L'abondance des énergies fossiles, le vecteur de la nouvelle géopolitique du monde

Samuel Furfari
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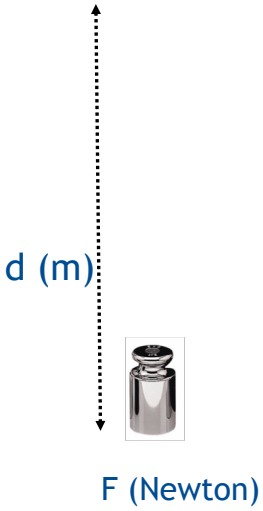
Fondation d'Arenberg, Sénat Belge

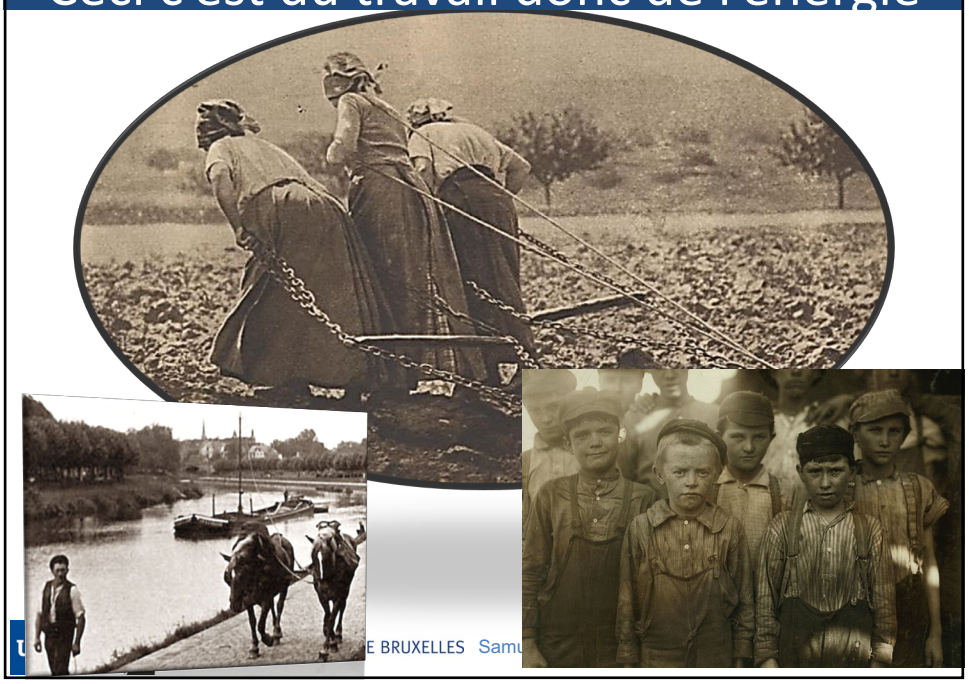
Energie ≡ Travail

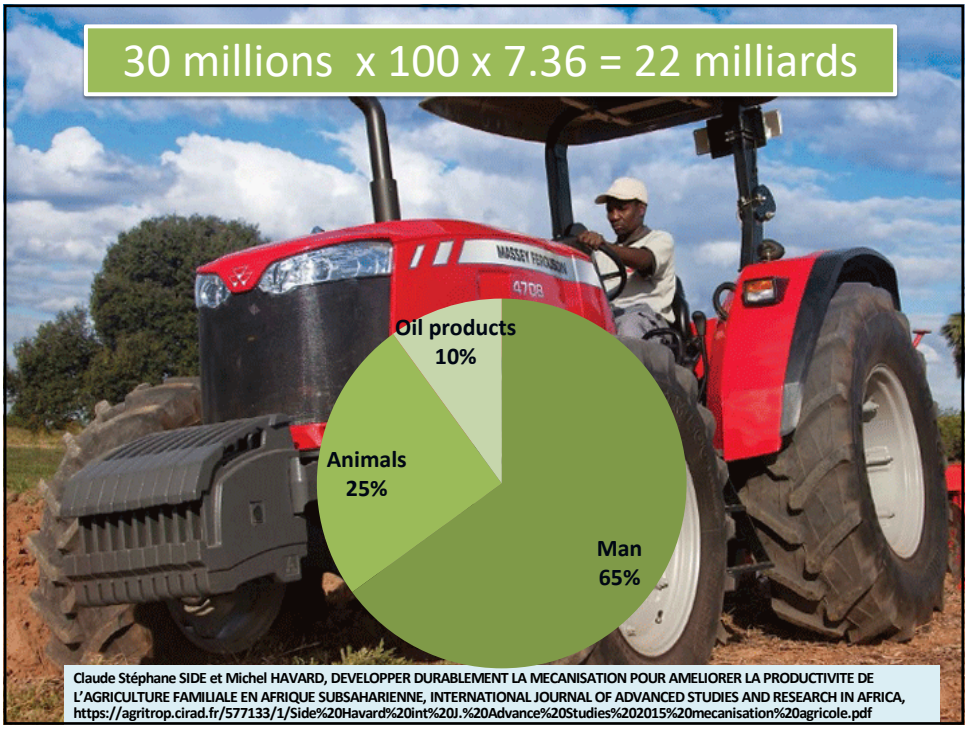
$W = \vec{F} \times \vec{d}$ $\quad W = \int \vec{F} . \overrightarrow{du}$

