

# What is the impact of changing patterns in energy markets on EU competitiveness?

## A refining industry perspective

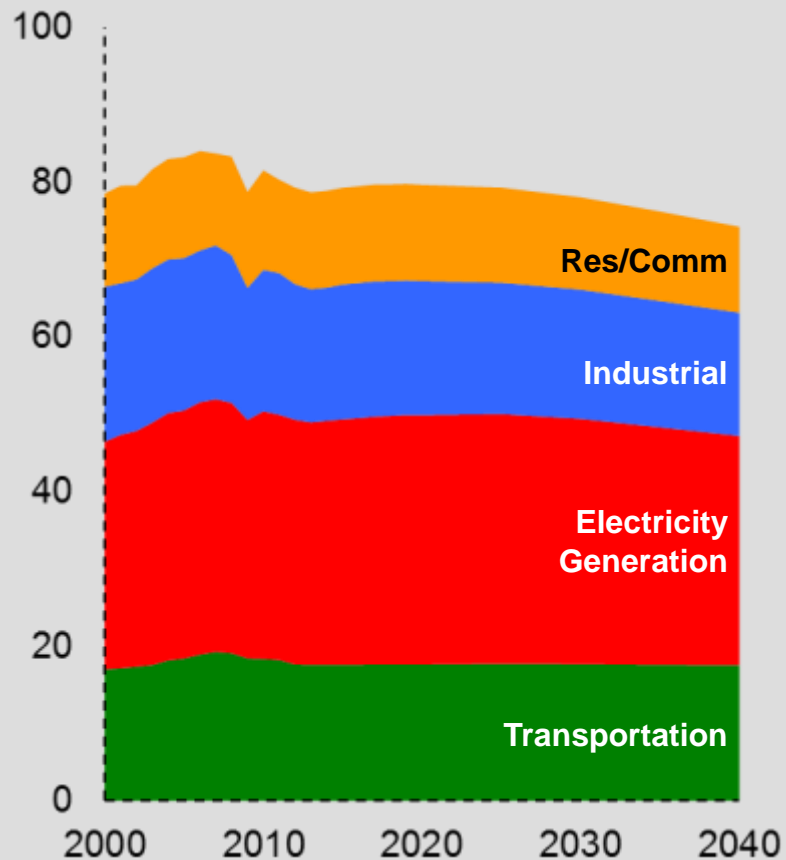
Energy transition: A multifaceted Challenge for Europe  
1<sup>st</sup> Symposium, Brussels, 30 April 2014

