



# Understanding the Scale of the Problem: US Energy Sources and CO2 Emissions

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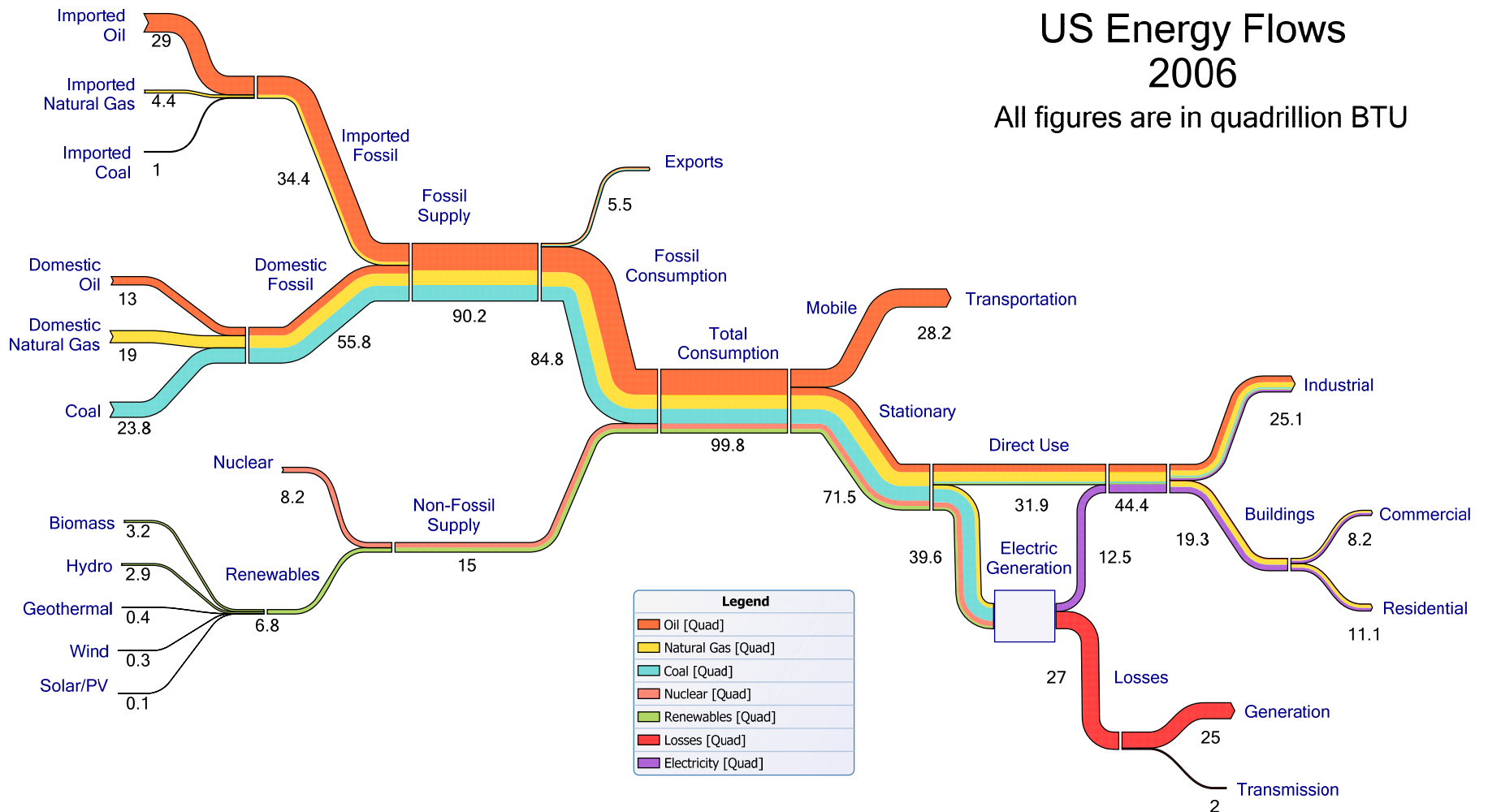
BUA/ECS 650/EST 696

