

Unsere Zukunft mit nachhaltiger Ernährung schon heute!



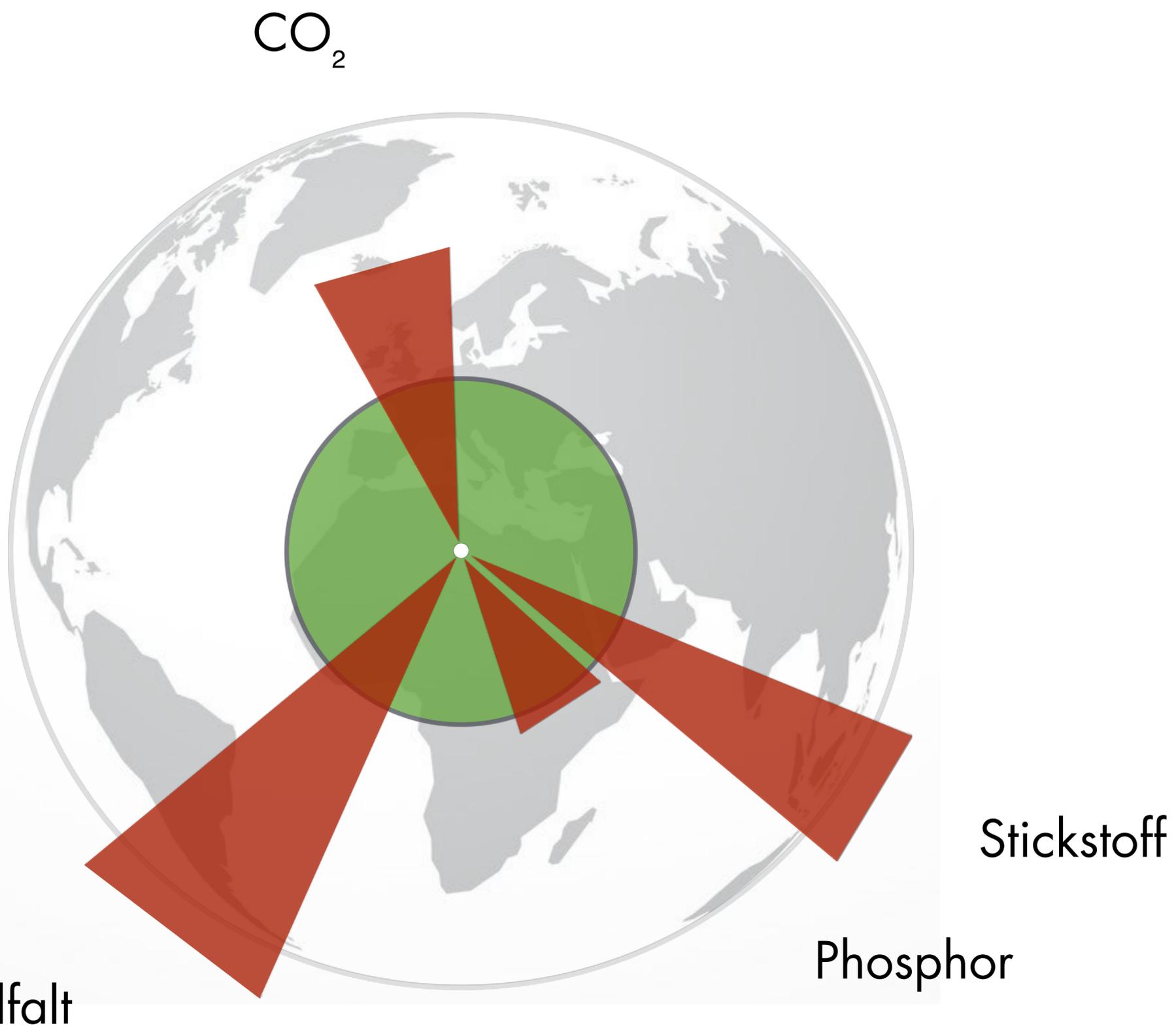
Manuel Klarmann



WEBing
S&F

www.eaternity.org
mklarmann@eaternity.ch
+41 77 44 66 981
@mklarmann

Planetaren Grenzen



Steffen et al., 2015

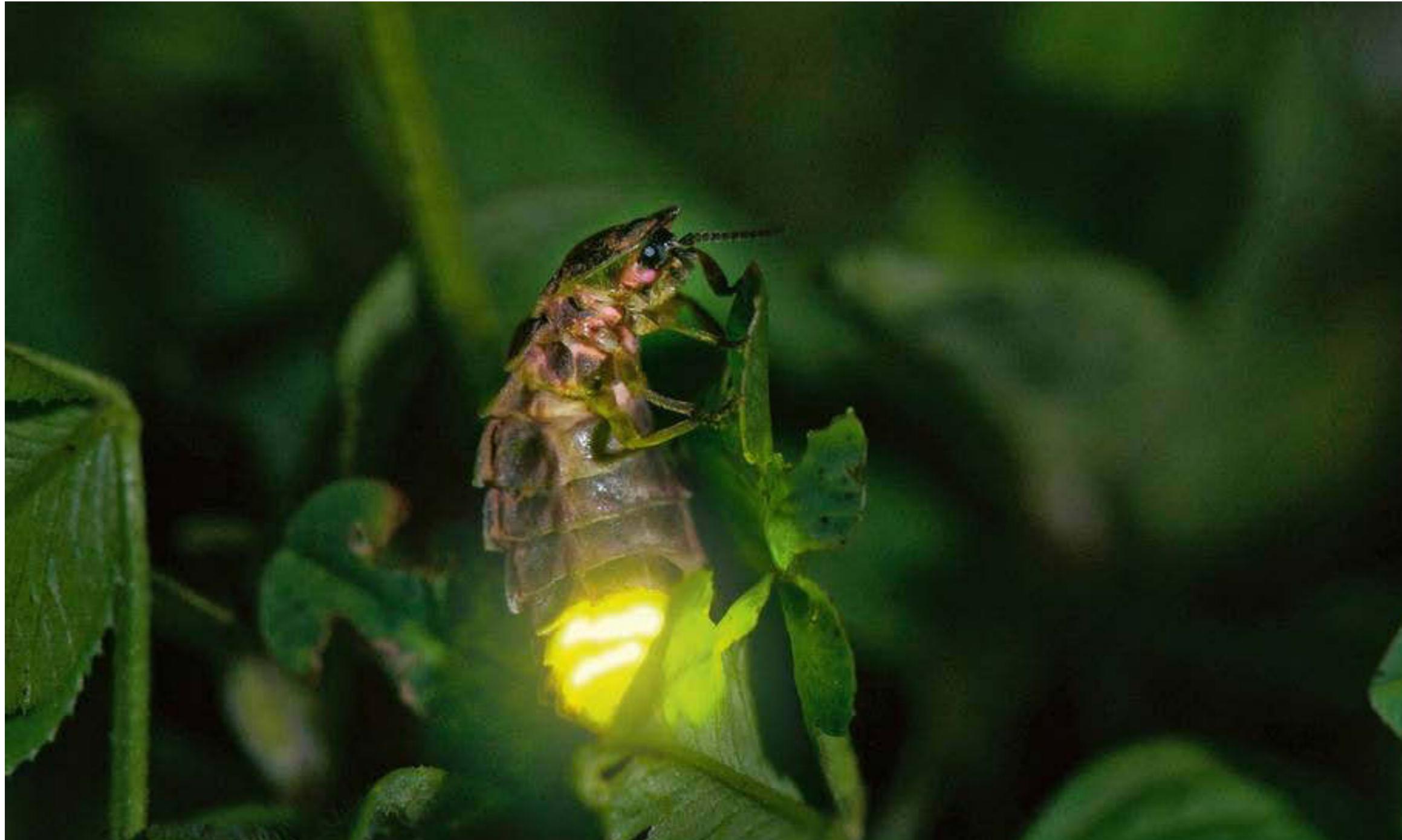
Irreversible Konsequenzen

Stickstoff



Irreversible Konsequenzen

