

Total industrial biomass energy consumption was approximately 2,031 trillion Btu in 2008. The bulk of industrial biomass energy consumption is derived from forestlands (lumber, paper and allied products); more than one-half of this total is black liquor – a pulping mill by-product containing unutilized wood fiber and chemicals. Black liquor is combusted in recovery boilers to recover valuable chemicals and to produce heat and power. Wood and wood wastes generated in primary wood processing mills account for another third of total industrial biomass energy consumption. The data contained in this table are from a survey of manufacturers that is conducted every four years by the EIA.

Section: INTRODUCTION
Industrial Biomass Energy Consumption and Electricity Net Generation by Industry and Energy Source, 2008

Industry	Energy Source	Biomass Energy Consumption (Trillion Btus)			Net Generation (Million Kilowatthours)
		Total	For Electricity	For Useful Thermal Output	
Total	Total	2,031.193	183.953	1,847.240	27,462
Agriculture, Forestry, and Mining	Total	16.159	1.231	14.928	229
	Agricultural Byproducts/Crops	16.159	1.231	14.928	229
Manufacturing	Total	1,908.531	182.721	1,725.810	27,233
Food and Kindred Industry Products	Total	21.328	0.631	20.697	107
	Agricultural Byproducts/Crops	15.819	0.160	15.659	33
	Other Biomass Gases	0.289	0.095	0.194	7
	Other Biomass Liquids	0.044	0.044	-	5
	Sludge Waste	0.243	0.055	0.188	8
	Wood/Wood Waste Solids	4.933	0.277	4.657	54
Lumber	Total	225.729	10.682	215.047	1,287
	Sludge Waste	0.052	0.006	0.046	1
	Wood/Wood Waste Solids	225.676	10.676	215.001	1,286
Paper and Allied Products	Total	1,116.304	170.909	945.396	25,774
	Agricultural Byproducts/Crops	1.335	0.036	1.300	5
	Black Liquor	787.380	112.361	675.019	17,152
	Landfill Gas	0.034	0.004	0.029	1
	Other Biomass Gases	0.183	0.015	0.168	3
	Other Biomass Liquids	0.122	0.015	0.107	3
	Other Biomass Solids	9.477	1.762	7.715	326
	Sludge Waste	4.083	0.937	3.147	160
	Wood/Wood Waste Liquids	2.510	0.383	2.127	73
	Wood/Wood Waste Solids	311.180	55.395	255.785	8,050
Chemicals and Allied Products	Total	4.319	0.152	4.167	28
	Other Biomass Liquids	0.061	0.005	0.056	1
	Sludge Waste	0.305	0.043	0.261	9
	Wood/Wood Waste Solids	3.953	0.104	3.849	18
Biorefineries	Total	532.042	-	532.042	-
	Biofuels Losses and Coproducts ^c	532.042	-	532.042	-
	Biodiesel Feedstock	1.195	-	1.195	-
	Ethanol Feedstock	530.847	-	530.847	-
Other ^a	Total	8.810	0.349	8.461	37
Nonspecified ^b	Total	106.502	-	106.502	-
	Ethanol ^d	11.652	-	11.652	-
	Landfill Gas	92.233	-	92.233	-
	Municipal Solid Waste Biogenic ^e	2.617	-	2.617	-

Source:

U.S. Department of Energy, Energy Information Administration, *Renewable Energy Annual*, 2008, Washington, D.C., Table 1.8, http://www.eia.doe.gov/cneaf/solar.renewables/page/rea_data/table1_8.html

Note: Totals may not equal sum of components due to independent rounding.
 = Not Applicable.

^aOther includes Apparel; Petroleum Refining; Rubber and Misc. Plastic Products; Transportation Equipment; Stone, Clay, Glass, and Concrete Products; Furniture and Fixtures; and related industries.

^bPrimary purpose of business is not specified.

^cLosses and coproducts from production of biodiesel and ethanol.

^dEthanol primarily derived from corn minus denaturant.

^eIncludes paper and paper board, wood, food, leather, textiles and yard trimmings.