



CLIMATE ACTION NETWORK International

Global CAN Vision
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Brussels



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Elements of *implementation* of a Vision include dosages of

- Ambition, science, aspiration, realism, deeply-rooted values
- Long-term view, short-term actions, actors motivations, participation
- Strategical and tactical alliances, partnerships, inclusiveness
- Comprehensiveness, sectoral focus, international, national, regional
- Communicability, mobilisation potentials

Are these visions? Montreal Protocol, *Entspannungspolitik*, SDG, Base income for all, 100% RES, Nuclear-free world, No further decline of biodiversity,



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So, what is our Vision as CAN?

1.5 C

Fossil fuel free world, halting fully deforestation

Net zero carbon/net negative GHG emissions

Significant cash for developing countries

Climate Justice, Fair and Just Transition, Equity

Or all of that and more – or other issues?

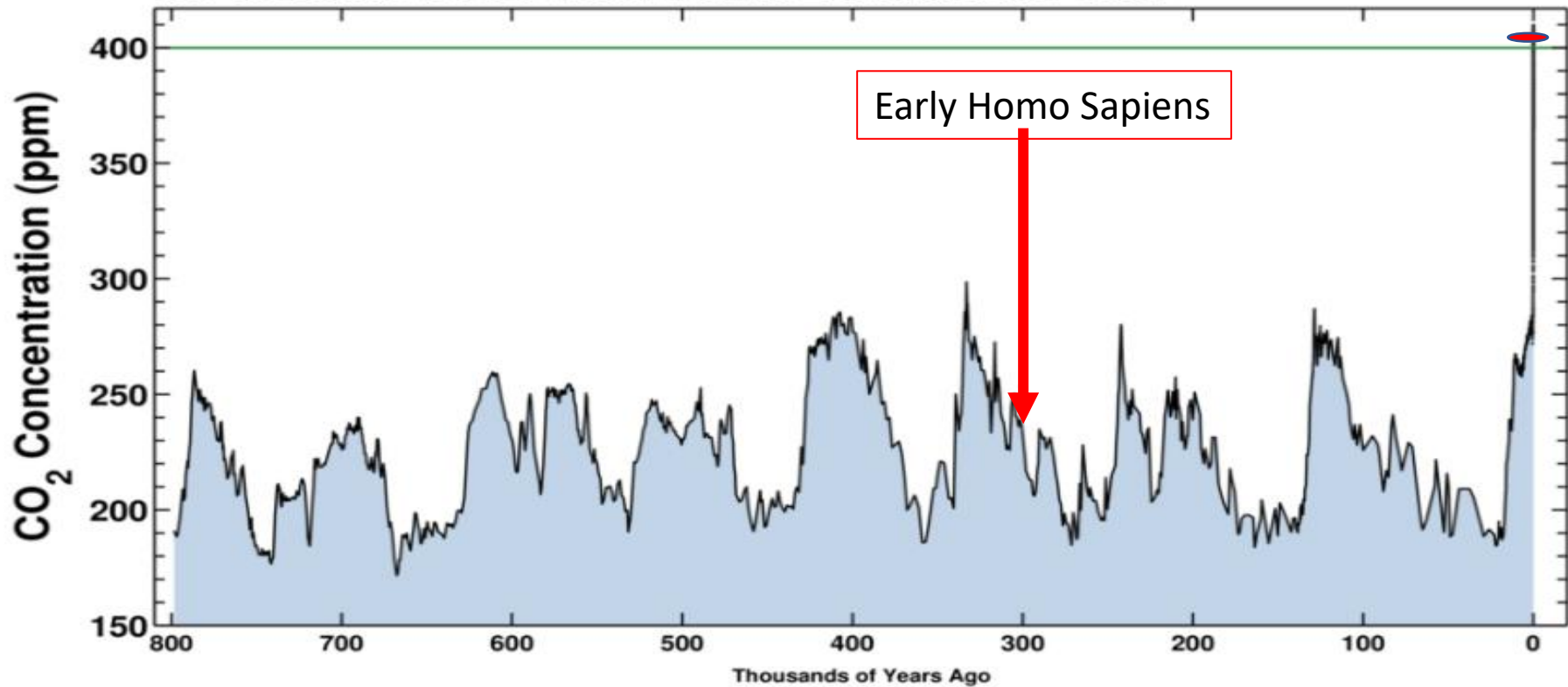


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Latest CO₂ reading
April 21, 2018

411.21 ppm

Ice-core data before 1958. Mauna Loa data after 1958.





