EU and the Global Climate Urgency

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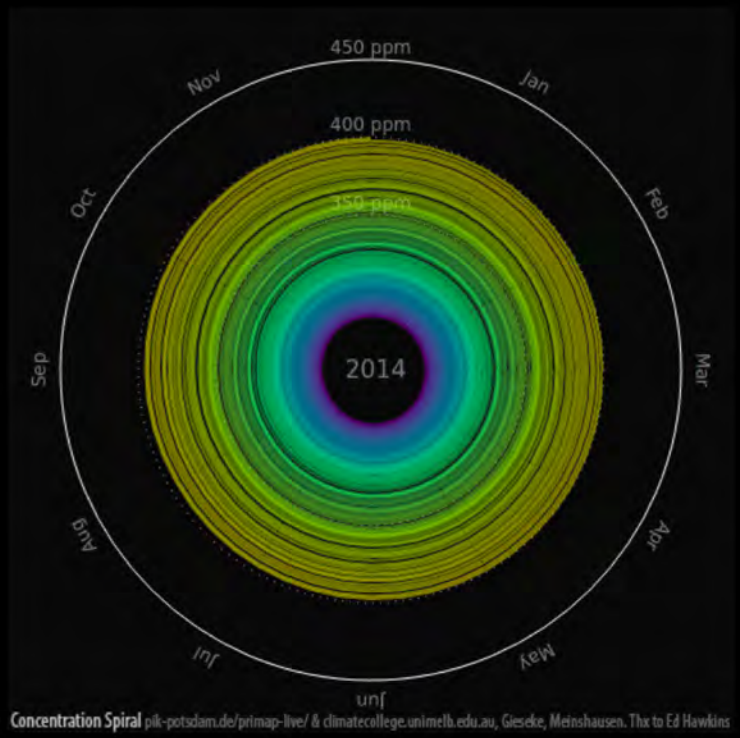
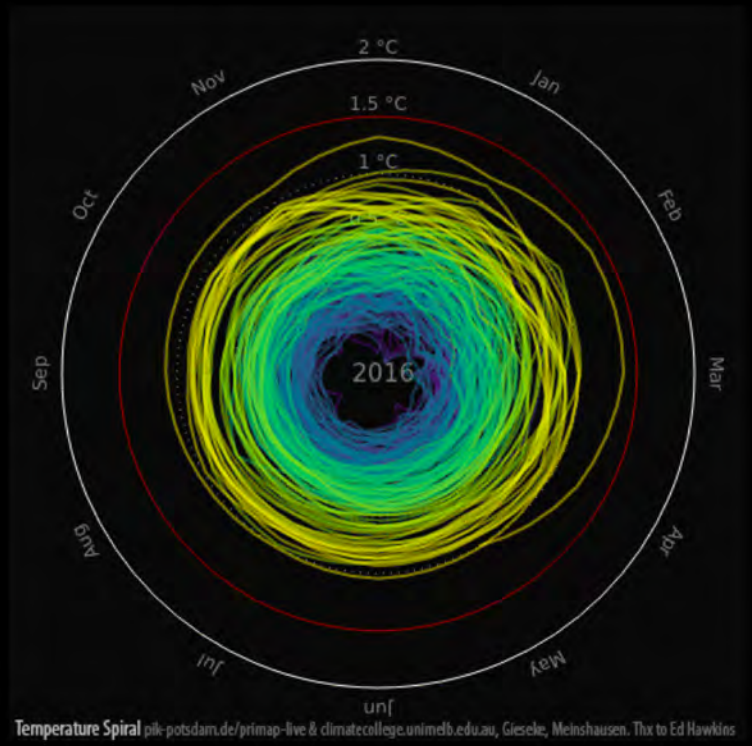
"The European Green Deal one year after / Perspective for 2021"

Egmont Institute, European Affairs Programme, Brussels (online), 23 February 2021

Thanks to the Government of Wallonia, supporting the Walloon Platform for IPCC and to my team at the Université catholique de Louvain

CO_2 Concentration and Temperature spirals





CO_2 Concentration since 1850 and Global Mean Temperature in °C relative to 1850 – 1900
Graph: Ed Hawkins (Climate Lab Book) – Data: HadCRUT4 global temperature dataset
Animation available on http://openclimatedata.net/climate-spirals/concentration-temperature/

