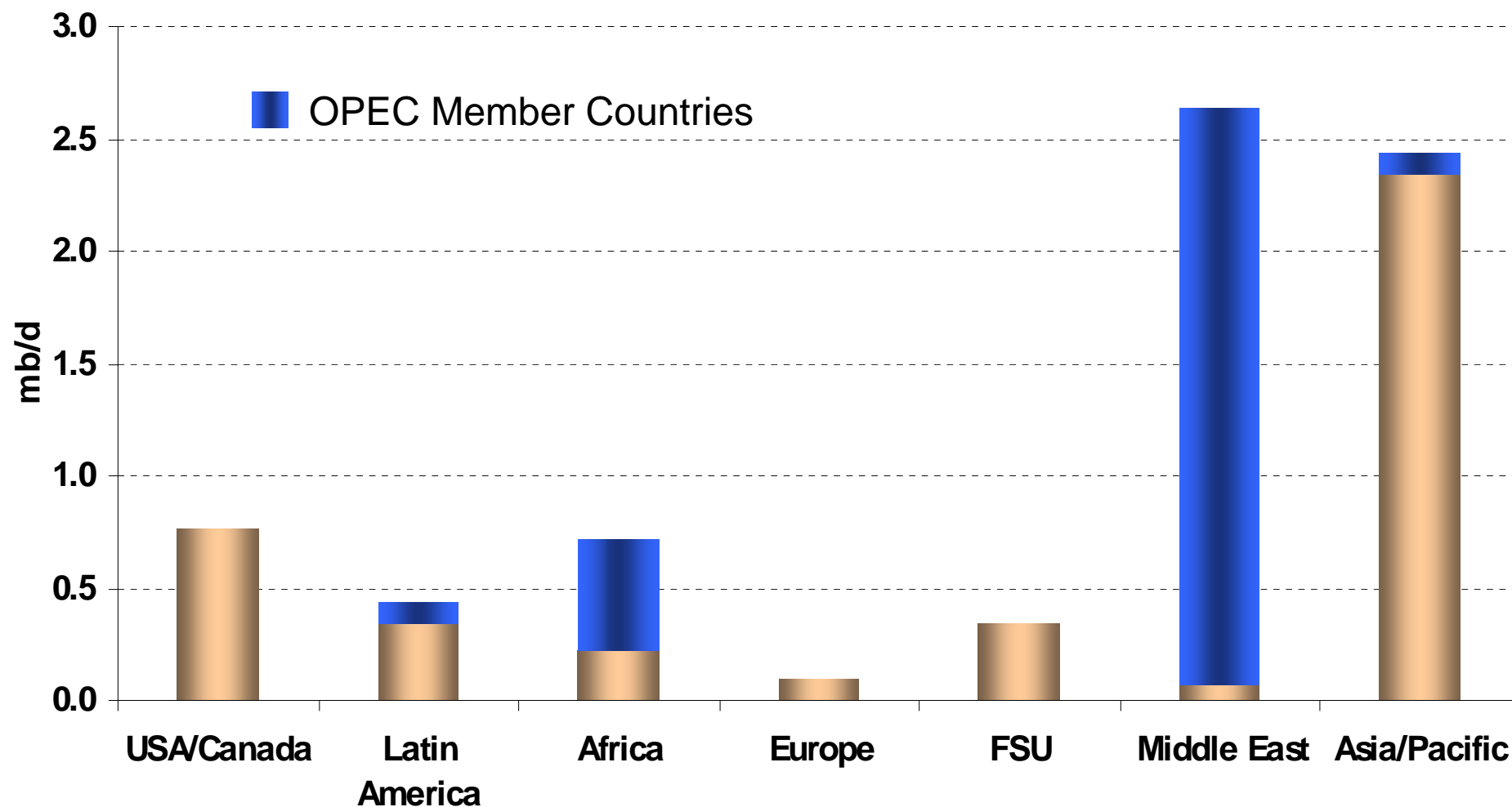


# **The Role of the Downstream**

**Dr. Fuad Siala**  
**OPEC Secretariat**

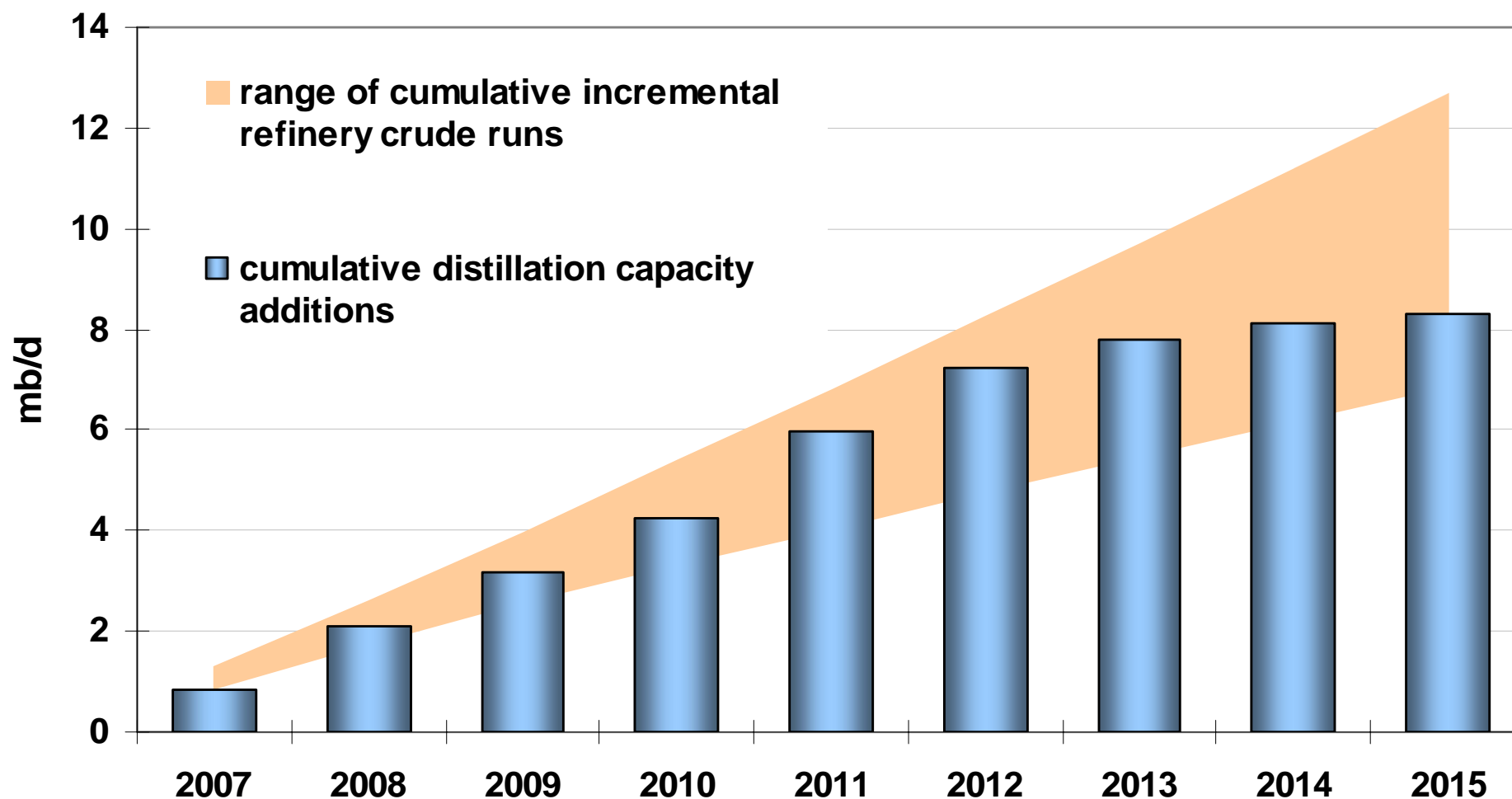
EU-OPEC Roundtable on Energy Policies  