Baudouin Kelecom, ExxonMobil

# Europe Energy Demand and Supply

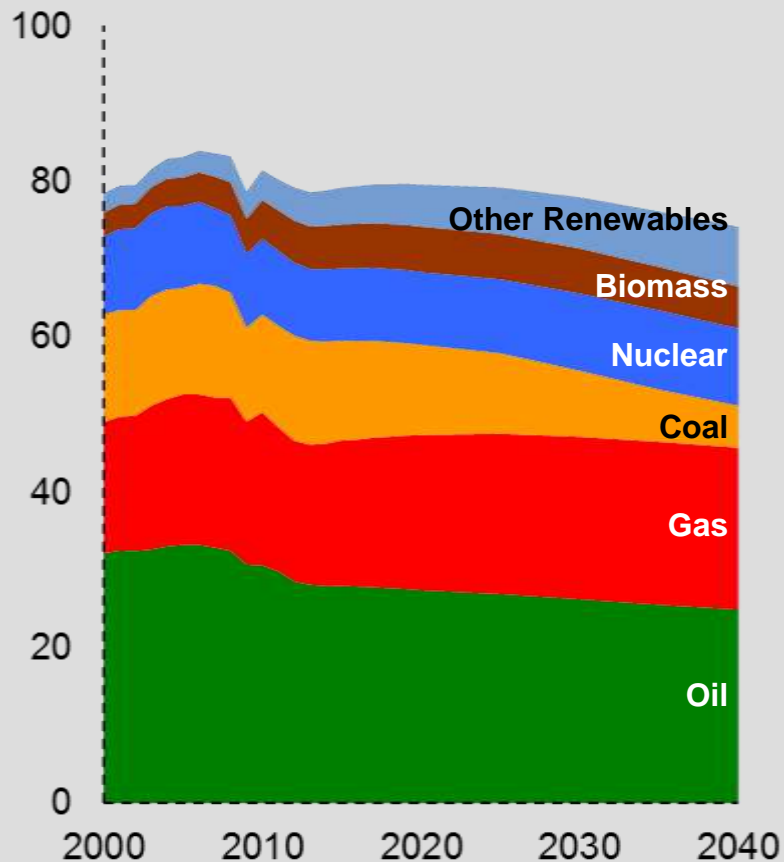
## By Sector

Quadrillion BTUs



## By Fuel

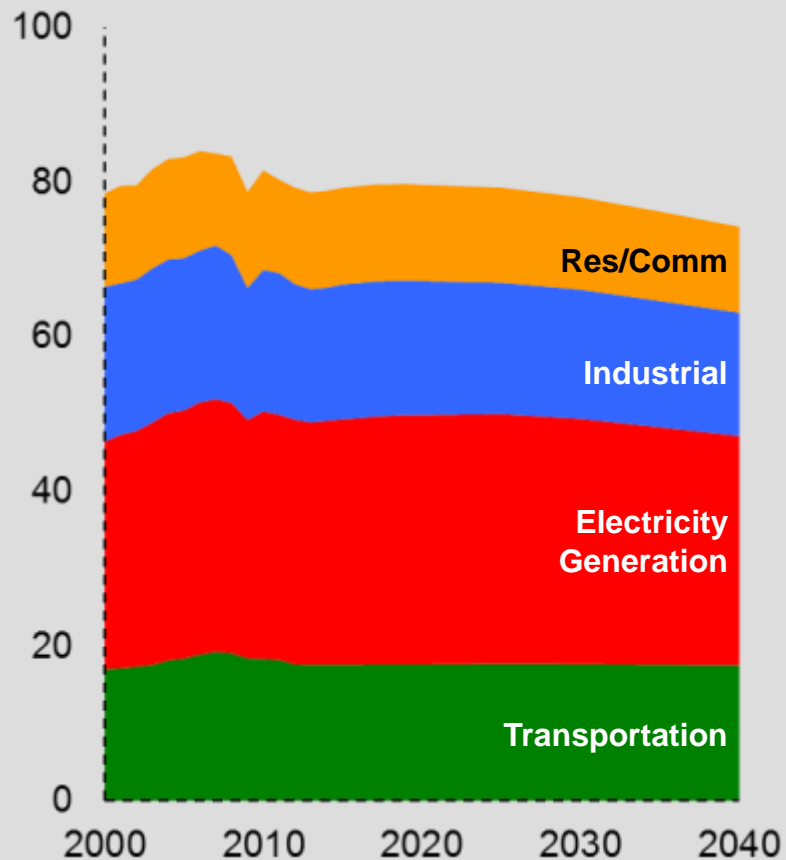
Quadrillion BTUs