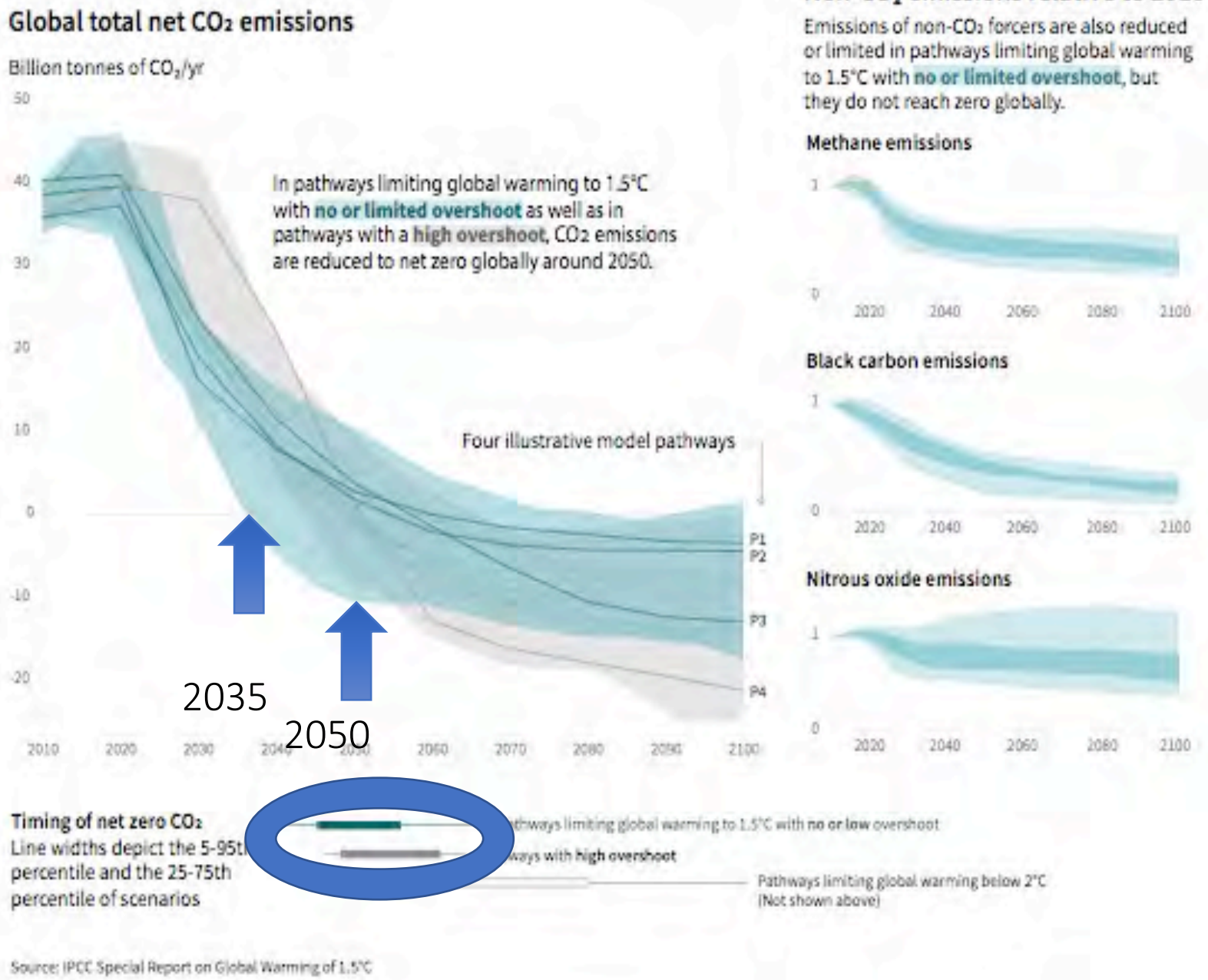
Heat waves kill

Une personne âgée dans un couloir des urgences du centre hospitalier de Versailles en août 2003. I AFP PHOTO MARTIN BUREAU

