

## Plan B 4.0 - Supporting Data for Chapters 4 and 5 - Geothermal

[World Cumulative Installed Geothermal Electricity-Generating Capacity, 1950-2009](#)

GRAPH: World Cumulative Installed Geothermal Electricity-Generating Capacity, 1950-2009

[Cumulative Installed Geothermal Electricity-Generating Capacity by Country, 1990-2007](#)

[U.S. Cumulative Installed Geothermal Electricity-Generating Capacity, 1990-2009](#)

[Confirmed U.S. Geothermal Projects Under Development as of March 2009](#)

A full listing of data for the entire book is on-line at:

[http://www.earthpolicy.org/index.php?/books/pb4/pb4\\_data](http://www.earthpolicy.org/index.php?/books/pb4/pb4_data)

This is part of a supporting dataset for Lester R. Brown, **Plan B 4.0: Mobilizing to Save Civilization** (New York: W.W. Norton & Company, 2009). For more information and a free download of the book, see Earth Policy Institute on-line at [www.earthpolicy.org](http://www.earthpolicy.org).

## World Cumulative Installed Geothermal Electricity-Generating Capacity, 1950-2009

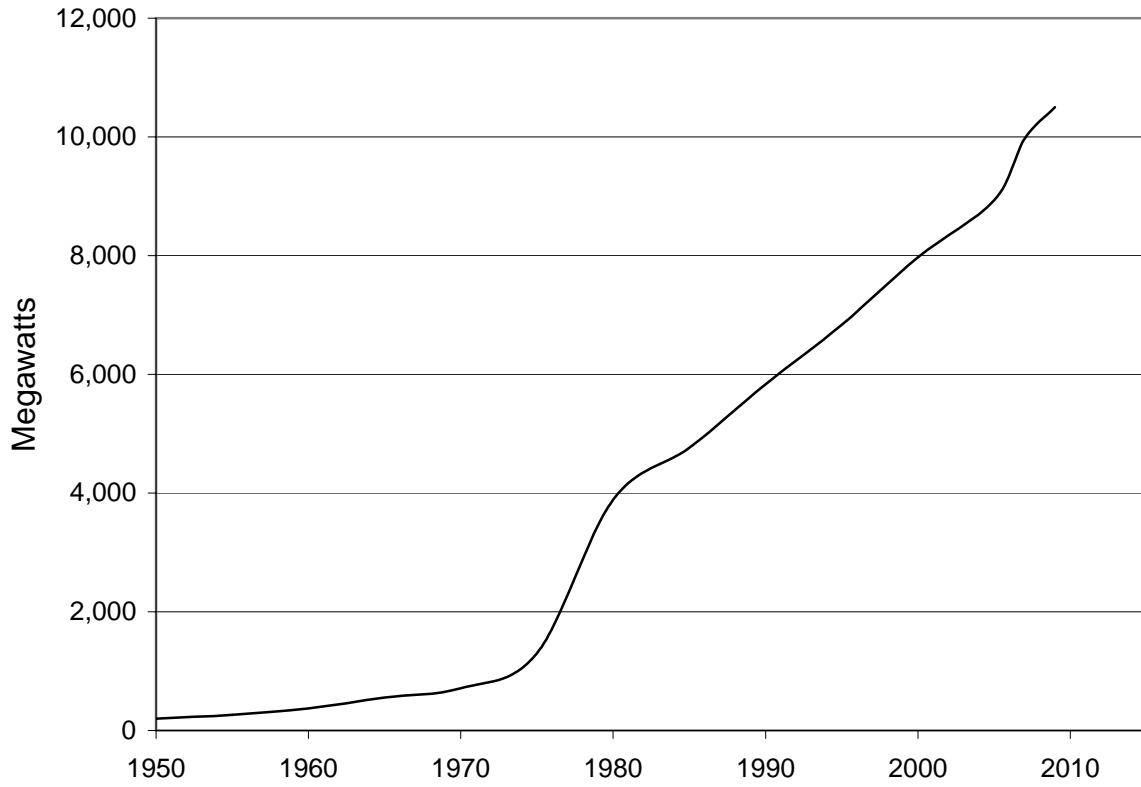
<u>Year</u>	<u>Cumulative Installed Capacity Megawatts</u>
1950	200
1955	262
1960	374
1965	556
1970	711
1975	1,300
1980	3,887
1985	4,764
1990	5,832
1995	6,833
2000	7,972
2005	8,933
2007 *	9,968
2009 *	10,500

\* Note: Data for 2007 and 2009 are estimates.

