



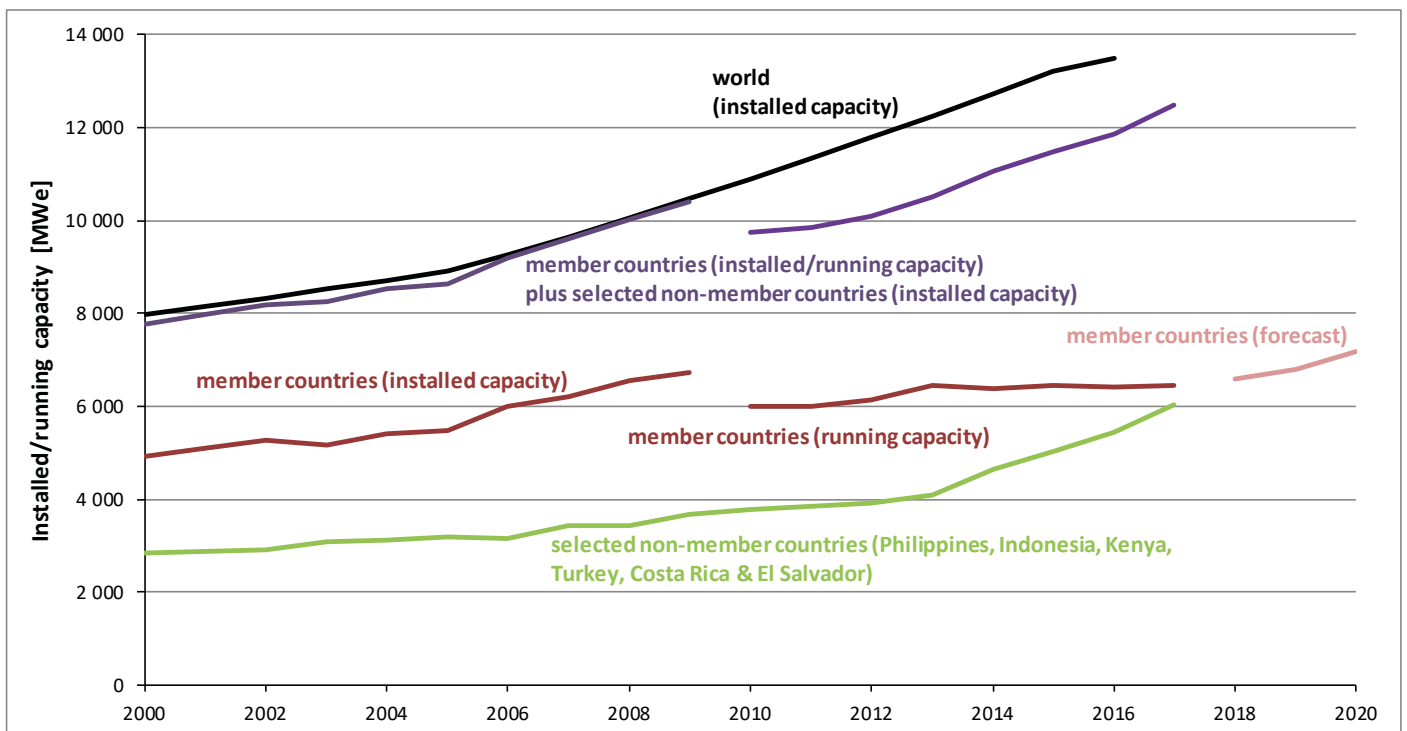
# Geothermal Power Statistics 2017

IEA Geothermal

## Installed/Running Capacity [MW<sub>e</sub>] 2000 - 2017

| Country          | Installed capacity [MW <sub>e</sub> ] |                            |                |                            |                |                | Running capacity [MW <sub>e</sub> ] |                |                |                |                           |                           |                           |                |
|------------------|---------------------------------------|----------------------------|----------------|----------------------------|----------------|----------------|-------------------------------------|----------------|----------------|----------------|---------------------------|---------------------------|---------------------------|----------------|
|                  | 2000                                  | 2005                       | 2006           | 2007                       | 2008           | 2009           | 2010                                | 2011           | 2012           | 2013           | 2014                      | 2015                      | 2016                      | 2017           |
| AUS              | 0.2                                   | 0.2                        | 0.1            | 0.1                        | 0.1            | 0.1            | 0.1                                 | 0.1            | 0.1            | 0.1            | 0.1                       | 0.1                       | 0.1                       | 0.0            |
| DEU              | 0.0                                   | 0.2                        | 0.2            | 3.2                        | 3.2            | 7.1            | 6.4                                 | 6.4            | 11.1           | 30.1           | 32.2                      | 31.9                      | 37.4                      | 36.2           |
| FRA              | 4.2                                   | 15.0                       | 15.0           | 15.0                       | 17.2           | 17.2           | 16.3                                | 15.4           | 15.4           | 10.3           | 16.1                      | 16.5                      | 16.5*                     | 16.5*          |
| ISL              | 170.0                                 | 202.0                      | 422.0          | 485.0                      | 575.0          | 575.0          | 575.0                               | 665.0          | 665.0          | 663.0          | 661.0                     | 663.0                     | 662.4                     | 707.6          |