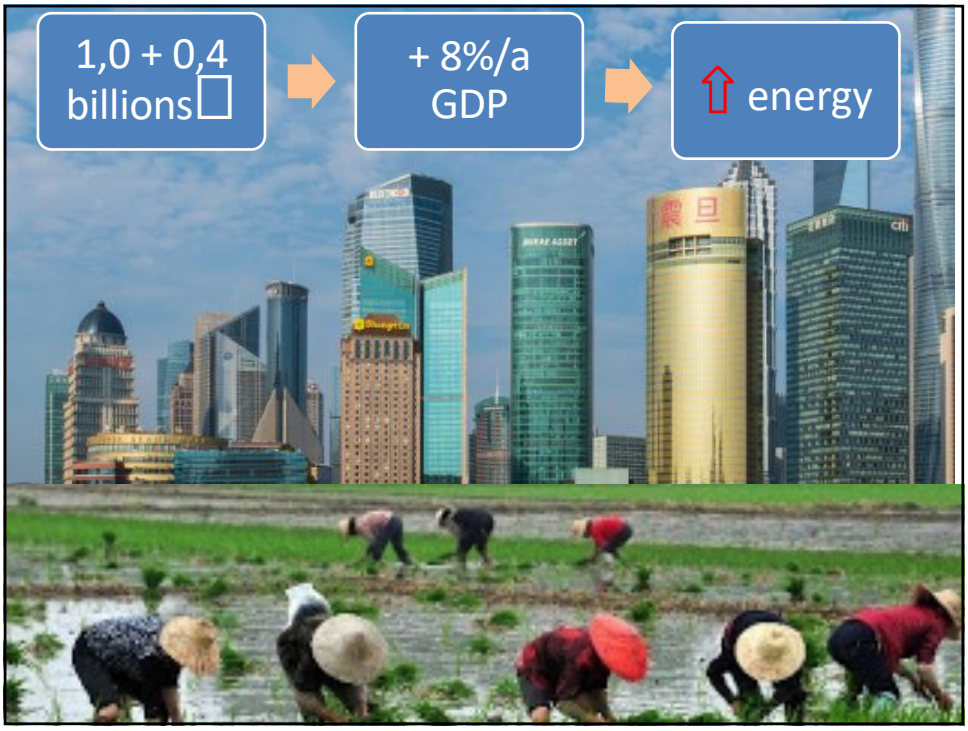
[1 Joule = 1 Newton x 1 mètre]

