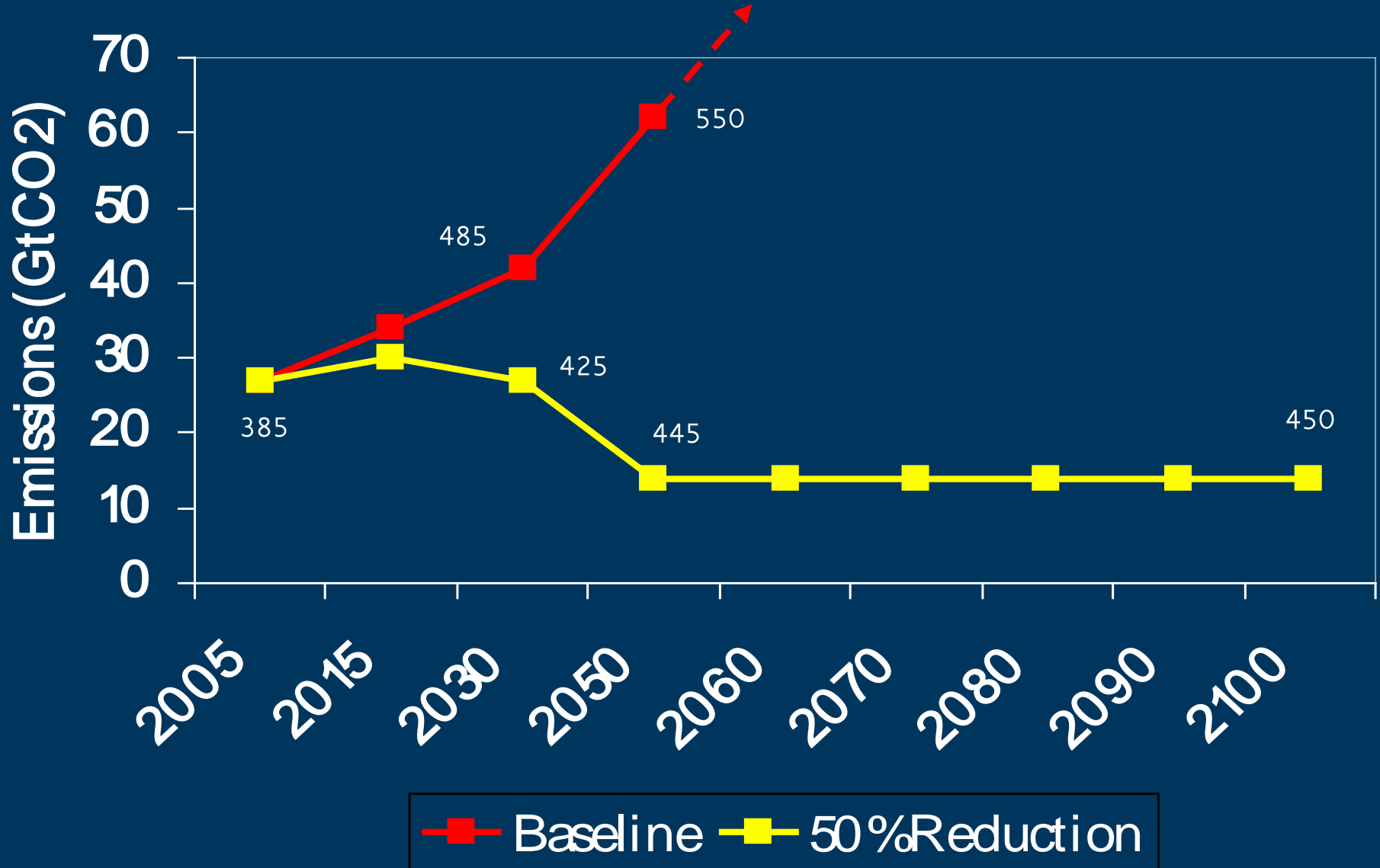


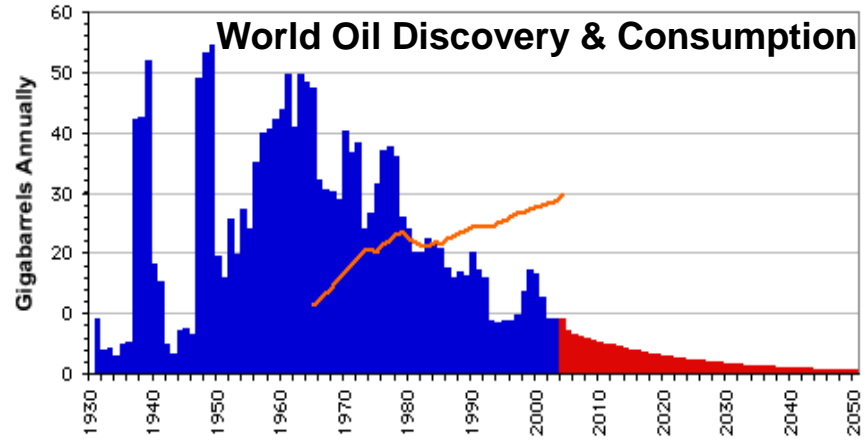
Stabilizing at 450 ppm CO₂

Global; International Energy Agency 2008

