

U.S. Environmental Footprint

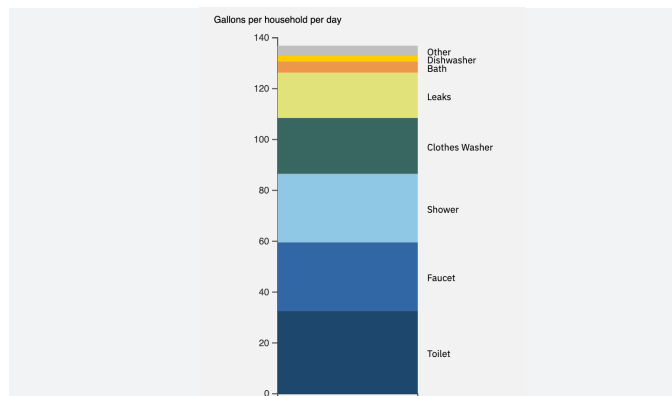
The U.S. population is projected to grow from 343M in 2026 to 364M by 2060.¹ One way to measure U.S. environmental impact is by estimating how many Earths would be needed if everyone lived like the average American; it would take five Earths to sustain that level of consumption globally.² Without major shifts in consumption, growing pressure on finite natural resources will accelerate environmental degradation. See other CSS Factsheets that expand on the topics below.

Food

- From 1978 to 2018, average daily calorie consumption in the U.S. rose from 1,807 to 2,093.³ Per capita fat consumption increased 66%³ from 1970 to 2010,⁴ while milk consumption has decreased 51% to 10.6 gal/yr from 1970.⁵
- Americans consume about 360 calories of added sugars and sweeteners per day.⁴ The American Heart Association recommends no more than 100–150 calories of added sugars daily for an average adult.⁶
- In 2023, the average American consumed 43 gal of soft drinks, a 300% increase since 1947.⁷
- Diets in the top 20% for carbon footprint emit 8 times the GHG of those in the bottom 20%.⁸
- 41.9% of U.S. adults and 19.7% of children (ages 2–19) are obese (BMI > 30).⁹
- 30–40% of food in the U.S. is wasted—making it the most commonly landfilled and incinerated material.¹⁰ The average American wastes 50% more food than in 1970.¹¹
- Food waste accounts for 22% of municipal solid waste¹² and costs \$450/yr per person.¹¹ See [U.S. Food System Factsheet](#).

Water

North American Household Water Use¹⁵



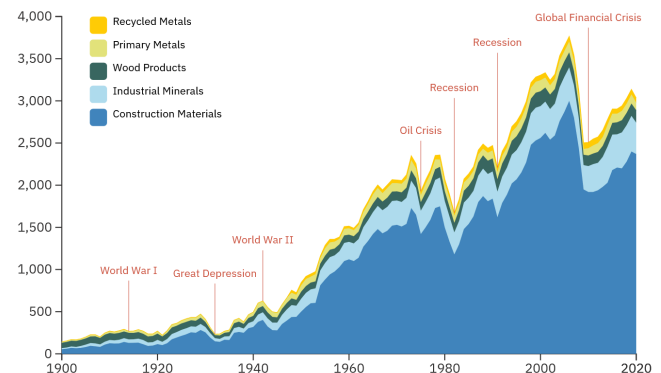
- In 2015, U.S. water withdrawals totaled 322B gal/day, down 9% from 2010.¹³ The largest uses were thermoelectric power (41%), irrigation (37%), and public supply (12%).¹³

- Western states used 48% more water per person than eastern states in 2015—primarily due to crop irrigation. Over 50% of water withdrawals occur in just 12 states, California alone accounts for 9%.¹³
- Americans each use 82 gal of water daily for indoor and outdoor use.¹⁴ With efficient fixtures and no leaks, it can drop by 20%.¹⁴ See [U.S. Water Supply and Distribution Factsheet](#).

Material Use and Waste Management

- In 2022, U.S. per capita material use (including fuels) was 23.5 t, 33% higher than the Organisation for Economic Co-operation and Development (OECD) average.¹⁶

U.S. Nonfuel Materials Consumption²²

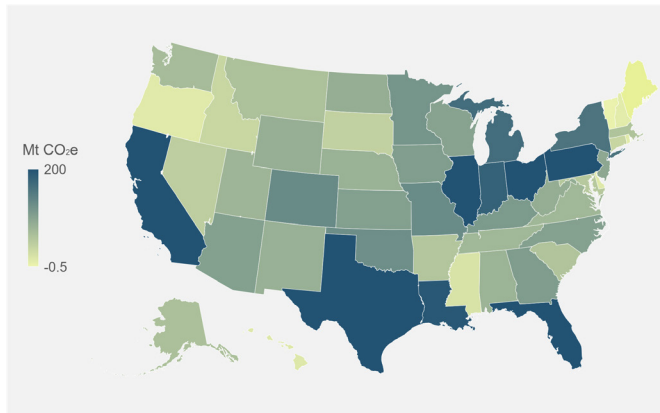


- In 1900, U.S. material use was under 2 t/person. It peaked in 2006 at over 13 t/person (excluding fuels).^{17,18} See [U.S. Material Use Factsheet](#).
- In 2018, the average American generated 4.9 lb of municipal solid waste (MSW) daily, only 1.6 lb were recycled or composted.¹² MSW daily generation was 2.4 lb/person in Sweden, 3.6 in Germany, and 2.6 in the U.K.¹⁹
- In 2018, 32.1% of U.S. MSW was recycled or composted, diverting 94 Mt from landfills—twice as much as in 1990.¹² See [U.S. MSW Factsheet](#).
- Only 53% of Americans are automatically enrolled in curbside recycling programs.²⁰ In 2016, 82% of cities with curbside recycling used single-stream collection, where materials such as glass and paper are separated and sorted at the collection facility.²¹

