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A large, stylized number '67' is formed by a green and yellow satellite-style map of the world. The '6' is on the left and the '7' is on the right, both rendered in a circular, semi-transparent style that allows the map to be seen through them. The colors transition from green at the top to yellow at the bottom.

June 2018 | **BP Statistical Review  
of World Energy**

**67<sup>th</sup> edition**

### Other renewables consumption\*

Million tonnes oil equivalent	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Growth rate per annum		Share 2017
												2017	2006-16	
US	24.8	29.7	33.9	39.3	45.7	51.7	60.2	67.2	71.5	83.1	<b>94.8</b>	14.3%	13.8%	19.5%
Canada	2.7	2.7	3.5	4.3	4.7	5.2	6.9	8.1	8.4	9.6	<b>10.3</b>	8.2%	14.0%	2.1%
Mexico	1.9	1.8	1.8	2.0	2.0	2.4	2.6	3.1	3.7	4.1	<b>4.4</b>	9.0%	9.1%	0.9%
<b>Total North America</b>	<b>29.5</b>	<b>34.2</b>	<b>39.3</b>	<b>45.6</b>	<b>52.5</b>	<b>59.3</b>	<b>69.8</b>	<b>78.4</b>	<b>83.6</b>	<b>96.8</b>	<b>109.5</b>	<b>13.5%</b>	<b>13.6%</b>	<b>22.5%</b>
Argentina	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7	<b>0.7</b>	2.3%	6.1%	0.1%
Brazil	4.2	4.7	5.4	7.6	7.9	9.1	10.6	13.3	16.0	19.1	<b>22.2</b>	16.1%	18.9%	4.6%
Chile	0.6	0.8	0.7	0.8	1.0	1.4	1.6	1.5	2.0	2.5	<b>3.0</b>	20.5%	22.8%	0.6%
Colombia	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	<b>0.4</b>	7.9%	9.9%	0.1%
Ecuador	†	†	†	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<b>0.1</b>	-8.8%	15.5%	♦
Peru	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.6	<b>0.6</b>	-2.4%	21.8%	0.1%
Trinidad & Tobago	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-21.9%	♦
Venezuela	-	-	-	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Other S. & Cent. America	1.4	1.6	1.8	2.0	2.2	2.6	3.0	3.6	4.5	5.2	<b>5.6</b>	9.4%	15.1%	1.2%
<b>Total S. &amp; Cent. America</b>	<b>6.9</b>	<b>7.7</b>	<b>8.7</b>	<b>11.3</b>	<b>12.1</b>	<b>14.3</b>	<b>16.5</b>	<b>19.8</b>	<b>24.1</b>	<b>28.6</b>	<b>32.6</b>	<b>14.3%</b>	<b>17.7%</b>	<b>6.7%</b>
Austria	1.4	1.4	1.4	1.5	1.5	1.7	1.9	2.0	2.3	2.5	<b>2.8</b>	14.6%	8.1%	0.6%
Belgium	0.7	0.9	1.2	1.4	1.9	2.3	2.6	2.7	3.2	3.1	<b>3.5</b>	12.0%	18.2%	0.7%
Czech Republic	0.3	0.4	0.5	0.7	1.2	1.3	1.5	1.6	1.7	1.7	<b>1.7</b>	4.8%	22.6%	0.4%
Finland	2.3	2.4	2.0	2.5	2.6	2.6	2.9	2.9	3.1	3.3	<b>3.7</b>	13.1%	2.9%	0.8%
France	1.9	2.3	2.9	3.5	4.4	5.5	5.9	6.6	7.9	8.4	<b>9.4</b>	11.8%	19.9%	1.9%
Germany	15.2	16.5	17.2	19.1	24.1	27.4	29.3	32.3	38.4	38.3	<b>44.8</b>	17.4%	12.6%	9.2%
Greece	0.5	0.6	0.6	0.7	0.9	1.3	1.8	1.7	2.0	2.1	<b>2.2</b>	5.3%	17.8%	0.5%
Hungary	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	<b>0.7</b>	10.1%	8.5%	0.2%
Italy	3.4	3.7	4.6	5.8	8.4	11.4	13.4	14.1	14.3	14.8	<b>15.5</b>	4.5%	17.0%	3.2%
Netherlands	1.7	2.1	2.4	2.5	2.8	2.8	2.7	2.6	3.1	3.3	<b>4.0</b>	19.9%	6.3%	0.8%
Norway	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.5	<b>0.7</b>	32.4%	8.7%	0.1%
Poland	0.7	1.0	1.4	1.8	2.4	3.4	3.3	4.0	4.7	4.7	<b>4.8</b>	2.7%	24.8%	1.0%
Portugal	1.4	1.8	2.3	2.8	2.8	3.1	3.6	3.6	3.6	3.7	<b>3.7</b>	0.1%	13.4%	0.8%
Romania	†	†	†	0.1	0.4	0.6	1.2	1.5	2.2	2.0	<b>2.2</b>	9.5%	111.5%	0.5%
Spain	7.0	8.8	10.7	12.3	12.6	15.0	16.8	16.1	15.6	15.4	<b>15.7</b>	2.2%	10.0%	3.2%
Sweden	2.5	2.8	3.2	3.6	4.0	4.4	4.8	5.0	6.1	6.1	<b>6.8</b>	10.4%	11.2%	1.4%
Switzerland	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	<b>0.8</b>	11.4%	10.3%	0.2%
Turkey	0.2	0.3	0.5	0.9	1.3	1.7	2.3	2.8	3.9	5.4	<b>6.6</b>	24.0%	51.4%	1.4%
United Kingdom	3.3	3.8	4.5	5.1	6.7	8.1	11.0	13.3	17.4	17.6	<b>21.0</b>	19.7%	19.1%	4.3%
Other Europe	3.9	4.2	4.5	5.3	6.5	7.2	8.0	8.9	9.7	9.8	<b>11.0</b>	13.2%	11.5%	2.3%
<b>Total Europe</b>	<b>47.3</b>	<b>54.0</b>	<b>61.1</b>	<b>70.9</b>	<b>85.9</b>	<b>101.4</b>	<b>114.5</b>	<b>123.5</b>	<b>141.2</b>	<b>144.2</b>	<b>161.8</b>	<b>12.5%</b>	<b>13.8%</b>	<b>33.2%</b>
Azerbaijan	-	-	†	†	-	-	†	†	†	†	<b>†</b>	-0.3%	-	♦
Belarus	†	†	†	†	†	†	†	†	†	†	<b>0.1</b>	36.9%	52.0%	♦
Kazakhstan	-	-	-	-	†	†	†	†	†	0.1	<b>0.1</b>	5.5%	-	♦
Russian Federation	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	<b>0.3</b>	8.7%	8.0%	0.1%
Turkmenistan	-	-	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Ukraine	0.1	0.1	†	0.1	0.1	0.2	0.3	0.4	0.4	0.4	<b>0.4</b>	9.6%	46.4%	0.1%
Uzbekistan	-	-	-	-	-	-	†	†	†	†	<b>†</b>	49.3%	-	♦
Other CIS	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-1.7%	27.6%	♦
<b>Total CIS</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.4</b>	<b>0.6</b>	<b>0.7</b>	<b>0.8</b>	<b>0.9</b>	<b>10.0%</b>	<b>20.1%</b>	<b>0.2%</b>
Iran	†	†	0.1	†	0.1	0.1	0.1	0.1	0.1	0.1	<b>0.1</b>	23.9%	14.4%	♦
Iraq	-	-	-	-	-	-	†	†	†	†	<b>†</b>	-	-	♦
Israel	†	†	†	†	0.1	0.1	0.1	0.2	0.3	0.4	<b>0.4</b>	8.2%	66.5%	0.1%
Kuwait	-	-	-	-	-	-	†	†	†	†	<b>†</b>	81.1%	-	♦
Oman	-	-	-	-	-	-	†	†	†	†	<b>†</b>	136.1%	-	♦
Qatar	-	-	-	-	†	†	†	†	†	†	<b>†</b>	0.6%	-	♦
Saudi Arabia	-	-	-	-	†	†	†	†	†	†	<b>†</b>	10.1%	-	♦
United Arab Emirates	-	-	†	†	†	†	†	0.1	0.1	0.1	<b>0.1</b>	65.0%	-	♦
Other Middle East	†	†	†	†	†	†	†	†	0.1	0.3	<b>0.6</b>	76.4%	66.6%	0.1%
<b>Total Middle East</b>	<b>†</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.5</b>	<b>0.6</b>	<b>1.0</b>	<b>1.4</b>	<b>37.6%</b>	<b>40.6%</b>	<b>0.3%</b>
Algeria	-	-	-	†	†	†	†	†	†	0.1	<b>0.1</b>	98.6%	-	♦
Egypt	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.4	0.6	<b>0.6</b>	3.4%	15.8%	0.1%
Morocco	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.6	0.8	<b>0.8</b>	1.7%	33.9%	0.2%
South Africa	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.6	1.4	1.8	<b>2.0</b>	10.3%	33.7%	0.4%
Other Africa	0.5	0.5	0.6	0.7	0.7	0.9	1.0	1.4	1.8	2.0	<b>2.1</b>	5.5%	10.3%	0.4%
<b>Total Africa</b>	<b>0.8</b>	<b>0.9</b>	<b>1.0</b>	<b>1.3</b>	<b>1.4</b>	<b>1.6</b>	<b>1.8</b>	<b>2.7</b>	<b>4.3</b>	<b>5.2</b>	<b>5.5</b>	<b>7.4%</b>	<b>17.8%</b>	<b>1.1%</b>
Australia	1.6	1.7	1.7	1.9	2.5	3.0	3.7	4.1	4.9	5.4	<b>5.7</b>	4.8%	14.5%	1.2%
Bangladesh	†	†	†	†	†	†	†	†	0.1	0.1	<b>0.1</b>	18.2%	41.9%	♦
China	3.5	6.4	11.0	15.9	22.8	29.4	42.3	51.1	64.1	81.7	<b>106.7</b>	31.1%	41.9%	21.9%
China Hong Kong SAR	†	†	†	†	†	†	†	†	†	†	<b>†</b>	0.4%	65.2%	♦
India	4.3	5.4	6.3	7.7	9.5	11.2	12.7	14.3	15.1	18.3	<b>21.8</b>	19.7%	18.4%	4.5%
Indonesia	1.6	1.9	2.1	2.1	2.2	2.2	2.2	2.3	2.4	2.6	<b>2.9</b>	15.9%	5.4%	0.6%
Japan	6.2	6.1	6.1	6.7	7.0	7.7	9.3	11.8	15.4	18.8	<b>22.4</b>	19.4%	12.5%	4.6%
Malaysia	†	†	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	<b>0.4</b>	9.5%	-	0.1%
New Zealand	1.1	1.3	1.6	1.8	2.0	2.0	2.0	2.3	2.4	2.4	<b>2.4</b>	-0.3%	9.1%	0.5%
Pakistan	0.2	0.3	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.6	<b>0.8</b>	33.0%	11.7%	0.2%
Philippines	2.3	2.4	2.4	2.3	2.3	2.4	2.2	2.4	2.8	3.1	<b>3.1</b>	-1.8%	2.8%	0.6%
Singapore	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	<b>0.3</b>	6.2%	8.3%	0.1%
South Korea	0.2	0.3	0.4	0.5	0.6	0.9	1.2	2.1	2.7	3.1	<b>3.6</b>	15.7%	38.1%	0.7%
Sri Lanka	†	†	†	†	†	†	0.1	0.1	0.1	0.1	<b>0.1</b>	18.6%	48.7%	♦
Taiwan	0.5	0.5	0.6	0.6	0.8	0.8	0.9	0.9	1.0	1.0	<b>1.2</b>	17.5%	8.0%	0.2%
Thailand	0.6	0.5	0.5	0.8	0.9	1.2	1.6	2.0	2.3	2.8	<b>3.4</b>	19.6%	19.9%	0.7%
Vietnam	†	†	†	†	†	†	†	†	0.1	0.1	<b>0.1</b>	19.4%	18.1%	♦
Other Asia Pacific	†	†	†	†	†	†	0.1	0.1	0.1	0.1	<b>0.1</b>	25.2%	18.4%	♦
<b>Total Asia Pacific</b>	<b>22.3</b>	<b>26.8</b>	<b>33.4</b>	<b>41.1</b>	<b>51.3</b>	<b>61.7</b>	<b>79.2</b>	<b>94.5</b>	<b>114.4</b>	<b>140.8</b>	<b>175.1</b>	<b>24.7%</b>	<b>21.9%</b>	<b>36.0%</b>
<b>Total World</b>	<b>107.0</b>	<b>123.9</b>	<b>143.7</b>	<b>170.5</b>	<b>203.5</b>	<b>238.7</b>	<b>282.6</b>	<b>320.1</b>	<b>368.8</b>	<b>417.4</b>	<b>486.8</b>	<b>17.0%</b>	<b>16.2%</b>	<b>100.0%</b>
of which: OECD	86.4	98.1	110.7	127.9	150.6	174.3	200.0	221.2	248.9	270.1	<b>304.9</b>	13.2%	13.6%	62.6%
Non-OECD	20.6	25.8	33.0	42.6	53.0	64.5	82.6	98.9	120.0	147.3	<b>181.9</b>	23.8%	23.7%	37.

