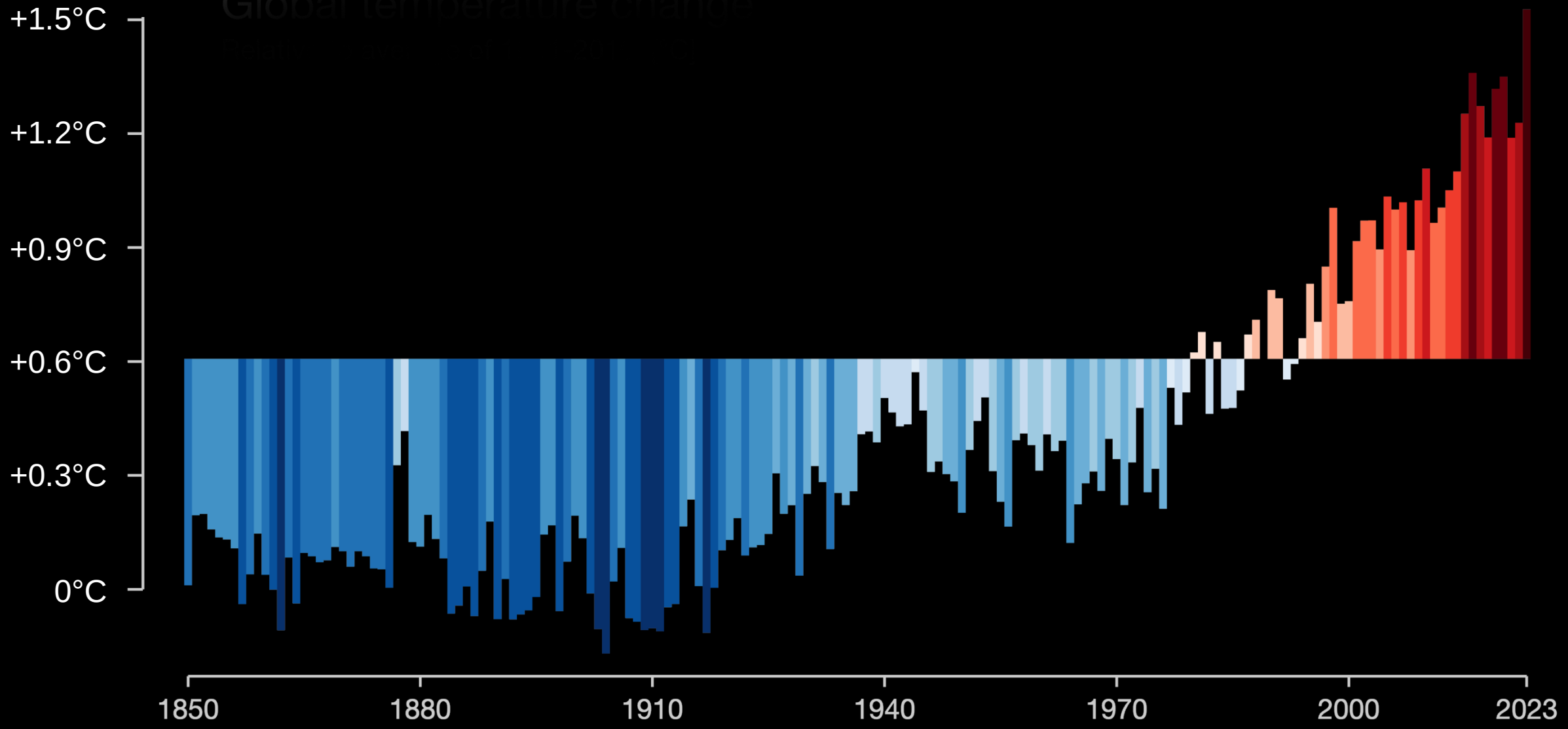
# Climate action and energy security while preserving biodiversity

