Öko-Institut e.V.
Institut für angewandte Ökologie
Institute for Applied Ecology

CO_2 compensation and climate responsibility

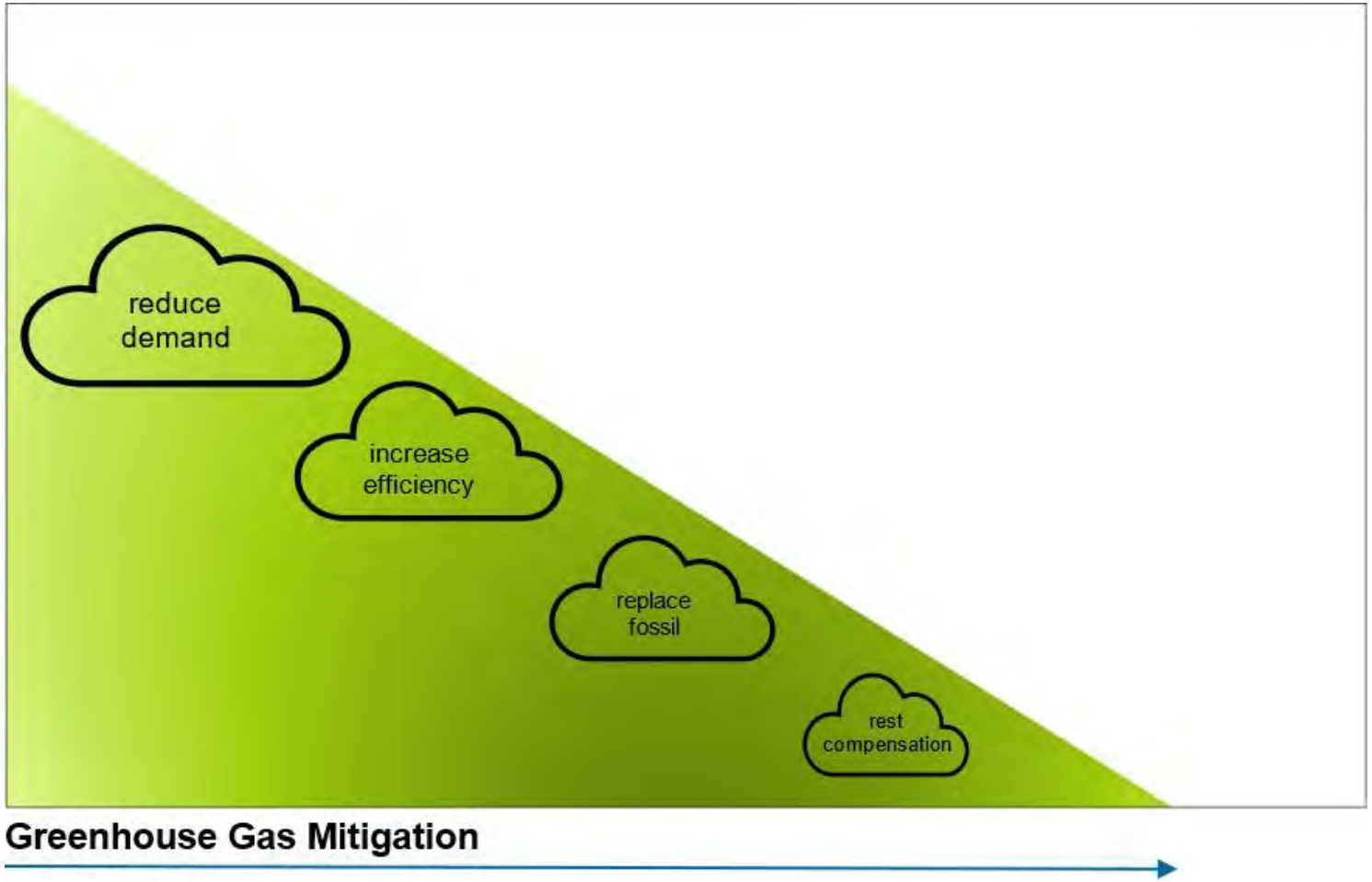
Challenges and options

Martin Cames | MS Teams | 13/05/2024

Background

- Paris Agreement
  - Climate neutral by 2070
  - CO_2 neutral by 2050
- Germany
  - Constitutional Court judgement April 2021
  - Climate neutrality by 2045
  - Studies identified policies required for achieving objectives
- EU
  - EHCR: violation of the right to respect for private and family life
  - Just-for-55 package
- Organisations: additional voluntary contribution to achieving climate targets

