



Breaking Greek Oil Addiction

Athens, 2013

Peter Polder

Independent oil expert working for environmental and other NGO's on oil and natural gas issues.

Peakoil Netherlands: Dutch Think tank on resource depletion and energy issues

•

•@peterpolder



Breaking Greek Oil Addiction

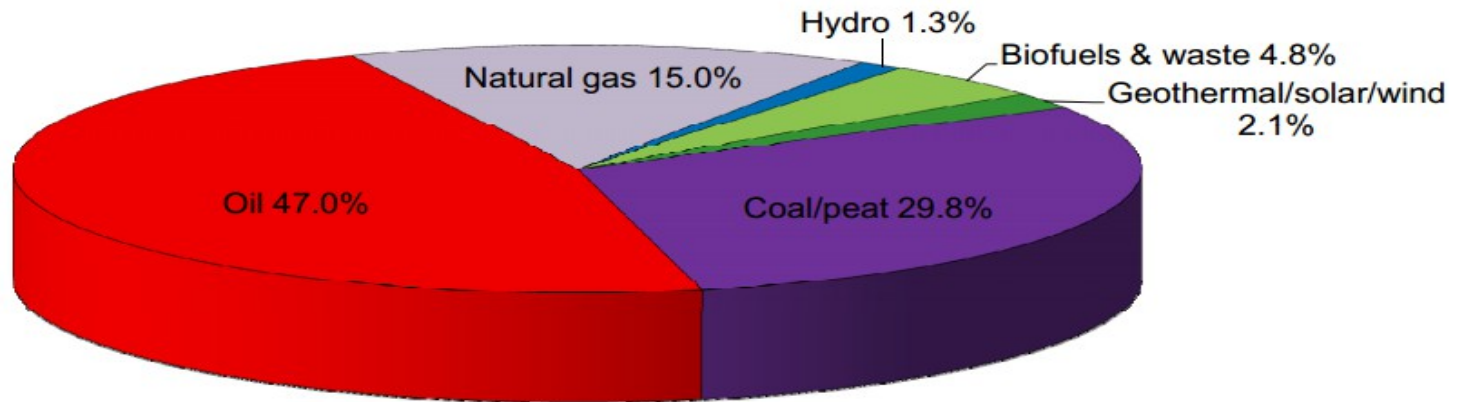
- Oil use & the effect of high oil prices in Greece
 - Radical changes in the oil and gas market
 - Breaking the addiction
-

Energy Mix



Share of total primary energy supply* in 2011

Greece



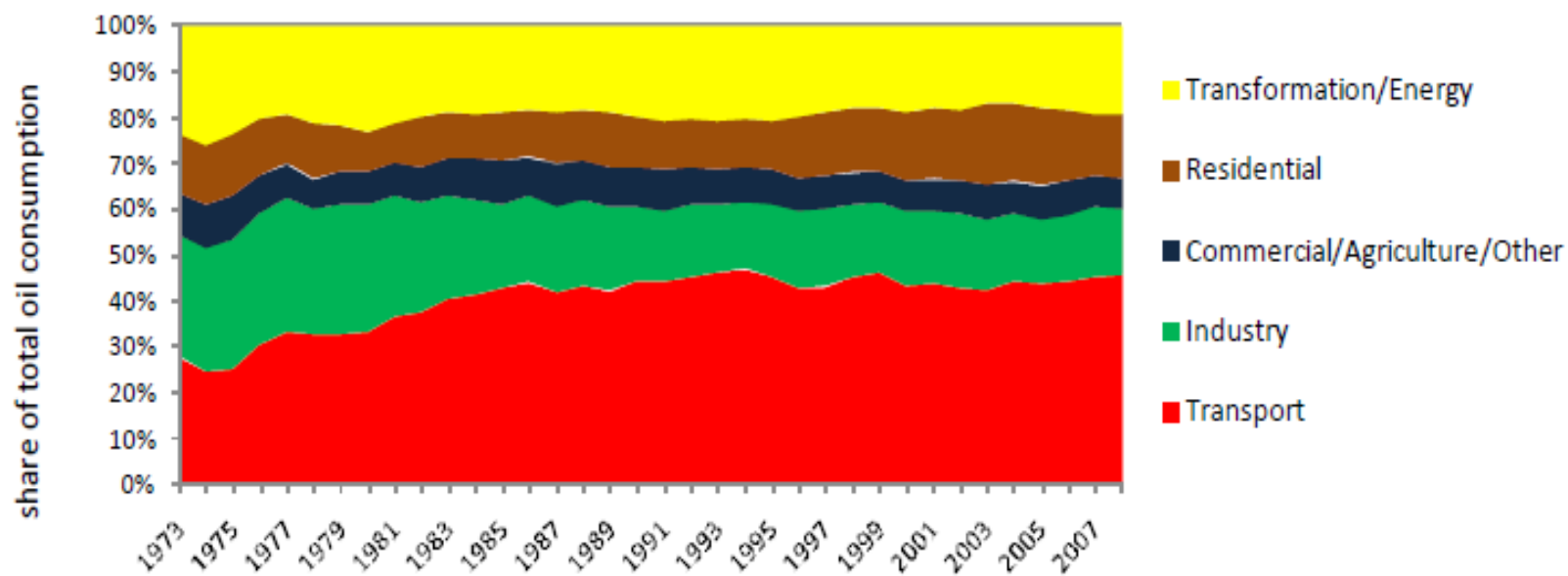
27 Mtoe

* Share of TPES excludes electricity trade.

Note: For presentational purposes, shares of under 0.1% are not included and consequently the total may not add up to 100%.

Greece oil consumption

Oil Consumption by Sector¹



Source: Oil Information, IEA

¹ Total Consumption (including refinery consumption), does not include international marine bunkers.