## Biofuels production

Thousand tonnes oil equivalent	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Growth rate per annum		Share 2017
												2017	2006-16	
US	14709	20934	23761	28044	31184	29808	31057	32890	33849	35986	<b>36936</b>	2.9%	12.9%	43.9%
Canada	502	543	761	787	899	1004	1059	1188	1142	1197	<b>1239</b>	3.8%	21.4%	1.5%
Mexico	5	5	5	10	13	9	7	7	5	14	<b>14</b>	-	-	♦
<b>Total North America</b>	<b>15216</b>	<b>21481</b>	<b>24527</b>	<b>28841</b>	<b>32095</b>	<b>30821</b>	<b>32124</b>	<b>34086</b>	<b>34996</b>	<b>37197</b>	<b>38190</b>	<b>3.0%</b>	<b>13.1%</b>	<b>45.4%</b>
Argentina	173	635	1055	1670	2234	2295	2014	2644	2038	2828	<b>3131</b>	11.0%	57.3%	3.7%
Brazil	12427	15486	15277	16866	14403	14739	17114	18005	19332	18168	<b>18465</b>	1.9%	6.6%	22.0%
Colombia	155	158	320	455	572	627	650	676	693	626	<b>617</b>	-1.1%	15.8%	0.7%
Other S. & Cent. America	606	806	634	232	313	304	359	382	385	409	<b>456</b>	11.8%	-2.3%	0.5%
<b>Total S. &amp; Cent. America</b>	<b>13360</b>	<b>17085</b>	<b>17285</b>	<b>19223</b>	<b>17522</b>	<b>17965</b>	<b>20136</b>	<b>21707</b>	<b>22448</b>	<b>22030</b>	<b>22669</b>	<b>3.2%</b>	<b>7.9%</b>	<b>26.9%</b>
Austria	222	269	373	391	390	390	374	329	381	419	<b>391</b>	-6.5%	14.4%	0.5%
Belgium	146	282	486	523	525	536	526	666	482	477	<b>471</b>	-1.0%	35.8%	0.6%
Finland	54	101	231	301	208	263	330	367	432	109	<b>219</b>	101.9%	24.2%	0.3%
France	1153	2064	2408	2353	1935	2145	2306	2573	2559	2405	<b>2224</b>	-7.3%	13.4%	2.6%
Germany	3243	2805	2834	3022	2967	3031	2770	3460	3191	3228	<b>3293</b>	2.3%	2.2%	3.9%
Italy	448	623	772	678	486	298	454	575	572	600	<b>595</b>	-0.5%	0.1%	0.7%
Netherlands	82	78	242	391	674	1276	1495	1980	1816	1477	<b>1658</b>	12.6%	51.4%	2.0%
Poland	103	290	408	439	414	652	697	750	940	928	<b>920</b>	-0.6%	19.7%	1.1%
Portugal	162	149	226	284	330	276	274	301	321	298	<b>315</b>	5.9%	15.5%	0.4%
Spain	378	384	1001	1312	851	620	749	1030	1122	1200	<b>1541</b>	28.7%	16.0%	1.8%
Sweden	150	183	254	339	400	491	635	789	222	211	<b>185</b>	-12.0%	8.7%	0.2%
United Kingdom	374	289	220	304	322	303	517	403	310	554	<b>617</b>	11.8%	9.3%	0.7%
Other Europe	504	956	1153	1153	1259	1413	1449	1494	1679	1745	<b>1738</b>	-0.1%	15.7%	2.1%
<b>Total Europe</b>	<b>7019</b>	<b>8473</b>	<b>10609</b>	<b>11490</b>	<b>10761</b>	<b>11692</b>	<b>12578</b>	<b>14717</b>	<b>14025</b>	<b>13652</b>	<b>14167</b>	<b>4.1%</b>	<b>10.0%</b>	<b>16.8%</b>
Total CIS	2	7	36	34	28	29	23	25	19	19	<b>19</b>	-	-	♦
Total Middle East	-	-	-	5	5	5	5	5	5	5	<b>5</b>	-	-	♦
<b>Total Africa</b>	<b>6</b>	<b>11</b>	<b>18</b>	<b>8</b>	<b>8</b>	<b>23</b>	<b>32</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	-	<b>15.8%</b>	<b>♦</b>
Australia	75	111	174	222	223	241	210	163	162	183	<b>144</b>	-21.1%	13.4%	0.2%
China	982	1194	1224	1584	1970	2103	2346	2609	2653	1811	<b>2147</b>	18.8%	6.9%	2.6%
India	100	154	61	123	192	168	198	198	438	544	<b>435</b>	-19.9%	22.0%	0.5%
Indonesia	217	530	469	723	1110	1397	1750	3110	1314	2238	<b>2326</b>	4.2%	48.1%	2.8%
South Korea	78	146	358	511	309	283	321	337	385	386	<b>406</b>	5.3%	25.1%	0.5%
Thailand	148	525	656	700	765	1054	1330	1490	1603	1610	<b>1846</b>	15.0%	33.9%	2.2%
Other Asia Pacific	227	390	478	443	692	1067	1363	1522	1777	1767	<b>1727</b>	-2.0%	28.5%	2.1%
<b>Total Asia Pacific</b>	<b>1827</b>	<b>3051</b>	<b>3419</b>	<b>4306</b>	<b>5262</b>	<b>6313</b>	<b>7518</b>	<b>9429</b>	<b>8333</b>	<b>8540</b>	<b>9031</b>	<b>6.0%</b>	<b>20.1%</b>	<b>10.7%</b>
<b>Total World</b>	<b>37429</b>	<b>50109</b>	<b>55894</b>	<b>63906</b>	<b>65680</b>	<b>66848</b>	<b>72415</b>	<b>80009</b>	<b>79866</b>	<b>81483</b>	<b>84121</b>	<b>3.5%</b>	<b>11.4%</b>	<b>100.0%</b>
of which: OECD	22297	30020	35413	40832	43107	42773	44936	49000	49235	51054	<b>52552</b>	3.2%	12.2%	62.5%
Non-OECD	15133	20090	20481	23074	22573	24074	27478	31009	30630	30429	<b>31569</b>	4.0%	10.1%	37.5%
European Union	6944	8332	10460	11387	10569	11581	12492	14632	13906	13532	<b>14044</b>	4.1%	10.0%	16.7%

♦ Less than 0.05%.

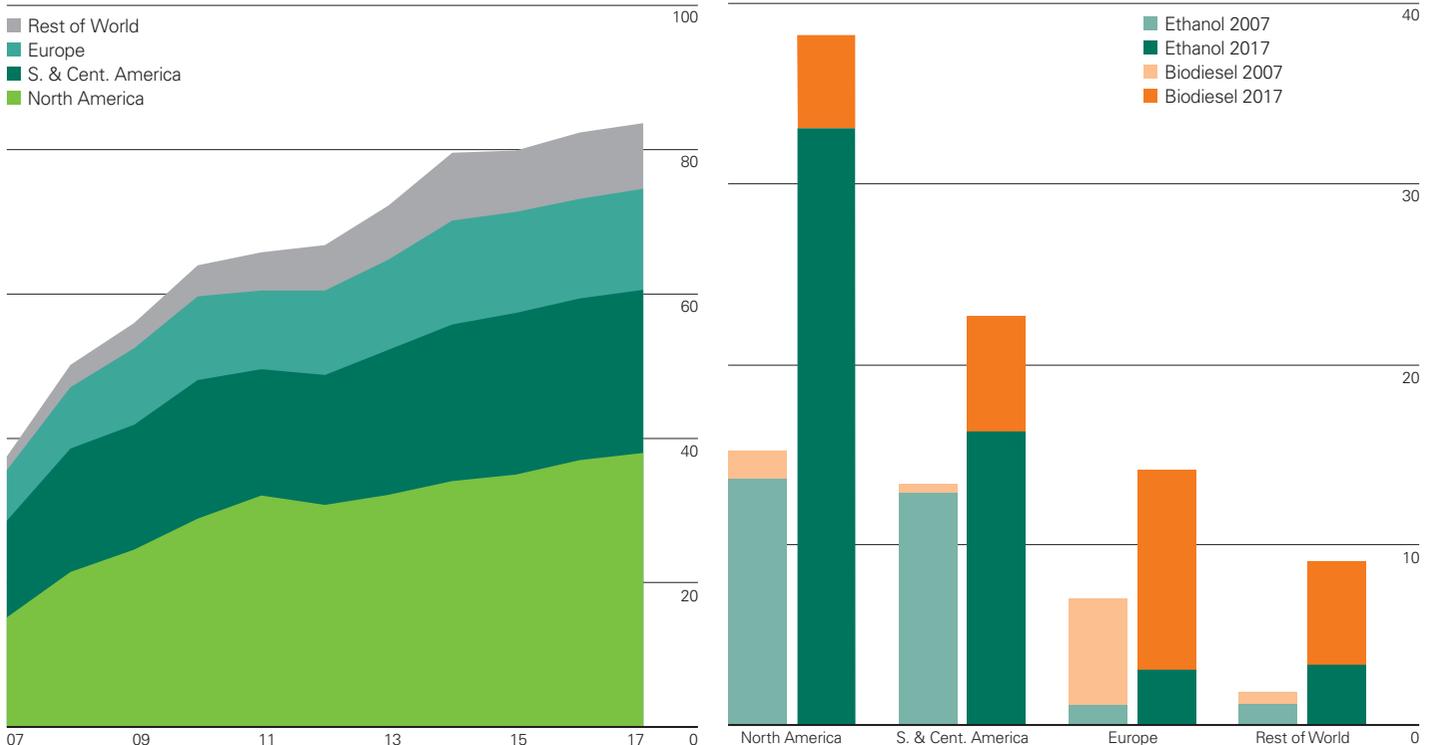
Notes: Consumption of fuel ethanol and biodiesel is included in oil consumption tables.

