

Séminaire mensuel énergie
Sciences Po – CERI
13 mars 2015

Séminaire "géopolitique de l'énergie"

Samuele Furfari

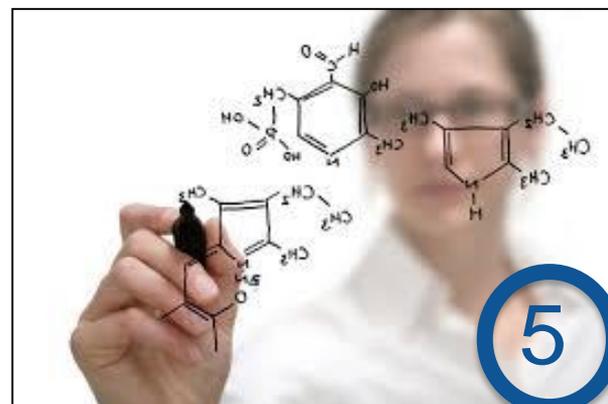
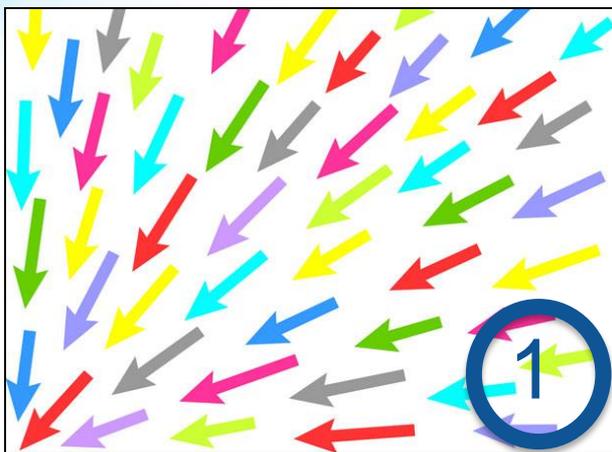
Commission Européenne

Université Libre de Bruxelles

L'Union de l'énergie



A secure, sustainable, competitive, affordable energy
for every European



Concrete actions and initiatives



5

GUIDING
DIMENSIONS

15

CONCRETE
ACTIONS

43

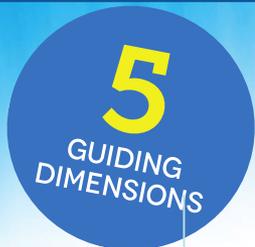
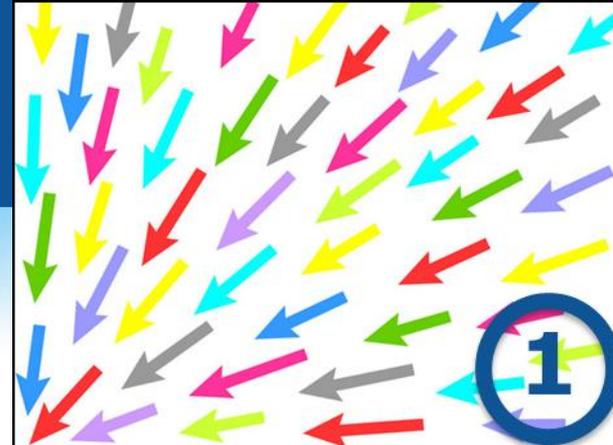
INITIATIVES

How and for whom?



- Article 122.1
 - **Solidarity and trust**
 - Article 194
 - speaking with **one voice** in global affairs
 - An **integrated** continent-wide energy system
 - Sustainable, low-carbon and climate-friendly **economy**
-
- For whom?
 1. Strong, innovative and competitive European economy
 2. Citizens taking ownership of the energy transition

1 Secure supplies



We have to become **less dependent** on energy from outside the EU

- increasing transparency on gas supply
- diversifying sources, supplies and routes
- working together on security of supply
- developing a stronger European role in global energy markets.



Revision of security of gas supply regulation



Comprehensive LNG strategy



Develop alternative suppliers, including Southern Gas Corridor and with the Mediterranean



Revision of the Decision on Intergovernmental Agreements



EU Energy and climate policy diplomacy and trade policy

2 Internal energy market



5
GUIDING
DIMENSIONS

Energy should flow freely across the EU – without any technical or regulatory barriers



- connecting markets through interconnections
- implementing and upgrading the internal market's software
- enhancing regional cooperation
- empowering consumers.

Concrete actions for the Internal energy market



Implementation of major infrastructure projects (PCIs)

Energy Infrastructure Forum

Legislation on security of supply for electricity

European electricity market design

Reinforced European regulatory framework

Guidance on regional cooperation

Analysis of Energy prices and costs

Vulnerable consumers protection

3 Energy efficiency first



5
GUIDING
DIMENSIONS

Rethink energy efficiency

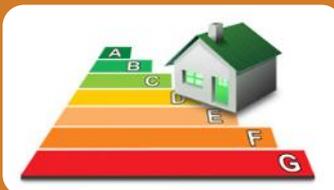


- increasing energy efficiency
- in particular in the building sector
- promoting an energy-efficient and decarbonized transport sector
- efficient products.

Concrete actions for energy efficiency



Review the Energy Efficiency Directive



Review the Energy Performance Building Directive



Review the Energy Labelling and Ecodesign Directives



Strengthened financial instruments to support investments in energy efficiency



EU strategy for Heating and Cooling

4 Emissions reduction

5

GUIDING
DIMENSIONS

European
Commission

An **ambitious climate policy** is an integral part of our Energy Union

LowCarbonEconomy.com™
Let's make it happen!

4

- to enforce the 2030 energy and climate framework
- becoming the number one in renewables.

Concrete actions for emissions reduction



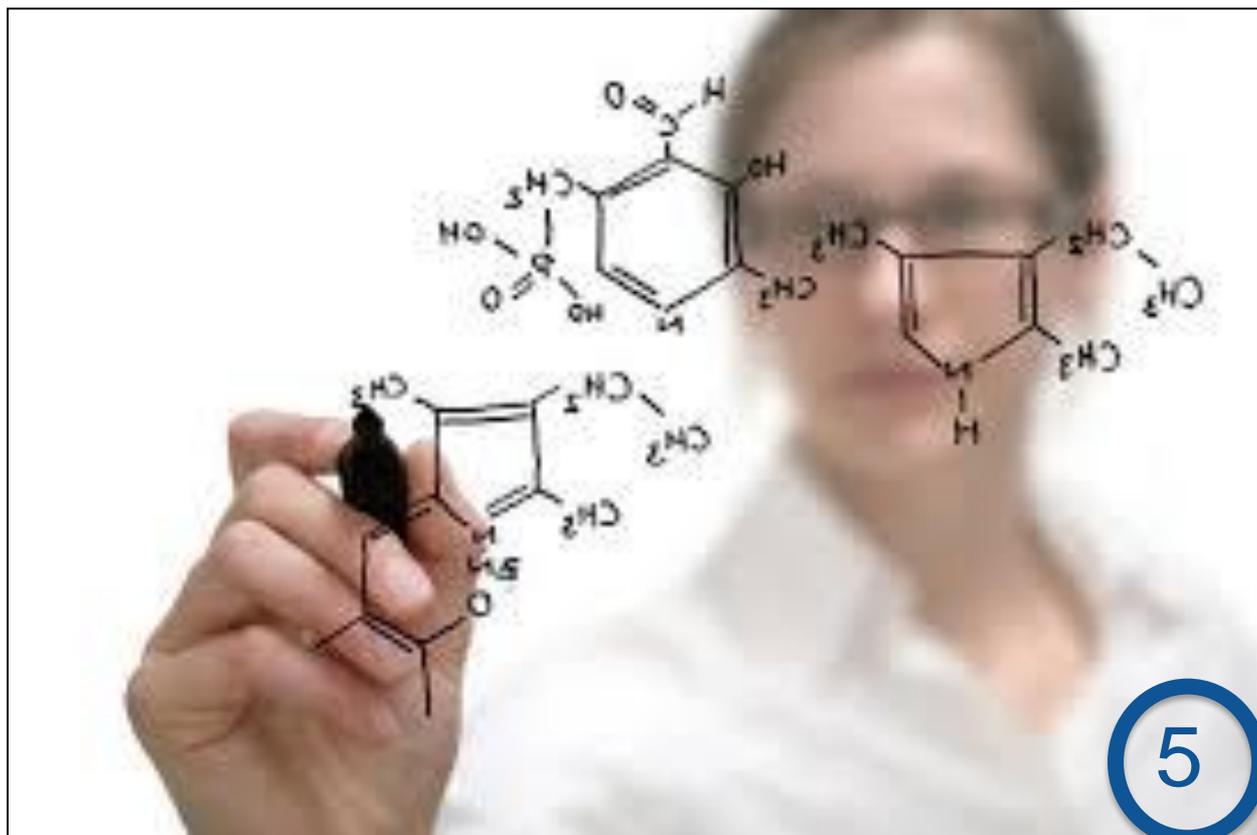
Legislation to achieve the 40% GHG reduction target (both in ETS and non ETS)

Renewable Energy Package: RES directive revision, best practices for self-consumption and support schemes

Comprehensive road transport package

Increased deployment of alternative fuels and clean vehicles

Developing EU **technological leadership** in low carbon technologies



Research & innovation : Concrete actions



Integrated SET Plan, including smart cities and smart financing



Strategic transport research and innovation R&I agenda



Initiative on EU global technology and innovation leadership

The Commission will launch a dynamic governance process for the European Energy Union



Integrated energy and climate governance



Streamlined planning and reporting



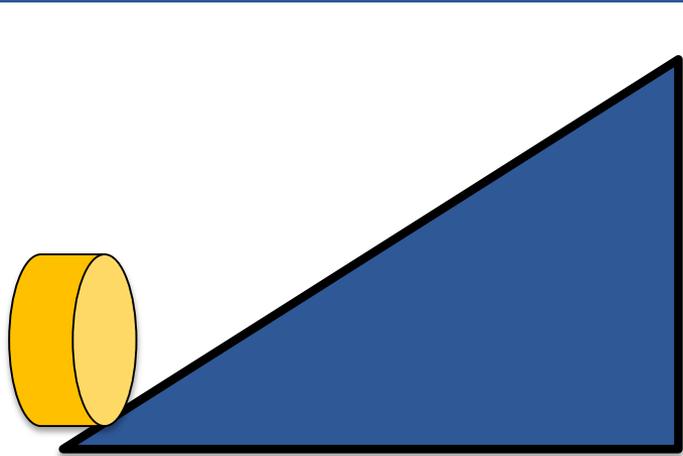
Deepen MS cooperation, improved data analysis and intelligence



Annual reporting to the EP and Council

Successful implementation depends on the political commitment of all actors concerned, including EU institutions and Member States!