# Europe Energy-Related CO<sub>2</sub> Emissions

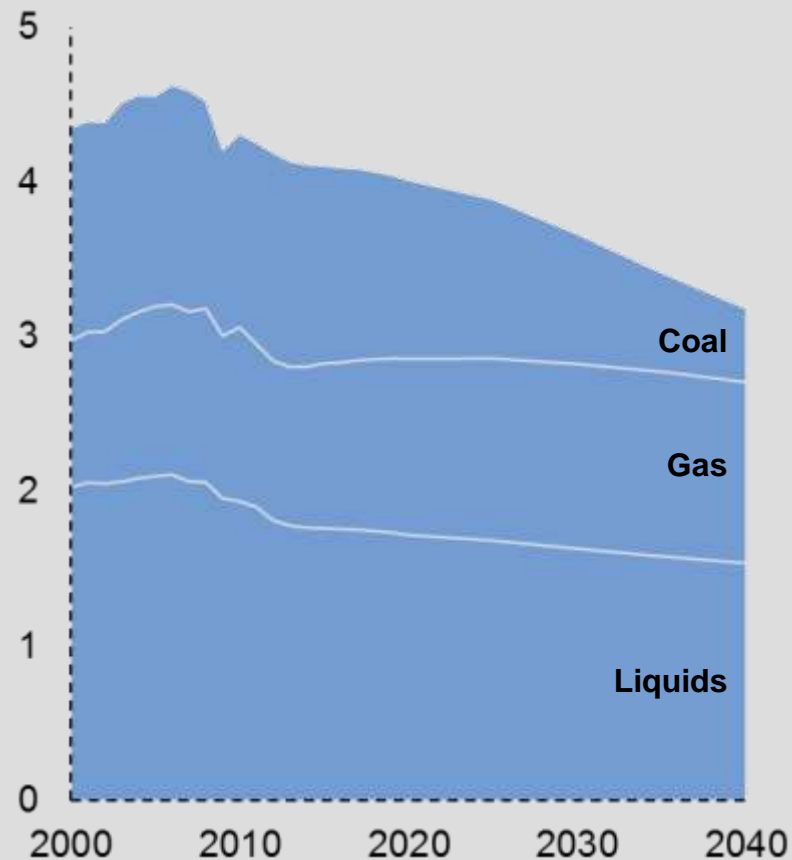
## By Sector

Quadrillion BTUs



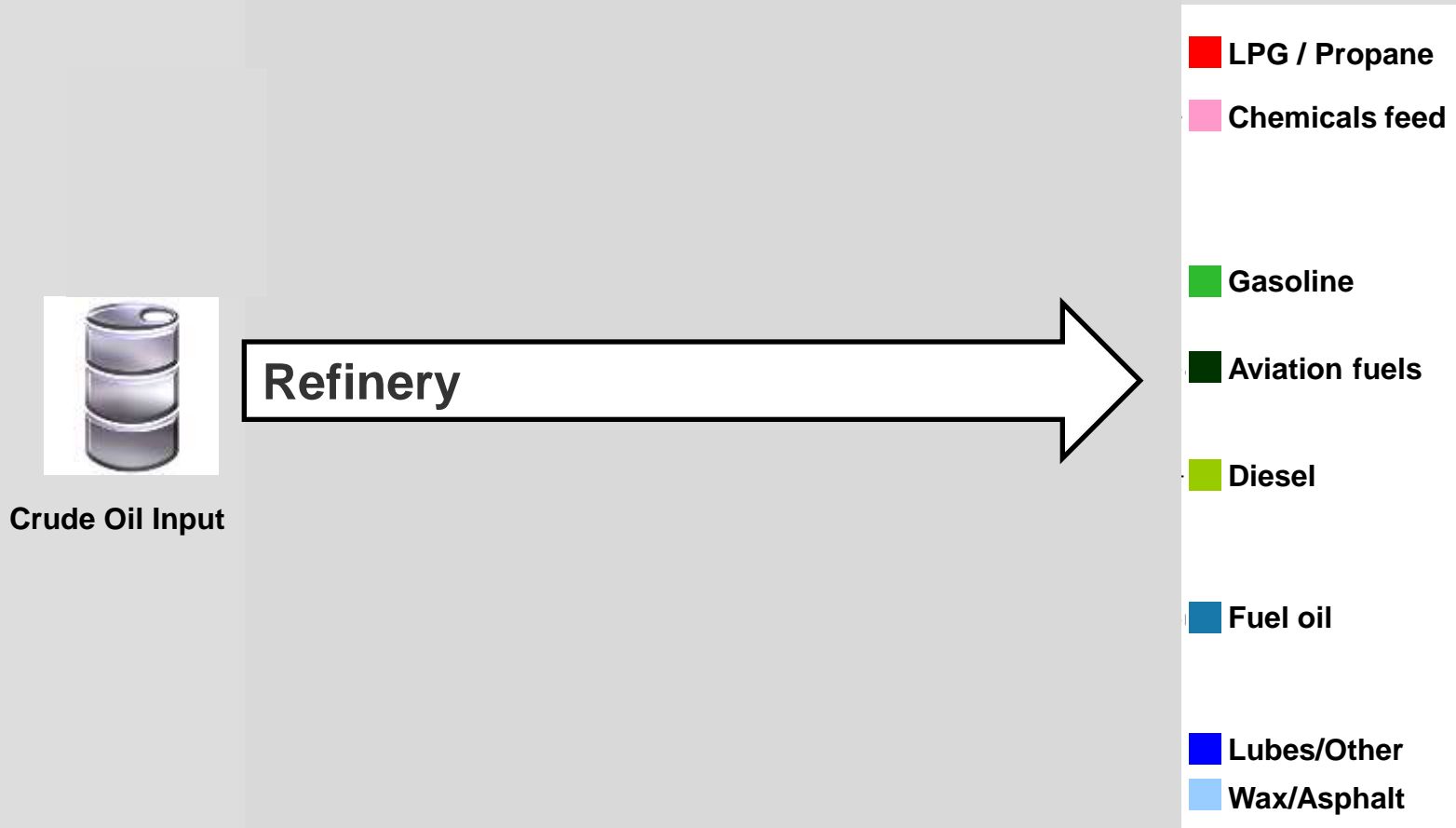
## By Fuel

Billion Tonnes



# Refining Converts Oil Into Many Products

Refining: Link between