Cyril Brunner

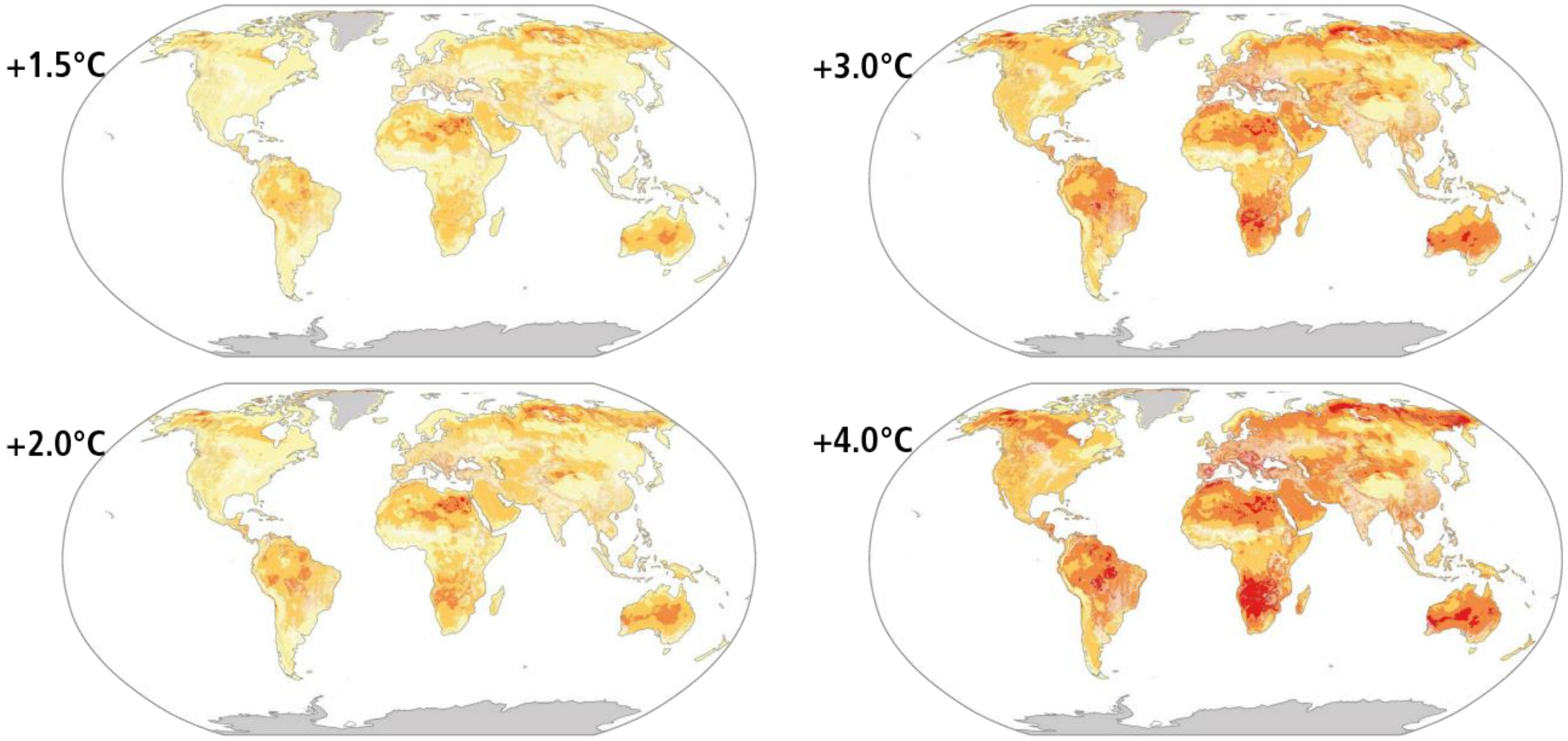
# Global temperatures have increased by over 1.3°C