*Brussels, Belgium*  
*May 30, 2007*

# Distillation capacity additions\* 2007 - 2012



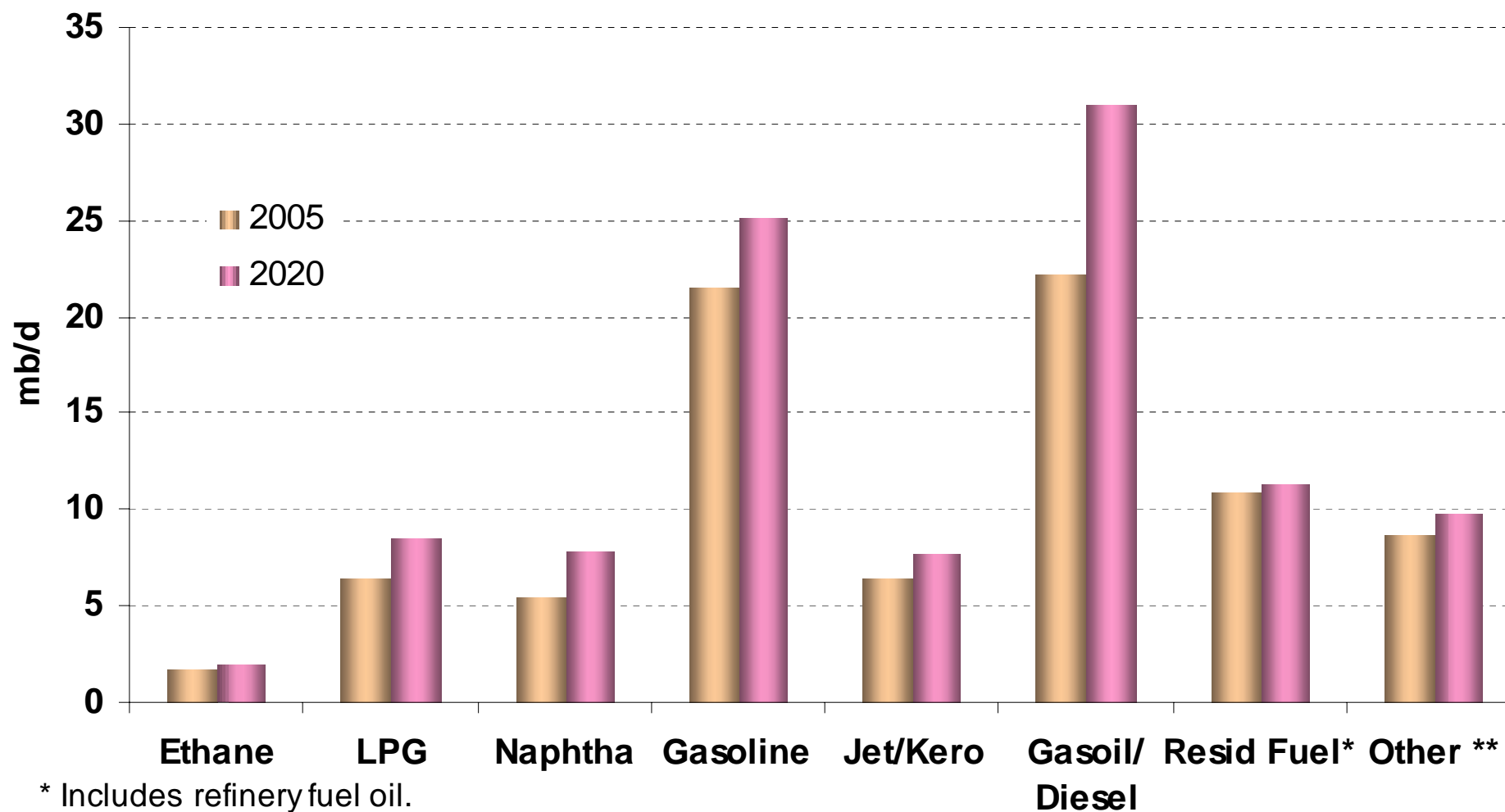
\* Existing projects only, except capacity creep

