

2004 Recycling Summary

This summary is a review of all recycled materials diverted from Montana landfills in 2004. The data presented in this summary on total recycled materials was obtained by reviewing permit renewal applications from all state 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 2004 Montana Recycling Survey.

<i><u>Summary of Data</u></i>	<i><u>Total Tons</u></i>	<i><u>Percentage of Total</u></i>
Solid Waste Generated:	1,472,320	100%
Landfilled Waste:	1,238,265	85%
Incinerated Waste:	11,967	less than 1%
Recycled Material:	176,296	12%
Composted Material:	45,792	3%
Total Diversion Rate:	222,088	15%

This data has been used with conjunction with the national Recycling Coalition's Environmental Benefits Calculator. The calculator generates estimates of environmental benefits based on the number of tons of specified materials recycled, landfilled and incinerated in Montana. The calculator yields 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 Converted by Environmental Benefits Calculator

Reductions in Greenhouse Gas Emissions through Recycling

Greenhouse Gas Emissions Associated with Recycling	-141,934
Greenhouse Gas If All Landfilled	3,968
Net Greenhouse Gas Emissions from Recycling Compared To Landfilled	-145,902
Greenhouse Gas Reduction in Passenger Cars Equivalent	-110,092

Energy Savings from Recycling

Net Energy from Recycling Compared to Disposal (millions BTU)	-5,243,688
Energy Savings in Per Household Equivalent	-49,845

Life Cycle Stage Comparisons

Energy Used During Recycling and Processing (millions BTU)	143,084
Energy Used Waste Collection and Landfill	53,269
Energy Used During Waste Collection, Processing and Incineration	185,758
Energy Used for State's Average Mix of Landfill and Incineration	54,537

Air Emissions and Waterborne Wastes

Reduced Emissions Due to Recycling (tons) AIR EMISSIONS	212,197.6
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Reduced Emissions Due to Recycling (tons) WATERBORNE WASTES	767.7
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Total (Excluding CO2 and Methane)	4,808.5
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Select National Resource Savings

Total Tons Resources Saved	149,596
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Number of Trees Saved

From recycling newsprint, mixed paper and office paper	278,364
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In summary, there are many ways to express the resource savings that recycling effects. 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