Biodiversität



Irreversible Konsequenzen

Klima



Irreversible Konsequenzen

Klima Krise



> 200 Millionen Menschen



TIME



There's
no Planet B

FRUST
HERRSCHT



ON BEHALF OF LIFE

 **CLIMATE CHANGE:**
12 YEARS TO SAVE EARTH 



future



Function
Rebellion

WE CAN'T EAT
MONEY

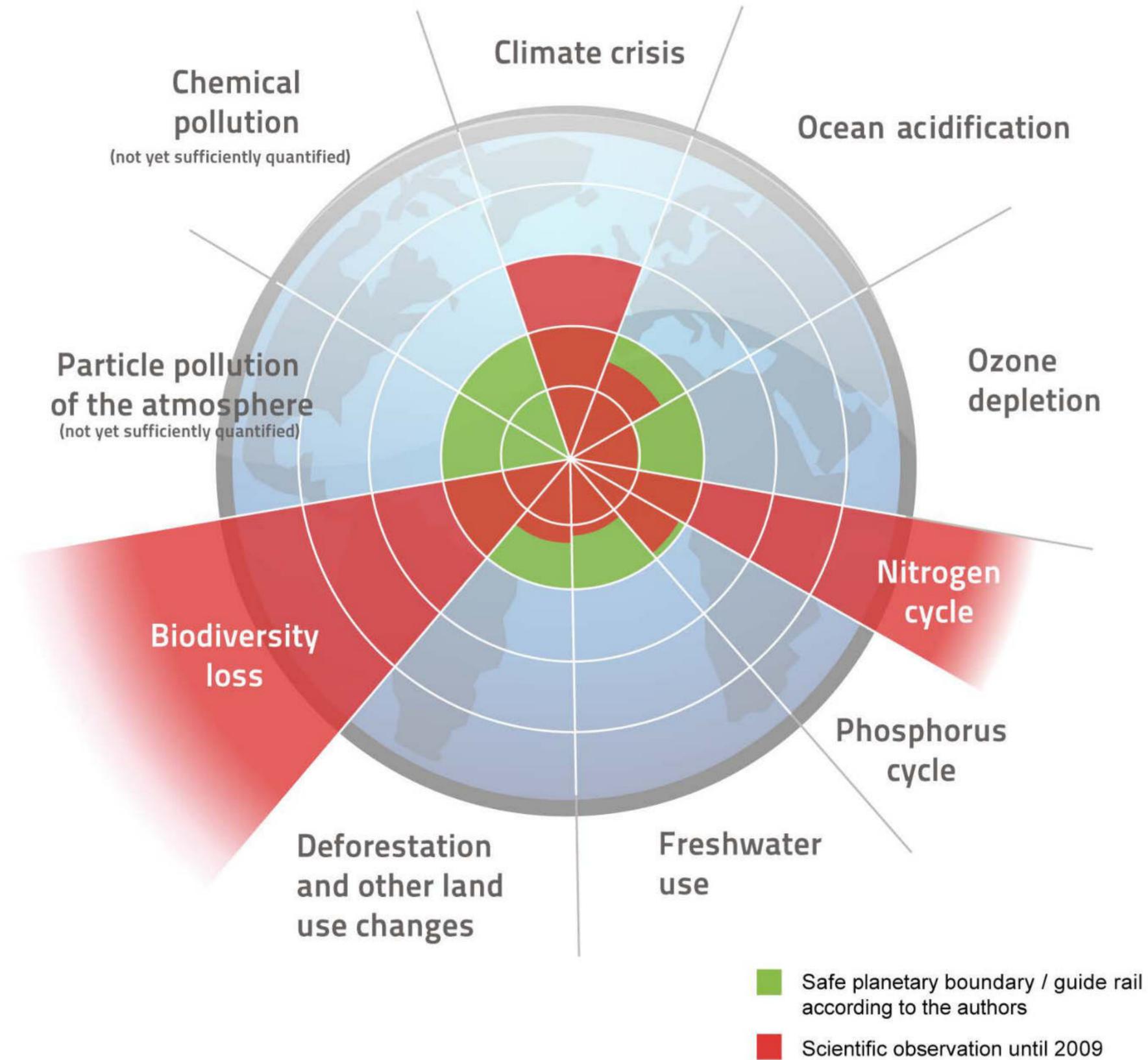


ARE WE THE LAST GENERATI  N?



