

CONSTRUCTION



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ECONOMICS



ENVIRONMENTAL
IMPACT



EFFICIENCY

CONSTRUCTION



The construction sector employs approximately 7,551,000 people in the U.S.

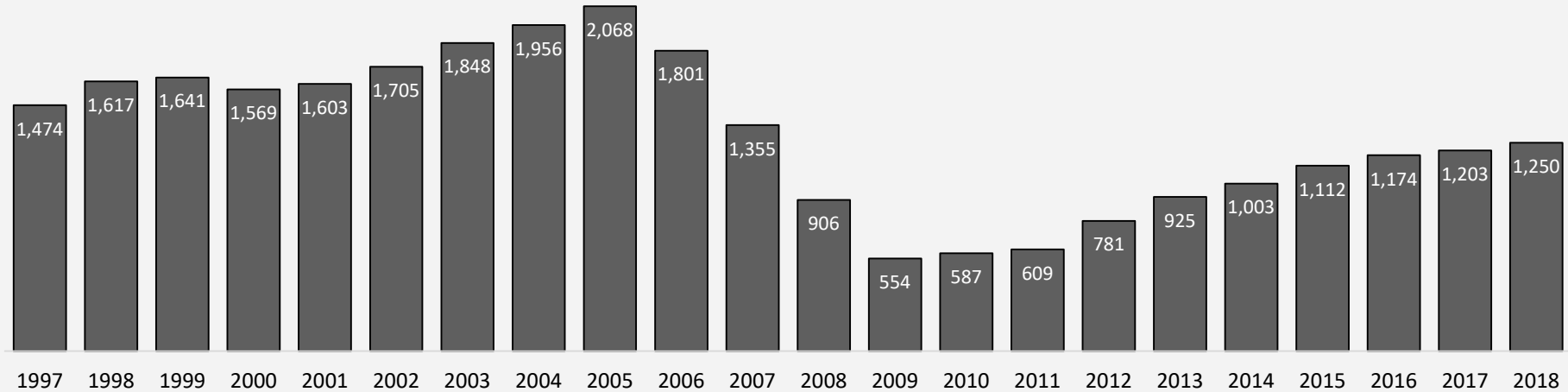
Bureau of Labor Statistics, 2019



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New Home Starts (1,000 homes)



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The number of new housing starts decreased to 554,000 during the 2008-09 recession, but has since doubled to 1,250,000 homes in 2018.

U.S. Census Bureau, 2018



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Construction contributed \$1.5 trillion to the U.S. GDP in 2017, growing over 100% since 1997.

Bureau of Economic Analysis, 2018



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The average construction cost of a single-family U.S. home in 2017 was \$237,760.

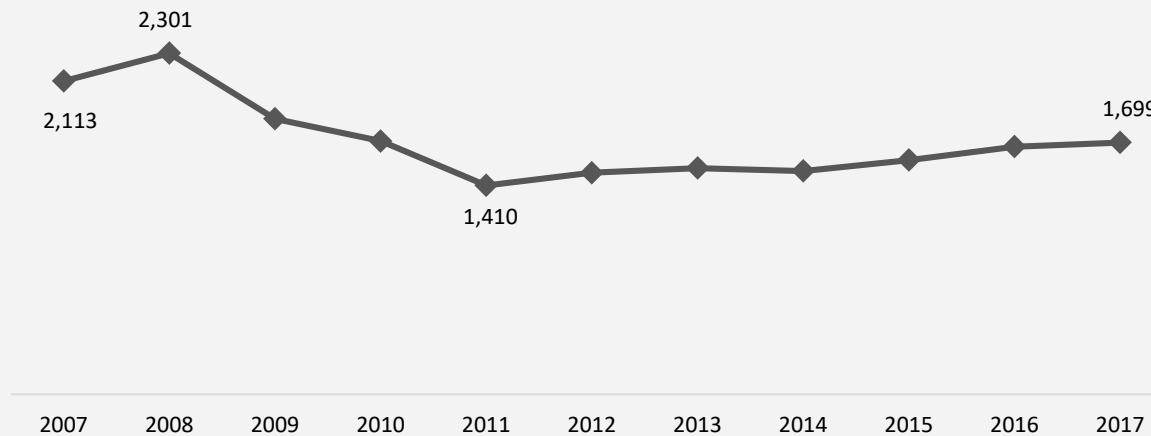
National Association of Home Builders, 2017