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- **CO2 atmospheric concentrations are likely the highest on Earth since**

- **At least 0.8 million years (IPCC)**
- **5 million years (NOOA, US)**
- **15 million years (PIK, Hadley)**
- **25 million years (Scientific American)**

Differences are due to lack of ice cores dating back that long and various assumptions on paleological CO2 data.

- **“About 15 to 40% of emitted CO2 will remain in the atmosphere longer than 1,000 years” (IPCC AR5 WGI, 2014)**

- **“In the past 200 years alone, ocean water has become 30 percent more acidic—faster than any known change in ocean chemistry in the last 50 million years” (Smithsonian Institute, 2016)**

52 Gt global GHG emissions – with new CH₄ GWP

Source: IPCC AR5 WG III (2014)

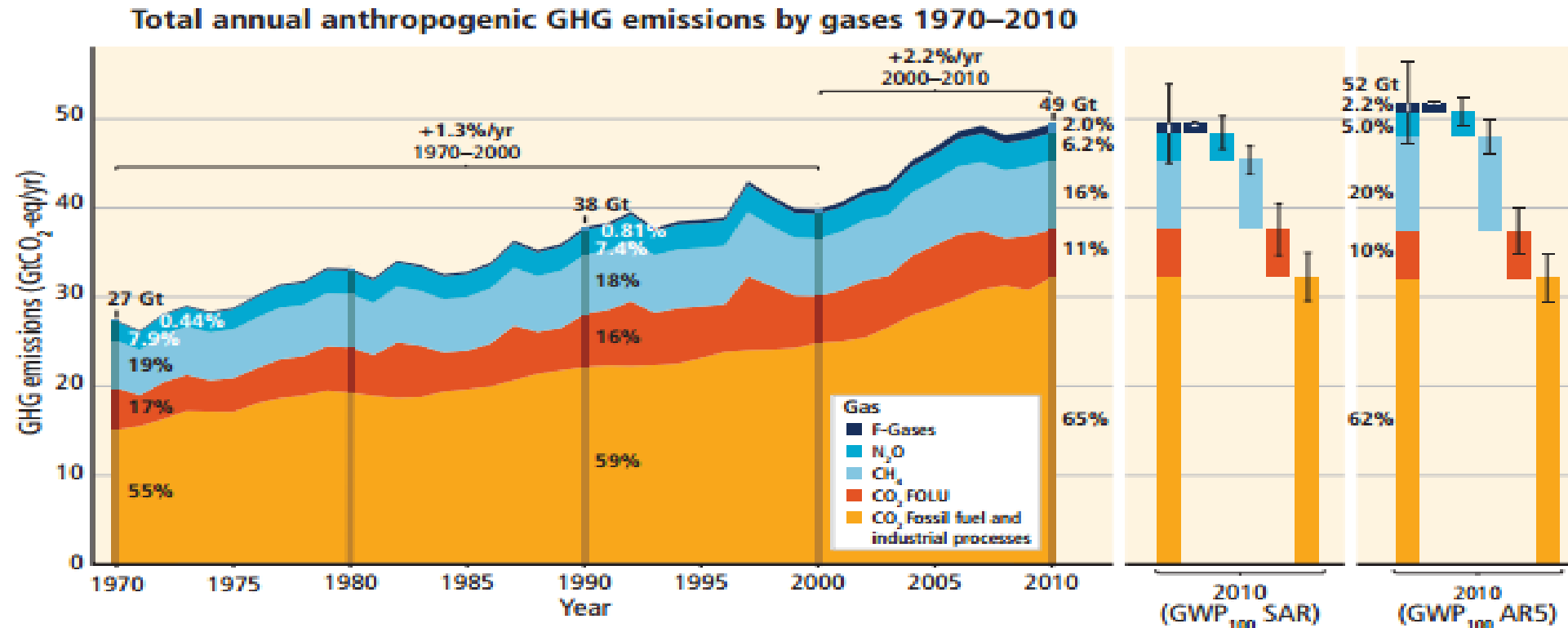
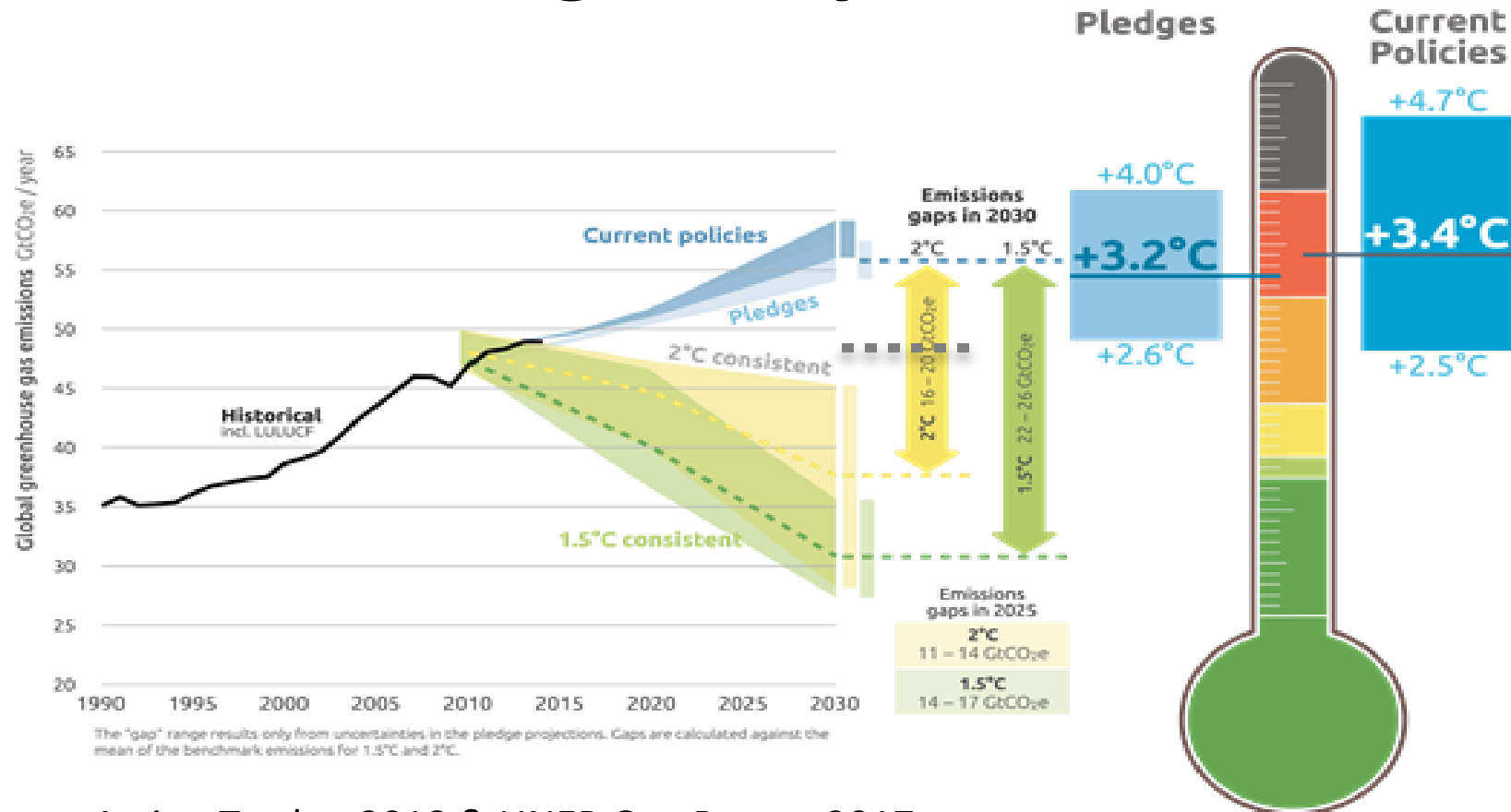


Figure SPM.2 | Total annual anthropogenic greenhouse gas (GHG) emissions (gigatonne of CO₂-equivalent per year, GtCO₂-eq/yr) for the period 1970 to 2010 by gases: CO₂ from fossil fuel combustion and industrial processes; CO₂ from Forestry and Other Land Use (FOLU); methane (CH₄); nitrous oxide (N₂O); fluorinated gases covered under the Kyoto Protocol (F-gases). Right hand side shows 2010 emissions, using alternatively CO₂-equivalent emission weightings based on IPCC Second Assessment Report (SAR) and AR5 values. Unless otherwise stated, CO₂-equivalent emissions in this report include the basket of Kyoto gases (CO₂, CH₄, N₂O as well as F-gases) calculated based on 100-year Global Warming Potential (GWP₁₀₀) values from the SAR (see Glossary). Using the most recent GWP₁₀₀ values from the AR5 (right-hand bars) would result in higher total annual GHG emissions (52 GtCO₂-eq/yr) from an increased contribution of methane, but does not change the long-term trend significantly. (Figure 1.6, Box 3.2)



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Where are we globally?

