<b>-4.0%</b>	<b>61 212</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

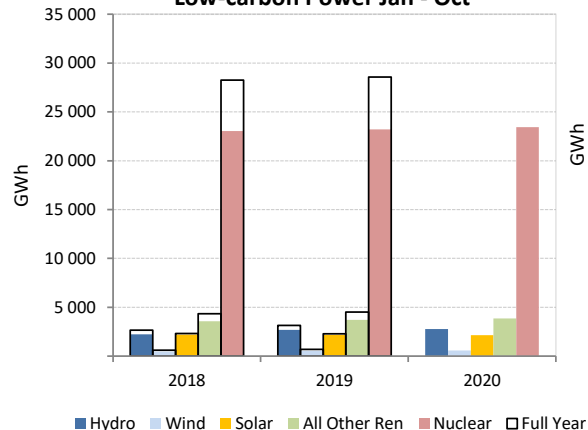
Electricity Production



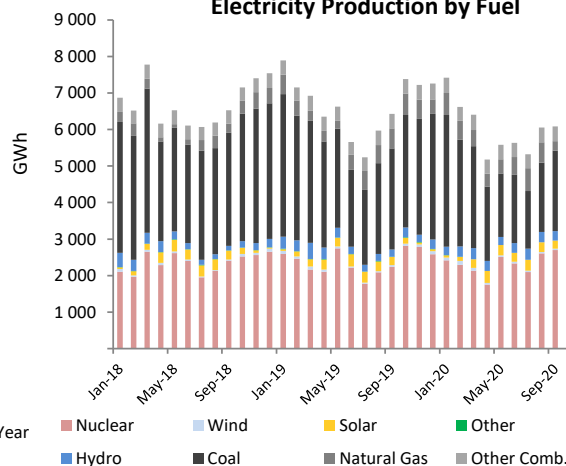
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

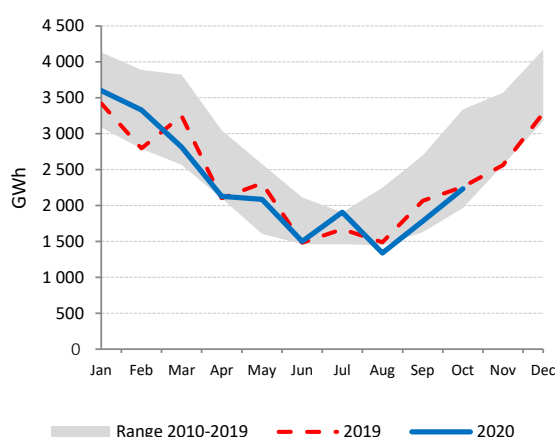


# DENMARK

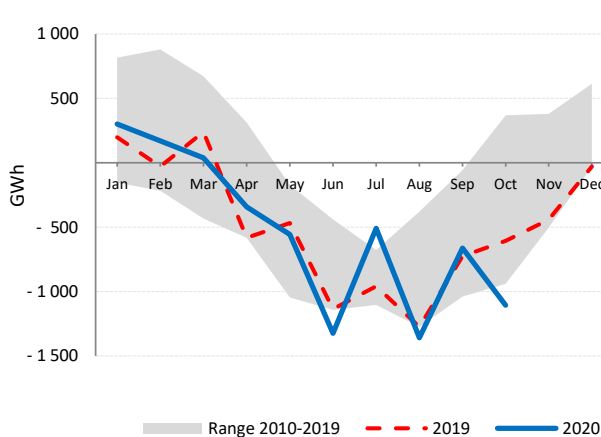
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>737</b>	<b>-22.6%</b>	<b>25.0%</b>	<b>33.0%</b>	<b>7 973</b>	<b>8 831</b>	<b>-9.7%</b>	<b>11 562</b>	<b>40.3%</b>
Coal	215	14.9%	61.3%	9.6%	2 498	2 366	5.6%	3 088	10.8%
Oil	24	-2.7%	53.8%	1.1%	165	172	-4.2%	226	0.8%
Natural Gas	93	-47.7%	29.0%	4.2%	881	1 511	-41.7%	1 961	6.8%
Combustible Renewables	349	-29.4%	11.7%	15.6%	3 833	4 181	-8.3%	5 552	19.4%
Other Combustibles	55	-17.1%	-0.5%	2.5%	595	600	-0.8%	736	2.6%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>1</b>	<b>-41.1%</b>	<b>3.4%</b>	<b>0.0%</b>	<b>15</b>	<b>13</b>	<b>15.1%</b>	<b>17</b>	<b>0.1%</b>
<b>Wind</b>	<b>1 439</b>	<b>14.2%</b>	<b>32.9%</b>	<b>64.4%</b>	<b>13 580</b>	<b>13 063</b>	<b>4.0%</b>	<b>16 150</b>	<b>56.3%</b>
<b>Solar</b>	<b>57</b>	<b>24.9%</b>	<b>-48.2%</b>	<b>2.6%</b>	<b>1 150</b>	<b>938</b>	<b>22.6%</b>	<b>963</b>	<b>3.4%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>1 847</b>	<b>2.5%</b>	<b>22.5%</b>	<b>82.7%</b>	<b>18 577</b>	<b>18 195</b>	<b>2.1%</b>	<b>22 683</b>	<b>79.1%</b>
<b>NON-RENEWABLES</b>	<b>388</b>	<b>-15.2%</b>	<b>40.1%</b>	<b>17.3%</b>	<b>4 139</b>	<b>4 650</b>	<b>-11.0%</b>	<b>6 010</b>	<b>20.9%</b>
<b>TOTAL NET PRODUCTION</b>	<b>2 234</b>	<b>-1.1%</b>	<b>25.3%</b>		<b>22 717</b>	<b>22 844</b>	<b>-0.6%</b>	<b>28 693</b>	
+ Imports	1 673	37.8%	-11.8%		16 548	13 469	22.9%	15 982	
- Exports	565	-7.1%	-54.1%		11 194	8 129	37.7%	10 171	
<b>= ELECTRICITY SUPPLIED</b>	<b>3 342</b>	<b>16.6%</b>	<b>36.5%</b>		<b>28 071</b>	<b>28 185</b>	<b>-0.4%</b>	<b>34 503</b>	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses	131	-2.6%	4.9%		1 451	1 319	10.0%	1 611	
<b>= ELECTRICITY CONSUMED</b>	<b>3 211</b>	<b>17.6%</b>	<b>38.2%</b>		<b>26 619</b>	<b>26 865</b>	<b>-0.9%</b>	<b>32 892</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

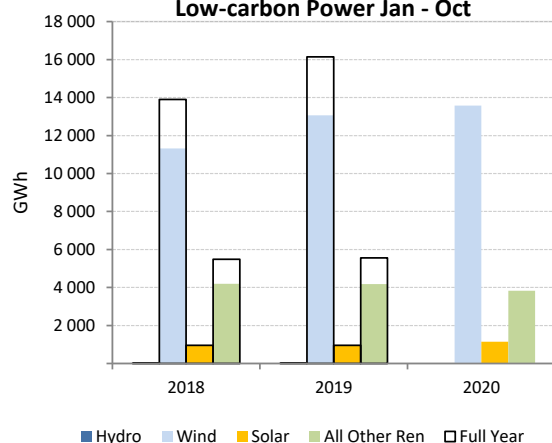
Electricity Production



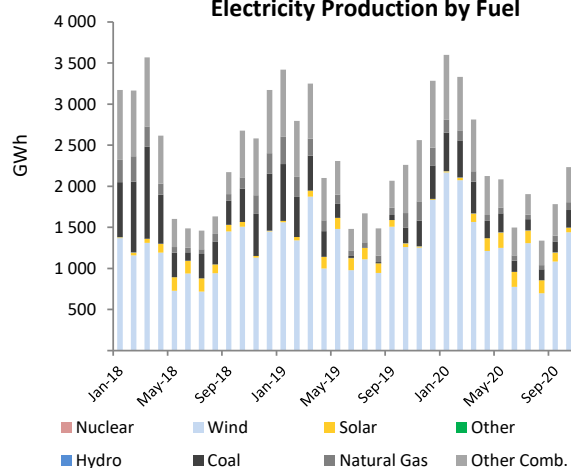
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

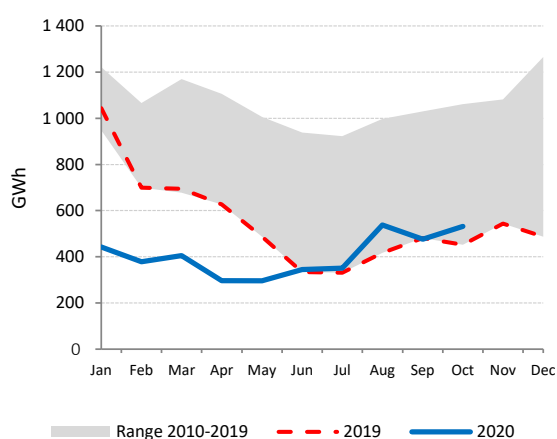


## ESTONIA

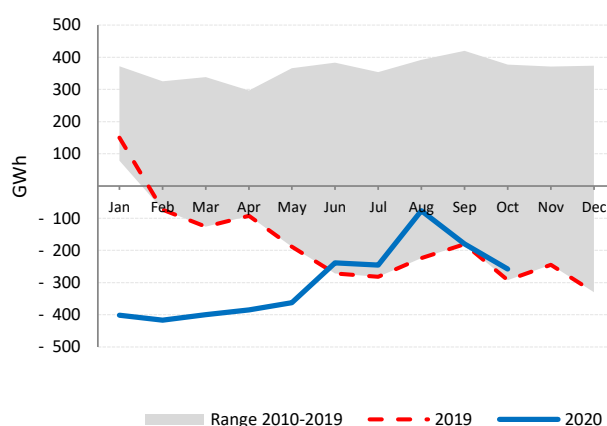
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>461</b>	<b>17.5%</b>	<b>14.5%</b>	<b>86.7%</b>	<b>3 293</b>	<b>4 947</b>	<b>-33.4%</b>	<b>5 821</b>	<b>88.2%</b>
Coal <sup>4</sup>	361	17.5%	14.5%	67.8%	2 574	3 867	-33.4%	4 549	68.9%
Oil <sup>4</sup>	2	17.5%	14.5%	0.4%	13	20	-33.4%	24	0.4%
Natural Gas <sup>4</sup>	3	17.5%	14.5%	0.5%	18	28	-33.4%	32	0.5%
Combustible Renewables <sup>4</sup>	92	17.5%	14.5%	17.3%	657	986	-33.4%	1 161	17.6%
Other Combustibles <sup>4</sup>	4	17.5%	14.5%	0.8%	31	46	-33.4%	55	0.8%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>3</b>	<b>66.6%</b>	<b>200.0%</b>	<b>0.6%</b>	<b>30</b>	<b>14</b>	<b>124.8%</b>	<b>19</b>	<b>0.3%</b>
<b>Wind</b>	<b>64</b>	<b>18.3%</b>	<b>-4.5%</b>	<b>12.0%</b>	<b>666</b>	<b>536</b>	<b>24.2%</b>	<b>687</b>	<b>10.4%</b>
<b>Solar</b>	<b>4</b>	<b>-</b>	<b>-36.8%</b>	<b>0.7%</b>	<b>71</b>	<b>71</b>	<b>-</b>	<b>74</b>	<b>1.1%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>163</b>	<b>18.0%</b>	<b>5.5%</b>	<b>30.6%</b>	<b>1 424</b>	<b>1 607</b>	<b>-11.4%</b>	<b>1 940</b>	<b>29.4%</b>
<b>NON-RENEWABLES</b>	<b>369</b>	<b>17.5%</b>	<b>14.5%</b>	<b>69.4%</b>	<b>2 637</b>	<b>3 961</b>	<b>-33.4%</b>	<b>4 660</b>	<b>70.6%</b>
<b>TOTAL NET PRODUCTION</b>	<b>532</b>	<b>17.6%</b>	<b>11.6%</b>		<b>4 061</b>	<b>5 568</b>	<b>-27.1%</b>	<b>6 600</b>	
+ Imports	582	13.9%	13.2%		6 041	4 021	50.2%	4 861	
- Exports	324	48.6%	-3.0%		3 076	2 439	26.1%	2 704	
<b>= ELECTRICITY SUPPLIED</b>	<b>790</b>	<b>6.0%</b>	<b>20.3%</b>		<b>7 025</b>	<b>7 151</b>	<b>-1.8%</b>	<b>8 757</b>	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses <sup>4</sup>	49	15.6%	12.5%		441	418	5.3%	500	
<b>= ELECTRICITY CONSUMED</b>	<b>741</b>	<b>5.4%</b>	<b>20.9%</b>		<b>6 584</b>	<b>6 732</b>	<b>-2.2%</b>	<b>8 257</b>	

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

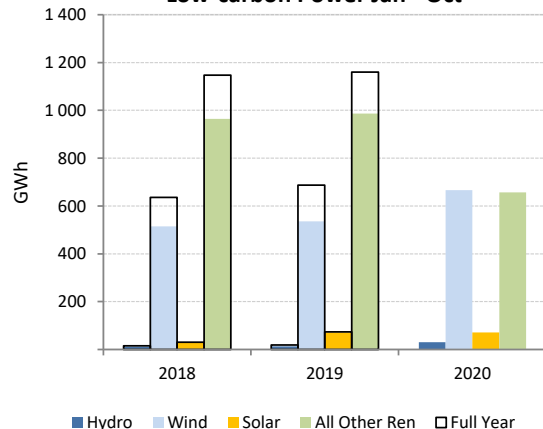
Electricity Production



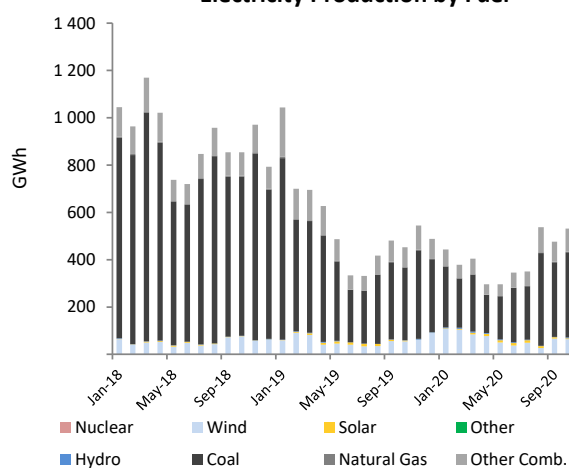
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

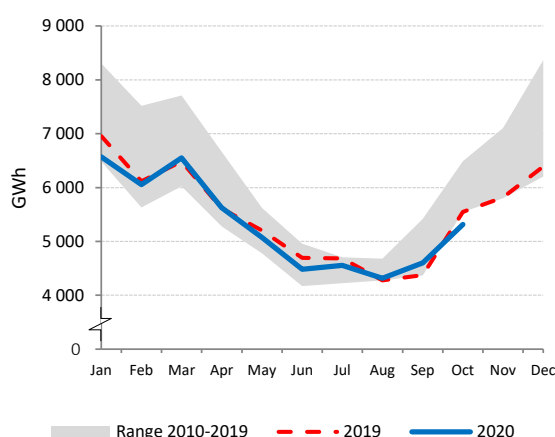


## FINLAND

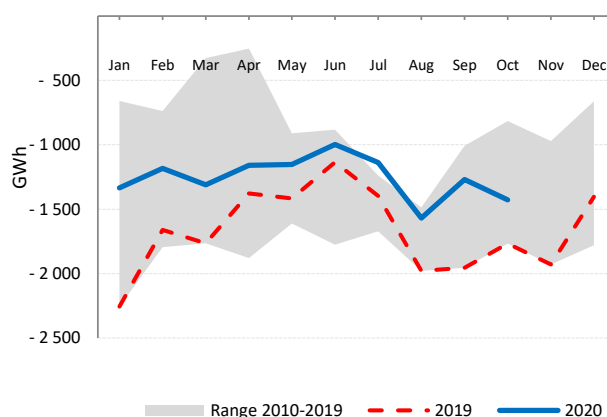
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>1 645</b>	<b>-23.3%</b>	<b>23.8%</b>	<b>30.9%</b>	<b>15 643</b>	<b>19 846</b>	<b>-21.2%</b>	<b>24 506</b>	<b>37.0%</b>
Coal	409	-42.2%	99.1%	7.7%	3 971	6 054	-34.4%	7 607	11.5%
Oil	19	-15.0%	41.7%	0.4%	154	200	-23.1%	242	0.4%
Natural Gas	428	29.2%	8.1%	8.1%	3 075	3 003	2.4%	3 769	5.7%
Combustible Renewables	758	-27.1%	10.3%	14.3%	8 096	10 180	-20.5%	12 393	18.7%
Other Combustibles <sup>4</sup>	30	-26.5%	16.3%	0.6%	347	409	-15.0%	496	0.7%
<b>Nuclear</b>	<b>1 792</b>	<b>-13.5%</b>	<b>10.5%</b>	<b>33.7%</b>	<b>18 504</b>	<b>18 831</b>	<b>-1.7%</b>	<b>22 927</b>	<b>34.7%</b>
<b>Hydro</b>	<b>1 234</b>	<b>48.9%</b>	<b>29.4%</b>	<b>23.2%</b>	<b>12 649</b>	<b>10 004</b>	<b>26.4%</b>	<b>12 299</b>	<b>18.6%</b>
<b>Wind</b>	<b>635</b>	<b>33.7%</b>	<b>-5.8%</b>	<b>11.9%</b>	<b>6 047</b>	<b>4 873</b>	<b>24.1%</b>	<b>5 985</b>	<b>9.0%</b>
<b>Solar</b>	<b>10</b>	<b>65.0%</b>	<b>-60.7%</b>	<b>0.2%</b>	<b>304</b>	<b>175</b>	<b>73.6%</b>	<b>178</b>	<b>0.3%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	208	-	249	0.4%
<b>RENEWABLES</b>	<b>2 637</b>	<b>12.2%</b>	<b>12.7%</b>	<b>49.6%</b>	<b>27 096</b>	<b>25 232</b>	<b>7.4%</b>	<b>30 855</b>	<b>46.6%</b>
<b>NON-RENEWABLES</b>	<b>2 679</b>	<b>-16.2%</b>	<b>18.4%</b>	<b>50.4%</b>	<b>26 051</b>	<b>28 704</b>	<b>-9.2%</b>	<b>35 290</b>	<b>53.4%</b>
<b>TOTAL NET PRODUCTION</b>	<b>5 316</b>	<b>-4.2%</b>	<b>15.5%</b>		<b>53 147</b>	<b>53 937</b>	<b>-1.5%</b>	<b>66 145</b>	
+ Imports	1 966	-9.9%	13.8%		17 983	20 026	-10.2%	23 938	
- Exports	540	30.1%	17.6%		5 444	3 318	64.1%	3 896	
<b>= ELECTRICITY SUPPLIED</b>	<b>6 742</b>	<b>-7.8%</b>	<b>14.8%</b>		<b>65 686</b>	<b>70 645</b>	<b>-7.0%</b>	<b>86 187</b>	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses	219	-7.4%	14.8%		2 128	2 289	-7.0%	2 793	
<b>= ELECTRICITY CONSUMED</b>	<b>6 523</b>	<b>-7.8%</b>	<b>14.8%</b>		<b>63 557</b>	<b>68 356</b>	<b>-7.0%</b>	<b>83 394</b>	

<sup>1</sup> current month to month of last year change<sup>4</sup> includes generation from peat<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

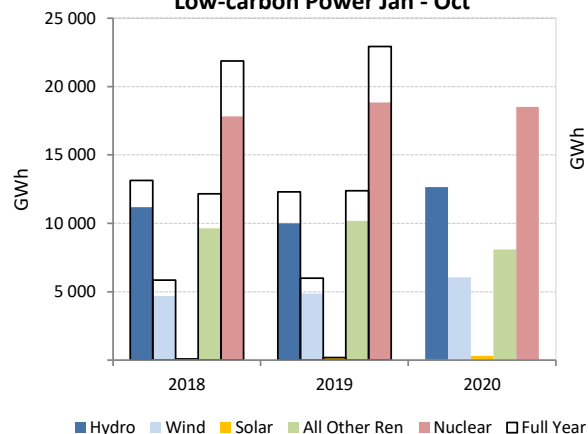
Electricity Production



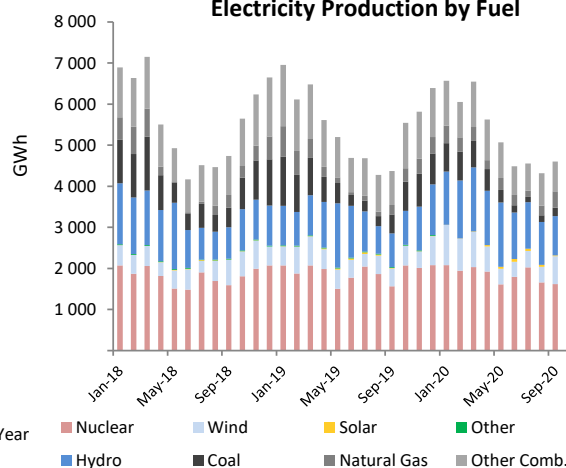
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

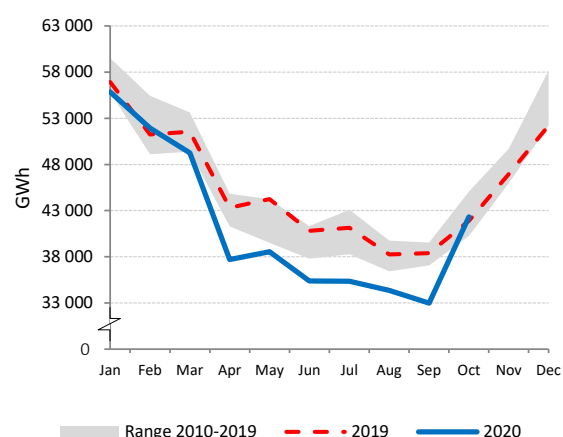


## FRANCE

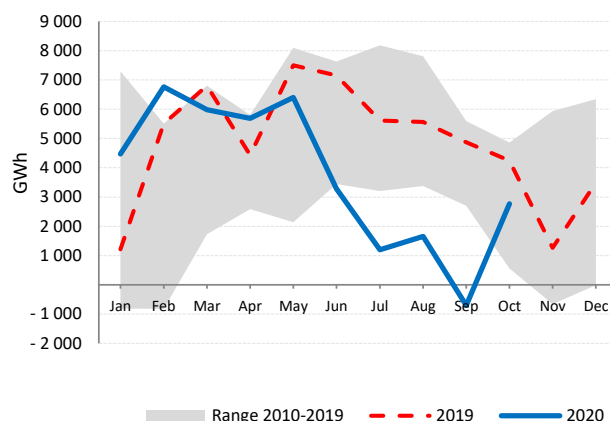
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>3 594</b>	<b>-19.3%</b>	<b>-12.9%</b>	<b>8.5%</b>	<b>41 357</b>	<b>45 360</b>	<b>-8.8%</b>	<b>58 630</b>	<b>10.7%</b>
Coal	336	42.5%	-46.1%	0.8%	2 985	3 389	-18.0%	5 540	1.0%
Oil	467	4.1%	-5.8%	1.1%	4 809	4 549	5.7%	5 580	1.0%
Natural Gas	2 226	-24.8%	-9.1%	5.3%	25 906	28 814	-10.1%	37 088	6.8%
Combustible Renewables	426	-13.3%	3.6%	1.0%	6 058	6 855	-11.6%	8 155	1.5%
Other Combustibles	139	-19.3%	-12.9%	0.3%	1 599	1 754	-8.8%	2 267	0.4%
<b>Nuclear</b>	<b>28 271</b>	<b>-3.1%</b>	<b>30.0%</b>	<b>66.8%</b>	<b>269 416</b>	<b>317 344</b>	<b>-15.1%</b>	<b>379 464</b>	<b>69.4%</b>
<b>Hydro</b>	<b>5 171</b>	<b>33.3%</b>	<b>49.9%</b>	<b>12.2%</b>	<b>55 813</b>	<b>46 333</b>	<b>20.5%</b>	<b>60 819</b>	<b>11.1%</b>
<b>Wind</b>	<b>4 318</b>	<b>24.1%</b>	<b>99.3%</b>	<b>10.2%</b>	<b>32 634</b>	<b>26 505</b>	<b>23.1%</b>	<b>34 722</b>	<b>6.3%</b>
<b>Solar</b>	<b>876</b>	<b>5.2%</b>	<b>-37.9%</b>	<b>2.1%</b>	<b>13 581</b>	<b>11 317</b>	<b>20.0%</b>	<b>12 225</b>	<b>2.2%</b>
Geothermal	9	-2.7%	-	0.0%	94	96	-2.7%	116	0.0%
Other Renewables	39	-	-	0.1%	394	394	-	473	0.1%
Non-Specified	44	-	-	0.1%	439	439	-	527	0.1%
<b>RENEWABLES</b>	<b>10 840</b>	<b>24.1%</b>	<b>44.8%</b>	<b>25.6%</b>	<b>108 573</b>	<b>91 500</b>	<b>18.7%</b>	<b>116 509</b>	<b>21.3%</b>
<b>NON-RENEWABLES</b>	<b>31 483</b>	<b>-5.1%</b>	<b>23.5%</b>	<b>74.4%</b>	<b>305 154</b>	<b>356 289</b>	<b>-14.4%</b>	<b>430 466</b>	<b>78.7%</b>
<b>TOTAL NET PRODUCTION</b>	<b>42 323</b>	<b>1.0%</b>	<b>28.3%</b>		<b>413 728</b>	<b>447 789</b>	<b>-7.6%</b>	<b>546 975</b>	
+ Imports	1 955	43.7%	-41.9%		15 674	10 558	48.5%	15 632	
- Exports	4 722	-15.8%	77.6%		53 184	63 465	-16.2%	73 299	
<b>= ELECTRICITY SUPPLIED</b>	<b>39 555</b>	<b>5.0%</b>	<b>17.4%</b>		<b>376 218</b>	<b>394 882</b>	<b>-4.7%</b>	<b>489 308</b>	
- Used for pumped storage	565	8.6%	27.7%		5 034	5 069	-0.7%	6 397	
- T&D Losses	3 067	9.4%	28.3%		29 415	30 142	-2.4%	38 112	
<b>= ELECTRICITY CONSUMED</b>	<b>35 923</b>	<b>4.6%</b>	<b>16.4%</b>		<b>341 769</b>	<b>359 670</b>	<b>-5.0%</b>	<b>444 799</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

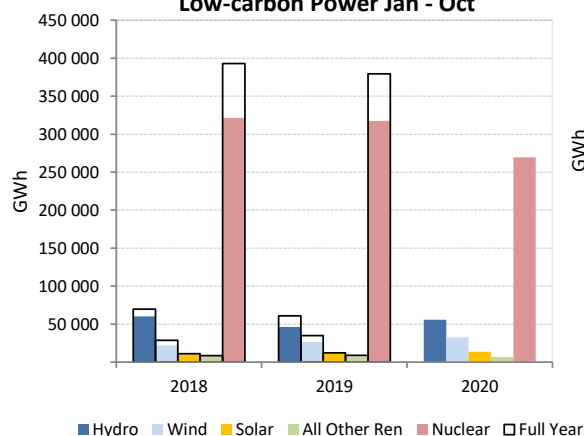
Electricity Production



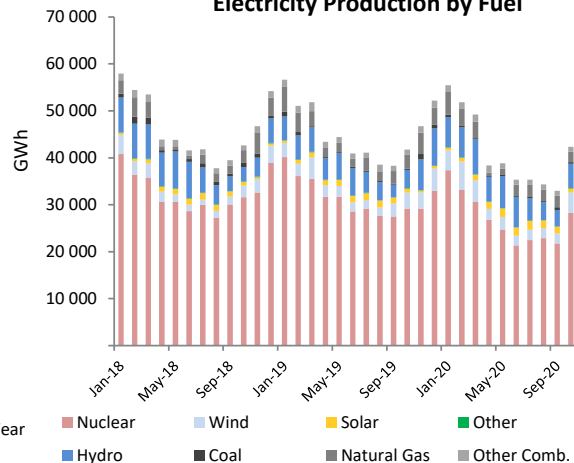
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

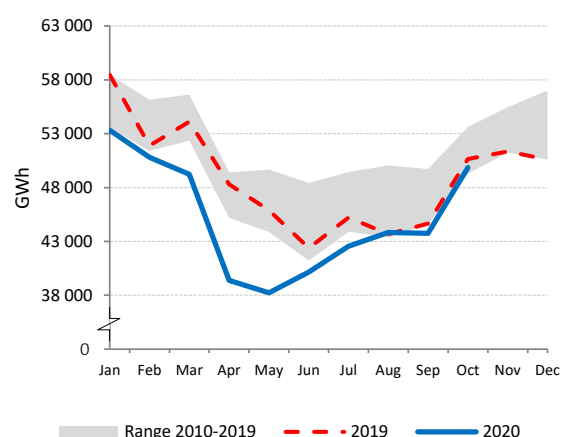


# GERMANY

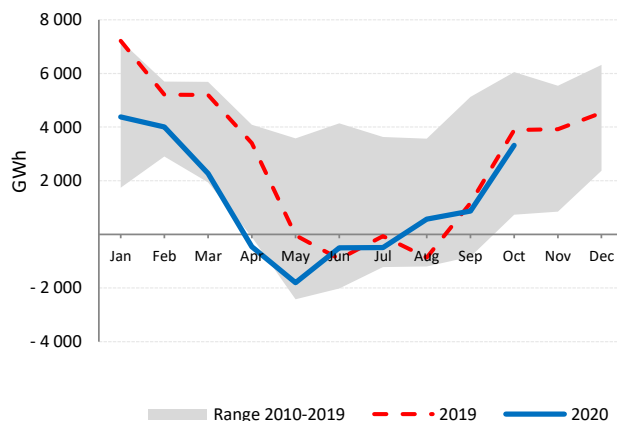
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>26 166</b>	<b>-4.0%</b>	<b>5.9%</b>	<b>52.5%</b>	<b>221 061</b>	<b>260 755</b>	<b>-15.2%</b>	<b>318 151</b>	<b>54.2%</b>
Coal	14 012	1.9%	5.8%	28.1%	103 167	140 733	-26.7%	172 439	29.4%
Oil	345	-24.8%	1.5%	0.7%	3 358	3 942	-14.8%	4 725	0.8%
Natural Gas	7 387	-13.4%	7.5%	14.8%	70 578	71 897	-1.8%	87 812	15.0%
Combustible Renewables	3 960	-0.6%	4.8%	7.9%	39 264	38 898	0.9%	46 897	8.0%
Other Combustibles	462	-16.2%	-1.6%	0.9%	4 693	5 285	-11.2%	6 277	1.1%
<b>Nuclear</b>	<b>5 129</b>	<b>-23.9%</b>	<b>-3.0%</b>	<b>10.3%</b>	<b>50 280</b>	<b>58 010</b>	<b>-13.3%</b>	<b>70 983</b>	<b>12.1%</b>
<b>Hydro</b>	<b>2 426</b>	<b>16.0%</b>	<b>25.7%</b>	<b>4.9%</b>	<b>21 428</b>	<b>21 829</b>	<b>-1.8%</b>	<b>25 800</b>	<b>4.4%</b>
<b>Wind</b>	<b>13 476</b>	<b>15.8%</b>	<b>111.8%</b>	<b>27.0%</b>	<b>106 923</b>	<b>98 343</b>	<b>8.7%</b>	<b>123 606</b>	<b>21.0%</b>
<b>Solar</b>	<b>2 561</b>	<b>-8.7%</b>	<b>-52.4%</b>	<b>5.1%</b>	<b>50 494</b>	<b>45 342</b>	<b>11.4%</b>	<b>47 517</b>	<b>8.1%</b>
Geothermal	11	-25.0%	-	0.0%	148	142	4.0%	170	0.0%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	71	-14.0%	-9.0%	0.1%	757	843	-10.2%	992	0.2%
<b>RENEWABLES</b>	<b>22 435</b>	<b>9.2%</b>	<b>28.5%</b>	<b>45.0%</b>	<b>218 258</b>	<b>204 555</b>	<b>6.7%</b>	<b>243 991</b>	<b>41.6%</b>
<b>NON-RENEWABLES</b>	<b>27 406</b>	<b>-9.0%</b>	<b>4.2%</b>	<b>55.0%</b>	<b>232 833</b>	<b>280 709</b>	<b>-17.1%</b>	<b>343 228</b>	<b>58.4%</b>
<b>TOTAL NET PRODUCTION</b>	<b>49 841</b>	<b>-1.6%</b>	<b>13.9%</b>		<b>451 091</b>	<b>485 264</b>	<b>-7.0%</b>	<b>587 219</b>	
+ Imports	2 792	2.2%	-23.0%		41 057	34 666	18.4%	40 123	
- Exports	6 113	-7.7%	36.0%		53 207	58 878	-9.6%	72 792	
<b>= ELECTRICITY SUPPLIED</b>	<b>46 520</b>	<b>-0.5%</b>	<b>8.5%</b>		<b>438 940</b>	<b>461 052</b>	<b>-4.8%</b>	<b>554 550</b>	
- Used for pumped storage	712	-1.9%	9.8%		7 446	6 799	9.5%	8 178	
- T&D Losses	2 501	1.9%	24.6%		21 913	21 694	1.0%	26 481	
<b>= ELECTRICITY CONSUMED</b>	<b>43 307</b>	<b>-0.6%</b>	<b>7.6%</b>		<b>409 581</b>	<b>432 559</b>	<b>-5.3%</b>	<b>519 891</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

