

## Climate Change: The Latest IPCC Report is a Source of Anxiety, but also of Hope

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Conference at the Foreign Correspondents Club of Japan (FCCJ),  
 Tokyo, 19 April 2023

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## The Essential Truth About Climate Change in Ten Words

The basic facts of climate change, established over decades of research, can be summarized in five key points:

**IT'S REAL**  
**IT'S US**  
**EXPERTS AGREE**  
**IT'S BAD**  
**THERE'S HOPE**

Global warming is happening.

Human activity is the main cause.

There's scientific consensus on human-caused global warming.

The impacts are serious and affect people.

We have the technology needed to avoid the worst climate impacts.

Source: @JohnCook

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That small blue dot is the Earth, as seen from Cassini, orbiting Saturn, 1.44 billion km from us, on 19-7-2013



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What will happen in Shizuoka, where Honda started?

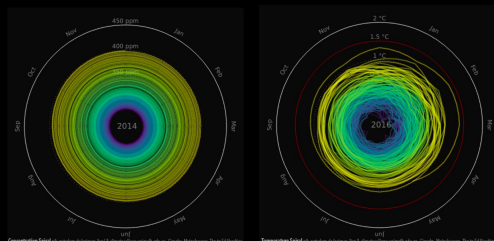


Photo:  
 @JPvanYpersele  
 April 2023

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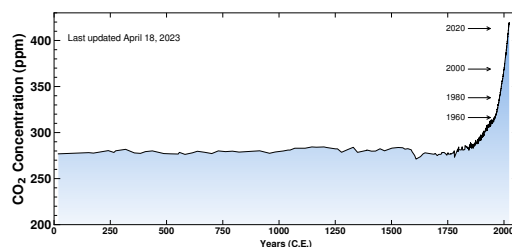
## CO<sub>2</sub> Concentration and Temperature spirals



CO<sub>2</sub> 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://journalclimatechange.net/climate-spirals/concentration-temperature/>

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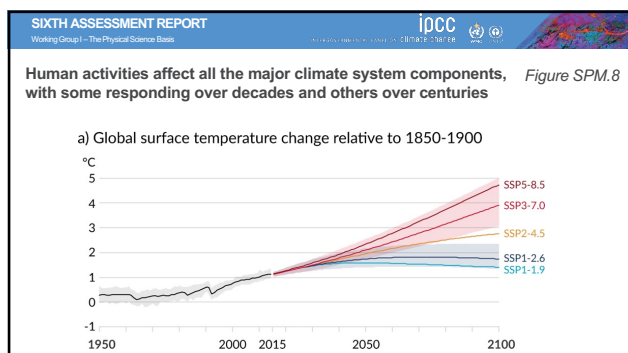
## CO<sub>2</sub> Concentration 18 April 2023: 424,03 ppm (Keeling curve + last 10000 years)



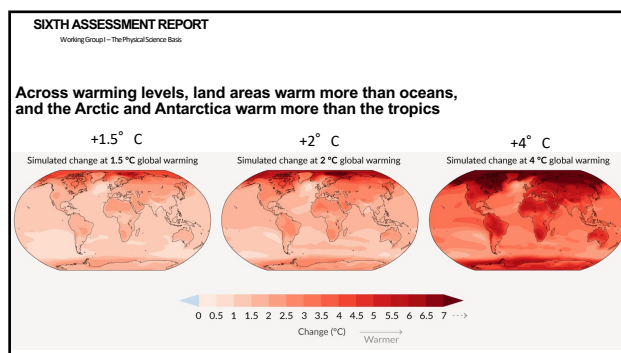
Source: [scripps.ucsd.edu/programs/keelingcurve/](https://scripps.ucsd.edu/programs/keelingcurve/)

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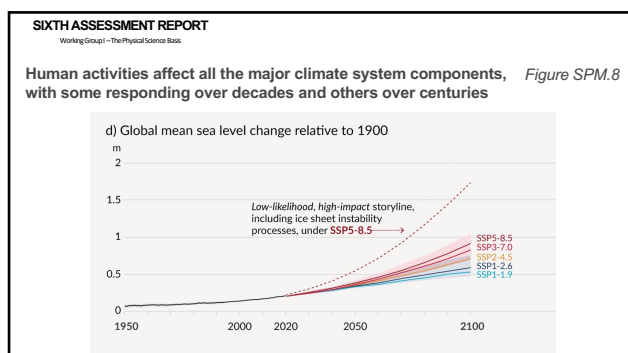