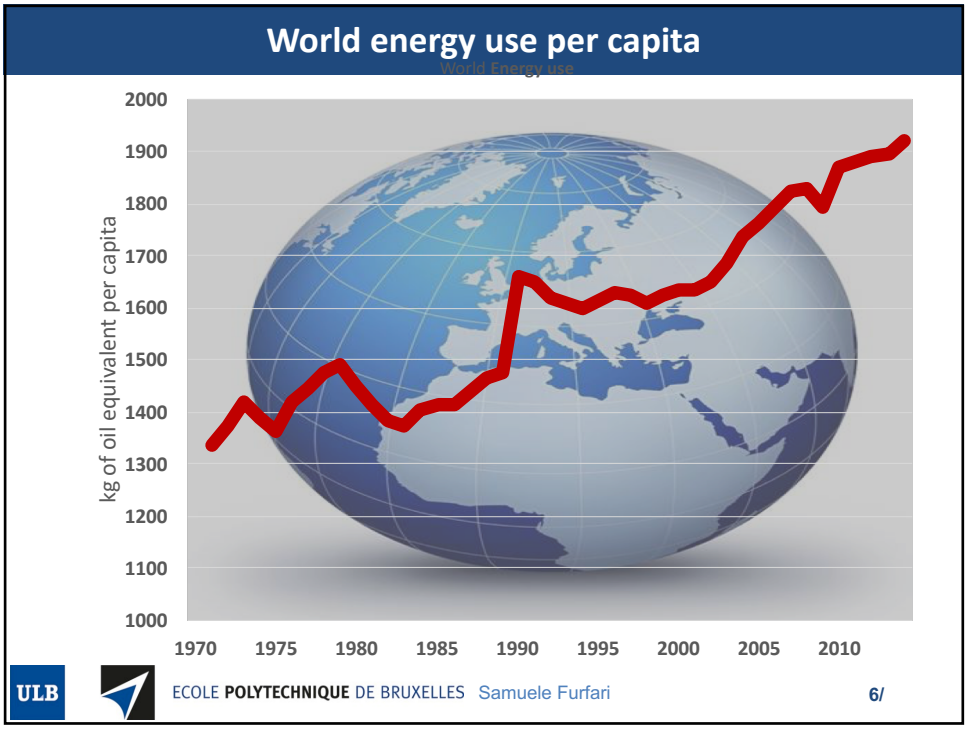


Ceci c'est du travail donc de l'énergie






1,0 + 0,4 billions
+ 8%/a GDP
⇧ energy


World energy use per capita
kg of oil equivalent per capita
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
1970
1975
1980
1985
1990
1995
2000
2005
2010
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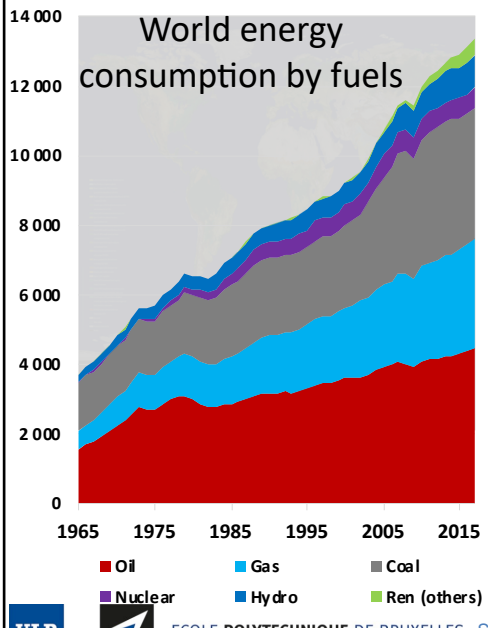
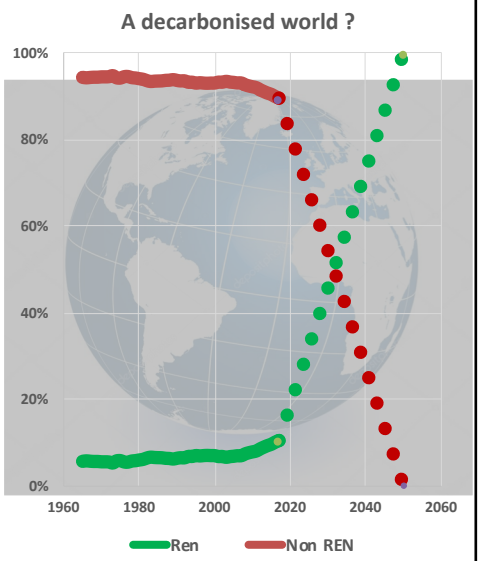
Towards the energy transition?





Data : BP 2018

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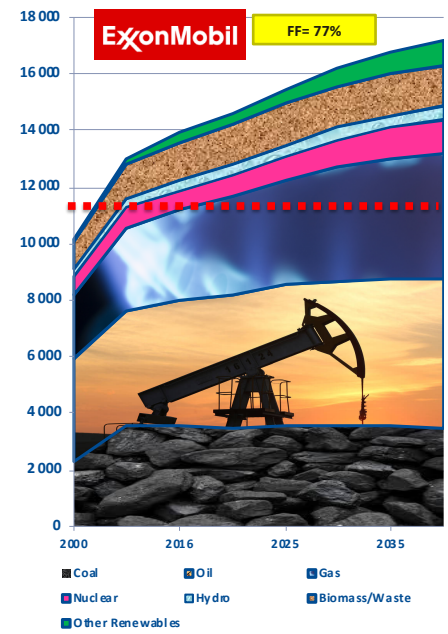
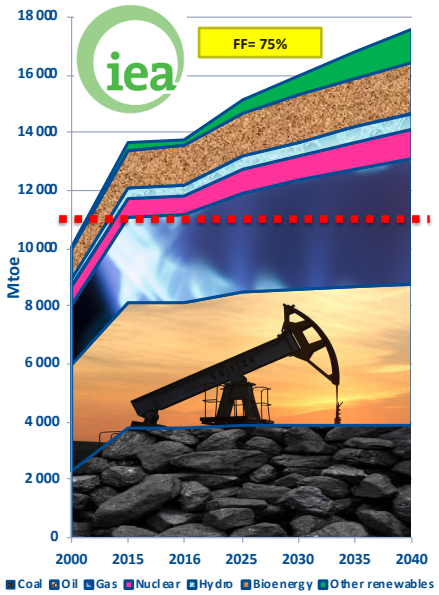
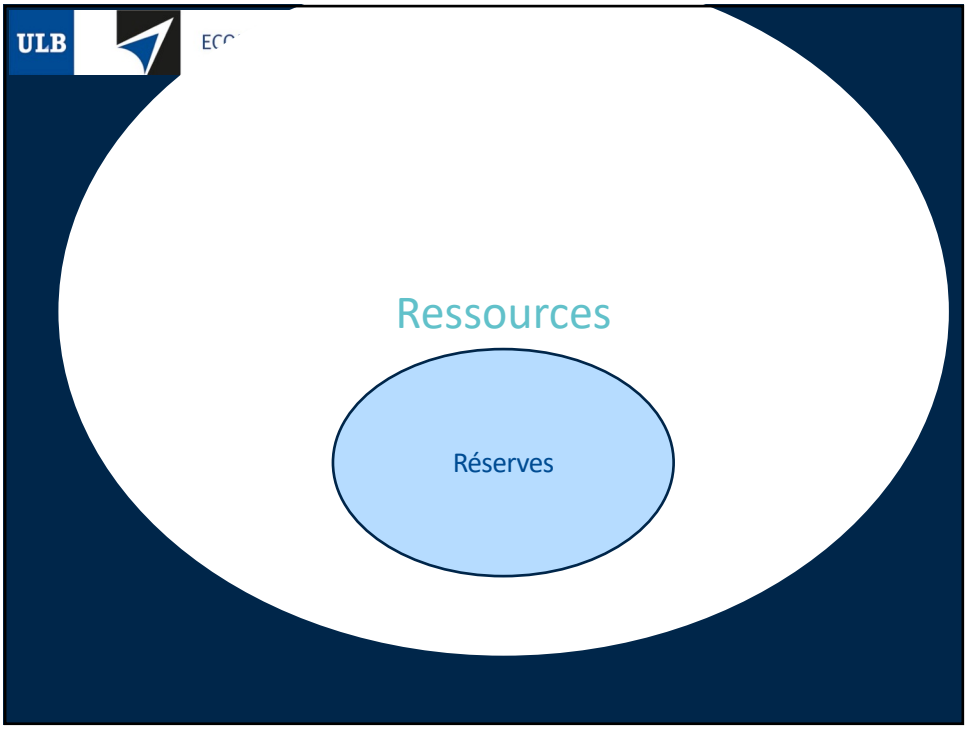
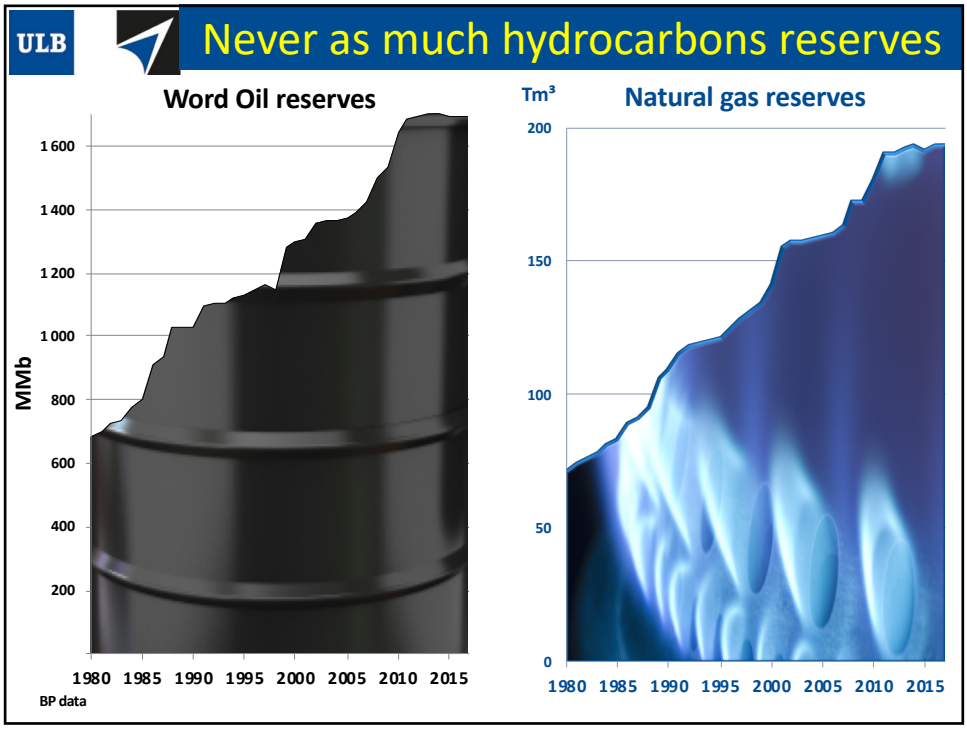
Word primary energy demand

