

**Table 4.17 Geothermal energy consumption by direct use of energy and from heat pumps, 1990 - 2009**

(quadrillion Btu)

<b>Year</b>	<b>Direct Use</b>	<b>Heat Pumps</b>	<b>Total</b>
1990	0.0048	0.0054	0.0102
1991	0.0050	0.0060	0.0110
1992	0.0051	0.0067	0.0118
1993	0.0053	0.0072	0.0125
1994	0.0056	0.0076	0.0132
1995	0.0058	0.0083	0.0141
1996	0.0059	0.0093	0.0152
1997	0.0061	0.0101	0.0162
1998	0.0063	0.0115	0.0178
1999	0.0079	0.0114	0.0193
2000	0.0084	0.0122	0.0206
2001	0.0090	0.0135	0.0225
2002	0.0090	0.0147	0.0237
2003	0.0086	0.0188	0.0274
2004	0.0086	0.0212	0.0298
2005	0.0088	0.0240	0.0328
2006	0.0091	0.0276	0.0367
2007	0.0094	0.0317	0.0411
2008	0.0097	0.0365	0.0462
2009	0.0087	0.0450	0.0537

**Note:** Direct use includes applications such as: district heating, aquaculture pond and raceway heating, greenhouse heating and agricultural drying.

**Source:** John Lund, Oregon Institute of Technology, Geo-Heat Center (Klamath Falls, Oregon, March 2010).