Primary Energy Use:

- 469 TBtu
- Total Combustion Emissions: 25 MMT CO₂e

**Manufacturing Energy and Carbon Footprint**  
**Sector:** Alumina and Aluminum (NAICS 3313)

### Primary Energy, 2014

**Offsite Energy**
- Fuel: 122 TBtu
- Electricity Generation: 18.5 TBtu
- Steam Generation: 0.2 TBtu
- Generation and Transmission Losses: 226 TBtu

**Onsite Energy**
- Electricity and Steam Generation Losses: 8 TBtu
- Steam Distribution Losses: 4 TBtu

**Process Energy**
- Process Losses: 109 TBtu
- Nonprocess Energy: 6.7 TBtu

**Nonprocess Energy**
- Steam: 3 TBtu

**Electricity Export**
- 13 TBtu

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**Energy Use**

**Last Revised:** September 2018

**Notes:**
- Sector-wide aggregate data for year 2014; 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

**Energy for All Purposes estimated at 480 TBtu**
- Includes primary energy plus net energy consumed for nonfuel purposes, including feedstock use

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