March 22, 2010

<http://wilcoxon.maxwell.insightworks.com/pages/3077.html>

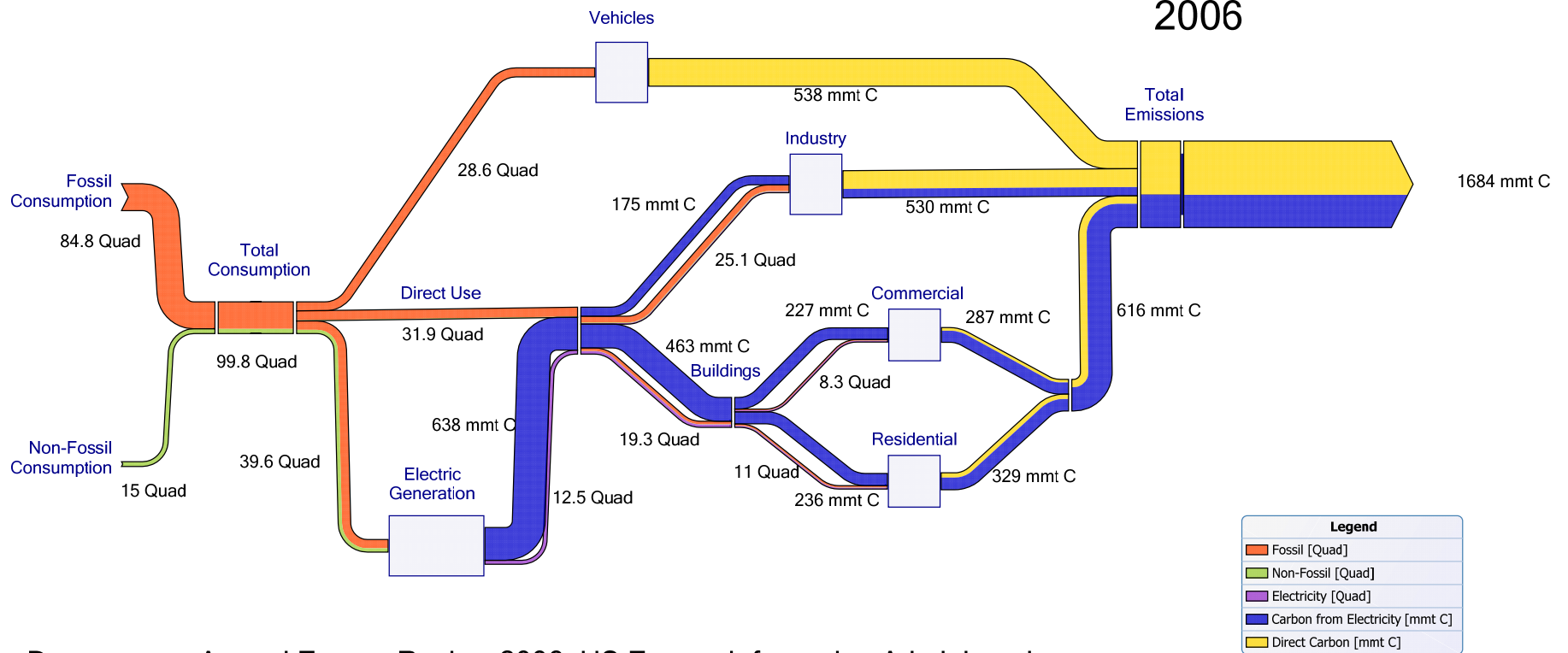
# US Energy Flows 2006

All figures are in quadrillion BTU



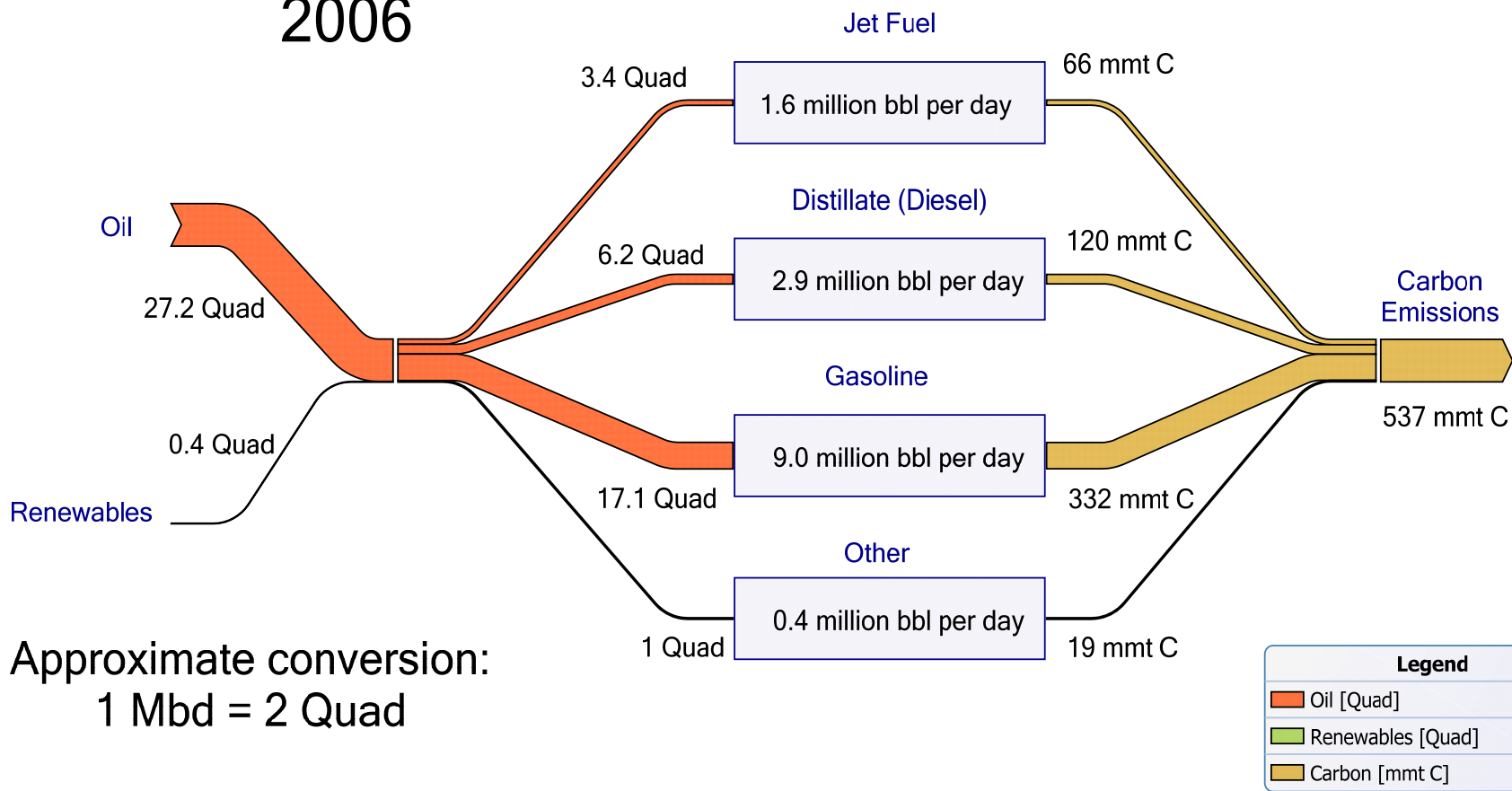
Data source: Annual Energy Review 2006, US Energy Information Administration

