



Schweizerische Eidgenossenschaft
Confédération suisse
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Eidgenössisches Departement für
Umwelt, Verkehr, Energie und Kommunikation UVEK

Bundesamt für Umwelt BAFU
Abteilung Ökonomie und Innovation



Environmental hotspots in the supply chain of Swiss companies

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Öbu & Global Compact: Working group on sustainable supply chains

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FOEN / Economics & Innovation Division

What we do

- **Section Innovation:**
 - E.g. Promotion of environmental technology projects (UTF)
- **Section Economics:**
 - E.g. Economic consultation or Research in the field of Planetary Boundaries
- **Section Sustainable consumption and production (SDG 12):**
 - Competence Center for Green Public Procurement
 - Competence Center for Life Cycle Assessment
 - Transparent datasets for life cycle assessment of Swiss products, Biofuels, ..., Input to Mobitool.ch etc.
 - Product Environmental Footprint (pilot phase)
 - Cooperation and dialogue
 - Voluntary agreements with industries; «Verein Go for Impact»



Exceeding the Planetary Boundaries



2002

2017

Melting ice increases the risks of natural hazards.



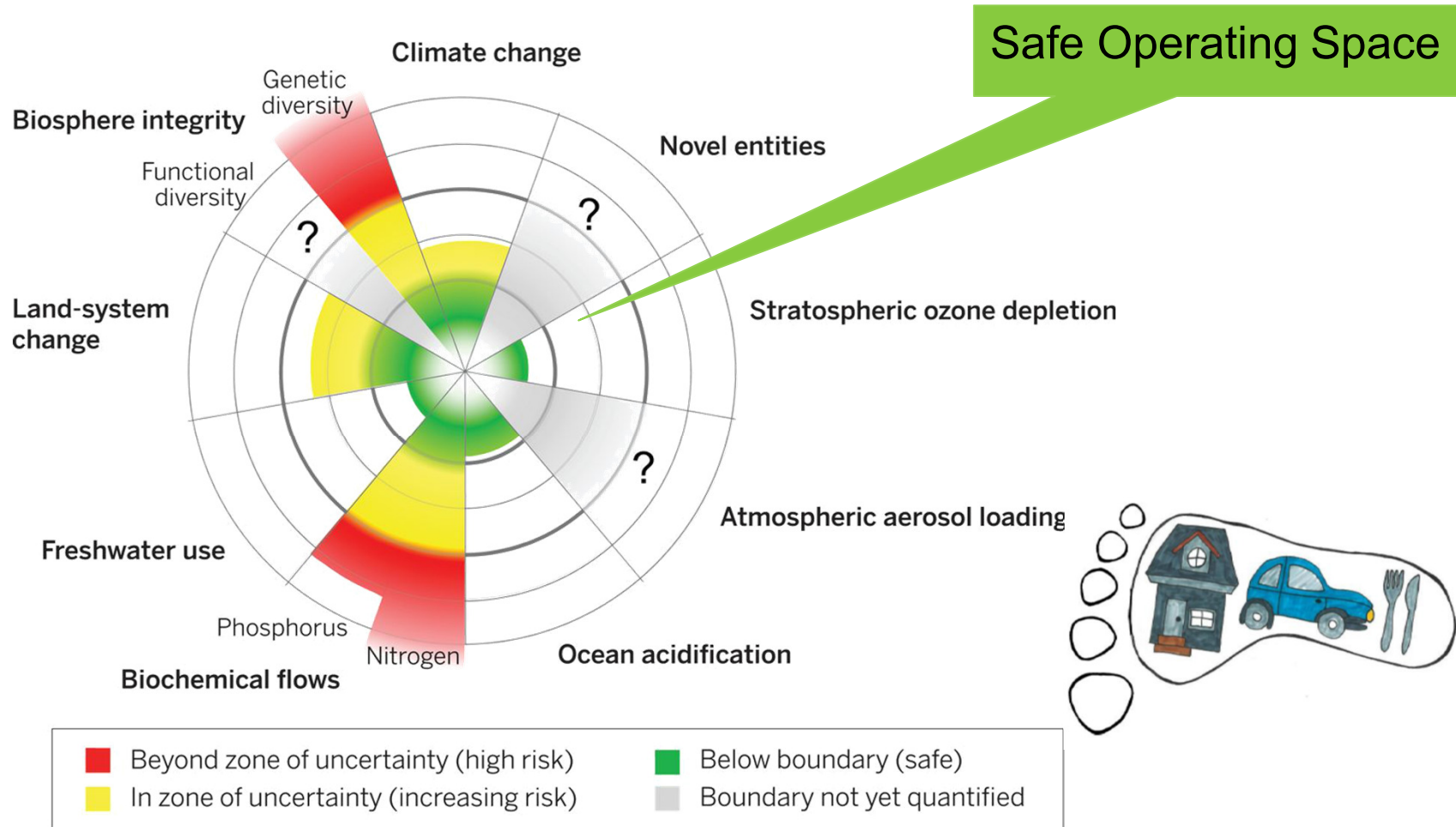
Exceeding the Planetary Boundaries



Deforestation destroys biodiversity.