| ITA              | 785.0                                 | 791.0                      | 810.0          | 810.0                      | 810.5          | 842.5          | 728.1                               | 728.0          | 766.0          | 767.0          | 807.0                     | 807.0*                    | 762.0                     | 762.0*         |
| JPN              | 547.0                                 | 535.3                      | 535.3          | 535.3                      | 535.3          | 535.3          | 537.7                               | 540.1          | 540.1          | 515.1          | 515.2                     | 513.7                     | 521.7                     | 527.4          |
| MEX              | 755.0                                 | 953.0                      | 953.0          | 958.0                      | 958.0          | 958.0          | 958.0                               | 883.0          | 805.0          | 839.0          | 840.2                     | 883.4                     | 891.1                     | 916.4          |
| NZL              | 437.0                                 | 435.0                      | 450.0          | 452.0                      | 632.0          | 632.0          | 758.0                               | 758.0          | 758.0          | 1,008.0        | 1,009.8                   | 1,001.0                   | 997.8                     | 1,005.0        |
| USA              | 2,228.0                               | 2,534.0                    | 2,831.0        | 2,936.5                    | 3,040.0        | 3,168.0        | 2,404.6                             | 2,409.2        | 2,592.1        | 2,607.0        | 2,514.3                   | 2,541.5                   | 2,511.5                   | 2,492.6        |
| <b>Total GIA</b> | <b>4,926.4</b>                        | <b>5,465.7</b>             | <b>6,016.6</b> | <b>6,195.1</b>             | <b>6,571.3</b> | <b>6,735.2</b> | <b>5,984.2</b>                      | <b>6,005.2</b> | <b>6,152.8</b> | <b>6,439.6</b> | <b>6,395.9</b>            | <b>6,458.1</b>            | <b>6,400.5</b>            | <b>6,463.7</b> |
| <b>World</b>     | <b>7,974.0<sup>1</sup></b>            | <b>8,903.0<sup>2</sup></b> | na             | <b>9,732.0<sup>3</sup></b> | na             | na             | <b>10,895<sup>2</sup></b>           | na             | na             | na             | <b>12,729<sup>4</sup></b> | <b>13,200<sup>5</sup></b> | <b>13,500<sup>6</sup></b> | na             |

Installed (2000-2009) and running capacity (2010-2017) in IEA Geothermal member countries and installed capacity worldwide ([1]-[6]). Years 2001-2004 have been hidden for lack of space. For more comprehensive information see the annual IEA Geothermal Trend Reports [e.g. 7]. Country data: Working Group 10 reports (for 2010-2017), IEA Geothermal Annual Reports (for 2004-2009), and [1] (for 2000). \*data from previous years

