Non-Fossil Panel Introductory Remarks

FSO Coal and Power Training

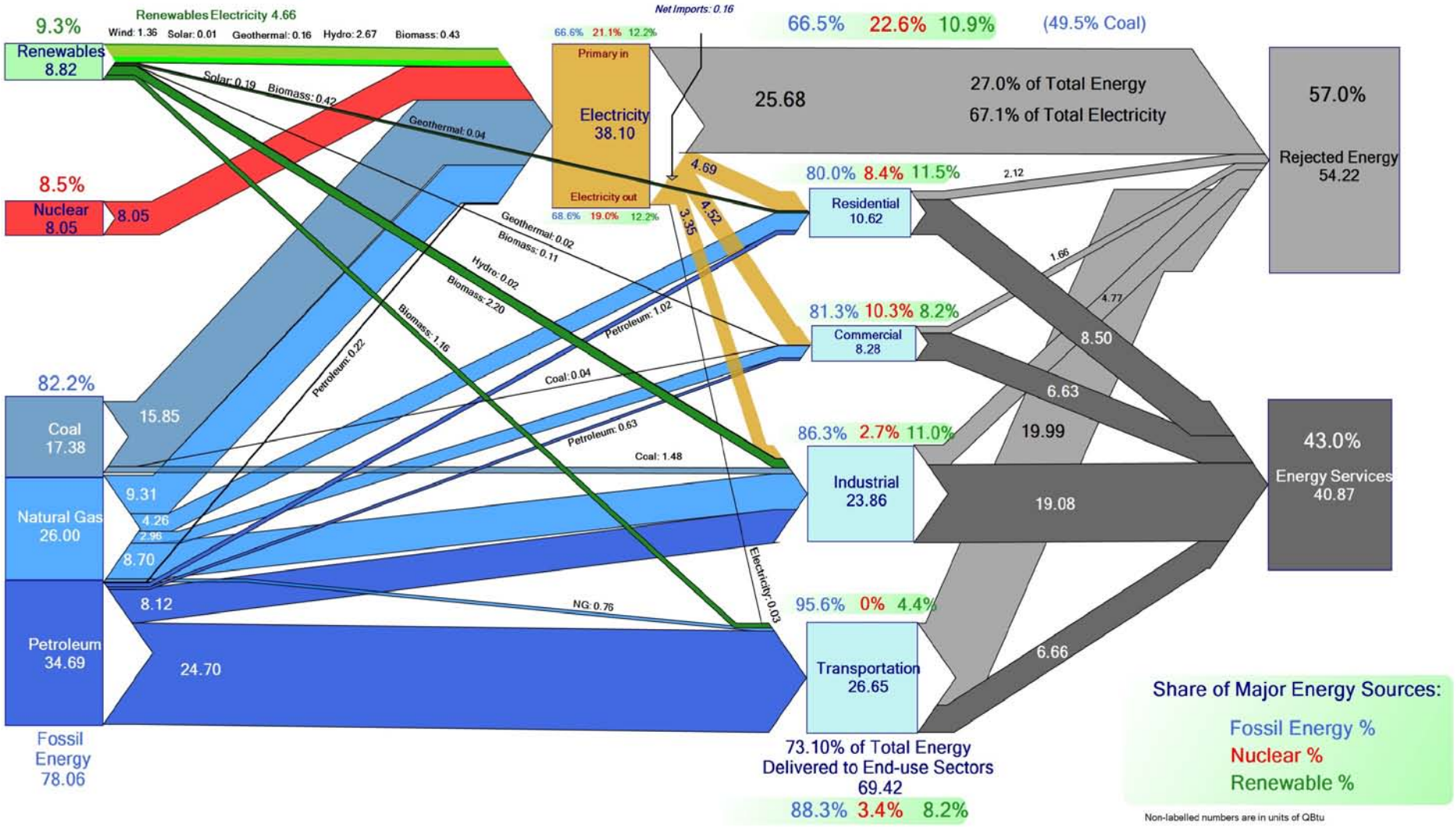
Peter C Balash, with Gavin Pickenpaugh and Erik Shuster