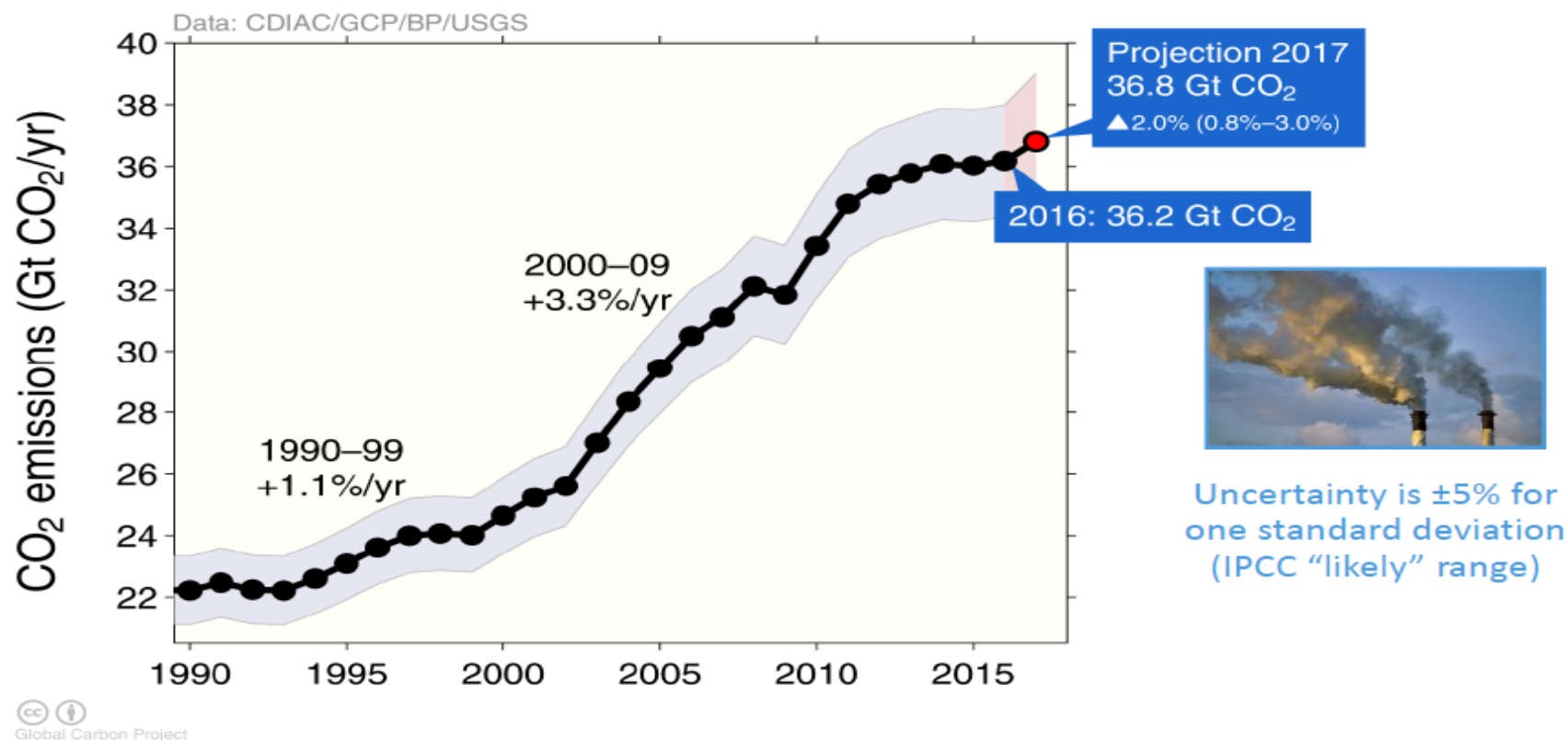


Source: Climate Action Tracker 2018 & UNEP Gap Report 2017

Emissions from fossil fuel use and industry

Global emissions from fossil fuel and industry: 36.2 ± 2 GtCO₂ in 2016, 62% over 1990

● Projection for 2017: 36.8 ± 2 GtCO₂, 2.0% higher than 2016



Estimates for 2015 and 2016 are preliminary. Growth rate is adjusted for the leap year in 2016.