# US Energy and Carbon Flows 2006



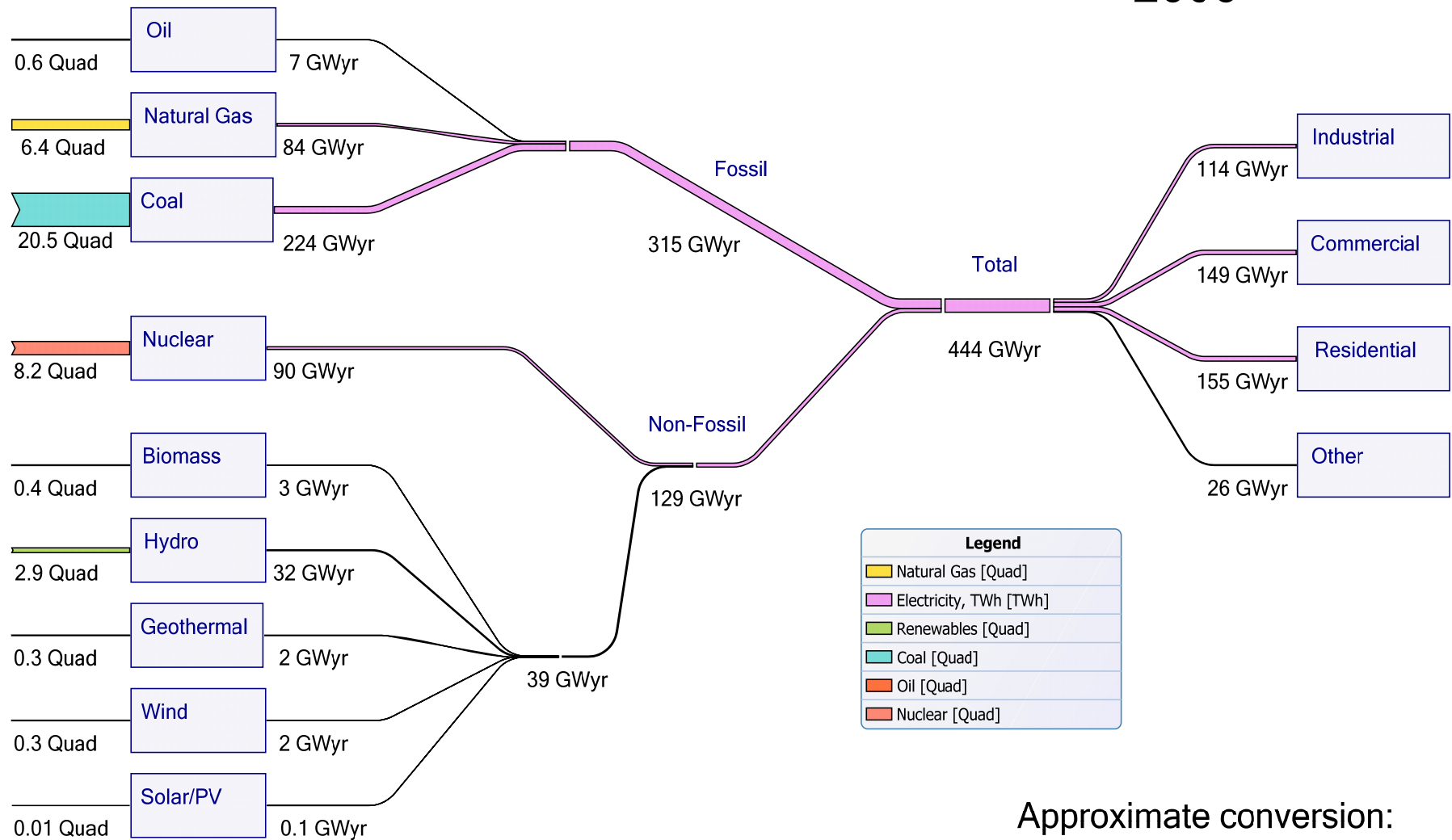
Data source: Annual Energy Review 2006, US Energy Information Administration