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Energy Use (trillion Btu)



After declining from a peak of 2.3 quadrillion Btu in 2008 to a low of 1.4 quadrillion Btu in 2011, energy use in construction increased from 2011 to 2017.

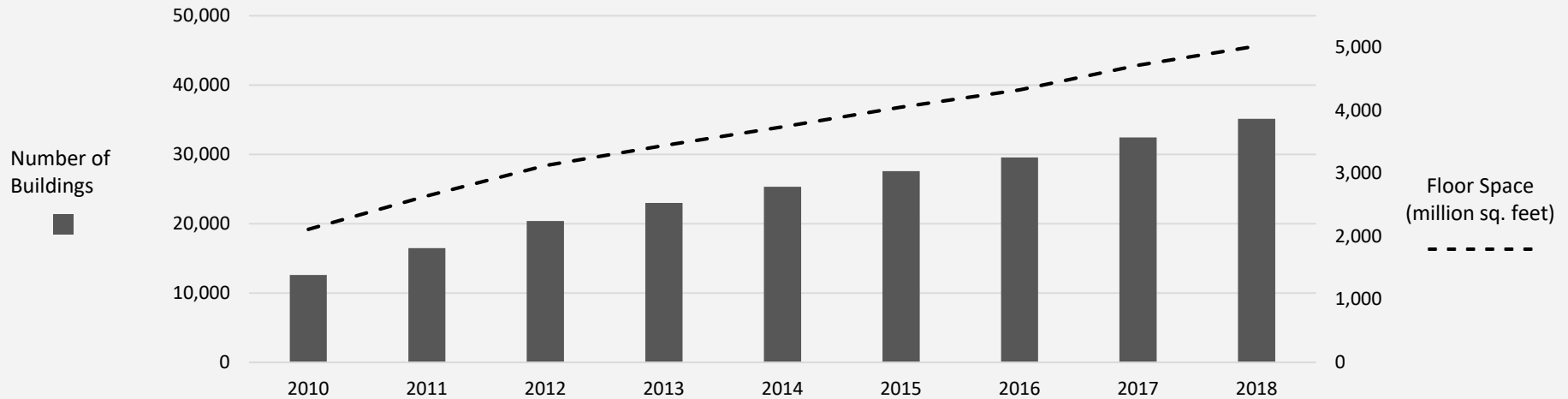
U.S. Energy Information Administration, 2018



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ENERGY STAR® Certified Commercial Buildings and Floor Space

