

# Monthly electricity statistics



International  
Energy Agency  
Secure  
Sustainable  
Together

With data up to:  
**October 2016**

# 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
Czech Republic	11
Denmark	12
Estonia	13
Finland	14
France	15
Germany	16
Greece	17
Hungary	18
Iceland	19
Ireland	20
Italy	21
Japan	22
Korea	23
Luxembourg	24
Mexico	25
Netherlands	26
New Zealand	27
Norway	28
Poland	29
Portugal	30
Slovak Republic	31
Slovenia	32
Spain	33
Sweden	34
Switzerland	35
Turkey	36
United Kingdom	37
United States	38
<b>PRINCIPLES AND DEFINITIONS</b>	39

# MONTHLY ELECTRICITY STATISTICS

## October 2016

### HIGHLIGHTS

#### October 2016 vs. October 2015

Total OECD electricity production reached 825.3 TWh in October 2016, an increase of 0.8% or 6.9 TWh over the same month last year.

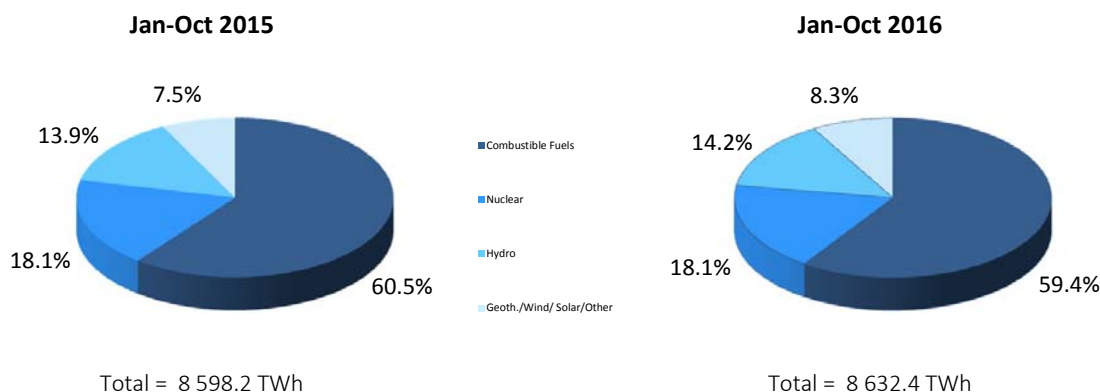
- Production from Combustible Fuels grew by 1.2% in the OECD, compared to October 2015, with a decrease in OECD Americas of 1.8% and increases in OECD Asia Oceania, 0.2%, and OECD Europe, 7.1%.
- Production from Geoth./Wind/Solar/Other grew by 13.4% in the OECD, compared to October 2015. This included growth in each OECD region, specifically, OECD Americas by 24.8%, OECD Europe by 6.1% and OECD Asia Oceania by 2.8%.

#### January - October 2016 vs. the same period in 2015

Total OECD electricity production reached 8 632.4 TWh, an increase of 0.4%, or 34.1 TWh, over the same period last year.

- Electricity supply for the months January – October 2016 was 0.4%, or 34.6 TWh, above the level for the same period in 2015. This comprised increases of 0.6% in both OECD Europe and OECD Asia Oceania and 0.2% in OECD Americas.
- The share of electricity production from Combustible Fuels fell by 1.1 percentage points while that of Hydro and Geoth./Wind/Solar/Other each grew by 0.3 and 0.8 percentage points, respectively. The share of electricity production from Nuclear remained the same.

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



## OECD Total

TWh

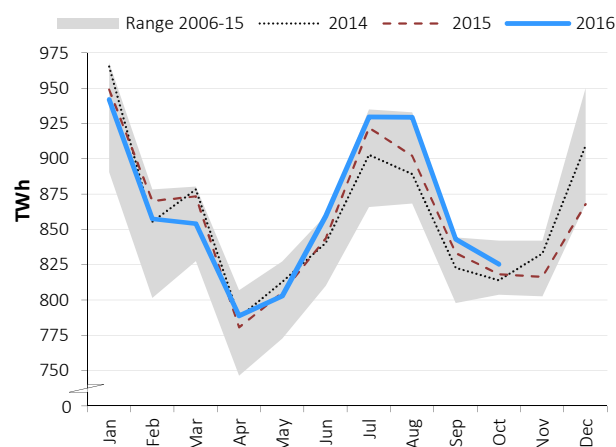
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	509.8	527.4	589.8	5 128.8	-1.4%	59.4%	6 187.2	60.2%
+ Nuclear	144.9	147.7	157.5	1 559.0	0.3%	18.1%	1 876.3	18.2%
+ Hydro	102.3	103.7	113.4	1 225.5	2.4%	14.2%	1 420.9	13.8%
+ Geoth./Wind/Solar/Other	68.3	64.2	68.7	719.1	10.9%	8.3%	798.3	7.8%
<b>= Indigenous Production</b>	<b>825.3</b>	<b>843.1</b>	<b>929.3</b>	<b>8 632.4</b>	<b>0.4%</b>	<b>100.0%</b>	<b>10 282.7</b>	<b>100.0%</b>
+ Imports	36.7	37.0	38.1	401.1	-4.9%		509.8	
- Exports	36.2	36.5	37.4	397.0	-5.1%		506.3	
<b>= Electricity Supplied</b>	<b>825.8</b>	<b>843.7</b>	<b>930.0</b>	<b>8 636.5</b>	<b>0.4%</b>		<b>10 286.2</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

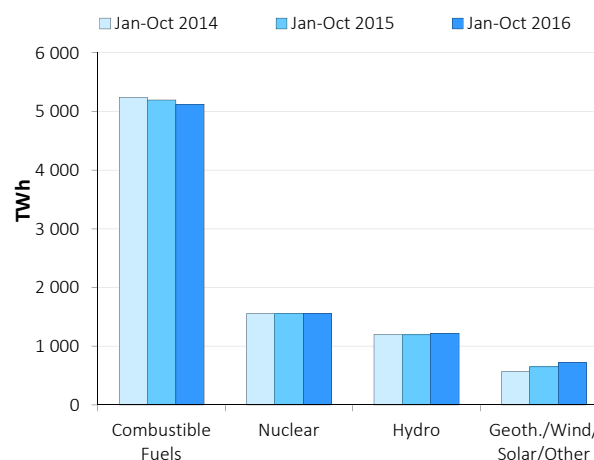
2. Share of electricity production by fuel type.

- Electricity production was 825.3 TWh in October 2016.
  - This was 6.9 TWh higher, or 0.8%, compared to October 2015 and 17.8 TWh, or 2.1%, lower compared to September 2016.
  - Combustible Fuels production reduced by 3.3%, a decrease of 17.6 TWh, compared to the previous month.
- Total production for the year-to-date was 8 632.4 TWh. Comparing this to the same period last year shows that:
  - Total production was higher by 34.1 TWh, or 0.4%.
  - Combustible Fuels production reduced by 1.4%, a decrease of 70.6 TWh
  - Geoth./Wind/Solar/Other production increased by 10.9%, or 70.5 TWh.
  - Trade volume decreased by 42.1 TWh, or 5%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- OECD Total includes Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, 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 and Latvia are not included in this report.

## OECD Americas

TWh

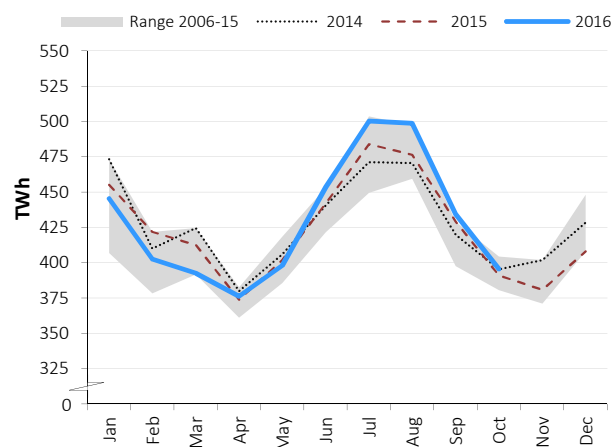
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	243.5	282.0	337.6	2 654.6	-2.3%	61.8%	3 184.5	62.7%
+ Nuclear	69.9	75.0	81.2	757.8	-0.1%	17.6%	906.6	17.9%
+ Hydro	51.3	51.0	56.5	601.0	3.3%	14.0%	700.3	13.8%
+ Geoth./Wind/Solar/Other	30.8	26.3	23.3	283.9	23.6%	6.6%	285.3	5.6%
<b>= Indigenous Production</b>	<b>395.5</b>	<b>434.3</b>	<b>498.6</b>	<b>4 297.3</b>	<b>0.2%</b>	<b>100.0%</b>	<b>5 076.7</b>	<b>100.0%</b>
+ Imports	7.1	8.0	9.2	78.0	6.2%		86.8	
- Exports	7.1	8.0	9.4	78.9	7.3%		86.7	
<b>= Electricity Supplied</b>	<b>395.5</b>	<b>434.3</b>	<b>498.4</b>	<b>4 296.4</b>	<b>0.2%</b>		<b>5 076.7</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

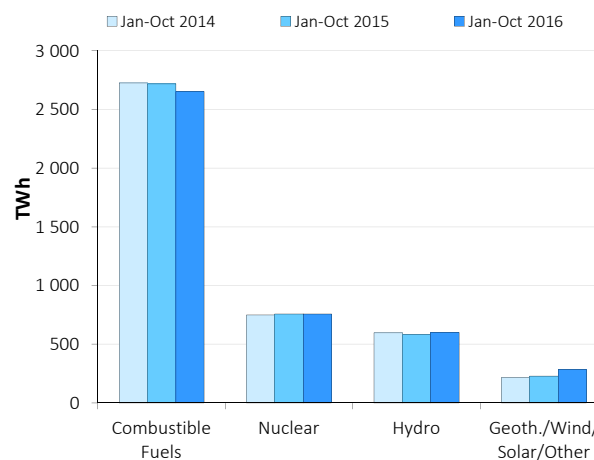
2. Share of electricity production by fuel type.

- Electricity production was 395.5 TWh in October 2016.
  - This was 4.4 TWh higher, or 1.1%, compared to October 2015 and 38.8 TWh, or 8.9%, lower compared to September 2016.
  - Combustible Fuels production reduced by 13.6%, a decrease of 38.5 TWh, compared to the previous month.
- Total production for the year-to-date was 4 297.3 TWh. Comparing this to the same period last year shows that:
  - Total production was higher by 9.4 TWh, or 0.2%.
  - Combustible Fuels production reduced by 2.3%, a decrease of 63.3 TWh.
  - Geoth./Wind/Solar/Other production increased by 23.6%, or 54.2 TWh.
  - Trade volume increased by 9.9 TWh, or 6.8%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- OECD Americas includes Canada, Chile, Mexico and the United States.



## OECD Asia Oceania

TWh

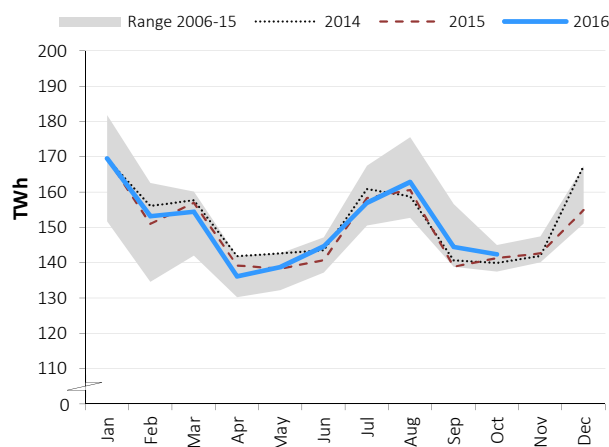
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	111.2	111.8	128.1	1 170.6	-1.2%	77.9%	1 421.5	79.3%
+ Nuclear	13.1	14.0	15.6	147.3	13.3%	9.8%	160.8	9.0%
+ Hydro	11.0	12.4	11.8	116.1	-0.1%	7.7%	134.8	7.5%
+ Geoth./Wind/Solar/Other	7.1	6.3	7.5	69.4	8.1%	4.6%	75.5	4.2%
<b>= Indigenous Production</b>	<b>142.4</b>	<b>144.5</b>	<b>162.9</b>	<b>1 503.4</b>	<b>0.6%</b>	<b>100.0%</b>	<b>1 792.6</b>	<b>100.0%</b>
+ Imports	0.0	0.0	0.0	0.0	0.0%		0.0	
- Exports	0.0	0.0	0.0	0.0	0.0%		0.0	
<b>= Electricity Supplied</b>	<b>142.4</b>	<b>144.5</b>	<b>162.9</b>	<b>1 503.4</b>	<b>0.6%</b>		<b>1 792.6</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

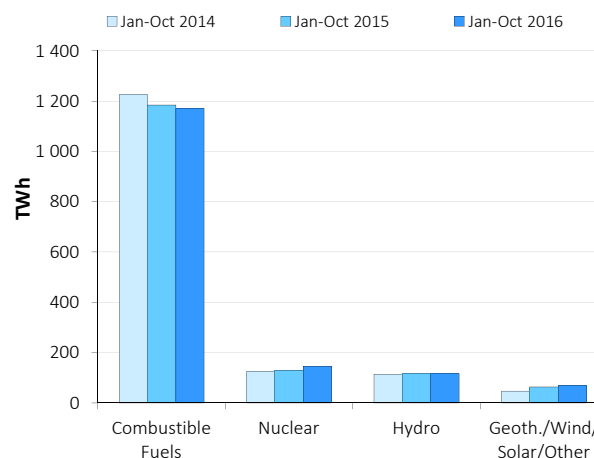
2. Share of electricity production by fuel type.

- Electricity production was 142.4 TWh in October 2016.
  - This was 1.1 TWh higher, or 0.7%, compared to October 2015 and 2.1 TWh, or 1.5%, lower compared to September 2016.
  - Combustible Fuels production reduced by 0.5%, a decrease of 0.6 TWh, compared to the previous month.
- Total production for the year-to-date was 1 503.4 TWh. Comparing this to the same period last year shows that:
  - Total production was higher by 8.4 TWh, or 0.6%.
  - Combustible Fuels production reduced by 1.2%, a decrease of 13.9 TWh.
  - Nuclear production showed the largest percentage change by energy source, being 13.3% higher.
  - Geoth./Wind/Solar/Other production increased by 8.1%, or 5.2 TWh.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- OECD Asia Oceania includes Australia, Japan, Korea and New Zealand.
- Israel is not included in this publication.

## OECD Europe

TWh

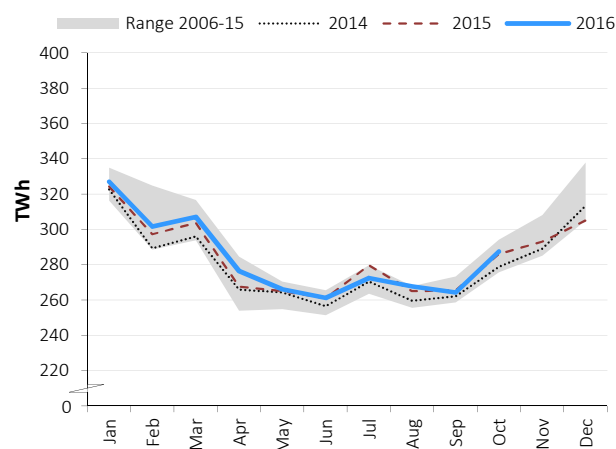
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	155.0	133.6	124.1	1 303.7	0.5%	46.0%	1 581.3	46.3%
+ Nuclear	61.9	58.7	60.7	653.8	-1.7%	23.1%	808.8	23.7%
+ Hydro	40.1	40.3	45.2	508.4	1.9%	18.0%	585.8	17.2%
+ Geoth./Wind/Solar/Other	30.4	31.7	37.9	365.8	3.1%	12.9%	437.5	12.8%
<b>= Indigenous Production</b>	<b>287.4</b>	<b>264.3</b>	<b>267.8</b>	<b>2 831.6</b>	<b>0.6%</b>	<b>100.0%</b>	<b>3 413.4</b>	<b>100.0%</b>
+ Imports	29.6	29.0	28.9	323.1	-7.3%		423.0	
- Exports	29.0	28.5	28.0	318.1	-7.7%		419.5	
<b>= Electricity Supplied</b>	<b>288.0</b>	<b>264.8</b>	<b>268.7</b>	<b>2 836.6</b>	<b>0.6%</b>		<b>3 416.8</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

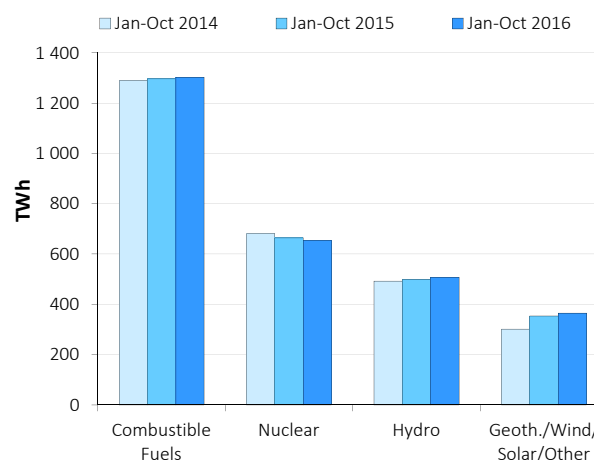
2. Share of electricity production by fuel type.