# US Transportation Sector 2006



Data source: Annual Energy Review 2006, US Energy Information Administration

# US Electricity Flows 2006

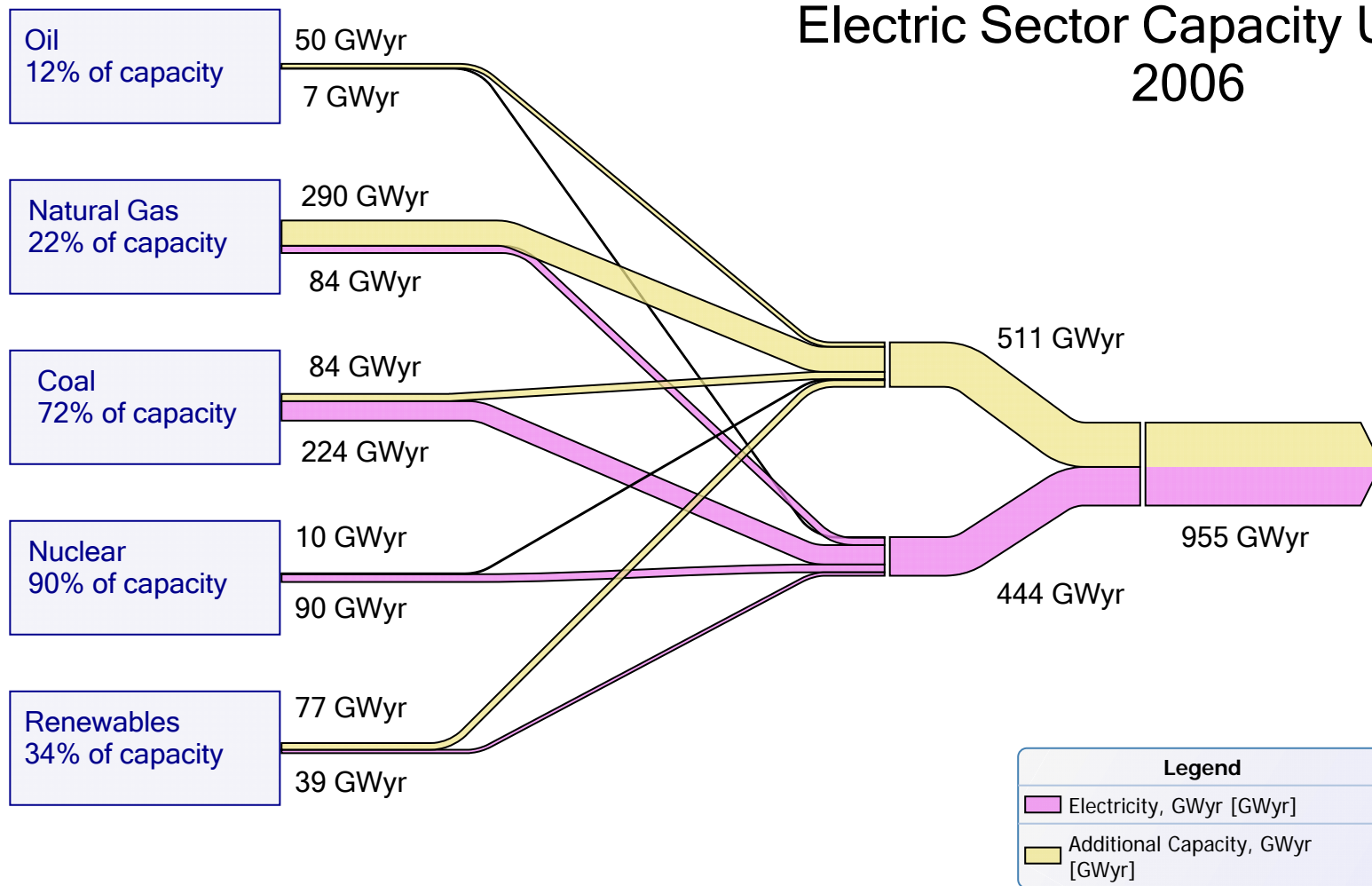


Legend	
Yellow bar	Natural Gas [Quad]
Pink bar	Electricity, TWh [TWh]