There are boundaries but no borders

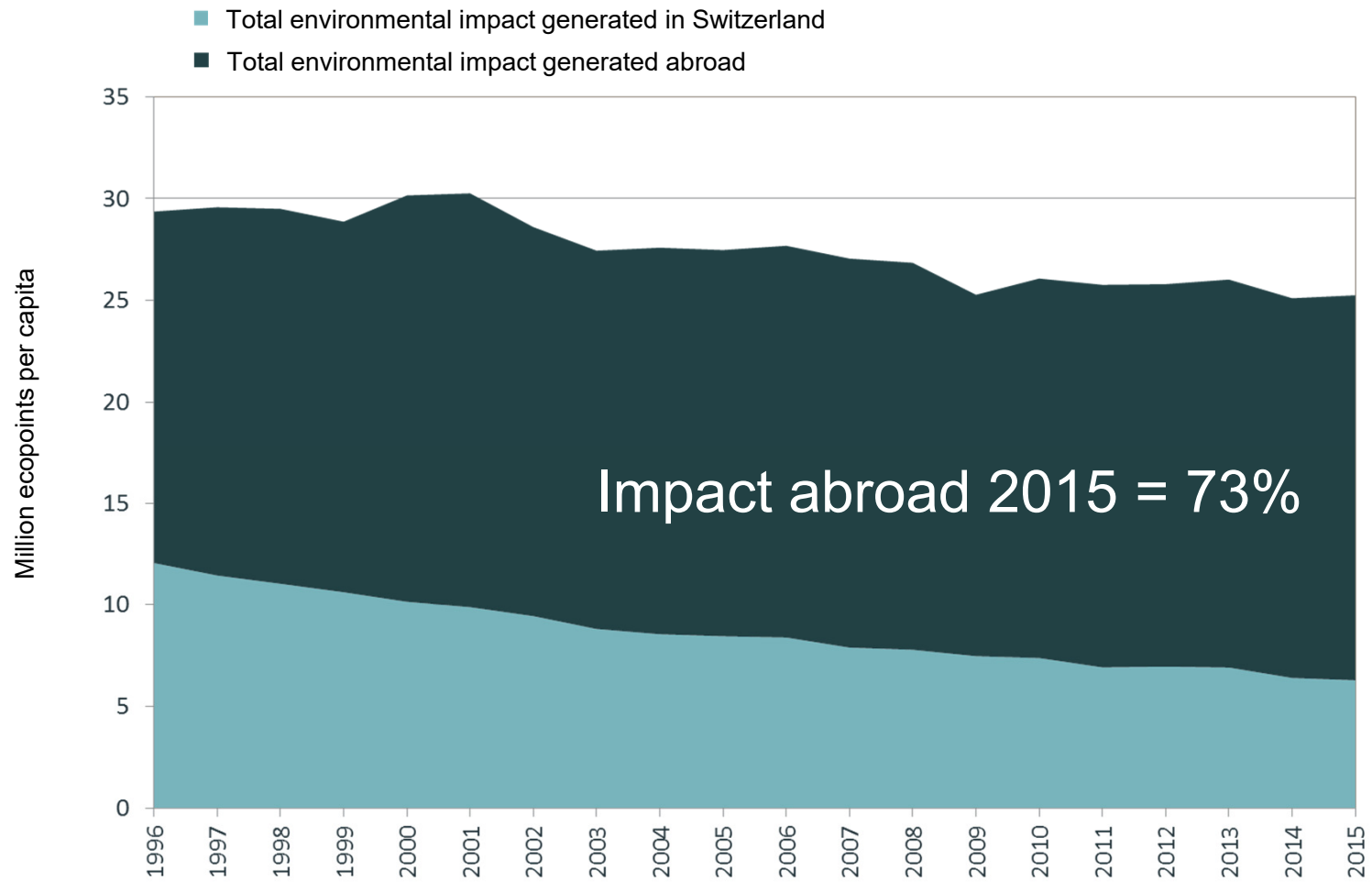


Four out of nine Planetary Boundaries are exceeded globally today. That threatens the resilience of the Earth System and is a risk for companies.

