



### Out precarious situation

WMO, 30 October 2017:

“the current levels of CO2 correspond to an “equilibrium” climate last observed... 3–5 million years ago... a climate that was 2–3° C warmer.. [with] sea levels that were 10–20 m higher than those today.”

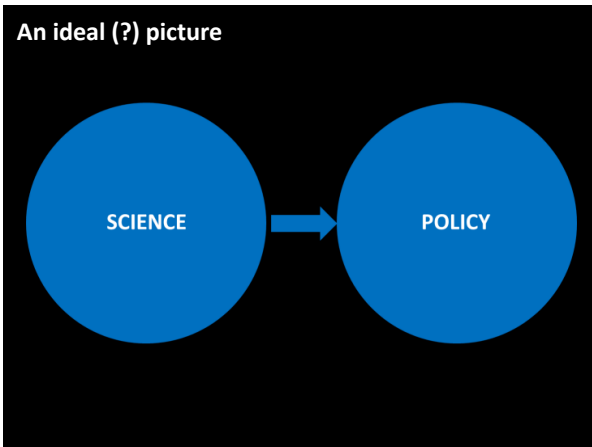
The rate of increase of greenhouse gases (CO2) over the past 70 years is nearly 100 times larger than that of the overall time scale. The rate of change is being observed to be still increasing and is projected to continue to rise over the next 50 years. The rate of change is being observed to be still increasing and is projected to continue to rise over the next 50 years. The rate of change is being observed to be still increasing and is projected to continue to rise over the next 50 years.

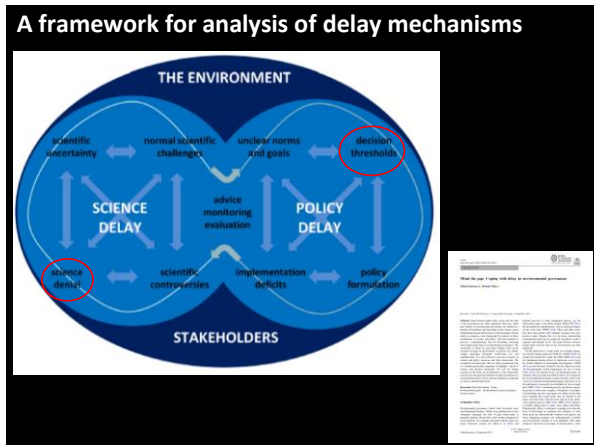


### Potential reasons for gaps to environmental goals

Numerous theories in various scientific disciplines:

- Lack of scientific knowledge and uncertainties
- Institutional inertia and technological lock-in
- Insufficiently operational goals and targets
- Social dilemmas and controversies
- Weak or ineffective regulation
- Lack of cost internalization
- Lobbyism...
- ...