Light Green bar	Renewables [Quad]
Teal bar	Coal [Quad]
Orange bar	Oil [Quad]
Red bar	Nuclear [Quad]

Approximate conversion:  
1 Quad = 11 GWyr

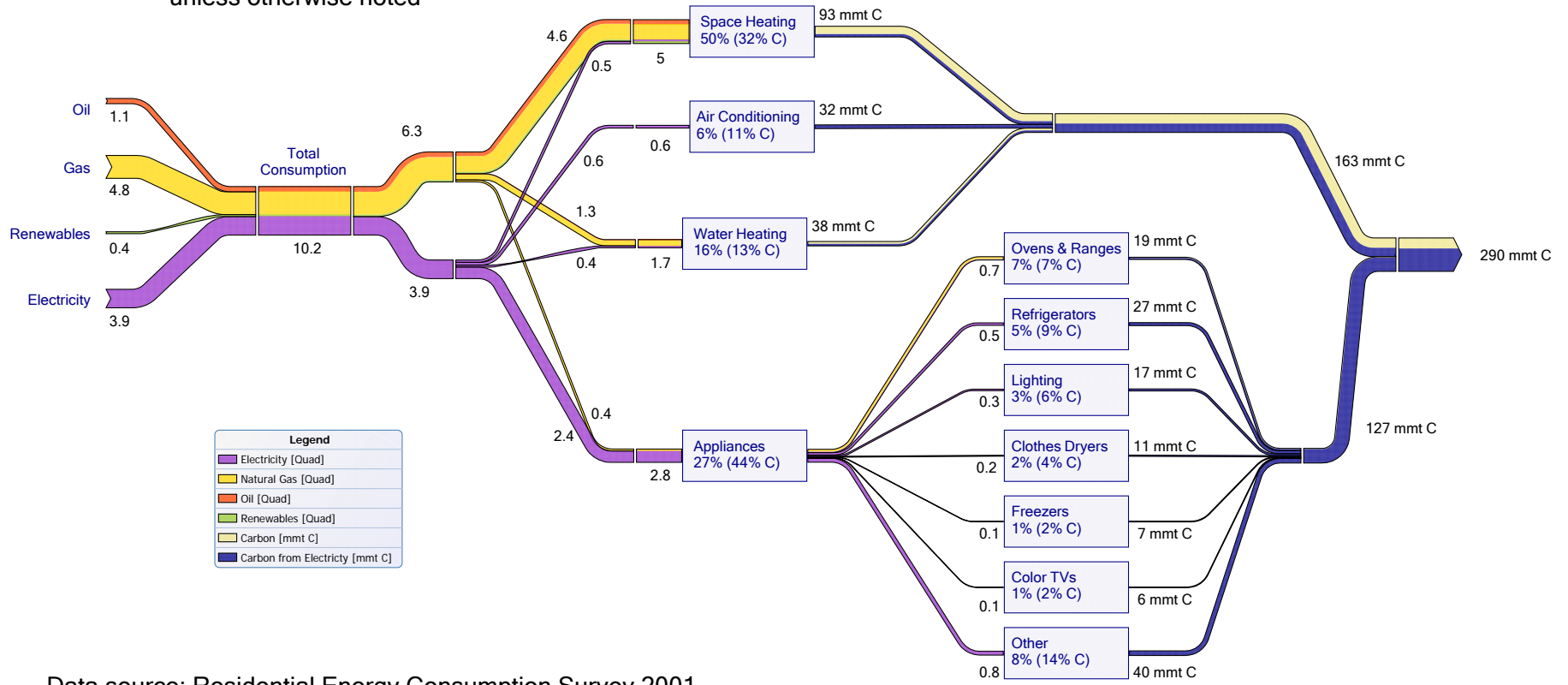
Data source: Annual Energy Review 2006, Energy Information Administration