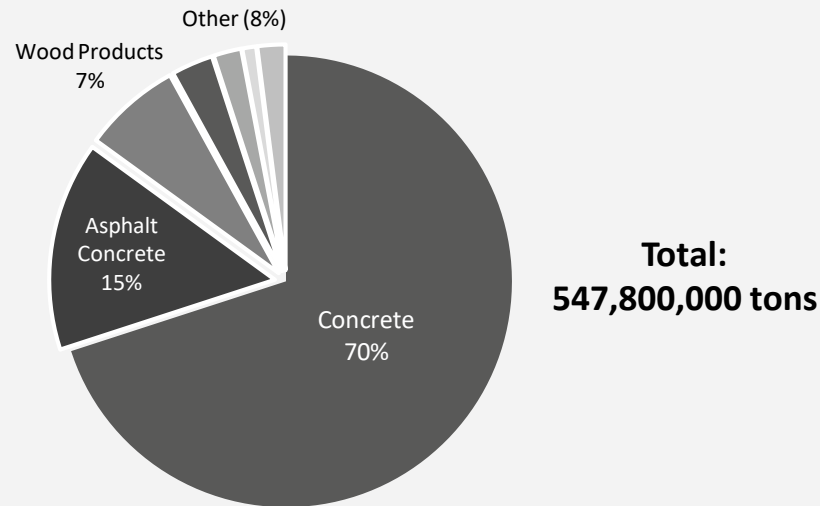


Over 35,000 commercial buildings cumulatively have been ENERGY STAR certified through 2018, representing over 5 billion square feet of floor space. On average, ENERGY STAR certified buildings use 35% less energy than typical buildings nationwide.

U.S. EPA, ENERGY STAR, 2018



Construction & Demolition Debris



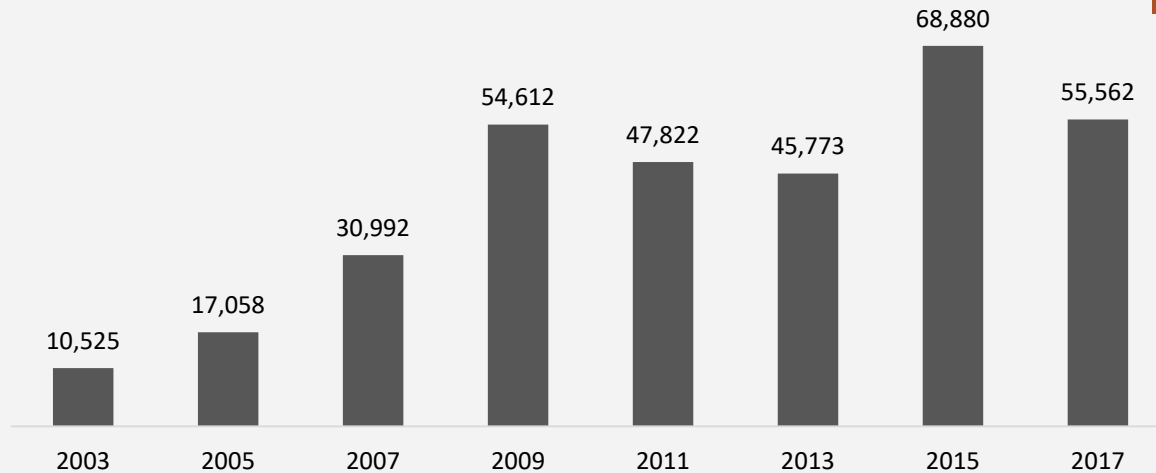
Construction and demolition debris totaled 547.8 million tons in 2015.

U.S. EPA, Advancing Sustainable Materials Management Report, 2018





Hazardous Waste Generation (tons)



Hazardous waste generation by the construction sector has increased from 10,525 tons in 2003 to 55,562 tons in 2017.