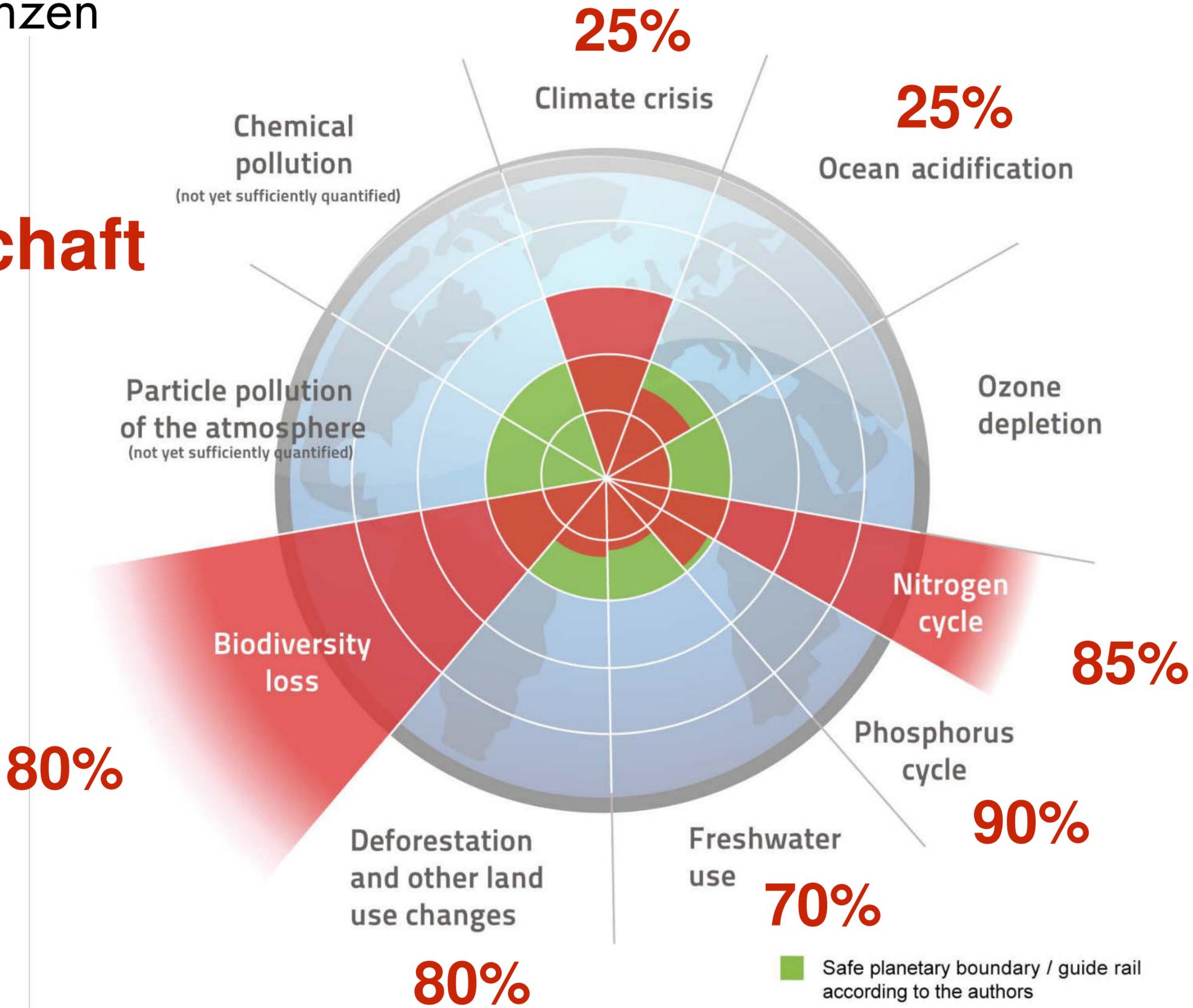


Planetaren Grenzen



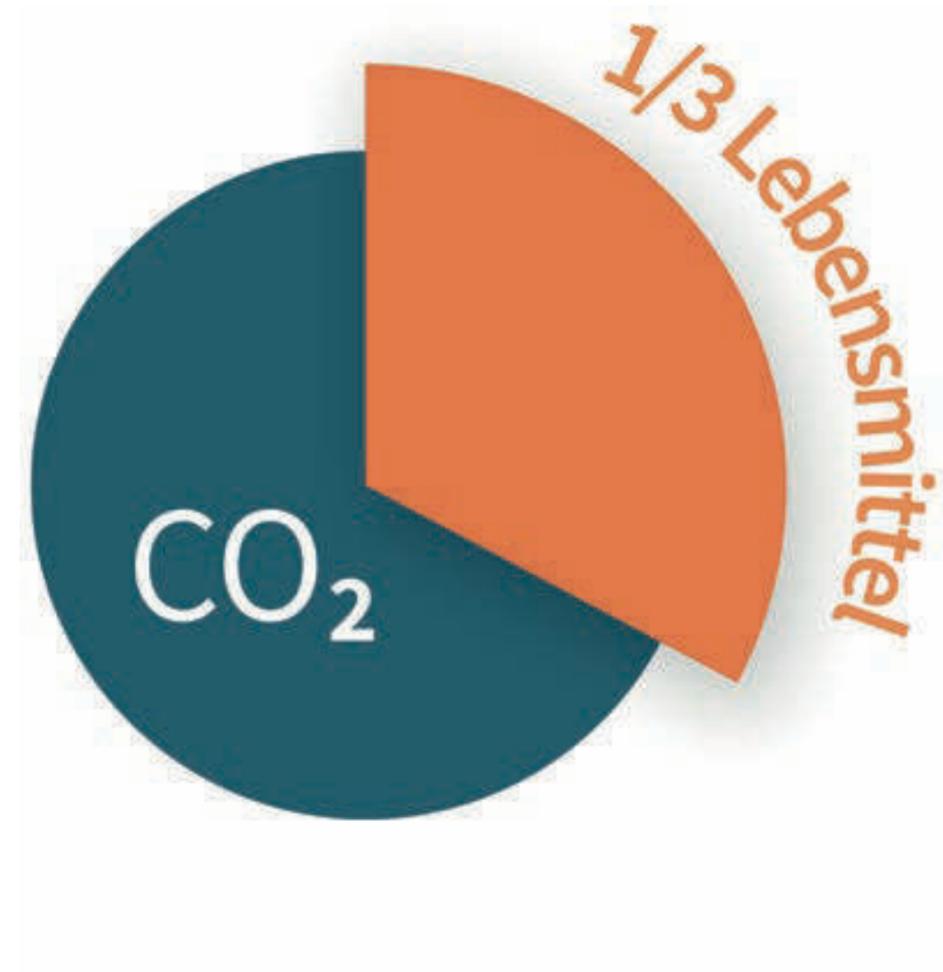
Planetaren Grenzen

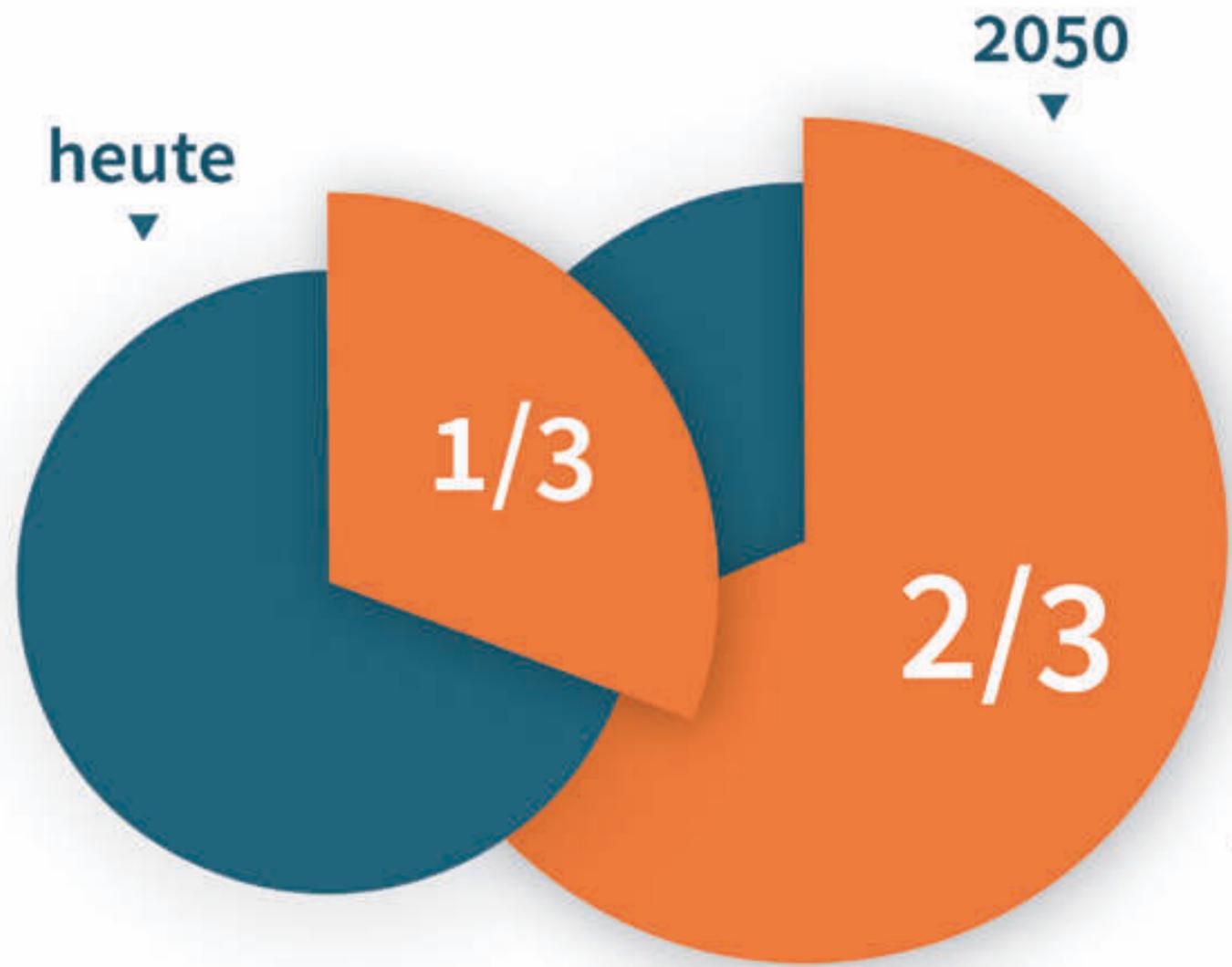
Anteil Landwirtschaft