# Electric Sector Capacity Utilization 2006



# US Residential Energy Consumption 2001

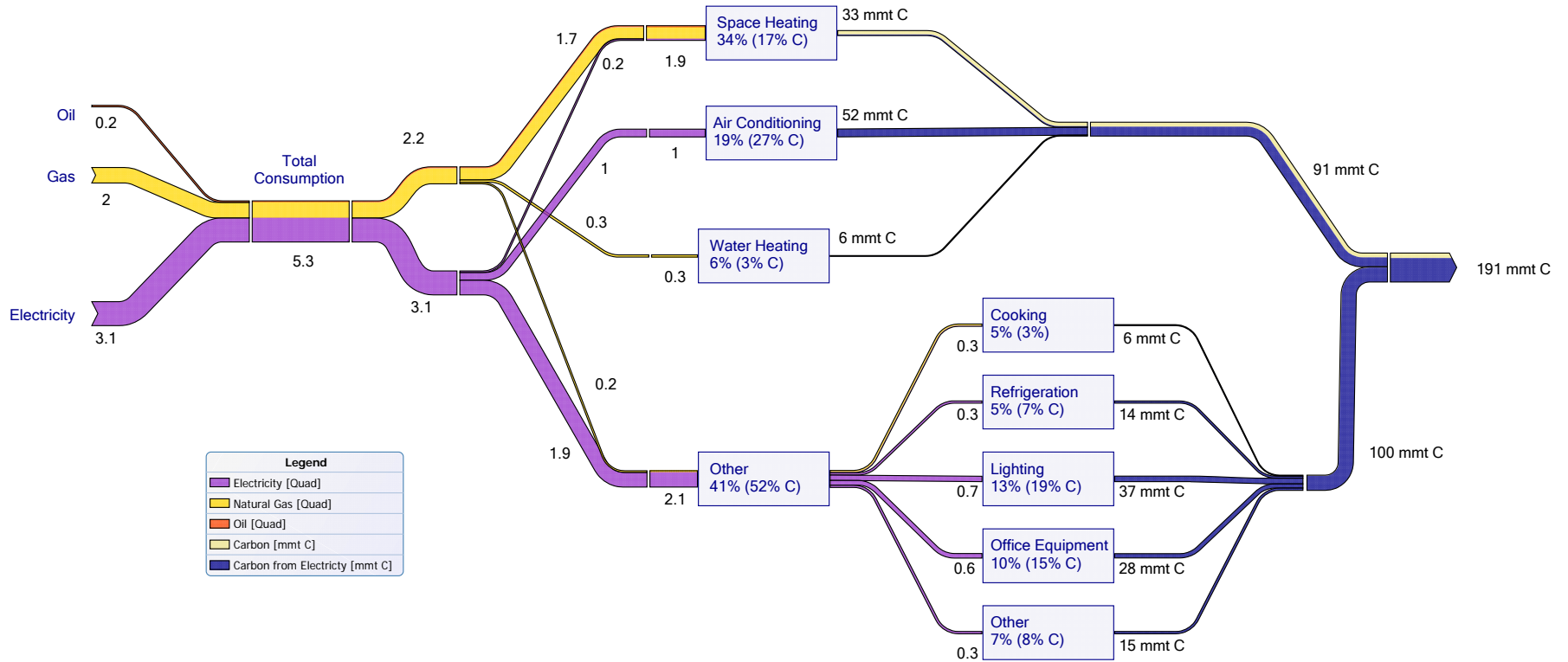
Values in quadrillion BTU  
unless otherwise noted



