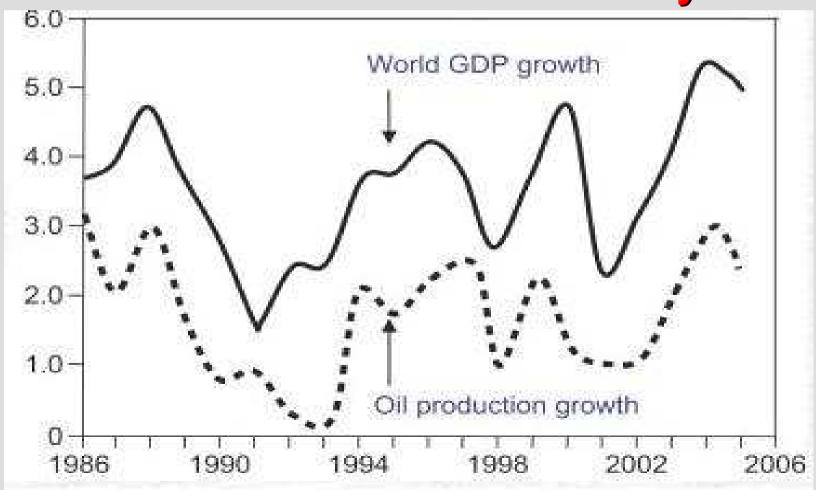


"America is addicted to oil"...

... not the only one!

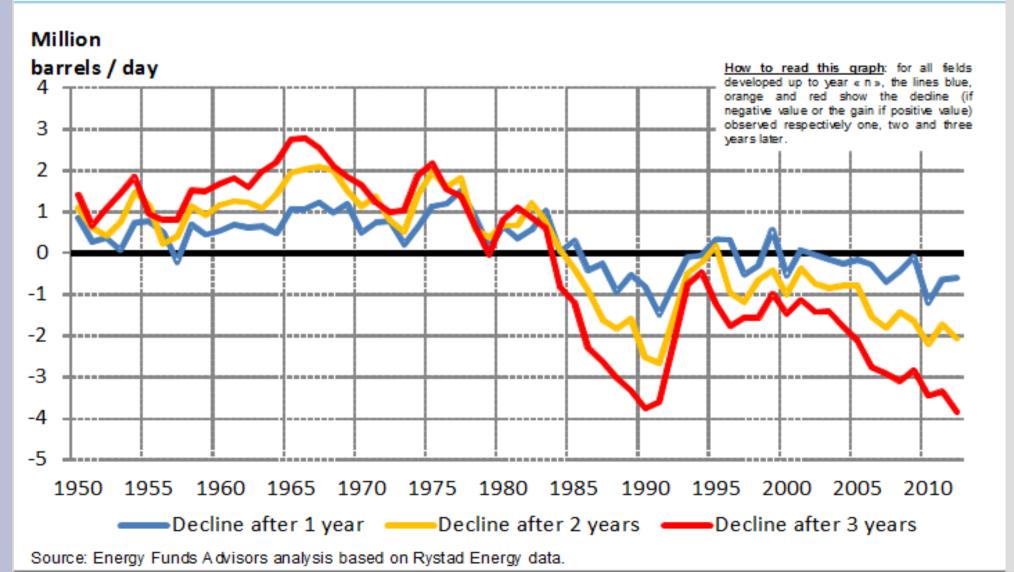


Running on a treadmill

The underlying decline rate is accelerating

Non-OPEC production crude and condensates (excluding extra heavy oil, shale oil, oil sands and natural gas liquids)





* The world needs to add the equivalent of 4 Saudi Arabia or 10 North Seas over the next 10 years just to keep supply level *



4 new Saudi Arabia?...



... in just 10 years?!

Deep Offshore: how deep?

Arctic Mirage?