Énergie = travail



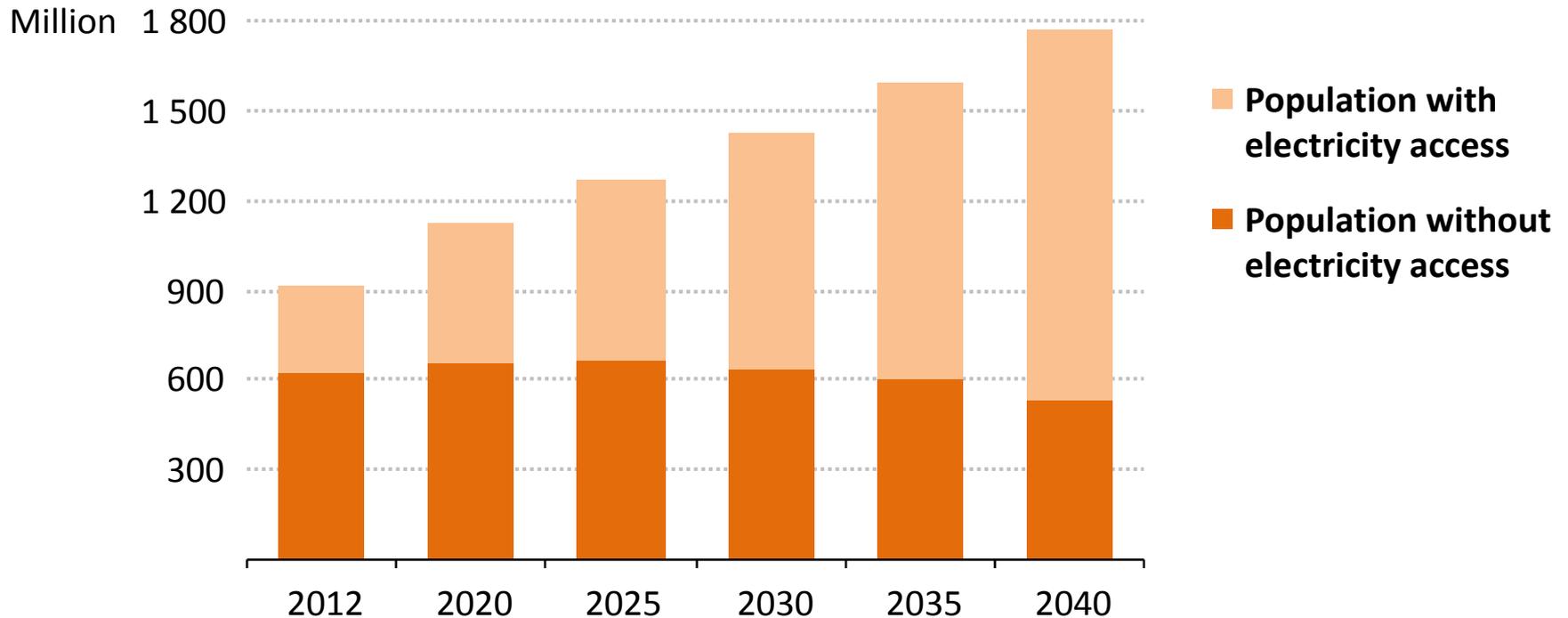


Bio!

2,7 milliards !

1.3 G sans électricité dans le monde

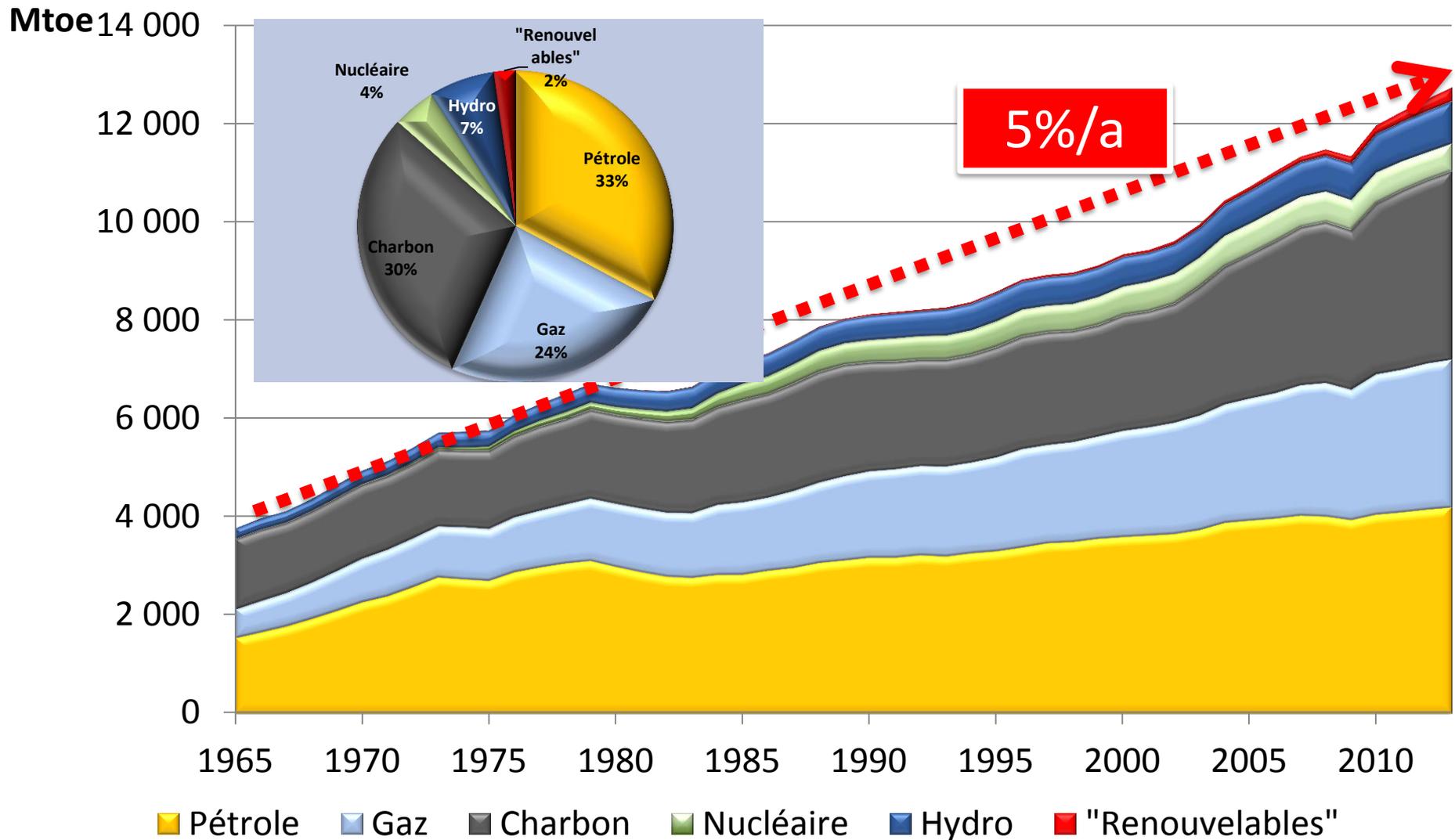
Access to electricity in sub-Saharan Africa

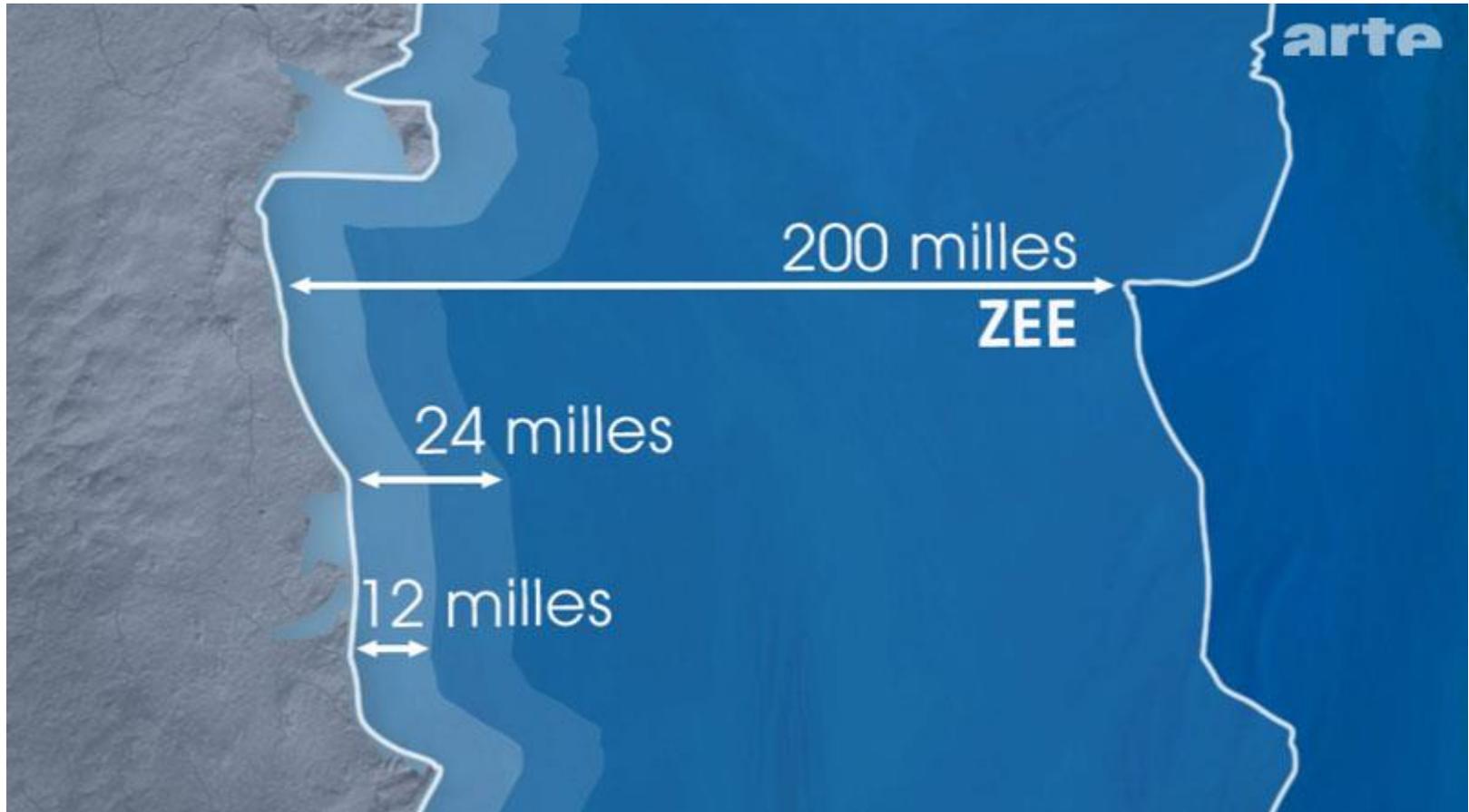


In sub-Saharan Africa, 620 million people – two-thirds of the population – live without electricity. Only a handful of countries have electrification rates above 50%

Nearly one billion people gain access to electricity, but this still leaves 530 million, primarily in rural communities, without power in 2040