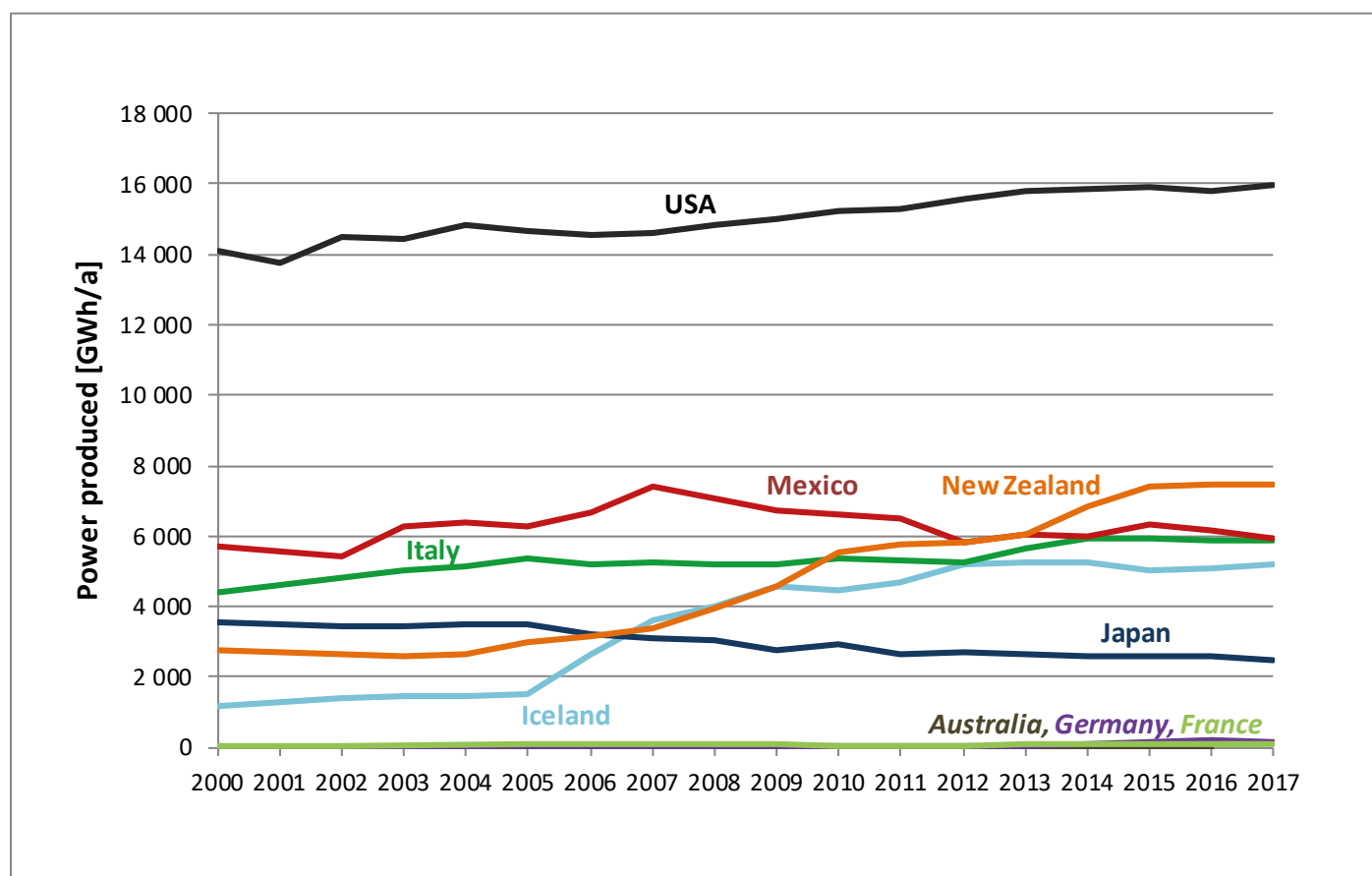


Installed (2000-2009) and running capacities (2010-2017) in IEA Geothermal member countries, selected non-member countries and worldwide 2000-2017 ([1]-[6], [8]), and forecast of the development of running capacities in IEA Geothermal member countries until 2020.