Steffen et al., 2015, Campbell et al, 2017

Lebensmittel: 2-3 Tonnen pro Person und Jahr

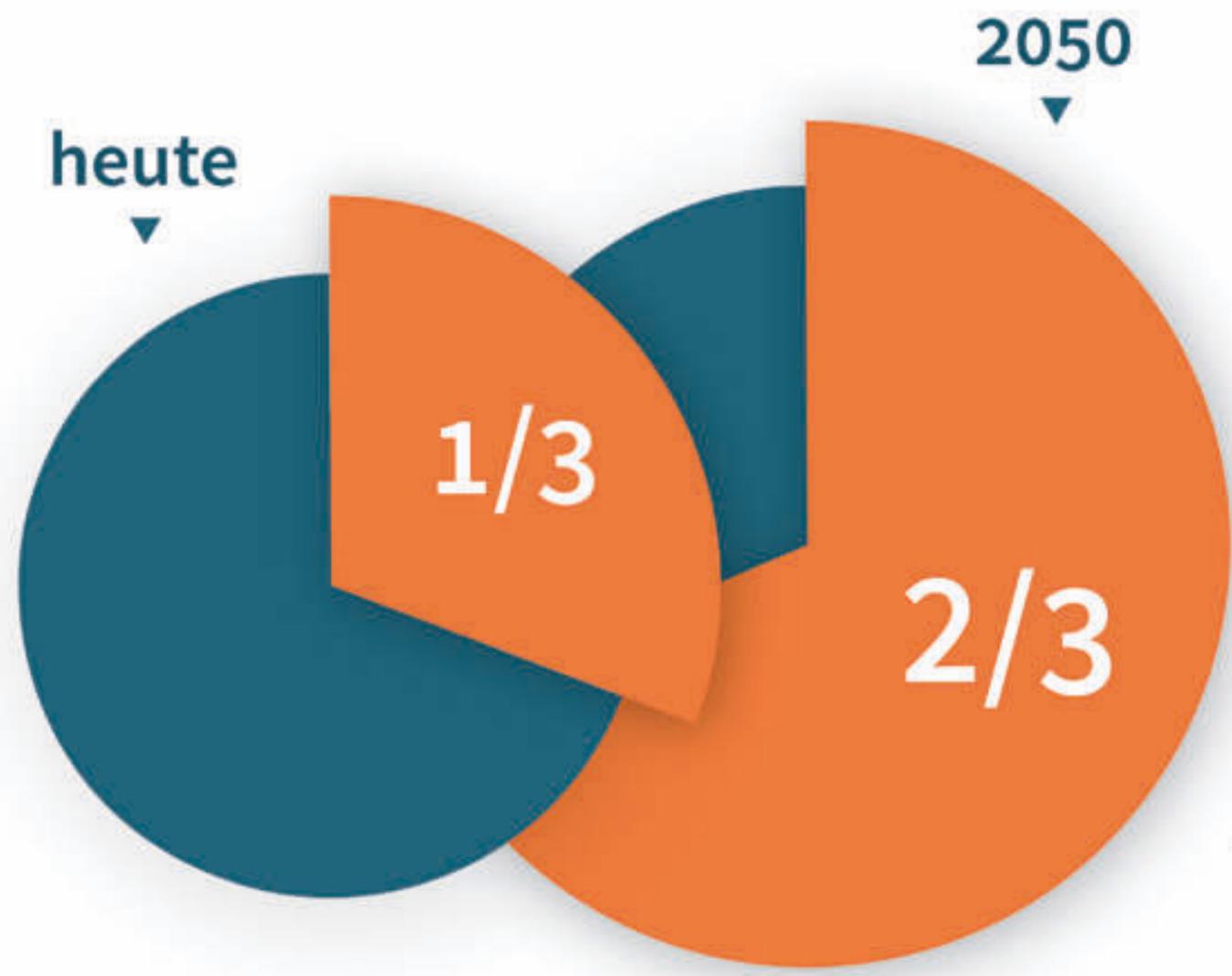




weltweiter Bevölkerung



Potentielle, durch den Klim
Ertragseinbusse bei Grun



20%

weltweiter Bevölkerungszuwachs in 30 Jahren

20%

Potentielle, durch den Klimawandel verursachte Ertragseinbusse bei Grundnahrungsmitteln

