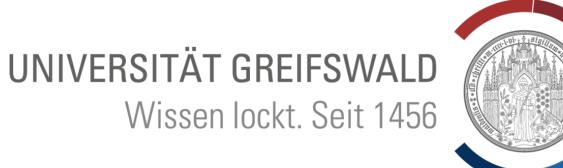
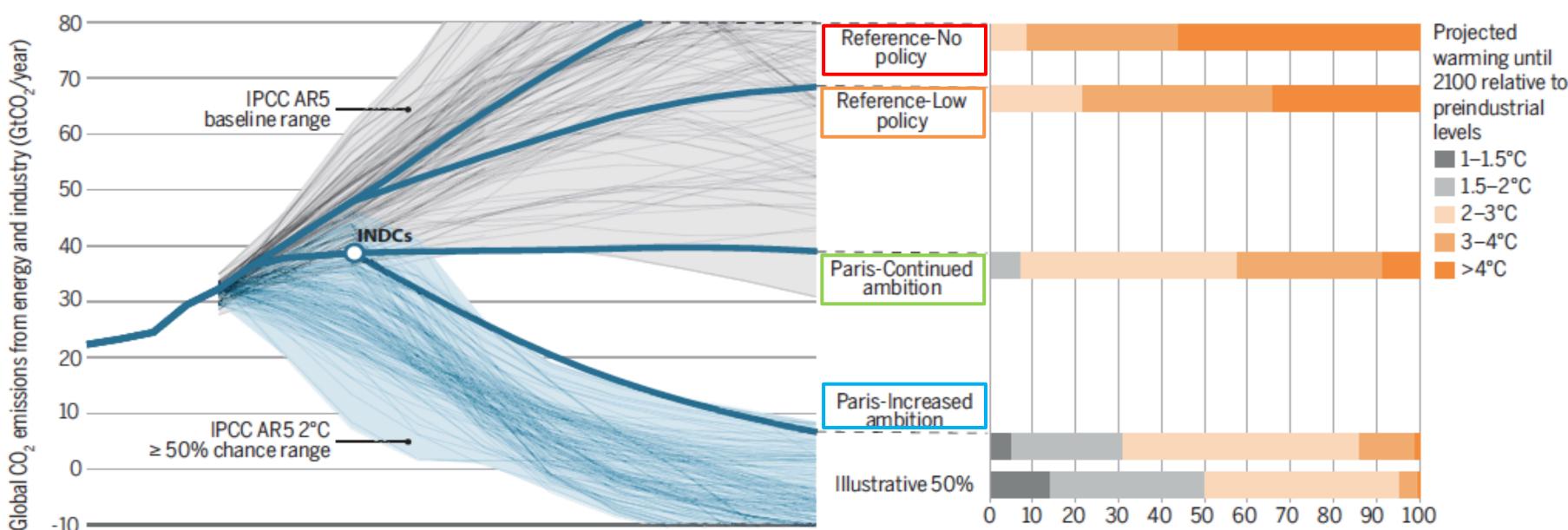
THE 1.5°C CLIMATIC TARGET - ARE WE ON TRACK?



Marie Baumgartner (<u>s-mabaum@uni-greifswald.de</u>); Lucia Licero-Villanueva (<u>lucia.licerovillanueva@stud.uni-greifswald.de</u>); Master's degree in Landscape Ecology and Nature Conservation (LENC)

CLIMATE SCENARIOS

A Emissions pathways



Temperature probabilities

PARIS AGREEMENT (2015)

195 countries decided to limit to 2°C global warming (better 1.5°C) by the 2nd half of this century, through national commitments (INDCs).