Consommation mondiale d'énergie

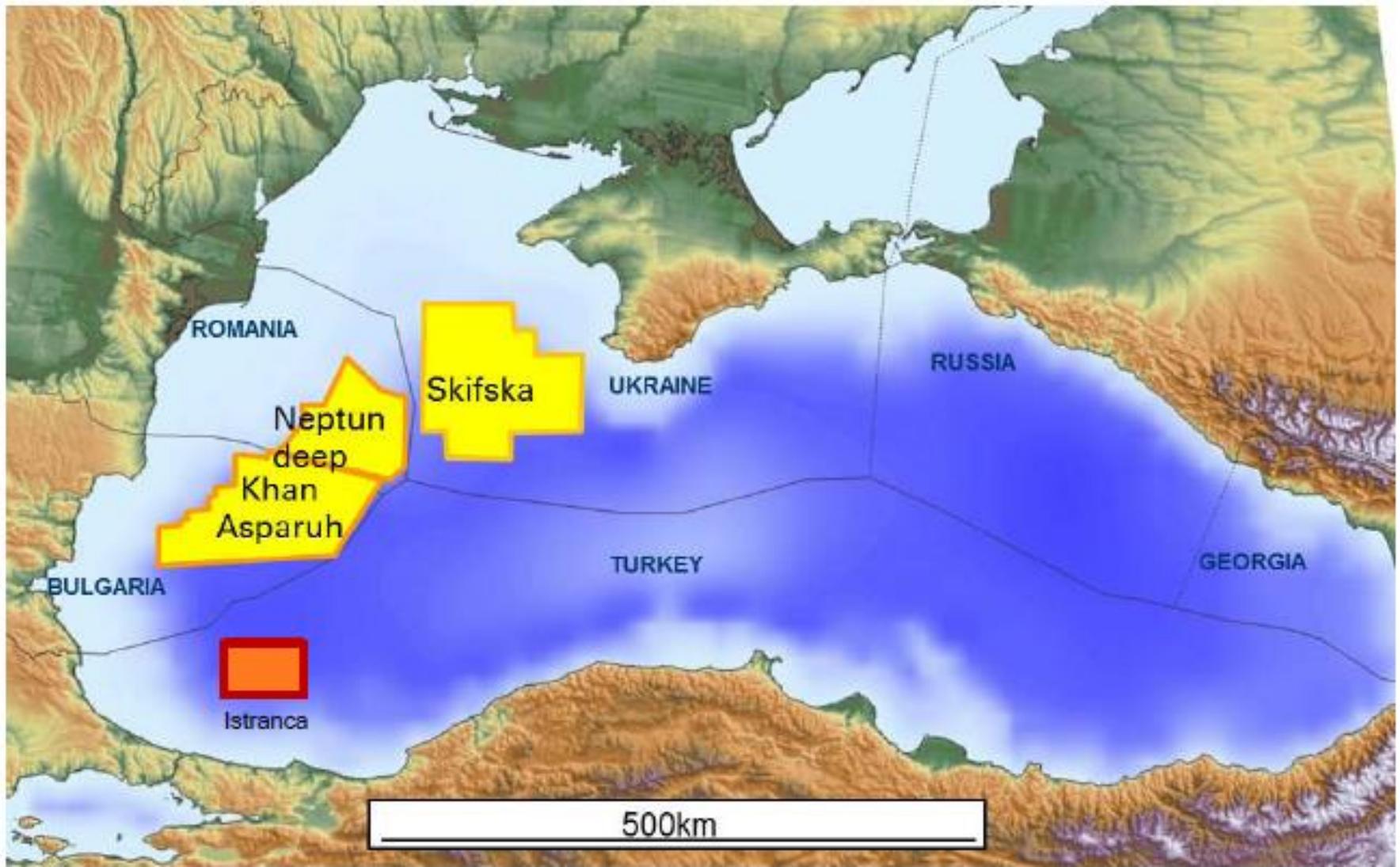




La nouvelle Europe



http://farm8.staticflickr.com/7292/10134658063_fca4fc3da2_o.jpg



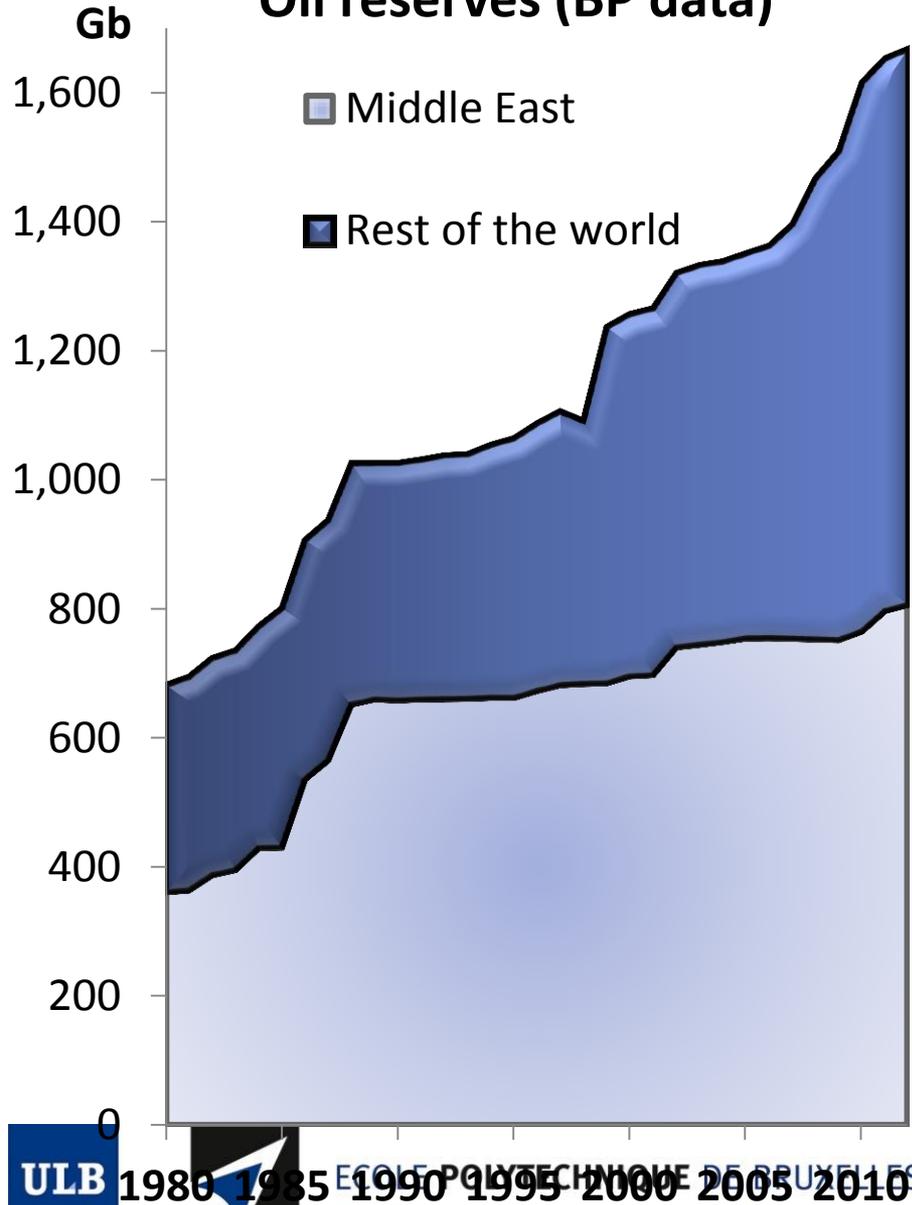
Blocks of OMV / OMV Petrom (Romania, Bulgaria, Ukraine)