Source: [CDIAC](#); [Le Quéré et al 2017](#); [Global Carbon Budget 2017](#)

Fate of anthropogenic CO₂ emissions (2007–2016)

Sources = Sinks



34.3 GtCO₂/yr
88%



12%
4.9 GtCO₂/yr

17.3 GtCO₂/yr
47%



30%
11.2 GtCO₂/yr



23%
8.7 GtCO₂/yr



Budget Imbalance:

(the difference between estimated sources & sinks)

6%

2.1 GtCO₂/yr



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Visions for us?

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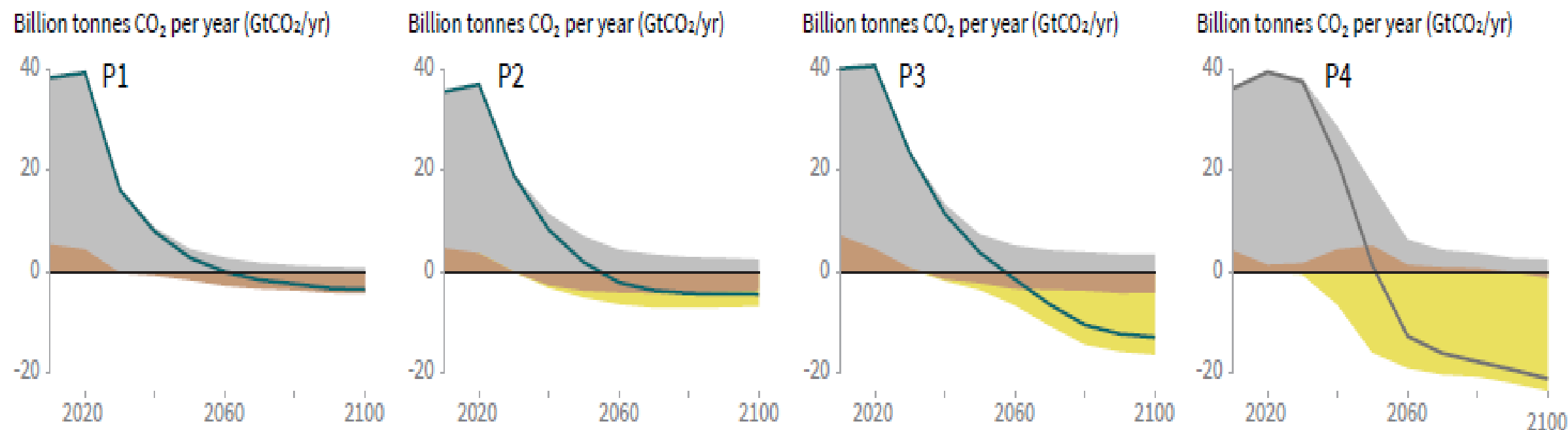
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Breakdown of contributions to global net CO₂ emissions in four illustrative model pathways