- Electricity production was 287.4 TWh in October 2016.
  - This was 1.4 TWh higher, or 0.5%, compared to October 2015 and 23.2 TWh, or 8.8%, higher compared to September 2016.
  - Combustible Fuels production grew by 16%, an increase of 21.4 TWh, compared to the previous month.
- Total production for the year-to-date was 2 831.6 TWh. Comparing this to the same period last year shows that:
  - Total production was higher by 16.3 TWh, or 0.6%.
  - Combustible Fuels production grew by 0.5%, an increase of 6.6 TWh.
  - Geoth./Wind/Solar/Other production increased by 3.1%, or 11.1 TWh.
  - Trade volume decreased by 52.1 TWh, or 7.5%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- OECD Europe includes Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.
- Latvia is not included in this report.

## IEA Total

TWh

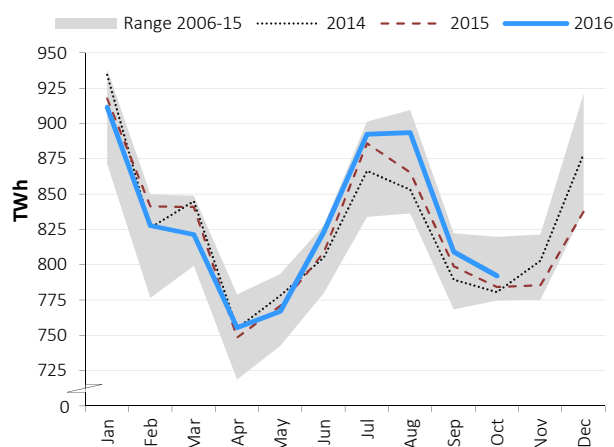
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	485.1	502.5	563.6	4 877.3	-1.6%	58.8%	5 900.2	59.7%
+ Nuclear	143.8	146.2	155.8	1 546.4	0.5%	18.6%	1 859.8	18.8%
+ Hydro	97.0	97.9	106.9	1 168.3	2.8%	14.1%	1 349.8	13.7%
+ Geoth./Wind/Solar/Other	66.1	62.6	67.0	701.7	11.3%	8.5%	776.6	7.9%
<b>= Indigenous Production</b>	<b>792.1</b>	<b>809.1</b>	<b>893.4</b>	<b>8 293.6</b>	<b>0.4%</b>	<b>100.0%</b>	<b>9 886.3</b>	<b>100.0%</b>
+ Imports	35.5	35.9	37.0	390.6	-5.3%		498.3	
- Exports	34.8	34.8	35.4	379.9	-5.7%		488.0	
<b>= Electricity Supplied</b>	<b>792.8</b>	<b>810.2</b>	<b>894.9</b>	<b>8 304.3</b>	<b>0.4%</b>		<b>9 896.6</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

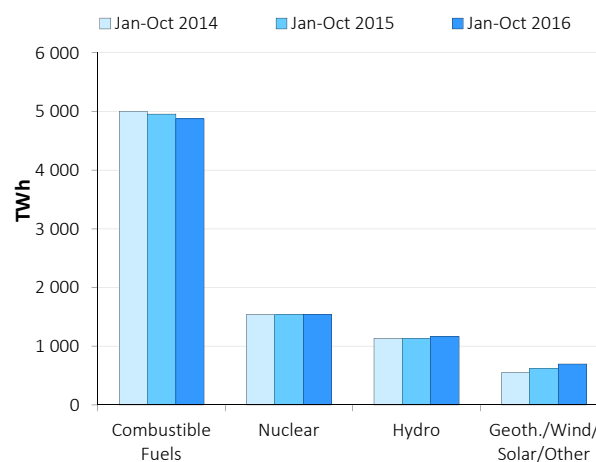
2. Share of electricity production by fuel type.

- Electricity production was 792.1 TWh in October 2016.
  - This was 7.8 TWh higher, or 1%, compared to October 2015 and 17.0 TWh, or 2.1%, lower compared to September 2016.
  - Combustible Fuels production reduced by 3.4%, a decrease of 17.3 TWh, compared to the previous month.
- Total production for the year-to-date was 8 293.6 TWh. Comparing this to the same period last year shows that:
  - Total production was higher by 30.5 TWh, or 0.4%.
  - Combustible Fuels production reduced by 1.6%, a decrease of 79.1 TWh.
  - Geoth./Wind/Solar/Other production increased by 11.3%, or 71.1 TWh.
  - Trade volume decreased by 44.6 TWh, or 5.5%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- IEA includes all countries included in OECD Total except Chile, Iceland, Mexico and Slovenia.



# AUSTRALIA

GWh

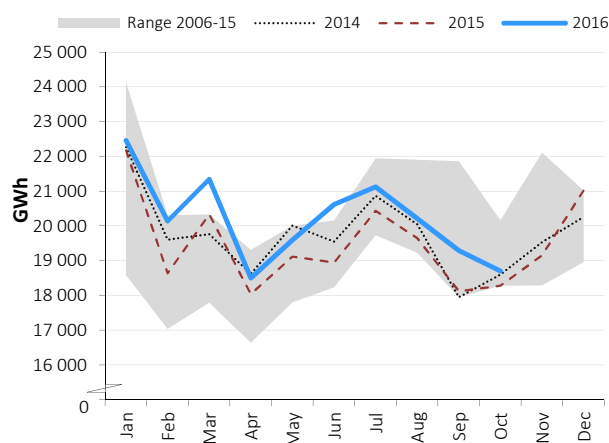
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	14 447	16 190	16 773	169 699	1.9%	84.0%	201 315	86.1%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	2 128	1 535	1 780	15 588	22.5%	7.7%	14 704	6.3%
+ Geoth./Wind/Solar/Other	2 133	1 564	1 658	16 701	15.0%	8.3%	17 909	7.7%
<b>= Indigenous Production</b>	<b>18 708</b>	<b>19 289</b>	<b>20 211</b>	<b>201 988</b>	<b>4.3%</b>	<b>100.0%</b>	<b>233 929</b>	<b>100.0%</b>
+ Imports	0	0	0	0	0.0%		0	
- Exports	0	0	0	0	0.0%		0	
<b>= Electricity Supplied</b>	<b>18 708</b>	<b>19 289</b>	<b>20 211</b>	<b>201 988</b>	<b>4.3%</b>		<b>233 929</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

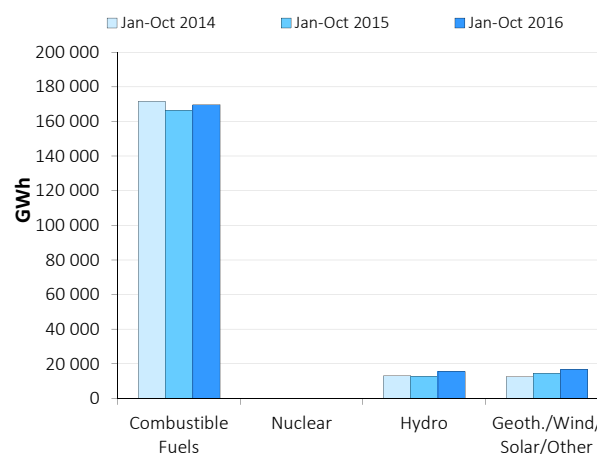
2. Share of electricity production by fuel type.

- Electricity production was 18 708 GWh in October 2016.
  - This was 427 GWh, or 2.3%, higher compared to October 2015 and 581 GWh, or 3%, lower compared to September 2016.
  - Combustible Fuels production reduced by 10.8%, a decrease of 1 743 GWh, compared to the previous month.
- Total production for the year-to-date was 201 988 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 8 240 GWh, or 4.3%.
  - Combustible Fuels production grew by 1.9%, an increase of 3 202 GWh.
  - Geoth./Wind/Solar/Other production increased by 15.0%, or 2 177 GWh.

### Electricity Production



### Electricity Production by Fuel Type



## COUNTRY NOTES:

- Excludes the overseas territories.
- Monthly reporting does not include production from other combustible fuels and solar, therefore they are estimated by the IEA Secretariat based on annual submission.
- Annual data shown are the sum of months, so may differ from annual data in other publications which are based on fiscal years beginning 1st of July and ending 31st of June.

# AUSTRIA

GWh

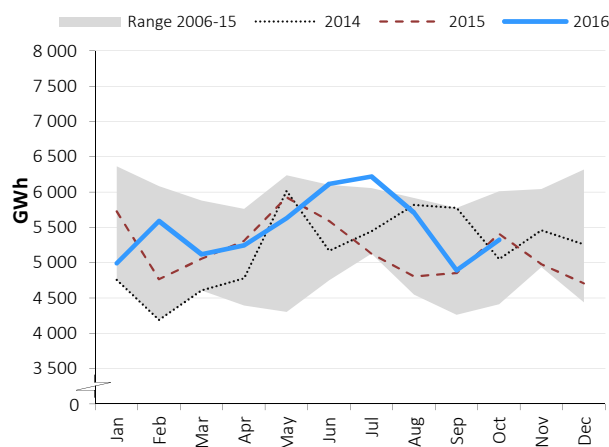
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	1 767	1 177	780	13 408	-1.5%	24.4%	18 056	29.0%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	2 971	3 385	4 428	35 899	5.0%	65.5%	38 671	62.1%
+ Geoth./Wind/Solar/Other	585	331	500	5 542	16.2%	10.1%	5 534	8.9%
<b>= Indigenous Production</b>	<b>5 323</b>	<b>4 893</b>	<b>5 708</b>	<b>54 846</b>	<b>4.3%</b>	<b>100.0%</b>	<b>62 258</b>	<b>100.0%</b>
+ Imports	2 380	2 159	1 615	21 378	-6.6%		29 367	
- Exports	1 472	1 393	1 809	16 304	1.3%		19 311	
<b>= Electricity Supplied</b>	<b>6 231</b>	<b>5 659</b>	<b>5 514</b>	<b>59 920</b>	<b>0.9%</b>		<b>72 314</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

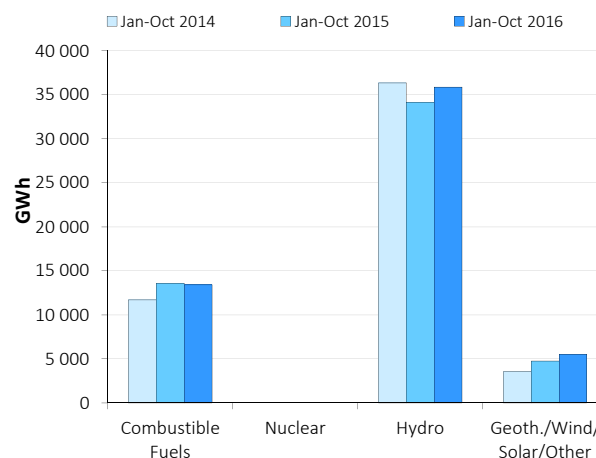
2. Share of electricity production by fuel type.

- Electricity production was 5 323 GWh in October 2016.
  - This was 89 GWh, or 1.6%, lower compared to October 2015 and 430 GWh, or 8.8%, higher compared to September 2016.
  - Hydro production reduced by 12.2%, a decrease of 414 GWh, compared to the previous month.
- Total production for the year-to-date was 54 846 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 2 276 GWh, or 4.3%.
  - Hydro production grew by 5%, an increase of 1 708 GWh.
  - Geoth./Wind/Solar/Other production increased by 16.2%, or 774 GWh.
  - Trade volume decreased by 1 291 GWh, or 3.3%.

### Electricity Production



### Electricity Production by Fuel Type



## COUNTRY NOTES:

- Monthly reporting does not include production from geothermal, solar and other non combustible fuels, therefore they are estimated by the IEA Secretariat based on annual submission.

# BELGIUM

GWh

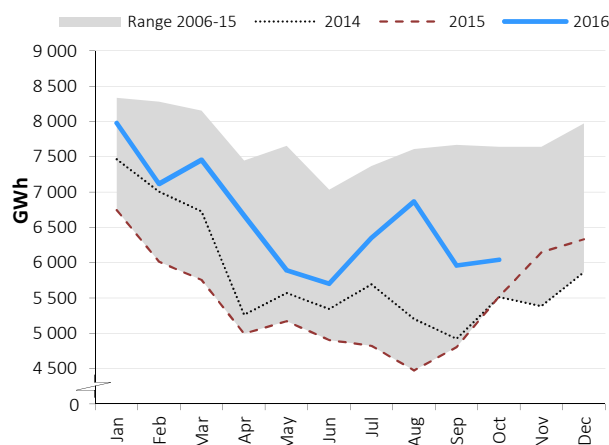
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	3 117	2 204	2 089	22 434	-10.8%	34.0%	30 894	47.0%
+ Nuclear	2 283	3 082	3 969	35 381	76.1%	53.6%	24 849	37.8%
+ Hydro	123	79	64	1 193	6.0%	1.8%	1 386	2.1%
+ Geoth./Wind/Solar/Other	520	596	745	7 028	2.6%	10.6%	8 571	13.0%
<b>= Indigenous Production</b>	<b>6 042</b>	<b>5 961</b>	<b>6 867</b>	<b>66 034</b>	<b>24.1%</b>	<b>100.0%</b>	<b>65 700</b>	<b>100.0%</b>
+ Imports	1 780	1 343	758	11 664	-43.9%		23 713	
- Exports	559	560	961	6 799	221.9%		2 714	
<b>= Electricity Supplied</b>	<b>7 263</b>	<b>6 744</b>	<b>6 664</b>	<b>70 899</b>	<b>-1.4%</b>		<b>86 699</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

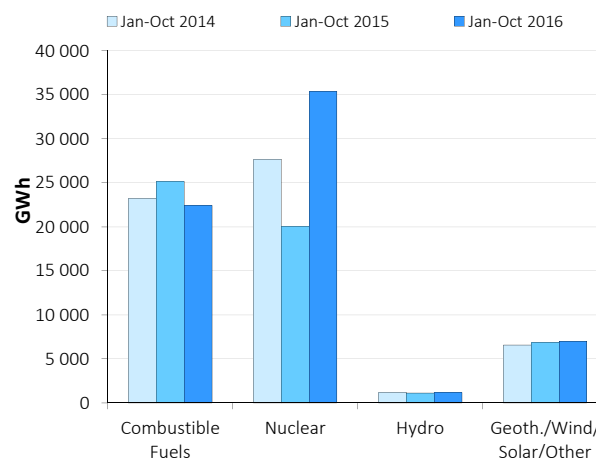
2. Share of electricity production by fuel type.

- Electricity production was 6 042 GWh in October 2016.
  - This was 521 GWh, or 9.4%, higher compared to October 2015 and 81 GWh, or 1.4%, higher compared to September 2016.
  - Combustible Fuels production grew by 41.4%, an increase of 913 GWh, compared to the previous month.
- Total production for the year-to-date was 66 034 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 12 813 GWh, or 24.1%.
  - Nuclear production grew by 76.1%, an increase of 15 291 GWh.
  - Geoth./Wind/Solar/Other production increased by 2.6%, or 180 GWh.
  - Trade volume decreased by 4 449 GWh, or 19.4%.

### Electricity Production



### Electricity Production by Fuel Type



## COUNTRY NOTES:

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

## CANADA

GWh

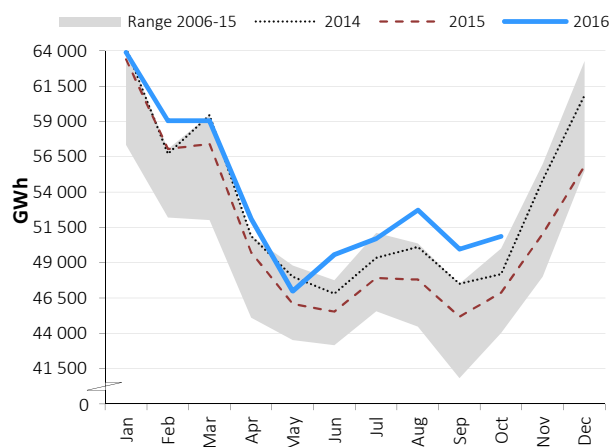
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	10 670	10 186	12 106	102 638	13.5%	19.2%	109 653	17.9%
+ Nuclear	8 109	8 589	8 535	81 293	-0.1%	15.2%	98 373	16.0%
+ Hydro	28 400	28 048	29 324	314 027	1.0%	58.7%	375 623	61.2%
+ Geoth./Wind/Solar/Other	3 680	3 133	2 759	36 957	51.2%	6.9%	30 297	4.9%
<b>= Indigenous Production</b>	<b>50 858</b>	<b>49 956</b>	<b>52 722</b>	<b>534 909</b>	<b>5.5%</b>	<b>100.0%</b>	<b>613 946</b>	<b>100.0%</b>
+ Imports	823	844	798	7 983	9.1%		8 728	
- Exports	5 511	6 183	7 298	61 570	6.4%		68 423	
<b>= Electricity Supplied</b>	<b>46 170</b>	<b>44 617</b>	<b>46 222</b>	<b>481 322</b>	<b>5.4%</b>		<b>554 251</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

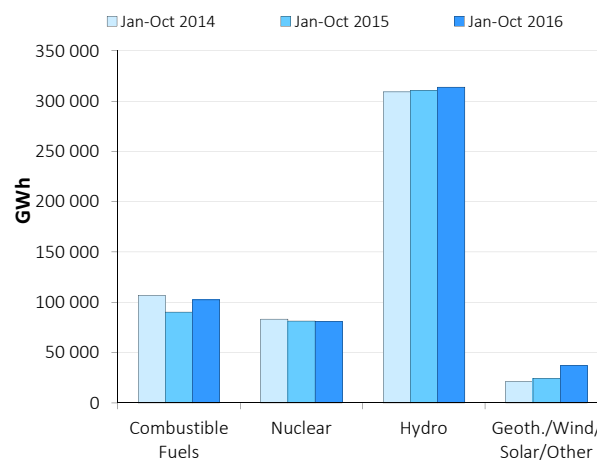
2. Share of electricity production by fuel type.