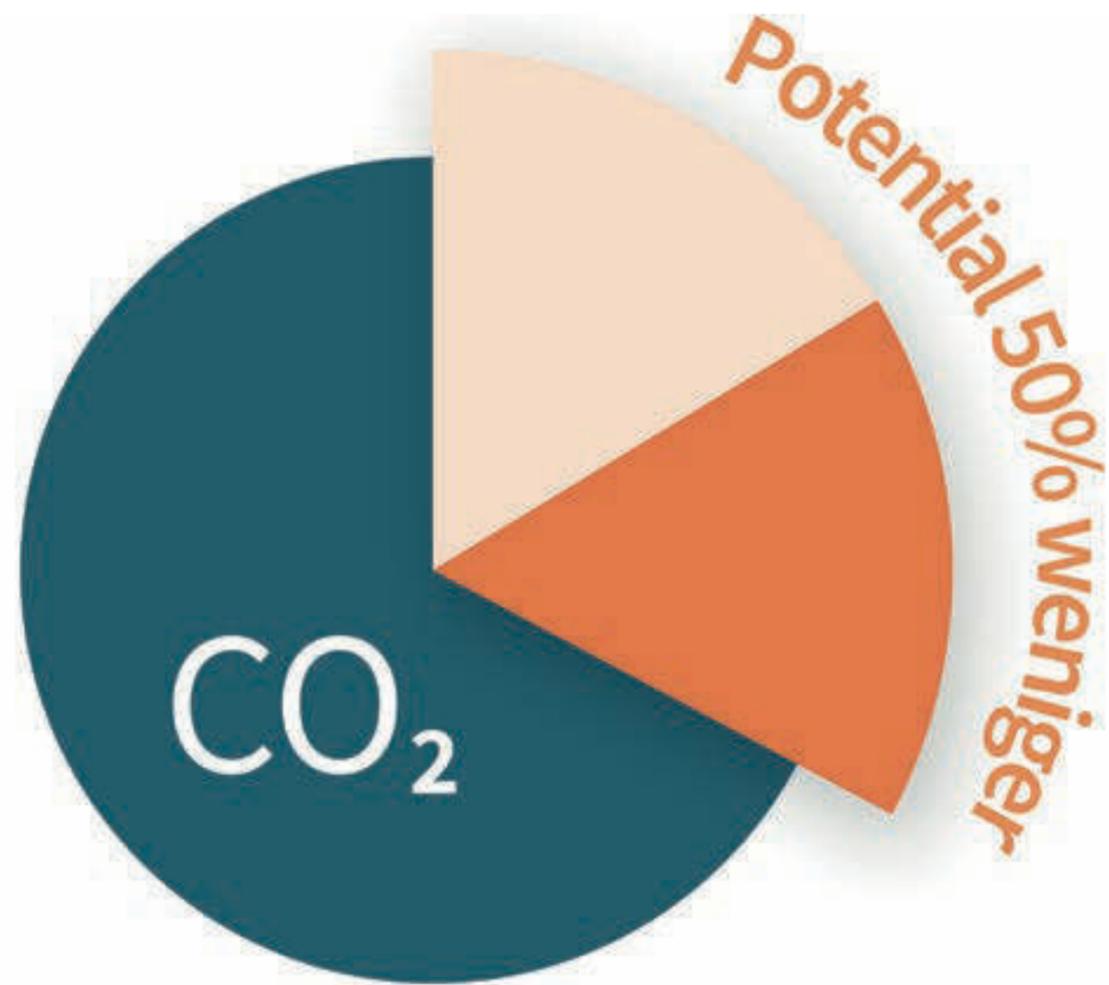
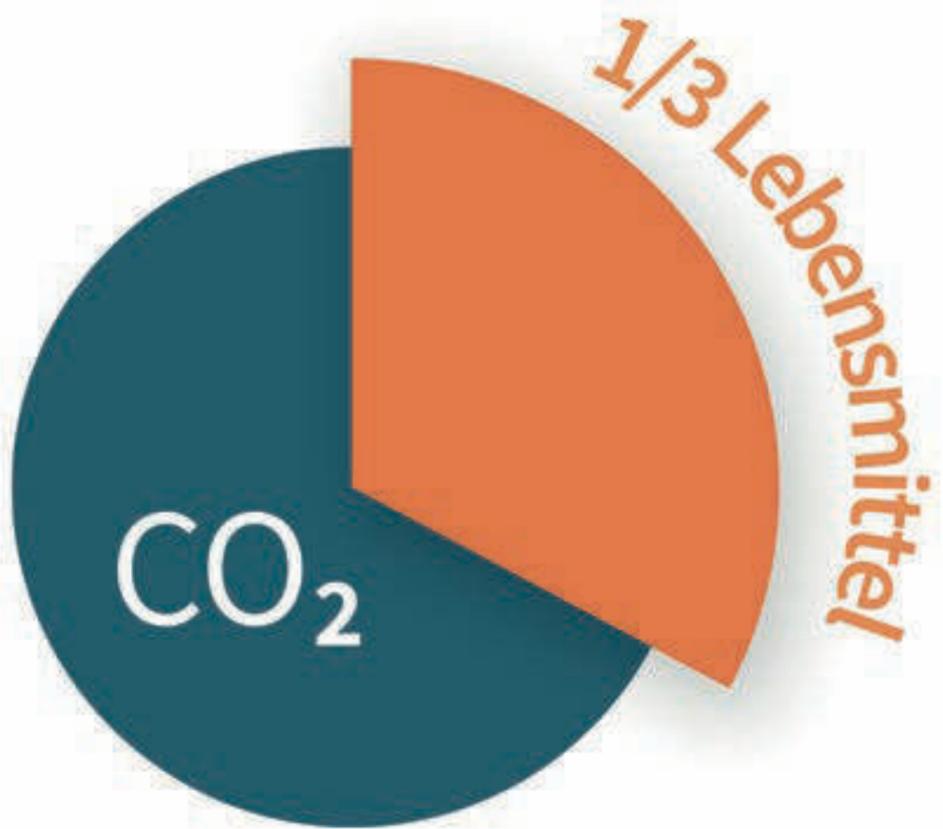