crude oil production and products demand

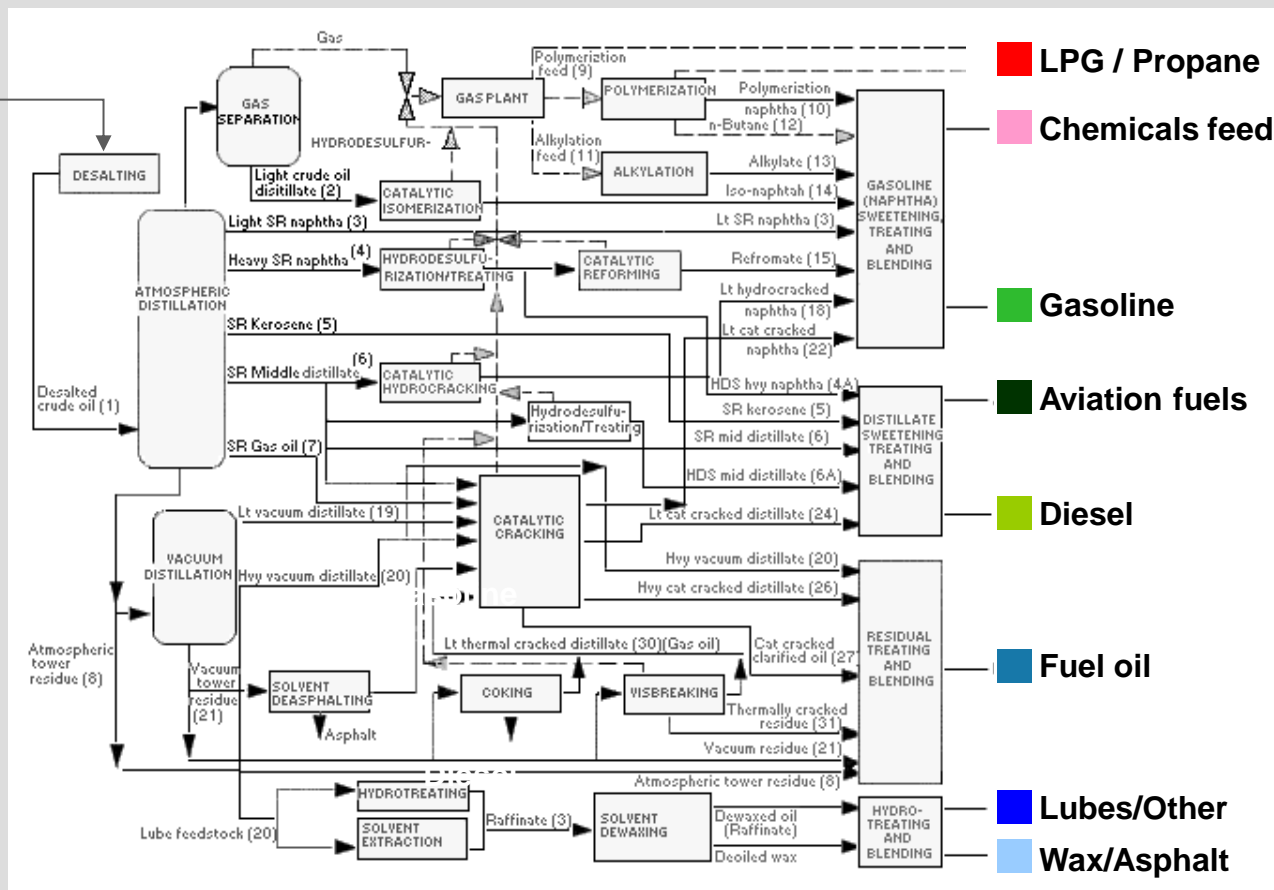


# Refining Converts Oil Into Many Products

Refining: Link between crude oil production and products demand

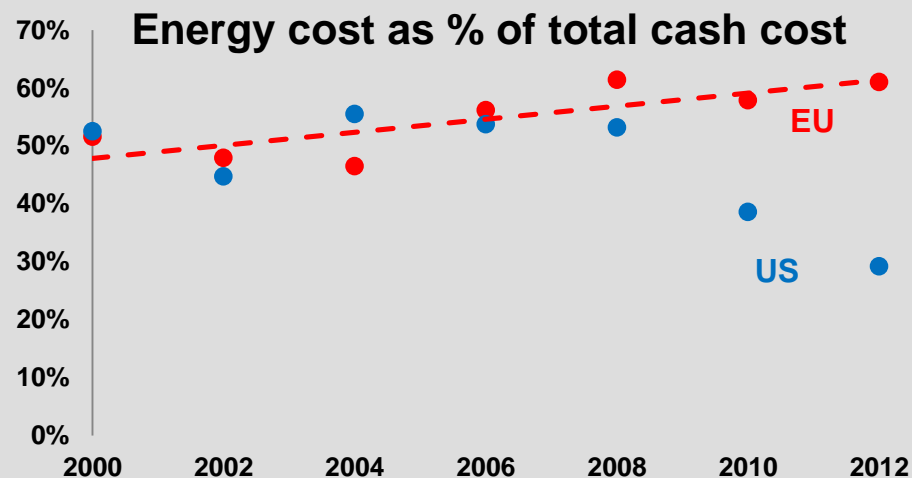
