

Second Austrian Assessment Report on Climate Change (AAR2)

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Introduction

Addressing the climate crisis requires a substantial socio-ecological transformation. Mitigation policies and adaptation measures have to be evaluated in a national and local context to identify cost-effective and socially acceptable strategies.

The **Second Austrian Assessment Report (AAR2)** will provide a comprehensive and inter-disciplinary synthesis of the scientific evidence on climate change in Austria. It will inform policymakers and society at large about synergies and trade-offs of alternative mitigation options and adaptation strategies.

The report will be written by more than 150 authors representing the entire Austrian scientific community from all relevant fields and disciplines.

Aims & Scope

The report will assess enabling policy instruments and boundary conditions for effective implementation of mitigation and adaptation measures. It will evaluate actions required for a sustainable and climate-neutral transformation including implications of delayed action or carbon lock-in.

Timeline



Pathways towards Climate Neutrality

Greenhouse gas emissions in Austria did not decline over the past three decades.

The AAR2 will assess quantitative, model-based pathways to reach climate neutrality consistent with European and national policy goals.

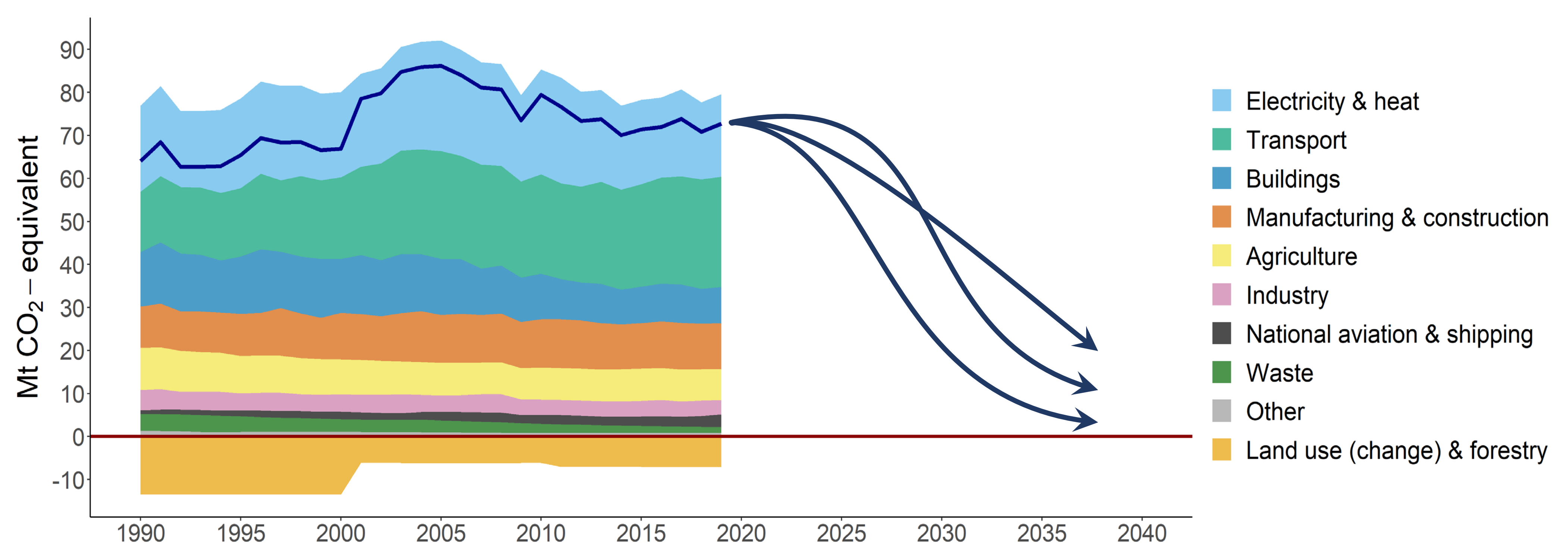


Figure 2: Austrian greenhouse gas emissions by sector from 1990 to 2019¹ and stylized paths towards climate neutrality

References

- Hannah Ritchie, Max Roser and Pablo Rosado (2020) - "CO₂ and Greenhouse Gas Emissions". Published online at OurWorldInData.org. <https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions>
- Bednar-Friedl, B., R. Biesbroek, D.N. Schmidt, et al., 2022: Europe. In: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 1817-1927, doi: 10.1017/9781009325844.015.

Key Risks for Europe & Austria

The IPCC AR6 WG2 (2022) assessed key risks from climate change at a regional/continental level. It identified heat, droughts, floods and productivity loss in agriculture as the most relevant risks for Europe. Impacts can already be observed in many regions and they can be linked to increased temperature levels.

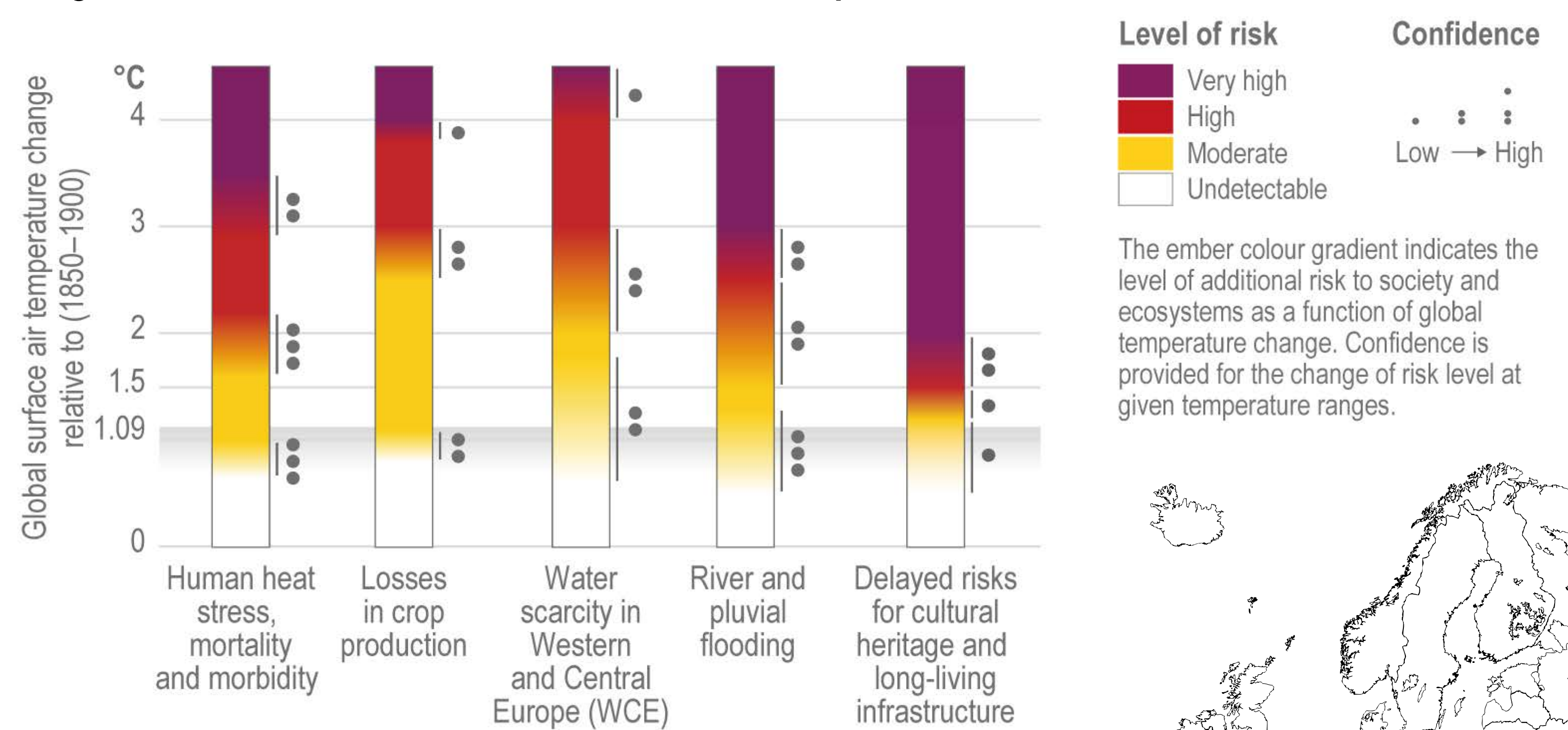


Figure 1a: Selected key risks for Europe under low-to-medium adaptation identified by the IPCC AR6 WG2, Chapter 13² (adapted from Figure 13.28)

The AAR2 will assess evidence of risks specifically for Austria. It will quantify system thresholds and support the transition to a climate-resilient society.

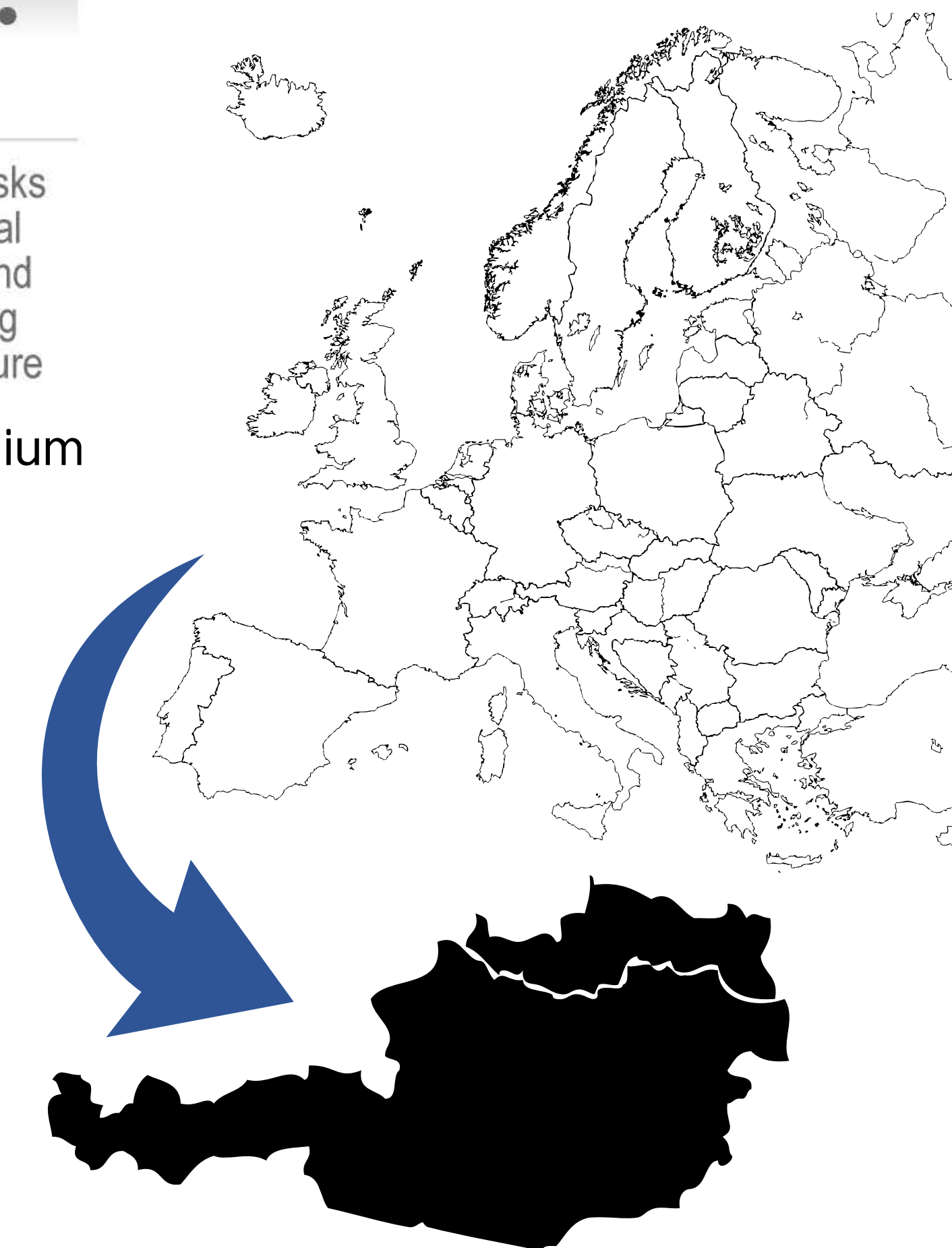


Figure 1b: Maps based on Wikimedia Commons "Europe blank political border map"

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