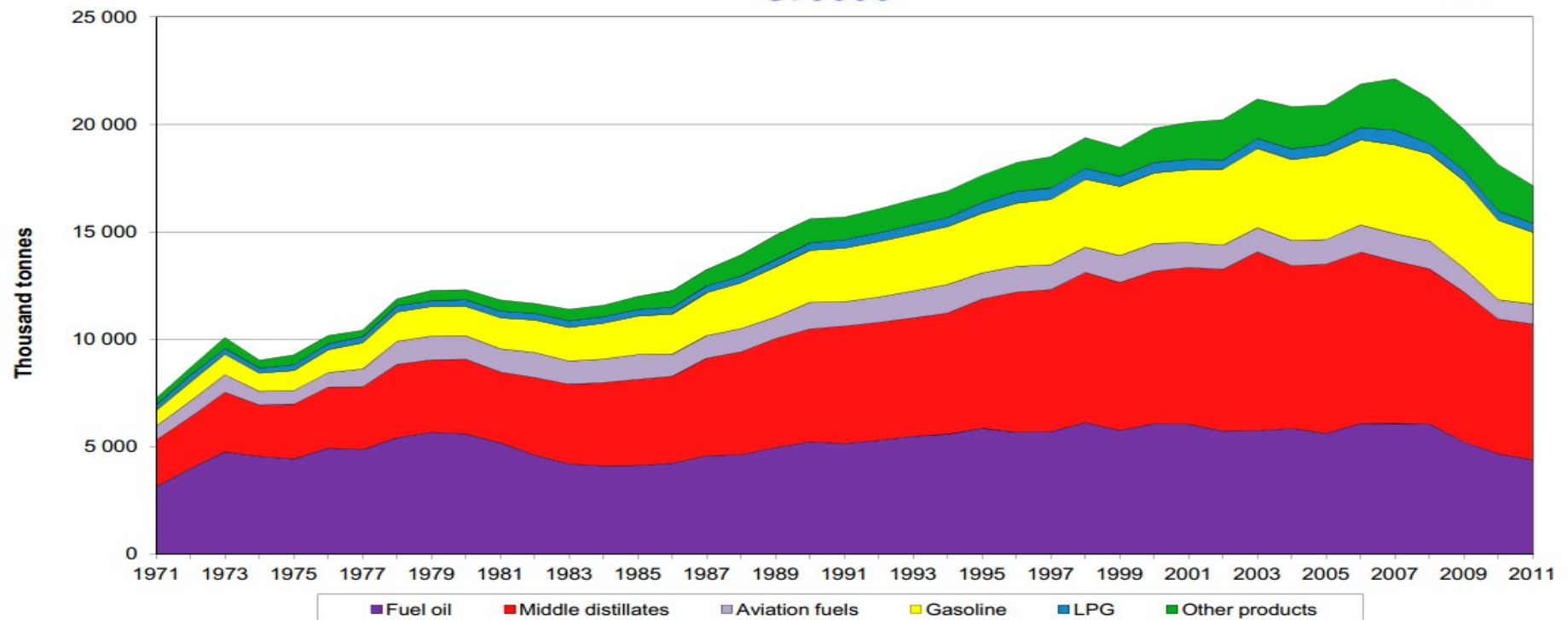
Greece oil consumption

IEA Energy Statistics

Statistics on the web: <http://www.iea.org/stats/index.asp>



Consumption of oil products* Greece



* Consumption includes international bunkers. LPG includes LPG, NGL, ethane and naphtha. Other also includes direct use of crude oil and other hydrocarbons.

© OECD/IEA 2013

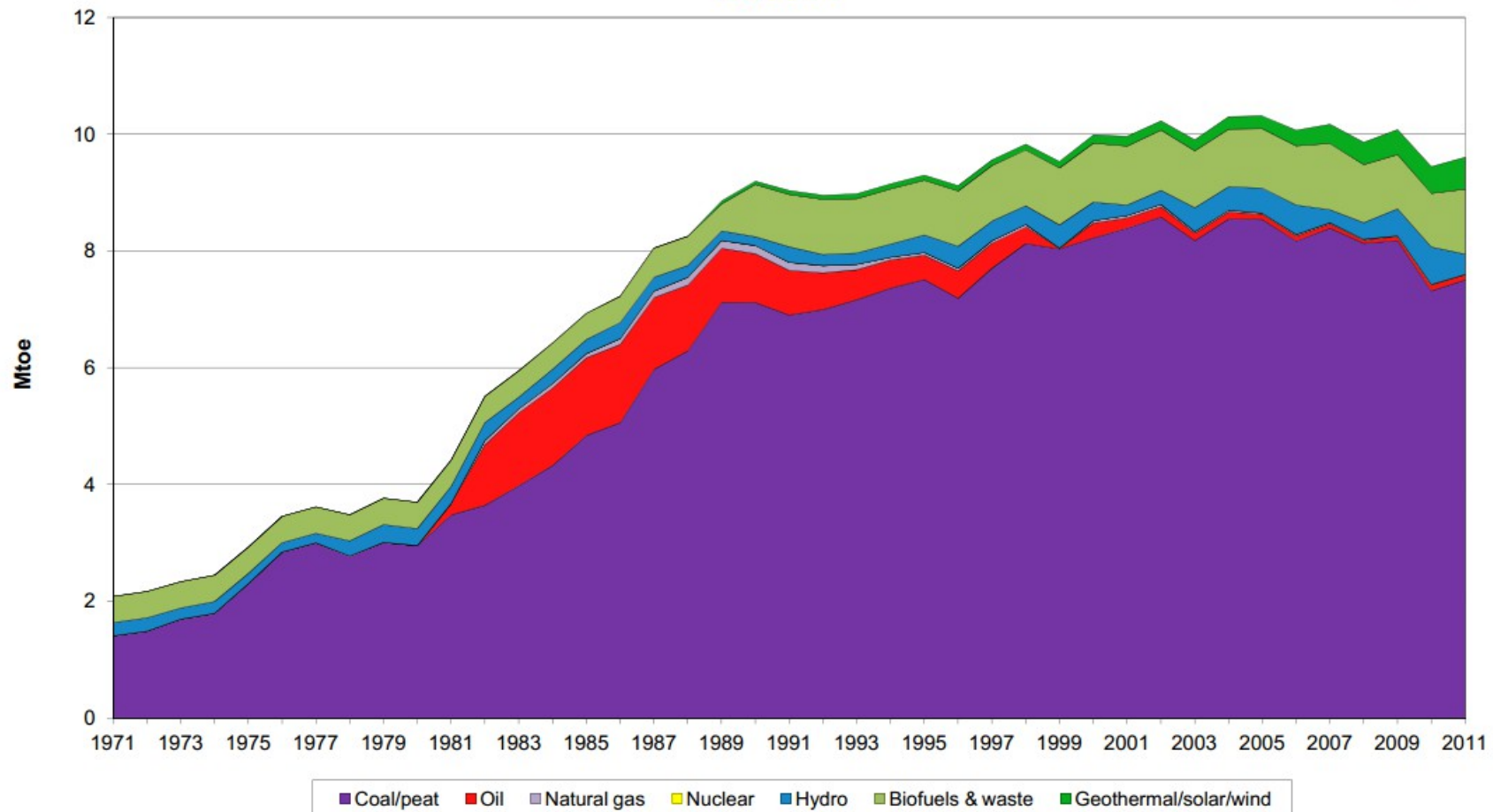
For more detailed data, please consult our on-line data service at <http://data.iea.org>.