## Geothermal Electricity Production 2000 - 2017

| Country          | Geothermal electricity produced [GWh/a] |                     |                 |                 |                 |                 |                     |                 |                 |                 |                     |                     |                     |                     |
|------------------|---|---------------------|-----------------|-----------------|-----------------|-----------------|---------------------|-----------------|-----------------|-----------------|---------------------|---------------------|---------------------|---------------------|
|                  | 2000                                    | 2005                | 2006            | 2007            | 2008            | 2009            | 2010                | 2011            | 2012            | 2013            | 2014                | 2015                | 2016                | 2017                |
| AUS              | 0.9                                     | 0.5                 | 0.7             | 0.5             | 0.8             | 0.6             | 0.0                 | 0.6             | 0.5             | 0.5             | 0.6                 | 0.3                 | 0.3                 | 0.0                 |
| DEU              | 0.0                                     | 0.2                 | 0.4             | 0.4             | 18.0            | 19.0            | 27.5                | 18.7            | 25.4            | 54.3            | 80.0                | 133.6               | 174.2               | 159.8               |
| FRA              | 24.6                                    | 102.0               | 102.0           | 95.0            | 90.0            | 89.0            | 14.9                | 56.6            | 50.6            | 80.6            | 79.0                | 83.0                | 83.0*               | 83.0*               |
| ISL              | 1,138.0                                 | 1,483.0             | 2,631.0         | 3,600.0         | 4,000.0         | 4,553.0         | 4,465.0             | 4,701.0         | 5,210.0         | 5,245.0         | 5,238.0             | 5,003.0             | 5,067.3             | 5,169.6             |
| ITA              | 4,403.0                                 | 5,340.0             | 5,200.0         | 5,233.0         | 5,181.0         | 5,200.0         | 5,376.0             | 5,315.0         | 5,235.0         | 5,659.0         | 5,916.0             | 5,916.0*            | 5,870.0             | 5,870.0*            |
| JPN              | 3,532.0                                 | 3,467.0             | 3,228.0         | 3,102.0         | 3,064.0         | 2,765.0         | 2,908.0             | 2,652.2         | 2,688.8         | 2,620.4         | 2,604.7             | 2,587.3             | 2,589.6             | 2,488.6             |
| MEX              | 5,681.0                                 | 6,282.0             | 6,685.0         | 7,393.0         | 7,056.0         | 6,740.0         | 6,618.0             | 6,524.0         | 5,817.0         | 6,070.0         | 6,000.0             | 6,331.0             | 6,150.7             | 5,937.3             |
| NZL              | 2,756.0                                 | 2,981.0             | 3,177.0         | 3,354.0         | 3,966.0         | 4,589.0         | 5,550.0             | 5,774.0         | 5,843.0         | 6,053.0         | 6,847.0             | 7,410.0             | 7,434.0             | 7,453.0             |
| USA              | 14,100.0                                | 14,692.0            | 14,568.0        | 14,637.0        | 14,840.0        | 15,009.0        | 15,219.0            | 15,316.0        | 15,562.0        | 15,775.0        | 15,877.0            | 15,918.0            | 15,825.8            | 15,976.0            |
| <b>Total GIA</b> | <b>31,635.5</b>                         | <b>34,347.7</b>     | <b>35,592.1</b> | <b>37,414.9</b> | <b>38,215.8</b> | <b>38,964.6</b> | <b>40,178.4</b>     | <b>40,358.1</b> | <b>40,432.3</b> | <b>41,557.8</b> | <b>42,624.3</b>     | <b>43,382.2</b>     | <b>43,194.9</b>     | <b>43,137.3</b>     |
| World            | 49,261 <sup>1</sup>                     | 55,709 <sup>2</sup> | na              | na              | na              | na              | 67,202 <sup>2</sup> | na              | na              | na              | 73,689 <sup>4</sup> | 75,000 <sup>5</sup> | 78,500 <sup>6</sup> | 85,000 <sup>9</sup> |

Geothermal electricity produced in IEA Geothermal member countries and worldwide 2000-2017 ([1], [2], [4]-[6], [9]). Years 2001-2004 have been hidden for lack of space. For more comprehensive information see the annual IEA Geothermal Trend Reports [e.g. 7]. Country data: Working Group 10 reports (for 2010-2017), IEA Geothermal Annual Reports (for 2004-2009), and [1] (for 2000). \*data from previous years



Geothermal power generation in IEA Geothermal member countries 2000-2017. Country data: Working Group 10 reports (for 2010-2017), IEA Geothermal Annual Reports (for 2001-2009), and [1] (for 2000).

## Main Activity and Autoproducers 2017

| Country      | Running capacity [MW <sub>e</sub> ] |              |               |            |
|--------------|-------------------------------------|--------------|---------------|------------|
|              | Main activity producers             |              | Autoproducers |            |
|              | Power                               | CHP          | Power         | CHP        |
| AUS          | 0.0                                 | 0.0          | 0.0           | 0.0        |
| DEU          | 17.2                                | 19.0         |               |            |
| FRA          | 16.5*                               |              |               |            |
| ISL          | 105.0                               | 602.6        |               |            |
| ITA          | 762.0*                              |              |               |            |
| JPN          | 514.9                               |              | 12.5          |            |
| MEX          | 898.9                               |              | 17.5          |            |
| NZL          | 1,005.0                             |              |               |            |
| USA          | 2,492.6                             |              |               |            |
| <b>Total</b> | <b>5,812.1</b>                      | <b>621.6</b> | <b>30.0</b>   | <b>0.0</b> |

| Country      | Gross power production [GWh] |                |               |            |
|--------------|------------------------------|----------------|---------------|------------|
|              | Main activity producers      |                | Autoproducers |            |
|              | Power                        | CHP            | Power         | CHP        |
| AUS          | 0.0                          | 0.0            | 0.0           | 0.0        |
| DEU          | 83.7                         | 76.1           |               |            |
| FRA          | 83.0*                        |                |               |            |
| ISL          | 558.6                        | 4,611.0        |               |            |
| ITA          | 5,870.0*                     |                |               |            |
| JPN          | 2,425.8                      |                | 62.8          |            |
| MEX          | 5,784.0                      |                | 153.3         |            |
| NZL          | 7,453.0                      |                |               |            |
| USA          | 15,976.0                     |                |               |            |
| <b>Total</b> | <b>38,234.1</b>              | <b>4,687.1</b> | <b>216.1</b>  | <b>0.0</b> |