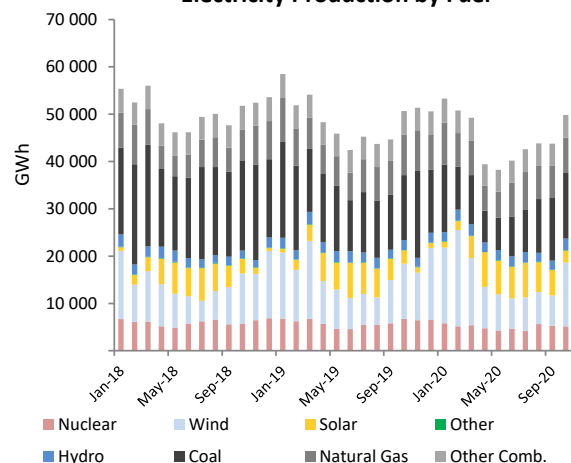
Electricity Production



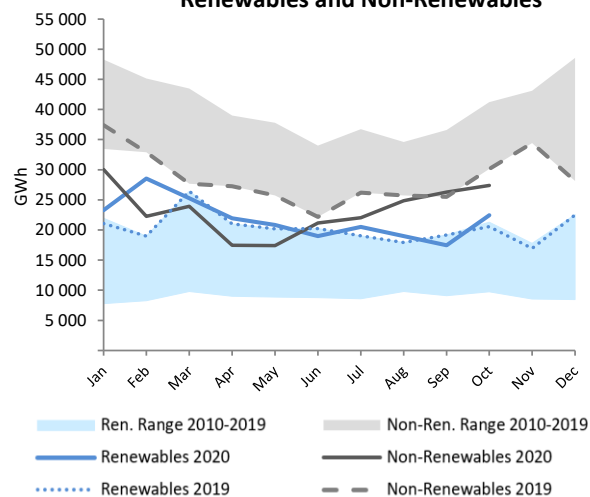
Net Electricity Exports



Electricity Production by Fuel



Renewables and Non-Renewables

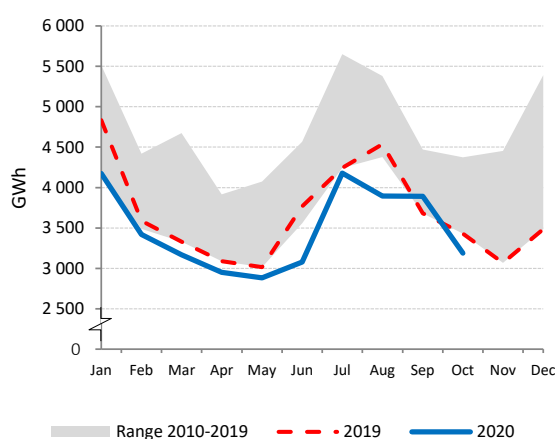


## GREECE

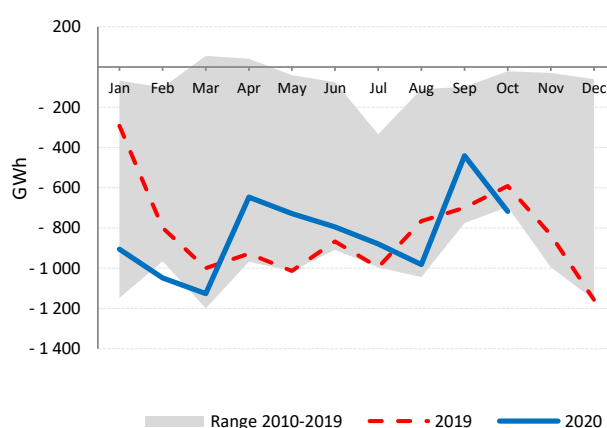
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>2 063</b>	<b>-16.1%</b>	<b>-9.4%</b>	<b>64.7%</b>	<b>21 684</b>	<b>25 885</b>	<b>-16.2%</b>	<b>30 286</b>	<b>68.7%</b>
Coal	325	-49.2%	11.0%	10.2%	4 065	8 140	-49.9%	9 782	22.2%
Oil	305	-8.7%	-9.7%	9.6%	2 860	3 512	-18.6%	4 047	9.2%
Natural Gas	1 292	-3.5%	-13.1%	40.5%	13 335	12 828	4.0%	14 759	33.5%
Combustible Renewables <sup>4</sup>	124	0.9%	-2.5%	3.9%	1 233	1 177	4.8%	1 429	3.2%
Other Combustibles <sup>4</sup>	18	-16.1%	-9.3%	0.6%	191	228	-16.2%	267	0.6%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>135</b>	<b>-0.6%</b>	<b>-27.9%</b>	<b>4.2%</b>	<b>1 851</b>	<b>2 155</b>	<b>-14.1%</b>	<b>2 539</b>	<b>5.8%</b>
<b>Wind</b>	<b>612</b>	<b>26.0%</b>	<b>-38.9%</b>	<b>19.2%</b>	<b>7 361</b>	<b>5 925</b>	<b>24.2%</b>	<b>7 278</b>	<b>16.5%</b>
<b>Solar</b>	<b>378</b>	<b>8.3%</b>	<b>-11.6%</b>	<b>11.8%</b>	<b>3 928</b>	<b>3 550</b>	<b>10.6%</b>	<b>3 961</b>	<b>9.0%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>1 249</b>	<b>14.2%</b>	<b>-28.4%</b>	<b>39.2%</b>	<b>14 372</b>	<b>12 806</b>	<b>12.2%</b>	<b>15 208</b>	<b>34.5%</b>
<b>NON-RENEWABLES</b>	<b>1 939</b>	<b>-17.0%</b>	<b>-9.8%</b>	<b>60.8%</b>	<b>20 451</b>	<b>24 708</b>	<b>-17.2%</b>	<b>28 856</b>	<b>65.5%</b>
<b>TOTAL NET PRODUCTION</b>	<b>3 188</b>	<b>-7.0%</b>	<b>-18.1%</b>		<b>34 824</b>	<b>37 515</b>	<b>-7.2%</b>	<b>44 064</b>	
+ Imports	738	-5.6%	11.2%		8 795	9 037	-2.7%	11 067	
- Exports	21	-89.2%	-90.8%		525	1 086	-51.7%	1 123	
<b>= ELECTRICITY SUPPLIED</b>	<b>3 906</b>	<b>-2.9%</b>	<b>-9.9%</b>		<b>43 093</b>	<b>45 466</b>	<b>-5.2%</b>	<b>54 008</b>	
- Used for pumped storage	7	331.9%	99.6%		86	32	167.4%	56	
- T&D Losses	267	-0.7%	-14.4%		2 736	2 828	-3.3%	3 434	
<b>= ELECTRICITY CONSUMED</b>	<b>3 632</b>	<b>-3.2%</b>	<b>-9.6%</b>		<b>40 272</b>	<b>42 606</b>	<b>-5.5%</b>	<b>50 518</b>	

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

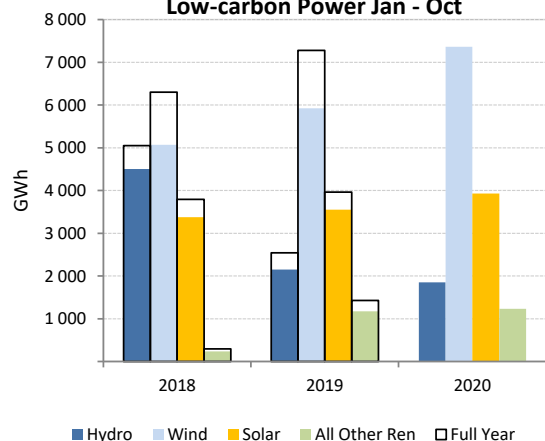
Electricity Production



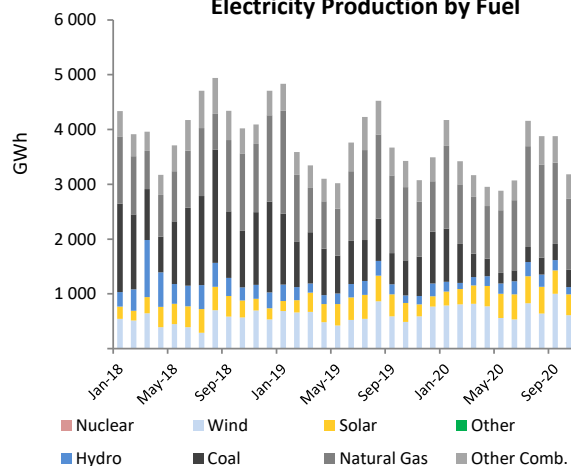
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

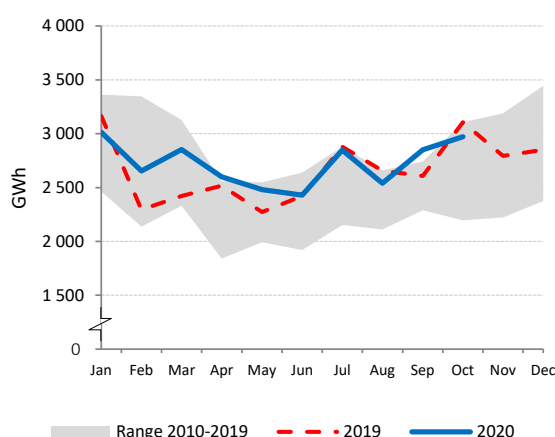


# HUNGARY

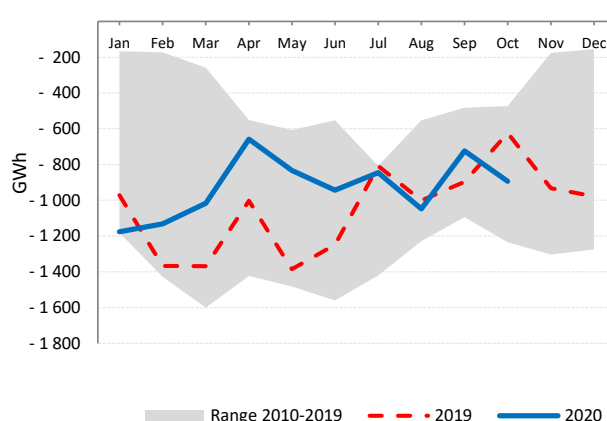
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>1 272</b>	<b>-13.5%</b>	<b>8.9%</b>	<b>42.8%</b>	<b>11 312</b>	<b>11 567</b>	<b>-2.2%</b>	<b>14 066</b>	<b>44.0%</b>
Coal	312	-23.2%	-4.2%	10.5%	2 927	3 275	-10.6%	3 856	12.1%
Oil	4	-25.3%	44.3%	0.1%	40	57	-29.7%	65	0.2%
Natural Gas	730	-16.8%	11.6%	24.6%	6 596	6 334	4.1%	7 868	24.6%
Combustible Renewables	210	28.7%	21.0%	7.1%	1 600	1 717	-6.8%	2 049	6.4%
Other Combustibles	16	-15.8%	33.6%	0.5%	150	184	-18.8%	229	0.7%
<b>Nuclear</b>	<b>1 434</b>	<b>1.0%</b>	<b>7.7%</b>	<b>48.2%</b>	<b>12 700</b>	<b>12 581</b>	<b>0.9%</b>	<b>15 403</b>	<b>48.2%</b>
<b>Hydro</b>	<b>22</b>	<b>108.9%</b>	<b>45.7%</b>	<b>0.7%</b>	<b>195</b>	<b>168</b>	<b>16.6%</b>	<b>213</b>	<b>0.7%</b>
<b>Wind</b>	<b>65</b>	<b>36.0%</b>	<b>85.3%</b>	<b>2.2%</b>	<b>541</b>	<b>561</b>	<b>-3.6%</b>	<b>709</b>	<b>2.2%</b>
<b>Solar</b>	<b>171</b>	<b>16.6%</b>	<b>-41.5%</b>	<b>5.8%</b>	<b>2 400</b>	<b>1 370</b>	<b>75.2%</b>	<b>1 480</b>	<b>4.6%</b>
<b>Geothermal</b>	<b>0</b>	<b>-95.1%</b>	<b>-87.9%</b>	<b>0.0%</b>	<b>6</b>	<b>7</b>	<b>-11.2%</b>	<b>9</b>	<b>0.0%</b>
<b>Other Renewables</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Non-Specified</b>	<b>9</b>	<b>-</b>	<b>-</b>	<b>0.3%</b>	<b>85</b>	<b>85</b>	<b>-</b>	<b>102</b>	<b>0.3%</b>
<b>RENEWABLES</b>	<b>468</b>	<b>26.8%</b>	<b>-9.4%</b>	<b>15.7%</b>	<b>4 743</b>	<b>3 823</b>	<b>24.1%</b>	<b>4 460</b>	<b>13.9%</b>
<b>NON-RENEWABLES</b>	<b>2 505</b>	<b>-8.5%</b>	<b>7.3%</b>	<b>84.3%</b>	<b>22 497</b>	<b>22 515</b>	<b>-0.1%</b>	<b>27 522</b>	<b>86.1%</b>
<b>TOTAL NET PRODUCTION</b>	<b>2 973</b>	<b>-4.3%</b>	<b>4.3%</b>		<b>27 240</b>	<b>26 338</b>	<b>3.4%</b>	<b>31 982</b>	
+ Imports	1 539	-6.6%	14.2%		15 610	16 955	-7.9%	19 853	
- Exports	646	-37.0%	3.6%		6 339	6 281	0.9%	7 269	
<b>= ELECTRICITY SUPPLIED</b>	<b>3 866</b>	<b>3.7%</b>	<b>8.1%</b>		<b>36 511</b>	<b>37 012</b>	<b>-1.4%</b>	<b>44 566</b>	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses	265	0.8%	16.4%		2 541	2 686	-5.4%	3 292	
<b>= ELECTRICITY CONSUMED</b>	<b>3 601</b>	<b>3.9%</b>	<b>7.6%</b>		<b>33 970</b>	<b>34 327</b>	<b>-1.0%</b>	<b>41 274</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

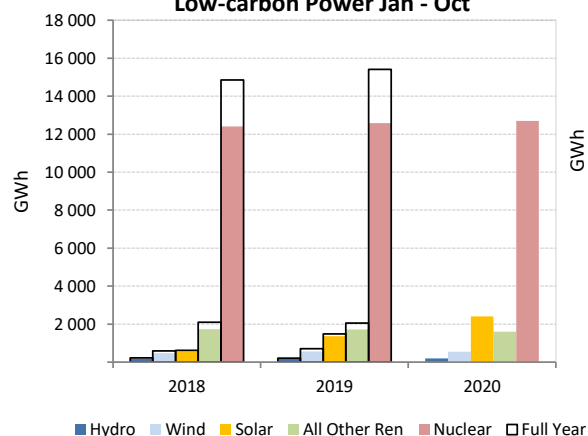
Electricity Production



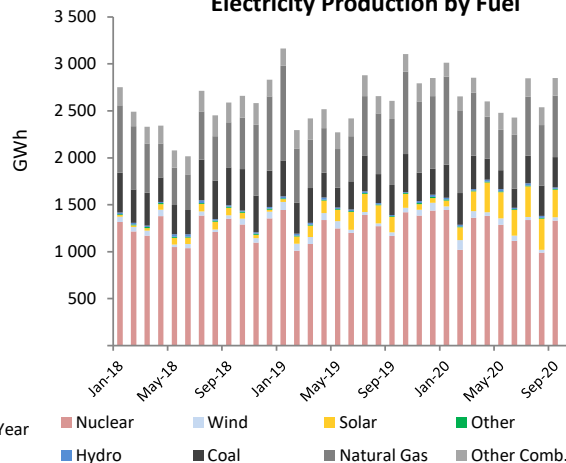
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

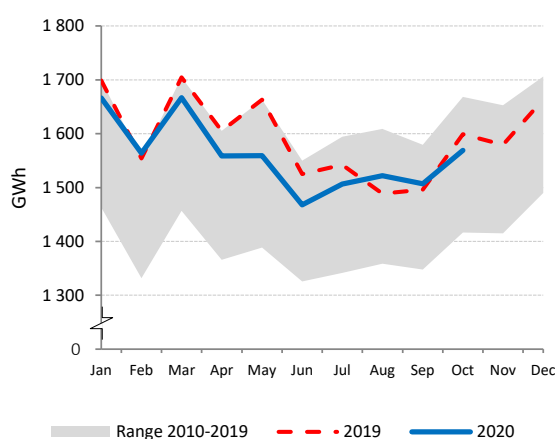


## ICELAND

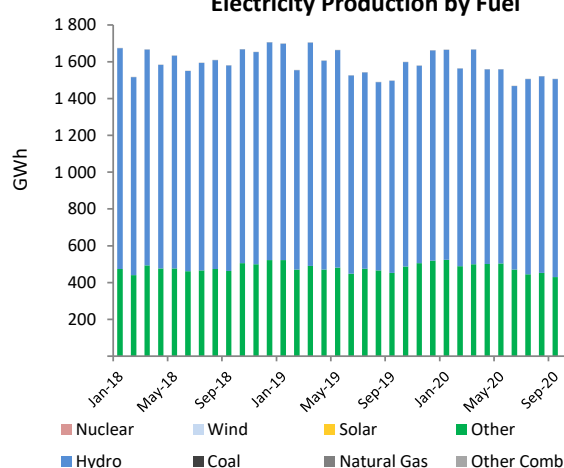
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>0</b>	<b>44.5%</b>	<b>14.7%</b>	<b>0.0%</b>	<b>3</b>	<b>1</b>	<b>117.5%</b>	<b>3</b>	<b>0.0%</b>
Coal	-	-	-	-	-	-	-	-	-
Oil	0	44.5%	14.7%	0.0%	3	1	117.5%	3	0.0%
Natural Gas	-	-	-	-	-	-	-	-	-
Combustible Renewables	-	-	-	-	-	-	-	-	-
Other Combustibles	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>1 110</b>	<b>-0.2%</b>	<b>3.0%</b>	<b>70.8%</b>	<b>10 810</b>	<b>11 112</b>	<b>-2.7%</b>	<b>13 329</b>	<b>69.7%</b>
<b>Wind</b>	<b>0</b>	<b>-35.1%</b>	<b>-2.2%</b>	<b>0.0%</b>	<b>5</b>	<b>5</b>	<b>-2.8%</b>	<b>7</b>	<b>0.0%</b>
<b>Solar</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Geothermal</b>	<b>458</b>	<b>-5.8%</b>	<b>6.8%</b>	<b>29.2%</b>	<b>4 769</b>	<b>4 759</b>	<b>0.2%</b>	<b>5 781</b>	<b>30.2%</b>
<b>Other Renewables</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Non-Specified</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>RENEWABLES</b>	<b>1 569</b>	<b>-1.9%</b>	<b>4.1%</b>	<b>100.0%</b>	<b>15 584</b>	<b>15 876</b>	<b>-1.8%</b>	<b>19 117</b>	<b>100.0%</b>
<b>NON-RENEWABLES</b>	<b>0</b>	<b>44.5%</b>	<b>14.2%</b>	<b>0.0%</b>	<b>3</b>	<b>1</b>	<b>117.7%</b>	<b>3</b>	<b>0.0%</b>
<b>TOTAL NET PRODUCTION</b>	<b>1 569</b>	<b>-1.9%</b>	<b>4.1%</b>		<b>15 587</b>	<b>15 877</b>	<b>-1.8%</b>	<b>19 120</b>	
+ Imports	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-
<b>= ELECTRICITY SUPPLIED</b>	<b>1 569</b>	<b>-1.9%</b>	<b>4.1%</b>		<b>15 587</b>	<b>15 877</b>	<b>-1.8%</b>	<b>19 120</b>	
- Used for pumped storage	-	-	-	-	-	-	-	-	-
- T&D Losses	43	-3.1%	0.5%		432	442	-2.3%	531	
<b>= ELECTRICITY CONSUMED</b>	<b>1 526</b>	<b>-1.9%</b>	<b>4.2%</b>		<b>15 155</b>	<b>15 435</b>	<b>-1.8%</b>	<b>18 589</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

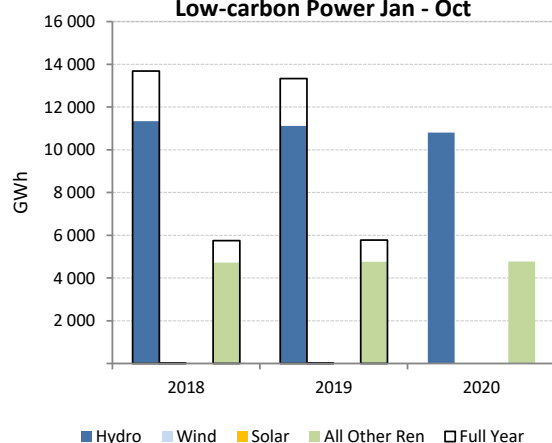
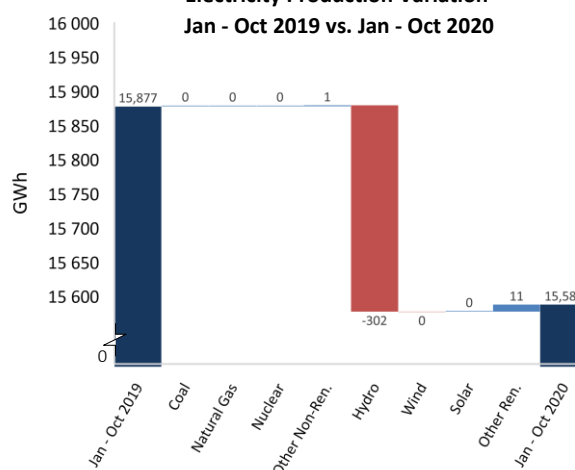
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Oct

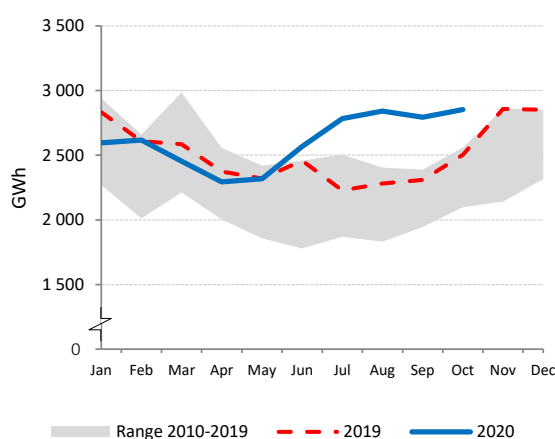
Electricity Production Variation  
Jan - Oct 2019 vs. Jan - Oct 2020

## IRELAND

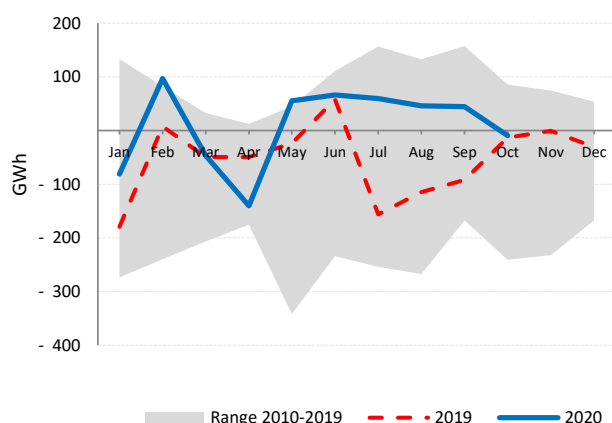
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>1 572</b>	<b>11.7%</b>	<b>-19.5%</b>	<b>55.1%</b>	<b>16 772</b>	<b>15 737</b>	<b>6.6%</b>	<b>19 094</b>	<b>63.2%</b>
Coal	321	712.6%	-10.9%	11.2%	2 317	1 750	32.4%	2 352	7.8%
Oil	39	13.5%	-44.2%	1.4%	396	230	72.3%	271	0.9%
Natural Gas	1 132	-8.8%	-20.8%	39.7%	13 137	12 872	2.1%	15 364	50.9%
Combustible Renewables	59	-8.0%	-29.1%	2.1%	778	656	18.6%	823	2.7%
Other Combustibles	21	-23.5%	105.5%	0.8%	145	229	-37.0%	285	0.9%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>108</b>	<b>-23.9%</b>	<b>32.3%</b>	<b>3.8%</b>	<b>895</b>	<b>835</b>	<b>7.2%</b>	<b>1 120</b>	<b>3.7%</b>
<b>Wind</b>	<b>1 171</b>	<b>23.2%</b>	<b>54.9%</b>	<b>41.0%</b>	<b>8 427</b>	<b>7 907</b>	<b>6.6%</b>	<b>9 974</b>	<b>33.0%</b>
<b>Solar</b>	<b>1</b>	<b>-</b>	<b>-29.1%</b>	<b>0.0%</b>	<b>20</b>	<b>20</b>	<b>-</b>	<b>21</b>	<b>0.1%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>1 340</b>	<b>15.6%</b>	<b>45.1%</b>	<b>47.0%</b>	<b>10 120</b>	<b>9 419</b>	<b>7.4%</b>	<b>11 939</b>	<b>39.5%</b>
<b>NON-RENEWABLES</b>	<b>1 513</b>	<b>12.6%</b>	<b>-19.1%</b>	<b>53.0%</b>	<b>15 994</b>	<b>15 081</b>	<b>6.1%</b>	<b>18 271</b>	<b>60.5%</b>
<b>TOTAL NET PRODUCTION</b>	<b>2 853</b>	<b>14.0%</b>	<b>2.2%</b>		<b>26 114</b>	<b>24 500</b>	<b>6.6%</b>	<b>30 210</b>	
+ Imports	177	4.1%	26.9%		1 470	1 827	-19.5%	2 180	
- Exports	168	7.1%	-8.8%		1 562	1 214	28.7%	1 535	
<b>= ELECTRICITY SUPPLIED</b>	<b>2 862</b>	<b>13.8%</b>	<b>4.1%</b>		<b>26 022</b>	<b>25 113</b>	<b>3.6%</b>	<b>30 854</b>	
- Used for pumped storage	46	-0.2%	6.1%		462	387	19.3%	478	
- T&D Losses	203	3.5%	10.7%		1 836	1 858	-1.2%	2 274	
<b>= ELECTRICITY CONSUMED</b>	<b>2 613</b>	<b>15.0%</b>	<b>3.6%</b>		<b>23 724</b>	<b>22 868</b>	<b>3.7%</b>	<b>28 102</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

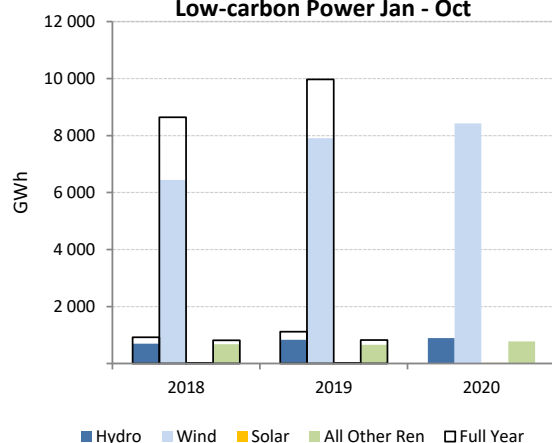
Electricity Production



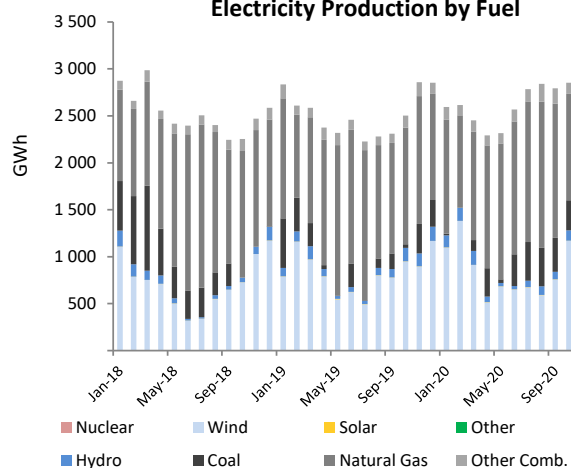
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

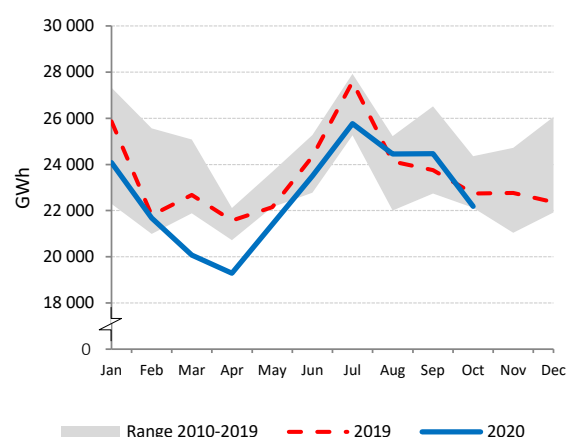


## ITALY

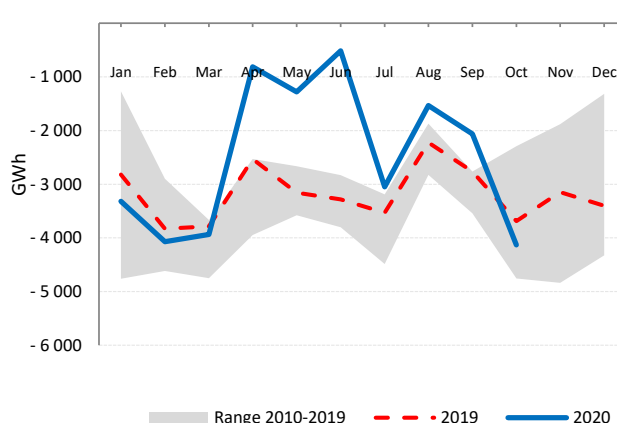
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>13 827</b>	<b>-16.3%</b>	<b>-15.2%</b>	<b>62.3%</b>	<b>142 674</b>	<b>156 494</b>	<b>-8.8%</b>	<b>185 146</b>	<b>65.7%</b>
Coal <sup>4</sup>	1 077	-29.5%	-28.6%	4.9%	11 614	14 734	-19.8%	17 134	6.1%
Oil <sup>4</sup>	775	-16.3%	-15.2%	3.5%	7 999	8 774	-8.8%	10 381	3.7%
Natural Gas <sup>4</sup>	10 230	-16.3%	-15.2%	46.1%	105 565	115 791	-8.8%	136 990	48.6%
Combustible Renewables	1 567	1.7%	-1.8%	7.1%	15 667	15 190	3.1%	18 269	6.5%
Other Combustibles <sup>4</sup>	177	-16.3%	-15.2%	0.8%	1 829	2 006	-8.8%	2 373	0.8%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>4 478</b>	<b>53.9%</b>	<b>10.7%</b>	<b>20.2%</b>	<b>40 937</b>	<b>37 877</b>	<b>8.1%</b>	<b>46 955</b>	<b>16.7%</b>
<b>Wind</b>	<b>1 604</b>	<b>53.7%</b>	<b>18.9%</b>	<b>7.2%</b>	<b>15 474</b>	<b>15 402</b>	<b>0.5%</b>	<b>20 054</b>	<b>7.1%</b>
<b>Solar</b>	<b>1 755</b>	<b>0.9%</b>	<b>-22.2%</b>	<b>7.9%</b>	<b>22 628</b>	<b>21 589</b>	<b>4.8%</b>	<b>23 313</b>	<b>8.3%</b>
<b>Geothermal</b>	<b>475</b>	<b>-1.0%</b>	<b>5.1%</b>	<b>2.1%</b>	<b>4 685</b>	<b>4 737</b>	<b>-1.1%</b>	<b>5 658</b>	<b>2.0%</b>
<b>Other Renewables</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Non-Specified</b>	<b>51</b>	<b>-</b>	<b>-</b>	<b>0.2%</b>	<b>510</b>	<b>510</b>	<b>-</b>	<b>612</b>	<b>0.2%</b>
<b>RENEWABLES</b>	<b>9 878</b>	<b>28.1%</b>	<b>1.9%</b>	<b>44.5%</b>	<b>99 391</b>	<b>94 795</b>	<b>4.8%</b>	<b>114 249</b>	<b>40.6%</b>
<b>NON-RENEWABLES</b>	<b>12 311</b>	<b>-18.1%</b>	<b>-16.6%</b>	<b>55.5%</b>	<b>127 517</b>	<b>141 815</b>	<b>-10.1%</b>	<b>167 490</b>	<b>59.4%</b>
<b>TOTAL NET PRODUCTION</b>	<b>22 189</b>	<b>-2.4%</b>	<b>-9.3%</b>		<b>226 908</b>	<b>236 609</b>	<b>-4.1%</b>	<b>281 738</b>	
+ Imports	4 305	2.9%	70.9%		31 363	36 425	-13.9%	43 980	
- Exports	175	-64.6%	-61.8%		6 655	4 811	38.3%	5 817	
<b>= ELECTRICITY SUPPLIED</b>	<b>26 319</b>	<b>-0.4%</b>	<b>-0.8%</b>		<b>251 615</b>	<b>268 224</b>	<b>-6.2%</b>	<b>319 901</b>	
- Used for pumped storage	277	4.9%	42.8%		2 109	1 940	8.7%	2 412	
- T&D Losses <sup>5</sup>	-	-	-		-	15 482	-	18 470	
<b>= ELECTRICITY CONSUMED</b>	<b>26 042</b>	<b>5.7%</b>	<b>-1.1%</b>		<b>249 506</b>	<b>250 802</b>	<b>-0.5%</b>	<b>299 020</b>	

<sup>1</sup> current month to month of last year change<sup>4</sup> estimated from annual data<sup>2</sup> month-to-month change<sup>5</sup> estimated<sup>3</sup> year-to-date compared to same period last year

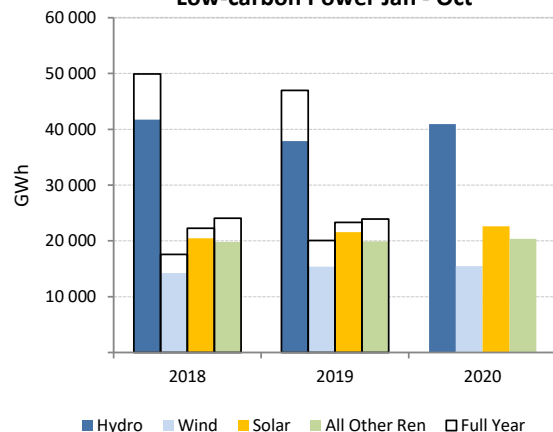
Electricity Production



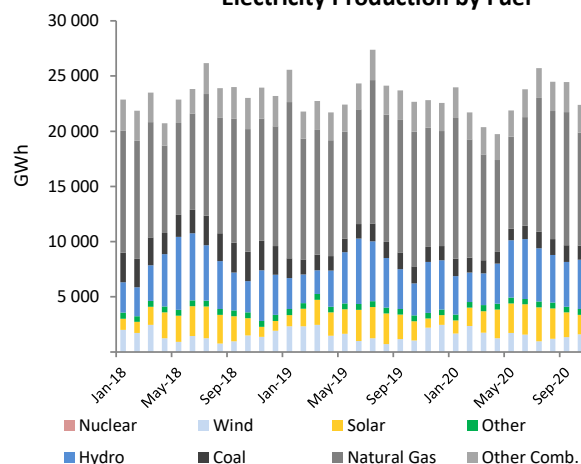
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

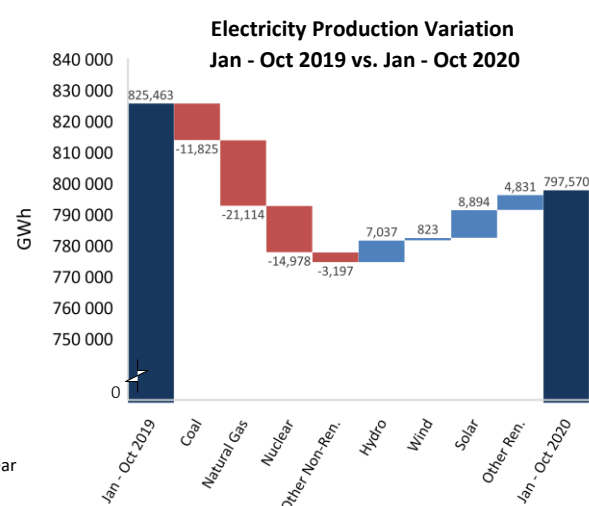
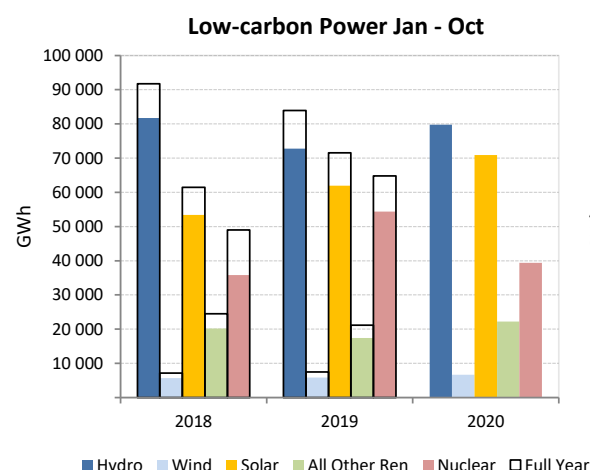
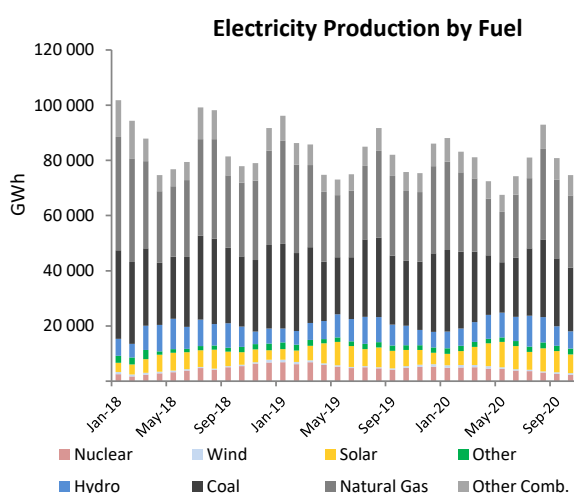
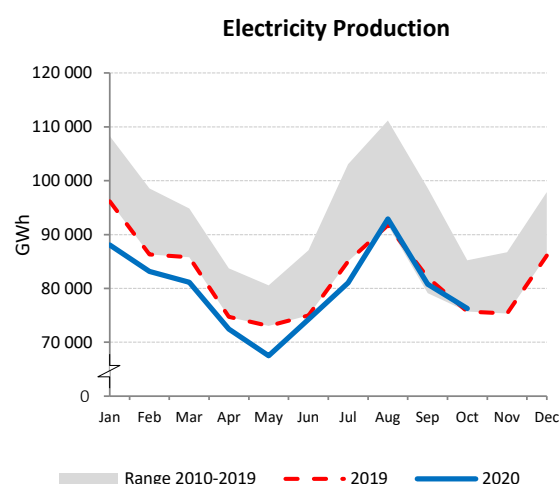


