Primary Energy, 2014

**Offsite Energy**

- **Fuel**: 3,055 TBtu
- **Electricity Generation**: 25.3
- **Steam Generation**: 11.7
- **Generation and Transmission Losses**: 309

**Onsite Energy**

- **Onsite Generation**: 1,038 TBtu
- **Onsite Losses**: 775
- **Process Losses**: 263

**Nonprocess Energy**

- **Nonprocess Losses**: 3
- **Steam Distribution Losses**: 722

**Total Energy Use**: 3,744 TBtu

**Combustion Emissions**

- **Total Emissions**: 248 MMT CO₂e

**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 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 Use**

- 2014 EIA MECS (with adjustments).

**Last Revised**: September 2018

**Energy for All Purposes estimated at 3,744 TBtu**

Includes primary energy plus net energy consumed for nonfuel purposes, including feedstock use.
### Onsite Energy Use:
- **3,373 TBtu**
- **Onsite Combustion Emissions:** 211 MMT CO₂e

#### Manufacturing Energy and Carbon Footprint
- **Sector:** Petroleum Refining (NAICS 324110)

### Onsite Energy, 2014

#### Onsite Generation
- **Conventional Boilers:** 31.3% of Total
- **CHP/Cogeneration:** 39.7% of Total
- **Other Electricity Generation:** 0.2% of Total

#### Process Energy
- **Process Heating:** 140.3 TBtu
- **Process Cooling and Refrigeration:** 73.9 TBtu

#### Nonprocess Energy
- **Other Process Uses:** 3 TBtu
- **Facility HVAC:** 1.8 TBtu
- **Facility Lighting:** 0.6 TBtu
- **Other Facility Support:** 0.3 TBtu
- **Onsite Transportation:** 0.3 TBtu
- **Other Nonprocess:** 3.3 TBtu

### Fuel Types
- **Still Gas (byproduct fuel):** 43% of Total
- **Natural Gas:** 33% of Total
- **Petroleum Coke (byproduct fuel):** 18% of Total
- **HGL (excl. natural gasoline):** 1%
- **Distillate and Residual Fuel Oils:** <1%
- **Coal:** <1%
- **Other Fuels:** 4%

### Combustion Emissions
- **Still Gas (byproduct fuel):** 25 TBtu
- **Natural Gas:** 181 TBtu
- **Petroleum Coke (byproduct fuel):** 189 TBtu
- **Coal:** 49 TBtu
- **Other Fuels:** 30 TBtu

### Energy Use Data Source
- 2014 EIA MECS (with adjustments); see page 1 of 2 for reference link
- Last Revised: September 2018

### Notes
- Sector-wide aggregate data for year 2014; energy values and fuel type percentages rounded to nearest whole number
- Offsite generation shown on net basis (purchases, sales, and transfers accounted for) and includes onsite non-combustion renewable output
- *Refers to sales and transfers offsite of electricity to utilities and other entities
- Feedstock energy excluded

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