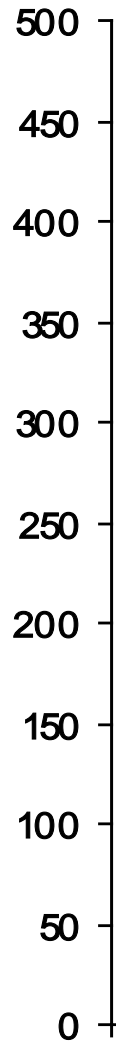


Billions of Dollars

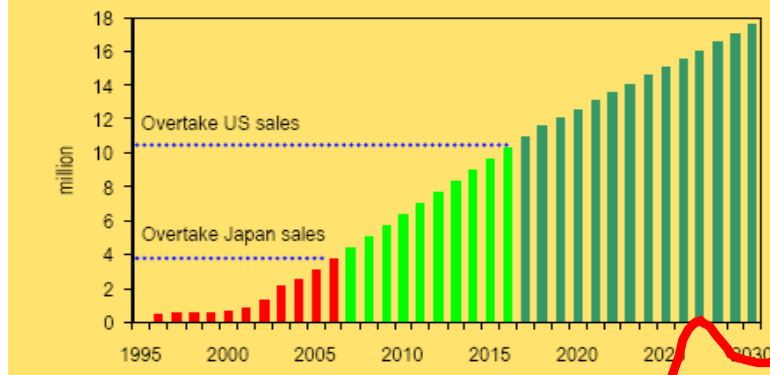
Past Future Consumption



Cost of U.S. Petroleum Imports