Growth rates are adjusted for leap years.

Source: Includes data from F.O. Lichts; Strategie grains; US Energy Information Administration (March 2018).

## World biofuels production

Million tonnes oil equivalent



World biofuels production increased by 3.5% in 2017, well below the 10-year average of 11.4%, but the fastest for three years. The US provided the largest increment (950 thousand tonnes of oil equivalent, or ktoe). By fuel type, global ethanol production grew at a similar rate of 3.3%, and contributing over 60% to total biofuels growth. Biodiesel production rose by 4%, driven mainly by growth in Argentina, Brazil and Spain.

# Renewables: Generation – solar\*

Terawatt-hours	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Growth rate per annum		Share 2017
												2017	2006-16	
US	1.1	1.6	2.1	3.0	4.7	9.0	16.0	29.2	39.4	55.4	77.9	40.9%	52.3%	17.6%
Canada	†	†	0.1	0.3	0.6	0.9	1.5	2.1	2.9	3.1	3.2	6.4%	63.3%	0.7%
Mexico	†	†	†	†	†	†	0.1	0.2	0.2	0.4	0.6	46.1%	45.3%	0.1%
<b>Total North America</b>	<b>1.1</b>	<b>1.7</b>	<b>2.2</b>	<b>3.3</b>	<b>5.4</b>	<b>10.0</b>	<b>17.6</b>	<b>31.6</b>	<b>42.6</b>	<b>58.9</b>	<b>81.7</b>	<b>39.1%</b>	<b>52.7%</b>	<b>18.5%</b>
Argentina	†	†	†	†	†	†	†	†	†	†	†	15.3%	66.0%	†
Brazil	†	†	†	†	†	†	†	†	†	†	†	735.3%	–	0.2%
Chile	†	†	†	†	†	†	†	0.5	1.3	2.6	4.0	53.4%	–	0.9%
Colombia	†	†	†	†	†	†	0.1	0.1	0.1	0.1	0.1	7.7%	23.8%	†
Ecuador	†	†	†	†	†	†	†	†	†	†	†	–	119.6%	†
Peru	†	†	†	†	†	0.1	0.2	0.2	0.2	0.2	0.3	19.5%	–	0.1%
Trinidad & Tobago	†	†	†	†	†	†	†	†	†	†	†	–	4.0%	†
Venezuela	†	†	†	†	†	†	†	†	†	†	†	–	–	†
Central America	†	†	†	†	†	†	†	†	0.6	1.2	1.6	29.1%	78.2%	0.4%
Other Caribbean	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.7	1.0	1.5	50.2%	30.5%	0.3%
Other South America	†	†	†	†	†	†	†	0.1	0.1	0.3	0.4	38.9%	84.3%	0.1%
<b>Total S. &amp; Cent. America</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.5</b>	<b>0.7</b>	<b>1.4</b>	<b>3.1</b>	<b>5.6</b>	<b>8.7</b>	<b>54.2%</b>	<b>51.5%</b>	<b>2.0%</b>
Austria	†	†	†	0.1	0.2	0.3	0.6	0.8	0.9	1.1	1.3	22.2%	47.6%	0.3%
Belgium	†	†	0.2	0.6	1.2	2.1	2.6	2.9	3.1	3.1	3.0	-1.0%	108.4%	0.7%
Bulgaria	†	†	†	†	0.1	0.8	1.4	1.3	1.4	1.4	1.4	-0.6%	–	0.3%
Croatia	†	†	†	†	†	†	†	†	†	†	†	6.7%	–	†
Cyprus	†	†	†	†	†	†	†	0.1	0.1	0.1	0.2	10.4%	64.6%	†
Czech Republic	†	†	0.1	0.6	2.1	2.2	2.1	2.1	2.3	2.1	2.2	3.0%	156.9%	0.5%
Denmark	†	†	†	†	†	0.1	0.5	0.6	0.6	0.7	0.8	6.3%	78.9%	0.2%
Estonia	†	†	†	†	†	†	†	†	†	†	†	25.9%	–	†
Finland	†	†	†	†	†	†	†	†	†	†	†	52.1%	18.0%	†
France	†	†	0.2	0.6	2.1	4.0	4.7	5.9	7.3	8.2	9.2	12.6%	92.1%	2.1%
Germany	3.1	4.4	6.6	11.7	19.6	26.4	31.0	36.1	38.7	38.1	39.9	5.0%	32.9%	9.0%
Greece	†	†	†	0.2	0.6	1.7	3.6	3.8	3.9	3.9	4.0	2.1%	128.8%	0.9%
Hungary	†	†	†	†	†	†	†	0.1	0.1	0.2	0.4	104.6%	–	0.1%
Iceland	†	†	†	†	†	†	†	†	†	†	†	–	–	†
Ireland	†	†	†	†	†	†	†	†	†	†	†	100.0%	–	†
Italy	†	0.2	0.7	1.9	10.8	18.9	21.6	22.3	22.9	22.1	25.2	14.3%	90.6%	5.7%
Latvia	†	†	†	†	†	†	†	†	†	†	†	34.2%	–	†
Lithuania	†	†	†	†	†	†	†	0.1	0.1	0.1	0.1	1.0%	–	†
Luxembourg	†	†	†	†	†	†	0.1	0.1	0.1	0.1	0.1	2.5%	16.9%	†
Macedonia	†	†	†	†	†	†	†	†	†	†	†	0.5%	–	†
Netherlands	†	†	†	0.1	0.1	0.3	0.5	0.8	1.1	1.6	1.9	21.1%	46.1%	0.4%
Norway	†	†	†	†	†	†	†	†	†	†	†	65.2%	11.5%	†
Poland	†	†	†	†	†	†	†	†	†	†	†	33.4%	–	†
Portugal	†	†	0.2	0.2	0.3	0.4	0.5	0.6	0.8	0.8	0.9	6.0%	66.6%	0.2%
Romania	†	†	†	†	†	†	0.4	1.3	2.0	1.8	1.9	3.7%	–	0.4%
Slovakia	†	†	†	†	0.4	0.4	0.6	0.6	0.5	0.5	0.6	11.4%	–	0.1%
Slovenia	†	†	†	†	0.1	0.2	0.2	0.3	0.3	0.3	0.3	6.5%	–	0.1%
Spain	0.5	2.6	6.1	7.1	8.7	12.0	13.1	13.7	13.9	13.6	14.4	5.5%	60.7%	3.2%
Sweden	†	†	†	†	†	†	†	†	0.1	0.1	0.2	31.7%	53.3%	†
Switzerland	†	†	0.1	0.1	0.2	0.3	0.5	0.9	1.1	1.3	1.6	17.3%	49.4%	0.4%
Turkey	†	†	†	†	†	†	†	†	0.2	1.0	2.7	162.7%	–	0.6%
United Kingdom	†	†	†	†	0.2	1.4	2.0	4.1	7.5	10.4	11.5	10.5%	98.4%	2.6%
Other Europe	†	†	†	†	†	†	0.1	0.1	0.1	0.2	0.2	15.8%	76.6%	†
<b>Total Europe</b>	<b>3.8</b>	<b>7.5</b>	<b>14.2</b>	<b>23.3</b>	<b>46.7</b>	<b>71.5</b>	<b>86.4</b>	<b>98.4</b>	<b>109.3</b>	<b>113.3</b>	<b>124.1</b>	<b>9.9%</b>	<b>46.3%</b>	<b>28.0%</b>
Azerbaijan	†	†	†	†	†	†	†	†	†	†	†	5.7%	–	†
Belarus	†	†	†	†	†	†	†	†	†	†	†	153.3%	–	†
Kazakhstan	†	†	†	†	†	†	†	†	†	0.1	0.1	-5.0%	–	†
Russian Federation	†	†	†	†	†	†	†	0.2	0.3	0.5	0.5	16.5%	–	0.1%
Turkmenistan	†	†	†	†	†	†	†	†	†	†	†	–	–	†
Ukraine	†	†	†	†	†	0.3	0.6	0.4	0.5	0.5	0.6	20.0%	–	0.1%
Uzbekistan	†	†	†	†	†	†	†	†	†	†	†	49.3%	–	†
Other CIS	†	†	†	†	†	†	†	†	†	†	†	-5.6%	–	†
<b>Total CIS</b>	<b>–</b>	<b>–</b>	<b>†</b>	<b>†</b>	<b>†</b>	<b>0.3</b>	<b>0.6</b>	<b>0.6</b>	<b>0.9</b>	<b>1.1</b>	<b>1.3</b>	<b>19.2%</b>	<b>–</b>	<b>0.3%</b>
Iran	†	†	†	†	†	†	†	†	†	0.1	0.1	119.7%	–	†
Iraq	†	†	†	†	†	†	0.1	0.1	0.1	0.1	0.1	–	–	†
Israel	†	†	†	0.1	0.2	0.4	0.5	0.8	1.1	1.5	1.7	7.9%	–	0.4%
Kuwait	†	†	†	†	†	†	†	†	†	†	†	81.1%	–	†
Oman	†	†	†	†	†	†	†	†	†	†	†	136.1%	–	†
Qatar	†	†	†	†	†	†	†	†	†	†	†	12.5%	–	†
Saudi Arabia	†	†	†	†	†	†	†	0.1	0.1	0.1	0.1	10.1%	–	†
United Arab Emirates	†	†	†	†	†	†	0.1	0.3	0.3	0.3	0.5	66.6%	–	0.1%
Other Middle East	†	†	†	†	†	†	†	†	0.2	1.1	2.1	94.8%	–	0.5%
<b>Total Middle East</b>	<b>–</b>	<b>†</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.5</b>	<b>0.7</b>	<b>1.3</b>	<b>1.8</b>	<b>3.2</b>	<b>4.7</b>	<b>45.6%</b>	<b>–</b>	<b>1.1%</b>
Algeria	†	†	†	†	†	†	†	0.1	0.1	0.2	0.5	106.3%	–	0.1%
Egypt	†	†	†	†	0.1	0.1	0.1	†	0.1	0.1	0.2	74.9%	58.8%	†
Morocco	†	†	†	†	†	†	†	†	†	0.4	0.4	3.7%	129.1%	0.1%
South Africa	†	†	†	†	0.1	0.1	0.2	1.1	2.7	3.3	3.7	12.2%	67.7%	0.8%
Eastern Africa	†	†	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.6	7.8%	38.8%	0.1%
Middle Africa	†	†	†	†	†	†	†	†	†	†	†	7.5%	40.8%	†
Western Africa	†	†	†	†	†	0.1	0.1	0.1	0.1	0.2	0.4	70.3%	38.5%	0.1%
Other Northern Africa	†	†	†	†	†	†	†	†	0.1	0.1	0.1	14.9%	40.5%	†
Other Southern Africa	†	†	†	†	†	†	†	†	†	†	†	16.9%	72.3%	†
<b>Total Africa</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.5</b>	<b>0.6</b>	<b>0.9</b>	<b>1.9</b>	<b>3.7</b>	<b>5.0</b>	<b>5.9</b>	<b>19.4%</b>	<b>57.1%</b>	<b>1.3%</b>
Australia	0.1	0.1	0.3	1.0	2.0	2.4	3.8	5.0	6.0	7.5	8.8	18.7%	54.3%	2.0%
Bangladesh	†	†	†	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	18.4%	44.3%	0.1%
China	0.1	0.2	0.3	0.7	2.6	3.6	8.4	23.5	43.6	61.7	108.2	75.9%	91.1%	24.4%
China Hong Kong SAR	†	†	†	†	†	†	†	†	†	†	†	8.5%	–	†
India	0.1	0.1	0.1	0.1	0.8	2.1	3.4	4.9	6.6	11.6	21.5	86.8%	109.2%	4.9%
Indonesia	†	†	†	†	†	†	†	†	†	†	†	35.7%	–	†
Japan	2.3	2.6	3.0	4.0	5.4	7.4	12.9	23.5	34.5	48.5	62.3	28.7%	37.6%	14.1%
Malaysia	†	†	†	†	†	†	0.1	0.2	0.3	0.4	0.4	16.4%	–	0.1%
New Zealand	†	†	†	†	†	†	†	†	†	0.1	0.1	39.8%	–	†
Pakistan	†	†	†	†	†	0.1	0.1	0.2	0.3	0.5	1.0	78.3%	–	0.2%
Philippines	†	†	†	†	†	†	†	†	0.1	0.1	1.2	10.1%	95.1%	0.3%
Singapore	†	†	†	†	†	†	†	†	†	†	†	45.0%	–	†
South Korea	0.1	0.3</												