Data source: Residential Energy Consumption Survey 2001

# US Commercial Building Energy Consumption 1999

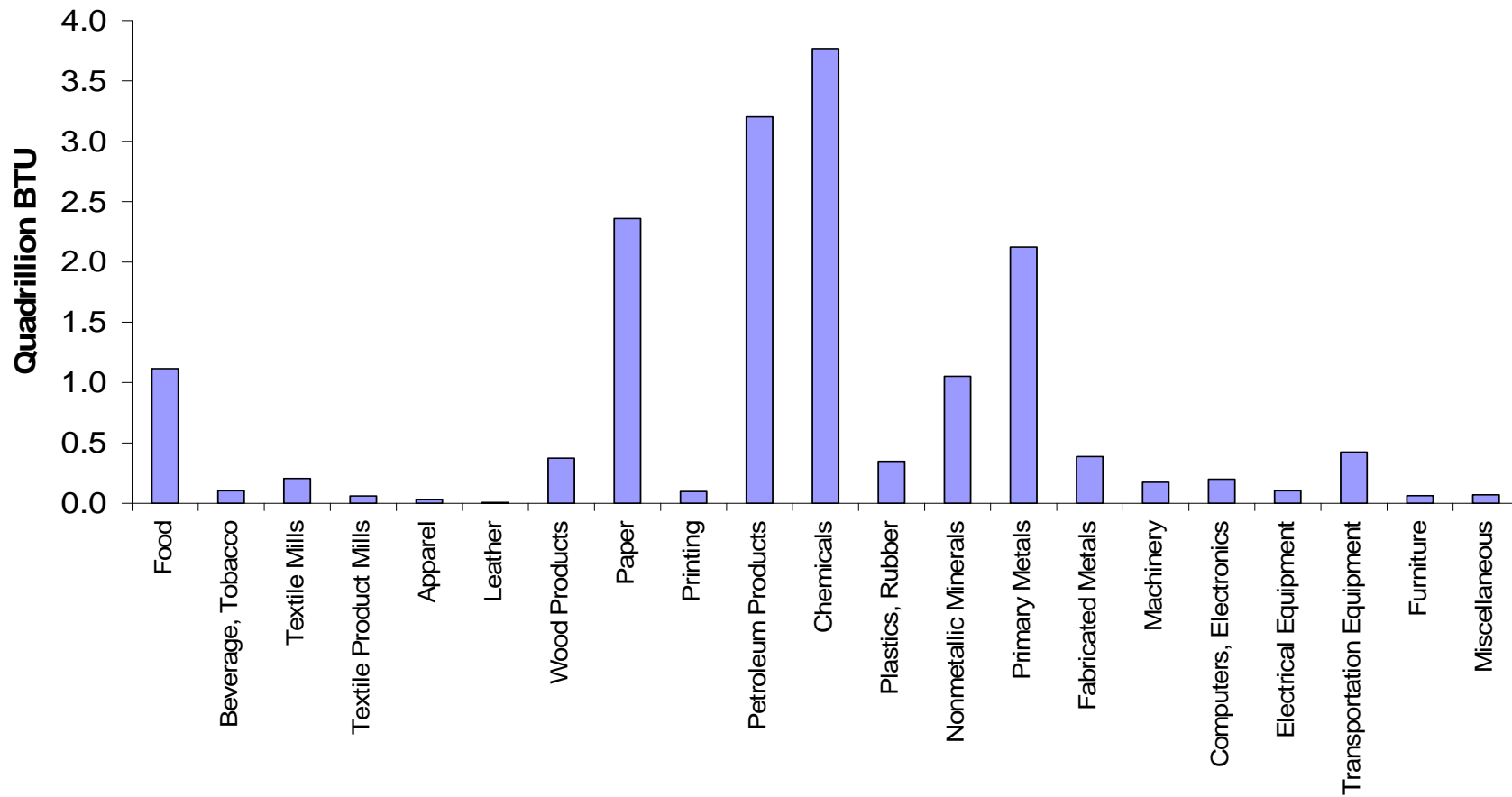
Values in quadrillion BTU  
unless otherwise noted