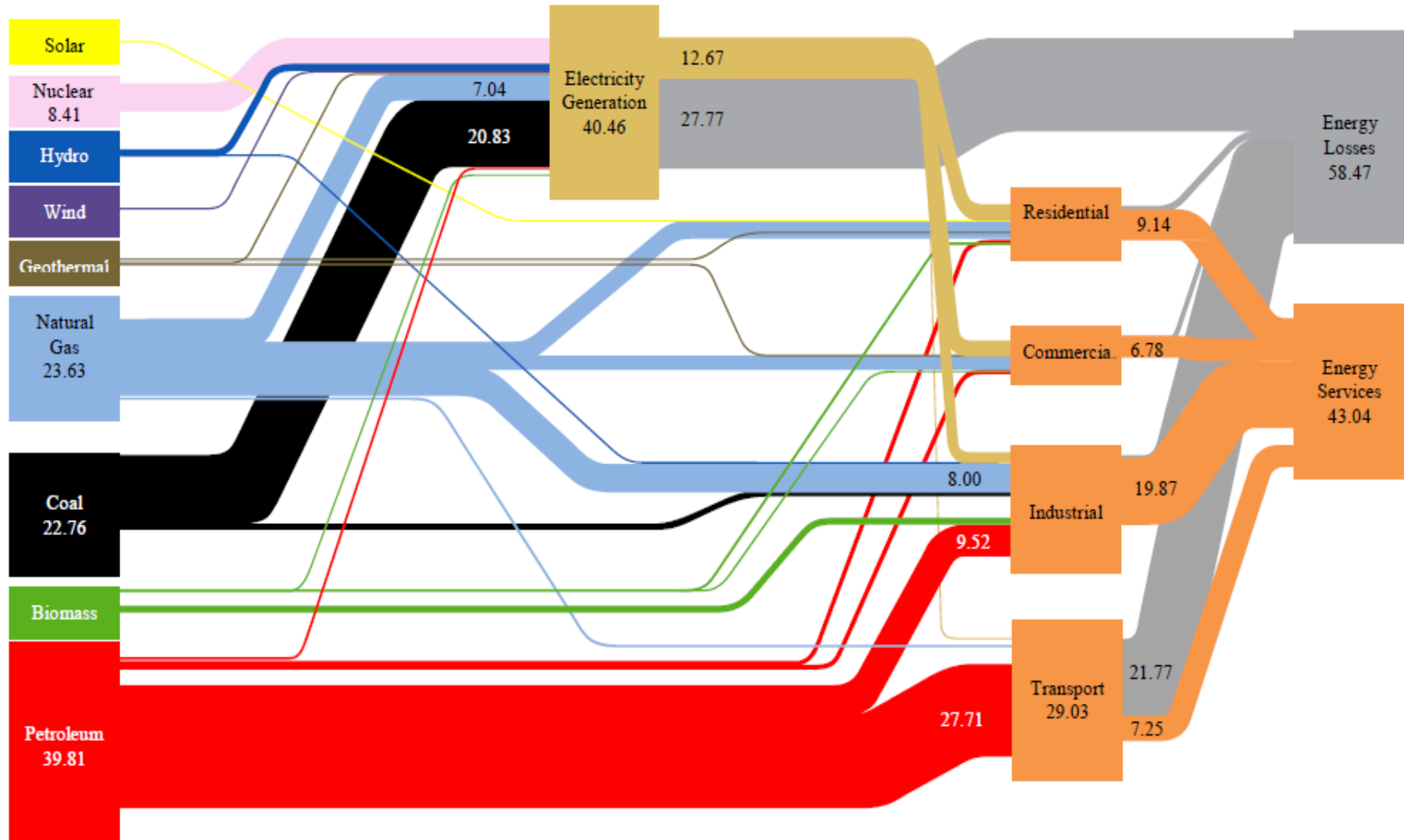


New Light-Duty Vehicle Sales in China



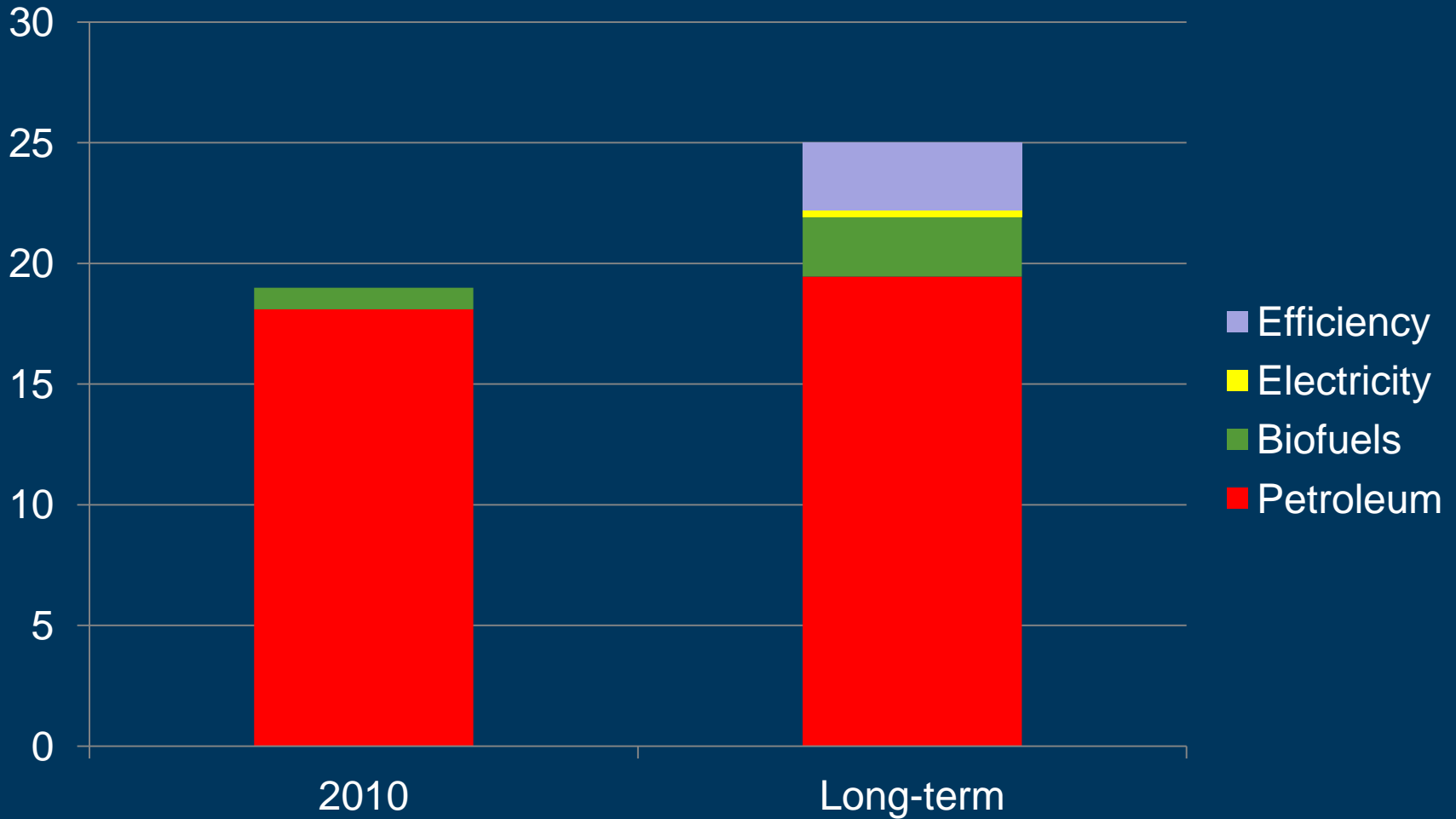
Energy Services