## JAPAN

	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>58 165</b>	<b>4.5%</b>	<b>-4.5%</b>	<b>76.3%</b>	<b>582 059</b>	<b>611 402</b>	<b>-4.8%</b>	<b>736 442</b>	<b>74.6%</b>
Coal	24 702	5.2%	0.4%	32.4%	246 122	256 312	-4.0%	309 566	31.4%
Oil	2 228	-31.0%	-16.7%	2.9%	29 236	41 813	-30.1%	49 739	5.0%
Natural Gas	26 113	3.1%	-8.6%	34.2%	261 753	282 867	-7.5%	339 604	34.4%
Combustible Renewables	2 228	35.6%	4.6%	2.9%	20 134	15 380	30.9%	18 703	1.9%
Other Combustibles	2 893	46.5%	-2.0%	3.8%	24 813	15 030	65.1%	18 829	1.9%
<b>Nuclear</b>	<b>2 294</b>	<b>-52.3%</b>	<b>-13.7%</b>	<b>3.0%</b>	<b>39 407</b>	<b>54 384</b>	<b>-27.5%</b>	<b>64 805</b>	<b>6.6%</b>
<b>Hydro</b>	<b>6 310</b>	<b>-10.9%</b>	<b>-10.4%</b>	<b>8.3%</b>	<b>79 819</b>	<b>72 782</b>	<b>9.7%</b>	<b>83 965</b>	<b>8.5%</b>
<b>Wind</b>	<b>653</b>	<b>7.3%</b>	<b>11.3%</b>	<b>0.9%</b>	<b>6 661</b>	<b>5 838</b>	<b>14.1%</b>	<b>7 481</b>	<b>0.8%</b>
<b>Solar</b>	<b>6 750</b>	<b>15.4%</b>	<b>-11.4%</b>	<b>8.9%</b>	<b>70 884</b>	<b>61 990</b>	<b>14.3%</b>	<b>71 534</b>	<b>7.2%</b>
<b>Geothermal</b>	<b>200</b>	<b>-4.6%</b>	<b>-4.8%</b>	<b>0.3%</b>	<b>2 085</b>	<b>2 008</b>	<b>3.8%</b>	<b>2 445</b>	<b>0.2%</b>
<b>Other Renewables</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Non-Specified</b>	<b>1 883</b>	<b>23.7%</b>	<b>8.5%</b>	<b>2.5%</b>	<b>16 656</b>	<b>17 059</b>	<b>-2.4%</b>	<b>20 245</b>	<b>2.1%</b>
<b>RENEWABLES</b>	<b>16 141</b>	<b>4.8%</b>	<b>-8.2%</b>	<b>21.2%</b>	<b>179 583</b>	<b>157 998</b>	<b>13.7%</b>	<b>184 128</b>	<b>18.7%</b>
<b>NON-RENEWABLES</b>	<b>60 114</b>	<b>-0.4%</b>	<b>-4.9%</b>	<b>78.8%</b>	<b>617 987</b>	<b>667 465</b>	<b>-7.4%</b>	<b>802 788</b>	<b>81.3%</b>
<b>TOTAL NET PRODUCTION</b>	<b>76 256</b>	<b>0.7%</b>	<b>-5.6%</b>		<b>797 570</b>	<b>825 463</b>	<b>-3.4%</b>	<b>986 916</b>	
+ Imports	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-
<b>= ELECTRICITY SUPPLIED</b>	<b>76 256</b>	<b>0.7%</b>	<b>-5.6%</b>		<b>797 570</b>	<b>825 463</b>	<b>-3.4%</b>	<b>986 916</b>	
- Used for pumped storage <sup>4</sup>	923	-1.1%	-6.5%		9 912	8 989	10.3%	10 554	
- T&D Losses <sup>4</sup>	3 459	1.4%	-5.0%		35 956	36 861	-2.5%	44 134	
<b>= ELECTRICITY CONSUMED</b>	<b>71 874</b>	<b>0.7%</b>	<b>-5.6%</b>		<b>751 702</b>	<b>779 614</b>	<b>-3.6%</b>	<b>932 228</b>	

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

October 2020 is estimated by the IEA Secretariat

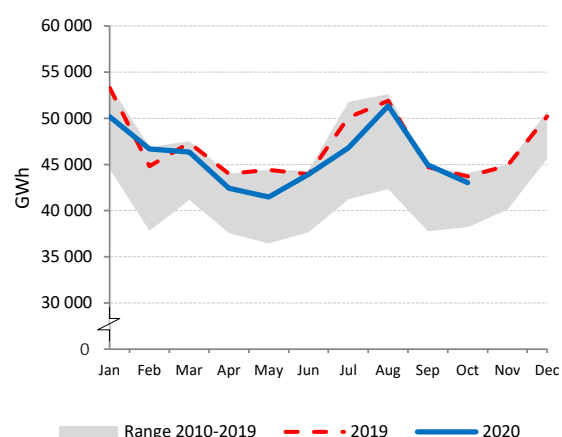
<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

## KOREA

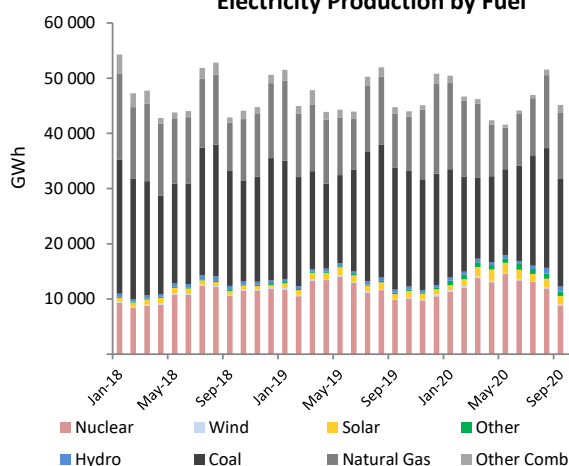
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>27 442</b>	<b>-12.8%</b>	<b>-16.1%</b>	<b>63.8%</b>	<b>300 077</b>	<b>328 884</b>	<b>-8.8%</b>	<b>399 842</b>	<b>71.0%</b>
Coal	15 223	-27.4%	-21.9%	35.4%	175 392	200 083	-12.0%	239 517	42.5%
Oil	257	-36.8%	-65.4%	0.6%	3 509	7 322	-52.1%	9 054	1.6%
Natural Gas	11 442	16.2%	-4.3%	26.6%	116 101	113 376	2.4%	142 204	25.2%
Combustible Renewables	471	-0.5%	-28.1%	1.1%	4 540	7 517	-39.6%	8 354	1.5%
Other Combustibles	49	-12.8%	-16.1%	0.1%	535	586	-8.8%	713	0.1%
<b>Nuclear</b>	<b>12 806</b>	<b>27.1%</b>	<b>44.9%</b>	<b>29.8%</b>	<b>124 628</b>	<b>118 439</b>	<b>5.2%</b>	<b>138 679</b>	<b>24.6%</b>
<b>Hydro</b>	<b>472</b>	<b>-12.5%</b>	<b>-46.3%</b>	<b>1.1%</b>	<b>6 313</b>	<b>5 257</b>	<b>20.1%</b>	<b>6 202</b>	<b>1.1%</b>
<b>Wind</b>	<b>232</b>	<b>3.1%</b>	<b>21.8%</b>	<b>0.5%</b>	<b>2 435</b>	<b>2 083</b>	<b>16.9%</b>	<b>2 679</b>	<b>0.5%</b>
<b>Solar</b>	<b>1 768</b>	<b>51.7%</b>	<b>15.0%</b>	<b>4.1%</b>	<b>15 552</b>	<b>11 162</b>	<b>39.3%</b>	<b>13 017</b>	<b>2.3%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	61	55.3%	5.5%	0.1%	511	396	28.8%	474	0.1%
Non-Specified	257	29.2%	-65.5%	0.6%	7 613	1 988	283.0%	2 385	0.4%
<b>RENEWABLES</b>	<b>3 004</b>	<b>23.0%</b>	<b>-9.5%</b>	<b>7.0%</b>	<b>29 351</b>	<b>26 415</b>	<b>11.1%</b>	<b>30 726</b>	<b>5.5%</b>
<b>NON-RENEWABLES</b>	<b>40 034</b>	<b>-3.0%</b>	<b>-3.8%</b>	<b>93.0%</b>	<b>427 778</b>	<b>441 794</b>	<b>-3.2%</b>	<b>532 552</b>	<b>94.5%</b>
<b>TOTAL NET PRODUCTION</b>	<b>43 038</b>	<b>-1.5%</b>	<b>-4.3%</b>		<b>457 129</b>	<b>468 209</b>	<b>-2.4%</b>	<b>563 278</b>	
+ Imports	-	-	-		-	-	-	-	
- Exports	-	-	-		-	-	-	-	
<b>= ELECTRICITY SUPPLIED</b>	<b>43 038</b>	<b>-1.5%</b>	<b>-4.3%</b>		<b>457 129</b>	<b>468 209</b>	<b>-2.4%</b>	<b>563 278</b>	
- Used for pumped storage <sup>4</sup>	321	-16.4%	-3.1%		3 622	3 838	-5.6%	4 588	
- T&D Losses <sup>4</sup>	1 452	-1.5%	-4.3%		15 420	15 794	-2.4%	19 000	
<b>= ELECTRICITY CONSUMED</b>	<b>41 265</b>	<b>-1.4%</b>	<b>-4.3%</b>		<b>438 088</b>	<b>448 577</b>	<b>-2.3%</b>	<b>539 690</b>	

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

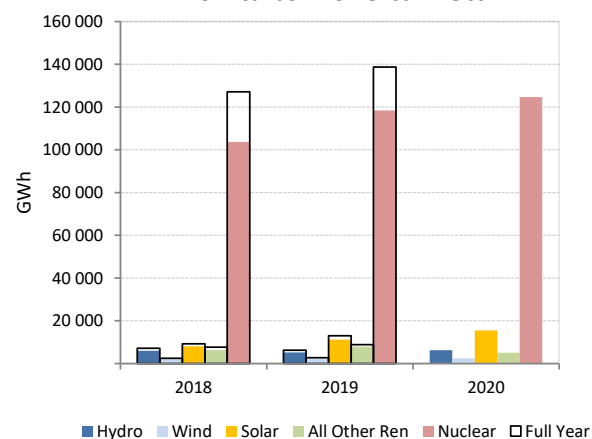
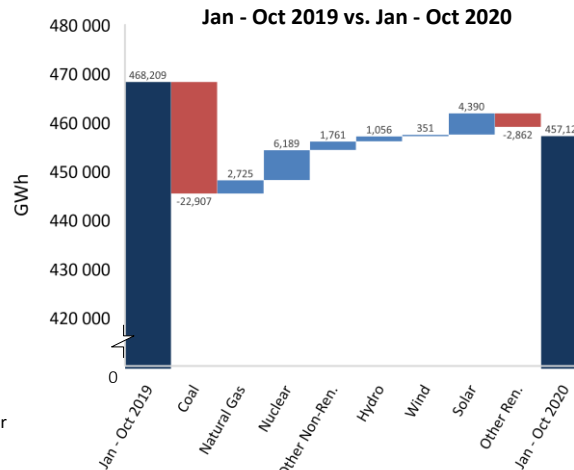
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Oct

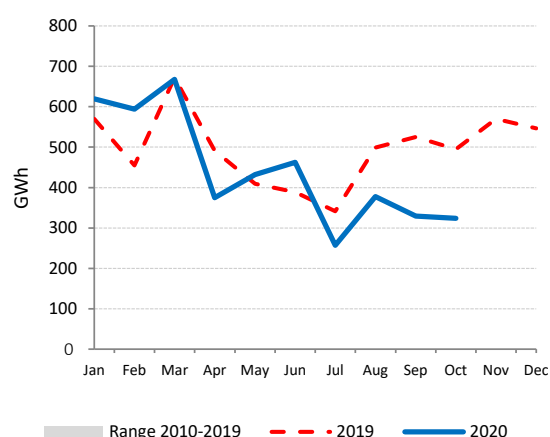
Electricity Production Variation  
Jan - Oct 2019 vs. Jan - Oct 2020

## LATVIA

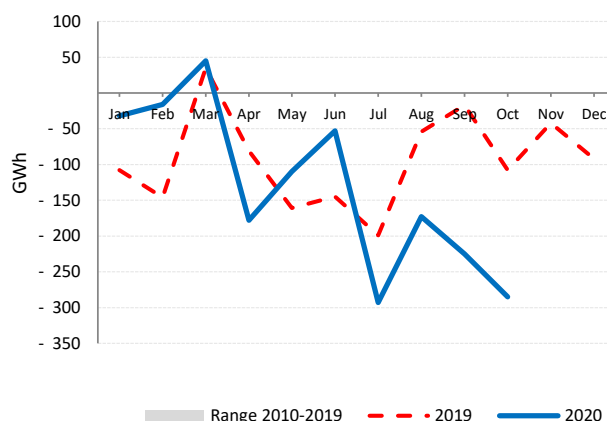
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>194</b>	<b>-40.7%</b>	<b>-5.3%</b>	<b>59.8%</b>	<b>2 030</b>	<b>3 172</b>	<b>-36.0%</b>	<b>3 711</b>	<b>62.2%</b>
Coal	0	-	-	-	0	0	-	0	0.0%
Oil	-	-	-	-	-	-	-	-	-
Natural Gas	134	-46.9%	-9.4%	41.3%	1 384	2 491	-44.5%	2 886	48.4%
Combustible Renewables	60	-20.0%	5.3%	18.6%	646	680	-5.0%	825	13.8%
Other Combustibles	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>116</b>	<b>-24.7%</b>	<b>5.5%</b>	<b>35.8%</b>	<b>2 261</b>	<b>1 550</b>	<b>45.9%</b>	<b>2 096</b>	<b>35.2%</b>
Wind	14	-	-	4.3%	144	121	19.0%	152	2.6%
Solar	0	-	-39.3%	0.1%	3	3	-	3	0.1%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>190</b>	<b>-21.8%</b>	<b>4.9%</b>	<b>58.7%</b>	<b>3 054</b>	<b>2 355</b>	<b>29.7%</b>	<b>3 076</b>	<b>51.6%</b>
<b>NON-RENEWABLES</b>	<b>134</b>	<b>-46.9%</b>	<b>-9.4%</b>	<b>41.3%</b>	<b>1 384</b>	<b>2 491</b>	<b>-44.5%</b>	<b>2 886</b>	<b>48.4%</b>
<b>TOTAL NET PRODUCTION</b>	<b>324</b>	<b>-34.5%</b>	<b>-1.5%</b>		<b>4 438</b>	<b>4 846</b>	<b>-8.4%</b>	<b>5 962</b>	
+ Imports	409	44.0%	-6.8%		3 592	4 028	-10.8%	4 611	
- Exports	124	-29.5%	-42.1%		2 272	3 044	-25.4%	3 493	
<b>= ELECTRICITY SUPPLIED</b>	<b>609</b>	<b>1.0%</b>	<b>9.9%</b>		<b>5 758</b>	<b>5 830</b>	<b>-1.2%</b>	<b>7 080</b>	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses <sup>4</sup>	30	-5.9%	-4.6%		325	359	-9.5%	427	
<b>= ELECTRICITY CONSUMED</b>	<b>579</b>	<b>1.4%</b>	<b>10.8%</b>		<b>5 433</b>	<b>5 471</b>	<b>-0.7%</b>	<b>6 653</b>	

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

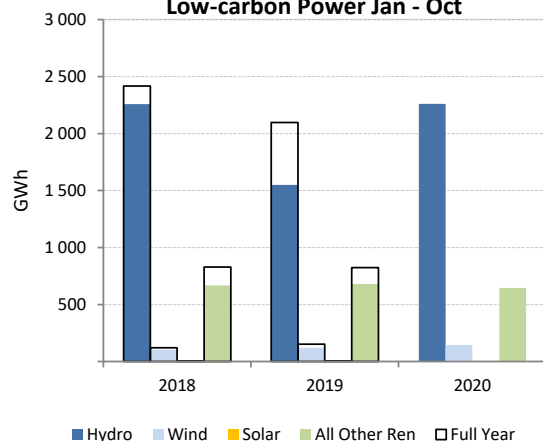
Electricity Production



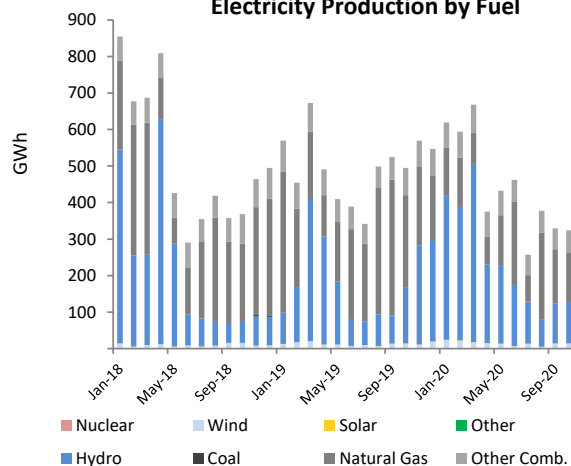
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

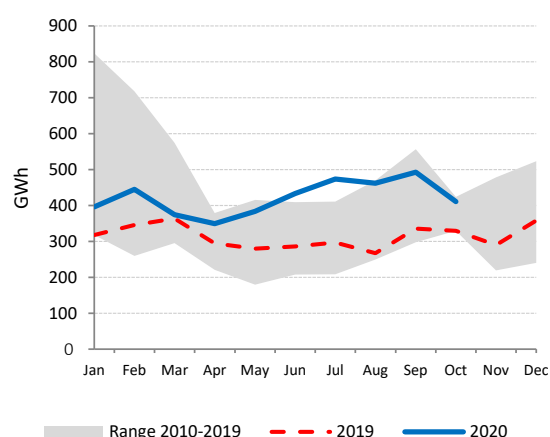


## LITHUANIA

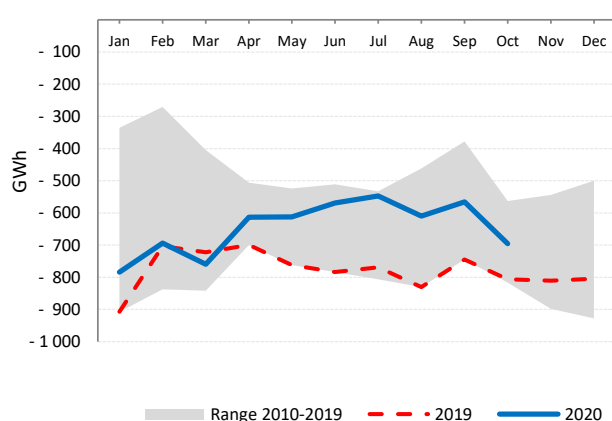
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>193</b>	<b>86.4%</b>	<b>-24.8%</b>	<b>47.1%</b>	<b>1 853</b>	<b>863</b>	<b>114.6%</b>	<b>1 050</b>	<b>27.9%</b>
Coal	-	-	-	-	-	-	-	-	-
Oil	4	-44.2%	-29.3%	1.0%	68	46	50.2%	59	1.6%
Natural Gas	142	189.4%	-31.9%	34.6%	1 295	394	228.6%	455	12.1%
Combustible Renewables	39	-9.2%	7.4%	9.4%	426	364	17.1%	463	12.3%
Other Combustibles	9	85.1%	24.8%	2.1%	63	60	5.5%	74	2.0%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>68</b>	<b>-15.5%</b>	<b>-21.8%</b>	<b>16.6%</b>	<b>875</b>	<b>807</b>	<b>8.3%</b>	<b>927</b>	<b>24.6%</b>
<b>Wind</b>	<b>129</b>	<b>5.7%</b>	<b>6.0%</b>	<b>31.4%</b>	<b>1 244</b>	<b>1 180</b>	<b>5.4%</b>	<b>1 490</b>	<b>39.6%</b>
<b>Solar</b>	<b>4</b>	<b>-18.3%</b>	<b>-59.5%</b>	<b>0.9%</b>	<b>81</b>	<b>82</b>	<b>-1.7%</b>	<b>84</b>	<b>2.2%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	17	-12.0%	-7.5%	4.1%	169	183	-7.8%	213	5.7%
<b>RENEWABLES</b>	<b>239</b>	<b>-4.1%</b>	<b>-5.6%</b>	<b>58.2%</b>	<b>2 626</b>	<b>2 434</b>	<b>7.9%</b>	<b>2 964</b>	<b>78.7%</b>
<b>NON-RENEWABLES</b>	<b>172</b>	<b>113.8%</b>	<b>-28.3%</b>	<b>41.8%</b>	<b>1 596</b>	<b>683</b>	<b>133.8%</b>	<b>801</b>	<b>21.3%</b>
<b>TOTAL NET PRODUCTION</b>	<b>411</b>	<b>24.6%</b>	<b>-16.6%</b>		<b>4 221</b>	<b>3 116</b>	<b>35.5%</b>	<b>3 765</b>	
+ Imports	918	-19.4%	-3.2%		9 930	10 986	-9.6%	13 268	
- Exports	223	-33.0%	-41.8%		3 480	3 257	6.8%	3 924	
<b>= ELECTRICITY SUPPLIED</b>	<b>1 106</b>	<b>-2.6%</b>	<b>4.5%</b>		<b>10 672</b>	<b>10 845</b>	<b>-1.6%</b>	<b>13 108</b>	
- Used for pumped storage	70	-12.2%	-30.4%		855	713	19.9%	810	
- T&D Losses	89	12.5%	51.8%		779	763	2.1%	886	
<b>= ELECTRICITY CONSUMED</b>	<b>948</b>	<b>-3.1%</b>	<b>5.3%</b>		<b>9 038</b>	<b>9 369</b>	<b>-3.5%</b>	<b>11 412</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

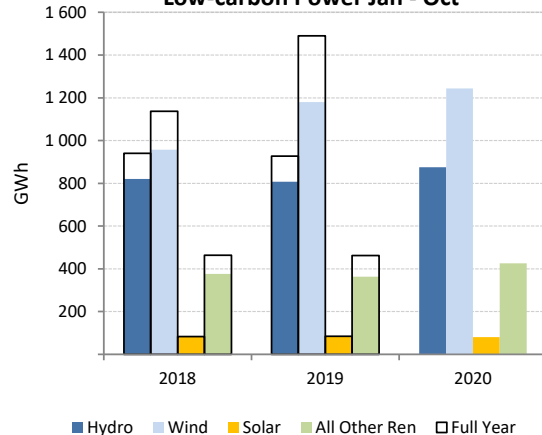
Electricity Production



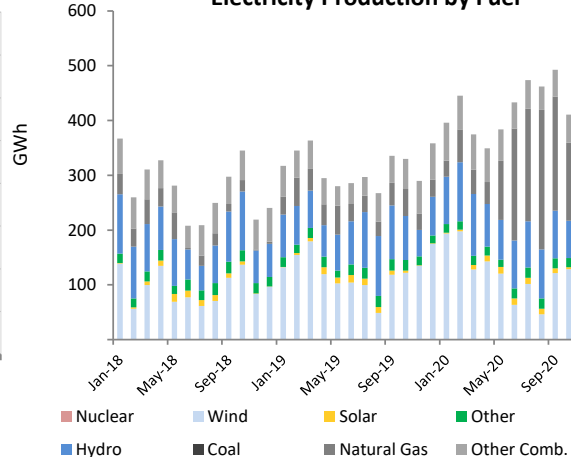
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

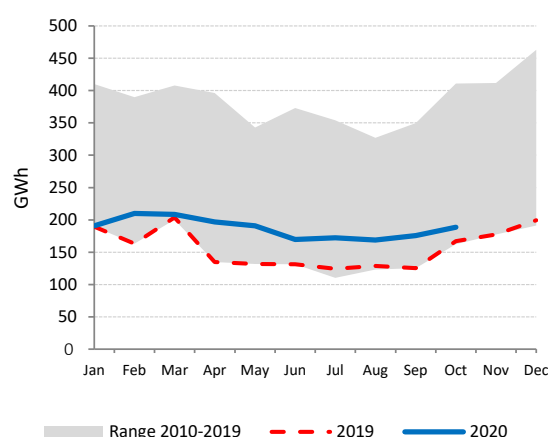


# LUXEMBOURG

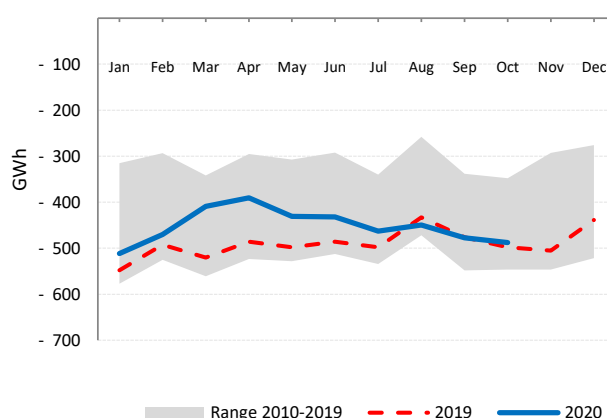
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>50</b>	<b>-0.7%</b>	<b>21.8%</b>	<b>26.5%</b>	<b>486</b>	<b>416</b>	<b>16.6%</b>	<b>528</b>	<b>28.1%</b>
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural Gas	13	-5.2%	43.0%	6.7%	127	147	-14.0%	185	9.8%
Combustible Renewables	34	11.8%	14.0%	18.0%	306	207	47.6%	268	14.3%
Other Combustibles	3	-49.0%	40.0%	1.8%	53	62	-14.5%	75	4.0%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>102</b>	<b>25.8%</b>	<b>4.5%</b>	<b>54.2%</b>	<b>923</b>	<b>737</b>	<b>25.2%</b>	<b>938</b>	<b>50.0%</b>
Wind	25	-15.2%	51.0%	13.4%	266	221	20.4%	281	15.0%
Solar	11	85.5%	-44.0%	6.0%	197	125	56.9%	130	6.9%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>172</b>	<b>17.1%</b>	<b>5.0%</b>	<b>91.5%</b>	<b>1 692</b>	<b>1 291</b>	<b>31.1%</b>	<b>1 617</b>	<b>86.2%</b>
<b>NON-RENEWABLES</b>	<b>16</b>	<b>-19.6%</b>	<b>42.4%</b>	<b>8.5%</b>	<b>179</b>	<b>209</b>	<b>-14.2%</b>	<b>260</b>	<b>13.8%</b>
<b>TOTAL NET PRODUCTION</b>	<b>188</b>	<b>12.8%</b>	<b>7.4%</b>		<b>1 872</b>	<b>1 500</b>	<b>24.8%</b>	<b>1 877</b>	
+ Imports	603	5.3%	2.2%		5 433	5 699	-4.7%	6 818	
- Exports	116	53.8%	2.6%		912	764	19.3%	939	
<b>= ELECTRICITY SUPPLIED</b>	<b>676</b>	<b>1.7%</b>	<b>3.6%</b>		<b>6 393</b>	<b>6 435</b>	<b>-0.7%</b>	<b>7 756</b>	
- Used for pumped storage	137	28.3%	4.6%		1 207	961	25.6%	1 203	
- T&D Losses	13	-3.5%	3.5%		123	130	-5.5%	156	
<b>= ELECTRICITY CONSUMED</b>	<b>526</b>	<b>-3.4%</b>	<b>3.3%</b>		<b>5 063</b>	<b>5 344</b>	<b>-5.3%</b>	<b>6 396</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

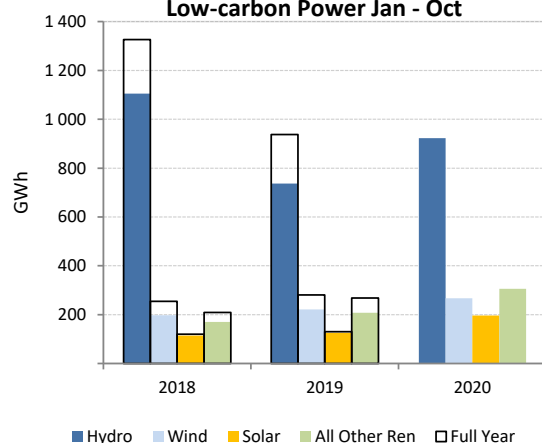
Electricity Production



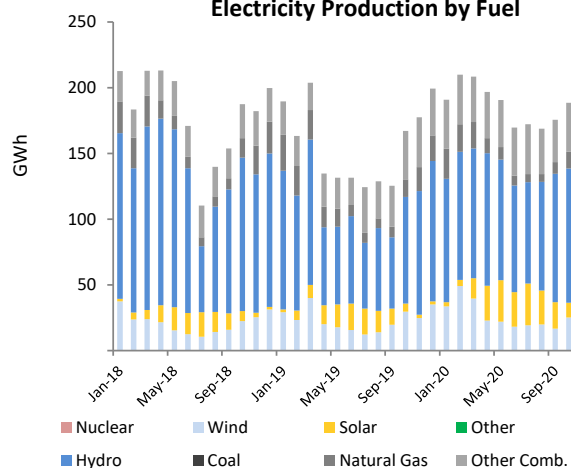
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

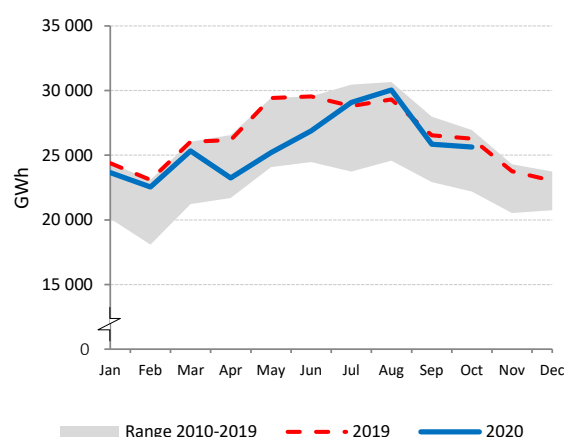


# MEXICO

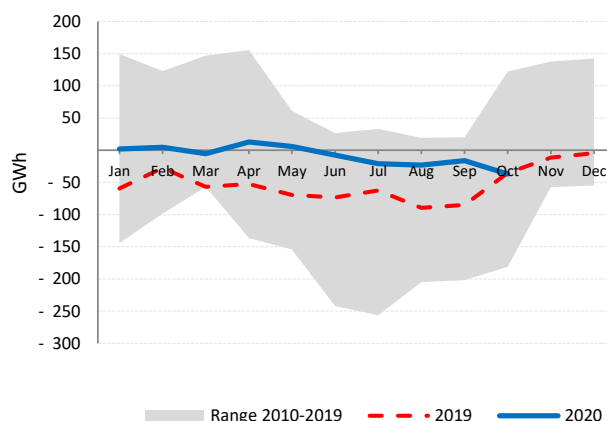
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>19 061</b>	<b>-11.3%</b>	<b>-4.2%</b>	<b>74.4%</b>	<b>195 839</b>	<b>216 366</b>	<b>-9.5%</b>	<b>252 920</b>	<b>79.9%</b>
Coal	1 128	-42.1%	6.8%	4.4%	13 985	25 178	-44.5%	28 131	8.9%
Oil <sup>4</sup>	2 593	-8.2%	-4.8%	10.1%	26 295	27 645	-4.9%	32 503	10.3%
Natural Gas <sup>4</sup>	15 113	-8.2%	-4.8%	59.0%	153 257	161 123	-4.9%	189 440	59.9%
Combustible Renewables <sup>4</sup>	189	-8.2%	-4.8%	0.7%	1 918	2 016	-4.9%	2 371	0.7%
Other Combustibles <sup>4</sup>	38	-8.2%	-4.8%	0.1%	384	403	-4.9%	474	0.1%
<b>Nuclear</b>	<b>1 010</b>	<b>-6.0%</b>	<b>96.6%</b>	<b>3.9%</b>	<b>9 806</b>	<b>8 925</b>	<b>9.9%</b>	<b>11 111</b>	<b>3.5%</b>
<b>Hydro</b>	<b>2 475</b>	<b>61.4%</b>	<b>-17.3%</b>	<b>9.7%</b>	<b>23 305</b>	<b>20 912</b>	<b>11.4%</b>	<b>23 713</b>	<b>7.5%</b>
<b>Wind</b>	<b>1 707</b>	<b>51.3%</b>	<b>38.4%</b>	<b>6.7%</b>	<b>15 588</b>	<b>13 422</b>	<b>16.1%</b>	<b>16 763</b>	<b>5.3%</b>
<b>Solar</b>	<b>1 017</b>	<b>61.3%</b>	<b>16.9%</b>	<b>4.0%</b>	<b>8 855</b>	<b>5 460</b>	<b>62.2%</b>	<b>6 544</b>	<b>2.1%</b>
<b>Geothermal</b>	<b>362</b>	<b>-14.2%</b>	<b>1.9%</b>	<b>1.4%</b>	<b>4 087</b>	<b>4 509</b>	<b>-9.4%</b>	<b>5 330</b>	<b>1.7%</b>
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>5 749</b>	<b>46.7%</b>	<b>1.7%</b>	<b>22.4%</b>	<b>53 753</b>	<b>46 320</b>	<b>16.0%</b>	<b>54 720</b>	<b>17.3%</b>
<b>NON-RENEWABLES</b>	<b>19 881</b>	<b>-11.1%</b>	<b>-1.6%</b>	<b>77.6%</b>	<b>203 727</b>	<b>223 275</b>	<b>-8.8%</b>	<b>261 660</b>	<b>82.7%</b>
<b>TOTAL NET PRODUCTION</b>	<b>25 630</b>	<b>-2.4%</b>	<b>-0.9%</b>		<b>257 480</b>	<b>269 595</b>	<b>-4.5%</b>	<b>316 381</b>	
+ Imports	88	41.6%	105.1%		434	1 514	-71.3%	1 590	
- Exports	51	91.7%	91.8%		349	903	-61.4%	963	
<b>= ELECTRICITY SUPPLIED</b>	<b>25 667</b>	<b>-2.4%</b>	<b>-0.8%</b>		<b>257 565</b>	<b>270 206</b>	<b>-4.7%</b>	<b>317 008</b>	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses <sup>5</sup>	3 528	-2.3%	-0.7%		35 380	37 191	-4.9%	43 619	
<b>= ELECTRICITY CONSUMED</b>	<b>22 139</b>	<b>-2.5%</b>	<b>-0.8%</b>		<b>222 185</b>	<b>233 016</b>	<b>-4.6%</b>	<b>273 389</b>	

<sup>1</sup> current month to month of last year change<sup>4</sup> estimated from annual data<sup>2</sup> month-to-month change<sup>5</sup> estimated<sup>3</sup> year-to-date compared to same period last year

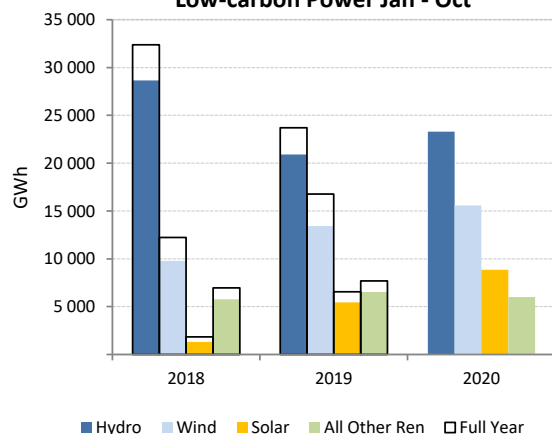
Electricity Production



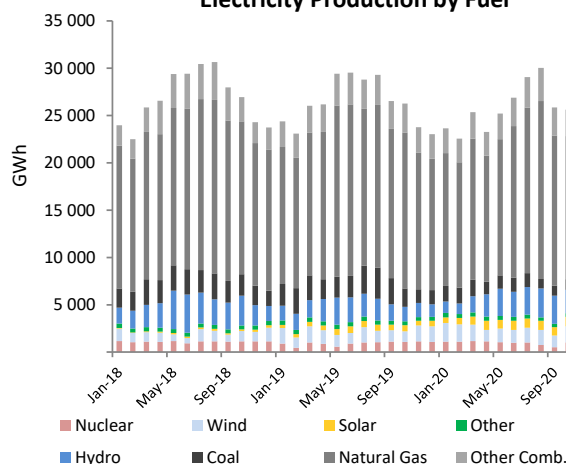
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