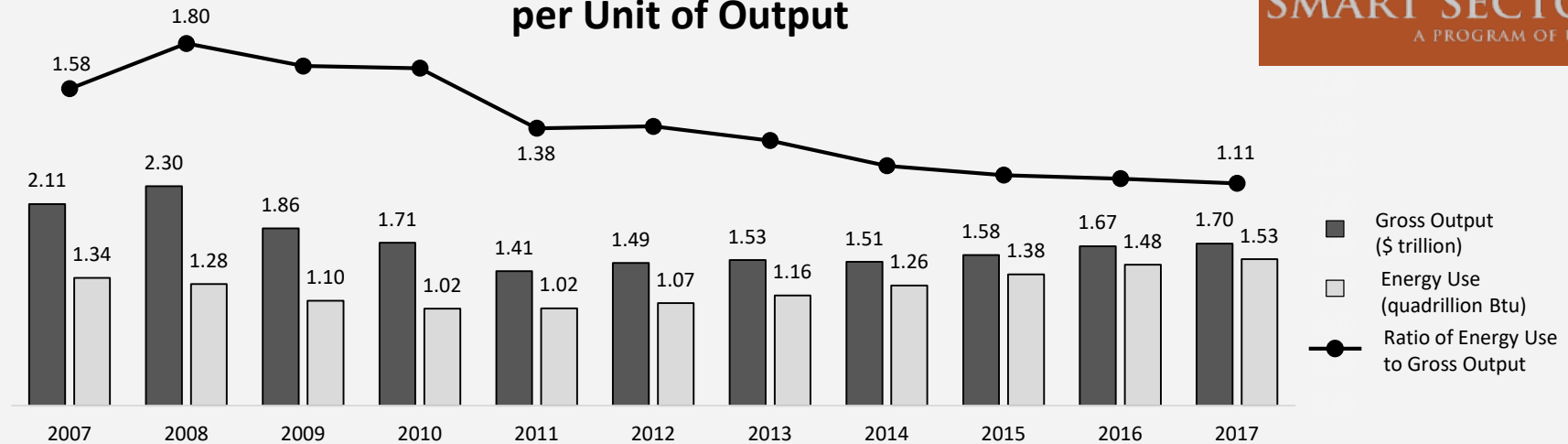
U.S. EPA, RCRA Biennial Report, 2017



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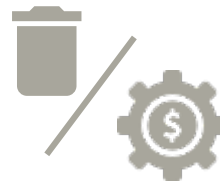


Construction Sector Energy Consumed per Unit of Output



In 2017, the construction sector used 1.7 quadrillion Btu of energy to produce output worth \$1.53 trillion. The ratio of energy used (quadrillion Btu) to gross output (\$ trillion) declined from 1.58 to 1.11 between 2007 and 2017.

Bureau of Economic Analysis, 2017; Energy Information Administration, Annual Energy Outlook, 2017

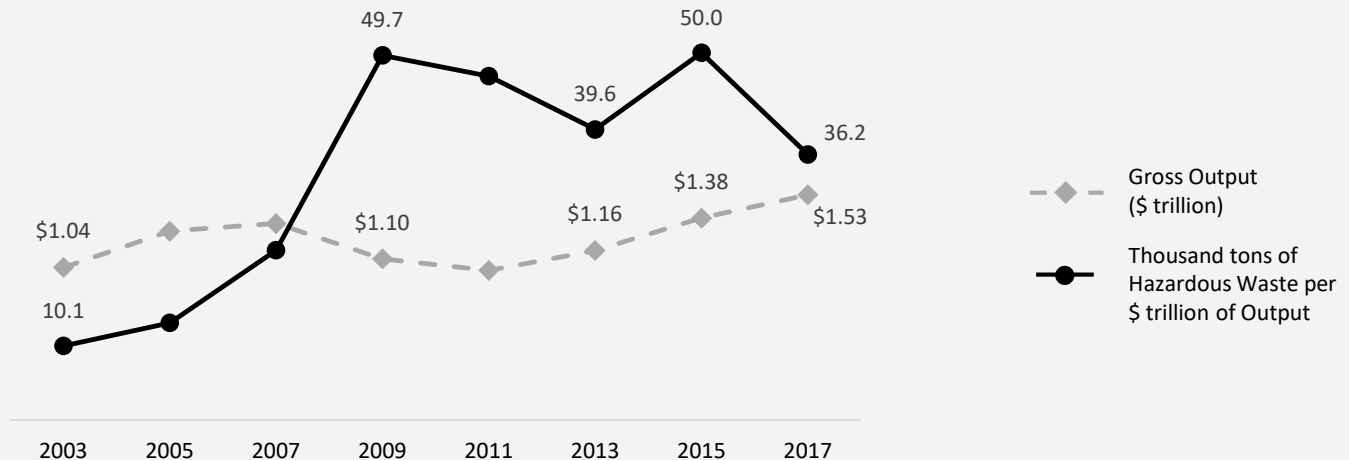


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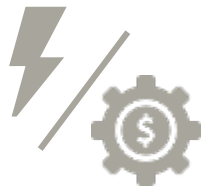
Hazardous Waste per Trillion Dollars of Output in the Construction Sector

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The amount of hazardous waste increased from 10.1 thousand tons per trillion dollars in 2003 to 36.2 thousand tons per trillion dollars in 2017.

