

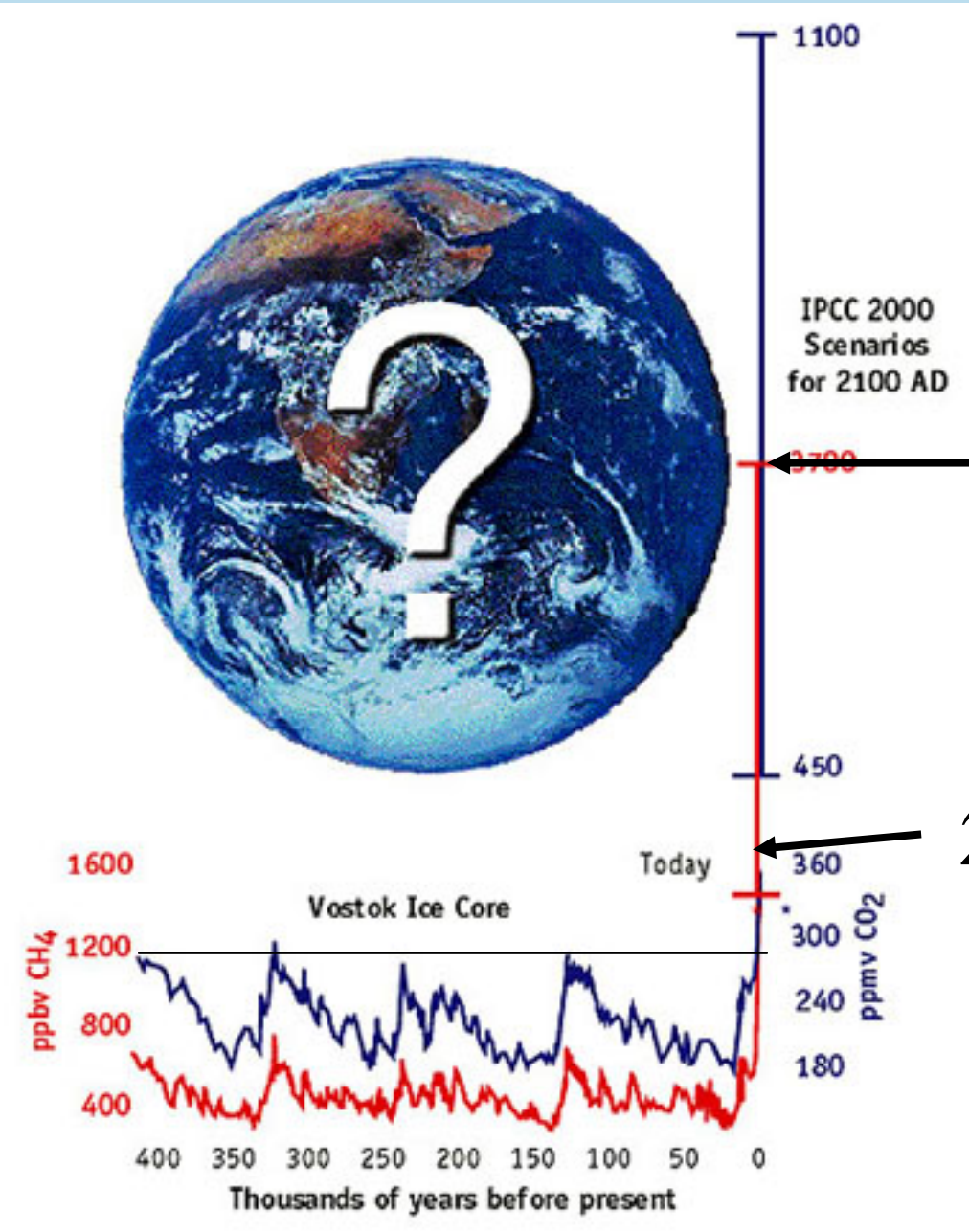
Why we need an energy revolution today and not tomorrow

Katherine Richardson
Formand for Klimakommissionen



KEY MESSAGE 1:

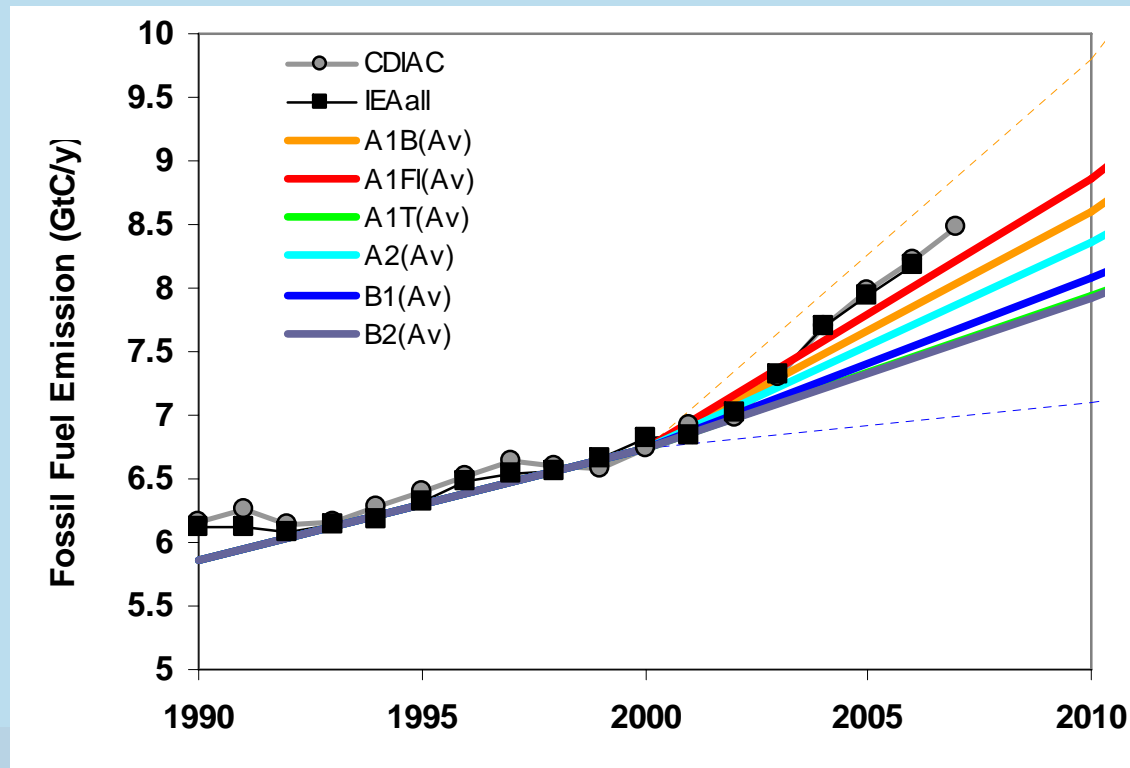
There is no real doubt that humans are changing the climate system...