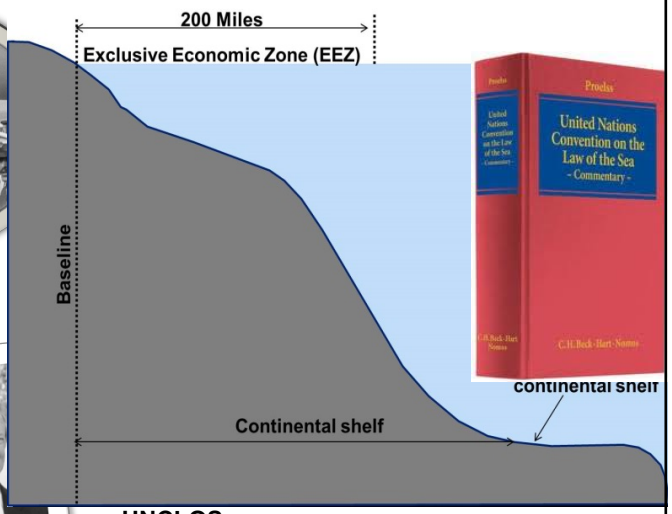





ULB
Ressources
Réserves


ULB
Never as much hydrocarbons reserves
Word Oil reserves
MMb
1 600
1 400
1 200
1 000
800
600
400
200
1980 1985 1990 1995 2000 2005 2010 2015
BP data
Tm³
Natural gas reserves
200
150
100
50
0
1980 1985 1990 1995 2000 2005 2010 2015

Convention des Nations Unies sur le droit de la mer



UNCLOS
Montego Bay, 1982, Entered into force in 1994

La nouvelle Europe

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

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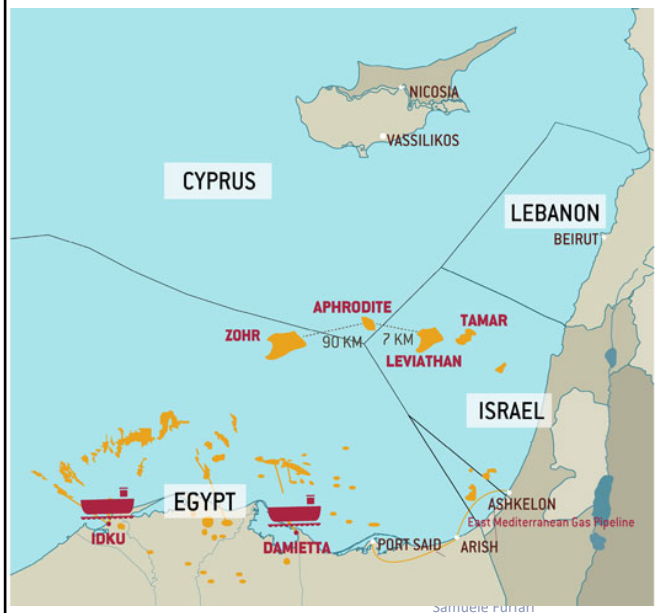