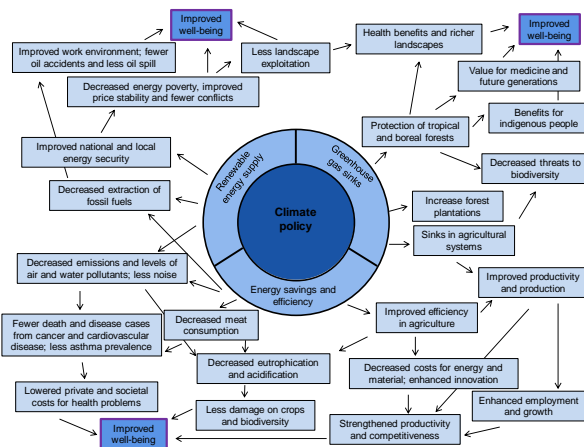




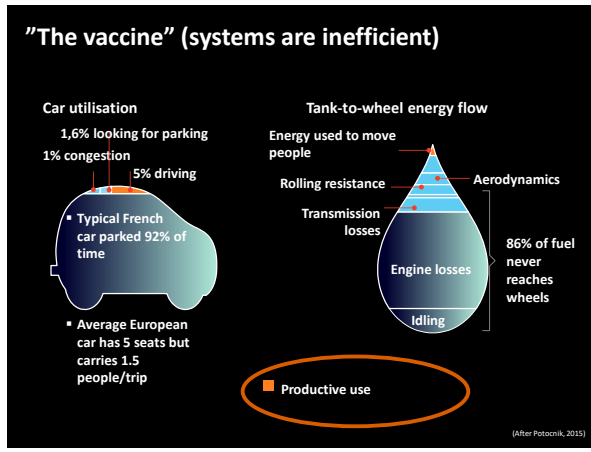
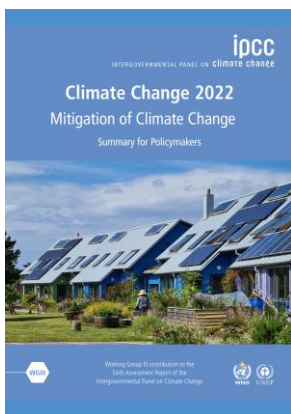
### 1. Science denial

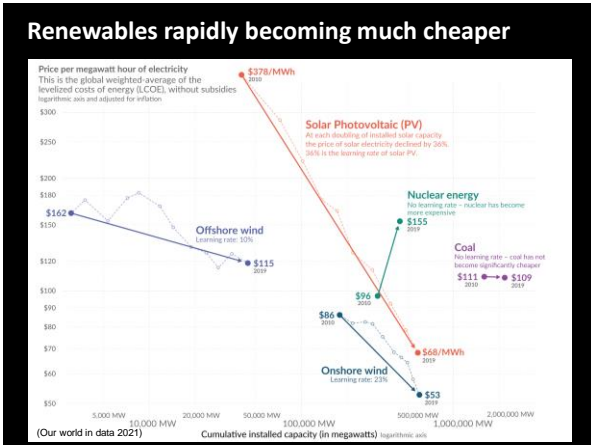
### 2. Environmental policy and decision-making thresholds

# Co-benefits large – but poorly explored



# Many solutions – the best ones available at negative costs





### Businesses increasingly on board

**Höga klimatambitioner är lönsamt för företagen**

**Svenska företag vill se tuffare klimatpolitik**

**Svenska företag: Vi vill se tuffare klimatpolitik**

### Business opportunities and survival

“If you are not transitioning, no one will buy your products, no one will want to work for you and no one will want to invest in your company. This is about survival.”

Henrik Henriksson  
CEO Scania

**Nordic businesses on climate transition, competitiveness and growth**  
- An interview study among leading businesses in the Nordics

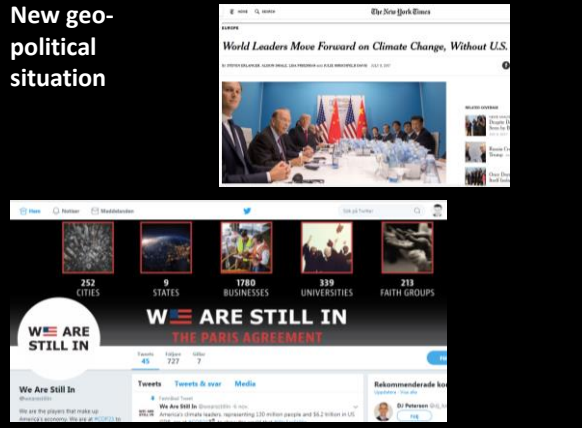
### We underestimate opportunities

- Sweden according to EU-Kyoto (1990-2008/12) + 4 %
- Klimatkommittén (governmental inquiry) - 2 %
- Parliament’s decision - 4 %
- Result 2012 - 16 %
- Today - 37 %

Positive political understanding



New geo-political situation



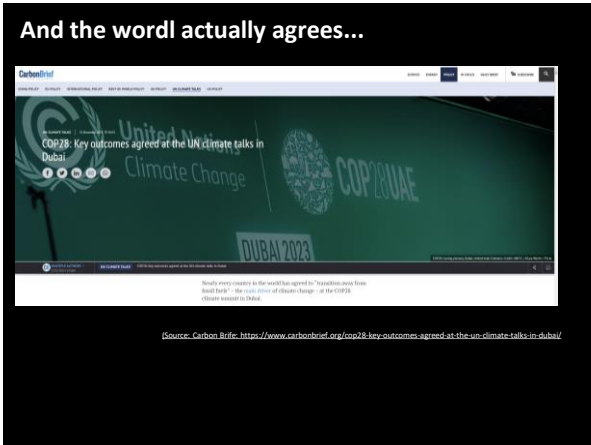
Broad global understanding of the risks at hand