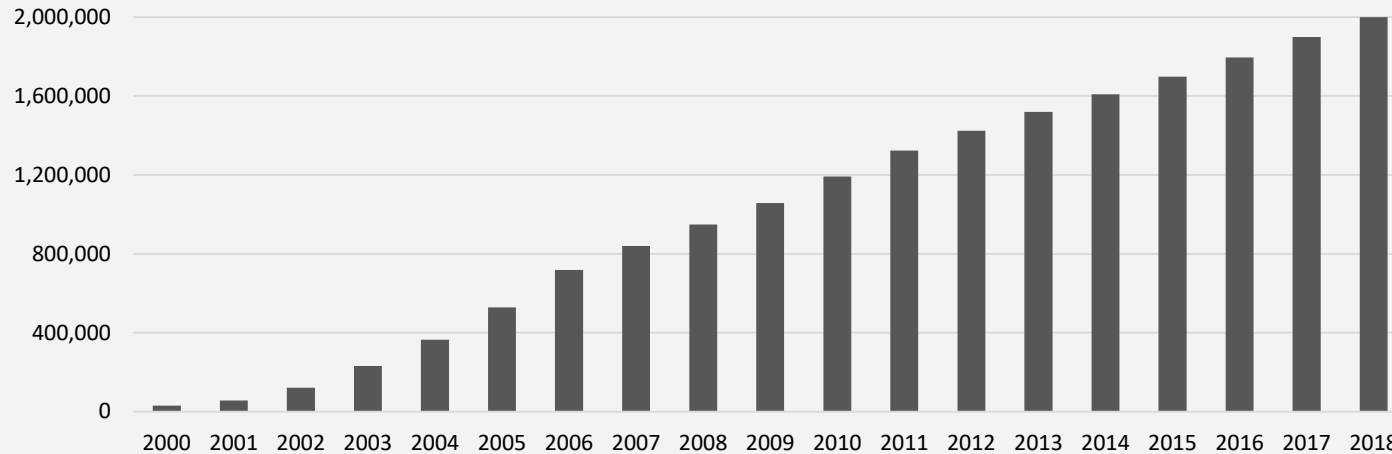
Bureau of Economic Analysis, 2017; U.S. EPA, RCRA Biennial Report, 2017



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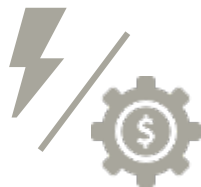


Cumulative ENERGY STAR® Certified Homes and Apartments



Through 2018, nearly 2,000,000 homes and apartments have earned certification through EPA's ENERGY STAR program. ENERGY STAR helps consumers and businesses save money and protect the environment through energy-efficient products and practices.

U.S. EPA, ENERGY STAR, 2018



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The construction sector includes construction of buildings (NAICS 236), heavy and civil engineering (NAICS 237) and specialty trade contractors (NAICS 238). Establishments in this sector are involved in the construction and demolition of residential and industrial and commercial buildings, water and sewer lines, oil and gas pipelines, highways, streets and bridges, and other such facilities.

Heavy and civil engineering further includes work related to construction and maintenance of power and communication lines. Specialty trade contractors include contractors for framing, masonry, glass and glazing, roofing, and other similar work required in the construction sector.

For more information about the EPA Smart Sectors program, visit: epa.gov/smartsectors.

For more information about the construction sector, visit:

- [U.S. EPA ENERGY STAR](#)
- [U.S. EPA Sustainable Materials Management](#)
- [U.S. Bureau of Labor Statistics – Construction Industry: Employment, Earnings, and Hours](#)
- [U.S. Census Bureau, NAICS 236, 237 and 238](#)
- [U.S. Census Bureau – Construction Spending](#)