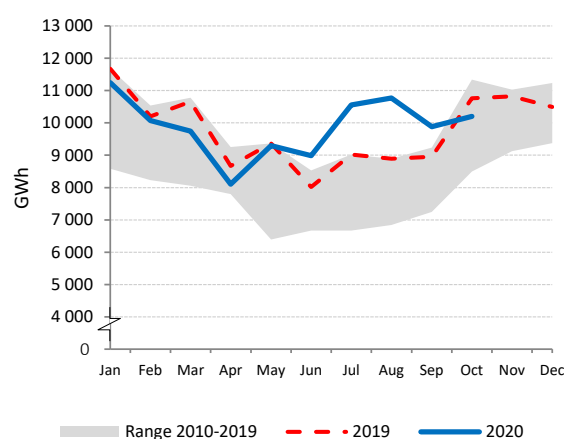


# NETHERLANDS

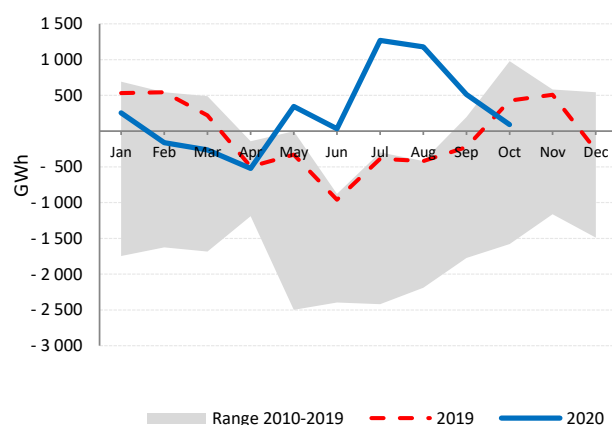
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>7 524</b>	<b>-16.2%</b>	<b>-3.1%</b>	<b>73.7%</b>	<b>75 411</b>	<b>78 627</b>	<b>-4.1%</b>	<b>96 489</b>	<b>82.1%</b>
Coal	1 095	-32.2%	-4.9%	10.7%	7 427	15 016	-50.5%	19 274	16.4%
Oil	84	-44.7%	9.2%	0.8%	1 021	1 118	-8.7%	1 353	1.2%
Natural Gas	5 373	-19.9%	-4.5%	52.6%	58 165	57 106	1.9%	68 634	58.4%
Combustible Renewables	798	112.8%	9.3%	7.8%	6 954	3 910	77.9%	5 413	4.6%
Other Combustibles	174	33.1%	-1.2%	1.7%	1 844	1 476	24.9%	1 815	1.5%
<b>Nuclear</b>	<b>359</b>	<b>0.0%</b>	<b>5.1%</b>	<b>3.5%</b>	<b>3 248</b>	<b>3 032</b>	<b>7.1%</b>	<b>3 749</b>	<b>3.2%</b>
<b>Hydro</b>	<b>3</b>	<b>-44.4%</b>	<b>297.3%</b>	<b>0.0%</b>	<b>37</b>	<b>58</b>	<b>-36.3%</b>	<b>74</b>	<b>0.1%</b>
<b>Wind</b>	<b>1 937</b>	<b>73.7%</b>	<b>98.7%</b>	<b>19.0%</b>	<b>11 950</b>	<b>9 125</b>	<b>31.0%</b>	<b>11 508</b>	<b>9.8%</b>
<b>Solar</b>	<b>337</b>	<b>32.0%</b>	<b>-55.6%</b>	<b>3.3%</b>	<b>7 760</b>	<b>4 912</b>	<b>58.0%</b>	<b>5 159</b>	<b>4.4%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
<b>Non-Specified</b>	<b>46</b>	<b>-</b>	<b>-</b>	<b>0.4%</b>	<b>456</b>	<b>456</b>	<b>-</b>	<b>547</b>	<b>0.5%</b>
<b>RENEWABLES</b>	<b>3 075</b>	<b>75.7%</b>	<b>24.7%</b>	<b>30.1%</b>	<b>26 701</b>	<b>18 005</b>	<b>48.3%</b>	<b>22 155</b>	<b>18.9%</b>
<b>NON-RENEWABLES</b>	<b>7 130</b>	<b>-20.9%</b>	<b>-3.9%</b>	<b>69.9%</b>	<b>72 161</b>	<b>78 205</b>	<b>-7.7%</b>	<b>95 371</b>	<b>81.1%</b>
<b>TOTAL NET PRODUCTION</b>	<b>10 205</b>	<b>-5.2%</b>	<b>3.2%</b>		<b>98 862</b>	<b>96 210</b>	<b>2.8%</b>	<b>117 526</b>	
+ Imports	1 841	46.8%	29.0%		16 255	16 971	-4.2%	20 403	
- Exports	1 930	15.0%	-0.4%		18 987	15 873	19.6%	19 548	
<b>= ELECTRICITY SUPPLIED</b>	<b>10 116</b>	<b>-2.1%</b>	<b>7.9%</b>		<b>96 131</b>	<b>97 308</b>	<b>-1.2%</b>	<b>118 381</b>	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses <sup>4</sup>	435	-5.2%	8.7%		4 192	4 431	-5.4%	5 394	
<b>= ELECTRICITY CONSUMED</b>	<b>9 681</b>	<b>-2.0%</b>	<b>7.9%</b>		<b>91 939</b>	<b>92 877</b>	<b>-1.0%</b>	<b>112 987</b>	

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

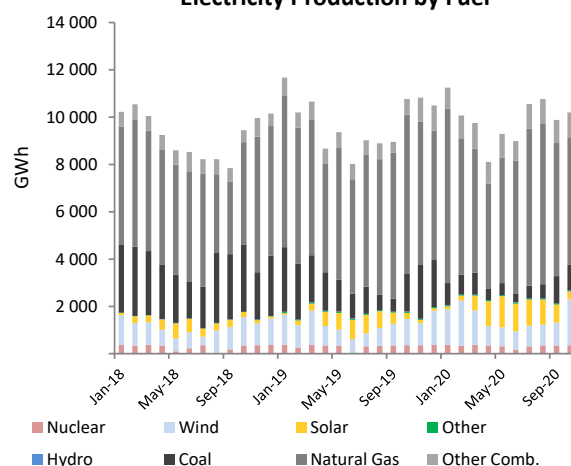
Electricity Production



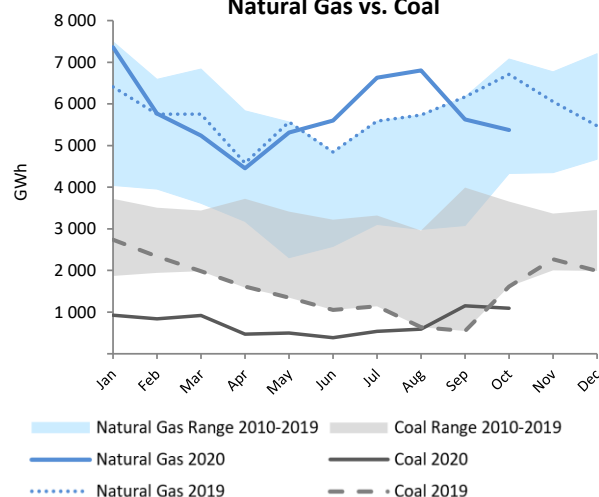
Net Electricity Exports



Electricity Production by Fuel



Natural Gas vs. Coal



## NEW ZEALAND

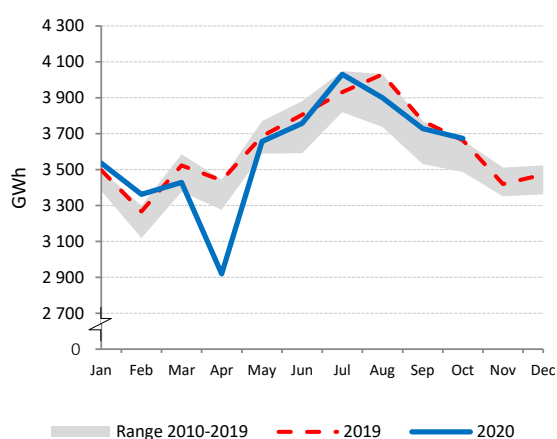
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>911</b>	<b>19.8%</b>	<b>-1.4%</b>	<b>24.8%</b>	<b>7 933</b>	<b>7 313</b>	<b>8.5%</b>	<b>8 192</b>	<b>18.8%</b>
Coal	291	19.2%	-1.5%	7.9%	1 988	1 928	4.4%	2 122	4.9%
Oil	-	-	-	-	-	-	-	-	-
Natural Gas	473	2.3%	-16.1%	12.9%	5 351	4 899	9.2%	5 495	12.6%
Combustible Renewables	147	206.7%	173.5%	4.0%	594	486	22.1%	575	1.3%
Other Combustibles	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>1 869</b>	<b>-6.9%</b>	<b>-2.1%</b>	<b>50.9%</b>	<b>19 605</b>	<b>20 888</b>	<b>-6.1%</b>	<b>25 321</b>	<b>58.2%</b>
Wind	248	11.7%	-0.7%	6.7%	1 912	1 822	5.0%	2 232	5.1%
Solar	13	9.3%	5.8%	0.3%	110	103	7.0%	126	0.3%
Geothermal	630	-4.2%	-0.4%	17.1%	6 428	6 448	-0.3%	7 586	17.4%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	4	-	-	0.1%	4	38	-90.0%	45	0.1%
<b>RENEWABLES</b>	<b>2 906</b>	<b>-1.3%</b>	<b>1.7%</b>	<b>79.1%</b>	<b>28 649</b>	<b>29 747</b>	<b>-3.7%</b>	<b>35 840</b>	<b>82.4%</b>
<b>NON-RENEWABLES</b>	<b>768</b>	<b>7.1%</b>	<b>-11.8%</b>	<b>20.9%</b>	<b>7 343</b>	<b>6 864</b>	<b>7.0%</b>	<b>7 663</b>	<b>17.6%</b>
<b>TOTAL NET PRODUCTION</b>	<b>3 674</b>	<b>0.3%</b>	<b>-1.4%</b>		<b>35 992</b>	<b>36 611</b>	<b>-1.7%</b>	<b>43 503</b>	
+ Imports	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-
<b>= ELECTRICITY SUPPLIED</b>	<b>3 674</b>	<b>0.3%</b>	<b>-1.4%</b>		<b>35 992</b>	<b>36 611</b>	<b>-1.7%</b>	<b>43 503</b>	
- Used for pumped storage	-	-	-	-	-	-	-	-	-
- T&D Losses	210	-15.1%	-8.3%		2 285	2 458	-7.0%	2 951	
<b>= ELECTRICITY CONSUMED</b>	<b>3 464</b>	<b>1.4%</b>	<b>-1.0%</b>		<b>33 707</b>	<b>34 154</b>	<b>-1.3%</b>	<b>40 552</b>	

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

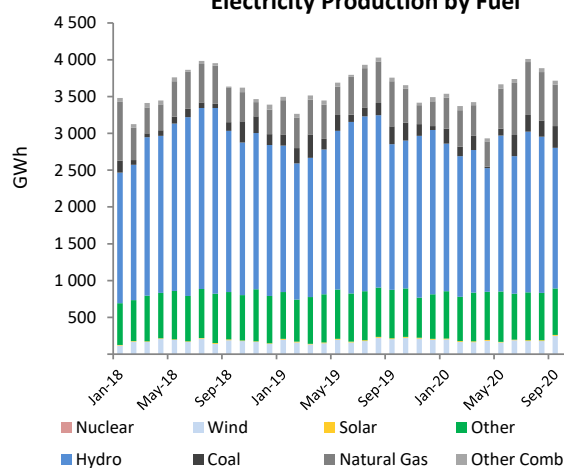
October 2020 is estimated by the IEA Secretariat

<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

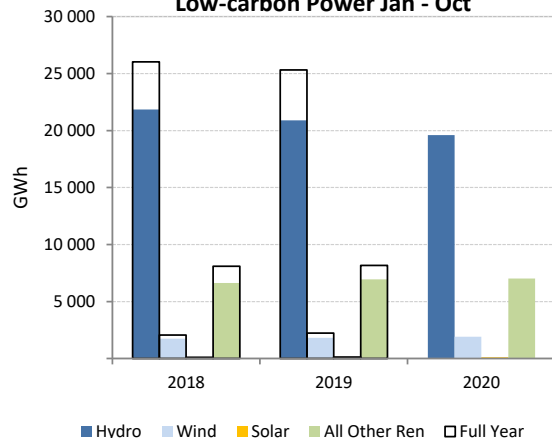
### Electricity Production



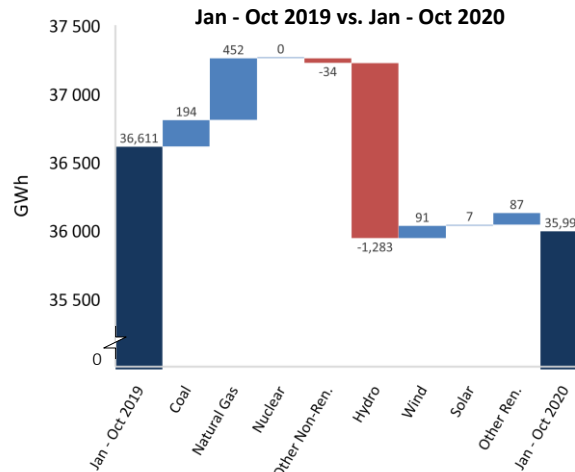
### Electricity Production by Fuel



### Low-carbon Power Jan - Oct

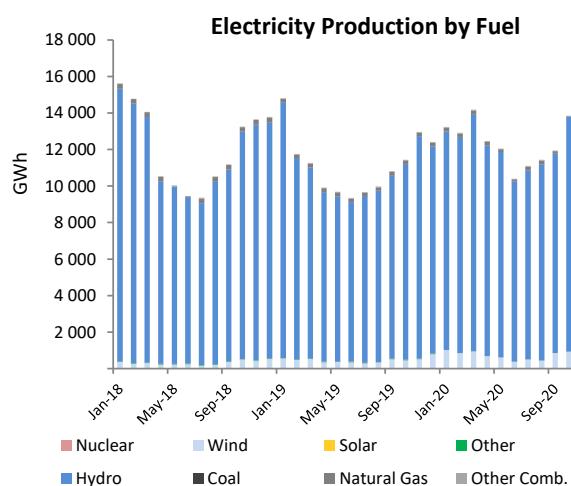
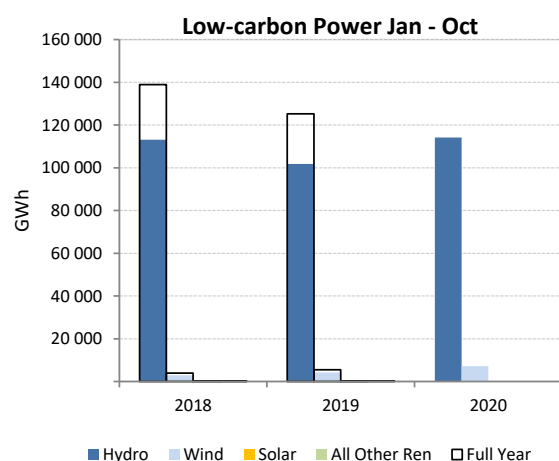
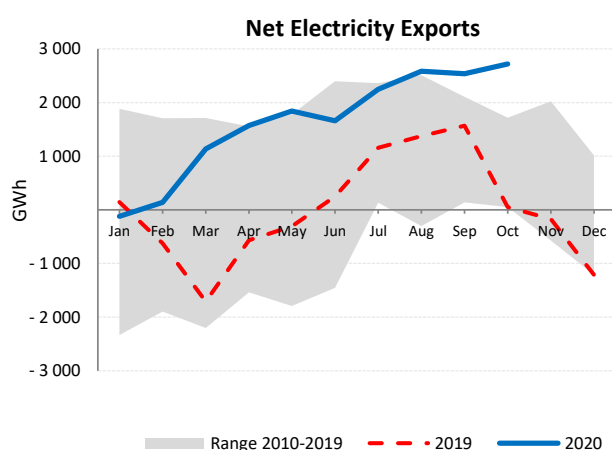
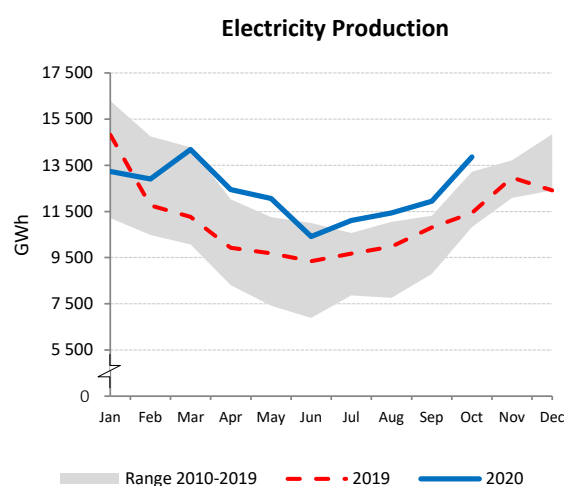


### Electricity Production Variation Jan - Oct 2019 vs. Jan - Oct 2020



## NORWAY

	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>77</b>	<b>-68.3%</b>	<b>-56.9%</b>	<b>0.6%</b>	<b>2 158</b>	<b>2 443</b>	<b>-11.7%</b>	<b>2 943</b>	<b>2.2%</b>
Coal <sup>4</sup>	20	51.0%	105.4%	0.1%	119	135	-11.7%	162	0.1%
Oil <sup>4</sup>	0	-68.3%	-56.8%	0.0%	13	14	-11.7%	17	0.0%
Natural Gas	24	-87.8%	-82.0%	0.2%	1 625	1 919	-15.3%	2 317	1.7%
Combustible Renewables	19	-11.2%	19.8%	0.1%	209	202	3.6%	241	0.2%
Other Combustibles	13	-9.1%	-7.5%	0.1%	164	171	-4.3%	205	0.2%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>12 858</b>	<b>20.0%</b>	<b>17.9%</b>	<b>92.8%</b>	<b>114 214</b>	<b>101 735</b>	<b>12.3%</b>	<b>125 243</b>	<b>93.4%</b>
<b>Wind</b>	<b>923</b>	<b>103.0%</b>	<b>7.5%</b>	<b>6.7%</b>	<b>7 211</b>	<b>4 226</b>	<b>70.7%</b>	<b>5 535</b>	<b>4.1%</b>
<b>Solar</b>	<b>1</b>	<b>-</b>	<b>-33.7%</b>	<b>0.0%</b>	<b>12</b>	<b>12</b>	<b>-</b>	<b>13</b>	<b>0.0%</b>
<b>Geothermal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Other Renewables</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Non-Specified</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>274</b>	<b>-</b>	<b>328</b>	<b>0.2%</b>
<b>RENEWABLES</b>	<b>13 801</b>	<b>23.3%</b>	<b>17.2%</b>	<b>99.6%</b>	<b>121 647</b>	<b>106 175</b>	<b>14.6%</b>	<b>131 033</b>	<b>97.7%</b>
<b>NON-RENEWABLES</b>	<b>57</b>	<b>-76.8%</b>	<b>-64.5%</b>	<b>0.4%</b>	<b>1 920</b>	<b>2 512</b>	<b>-23.6%</b>	<b>3 030</b>	<b>2.3%</b>
<b>TOTAL NET PRODUCTION</b>	<b>13 858</b>	<b>21.2%</b>	<b>16.1%</b>		<b>123 567</b>	<b>108 687</b>	<b>13.7%</b>	<b>134 062</b>	
+ Imports	165	-78.7%	739.5%		3 623	9 359	-61.3%	12 353	
- Exports	2 884	249.3%	12.8%		19 947	10 698	86.5%	12 309	
<b>= ELECTRICITY SUPPLIED</b>	<b>11 139</b>	<b>-2.1%</b>	<b>18.5%</b>		<b>107 243</b>	<b>107 349</b>	<b>-0.1%</b>	<b>134 106</b>	
- Used for pumped storage	43	-8.5%	26.7%		1 056	1 235	-14.5%	1 262	
- T&D Losses	941	20.7%	15.5%		8 427	7 402	13.9%	9 109	
<b>= ELECTRICITY CONSUMED</b>	<b>10 155</b>	<b>-3.8%</b>	<b>18.7%</b>		<b>97 759</b>	<b>98 711</b>	<b>-1.0%</b>	<b>123 734</b>	

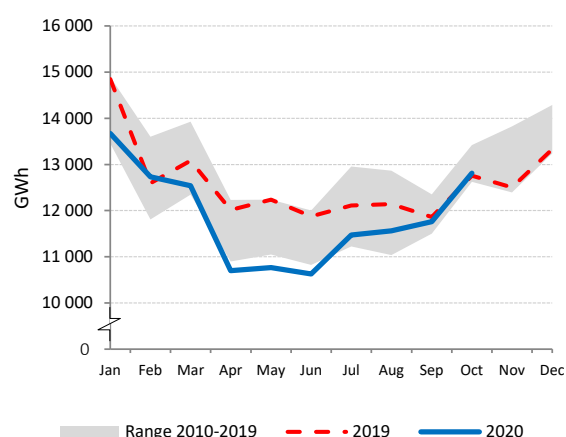
<sup>1</sup> current month to month of last year change<sup>4</sup> estimated from annual data<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

# POLAND

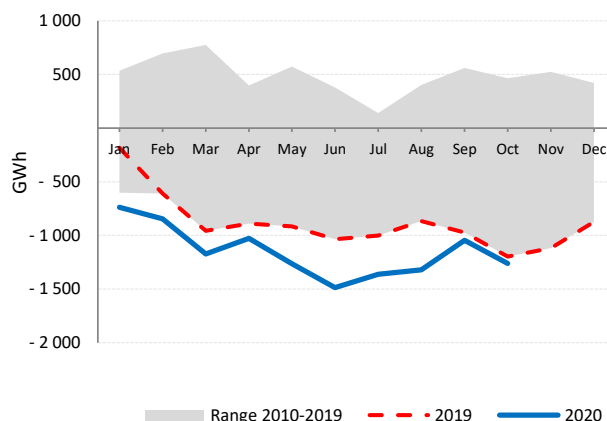
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>11 082</b>	<b>-2.5%</b>	<b>6.3%</b>	<b>86.5%</b>	<b>101 905</b>	<b>110 786</b>	<b>-8.0%</b>	<b>133 026</b>	<b>87.9%</b>
Coal	8 946	-5.1%	5.3%	69.8%	81 950	93 836	-11.4%	110 300	72.9%
Oil <sup>4</sup>	-	-	-	-	-	-	-	1 620	1.1%
Natural Gas	1 273	12.3%	10.2%	9.9%	11 765	10 793	9.0%	13 550	9.0%
Combustible Renewables	679	7.2%	11.5%	5.3%	6 260	5 715	9.5%	7 035	4.6%
Other Combustibles	184	258.1%	14.1%	1.4%	1 929	442	336.5%	520	0.3%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>288</b>	<b>83.5%</b>	<b>63.8%</b>	<b>2.2%</b>	<b>2 377</b>	<b>2 232</b>	<b>6.5%</b>	<b>2 637</b>	<b>1.7%</b>
<b>Wind</b>	<b>1 309</b>	<b>13.4%</b>	<b>43.7%</b>	<b>10.2%</b>	<b>12 349</b>	<b>11 662</b>	<b>5.9%</b>	<b>14 761</b>	<b>9.8%</b>
<b>Solar</b>	<b>113</b>	<b>85.2%</b>	<b>-51.3%</b>	<b>0.9%</b>	<b>1 824</b>	<b>660</b>	<b>176.4%</b>	<b>711</b>	<b>0.5%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	19	-	-	0.1%	191	191	-	229	0.2%
<b>RENEWABLES</b>	<b>2 389</b>	<b>19.1%</b>	<b>23.9%</b>	<b>18.7%</b>	<b>22 810</b>	<b>20 269</b>	<b>12.5%</b>	<b>25 144</b>	<b>16.6%</b>
<b>NON-RENEWABLES</b>	<b>10 422</b>	<b>-3.1%</b>	<b>6.0%</b>	<b>81.3%</b>	<b>95 835</b>	<b>105 262</b>	<b>-9.0%</b>	<b>126 219</b>	<b>83.4%</b>
<b>TOTAL NET PRODUCTION</b>	<b>12 811</b>	<b>0.4%</b>	<b>8.9%</b>		<b>118 645</b>	<b>125 531</b>	<b>-5.5%</b>	<b>151 363</b>	
+ Imports	1 713	-1.7%	20.0%		17 242	14 733	17.0%	17 868	
- Exports	453	-17.0%	18.3%		5 718	6 103	-6.3%	7 245	
<b>= ELECTRICITY SUPPLIED</b>	<b>14 071</b>	<b>0.8%</b>	<b>9.9%</b>		<b>130 169</b>	<b>134 161</b>	<b>-3.0%</b>	<b>161 986</b>	
- Used for pumped storage	106	27.4%	32.7%		892	799	11.6%	1 033	
- T&D Losses	1 013	6.8%	38.8%		8 921	7 084	25.9%	8 951	
<b>= ELECTRICITY CONSUMED</b>	<b>12 953</b>	<b>0.2%</b>	<b>7.9%</b>		<b>120 356</b>	<b>126 278</b>	<b>-4.7%</b>	<b>152 002</b>	

<sup>1</sup> current month to month of last year change<sup>4</sup> monthly figures are confidential<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

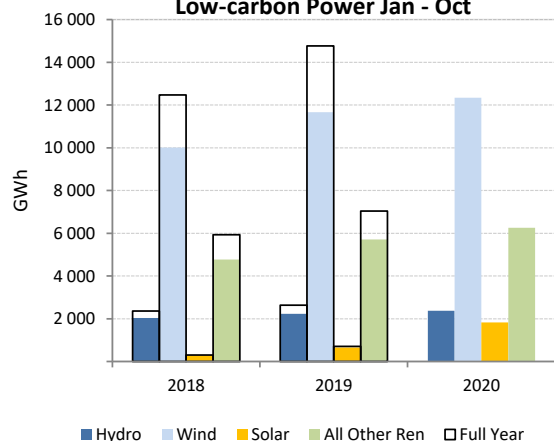
Electricity Production



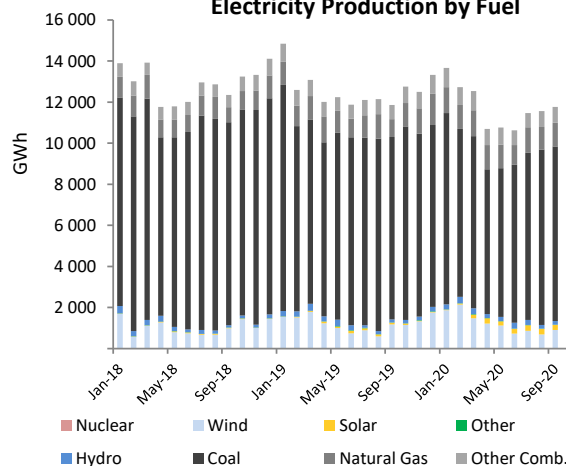
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

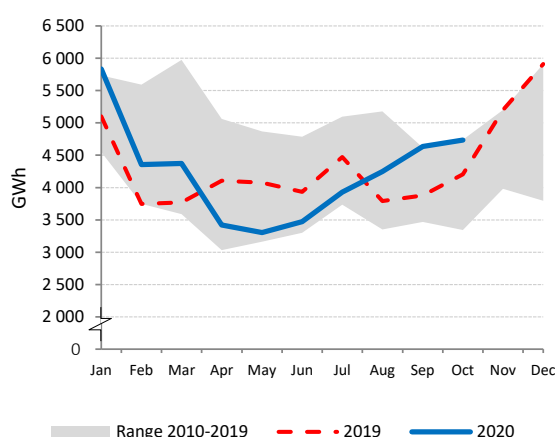


# PORTUGAL

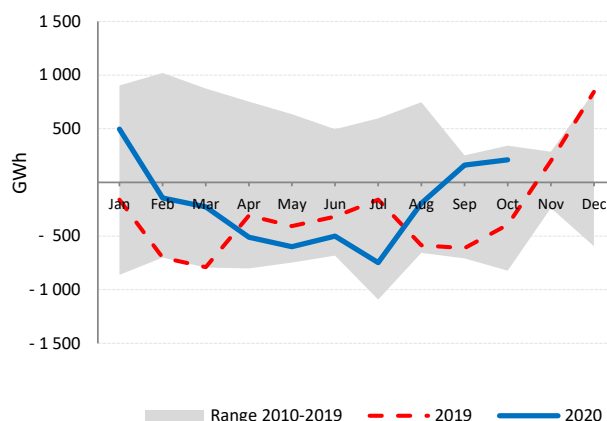
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>2 367</b>	<b>-4.6%</b>	<b>-21.8%</b>	<b>50.0%</b>	<b>20 130</b>	<b>22 901</b>	<b>-12.1%</b>	<b>26 902</b>	<b>51.6%</b>
Coal	244	-21.0%	-58.2%	5.1%	1 445	5 000	-71.1%	5 376	10.3%
Oil	124	10.3%	8.4%	2.6%	1 018	998	2.0%	1 218	2.3%
Natural Gas	1 666	-4.6%	-16.6%	35.2%	14 526	13 971	4.0%	16 774	32.1%
Combustible Renewables	318	9.5%	3.0%	6.7%	2 926	2 698	8.5%	3 268	6.3%
Other Combustibles	15	-33.2%	-34.0%	0.3%	215	233	-7.9%	267	0.5%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>995</b>	<b>81.6%</b>	<b>49.2%</b>	<b>21.0%</b>	<b>11 037</b>	<b>6 692</b>	<b>64.9%</b>	<b>10 175</b>	<b>19.5%</b>
<b>Wind</b>	<b>1 220</b>	<b>15.3%</b>	<b>58.9%</b>	<b>25.8%</b>	<b>9 446</b>	<b>10 107</b>	<b>-6.5%</b>	<b>13 576</b>	<b>26.0%</b>
<b>Solar</b>	<b>140</b>	<b>39.5%</b>	<b>-10.8%</b>	<b>3.0%</b>	<b>1 526</b>	<b>1 212</b>	<b>26.0%</b>	<b>1 341</b>	<b>2.6%</b>
<b>Geothermal</b>	<b>12</b>	<b>-22.7%</b>	<b>-23.6%</b>	<b>0.3%</b>	<b>161</b>	<b>163</b>	<b>-1.1%</b>	<b>192</b>	<b>0.4%</b>
<b>Other Renewables</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Non-Specified</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>RENEWABLES</b>	<b>2 686</b>	<b>33.4%</b>	<b>40.1%</b>	<b>56.7%</b>	<b>25 097</b>	<b>20 871</b>	<b>20.2%</b>	<b>28 551</b>	<b>54.7%</b>
<b>NON-RENEWABLES</b>	<b>2 049</b>	<b>-6.5%</b>	<b>-24.6%</b>	<b>43.3%</b>	<b>17 204</b>	<b>20 203</b>	<b>-14.8%</b>	<b>23 634</b>	<b>45.3%</b>
<b>TOTAL NET PRODUCTION</b>	<b>4 735</b>	<b>12.6%</b>	<b>2.2%</b>		<b>42 301</b>	<b>41 074</b>	<b>3.0%</b>	<b>52 185</b>	
+ Imports	451	-36.4%	6.4%		6 647	7 223	-8.0%	8 099	
- Exports	661	110.2%	13.1%		4 587	2 779	65.1%	4 700	
<b>= ELECTRICITY SUPPLIED</b>	<b>4 524</b>	<b>-1.6%</b>	<b>1.1%</b>		<b>44 361</b>	<b>45 517</b>	<b>-2.5%</b>	<b>55 584</b>	
- Used for pumped storage	170	9.6%	23.0%		1 662	1 357	22.5%	1 827	
- T&D Losses	435	6.4%	1.0%		4 278	4 062	5.3%	4 948	
<b>= ELECTRICITY CONSUMED</b>	<b>3 920</b>	<b>-2.8%</b>	<b>0.4%</b>		<b>38 421</b>	<b>40 098</b>	<b>-4.2%</b>	<b>48 810</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

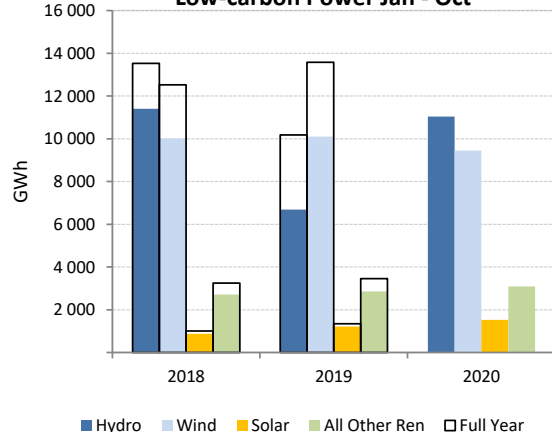
Electricity Production



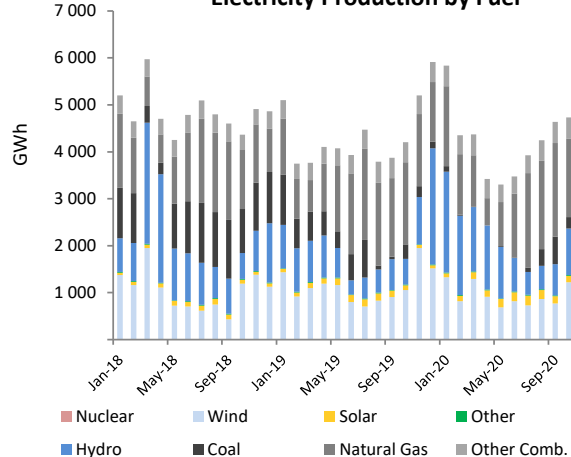
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