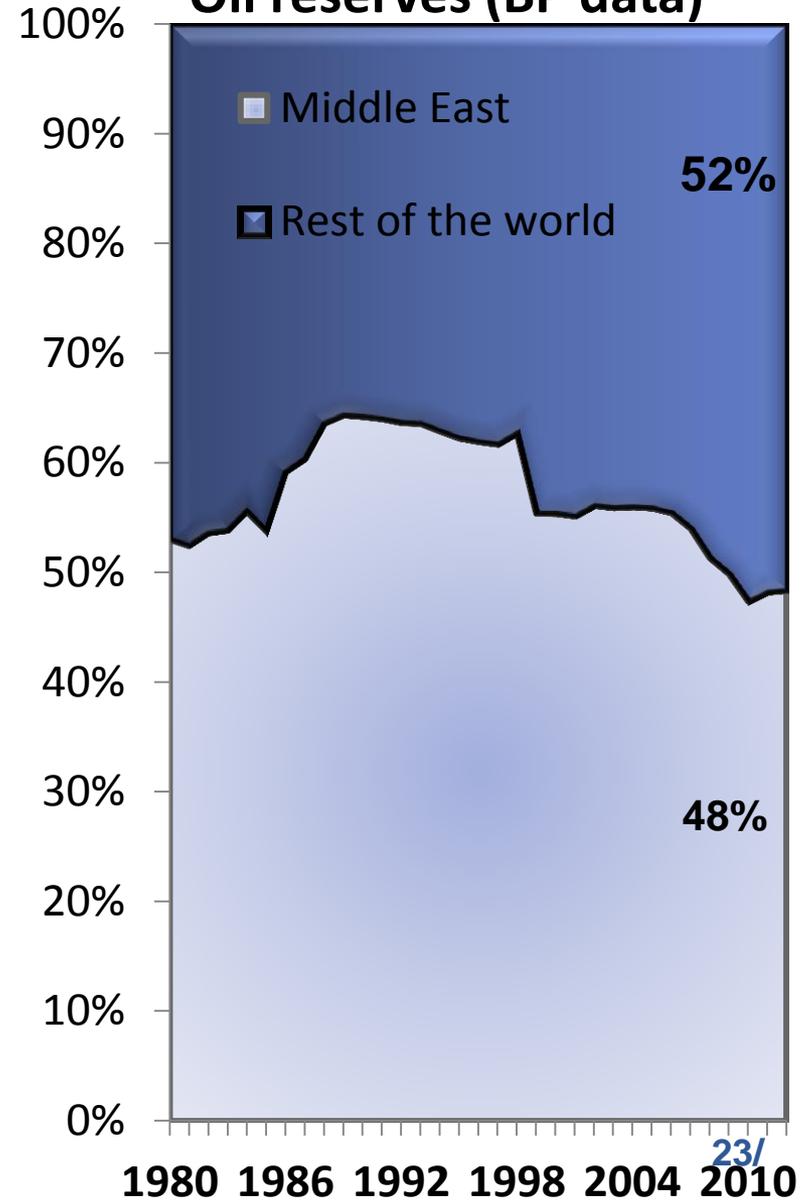
Blocks of TPAO

World proven oil reserves are still growing

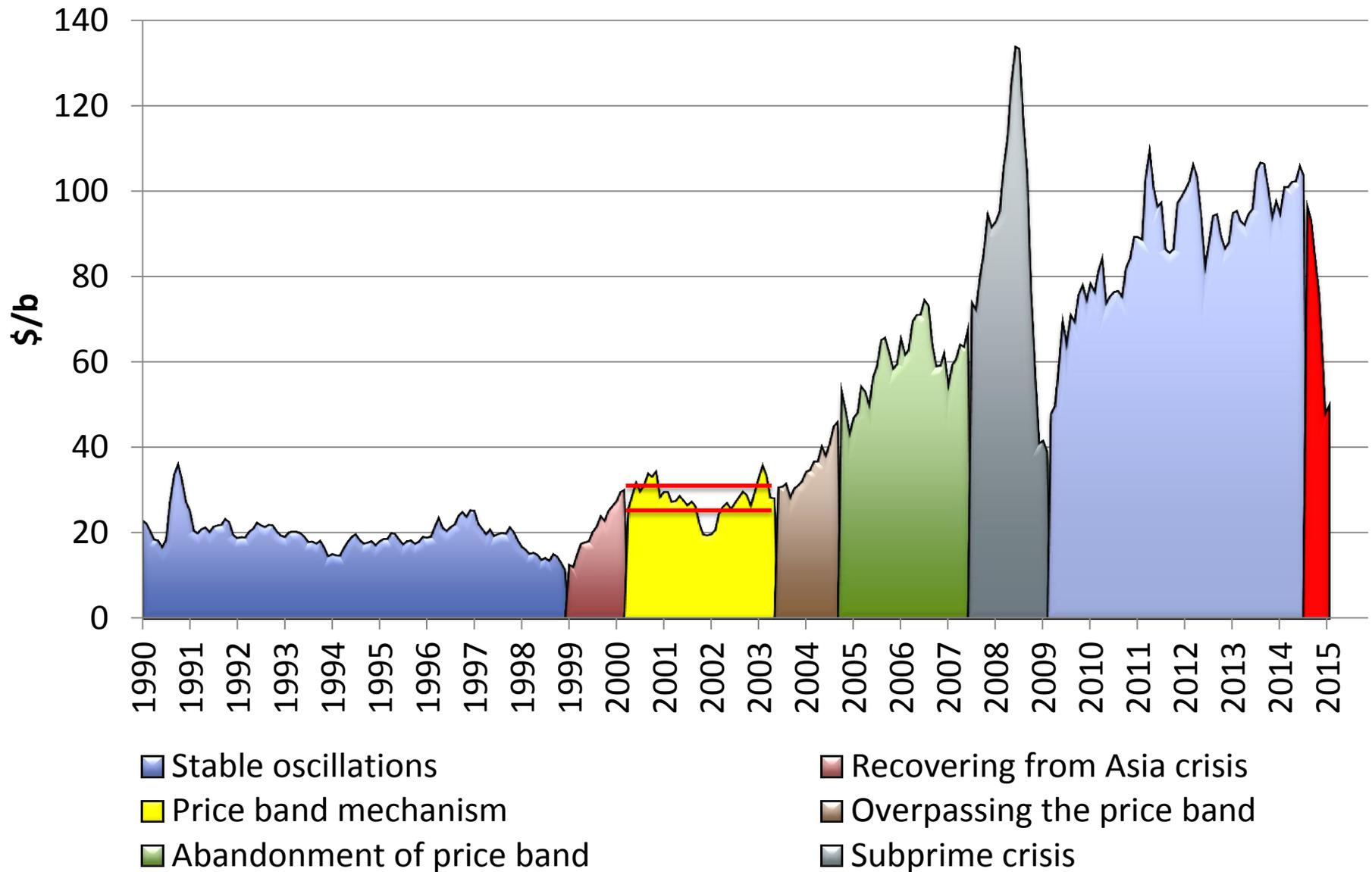
Oil réserves (BP data)



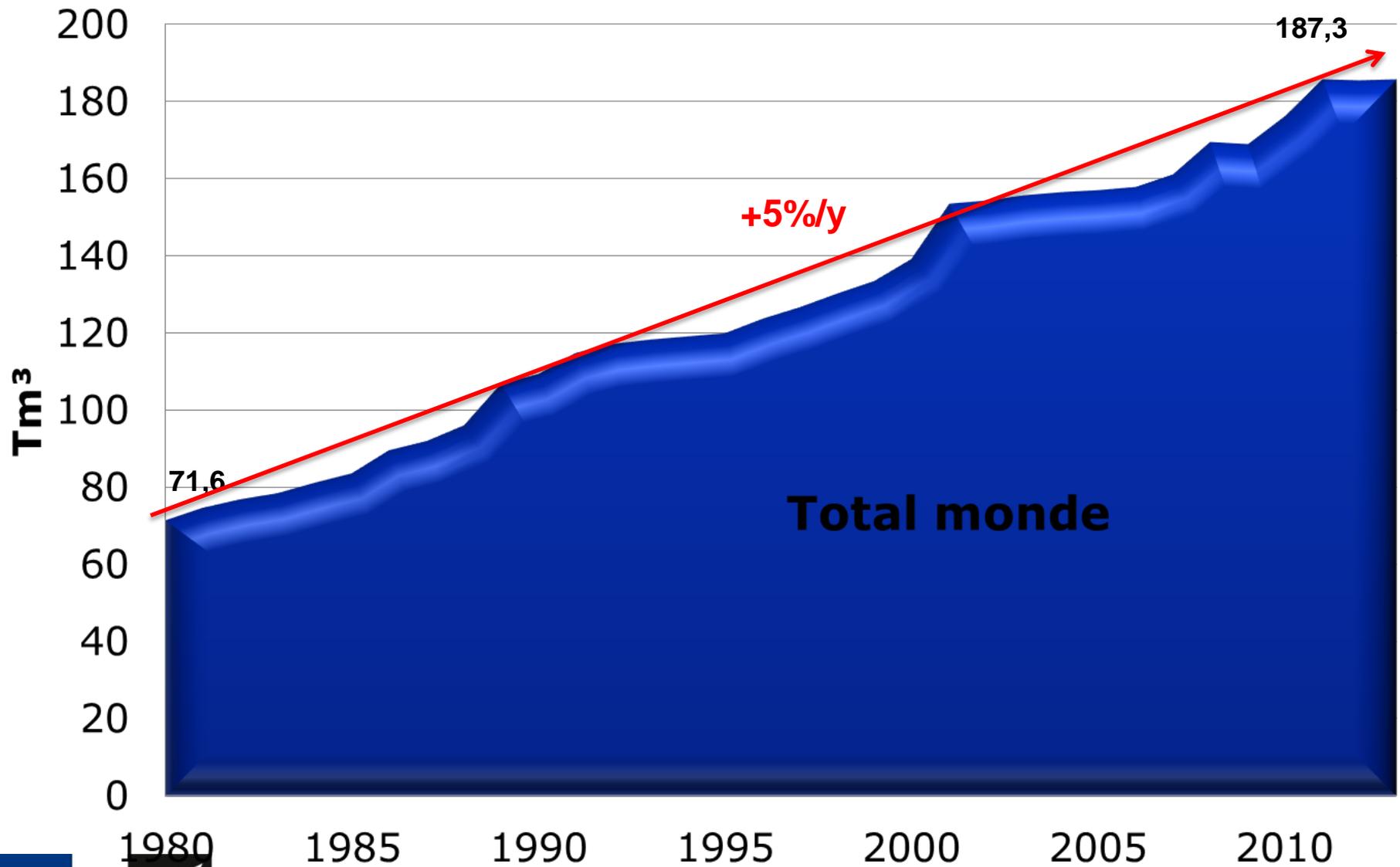
Oil réserves (BP data)



Crude oil price evolution

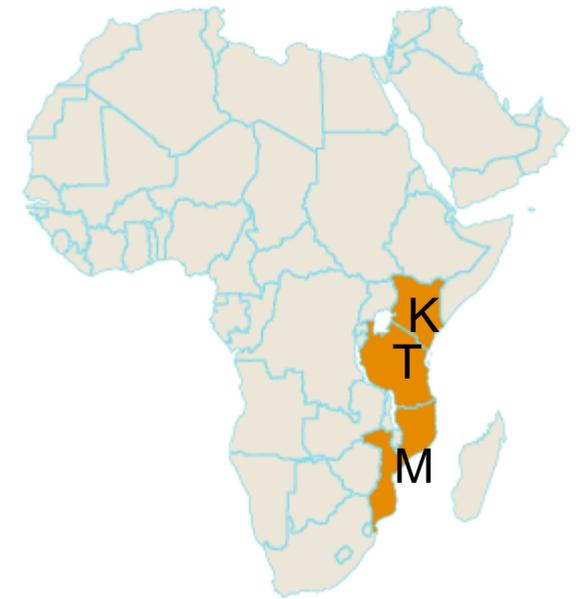
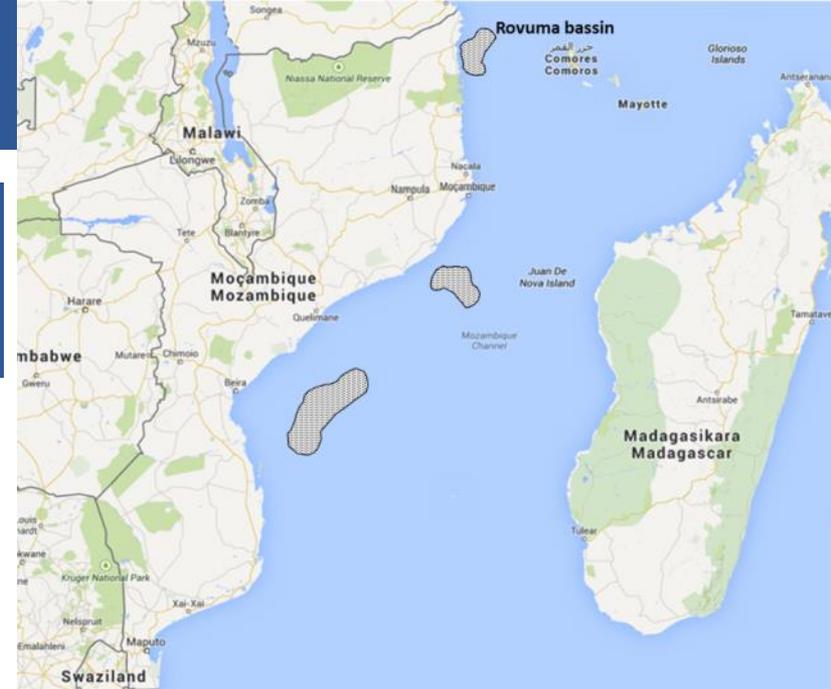
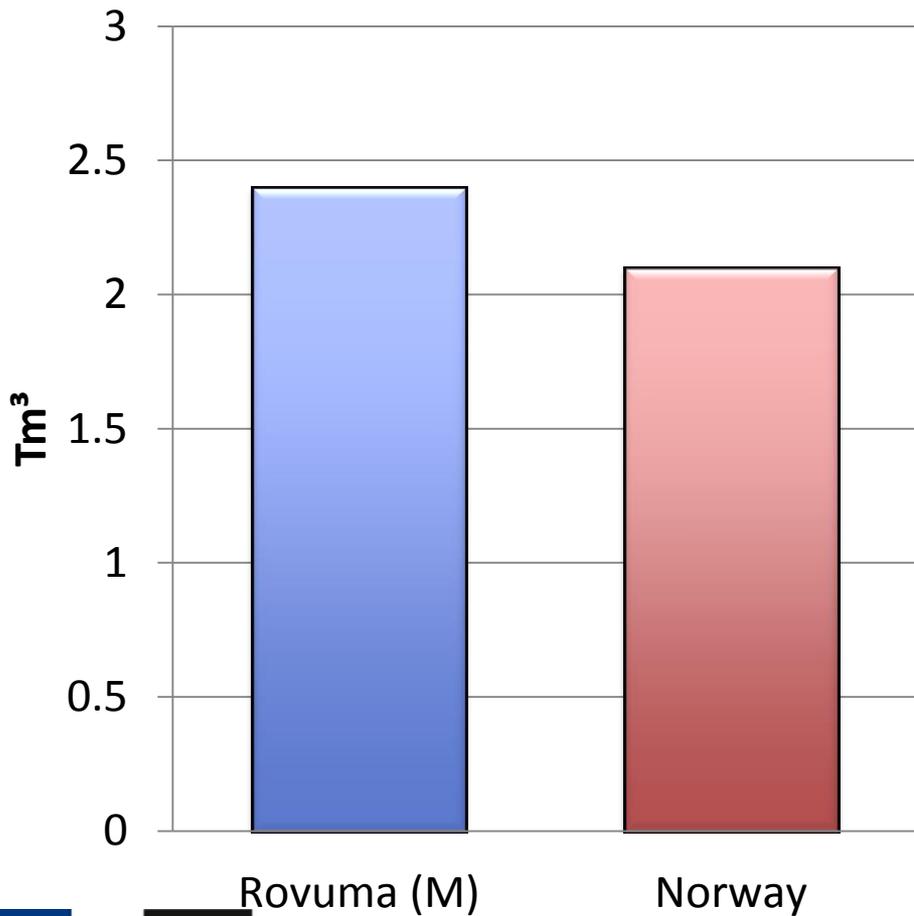