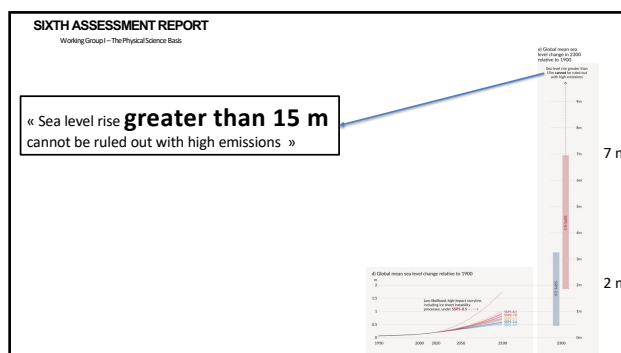
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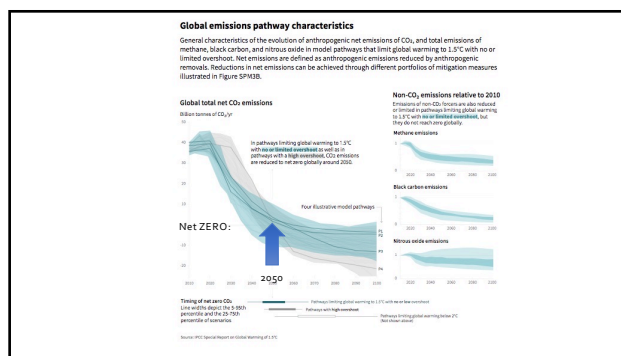
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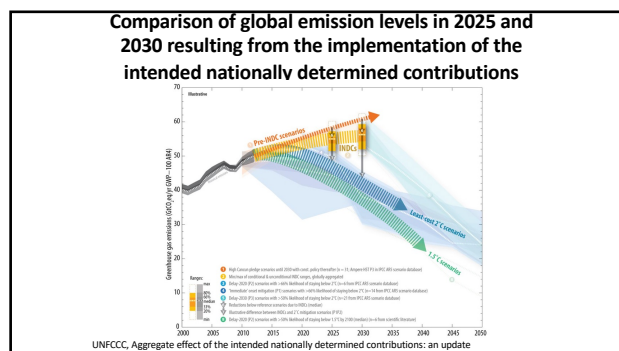
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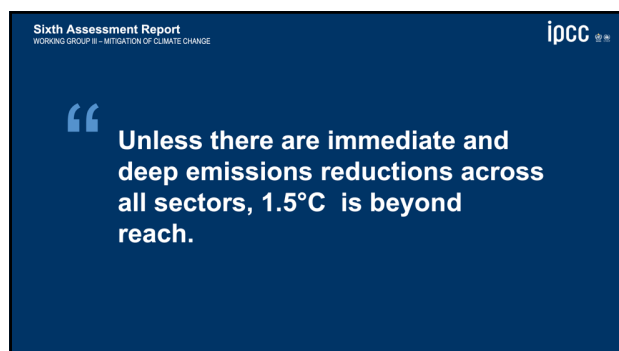
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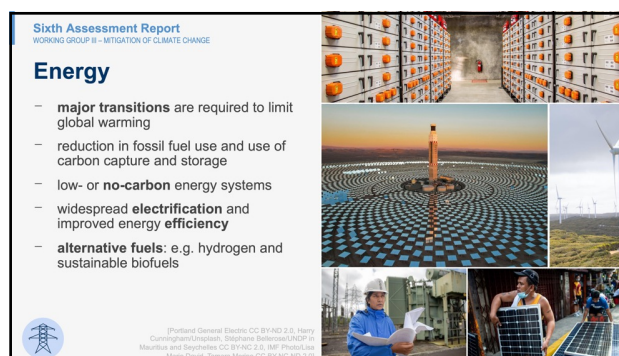
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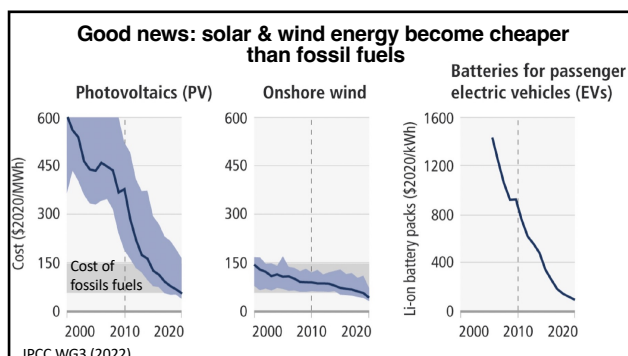


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**Demand and services**

- potential to **bring down** global emissions by **40-70%** by 2050
- walking and cycling, electrified transport, reducing air travel, and adapting houses make large contributions
- lifestyle changes** require **systemic changes** across all of society
- some people** require additional **housing, energy** and **resources** for human wellbeing

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**Buildings**

- buildings: possible to reach net zero emissions in 2050
- action in this decade is critical to fully capture this potential
- involves retrofitting existing buildings and effective mitigation techniques in new buildings
- requires ambitious policy packages
- zero energy and **zero-carbon** buildings exist in new builds and retrofits

(Photographs for Europe/Unsplash, City of St. Peter CC BY-ND 2.0, Unsplash, Eindhoven Municipality, Arne Moen/Unsplash, CC BY-SA 4.0)

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**Sixth Assessment Report**  
WORKING GROUP II – MITIGATION OF CLIMATE CHANGE