Strategic Energy Analysis and Planning

July 19, 2013

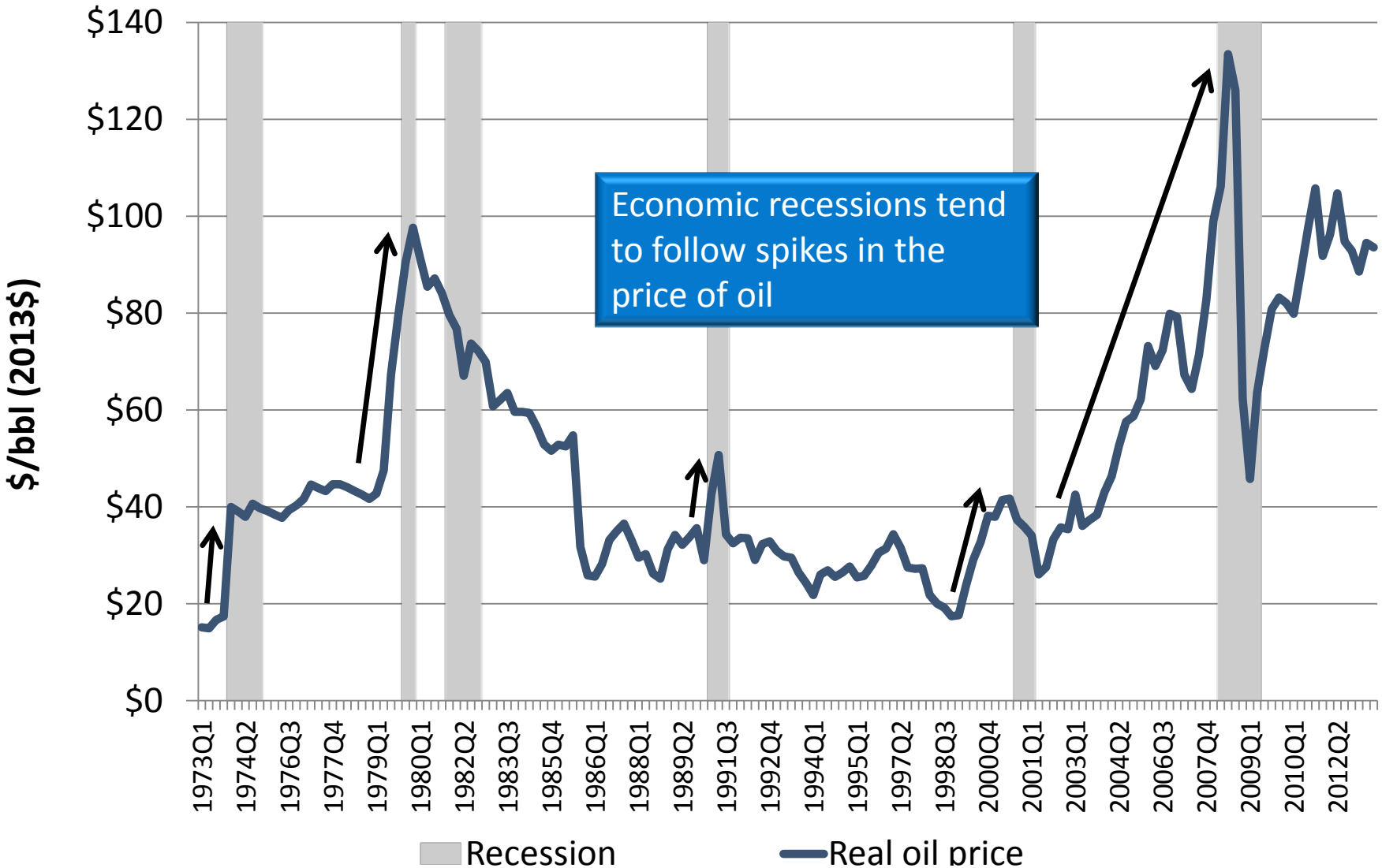
Estimated U.S. Energy Use in 2012: 95.1 Quads

