Manufacturing Energy and Carbon Footprint
Sector: Iron and Steel (NAICS 331110, 3312)

Primary Energy Use: 1,469 TBtu
Total GHG Emissions: 100 MMT CO₂e

Primary Energy, 2018

- Offsite Energy
  - Fuel: 855
  - Electricity Generation: 28.4
    - Generation and Transmission Losses: 391
  - Steam Generation: 0.5
    - Generation and Transmission Losses: 2

- Onsite Energy
  - Onsite Generation (excludes <0.1 TBtu renewable, non-combustion electricity output)
    - Process Energy: 94.0
      - Process Losses: 441
    - Nonprocess Energy: 3.5
      - Nonprocess Losses: 29
  - Onsite (Combustion + Process) Energy: 934
    - Steam Distribution Losses: 25
    - Steam: 7
      - Generation: 7
      - Generation and Transmission Losses: 0.5

- Total Emissions = Offsite Emissions + Onsite (Combustion + Process) Emissions

Energy use data source: 2018 EIA MECS (with adjustments). For full information on references, definitions, assumptions, and other sectors, visit this webpage

Last Revised: December 2021

Notes:
- Sector-wide aggregate data for year 2018; energy values rounded to nearest whole number
- Offsite generation shown on net basis (purchases, sales, and transfers accounted for) and includes onsite non-combustion renewable output
- Electricity export refers to sales and transfers offsite of electricity to utilities and other entities
- Feedstock energy excluded from primary, offsite, and onsite energy values and included in Energy for All Purposes
- Excess steam refers to the sales and transfer offsite or purging of surplus steam

Energy for All Purposes estimated at 1,493 TBtu
Includes primary energy plus net energy consumed for nonfuel purposes, including feedstock use