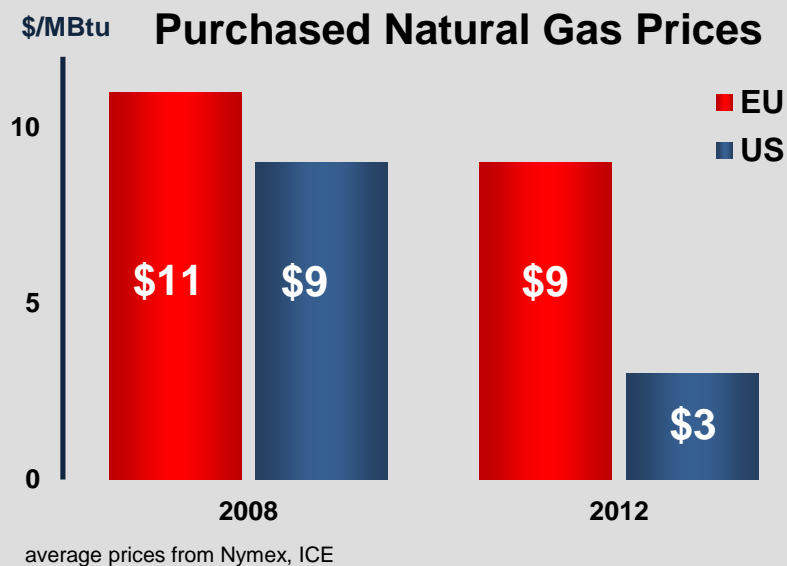
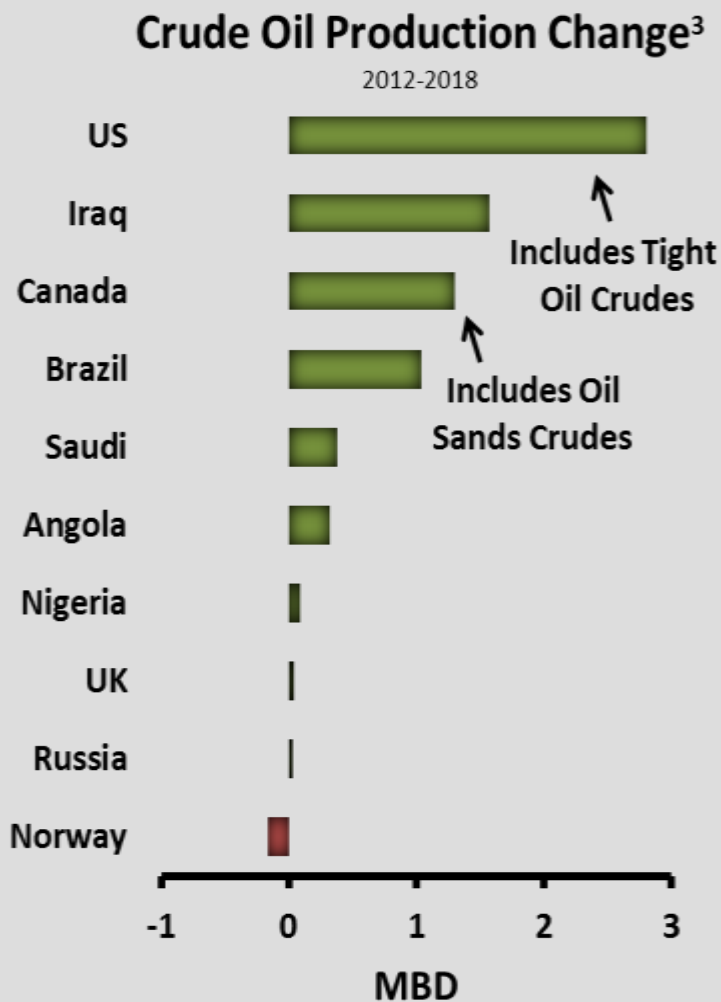


Crude Oil Input



Refinery

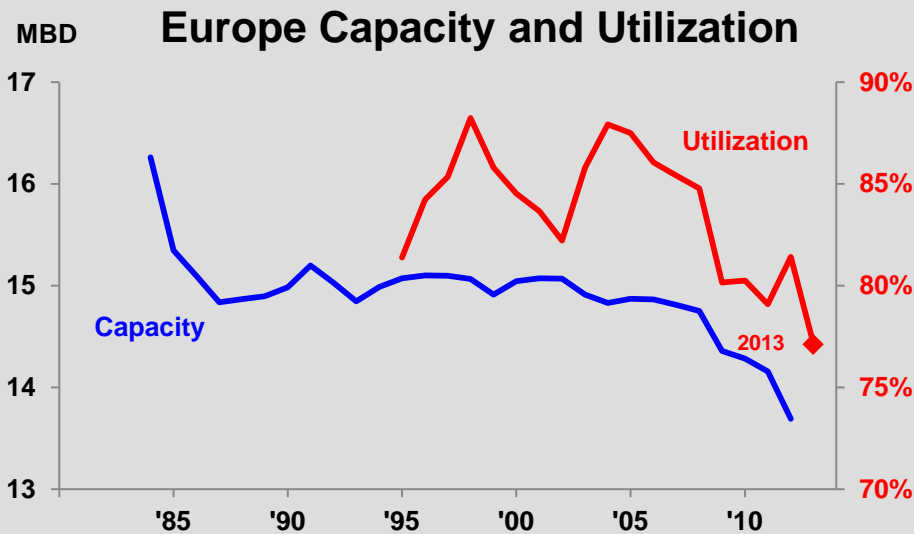
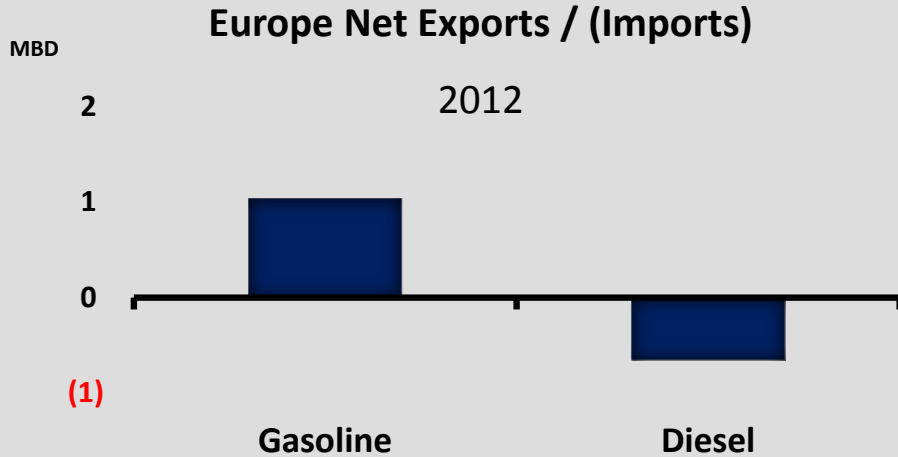
# US industry has a competitive advantage



