

FACT SHEET – WASTE REDUCTION IN HELENA

- In a 2009 report, the United States Environmental Protection Agency (“USEPA”) stated: “[C]limate change is primarily the result of greenhouse gas (GHG) emissions, its effects will worsen over time in the absence of regulatory action, and the overall rate and magnitude of human-induced climate change will likely increase, such that risks to public health and welfare will likewise grow over time so that future generations will be especially vulnerable; their vulnerability will include potentially catastrophic harms.”¹
- The USEPA provided the link between materials management and GHG emissions, estimating materials management is associated with 42% of total U.S. GHG emissions (and defining “materials management” as the management of material resources as they flow through the economy, from extraction or harvest, to production, transport, provision of services, reuse, and disposal).²
- The 2009 report also pointed out that unlike many GHG mitigation options, materials management is heavily determined by states and local communities.³
- The USEPA considers waste prevention and recycling, jointly referred to as waste reduction, as potent strategies for reducing greenhouse gases.”⁴ Taken together, these measures will reduce emissions from energy consumption, reduce emissions from incinerators, reduce methane emissions from landfills, and increase storage of carbon in trees.⁵
- The terms “circular economy” and “closed loop economy” refer to systems that manage materials to keep them in use, and within sustainable boundaries, in contrast to a “linear economy,” in which products are made and disposed of.⁶
- In 2018, the USEPA calculated that each person in this country generated an average of 4.9 pounds of municipal solid waste (“MSW”) per day.⁷

1 ["Opportunities to Reduce Greenhouse Gas Emissions through Materials and Land Management Practices, September 2009" \(epa.gov\)](#), at 1.

2 *Id.* at 1-2.

3 *Id.* at 2.

4 <https://archive.epa.gov/wastes/conservation/tools/payt/web/html/factfin.html>; *see also* <https://www.epa.gov/recycle/reducing-and-reusing-basics>; <https://www.epa.gov/recycle>.

5 *Id.*

6 *See, e.g.*, [What Is the circular economy? \(ellenmacarthurfoundation.org\)](#); [Zero Waste Hierarchy of Highest and Best Use - Zero Waste International Alliance \(zwia.org\)](#);

7 [National Overview: Facts and Figures on Materials, Wastes and Recycling | Facts and Figures about Materials, Waste and Recycling | US EPA](#). This figure (MSW) includes things such as bottles, corrugated boxes, food, grass clippings, sofas, computers, tires, and refrigerators; it does not include non-hazardous construction and demolition waste, which USEPA calculates separately. *Id.*

- Nationally, paper and paperboard make up the largest portion of MSW, followed by food waste, yard trimmings, and plastics, in that order. Food, then plastics, then paper and paperboard make up the largest portion of materials that are landfilled.⁸
- Although the amount of MSW has increased substantially from 1960, when generation was only 2.68 pounds per person per day, due to public interest and public policy, the amount of MSW that is *landfilled* has decreased from 94% of MSW in 1960 to 50% of the amount generated in 2018 (approximately 32% recycled/composted; 6% other food diversion; 12% combusted with energy recovery).⁹
- The following waste management hierarchy is recognized almost universally, in order of priority, as: Reduce, Reuse, Recycle, Compost, Landfill. Montana’s Integrated Waste Management Act recognizes this hierarchy,¹⁰ as did the Helena City Commission, in its new Growth Policy, adopted in June 2020.¹¹ Additionally, the category “Refuse” is commonly included in the hierarchy, in which case it is considered the highest priority.¹²
- Through its new Growth Policy, the City of Helena committed to “reduce . . . the amount of solid waste generated by households, businesses, and governmental entities located within the City and disposed of in the landfill.”¹³ The Policy incorporates a “Zero-Waste” goal, covering not only solid waste collection and disposal services, but also reduction, reuse, recycling and composting, . . . [to] reduce the environmental impact of waste, and protect our local water and environment.”¹⁴
- Reuse, recycling, and composting create far more jobs than burying our resources.¹⁵ The USEPA has found that recycling and reusing materials creates the equivalent of 1.17 jobs for every 1,000 tons of material recycled.¹⁶
- Most communities in Montana focus most of their resources on “the most expensive, least-preferred management option: landfilling.”¹⁷

8 *Id.*

9 *Id.*

10 Mont. Code Ann. § 75-10-804.

11 City of Helena 2019 Growth Policy, chapter 5, page 9, found at <https://www.helenamt.gov/government/departments/community-development/planning/long-range-planning>.

12 *See, e.g.*, <https://zerowasteworld.org/zwmp/>.

13 City of Helena 2019 Growth Policy, chapter 5, page 9, found at <https://www.helenamt.gov/government/departments/community-development/planning/long-range-planning>.

14 *Id.*

15 *See, e.g.*, [Zero Waste Creates Jobs \(ecocycle.org\)](https://www.ecocycle.org/); [How Recycling Creates New Jobs \(thebalancesmb.com\)](https://www.thebalancesmb.com/).

16 [Recycling Economic Information \(REI\) Report | Sustainable Materials Management | US EPA](https://www.epa.gov/recycling-economic-information).

17 Montana Department of Environmental Quality’s 2018 Integrated Waste Management Plan, at 3, found at [IWMP2018.pdf \(mt.gov\)](https://www.mt.gov/Portals/0/DEQ/2018%20IWMMP.pdf).

- Eleven years ago, in 2009, Helena’s Climate Change Task Force recommended the City adopt the then-USEPA goal of recycling 35% of MSW by 2020.¹⁸
- The USEPA 35% diversion rate goal was reached, nationally, by 2017.¹⁹
- The Montana Integrated Waste Management Act established less ambitious goals than the USEPA goals for recycling and composting as a percentage of total solid waste: 17% by 2008; 19% by 2011; and 22% by 2015.²⁰
- Helena’s solid waste diversion rates fell short of both the USEPA goal and the less stringent Montana goals for waste diversion: 13.7% in 2008; 17.5% in 2011; and 16.3% in 2015. Although Helena diverted 22% of its waste in 2019, since 2005 Helena’s annual solid waste diversion rates have averaged 16.5%.²¹
- The Helena community supports waste reduction. Survey results from the joint City-County 2014 Efficiency Study of the City-County Solid Waste System indicated Helena-area residents were not satisfied with then-current recycling options, and the vast majority (75.9%) believed that materials should be recycled even if recycling cost more than landfilling.²²

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https://www.helenamt.gov/fileadmin/user_upload/Commission/Citizen_Conservation_Board_Documents/Climate_Task_Force_Report_8-19-09.pdf, p. 84.

19 <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials#R&Ctrends>

20 Section 75-10-803, MCA, of Montana’s Integrated Waste Management Act.

21 Data compiled by Helena’s Sustainability Coordinator from information provided by Helena’s Solid Waste Division.

22 Efficiency Study of: The City of Helena and Lewis & Clark County Solid Waste System, 10/20/14, at App. F, p. 45.