2008 Quadrillion Btu's/System Percentage



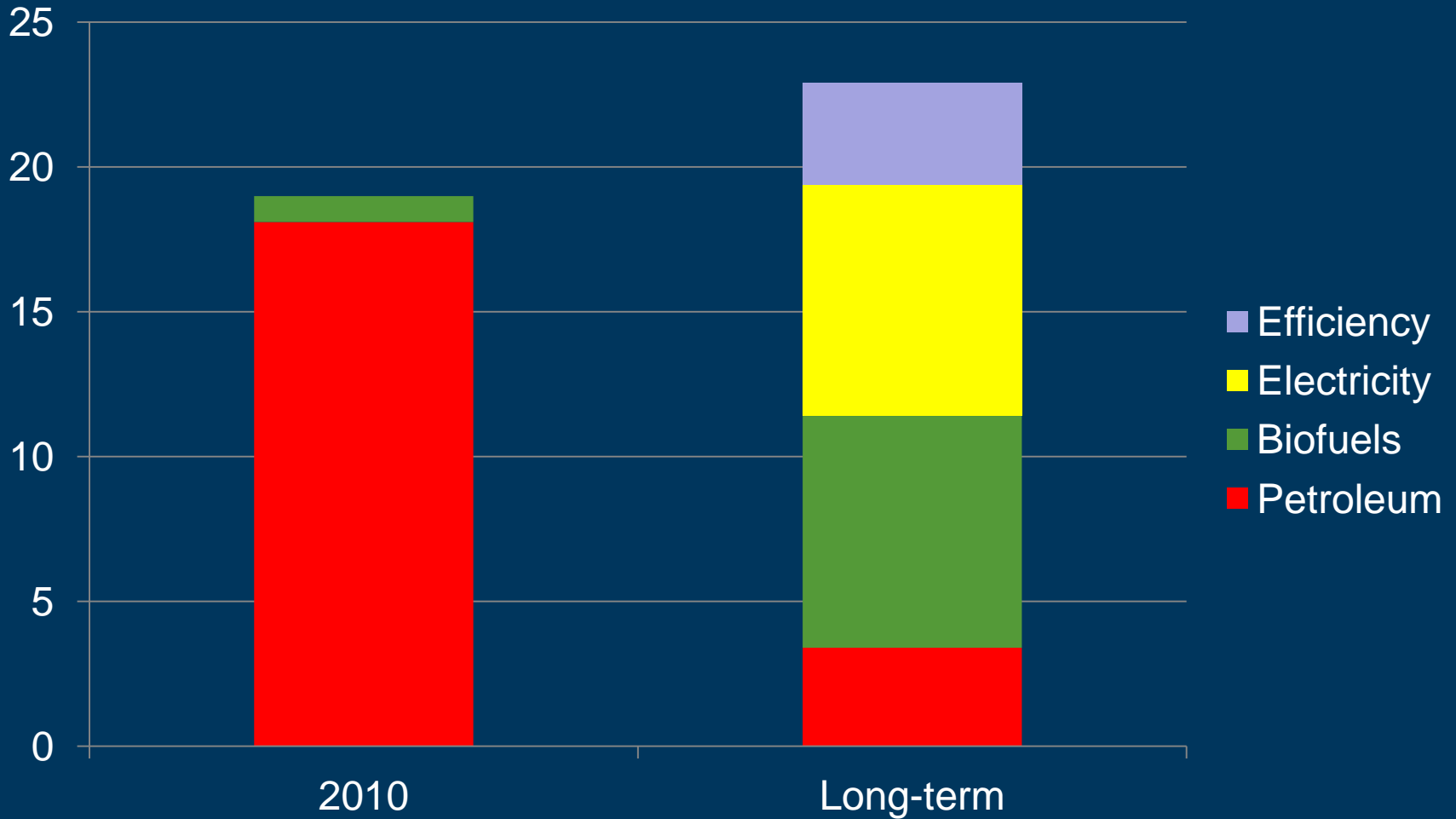
Transportation Energy Projection

Millions of Barrels per Day



Low Carbon Transportation Energy

