

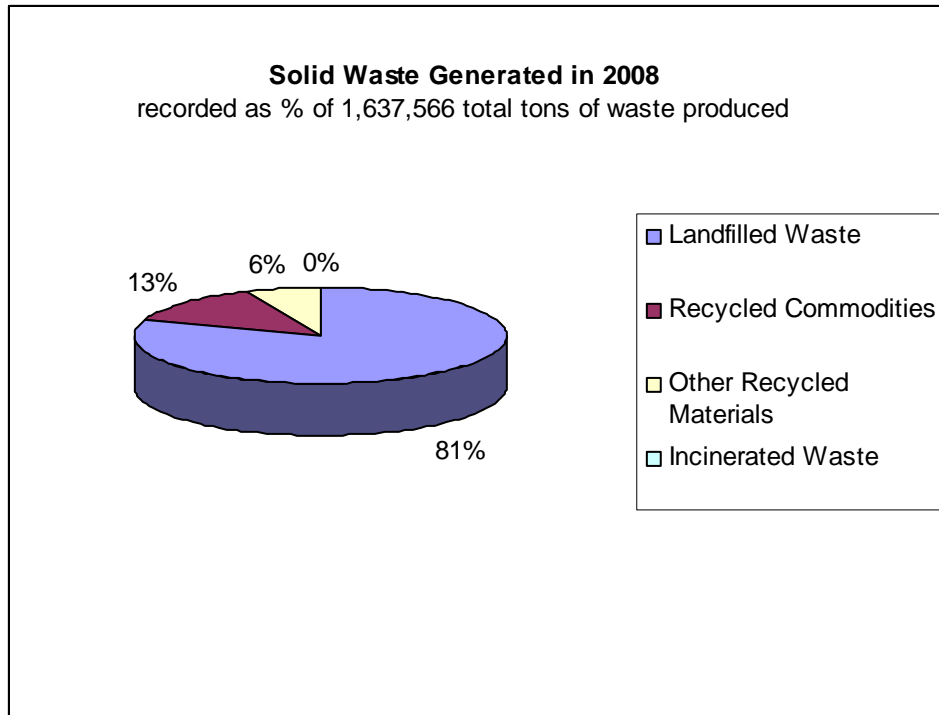
2008 Recycling Summary

This is a summary of the materials diverted from Montana landfills in 2008. The tonnage reported was obtained by reviewing Annual License Renewal applications from Montana licensed solid waste management facilities including landfills, transfer facilities, compost operations and resource recovery facilities. Data from non-licensed recycling organizations, businesses, and end processors was obtained through voluntary participation in the 2008 Montana Recycling Survey, and it's important to note that several major recyclers did not report the tonnages that they recycled in 2008.

The Environmental Protection Agency reports that In the United States in 2008, approximately 250 million tons of Municipal Solid Waste (MSW) was generated. Excluding composting, the amount recycled was 61 million tons. During 2008 4.5 pounds of MSW was generated per person each day in the US, a slight decrease over 2007. The recycling rate per person per day was 1.5 pounds.

In Montana 1.3 million tons of MSW were generated in 2008. Based on the census population figure of 967,440, Montanans generated 9.3 pounds of waste per person each day, and recycled 1.82 pounds per person per day, including materials diverted for composting.

<i>Summary of Data</i>	<i>Total Tons</i>	<i>Percentage of Total</i>
Solid Waste Generated:	1,637,556	100%
Landfilled Waste:	1,317,324	80.4%
Incinerated Waste:	0	0
Recycled Commodities:	216,278	13.2%
Other Materials:	103,953	6.4%
Total Diversion Rate:	320,231	19.6%



The National Recycling Coalition's Environmental Benefits Calculator was used to determine the percentage of material recycled in Montana, and the environmental benefits of the material recycled.

The recyclable commodities used for the Montana calculations are:

Aluminum Cans	Plastics
Steel Cans	Mixed Metals
Ferrous Scrap Metal	Glass
Office Paper	Newspaper
Mixed Paper	Corrugated Cardboard

Other diverted materials included in the Montana calculations are:

Yard Waste	Landscape Material
Manure	Agriculture Wastes
Sewage Sludge	Road Mortalities (composted by MDT)
Fly Ash	Construction/Demolition
Batteries	Electronics

The calculator provides detailed information in the following areas:

- Reductions in Greenhouse Gas Emissions through Recycling
- Energy Savings from Recycling

- Life Cycle stage Comparisons
- Air Emissions and Waterborne Wastes
- Select National Resource Savings
- Number of Trees Saved

***Review of Montana Recycled Materials Calculated by the
Environmental Benefits Calculator***

Reductions in Greenhouse Gas Emissions through Recycling

Greenhouse Gas Emissions Associated with Recycling -193,132

Greenhouse Gas if all Landfilled 7,908

Net Greenhouse Gas Emissions from Recycling
Compared to Landfilled -201,040

Greenhouse Gas Reduction in Passenger Cars
Equivalent -151,697

Energy Savings from Recycling

Net Energy from Recycling Compared to Disposal
(millions BTU) -8,084,894

Energy Savings in Per Household Equivalent -76,853

Life Cycle Stage Comparisons

Energy Used During Recycling and Processing
(millions BTU) 181,241

Energy Used Waste Collection and Landfill 67,479

Energy Used Waste Collection, Processing
And Incineration 235,311

Energy Used for State's Average Mix of Landfill 67,479

<u>Air Emissions and Waterborne Wastes</u>	
Reduced Emissions Due to Recycling (tons)	268,351.6
AIR EMISSIONS	

Reduced Emissions Due to Recycling (tons)	999.1
WATERBORNE WASTES	

Total (Excluding CO ₂ and Methane)	6,100.1
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<u>Select National Resource Savings</u>	
Total Tons Resources Saved	223,252

<u>Number of Trees Saved</u>	
From recycling newsprint, mixed paper and office paper	329,263

In summary, there are many ways to express resource savings through recycling. Even when considering energy used to recycle, the savings in resources rationalizes the value of recycling. As Montana recycling statistics increase, the efficiency will only become more evident. For more information on recycling, visit the DEQ website at: www.deq.mt.gov/recycle/index.asp

Recycling Rates for the State of Montana

2003	15.0%
2004	15.0%
2005	18.7%
2006	18.6%
2007	18.3%
2008	19.6%

The increase in the percentage recycled in 2008 can be attributed mainly to an increase in scrap metal and organic materials recycled.

During 2008 State Government recycled the following amounts:

Cardboard	31,029 lbs.
Shredded Paper	18,686 lbs.
Newsprint	59,327 lbs.
Office Paper	296,171 lbs.