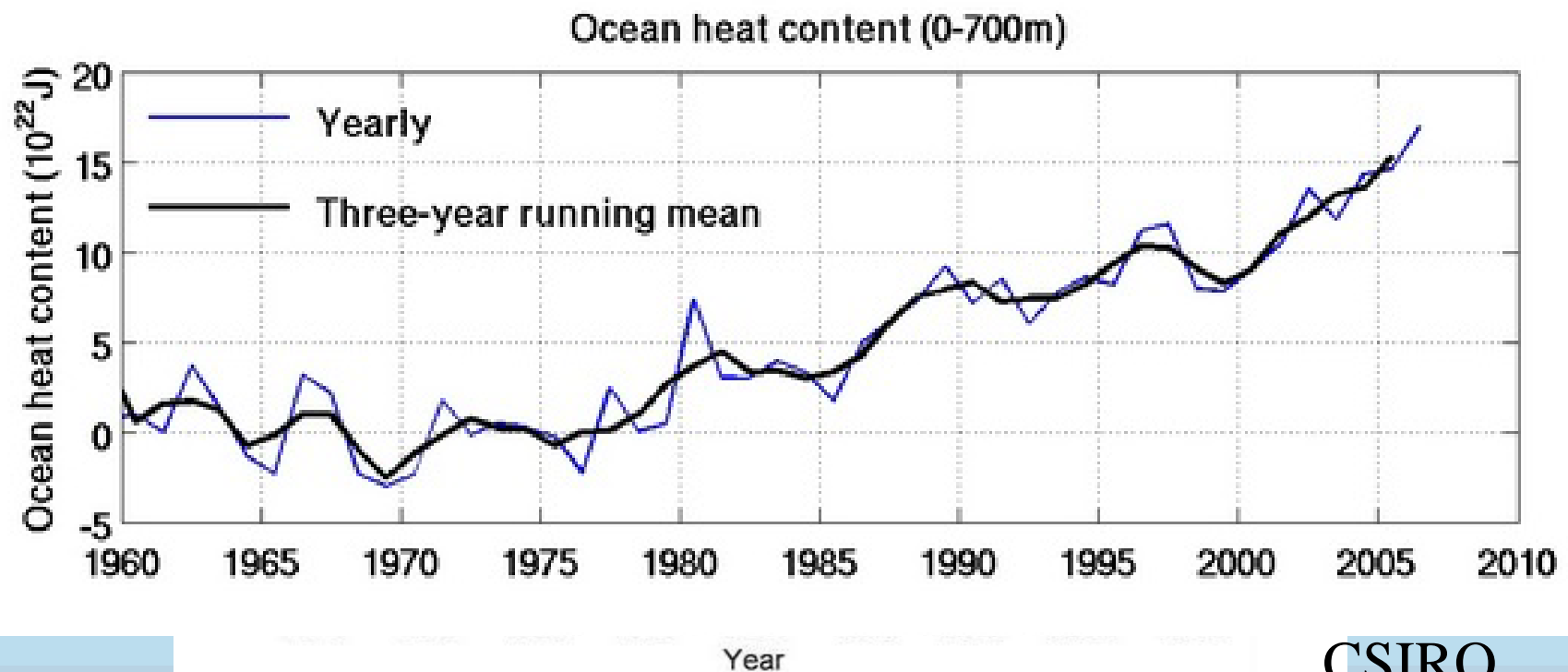
2100?

2009

Emissions:

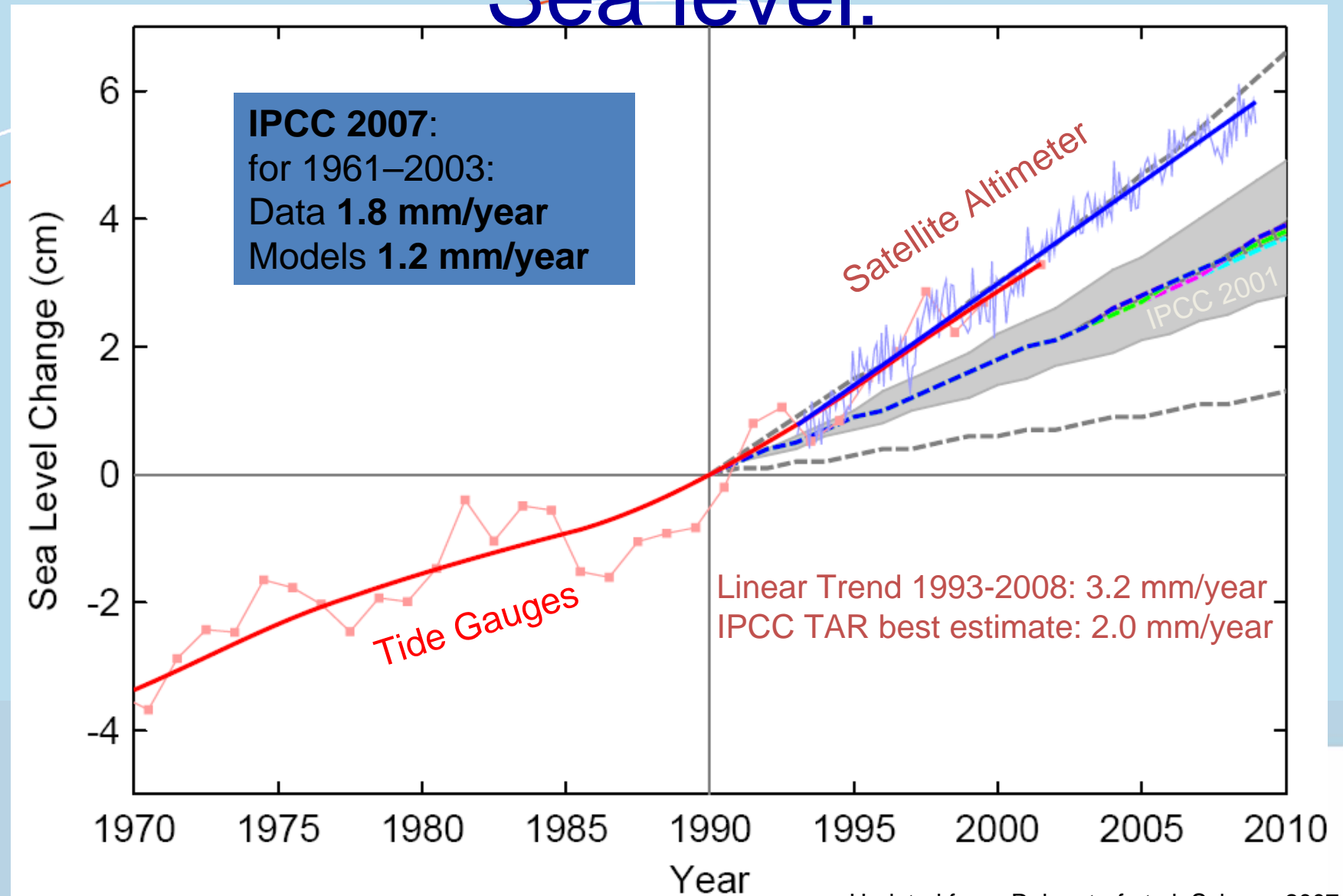


Climate Change

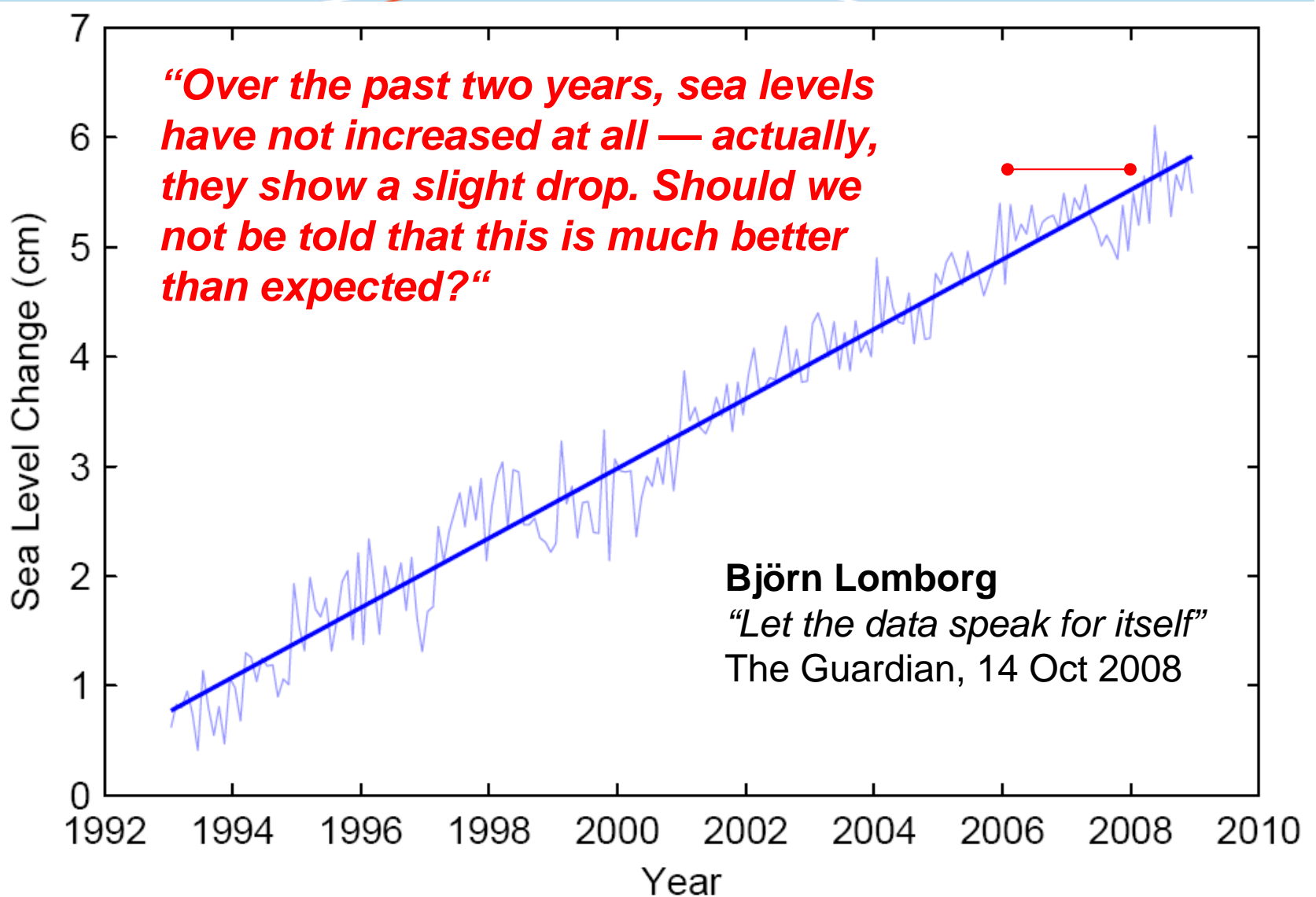