World conventional gas reserves

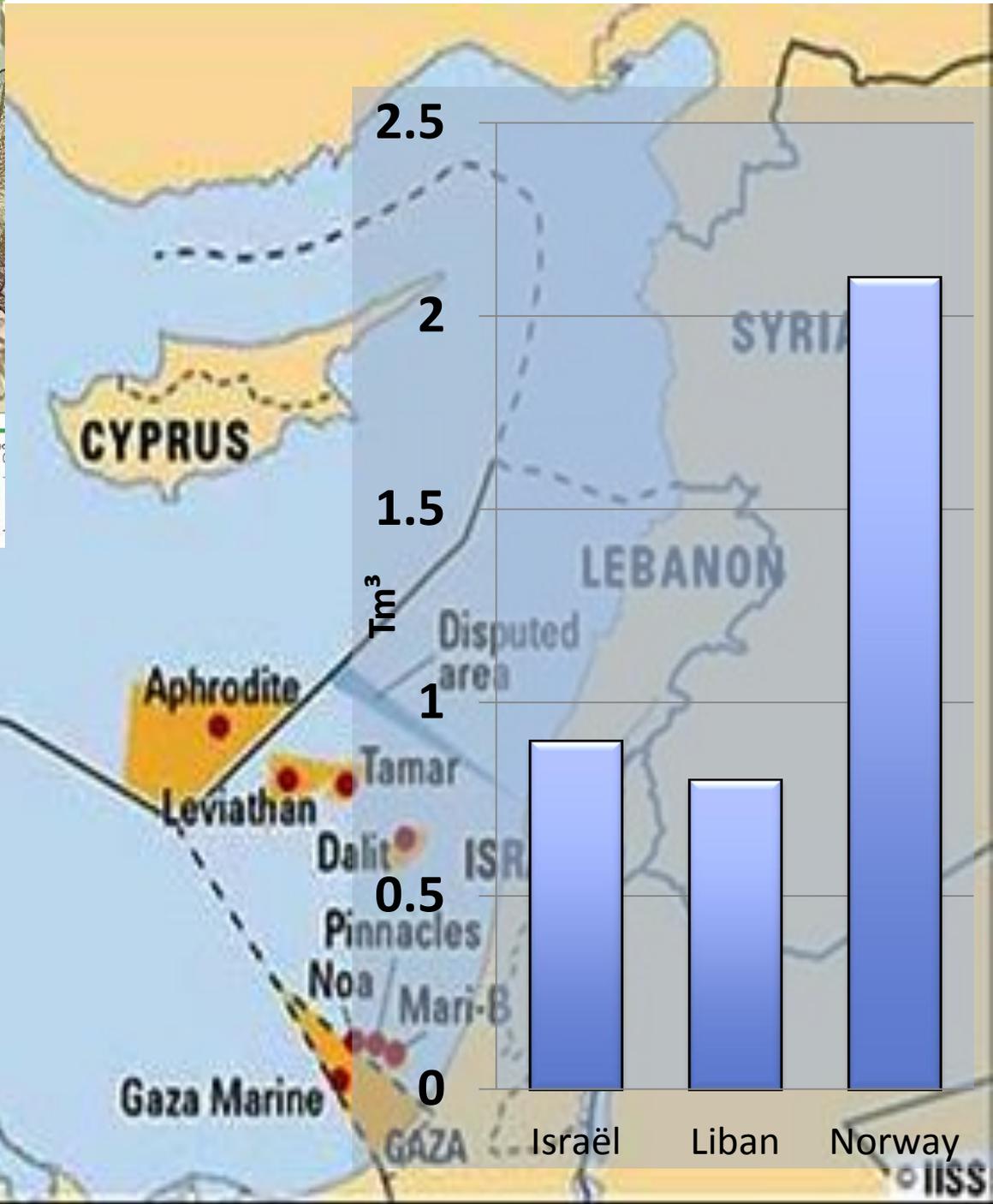
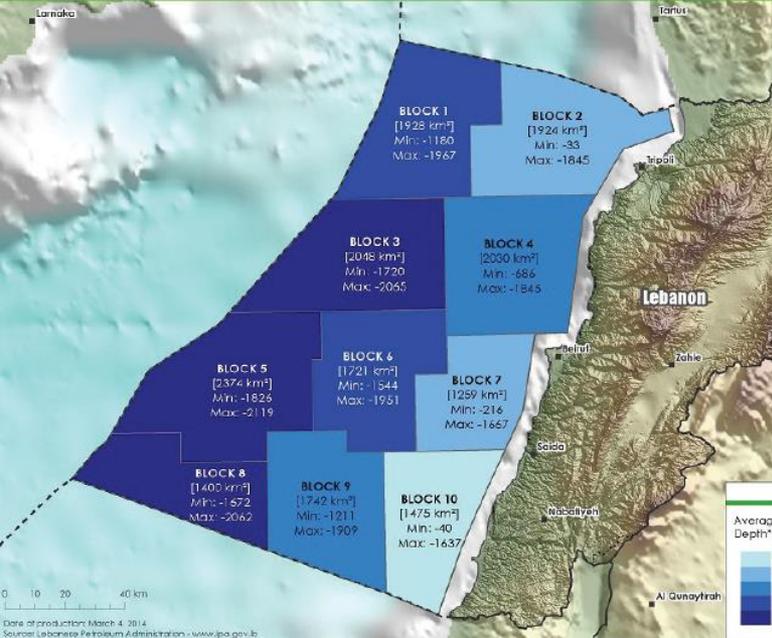


