Industrial
Industrial sector energy consumption

Industrial energy consumption by fuel
AEO2022 Reference case
quadrillion British thermal units

Industrial energy consumption by subsector
AEO2022 Reference case
quadrillion British thermal units

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
Industrial sector delivered energy consumption across cases

Industrial delivered energy consumption

AEO2022 selected side cases

quadrillion British thermal units

2021

history  projections

High Economic Growth
High Oil Price
High Oil and Gas Supply

Reference
Low Oil Price
Low Economic Growth
Low Oil and Gas Supply

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
Industrial sector energy intensity

Energy intensity by subsector
AEO2022 Reference case
trillion British thermal units per billion 2012 dollar shipments

- total industry
- manufacturing
- energy-intensive manufacturing
- non-energy intensive manufacturing
- non-manufacturing

Energy-intensive manufacturing by industry
AEO2022 Reference case
trillion British thermal units per billion 2012 dollar shipments

- cement and lime
- iron and steel
- paper
- bulk chemical feedstocks
- bulk chemical heat and power
- glass
- aluminum

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
Iron and steel industry energy consumption by source

AEO2022 Reference case

quadrillion British thermal units

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
Cement and lime industry energy consumption by source

**AEO2022 Reference case**
quadrillion British thermal units

- Petroleum and other liquids
- Purchased electricity
- Natural gas
- Renewables
- Coal

Bulk chemicals industry energy consumption by source

AEO2022 Reference case

quadrillion British thermal units

Note: Other includes coal, renewables, and other petroleum.
Hydrocarbon gas liquid and naphtha feedstocks consumed for chemical production

Hydrocarbon gas liquid (HGL) and naphtha chemical feedstocks
AEO2022 Reference case
quadrillion British thermal units

Note: Excludes propylene.

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)
Industrial sector combined-heat-and-power (CHP) generation

CHP generation by industry
AEO2022 Reference case
billion kilowatthours

2021

Note: Other fuels includes renewables and other petroleum.
Industrial sector CO₂ emissions and CO₂ intensity

Industrial sector CO₂ emissions
AEO2022 economic growth cases
billion metric tons of CO₂

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High Economic Growth
Reference
Low Economic Growth

Industrial sector CO₂ intensity
AEO2022 Reference case
metric tons of CO₂ per billion British thermal units

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High Economic Growth
Reference
Low Economic Growth

Note: Series does not include greenhouse gases other than CO₂. Industrial sector CO₂ emissions do not include process emissions, such as the emissions from cement clinker production. Series excludes power sector emissions.

Source: U.S. Energy Information Administration, Annual Energy Outlook 2022 (AEO2022)