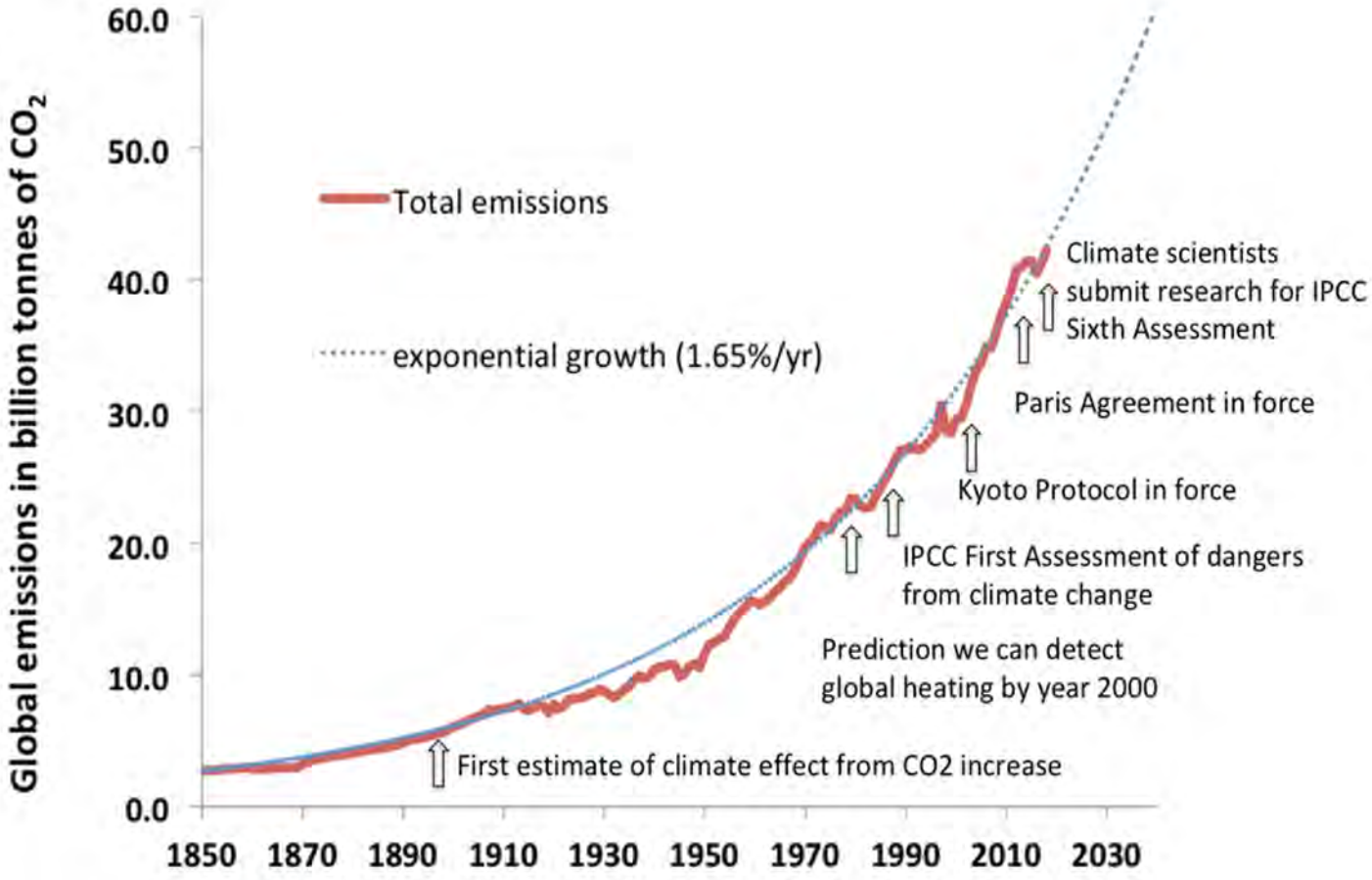
Floods cost

Emission pathways compatible with below 1.5° C warming:

Net ZERO:

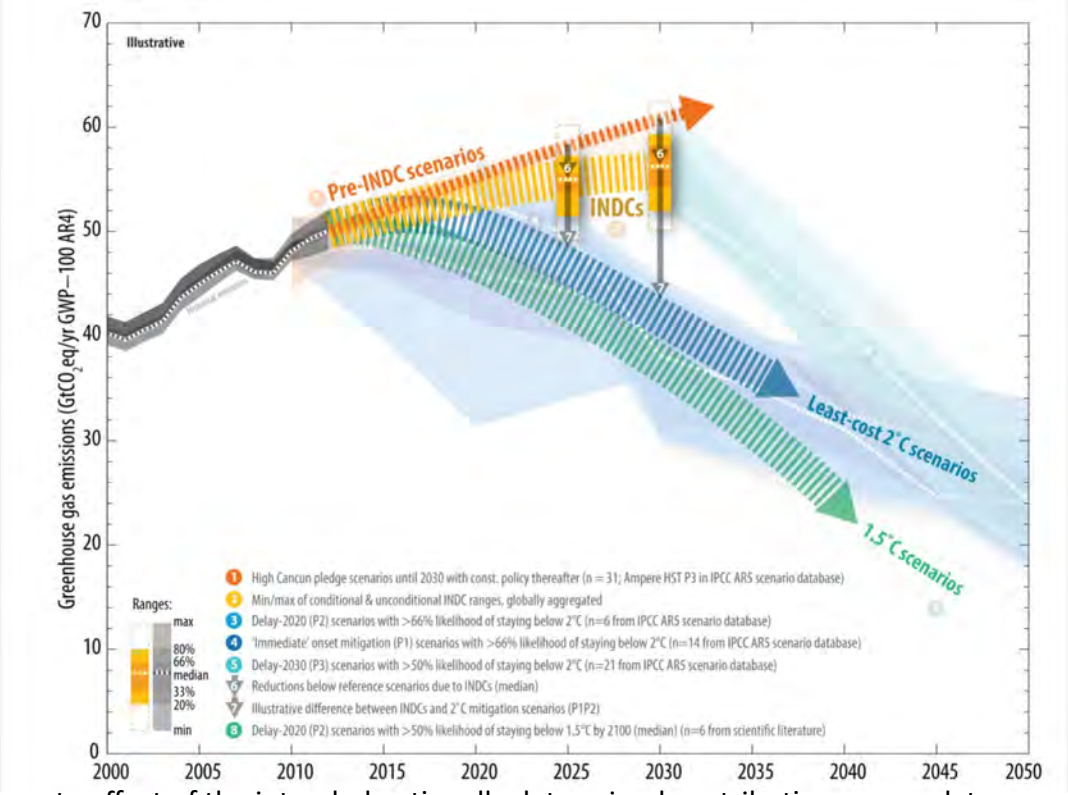


Source: IPCC SR15



Source: Wolfgang Knorr, in The Conversation (2019)

Comparison of global emission levels in 2025 and 2030 resulting from the implementation of the intended nationally determined contributions



UNFCCC, Aggregate effect of the intended nationally determined contributions: an update
http://unfccc.int/resource/docs/2016/cop22/eng/02.pdf

Key messages

Impacts of climate change are spreading and costing more and more

Climate urgency is greater than ever

Respecting the 1.5°C Paris Agreement objective is essential

It requires reduction of global net CO2 emissions to ZERO *before* 2050

If this is needed for global emissions, it means an even earlier deadline for the EU, because:

- **EU has a high historical responsibility**
- **EU has the means to be ambitious**

Emission reductions need to be mostly obtained by fossil fuel phaseout

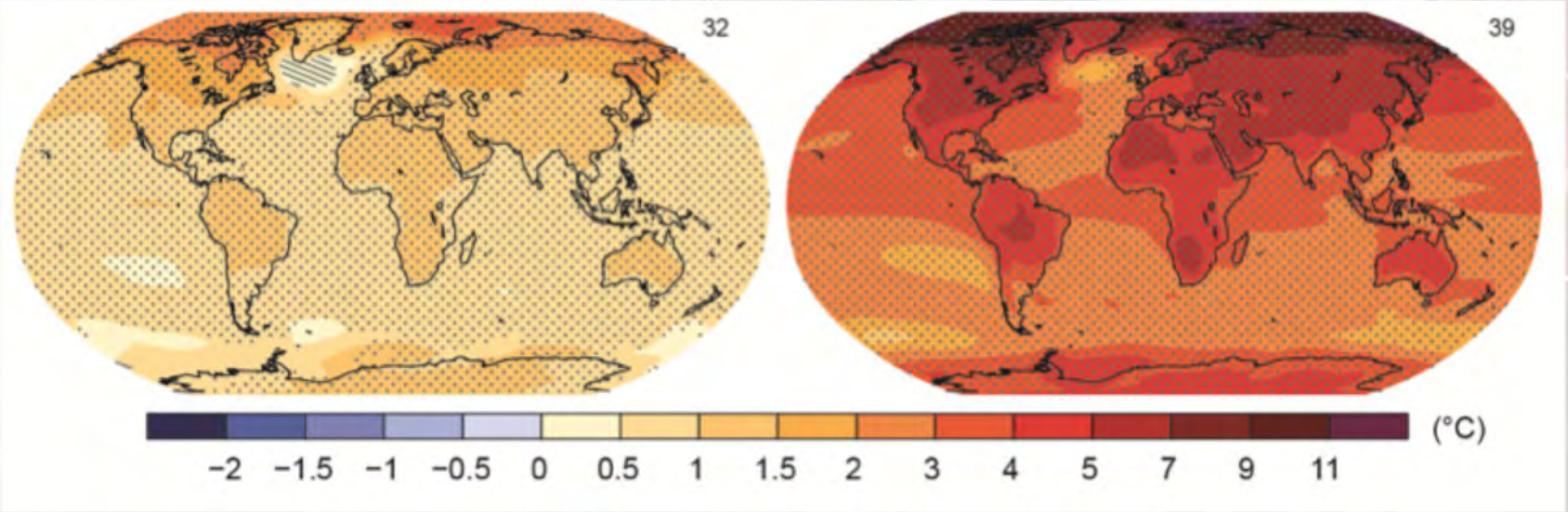
Increases in CO2 absorption capacity by forests, soils, etc , are welcome, but much more difficult to measure and guarantee in time (think, e.g., forest fires!)