Contributions of Major Energy Sources



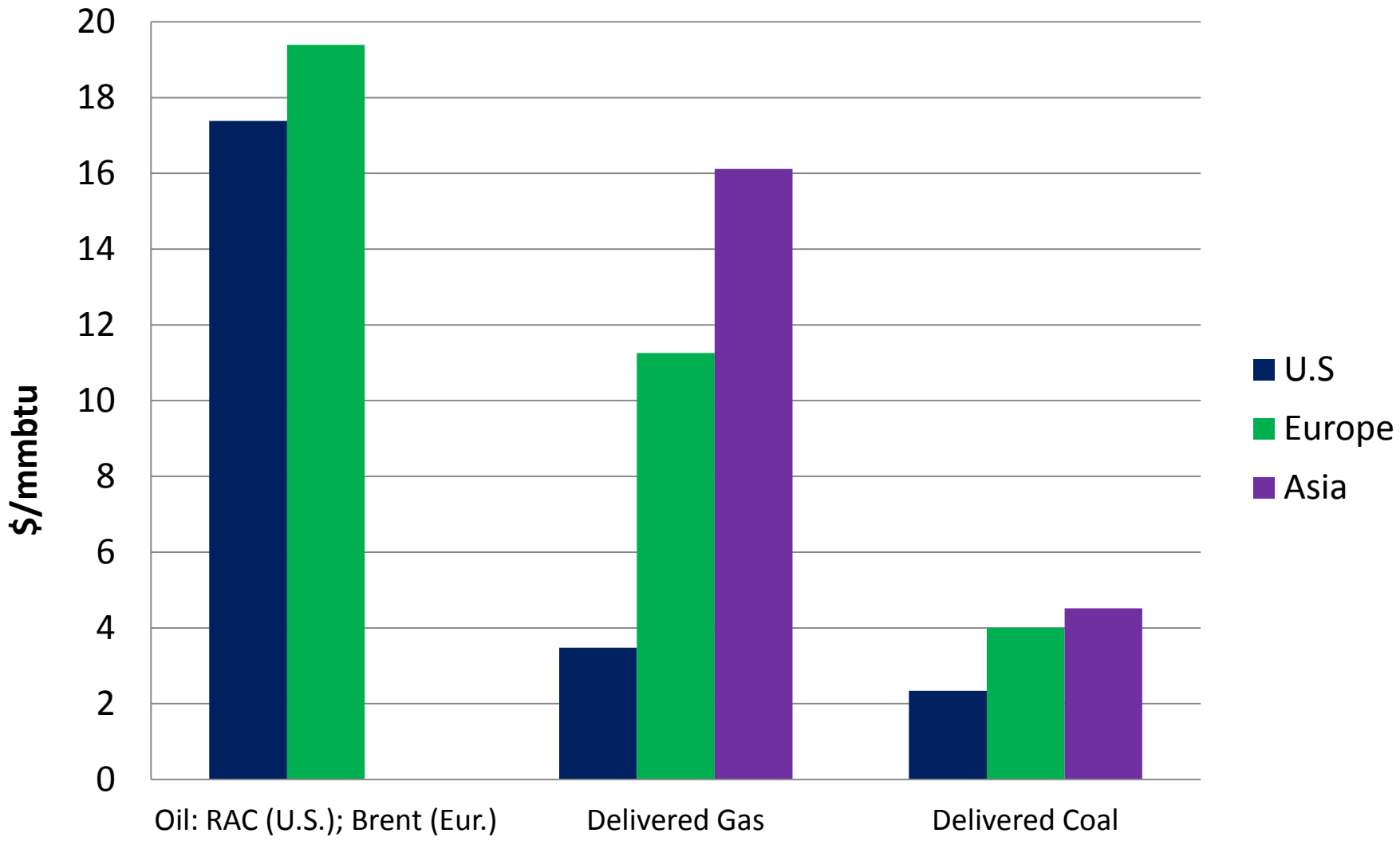
Reference: Lawrence Livermore National Laboratory (2010), Data is based on DOE/EIA-0035(2013/05);
Rearranged to segregate and accumulate totals by major energy source

Real Oil Prices and Recessions, 1973-2013Q2



Source: Federal Reserve, WTI Oil Price; EIA, Short Term Energy Outlook; US Bureau of Economic Analysis, GDP deflator