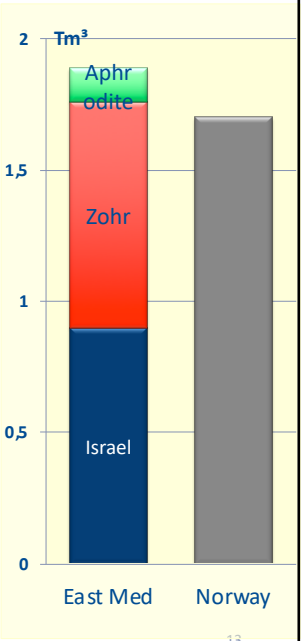

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Zohr, grand succès pour ENI et l'Egypte

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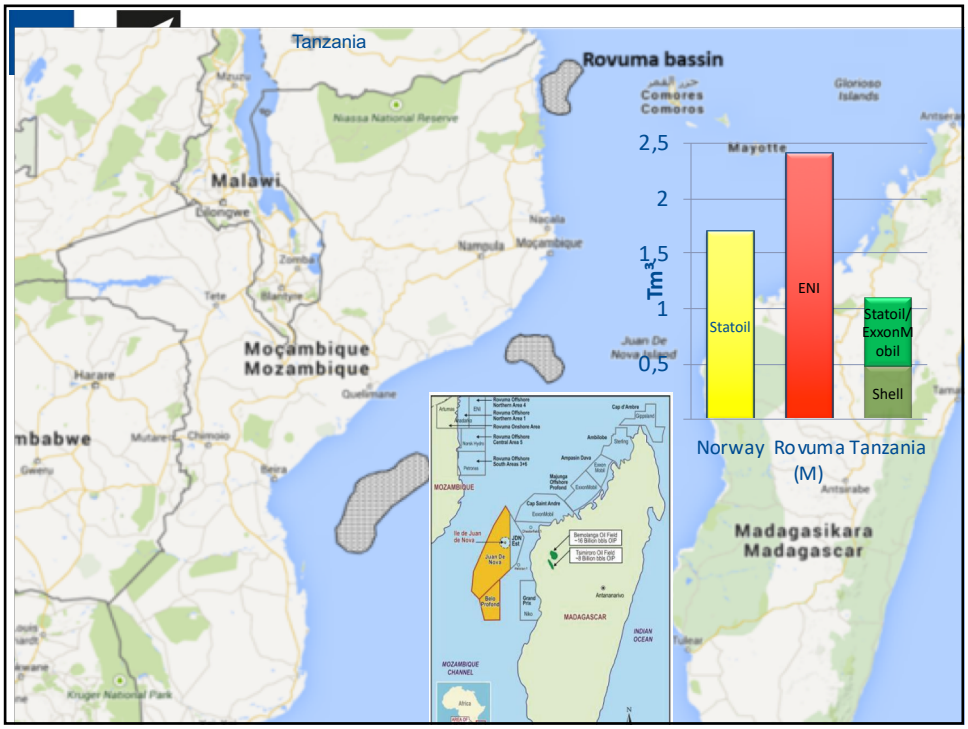