GAS EN MOZAMBIQUE

Entre Juin 2012 et Juin 2013



Click the country areas to view





Norway

Russia

Caspian Sea

America

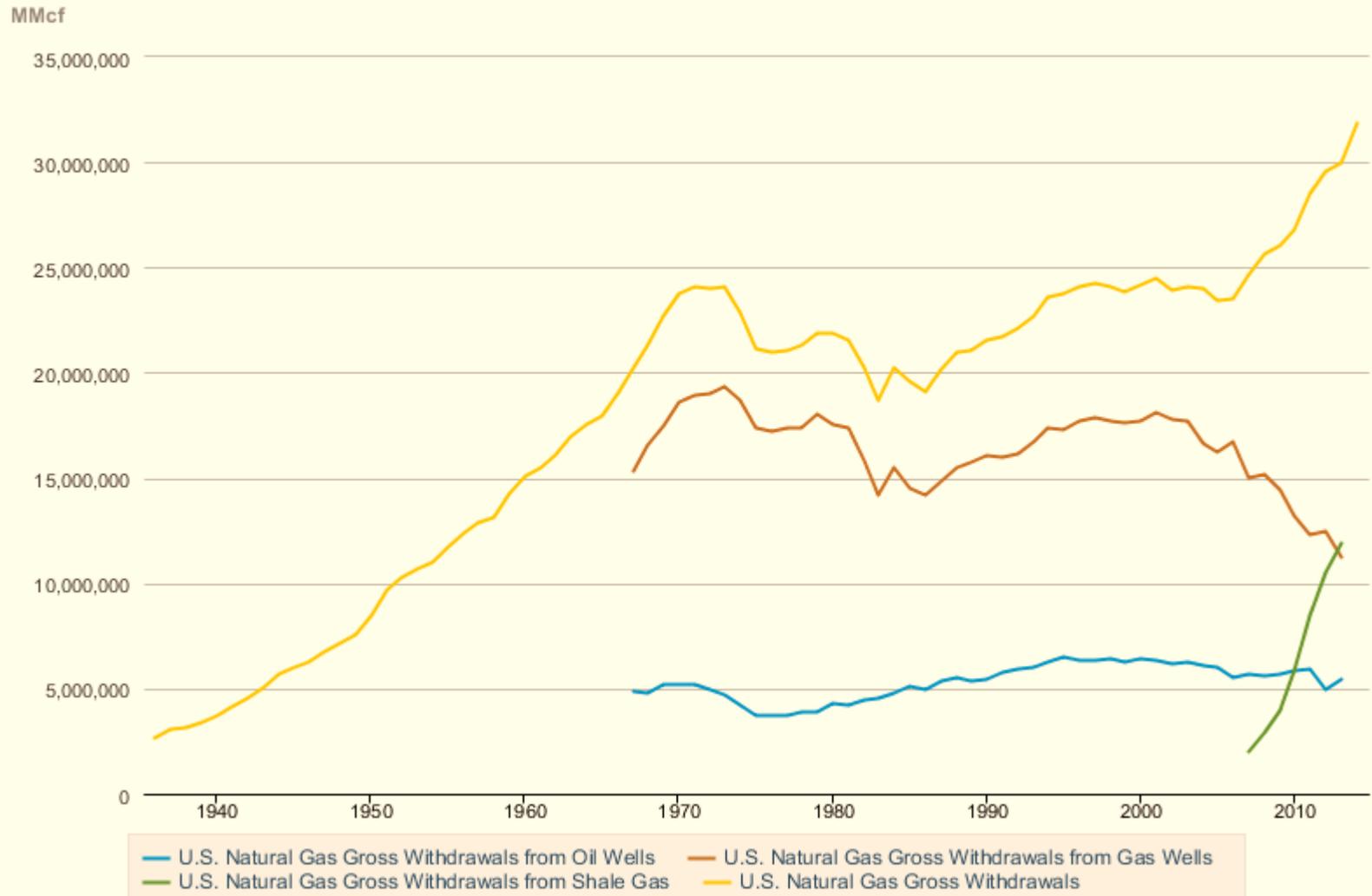
Nigeria

Algeria
Libya

Qatar or ME

USA gas production

Natural Gas Gross Withdrawals and Production



Source: U.S. Energy Information Administration

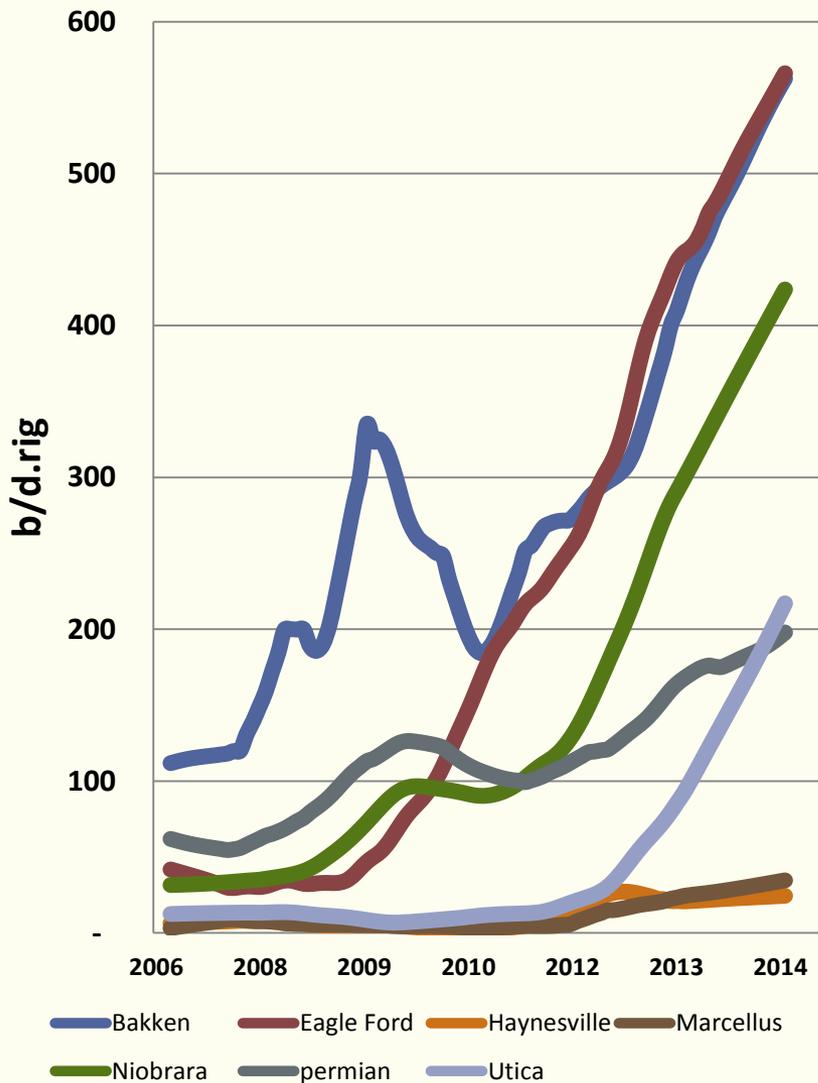
Saudi America

Crude Oil Production

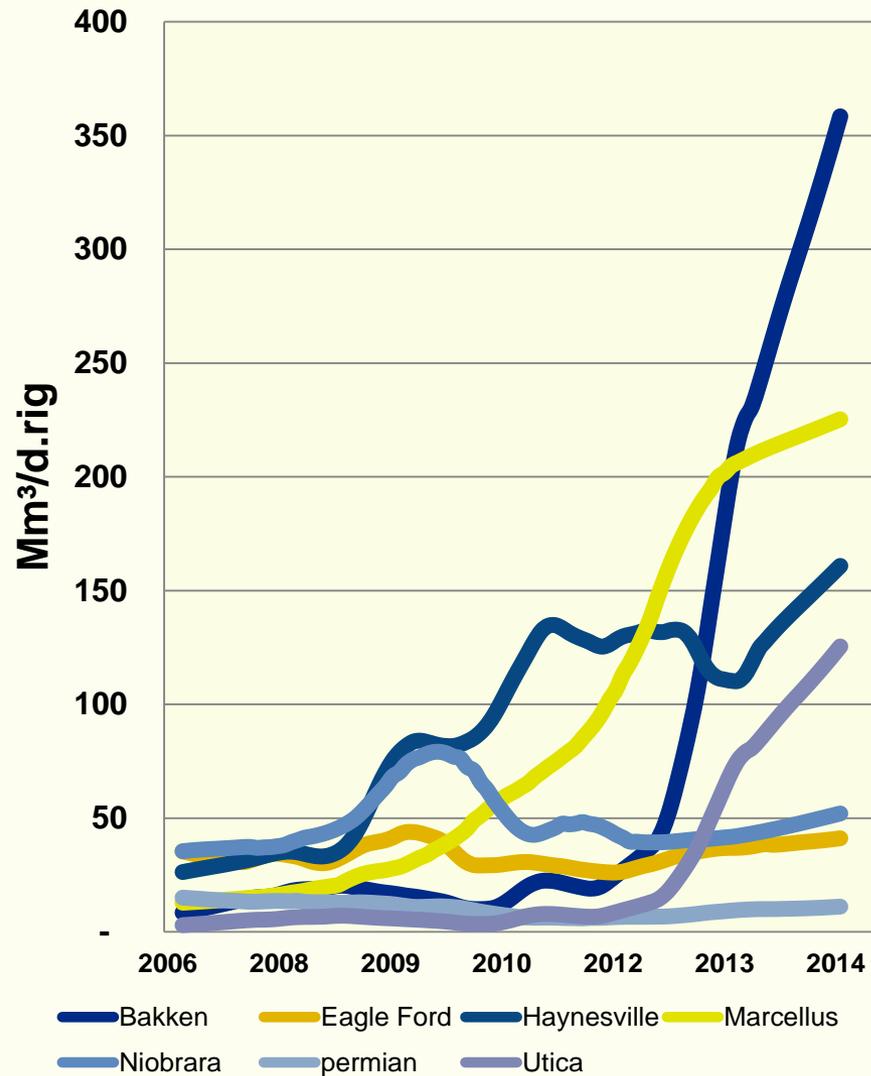


eia Source: U.S. Energy Information Administration

Oil rig productivity



Gas rig productivity



The Bureau of Energy Resources



Amos J Hochstein



will ensure that all our diplomatic relationships advance our interests in having access to secure, reliable, and ever-cleaner sources of energy.

To manage the geopolitics of today's energy economy through reinvigorated energy diplomacy with major producers and consumers.

Bureau of Energy Resources (ENR) will ensure that all our diplomatic relationships in having access to secure, reliable, and ever-cleaner sources of energy. The development of ENR is a direct result of the Quadrennial Diplomacy and Development Review (QDDR).

The Bureau of Energy Resources has three

to manage the energy economy and energy diplomacy with major producers and consumers.

mission: To stimulate the energy economy and sustain energy policies in terms of energy security, development,



Secretary Kerry Keynotes Energy



John Boehner – Orrin Hatch

Please, come back to Iran. We will change our buy-back contract's type

Iran Crude Oil Production



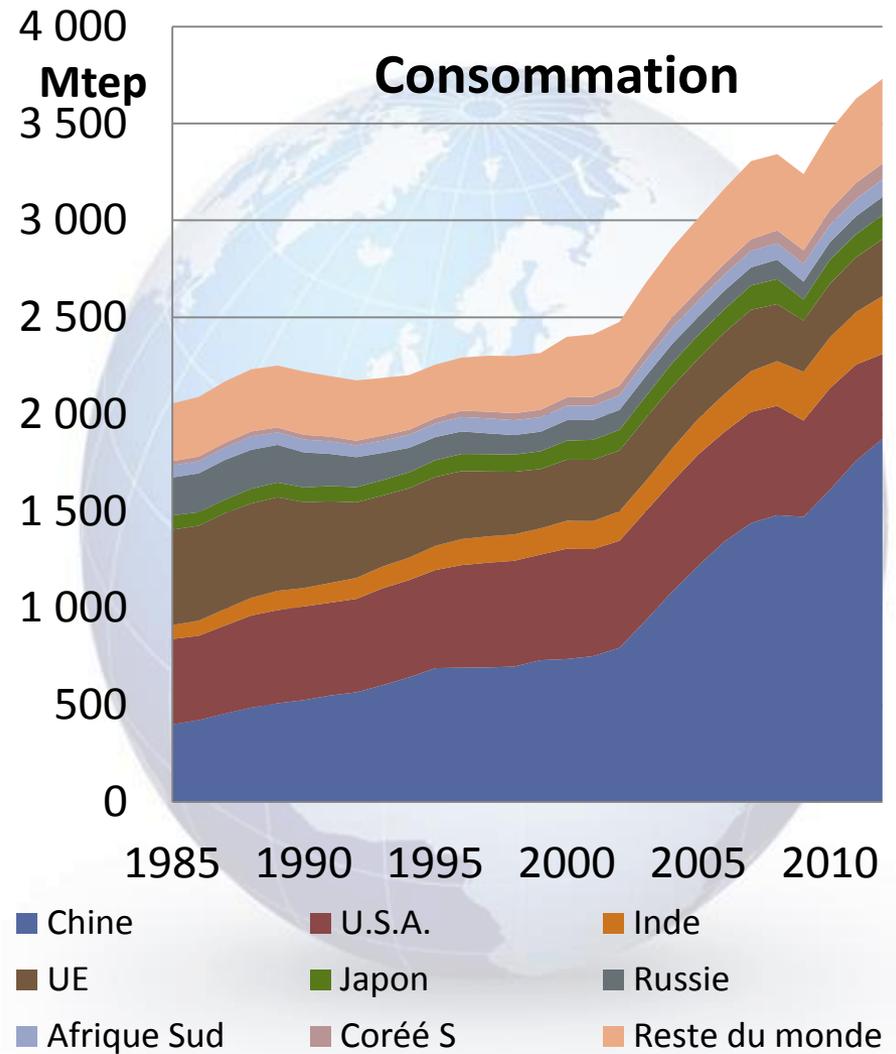
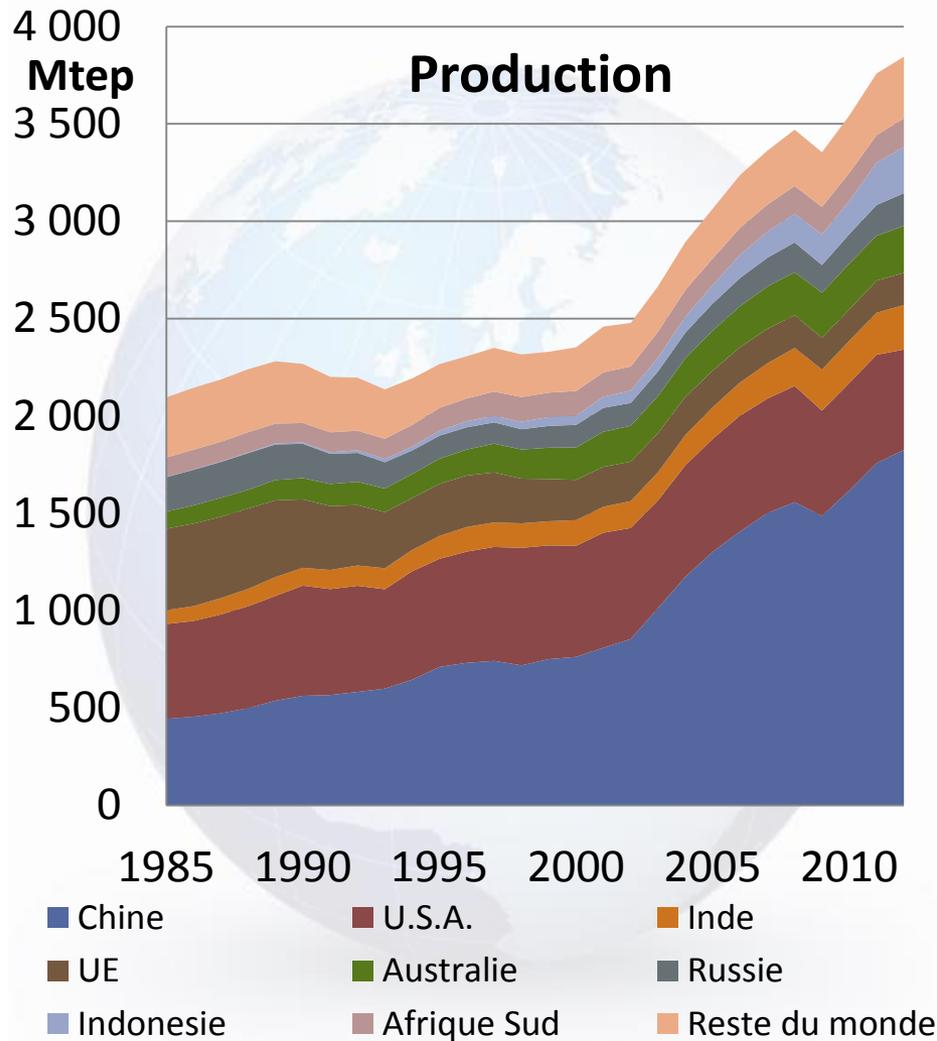
Market Realist^Q