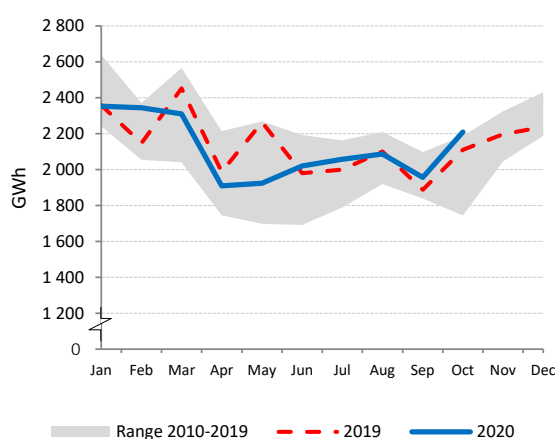


## SLOVAK REPUBLIC

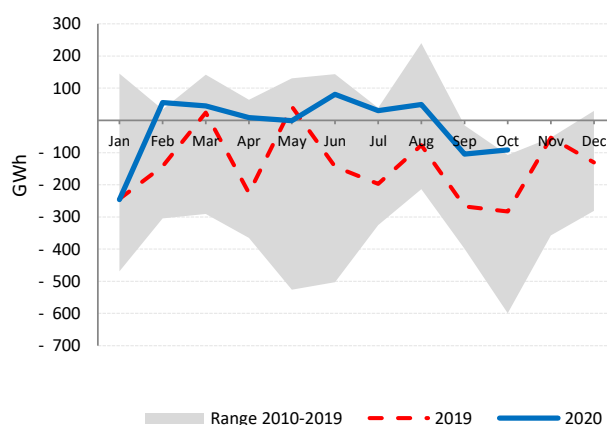
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>519</b>	<b>-2.7%</b>	<b>0.7%</b>	<b>23.5%</b>	<b>4 864</b>	<b>5 081</b>	<b>-4.3%</b>	<b>6 174</b>	<b>24.0%</b>
Coal	112	-28.4%	-2.6%	5.1%	1 179	1 823	-35.3%	2 233	8.7%
Oil	28	-42.9%	-	1.3%	305	328	-7.1%	399	1.6%
Natural Gas	280	13.9%	0.3%	12.7%	2 534	2 015	25.8%	2 478	9.6%
Combustible Renewables	97	21.1%	6.2%	4.4%	836	907	-7.8%	1 052	4.1%
Other Combustibles	1	53.6%	10.3%	0.1%	11	9	16.9%	11	0.0%
<b>Nuclear</b>	<b>1 129</b>	<b>-12.4%</b>	<b>10.8%</b>	<b>51.1%</b>	<b>11 623</b>	<b>11 772</b>	<b>-1.3%</b>	<b>14 407</b>	<b>56.0%</b>
<b>Hydro</b>	<b>522</b>	<b>124.9%</b>	<b>48.7%</b>	<b>23.6%</b>	<b>4 008</b>	<b>3 830</b>	<b>4.6%</b>	<b>4 489</b>	<b>17.5%</b>
Wind	-	-	-	-	-	2	-	5	0.0%
Solar	33	-34.0%	-50.0%	1.5%	628	557	12.7%	589	2.3%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	6	-	25.0%	0.3%	47	47	0.0%	59	0.2%
<b>RENEWABLES</b>	<b>652</b>	<b>80.0%</b>	<b>28.2%</b>	<b>29.5%</b>	<b>5 472</b>	<b>5 296</b>	<b>3.3%</b>	<b>6 135</b>	<b>23.9%</b>
<b>NON-RENEWABLES</b>	<b>1 557</b>	<b>-10.9%</b>	<b>7.5%</b>	<b>70.5%</b>	<b>15 698</b>	<b>15 993</b>	<b>-1.8%</b>	<b>19 588</b>	<b>76.1%</b>
<b>TOTAL NET PRODUCTION</b>	<b>2 209</b>	<b>4.7%</b>	<b>12.9%</b>		<b>21 170</b>	<b>21 289</b>	<b>-0.6%</b>	<b>25 723</b>	
+ Imports	1 067	-24.6%	27.9%		10 616	11 523	-7.9%	13 538	
- Exports	975	-13.9%	33.7%		10 440	10 008	4.3%	11 838	
<b>= ELECTRICITY SUPPLIED</b>	<b>2 301</b>	<b>-3.9%</b>	<b>11.6%</b>		<b>21 346</b>	<b>22 804</b>	<b>-6.4%</b>	<b>27 423</b>	
- Used for pumped storage	38	65.2%	-9.5%		311	245	26.9%	295	
- T&D Losses <sup>4</sup>	-	-	-		-	1 067	-	1 277	
<b>= ELECTRICITY CONSUMED</b>	<b>2 263</b>	<b>0.3%</b>	<b>12.1%</b>		<b>21 035</b>	<b>21 492</b>	<b>-2.1%</b>	<b>25 852</b>	

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

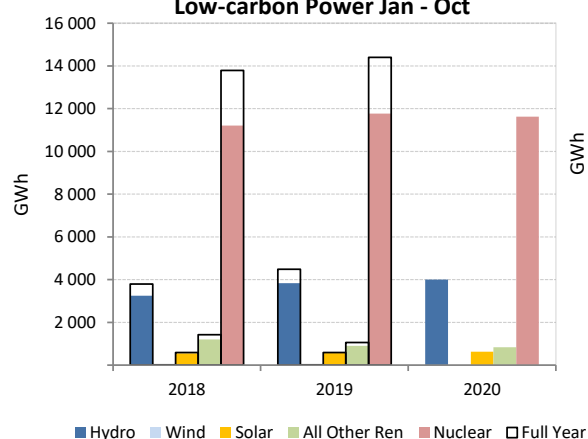
Electricity Production



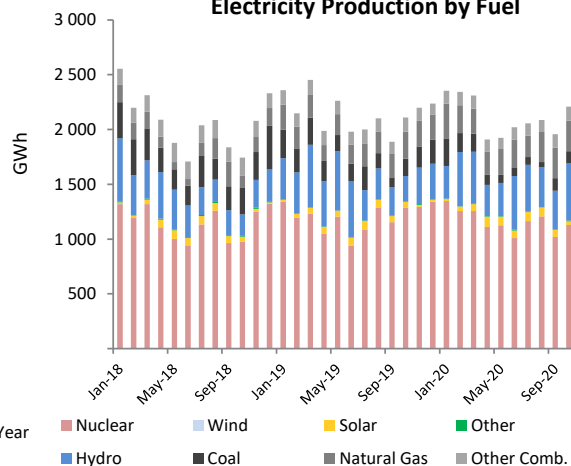
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

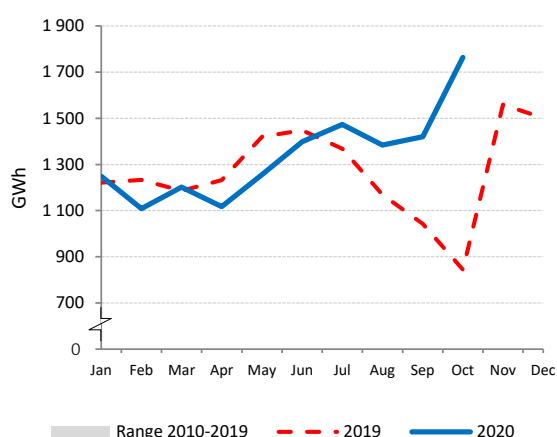


## SLOVENIA

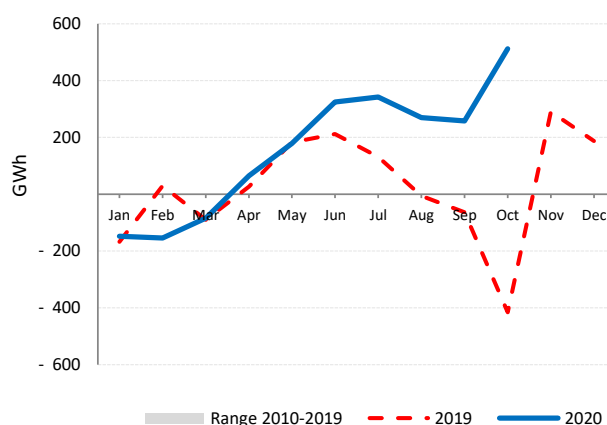
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>542</b>	<b>-0.5%</b>	<b>33.8%</b>	<b>30.7%</b>	<b>3 691</b>	<b>3 926</b>	<b>-6.0%</b>	<b>4 761</b>	<b>31.3%</b>
Coal	484	1.8%	38.2%	27.4%	3 088	3 355	-8.0%	4 037	26.5%
Oil	0	-56.9%	-88.5%	0.0%	6	9	-34.6%	9	0.1%
Natural Gas	37	-20.6%	-4.6%	2.1%	406	371	9.3%	480	3.1%
Combustible Renewables	20	-4.9%	61.2%	1.1%	184	184	0.3%	226	1.5%
Other Combustibles	0	-38.4%	-76.8%	0.0%	7	7	3.0%	9	0.1%
<b>Nuclear</b>	<b>517</b>	<b>2310.7%</b>	<b>4.7%</b>	<b>29.3%</b>	<b>5 052</b>	<b>4 524</b>	<b>11.7%</b>	<b>5 533</b>	<b>36.3%</b>
<b>Hydro</b>	<b>686</b>	<b>168.4%</b>	<b>40.1%</b>	<b>38.9%</b>	<b>4 323</b>	<b>3 428</b>	<b>26.1%</b>	<b>4 622</b>	<b>30.4%</b>
Wind	0	-11.4%	-35.4%	0.0%	5	5	-4.4%	6	0.0%
Solar	19	-16.4%	-38.2%	1.1%	301	281	7.1%	302	2.0%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>725</b>	<b>141.9%</b>	<b>36.0%</b>	<b>41.1%</b>	<b>4 813</b>	<b>3 898</b>	<b>23.5%</b>	<b>5 157</b>	<b>33.9%</b>
<b>NON-RENEWABLES</b>	<b>1 039</b>	<b>90.7%</b>	<b>17.2%</b>	<b>58.9%</b>	<b>8 559</b>	<b>8 267</b>	<b>3.5%</b>	<b>10 068</b>	<b>66.1%</b>
<b>TOTAL NET PRODUCTION</b>	<b>1 764</b>	<b>108.9%</b>	<b>24.2%</b>		<b>13 372</b>	<b>12 164</b>	<b>9.9%</b>	<b>15 224</b>	
+ Imports	478	-47.4%	-8.3%		5 997	7 848	-23.6%	9 021	
- Exports	990	100.6%	27.1%		7 561	7 689	-1.7%	9 340	
<b>= ELECTRICITY SUPPLIED</b>	<b>1 252</b>	<b>-0.6%</b>	<b>7.7%</b>		<b>11 807</b>	<b>12 323</b>	<b>-4.2%</b>	<b>14 906</b>	
- Used for pumped storage	36	13.4%	27.7%		312	200	55.9%	272	
- T&D Losses	83	36.4%	58.4%		642	664	-3.4%	858	
<b>= ELECTRICITY CONSUMED</b>	<b>1 132</b>	<b>-3.0%</b>	<b>4.8%</b>		<b>10 853</b>	<b>11 459</b>	<b>-5.3%</b>	<b>13 776</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

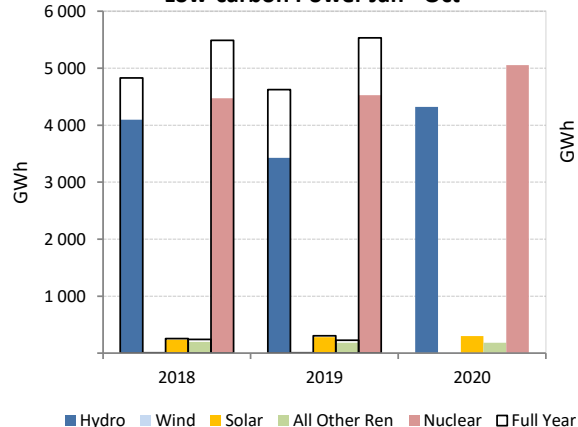
Electricity Production



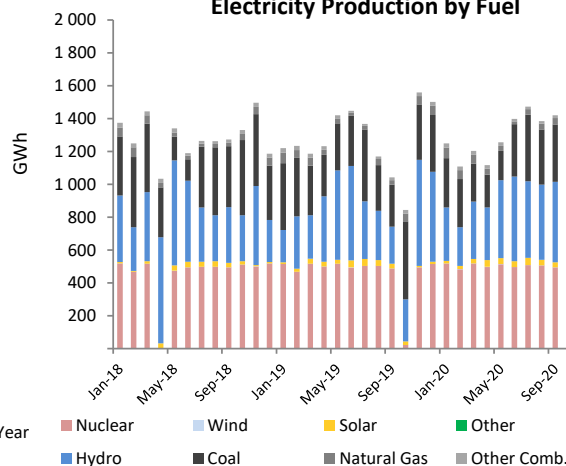
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

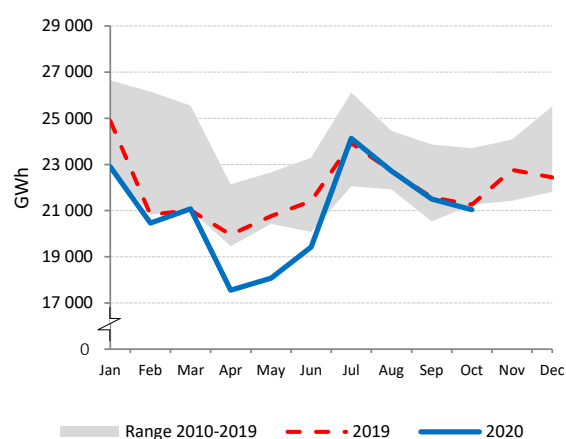


# SPAIN

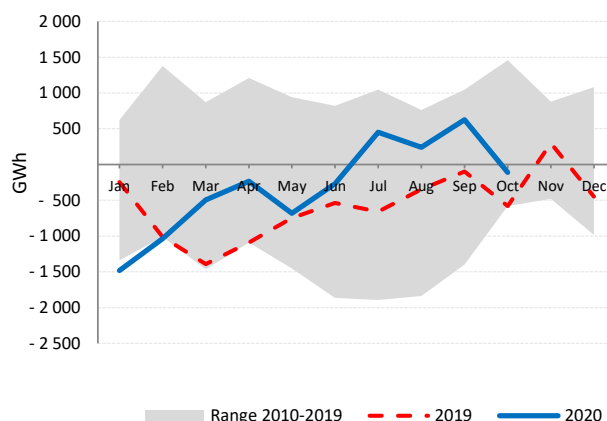
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>7 027</b>	<b>-33.8%</b>	<b>-21.4%</b>	<b>33.4%</b>	<b>75 097</b>	<b>96 923</b>	<b>-22.5%</b>	<b>112 593</b>	<b>42.7%</b>
Coal	326	-64.8%	-13.3%	1.6%	4 674	12 289	-62.0%	13 562	5.1%
Oil	873	-16.5%	-4.2%	4.2%	8 642	10 110	-14.5%	12 056	4.6%
Natural Gas	5 159	-36.1%	-26.2%	24.5%	55 887	69 091	-19.1%	80 466	30.5%
Combustible Renewables	597	25.5%	3.8%	2.8%	5 171	4 593	12.6%	5 523	2.1%
Other Combustibles	72	-11.5%	-13.5%	0.3%	723	839	-13.9%	985	0.4%
<b>Nuclear</b>	<b>4 533</b>	<b>-0.1%</b>	<b>-7.0%</b>	<b>21.5%</b>	<b>45 894</b>	<b>48 097</b>	<b>-4.6%</b>	<b>55 883</b>	<b>21.2%</b>
<b>Hydro</b>	<b>2 119</b>	<b>71.5%</b>	<b>13.8%</b>	<b>10.1%</b>	<b>27 147</b>	<b>18 576</b>	<b>46.1%</b>	<b>26 349</b>	<b>10.0%</b>
<b>Wind</b>	<b>5 727</b>	<b>51.4%</b>	<b>45.8%</b>	<b>27.2%</b>	<b>42 819</b>	<b>41 419</b>	<b>3.4%</b>	<b>54 235</b>	<b>20.6%</b>
<b>Solar</b>	<b>1 629</b>	<b>49.7%</b>	<b>-14.0%</b>	<b>7.7%</b>	<b>17 898</b>	<b>13 248</b>	<b>35.1%</b>	<b>14 400</b>	<b>5.5%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	93	-	112	0.0%
<b>RENEWABLES</b>	<b>10 072</b>	<b>53.0%</b>	<b>22.0%</b>	<b>47.9%</b>	<b>93 034</b>	<b>77 837</b>	<b>19.5%</b>	<b>100 507</b>	<b>38.1%</b>
<b>NON-RENEWABLES</b>	<b>10 963</b>	<b>-25.3%</b>	<b>-17.2%</b>	<b>52.1%</b>	<b>115 820</b>	<b>140 520</b>	<b>-17.6%</b>	<b>163 064</b>	<b>61.9%</b>
<b>TOTAL NET PRODUCTION</b>	<b>21 035</b>	<b>-1.1%</b>	<b>-2.1%</b>		<b>208 854</b>	<b>218 357</b>	<b>-4.4%</b>	<b>263 571</b>	
+ Imports	1 394	-6.3%	51.6%		14 794	15 835	-6.6%	18 720	
- Exports	1 286	41.8%	-16.8%		11 806	9 124	29.4%	11 858	
<b>= ELECTRICITY SUPPLIED</b>	<b>21 143</b>	<b>-3.2%</b>	<b>1.3%</b>		<b>211 843</b>	<b>225 067</b>	<b>-5.9%</b>	<b>270 433</b>	
- Used for pumped storage	340	99.8%	62.5%		3 829	2 032	88.4%	3 025	
- T&D Losses	1 966	-3.6%	0.9%		19 641	20 997	-6.5%	25 187	
<b>= ELECTRICITY CONSUMED</b>	<b>18 837</b>	<b>-4.0%</b>	<b>0.7%</b>		<b>188 374</b>	<b>202 039</b>	<b>-6.8%</b>	<b>242 221</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

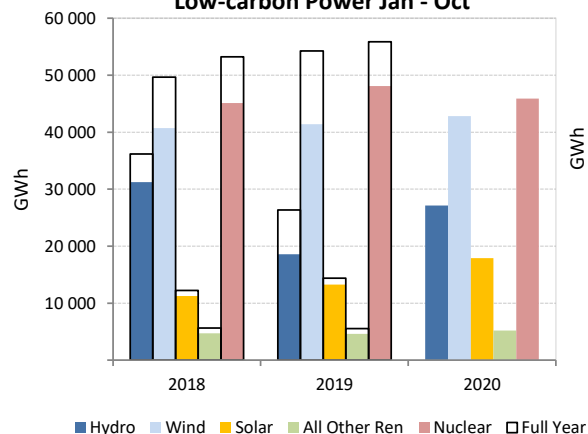
Electricity Production



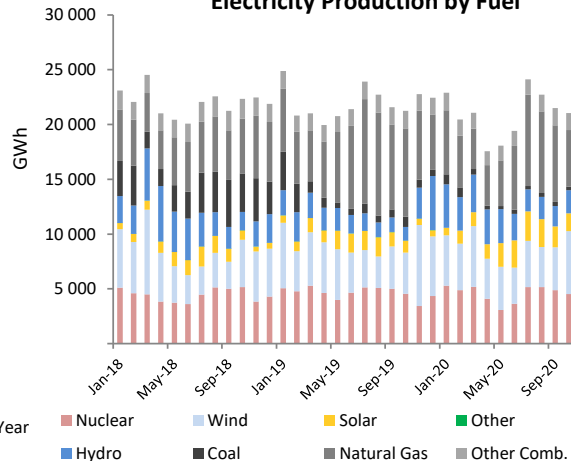
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

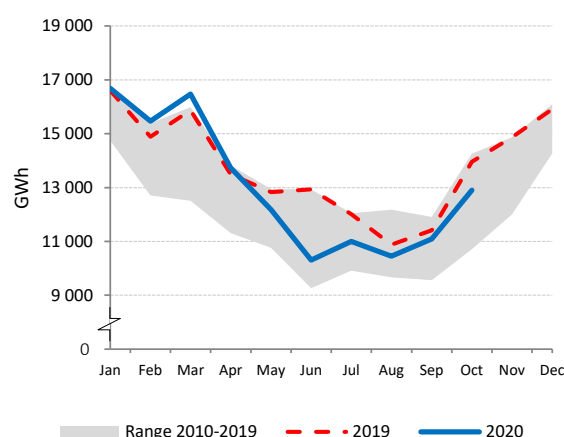


# SWEDEN

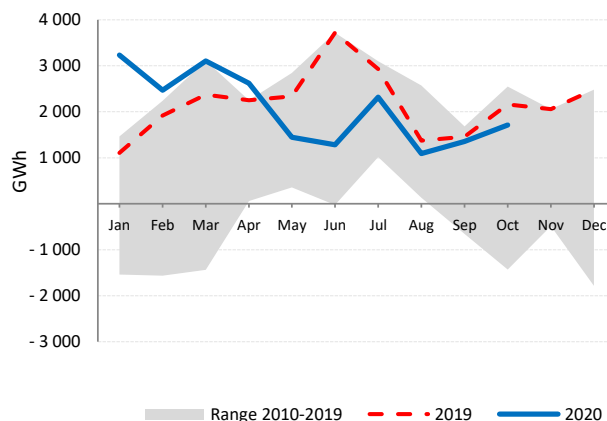
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>998</b>	<b>-12.6%</b>	<b>16.8%</b>	<b>7.7%</b>	<b>9 876</b>	<b>12 886</b>	<b>-23.4%</b>	<b>15 816</b>	<b>9.5%</b>
Coal	0	-100.0%	-100.0%	-	5	1 134	-99.5%	1 142	0.7%
Oil	14	46.9%	84.4%	0.1%	88	186	-52.7%	209	0.1%
Natural Gas	4	15.6%	-20.7%	0.0%	42	253	-83.3%	274	0.2%
Combustible Renewables	837	-15.3%	14.2%	6.5%	8 511	9 987	-14.8%	12 579	7.6%
Other Combustibles	143	6.8%	32.1%	1.1%	1 229	1 327	-7.3%	1 612	1.0%
<b>Nuclear</b>	<b>3 911</b>	<b>-28.3%</b>	<b>24.2%</b>	<b>30.3%</b>	<b>39 145</b>	<b>52 994</b>	<b>-26.1%</b>	<b>64 334</b>	<b>38.8%</b>
<b>Hydro</b>	<b>5 733</b>	<b>0.7%</b>	<b>22.9%</b>	<b>44.4%</b>	<b>58 221</b>	<b>52 447</b>	<b>11.0%</b>	<b>64 969</b>	<b>39.2%</b>
<b>Wind</b>	<b>2 221</b>	<b>36.0%</b>	<b>-6.0%</b>	<b>17.2%</b>	<b>22 371</b>	<b>15 895</b>	<b>40.7%</b>	<b>19 847</b>	<b>12.0%</b>
<b>Solar<sup>4</sup></b>	<b>38</b>	<b>-</b>	<b>-37.9%</b>	<b>0.3%</b>	<b>651</b>	<b>651</b>	<b>-</b>	<b>679</b>	<b>0.4%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>8 829</b>	<b>5.7%</b>	<b>12.9%</b>	<b>68.4%</b>	<b>89 755</b>	<b>78 980</b>	<b>13.6%</b>	<b>98 074</b>	<b>59.2%</b>
<b>NON-RENEWABLES</b>	<b>4 072</b>	<b>-27.4%</b>	<b>24.5%</b>	<b>31.6%</b>	<b>40 510</b>	<b>55 894</b>	<b>-27.5%</b>	<b>67 571</b>	<b>40.8%</b>
<b>TOTAL NET PRODUCTION</b>	<b>12 901</b>	<b>-7.6%</b>	<b>16.3%</b>		<b>130 265</b>	<b>134 874</b>	<b>-3.4%</b>	<b>165 645</b>	
+ Imports	1 512	112.5%	12.9%		10 088	7 520	34.2%	9 070	
- Exports	3 221	12.2%	19.6%		30 717	29 145	5.4%	35 231	
<b>= ELECTRICITY SUPPLIED</b>	<b>11 192</b>	<b>-5.2%</b>	<b>14.9%</b>		<b>109 636</b>	<b>113 248</b>	<b>-3.2%</b>	<b>139 484</b>	
- Used for pumped storage	1	-58.1%	-54.6%		21	26	-20.5%	32	
- T&D Losses	926	0.3%	26.3%		8 733	8 614	1.4%	10 842	
<b>= ELECTRICITY CONSUMED</b>	<b>10 265</b>	<b>-5.6%</b>	<b>14.0%</b>		<b>100 882</b>	<b>104 609</b>	<b>-3.6%</b>	<b>128 610</b>	

<sup>1</sup> current month to month of last year change<sup>4</sup> estimated by the IEA secretariat<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

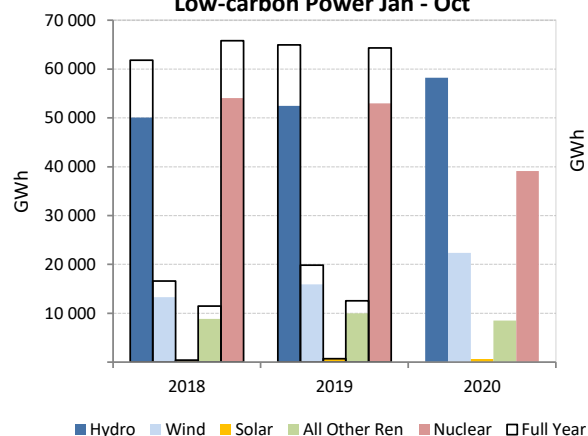
Electricity Production



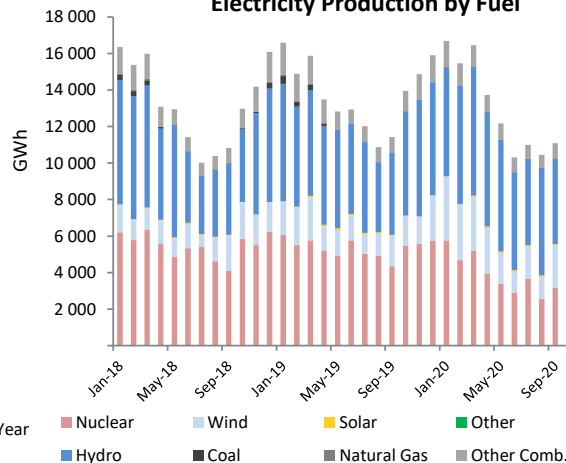
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

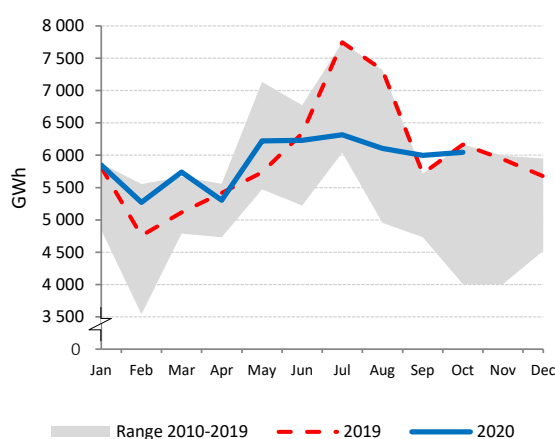


# SWITZERLAND

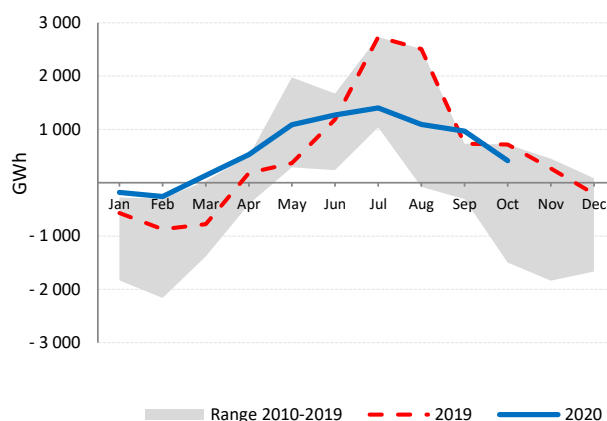
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>296</b>	<b>-3.3%</b>	<b>-5.3%</b>	<b>4.9%</b>	<b>2 997</b>	<b>2 899</b>	<b>3.4%</b>	<b>3 580</b>	<b>5.0%</b>
Coal	-	-	-	-	-	-	-	-	-
Oil	1	-50.0%	-	0.0%	12	25	-50.0%	30	0.0%
Natural Gas	41	-16.2%	-4.6%	0.7%	414	465	-11.0%	575	0.8%
Combustible Renewables	149	-2.1%	-5.7%	2.5%	1 512	1 441	4.9%	1 779	2.5%
Other Combustibles	105	2.4%	-5.2%	1.7%	1 058	968	9.3%	1 196	1.7%
<b>Nuclear</b>	<b>2 164</b>	<b>-11.3%</b>	<b>4.7%</b>	<b>35.8%</b>	<b>18 920</b>	<b>20 657</b>	<b>-8.4%</b>	<b>25 280</b>	<b>35.2%</b>
<b>Hydro</b>	<b>3 430</b>	<b>4.9%</b>	<b>1.9%</b>	<b>56.7%</b>	<b>34 672</b>	<b>34 389</b>	<b>0.8%</b>	<b>40 556</b>	<b>56.5%</b>
Wind	15	7.1%	87.5%	0.2%	117	112	4.4%	146	0.2%
Solar	141	3.5%	-42.1%	2.3%	2 373	2 067	14.8%	2 178	3.0%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>3 735</b>	<b>4.6%</b>	<b>-1.0%</b>	<b>61.8%</b>	<b>38 674</b>	<b>38 009</b>	<b>1.7%</b>	<b>44 659</b>	<b>62.3%</b>
<b>NON-RENEWABLES</b>	<b>2 311</b>	<b>-10.9%</b>	<b>4.0%</b>	<b>38.2%</b>	<b>20 404</b>	<b>22 115</b>	<b>-7.7%</b>	<b>27 080</b>	<b>37.7%</b>
<b>TOTAL NET PRODUCTION</b>	<b>6 046</b>	<b>-1.9%</b>	<b>0.8%</b>		<b>59 079</b>	<b>60 125</b>	<b>-1.7%</b>	<b>71 739</b>	
+ Imports	2 420	-12.5%	53.0%		20 758	23 604	-12.1%	29 505	
- Exports	2 835	-18.5%	11.3%		27 218	29 806	-8.7%	35 765	
<b>= ELECTRICITY SUPPLIED</b>	<b>5 632</b>	<b>3.3%</b>	<b>11.9%</b>		<b>52 619</b>	<b>53 923</b>	<b>-2.4%</b>	<b>65 479</b>	
- Used for pumped storage	425	7.9%	10.4%		3 986	3 598	10.8%	4 133	
- T&D Losses	367	2.7%	17.3%		3 305	3 426	-3.5%	4 149	
<b>= ELECTRICITY CONSUMED</b>	<b>4 840</b>	<b>3.0%</b>	<b>11.7%</b>		<b>45 328</b>	<b>46 898</b>	<b>-3.3%</b>	<b>57 197</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

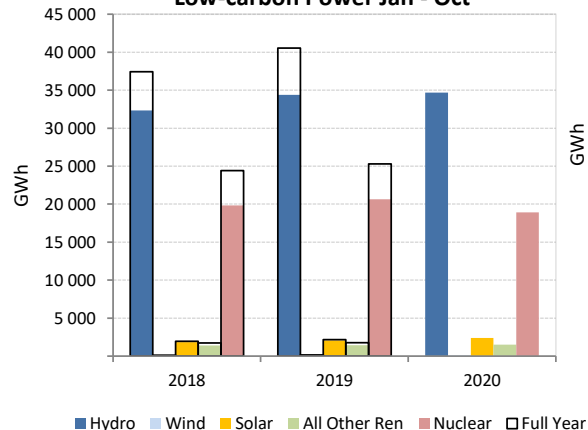
Electricity Production



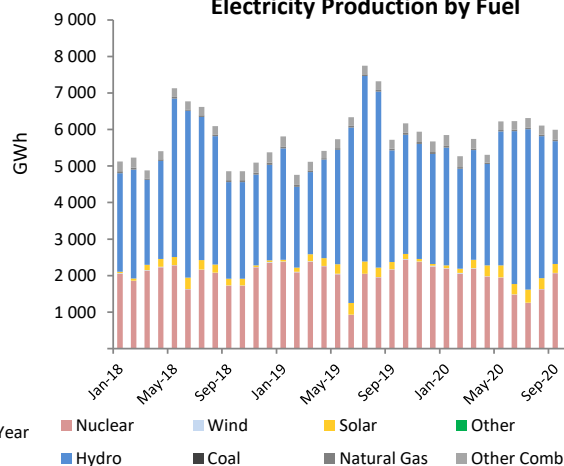
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

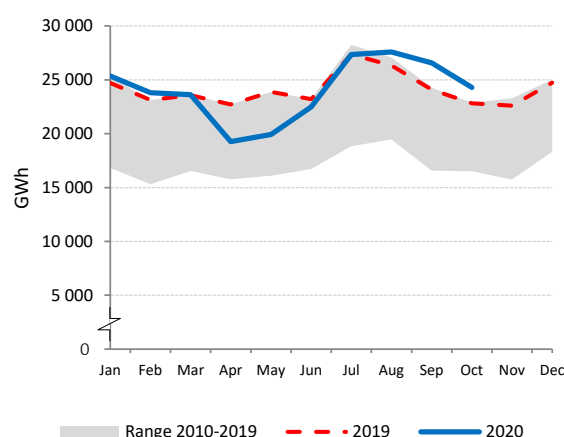


# TURKEY

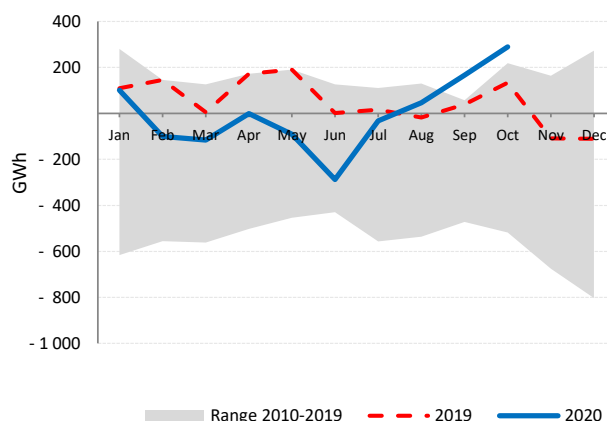
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>17 070</b>	<b>13.7%</b>	<b>-0.9%</b>	<b>70.3%</b>	<b>133 601</b>	<b>129 836</b>	<b>2.9%</b>	<b>161 975</b>	<b>56.0%</b>
Coal	8 718	-13.2%	-1.2%	35.9%	80 409	84 912	-5.3%	105 067	36.3%
Oil	27	40.1%	-87.0%	0.1%	437	272	60.7%	313	0.1%
Natural Gas	7 948	70.0%	1.5%	32.7%	49 310	41 986	17.4%	53 317	18.4%
Combustible Renewables	376	36.5%	6.3%	1.5%	3 428	2 654	29.2%	3 263	1.1%
Other Combustibles	1	-30.9%	0.2%	0.0%	18	13	37.2%	16	0.0%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>4 446</b>	<b>-12.4%</b>	<b>-19.7%</b>	<b>18.3%</b>	<b>70 213</b>	<b>78 686</b>	<b>-10.8%</b>	<b>88 209</b>	<b>30.5%</b>
<b>Wind</b>	<b>1 138</b>	<b>-10.2%</b>	<b>-46.0%</b>	<b>4.7%</b>	<b>20 006</b>	<b>18 392</b>	<b>8.8%</b>	<b>21 613</b>	<b>7.5%</b>
<b>Solar</b>	<b>911</b>	<b>15.9%</b>	<b>-13.8%</b>	<b>3.8%</b>	<b>9 539</b>	<b>7 957</b>	<b>19.9%</b>	<b>8 946</b>	<b>3.1%</b>
<b>Geothermal</b>	<b>614</b>	<b>7.0%</b>	<b>12.5%</b>	<b>2.5%</b>	<b>5 917</b>	<b>6 072</b>	<b>-2.6%</b>	<b>7 352</b>	<b>2.5%</b>
<b>Other Renewables</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Non-Specified</b>	<b>110</b>	<b>8.2%</b>	<b>3.6%</b>	<b>0.5%</b>	<b>937</b>	<b>864</b>	<b>8.5%</b>	<b>1 040</b>	<b>0.4%</b>
<b>RENEWABLES</b>	<b>7 485</b>	<b>-6.2%</b>	<b>-22.0%</b>	<b>30.8%</b>	<b>109 103</b>	<b>113 761</b>	<b>-4.1%</b>	<b>129 383</b>	<b>44.7%</b>
<b>NON-RENEWABLES</b>	<b>16 804</b>	<b>13.2%</b>	<b>-1.0%</b>	<b>69.2%</b>	<b>131 110</b>	<b>128 046</b>	<b>2.4%</b>	<b>159 752</b>	<b>55.3%</b>
<b>TOTAL NET PRODUCTION</b>	<b>24 290</b>	<b>6.4%</b>	<b>-8.6%</b>		<b>240 213</b>	<b>241 807</b>	<b>-0.7%</b>	<b>289 136</b>	
+ Imports	31	-76.0%	-42.2%		1 798	1 603	12.2%	2 212	
- Exports	320	23.0%	46.4%		1 774	2 399	-26.1%	2 789	
<b>= ELECTRICITY SUPPLIED</b>	<b>24 000</b>	<b>5.8%</b>	<b>-9.1%</b>		<b>240 236</b>	<b>241 011</b>	<b>-0.3%</b>	<b>288 559</b>	
- Used for pumped storage	-	-	-		-	-	-	-	
- T&D Losses <sup>4</sup>	2 612	6.0%	-8.6%		25 988	26 138	-0.6%	31 285	
<b>= ELECTRICITY CONSUMED</b>	<b>21 389</b>	<b>5.8%</b>	<b>-9.2%</b>		<b>214 249</b>	<b>214 873</b>	<b>-0.3%</b>	<b>257 273</b>	