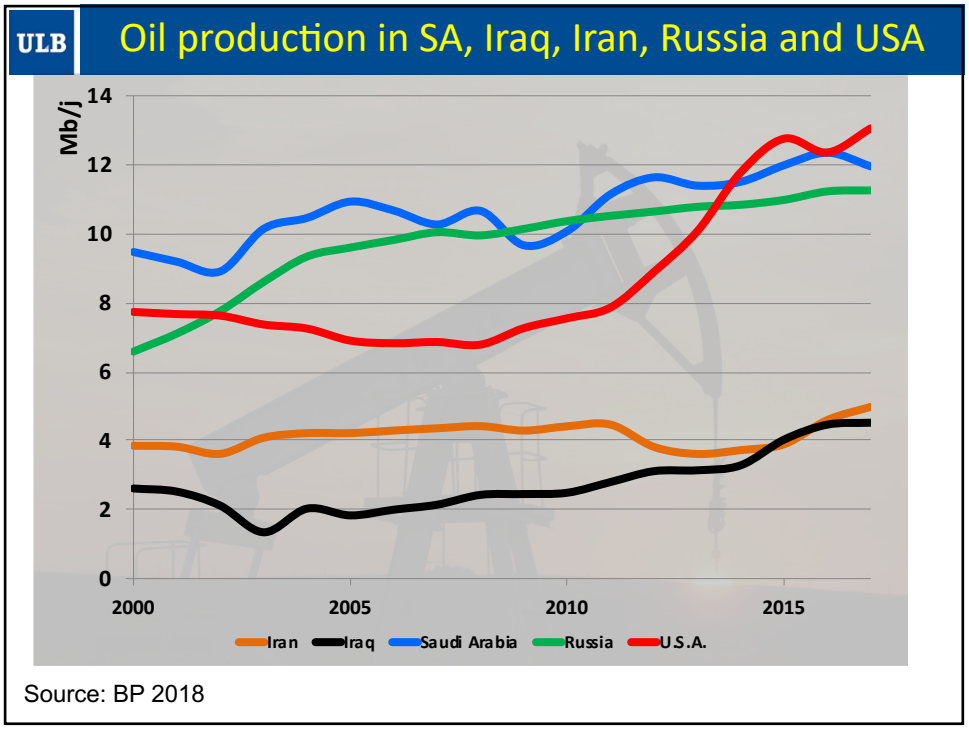
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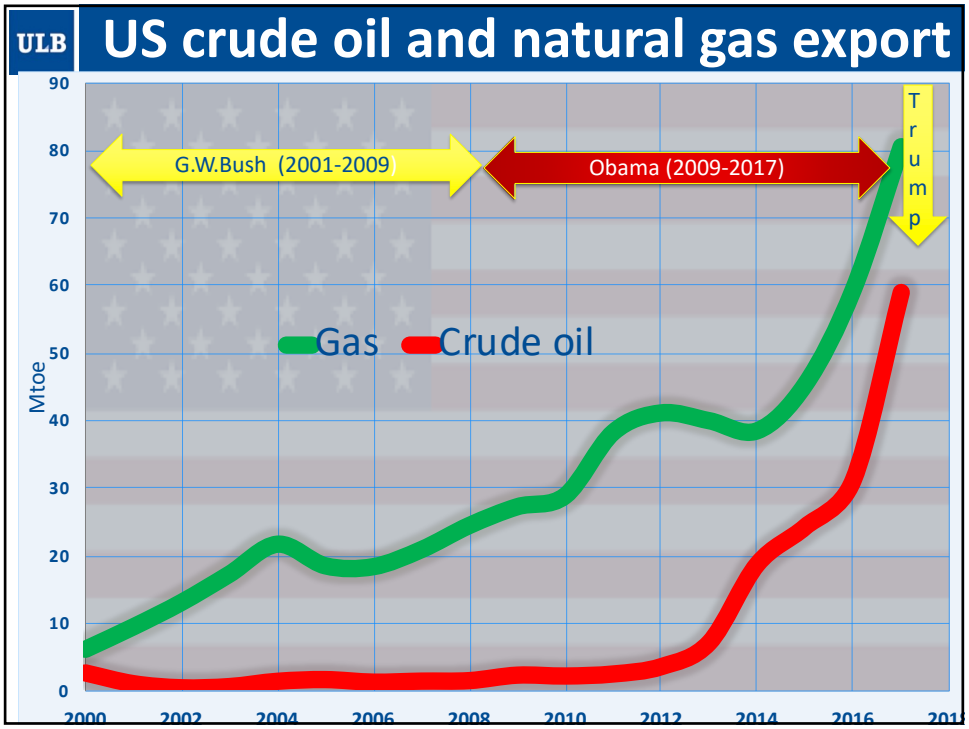
Oil production in SA, Iraq, Iran, Russia and USA
Mb/j
14
12
10
8
6
4
2
0
2000
2005
2010
2015
Iran
Iraq
Saudi Arabia
Russia
U.S.A.
Source: BP 2018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US crude oil and natural gas export
Mtoe
90
80
70
60
50
40
30
20
10
0
G.W.Bush (2001-2009)
Obama (2009-2017)
Trump
Gas
Crude oil
2000
2002
2004
2006
2008
2010
2012
2014
2016

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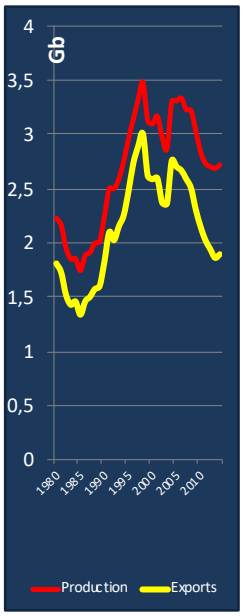

