

# Sustainable Law Academy

## *Introduction*

History, « Sustainability », « Corporate social responsibility »  
Jean-Marc Gollier

# Plan



The Definitions: « Sustainable development », « CSR », « Development »



Three *Hockey Stick Graphs*: GDP – CO2 – Demography / The SDGs



*Chronicle of a Death Foretold:*  
*Climate change*  
*Biodiversity loss*

# *The Definitions*

# Definitions: Sustainable development

- **Sustainable development** (Brundtland Report, 1987):
- “Sustainable development is **development that meets the needs of the present without compromising the ability of future generations to meet their own needs**. It contains within it two key concepts:
  - the concept of '**needs**', in particular the essential needs of the world's poor, to which overriding priority should be given;
  - the idea of **limitations** imposed by the state of technology and social organization on the environment's ability to meet present and future needs.”
- Anthro-po-centered,
- Combining synchrony (relation in the present time) and diachrony (relation between present and future generations),
- Case law: Bundersgerichtshof (German Constitutional Court), [24 March 2021](#): *there is an intergenerational justice (political) obligation.*

# Definitions: Sustainable development - CSR

- **Corporate Social Responsibility** (EU Commission, 25 October 2011):
- “The Commission puts forward a new definition of CSR as “**the responsibility of enterprises for their impacts on society**”. **Respect for applicable legislation**, and for collective agreements between social partners, is a prerequisite for meeting that responsibility. To fully meet their corporate social responsibility, enterprises should have in place a process to **integrate social, environmental, ethical, human rights and consumer concerns** into their business operations and core strategy in close collaboration with their **stakeholders**, with the aim of:
  - – **maximising the creation of shared value** for their owners/shareholders and for their other stakeholders and society at large;
  - – **identifying, preventing and mitigating their possible adverse impacts.**”
- Anthro-centered,
- “Concerns” => “duty of care” => due diligence,
- Synchronic approach (present responsibility for potential liability),
- Case law: Total – Erika (2012); Shell – Climate case (2021 – future generations); Shell in Nigeria (2021 - UK-NL: distant populations); Maran (2021 – UK: distant workers).

# Definitions: Development (UN “Agenda for Development” ([A/RES/51/240](https://research.un.org/en/docs/dev)))

<https://research.un.org/en/docs/dev>

<b>Introduction</b>
1946-1959
1960-1970, 1st Development Decade
1971-1980, 2nd Development Decade
1981-1990, 3rd Development Decade
1991-1999, Human Development Reports
2000-2015, Millennium Development Goals
2016-2030, Sustainable Development Goals
Research Resources
FAQ & More

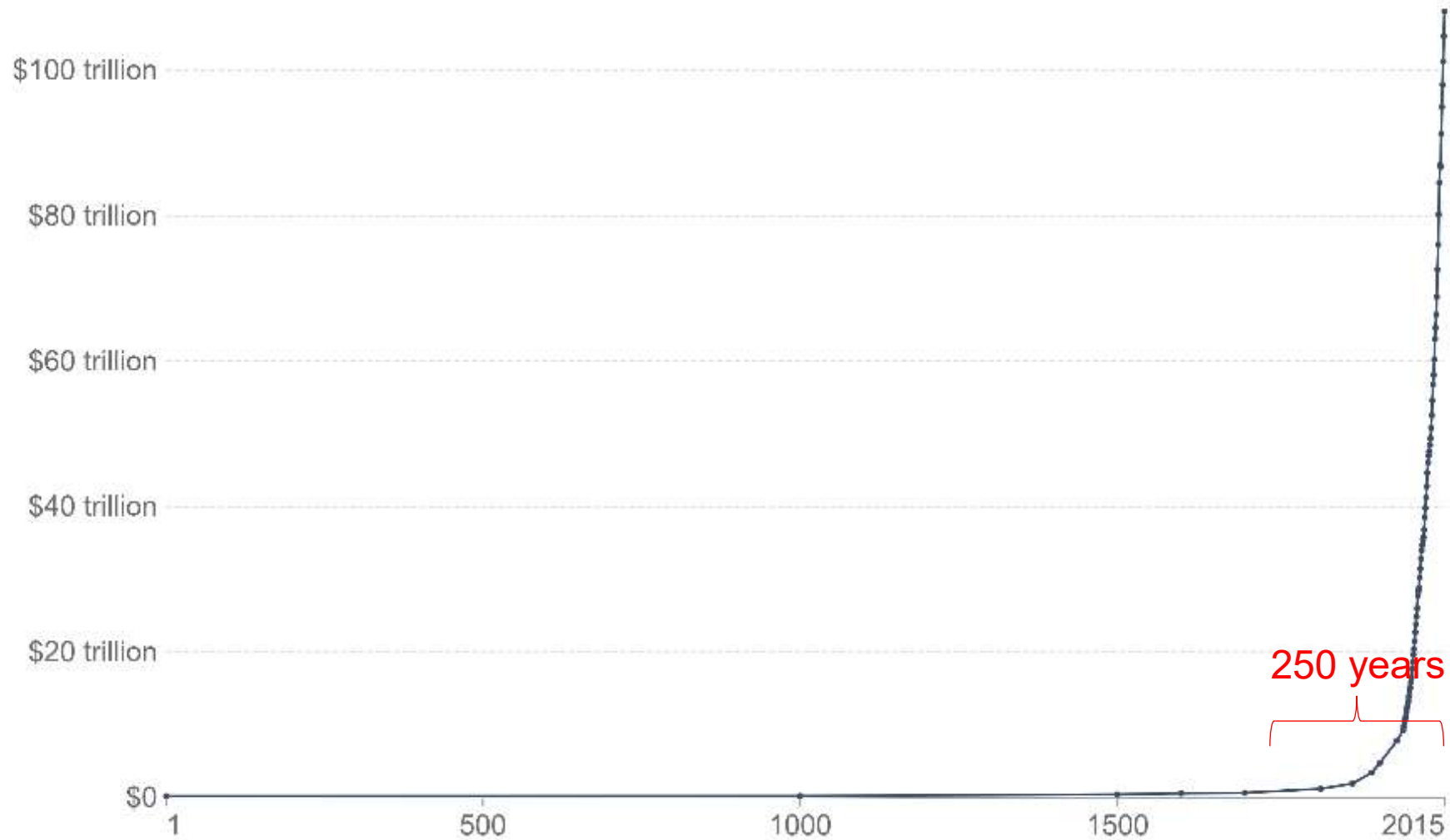
- “The concept of development includes many aspects and has changed over time. The first paragraph of **the Agenda for Development** (A/RES/51/240 - 1997) states:
  - “Development is one of the main priorities of the United Nations. Development is a multidimensional undertaking **to achieve a higher quality of life for all people**. Economic development, social development and environmental protection are interdependent and mutually reinforcing components of sustainable development.
  - “**Sustained economic growth** is essential to the economic and social development of all countries, in particular developing countries. **Through such growth**, which should be broadly based so as to benefit all people, **countries will be able to improve the standards of living of their people** through the eradication of poverty, hunger, disease and illiteracy, the provision of adequate shelter and secure employment for all and the preservation of the integrity of the environment.
  - “**Democracy**, respect for all human rights and fundamental freedoms, including the right to development, transparent and accountable governance and administration in all sectors of society, and effective participation by civil society are **also an essential part of** the necessary foundations for the realization of social and **people-centred sustainable development**.
  - “The **empowerment of women** and their full participation on a basis of equality in all spheres of society is fundamental for development.” ”