Greece energy production

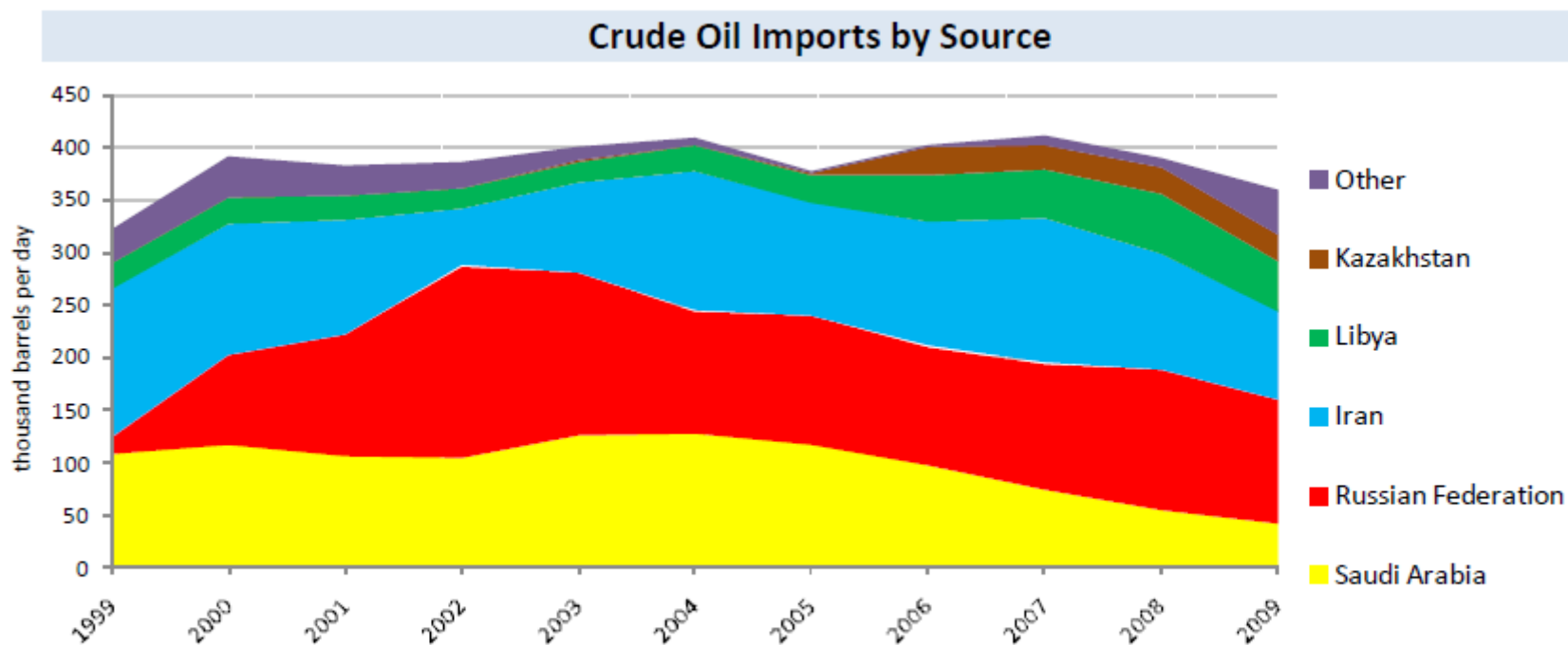
IEA Energy Statistics

Statistics on the web: <http://www.iea.org/stats/index.asp>

Energy production Greece



Greece oil imports



Source: Monthly Oil Statistics, IEA

Greece oil crisis

Growing number of people not able to buy heating oil

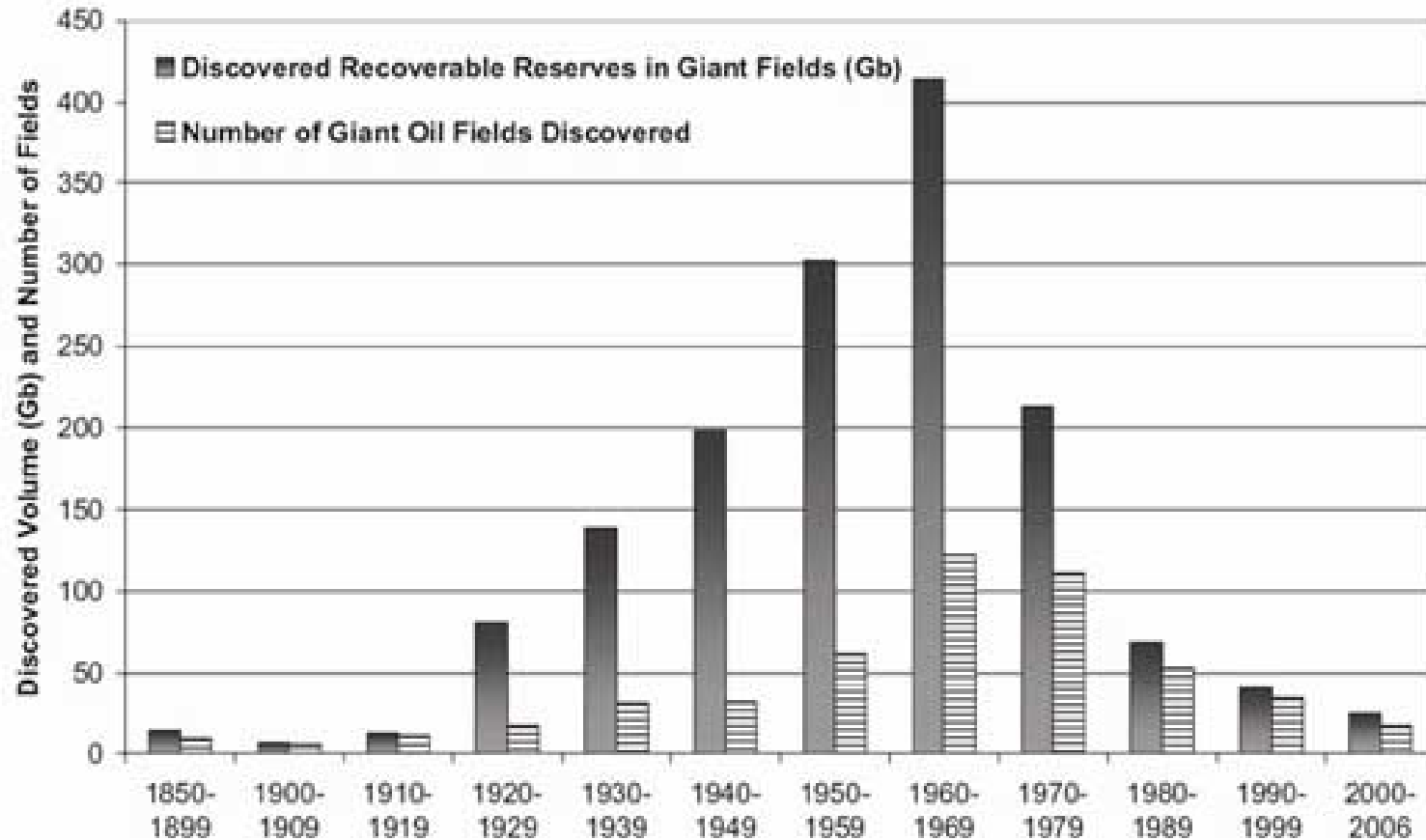