2020 2030 2040 2050 2060 2070 2080 2010

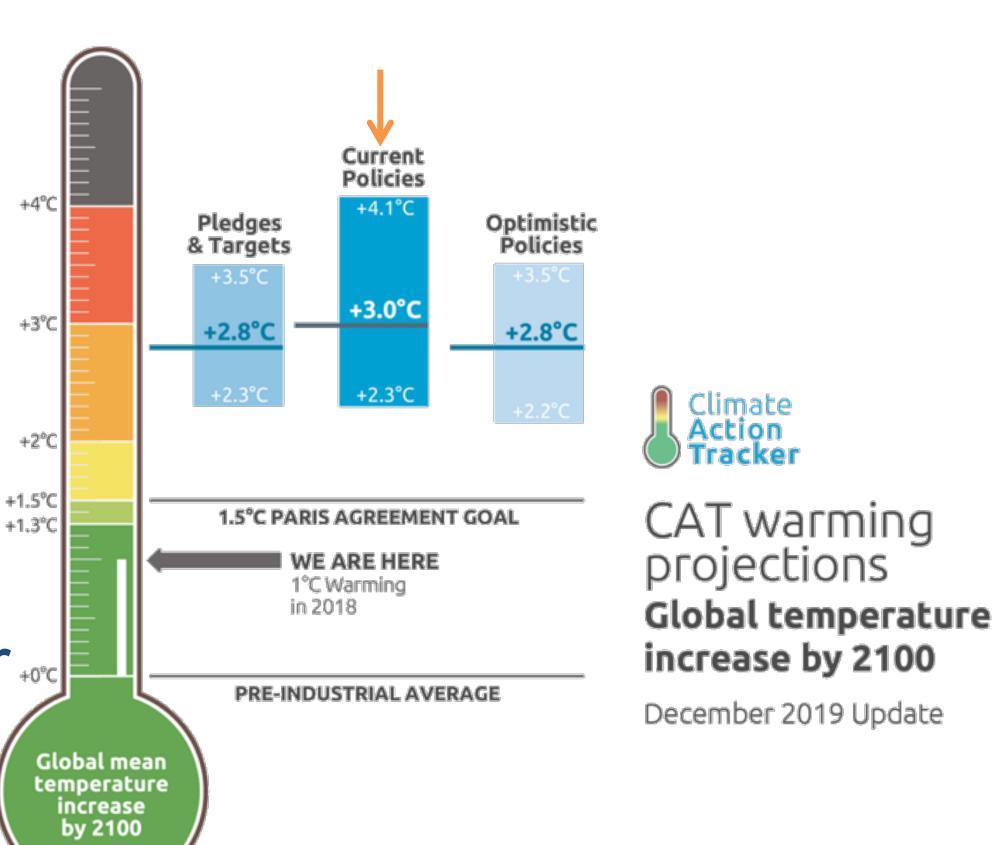
0 10 20 30 40 50 60 70 80 90 100 Likelihood of projected warming until 2100 (%)

Pessimistic: No policies and implementations to reach the Paris goal. Less pessimistic: Some policies and implementations to reach the goal. Paris goal: Policies and actions taken to follow INDCs. **Optimistic:** Better policies and actions taken to overdue the INDCs.

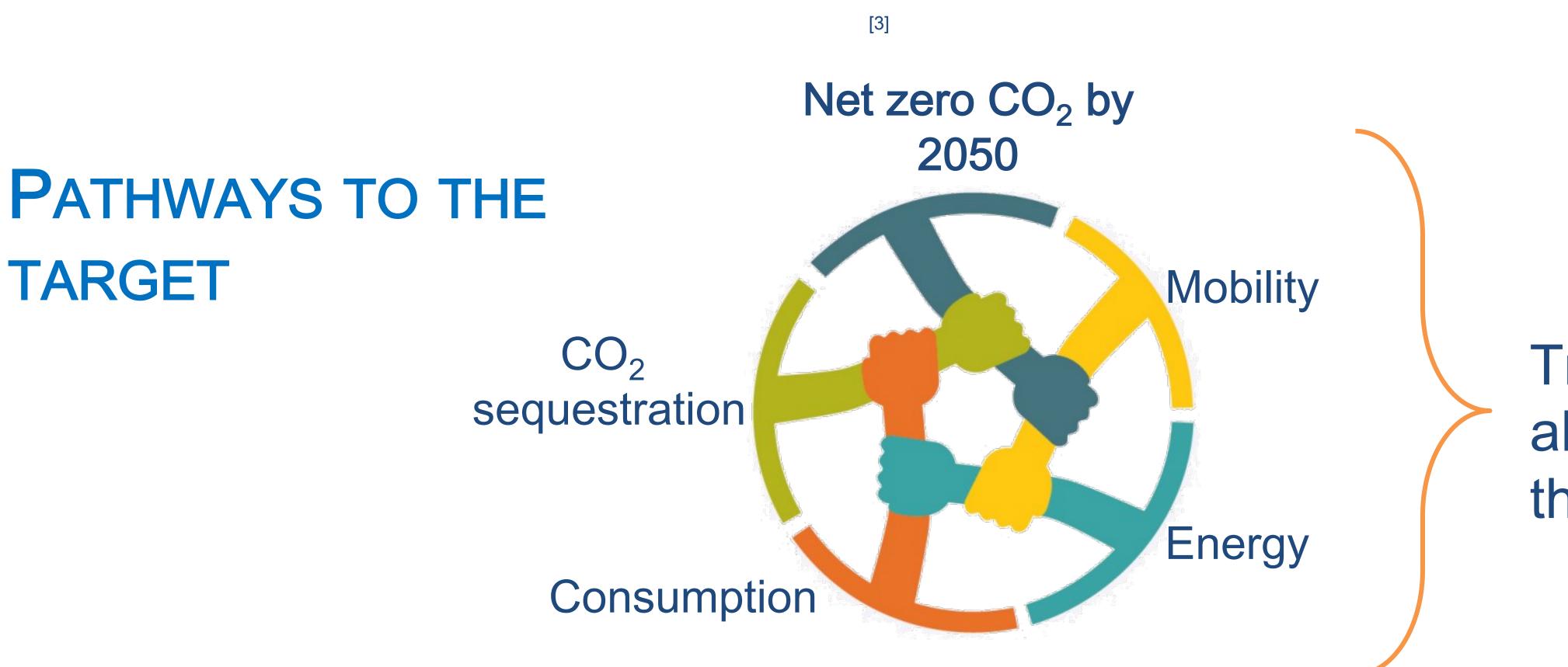
How close are we?