SPEED2ZERO

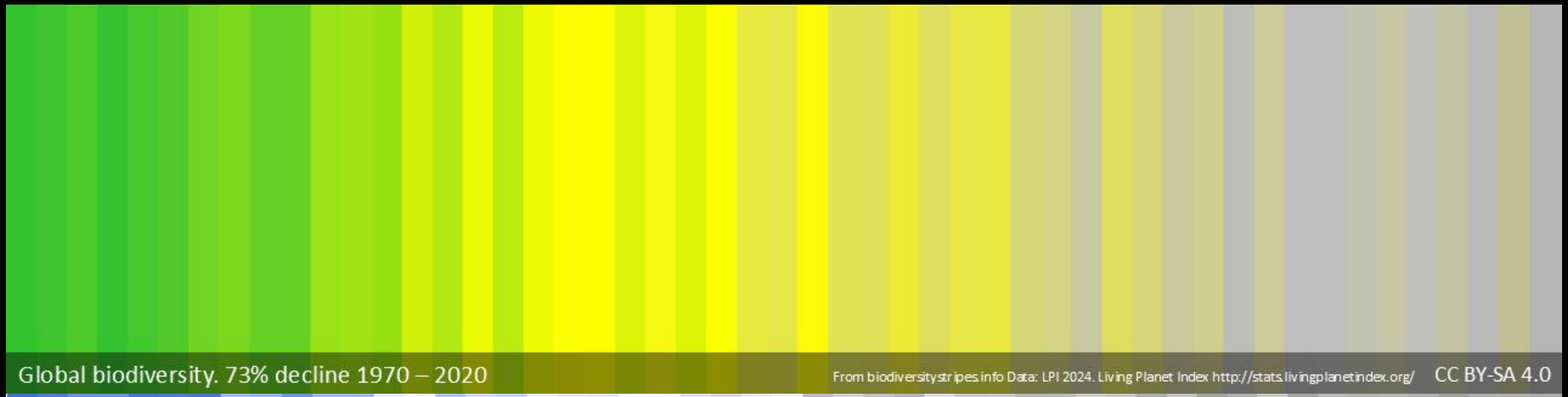
# Projected loss of terrestrial and freshwater biodiversity

compared to pre-industrial period




Source: IPCC AR6 WGII (2022)

# Global biodiversity has decreased by more than ⅔





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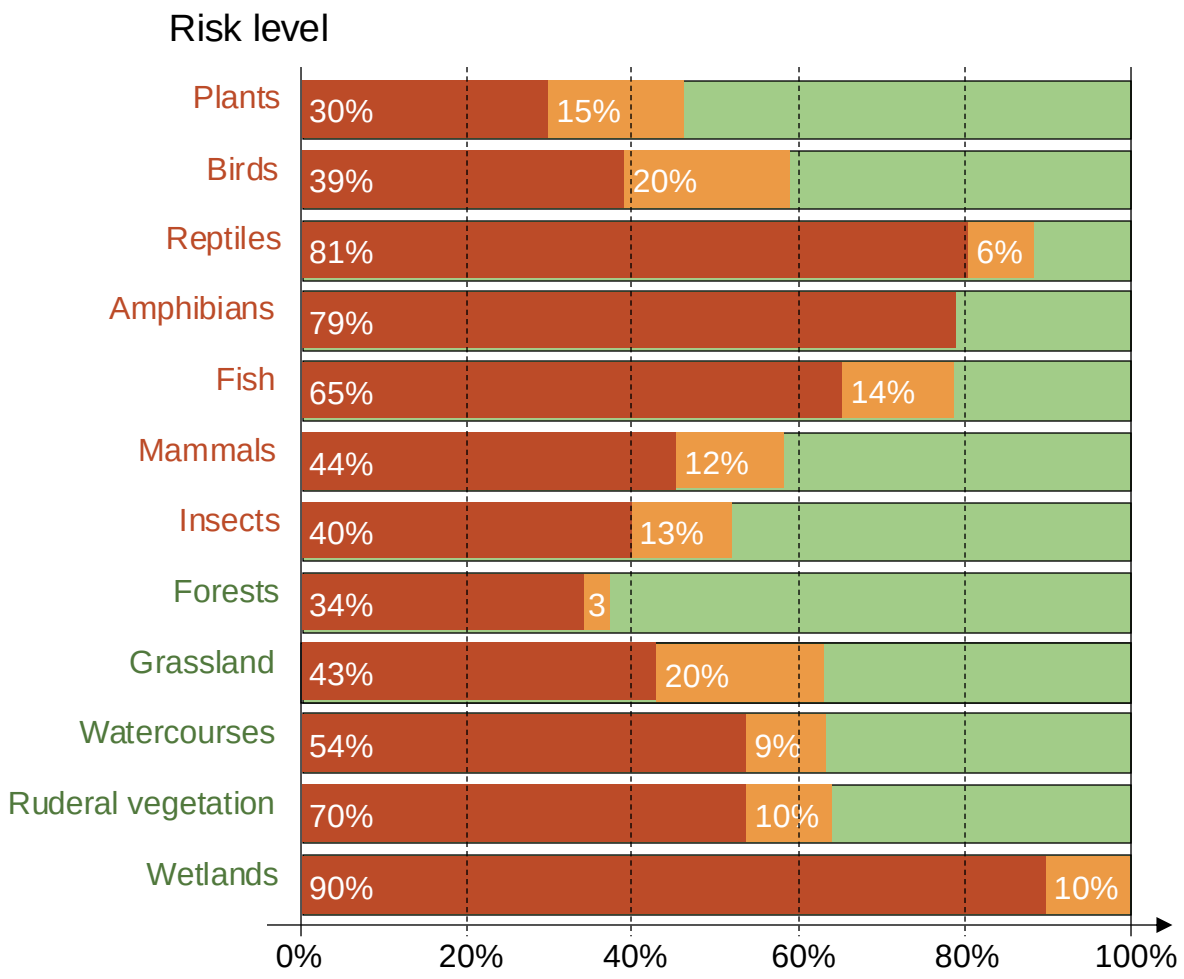
# Many species are endangered or threatened with extinction