Millions of Barrels per Day





Electric Power Generation

Terawatt Hours/Year

6000

5000

4000

3000

2000

1000

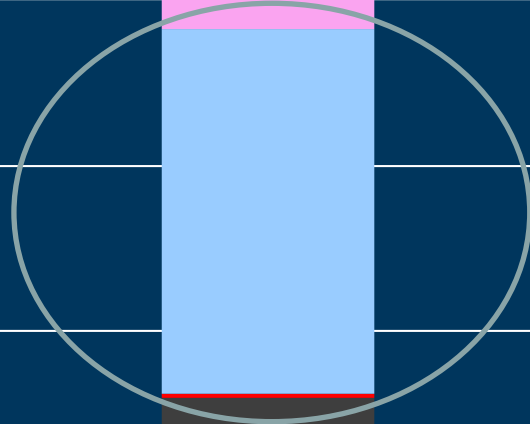
0

2010

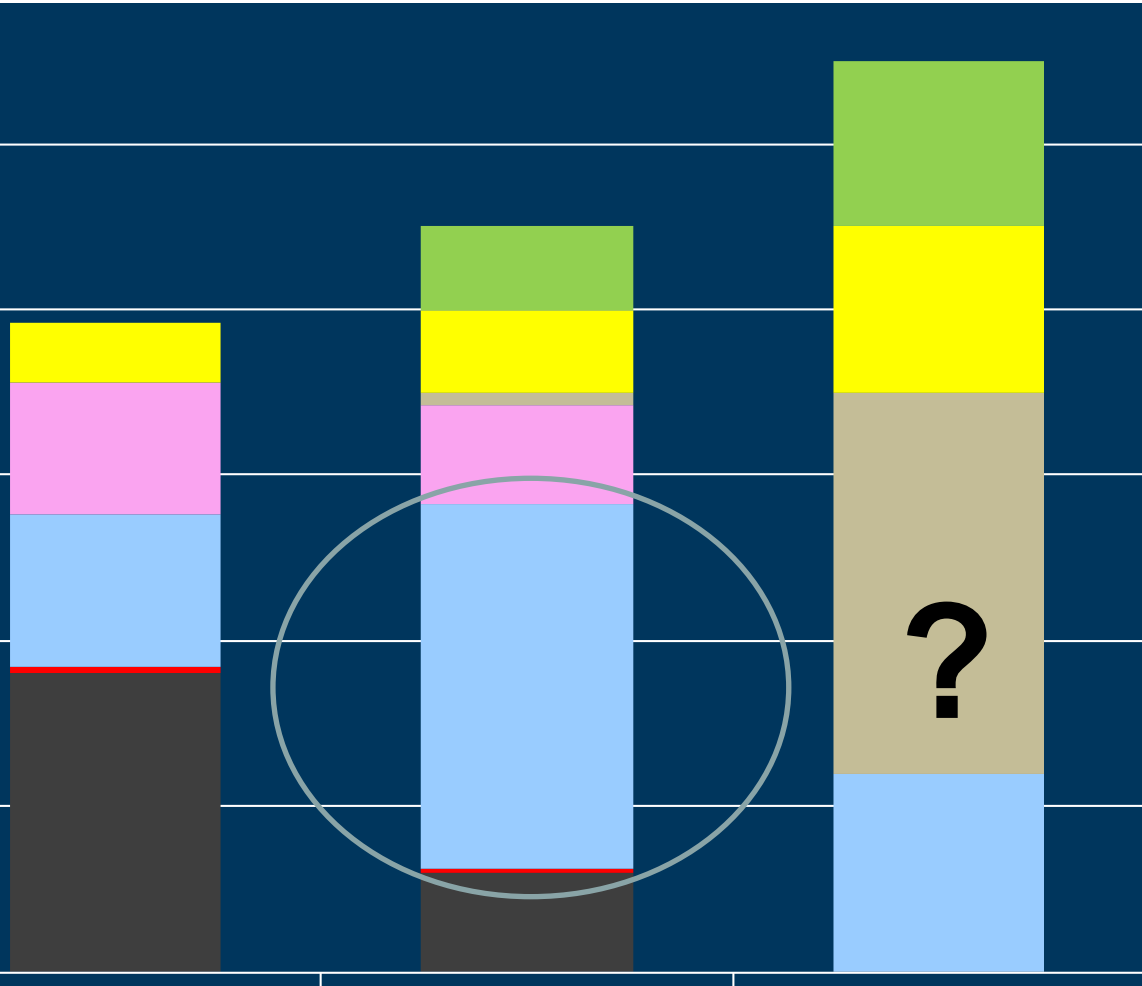
Transition

2035

- Efficiency
- Renewable
- New Technology
- Nuclear
- Natural Gas
- Petroleum
- Coal



?