CSIRO

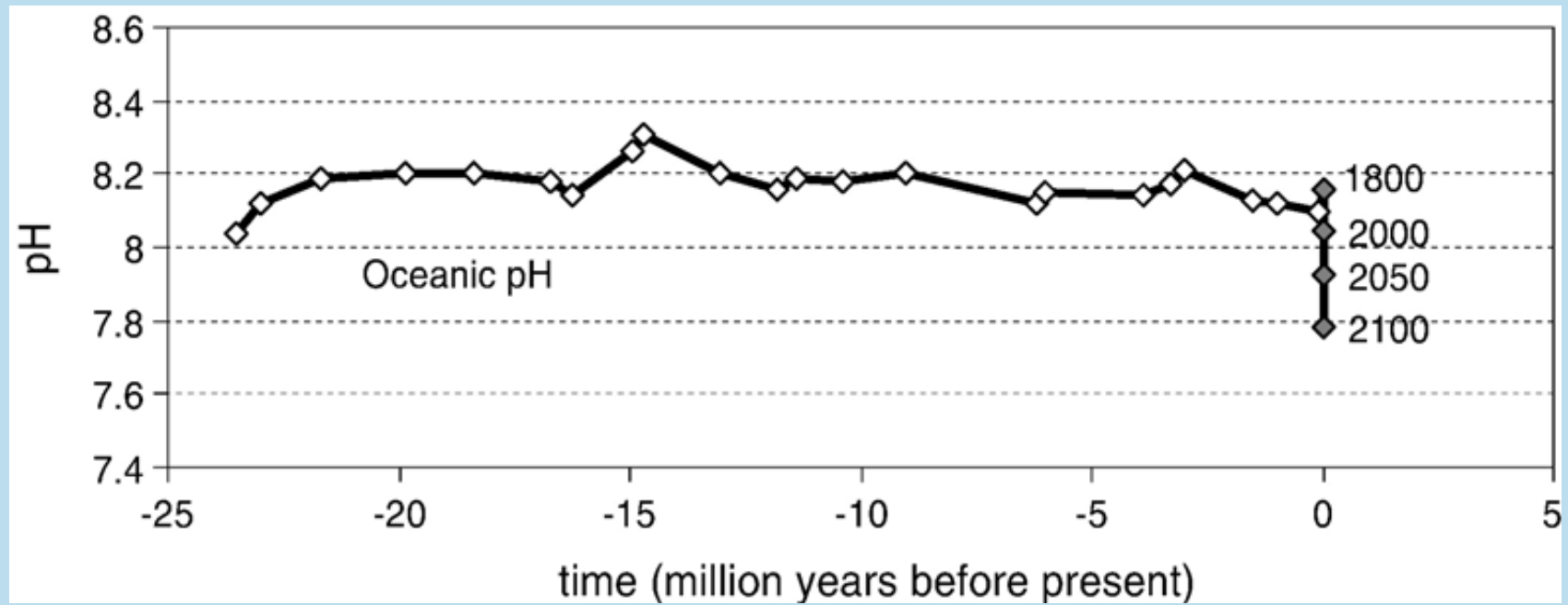
Sea level:



Need for long time series:



Ocean acidification



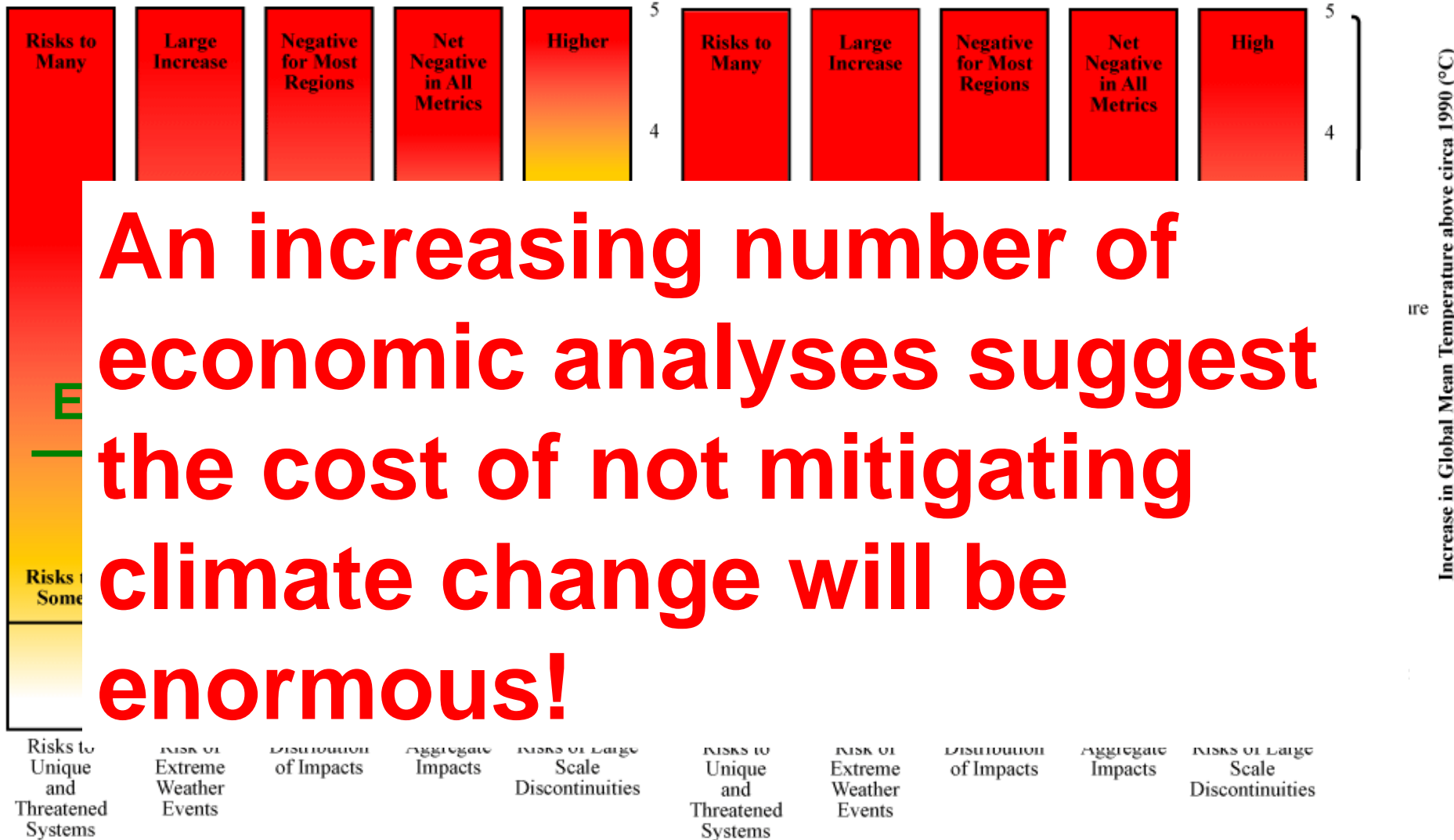
KEY MESSAGE 2:
SOCIAL DISRUPTION

**and that these changes threaten our
society...**

Updated Reasons for Concern

TAR (2001) Reasons For Concern

Proposed AR4 (2007) Reasons For Concern



KEY MESSAGE 3:

Future energy supplies are not secure...

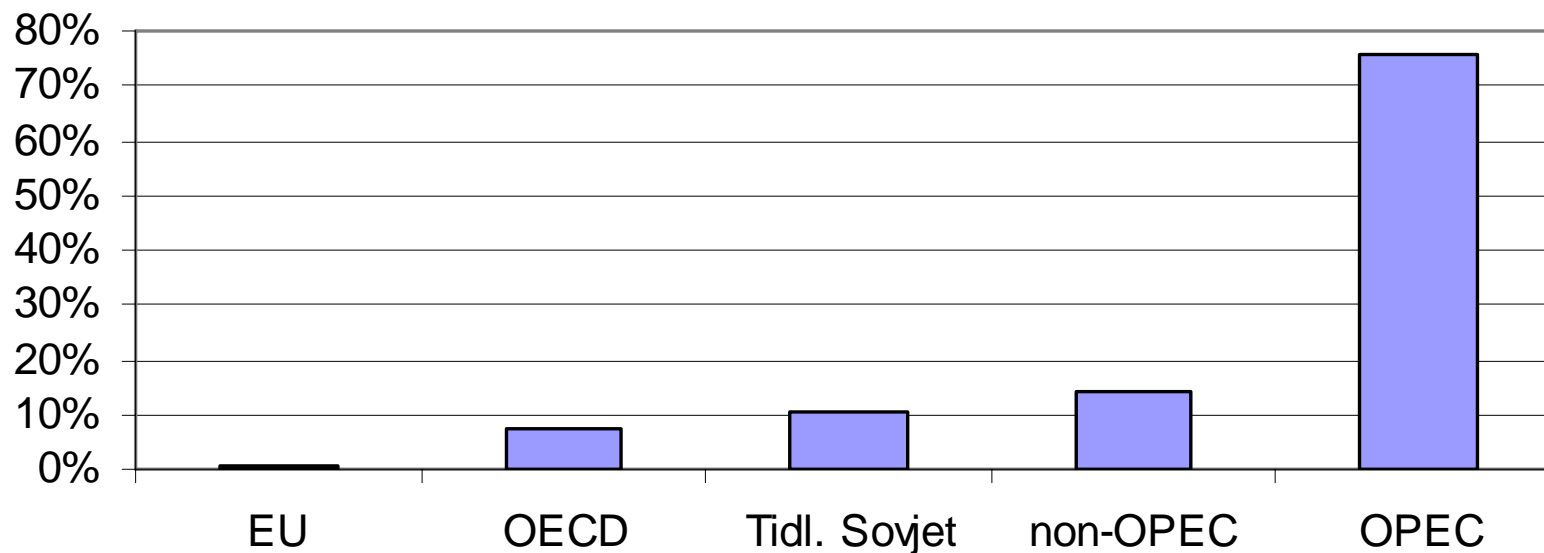


Becoming independent of fossil fuels is necessary – not only for the sake of climate!