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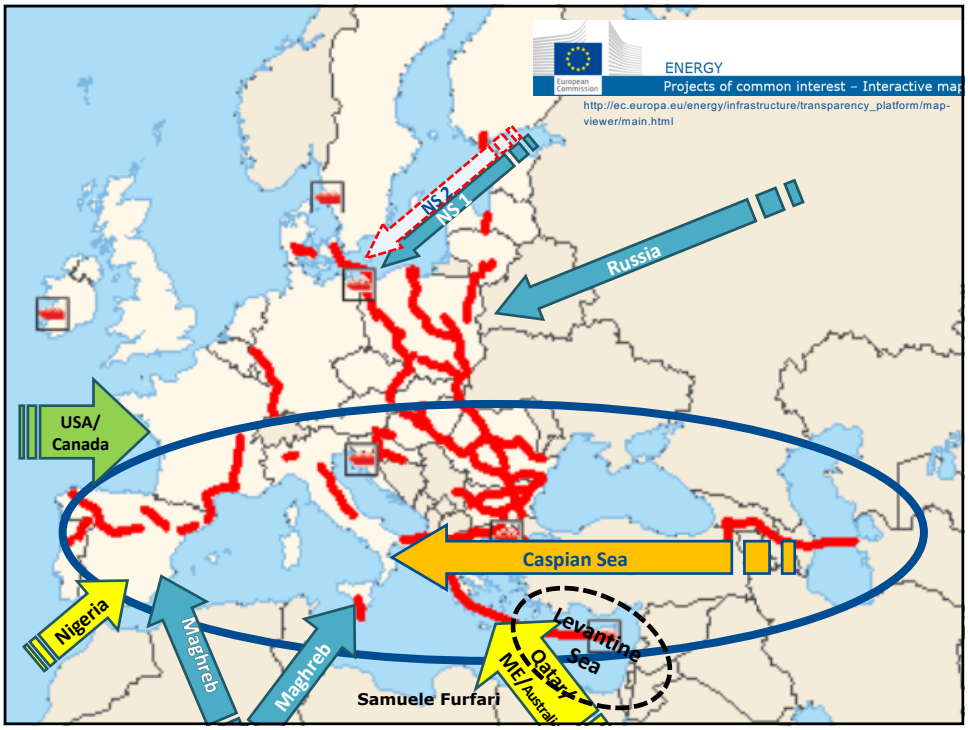
ENERGY
Projects of common interest – Interactive map
http://ec.europa.eu/energy/infrastructure/transparency_platform/map-viewer/main.html
NS 2
NS 1
Russia
USA/
Canada
Caspian Sea
Nigeria
Maghreb
Maghreb
Levantine
Sea
Qatar
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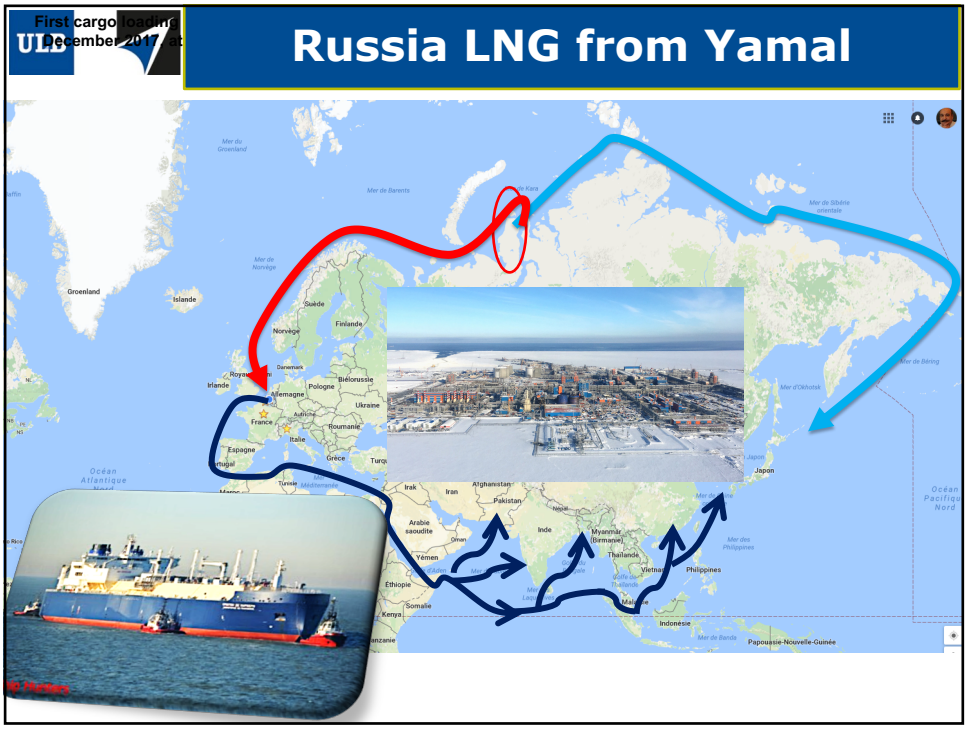
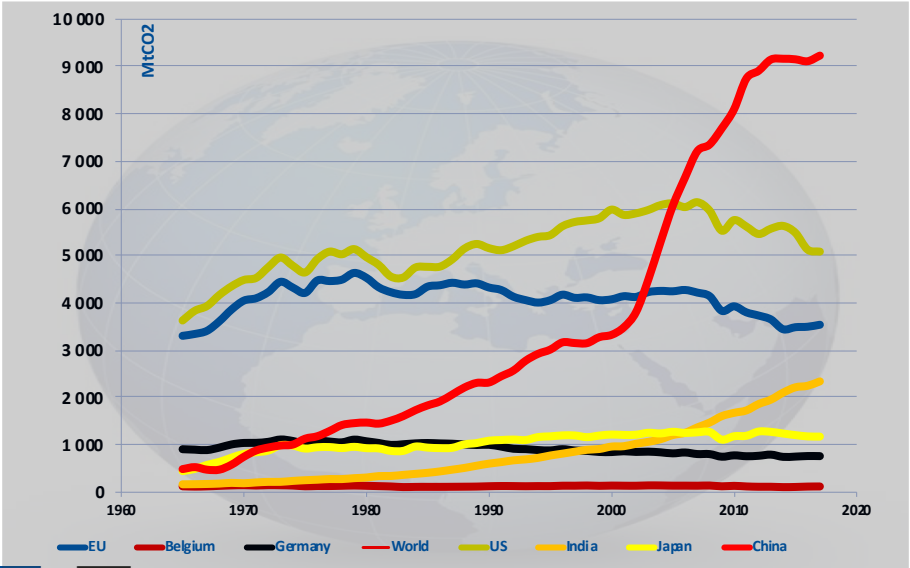

Russia LNG from Yamal
Groenland
Islande
Suède
Finlande
Norvège
Irlande
Pologne
Biélorussie
Allemagne
Ukraine
France
Roumanie
Italie
Espagne
Grèce
Tunisie
Irak
Iran
Afghanistan
Pakistan
Arabie saoudite
Yémen
Oman
Inde
Myanmar (Birmanie)
Thaïlande
Vietnam
Philippines
Malaisie
Indonésie
Japon
Ethiopie
Somalie
Kenya
Papouasie-Nouvelle-Guinée