from: Fischer et al., 2015. Zustand der Biodiversität in der Schweiz 2014. Forum Biodiversität Schweiz, Bern.

# Aim of SPEED2ZERO

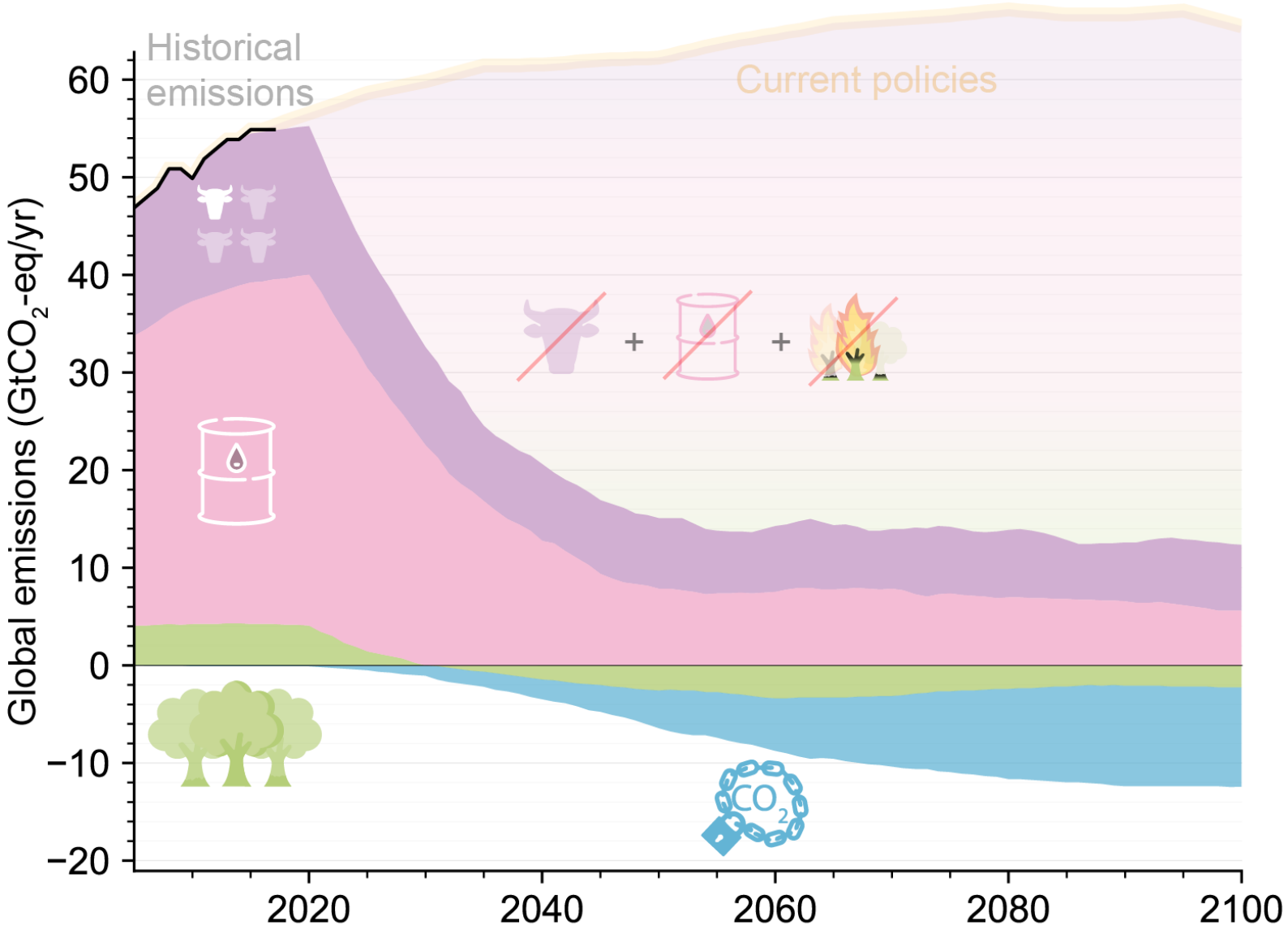
In SPEED2ZERO, tools, action plans and technologies are being developed to support a sustainable transformation in Switzerland.