- Years of global supplies left - oil: 41 år, gas: 60 ; coal: 133 år (BP Statistical Review of World Energy 2008)
- Fossil fuels are associated with geopolitical issues such as security and economy.

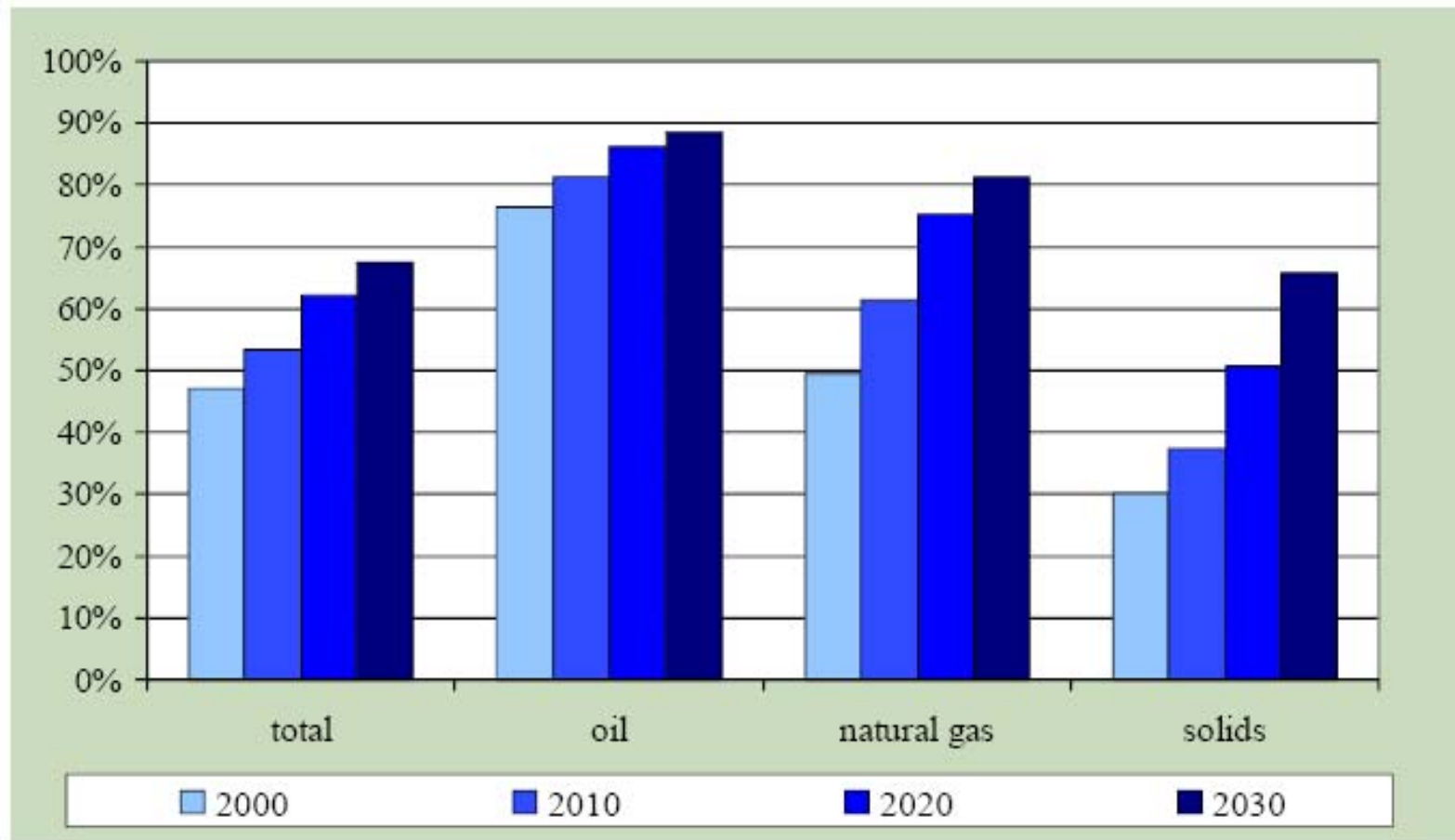
Hvorfor fossile brændsler er et politisk problem: Påviste reserver, olie (kilde:BP)

Påviste oliereserver fordelt på "politisk region" (BP 2007)



