Manufacturing Energy and Carbon Footprint
Sector: Foundries (NAICS 3315)

Total Primary Energy Use: 281 TBtu
Total Combustion Emissions: 16 MMT CO₂e

Total Energy

<table>
<thead>
<tr>
<th>Energy Use (TBtu = Trillion British Thermal Units)</th>
<th>Combustion Emissions (MMT CO₂e = Million Metric Tons Carbon Dioxide Equivalent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offsite</td>
<td></td>
</tr>
<tr>
<td>Total Emissions = Offsite Emissions + Onsite Emissions</td>
<td></td>
</tr>
</tbody>
</table>

Prepared for the Advanced Manufacturing Office (AMO) by Energetics Incorporated

Energy use data source: 2006 MECS (with adjustments)
Last Revised: October 2012
Notes: Feedstock energy not included
Energy values <0.5 TBtu shown as 0
Values represent aggregate data
Offsite generation shown on net basis
## Manufacturing Energy and Carbon Footprint

**Sector:** Foundries (NAICS 3315)

### Onsite Energy Use:

- **Total Energy Use:** 158 TBtu
- **Onsite Combustion Emissions:** 5 MMT CO₂e

### Onsite Energy

#### Onsite Generation

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>71%</td>
</tr>
<tr>
<td>Coke and Breeze</td>
<td>12%</td>
</tr>
<tr>
<td>Petroleum Coke (byproduct fuel)</td>
<td>7%</td>
</tr>
<tr>
<td>Distillate and Residue Fuel Oils</td>
<td>5%</td>
</tr>
<tr>
<td>LPG and NGL</td>
<td>5%</td>
</tr>
<tr>
<td>Other Fuels</td>
<td>8%</td>
</tr>
</tbody>
</table>

#### Process Energy

- **Process Heating:** 9.1 TBtu
- **Process Cooling and Refrigeration:** 4.0 TBtu
- **Other Process Uses:** 0.2 TBtu
- **Electro-Chemical:** 0.4 TBtu
- **Machine Drive:** 3.4 TBtu

#### Nonprocess Energy

- **Facility HVAC:** 1.7 MMT CO₂e
- **Facility Lighting:** 0.6 MMT CO₂e
- **Other Facility Support:** 0.2 MMT CO₂e
- **Onsite Transportation:** 0.1 MMT CO₂e
- **Other Nonprocess:** 0.0 MMT CO₂e

### Energy Use (TBtu = Trillion British Thermal Units)

- **All Energy**
  - **Fuel**
  - **Electricity**
  - **Steam**

### Combustion Emissions (MMT CO₂e = Million Metric Tons Carbon Dioxide Equivalent)

- **Total Energy Use:**
  - **Onsite Emissions:**
  - **Offsite Emissions:**

### Notes:

- Feedstock energy not included
- Energy values <0.5 TBtu shown as 0
- Values represent aggregate data
- Offsite generation shown on net basis

*Onsite, renewable, non-combustion generation contributes 0 TBtu*