Source: BBG



Davos, 23/1/2014

Le charbon dans le monde



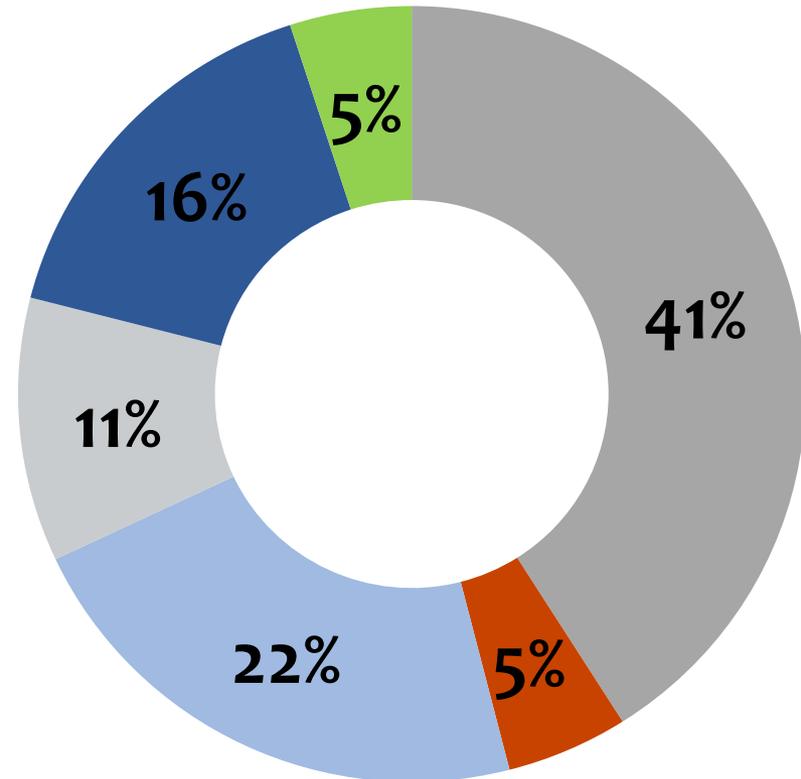
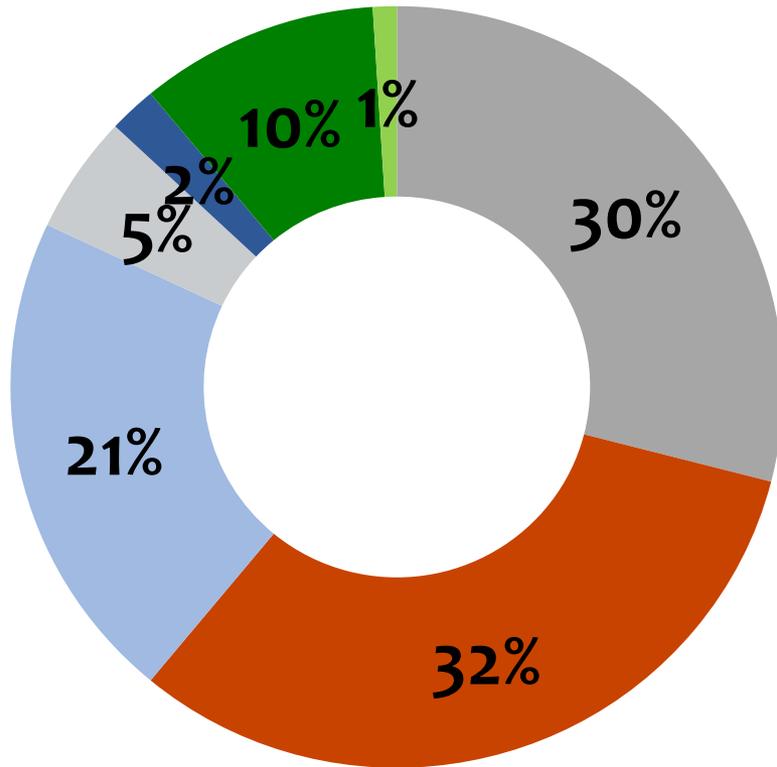
Asia /Pacific : 70% of world consumption
China : 50 % of world consumption



Le charbon, important pour l'énergie et encore plus pour l'électricité

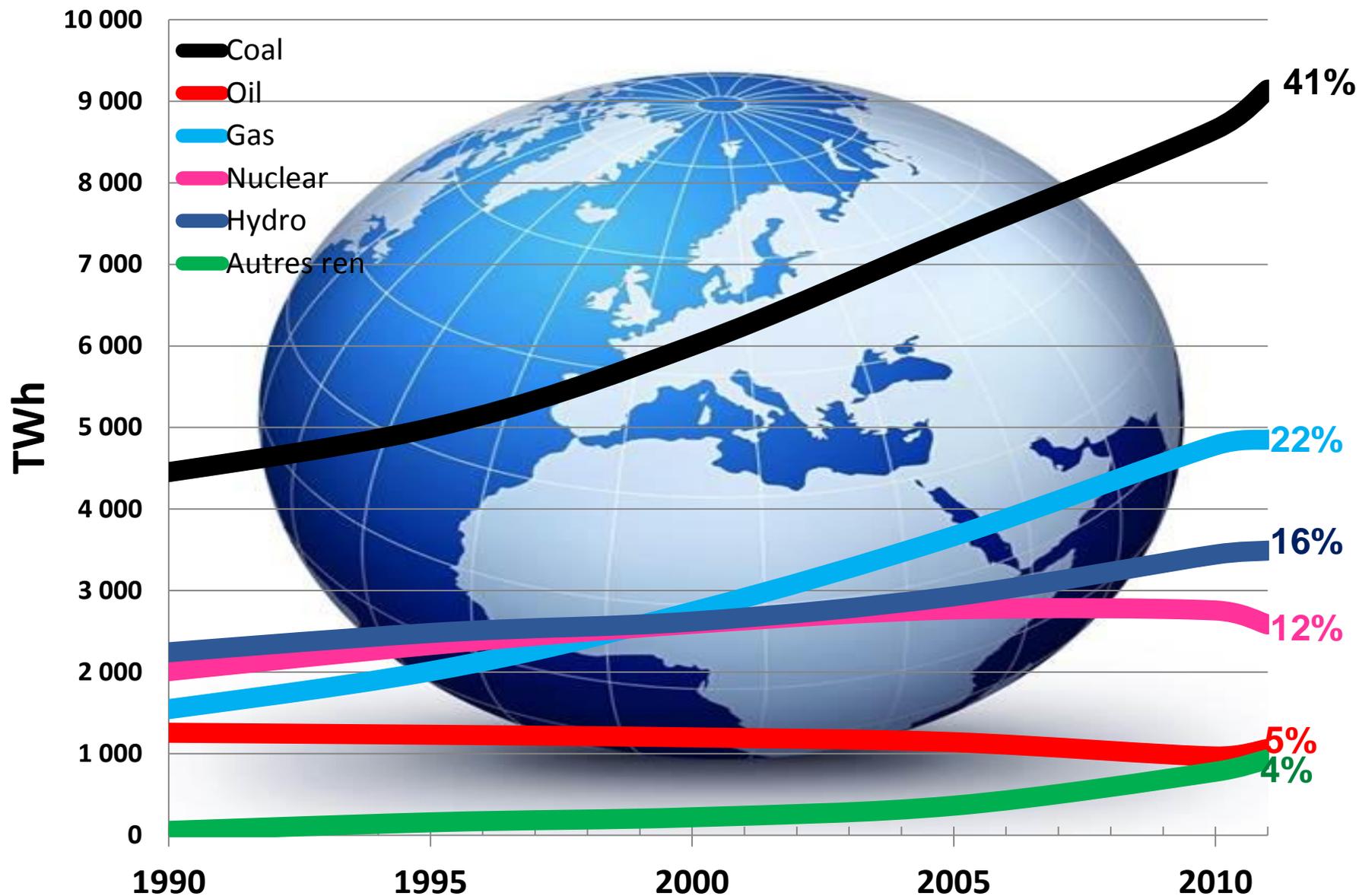
Total Primary Energy Supply
19,1Gtce

Gross Power Generation
22 500Twh

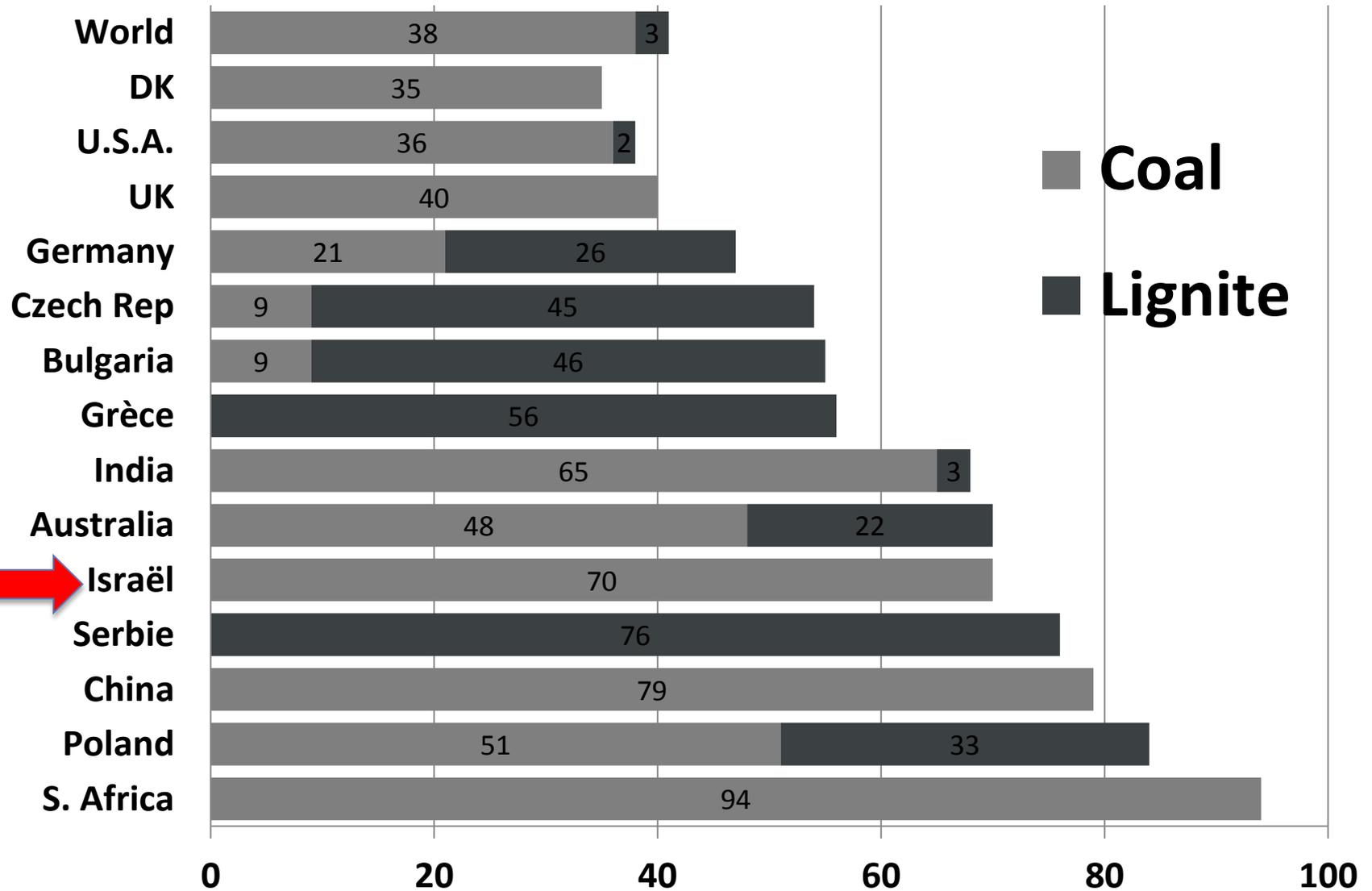


- Coal
- Oil
- Natural Gas
- Nuclear Energy
- Hydro
- Traditional Biomass
- New Renewables