The big players are moving



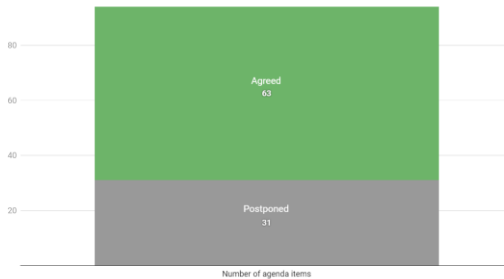
"This is Europe's man on the moon moment."



... even though much remains to be settled

**The status of the COP28 negotiations**

Number of agenda items that have no text, draft text or agreed text



[Carbon Brief: <https://www.carbonbrief.org/interactive-tracking-negotiating-texts-at-cop28-climate-summit/>]

**Global Stocktake: a late step in the right direction**

28. Further recognizes the need for deep, rapid and sustained reductions in greenhouse gas emissions in line with 1.5 °C pathways and **calls** on Parties to contribute to the following global efforts, in a nationally determined manner, taking into account the Paris Agreement and their different national circumstances, pathways and approaches:

- (a) **Tripling renewable energy capacity globally and doubling the global average annual rate of energy efficiency improvements by 2030.**
- (b) Accelerating efforts towards the **phase-down of unabated coal power.**
- (c) Accelerating efforts globally towards **net zero emission energy systems, utilizing zero- and low-carbon fuels well before or by around mid-century.**
- (d) **Transitioning away** from fossil fuels in energy systems, in a just, orderly and equitable manner, accelerating action in this critical decade, **so as to** achieve net zero by 2050 in keeping with the science;
- (e) **Accelerating zero- and low-emission technologies, including, inter alia, renewables, nuclear, abatement and removal technologies such as carbon capture and utilization and storage, particularly in hard-to-abate sectors, and low-carbon hydrogen production.**

**Stricter policies needed**

**The climate challenge - Achieving zero emissions**

Secretary-General

London, 9 October 2023

Watch the lecture and the **speeches**

“A clear, long term signal that the price of emissions will only go one way – up – would be the best path to put us on a trajectory towards zero emissions.”



### Stricter policies positive from several viewpoints



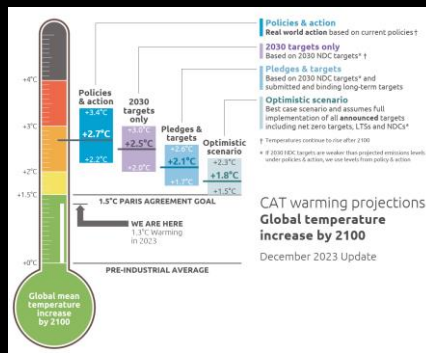
'As globalisation continues and ever more techno-logically advanced countries compete over growth, employment and resources, the ability to serve green markets will be a crucial factor in **maintaining** competitiveness.'



"...the EU could realistically reduce the total material requirements of its economy by 17% to 24%, **boosting GDP and creating between 1.4 and 2.8 million jobs.**"

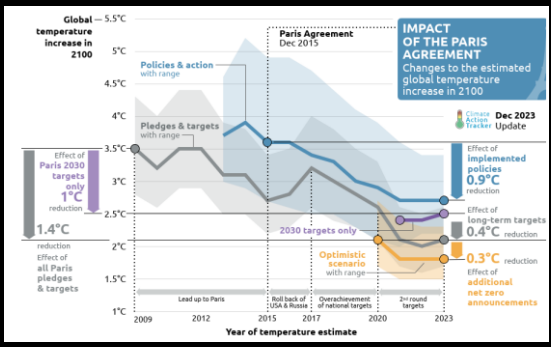
"Every percentage point reduction in resource use could therefore lead to up to 100,000 to 200,000 new jobs."

### Since the Paris Agreement in 2015



(CAT 2023: <https://climateactiontracker.org/press/>)

### Positive development since the Paris Agreement



(CAT 2023: <https://climateactiontracker.org/press/>)



Thank you!

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