# Renewables: Generation – wind\*

Terawatt-hours	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Growth rate per annum		Share 2017
												2017	2006-16	
US	34.8	55.9	74.6	95.6	121.4	142.2	169.5	183.5	192.6	229.3	<b>256.8</b>	12.3%	23.9%	22.9%
Canada	3.0	3.8	6.6	8.6	10.2	11.3	18.0	22.5	27.0	30.8	<b>32.5</b>	6.0%	28.8%	2.9%
Mexico	0.2	0.3	0.6	1.2	1.6	3.7	4.2	6.4	8.7	10.4	<b>11.7</b>	13.5%	72.3%	1.0%
<b>Total North America</b>	<b>38.0</b>	<b>59.9</b>	<b>81.8</b>	<b>105.5</b>	<b>133.2</b>	<b>157.2</b>	<b>191.7</b>	<b>212.5</b>	<b>228.4</b>	<b>270.4</b>	<b>301.1</b>	<b>11.6%</b>	<b>24.9%</b>	<b>26.8%</b>
Argentina	0.1	†	†	†	†	0.4	0.5	0.6	0.6	0.5	<b>0.6</b>	12.9%	22.9%	0.1%
Brazil	0.7	1.2	1.2	2.2	2.7	5.1	6.6	12.2	21.6	33.5	<b>42.7</b>	27.9%	64.1%	3.8%
Chile	†	†	0.1	0.3	0.3	0.4	0.5	1.4	2.1	2.5	<b>3.8</b>	55.3%	79.7%	0.3%
Colombia	†	0.1	0.1	†	†	†	0.1	0.1	0.1	0.1	<b>†</b>	-93.9%	-2.1%	♦
Ecuador	†	†	†	†	†	†	0.1	0.1	0.1	0.1	<b>0.1</b>	-12.3%	-	♦
Peru	†	†	†	†	†	†	†	0.3	0.6	1.1	<b>1.1</b>	1.3%	97.0%	0.1%
Trinidad & Tobago	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	-
Venezuela	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Central America	0.2	0.2	0.4	0.5	0.7	1.1	1.3	2.1	3.1	3.3	<b>3.2</b>	-2.4%	28.3%	0.3%
Other Caribbean	0.1	0.1	0.2	0.3	0.4	0.7	1.3	1.3	1.5	1.6	<b>1.8</b>	14.6%	29.2%	0.2%
Other South America	†	†	†	0.1	0.1	0.1	0.2	0.7	2.1	3.0	<b>3.8</b>	26.5%	123.0%	0.3%
<b>Total S. &amp; Cent. America</b>	<b>1.2</b>	<b>1.7</b>	<b>2.1</b>	<b>3.4</b>	<b>4.3</b>	<b>7.8</b>	<b>10.5</b>	<b>18.8</b>	<b>31.8</b>	<b>45.6</b>	<b>57.2</b>	<b>25.6%</b>	<b>50.3%</b>	<b>5.1%</b>
Austria	2.0	2.0	2.0	2.1	1.9	2.5	3.2	3.8	4.8	5.2	<b>6.5</b>	25.0%	11.6%	0.6%
Belgium	0.5	0.6	1.0	1.3	2.3	2.8	3.7	4.6	5.6	5.4	<b>6.6</b>	22.4%	31.0%	0.6%
Bulgaria	†	0.1	0.2	0.7	0.9	1.2	1.4	1.3	1.5	1.4	<b>1.5</b>	6.7%	53.2%	0.1%
Croatia	†	†	0.1	0.1	0.2	0.3	0.5	0.7	0.8	1.0	<b>1.2</b>	19.1%	48.8%	0.1%
Cyprus	†	†	†	†	0.1	0.2	0.2	0.2	0.2	0.2	<b>0.2</b>	-6.7%	90.8%	♦
Czech Republic	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.5	<b>0.6</b>	19.2%	26.0%	0.1%
Denmark	7.2	6.9	6.7	7.8	9.8	10.3	11.1	13.1	14.1	12.8	<b>14.8</b>	15.9%	7.7%	1.3%
Estonia	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.6	<b>0.7</b>	20.6%	22.8%	0.1%
Finland	0.2	0.3	0.3	0.3	0.5	0.5	0.8	1.1	2.3	3.1	<b>4.8</b>	56.9%	35.0%	0.4%
France	4.1	5.7	7.9	9.9	12.1	14.9	16.0	17.2	21.2	21.4	<b>24.3</b>	13.9%	25.6%	2.2%
Germany	39.7	40.6	38.6	38.5	49.9	51.7	52.7	58.5	80.6	79.9	<b>106.6</b>	33.8%	10.0%	9.5%
Greece	1.8	2.2	2.5	2.7	3.3	3.9	4.1	3.7	4.6	5.1	<b>5.5</b>	7.9%	11.7%	0.5%
Hungary	0.1	0.2	0.3	0.5	0.6	0.8	0.7	0.7	0.7	0.7	<b>0.8</b>	11.1%	31.9%	0.1%
Iceland	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-11.5%	-	♦
Ireland	2.0	2.4	3.0	2.8	4.4	4.0	4.5	5.1	6.6	6.1	<b>7.4</b>	21.4%	14.3%	0.7%
Italy	4.0	4.9	6.5	9.1	9.9	13.4	14.9	15.2	14.8	17.7	<b>17.7</b>	0.1%	19.5%	1.6%
Latvia	0.1	0.1	†	†	0.1	0.1	0.1	0.1	0.1	0.1	<b>0.1</b>	18.0%	10.9%	♦
Lithuania	0.1	0.1	0.2	0.2	0.5	0.5	0.6	0.6	0.8	1.1	<b>1.4</b>	19.2%	55.5%	0.1%
Luxembourg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<b>0.2</b>	135.8%	5.8%	♦
Macedonia	†	†	†	†	†	†	†	†	†	†	<b>†</b>	1.2%	-	♦
Netherlands	3.4	4.3	4.6	4.0	5.1	5.0	5.6	5.8	7.5	8.2	<b>10.6</b>	29.8%	11.6%	0.9%
Norway	0.9	0.9	1.0	0.9	1.3	1.5	1.9	2.2	2.5	2.1	<b>2.8</b>	35.1%	12.8%	0.3%
Poland	0.5	0.8	1.1	1.7	3.2	4.7	6.0	7.7	10.9	12.6	<b>14.9</b>	18.7%	47.6%	1.3%
Portugal	4.0	5.8	7.6	9.2	9.2	10.3	12.0	12.1	11.6	12.5	<b>12.3</b>	-1.5%	15.6%	1.1%
Romania	†	†	†	0.3	1.4	2.6	4.5	4.7	7.1	6.6	<b>7.4</b>	12.8%	140.9%	0.7%
Slovakia	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Slovenia	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Spain	27.6	32.9	37.9	43.7	42.4	49.5	55.8	52.0	49.3	48.9	<b>49.1</b>	0.7%	7.7%	4.4%
Sweden	1.4	2.0	2.5	3.5	6.1	7.2	9.8	11.2	16.3	15.5	<b>17.3</b>	12.3%	31.7%	1.5%
Switzerland	†	†	†	†	0.1	0.1	0.1	0.1	0.1	0.1	<b>0.1</b>	-4.3%	21.9%	♦
Turkey	0.4	0.8	1.5	2.9	4.7	5.9	7.6	8.5	11.7	15.5	<b>17.9</b>	15.4%	61.3%	1.6%
United Kingdom	5.3	7.1	9.3	10.3	16.0	19.8	28.4	32.0	40.3	37.4	<b>49.6</b>	33.1%	24.3%	4.4%
Other Europe	†	†	†	†	†	†	†	†	0.1	0.1	<b>0.2</b>	119.9%	18.7%	♦
<b>Total Europe</b>	<b>105.7</b>	<b>121.3</b>	<b>135.3</b>	<b>153.4</b>	<b>186.6</b>	<b>214.6</b>	<b>247.5</b>	<b>263.7</b>	<b>317.8</b>	<b>322.2</b>	<b>383.4</b>	<b>19.3%</b>	<b>14.5%</b>	<b>34.1%</b>
Azerbaijan	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-2.8%	-	♦
Belarus	†	†	†	†	†	†	†	†	†	0.1	<b>0.1</b>	36.6%	54.0%	♦
Kazakhstan	†	†	†	†	†	†	†	†	0.1	0.3	<b>0.3</b>	9.0%	-	♦
Russian Federation	†	†	†	†	†	†	†	0.1	0.1	0.1	<b>0.1</b>	-2.0%	39.2%	♦
Turkmenistan	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Ukraine	†	†	†	†	0.1	0.3	0.6	1.1	1.1	1.0	<b>1.0</b>	2.5%	39.2%	0.1%
Uzbekistan	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Other CIS	†	†	†	†	†	†	†	†	†	†	<b>†</b>	2.1%	6.8%	♦
<b>Total CIS</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.3</b>	<b>0.7</b>	<b>1.3</b>	<b>1.4</b>	<b>1.5</b>	<b>1.5</b>	<b>4.9%</b>	<b>42.1%</b>	<b>0.1%</b>
Iran	0.1	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	<b>0.5</b>	10.9%	12.6%	♦
Iraq	†	†	†	†	†	†	†	†	†	†	<b>†</b>	63.9%	6.4%	♦
Israel	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Kuwait	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Oman	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Qatar	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Saudi Arabia	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
United Arab Emirates	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-33.3%	-	♦
Other Middle East	†	†	†	†	†	†	†	†	0.1	0.4	<b>0.5</b>	26.3%	62.8%	♦
<b>Total Middle East</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.4</b>	<b>0.4</b>	<b>0.5</b>	<b>0.8</b>	<b>1.0</b>	<b>19.4%</b>	<b>19.5%</b>	<b>0.1%</b>
Algeria	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Egypt	0.7	0.9	1.0	1.4	1.6	1.8	1.5	1.1	1.9	2.5	<b>2.5</b>	0.5%	15.4%	0.2%
Morocco	0.3	0.3	0.4	0.7	0.7	0.7	1.2	1.9	2.5	3.0	<b>3.0</b>	1.4%	32.3%	0.3%
South Africa	†	†	†	†	†	†	†	†	†	†	<b>†</b>	68.1%	-3.4%	♦
Eastern Africa	†	†	†	†	†	†	0.2	0.3	0.4	0.8	<b>0.9</b>	9.6%	79.7%	0.4%
Middle Africa	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-2.5%	68.6%	0.1%
Western Africa	†	†	†	†	†	0.1	0.1	0.1	0.2	0.3	<b>0.3</b>	-	39.2%	♦
Other Northern Africa	†	†	0.1	0.1	0.1	0.2	0.4	0.5	0.4	0.5	<b>0.4</b>	-5.2%	28.7%	♦
Other Southern Africa	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
<b>Total Africa</b>	<b>1.0</b>	<b>1.3</b>	<b>1.6</b>	<b>2.3</b>	<b>2.5</b>	<b>3.0</b>	<b>3.6</b>	<b>5.2</b>	<b>8.9</b>	<b>11.4</b>	<b>11.8</b>	<b>3.6%</b>	<b>29.6%</b>	<b>1.0%</b>
Australia	2.9	3.5	4.4	5.0	6.4	7.7	9.3	9.8	11.8	13.0	<b>12.7</b>	-2.5%	19.7%	1.1%
Bangladesh	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	14.5%	♦
China	5.5	13.1	27.6	44.6	70.3	96.0	141.2	156.1	185.8	237.1	<b>286.1</b>	21.0%	51.5%	25.5%
China Hong Kong SAR	†	†	†	†	†	†	†	†	†	†	<b>†</b>	68.1%	-3.4%	♦
India	11.7	14.4	16.3	19.5	24.0	27.4	30.0	33.5	32.7	43.5	<b>52.6</b>	21.4%	16.6%	4.7%
Indonesia	†	†	†	†	†	†	†	†	†	†	<b>†</b>	-	-	♦
Japan	2.7	2.9	3.4	3										