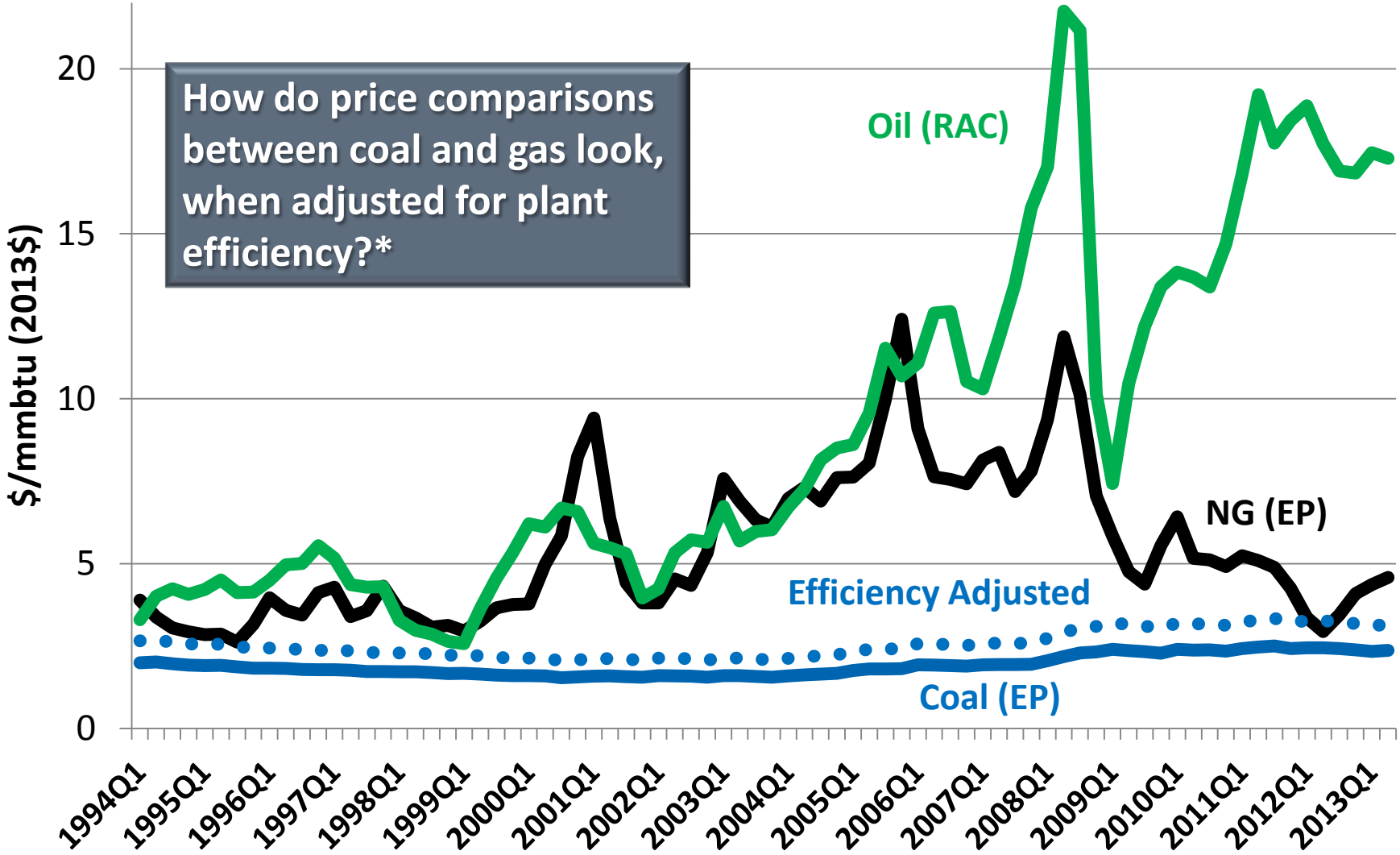
World Price Comparison (2013Q1)