Production mondiale d'électricité par énergie primaire

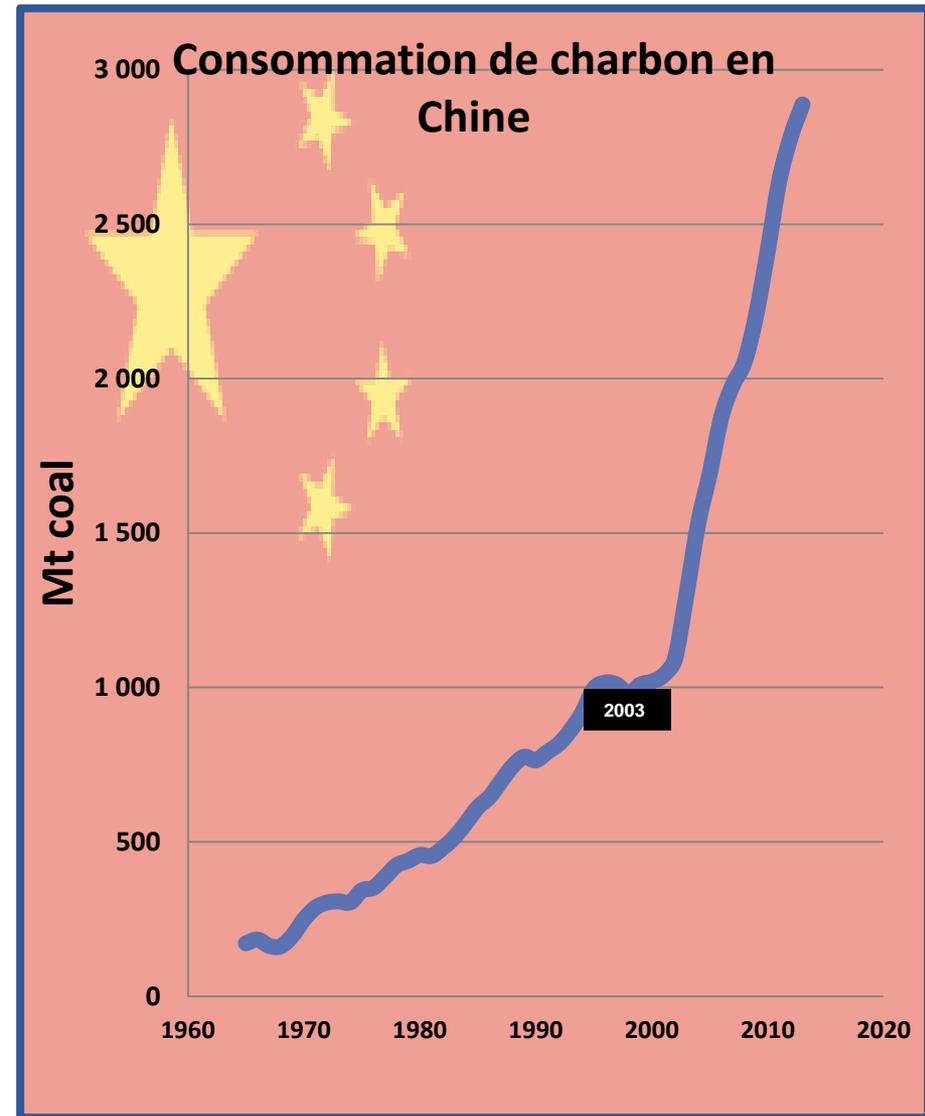
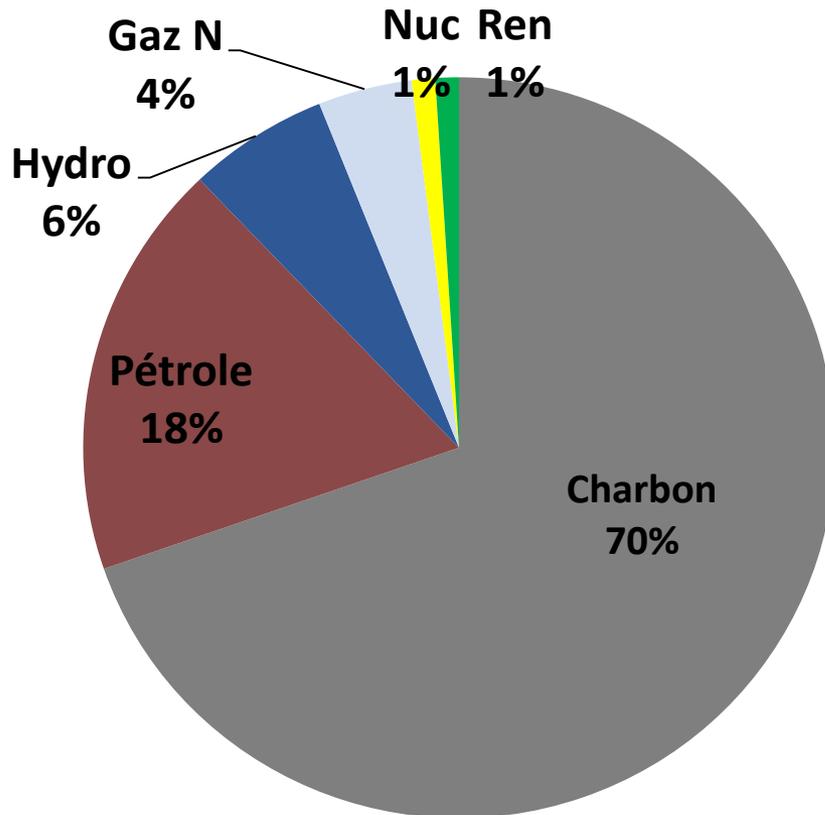


Part du charbon dans la génération d'électricité (%)

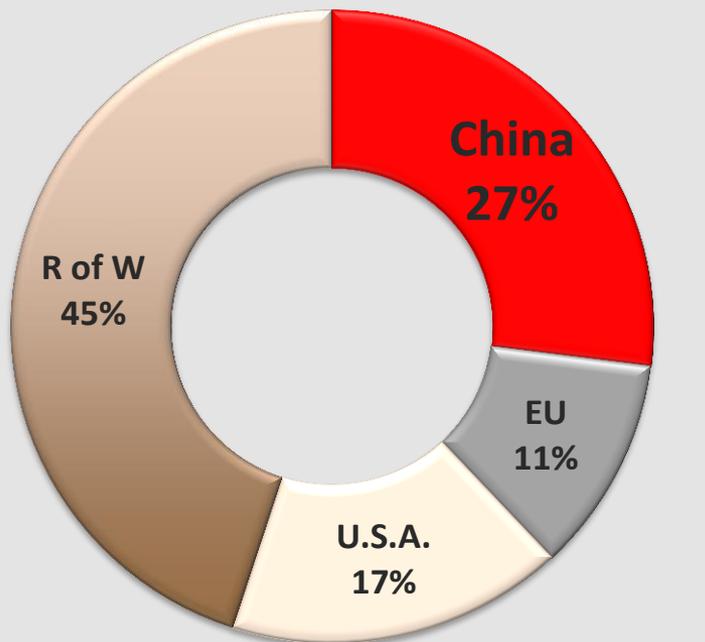


Chine: le charbon n'a pas d'autres alternatives

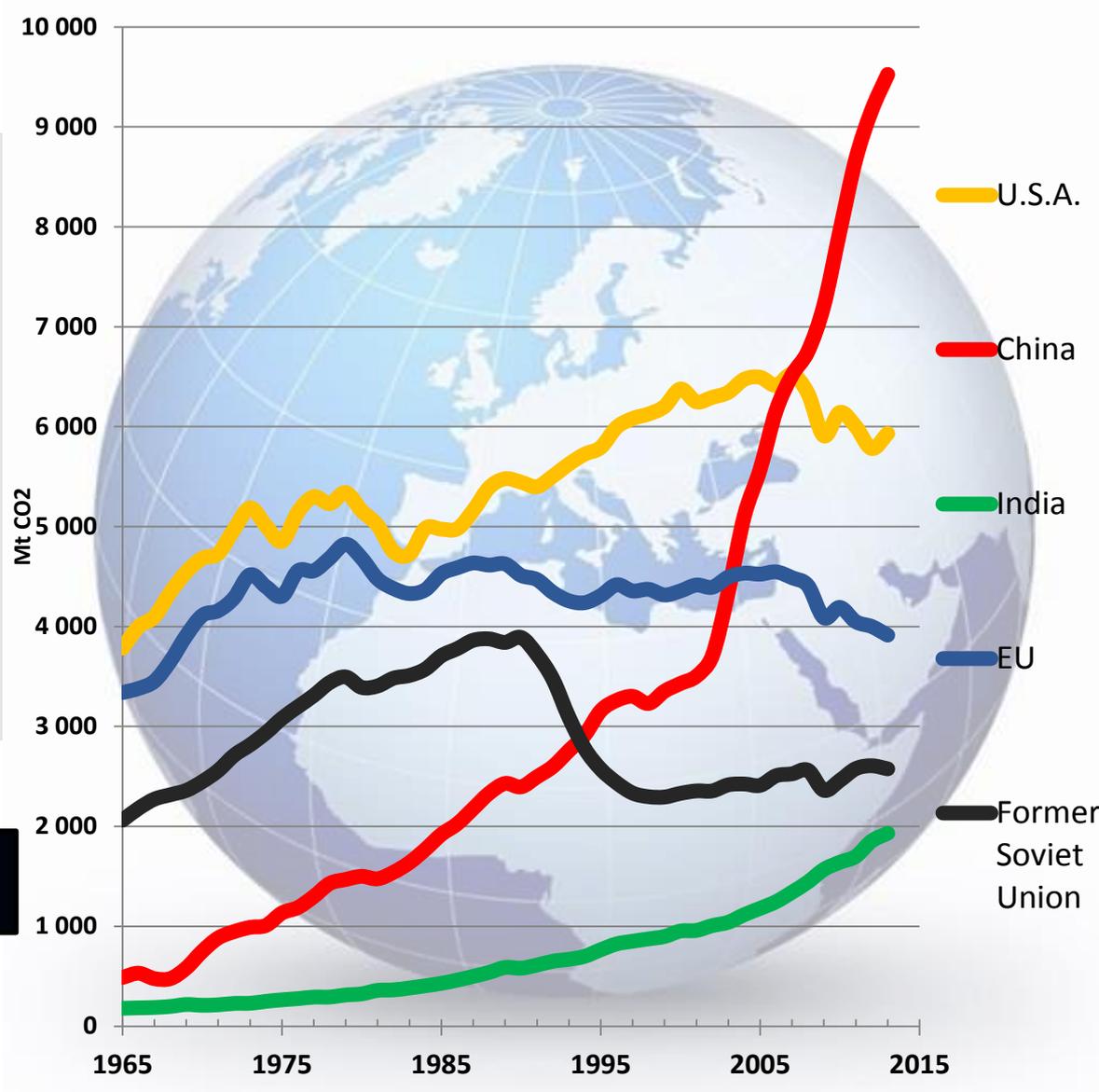
- 400 millions "Occidentals" + 1200 million "Indians"
- Country is completely electrified



Emissions de CO₂



+55% depuis Rio-1992



Merci pour votre attention

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