# Renewables: Generation – geothermal, biomass and other\*

Terawatt-hours	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Growth rate per annum		Share 2017
												2017	2006-16	
US	73.9	73.6	73.2	75.1	75.8	77.0	80.7	84.1	83.7	82.7	84.2	2.1%	1.2%	14.4%
Canada	9.0	8.0	8.9	10.3	10.2	10.9	11.0	11.3	7.4	8.4	9.8	16.6%	-0.6%	1.7%
Mexico	8.2	7.9	7.5	7.4	7.4	6.8	7.3	7.1	7.4	7.2	7.2	0.4%	-0.4%	1.2%
<b>Total North America</b>	<b>91.1</b>	<b>89.4</b>	<b>89.6</b>	<b>92.8</b>	<b>93.4</b>	<b>94.7</b>	<b>99.0</b>	<b>102.5</b>	<b>98.6</b>	<b>98.4</b>	<b>101.3</b>	<b>3.2%</b>	<b>1.0%</b>	<b>17.3%</b>
Argentina	1.6	1.7	1.7	2.0	2.1	2.4	2.4	2.4	2.3	2.4	2.4	-0.2%	4.3%	0.4%
Brazil	18.0	19.5	22.6	31.5	32.2	35.3	40.5	46.4	49.2	51.0	54.5	7.1%	13.2%	9.3%
Chile	2.7	3.3	3.1	3.1	4.0	5.6	6.5	4.6	5.3	6.1	5.6	-7.7%	15.6%	1.0%
Colombia	0.5	0.5	0.7	1.0	1.1	1.0	1.1	1.3	1.4	1.5	1.7	11.3%	10.2%	0.3%
Ecuador	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	-6.1%	12.9%	0.1%
Peru	0.4	0.5	0.5	0.7	0.7	0.7	1.0	1.3	1.1	1.2	1.1	-10.0%	13.3%	0.2%
Trinidad & Tobago	†	†	†	-	-	-	-	-	-	-	-	-	-100.0%	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central America	4.8	4.9	5.3	5.8	6.3	7.0	7.6	7.9	8.1	8.7	8.8	1.1%	7.3%	1.5%
Other Caribbean	0.7	0.8	0.8	0.7	0.7	0.9	1.0	1.0	1.1	1.1	1.0	-2.3%	4.5%	0.2%
Other South America	0.3	1.0	1.1	1.3	1.3	1.5	1.6	2.1	2.6	2.6	2.7	5.0%	33.7%	0.5%
<b>Total S. &amp; Cent. America</b>	<b>29.2</b>	<b>32.4</b>	<b>36.1</b>	<b>46.3</b>	<b>48.7</b>	<b>54.7</b>	<b>61.9</b>	<b>67.4</b>	<b>71.6</b>	<b>75.1</b>	<b>78.3</b>	<b>4.5%</b>	<b>12.1%</b>	<b>13.4%</b>
Austria	4.1	4.3	4.3	4.5	4.5	4.6	4.6	4.3	4.4	4.6	4.6	1.0%	3.6%	0.8%
Belgium	2.6	3.3	3.9	4.3	4.7	5.2	5.0	4.4	5.5	5.3	5.7	8.8%	9.0%	1.0%
Bulgaria	-	†	†	†	†	†	0.1	0.2	0.3	0.4	0.5	38.9%	-	0.1%
Croatia	†	†	†	†	†	†	0.1	0.1	0.2	0.3	0.4	-28.7%	44.3%	0.1%
Cyprus	†	†	†	†	†	†	†	†	†	†	†	-1.0%	78.9%	†
Czech Republic	1.2	1.5	1.9	2.1	2.7	3.4	4.0	4.7	4.8	4.8	4.9	4.1%	18.0%	0.8%
Denmark	3.1	3.1	3.3	4.6	4.4	4.4	4.3	4.3	4.2	4.9	5.4	10.3%	4.8%	0.9%
Estonia	†	†	0.3	0.7	0.8	1.0	0.7	0.7	0.8	0.9	1.3	45.8%	37.0%	0.2%
Finland	9.9	10.4	8.7	10.9	11.1	11.1	11.9	11.7	11.3	11.4	11.5	1.2%	0.6%	2.0%
France	4.2	4.4	4.6	4.9	5.5	5.4	5.4	5.8	6.5	7.6	8.0	4.9%	7.1%	1.4%
Germany	24.4	27.8	30.7	34.0	36.9	43.2	45.6	48.4	50.5	51.1	51.5	1.2%	10.6%	8.8%
Greece	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4%	9.2%	†
Hungary	1.6	1.9	2.3	2.3	1.9	1.7	1.8	2.1	2.2	2.1	2.1	0.6%	5.1%	0.4%
Iceland	3.6	4.0	4.6	4.5	4.7	5.2	5.2	5.2	5.0	5.1	5.2	2.3%	6.8%	0.9%
Ireland	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.7	0.8	19.4%	18.2%	0.1%
Italy	10.8	11.5	12.9	14.8	16.5	18.1	22.7	24.6	25.6	25.8	25.5	-0.9%	9.3%	4.4%
Latvia	†	†	†	†	†	†	0.3	0.5	0.7	0.8	0.9	13.4%	34.3%	0.2%
Lithuania	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.4	0.4	0.4	0.4	-0.3%	33.0%	0.1%
Luxembourg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3%	9.3%	†
Macedonia	-	-	-	-	-	-	-	-	†	†	†	43.5%	-	†
Netherlands	4.0	5.1	6.1	7.1	7.1	7.2	6.0	5.0	4.9	4.9	5.0	3.0%	-0.6%	0.9%
Norway	0.4	0.4	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.2	6.1%	-5.0%	†
Poland	2.6	3.6	5.2	6.3	7.6	10.1	8.6	10.0	9.9	8.0	6.1	-23.1%	14.8%	1.0%
Portugal	2.1	2.0	2.3	2.8	3.1	3.1	3.2	3.3	3.3	3.2	3.4	4.7%	6.1%	0.6%
Romania	†	†	†	0.1	0.2	0.2	0.3	0.5	0.5	0.5	0.5	-11.6%	63.0%	0.1%
Slovakia	0.5	0.5	0.5	0.7	0.8	0.9	0.9	1.4	1.7	1.7	1.7	-0.4%	15.8%	0.3%
Slovenia	0.1	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-8.5%	11.1%	†
Spain	2.9	3.3	3.4	3.8	4.5	5.0	5.3	5.4	5.8	5.7	6.1	7.2%	7.4%	1.0%
Sweden	9.8	10.3	11.5	12.2	11.5	12.2	11.5	10.7	10.8	11.5	12.3	7.6%	3.2%	2.1%
Switzerland	1.2	1.3	1.3	1.3	1.5	1.6	1.7	1.8	1.7	1.8	2.0	8.0%	4.4%	0.3%
Turkey	0.4	0.4	0.8	1.1	1.2	1.6	2.5	3.8	5.2	7.2	8.8	22.3%	40.3%	1.5%
United Kingdom	9.3	9.6	10.7	12.3	13.3	14.7	18.1	22.6	29.2	30.0	31.8	6.2%	12.5%	5.4%
Other Europe	†	†	†	†	†	†	0.1	0.1	0.1	0.1	0.1	6.1%	16.9%	†
<b>Total Europe</b>	<b>99.4</b>	<b>109.9</b>	<b>120.5</b>	<b>136.9</b>	<b>146.2</b>	<b>162.1</b>	<b>172.1</b>	<b>183.8</b>	<b>196.9</b>	<b>201.9</b>	<b>207.6</b>	<b>3.1%</b>	<b>8.5%</b>	<b>35.4%</b>
Azerbaijan	†	†	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-2.1%	-	†
Belarus	†	†	†	†	†	†	†	†	†	†	†	2.4%	47.0%	†
Kazakhstan	-	-	-	-	-	-	-	-	†	†	†	-	-	†
Russian Federation	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.5	0.5	0.5	4.5%	-0.2%	0.1%
Turkmenistan	-	-	-	-	-	-	-	-	-	-	-	-	-	†
Ukraine	0.3	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	22.0%	-	†
Uzbekistan	-	-	-	-	-	-	-	-	-	-	-	-	-	†
Other CIS	-	-	-	-	-	-	†	†	†	†	†	-	-	†
<b>Total CIS</b>	<b>0.8</b>	<b>0.8</b>	<b>0.7</b>	<b>0.8</b>	<b>0.8</b>	<b>0.7</b>	<b>0.7</b>	<b>0.9</b>	<b>0.8</b>	<b>0.8</b>	<b>0.9</b>	<b>6.4%</b>	<b>5.0%</b>	<b>0.1%</b>
Iran	-	-	†	†	†	†	†	†	†	†	†	-	-	†
Iraq	-	-	-	-	-	-	-	-	-	-	-	-	-	†
Israel	-	†	†	0.1	0.1	0.1	†	0.1	0.1	0.1	0.1	-	-	†
Kuwait	-	-	-	-	-	-	-	-	-	-	-	-	-	†
Oman	-	-	-	-	-	-	-	-	-	-	-	-	-	†
Qatar	-	-	-	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-	-	†
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	-	-	†
United Arab Emirates	-	-	-	-	-	-	†	†	†	†	†	-	-	†
Other Middle East	†	†	†	†	†	†	†	†	†	†	†	-	-3.7%	†
<b>Total Middle East</b>	<b>†</b>	<b>†</b>	<b>0.1</b>	<b>0.1</b>	<b>0.3</b>	<b>-</b>	<b>47.4%</b>	<b>†</b>						
Algeria	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Morocco	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Africa	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	3.0%	1.2%	0.1%
Eastern Africa	1.6	1.7	2.1	2.3	2.4	2.5	2.8	4.0	5.5	5.6	5.8	5.5%	9.8%	1.0%
Middle Africa	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-18.3%	†
Western Africa	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	-	0.4%	†
Other Northern Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	†
Other Southern Africa	0.2	0.1	0.1	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	-	4.0%	†
<b>Total Africa</b>	<b>2.4</b>	<b>2.6</b>	<b>2.9</b>	<b>3.1</b>	<b>3.3</b>	<b>3.4</b>	<b>3.7</b>	<b>4.8</b>	<b>6.4</b>	<b>6.5</b>	<b>6.8</b>	<b>4.9%</b>	<b>6.2%</b>	<b>1.2%</b>
Australia	4.3	3.7	2.8	2.4	2.6	3.1	3.3	3.5	3.7	3.6	3.6	1.9%	-0.9%	0.6%
Bangladesh	-	-	†	†	†	†	†	†	†	†	†	27.5%	-	†
China	9.9	14.9	20.9	24.9	27.7	30.5	37.3	46.4	54.1	62.1	77.4	24.9%	24.2%	13.2%
China Hong Kong SAR	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-	†
India	7.4	9.3	11.6	14.3	17.1	19.9	22.5	24.7	27.5	25.7	22.3	-13.2%	16.5%	3.8%
Indonesia	7.1	8.4	9.4	9.5	9.6	9.7	9.6	10.3	10.5	11.2	13.0	15.9%	5.3%	2.2%
Japan	22.2	21.3	20.3	21.8	21.1	22.1	23.2	23.6	28.5	29.2	30.9	6.1%	3.1%	5.3%
Malaysia	-	-	1.5	1.4	1.5	1.5	1.1	0.9	0.9	1.1	1.2	7.2%	-	0.2%
New Zealand	4.1	4.8	5.4	6.4	6.7	6.8	7.0	7.9	8.4	8.4	8.5	0.7%	3.8%	1.4%
Pakistan	1.1	1.3	1.0											