Separate, bold, targets for emission reductions and for absorption increases would be better

Humanity still has the choice

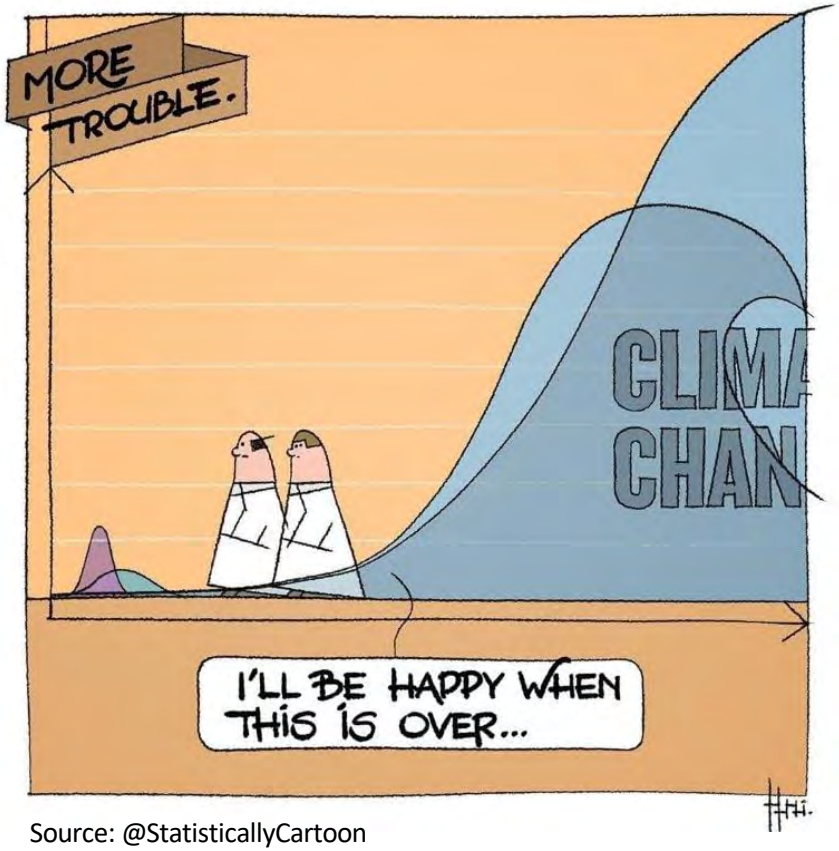
With substantial mitigation

Without additional mitigation



Change in average surface temperature (1986–2005 to 2081–2100)