Growing number of people not able to access transport

Rising costs for oil powered electricity production

High costs of fuel and feedstock hamper economic growth



Limits on oil production

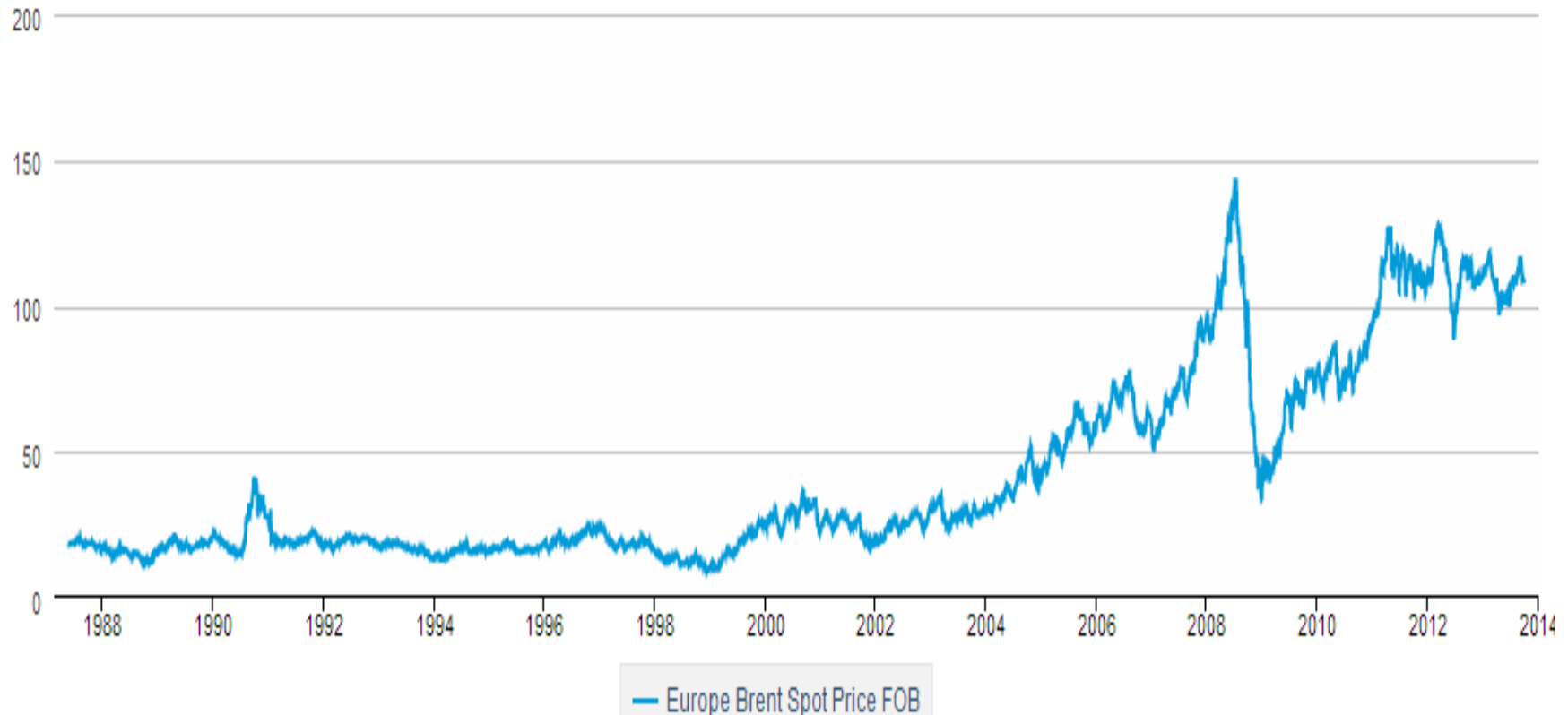


Since 1986 more oil consumption than discovery
In period 2000 - 2008: ± 90 billion barrels found
253 billion barrels used