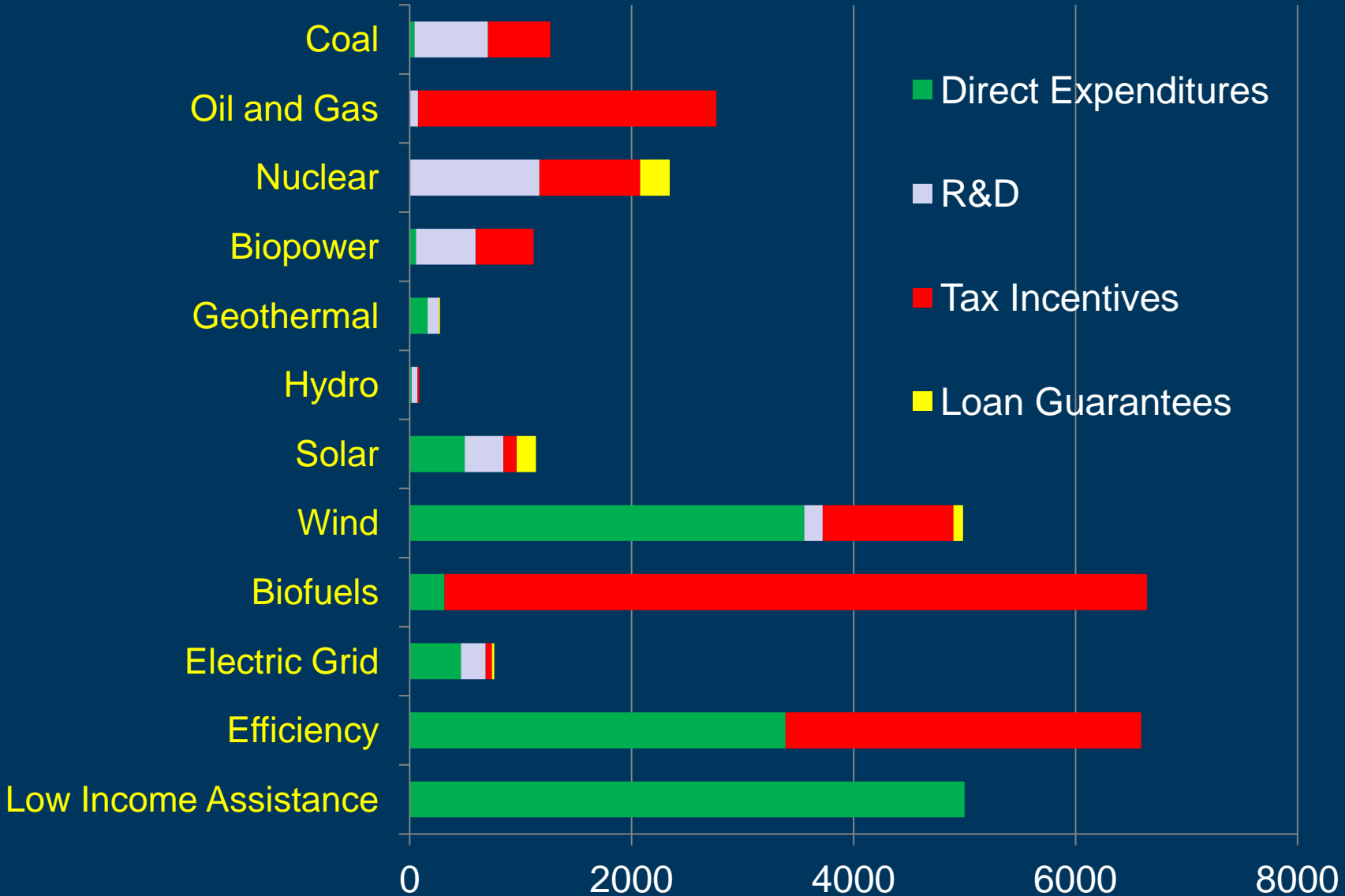


Low Carbon Power Options

- Fossil fuels with carbon capture and sequestration
- New, inherently safer and modular, nuclear technology
- Solar and wind with energy storage
- Deep geothermal energy