# Renewable energy – geothermal

## Cumulative installed geothermal power capacity\*

Megawatts	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Growth rate per annum		Share 2017
												2017	2006-16	
Australia	†	†	1	1	1	1	2	2	2	2	<b>2</b>	–	30.2%	♦
Austria	1	1	1	1	1	1	1	1	1	1	<b>1</b>	–	1.6%	♦
Chile	–	–	–	–	–	–	–	–	–	–	<b>48</b>	n/a	n/a	0.3%
China	26	26	27	27	27	27	27	27	27	27	<b>27</b>	–	0.4%	0.2%
Costa Rica	166	166	166	166	208	208	208	208	208	208	<b>208</b>	–	2.3%	1.5%
El Salvador	204	204	204	204	204	204	204	204	204	204	<b>204</b>	–	3.1%	1.4%
Ethiopia	7	7	7	7	7	7	7	7	7	7	<b>7</b>	–	–	0.1%
France	15	16	16	16	16	16	17	17	17	19	<b>19</b>	–	2.4%	0.1%
Germany	3	3	8	8	8	19	30	33	33	39	<b>39</b>	–	69.4%	0.3%
Guadeloupe	15	15	15	15	15	15	15	12	15	15	<b>15</b>	–	-0.3%	0.1%
Guatemala	54	54	52	52	52	52	48	48	48	48	<b>48</b>	–	-1.2%	0.3%
Honduras	–	–	–	–	–	–	–	–	–	–	<b>35</b>	n/a	n/a	0.2%
Hungary	–	–	–	–	–	–	–	–	–	–	<b>3</b>	n/a	n/a	♦
Iceland	485	573	573	573	663	663	663	663	663	663	<b>708</b>	6.8%	4.6%	4.9%
Indonesia	980	1052	1189	1193	1209	1344	1345	1405	1435	1640	<b>1860</b>	13.4%	6.8%	13.0%
Italy	811	811	843	883	883	875	876	916	916	916	<b>916</b>	–	1.2%	6.4%
Japan	532	532	536	536	536	536	537	539	544	544	<b>549</b>	0.9%	0.2%	3.8%
Kenya	170	174	174	209	212	217	253	450	605	676	<b>676</b>	–	15.0%	4.7%
Mexico	960	965	965	965	887	812	823	813	874	894	<b>919</b>	2.8%	-0.7%	6.4%
New Zealand	443	585	625	723	723	723	805	971	978	978	<b>978</b>	–	8.7%	6.8%
Nicaragua	88	88	88	88	88	160	160	160	160	160	<b>160</b>	–	7.5%	1.1%
Papua New Guinea	56	56	56	56	56	56	56	56	56	56	<b>56</b>	–	10.3%	0.4%
Philippines	1958	1958	1953	1966	1783	1848	1868	1918	1917	1916	<b>1928</b>	0.6%	-0.3%	13.5%
Portugal	29	29	29	29	29	29	29	29	29	29	<b>33</b>	13.8%	6.1%	0.2%
Russia	82	82	82	82	82	82	82	82	82	82	<b>82</b>	–	0.4%	0.6%
Thailand	†	†	†	†	†	†	†	†	†	†	<b>†</b>	–	–	♦
Turkey	23	30	77	94	114	162	311	405	624	821	<b>1064</b>	29.6%	43.0%	7.4%
US	3233	3243	3421	3498	3500	3724	3765	3757	3812	3805	<b>3719</b>	-2.3%	1.8%	26.0%
<b>Total World</b>	<b>10341</b>	<b>10670</b>	<b>11109</b>	<b>11393</b>	<b>11305</b>	<b>11782</b>	<b>12134</b>	<b>12725</b>	<b>13258</b>	<b>13751</b>	<b>14305</b>	<b>4.0%</b>	<b>3.3%</b>	<b>100.0%</b>

\*End of year.  
†Less than 0.05.  
♦Less than 0.05%.  
n/a not available.

Sources: ThinkGeoEnergy, International Geothermal Association, IRENA, and national sources.