- Electricity production was 50 858 GWh in October 2016.
  - This was 3 980 GWh, or 8.5%, higher compared to October 2015 and 902 GWh, or 1.8%, higher compared to September 2016.
  - Hydro production grew by 1.3%, an increase of 352 GWh, compared to the previous month.
- Total production for the year-to-date was 534 909 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 27 881 GWh, or 5.5%.
  - Hydro production grew by 1%, an increase of 3 252 GWh.
  - Geoth./Wind/Solar/Other production increased by 51.2%, or 12 513 GWh.
  - Trade volume increased by 4 376 GWh, or 6.7%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- Due to an increase in survey coverage for monthly electricity starting from January 2016, the level of production and the growth rate shown may be higher than actual.

# CHILE

GWh

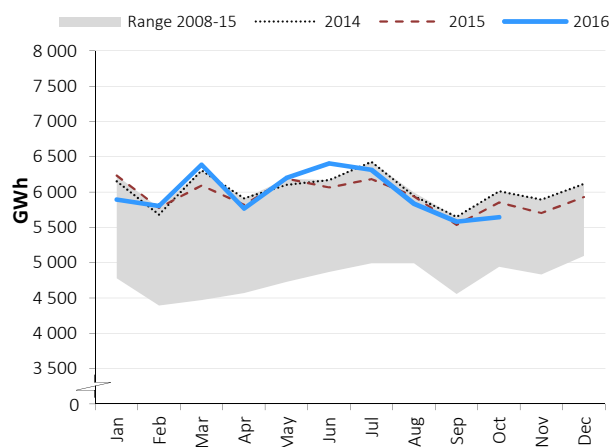
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	3 789	3 894	4 006	42 532	5.6%	71.1%	45 823	64.2%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	1 519	1 425	1 531	15 068	-13.3%	25.2%	22 913	32.1%
+ Geoth./Wind/Solar/Other	337	263	300	2 241	9.6%	3.7%	2 598	3.6%
<b>= Indigenous Production</b>	<b>5 645</b>	<b>5 582</b>	<b>5 836</b>	<b>59 841</b>	<b>0.2%</b>	<b>100.0%</b>	<b>71 333</b>	<b>100.0%</b>
+ Imports	0	0	0	0	0.0%		0	
- Exports	0	0	0	0	0.0%		0	
<b>= Electricity Supplied</b>	<b>5 645</b>	<b>5 582</b>	<b>5 836</b>	<b>59 841</b>	<b>0.2%</b>		<b>71 333</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

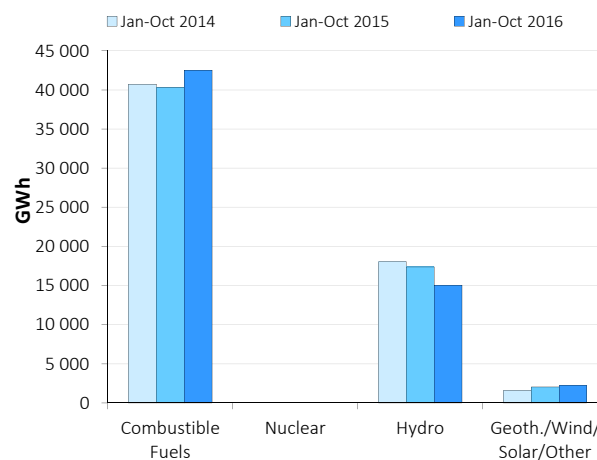
2. Share of electricity production by fuel type.

- Electricity production was 5 645 GWh in October 2016.
  - This was 207 GWh, or 3.5%, lower compared to October 2015 and 63 GWh, or 1.1%, higher compared to September 2016.
  - Combustible Fuels production reduced by 2.7%, a decrease of 105 GWh, compared to the previous month.
- Total production for the year-to-date was 59 841 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 143 GWh, or 0.2%.
  - Combustible Fuels production grew by 5.6%, an increase of 2 254 GWh.
  - Hydro production showed the largest percentage change by energy source, being 13.3% lower.
  - Geoth./Wind/Solar/Other production increased by 9.6%, or 196 GWh.

## Electricity Production



## Electricity Production by Fuel Type



## COUNTRY NOTES:

- Annual data for 2014 were estimated by the IEA Secretariat.

## CZECH REPUBLIC

GWh

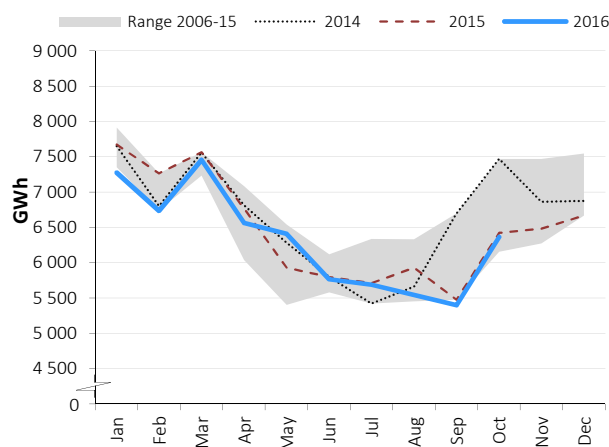
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	4 661	4 131	3 591	40 061	3.4%	63.4%	47 544	61.2%
+ Nuclear	1 402	866	1 482	19 015	-11.8%	30.1%	25 329	32.6%
+ Hydro	171	142	171	1 792	4.0%	2.8%	2 055	2.6%
+ Geoth./Wind/Solar/Other	130	260	301	2 336	-6.6%	3.7%	2 773	3.6%
<b>= Indigenous Production</b>	<b>6 364</b>	<b>5 399</b>	<b>5 545</b>	<b>63 205</b>	<b>-2.1%</b>	<b>100.0%</b>	<b>77 698</b>	<b>100.0%</b>
+ Imports	1 241	1 298	831	11 015	-11.0%		16 148	
- Exports	1 924	1 610	1 418	20 320	-12.7%		28 660	
<b>= Electricity Supplied</b>	<b>5 681</b>	<b>5 087</b>	<b>4 958</b>	<b>53 900</b>	<b>0.4%</b>		<b>65 186</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

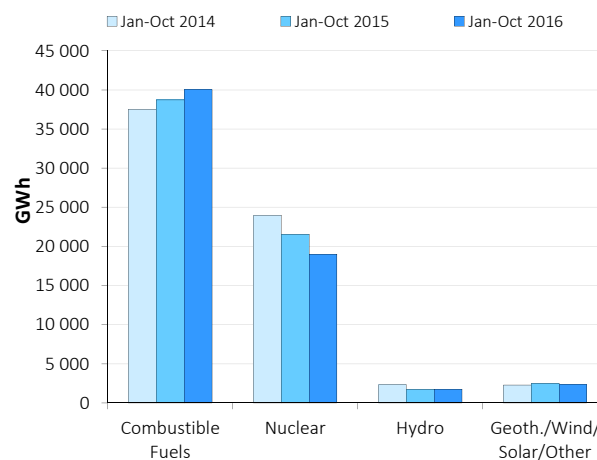
2. Share of electricity production by fuel type.

- Electricity production was 6 364 GWh in October 2016.
  - This was 60 GWh, or 0.9%, lower compared to October 2015 and 965 GWh, or 17.9%, higher compared to September 2016.
  - Combustible Fuels production grew by 12.8%, an increase of 530 GWh, compared to the previous month.
- Total production for the year-to-date was 63 205 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 1 343 GWh, or 2.1%.
  - Combustible Fuels production grew by 3.4%, an increase of 1 305 GWh.
  - Nuclear production showed the largest percentage change by energy source, being 11.8% lower.
  - Geoth./Wind/Solar/Other production decreased by 6.6%, or 165 GWh.
  - Trade volume decreased by 4 312 GWh, or 12.1%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:



# DENMARK

GWh

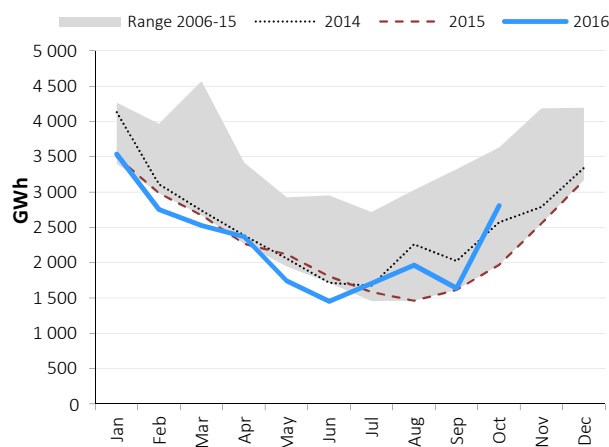
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	1 487	816	851	11 801	13.9%	52.4%	12 963	46.8%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	1	1	1	14	7.7%	0.1%	17	0.1%
+ Geoth./Wind/Solar/Other	1 319	822	1 117	10 702	-7.8%	47.5%	14 737	53.2%
<b>= Indigenous Production</b>	<b>2 808</b>	<b>1 639</b>	<b>1 968</b>	<b>22 517</b>	<b>2.4%</b>	<b>100.0%</b>	<b>27 717</b>	<b>100.0%</b>
+ Imports	944	1 466	1 412	13 035	-2.9%		15 644	
- Exports	888	504	734	7 748	-1.0%		9 732	
<b>= Electricity Supplied</b>	<b>2 864</b>	<b>2 601</b>	<b>2 646</b>	<b>27 804</b>	<b>0.8%</b>		<b>33 629</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

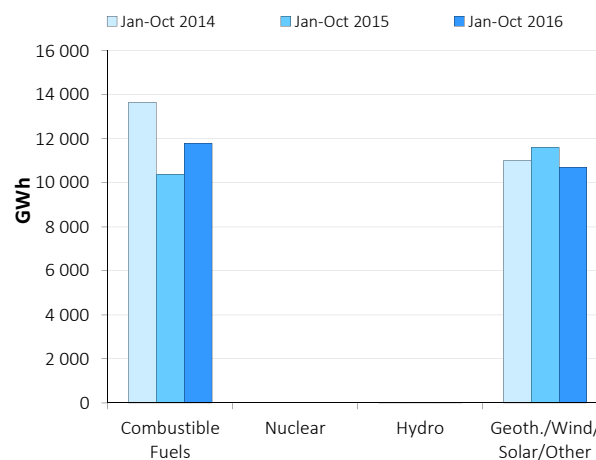
2. Share of electricity production by fuel type.

- Electricity production was 2 808 GWh in October 2016.
  - This was 839 GWh, or 42.6%, higher compared to October 2015 and 1 169 GWh, or 71.3%, higher compared to September 2016.
  - Combustible Fuels production grew by 82.2%, an increase of 671 GWh, compared to the previous month.
- Total production for the year-to-date was 22 517 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 527 GWh, or 2.4%.
  - Combustible Fuels production grew by 13.9%, an increase of 1 437 GWh.
  - Geoth./Wind/Solar/Other production decreased by 7.8%, or 911 GWh.
  - Trade volume decreased by 467 GWh, or 2.2%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- Excludes the Faroe Islands and Greenland.

# ESTONIA

GWh

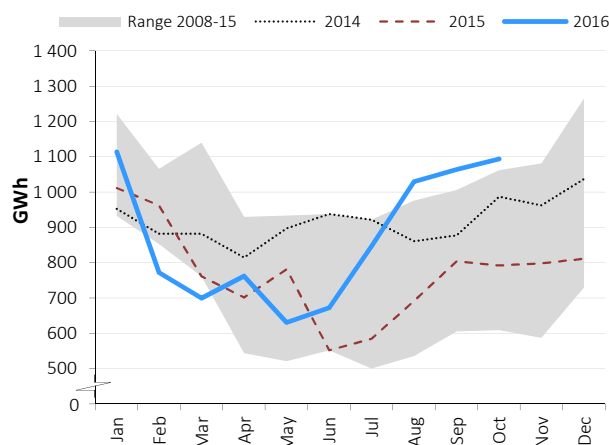
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	1 020	1 022	977	8 201	16.0%	94.4%	8 512	92.0%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	2	3	3	29	16.0%	0.3%	29	0.3%
+ Geoth./Wind/Solar/Other	72	39	50	459	-16.7%	5.3%	714	7.7%
<b>= Indigenous Production</b>	<b>1 094</b>	<b>1 064</b>	<b>1 030</b>	<b>8 687</b>	<b>13.6%</b>	<b>100.0%</b>	<b>9 254</b>	<b>100.0%</b>
+ Imports	84	151	138	3 285	-28.9%		5 453	
- Exports	441	507	530	4 890	-10.2%		6 377	
<b>= Electricity Supplied</b>	<b>737</b>	<b>708</b>	<b>638</b>	<b>7 082</b>	<b>3.9%</b>		<b>8 330</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

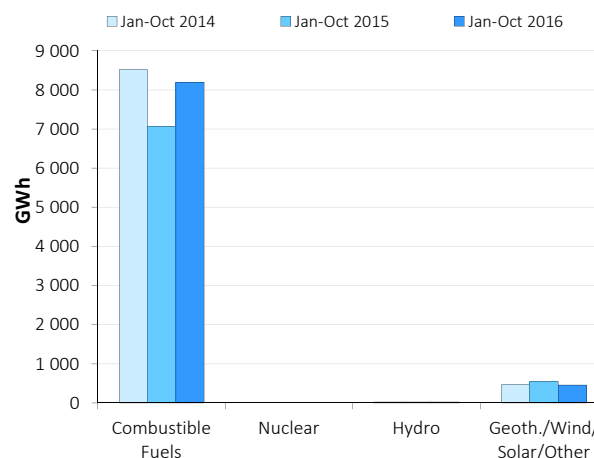
2. Share of electricity production by fuel type.

- Electricity production was 1 094 GWh in October 2016.
  - This was 302 GWh, or 38.1%, higher compared to October 2015 and 30 GWh, or 2.8%, higher compared to September 2016.
  - Combustible Fuels production reduced by 0.2%, a decrease of 2 GWh, compared to the previous month.
- Total production for the year-to-date was 8 687 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 1 043 GWh, or 13.6%.
  - Combustible Fuels production grew by 16%, an increase of 1 132 GWh.
  - Geoth./Wind/Solar/Other production decreased by 16.7%, or 92 GWh.
  - Trade volume decreased by 1 891 GWh, or 18.8%.

### Electricity Production



### Electricity Production by Fuel Type



## COUNTRY NOTES:

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

## FINLAND

GWh

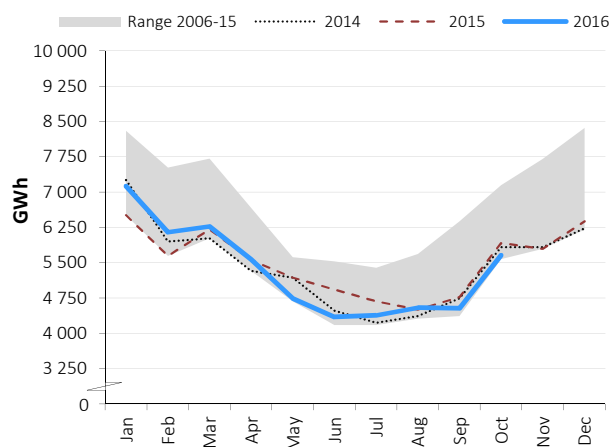
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	2 317	1 306	1 144	19 011	-4.0%	35.7%	24 622	37.3%
+ Nuclear	1 950	1 606	1 702	18 333	0.1%	34.4%	22 323	33.8%
+ Hydro	1 125	1 358	1 388	13 632	-1.7%	25.6%	16 560	25.1%
+ Geoth./Wind/Solar/Other	270	258	312	2 343	21.0%	4.4%	2 587	3.9%
<b>= Indigenous Production</b>	<b>5 662</b>	<b>4 528</b>	<b>4 545</b>	<b>53 318</b>	<b>-1.1%</b>	<b>100.0%</b>	<b>66 094</b>	<b>100.0%</b>
+ Imports	1 584	1 751	1 706	18 654	4.6%		21 459	
- Exports	63	113	202	3 085	-28.8%		5 122	
<b>= Electricity Supplied</b>	<b>7 183</b>	<b>6 166</b>	<b>6 049</b>	<b>68 887</b>	<b>2.2%</b>		<b>82 431</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

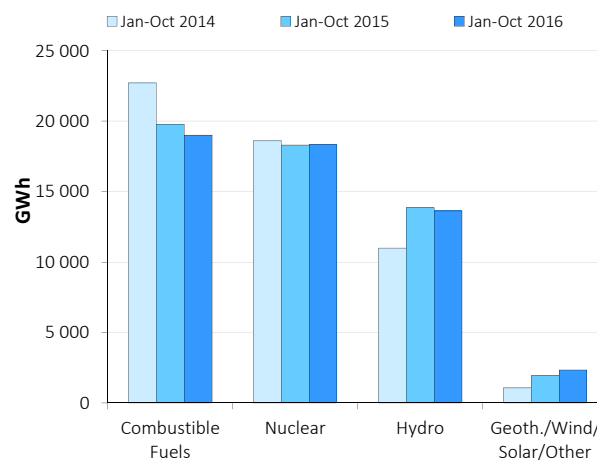
2. Share of electricity production by fuel type.

- Electricity production was 5 662 GWh in October 2016.
  - This was 258 GWh, or 4.4%, lower compared to October 2015 and 1 134 GWh, or 25%, higher compared to September 2016.
  - Combustible Fuels production grew by 77.4%, an increase of 1 011 GWh, compared to the previous month.
- Total production for the year-to-date was 53 318 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 599 GWh, or 1.1%.
  - Combustible Fuels production reduced by 4%, a decrease of 784 GWh.
  - Geoth./Wind/Solar/Other production increased by 21%, or 407 GWh.
  - Trade volume decreased by 433 GWh, or 2%.

Electricity Production



Electricity Production by Fuel Type



## COUNTRY NOTES:

- Monthly reporting does not include production from other non combustible fuels, therefore they are estimated by the IEA Secretariat based on annual submission.
- Monthly reporting does not include production from solar, therefore they are estimated by the IEA Secretariat based on annual submission.

## FRANCE

GWh

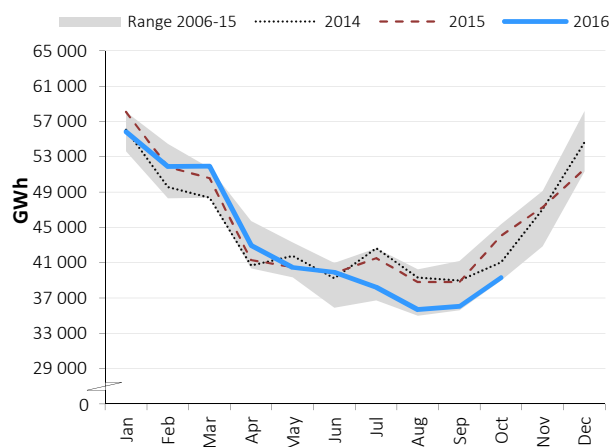
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	5 160	4 334	2 479	35 652	22.4%	8.2%	38 924	7.2%
+ Nuclear	29 005	26 464	27 100	316 013	-7.2%	73.1%	416 627	76.5%
+ Hydro	3 076	3 393	3 910	55 413	6.7%	12.8%	59 151	10.9%
+ Geoth./Wind/Solar/Other	2 053	1 847	2 212	25 165	6.5%	5.8%	29 605	5.4%
<b>= Indigenous Production</b>	<b>39 295</b>	<b>36 038</b>	<b>35 701</b>	<b>432 244</b>	<b>-3.0%</b>	<b>100.0%</b>	<b>544 304</b>	<b>100.0%</b>
+ Imports	2 650	1 727	1 607	14 522	74.9%		9 975	
- Exports	3 238	4 358	4 920	54 899	-8.6%		74 024	
<b>= Electricity Supplied</b>	<b>38 707</b>	<b>33 407</b>	<b>32 388</b>	<b>391 867</b>	<b>-0.4%</b>		<b>480 255</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

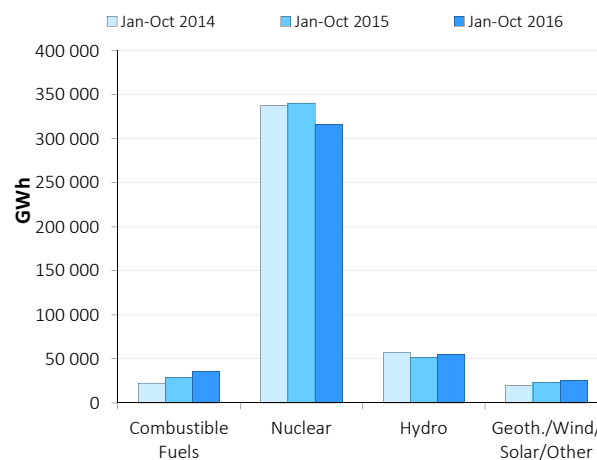
2. Share of electricity production by fuel type.

- Electricity production was 39 295 GWh in October 2016.
  - This was 4 764 GWh, or 10.8%, lower compared to October 2015 and 3 257 GWh, or 9%, higher compared to September 2016.
  - Nuclear production grew by 9.6%, an increase of 2 541 GWh, compared to the previous month.
- Total production for the year-to-date was 432 244 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 13 143 GWh, or 3%.
  - Nuclear production reduced by 7.2%, a decrease of 24 676 GWh.
  - Combustible Fuels production showed the largest percentage change by energy source, being 22.4% higher.
  - Geoth./Wind/Solar/Other production increased by 6.5%, or 1 527 GWh.
  - Trade volume increased by 1 045 GWh, or 1.5%.

Electricity Production



Electricity Production by Fuel Type



## COUNTRY NOTES:

- Includes Monaco, but excludes the French overseas territories: French Polynesia, Guadeloupe, Guyane, Martinique, New Caledonia, Reunion, Saint Pierre and Miquelon.
- Monthly reporting does not include production from solar and other non combustible fuels, therefore they are estimated by the IEA Secretariat based on annual submission.

# GERMANY

GWh

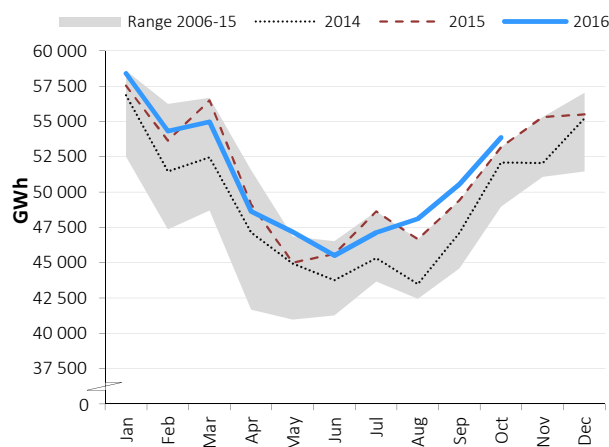
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	36 936	33 383	28 810	319 978	2.8%	62.9%	376 592	61.1%
+ Nuclear	7 809	6 841	7 008	66 442	-7.4%	13.1%	86 861	14.1%
+ Hydro	1 617	1 829	2 270	22 104	5.1%	4.3%	24 474	4.0%
+ Geoth./Wind/Solar/Other	7 497	8 511	10 015	100 197	-1.0%	19.7%	128 254	20.8%
<b>= Indigenous Production</b>	<b>53 859</b>	<b>50 563</b>	<b>48 104</b>	<b>508 721</b>	<b>0.7%</b>	<b>100.0%</b>	<b>616 178</b>	<b>100.0%</b>
+ Imports	1 563	1 480	1 959	24 468	-20.7%		37 009	
- Exports	6 974	6 600	5 429	64 038	-5.5%		85 291	
<b>= Electricity Supplied</b>	<b>48 448</b>	<b>45 443</b>	<b>44 634</b>	<b>469 151</b>	<b>0.1%</b>		<b>567 896</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

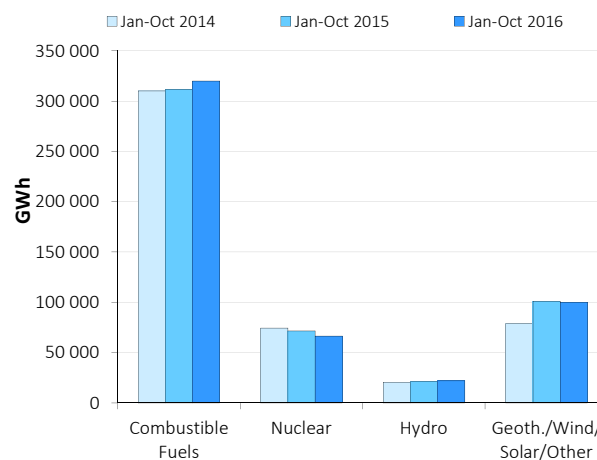
2. Share of electricity production by fuel type.

- Electricity production was 53 859 GWh in October 2016.
  - This was 665 GWh, or 1.3%, higher compared to October 2015 and 3 296 GWh, or 6.5%, higher compared to September 2016.
  - Combustible Fuels production grew by 10.6%, an increase of 3 553 GWh, compared to the previous month.
- Total production for the year-to-date was 508 721 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 3 358 GWh, or 0.7%.
  - Combustible Fuels production grew by 2.8%, an increase of 8 605 GWh.
  - Nuclear production showed the largest percentage change by energy source, being 7.4% lower.
  - Geoth./Wind/Solar/Other production decreased by 1%, or 1 036 GWh.
  - Trade volume decreased by 10 116 GWh, or 10.3%.

### Electricity Production



### Electricity Production by Fuel Type



## COUNTRY NOTES:

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

## GREECE

GWh

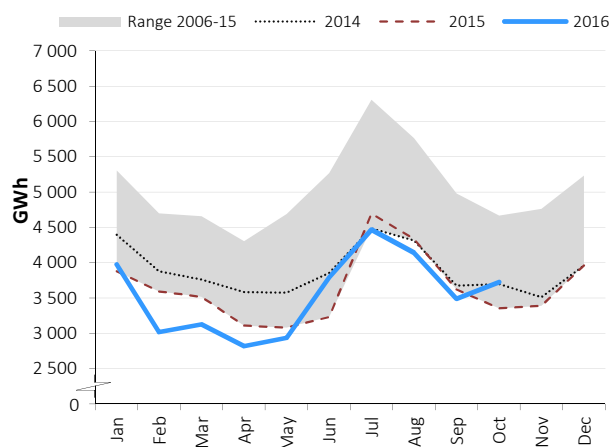
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	2 727	2 535	2 832	24 437	-1.1%	68.8%	30 334	69.3%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	371	281	420	4 026	-19.7%	11.3%	5 585	12.8%
+ Geoth./Wind/Solar/Other	630	673	890	7 032	5.0%	19.8%	7 861	18.0%
<b>= Indigenous Production</b>	<b>3 727</b>	<b>3 489</b>	<b>4 142</b>	<b>35 496</b>	<b>-2.6%</b>	<b>100.0%</b>	<b>43 779</b>	<b>100.0%</b>
+ Imports	557	788	970	8 919	-7.7%		11 081	
- Exports	240	104	58	782	-31.6%		1 472	
<b>= Electricity Supplied</b>	<b>4 044</b>	<b>4 173</b>	<b>5 054</b>	<b>43 633</b>	<b>-2.9%</b>		<b>53 388</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

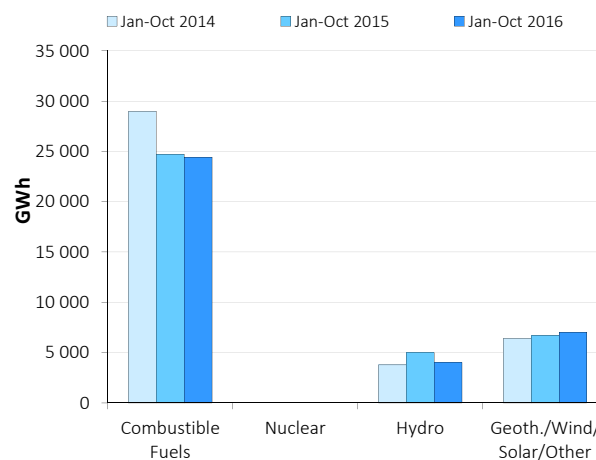
2. Share of electricity production by fuel type.

- Electricity production was 3 727 GWh in October 2016.
  - This was 374 GWh, or 11.2%, higher compared to October 2015 and 238 GWh, or 6.8%, higher compared to September 2016.
  - Combustible Fuels production grew by 7.6%, an increase of 192 GWh, compared to the previous month.
- Total production for the year-to-date was 35 496 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 932 GWh, or 2.6%.
  - Combustible Fuels production reduced by 1.1%, a decrease of 278 GWh.
  - Hydro production showed the largest percentage change by energy source, being 19.7% lower.
  - Geoth./Wind/Solar/Other production increased by 5%, or 332 GWh.
  - Trade volume decreased by 1 102 GWh, or 10.2%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:



# HUNGARY

GWh

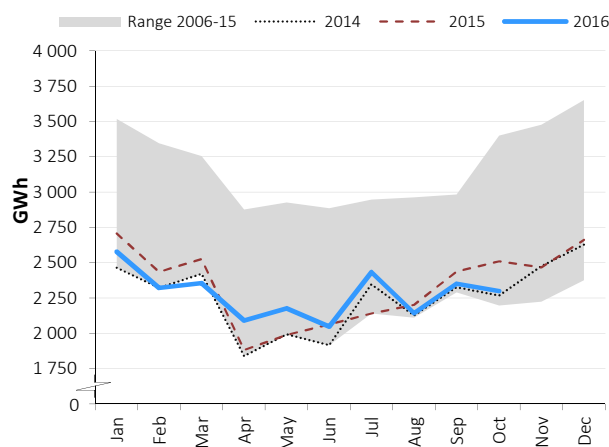
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	1 026	1 039	1 013	9 589	0.4%	42.1%	12 088	43.1%
+ Nuclear	1 181	1 255	1 022	12 240	-1.6%	53.7%	14 895	53.1%
+ Hydro	21	14	21	204	7.4%	0.9%	228	0.8%
+ Geoth./Wind/Solar/Other	71	45	88	765	5.4%	3.4%	817	2.9%
<b>= Indigenous Production</b>	<b>2 300</b>	<b>2 352</b>	<b>2 142</b>	<b>22 797</b>	<b>-0.4%</b>	<b>100.0%</b>	<b>28 026</b>	<b>100.0%</b>
+ Imports	1 438	1 249	1 386	14 649	-11.4%		19 936	
- Exports	381	429	323	4 515	-7.0%		6 247	
<b>= Electricity Supplied</b>	<b>3 357</b>	<b>3 172</b>	<b>3 205</b>	<b>32 931</b>	<b>-4.8%</b>		<b>41 715</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

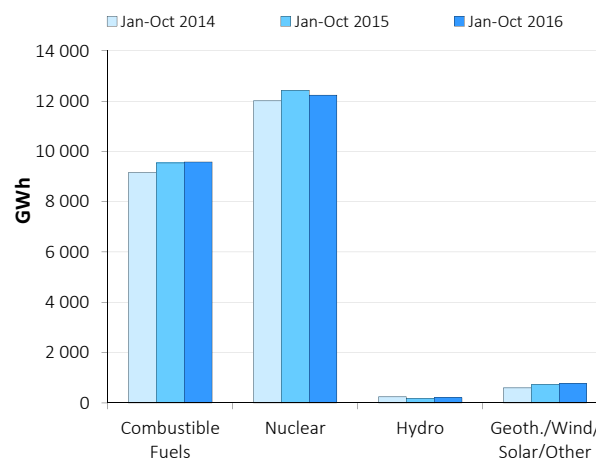
2. Share of electricity production by fuel type.

- Electricity production was 2 300 GWh in October 2016.
  - This was 210 GWh, or 8.4%, lower compared to October 2015 and 52 GWh, or 2.2%, lower compared to September 2016.
  - Nuclear production reduced by 5.9%, a decrease of 74 GWh, compared to the previous month.
- Total production for the year-to-date was 22 797 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 100 GWh, or 0.4%.
  - Nuclear production reduced by 1.6%, a decrease of 195 GWh.
  - Hydro production showed the largest percentage change by energy source, being 7.4% higher.
  - Geoth./Wind/Solar/Other production increased by 5.4%, or 39 GWh.
  - Trade volume decreased by 2 234 GWh, or 10.4%.

### Electricity Production



### Electricity Production by Fuel Type



## COUNTRY NOTES:

- Net production has been estimated from monthly submission of gross production through December 2015 by the IEA Secretariat.
- Monthly reporting does not include production from oil, therefore it is estimated by the IEA Secretariat based on annual submission through December 2015.

# ICELAND

GWh

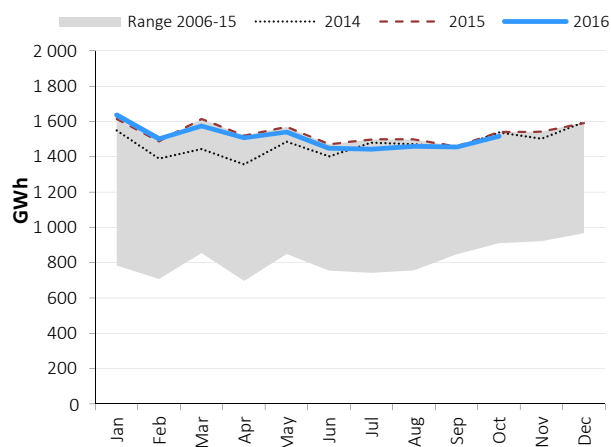
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	0	0	0	0	0.0%	0.0%	2	0.0%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	1 094	1 067	1 083	10 979	-2.5%	72.8%	13 578	73.8%
+ Geoth./Wind/Solar/Other	422	388	375	4 103	2.4%	27.2%	4 823	26.2%
<b>= Indigenous Production</b>	<b>1 517</b>	<b>1 455</b>	<b>1 458</b>	<b>15 084</b>	<b>-1.3%</b>	<b>100.0%</b>	<b>18 408</b>	<b>100.0%</b>
+ Imports	0	0	0	0	0.0%		0	
- Exports	0	0	0	0	0.0%		0	
<b>= Electricity Supplied</b>	<b>1 517</b>	<b>1 455</b>	<b>1 458</b>	<b>15 084</b>	<b>-1.3%</b>		<b>18 408</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

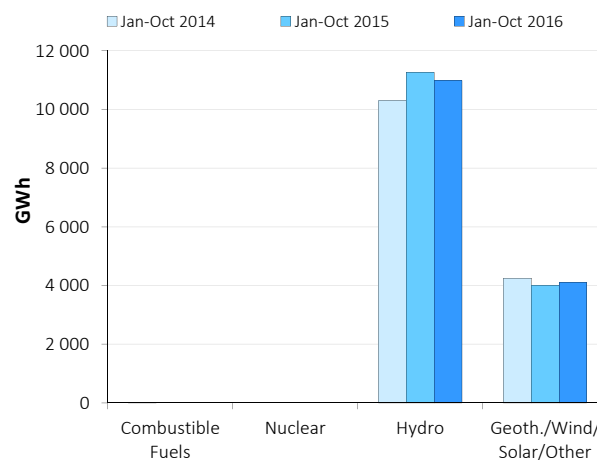
2. Share of electricity production by fuel type.

- Electricity production was 1 517 GWh in October 2016.
  - This was 24 GWh, or 1.6%, lower compared to October 2015 and 62 GWh, or 4.3%, higher compared to September 2016.
  - Hydro production grew by 2.5%, an increase of 27 GWh, compared to the previous month.
- Total production for the year-to-date was 15 084 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 191 GWh, or 1.3%.
  - Hydro production reduced by 2.5%, a decrease of 285 GWh.
  - Geoth./Wind/Solar/Other production increased by 2.4%, or 97 GWh.

## Electricity Production



## Electricity Production by Fuel Type



## COUNTRY NOTES:

- Net production has been estimated from monthly submission of gross production by the IEA Secretariat.

## IRELAND

GWh

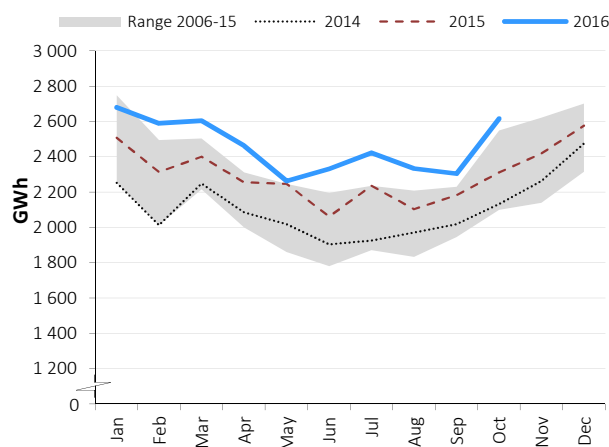
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	2 103	1 697	1 776	18 859	11.3%	76.6%	19 965	72.3%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	65	69	51	815	2.1%	3.3%	1 083	3.9%
+ Geoth./Wind/Solar/Other	448	538	505	4 931	1.0%	20.0%	6 570	23.8%
<b>= Indigenous Production</b>	<b>2 616</b>	<b>2 305</b>	<b>2 333</b>	<b>24 605</b>	<b>8.8%</b>	<b>100.0%</b>	<b>27 617</b>	<b>100.0%</b>
+ Imports	15	8	75	800	-46.9%		1 752	
- Exports	101	138	208	1 397	64.4%		1 079	
<b>= Electricity Supplied</b>	<b>2 530</b>	<b>2 175</b>	<b>2 200</b>	<b>24 008</b>	<b>3.1%</b>		<b>28 290</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

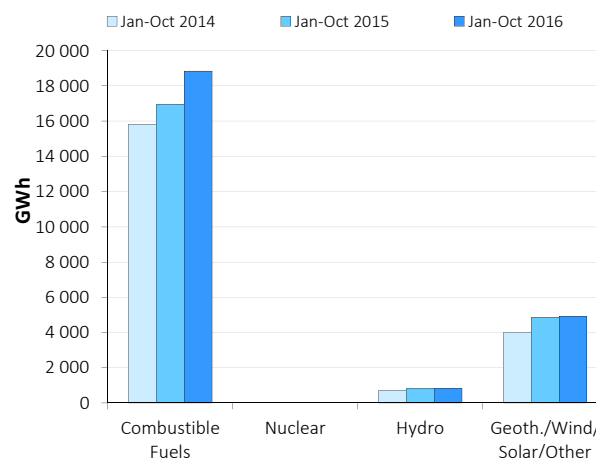
2. Share of electricity production by fuel type.

- Electricity production was 2 616 GWh in October 2016.
  - This was 304 GWh, or 13.1%, higher compared to October 2015 and 311 GWh, or 13.5%, higher compared to September 2016.
  - Combustible Fuels production grew by 23.9%, an increase of 406 GWh, compared to the previous month.
- Total production for the year-to-date was 24 605 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 1 984 GWh, or 8.8%.
  - Combustible Fuels production increased by 11.3%, a rise of 1 917 GWh.
  - Geoth./Wind/Solar/Other production increased by 1.0%, or 49 GWh.
  - Trade volume decreased by 160 GWh, or 6.8%.

Electricity Production



Electricity Production by Fuel Type



## COUNTRY NOTES:

# ITALY

GWh

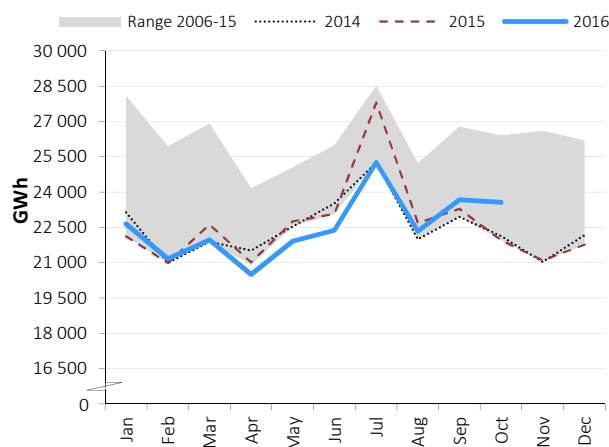
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	17 492	16 905	13 609	147 772	0.2%	65.5%	180 349	66.5%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	2 569	3 014	3 927	35 078	-12.0%	15.6%	44 719	16.5%
+ Geoth./Wind/Solar/Other	3 497	3 758	4 808	42 587	4.0%	18.9%	46 128	17.0%
<b>= Indigenous Production</b>	<b>23 557</b>	<b>23 677</b>	<b>22 344</b>	<b>225 437</b>	<b>-1.3%</b>	<b>100.0%</b>	<b>271 197</b>	<b>100.0%</b>
+ Imports	2 745	3 305	2 817	38 984	-5.4%		50 849	
- Exports	452	404	654	5 154	29.9%		4 469	
<b>= Electricity Supplied</b>	<b>25 850</b>	<b>26 578</b>	<b>24 507</b>	<b>259 267</b>	<b>-2.4%</b>		<b>317 577</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

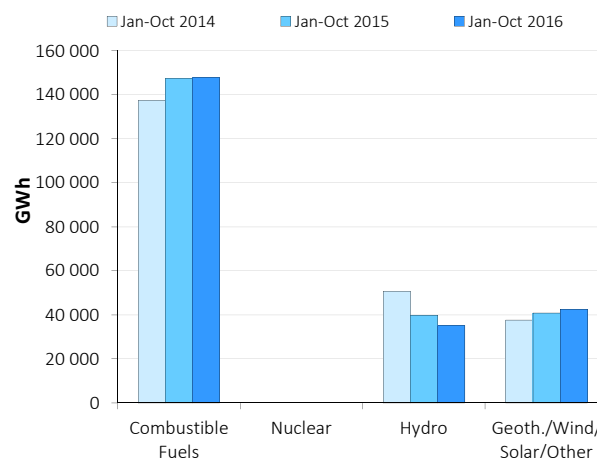
2. Share of electricity production by fuel type.

- Electricity production was 23 557 GWh in October 2016.
  - This was 1 595 GWh, or 7.3%, higher compared to October 2015 and 120 GWh, or 0.5%, lower compared to September 2016.
  - Combustible Fuels production grew by 3.5%, an increase of 587 GWh, compared to the previous month.
- Total production for the year-to-date was 225 437 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 2 888 GWh, or 1.3%.
  - Combustible Fuels production grew by 0.2%, an increase of 294 GWh.
  - Hydro production showed the largest percentage change by energy source, being 12% lower.
  - Geoth./Wind/Solar/Other production increased by 4%, or 1 619 GWh.
  - Trade volume decreased by 1 019 GWh, or 2.3%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- 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.

# JAPAN

GWh

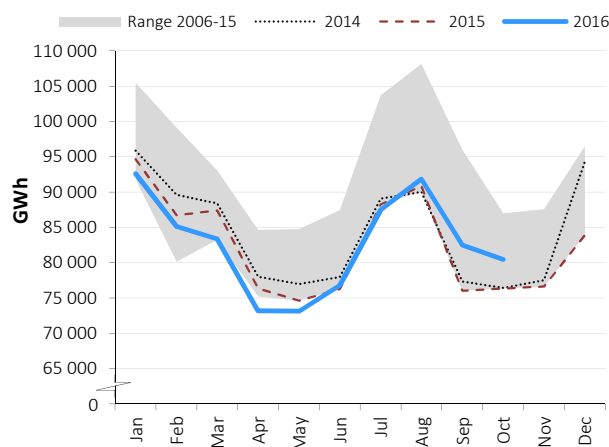
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	68 640	69 098	78 910	698 550	-1.8%	84.5%	852 097	86.2%
+ Nuclear	1 969	1 906	1 576	14 629	930.9%	1.8%	3 604	0.4%
+ Hydro	6 165	8 021	6 773	73 441	-5.9%	8.9%	89 934	9.1%
+ Geoth./Wind/Solar/Other	3 689	3 490	4 583	39 940	8.1%	4.8%	42 431	4.3%
<b>= Indigenous Production</b>	<b>80 463</b>	<b>82 515</b>	<b>91 842</b>	<b>826 559</b>	<b>-0.1%</b>	<b>100.0%</b>	<b>988 067</b>	<b>100.0%</b>
+ Imports	0	0	0	0	0.0%		0	
- Exports	0	0	0	0	0.0%		0	
<b>= Electricity Supplied</b>	<b>80 463</b>	<b>82 515</b>	<b>91 842</b>	<b>826 559</b>	<b>-0.1%</b>		<b>988 067</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

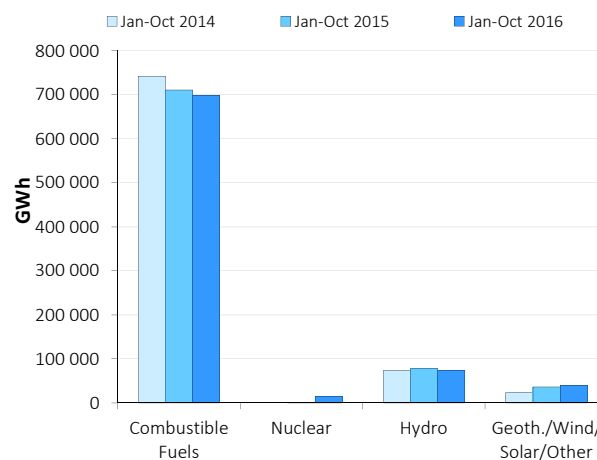
2. Share of electricity production by fuel type.

- Electricity production was 80 463 GWh in October 2016.
  - This was 4 133 GWh, or 5.4%, higher compared to October 2015 and 2 052 GWh, or 2.5%, lower compared to September 2016.
  - Combustible Fuels production reduced by 0.7%, a decrease of 458 GWh, compared to the previous month.
- Total production for the year-to-date was 826 559 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 950 GWh, or 0.1%.
  - Combustible Fuels production reduced by 1.8%, a decrease of 12 561 GWh.
  - Nuclear production showed the largest percentage change by energy source, being 930.9% higher.
  - Geoth./Wind/Solar/Other production increased by 8.1%, or 3 004 GWh.

Electricity Production



Electricity Production by Fuel Type



## COUNTRY NOTES:

- Net production is estimated from monthly submission of gross production for main producers by the IEA Secretariat.
- Annual data shown are the sum of months, so may differ from annual data in other publications which are based on fiscal years beginning 1st of April and ending 31st of March.
- Production data for October 2016 are estimated by the IEA Secretariat.

## KOREA

GWh

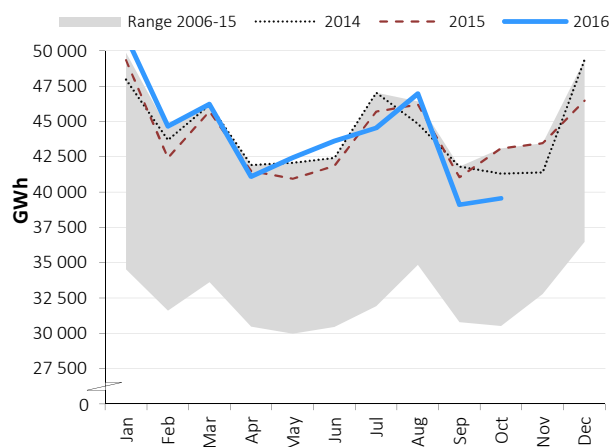
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	27 540	25 937	31 862	296 215	-1.1%	67.4%	359 289	68.1%
+ Nuclear	11 125	12 103	13 982	132 718	3.2%	30.2%	157 241	29.8%
+ Hydro	477	633	697	5 767	12.0%	1.3%	5 858	1.1%
+ Geoth./Wind/Solar/Other	428	430	434	4 559	-0.7%	1.0%	5 354	1.0%
<b>= Indigenous Production</b>	<b>39 569</b>	<b>39 103</b>	<b>46 975</b>	<b>439 257</b>	<b>0.3%</b>	<b>100.0%</b>	<b>527 739</b>	<b>100.0%</b>
+ Imports	0	0	0	0	0.0%		0	
- Exports	0	0	0	0	0.0%		0	
<b>= Electricity Supplied</b>	<b>39 569</b>	<b>39 103</b>	<b>46 975</b>	<b>439 257</b>	<b>0.3%</b>		<b>527 739</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

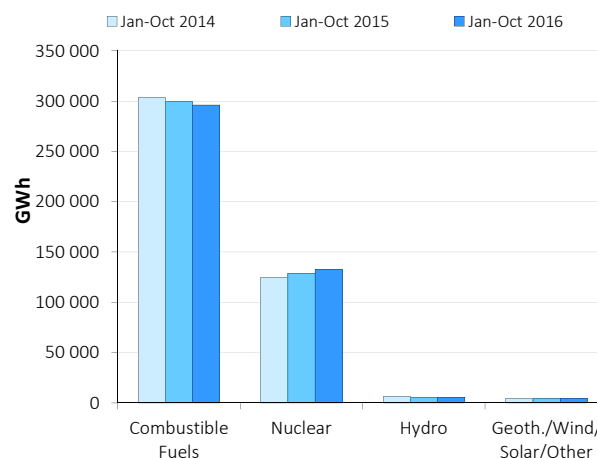
2. Share of electricity production by fuel type.

- Electricity production was 39 569 GWh in October 2016.
  - This was 3 522 GWh, or 8.2%, lower compared to October 2015 and 466 GWh, or 1.2%, higher compared to September 2016.
  - Combustible Fuels production grew by 6.2%, an increase of 1 603 GWh, compared to the previous month.
- Total production for the year-to-date was 439 257 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 1 441 GWh, or 0.3%.
  - Combustible Fuels production reduced by 1.1%, a decrease of 3 262 GWh.
  - Hydro production showed the largest percentage change by energy source, being 12% higher.
  - Geoth./Wind/Solar/Other production decreased by 0.7%, or 32 GWh.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- 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, solar and other non combustible fuels, therefore they are estimated by the IEA Secretariat based on annual submission.



# LUXEMBOURG

GWh

	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	27	25	27	344	-62.9%	19.4%	1 011	37.3%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	119	111	107	1 258	1.6%	71.0%	1 512	55.8%
+ Geoth./Wind/Solar/Other	22	13	15	171	28.6%	9.7%	183	6.8%
<b>= Indigenous Production</b>	<b>168</b>	<b>148</b>	<b>149</b>	<b>1 772</b>	<b>-23.0%</b>	<b>100.0%</b>	<b>2 711</b>	<b>100.0%</b>
+ Imports	660	632	559	6 396	2.5%		7 518	
- Exports	113	109	103	1 164	-30.0%		1 921	
<b>= Electricity Supplied</b>	<b>715</b>	<b>671</b>	<b>605</b>	<b>7 004</b>	<b>1.8%</b>		<b>8 308</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

2. Share of electricity production by fuel type.

- Electricity production from combustible fuels has decreased due to limited production from the Twinerg CCGT plant caused by the current market situation. As a consequence of decreased production, exports have decreased as well.

- Electricity production was 168 GWh in October 2016.

- This was 2 GWh, or 1.2%, lower compared to October 2015 and 20 GWh, or 13.5%, higher compared to September 2016.

- Hydro production grew by 7.2%, an increase of 8 GWh, compared to the previous month.

- Total production for the year-to-date was 1 772 GWh. Comparing this to the same period last year shows that:

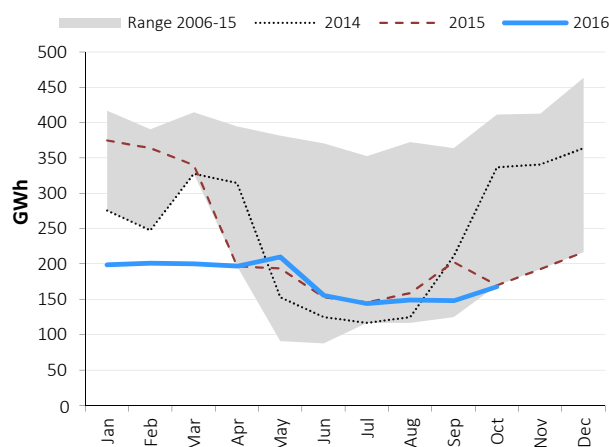
- Total production was lower by 529 GWh, or 23%.

- Hydro production grew by 1.6%, an increase of 20 GWh.