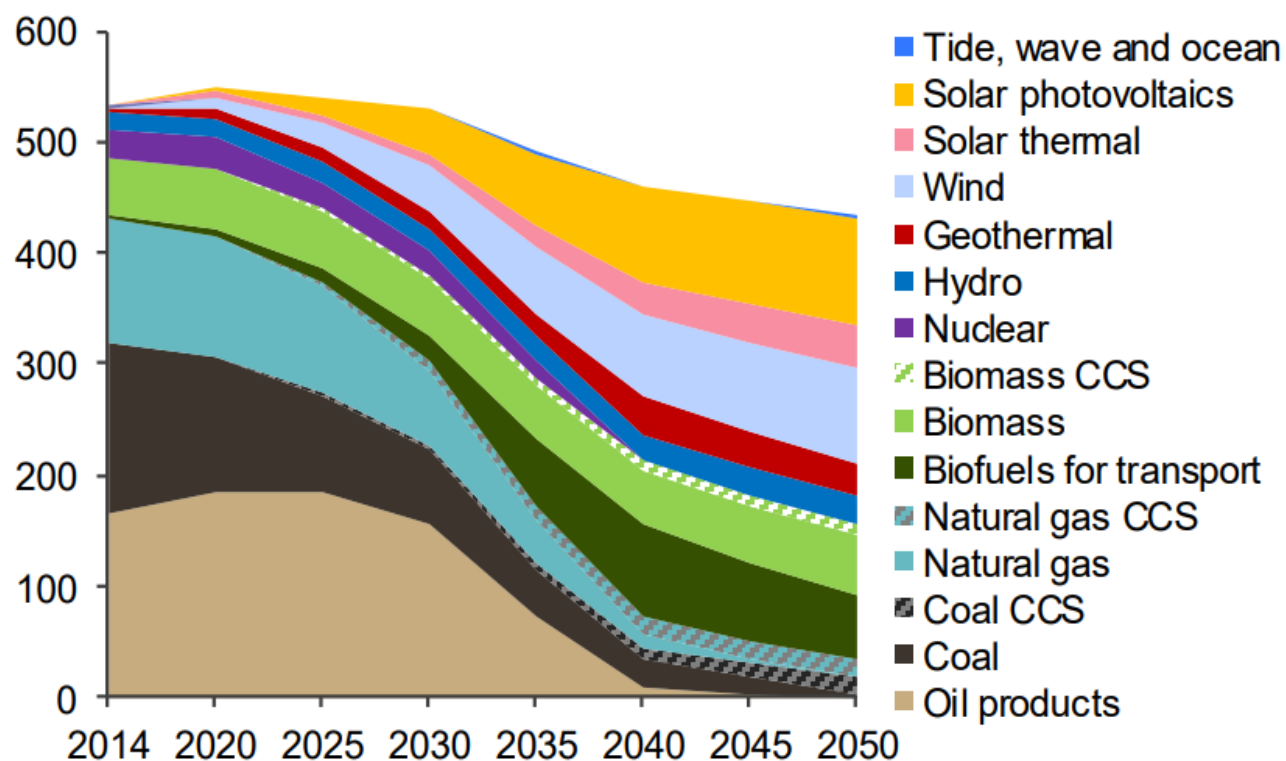
● Fossil fuel and industry ● AFOLU ● BECCS





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Total primary energy supply (EJ)



Annual CO₂ emissions (Gt CO₂)