# Cumulative distillation capacity additions vs. incremental refinery runs



Downside risks on projected incremental crude runs are increasing

# Global demand – increased emphasis on light products



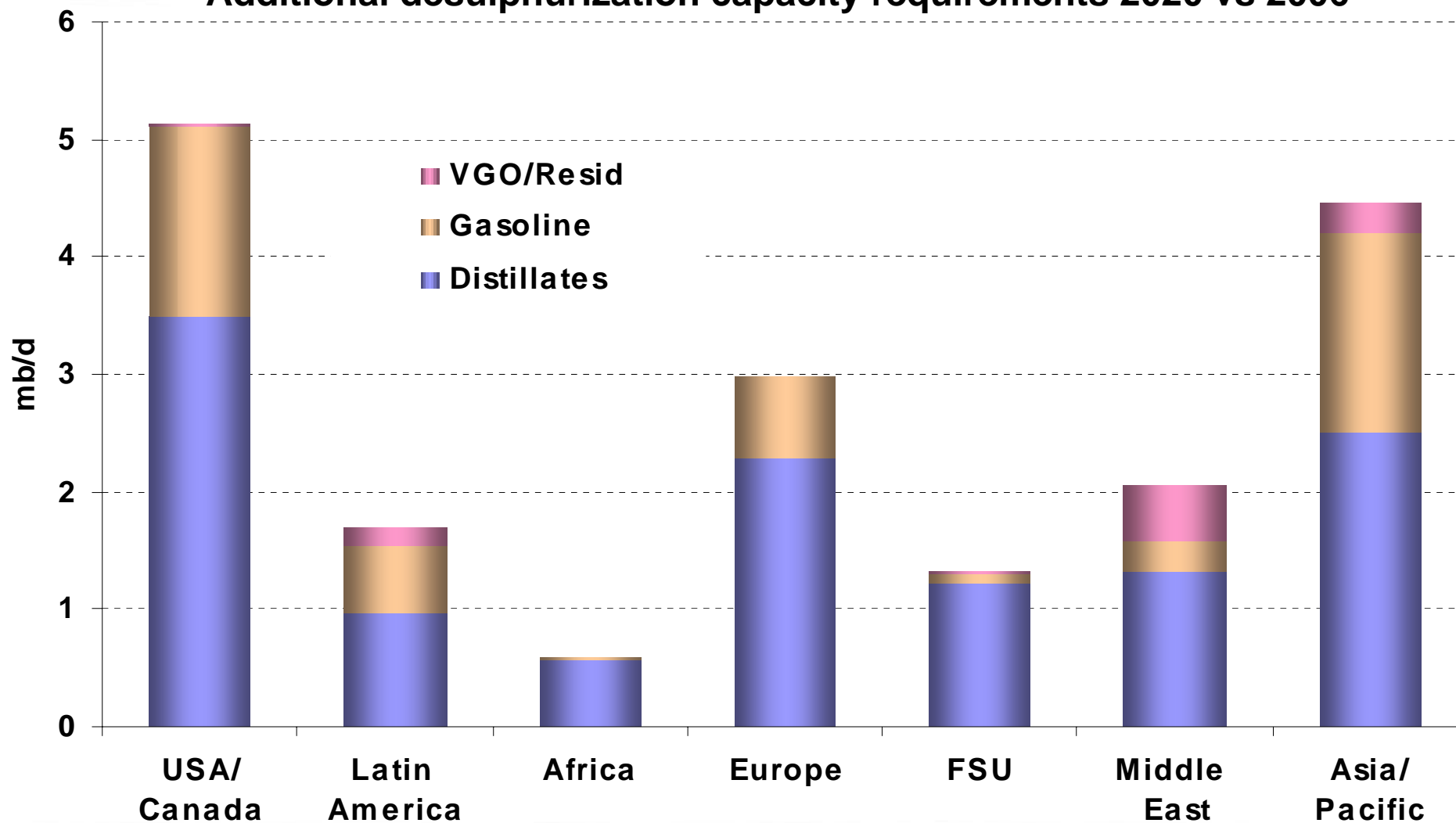
\* Includes refinery fuel oil.

\*\* Includes bitumen, lubricants, waxes, still gas, coke, sulphur, direct use of crude oil