Ecological priorities of climate protection strategies



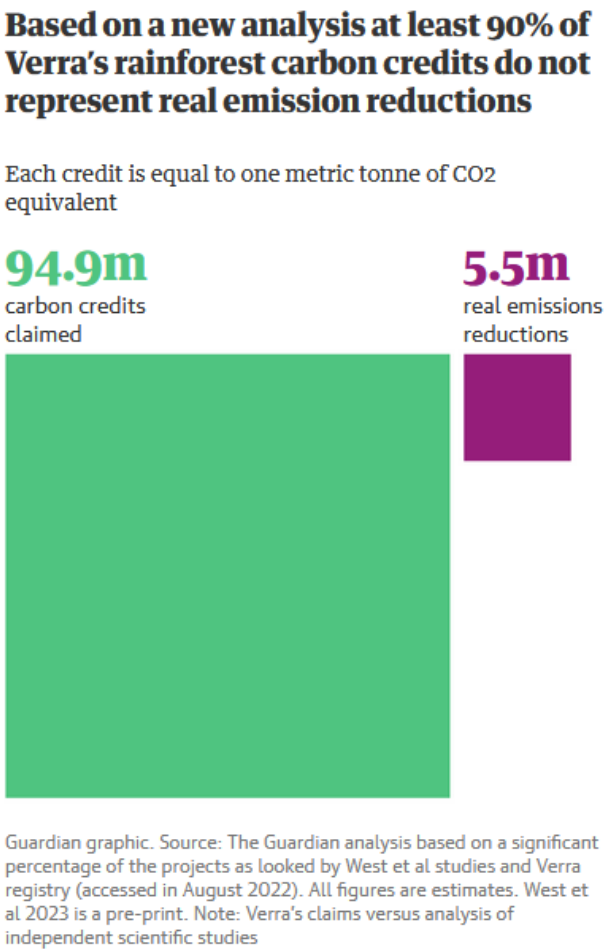
- Economic priorities are often different, e.g. replacement of fossil fuels cheaper than efficiency
- Certificate price: avoid or offset?
- What price is appropriate?

Challenges of compensation strategies

- **Additionality:** would not have happened anyway because it is required by law or is economically viable under the given framework conditions anyway
- **Permanence:** not emitted again at a later point in time, as is possible with forests, for example, which initially bind CO_2 that may be released again in the event of a forest fire
- More than 20 years of experience with the Clean Development Mechanism (CDM)
  - Baseline
  - Leakage
  - Perverse incentives
  - Double counting
- Certainty of emissions reductions often not sufficient

Environmental integrity of offset credits

- 23/01/2024, Australia Institute: Here are 23 Times Carbon Offsets Were Found to be Dodgy
- 28/11/2023, swissinfo.ch: Offset scandals put Switzerland in the spotlight at COP28
- 31/03/2023, Time: Bogus Carbon Credits are a 'Pervasive' Problem, Scientists Warn
- 18/01/2023, Guardian: Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows
- Cames et al. (2016): How additional is the CDM?



Climate compensation in the era of the Paris Agreement

- Hope in the 90s: Reduction where specific costs are most favourable
- **Reduction contributions from all countries**: Expand coverage (sectors, gases) and 'sharpening' ambition
- **Decarbonisation in 30 years** instead of greenhouse gas reduction: all reduction options instead of most cost-effective
- **Climate neutrality**: future goal or current aspiration
  - Currently de facto impossible due to upstream chain
  - Options with significantly higher costs necessary (2030: 50-100 or 215 €/t)
- **Change claim**: climate responsible instead of climate neutrality

Dealing with unavoidable emissions

- Compensation: acquisition of reduction credits or emission rights to offset emissions
- Climate responsibility: remaining emissions x applicable price = budget
  - Financing of climate protection measures, e.g. in own area of responsibility (DAV)
  - Acquisition of high-quality certificates
  - Transparency: ***Claiming responsibility*** climate instead of ***climate neutrality***