3) IEA's 2013 Medium-Term Oil Market Report

Source: Concawe study based on Solomon Associates data for industry averages Western Europe, United States

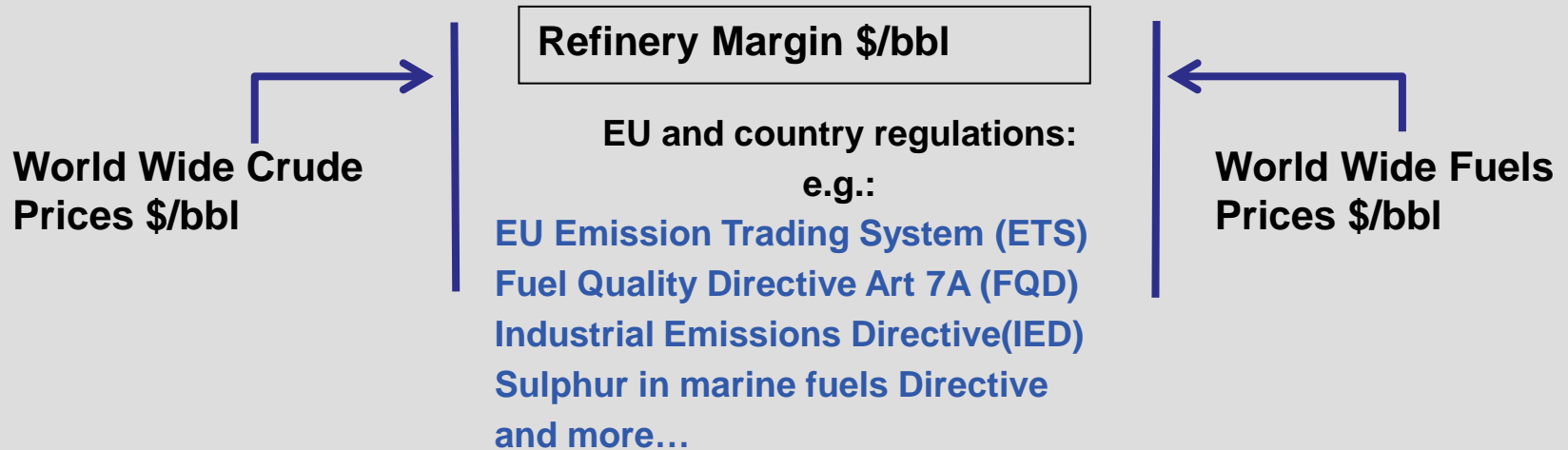
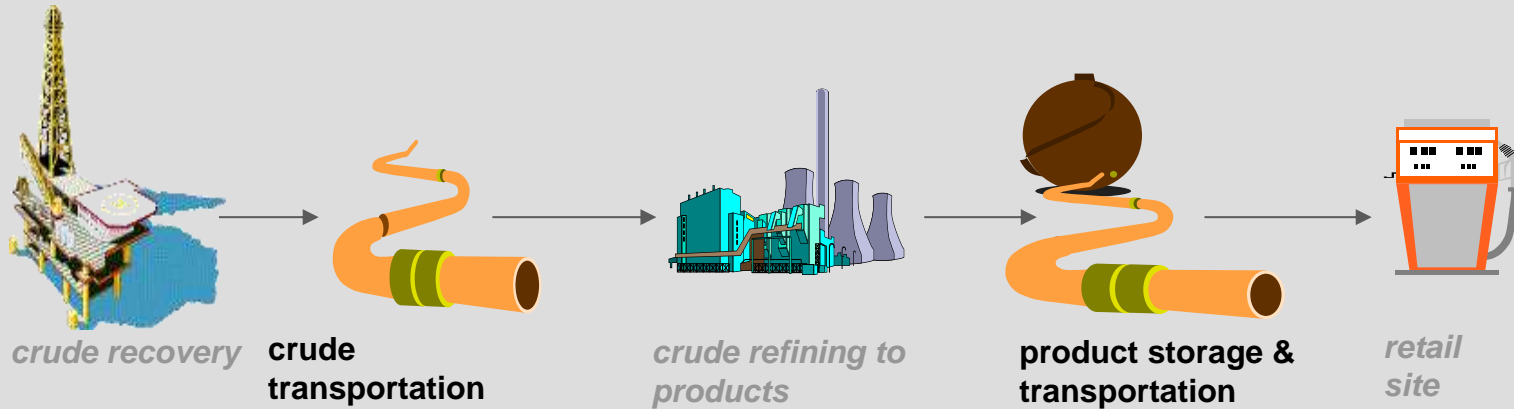
# Changing supply patterns for EU Refining