Note: Asia gas price is Japan LNG price

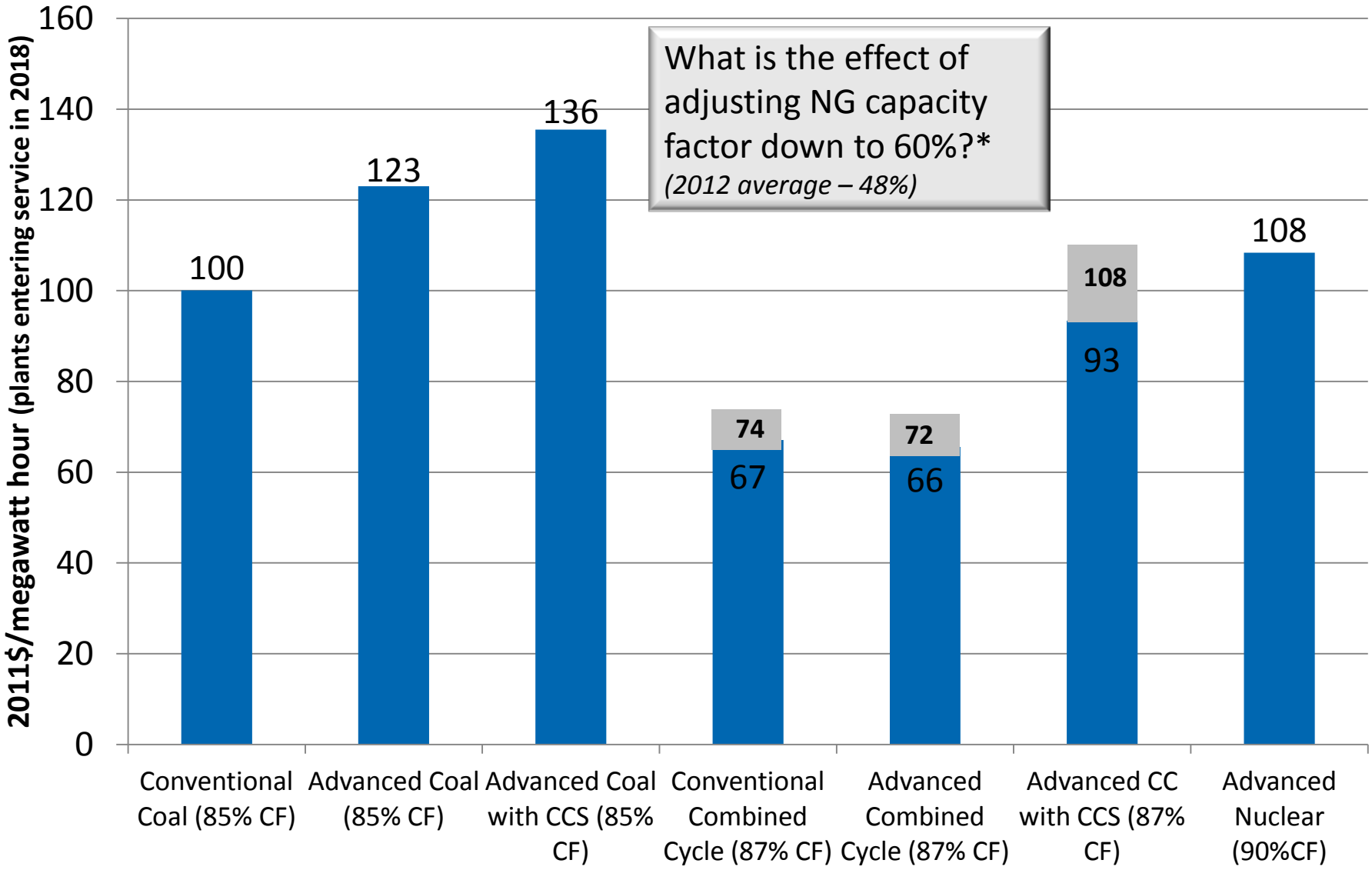
Sources: Energy Information Administration: Short Term Energy Outlook, Petroleum Marketing Monthly; IHS CERA; IHS McCloskey

Fossil Fuel Price Comparison (Delivered)



