

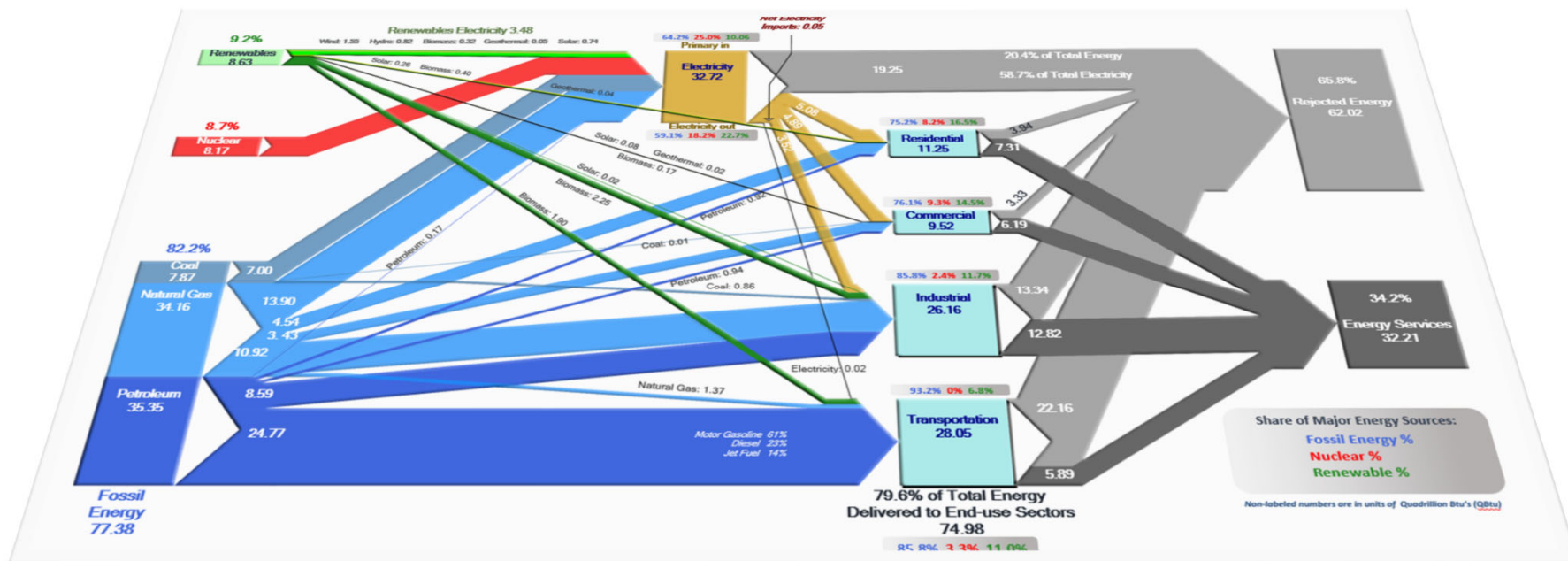
# NETL Energy Related Diagrams

2024 Edition



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Strategic Systems Analysis & Engineering



DOE/DOE/NETL-2025/4931

# U.S. Fossil Energy Production and Trade 2024

## Imports

**Petroleum**  
18 QBtu  
3.0 Billion Barrels

Petroleum Products 21%  
Crude Oil 79%

**Coal**  
0.04 QBtu  
2.0 Million Tons

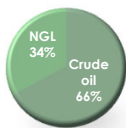
49% from Colombia

**Natural Gas**  
3.2 QBtu  
3.1 TCF

99% from Canada

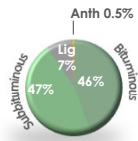
## Production

### Petroleum



**36.5QBtu**  
7.4 Billion Barrels

### Coal



**10.3 QBtu**  
512 Million Tons

### Natural Gas (dry)



**39.2 QBtu**  
38 TCF

**Unconventional Gas**  
Shale gas 85%  
Tight gas 13%  
Coalbed Methane 2%

Approximate Heat Content

	Imports	Production	Exports
<b>Petroleum</b>			
Crude oil	6.1 mmBtu/Barrel	5.7 mmBtu/Barrel	5.7 mmBtu/Barrel
Petro. Products	5.5	none	5.1
NGL	none	3.7	None
<b>Coal</b>			
	21.5 mmBtu/Ton	20.0 mmBtu/Ton	24.6 mmBtu/Ton
<b>Natural Gas</b>			
	1,025 Btu/FP	1,036 Btu/FP	1,009 Btu/FP

