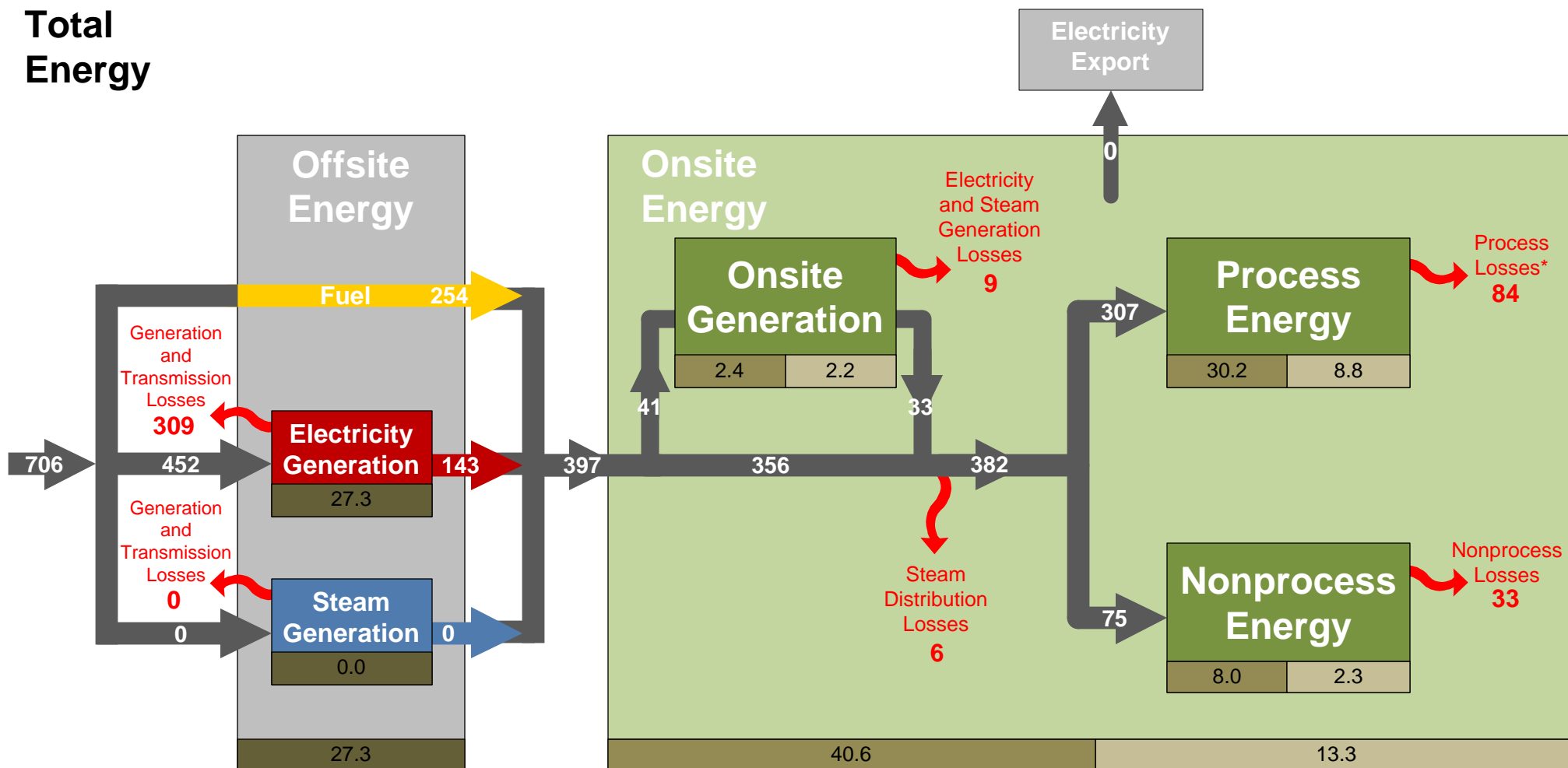


Manufacturing Energy and Carbon Footprint

Sector: Fabricated Metals (NAICS 332)

Total Primary Energy Use: 706 TBtu
Total Combustion Emissions: 41 MMT CO₂e

Total Energy



Energy Use (TBtu)	All Energy
	Fuel
	Electricity
	Steam
	Losses
Combustion Emissions (MMT CO ₂ e)	Offsite
	Onsite
	Total
Total = Onsite + Offsite	

* Exhaust losses from process heating are not estimated

Data source: 2006 MECS

Published: August 2010, revised December 2010

Units:

TBtu = Trillion British Thermal Units

MMT CO₂e = Million Metric Tons Carbon Dioxide Equivalent

Notes:

Feedstock energy not included

Energy values <0.5 TBtu shown as 0

Manufacturing Energy and Carbon Footprint

Sector: Fabricated Metals (NAICS 332)

Onsite Energy Use: 397 TBtu
Onsite Combustion Emissions: 13 MMT CO₂e

Onsite Energy

Onsite Generation

Conventional Boilers

2.1 1.9

CHP/ Cogeneration

0.2 0.2

Other Electricity Generation**

0.0 0.0

2.4 2.2

Steam Generation 8
Electricity Generation 0

Process Energy

Process Heating

14.0 8.6

Process Cooling and Refrigeration

1.0 0.1

Other Process Uses

0.8 0.1

Electro-Chemical

0.6 0.0

Machine Drive

13.8 0.1

Machine-Driven Systems

Pumps	15
Fans	11
Compressed Air	12
Materials Handling	8
Materials Processing	25
Other Systems	3
	30.2
	8.8

Exhaust Losses*

Nonprocess Energy

Facility HVAC

4.7 2.0

Facility Lighting

2.5 0.0

Other Facility Support

0.7 0.1

Onsite Transportation

0.2 0.2

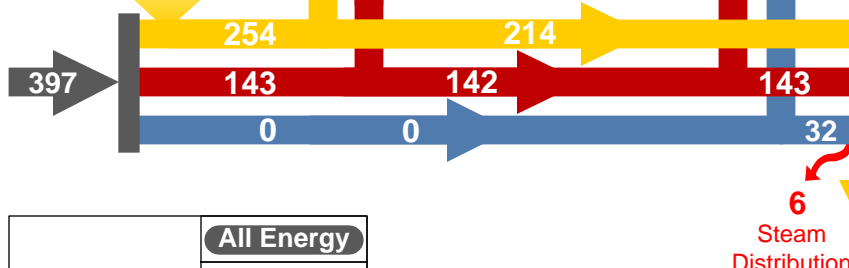
Other Nonprocess

0.0 0.0

8.0 2.3

Fuel Type	% of Total
Natural Gas	94%
LPG and NGL	2%
Distillate and Residual Fuel Oils	1%
Waste Gas (byproduct fuel)	1%
Other Fuels	2%

Fuel Types



Energy Use (TBtu)	All Energy
	Fuel
	Electricity
	Steam
Combustion Emissions (MMT CO ₂ e)	Offsite
	Onsite
	Total
	Total = Onsite + Offsite

* Exhaust losses from process heating are not estimated

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

Data source: 2006 MECS

Published: August 2010, revised December 2010

Units:

TBtu = Trillion British Thermal Units

MMT CO₂e = Million Metric Tons Carbon Dioxide Equivalent

Feedstock energy not included

Energy values <0.5 TBtu shown as 0