

Real Estate & Construction

Introduction

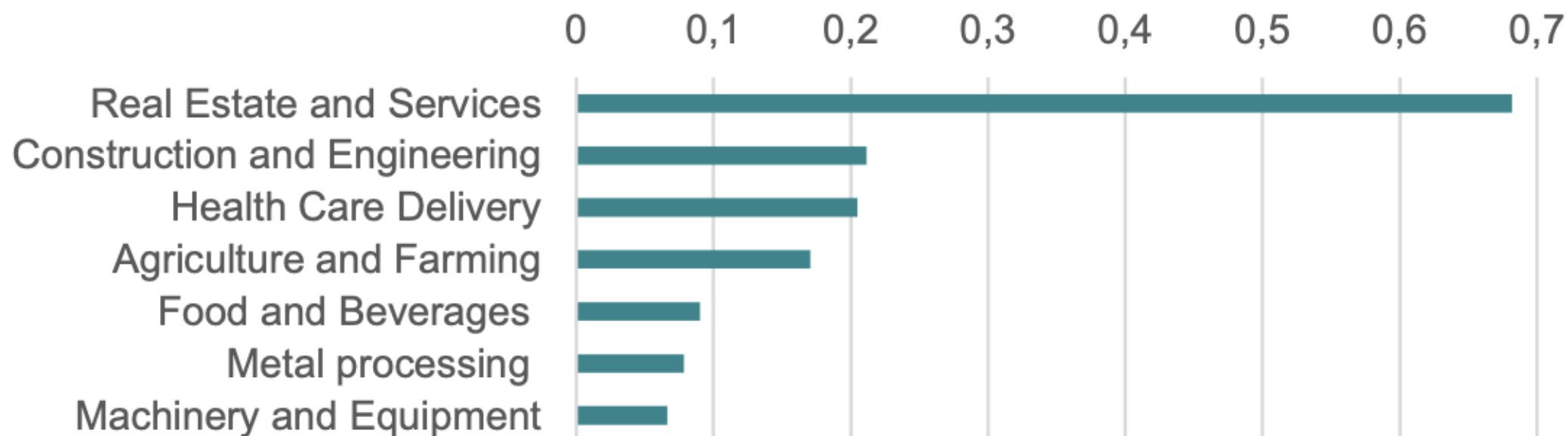
RBI Biodiversity Day
27.11.2024

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How dependent are banks and companies on biodiversity?

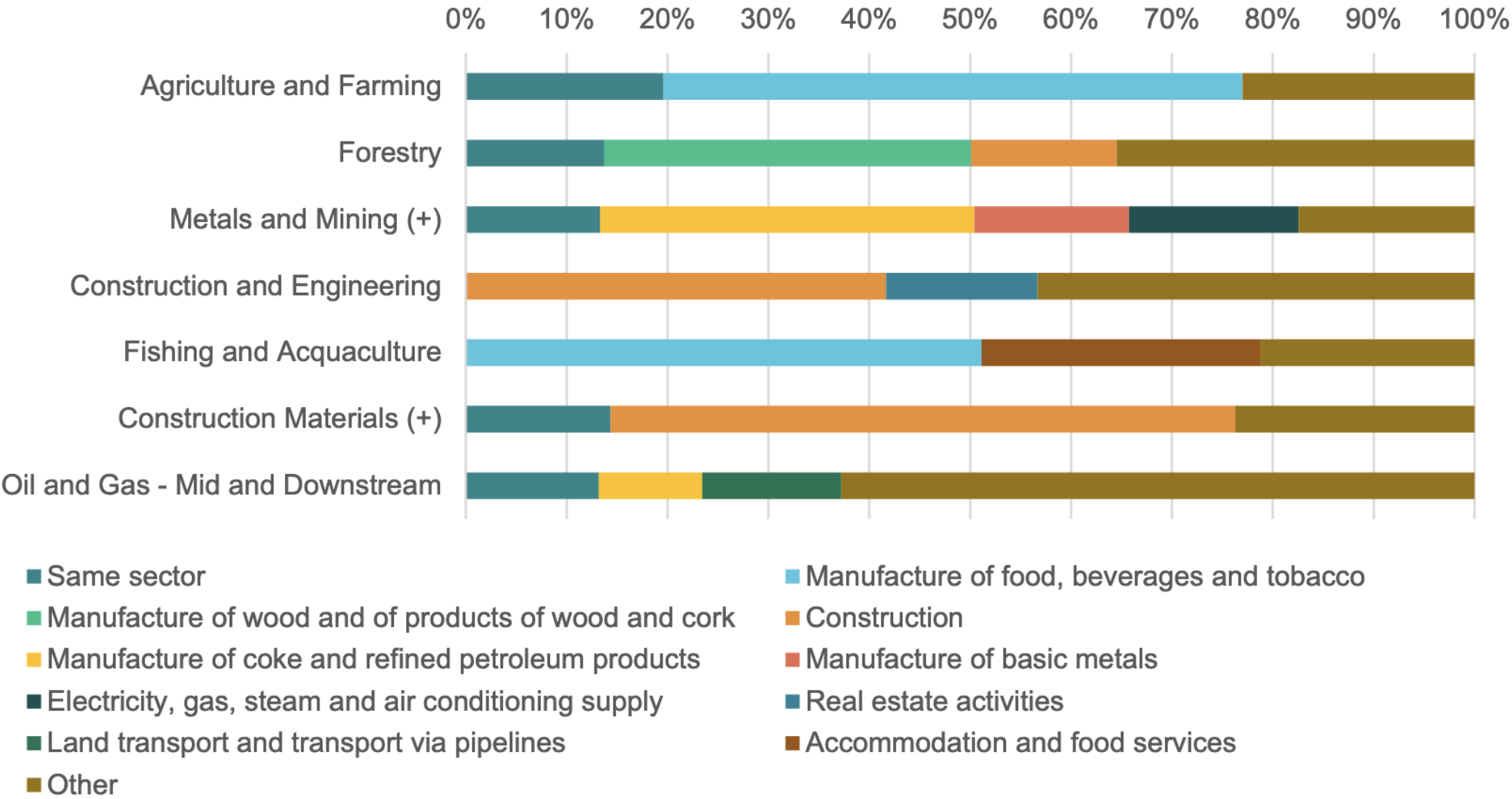
- ❑ **Financial institutions do not have a direct dependence on biodiversity** and ecosystems but are indirectly affected by nature-related risks through the sectors they invest in. The most exposed sectors are agriculture, real estate, and healthcare. ([EC](#), 2024)
- ❑ 75% of corporate bank loans in the euro area were granted to non-financial corporations that are heavily dependent on at least one ecosystem service. ([ECB](#), 2023)
- ❑ “Credit risks are closely linked to biodiversity and nature related transition risk, especially as the EU and several member states are becoming more and more aware and ambitious regarding the importance of limiting negative impact on biodiversity and ecosystem degradation, with the new regulations and policies often imposing significant costs on real estate developers and operators, with implications on their ability to repay debts.” ([EC](#), 2024)

Ranking of sectors: Overall risk index for nature-related risks and the indicator for economic relevance in the EU



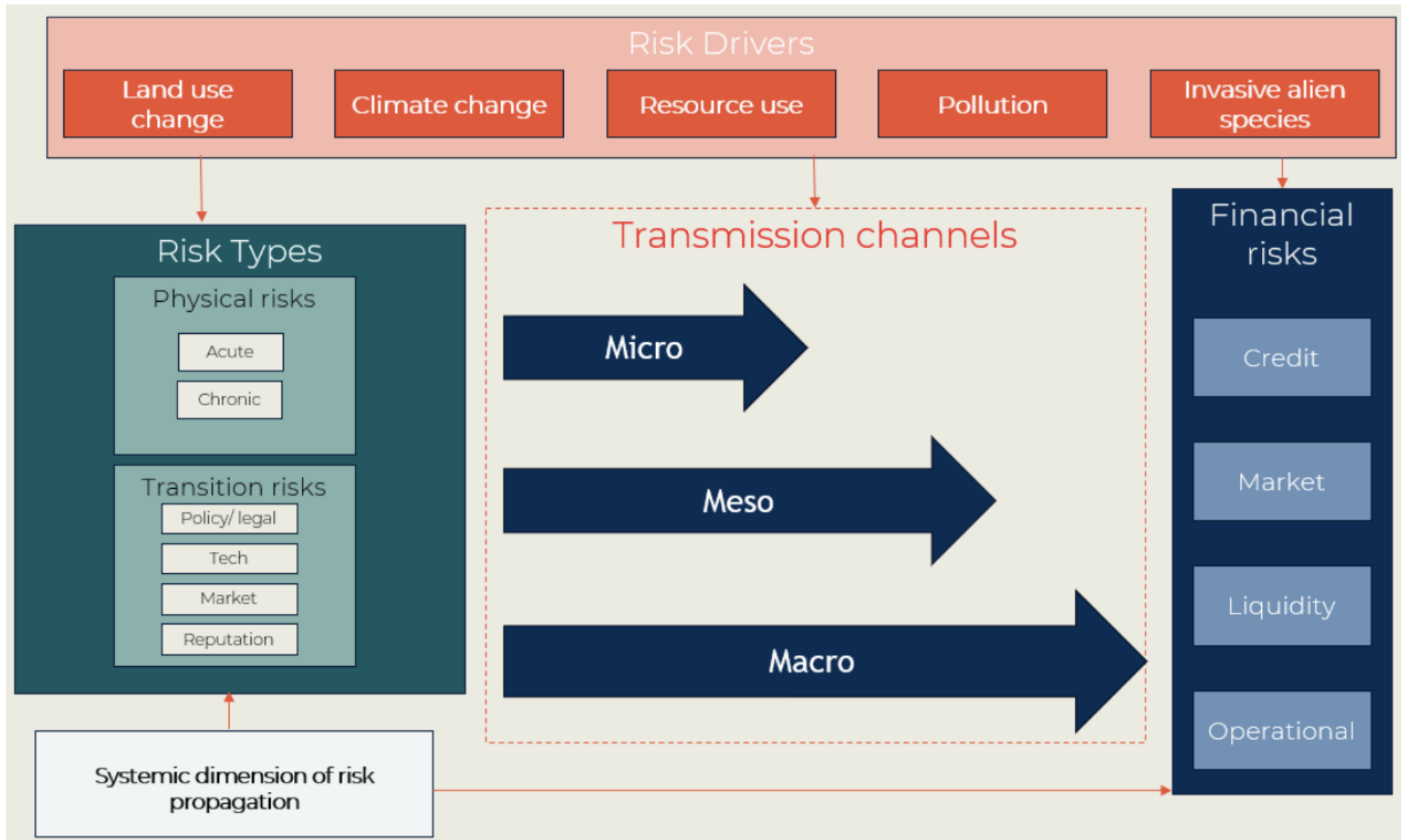
Source: EC, Study for a methodological framework and assessment of potential financial risks associated with biodiversity loss and ecosystem degradation (Juni, 2024). Trinomics calculations based on data from Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE), and Eurostat, 2020 and 2021.

Where do hidden biodiversity risks for banks arise in the real estate sector?

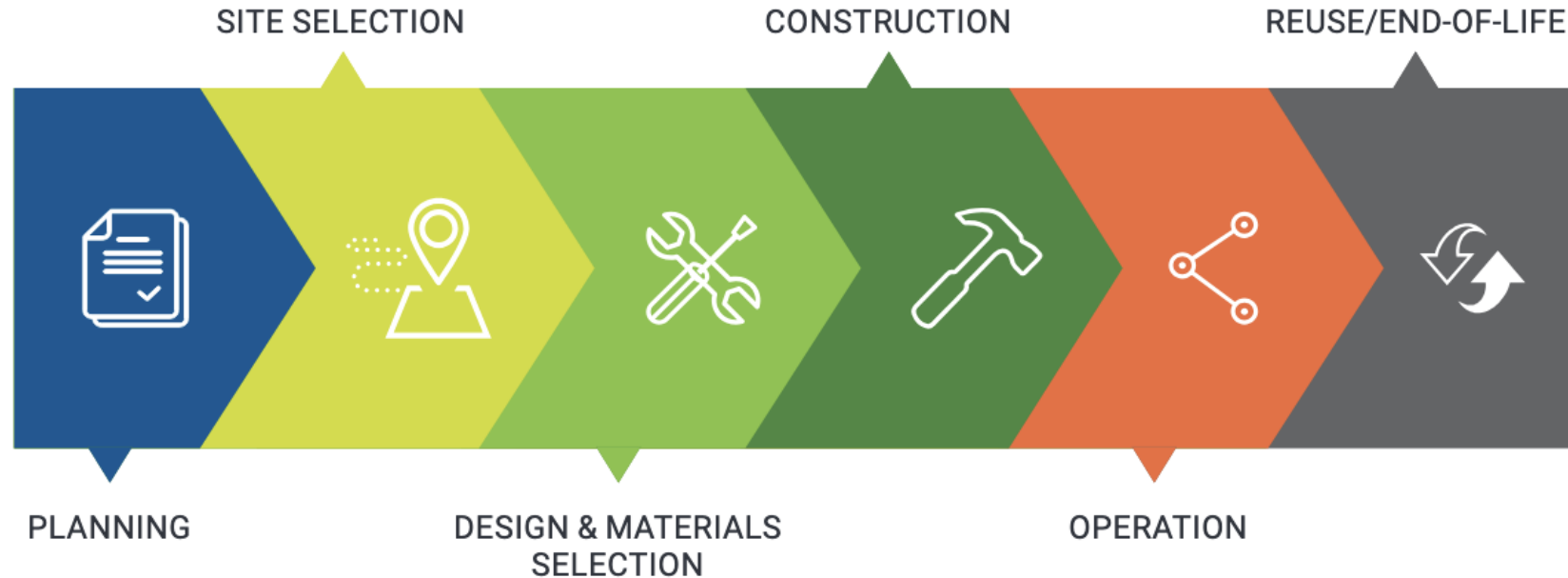


Source: European Commission 2024, Trinomics Calculations

Where do biodiversity-related risks arise from?



Real estate lifecycle and impact opportunities

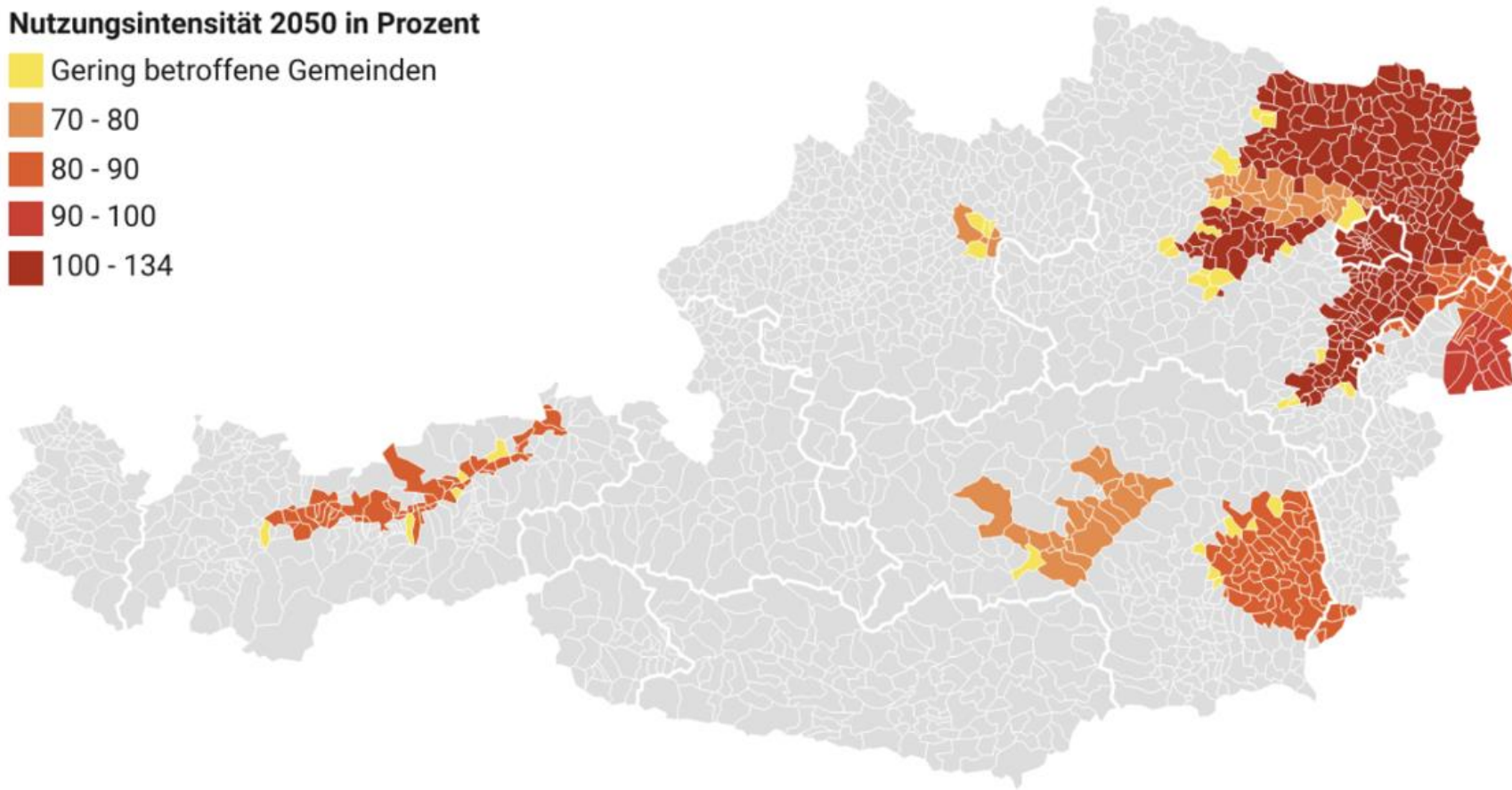
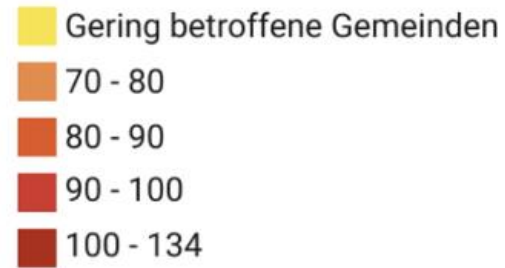


- ❑ **Pre-construction phase:** Positive impacts through the design, e.g., preservation of existing green spaces or improvement of habitats that are in poor condition.
- ❑ **Post-construction phase:** Implementation of green infrastructure to promote ecological benefits and sustainable development, or “retrofitting.”

Source: Green Building Council Australia (2023) [Building with nature 2.0](#)

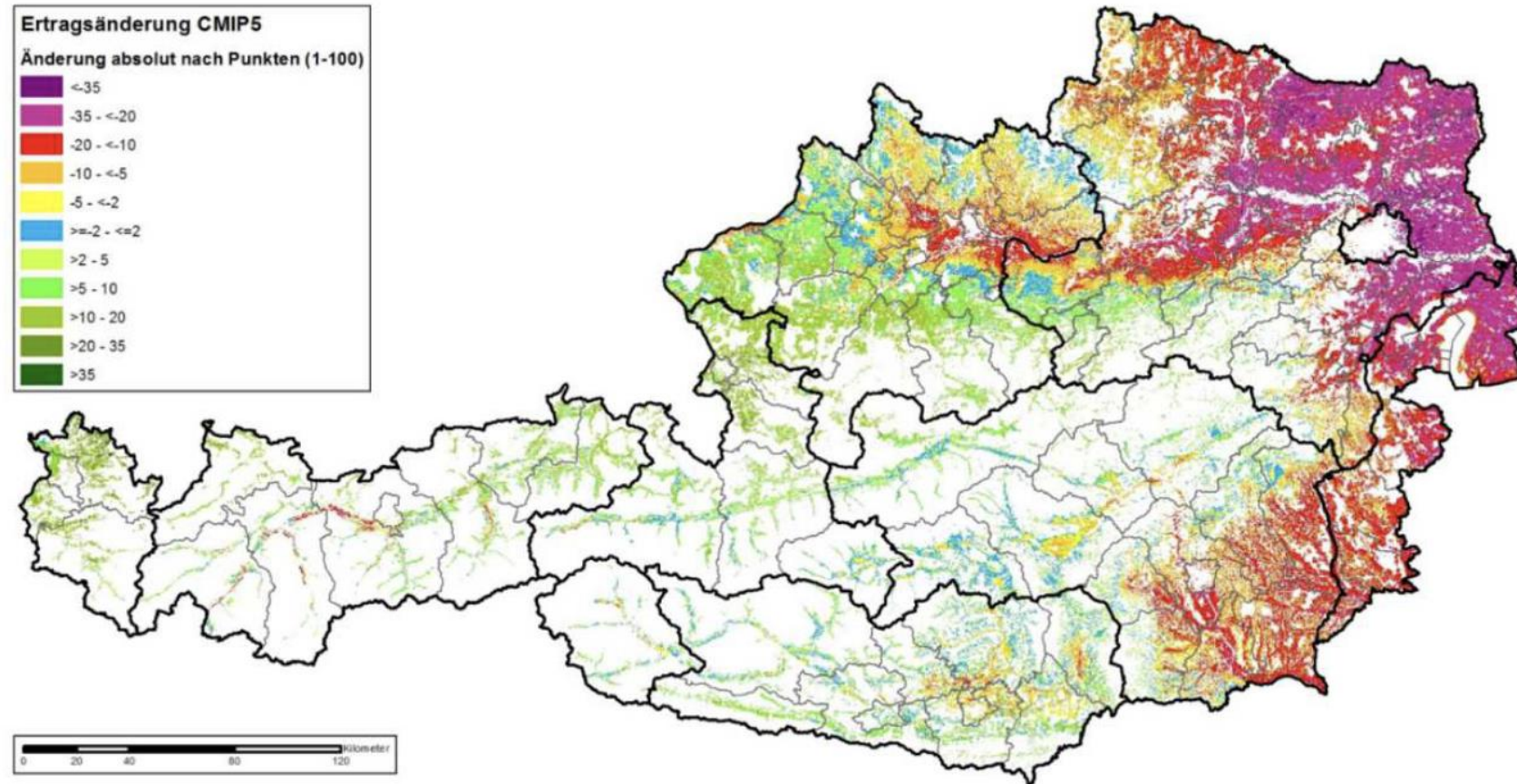
Relevance of site selection from the perspective of resource-use conflicts: Water scarcity

Nutzungsintensität 2050 in Prozent



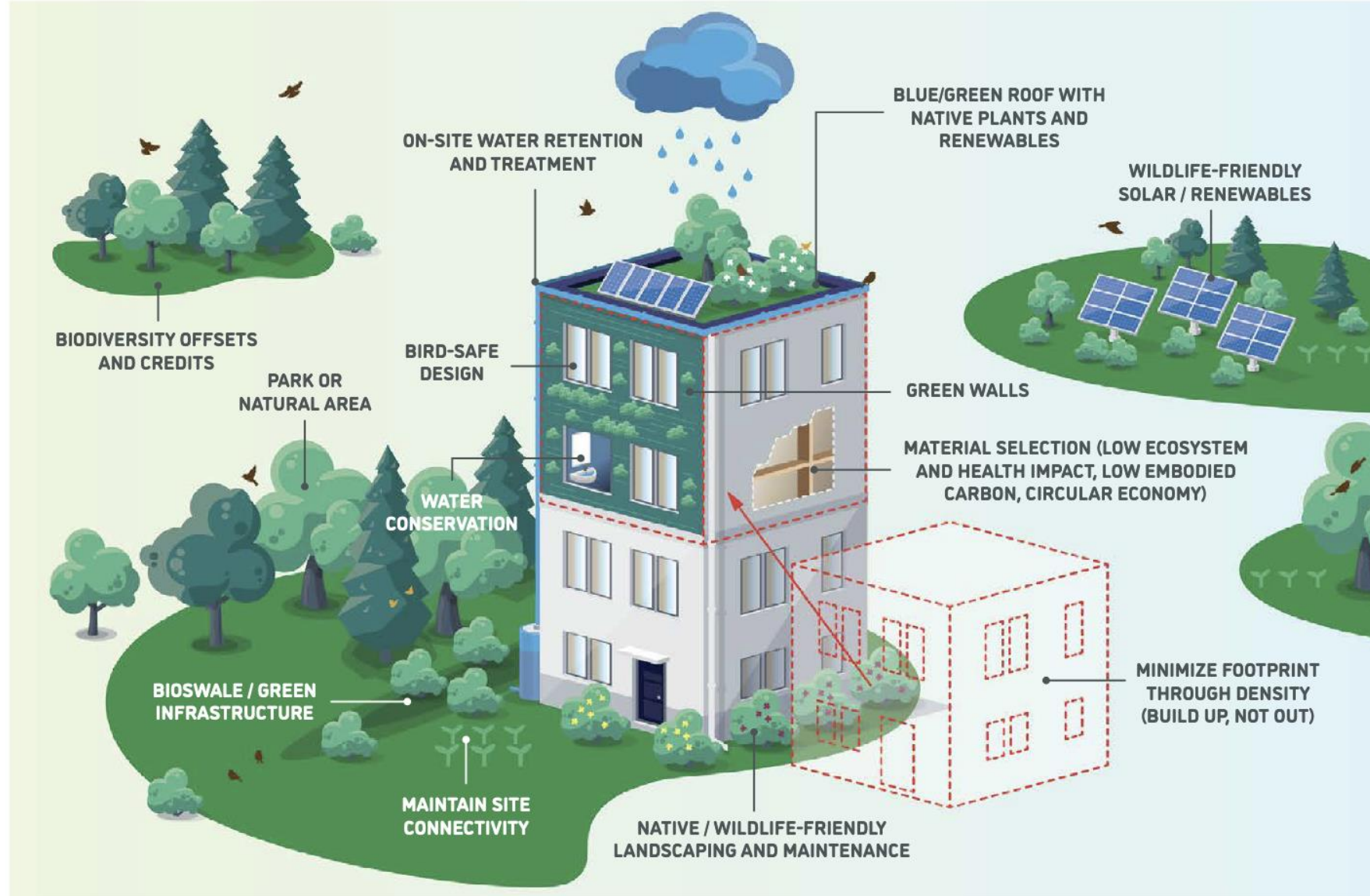
Quelle: Greenpeace • Kartenmaterial: Statistik Austria • Erstellt mit Datawrapper

Relevance of site selection from the perspective of land-use conflicts: land availability



AGES, Austrian Agency for Health and Food Safety ([2018](#)): warned of declining soil quality due to climate change in Austria, particularly in high-yield regions in the northeast and east. Full compensation through yield increases in other areas is unlikely.

Nature-based solutions to reduce negative impacts on biodiversity



Land-use change: The role of mitigation hierarchy

Examples:

❑ ESRS E4-5 AR 34

- Total land use
- Total sealed area
- Total nature-oriented area on-site
- Total nature-oriented area off-site

❑ Biodiversity Footprint for monitoring purposes

❑ **Missing aspect:** Analysis of the conservation value of individual land plots



What positive impacts could be possible in the real estate sector?

❑ **Green roof** (horizontally growing vegetation) can

- Provide energy savings of 6.7% for the space directly beneath the roof through insulation.
- Reduce noise by 11 decibels.
- Solar panels on green roofs produce an average daily output that is 13% greater than that of a conventional roof while supporting biodiversity (Daramu House, Australia)

❑ **Green wall** (vertically growing vegetation) can:

- Achieve energy savings of up to 8% for the adjacent space.
- Reduce the indoor temperature by 2.7°C.
- Improve local outdoor air quality by removing nitrogen oxides.

❑ **Street trees can:**

- Reduce air temperature by up to 3°C (mitigating urban heat islands).
- Capture carbon from the atmosphere (natural carbon sinks).

❑ **Green infrastructure can increase property value by approximately 9.5%** : The bank benefits from more stable collateral due to the rising value of the property.

Source: abrdn (2024) [Planting the seed of change: real estates role in the nature crisis](#)