Illustration: Felix Müller (www.zukunft-selbermachen.de) | Licence: CC-BY-SA 4.0

+



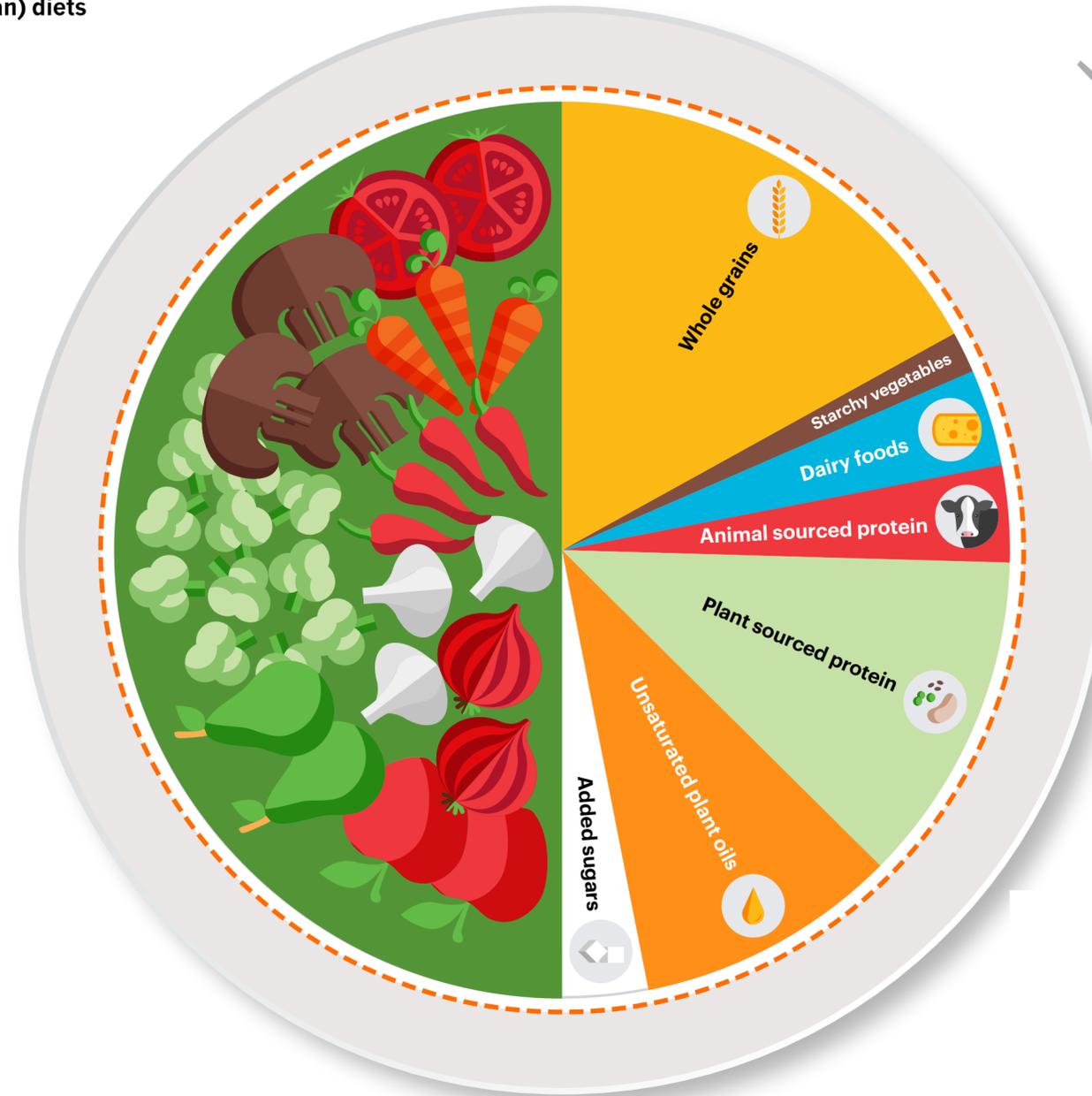
Nachhaltig und Gesund

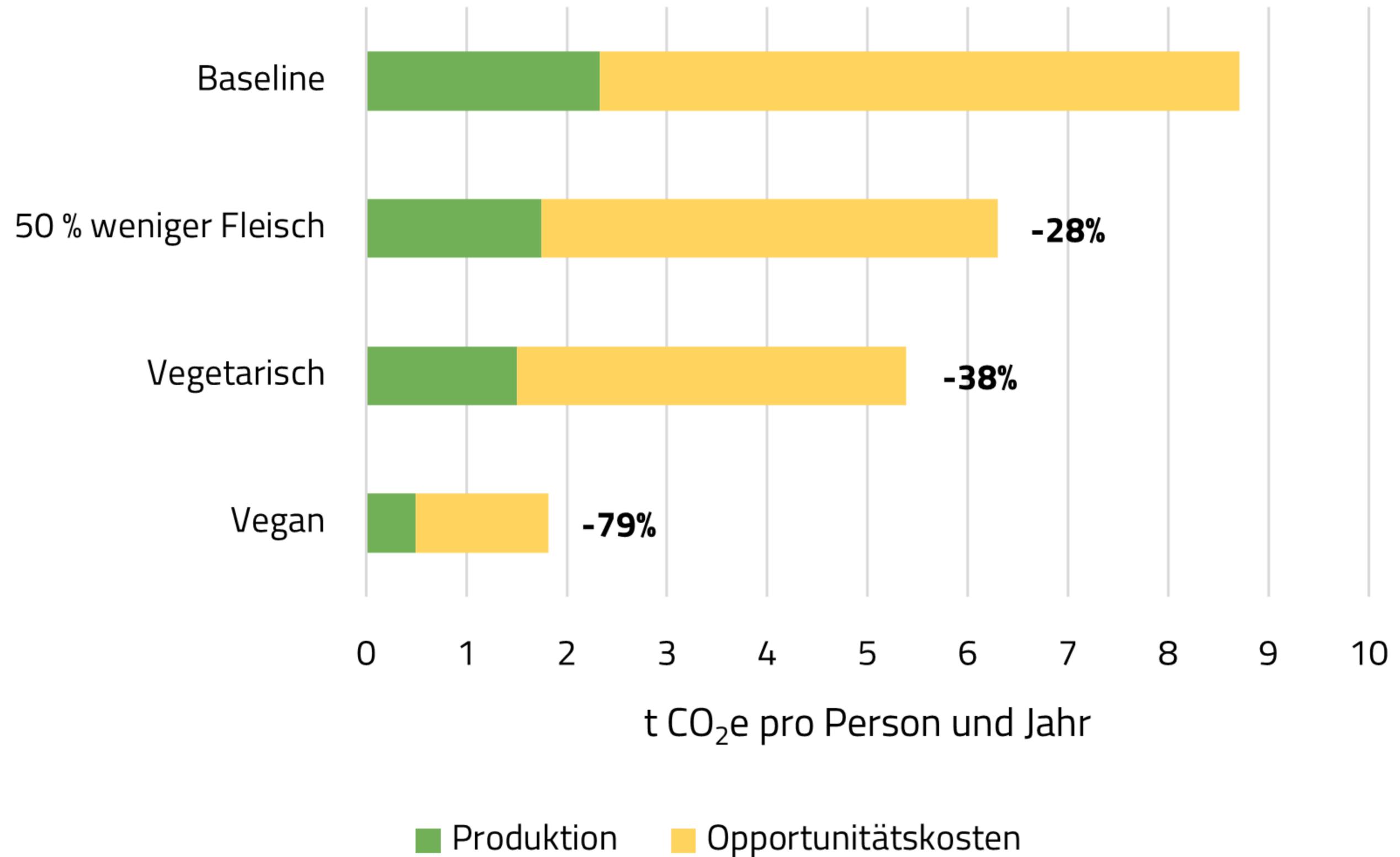
Diät der Zukunft

Extended Data Table 5 | Food-based dietary recommendations for healthy, more plant-based (flexitarian) diets