**Industry**

- using materials more **efficiently**, **reusing**, **recycling**, **minimising waste**; currently **under-used** in policies and practice
- basic materials**: low- to zero-greenhouse gas production processes at **pilot** to **near-commercial** stage
- achieving **net zero** is challenging

(Illustration/Unsplash, IMF Focus | Industry and Manufacturing CC BY-NC-ND 2.0, Reuters/Getty Images, CC BY-ND 2.0, ILO/IMF Focus CC BY-NC-ND 2.0, Shutterstock/Photo stock)

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**Sixth Assessment Report**  
WORKING GROUP II – MITIGATION OF CLIMATE CHANGE

**Technology and Innovation**

- investment and policies **push forward** **low emissions** technological innovation
- effective decision making** requires assessing potential benefits, barriers and risks
- some options** are technically **viable**, rapidly becoming **cost-effective**, and have relatively **high public support**. Other options face barriers

**Adoption of low-emission technologies is slower in most developing countries, particularly the least developed ones.**

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**Sixth Assessment Report**  
WORKING GROUP II – MITIGATION OF CLIMATE CHANGE

**Policies, regulatory and economic instruments**

- regulatory and economic instruments have **already proven effective** in reducing emissions
- policy packages** and **economy-wide packages** are able to achieve **systemic change**
- ambitious and effective mitigation requires **coordination across government** and **society**

**Energy**  
Manufacturing  
More efficient  
Less efficient  
Energy consumption  
1.75  
Energy efficiency  
Energy efficiency  
Energy efficiency

**TAX STATEMENT FOR YEAR 2019**

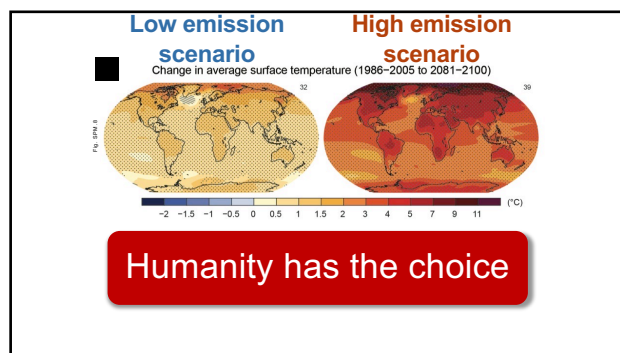
(World Bank/Smirne D. McCourtie, Dominic Chavez CC BY-NC-ND 2.0, Getty Images/Photo stock, Development CC BY 2.0, IMF Photo/Tamara Marino CC BY-NC-ND 2.0, Photo/Unsplash/Photo stock)

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**PROF. JEAN-PASCAL VAN YPERSELE**  
CANDIDATE FOR IPCC CHAIR

**STANDING FOR**

- IPCC as the global VOICE of climate
- Connecting solid science and the world's policy makers
- Delivering a more inclusive, dynamic, and relevant IPCC

**UN SDGs**  
**CLIMATE JUSTICE**  
**A FAIR TRANSITION**

With the official support of the Belgian Government

**EXPERIENCE & ENERGY**

- IPCC Vice-Chair (2008-2015) and active in IPCC since 1995
- 40 years experience in climate science and diplomacy
- Full professor of climate and sustainable development (UCLouvain)
- Global Sustainable Development Report 2019 co-author
- Lead Author for the Third Assessment Report
- High profile media commentator and spokesperson
- Strong track record of advocacy, chairing, and partnerships
- An award winning science communicator

**READY TO REPRESENT**

- Global North AND South
- Interdisciplinary science AND policy making
- People, science, AND decisive action

Highly experienced global player from the first Rio Summit in '92 through to the latest COP via a wide range of working groups, task forces, and scientific conferences.

More information: [@JPvanYpersele](https://climate.be/en/people/JPvanYpersele)  
#IPCCvoiceClimate

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## Key aspects of my IPCC Chair candidacy

1. The IPCC must be the most scientifically solid « **Voice of Climate** » at the international level
2. The IPCC must become even **more useful** for policy- and decision-makers, while staying **policy-neutral**

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## Key aspects of my IPCC Chair candidacy

3. The IPCC must be **inclusive** (gender balance, developing countries participation...), **respectful** of all people and cultures, open to more disciplines and more **interdisciplinarity**, and help train more **young scientists** into the IPCC process
4. IPCC procedures & products need to be updated to **respond better to the new needs** of UNFCCC and others

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## To go further :

- [www.climate.be/vanyp](http://www.climate.be/vanyp) : my slides (under « conferences »)
- [www.ipcc.ch](http://www.ipcc.ch) : IPCC
- [www.realclimate.org](http://www.realclimate.org) : answers to the merchants of doubt arguments
- [www.skepticalscience.com](http://www.skepticalscience.com) : same
- [www.plateforme-wallonne-giec.be](http://www.plateforme-wallonne-giec.be) : IPCC-related in French, Newsletter, latest on climate, basic climate science
- **Twitter: @JPvanYpersele & @IPCC\_CH**

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