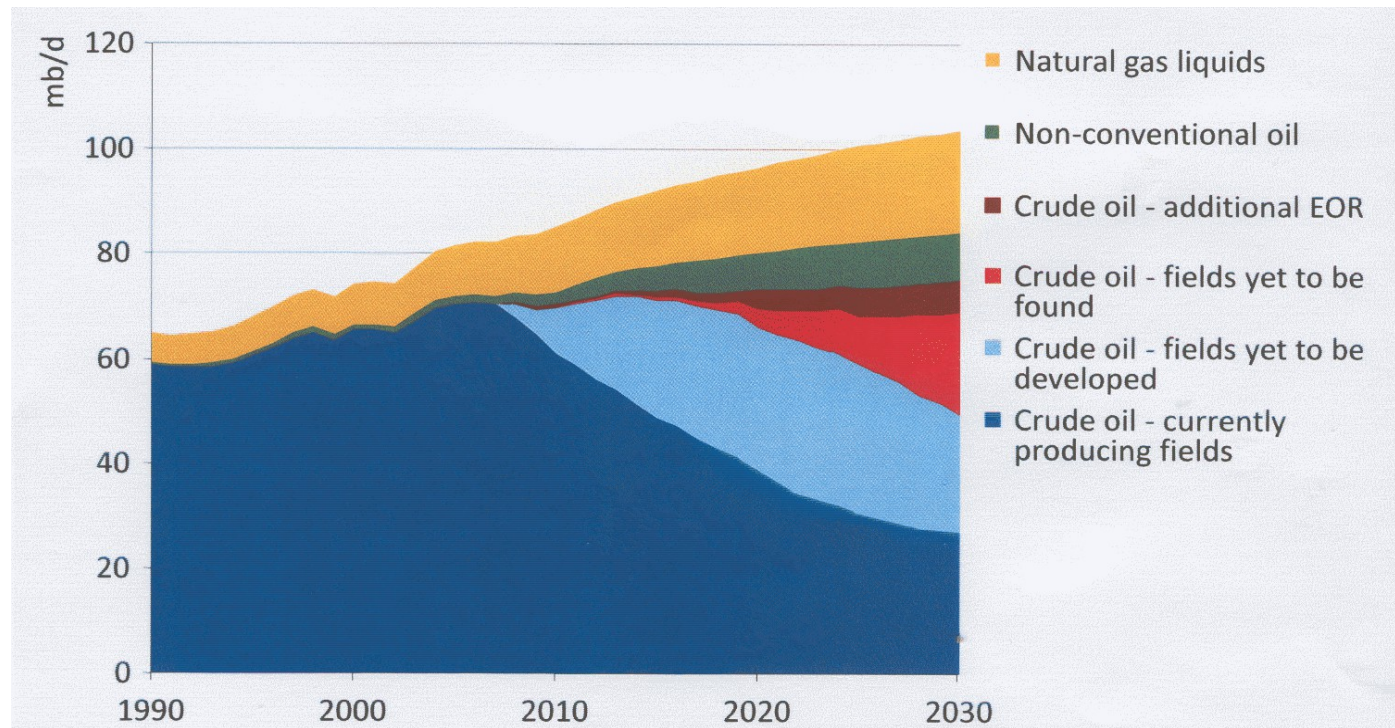
High Oil price, \$100 the new normal

Europe Brent Spot Price FOB

Dollars per Barrel



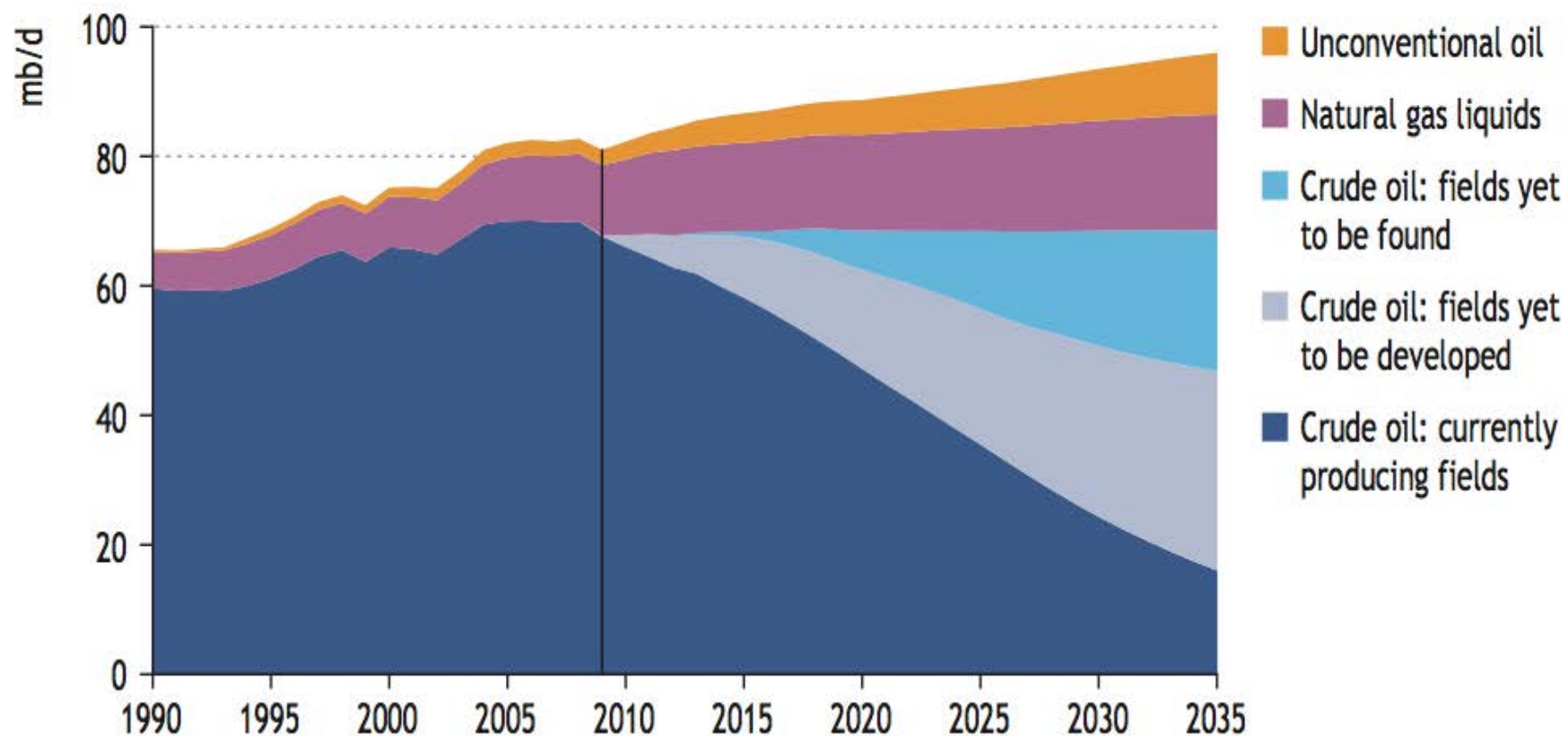
IEA forecast 2008, 104 mbd



Production reaches 104 mb/d in 2030, requiring 64 mb/d of gross capacity additions – six times the current capacity of Saudi Arabia – to meet demand growth & counter decline