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

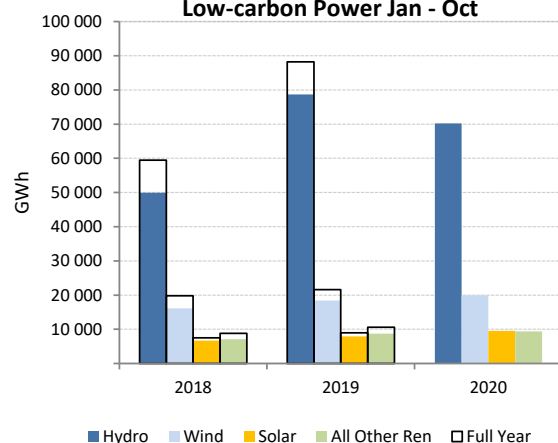
Electricity Production



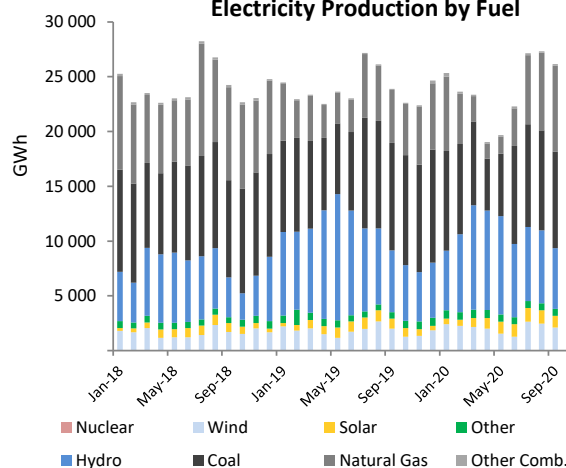
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

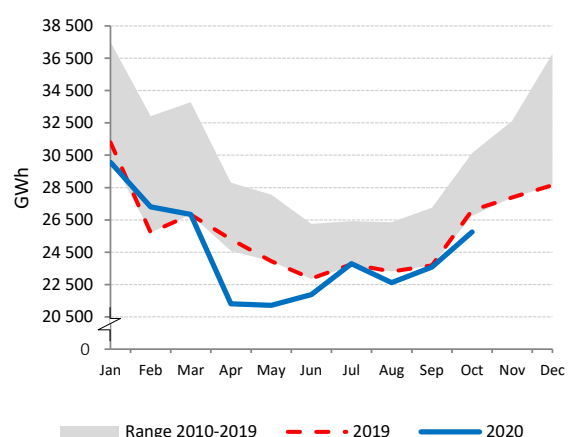


## UNITED KINGDOM

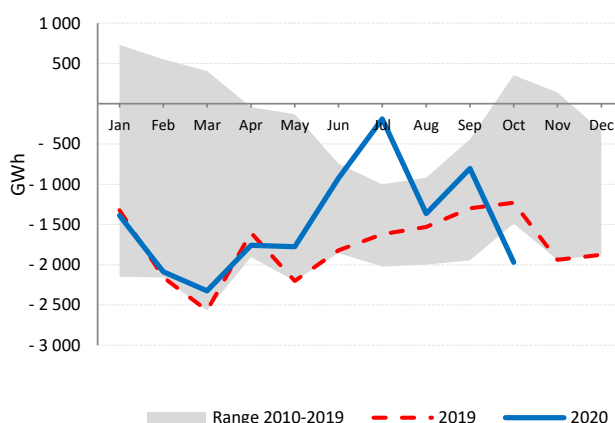
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>12 992</b>	<b>-9.6%</b>	<b>0.3%</b>	<b>50.4%</b>	<b>126 847</b>	<b>142 553</b>	<b>-11.0%</b>	<b>174 422</b>	<b>56.2%</b>
Coal	202	-53.8%	-30.1%	0.8%	4 661	4 956	-6.0%	7 359	2.4%
Oil	98	-12.7%	4.1%	0.4%	825	1 124	-26.6%	1 418	0.5%
Natural Gas	9 352	-12.1%	-2.8%	36.3%	85 919	104 217	-17.6%	125 353	40.4%
Combustible Renewables	2 960	5.9%	13.9%	11.5%	31 505	28 569	10.3%	35 809	11.5%
Other Combustibles	380	-2.6%	6.8%	1.5%	3 938	3 687	6.8%	4 483	1.4%
<b>Nuclear</b>	<b>4 419</b>	<b>-8.0%</b>	<b>36.3%</b>	<b>17.2%</b>	<b>37 034</b>	<b>41 650</b>	<b>-11.1%</b>	<b>51 032</b>	<b>16.4%</b>
<b>Hydro</b>	<b>749</b>	<b>-13.2%</b>	<b>57.3%</b>	<b>2.9%</b>	<b>6 026</b>	<b>6 121</b>	<b>-1.6%</b>	<b>7 618</b>	<b>2.5%</b>
<b>Wind</b>	<b>6 925</b>	<b>9.6%</b>	<b>23.4%</b>	<b>26.9%</b>	<b>61 832</b>	<b>51 218</b>	<b>20.7%</b>	<b>64 335</b>	<b>20.7%</b>
<b>Solar</b>	<b>667</b>	<b>-10.4%</b>	<b>-48.7%</b>	<b>2.6%</b>	<b>12 594</b>	<b>12 255</b>	<b>2.8%</b>	<b>12 918</b>	<b>4.2%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	1	-	-	0.0%	12	12	-	14	0.0%
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>11 303</b>	<b>5.4%</b>	<b>13.2%</b>	<b>43.9%</b>	<b>111 968</b>	<b>98 174</b>	<b>14.1%</b>	<b>120 693</b>	<b>38.9%</b>
<b>NON-RENEWABLES</b>	<b>14 451</b>	<b>-11.8%</b>	<b>6.3%</b>	<b>56.1%</b>	<b>132 376</b>	<b>155 634</b>	<b>-14.9%</b>	<b>189 645</b>	<b>61.1%</b>
<b>TOTAL NET PRODUCTION</b>	<b>25 754</b>	<b>-5.0%</b>	<b>9.2%</b>		<b>244 345</b>	<b>253 809</b>	<b>-3.7%</b>	<b>310 339</b>	
+ Imports	2 165	32.8%	64.5%		18 429	20 057	-8.1%	24 556	
- Exports	194	-51.5%	-62.0%		3 839	2 704	42.0%	3 385	
<b>= ELECTRICITY SUPPLIED</b>	<b>27 724</b>	<b>-2.1%</b>	<b>13.7%</b>		<b>258 934</b>	<b>271 162</b>	<b>-4.5%</b>	<b>331 509</b>	
- Used for pumped storage	149	-26.7%	23.1%		1 309	1 741	-24.8%	2 115	
- T&D Losses	2 368	1.5%	20.2%		23 085	21 601	6.9%	26 732	
<b>= ELECTRICITY CONSUMED</b>	<b>25 207</b>	<b>-2.3%</b>	<b>13.0%</b>		<b>234 540</b>	<b>247 819</b>	<b>-5.4%</b>	<b>302 662</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

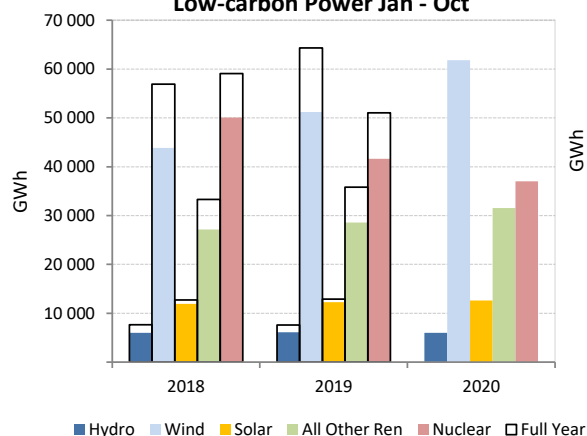
Electricity Production



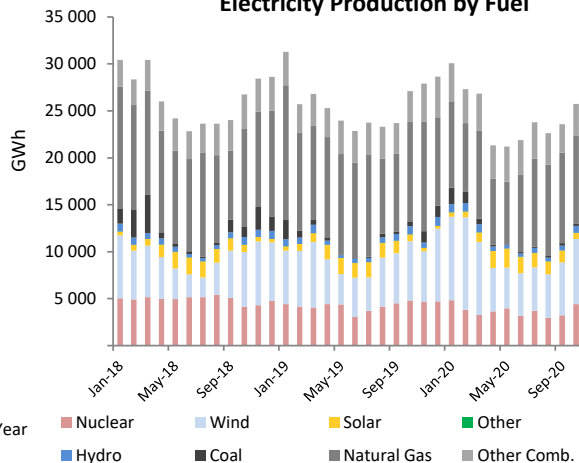
Net Electricity Exports



Low-carbon Power Jan - Oct



Electricity Production by Fuel

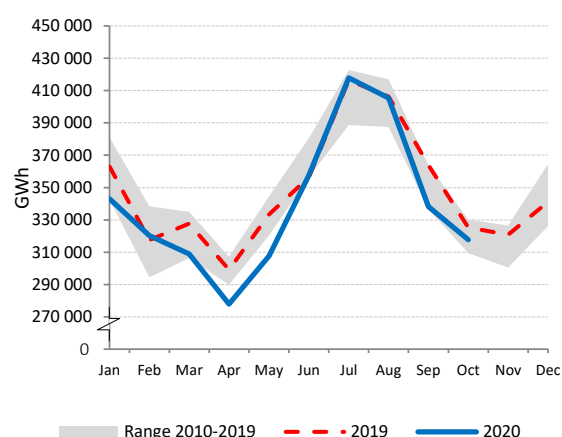


## UNITED STATES

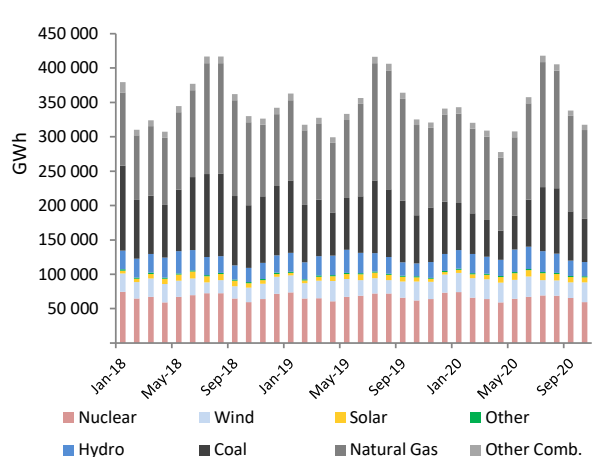
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>199 776</b>	<b>-4.6%</b>	<b>-8.5%</b>	<b>62.9%</b>	<b>2 106 000</b>	<b>2 251 142</b>	<b>-6.4%</b>	<b>2 665 893</b>	<b>63.9%</b>
Coal	62 832	-10.5%	-12.3%	19.8%	664 591	855 965	-22.4%	1 011 531	24.3%
Oil	2 401	0.6%	-2.7%	0.8%	30 297	28 940	4.7%	33 849	0.8%
Natural Gas	129 370	-1.5%	-6.9%	40.7%	1 355 889	1 308 059	3.7%	1 550 904	37.2%
Combustible Renewables	4 363	-7.2%	-3.0%	1.4%	46 762	50 067	-6.6%	59 766	1.4%
Other Combustibles	810	-3.4%	-1.1%	0.3%	8 460	8 112	4.3%	9 843	0.2%
<b>Nuclear</b>	<b>59 375</b>	<b>-4.3%</b>	<b>-9.7%</b>	<b>18.7%</b>	<b>658 462</b>	<b>672 181</b>	<b>-2.0%</b>	<b>809 409</b>	<b>19.4%</b>
<b>Hydro</b>	<b>20 789</b>	<b>11.8%</b>	<b>-6.2%</b>	<b>6.5%</b>	<b>269 508</b>	<b>261 043</b>	<b>3.2%</b>	<b>308 646</b>	<b>7.4%</b>
<b>Wind</b>	<b>28 742</b>	<b>4.5%</b>	<b>26.9%</b>	<b>9.0%</b>	<b>266 565</b>	<b>243 447</b>	<b>9.5%</b>	<b>295 062</b>	<b>7.1%</b>
<b>Solar</b>	<b>7 250</b>	<b>19.7%</b>	<b>-5.6%</b>	<b>2.3%</b>	<b>77 691</b>	<b>64 387</b>	<b>20.7%</b>	<b>72 180</b>	<b>1.7%</b>
<b>Geothermal</b>	<b>1 308</b>	<b>8.1%</b>	<b>-0.8%</b>	<b>0.4%</b>	<b>12 960</b>	<b>13 184</b>	<b>-1.7%</b>	<b>15 473</b>	<b>0.4%</b>
<b>Other Renewables</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Non-Specified</b>	<b>371</b>	<b>-2.1%</b>	<b>18.1%</b>	<b>0.1%</b>	<b>3 376</b>	<b>3 779</b>	<b>-10.7%</b>	<b>4 511</b>	<b>0.1%</b>
<b>RENEWABLES</b>	<b>62 452</b>	<b>7.6%</b>	<b>7.1%</b>	<b>19.7%</b>	<b>673 484</b>	<b>632 127</b>	<b>6.5%</b>	<b>751 128</b>	<b>18.0%</b>
<b>NON-RENEWABLES</b>	<b>255 159</b>	<b>-4.5%</b>	<b>-8.9%</b>	<b>80.3%</b>	<b>2 721 075</b>	<b>2 877 036</b>	<b>-5.4%</b>	<b>3 420 047</b>	<b>82.0%</b>
<b>TOTAL NET PRODUCTION</b>	<b>317 611</b>	<b>-2.3%</b>	<b>-6.1%</b>		<b>3 394 560</b>	<b>3 509 163</b>	<b>-3.3%</b>	<b>4 171 175</b>	
+ Imports	4 424	6.0%	-12.3%		50 680	51 181	-1.0%	59 052	
- Exports	1 784	22.0%	-7.9%		21 366	16 610	28.6%	20 008	
<b>= ELECTRICITY SUPPLIED</b>	<b>320 252</b>	<b>-2.3%</b>	<b>-6.2%</b>		<b>3 423 874</b>	<b>3 543 734</b>	<b>-3.4%</b>	<b>4 210 219</b>	
- Used for pumped storage	1 853	4.4%	-24.2%		22 958	22 499	2.0%	26 033	
- T&D Losses	12 593	4.5%	11.8%		186 167	200 577	-7.2%	244 112	
<b>= ELECTRICITY CONSUMED</b>	<b>305 806</b>	<b>-2.6%</b>	<b>-6.7%</b>		<b>3 214 749</b>	<b>3 320 658</b>	<b>-3.2%</b>	<b>3 940 074</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

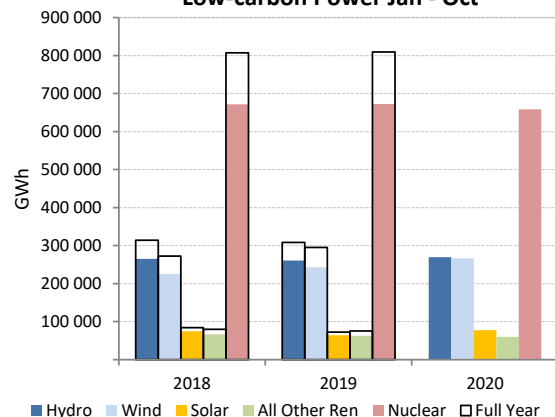
Electricity Production



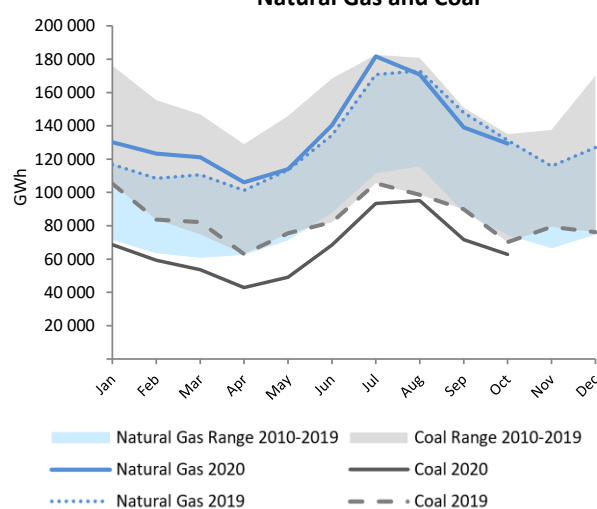
Electricity Production by Fuel



Low-carbon Power Jan - Oct

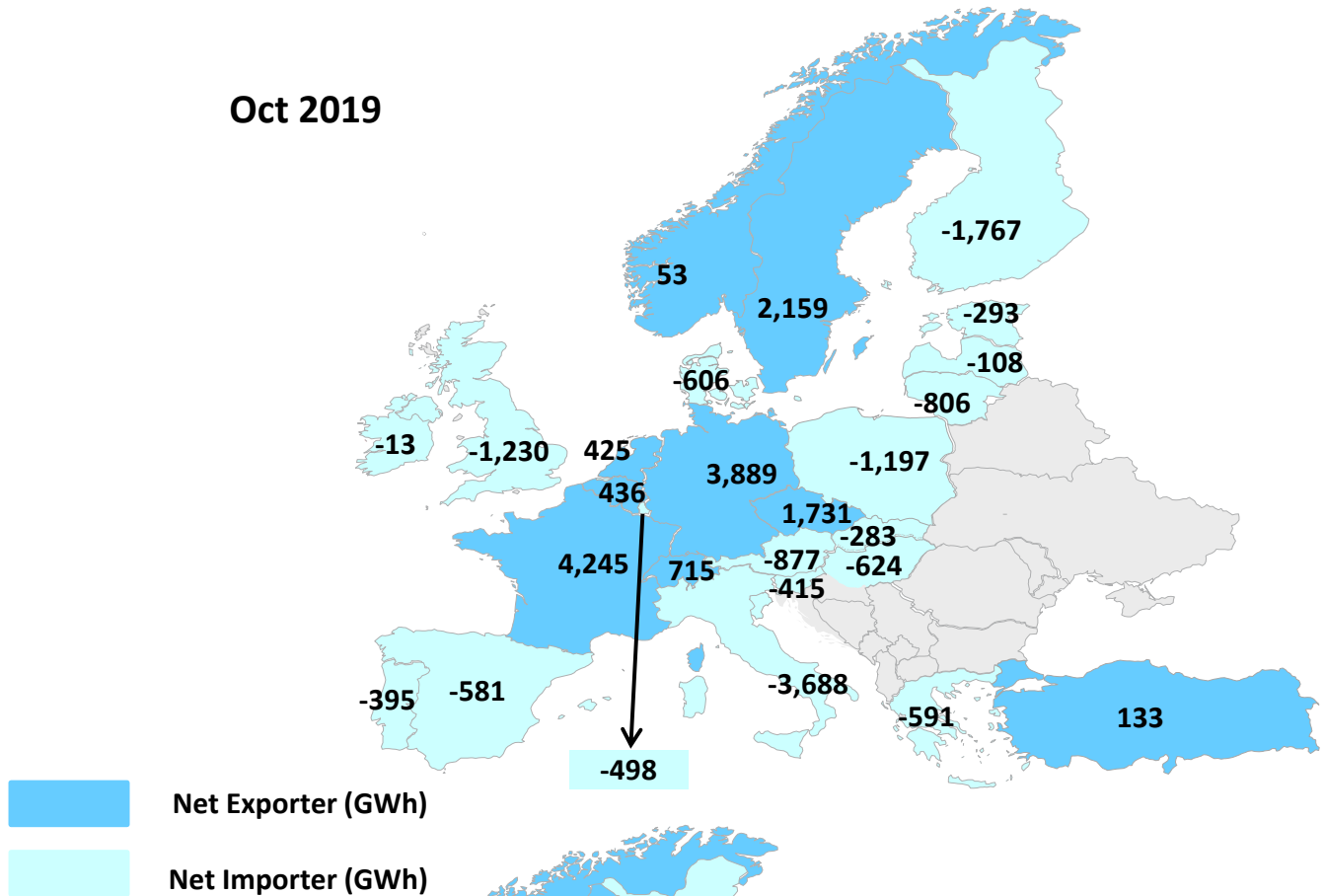


Natural Gas and Coal

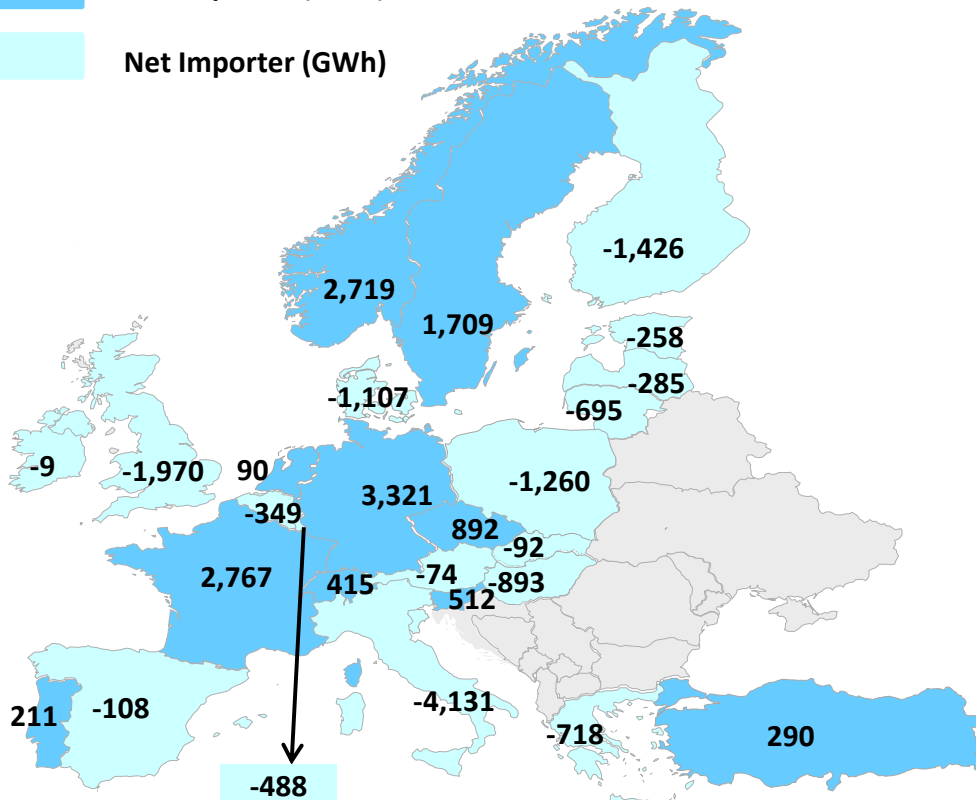


# NET ELECTRICITY EXPORTS OECD EUROPE MAP 1

Oct 2019

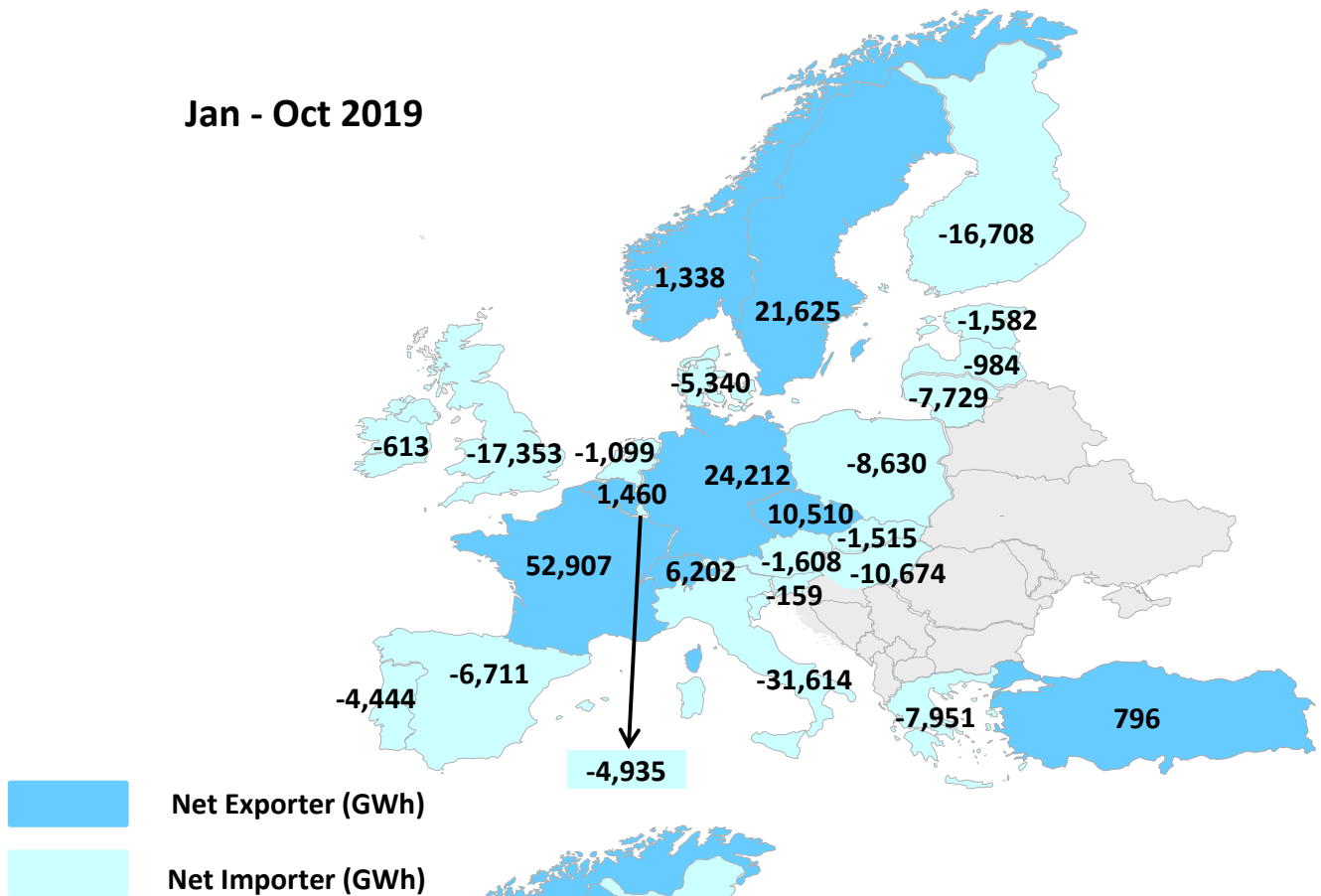


Oct 2020

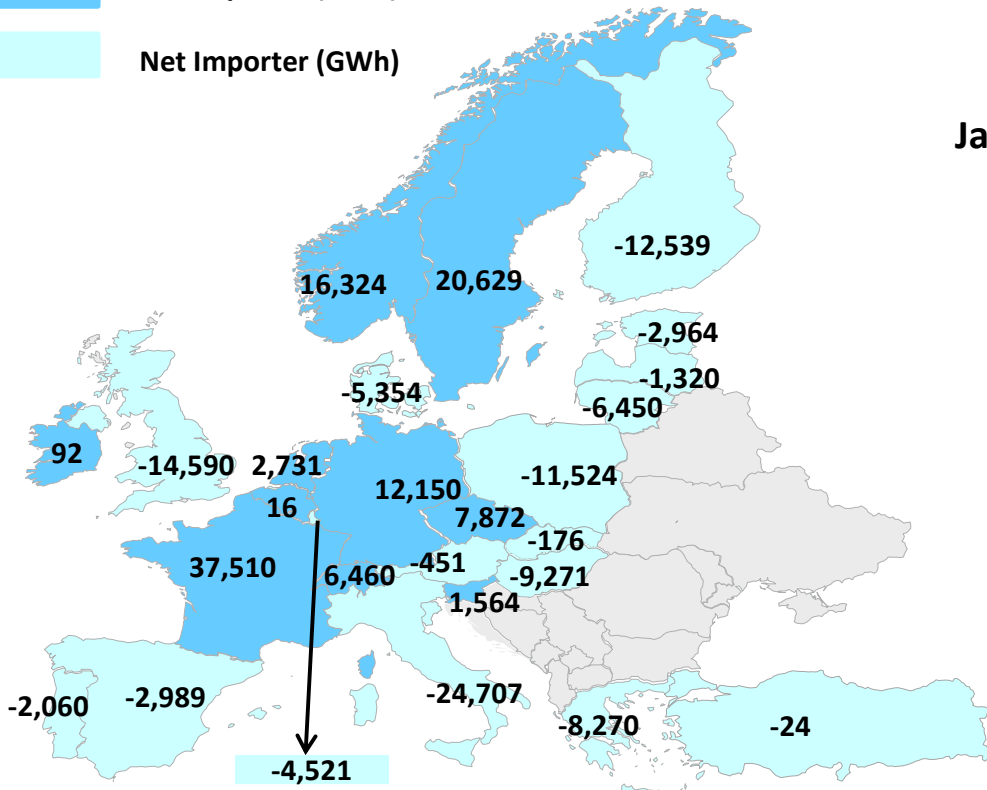


# NET ELECTRICITY EXPORTS OECD EUROPE MAP 2

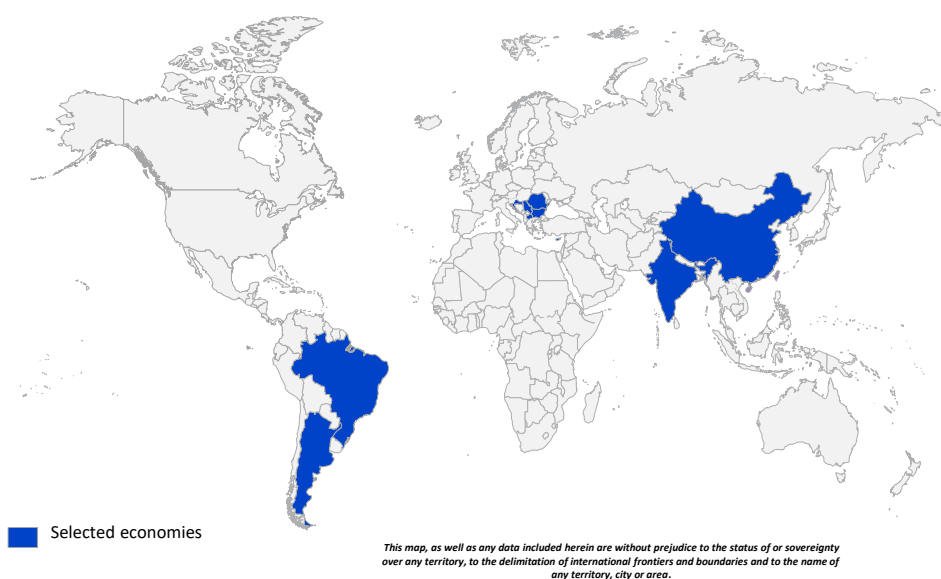
Jan - Oct 2019



Jan - Oct 2020



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



### HIGHLIGHTS

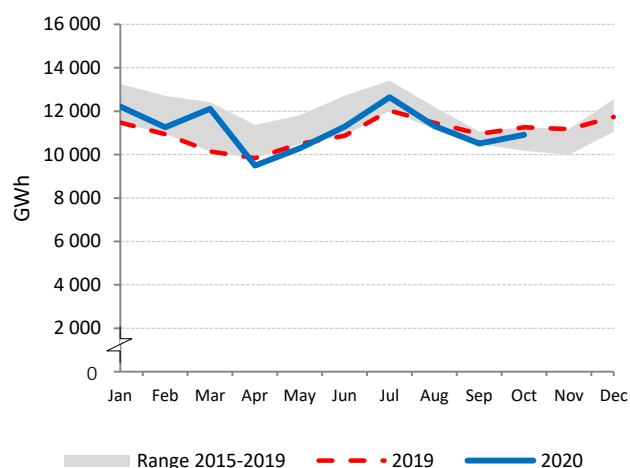
- Five new countries were added in January 2021 to the Monthly electricity Statistics report. They include: Bulgaria, Cyprus, Malta, North Macedonia, and Serbia.
- In Croatia, net electricity production was 1,354.1 GWh in October 2020, 46.9% higher than in October 2019 and 36.9% higher than in September 2020. This was caused by higher hydro production which was 714.9 GWh, 190.8% higher than October 2019 and 100.2% higher than in September 2020. These seasonal record high levels are a result of heavy rainfall in Croatia in October 2020, a consequence of the European storms.
- In Cyprus, record solar capacity was installed in the first seven months of 2020. This new capacity is mainly distributed as rooftop solar panels on households. As a result, solar production in the first ten months of 2020 was 285.3 GWh, up by 52.7% compared to the same period in 2019. In October 2020, solar production was 29.9 GWh, up by 59.7% compared to October 2019.