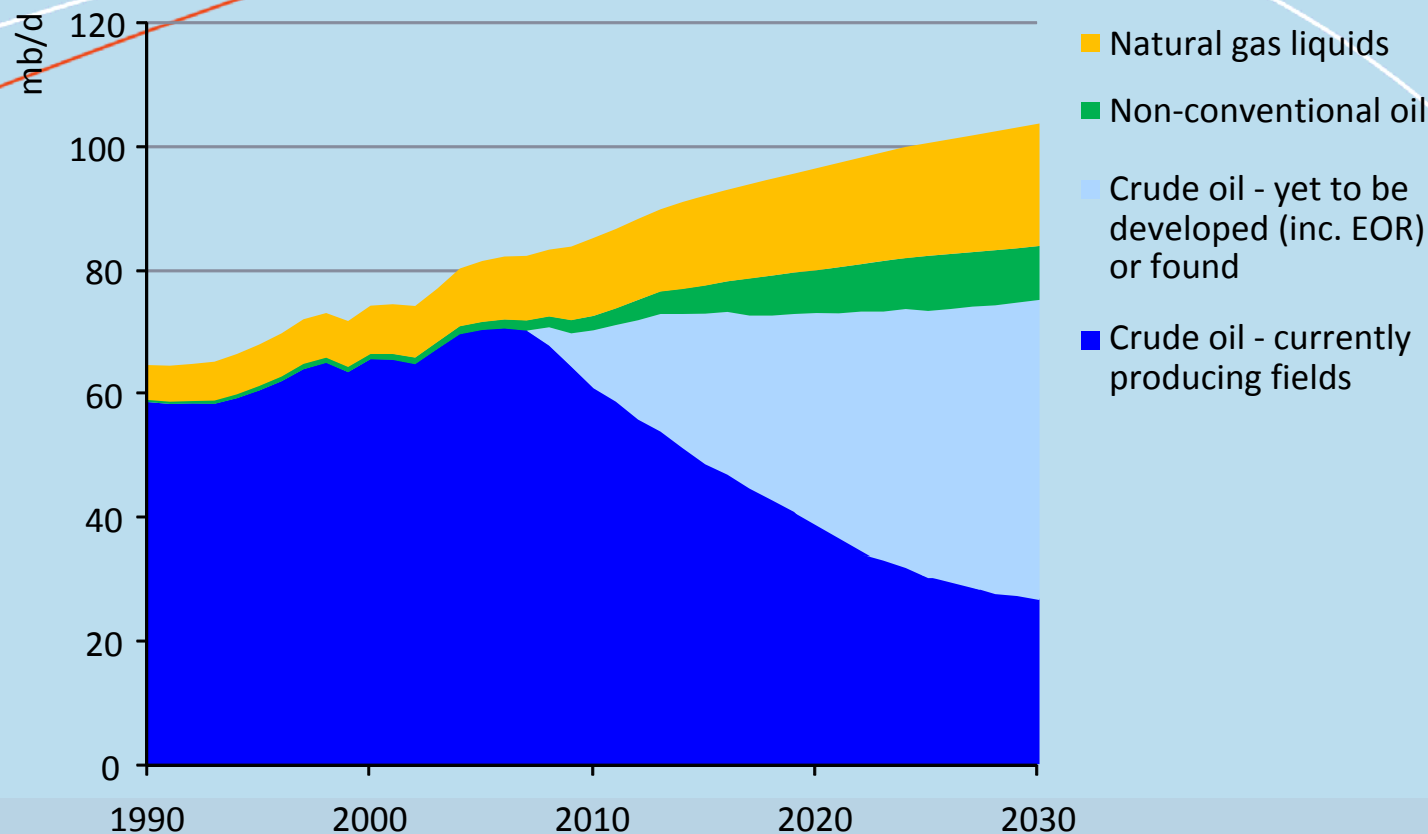


EU's situation: Stigende importafhængighed over de næste 25 år



World oil production by source in the Reference Scenario

World Energy Outlook 2008



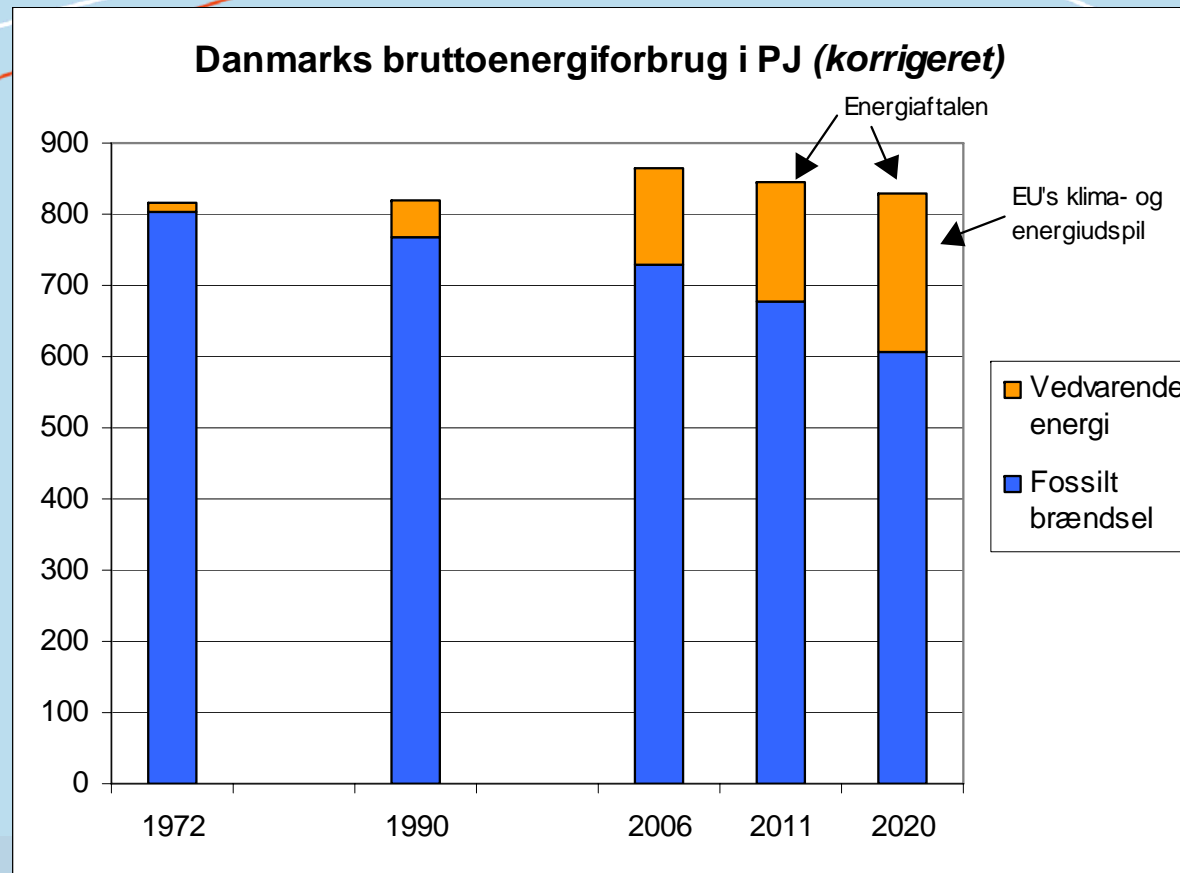
64 mb/d of gross capacity needs to be installed between 2007 & 2030 – six times the current capacity of Saudi Arabia – to meet demand growth & offset decline