## Legend

- Eastern Coal
- Interior Coal
- Western Coal
- Major Shale Play
- Oil/Gas Field
- Shale-Coal Overlap
- Shale-Oil/Gas Overlap

## Gross Heating Values

LNG	22,300 Btu/lb
Gasoline	20,500 Btu/lb
Crude Oil	18,300-19,500 Btu/lb
Coal (Bituminous)	10,200 – 14,600 Btu/lb
Ethanol	11,600 Btu/lb

1 ton LNG ~ 44,192 ft<sup>3</sup> ~ 47 million Btu

## Exports

**Petroleum**  
20.6 QBtu  
3.9 Billion Barrels

Petroleum Products 62%  
Crude Oil 38%

**Coal**  
2.6 QBtu  
108 Million Tons

Metallurgical Coal 53%  
Steam Coal 47%

**Natural Gas**  
7.8 QBtu  
7.7 TCF

Data Sources: EIA Monthly Energy Review (March 2025)  
EIA Annual Energy Outlook 2024

Petroleum = Crude Oil + Petroleum Products + Natural Gas Liquids (NGL)

Anth = Anthracite, Lig = Lignite, TCF = Trillion Cubic Feet, QBtu = Quadrillion British Thermal Units, Mtoe = Million Tonnes Oil Equivalent

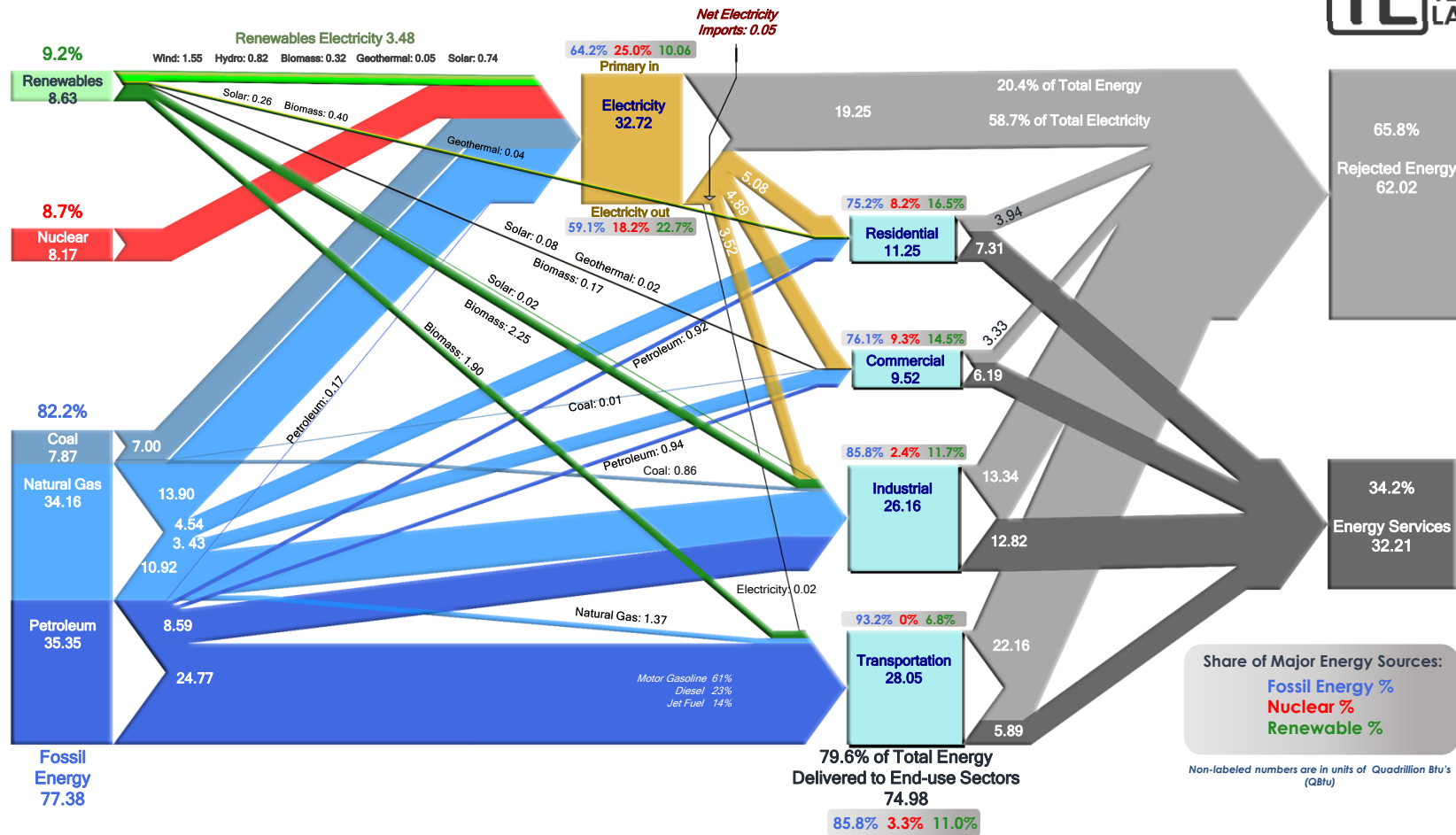
All percent values are based off specific fuel units (not QBtu) | Crude Oil/Petro Products percentages based on Barrels | Metallurgical/Steam Coal percentages based on Tons