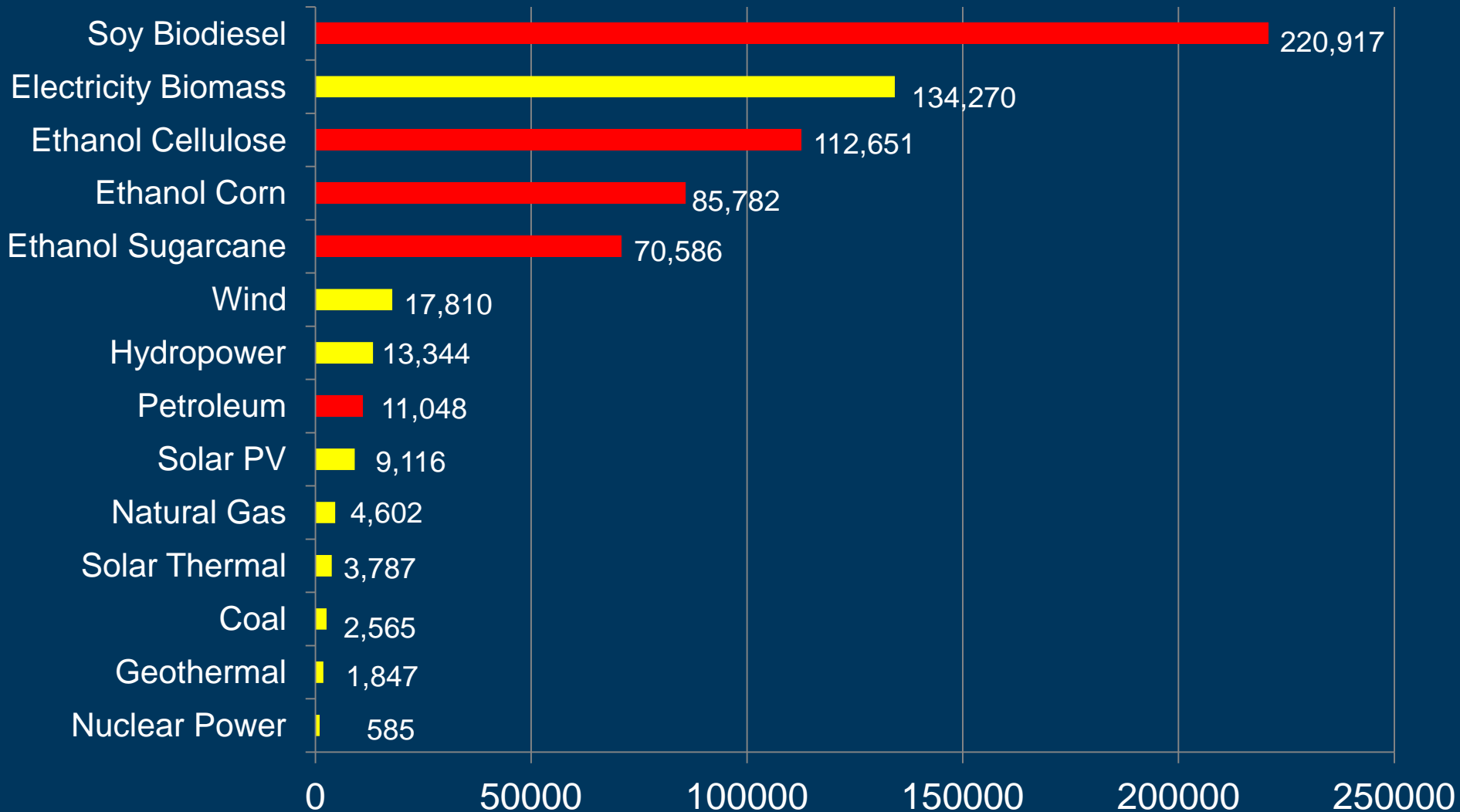
2010 Federal Energy Subsidies = \$37B

Millions of Dollars



Energy Sprawl

Acres per Terawatt Hour



Summary: High-Level Strategies

- Put a price a greenhouse gas emissions
- Improve residential and commercial building and appliance efficiency
- Increase solar, wind and geothermal power production
- Develop new low-carbon baseload power generation technologies
- Improve vehicle fuel efficiency
- Convert urban personal vehicle fleet to electricity
- Develop low-carbon biofuel for long-distance transportation