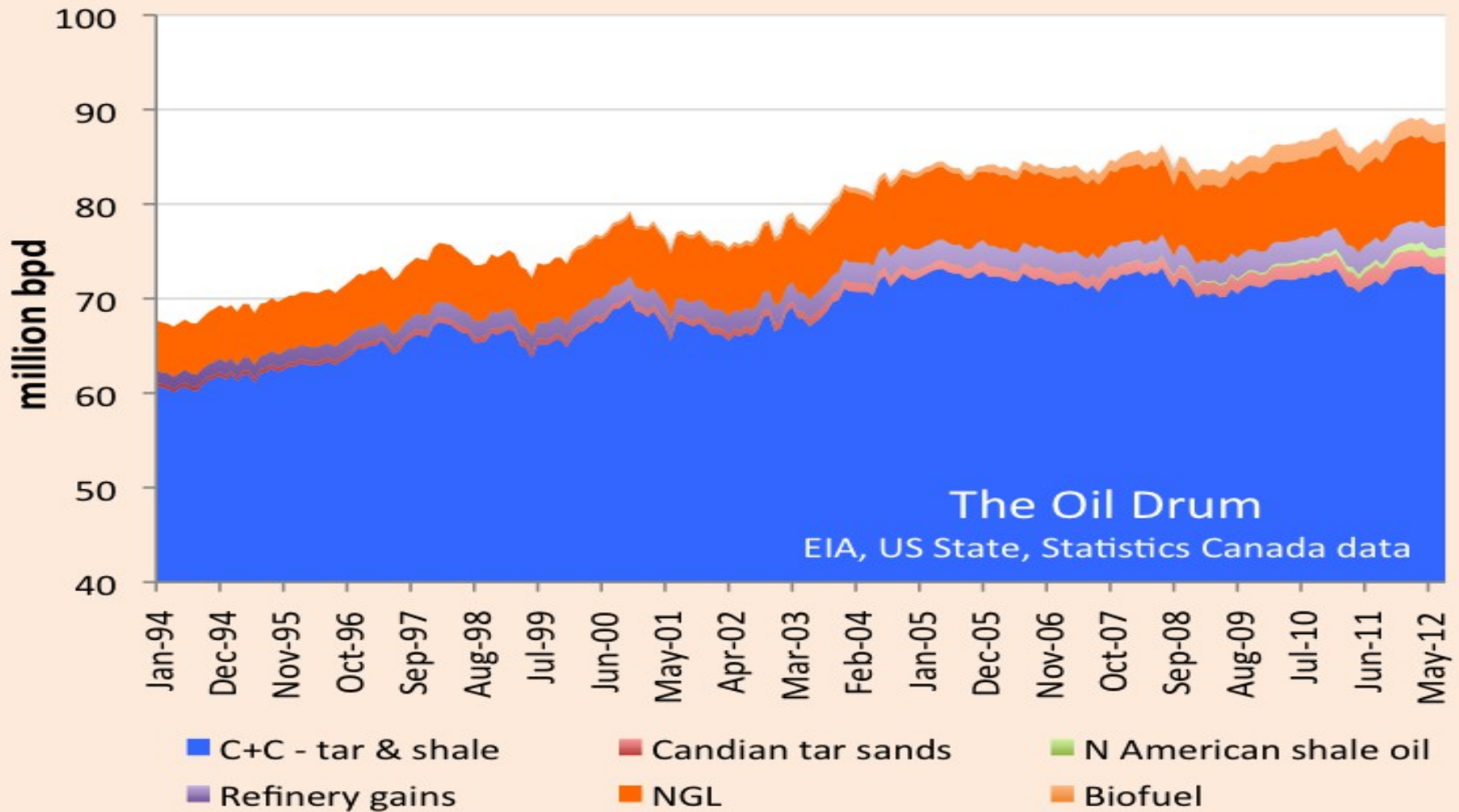
IEA forecast in 2010, 96 mbd

Figure 3.19 • World oil production by type in the New Policies Scenario



Peak Cheap Oil in 2005

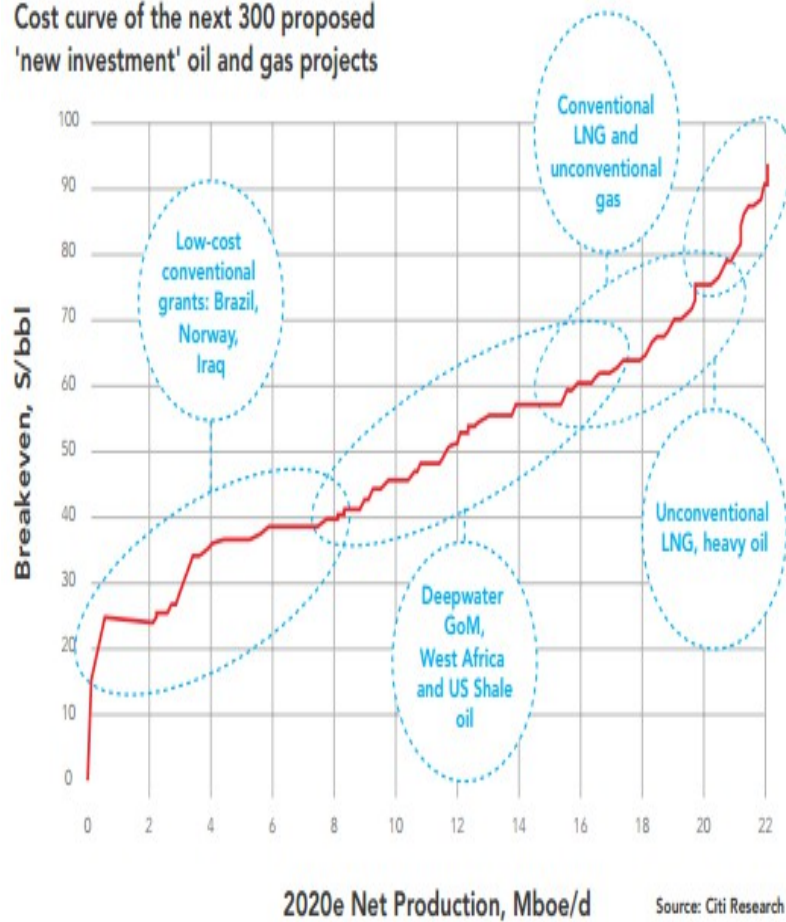
World Total Liquids Production



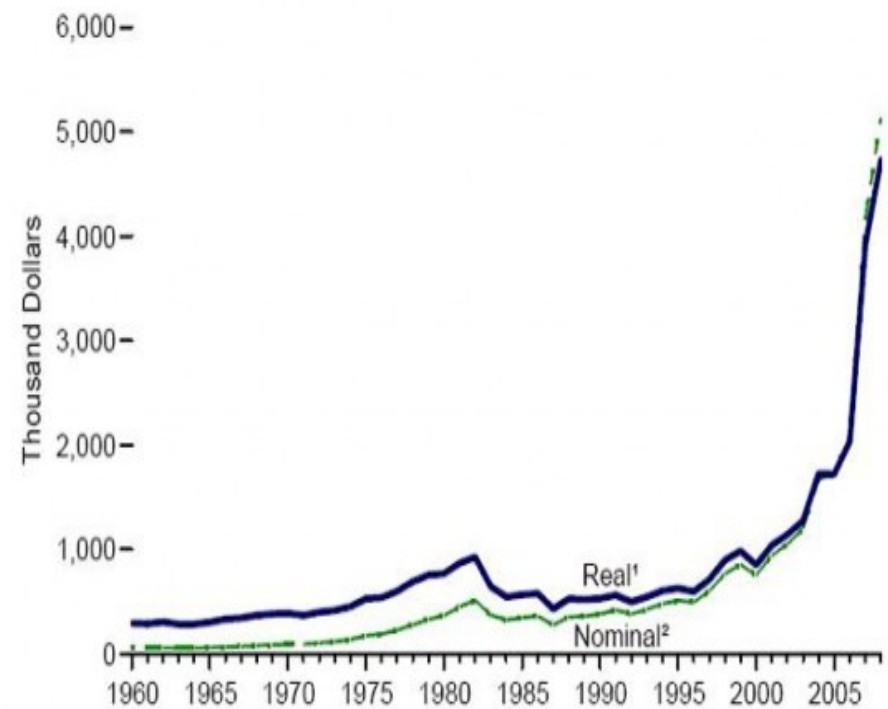
The Oil Drum
EIA, US State, Statistics Canada data