SSAE 4/12/2025



# Estimated U.S. Energy Consumption in 2024: 94.2 QBTu

## Contributions of Major Energy Sources



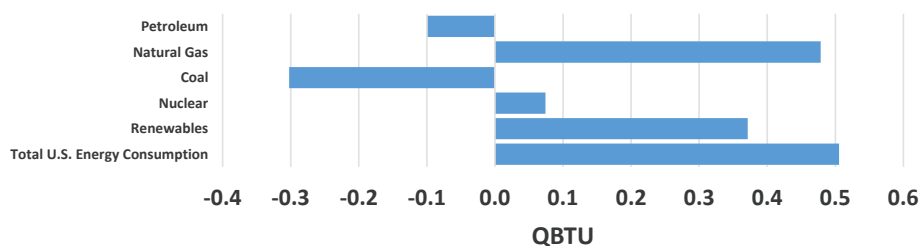
# Changes in Energy Consumption



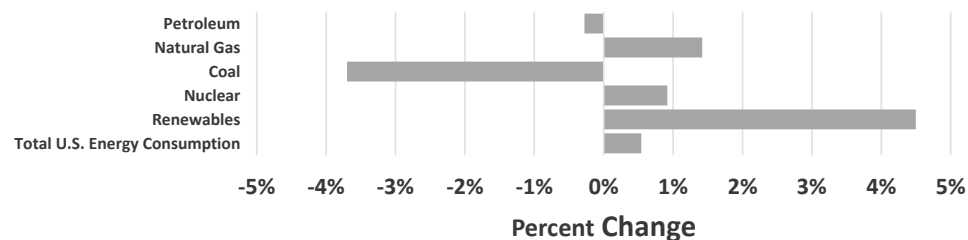
2023 - 2024

## Energy - Primary Fuel Consumption

Change in Primary Energy Consumption  
2023 - 2024

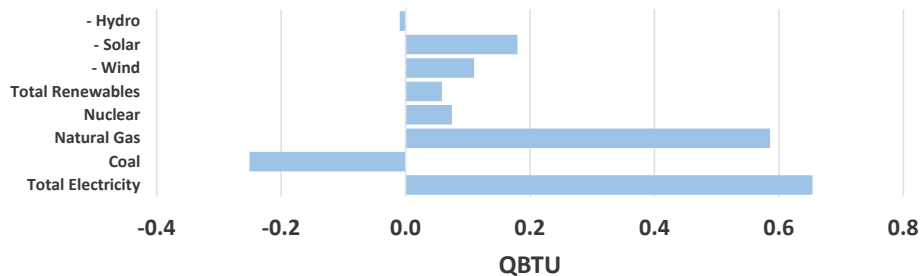


% Change in Primary Energy Consumption  
2023 - 2024

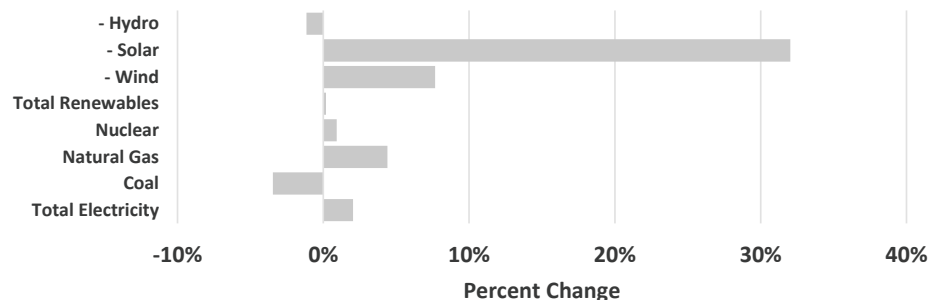


## Electricity – Fuel Consumption

Change in Fuel Consumption for  
Electricity Generation 2023 - 2024



% Change in Fuel Consumption for  
Electricity Generation 2023 - 2024



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