If everyone consumed like the Swiss, the planetary boundary of climate change would be exceeded by more than 20 times.⁵



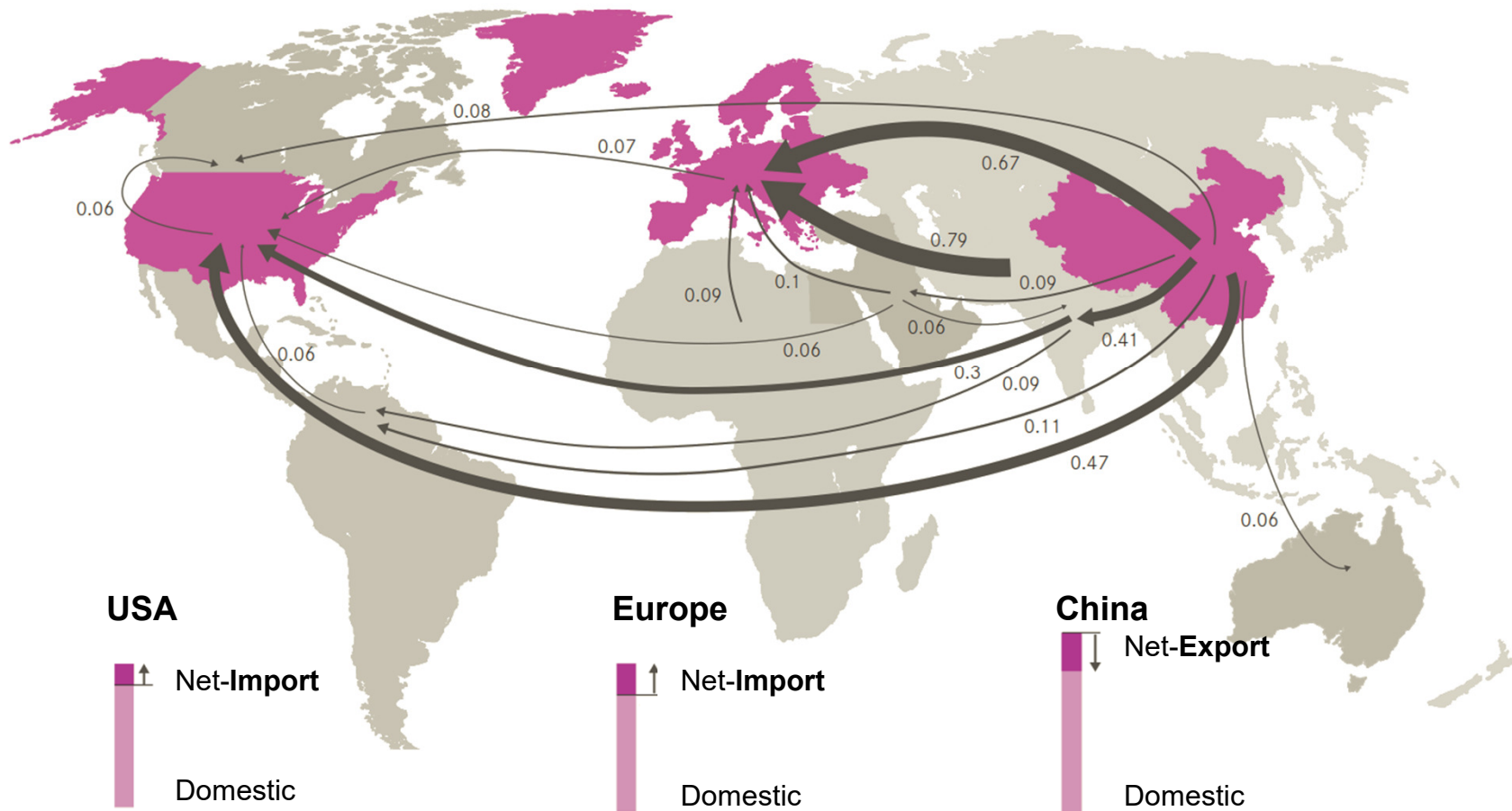
Total environmental impact of Switzerland per capita