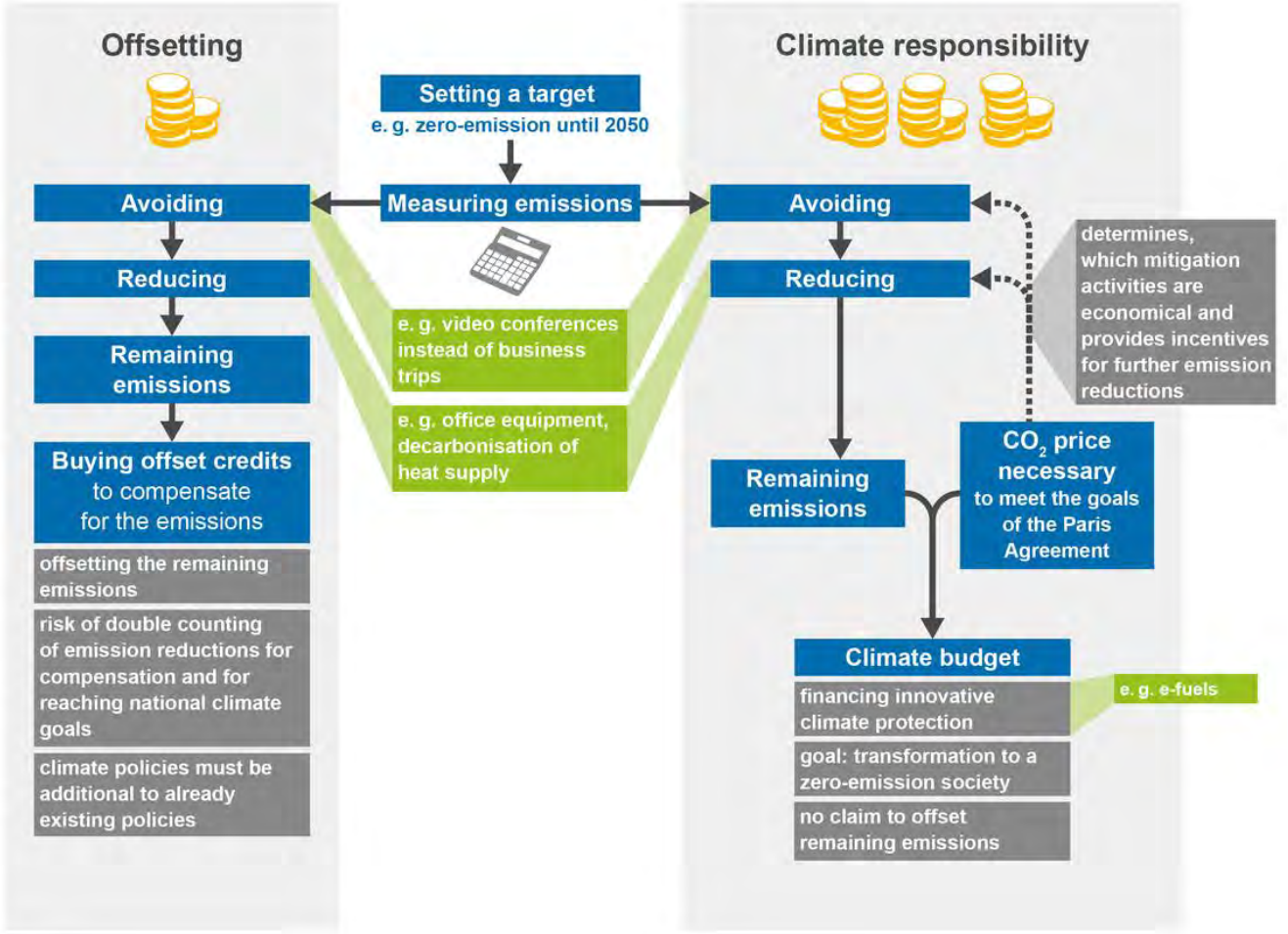
- Selection of high-quality certificates
  - GHGMI & SEI: Carbon Offset Guide - https://www.offsetguide.org/
  - Öko-Institut, EDF & WWF: The Carbon Credit Quality Initiative - https://carboncreditquality.org/

Applicable price

Differentiation between unavoidable and avoidable options?

- Damage costs: Costs caused by the emission of greenhouse gases:
  195 €/t in 2020 to 215 €/t in 2030 (UBA 2020)
- Avoidance costs: certificate prices for Paris-compatible reduction path 2020:
  40-80 $/t, 2030: 50-100 $/t (35-70 €/t or 45-90 €/t - CPLC 2017)
- Empirical prices
  - EU ETS allowances (EUA)
    2020: 24.61 €/t, 2021: 52.50 €/t, 2023: 83,59 €/t
  - Offset credits: global average 2020: 2.20 €/t,
    atmosfair 23.00 €/t
- Current EUA price: approx. 70 €/t

From climate compensation to climate responsibility



Not claiming compensation

- Increases the incentive to reduce in the value chain
- Quality criteria: Additionality, avoidance of double counting, etc. are not in the foreground
- Addresses double counting
- Transformative technologies: innovative measures with currently low reduction contributions but high potential in the future
- Is innovative and ambitious

Conclusion

- Climate neutrality: risk of being perceived as greenwashing
- Climate responsibility
  - No compensation but contribution to achieving climate neutrality
  - Applicable price (avoidable/unavoidable or calculation of the responsibility budget)
    - 25 €/t (high-value reduction credits)
    - 50 €/t (emission allowances)
    - 100 €/t (avoidance costs)
  - Use of the determined budget
    - Financing of mitigation measures including transitional technologies
    - High-value reduction credits
- Strengthens climate awareness among teams and spectators

Thank you for your attention!

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