# Renewable energy – solar

## Cumulative installed photovoltaic (PV) power\*

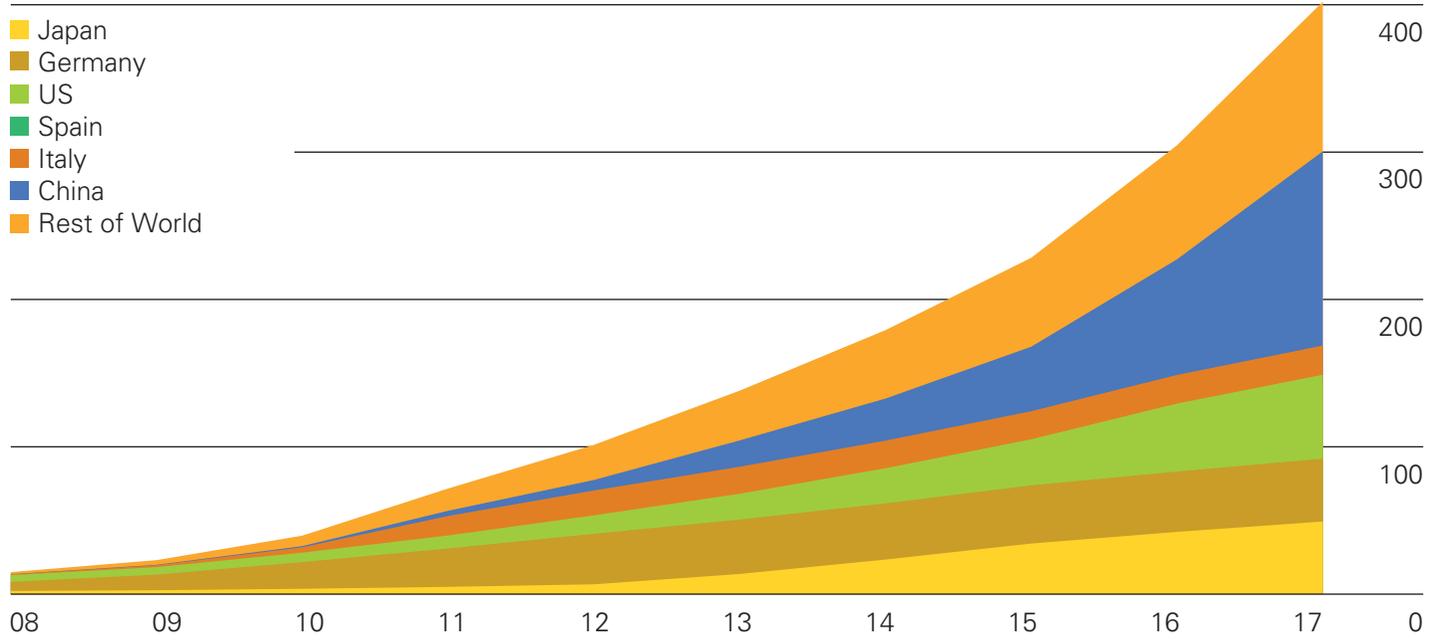
Megawatts	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Growth rate per annum		Share 2017
												2017	2006-16	
US	455	753	1188	2040	3959	7328	12079	18317	25674	40400	<b>51000</b>	26.2%	63.6%	12.8%
Canada	26	33	95	281	558	827	1272	1904	2579	2688	<b>2900</b>	7.9%	63.2%	0.7%
Mexico	21	22	25	31	40	52	112	179	246	389	<b>539</b>	38.6%	34.6%	0.1%
<b>Total North America</b>	<b>502</b>	<b>808</b>	<b>1308</b>	<b>2352</b>	<b>4557</b>	<b>8207</b>	<b>13463</b>	<b>20400</b>	<b>28499</b>	<b>43477</b>	<b>54439</b>	<b>25.2%</b>	<b>62.7%</b>	<b>13.6%</b>
Brazil	–	–	–	1	1	2	5	15	23	80	<b>1097</b>	1271.3%	n/a	0.3%
Chile	–	–	–	–	–	2	15	242	576	1603	<b>2110</b>	31.7%	n/a	0.5%
Honduras	3	3	4	4	4	5	5	5	393	414	<b>451</b>	8.9%	64.4%	0.1%
Other S. & Cent. America	27	36	60	113	164	318	425	569	841	1062	<b>1458</b>	37.4%	48.8%	0.4%
<b>Total S. &amp; Cent. America</b>	<b>30</b>	<b>40</b>	<b>63</b>	<b>118</b>	<b>170</b>	<b>327</b>	<b>450</b>	<b>831</b>	<b>1833</b>	<b>3158</b>	<b>5117</b>	<b>62.0%</b>	<b>63.7%</b>	<b>1.3%</b>
Austria	29	32	53	95	187	263	626	785	937	1097	<b>1250</b>	13.9%	45.4%	0.3%
Belgium	24	109	648	1066	2105	2800	3058	3153	3250	3516	<b>3800</b>	8.1%	111.1%	1.0%
Bulgaria	†	†	2	25	154	1013	1020	1026	1029	1028	<b>1028</b>	0.0%	n/a	0.3%
Czech Republic	4	40	465	1727	1913	2022	2064	2068	2075	2068	<b>2061</b>	–0.3%	114.6%	0.5%
Denmark	3	3	5	7	17	408	563	606	787	850	<b>910</b>	7.1%	75.9%	0.2%
Finland	2	3	5	7	8	8	8	11	15	35	<b>50</b>	42.9%	33.1%	–
France	76	180	371	1209	2973	4094	4748	5702	6605	7125	<b>8000</b>	12.3%	68.8%	2.0%
Germany	4170	6120	10566	18006	25916	34077	36710	37900	39224	40716	<b>42394</b>	4.1%	30.2%	10.6%
Greece	9	12	46	202	612	1536	2579	2596	2604	2604	<b>2604</b>	0.0%	86.9%	0.7%
Hungary	–	1	1	2	4	12	35	77	168	220	<b>300</b>	36.4%	n/a	0.1%
Italy	100	496	1277	3605	13141	16796	18198	18606	18915	19291	<b>19700</b>	2.1%	81.4%	4.9%
Netherlands	49	53	64	85	143	363	723	1123	1560	2047	<b>2900</b>	41.7%	45.5%	0.7%
Norway	8	8	9	9	10	10	11	13	15	27	<b>45</b>	66.7%	12.9%	0.0%
Portugal	15	56	99	134	175	244	299	416	465	520	<b>577</b>	11.0%	62.7%	0.1%
Romania	–	–	–	†	1	41	761	1293	1326	1372	<b>1378</b>	0.4%	n/a	0.3%
Slovakia	–	–	–	19	496	513	533	533	533	533	<b>533</b>	0.0%	n/a	0.1%
Spain	778	3829	3848	4330	4792	5104	5354	5376	5425	5453	<b>5600</b>	2.7%	41.7%	1.4%
Sweden	6	8	9	11	15	23	42	78	126	210	<b>303</b>	44.3%	45.3%	0.1%
Switzerland	36	48	74	111	211	437	756	1061	1394	1640	<b>1900</b>	15.9%	49.2%	0.5%
Turkey	3	4	5	6	7	12	18	58	266	800	<b>3400</b>	325.0%	74.8%	0.9%
United Kingdom	18	24	27	95	1000	1754	2937	5528	9535	11899	<b>12760</b>	7.2%	96.2%	3.2%
Other Europe	26	30	39	56	310	644	1204	1452	1719	2023	<b>2551</b>	26.1%	54.6%	0.6%
<b>Total Europe</b>	<b>5356</b>	<b>11056</b>	<b>17612</b>	<b>30807</b>	<b>54190</b>	<b>72173</b>	<b>82247</b>	<b>89461</b>	<b>97973</b>	<b>105074</b>	<b>114044</b>	<b>8.5%</b>	<b>41.2%</b>	<b>28.5%</b>
Ukraine	–	–	–	3	188	371	748	819	839	938	<b>1149</b>	22.5%	n/a	0.3%
Other CIS	†	†	†	†	1	1	4	12	88	119	<b>234</b>	97.1%	103.0%	0.1%
<b>Total CIS</b>	<b>†</b>	<b>†</b>	<b>†</b>	<b>3</b>	<b>189</b>	<b>372</b>	<b>752</b>	<b>830</b>	<b>927</b>	<b>1057</b>	<b>1383</b>	<b>30.9%</b>	<b>152.6%</b>	<b>0.3%</b>
Israel	2	3	25	70	190	237	481	681	886	1040	<b>1100</b>	5.8%	100.3%	0.3%
Jordan	–	–	–	–	–	–	–	–	29	296	<b>362</b>	22.6%	n/a	0.1%
Other Middle East	†	1	12	15	19	32	91	127	250	570	<b>984</b>	72.8%	n/a	0.2%
<b>Total Middle East</b>	<b>2</b>	<b>4</b>	<b>37</b>	<b>85</b>	<b>209</b>	<b>269</b>	<b>572</b>	<b>809</b>	<b>1165</b>	<b>1905</b>	<b>2447</b>	<b>28.4%</b>	<b>112.8%</b>	<b>0.6%</b>
Algeria	–	–	–	–	–	–	–	1	49	219	<b>400</b>	82.6%	n/a	0.1%
South Africa	17	18	20	23	67	72	280	1034	1039	1549	<b>1714</b>	10.7%	58.4%	0.4%
Other Africa	55	71	114	203	272	342	408	487	573	737	<b>946</b>	28.4%	32.7%	0.2%
<b>Total Africa</b>	<b>72</b>	<b>89</b>	<b>133</b>	<b>226</b>	<b>339</b>	<b>415</b>	<b>688</b>	<b>1522</b>	<b>1661</b>	<b>2505</b>	<b>3060</b>	<b>22.2%</b>	<b>45.4%</b>	<b>0.8%</b>
Australia	82	105	188	571	1377	2415	3226	4088	5109	5950	<b>7200</b>	21.0%	55.9%	1.8%
China	100	140	300	800	3500	7060	17740	28380	43530	78000	<b>131000</b>	67.9%	99.0%	32.8%
India	4	10	12	37	562	923	1283	3290	5168	9418	<b>19047</b>	102.2%	113.4%	4.8%
Japan	1919	2144	2627	3618	4914	6632	13599	23339	34150	42000	<b>49000</b>	16.7%	37.7%	12.3%
Malaysia	7	9	11	13	14	34	141	206	264	336	<b>386</b>	14.9%	50.9%	0.1%
Pakistan	†	1	4	9	19	46	100	165	230	410	<b>730</b>	78.0%	n/a	0.2%
Philippines	1	1	1	1	1	1	1	22	132	765	<b>885</b>	15.7%	94.3%	0.2%
South Korea	81	357	524	650	729	1024	1555	2481	3493	4400	<b>5600</b>	27.3%	61.7%	1.4%
Taiwan	2	6	10	22	118	223	392	620	842	1210	<b>1733</b>	43.2%	96.6%	0.4%
Thailand	32	33	43	49	242	388	824	1299	1420	2449	<b>2700</b>	10.2%	55.3%	0.7%
Other Asia Pacific	38	52	65	95	122	169	226	347	512	667	<b>842</b>	26.2%	37.3%	0.2%
<b>Total Asia Pacific</b>	<b>2267</b>	<b>2857</b>	<b>3784</b>	<b>5865</b>	<b>11598</b>	<b>18914</b>	<b>39087</b>	<b>64237</b>	<b>94849</b>	<b>145606</b>	<b>219123</b>	<b>50.5%</b>	<b>53.8%</b>	<b>54.8%</b>
<b>Total World</b>	<b>8230</b>	<b>14855</b>	<b>22938</b>	<b>39455</b>	<b>71251</b>	<b>100677</b>	<b>137260</b>	<b>178090</b>	<b>226907</b>	<b>302782</b>	<b>399613</b>	<b>32.0%</b>	<b>48.7%</b>	<b>100.0%</b>

\*End of year.  
†Less than 0.05.  
n/a not available.

Sources: IEA Photovoltaic Power Systems Programme, IRENA, EurObserver, and national sources.

# Solar PV generation capacity

Gigawatts, cumulative installed capacity



Source: includes data from IEA PV Power Systems Programme, Solar Power Europe, EurObserver, and IRENA.