Paris agreement : NDC for 2030

Country	INDC	./. year
EU	- 40%	1990
Japan	- 25%	2013
S. Korea	-37%	?
Australia	-26/28% Fall of PM Turnbull	2005
Russia	25-30% might be a long-term indicator, subject to the maximum possible account of absorbing capacity of forests	1990
Iran	-4%	./. BAU
India	to reduce the emissions intensity of its GDP by 33 to 35%	2005
China	Stop growth around 2030	

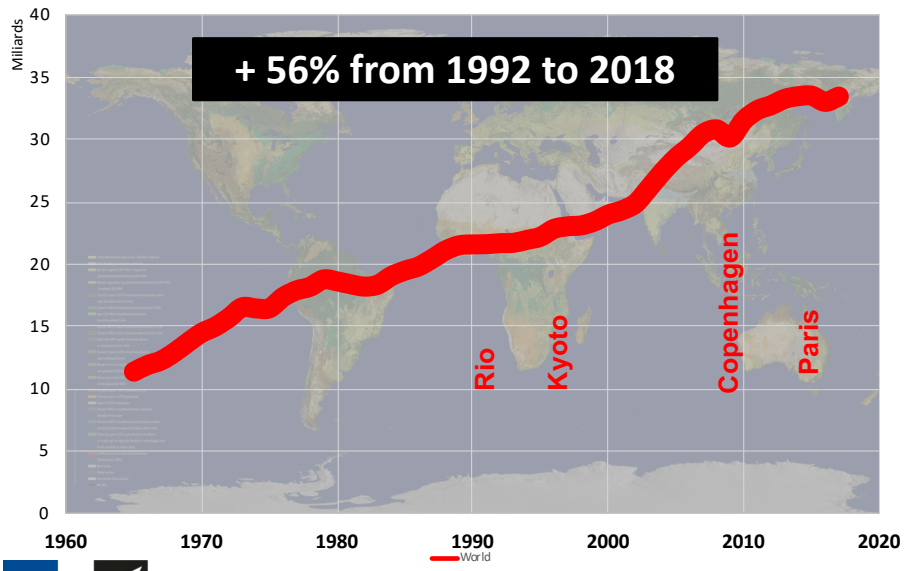
http://www4.unfccc.int/submissions/INDC/Submission%20Pages/submissions.aspx

Evolution of CO_2 emissions of main emitters



Data : BP 2018

World CO_2 emissions



Data : BP 2019

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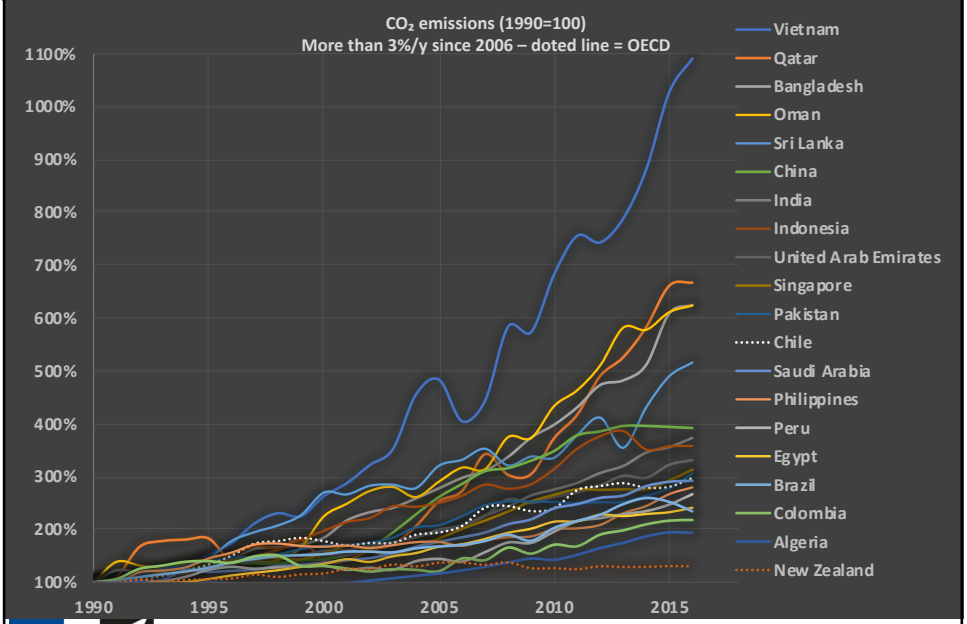
Vont-il arrêter ?



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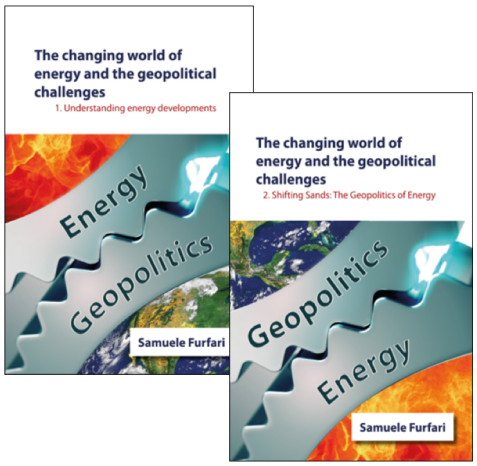
I ❤ energy



sfurfari@ulb.ac.be