Total Primary Energy, 2010

Manufacturing Energy and Carbon Footprint
Sector: Alumina and Aluminum (NAICS 3313)
Total Primary Energy Use: 456 TBtu
Total Combustion Emissions: 26 MMT CO₂e

Onsite Energy
- Fuel 99
- Electricity Generation 20.3
- Steam Generation 0.4
- Offsite Energy
  - Generation and Transmission Losses 234
  - Electricity Generation 351
  - Steam Generation 7
  - Total Primary Energy Use: 456

Onsite Generation
- Electricity and Steam Generation Losses 3
- Steam Distribution Losses 3
- Total Emissions = Offsite Emissions + Onsite Emissions:
  - Total: 26.1
  - Onsite: 5.3

Process Energy
- Process Losses 105
- Total Combustion Emissions: 26 MMT CO₂e

Nonprocess Energy
- Nonprocess Losses 7
- Total Combustion Emissions: 26 MMT CO₂e

Notes:
- Offsite generation shown on net basis (purchases, sales, and transfers accounted for)
- Energy values rounded to nearest whole number
- Feedstock energy not included

Energy use data source: 2010 EIA MECS (with adjustments)
Last Revised: February 2014

Prepared for the U.S. Department of Energy, Advanced Manufacturing Office by Energetics Incorporated