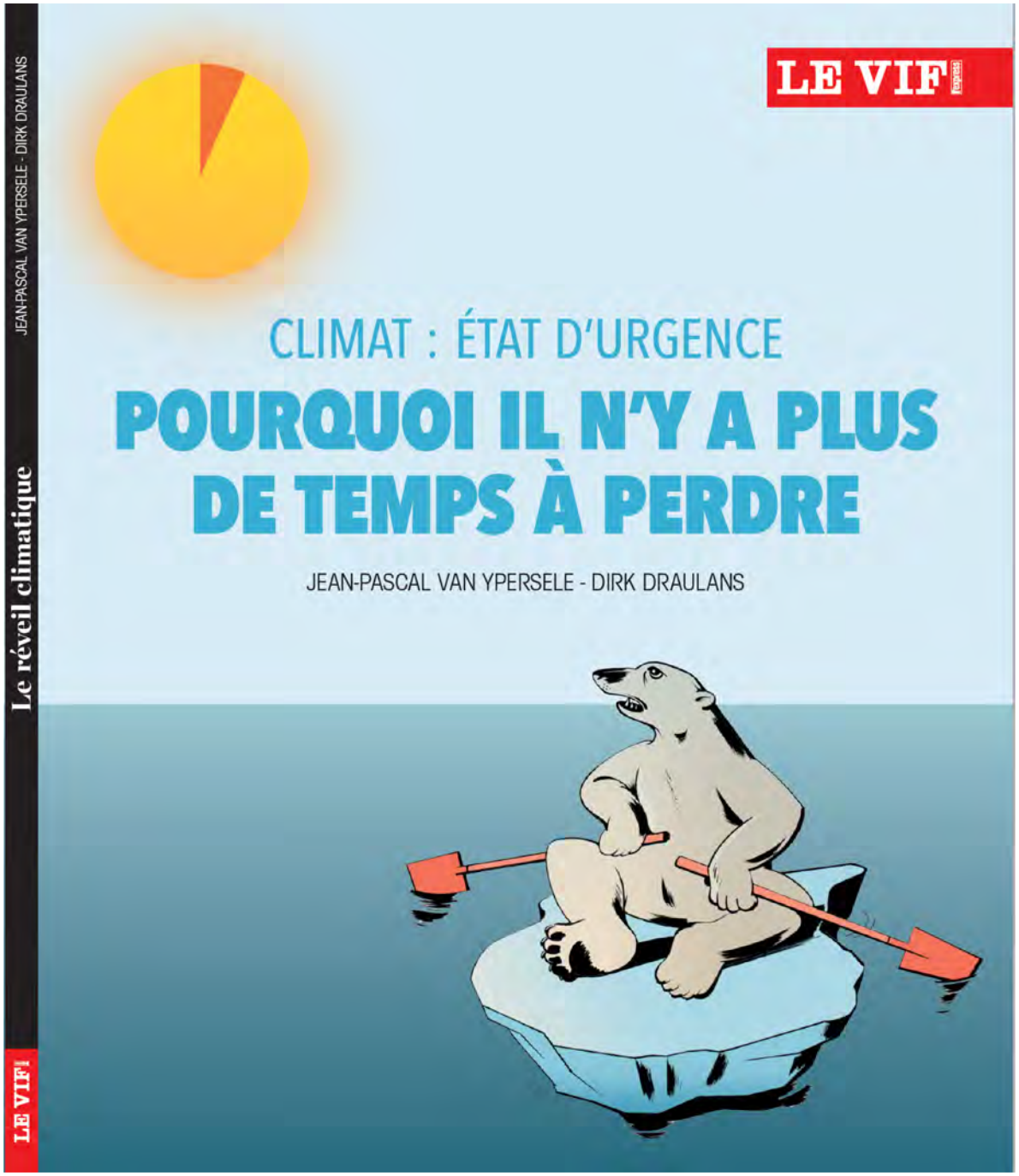
AR5 WGI SPM



Source: @StatisticallyCartoon

@JPvanYpersele

Gratuit sur
www.levif.be/reveil-climatique



DAT POLITICI OVER TWINTIG JAAR NIET KOMEN JANKEN DAT ZE HET NIET WISTEN.

DIRK DRAULANS (1956) is bioloog, doctor in de wetenschappen en was gastonderzoeker aan de University of Oxford. Sinds 1987 is hij journalist bij Knack.

JEAN-PASCAL VAN YPERSELE (1957) is fysicus en klimatoloog. Hij is hoogleraar klimatologie en milieuwetenschappen aan de UCLouvain en was ondervoorzitter van het Intergovernmental Panel on Climate Change (IPCC).

BIJLAGE BIJ KNACK VAN 16 SEPTEMBER 2020. MAG NIET LOS VERKOCHT WORDEN.

HET KLIMAATALARM

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Dirk Draulans en
Jean-Pascal van Ypersele

Knack

Gratis pdf op : www.knack.be/klimaatalarm

To go further :

- www.climate.be/vanyp : my slides (under « conferences)
- www.ipcc.ch : IPCC
- www.plateforme-wallonne-giec.be : IPCC-related in French, Newsletter, latests on SR15, basic climate science
- **Twitter: @JPvanYpersele & @IPCC_CH**

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