*Three Hockey Stick Graphs:  
GDP – CO2 – Demography /  
The SDGs*

# World GDP over the last two millennia

Total output of the world economy; adjusted for inflation and expressed in international-\$ in 2011 prices.

Our World  
in Data



Source: World GDP - Our World In Data based on World Bank & Maddison (2017)

OurWorldInData.org/economic-growth • CC BY



Christian Gollier  
Avenir Commun Durable  
(chaire annuelle 2021-2022)

- Leçon inaugurale
- Cours & Séminaires
- Colloques
- Agenda
- Audio/vidéo
- Présentation
- Biographie
- La chaire
- Entretien



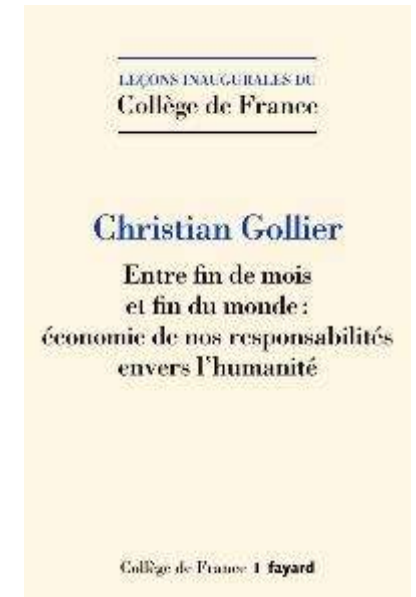

La chaire annuelle Avenir Commun Durable, qui bénéficie du soutien de la Fondation du Collège de France et de ses grands mécènes Covéa et TotalEnergies, porte sur les enjeux de la transition environnementale et énergétique.

en savoir plus

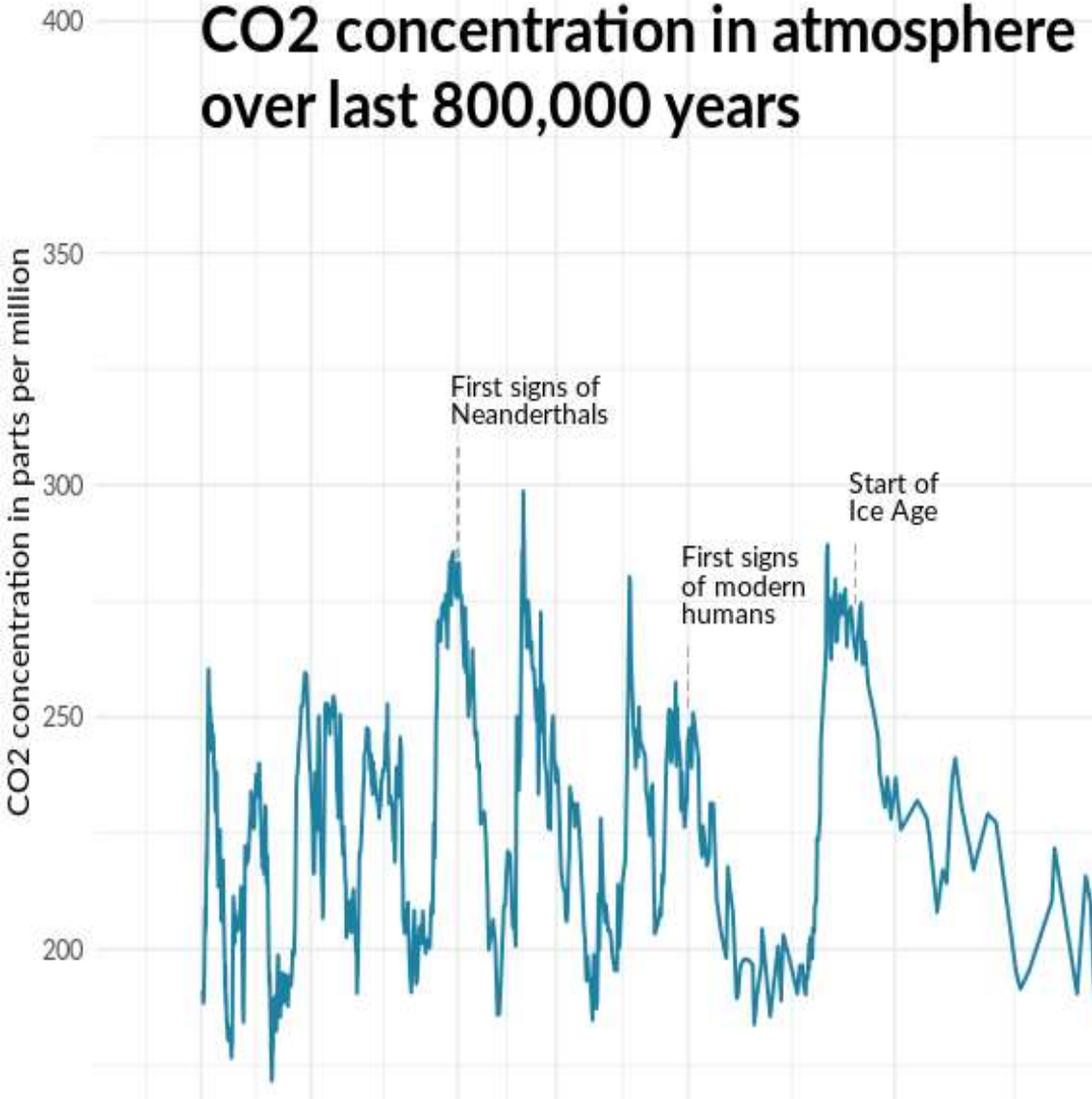
## Growth in question (by an atypical neo-classical economist)

« *With a real **growth** rate of **2 percent per year**, **we now consume fifty times more goods and services than during the Napoleonic era** »*

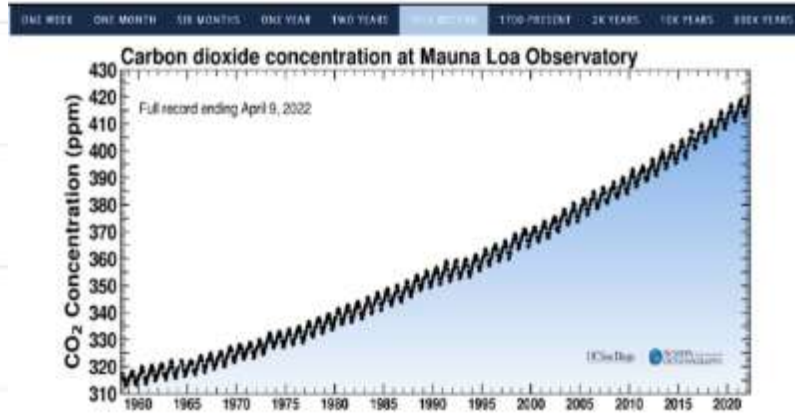
(Christian Gollier, *Ethical asset valuation and the good society*, Columbia University Press, New York, 2017, p. 84; trad. *Finance responsable pour une société meilleure*, PUF, 2019)



# CO2 concentration in atmosphere over last 800,000 years



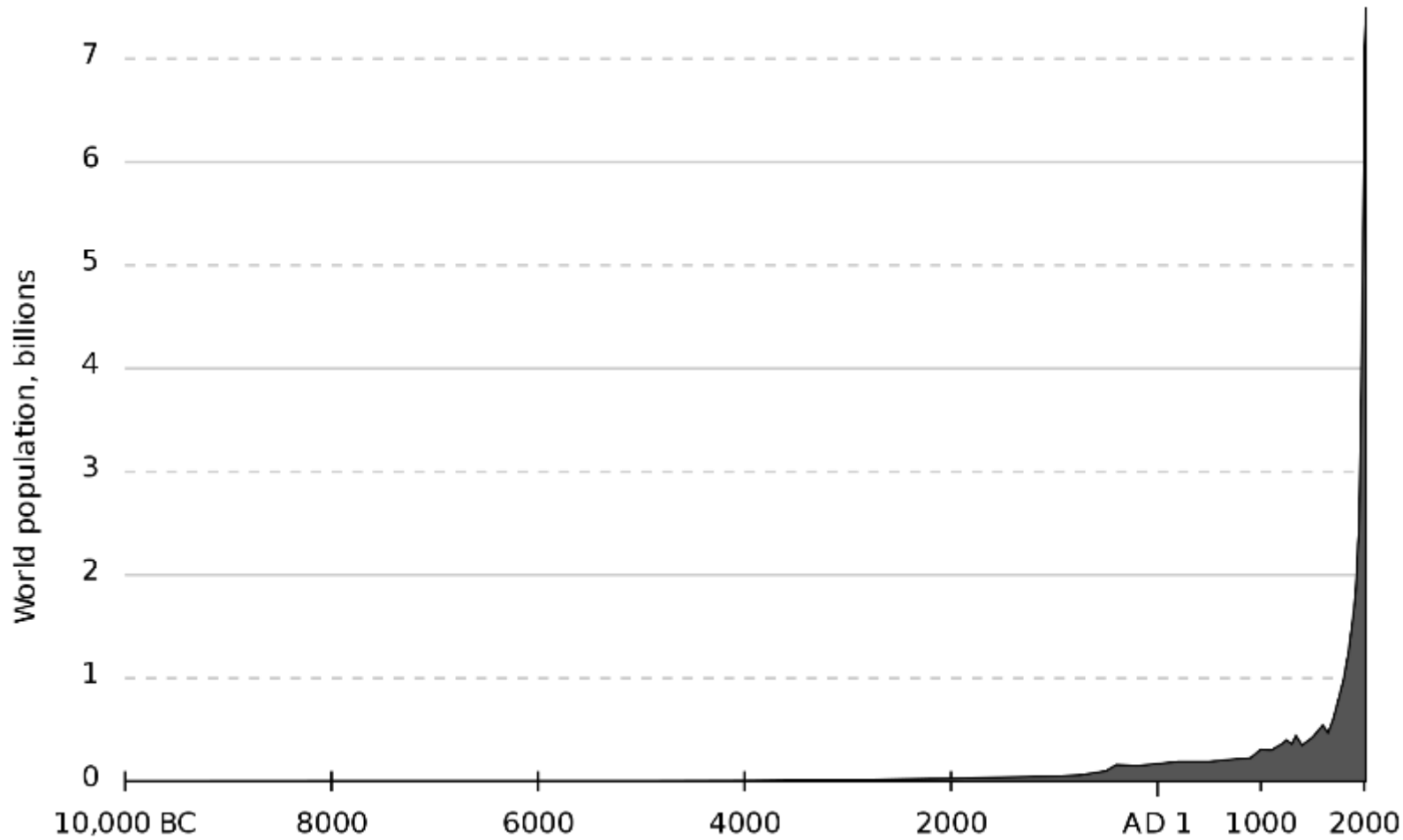
Latest CO<sub>2</sub> reading: 420.40 ppm



First use of gunpowder in war  
Invention of dynamite  
World War II  
World War I  
Industrial Revolution  
Bitcoin  
*Great acceleration*

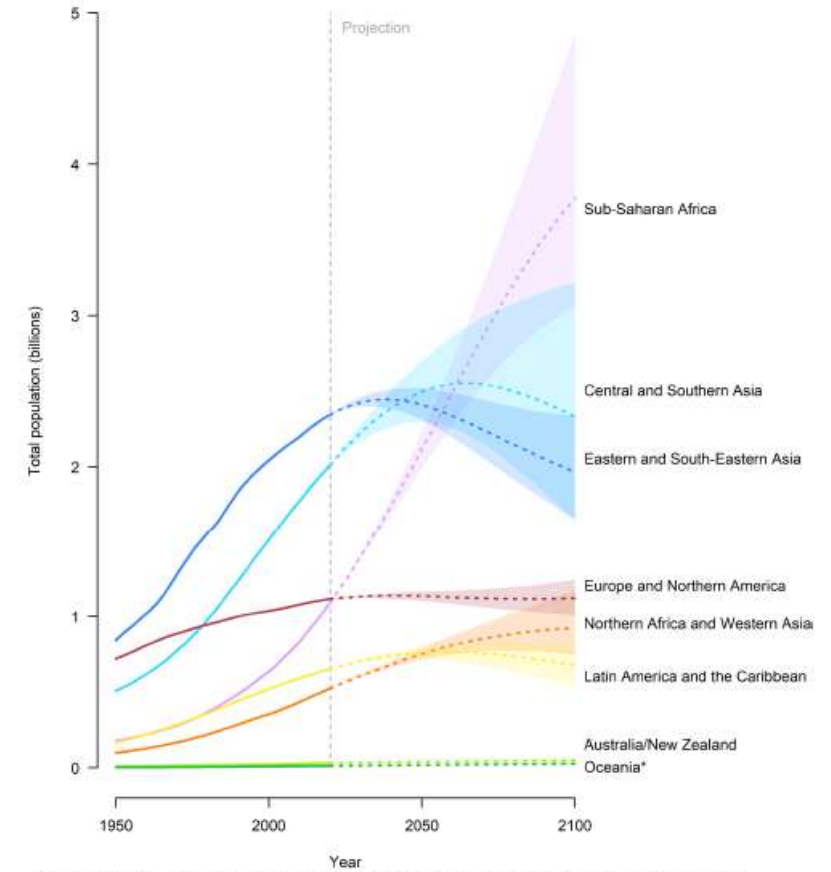
Source: <https://i.redd.it/f0pwsd5hcph31.png>

# World population growth



Source: census.org (USA)

Figure 2. Population by SDG region: estimates, 1950-2020, and medium-variant projection with 95 per cent prediction intervals, 2020-2100  
Of the eight SDG regions, only sub-Saharan Africa is projected to sustain rapid population growth through the end of the century, according to the medium-variant projection

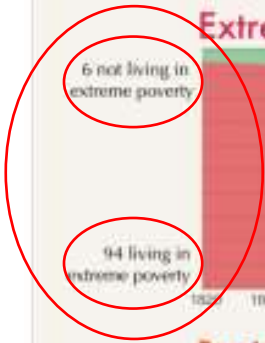


Data source: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019. \* excluding Australia and New Zealand

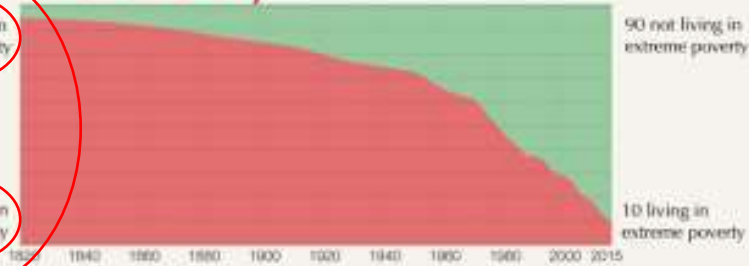
United Nations, Department of Economic and Social Affairs, Population Division

ONU, World Population Prospects 2019: Highlights

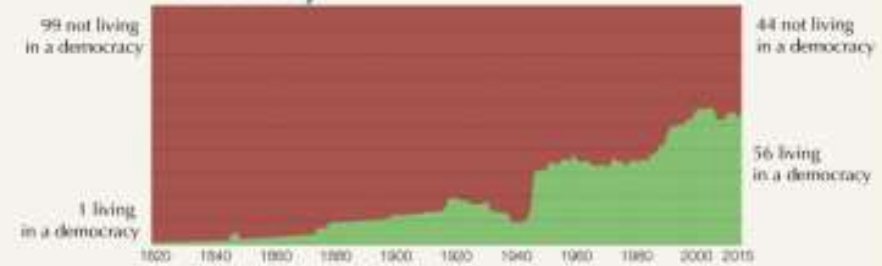
# The World as 100 People over the last two centuries



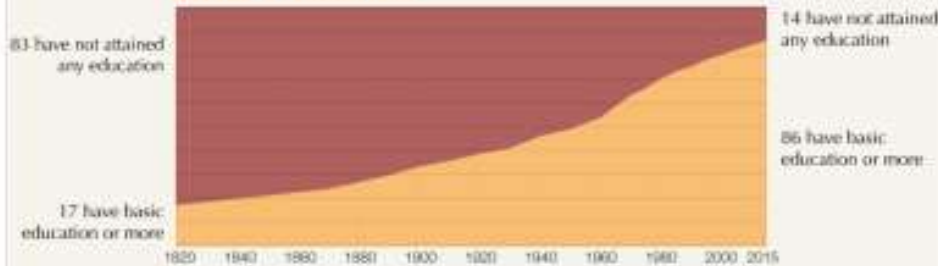
## Extreme Poverty



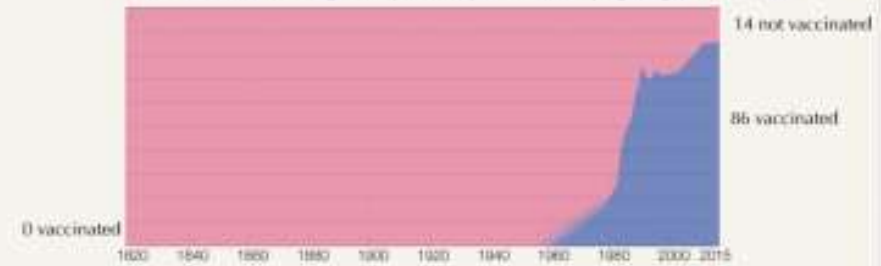
## Democracy



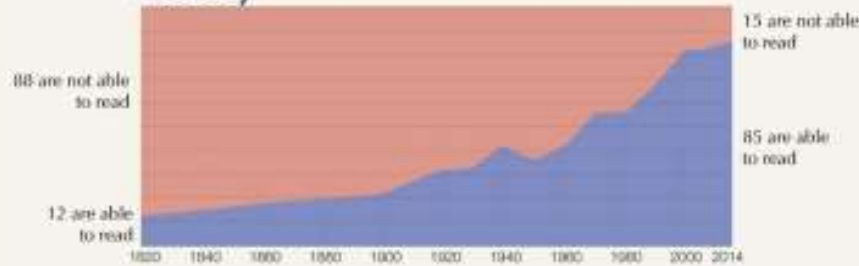
## Basic Education



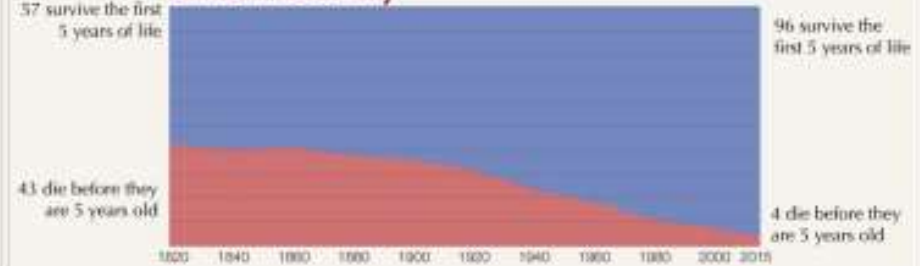
## Vaccination against diphtheria, pertussis (whooping cough), and tetanus



## Literacy



## Child Mortality



Data sources:  
 - Extreme Poverty: Bourguignon & Morrison (2012) up to 1976 - World Bank (201) and later (2015 is a projection)  
 - Vaccination: WHO Global data are available for 1980 to 2015 - the DPT2 vaccination was launched in 1980  
 - Education: OECD for the period 1820 to 1995, UNESCO for the time thereafter  
 - Literacy: OECD for the period 1820 to 1995, UNESCO for 2004 and later

Democracy: Polity IV data (own calculation of global population share)  
 - Child mortality: Bloomer and Fife (own calculation of global population share)  
 - Child mortality: IHME database  
 - Child mortality: up to 1960 own calculations based on Gapminder; World Bank thereafter



All these visualizations are from [OurWorldInData.org](http://OurWorldInData.org) an online publication that presents the empirical evidence on how the world is changing.

Licensed under CC-BY-SA by the author Max Roser

# Sustainable development goals – SDGs (UN 27 September 2015)



<https://sdgs.un.org/>

Fig. 4. The 17 Sustainable Development Goals positioned in relation to the biosphere foundation and the safe operating space for humans on Earth. Redrawn from Rockström and Sukhdev (2014) as presented at the 2016 EAT Forum (<http://eatforum.org/event/eat-stockholm-food-forum-2016/#program>). The global goals logo and icons are from the Global Goals (<http://www.globalgoals.org/#the-goals>), see also the Sustainable Development Knowledge Platform of United Nations (<https://sustainabledevelopment.un.org/sdgs>).

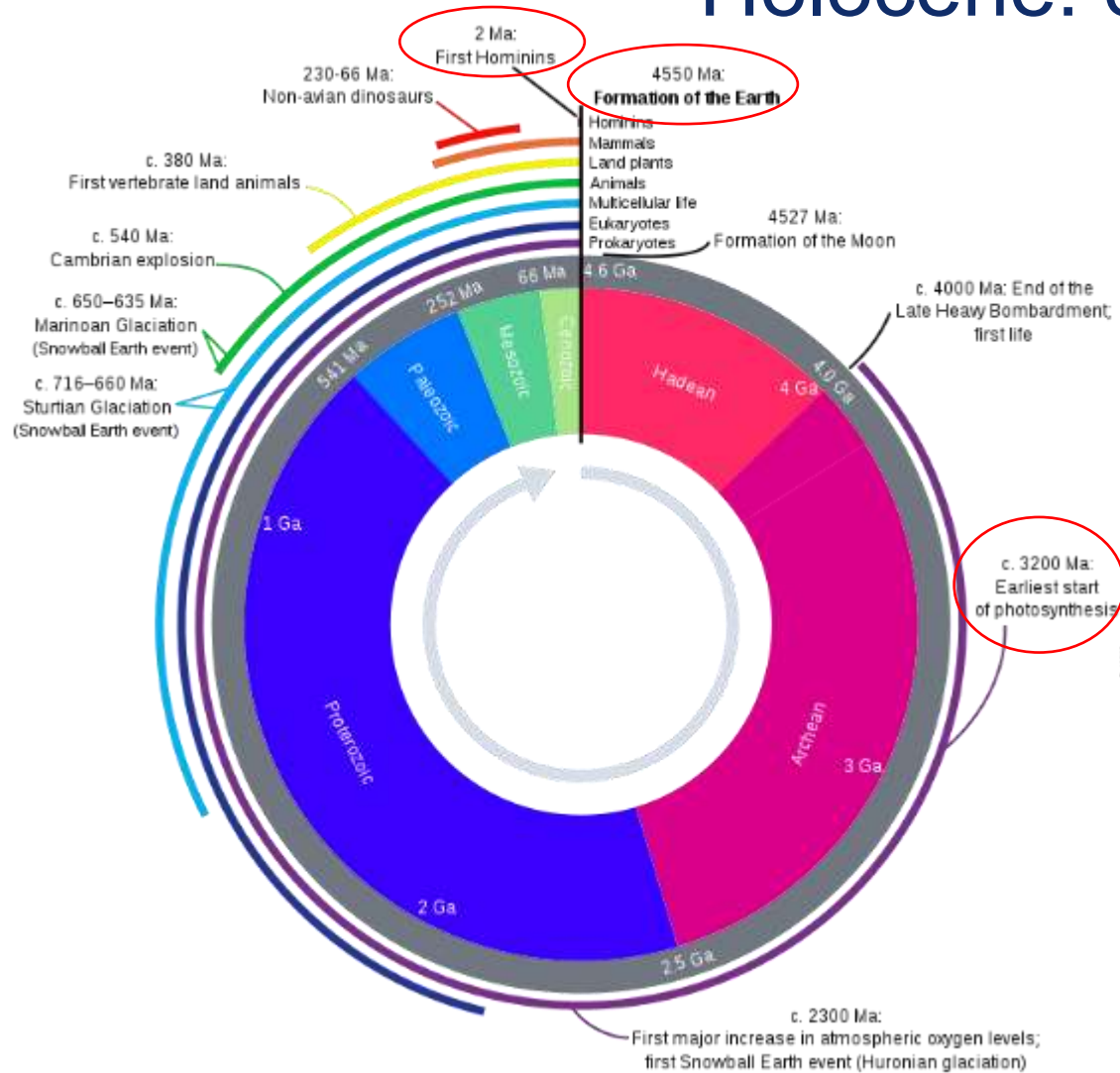


J. ROCKSTROM & alii, "Social-ecological resilience and biosphere-based sustainability science", September 2016, *ECOLOGY AND SOCIETY*, [Stockholm Resilience Centre](http://www.stockholmresilience.org/)

*Chronicle of a Death  
Foretold*

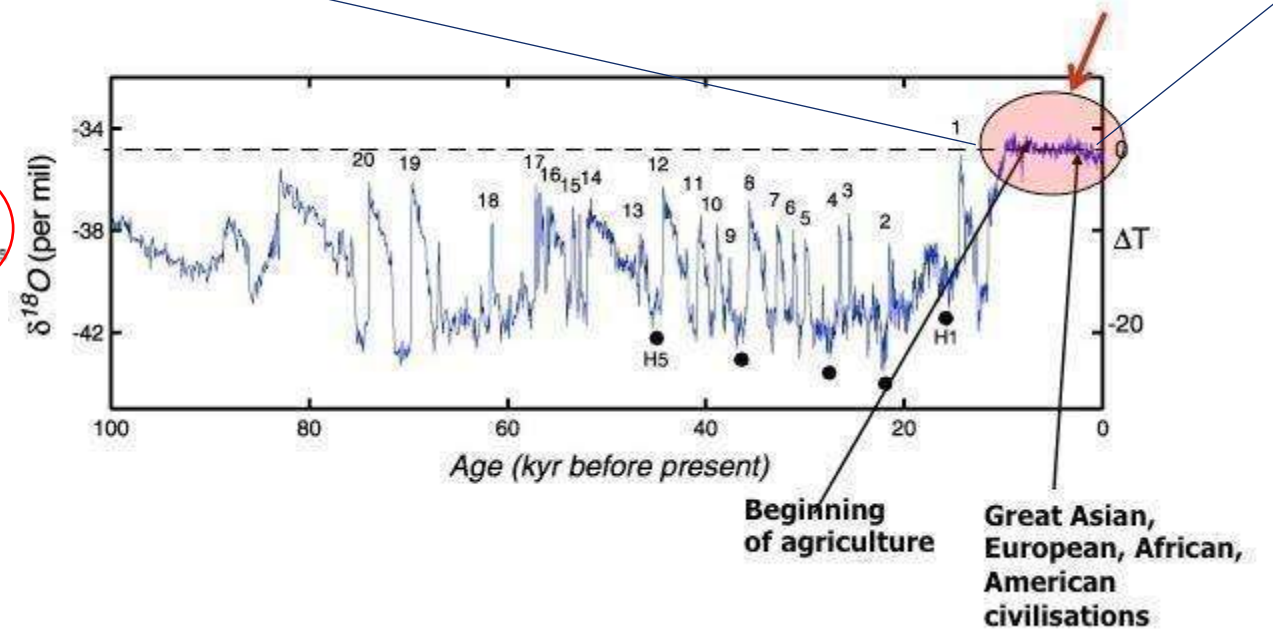
# Climate Change: Historical context

# Holocene: climatic optimum



*Holocene* is the current geological epoch. It began approximately **11,500 years ago**. It is considered by some to be an interglacial period within the Pleistocene Epoch, called the Flandrian interglacial.

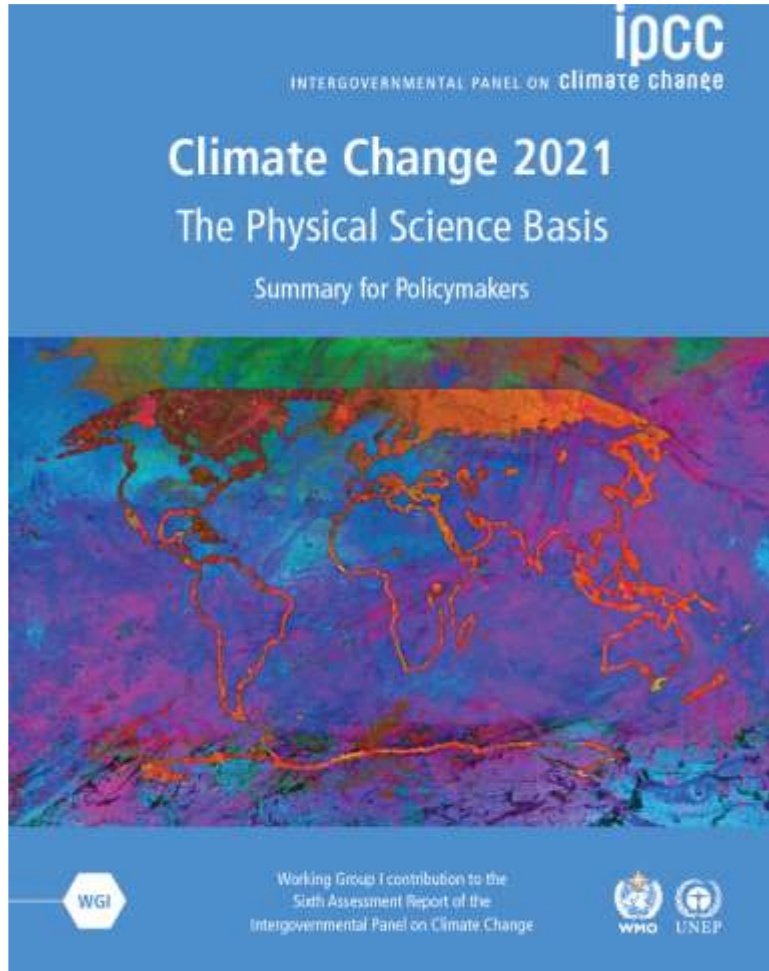
[https://en.wikipedia.org/wiki/Holocene\\_climatic\\_optimum](https://en.wikipedia.org/wiki/Holocene_climatic_optimum)



[https://en.wikipedia.org/wiki/History\\_of\\_Earth](https://en.wikipedia.org/wiki/History_of_Earth)

Source: <https://stockholmresilience.org/research/planetary-boundaries/planetary-boundaries-data.html>

# IPCC AR6 – VGW – 8 August 2021: climate change evidence



Approved Version

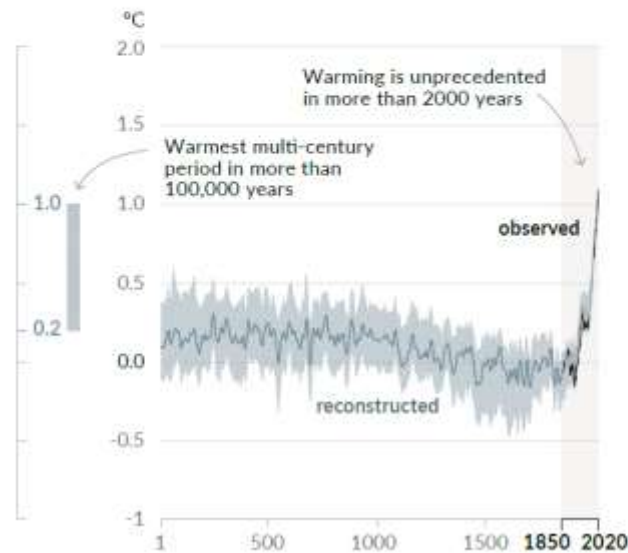
Summary for Policymakers

IPCC AR6 WGI

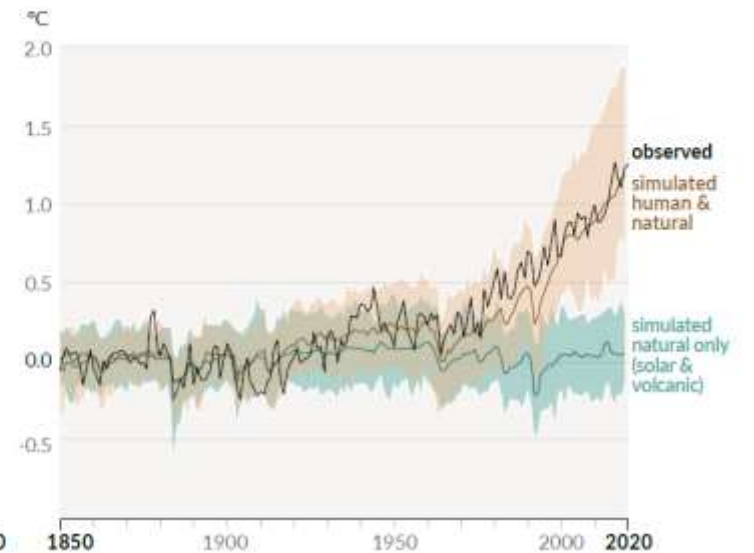
## Human influence has warmed the climate at a rate that is unprecedented in at least the last 2000 years

### Changes in global surface temperature relative to 1850-1900

a) Change in global surface temperature (decadal average) as reconstructed (1-2000) and **observed** (1850-2020)



b) Change in global surface temperature (annual average) as **observed** and simulated using **human & natural** and **only natural** factors (both 1850-2020)



# Climate Change 2022

## Mitigation of Climate Change

Summary for Policymakers



## 4 April 2022, Geneva, IPCC WG3 press release (extracts):

- **It is clear: we can halve emissions by 2030, but we must act now.**
  - Without immediate and drastic emission cuts in all sectors, we will not be able to limit global warming to 1.5°C.
  - “We are at a **crossroads**. The decisions we make now can secure a liveable future. **We have the tools and know-how required to limit warming.**” said IPCC Chair Hoesung Lee.
- **The next few years will be crucial**
  - To limit warming to 1.5 °C (2.7 °F), it requires global greenhouse gas emissions to peak before 2025 at the latest, and be reduced by 43% by 2030; at the same time, methane would also need to be reduced by about a third. Even if we do this, it is almost inevitable that we will temporarily exceed this temperature threshold but could return to below it by the end of the century.
  - The report looks beyond technologies and demonstrates that **while financial flows are a factor of three to six times lower than levels needed by 2030 to limit warming to below 2°C (3.6°F), there is sufficient global capital and liquidity** to close investment gaps.