A transformation:

- that **meets** international and national **climate targets**
- that guarantees a **resilient energy supply**
- in which **biodiversity** can **regain** its **richness**.

SPEED2ZERO aims to create **direct benefits** for Switzerland.

# How to stop additional global warming




To stop additional global warming, we need to:

1. Stop buring fossil fuels

2. Use biomass sustainably

3. Reduce our non-$CO_2$ emissions

4. Carbon dioxide removal to achieve a net emissions balance of zero

Sources:
IPCC AR6 WGIII (2022)
AR6 Scenarios Database hosted by IIASA; Byers et al. (2022).

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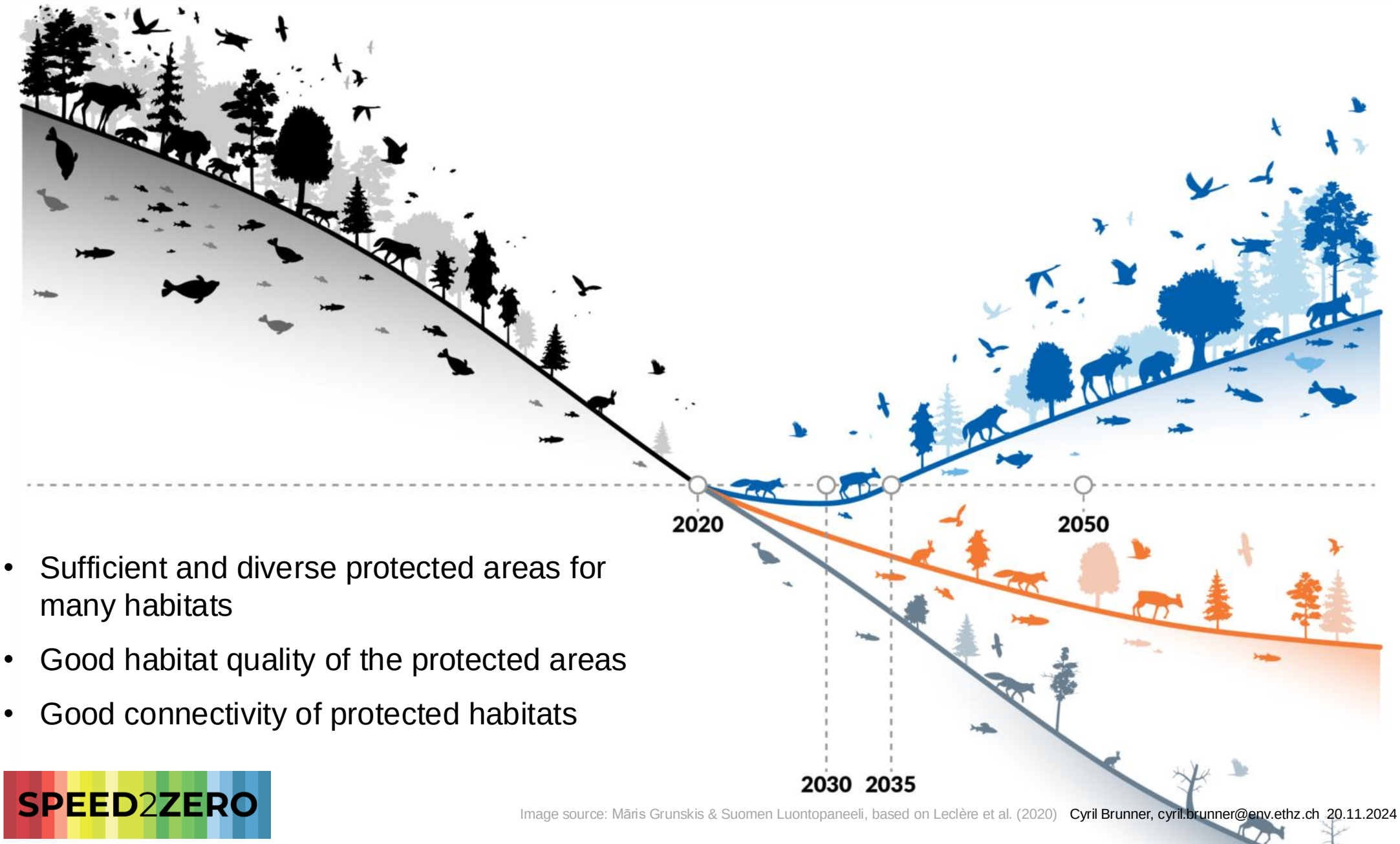
# How can we protect biodiversity?