# ARGENTINA

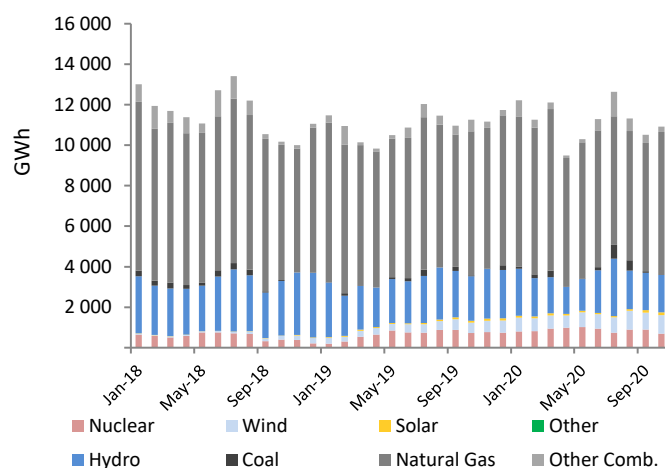
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>7 316</b>	<b>-5.5%</b>	<b>7.3%</b>	<b>67.0%</b>	<b>75 516</b>	<b>76 187</b>	<b>-0.9%</b>	<b>91 369</b>	<b>69.0%</b>
Coal	0	-100.0%	-100.0%	0.0%	2 066	932	121.6%	1 187	0.9%
Oil	36	-91.0%	-79.1%	0.3%	3 216	3 007	7.0%	3 282	2.5%
Natural Gas	7 057	-0.9%	11.4%	64.7%	68 582	70 924	-3.3%	85 282	64.4%
Combustible Renewables	222	32.7%	-1.8%	2.0%	1 652	1 324	24.8%	1 618	1.2%
Other Combustibles	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	<b>697</b>	<b>-3.0%</b>	<b>-21.5%</b>	<b>6.4%</b>	<b>8 720</b>	<b>6 497</b>	<b>34.2%</b>	<b>8 002</b>	<b>6.0%</b>
<b>Hydro</b>	<b>1 844</b>	<b>-15.7%</b>	<b>0.4%</b>	<b>16.9%</b>	<b>19 425</b>	<b>22 430</b>	<b>-13.4%</b>	<b>27 253</b>	<b>20.6%</b>
<b>Wind</b>	<b>904</b>	<b>74.5%</b>	<b>6.8%</b>	<b>8.3%</b>	<b>7 466</b>	<b>3 795</b>	<b>96.7%</b>	<b>4 960</b>	<b>3.7%</b>
<b>Solar</b>	<b>150</b>	<b>56.9%</b>	<b>20.6%</b>	<b>1.4%</b>	<b>928</b>	<b>569</b>	<b>63.2%</b>	<b>795</b>	<b>0.6%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>3 120</b>	<b>5.1%</b>	<b>2.8%</b>	<b>28.6%</b>	<b>29 471</b>	<b>28 118</b>	<b>4.8%</b>	<b>34 625</b>	<b>26.2%</b>
<b>NON-RENEWABLES</b>	<b>7 791</b>	<b>-6.0%</b>	<b>4.2%</b>	<b>71.4%</b>	<b>82 585</b>	<b>81 360</b>	<b>1.5%</b>	<b>97 754</b>	<b>73.8%</b>
<b>TOTAL NET PRODUCTION</b>	<b>10 911</b>	<b>-3.1%</b>	<b>3.8%</b>		<b>112 055</b>	<b>109 478</b>	<b>2.4%</b>	<b>132 379</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

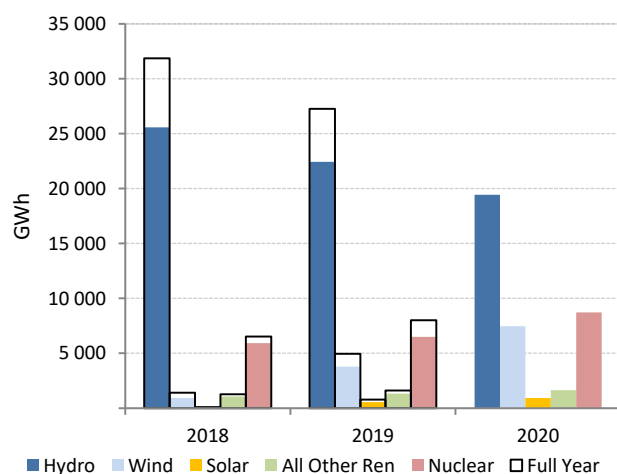
### Electricity Production



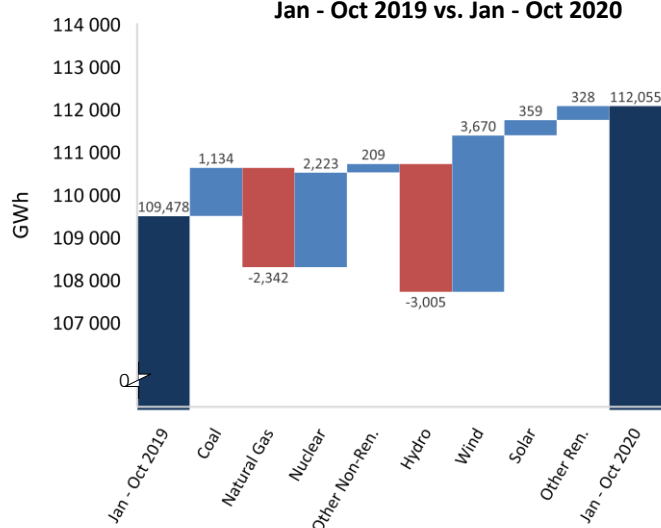
### Electricity Production by Fuel



### Low-carbon Power Jan - Oct

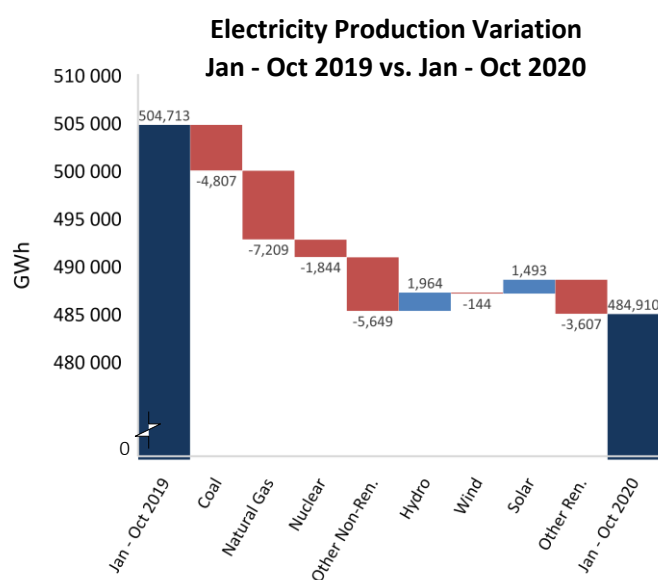
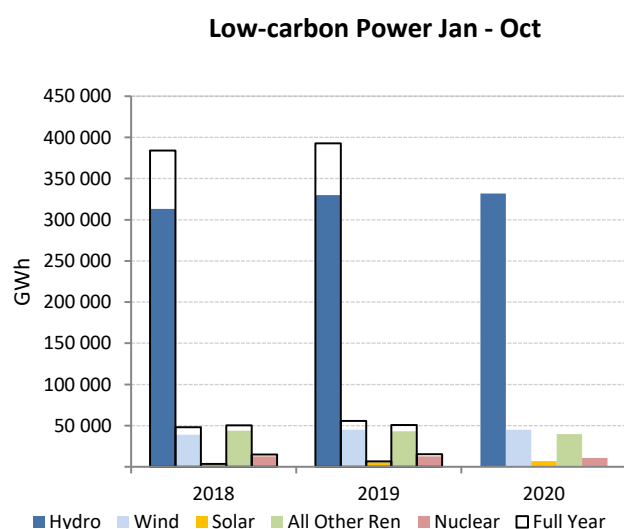
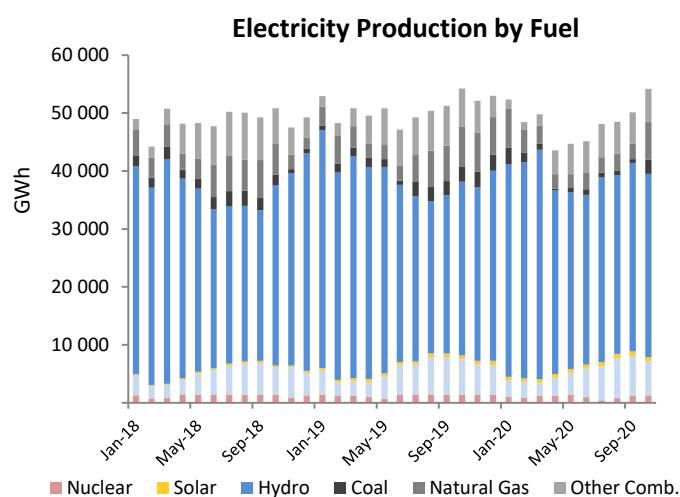
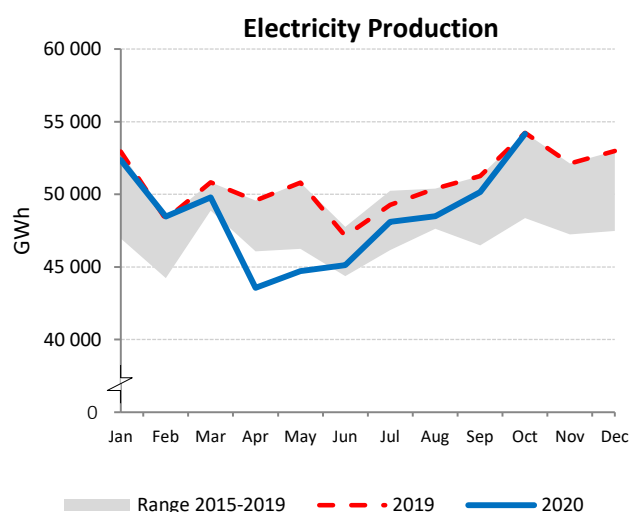


### Electricity Production Variation Jan - Oct 2019 vs. Jan - Oct 2020



# BRAZIL

	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>14 667</b>	<b>-8.6%</b>	<b>67.4%</b>	<b>27.1%</b>	<b>90 624</b>	<b>111 897</b>	<b>-19.0%</b>	<b>139 682</b>	<b>22.9%</b>
Coal	2 447	-3.1%	262.6%	4.5%	12 381	17 189	-28.0%	22 606	3.7%
Oil	565	-28.0%	393.3%	1.0%	2 398	8 046	-70.2%	9 595	1.6%
Natural Gas	6 529	-5.8%	147.4%	12.1%	36 251	43 460	-16.6%	56 727	9.3%
Combustible Renewables	5 126	-11.8%	-3.8%	9.5%	39 594	43 201	-8.4%	50 753	8.3%
Other Combustibles	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	<b>1 300</b>	<b>-5.3%</b>	<b>2.8%</b>	<b>2.4%</b>	<b>10 626</b>	<b>12 470</b>	<b>-14.8%</b>	<b>15 224</b>	<b>2.5%</b>
<b>Hydro</b>	<b>31 622</b>	<b>5.4%</b>	<b>-2.8%</b>	<b>58.4%</b>	<b>331 874</b>	<b>329 909</b>	<b>0.6%</b>	<b>392 716</b>	<b>64.4%</b>
<b>Wind</b>	<b>5 872</b>	<b>-4.2%</b>	<b>-13.9%</b>	<b>10.8%</b>	<b>45 009</b>	<b>45 152</b>	<b>-0.3%</b>	<b>55 571</b>	<b>9.1%</b>
<b>Solar</b>	<b>701</b>	<b>1.6%</b>	<b>-11.1%</b>	<b>1.3%</b>	<b>6 777</b>	<b>5 285</b>	<b>28.2%</b>	<b>6 615</b>	<b>1.1%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>43 321</b>	<b>1.6%</b>	<b>-4.7%</b>	<b>80.0%</b>	<b>423 253</b>	<b>423 548</b>	<b>-0.1%</b>	<b>505 656</b>	<b>82.9%</b>
<b>NON-RENEWABLES</b>	<b>10 840</b>	<b>-6.6%</b>	<b>131.0%</b>	<b>20.0%</b>	<b>61 657</b>	<b>81 165</b>	<b>-24.0%</b>	<b>104 153</b>	<b>17.1%</b>
<b>TOTAL NET PRODUCTION</b>	<b>54 161</b>	<b>-0.1%</b>	<b>8.0%</b>		<b>484 910</b>	<b>504 713</b>	<b>-3.9%</b>	<b>609 808</b>	

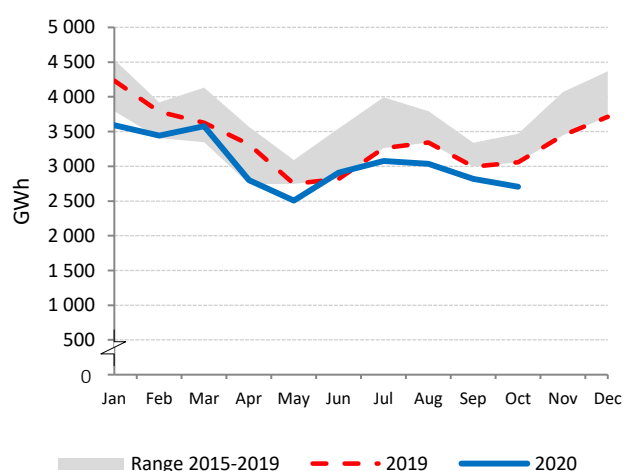
<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

# BULGARIA

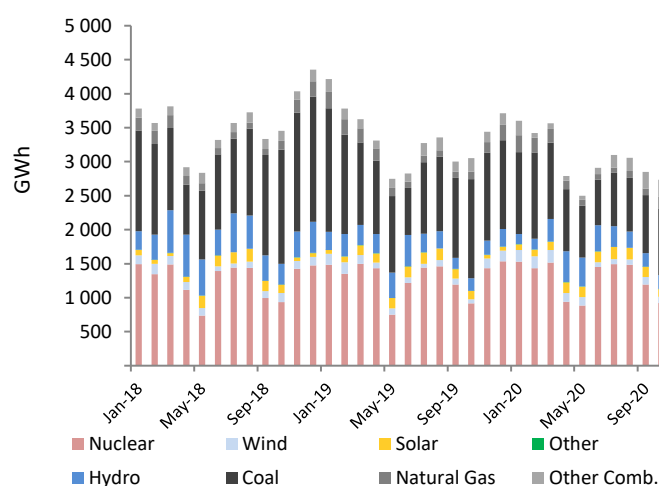
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>1 376</b>	<b>-22.4%</b>	<b>18.2%</b>	<b>50.8%</b>	<b>12 153</b>	<b>15 185</b>	<b>-20.0%</b>	<b>18 495</b>	<b>45.8%</b>
Coal	945	-35.1%	10.7%	34.9%	9 265	12 167	-23.9%	14 767	36.6%
Oil	26	-7.3%	-9.1%	0.9%	241	270	-10.7%	318	0.8%
Natural Gas	181	60.3%	81.0%	6.7%	1 432	1 455	-1.5%	1 840	4.6%
Combustible Renewables	224	32.3%	4.1%	8.3%	1 209	1 286	-6.0%	1 561	3.9%
Other Combustibles	1	-22.4%	18.1%	0.0%	6	7	-20.0%	9	0.0%
<b>Nuclear</b>	<b>920</b>	<b>0.2%</b>	<b>-23.0%</b>	<b>34.0%</b>	<b>12 853</b>	<b>12 747</b>	<b>0.8%</b>	<b>15 712</b>	<b>38.9%</b>
<b>Hydro</b>	<b>203</b>	<b>11.8%</b>	<b>2.9%</b>	<b>7.5%</b>	<b>2 840</b>	<b>2 882</b>	<b>-1.5%</b>	<b>3 349</b>	<b>8.3%</b>
<b>Wind</b>	<b>92</b>	<b>52.9%</b>	<b>-13.5%</b>	<b>3.4%</b>	<b>1 201</b>	<b>1 015</b>	<b>18.4%</b>	<b>1 317</b>	<b>3.3%</b>
<b>Solar</b>	<b>112</b>	<b>-9.5%</b>	<b>-27.1%</b>	<b>4.1%</b>	<b>1 383</b>	<b>1 333</b>	<b>3.8%</b>	<b>1 442</b>	<b>3.6%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	4	1121.3%	10352.9%	0.1%	29	24	20.2%	31	0.1%
<b>RENEWABLES</b>	<b>631</b>	<b>18.0%</b>	<b>-6.2%</b>	<b>23.3%</b>	<b>6 634</b>	<b>6 515</b>	<b>1.8%</b>	<b>7 669</b>	<b>19.0%</b>
<b>NON-RENEWABLES</b>	<b>2 076</b>	<b>-17.7%</b>	<b>-3.2%</b>	<b>76.7%</b>	<b>23 825</b>	<b>26 670</b>	<b>-10.7%</b>	<b>32 677</b>	<b>81.0%</b>
<b>TOTAL NET PRODUCTION</b>	<b>2 707</b>	<b>-11.5%</b>	<b>-3.9%</b>		<b>30 459</b>	<b>33 185</b>	<b>-8.2%</b>	<b>40 346</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

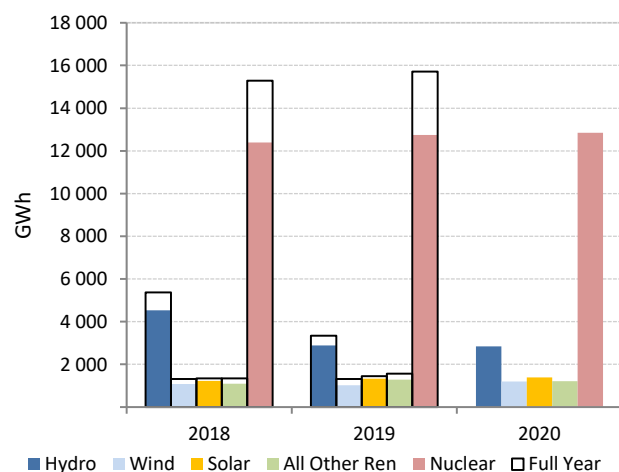
### Electricity Production



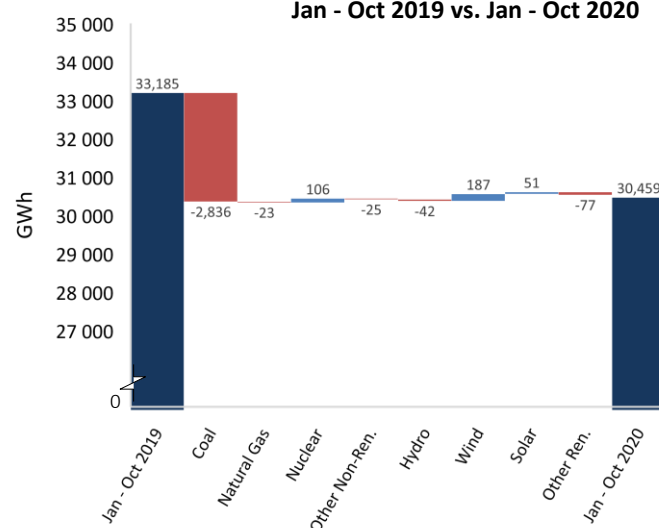
### Electricity Production by Fuel



### Low-carbon Power Jan - Oct



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

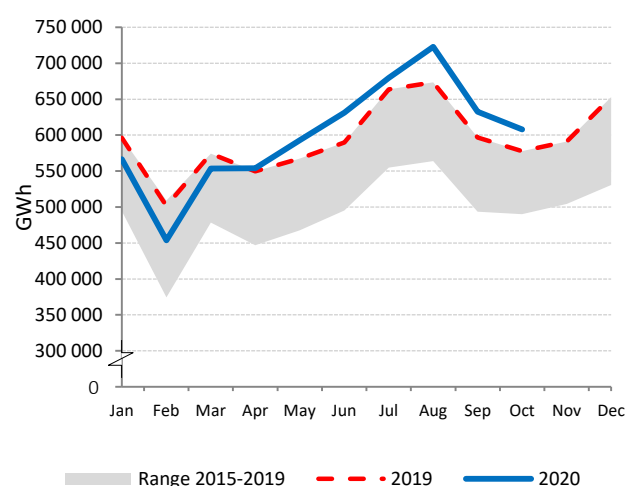


## CHINA

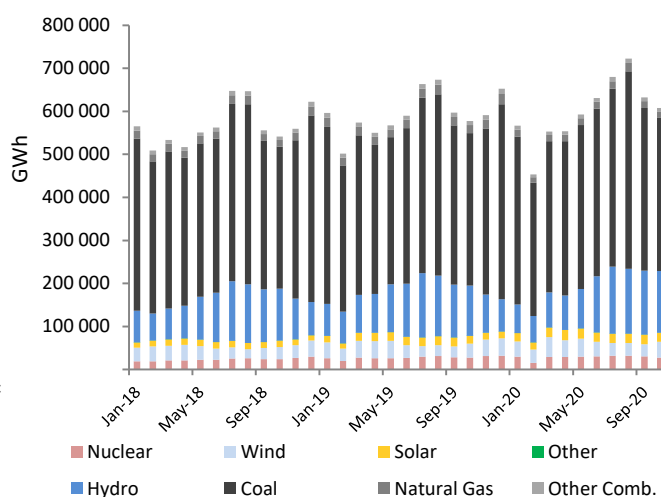
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>378 736</b>	<b>-1.0%</b>	<b>-6.1%</b>	<b>62.3%</b>	<b>4 033 124</b>	<b>4 023 414</b>	<b>0.2%</b>	<b>4 929 609</b>	<b>69.1%</b>
Coal <sup>4</sup>	355 744	0.4%	-6.1%	58.5%	3 789 208	3 727 745	1.6%	4 567 347	64.0%
Oil <sup>4</sup>	791	-0.1%	-6.1%	0.1%	8 403	8 335	0.8%	10 213	0.1%
Natural Gas <sup>4</sup>	14 840	-20.5%	-6.0%	2.4%	157 103	196 308	-20.0%	240 522	3.4%
Combustible Renewables <sup>4</sup>	6 300	-16.4%	-6.1%	1.0%	67 102	79 273	-15.4%	97 127	1.4%
Other Combustibles <sup>4</sup>	1 062	-5.0%	-6.1%	0.2%	11 308	11 752	-3.8%	14 399	0.2%
<b>Nuclear</b>	<b>27 369</b>	<b>0.1%</b>	<b>-10.0%</b>	<b>4.5%</b>	<b>285 081</b>	<b>268 738</b>	<b>6.1%</b>	<b>331 265</b>	<b>4.6%</b>
<b>Hydro</b>	<b>144 312</b>	<b>23.5%</b>	<b>-2.9%</b>	<b>23.7%</b>	<b>1 111 714</b>	<b>1 090 491</b>	<b>1.9%</b>	<b>1 254 465</b>	<b>17.6%</b>
<b>Wind</b>	<b>36 782</b>	<b>12.5%</b>	<b>31.3%</b>	<b>6.0%</b>	<b>351 560</b>	<b>322 450</b>	<b>9.0%</b>	<b>401 643</b>	<b>5.6%</b>
<b>Solar</b>	<b>20 835</b>	<b>14.5%</b>	<b>-6.9%</b>	<b>3.4%</b>	<b>213 381</b>	<b>185 438</b>	<b>15.1%</b>	<b>217 377</b>	<b>3.0%</b>
Geothermal	10	-	-	0.0%	97	98	-0.6%	118	0.0%
Other Renewables	1	-	-	0.0%	9	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>208 239</b>	<b>18.8%</b>	<b>1.2%</b>	<b>34.2%</b>	<b>1 743 864</b>	<b>1 677 750</b>	<b>3.9%</b>	<b>1 970 730</b>	<b>27.6%</b>
<b>NON-RENEWABLES</b>	<b>399 806</b>	<b>-0.6%</b>	<b>-6.3%</b>	<b>65.8%</b>	<b>4 251 104</b>	<b>4 212 879</b>	<b>0.9%</b>	<b>5 163 747</b>	<b>72.4%</b>
<b>TOTAL NET PRODUCTION</b>	<b>608 045</b>	<b>5.3%</b>	<b>-3.9%</b>		<b>5 994 968</b>	<b>5 890 629</b>	<b>1.8%</b>	<b>7 134 477</b>	

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

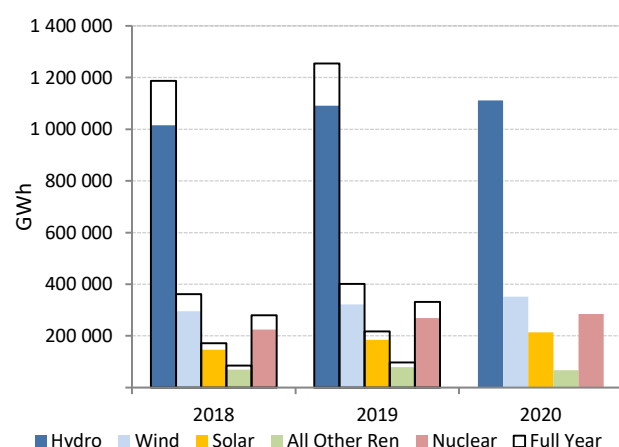
Electricity Production



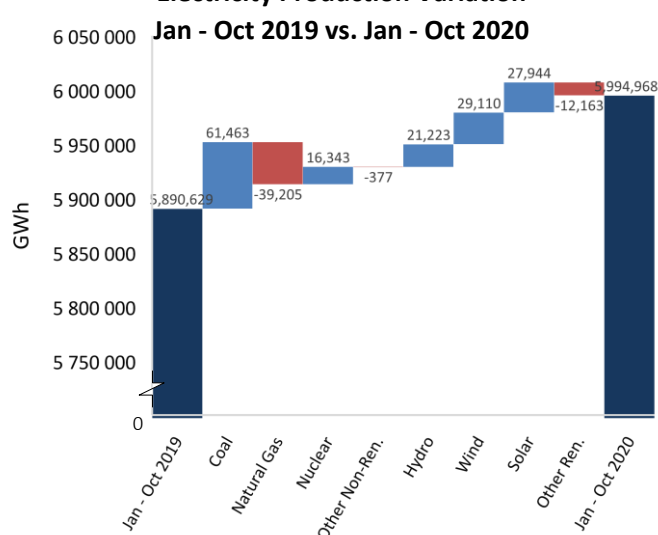
Electricity Production by Fuel



Low-carbon Power Jan - Oct



Electricity Production Variation

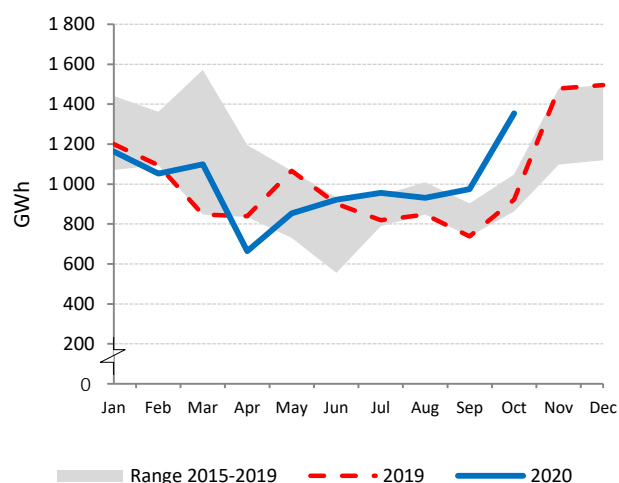


## CROATIA

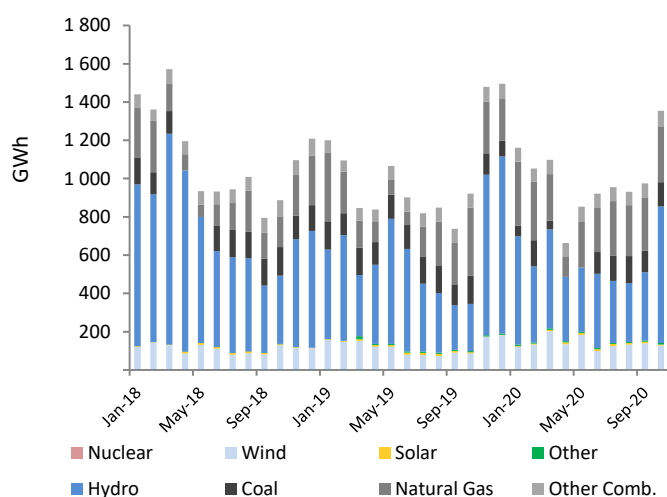
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>499</b>	<b>-13.5%</b>	<b>7.4%</b>	<b>36.8%</b>	<b>4 184</b>	<b>3 940</b>	<b>6.2%</b>	<b>4 778</b>	<b>39.0%</b>
Coal	127	-14.2%	12.7%	9.4%	867	1 317	-34.2%	1 511	12.3%
Oil	1	-81.6%	-	0.1%	7	27	-72.7%	35	0.3%
Natural Gas	292	-17.7%	5.8%	21.6%	2 575	1 935	33.1%	2 423	19.8%
Combustible Renewables	79	14.1%	5.7%	5.8%	735	661	11.2%	809	6.6%
Other Combustibles	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>715</b>	<b>190.8%</b>	<b>100.2%</b>	<b>52.8%</b>	<b>4 242</b>	<b>4 088</b>	<b>3.8%</b>	<b>5 854</b>	<b>47.8%</b>
Wind	128	48.5%	-7.6%	9.5%	1 396	1 107	26.0%	1 461	11.9%
Solar	5	-15.4%	-37.3%	0.4%	80	78	2.0%	83	0.7%
Geothermal	7	2.3%	9.6%	0.5%	65	62	4.3%	74	0.6%
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>934</b>	<b>125.4%</b>	<b>59.6%</b>	<b>69.0%</b>	<b>6 518</b>	<b>5 997</b>	<b>8.7%</b>	<b>8 281</b>	<b>67.6%</b>
<b>NON-RENEWABLES</b>	<b>420</b>	<b>-17.3%</b>	<b>7.8%</b>	<b>31.0%</b>	<b>3 450</b>	<b>3 279</b>	<b>5.2%</b>	<b>3 969</b>	<b>32.4%</b>
<b>TOTAL NET PRODUCTION</b>	<b>1 354</b>	<b>46.9%</b>	<b>38.9%</b>		<b>9 967</b>	<b>9 276</b>	<b>7.5%</b>	<b>12 250</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

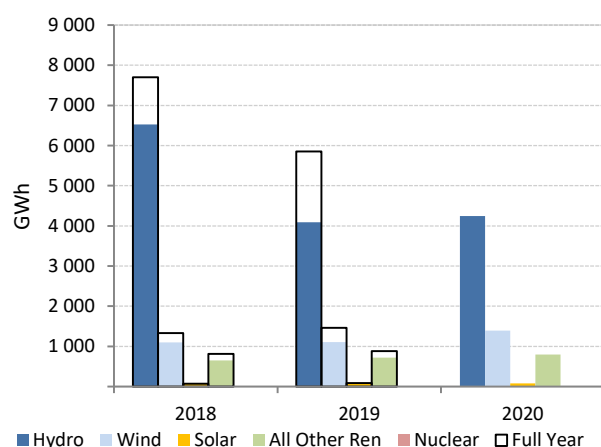
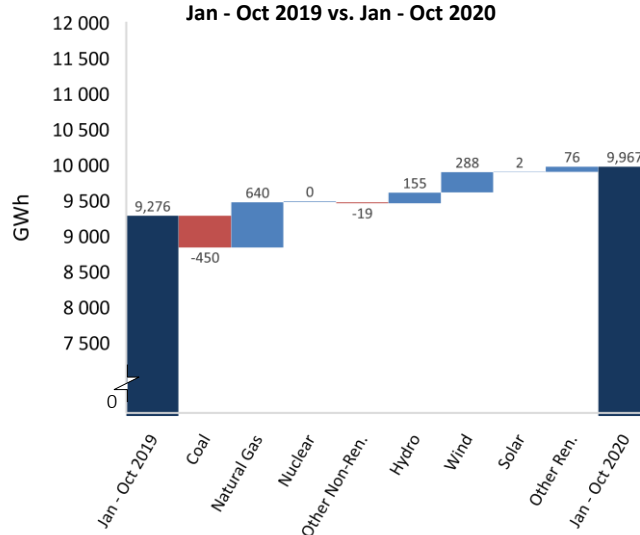
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Oct

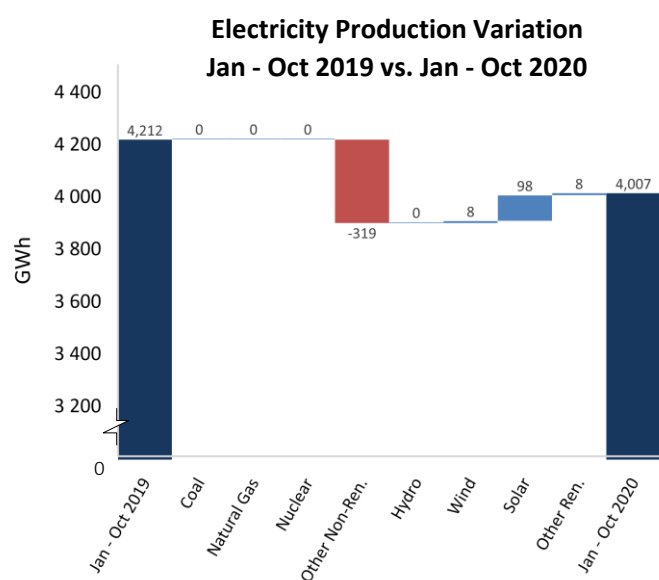
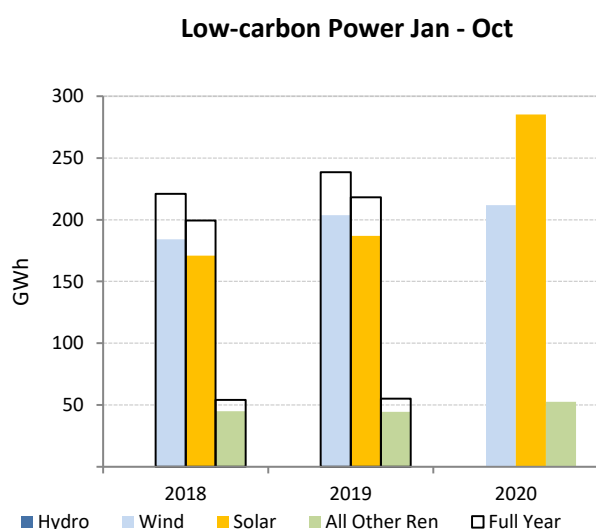
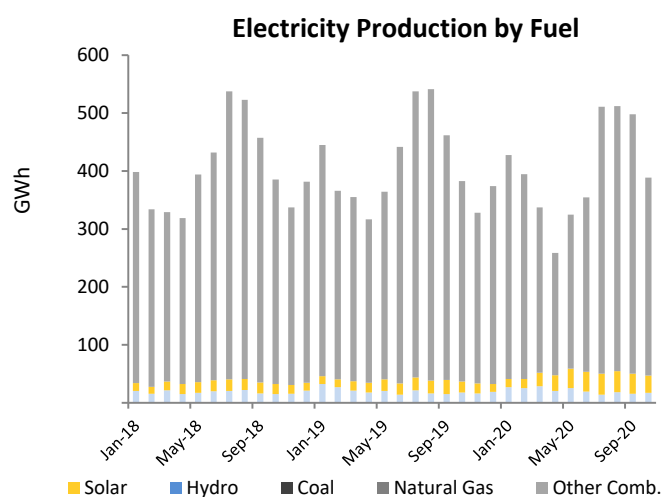
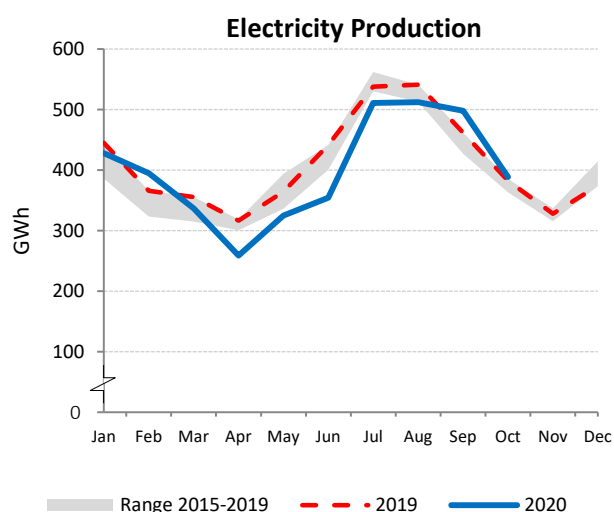
Electricity Production Variation  
Jan - Oct 2019 vs. Jan - Oct 2020

## CYPRUS

	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>342</b>	<b>-1.2%</b>	<b>-23.7%</b>	<b>87.9%</b>	<b>3 510</b>	<b>3 821</b>	<b>-8.1%</b>	<b>4 457</b>	<b>90.7%</b>
Coal	0	-	-	-	0	0	-	0	0.0%
Oil	337	-1.3%	-24.0%	86.6%	3 458	3 777	-8.4%	4 402	89.6%
Natural Gas	-	-	-	-	-	-	-	-	-
Combustible Renewables	5	7.7%	9.3%	1.3%	53	45	18.2%	55	1.1%
Other Combustibles	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Wind	17	-4.1%	10.3%	4.5%	212	204	4.0%	239	4.9%
Solar	30	59.7%	-14.0%	7.7%	285	187	52.7%	218	4.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>52</b>	<b>26.0%</b>	<b>-5.1%</b>	<b>13.4%</b>	<b>550</b>	<b>435</b>	<b>26.4%</b>	<b>512</b>	<b>10.4%</b>
<b>NON-RENEWABLES</b>	<b>337</b>	<b>-1.3%</b>	<b>-24.0%</b>	<b>86.6%</b>	<b>3 458</b>	<b>3 777</b>	<b>-8.4%</b>	<b>4 402</b>	<b>89.6%</b>
<b>TOTAL NET PRODUCTION</b>	<b>389</b>	<b>1.6%</b>	<b>-21.9%</b>		<b>4 007</b>	<b>4 212</b>	<b>-4.9%</b>	<b>4 914</b>	

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

Please refer to Country Notes

<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

## INDIA

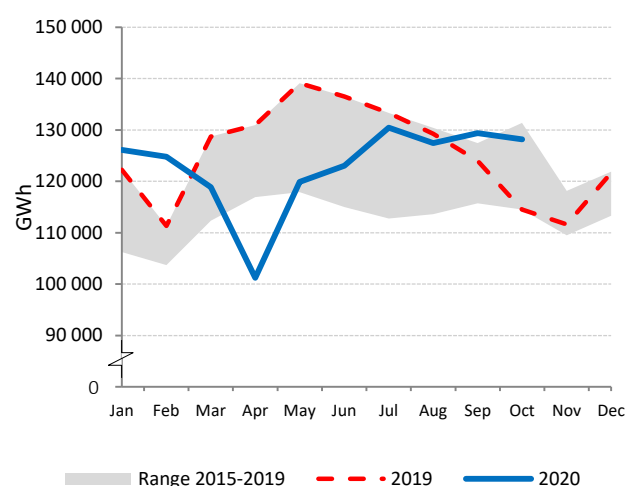
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>101 748</b>	<b>15.8%</b>	<b>6.2%</b>	<b>79.4%</b>	<b>938 687</b>	<b>993 265</b>	<b>-5.5%</b>	<b>1 183 042</b>	<b>78.7%</b>
Coal	90 706	13.4%	4.1%	70.8%	834 453	897 133	-7.0%	1 066 480	70.9%
Oil <sup>4</sup>	377	-21.1%	-44.7%	0.3%	6 526	5 924	10.2%	6 900	0.5%
Natural Gas	6 604	12.0%	8.4%	5.2%	62 176	56 379	10.3%	66 588	4.4%
Combustible Renewables	4 000	172.3%	117.9%	3.1%	34 920	33 225	5.1%	42 347	2.8%
Other Combustibles <sup>4</sup>	61	-	-	0.0%	612	604	1.3%	726	0.0%
<b>Nuclear</b>	<b>3 758</b>	<b>-8.0%</b>	<b>2.2%</b>	<b>2.9%</b>	<b>34 923</b>	<b>35 527</b>	<b>-1.7%</b>	<b>42 599</b>	<b>2.8%</b>
<b>Hydro</b>	<b>14 286</b>	<b>-12.6%</b>	<b>-31.6%</b>	<b>11.1%</b>	<b>150 078</b>	<b>146 556</b>	<b>2.4%</b>	<b>167 836</b>	<b>11.2%</b>
<b>Wind</b>	<b>3 847</b>	<b>68.9%</b>	<b>-20.6%</b>	<b>3.0%</b>	<b>56 616</b>	<b>56 346</b>	<b>0.5%</b>	<b>63 537</b>	<b>4.2%</b>
<b>Solar</b>	<b>4 544</b>	<b>15.6%</b>	<b>9.9%</b>	<b>3.5%</b>	<b>49 062</b>	<b>38 255</b>	<b>28.2%</b>	<b>46 226</b>	<b>3.1%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>26 677</b>	<b>11.0%</b>	<b>-15.9%</b>	<b>20.8%</b>	<b>290 677</b>	<b>274 383</b>	<b>5.9%</b>	<b>319 945</b>	<b>21.3%</b>
<b>NON-RENEWABLES</b>	<b>101 506</b>	<b>12.2%</b>	<b>3.9%</b>	<b>79.2%</b>	<b>938 689</b>	<b>995 567</b>	<b>-5.7%</b>	<b>1 183 294</b>	<b>78.7%</b>
<b>TOTAL NET PRODUCTION</b>	<b>128 183</b>	<b>11.9%</b>	<b>-0.9%</b>		<b>1 229 366</b>	<b>1 269 950</b>	<b>-3.2%</b>	<b>1 503 239</b>	

<sup>1</sup> current month to month of last year change<sup>4</sup> estimated from annual data<sup>2</sup> month-to-month change

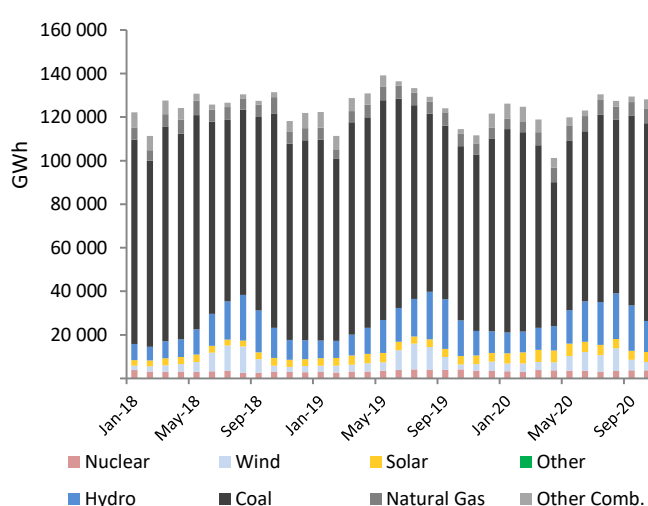
Distributed generation is estimated by the IEA Secretariat

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

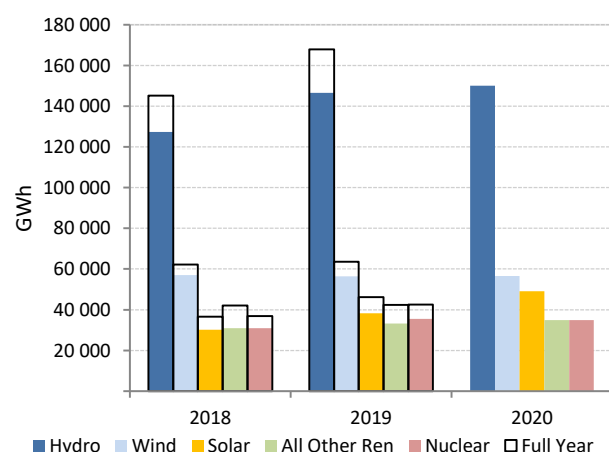
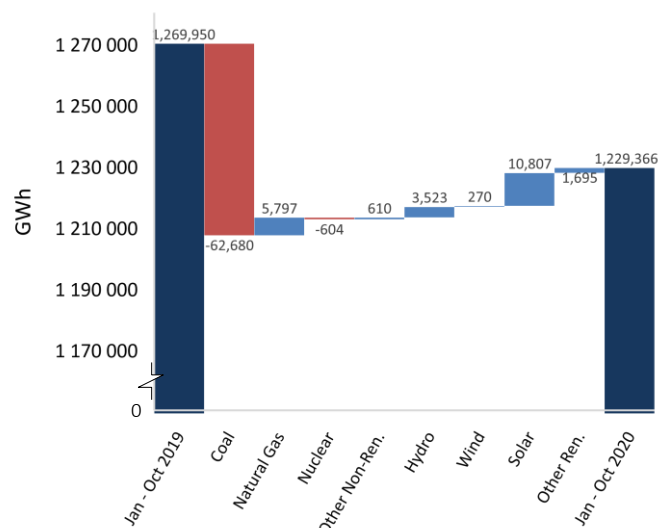
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Oct

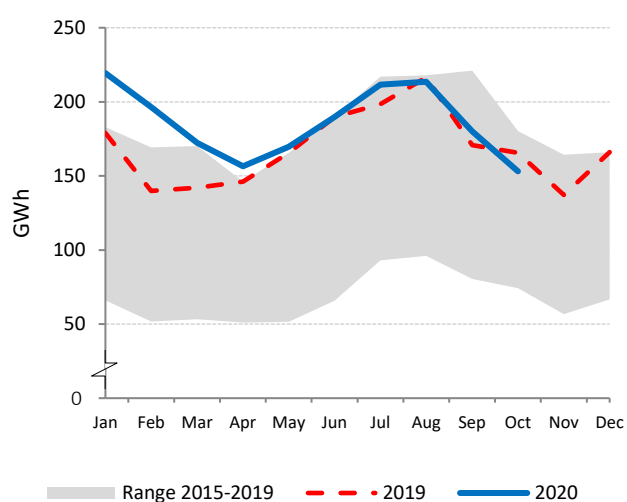
Electricity Production Variation  
Jan - Oct 2019 vs. Jan - Oct 2020

## MALTA

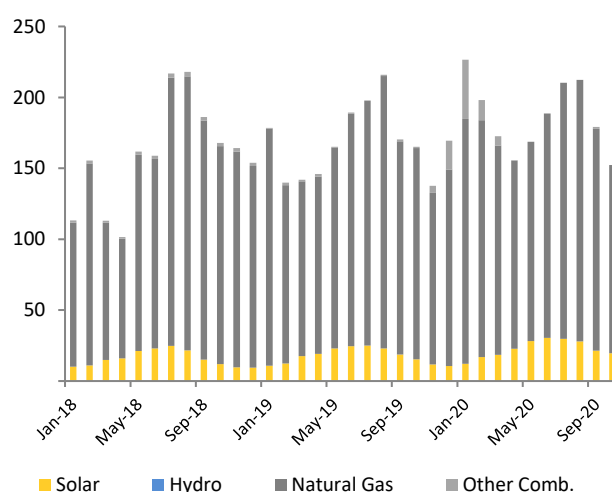
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>133</b>	<b>-11.2%</b>	<b>-15.8%</b>	<b>87.1%</b>	<b>1 635</b>	<b>1 525</b>	<b>7.2%</b>	<b>1 806</b>	<b>89.5%</b>
Coal <sup>4</sup>	1	-	-	0.6%	- 2	4	-	0	0.0%
Oil <sup>4</sup>	-	-	-	-	64	5	1228.5%	29	1.4%
Natural Gas <sup>4</sup>	133	-10.9%	-15.3%	86.6%	1 573	1 511	4.1%	1 770	87.8%
Combustible Renewables <sup>4</sup>	-	-	-	-	-	5	-	6	0.3%
Other Combustibles <sup>4</sup>	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	-	-	-	-	-	-	-	-	-
<b>Hydro</b>	-	-	-	-	-	-	-	-	-
<b>Wind</b>	-	-	-	-	-	-	-	-	-
<b>Solar</b>	<b>20</b>	<b>28.0%</b>	<b>-8.3%</b>	<b>12.9%</b>	<b>228</b>	<b>189</b>	<b>20.2%</b>	<b>212</b>	<b>10.5%</b>
<b>Geothermal</b>	-	-	-	-	-	-	-	-	-
<b>Other Renewables</b>	-	-	-	-	-	-	-	-	-
<b>Non-Specified</b>	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>20</b>	<b>23.8%</b>	<b>-8.3%</b>	<b>12.9%</b>	<b>228</b>	<b>195</b>	<b>17.0%</b>	<b>218</b>	<b>10.8%</b>
<b>NON-RENEWABLES</b>	<b>133</b>	<b>-10.9%</b>	<b>-15.8%</b>	<b>87.1%</b>	<b>1 635</b>	<b>1 519</b>	<b>7.6%</b>	<b>1 800</b>	<b>89.2%</b>
<b>TOTAL NET PRODUCTION</b>	<b>153</b>	<b>-7.6%</b>	<b>-14.9%</b>		<b>1 862</b>	<b>1 714</b>	<b>8.6%</b>	<b>2 017</b>	

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

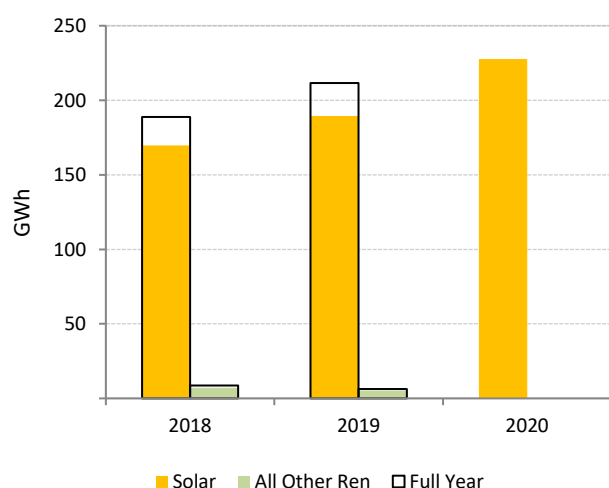
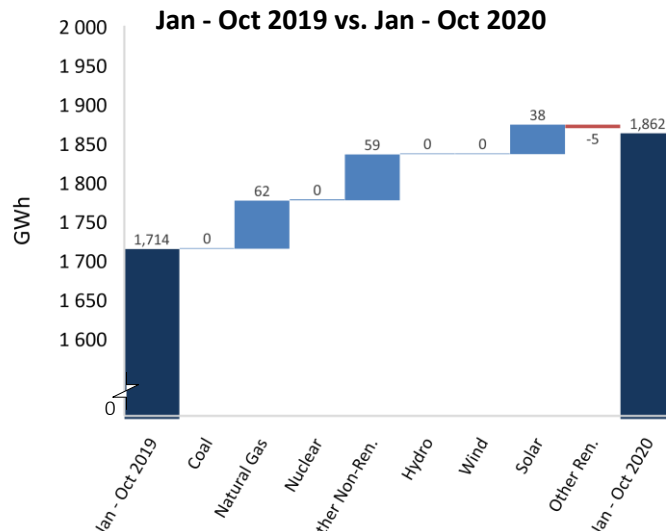
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Oct

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



-



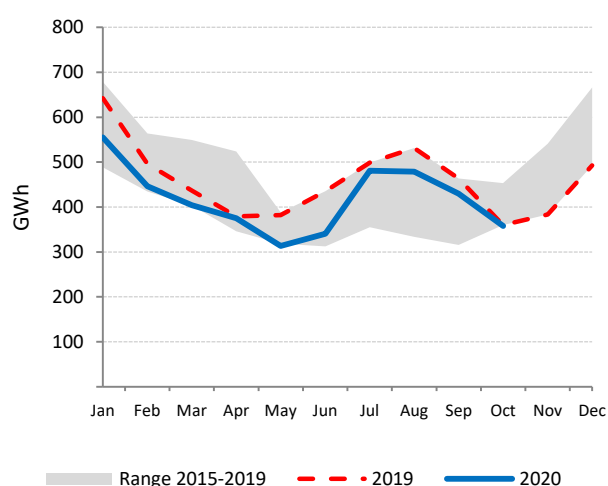


# NORTH MACEDONIA

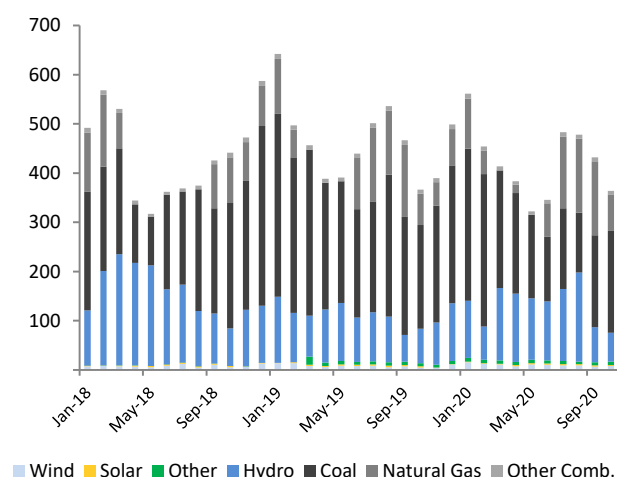
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>289</b>	<b>2.1%</b>	<b>-17.1%</b>	<b>81.0%</b>	<b>2 886</b>	<b>3 565</b>	<b>-19.0%</b>	<b>4 220</b>	<b>76.7%</b>
Coal	207	-1.9%	11.2%	58.0%	2 041	2 714	-24.8%	3 231	58.7%
Oil	4	2.1%	-17.0%	1.1%	38	48	-19.0%	56	1.0%
Natural Gas	73	14.8%	-51.2%	20.4%	753	761	-1.0%	882	16.0%
Combustible Renewables	5	0.6%	2.5%	1.3%	44	42	4.7%	51	0.9%
Other Combustibles	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>59</b>	<b>-15.8%</b>	<b>-18.1%</b>	<b>16.4%</b>	<b>1 173</b>	<b>952</b>	<b>23.2%</b>	<b>1 155</b>	<b>21.0%</b>
Wind	8	57.1%	15.4%	2.3%	102	86	18.3%	102	1.9%
Solar	2	-7.5%	-16.4%	0.5%	21	22	-0.6%	23	0.4%
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>73</b>	<b>-10.0%</b>	<b>-14.2%</b>	<b>20.5%</b>	<b>1 340</b>	<b>1 102</b>	<b>21.6%</b>	<b>1 331</b>	<b>24.2%</b>
<b>NON-RENEWABLES</b>	<b>284</b>	<b>1.8%</b>	<b>-17.5%</b>	<b>79.5%</b>	<b>2 833</b>	<b>3 522</b>	<b>-19.6%</b>	<b>4 170</b>	<b>75.8%</b>
<b>TOTAL NET PRODUCTION</b>	<b>357</b>	<b>-0.8%</b>	<b>-16.9%</b>		<b>4 173</b>	<b>4 624</b>	<b>-9.8%</b>	<b>5 501</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

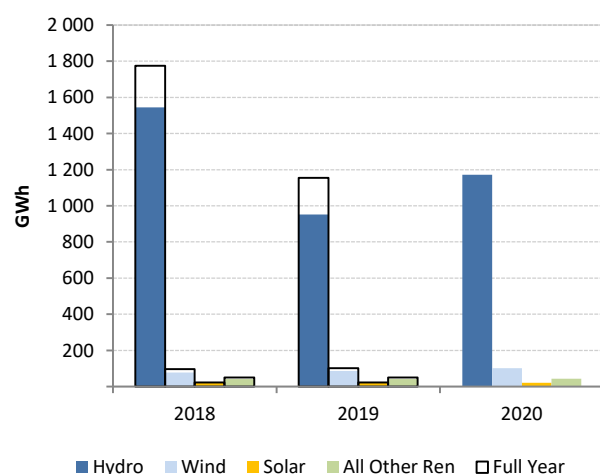
### Electricity Production



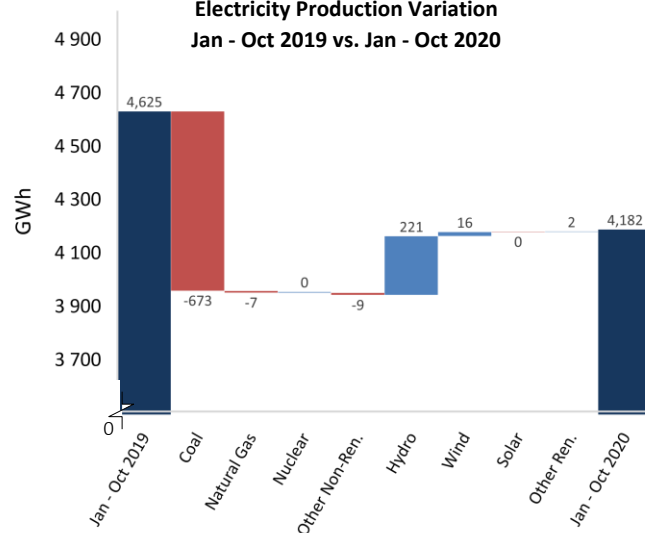
### Electricity Production by Fuel



### Low-carbon Power Jan - Oct



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

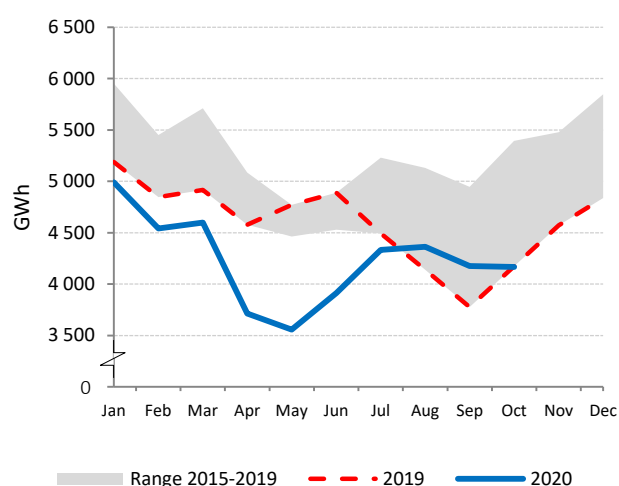


# ROMANIA

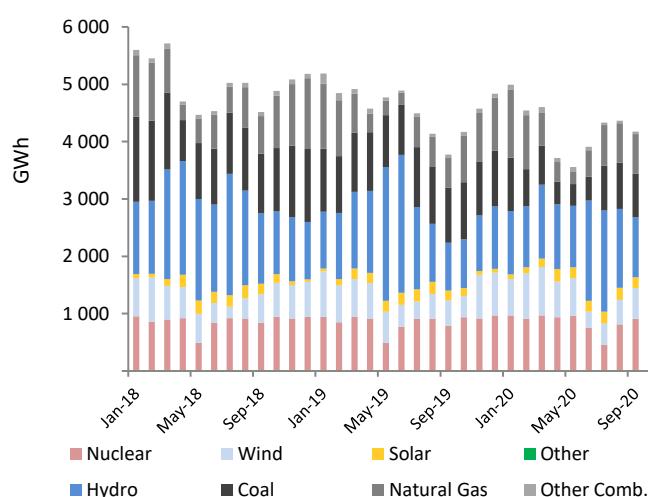
	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>1 234</b>	<b>-34.2%</b>	<b>-17.3%</b>	<b>29.6%</b>	<b>13 441</b>	<b>16 679</b>	<b>-19.4%</b>	<b>20 509</b>	<b>37.2%</b>
Coal	703	-29.5%	-7.6%	16.9%	6 507	9 921	-34.4%	11 838	21.5%
Oil	30	-	33.3%	0.7%	296	455	-35.0%	516	0.9%
Natural Gas	445	-44.6%	-35.1%	10.7%	6 259	5 956	5.1%	7 720	14.0%
Combustible Renewables	56	25.9%	142.9%	1.3%	380	347	9.5%	435	0.8%
Other Combustibles	-	-	-	-	-	-	-	-	-
<b>Nuclear</b>	<b>967</b>	<b>3.4%</b>	<b>6.0%</b>	<b>23.2%</b>	<b>8 649</b>	<b>8 458</b>	<b>2.3%</b>	<b>10 345</b>	<b>18.7%</b>
<b>Hydro</b>	<b>1 318</b>	<b>55.2%</b>	<b>25.6%</b>	<b>31.6%</b>	<b>12 911</b>	<b>13 786</b>	<b>-6.3%</b>	<b>15 842</b>	<b>28.7%</b>
<b>Wind</b>	<b>537</b>	<b>45.1%</b>	<b>-</b>	<b>12.9%</b>	<b>5 715</b>	<b>5 194</b>	<b>10.0%</b>	<b>6 703</b>	<b>12.1%</b>
<b>Solar</b>	<b>111</b>	<b>-22.5%</b>	<b>-39.9%</b>	<b>2.7%</b>	<b>1 633</b>	<b>1 651</b>	<b>-1.1%</b>	<b>1 778</b>	<b>3.2%</b>
Geothermal	-	-	-	-	-	-	-	-	-
Other Renewables	-	-	-	-	-	-	-	-	-
Non-Specified	-	-	-	-	-	-	-	-	-
<b>RENEWABLES</b>	<b>2 022</b>	<b>43.7%</b>	<b>12.7%</b>	<b>48.5%</b>	<b>20 639</b>	<b>20 978</b>	<b>-1.6%</b>	<b>24 757</b>	<b>44.9%</b>
<b>NON-RENEWABLES</b>	<b>2 145</b>	<b>-22.4%</b>	<b>-9.9%</b>	<b>51.5%</b>	<b>21 710</b>	<b>24 790</b>	<b>-12.4%</b>	<b>30 420</b>	<b>55.1%</b>
<b>TOTAL NET PRODUCTION</b>	<b>4 167</b>	<b>-0.1%</b>	<b>-0.2%</b>		<b>42 349</b>	<b>45 768</b>	<b>-7.5%</b>	<b>55 177</b>	

<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year

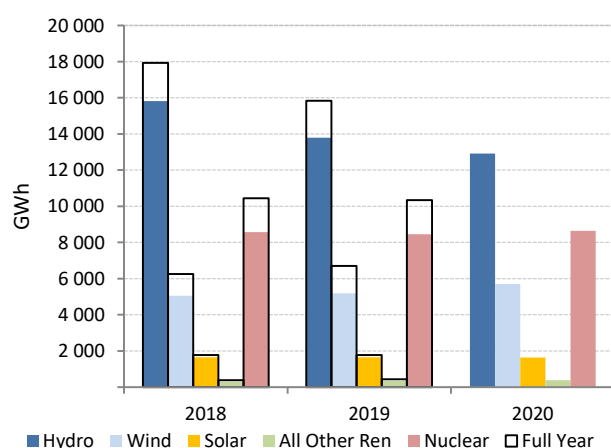
### Electricity Production



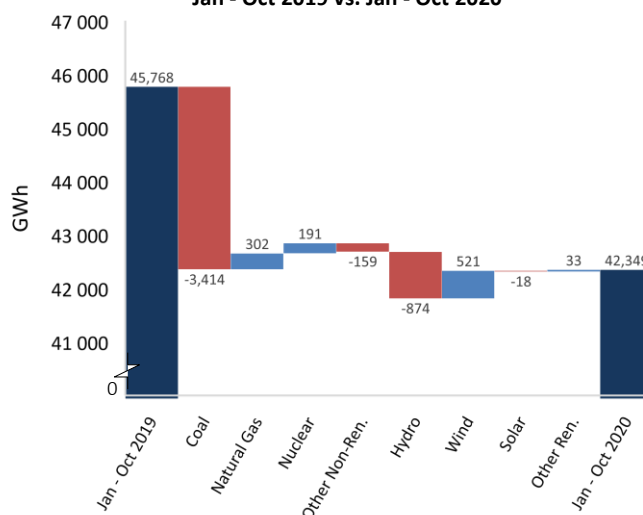
### Electricity Production by Fuel



### Low-carbon Power Jan - Oct



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



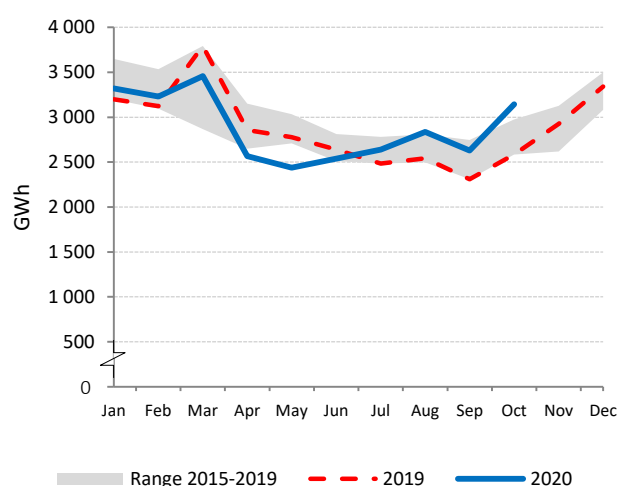
# SERBIA

	Oct 2020				Year-to-Date			2019	
	GWh	change <sup>1</sup>	change <sup>2</sup>	share	2020	2019	change <sup>3</sup>	GWh	share
<b>CONVENTIONAL THERMAL</b>	<b>2 110</b>	<b>5.0%</b>	<b>10.0%</b>	<b>67.1%</b>	<b>19 911</b>	<b>19 213</b>	<b>3.6%</b>	<b>23 547</b>	<b>68.1%</b>
Coal	2 029	4.3%	10.0%	64.5%	19 183	18 612	3.1%	22 808	66.0%
Oil <sup>4</sup>	2	16.2%	10.0%	0.1%	18	16	14.9%	20	0.1%
Natural Gas	60	19.6%	10.0%	1.9%	571	483	18.2%	591	1.7%
Combustible Renewables	18	57.3%	9.4%	0.6%	134	98	37.3%	123	0.4%
Other Combustibles <sup>4</sup>	0	-	-	0.0%	4	4	-	5	0.0%
<b>Nuclear</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Hydro</b>	<b>941</b>	<b>84.2%</b>	<b>50.1%</b>	<b>29.9%</b>	<b>8 073</b>	<b>8 481</b>	<b>-4.8%</b>	<b>10 106</b>	<b>29.2%</b>
<b>Wind</b>	<b>92</b>	<b>50.3%</b>	<b>11.9%</b>	<b>2.9%</b>	<b>802</b>	<b>594</b>	<b>35.1%</b>	<b>898</b>	<b>2.6%</b>
<b>Solar</b>	<b>1</b>	<b>-16.1%</b>	<b>-28.8%</b>	<b>0.0%</b>	<b>13</b>	<b>13</b>	<b>0.0%</b>	<b>14</b>	<b>0.0%</b>
<b>Geothermal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Other Renewables</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Non-Specified</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>RENEWABLES</b>	<b>1 052</b>	<b>80.0%</b>	<b>44.7%</b>	<b>33.5%</b>	<b>9 022</b>	<b>9 185</b>	<b>-1.8%</b>	<b>11 141</b>	<b>32.2%</b>
<b>NON-RENEWABLES</b>	<b>2 092</b>	<b>4.7%</b>	<b>10.0%</b>	<b>66.5%</b>	<b>19 776</b>	<b>19 115</b>	<b>3.5%</b>	<b>23 424</b>	<b>67.8%</b>
<b>TOTAL NET PRODUCTION</b>	<b>3 144</b>	<b>21.7%</b>	<b>19.6%</b>		<b>28 798</b>	<b>28 300</b>	<b>1.8%</b>	<b>34 565</b>	

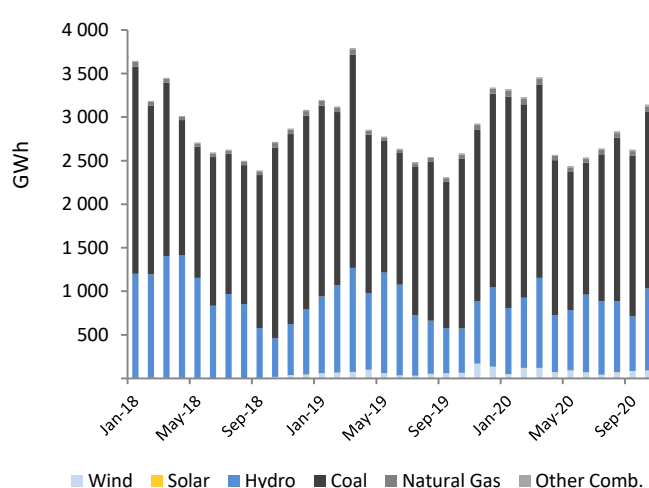
<sup>1</sup> current month to month of last year change<sup>2</sup> month-to-month change<sup>3</sup> year-to-date compared to same period last year<sup>4</sup> estimated from annual data

Distributed generation is estimated by the IEA Secretariat

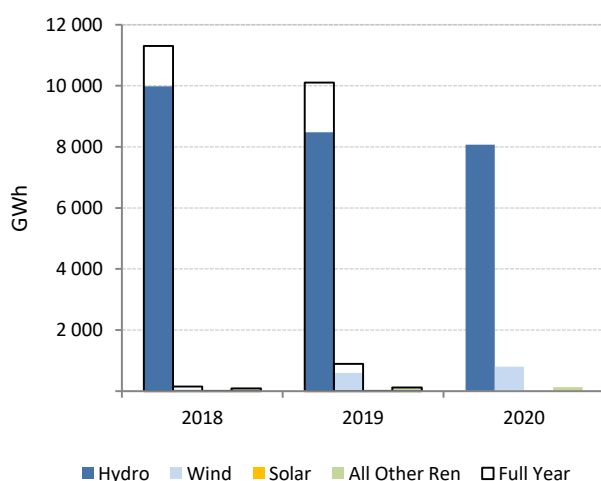
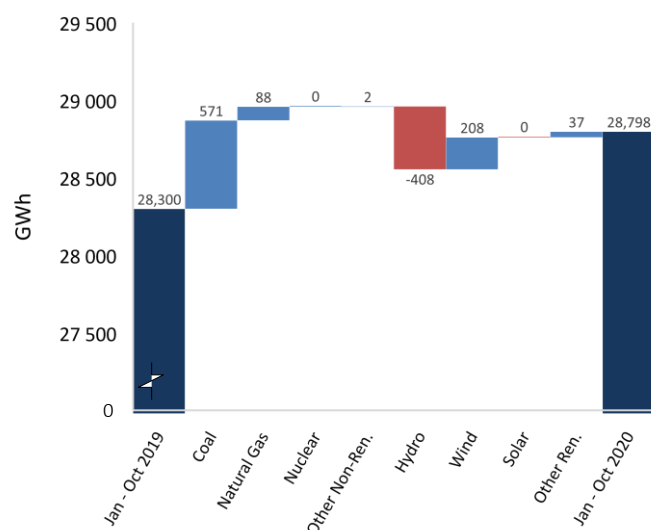
Electricity Production



Electricity Production by Fuel



Low-carbon Power Jan - Oct

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

## PRINCIPLES AND DEFINITIONS

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

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

### General notes

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

### Basic definitions

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

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

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

### Regional Groupings

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

### Publication details and further information

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

## NOTES ON CHARTS AND MAPS

### Tables

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

### Chart Types

#### Electricity Production Chart

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

#### Net Exports Chart

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

#### Electricity Production by Fuel Chart

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

#### Low-carbon Power Chart

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

#### Electricity Production Variation Chart

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

#### Fuel Switching Chart

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

### Maps

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

## 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/>

### AUSTRALIA

Excludes the overseas territories.

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

The last coal power plant in Austria closed in April 2020. From then on, coal production comes from autoproducer CHP plants and is mainly from coal products.

### 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.

The last main activity coal power plant closed in March 2016. From then on, coal production in Belgium is mainly from manufactured gases.

### 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.

### COLOMBIA

Colombia was included in the MES Report in November 2020 becoming an OECD Member Country in April 2020.

Monthly reporting includes data from January 2014 onwards.

Monthly submissions are presented in gross values. The values in the MES report are net and are estimated by the IEA Secretariat.

Monthly submissions only include autoproduction that is injected back into the grid. Other autoproduction is estimated by the IEA Secretariat. This includes autoproduction from the hydrocarbon sector.

### 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<sup>st</sup> of April and ending 31<sup>st</sup> 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.

The last coal-fired power plant in Sweden closed in April 2020.

**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.

**BULGARIA**

Monthly data is collected on the Eurostat Database.

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.

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 and conventional thermal productions were included in the monthly reporting.

**CHINA**

Raw monthly 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 IEA 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.

**CYPRUS****Note by Turkey:**

*The information in this document with reference to “Cyprus” relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the “Cyprus issue”.*

**Note by all the European Union member states of the OECD and the European Union:**

*The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.*

Monthly data is collected on the Eurostat Database.

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.

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 and conventional thermal productions were included in the monthly reporting.

**INDIA**

Raw monthly 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<sup>st</sup> of April and ending 31<sup>st</sup> 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.

**MALTA**

Monthly data is collected on the Eurostat Database.

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.

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 and conventional thermal productions were included in the monthly reporting.

**NORTH MACEDONIA**

Monthly data is collected on the Eurostat Database.

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.

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 and conventional thermal productions were included in the monthly reporting.

**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.

**SERBIA**

Monthly data is collected on the Eurostat Database.

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.

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 and conventional thermal productions were included in the monthly reporting.

# Statistics report

## Overall responsibility

Mr. Julian Prime

## Statistics

Ms. Mathilde Daugy

## Contacts:

International Energy Agency  
Energy Data Centre  
Coal, Renewables, Electricity & Heat Statistics Section  
31-35, rue de la Fédération  
75739 PARIS Cedex 15  
France

☎ +33 (0)1 40 57 68 39

✉ [CES@iea.org](mailto:CES@iea.org)

## Media Enquiries:

IEA Press Office

☎ +33 (0)1 40 57 65 54

✉ [ieapressoffice@iea.org](mailto:ieapressoffice@iea.org)

**This document can be downloaded free of charge at:**

<https://www.iea.org/reports/monthly-electricity-statistics/>

**Published on the 15<sup>th</sup> of each month.**

2020