**Earth System moves to a new state? Severe challenge to contemporary civilisation. Possible collapse?**

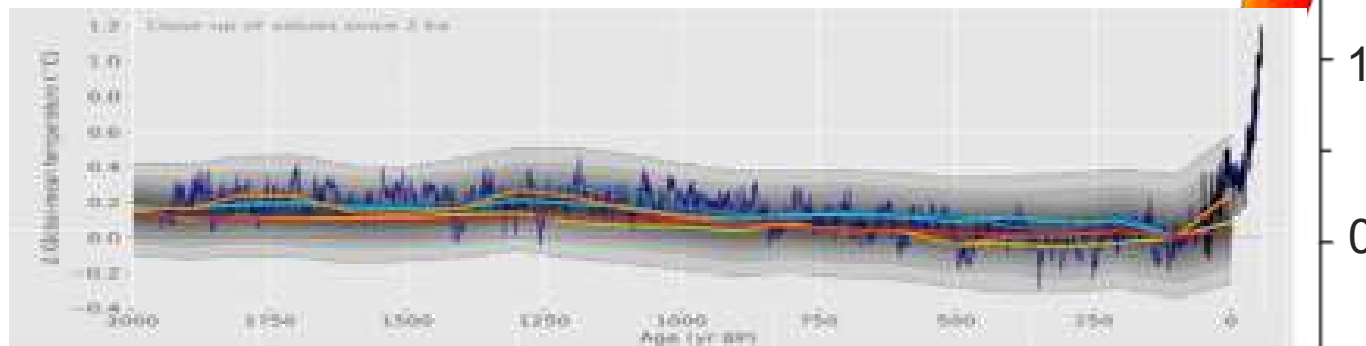
**Current trajectory**

**Tipping Points?**

**Paris targets**

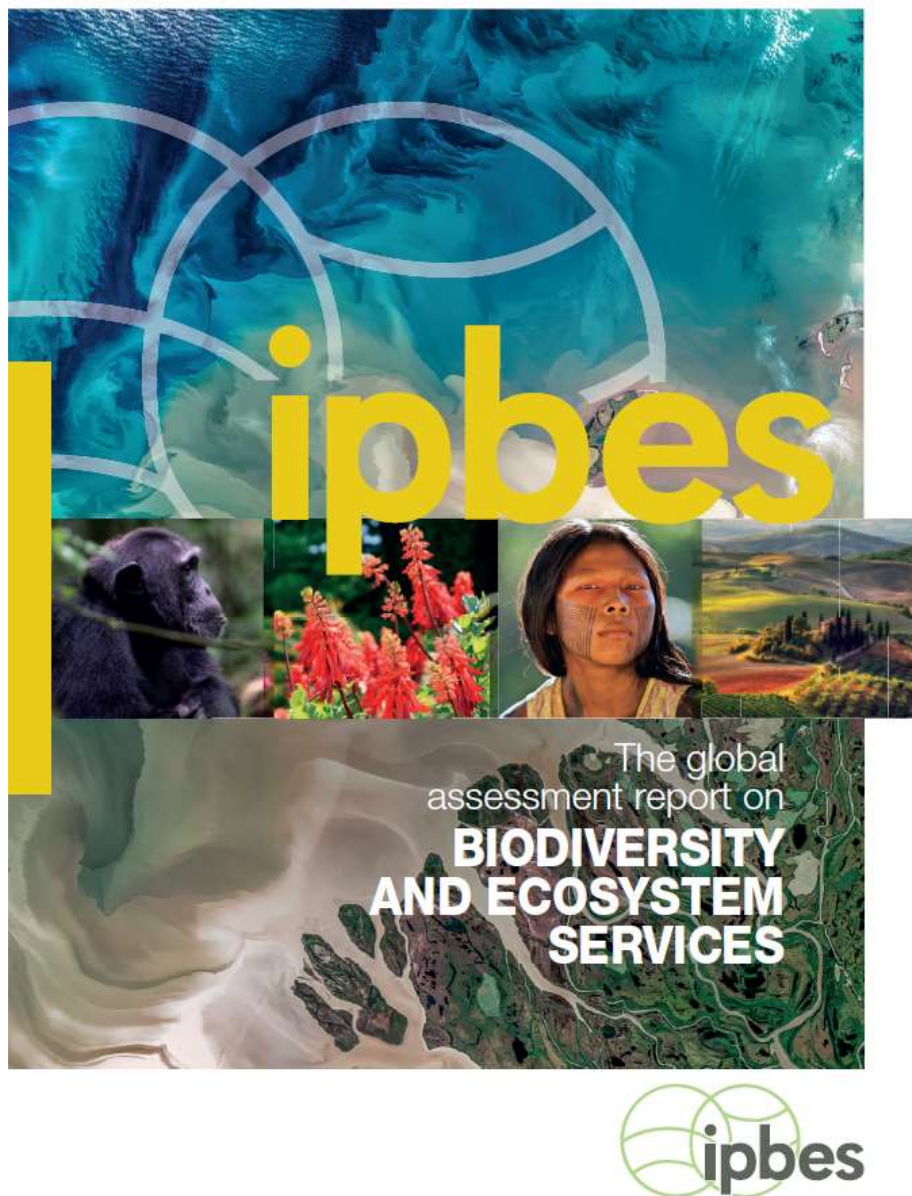
IPCC Projections  
2100 AD

Global Temperature (°C)



Source: [Brussels, 5 October 2021] Will Steffen,  
Emeritus Professor, Australian National University,  
The Earth System, the Anthropocene, and Planetary Boundaries

# Biodiversity loss: State of play



## First IPBES (« IPCC » of biodiversity) global assessment report on **6 May 2019**, KEY MESSAGES:

- **Nature and its vital contributions to people, which together embody biodiversity and ecosystem functions and services, are deteriorating worldwide,**
- Direct and indirect drivers of change have accelerated during the past 50 years.
- **Goals for conserving and sustainably using nature and achieving sustainability cannot be met by current trajectories, and goals for 2030 and beyond may only be achieved through transformative changes across economic, social, political and technological factors, and**
- **Nature can be conserved, restored and used sustainably** while other global societal goals are simultaneously met **through urgent and concerted efforts** fostering transformative change.

## “**Sustainable Use Assessment**” **8 July 2022**:

“A new report ... offers insights, analysis and tools to establish **more sustainable use of wild species** of plants, animals, fungi and algae around the world. **Sustainable use is when biodiversity and ecosystem functioning are maintained while contributing to human well-being.**”