KEY MESSAGE 4:

**Breaking our dependence on fossil fuels
will take time!**

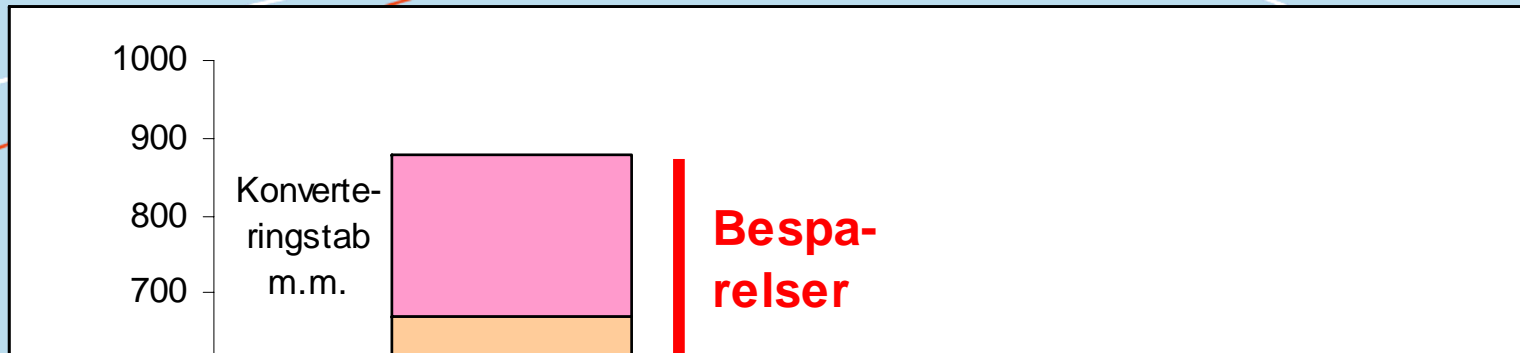
Danmark's energy source: world expert in renewable energy but there's a long way to go!



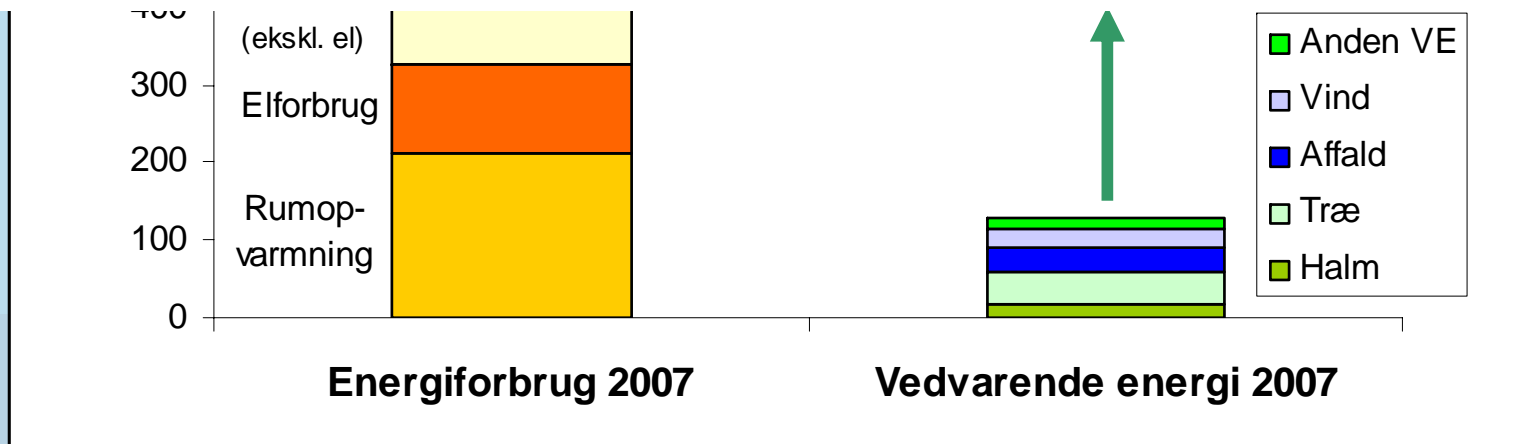
Climate Commission

- **Vision**: Danmark becomes independent of energy from fossil fuels
- **Charged with creating a "roadmap" for how this can happen**
- **Report in 2010**

Double challenge: to reduce energy use and to replace fossil fuels as the primary energy source



We have the technology!!



How is the Commission tackling the job?

- Gross energy supply to be 100% non-fossil fuel by about 2050;
- At least an 85% reduction in greenhouse gas emission by 2050 (in comparison to 2005);
- Focus on incentive structures (and dialogue)!
- Net import of renewable energy to be kept to a minimum (energy security)
- Facilitate the "transition"

**What can we already say about a
Denmark independent of fossil
fuels in 2050?**

**Some major
commercial players
are also planning
along these lines!**

We have to change the way we think and talk about responding to climate change!!

- *“reductions” “burdens”*
- *Switching to non-fossil fuel energy supplies is a necessity and a prerequisite for future social and economic stability in future.*
- *Without a stable energy supply, there will be no economic growth!*