With the Current policies we will fail to reach the target.

Even if all countries fulfil their INDCs we still fail.



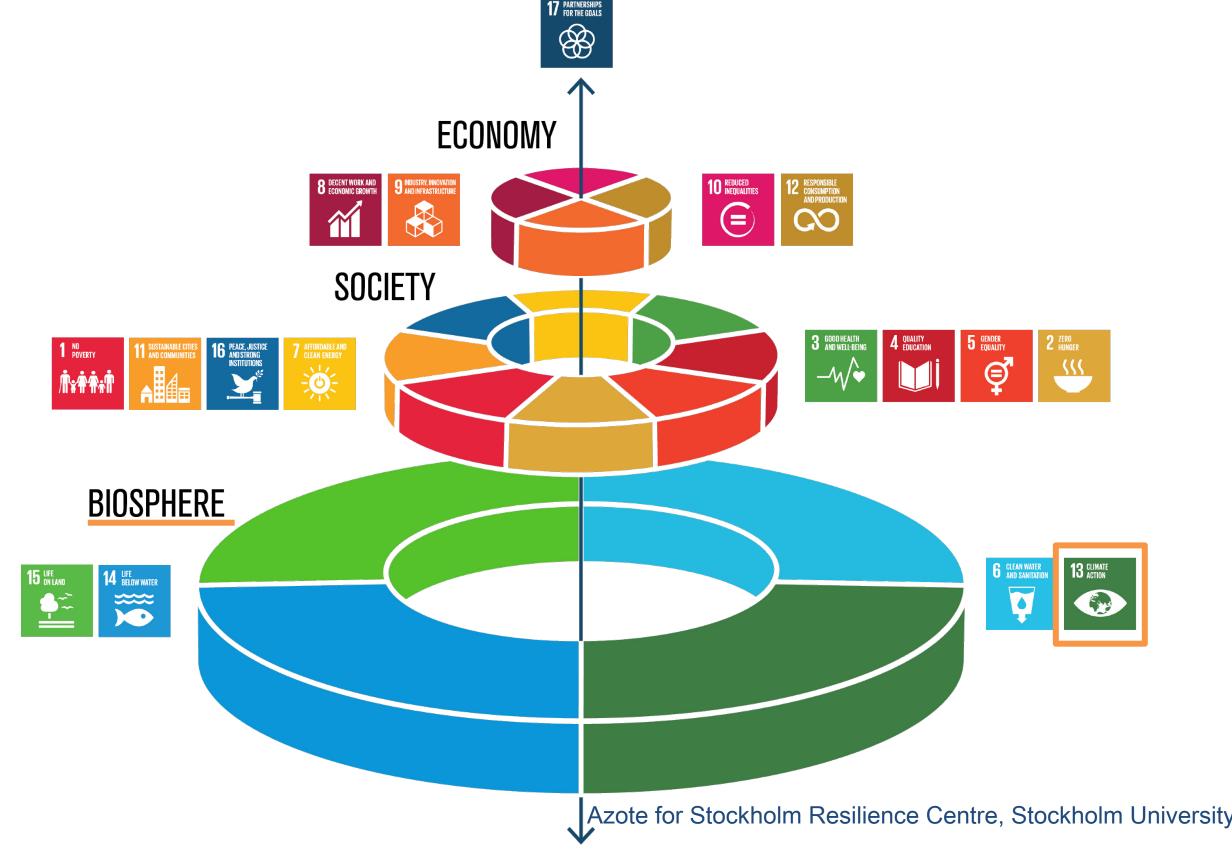




Transformative changes in all sectors are needed to hit the 1.5°C target!

CONSEQUENCES OF FAILING & SOCIAL EQUITY

Overall reduction of Earth system resilience (e.g. decreasing) crops, rising sea level, permafrost melting, species extinction, etc.).



"Business as usual" \rightarrow fail to tackle the main threats to our Biosphere \rightarrow No Sustainable Development Goals (SDGs) are reached \rightarrow social inequity + high vulnerability to climatic hazards. [1]



References:

[1] Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, T. Waterfield (eds.)]. In Press.

[2] A.A. Fawcett, G.C. Iyer, L.E. Clarke, J.A. Edmonds, N.E. Hultman, H.C. McJeon, J. Rogeli, R. Schuler, J. Alsalam, G.R. Asrar, J. Creason, M. Jeong, J. McFarland, A. Mundra, and W. Shi, 2015: Can Paris pledges avert severe climate change? Science, 350 6266,1168-1169

[3] (https://climateactiontracker.org/global/temperatures/; 25.06.2020)

Check out the video abstract

