Section: BIOPOWER
Number of Home Electricity Needs Met Calculation, 2010

Conversion Formula:	*Step 1*	*Capacity (A) x Capacity Factor (B) x Annual Hours (C) = Annual Electricity Generation (D)*
	Step 2	*Annual Electricity Generation (D) / Average Consumption (E) = Number of Households (F)*

Technology	Wind	Geothermal	Biomass	Hydropower	PV	Solar Thermal
(A) Capacity (kW)	37,870,000	2,410,000	7,560,000	77,570,000	2,340,000	610,000
(B) Capacity Factor (%)	36.0%	90.0%	80.0%	44.2%	22.5%	24.4%
(C) Annual Hours	8,760	8,760	8,760	8,760	8,760	8,760
(D) Annual Electricity Generation (kWh)	119,426,832,000	19,000,440,000	52,980,480,000	300,301,647,108	4,612,140,000	1,303,838,400
(E) Average Annual Household Electricity Consumption (kWh)	12,696	12,696	12,696	12,696	12,696	12,696
(F) Number of Households	9,406,857	1,496,602	4,173,097	23,653,769	363,283	102,699

Source:

Sources: Capacity, EIA, Annual Energy Outlook 2011, DOE/EIA-0383 (2011) Washington, D.C., April 26, 2011, Summary Case Table 16.
Capacity Factor: National Renewable Energy Laboratory, Power Technologies Energy Data Book, Table 12.1, http://www.nrel.gov/analysis/power_databook/chapter12.html
Annual Hours: National Renewable Energy Laboratory, Power Technologies Energy Data Book, Table 12.1, http://www.nrel.gov/analysis/power_databook/chapter12.html
Household Electricity Consumption: Annual Energy Outlook 2011, DOE/EIA-0383 (2011) Washington, D.C., April 26, 2011, Summary/Reference Case Table 4.