# Renewable energy – wind

## Cumulative installed wind turbine capacity\*

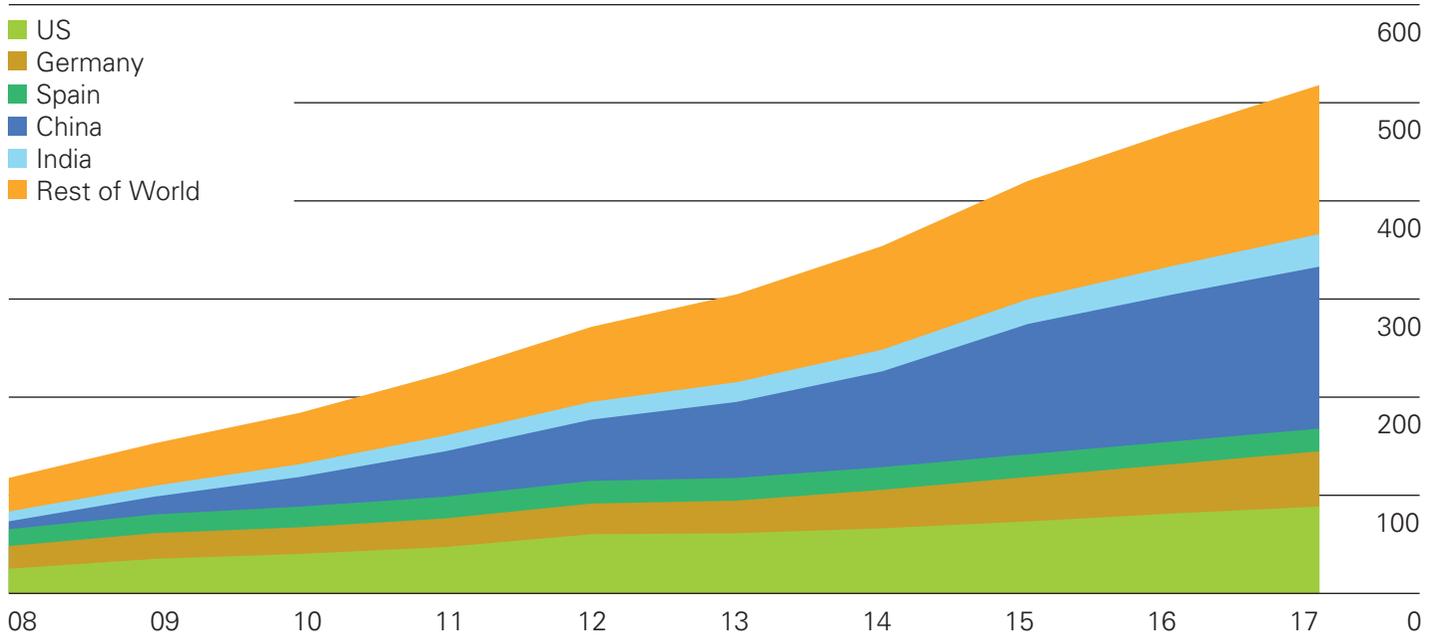
Megawatts	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Growth rate per annum		Share 2017
												2017	2006-16	
US	16879	25237	35159	40274	47084	60208	61292	66146	72573	81287	<b>87544</b>	7.7%	21.5%	17.0%
Canada	1845	2371	3321	4011	5278	6214	7813	9684	11214	11972	<b>12313</b>	2.8%	23.4%	2.4%
Mexico	86	332	453	769	1123	1512	1988	2510	3271	3735	<b>4213</b>	12.8%	45.8%	0.8%
<b>Total North America</b>	<b>18810</b>	<b>27940</b>	<b>38933</b>	<b>45054</b>	<b>53485</b>	<b>67934</b>	<b>71093</b>	<b>78340</b>	<b>87058</b>	<b>96994</b>	<b>104070</b>	<b>7.3%</b>	<b>22.1%</b>	<b>20.2%</b>
Argentina	28	28	28	28	60	137	192	217	217	217	<b>241</b>	11.0%	22.8%	♦
Brazil	247	398	602	927	1426	1894	2202	4888	7633	10124	<b>12293</b>	21.4%	45.6%	2.4%
Chile	20	20	163	163	184	202	301	731	907	1298	<b>1421</b>	9.4%	91.1%	0.3%
Costa Rica	70	70	120	120	133	148	148	197	278	319	<b>378</b>	18.4%	16.6%	0.1%
Uruguay	–	15	31	41	44	53	59	481	857	1212	<b>1504</b>	24.1%	n/a	0.3%
Other S. & Cent. America	82	84	135	212	352	639	719	965	1366	1540	<b>1579</b>	2.5%	34.9%	0.3%
<b>Total S. &amp; Cent. America</b>	<b>447</b>	<b>615</b>	<b>1078</b>	<b>1490</b>	<b>2198</b>	<b>3072</b>	<b>3622</b>	<b>7479</b>	<b>11259</b>	<b>14710</b>	<b>17415</b>	<b>18.4%</b>	<b>43.0%</b>	<b>3.4%</b>
Austria	983	997	997	1013	1082	1378	1661	2072	2390	2635	<b>2830</b>	7.4%	10.6%	0.5%
Belgium	297	385	605	955	1147	1444	1720	1960	2170	2384	<b>2849</b>	19.5%	26.8%	0.6%
Bulgaria	41	113	335	488	582	643	650	660	660	668	<b>668</b>	–	n/a	0.1%
Denmark	3088	3159	3408	3805	3927	4137	4747	4778	4966	5137	<b>5412</b>	5.4%	5.2%	1.1%
Finland	113	113	117	169	178	268	428	611	984	1511	<b>2023</b>	33.9%	32.7%	0.4%
France	2471	3671	4775	5940	6811	7583	8164	9337	10324	11761	<b>13559</b>	15.3%	22.2%	2.6%
Germany	22116	22794	25732	26903	28712	30979	33477	38614	44580	49586	<b>55876</b>	12.7%	9.2%	10.9%
Greece	846	1022	1171	1298	1640	1753	1809	1978	2136	2370	<b>2541</b>	7.2%	12.2%	0.5%
Hungary	61	134	203	293	331	325	329	329	329	329	<b>329</b>	0.0%	25.9%	0.1%
Ireland	807	1015	1187	1449	1688	1812	2100	2322	2500	2887	<b>3425</b>	18.6%	14.5%	0.7%
Italy	2721	3731	4845	5814	6936	8119	8561	8703	9162	9410	<b>9662</b>	2.7%	16.1%	1.9%
Netherlands	1745	2222	2226	2241	2309	2552	2714	2876	3402	4268	<b>4281</b>	0.3%	10.6%	0.8%
Norway	355	385	390	411	487	683	793	841	822	838	<b>1162</b>	38.7%	9.8%	0.2%
Poland	313	472	849	1231	1667	2547	3441	3885	5149	5796	<b>6446</b>	11.2%	42.3%	1.3%
Portugal	2150	2829	3474	3837	4214	4363	4557	4683	4770	5049	<b>5049</b>	–	11.4%	1.0%
Romania	15	76	129	470	990	1913	2608	2962	2985	3034	<b>3038</b>	0.1%	99.8%	0.6%
Spain	14820	16555	19176	20693	21529	22789	22958	22975	22938	23025	<b>23120</b>	0.4%	7.0%	4.5%
Sweden	789	1024	1537	2141	2904	3750	4474	5524	6128	6594	<b>6820</b>	3.4%	27.7%	1.3%
Turkey	147	364	792	1320	1729	2261	2760	3630	4503	5751	<b>6516</b>	13.3%	60.7%	1.3%
United Kingdom	2477	3406	4422	5422	6597	9031	11282	13074	14315	16217	<b>19836</b>	22.3%	23.6%	3.9%
Other Europe	394	477	650	829	1144	1556	1762	2101	2425	2690	<b>2872</b>	6.8%	25.3%	0.6%
<b>Total Europe</b>	<b>56749</b>	<b>64943</b>	<b>77020</b>	<b>86722</b>	<b>96603</b>	<b>109885</b>	<b>120995</b>	<b>133915</b>	<b>147638</b>	<b>161940</b>	<b>178314</b>	<b>10.1%</b>	<b>12.8%</b>	<b>34.6%</b>
<b>Total CIS</b>	<b>13</b>	<b>13</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>16</b>	<b>16</b>	<b>25</b>	<b>88</b>	<b>96</b>	<b>8.5%</b>	<b>21.4%</b>	<b>♦</b>
Iran	63	63	92	95	98	106	108	149	153	191	<b>191</b>	–	15.0%	♦
Other Middle East	8	9	9	9	9	9	12	13	130	227	<b>244</b>	7.1%	39.8%	♦
<b>Total Middle East</b>	<b>71</b>	<b>72</b>	<b>101</b>	<b>104</b>	<b>107</b>	<b>115</b>	<b>119</b>	<b>162</b>	<b>284</b>	<b>418</b>	<b>434</b>	<b>3.9%</b>	<b>22.5%</b>	<b>0.1%</b>
Egypt	310	390	435	550	550	550	550	550	750	750	<b>750</b>	–	12.5%	0.1%
Ethiopia	–	–	–	–	81	81	171	171	324	324	<b>324</b>	–	n/a	0.1%
Morocco	124	134	253	253	292	394	532	834	834	934	<b>934</b>	–	30.7%	0.2%
South Africa	3	8	8	10	10	10	257	569	1079	1473	<b>2094</b>	42.2%	84.9%	0.4%
Tunisia	19	19	53	53	53	173	200	233	240	245	<b>245</b>	–	29.1%	0.0%
Other Africa	21	21	22	28	49	51	62	75	126	138	<b>145</b>	5.0%	22.3%	♦
<b>Total Africa</b>	<b>478</b>	<b>573</b>	<b>772</b>	<b>894</b>	<b>1035</b>	<b>1260</b>	<b>1772</b>	<b>2432</b>	<b>3353</b>	<b>3864</b>	<b>4492</b>	<b>16.3%</b>	<b>27.7%</b>	<b>0.9%</b>
Australia	972	1587	1886	2084	2476	2834	3489	4056	4189	4327	<b>4572</b>	5.7%	18.4%	0.9%
China	4200	8388	17599	29633	46355	61597	76731	96819	131598	148983	<b>164061</b>	10.1%	50.0%	31.9%
India	7845	9655	10926	13065	16084	18421	20150	22465	25088	28700	<b>32878</b>	14.6%	16.4%	6.4%
Japan	1527	1756	1997	2294	2419	2673	2722	2840	3038	3230	<b>3399</b>	5.2%	6.0%	0.7%
New Zealand	320	322	497	524	623	623	623	683	683	690	<b>690</b>	–	15.1%	0.1%
Pakistan	–	6	6	6	6	56	106	256	308	591	<b>792</b>	34.0%	n/a	0.2%
Philippines	33	33	33	33	33	33	33	337	427	427	<b>427</b>	–	29.2%	0.1%
South Korea	196	304	351	382	425	488	560	612	869	1034	<b>1215</b>	17.5%	18.9%	0.2%
Taiwan	186	250	374	476	523	571	614	637	647	682	<b>692</b>	1.5%	20.9%	0.1%
Thailand	1	1	5	6	7	112	223	225	234	507	<b>628</b>	23.8%	107.7%	0.1%
Other Asia Pacific	47	54	63	119	123	165	246	344	448	513	<b>624</b>	21.6%	31.8%	0.1%
<b>Total Asia Pacific</b>	<b>15327</b>	<b>22356</b>	<b>33738</b>	<b>48622</b>	<b>69074</b>	<b>87573</b>	<b>105496</b>	<b>129274</b>	<b>167528</b>	<b>189685</b>	<b>209977</b>	<b>10.7%</b>	<b>31.8%</b>	<b>40.8%</b>
<b>Total World</b>	<b>91894</b>	<b>116512</b>	<b>151656</b>	<b>182901</b>	<b>222517</b>	<b>269853</b>	<b>303113</b>	<b>351618</b>	<b>417144</b>	<b>467698</b>	<b>514798</b>	<b>10.1%</b>	<b>20.2%</b>	<b>100.0%</b>

\*End of year.  
♦Less than 0.05%.  
n/a not available.

Sources: IRENA, Global Wind Energy Council, Navigant Consulting and national sources.

# Wind generation capacity

Gigawatts, cumulative installed capacity



Source: includes data from Navigant Consulting, Global Wind Energy Council, and IRENA.