Source: Compiled by Earth Policy Institute with 1950-1970 data from Worldwatch Institute, *Signposts 2004*, CD-ROM (Washington, DC: 2004); 1975-2005 data from Ruggero Bertani, "World Geothermal Generation in 2007," *GHC Bulletin*, September 2007, p. 8; 2007 figure calculated from Ruggero Bertani, "World Geothermal Generation in 2007," *GHC Bulletin*, September 2007 with U.S. data from Mark Taylor, *Update on US Geothermal Power Production and Development* (Washington, DC: Geothermal Energy Association, 16 January 2008); 2009 estimate from Emerging Energy Research, *Global Geothermal Markets and Strategies 2009–2020* (Cambridge, MA: May 2009).

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# World Cumulative Installed Geothermal Electricity-Generating Capacity, 1950-2009



Source: Worldwatch; Bertani; GEA; EER

## Cumulative Installed Geothermal Electricity-Generating Capacity by Country, 1990-2007

Country	1990	1995	2000	2005	2007 *
	Megawatts				
Australia	0.0	0.2	0.2	0.2	0.2
Austria	0.0	0.0	0.0	1.1	1.1
China	19.2	28.8	29.2	27.8	27.8
Costa Rica	0.0	55.0	142.5	163.0	162.5
El Salvador	95.0	105.0	161.0	151.0	204.2
Ethiopia	0.0	0.0	7.3	7.3	7.3
France	4.2	4.2	4.2	14.7	14.7
Germany	0.0	0.0	0.0	0.2	8.4
Guatemala	0.0	33.4	33.4	33.0	53.0
Iceland	44.6	50.0	170.0	202.0	421.2
Indonesia	144.8	309.8	589.5	797.0	992.0
Italy	545.0	631.7	785.0	791.0	810.5
Japan	214.6	413.7	546.9	535.0	535.2
Kenya	45.0	45.0	45.0	129.0	128.8
Mexico	700.0	753.0	755.0	953.0	953.0
New Zealand	283.2	286.0	437.0	435.0	471.6
Nicaragua	35.0	70.0	70.0	77.0	87.4
Papua New Guinea	0.0	0.0	0.0	6.0	56.0
Philippines	891.0	1,227.0	1,909.0	1,930.0	1,969.7
Portugal	3.0	5.0	16.0	16.0	23.0
Russia	11.0	11.0	23.0	79.0	79.0
Thailand	0.3	0.3	0.3	0.3	0.3
Turkey	20.6	20.4	20.4	20.0	38.0
United States	2,774.6	2,816.7	2,228.0	2,564.0	2,923.5
<b>World Total</b>	<b>5,831.1</b>	<b>6,866.1</b>	<b>7,972.9</b>	<b>8,932.6</b>	<b>9,968.4</b>

\* Estimates.

Source: Compiled by Earth Policy Institute with 1990 and 1995 from International Geothermal Association, "Installed Generating Capacity," at <http://iga.igg.cnr.it/geoworld/geoworld.php?sub=elgen>, updated 29 July 2008; 2000, 2005, and 2007 from Ruggero Bertani, "World Geothermal Generation in 2007," *GHC Bulletin*, September 2007, p. 9; 2007 U.S. data from Geothermal Energy Association, *Update on US Geothermal Power Production and Development* (Washington, DC: 16 January 2008).

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## U.S. Cumulative Installed Geothermal Electricity-Generating Capacity, 1990-2009

Year	Cumulative Installed Capacity Megawatts
1990	2,775
1995	2,817
2000	2,228
2005	2,564
2009 *	3,040

\* Note: Installed capacity as of March 2009.

Source: Compiled by Earth Policy Institute with 1990 and 1995 from International Geothermal Association, "Installed Generating Capacity," at <http://iga.igg.cnr.it/geoworld/geoworld.php?sub=elgen>, updated 3 July 2009; 2000 and 2005 from Ruggero Bertani, "World Geothermal Generation in 2007," *GHC Bulletin*, September 2007, p. 9; 2009 from Kara Slack, *U.S. Geothermal Power Production and Development Update* (Washington, DC: Geothermal Energy Association, March 2009), p. 3.

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## Confirmed U.S. Geothermal Projects Under Development as of March 2009

State	Number of Projects	Expected Capacity	
		Low Range	High Range
Megawatts			
Alaska	5	60.0	100.0
Arizona	1	2.0	20.0
California	27	1,038.6	1,327.6
Colorado	1	10.0	10.0
Florida	1	0.2	1.0
Hawaii <sup>(1)</sup>	2	8.0	8.0
Idaho	5	238.0	326.0
Nevada	58	1,692.4	3,172.4
New Mexico	1	10.0	10.0
Oregon	12	292.4	318.4
Utah	7	194.0	194.0
Washington <sup>(2)</sup>	1	n.a.	n.a.
<b>Total</b>	<b>121</b>	<b>3,545.6</b>	<b>5,487.4</b>

Notes: <sup>(1)</sup> Expected capacity only reported for one of the two projects (8 megawatts); <sup>(2)</sup> Expected capacity not reported.

Source: Kara Slack, *U.S. Geothermal Power Production and Development Update* (Washington, DC: Geothermal Energy Association, March 2009), p. 9.

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