- Dieselization of demand
- Growing regional supply / demand imbalance
- New-build export capacities in Middle East / Far East
- Excess global refining capacity
- Leading to record low utilization of European refineries

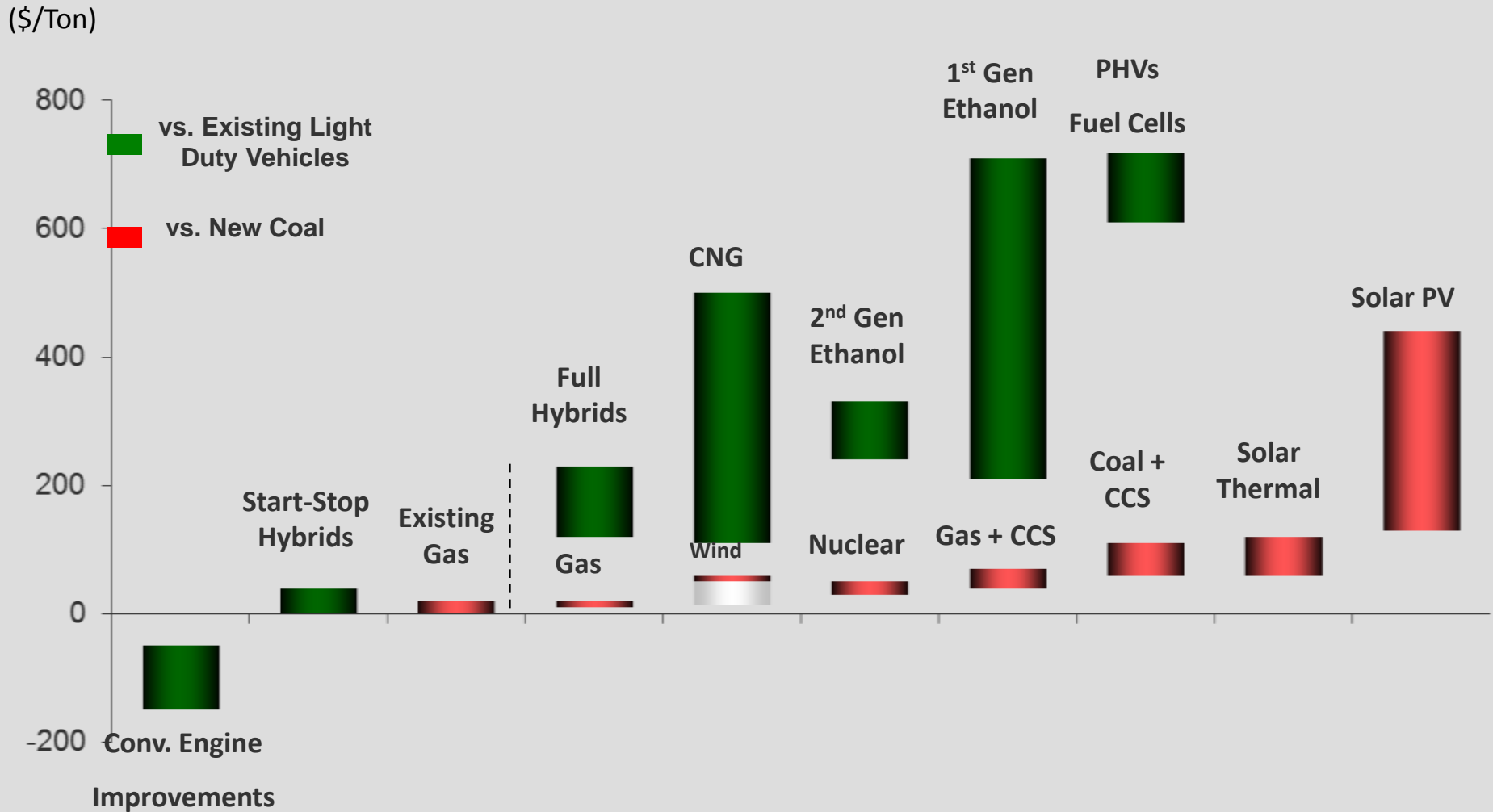
Source: PIRA

# Cumulative impact of EU regulations

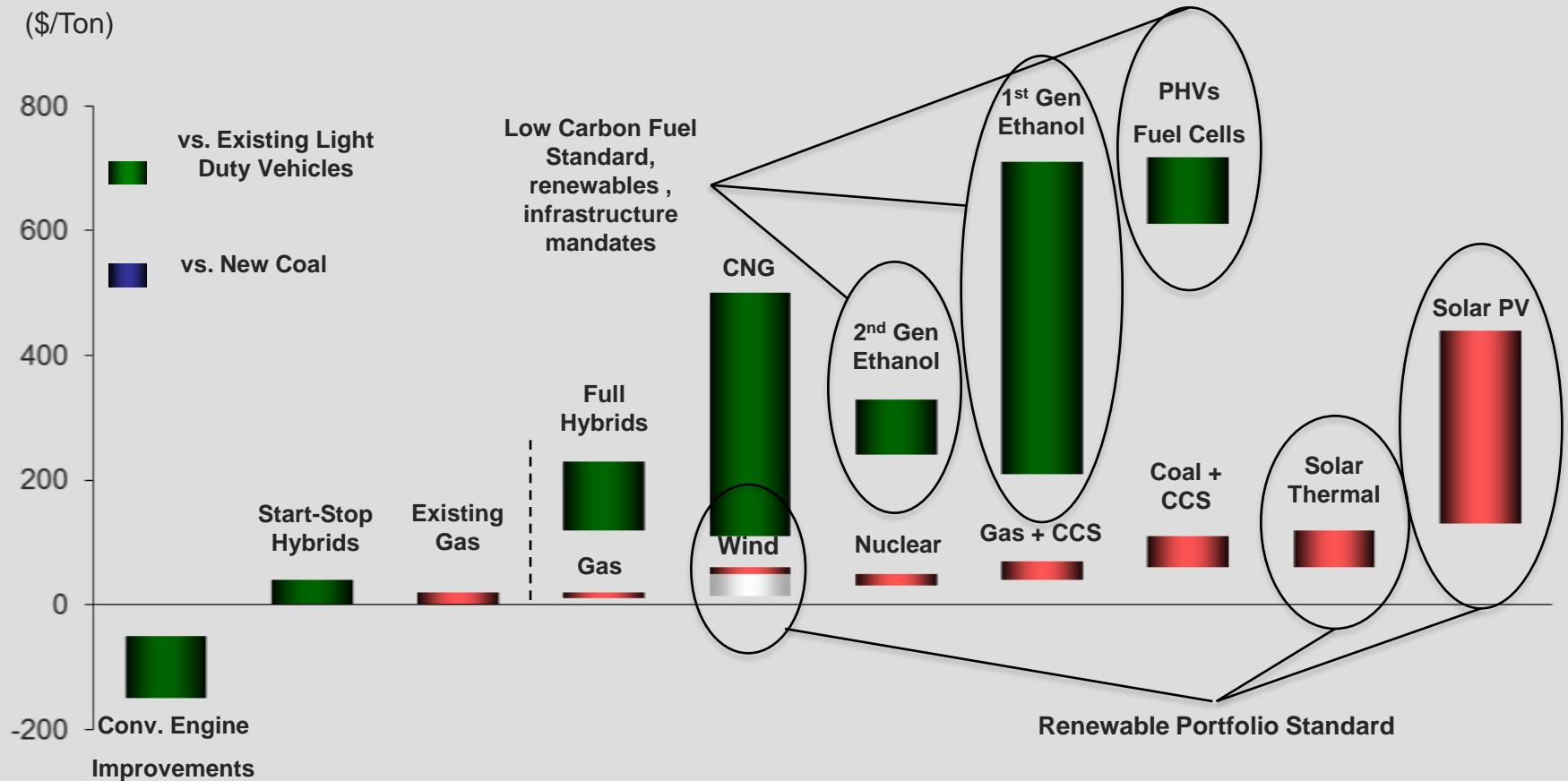




# Mitigation Options and Costs



# Regulatory Policies Drive High-Cost Mitigation



# Policymakers can help sustain EU competitiveness

- Encourage market conditions that provide European industry with access to energy and feedstock at a competitive cost.
  - Access can be made possible through LNG exports from the US and indigenous gas exploration in the EU.
- Energy policies should
  - be transparent, predictable and based on cost/benefit analysis
  - allow market prices and open competition to determine the solutions and investments necessary to achieve societal goals at lowest cost.
  - promote consistent energy taxation proportional to energy content.
- EU should guarantee a level-playing field amongst cost effective technologies.
- EU should encourage the setting of a common, predictable carbon price across the economy.

# Summary

- Oil will remain essential for European economies for the foreseeable future.
- The refining industry is an essential and integrated part of many other European industries.
- EU prices are twice as high for electricity and three times higher for Gas compared to the US.
- Europe's regulatory environment is having a cumulative impact on industry competitiveness.
- EU policy makers can help sustain European competitiveness through transparent, predictable and market based policies.