Breakdown of running capacity and gross power production by main activity and autoproducers in 2017. For details and definitions see IEA Geothermal Trend Report 2015 [7]. \*data from previous year

## Latest Geothermal Power Plants (> 1 MW<sub>e</sub>)

| Locality/Power Plant name | Year of Commissioning | Type of Unit | Running Capacity [MW <sub>e</sub> ] | Installed Capacity [MW <sub>e</sub> ] | Energy Production 2017 [GWh/a] | Main Activity or Autoproducer |
|---------------------------|-----------------------|--------------|-------------------------------------|---------------------------------------|--------------------------------|-------------------------------|
| <b>Germany</b>            |                       |              |                                     |                                       |                                |                               |
| Traunreut                 | 2016                  | ORC Binary   | 5.5                                 | 5.5                                   | 25.6                           | M                             |
| Grünwald (Laußzorn)       | 2014                  | ORC Binary   | 4.3                                 | 4.3                                   | 17.6                           | M                             |
| Kirchstockach             | 2013                  | ORC Binary   | 6.0                                 | 6.0                                   | 35.0                           | M                             |
| <b>Iceland</b>            |                       |              |                                     |                                       |                                |                               |
| Peistareykir              | 2017                  | Flash Steam  | 45.0                                | 45.0                                  | 70.6                           | M                             |
| Hellisheiði               | 2006                  | Flash Steam  | 303.0                               | 303.0                                 | 2,366.8                        | M                             |
| <b>Japan</b>              |                       |              |                                     |                                       |                                |                               |
| Takigami Binary           | 2017                  | ORC Binary   | 5.1                                 | 5.1                                   | 3.5                            | M                             |
| Sugawara                  | 2015                  | ORC Binary   | 5.0                                 | 5.0                                   | 41.0                           | M                             |
| Waita                     | 2015                  | Flash Steam  | 2.0                                 | 2.0                                   | 13.6                           | M                             |
| <b>Mexico</b>             |                       |              |                                     |                                       |                                |                               |
| Los Humeros/U11           | 2017                  | Flash Steam  | 26.3                                | 26.3                                  | na                             | M                             |
| Domo San Pedro/U3         | 2016                  | Flash Steam  | 17.5                                | 25.5                                  | 153.3                          | A                             |
| Los Azufres/U17           | 2015                  | Flash Steam  | 53.4                                | 53.4                                  | 403.3                          | M                             |
| <b>New Zealand</b>        |                       |              |                                     |                                       |                                |                               |
| Ngatamariki               | 2013                  | ORC Binary   | 82.0                                | 82.0                                  | 710.0                          | M                             |
| Kawerau (TOPP1)           | 2013                  | Flash Steam  | 25.0                                | 25.0                                  | 200.0                          | M                             |
| Wairakei - Te Mihi        | 2013                  | Flash Steam  | 170.0                               | 166.0                                 | 1,400.0                        | M                             |
| <b>United States</b>      |                       |              |                                     |                                       |                                |                               |
| Tungston Mountain         | 2017                  | ORC Binary   | 37.0                                | 37.0                                  | na                             | M                             |
| Don A Campbell 2          | 2015                  | ORC Binary   | 16.2                                | 25.0                                  | na                             | M                             |
| McGinness Hills 2         | 2015                  | ORC Binary   | 30.0                                | 48.0                                  | na                             | M                             |

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**France:** Philippe Rocher (BRGM)

**Germany:** Josef Weber (Leibniz Institute for Applied Geophysics)

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**IEA Geothermal**

Publication of the IEA Geothermal, February 2019.  
<http://iea-gia.org>

**Corresponding Author:**

Dr. Josef Weber, Leibniz Institute for Applied Geophysics  
Stilleweg 2, 30655 Hannover, Germany  
E-mail: [josef.weber@leibniz-liag.de](mailto:josef.weber@leibniz-liag.de)

**IEA Geothermal Secretariat:**

Brian Carey, GNS Science, Wairakei Research Centre  
Private Bag 2000, Taupo 3352, New Zealand  
E-mail: [iea-giasec@gns.cri.nz](mailto:iea-giasec@gns.cri.nz)





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