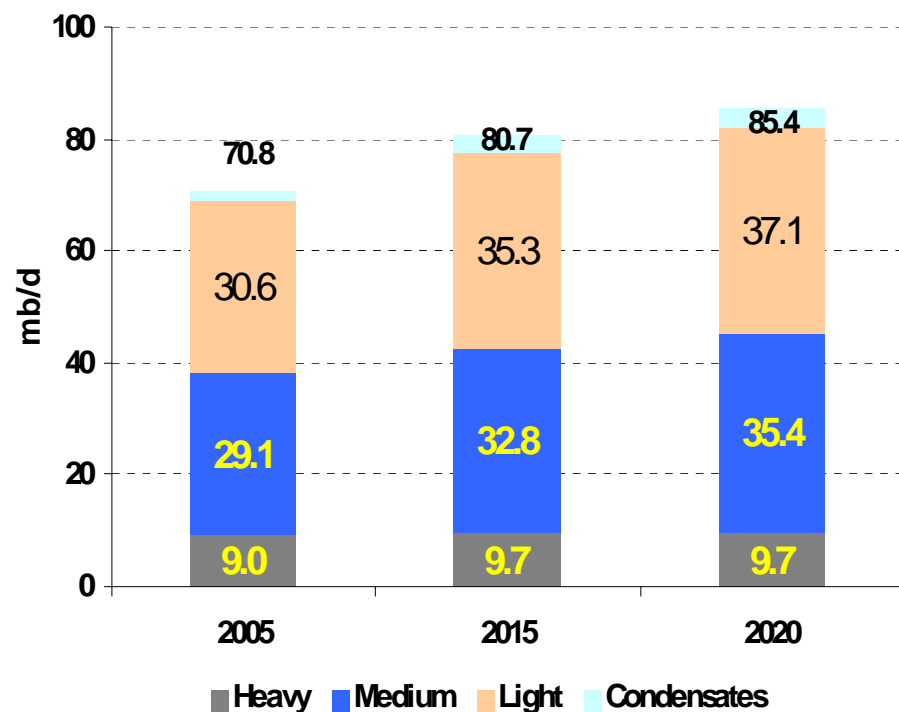
# The impact of tighter product specification

Additional desulphurization capacity requirements 2020 vs 2006

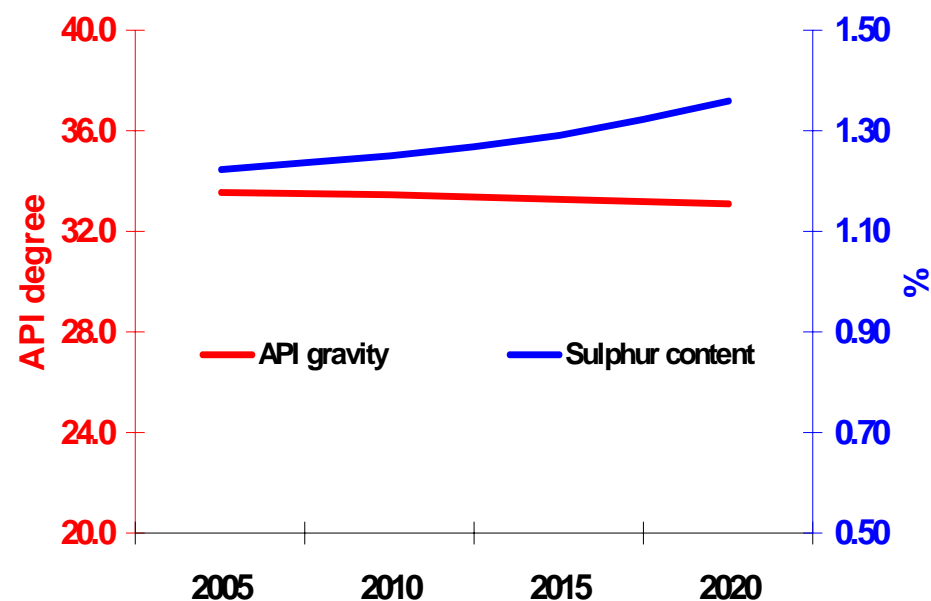


# Global crude quality– a manageable change

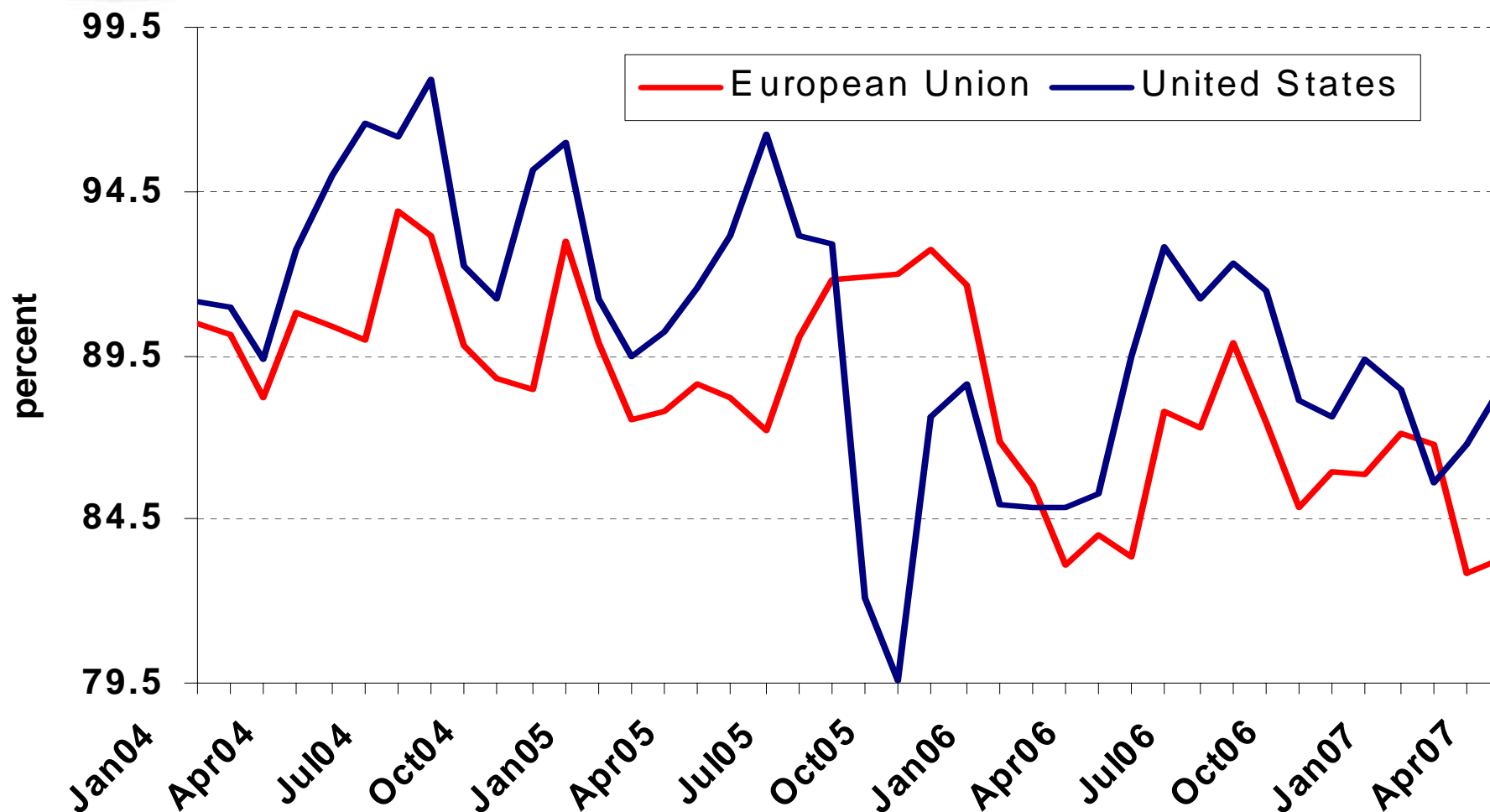
Global crude inputs to refineries by category



Average quality of global crude slate

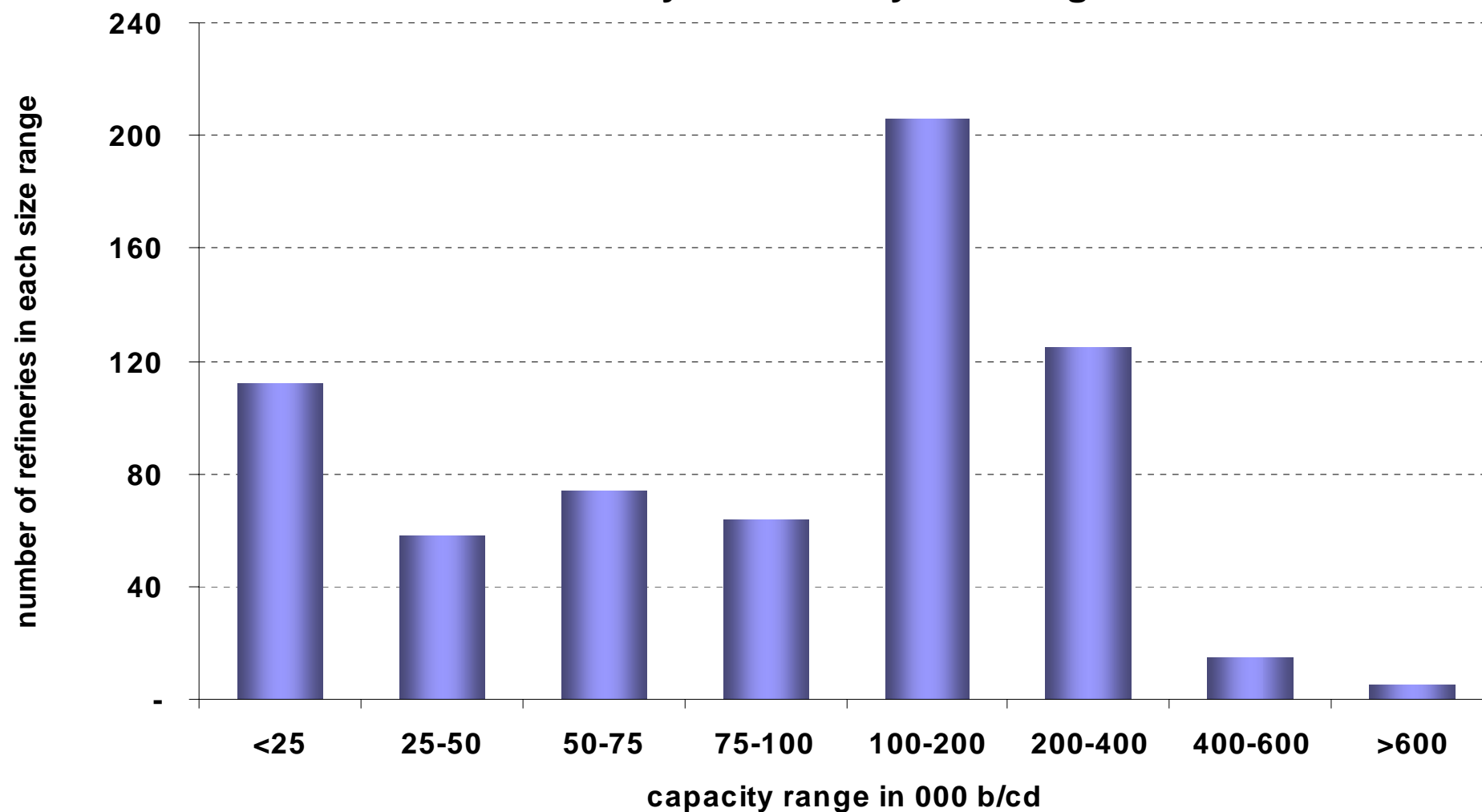


# High utilization rates a source of price spikes

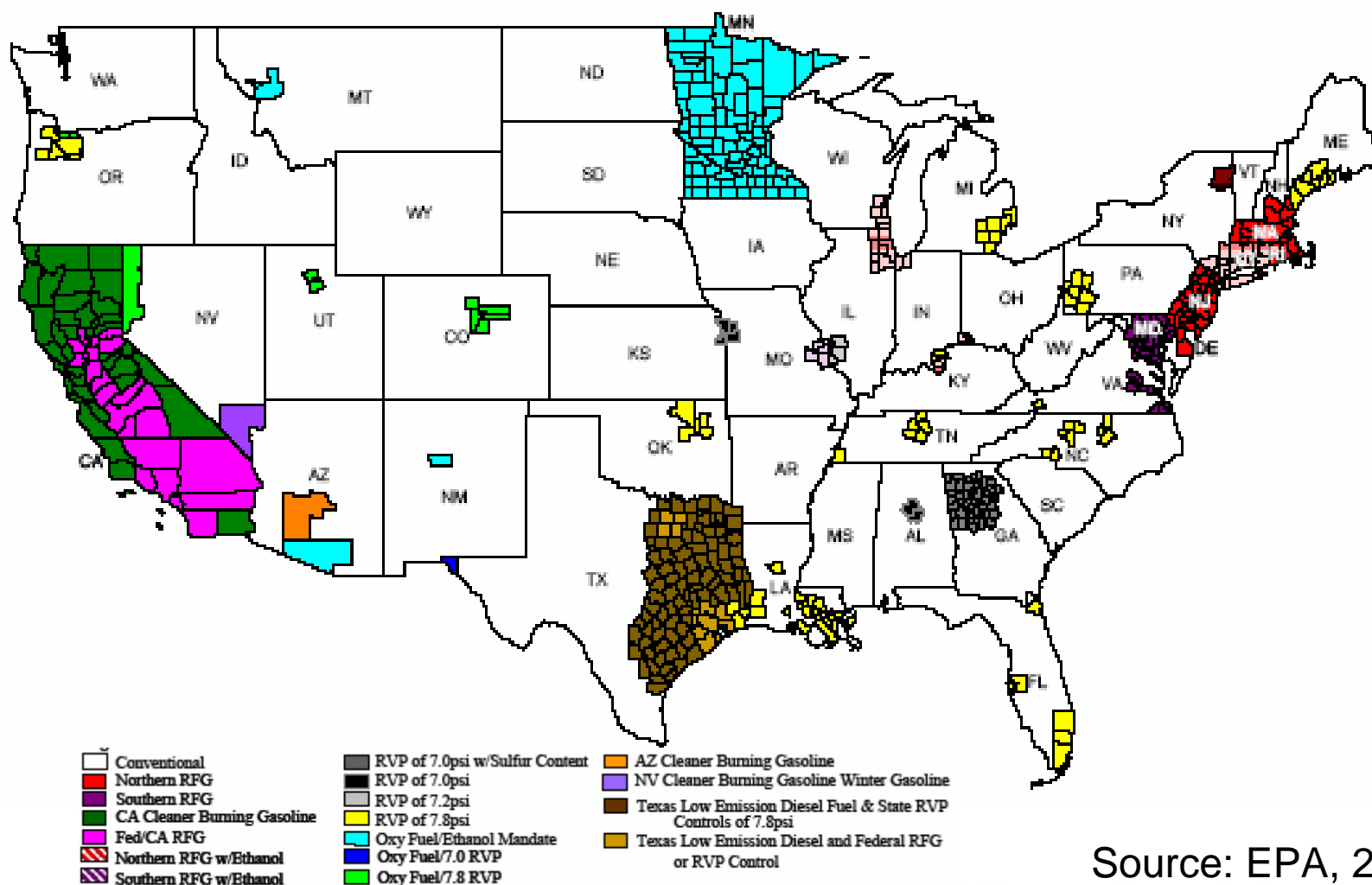


# Larger, but fewer, refineries

Global refinery numbers by size range



# Boutique fuels – refining is a localized business



Source: EPA, 2006

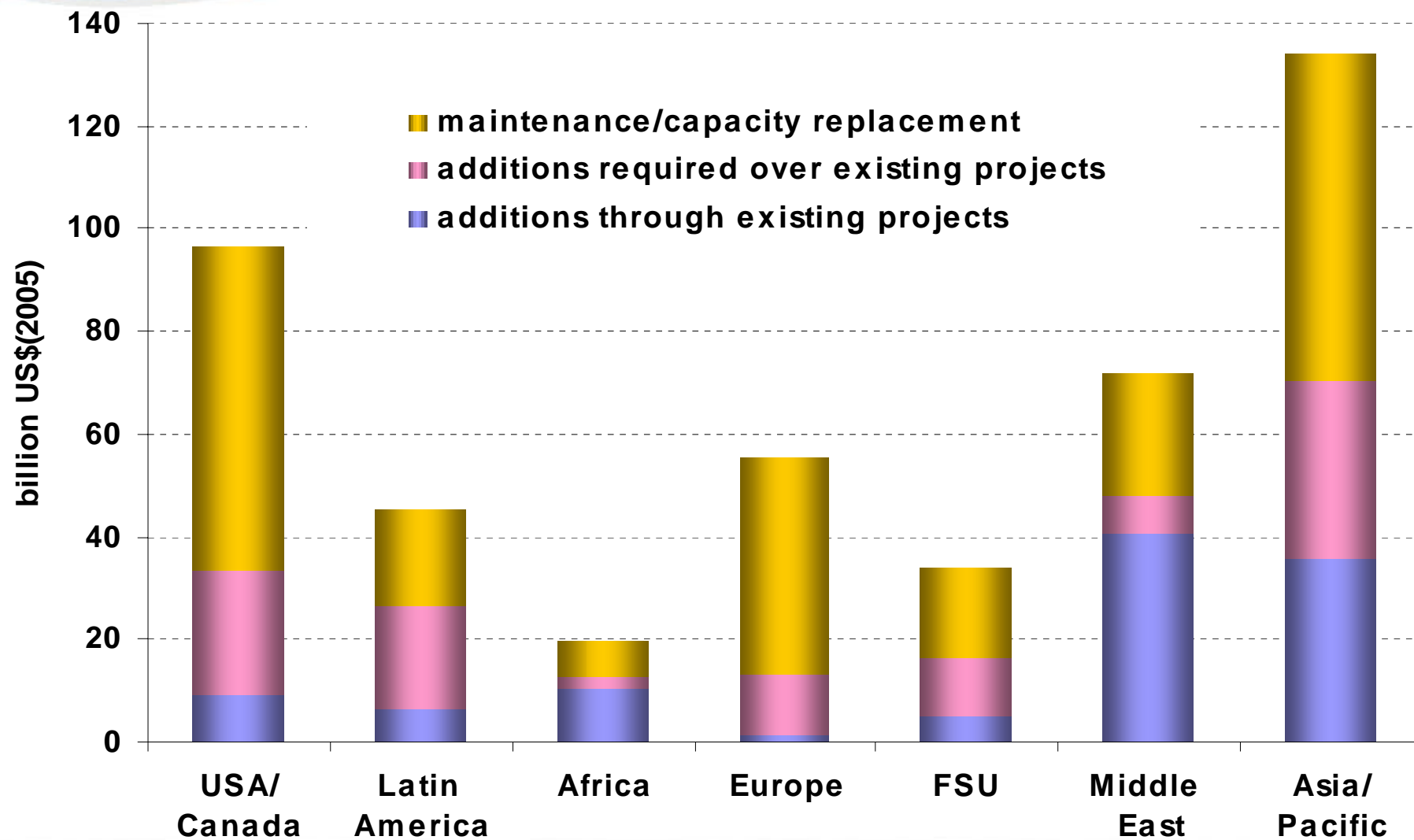


# Biofuels policies in the EU – impacts on refiners

- ❑ Biofuels directive of 2003:
  - 2% (energy) by 2005
  - 5.75% (energy) by 2010
- ❑ EU Energy Package endorsed by EU Spring Council, 2007:
  - 20% renewables in total energy mix
  - minimum 10% (energy) biofuels by 2020
- ❑ Biofuels production may help ease refining tightness
- ❑ But very large increases create risk of low utilization rates and margins, thus contributing to a period of low investments
- ❑ Policies need to be finely calibrated, also in terms of boosting ethanol or biodiesel

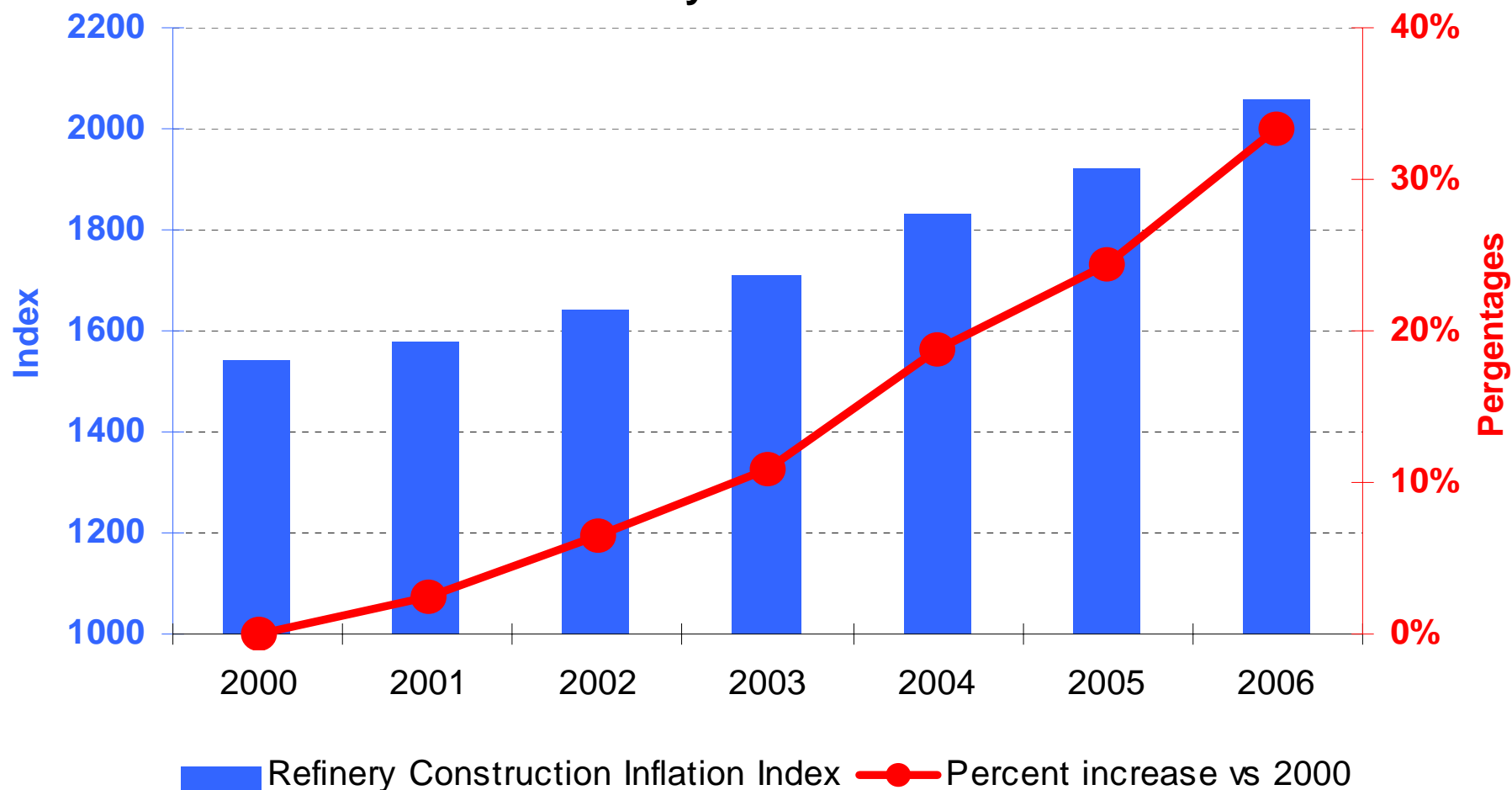


# Refinery investments 2006-2020



# Costs are rising

## Nelson Farrar Refinery Construction Inflation Index

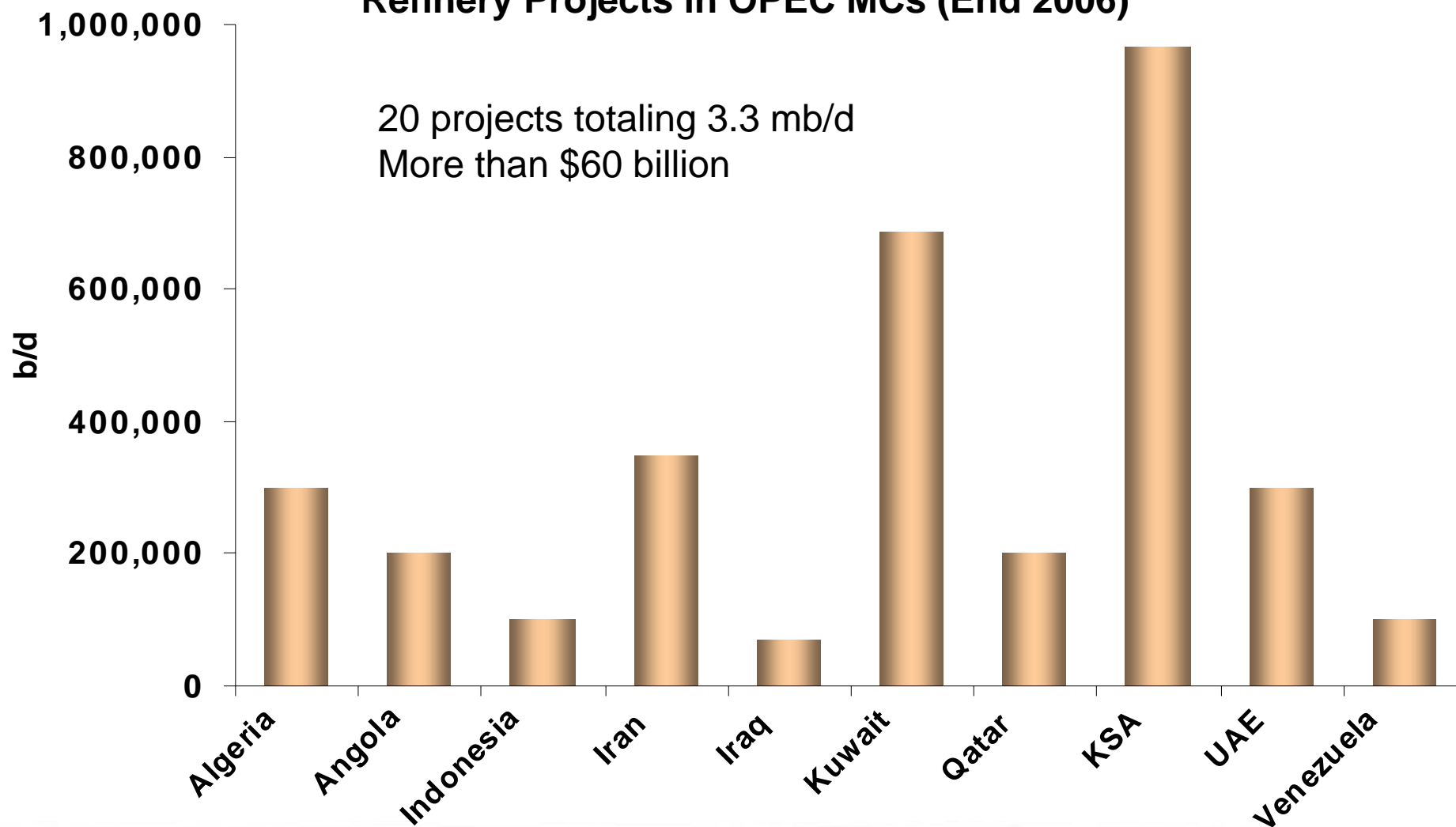


Source: Oil & Gas Journal



# OPEC is investing in the downstream

## Refinery Projects in OPEC MCs (End 2006)



## Final remarks

- ❑ Refinery capacity expansions do not keep pace with required incremental refinery runs
- ❑ Downstream tightness is compounded by several other challenges:
  - ❑ emphasis on light products in incremental demand
  - ❑ tightening of refined products specifications
- ❑ Long permitting processes and uncertain demand hinder investment, leading to high utilization rates
- ❑ Shift to less, but higher capacity, refineries and boutique fuels major sources of potential volatility
- ❑ Downstream is responsibility of consumers
- ❑ OPEC is contributing to alleviating downstream tightness



---

ORGANIZATION OF THE PETROLEUM EXPORTING COUNTRIES

---

[www.opec.org](http://www.opec.org)



OPEC

**Thank you**



*Stability in the oil market*