Quelle: Berechnungen treeze und Rütter Sococo, 2018.



Carbon embodied in trade and final consumption (CO₂)



CO₂ emissions in international trade between 3 main economic areas

Quelle: Tukker et al. 2014 basierend auf Daten von 2007

Switzerland's environmental impact abroad

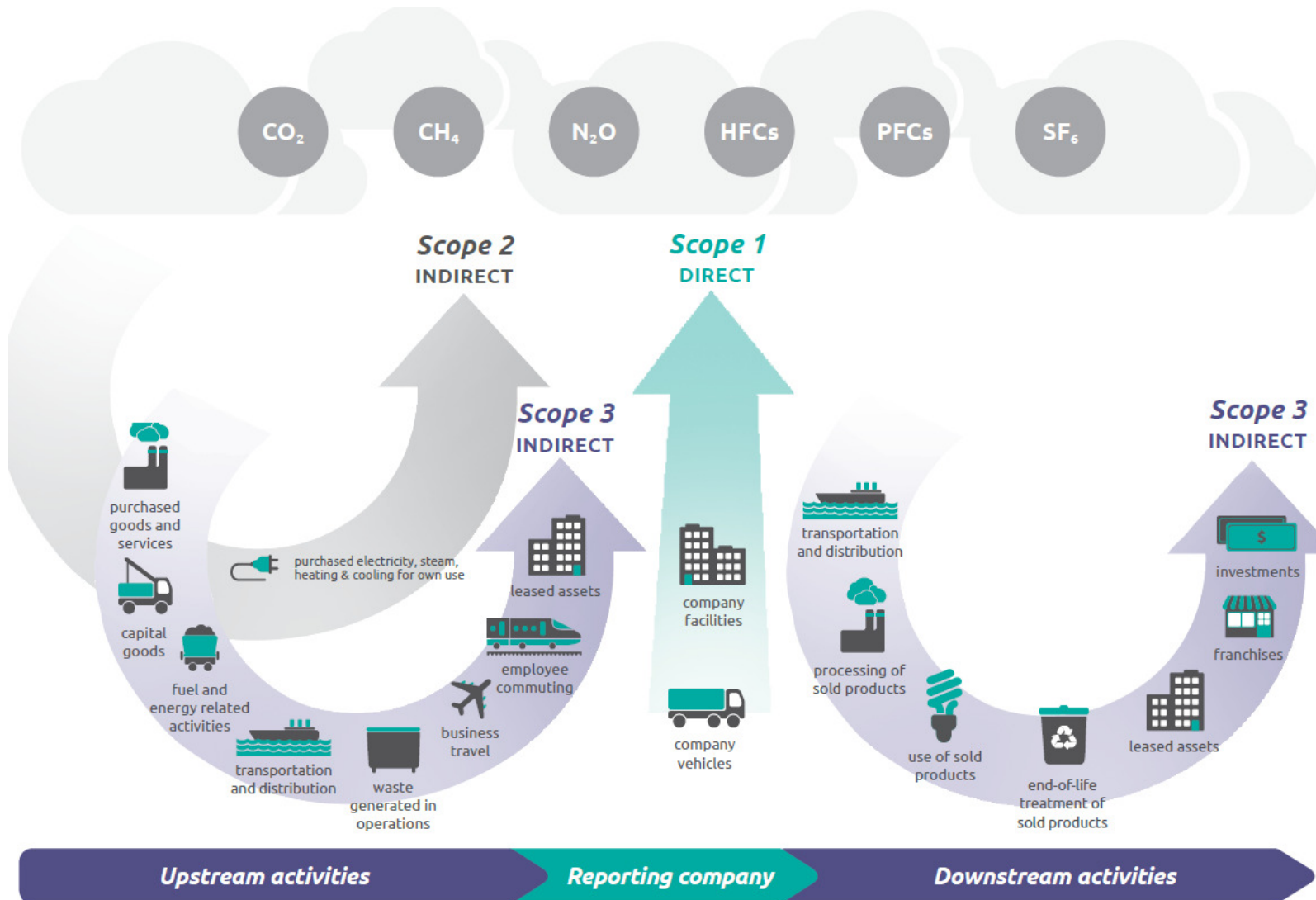
Wodurch beeinflusst die Schweiz die Umweltbelastung im Ausland?

Umweltbelastung im Ausland wird getrieben durch Konsum- und Investitionsentscheide, Standortwahl und Produktionsweisen.





From Domestic to Footprint Perspective



Quelle: WRI/WBCSD. Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

What is needed is responsibility along the entire supply chain at home and abroad.



«Environmental Atlas Supply Chains Switzerland»



Environmental impacts of 8 Swiss industries:

1. **Food Trade**
2. Meat production
3. **Real estate services and construction**
4. Health and social work
5. **Production of chemical products**
6. **Production of machinery**
7. Trade with clothing, textiles and footwear
8. Traded with household devices

Content:

- **Environmental impacts** differentiated by 4 **supply chain stages**:
 - **Industry itself (SCOPE 1 & 2), direct suppliers (SCOPE 3), remaining upstream chains, raw material extraction (SCOPE 3)**
 - Additional: **use phase**, where relevant (SCOPE 3)
- **Recommendations**
- **Existing initiatives and standards**

Availability of Publications

- Study «**Environmental hotspots in the supply chain of Swiss companies**» will be available by the end of June or earlier at: www.treeze.ch
- The «**Environmental Atlas Supply Chains Switzerland**» will be available by the end of June at: www.treeze.ch
- The “**Environmental Atlas Supply Chains Germany**” is available at: <https://www.adelphi.de/de/publikation/umweltatlas-lieferketten>
- Study «**Environmental Footprints of Switzerland. Developments from 1996 to 2015**” is available at:
 - **Study:** <https://www.bafu.admin.ch/dam/bafu/de/dokumente/wirtschaft-konsum/uz-umwelt-zustand/uz-1811-d.pdf.download.pdf/uz-1811-d.pdf>
 - **Data provision**
http://treeze.ch/fileadmin/user_upload/downloads/Publications/Case_Studies/Life_styles/Environmental_Footprints_of_Swiss_Consumption/603-Umwelt-Fussabdr%C3%BCcke-Schweiz-Readme-Datenbereitstellung-v1.3.pdf



Conclusion

- **Switzerland must reduce its pressure** on at least four out of nine planetary boundaries **by -50 or even - 95 percent.**
- A majority of the **environmental impacts** of Swiss industries occur in their supply chain, **often abroad.**
- What is needed is **responsibility along the entire supply chain.**
- There are many possibilities for **support from the Swiss Confederation**, e.g. financial support for innovative projects, transparent LCA-datasets or the “Environmental Atlas Supply Chains Switzerland”.
- Last but not least: A reduction in environmental impacts usually has in most cases a **positive effect on social aspects.**



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