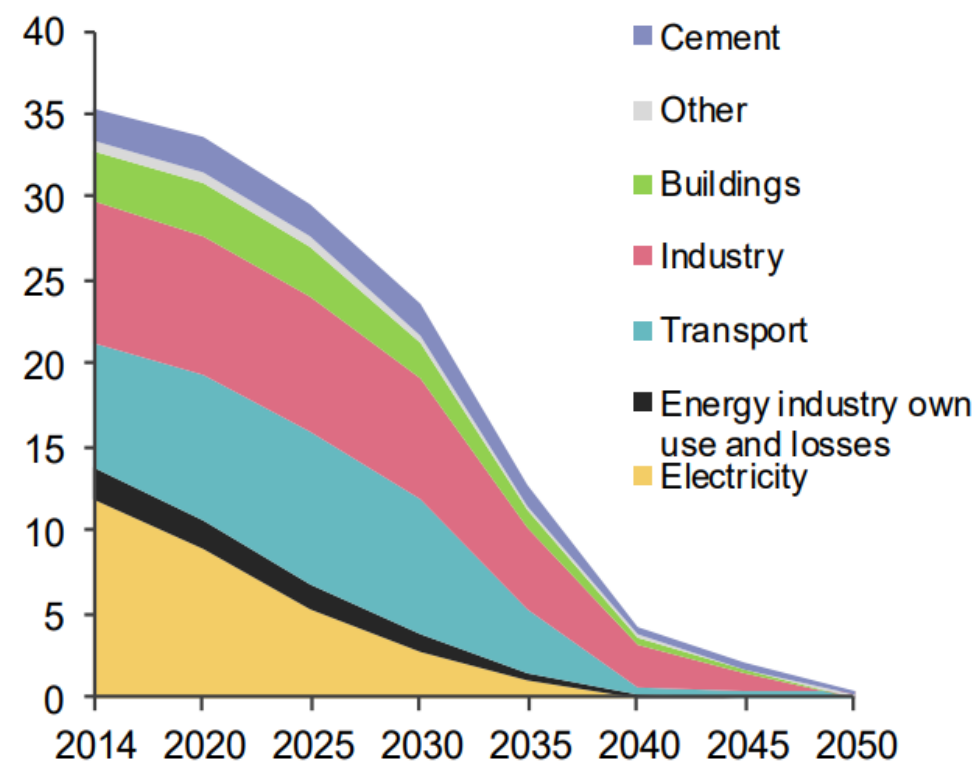
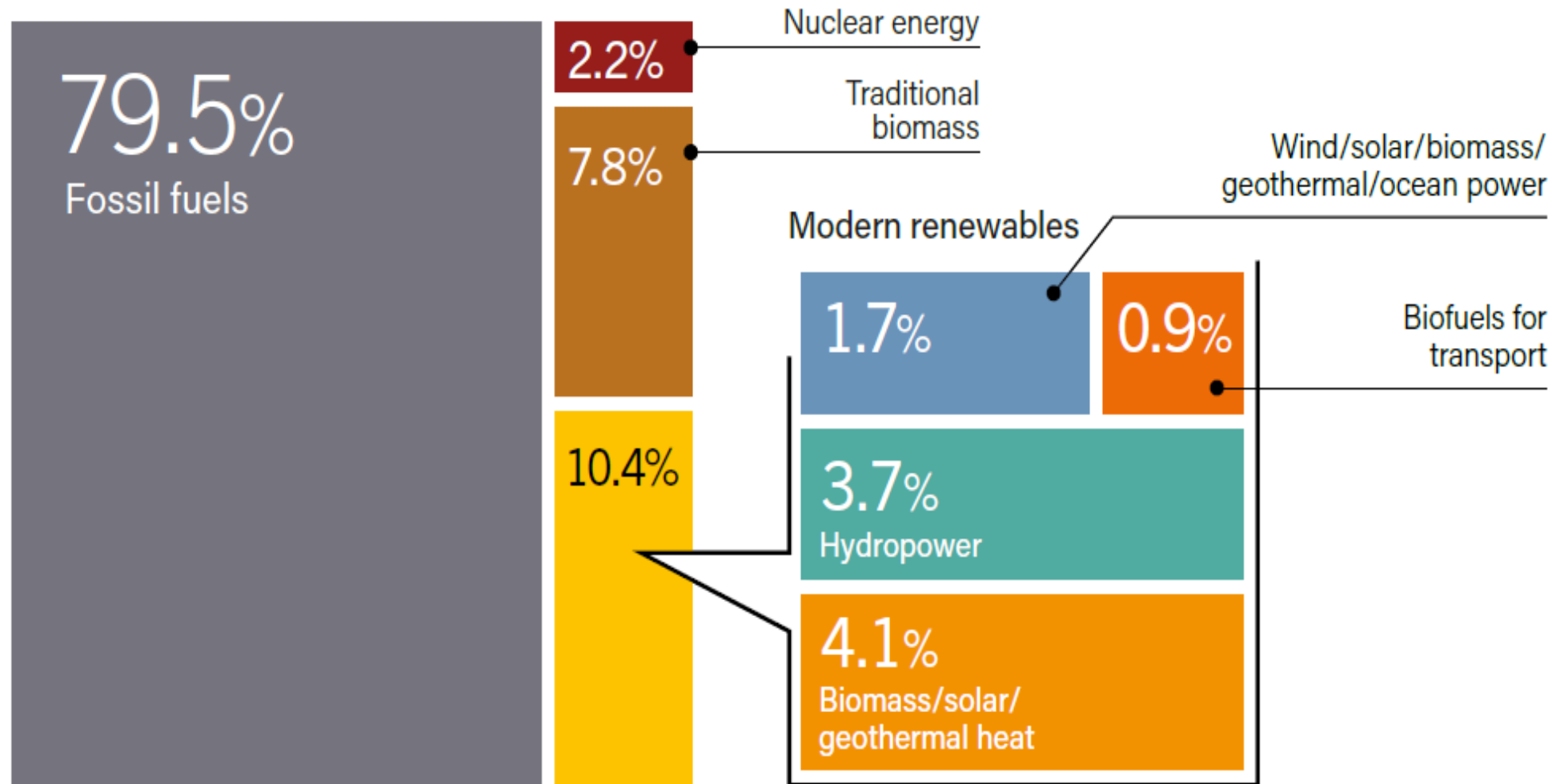


Figure 1. Global total primary energy supply and annual CO₂ emissions in our decarbonisation scenario