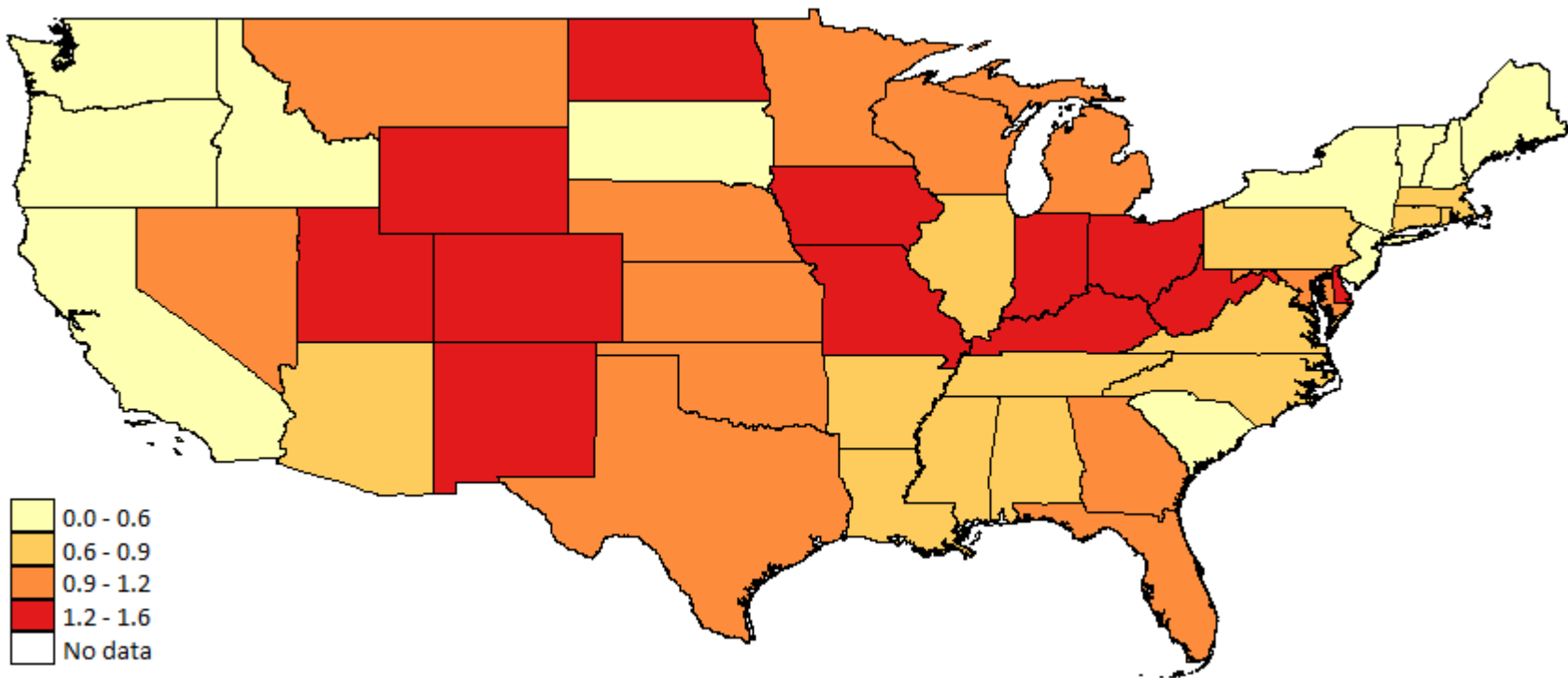
Data source: Residential Energy Consumption Survey 2001



## US Manufacturing Energy Consumption, 2002



## Cents per kWh due to a \$15 CO2 fee



National average price is now about 9 cents per kWh