



# Terrestrial biodiversity research

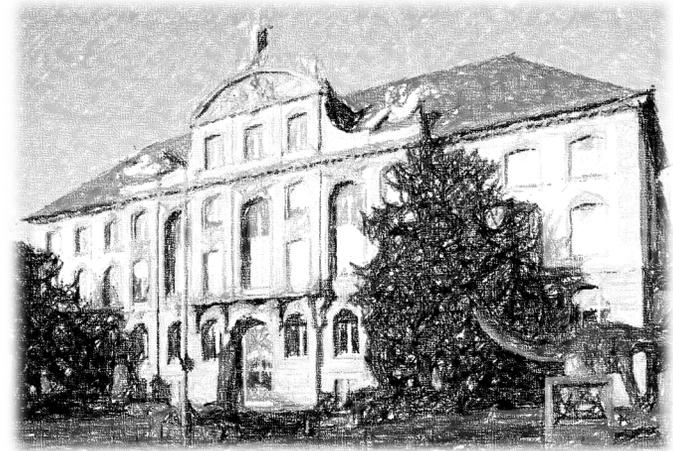
Gabriela Rabeschini  
Alke Voskamp  
Kastner Lab Group

Senckenberg Biodiversity and Climate  
Research Centre (BiK-F)

**Evidence-based** decisions, **measurable** goals and scientific co-design to support the transformation to nature-positive business practices



Business

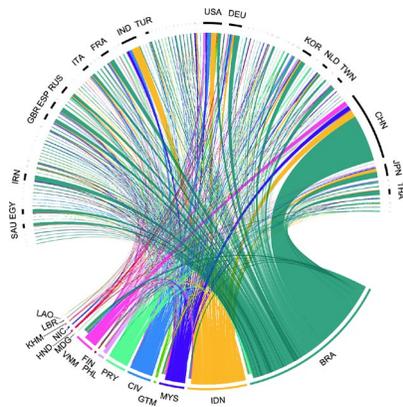


Science

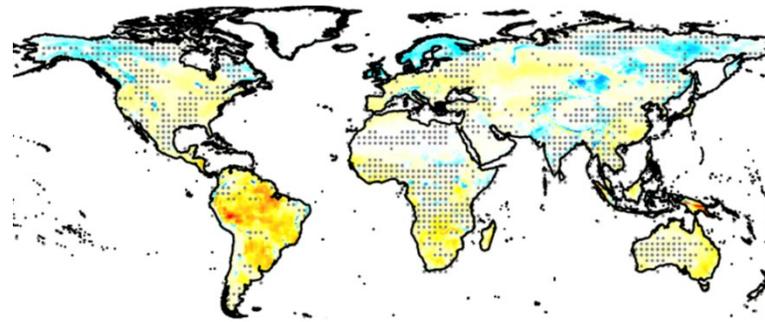
# BiolImpact: Assessing the biodiversity footprint of companies