- Sufficient and diverse protected areas for many habitats
- Good habitat quality of the protected areas
- Good connectivity of protected habitats

Image source: Māris Grunskis & Suomen Luontopaneeli, based on Leclère et al. (2020)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Erneuerbare Energien, Pressemitteilungen, Solarparks 26.09.2024

# Studie: Solarparks positiv für Artenvielfalt

*Berlin, 26. September 2024* – Wird auf ehemaligen Ackerflächen ein Solarpark errichtet, steigt die Anzahl und die Vielfalt an Pflanzen und Tieren deutlich an. So konnten in PV-Freiflächenanlagen über 350 unterschiedliche Pflanzenarten und eine Vielzahl von Vogel-, Reptilien- und Insektenarten nachgewiesen werden. Das zeigen die heute veröffentlichten ersten Auswertungen der umfangreichen Untersuchung „Artenvielfalt im Solarpark – Eine bundesweite Feldstudie“, die der Bundesverband Neue Energiewirtschaft e.V. (bne) in Auftrag gegeben hat.

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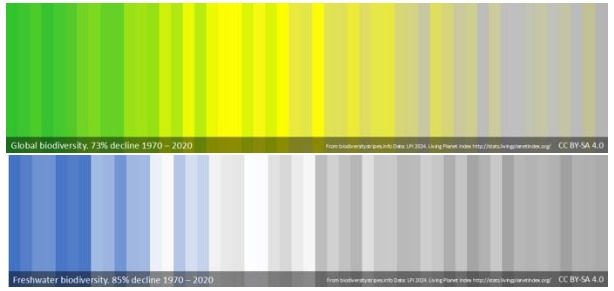
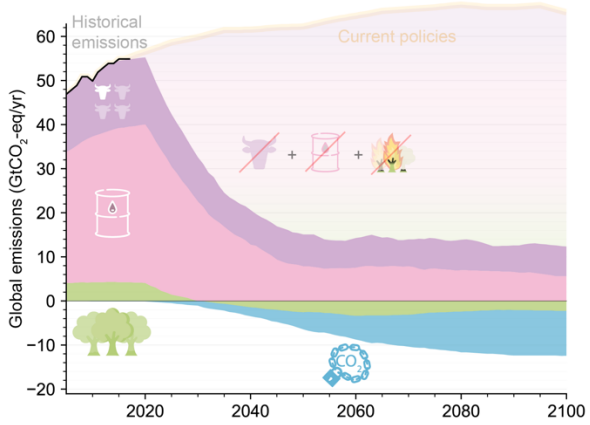
# Zusammenfassung

- The state of biodiversity is concerning. Drivers of biodiversity loss are mainly not energy-related. However, if climate change remains unaddressed, it is expected to become a main driver of biodiversity loss.




- Change is inevitable: doing nothing does not mean that nothing will change. We need to make conscious changes today, while we still have some levers to steer change in a desirable direction.




- We have all knowledge, all technologies, all resources to mitigate climate change today. There are several options that go well together with preserving biodiversity.

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# More information: