

# 2018 Energy Statistics Yearbook



## Department of Economic and Social Affairs

The Department of Economic and Social Affairs of the United Nations Secretariat is a vital interface between global policies in the economic, social and environmental spheres and national action. The Department works in three main interlinked areas: (i) it compiles, generates and analyses a wide range of economic, social and environmental data and information on which States Members of the United Nations draw to review common problems and to take stock of policy options; (ii) it facilitates the negotiations of Member States in many intergovernmental bodies on joint courses of action to address ongoing or emerging global challenges; and (iii) it advises interested Governments on the ways and means of translating policy frameworks developed in United Nations conferences and summits into programmes at the country level and, through technical assistance, helps build national capacities.

### Note

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates reference to a United Nations document.

#### *General Disclaimer*

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Where the designation "country or area" appears in the headings of tables, it covers countries, territories, cities or areas. In prior issues of this publication, where the designation "country" appears in the headings of tables, it should be interpreted to cover countries, territories, cities or areas.

The Energy Statistics Yearbook is published by United Nations Publications, 405 East 42nd Street, S-09FW001, New York, NY 10017 USA, Email: [publications@un.org](mailto:publications@un.org), Website: [shop.un.org](http://shop.un.org).

ST/ESA/STAT/SER.J/62

Sales number: E.21.XVII.6

ISBN: 978-92-1-259163-6  
eISBN: 978-92-1-005525-3  
ISSN 0256-6400  
online ISSN: 2412-1053

Copyright © United Nations 2021  
All rights reserved

# CONTENTS

	Page
Introduction .....	vi
Abbreviations and symbols.....	viii
Energy product definitions .....	ix
Energy flow definitions.....	xvi
Capacities and other definitions .....	xviii
General notes .....	xx
Geographical notes.....	xxi
Country specific information .....	xxiii
Units of measurement and conversion .....	xxv
<b>Conversion factors</b>	
I. Net calorific values of energy products .....	xxvi
II. Selected conversion factors for crude oil and oil products.....	xliii
<b>TABLES</b>	
<b>Summary tables</b>	
1. Total energy supply... ..	2
2. Components of total energy supply .....	10
3. Total final consumption and its components.....	47
<b>Solid fuels</b>	
4. Production, trade and supply of coal.....	67
5. Production, trade and supply of hard coal .....	81
6. International trade of hard coal (Principal importers/exporters), 2017 and 2018.....	92
7. Production, trade and supply of brown coal and oil shale .....	97
8. Production, trade and supply of coke .....	105
9. Production, trade and supply of patent fuel ....	113
10. Production, trade and supply of brown coal briquettes and peat products .....	117
11. Production, trade and supply of peat .....	123
12. Production of biofuels and wastes.....	127
<b>Liquid fuels</b>	
13. Production, trade and supply of conventional crude oil .....	160
14. Production of additives and other hydrocarbons .....	173
15. International trade of conventional crude oil (Principal importers/exporters), 2017 and 2018 .....	178
16. Refinery distillation capacity, throughput and output .....	182
17. Production, trade and supply of liquefied petroleum gases (LPG) .....	195
18. Production, trade and supply of motor gasoline.....	213
19. Production, trade and supply of other kerosene .....	233
20. Production, trade and supply of jet fuels .....	249
21. Production, trade and supply of gas oil/diesel oil .....	267
22. Production, trade and supply of fuel oil .....	287
23. Production of minor oil products from refineries – by type.....	305
24. Production of oil products from refineries – by type.....	317
25. Production, trade and supply of oil products....	329
26. Production of natural gas liquids – by end use	349
<b>Gaseous fuels</b>	
27. Production, trade and supply of natural gas ....	357
28. International trade of natural gas (Principal importers/exporters), 2017 and 2018.....	370
29. Production of manufactured and recovered gases - by type .....	375
<b>Electricity and Heat</b>	
30. Net installed capacity of electricity plants – by type .....	383
31. Utilization of installed electricity capacity – by type.....	419
32. Production of electricity – by type .....	454
33. Electricity supply and consumption .....	491
34. Production of heat - by type .....	511
<b>Nuclear fuels</b>	
35. Production of uranium (uranium content).....	521

## Energy resources

36. Selected energy resources and reserves ..... 525

## FIGURES

### Page

### Total energy supply and final consumption

1. Total energy supply by region, 1990.....	2
2. Total energy supply by region, 2018.....	2
3. Total energy supply by region, 1990-2018.....	3
4. Total per capita energy supply by region, selected years.....	10
5. Production of solids by region, 2018.....	11
6. Production of liquids by region, 2018.....	11
7. Production of gases by region, 2018.....	11
8. Primary electricity production by region, 2018....	11
9. World total final consumption by component, 2018.....	47
10. Total final consumption by region, 1990-2018....	47

### Solid fuels

11. Production of coal by region, 1990-2018.....	67
12. Production of hard coal by region, 1990-2018....	81
13. Major hard coal producing countries, 2018.....	81
14. Major hard coal consuming countries, 2018.....	81
15. Production of brown coal and oil shale by region, 1990-2018.....	97
16. Major brown coal producing countries, 2018.....	97
17. Major brown coal consuming countries, 2018....	97
18. Per capita supply of coke by region, 2018.....	105
19. Major coke producing countries, 2018.....	105
20. Major coke consuming countries, 2018.....	105
21. Major patent fuel producing countries, 2018....	113
22. Major patent fuel consuming countries, 2018... ..	113
23. Production of BKB and peat products by region, 1990-2018.....	117
24. Major BKB and peat products producing countries, 2018.....	117
25. Major BKB and peat products consuming countries, 2018.....	117
26. World production of peat, 1990-2018.....	123
27. Major peat producing countries, 2018.....	123
28. Major peat consuming countries, 2018.....	123
29. Production of fuelwood by region, 1990-2018 ..	128
30. Production of charcoal by region, 1990-2018 ...	128
31. Production of total solid biofuels by region, 2018.....	129
32. Production of biogases by region, 2018.....	129
33. Production of bagasse by region, 2018.....	129
34. Production of liquid biofuels by region, 2018....	129

35. Production of energy from wastes by region, 2018 ..... 129

### Liquid fuels

36. Production of conventional crude oil by region, 1990-2018.....	160
37. Exports of conventional crude oil by region, 1990-2018.....	160
38. Production, trade and supply of conventional crude oil by region, 2018.....	161
39. Major crude oil producing countries, 2018.....	161
40. Major crude oil consuming countries, 2018.....	161
41. Major additives producing countries, 2018.....	173
42. Major other hydrocarbons producing countries, 2018.....	173
43. Refinery distillation capacity, throughput and output by region, 2018.....	182
44. Total refinery distillation capacity by region, 1990-2018.....	183
45. Production of LPG by region, 1990-2018.....	195
46. Major LPG producing countries, 2018.....	195
47. Major LPG consuming countries, 2018.....	195
48. Production of motor gasoline by region, 1990-2018.....	213
49. Major motor gasoline producing countries, 2018.....	213
50. Major motor gasoline consuming countries, 2018.....	213
51. Production of other kerosene by region, 1990-2018.....	233
52. Major other kerosene producing countries, 2018.....	233
53. Major other kerosene consuming countries, 2018.....	233
54. Production of jet fuels by region, 1990-2018....	249
55. Major jet fuels producing countries, 2018.....	249
56. Major jet fuels consuming countries, 2018.....	249
57. Production of gas oil/diesel oil by region, 1990-2018.....	267
58. Major gas oil/diesel oil producing countries, 2018.....	267
59. Major gas oil/diesel oil consuming countries, 2018.....	267
60. Production of fuel oil by region, 1990-2018.....	287
61. Major fuel oil producing countries, 2018.....	287
62. Major fuel oil consuming countries, 2018.....	287
63. Production of minor oil products from refineries, 2018.....	305
64. Production of selected oil products from refineries, 1990-2018.....	317
65. Production of oil products by region, 1990-2018.....	329

66. Production of natural gas liquids by region, 1990-2018 .....	349
67. Production of natural gas liquids by end-use product, 2018 .....	349

### **Gaseous fuels**

68. Production of natural gas by region, 1990-2018 .....	357
69. Major natural gas producing countries, 2018....	357
70. Major natural gas consuming countries, 2018 ..	357
71. Production of manufactured and recovered gases by region, 1990-2018.....	375
72. World production of manufactured and recovered gases by type, 2018.....	375

### **Electricity and Heat**

73. Change in net installed capacity of electricity generating plants by source, 2013-2018.....	383
74. Utilization of installed electric generating capacity by source and region, 2018 .....	419
75. World electricity generation by source, 1990-2018 .....	454

76. World production of electricity by source and region, 2018 .....	455
77. Major countries producing electricity from combustible fuels, 2018 .....	455
78. Major countries producing hydro electricity, 2018 .....	455
79. Major countries producing nuclear electricity, 2018 .....	455
80. Major countries producing electricity from other sources, 2018.....	455
81. World electricity generation by region, 1990-2018 .....	491
82. Major electricity producing countries, 2018.....	491
83. Major electricity consuming countries, 2018 .....	491
84. Heat production by region, 1990-2018.....	511
85. Major heat producing countries, 2018.....	511
86. World heat production by type, 2018 .....	511

Statistics compiled as of December 2020