**Project:** linking biodiversity research and the private sector

**Aim:** Develop and provide a service for assessing and evaluating biodiversity impacts of companies



**Land-use change**  
(Production areas)



**Climate change**  
(Emissions)

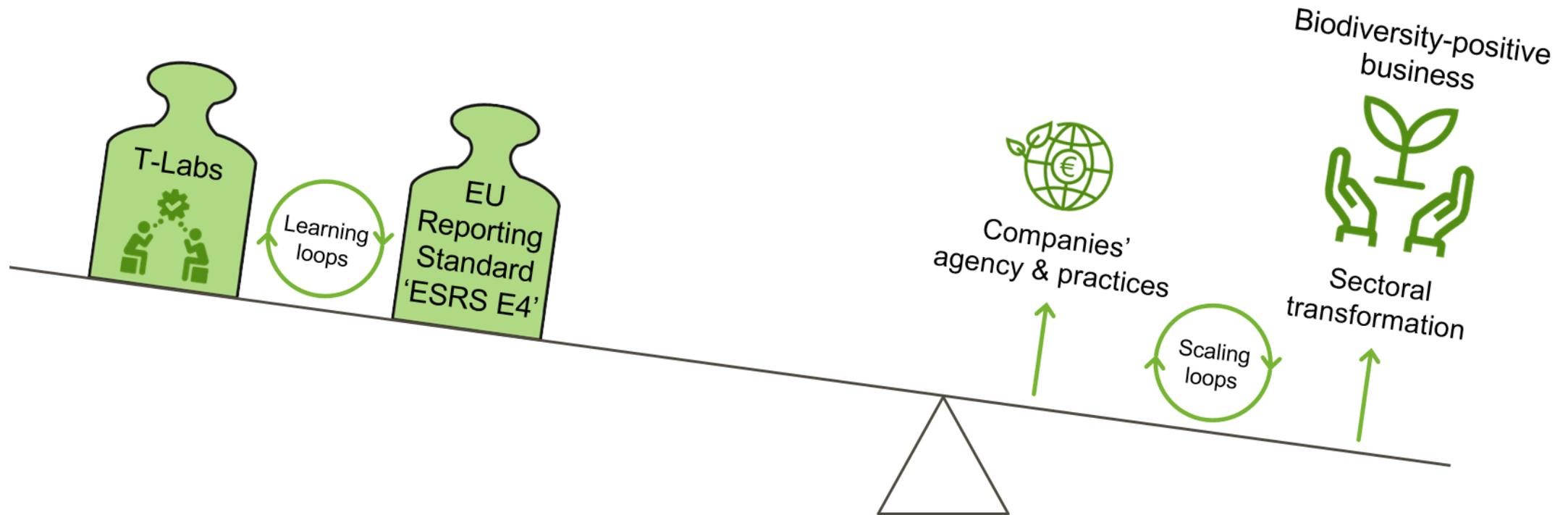


**Invasive species**  
(International transport)

Schwarz Müller & Kastner 2022, Sustainability Science, Hof et al 2018, PNAS

# Business for Biodiversity:

T-Labs as experimental spaces to foster social-ecological transformation



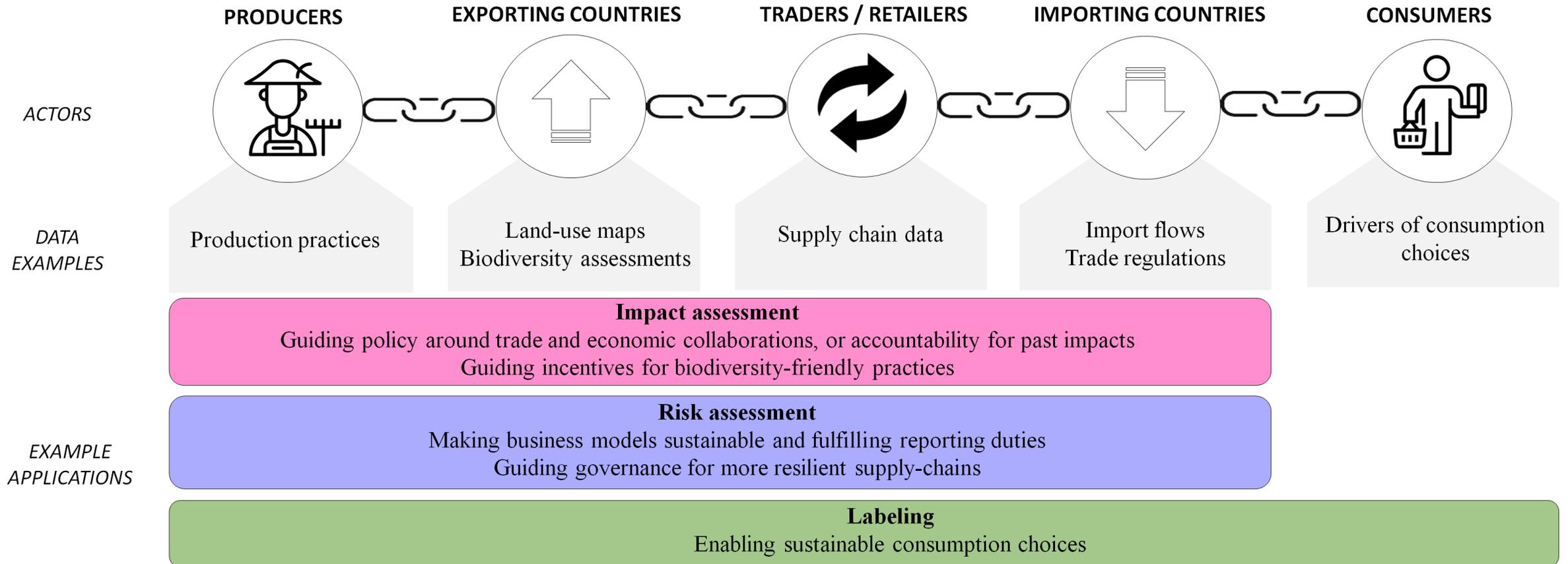
**ISOE staff members:**  
Prof. Dr. Flurina Schneider,  
Dr. Alexandra Lux,  
Dr. Sophie Peter

**SBiK-F staff members:**  
Prof. Dr. Katrin Böhning-Gaese,  
Dr. Alke Voskamp,  
Dr. Thomas Kastner

Tracing impacts of agricultural production and consumption on ecosystems and biodiversity along international supply chains

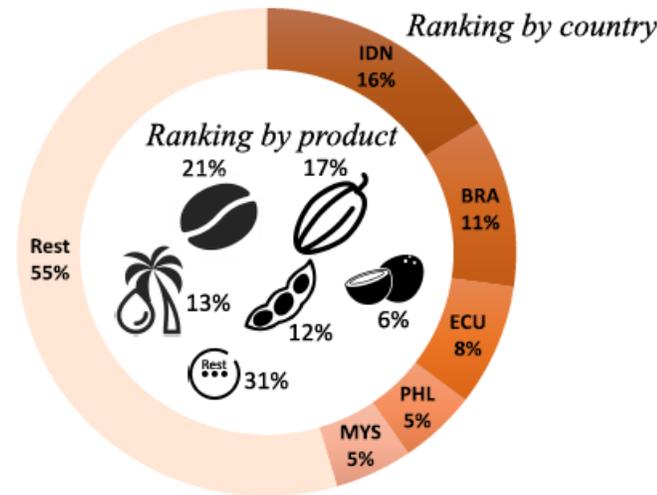


## Assessing biodiversity impacts



Ex.:

## Biodiversity impacts of consumption in Germany



### Global loss of vertebrate species

National level assessments can identify countries/regions or products of interest that could be targeted by policy interventions. They can also guide supply-chain initiatives in order to minimize impacts. The values here are very general and should be reassessed for specific producer countries and products.

Data from Kastner et al. (*One Earth* 2021)

## *Outlook*

- Shifting of burdens and benefits and power relations
- Options for action in different scales / actors perspectives
- Trade-offs between different impacts
- Feedbacks between impacts and dependencies