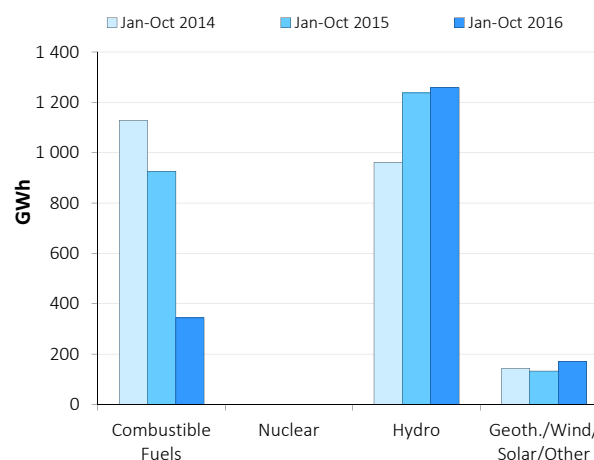
- Geoth./Wind/Solar/Other production increased by 28.6%, or 38 GWh.

- Trade volume decreased by 342 GWh, or 4.3%.

### Electricity Production



### Electricity Production by Fuel Type



## COUNTRY NOTES:

- Monthly reporting does not include production from solar, therefore it is estimated by the IEA Secretariat based on annual submission.
- Electricity production from combustible fuels has decreased because the Twinerg CCGT plant has been producing negligible amounts of electricity.
- Production data for October 2016 are estimated by the IEA Secretariat.

# MEXICO

GWh

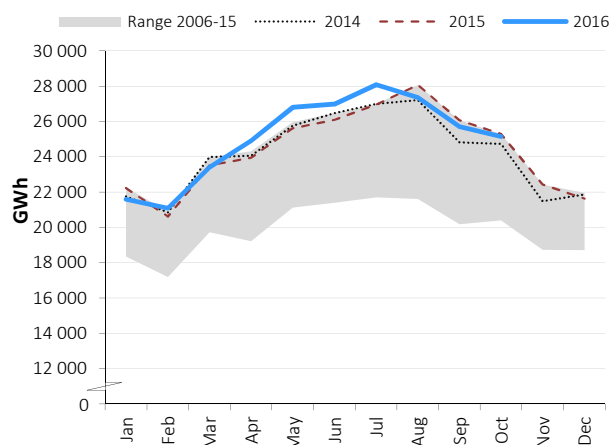
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	20 277	20 597	21 804	204 968	2.9%	81.6%	236 747	80.9%
+ Nuclear	1 102	1 021	1 134	8 124	-19.1%	3.2%	11 131	3.8%
+ Hydro	2 415	3 095	3 435	27 203	-1.2%	10.8%	30 550	10.4%
+ Geoth./Wind/Solar/Other	1 363	1 004	980	10 793	-7.5%	4.3%	14 060	4.8%
<b>= Indigenous Production</b>	<b>25 156</b>	<b>25 716</b>	<b>27 353</b>	<b>251 086</b>	<b>1.1%</b>	<b>100.0%</b>	<b>292 486</b>	<b>100.0%</b>
+ Imports	263	477	587	3 426	52.1%		2 442	
- Exports	756	922	1 237	9 079	13.2%		9 160	
<b>= Electricity Supplied</b>	<b>24 663</b>	<b>25 271</b>	<b>26 703</b>	<b>245 433</b>	<b>1.1%</b>		<b>285 768</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

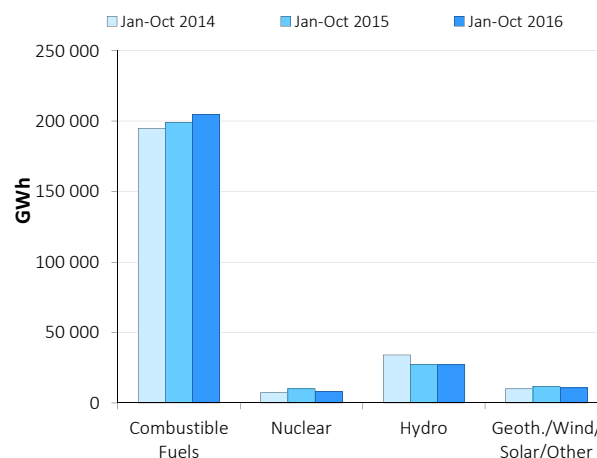
2. Share of electricity production by fuel type.

- Electricity production was 25 156 GWh in October 2016.
  - This was 138 GWh, or 0.5%, lower compared to October 2015 and 560 GWh, or 2.2%, lower compared to September 2016.
  - Combustible Fuels production reduced by 1.6%, a decrease of 320 GWh, compared to the previous month.
- Total production for the year-to-date was 251 086 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 2 662 GWh, or 1.1%.
  - Combustible Fuels production grew by 2.9%, an increase of 5 794 GWh.
  - Nuclear production showed the largest percentage change by energy source, being 19.1% lower.
  - Geoth./Wind/Solar/Other production decreased by 7.5%, or 871 GWh.
  - Trade volume increased by 2 233 GWh, or 21.7%.

### Electricity Production



### Electricity Production by Fuel Type



## COUNTRY NOTES:

- Monthly reporting of electricity production does not include autoproducers, therefore it is estimated by the IEA Secretariat based on annual submission.
- Production data from combustible fuels for October 2016 are estimated by the IEA Secretariat.

## NETHERLANDS

GWh

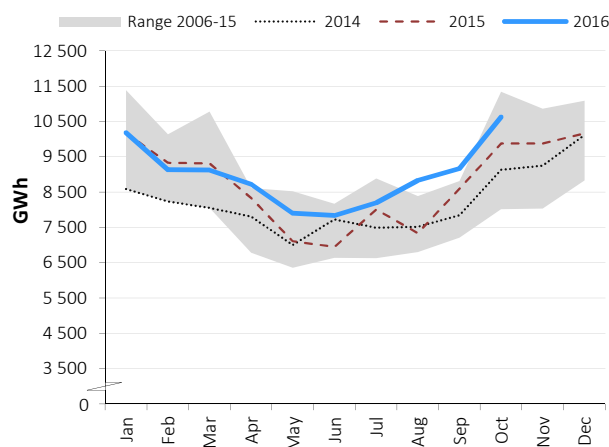
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	9 574	8 114	7 773	78 838	4.3%	87.9%	92 606	88.1%
+ Nuclear	326	332	332	3 107	3.8%	3.5%	3 670	3.5%
+ Hydro	2	2	11	98	38.0%	0.1%	90	0.1%
+ Geoth./Wind/Solar/Other	723	722	720	7 684	21.0%	8.6%	8 711	8.3%
<b>= Indigenous Production</b>	<b>10 625</b>	<b>9 170</b>	<b>8 837</b>	<b>89 729</b>	<b>5.5%</b>	<b>100.0%</b>	<b>105 080</b>	<b>100.0%</b>
+ Imports	1 686	1 742	2 422	21 221	-20.3%		30 761	
- Exports	2 456	1 923	977	14 526	-21.2%		22 011	
<b>= Electricity Supplied</b>	<b>9 855</b>	<b>8 989</b>	<b>10 282</b>	<b>96 424</b>	<b>3.4%</b>		<b>113 830</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

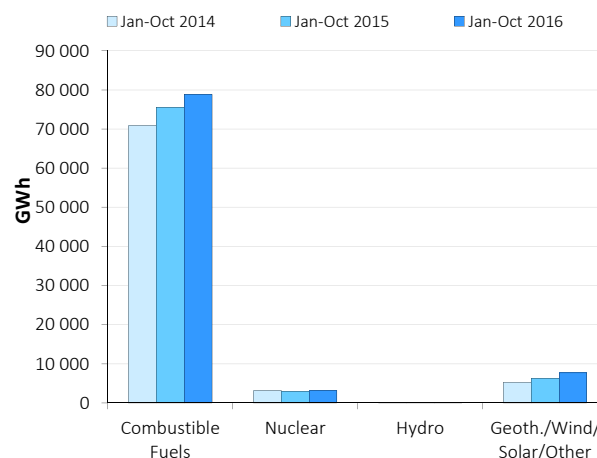
2. Share of electricity production by fuel type.

- Electricity production was 10 625 GWh in October 2016.
  - This was 746 GWh, or 7.6%, higher compared to October 2015 and 1 455 GWh, or 15.9%, higher compared to September 2016.
  - Combustible Fuels production grew by 18%, an increase of 1 460 GWh, compared to the previous month.
- Total production for the year-to-date was 89 729 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 4 693 GWh, or 5.5%.
  - Combustible Fuels production grew by 4.3%, an increase of 3 222 GWh.
  - Hydro production showed the largest percentage change by energy source, being 38% higher.
  - Geoth./Wind/Solar/Other production increased by 21%, or 1 331 GWh.
  - Trade volume decreased by 9 308 GWh, or 20.7%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- 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.

## NEW ZEALAND

GWh

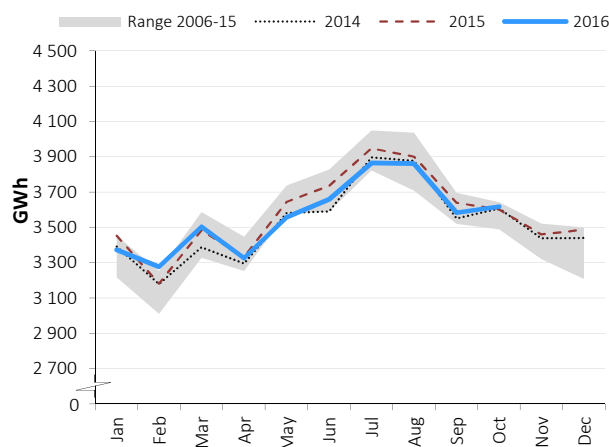
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	600	569	538	6 086	-17.7%	17.1%	8 755	20.4%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	2 182	2 210	2 529	21 307	4.7%	59.8%	24 282	56.6%
+ Geoth./Wind/Solar/Other	836	804	794	8 232	0.9%	23.1%	9 828	22.9%
<b>= Indigenous Production</b>	<b>3 618</b>	<b>3 583</b>	<b>3 861</b>	<b>35 627</b>	<b>-0.8%</b>	<b>100.0%</b>	<b>42 867</b>	<b>100.0%</b>
+ Imports	0	0	0	0	0.0%		0	
- Exports	0	0	0	0	0.0%		0	
<b>= Electricity Supplied</b>	<b>3 618</b>	<b>3 583</b>	<b>3 861</b>	<b>35 627</b>	<b>-0.8%</b>		<b>42 867</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

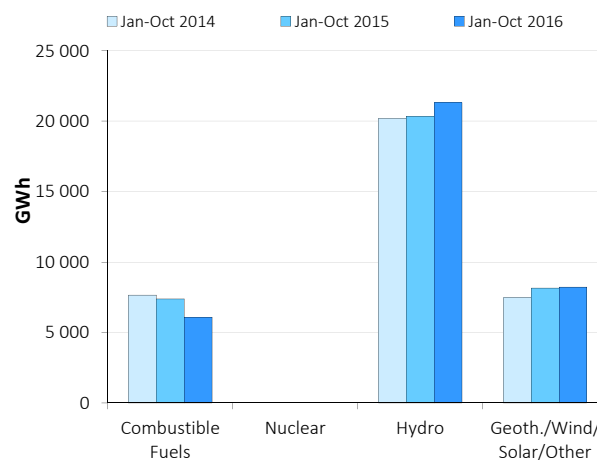
2. Share of electricity production by fuel type.

- Electricity production was 3 618 GWh in October 2016.
  - This was 16 GWh, or 0.4%, higher compared to October 2015 and 35 GWh, or 1%, higher compared to September 2016.
  - Hydro production reduced by 1.3%, a decrease of 28 GWh, compared to the previous month.
- Total production for the year-to-date was 35 627 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 293 GWh, or 0.8%.
  - Hydro production grew by 4.7%, an increase of 948 GWh.
  - Combustible Fuels production showed the largest percentage change by energy source, being 17.7% lower.
  - Geoth./Wind/Solar/Other production increased by 0.9%, or 70 GWh.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- Combustible Fuels production is estimated from monthly submission from main electricity producers.
- Monthly reporting does not include production from other non combustible fuels, therefore it is estimated by the IEA Secretariat based on annual submission.
- Production data for October 2016 are estimated by the IEA Secretariat.

## NORWAY

GWh

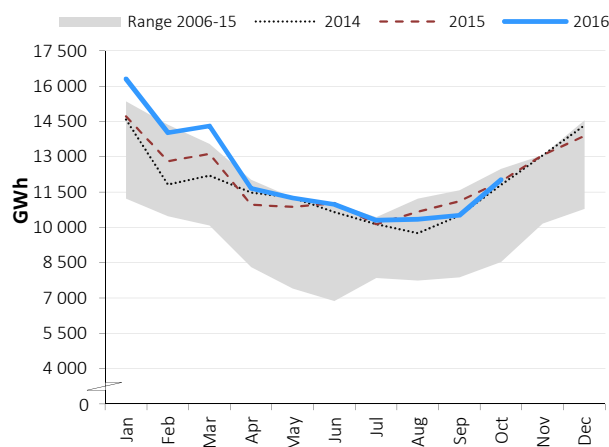
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	233	195	278	2 556	-2.8%	2.1%	3 158	2.2%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	11 598	10 136	9 907	117 325	4.3%	96.4%	138 407	95.9%
+ Geoth./Wind/Solar/Other	198	182	154	1 838	-18.5%	1.5%	2 811	1.9%
<b>= Indigenous Production</b>	<b>12 030</b>	<b>10 513</b>	<b>10 339</b>	<b>121 720</b>	<b>3.7%</b>	<b>100.0%</b>	<b>144 377</b>	<b>100.0%</b>
+ Imports	455	157	250	4 224	-31.0%		7 372	
- Exports	1 551	1 841	1 742	18 967	2.5%		22 013	
<b>= Electricity Supplied</b>	<b>10 934</b>	<b>8 829</b>	<b>8 847</b>	<b>106 977</b>	<b>1.9%</b>		<b>129 736</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

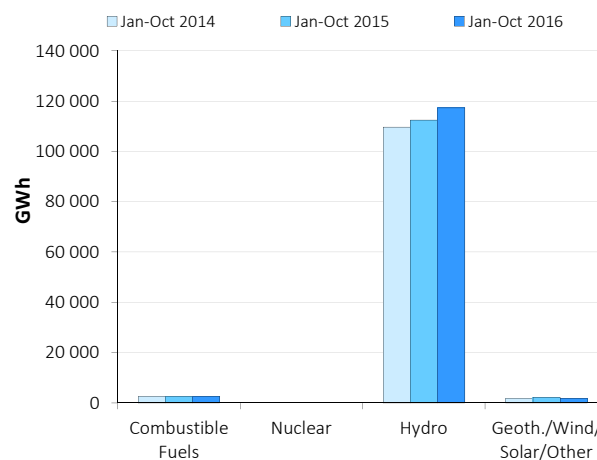
2. Share of electricity production by fuel type.

- Electricity production was 12 030 GWh in October 2016.
  - This was 71 GWh, or 0.6%, higher compared to October 2015 and 1 517 GWh, or 14.4%, higher compared to September 2016.
  - Hydro production grew by 14.4%, an increase of 1 462 GWh, compared to the previous month.
- Total production for the year-to-date was 121 720 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 4 306 GWh, or 3.7%.
  - Hydro production grew by 4.3%, an increase of 4 798 GWh.
  - Geoth./Wind/Solar/Other production decreased by 18.5%, or 417 GWh.
  - Trade volume decreased by 1 438 GWh, or 5.8%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- Net production has been 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.

## POLAND

GWh

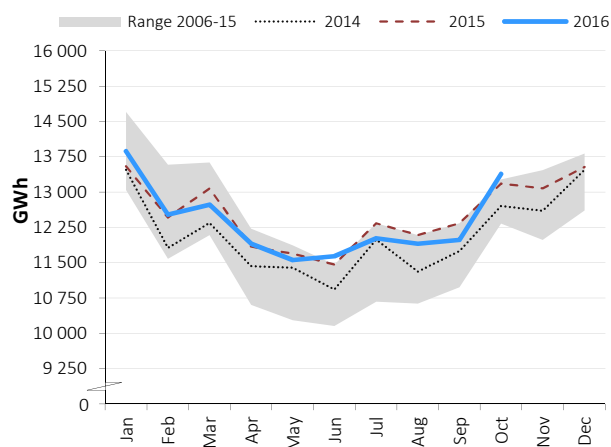
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	11 920	11 193	11 011	112 203	-1.7%	90.8%	137 336	91.2%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	236	129	153	2 094	5.6%	1.7%	2 413	1.6%
+ Geoth./Wind/Solar/Other	1 228	662	743	9 226	16.4%	7.5%	10 906	7.2%
<b>= Indigenous Production</b>	<b>13 385</b>	<b>11 984</b>	<b>11 907</b>	<b>123 525</b>	<b>-0.4%</b>	<b>100.0%</b>	<b>150 650</b>	<b>100.0%</b>
+ Imports	901	1 052	933	12 436	5.9%		14 459	
- Exports	1 043	693	577	9 719	-16.4%		14 793	
<b>= Electricity Supplied</b>	<b>13 243</b>	<b>12 343</b>	<b>12 263</b>	<b>126 242</b>	<b>1.7%</b>		<b>150 316</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

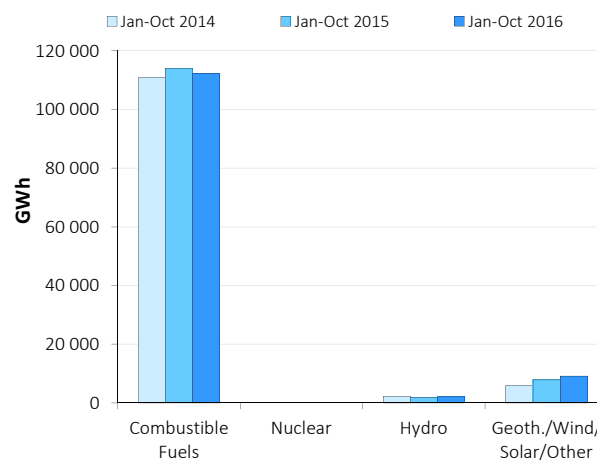
2. Share of electricity production by fuel type.

- Electricity production was 13 385 GWh in October 2016.
  - This was 202 GWh, or 1.5%, higher compared to October 2015 and 1 401 GWh, or 11.7%, higher compared to September 2016.
  - Combustible Fuels production grew by 6.5%, an increase of 727 GWh, compared to the previous month.
- Total production for the year-to-date was 123 525 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 510 GWh, or 0.4%.
  - Combustible Fuels production reduced by 1.7%, a decrease of 1 925 GWh.
  - Geoth./Wind/Solar/Other production increased by 16.4%, or 1 298 GWh.
  - Trade volume decreased by 1 216 GWh, or 5.2%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

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



# PORTUGAL

GWh

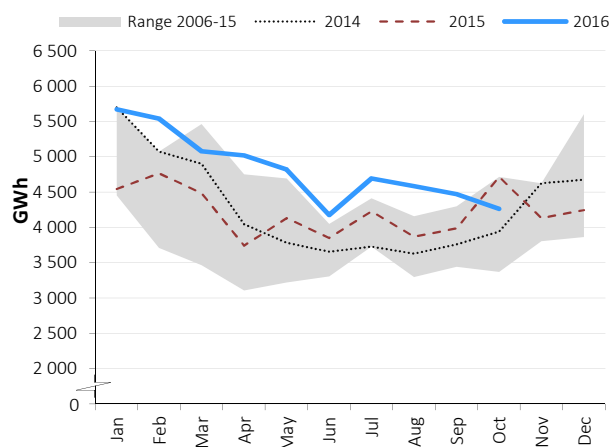
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	2 696	3 013	3 013	22 112	-6.7%	45.8%	28 527	56.3%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	762	704	621	15 239	84.4%	31.5%	9 691	19.1%
+ Geoth./Wind/Solar/Other	804	754	948	10 968	5.9%	22.7%	12 479	24.6%
<b>= Indigenous Production</b>	<b>4 262</b>	<b>4 471</b>	<b>4 583</b>	<b>48 323</b>	<b>14.2%</b>	<b>100.0%</b>	<b>50 695</b>	<b>100.0%</b>
+ Imports	545	397	396	3 574	-45.4%		8 078	
- Exports	516	590	633	8 160	69.8%		5 808	
<b>= Electricity Supplied</b>	<b>4 291</b>	<b>4 278</b>	<b>4 346</b>	<b>43 737</b>	<b>-0.7%</b>		<b>52 965</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

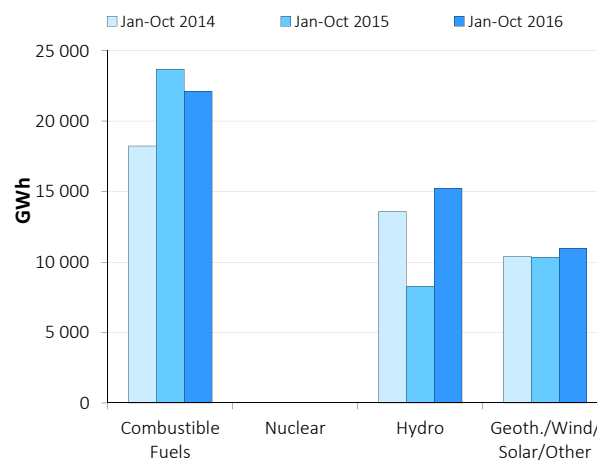
2. Share of electricity production by fuel type.

- Electricity production was 4 262 GWh in October 2016.
  - This was 454 GWh, or 9.6%, lower compared to October 2015 and 209 GWh, or 4.7%, lower compared to September 2016.
  - Combustible Fuels production reduced by 10.5%, a decrease of 317 GWh, compared to the previous month.
- Total production for the year-to-date was 48 323 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 6 004 GWh, or 14.2%.
  - Combustible Fuels production reduced by 6.7%, a decrease of 1 591 GWh.
  - Hydro production showed the largest percentage change by energy source, being 84.4% higher.
  - Geoth./Wind/Solar/Other production increased by 5.9%, or 614 GWh.
  - Trade volume increased by 385 GWh, or 3.4%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- Includes the Açores and Madeira.

## SLOVAK REPUBLIC

GWh

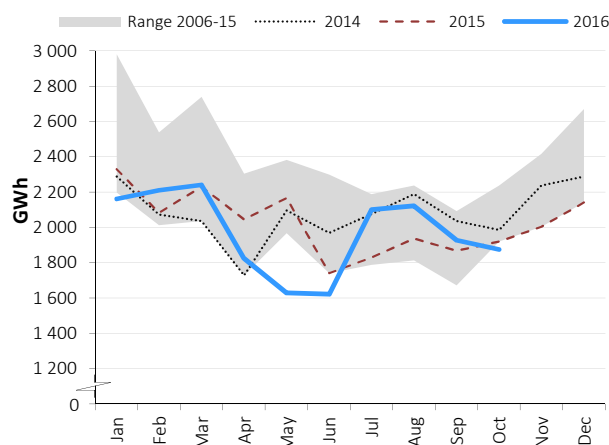
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	425	385	391	4 422	-5.5%	22.4%	5 725	23.6%
+ Nuclear	1 088	1 233	1 285	11 140	-3.2%	56.5%	14 090	58.0%
+ Hydro	315	251	371	3 557	5.5%	18.0%	3 842	15.8%
+ Geoth./Wind/Solar/Other	49	59	74	593	0.0%	3.0%	642	2.6%
<b>= Indigenous Production</b>	<b>1 876</b>	<b>1 928</b>	<b>2 121</b>	<b>19 711</b>	<b>-2.2%</b>	<b>100.0%</b>	<b>24 299</b>	<b>100.0%</b>
+ Imports	1 133	856	638	11 118	-7.4%		14 956	
- Exports	706	706	698	8 861	-12.9%		12 608	
<b>= Electricity Supplied</b>	<b>2 303</b>	<b>2 078</b>	<b>2 061</b>	<b>21 968</b>	<b>-0.1%</b>		<b>26 647</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

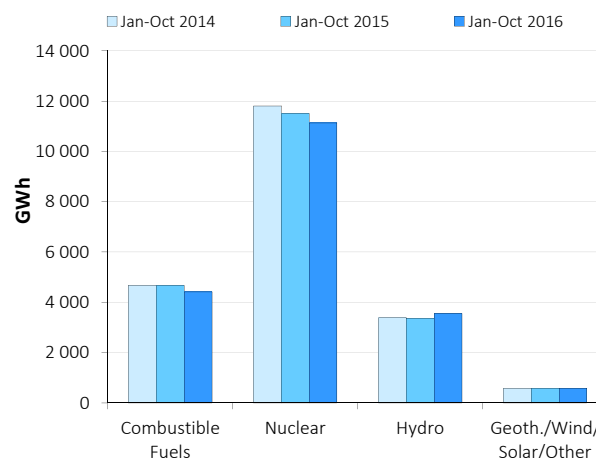
2. Share of electricity production by fuel type.

- Electricity production was 1 876 GWh in October 2016.
  - This was 45 GWh, or 2.3%, lower compared to October 2015 and 52 GWh, or 2.7%, lower compared to September 2016.
  - Nuclear production reduced by 11.8%, a decrease of 145 GWh, compared to the previous month.
- Total production for the year-to-date was 19 711 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 442 GWh, or 2.2%.
  - Nuclear production reduced by 3.2%, a decrease of 369 GWh.
  - Combustible Fuels production showed the largest percentage change by energy source, being 5.5% lower.
  - Geoth./Wind/Solar/Other production decreased remained the same.
  - Trade volume decreased by 2 202 GWh, or 9.9%.

Electricity Production



Electricity Production by Fuel Type



## COUNTRY NOTES:

- Monthly reporting does not include production from wind, solar and other non-combustible fuels, therefore they are estimated by the IEA Secretariat based on annual submission.

## SLOVENIA

GWh

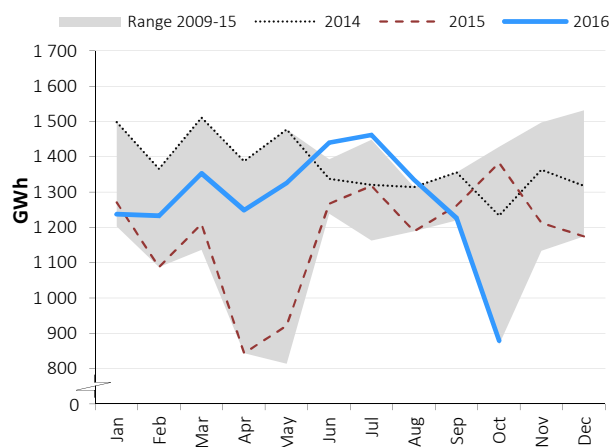
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	553	443	364	4 038	11.6%	31.7%	4 467	31.6%
+ Nuclear	0	486	506	4 530	4.0%	35.6%	5 371	38.0%
+ Hydro	310	271	431	3 931	11.2%	30.9%	4 035	28.5%
+ Geoth./Wind/Solar/Other	16	26	34	244	-2.0%	1.9%	274	1.9%
<b>= Indigenous Production</b>	<b>879</b>	<b>1 226</b>	<b>1 335</b>	<b>12 740</b>	<b>8.4%</b>	<b>100.0%</b>	<b>14 142</b>	<b>100.0%</b>
+ Imports	904	681	549	7 069	-4.3%		9 045	
- Exports	564	767	780	8 037	7.2%		9 094	
<b>= Electricity Supplied</b>	<b>1 219</b>	<b>1 140</b>	<b>1 104</b>	<b>11 772</b>	<b>1.1%</b>		<b>14 093</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

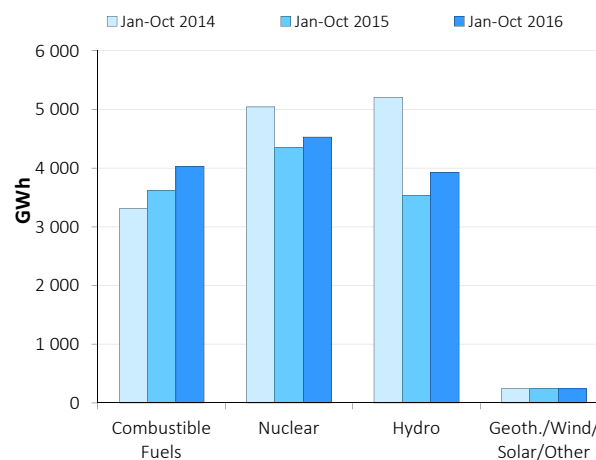
2. Share of electricity production by fuel type.

- Electricity production was 879 GWh in October 2016.
  - This was 504 GWh, or 36.4%, lower compared to October 2015 and 347 GWh, or 28.3%, lower compared to September 2016.
  - Combustible Fuels production grew by 24.8%, an increase of 110 GWh, compared to the previous month.
- Total production for the year-to-date was 12 740 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 986 GWh, or 8.4%.
  - Nuclear production grew by 4%, an increase of 176 GWh.
  - Combustible Fuels production showed the largest percentage change by energy source, being 11.6% higher.
  - Geoth./Wind/Solar/Other production decreased by 2%, or 5 GWh.
  - Trade volume increased by 225 GWh, or 1.5%.

Electricity Production



Electricity Production by Fuel Type



## COUNTRY NOTES:

- The nuclear power plant Krško was closed for maintenance and refueling from the 1st of October to the 5th of November.

# SPAIN

GWh

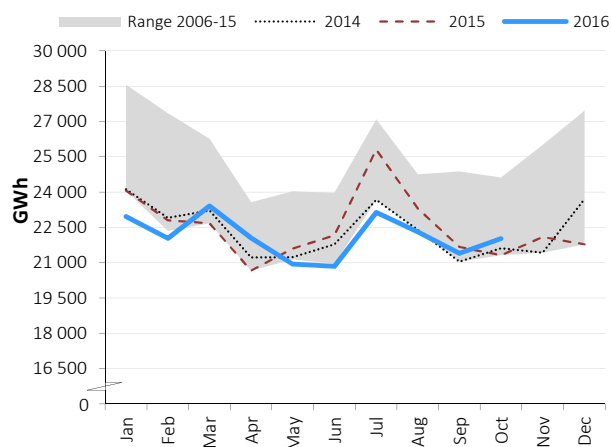
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	11 836	10 566	9 632	84 298	-16.0%	38.1%	122 514	45.4%
+ Nuclear	5 082	4 994	5 131	47 802	4.1%	21.6%	54 916	20.3%
+ Hydro	1 813	1 781	2 169	35 703	33.3%	16.1%	30 753	11.4%
+ Geoth./Wind/Solar/Other	3 290	4 060	5 378	53 316	0.6%	24.1%	61 741	22.9%
<b>= Indigenous Production</b>	<b>22 020</b>	<b>21 401</b>	<b>22 311</b>	<b>221 120</b>	<b>-2.2%</b>	<b>100.0%</b>	<b>269 925</b>	<b>100.0%</b>
+ Imports	1 343	1 865	2 189	18 782	71.2%		14 956	
- Exports	1 803	670	1 074	11 941	-5.0%		15 090	
<b>= Electricity Supplied</b>	<b>21 560</b>	<b>22 596</b>	<b>23 426</b>	<b>227 961</b>	<b>1.6%</b>		<b>269 791</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

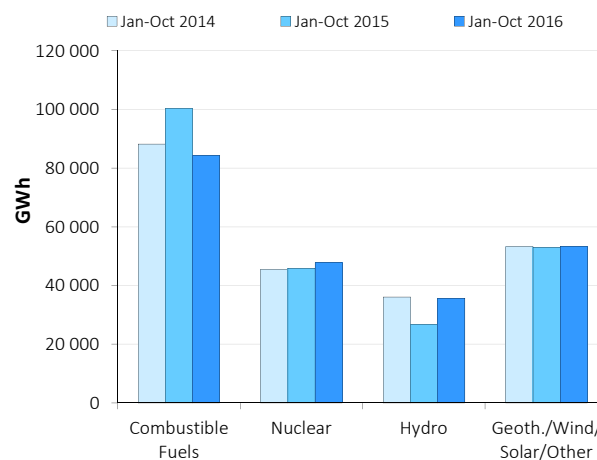
2. Share of electricity production by fuel type.

- Electricity production was 22 020 GWh in October 2016.
  - This was 700 GWh, or 3.3%, higher compared to October 2015 and 619 GWh, or 2.9%, higher compared to September 2016.
  - Combustible Fuels production grew by 12%, an increase of 1 270 GWh, compared to the previous month.
- Total production for the year-to-date was 221 120 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 4 930 GWh, or 2.2%.
  - Combustible Fuels production reduced by 16%, a decrease of 16 047 GWh.
  - Hydro production showed the largest percentage change by energy source, being 33.3% higher.
  - Geoth./Wind/Solar/Other production increased by 0.6%, or 325 GWh.
  - Trade volume increased by 7 187 GWh, or 30.5%.

## Electricity Production



## Electricity Production by Fuel Type



## COUNTRY NOTES:

- Includes the Canary Islands.

## SWEDEN

GWh

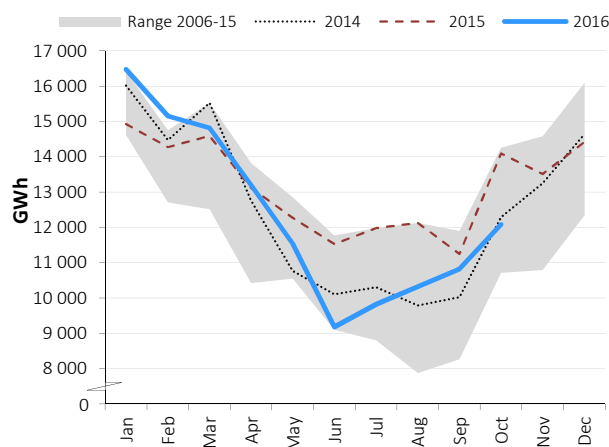
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	1 147	681	712	11 061	1.5%	9.0%	13 622	8.6%
+ Nuclear	4 931	4 761	4 519	48 580	9.3%	39.4%	53 890	34.1%
+ Hydro	4 551	4 355	3 899	52 437	-15.5%	42.5%	73 864	46.7%
+ Geoth./Wind/Solar/Other	1 451	1 023	1 200	11 351	-11.4%	9.2%	16 719	10.6%
<b>= Indigenous Production</b>	<b>12 080</b>	<b>10 821</b>	<b>10 329</b>	<b>123 427</b>	<b>-5.2%</b>	<b>100.0%</b>	<b>158 092</b>	<b>100.0%</b>
+ Imports	1 028	1 057	1 167	11 900	65.3%		9 290	
- Exports	1 539	2 235	1 980	22 875	-15.8%		31 893	
<b>= Electricity Supplied</b>	<b>11 569</b>	<b>9 643</b>	<b>9 516</b>	<b>112 452</b>	<b>2.1%</b>		<b>135 489</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

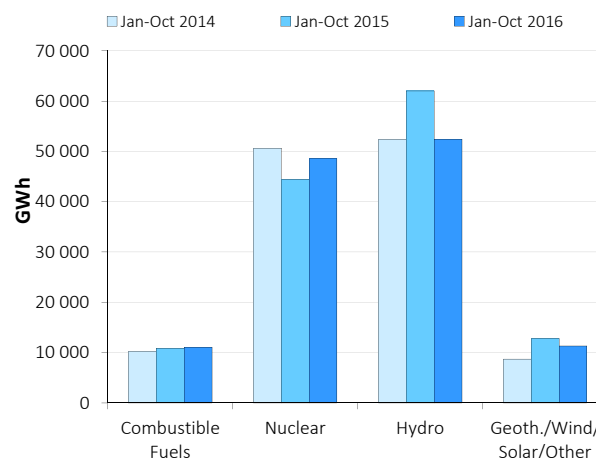
2. Share of electricity production by fuel type.

- Electricity production was 12 080 GWh in October 2016.
  - This was 2 010 GWh, or 14.3%, lower compared to October 2015 and 1 259 GWh, or 11.6%, higher compared to September 2016.
  - Nuclear production grew by 3.6%, an increase of 170 GWh, compared to the previous month.
- Total production for the year-to-date was 123 427 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 6 729 GWh, or 5.2%.
  - Hydro production reduced by 15.5%, a decrease of 9 592 GWh.
  - Geoth./Wind/Solar/Other production decreased by 11.4%, or 1 454 GWh.
  - Trade volume increased by 414 GWh, or 1.2%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

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

# SWITZERLAND

GWh

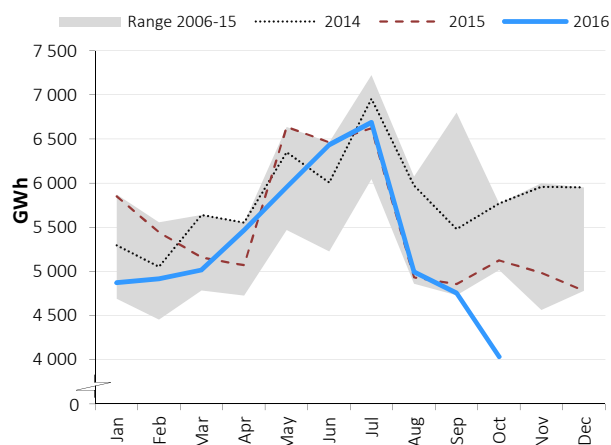
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	353	298	267	3 075	24.4%	5.8%	3 080	4.7%
+ Nuclear	1 280	1 143	973	17 693	-3.4%	33.3%	22 095	33.5%
+ Hydro	2 308	3 189	3 608	31 198	-8.8%	58.7%	39 486	59.9%
+ Geoth./Wind/Solar/Other	97	127	148	1 187	0.0%	2.2%	1 289	2.0%
<b>= Indigenous Production</b>	<b>4 037</b>	<b>4 757</b>	<b>4 996</b>	<b>53 150</b>	<b>-5.4%</b>	<b>100.0%</b>	<b>65 947</b>	<b>100.0%</b>
+ Imports	2 562	2 141	1 935	21 715	-23.5%		34 034	
- Exports	1 376	2 023	2 007	21 512	-29.9%		35 070	
<b>= Electricity Supplied</b>	<b>5 223</b>	<b>4 875</b>	<b>4 924</b>	<b>53 353</b>	<b>-1.0%</b>		<b>64 911</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

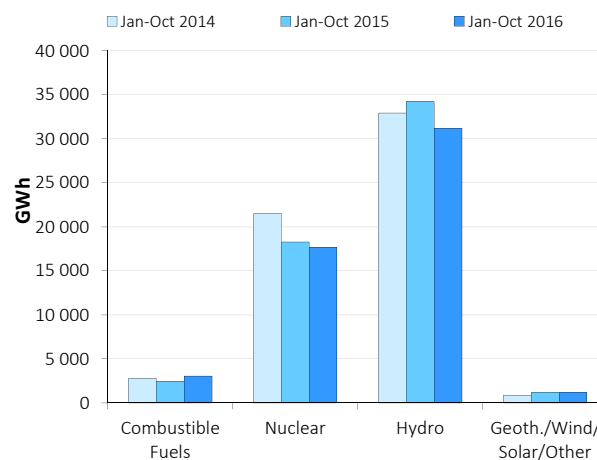
2. Share of electricity production by fuel type.

- Electricity production was 4 037 GWh in October 2016.
  - This was 1 091 GWh, or 21.3%, lower compared to October 2015 and 720 GWh, or 15.1%, lower compared to September 2016.
  - Hydro production reduced by 27.6%, a decrease of 881 GWh, compared to the previous month.
- Total production for the year-to-date was 53 150 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 3 027 GWh, or 5.4%.
  - Hydro production reduced by 8.8%, a decrease of 3 013 GWh.
  - Combustible Fuels production showed the largest percentage change by energy source, being 24.4% higher.
  - Geoth./Wind/Solar/Other production remained flat.
  - Trade volume decreased by 15 840 GWh, or 26.8%.

## Electricity Production



## Electricity Production by Fuel Type



## COUNTRY NOTES:

- Excludes Liechtenstein.

# TURKEY

GWh

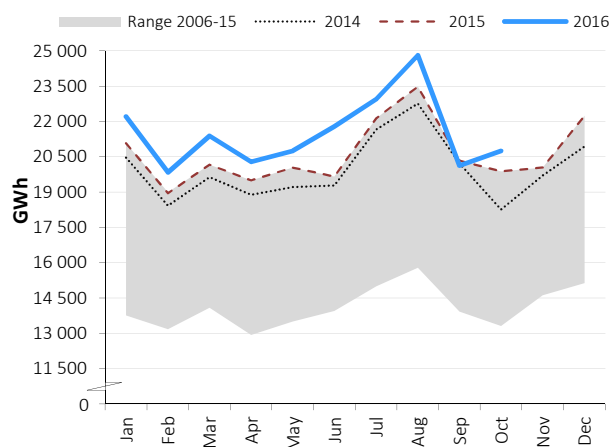
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	15 214	14 224	17 114	141 140	3.6%	65.7%	167 244	67.6%
+ Nuclear	0	0	0	0	0.0%	0.0%	0	0.0%
+ Hydro	3 951	4 118	5 544	57 078	0.3%	26.6%	65 503	26.5%
+ Geoth./Wind/Solar/Other	1 580	1 777	2 158	16 679	38.6%	7.8%	14 777	6.0%
<b>= Indigenous Production</b>	<b>20 746</b>	<b>20 118</b>	<b>24 816</b>	<b>214 896</b>	<b>4.7%</b>	<b>100.0%</b>	<b>247 523</b>	<b>100.0%</b>
+ Imports	447	494	691	5 469	-8.7%		7 411	
- Exports	177	90	112	1 089	-56.2%		2 964	
<b>= Electricity Supplied</b>	<b>21 016</b>	<b>20 522</b>	<b>25 395</b>	<b>219 276</b>	<b>5.0%</b>		<b>251 970</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

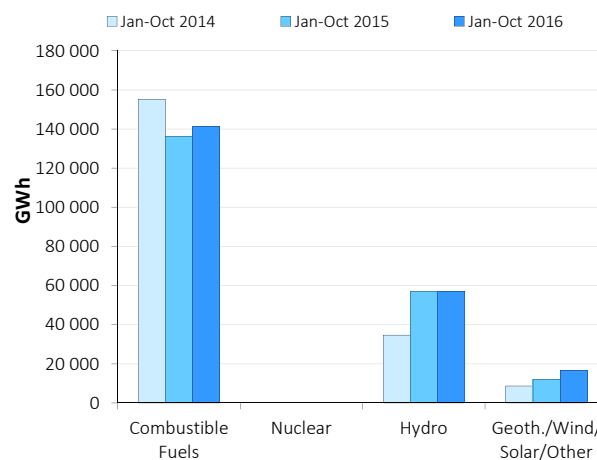
2. Share of electricity production by fuel type.

- Electricity production was 20 746 GWh in October 2016.
  - This was 861 GWh, or 4.3%, higher compared to October 2015 and 628 GWh, or 3.1%, higher compared to September 2016.
  - Combustible Fuels production grew by 7%, an increase of 990 GWh, compared to the previous month.
- Total production for the year-to-date was 214 896 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 9 660 GWh, or 4.7%.
  - Combustible Fuels production grew by 3.6%, an increase of 4 863 GWh.
  - Geoth./Wind/Solar/Other production increased by 38.6%, or 4 644 GWh.
  - Trade volume decreased by 1 921 GWh, or 22.7%.

### Electricity Production



### Electricity Production by Fuel Type



## COUNTRY NOTES:

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

## UNITED KINGDOM

GWh

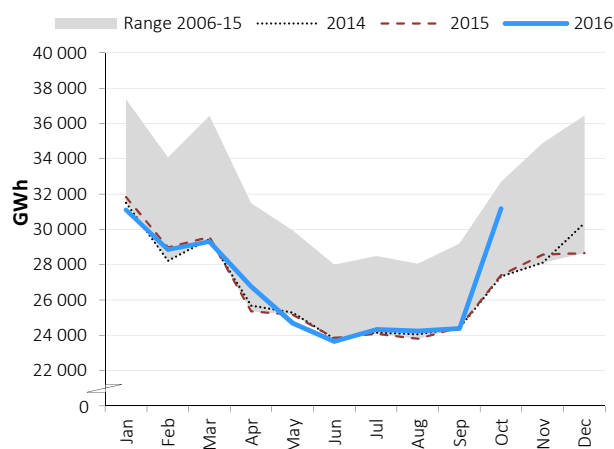
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	21 225	13 948	13 528	168 365	0.3%	62.7%	201 121	62.5%
+ Nuclear	5 555	5 612	5 712	53 561	1.9%	19.9%	63 896	19.9%
+ Hydro	922	635	615	7 262	8.2%	2.7%	8 714	2.7%
+ Geoth./Wind/Solar/Other	3 474	4 190	4 376	39 326	5.0%	14.6%	48 000	14.9%
<b>= Indigenous Production</b>	<b>31 176</b>	<b>24 386</b>	<b>24 231</b>	<b>268 517</b>	<b>1.5%</b>	<b>100.0%</b>	<b>321 726</b>	<b>100.0%</b>
+ Imports	931	1 228	1 911	17 833	-7.5%		22 717	
- Exports	461	110	104	1 335	-8.5%		1 777	
<b>= Electricity Supplied</b>	<b>31 646</b>	<b>25 504</b>	<b>26 038</b>	<b>285 015</b>	<b>1.0%</b>		<b>342 666</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

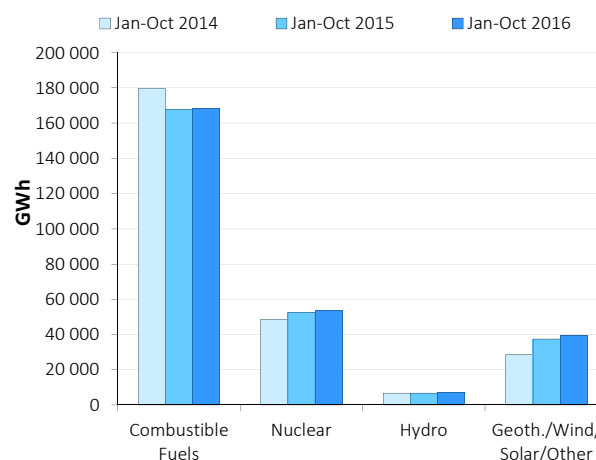
2. Share of electricity production by fuel type.

- Electricity production was 31 176 GWh in October 2016.
  - This was 3 762 GWh, or 13.7%, higher compared to October 2015 and 6 790 GWh, or 27.8%, higher compared to September 2016.
  - Combustible Fuels production grew by 52.2%, an increase of 7 277 GWh, compared to the previous month.
- Total production for the year-to-date was 268 517 GWh. Comparing this to the same period last year shows that:
  - Total production was higher by 4 014 GWh, or 1.5%.
  - Combustible Fuels production grew by 0.3%, an increase of 570 GWh.
  - Hydro production showed the largest percentage change by energy source, being 8.2% higher.
  - Geoth./Wind/Solar/Other production increased by 5%, or 1 877 GWh.
  - Trade volume decreased by 1 569 GWh, or 7.6%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- Monthly reporting does not include production from other combustible and other non combustible fuels, therefore they are estimated by the IEA Secretariat based on annual submission.



## UNITED STATES

GWh

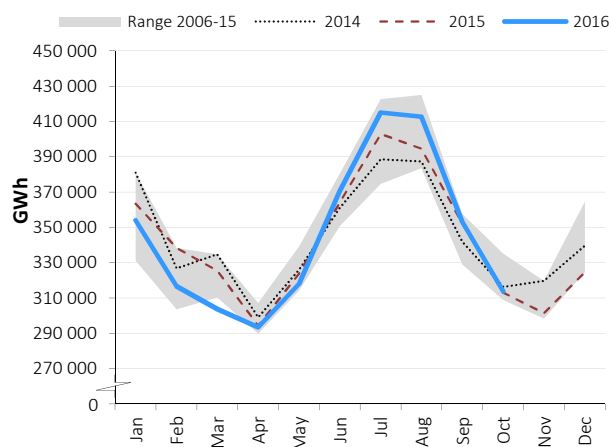
	Last 3 months			Year-to-Date			Past Year	
	Oct-16	Sep-16	Aug-16	Jan-Oct-16	change <sup>1</sup>	share <sup>2</sup>	2015	share <sup>2</sup>
+ Combustible Fuels	208 786	247 295	299 709	2 304 491	-3.5%	66.8%	2 792 308	68.1%
+ Nuclear	60 729	65 415	71 521	668 406	0.2%	19.4%	797 122	19.4%
+ Hydro	18 951	18 455	22 177	244 726	8.3%	7.1%	271 178	6.6%
+ Geoth./Wind/Solar/Other	25 372	21 895	19 285	233 872	22.1%	6.8%	238 328	5.8%
<b>= Indigenous Production</b>	<b>313 838</b>	<b>353 060</b>	<b>412 692</b>	<b>3 451 495</b>	<b>-0.6%</b>	<b>100.0%</b>	<b>4 098 936</b>	<b>100.0%</b>
+ Imports	6 026	6 678	7 806	66 607	4.3%		75 605	
- Exports	849	870	824	8 266	7.7%		9 146	
<b>= Electricity Supplied</b>	<b>319 015</b>	<b>358 868</b>	<b>419 674</b>	<b>3 509 836</b>	<b>-0.5%</b>		<b>4 165 395</b>	

1. Percentage change over corresponding period (beginning of year to current month) of previous year.

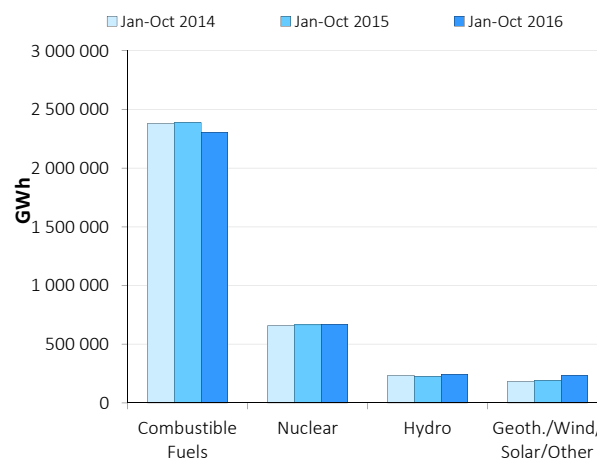
2. Share of electricity production by fuel type.

- Electricity production was 313 838 GWh in October 2016.
  - This was 787 GWh, or 0.3%, higher compared to October 2015 and 39 222 GWh, or 11.1%, lower compared to September 2016.
  - Combustible Fuels production reduced by 15.6%, a decrease of 38 509 GWh, compared to the previous month.
- Total production for the year-to-date was 3 451 495 GWh. Comparing this to the same period last year shows that:
  - Total production was lower by 21 277 GWh, or 0.6%.
  - Combustible Fuels production reduced by 3.5%, a decrease of 83 550 GWh.
  - Geoth./Wind/Solar/Other production increased by 22.1%, or 42 351 GWh.
  - Trade volume increased by 3 323 GWh, or 4.6%.

### Electricity Production



### Electricity Production by Fuel Type



### COUNTRY NOTES:

- Includes the 50 States and the District of Columbia.

## 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.

### 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.
- Monthly data are consistent with those provided in the quarterly "Oil, Gas, Coal and Electricity" book published by the IEA.
- 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>Production</i>	Net generation excludes power station own use.
<i>Combustible Fuels</i>	Production from fossil fuels (primary coal, coal products, peat and peat products, oil shale and oil sands, crude oil, NGL, petroleum products, natural gas), combustible renewables and wastes (solid biofuels, biogases, liquid biofuels, industrial and municipal waste) and other combustible fuels.
<i>Nuclear</i>	Electricity produced using heat generated from nuclear fission.
<i>Hydro</i>	Net generation from hydro facilities including pumped storage production.
<i>Geoth./Wind/Solar/Other</i>	Generation from geothermal, solar photovoltaic, solar thermal, wind, tide, wave, ocean and other non-combustible sources.
<i>Indigenous Production</i>	The sum of electricity production by energy source.
<i>Imports/ Exports</i>	Amounts of electricity that have crossed political boundaries of the country, whether customs clearance has taken place or not.
<i>Electricity supplied</i>	Indigenous production + Imports - Exports. It includes transmission and distribution losses.
<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.

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