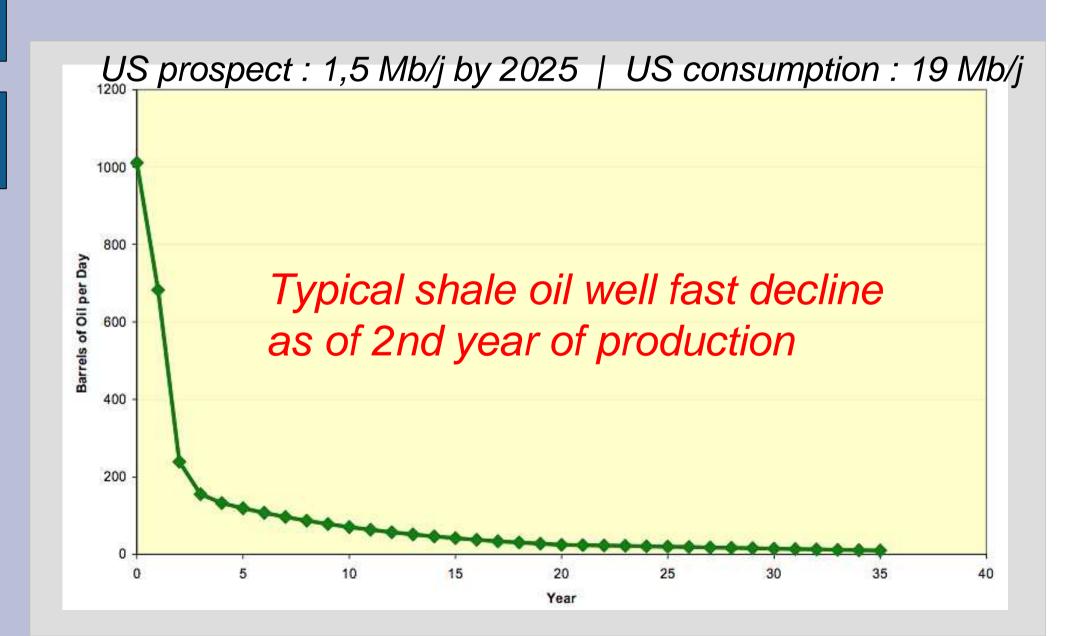
Russian titanium flag beneath the Arctic (2007)

Exxon CEO with Vladimir Putin (2011)

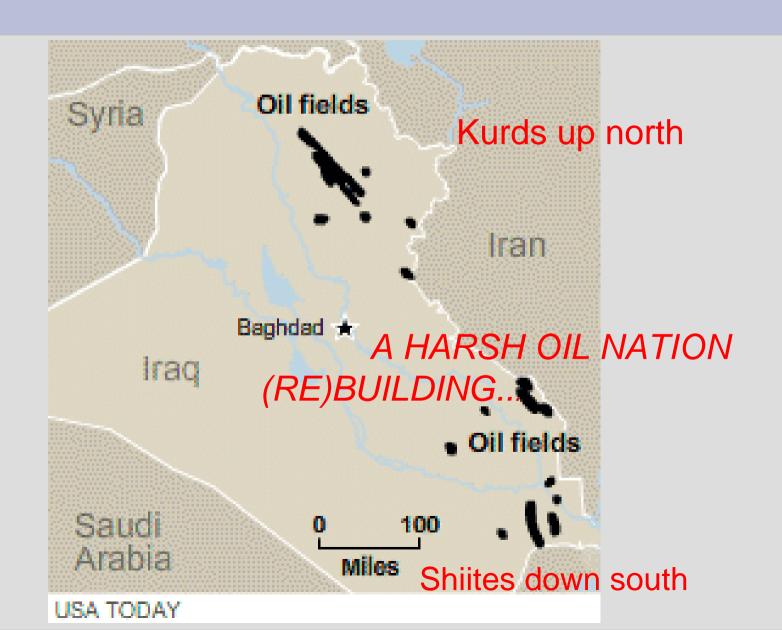
Blame Canada?



Tight Oil: trees reaching sky?



Iraq: the crumbly keystone



World Oil Shopping List

4 Saudi Arabia needed by year 2025 = 45 Mb/d

New Projects

- Oil Sands from Canada	7 Mb/d
- Iraq	5 Mb/d
- US Tight Oil	3 Mb/d
- Deep Offshore (Brazil)	3 Mb/d
- Other	5 Mb/d

possibly added 23 Mb/d

STILL MISSING

> 20 Mb/d

a quarter of today's oil production

Old "Elephants" Also Die

What about...

Norway,

Russia,

Iran,

China,

Venezuela,

Mexico, UAE,...



EDF R&D report, 2007:

When world tensions will become reality, each region on Earth will have to build emergency plans, by using its own resources:

Northern America will use its coal and its unconventional oils

Asia will use its coal, although there soon won't be enough of it for fast growing energy needs

Southern America & Africa will be able to lean on their renewable resources (bio, hydro, solar) and on their fossil fuels

Former Soviet Union & Middle East will be in a position of strength, as they will have a sustainable surplus of fossil fuels.

Europe on the other hand has neither fossil nor fissile reserves, nor enough space for a massive build up in renewable energy.

It will be in a newtiendarky frequile eithetier w