Expensive Oil

Cost curve of the next 300 proposed 'new investment' oil and gas projects

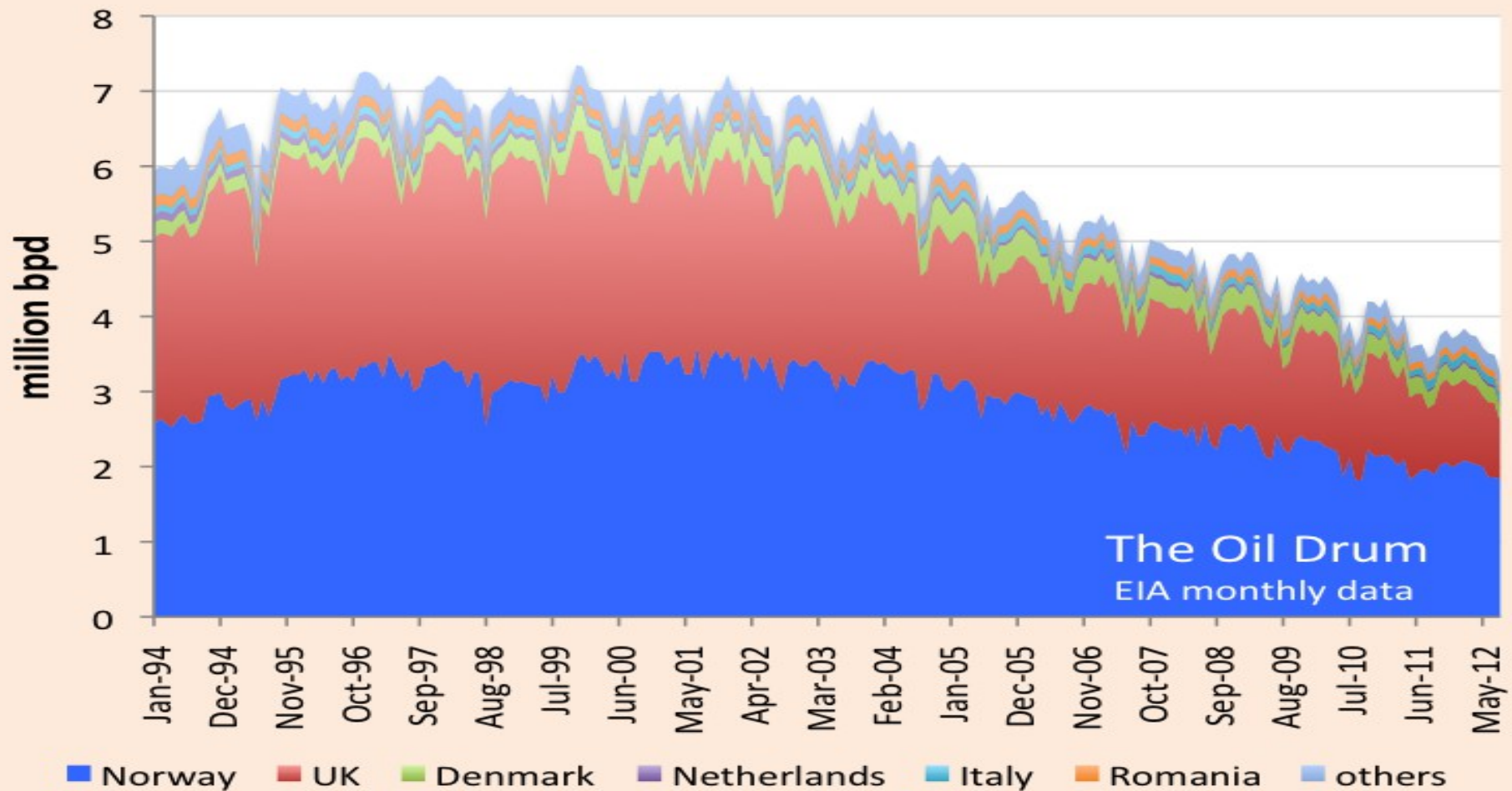


Costs per Well, All Wells, 1960-2008



Peakoil for Europe

Europe C+C+NGL Production



The Oil Drum
EIA monthly data

High oil prices wil stay

High oil prices wil stay

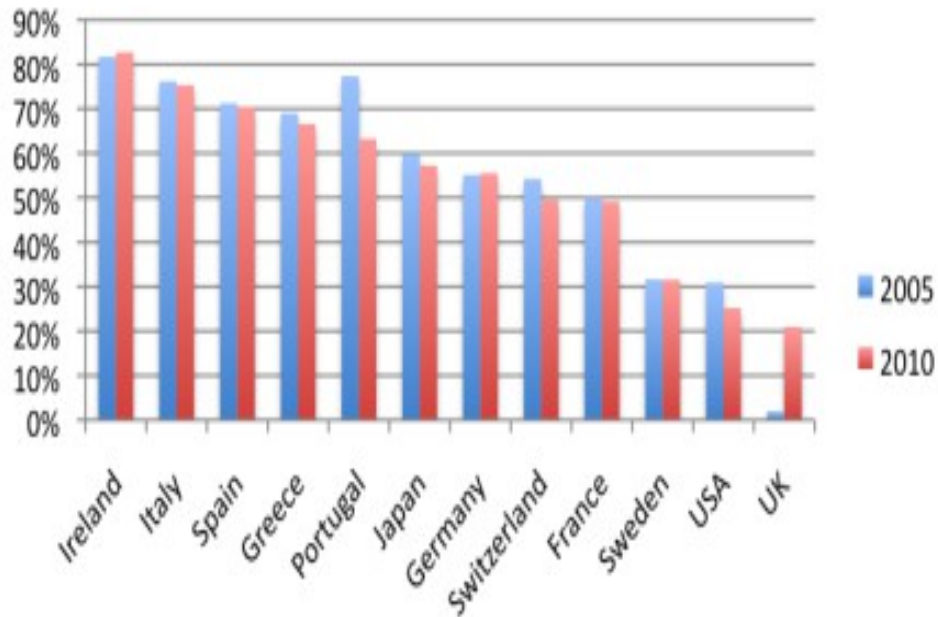
Oil production in the future

- More risks
- More costs
- More Co2
- More volatile
- Less oil after 2020?
- Smaller number of big producers
- More state owned producers
- More energy intensive

Oil price will fluctuate between to high for consumers and to low for producers. Slowing demand and production.

Oil and the Crisis

% of Energy Consumption from Imported Oil and Gas

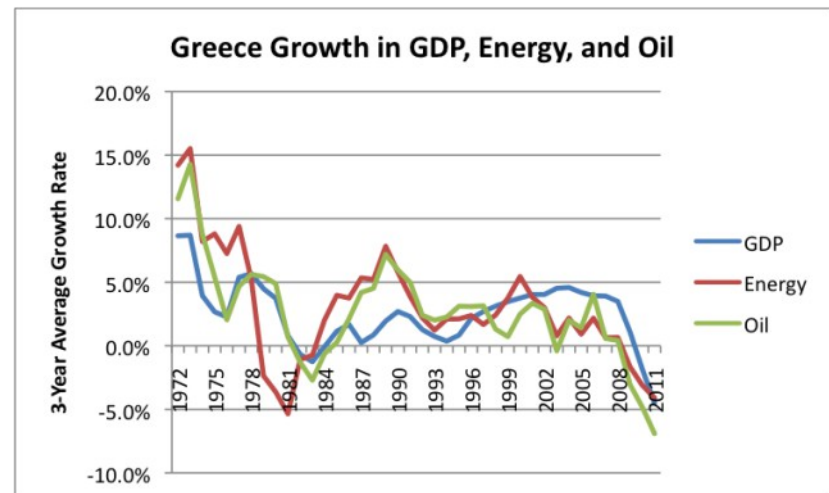


Trade balance problems

Slows economic growth

Job losses

Less tax incomes



Breaking the addiction

- Setting an oil reduction target
 - Scenario's and planning with real oil price forecast
 - More research
 - Starting now with available alternatives
 - Education
- * Lower maximum speed, limit car access and parking
 - * Heating and electricity to Natural Gas & renewables
 - * Isolation
 - * Biobased chemicals
 - * Replace old vehicles
 - * Natural Gas in shipping
 - * Localize the economy

Oil and capitalism

Post oil

- Cooperative local energy
- Stable economy
- Independence
- Localized economy
- Living within planetary boundaries



Oil

- Monopoly
- Endless growth
- Recourse wars
- Globalisation
- Climate changes





•







Meer informatie

