Manufacturing Energy Consumption Survey (MECS)

MECS is a national survey that collects data from U.S. manufacturing establishments about their energy-related building characteristics and their energy consumption and expenditures.

About MECS

EIA collects data from manufacturing establishments through web questionnaires and publishes these data every four years. The 2018 MECS sample size is approximately 15,000 establishments and represents 97%–98% of manufacturing energy consumption. It represents separate estimates of energy use for 21 manufacturing subsectors and 79 industry groups and industries.

Key takeaways from EIA’s 2018 MECS

- Natural gas and hydrocarbon gas liquids (HGLs) continue to increase their shares of total consumption.
- Gross output continues to outpace manufacturing energy consumption, resulting in an overall decrease in energy intensity.
- From 1998 to 2018, manufacturing energy intensity decreased by 26%. During this same period, manufacturing gross output increased by 12%, implying continued energy efficiency gains.
- Nonfuel consumption (or the use of energy as a feedstock or raw input rather than for fuel) is dominant in the chemicals industry.
- Four industries—chemical, petroleum and coal products, paper, and primary metals—account for most of manufacturing energy consumption.
- Most subsectors cannot easily switch from natural gas to alternative fuels such as coal, electricity, and renewables within 30 days.