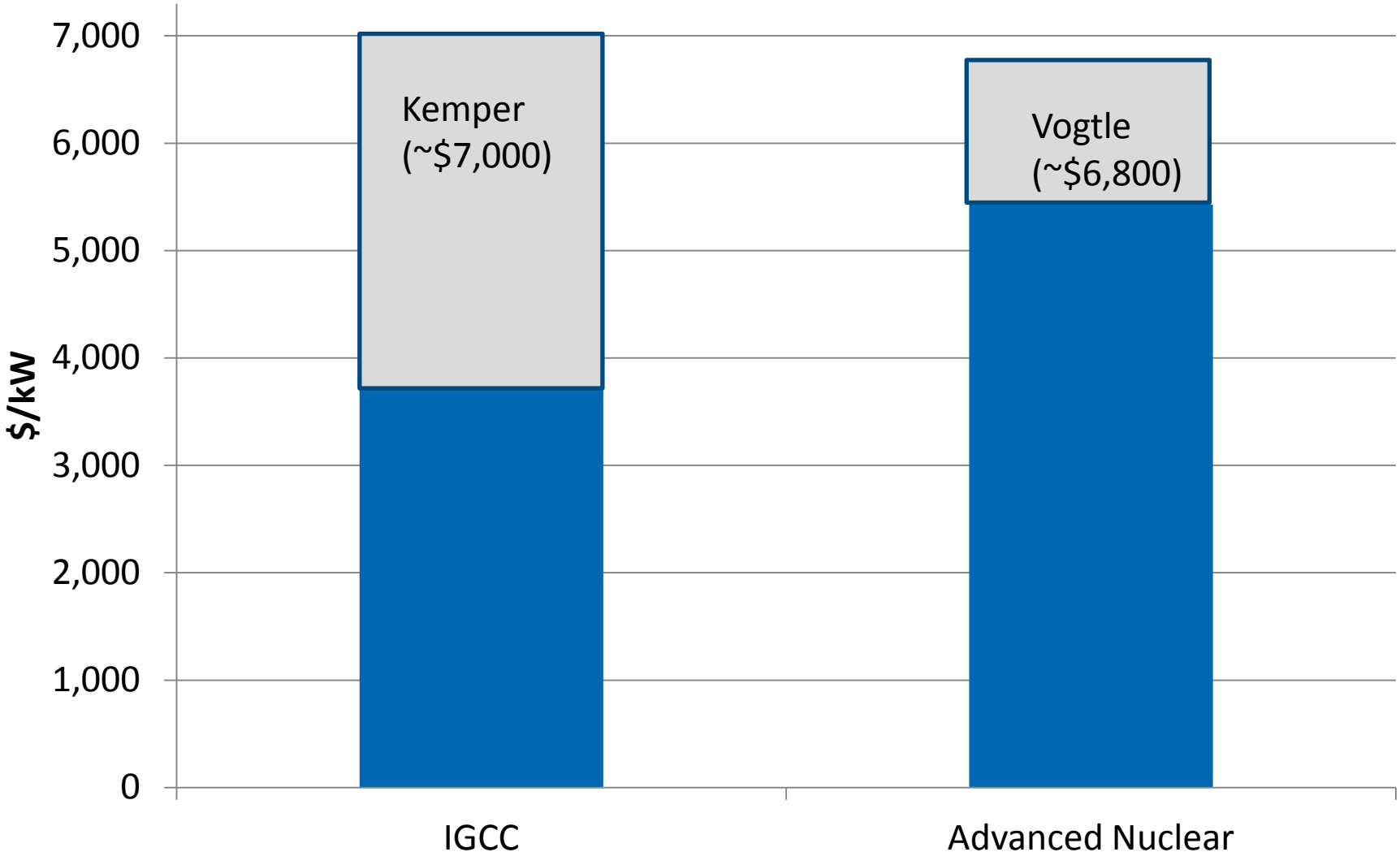
Sources: EIA, Electricity; EIA, Short Term Energy Outlook; BEA, NIPA Table 1.1.9; EP stands for Electric Power Sector Uses EIA's 2011 average tested NG combined cycle plant heat rate of 7,603 and average tested coal steam generator heat rate of 10,128, for a factor of 1.332*

Total System Levelized Cost



Sources: EIA, AEO'13; NETL, Power LCAT (for determining cost of 60% capacity factor cases by using the percent difference between a 60% CF and 87% CF and applying that to the respective EIA numbers.

Total Overnight Costs



Source: Public information