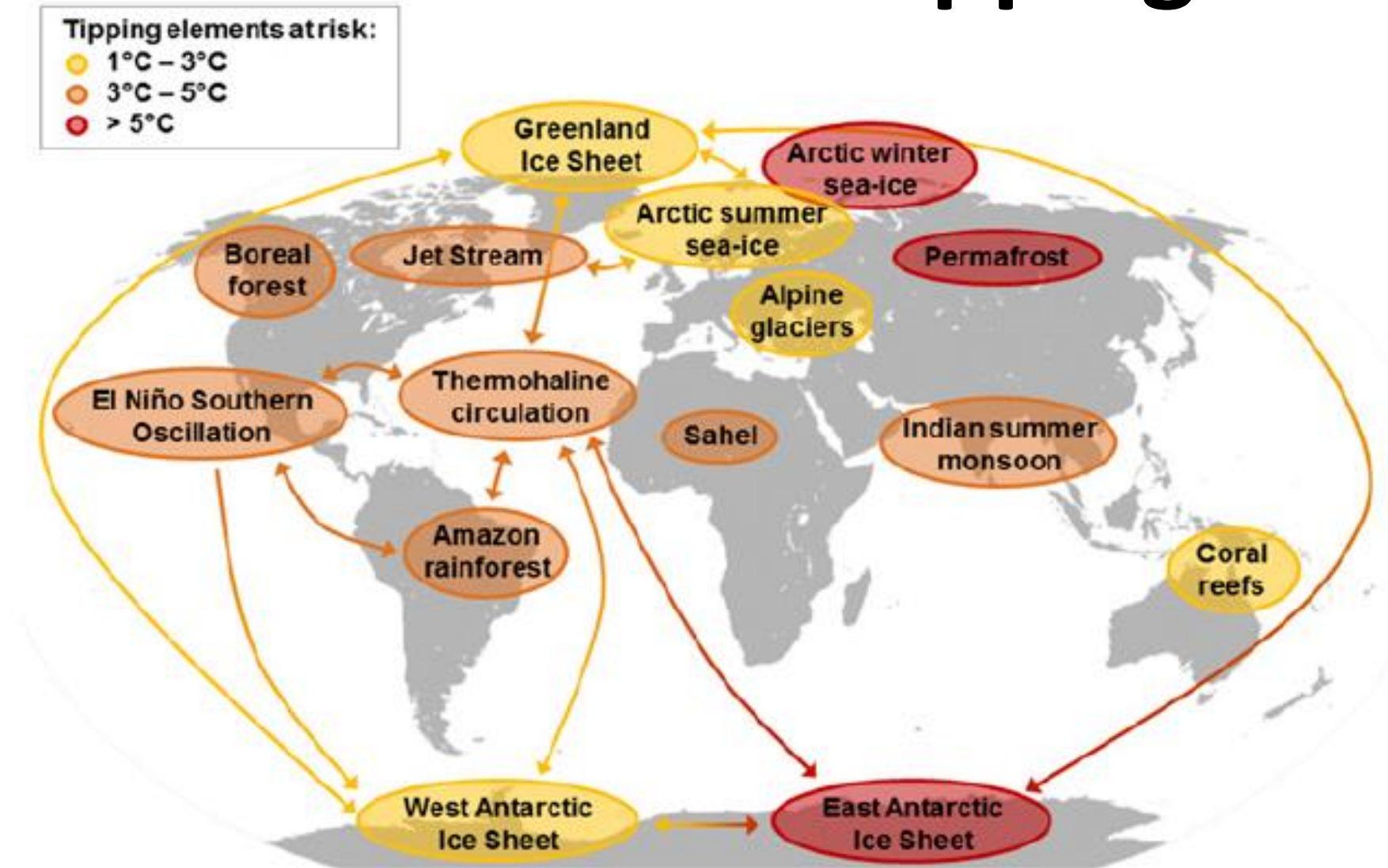
Source: ECOFYS 2018

But electricity is only 20% of final energy demand

ESTIMATED RENEWABLE ENERGY SHARE OF TOTAL FINAL ENERGY CONSUMPTION, 2016



Global Tipping Points





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1.5 C and some questions



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Global Vision For CAN – elements

- **Returning to preindustrial temperatures/climate, NOT 1.5C**
- **Halting all biodiversity decline**
- **Global equity and decent lives for all**

Hence time horizon is important, 2200?

Too long? Remember French Revolution values.....