Greenhouse Gases (GHG)

- In 2024, U.S. GHG emissions were 17.3 t CO₂e/person.²³ Electricity generation accounts for 25% of the U.S. total.²⁴
- From 1990–2019, emissions increased by 0.8%. In 2020, they fell by 9% due to the COVID-19 pandemic, then rose 6% in 2021—but remained below 1990 levels.²⁴
- In 2023, the Intergovernmental Panel on Climate Change (IPCC) concluded that human activities—principally through GHG emissions—have unequivocally caused global warming, with global surface temperatures reaching 1.1 °C above pre-

U.S. GHG Emissions by State, 2022 (Mt CO₂e)²⁴



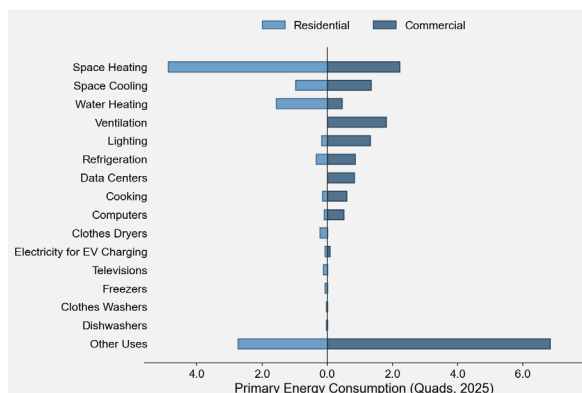
industrial levels in 2011 to 2020.²⁵

- Individuals can immediately reduce personal GHG emissions by using energy-efficient products and low-emission transportation.

Residential and Commercial Buildings

- From the 1970s to the 2010s, U.S. houses became larger with fewer occupants; House size increased 21.4%²⁶ while occupants per house decreased 14%.²⁷ Living space per person rose 41%.^{26,27} See [Residential Buildings Factsheet](#).
- Significant energy savings are possible by improving insulation, upgrading to efficient appliances, and using energy-saving lighting in both residential and commercial buildings.
- Average site energy intensity in commercial buildings fell by 19%, from 115,000 Btu/ft² in 1979²⁸ to 94,600 Btu/ft² in 2025.²⁹ See [Commercial Buildings Factsheet](#).
- Developed land in the U.S. increased 61% from 1982 to 2017, covering 6% of U.S. land area by 2017.³⁰

Buildings Primary Energy Use, 2024²⁹

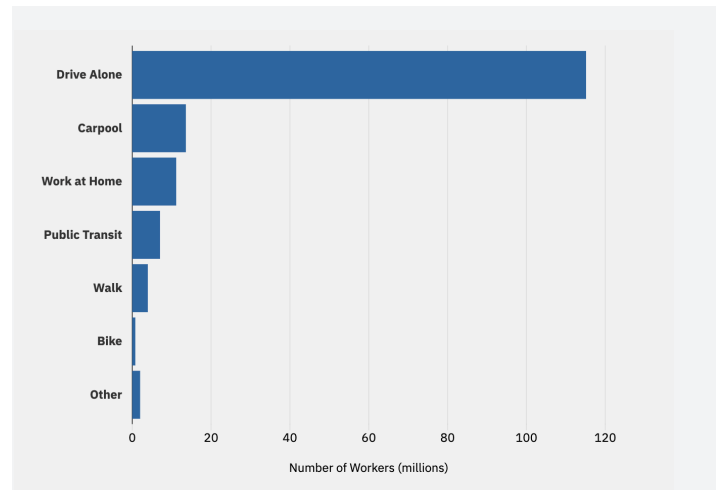


Transportation

- In 2024, there were 298M vehicles in the U.S. and 240M licensed drivers.³¹
- Drivers traveled 3.3T vehicle-miles—more than double the amount traveled in 1980.³¹ This is equivalent to 6.9M round-trips to the moon.³²

- Compared to 1981 models, the average 2024 vehicle has 36% more mass and 153% more horsepower.³³ Acceleration (0-60 mph time) is 45% faster than 1978.³³
- In 2009, fuel economy surpassed 1988 levels after years of decline.³⁴
- Average vehicle occupancy is 1.5 people for a passenger car, 7.5 for a transit bus, and 26.1 for a train.³⁵
- In 2022, congestion caused an additional 8.5B hours of travel time, 3.3B gallons of fuel use, and 64.7B lb of CO₂ emissions in the U.S.³⁶

U.S. Modes of Transportation to Work, 2020³⁵



Energy

- In 2024, the U.S. spent \$1.5T on energy—about \$4,440.10 per person, or 5.15% of GDP.³⁷
- More U.S. energy comes from petroleum than any other source, accounting for more than 37% of energy consumption.³⁸
- Daily U.S. per capita energy use included 2.53 gal of oil, 7.24 lb of coal, and 268 ft³ of natural gas.^{1,38}
- Residential electricity use was 12 kWh/person daily.³⁸
- In 2022, with less than 5% of the world's population,^{39,40} the U.S. used 16% of the world's energy⁴¹ and generated 15% of world GDP.⁴²
- The EU had 6% of the world's population,⁴⁰ used 10% of global energy, and accounted for 15% of world GDP.⁴² While China had 18% of the world's population,³⁹ used 29% of its energy,⁴¹ and contributed 18% of world GDP.⁴²