Food item	minimum level		maximum level	
	g/d	serving	g/d	serving
✓ wheat			A total of up to 860 kcal/d for energy balance for all staple crops	
✓ rice				
maize				
other grains				
roots				
+400% legumes	50	1/2		3-4 (1/3 of energy)
+100% soybeans	25	1/4		
nuts & seeds	50	2		
+50% vegetables	300	3-4		
fruits	200	2-3		
sugar			31	5% of energy
palm oil			6.8	1
vegetable oil			80	1/3 of energy
-84% beef			A total of 14 g/d for all red meat	
lamb				
pork				
✓ poultry			29	1/2
eggs			13	1/5
-75% milk			250	1
shellfish	A total of 28 g/d for all fish and seafood			
fish (freshwater)				
fish (demersal)				
fish (pelagic)				1/2

The recommendations include recommended minimum and maximum intakes expressed as weight or calories, and servings. Fish and seafood can be replaced by plant-based foods (legumes, soybeans, nuts and seeds, fruits and vegetables) in vegetarian diets. Units are g or kcal per day.

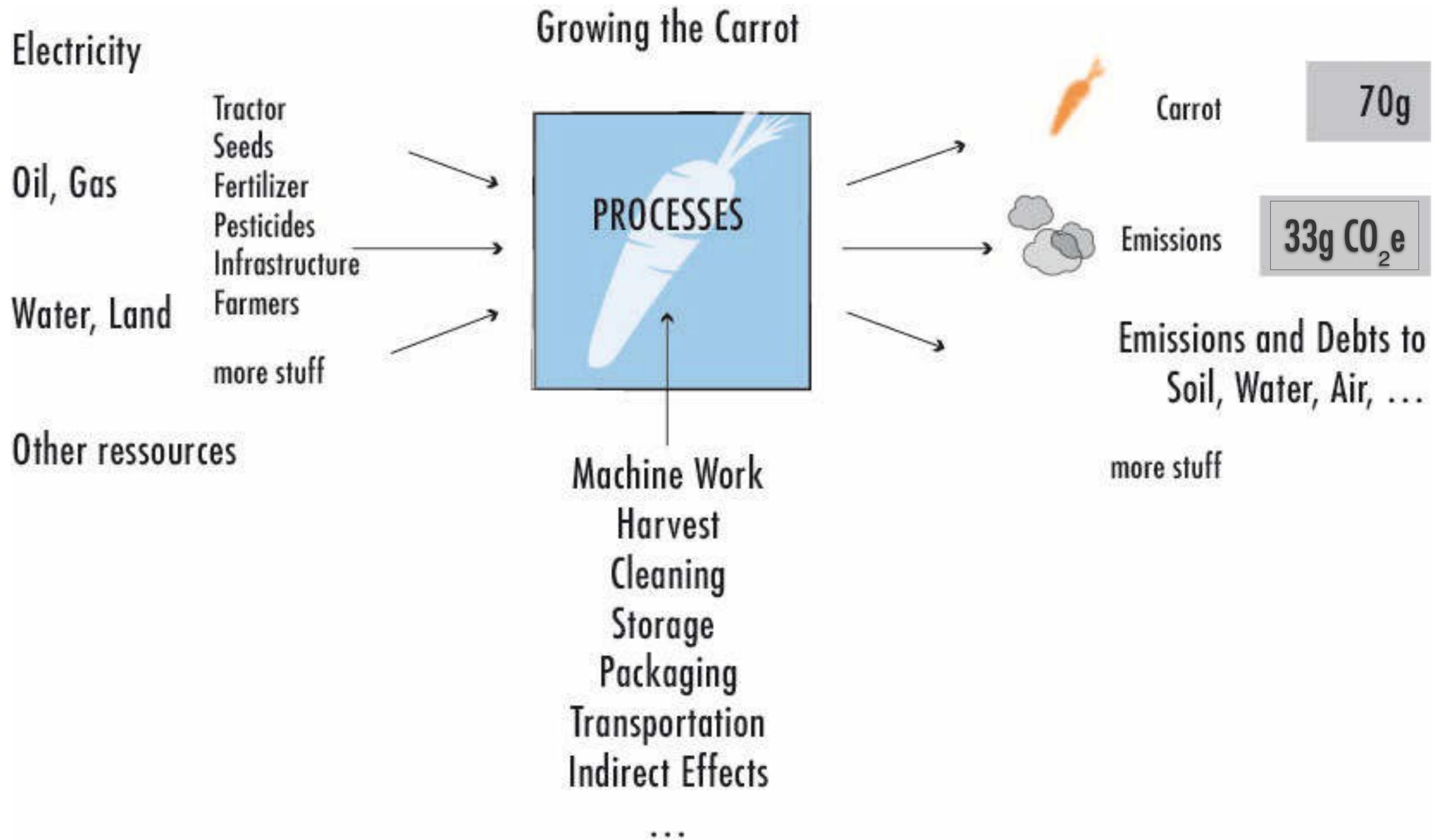


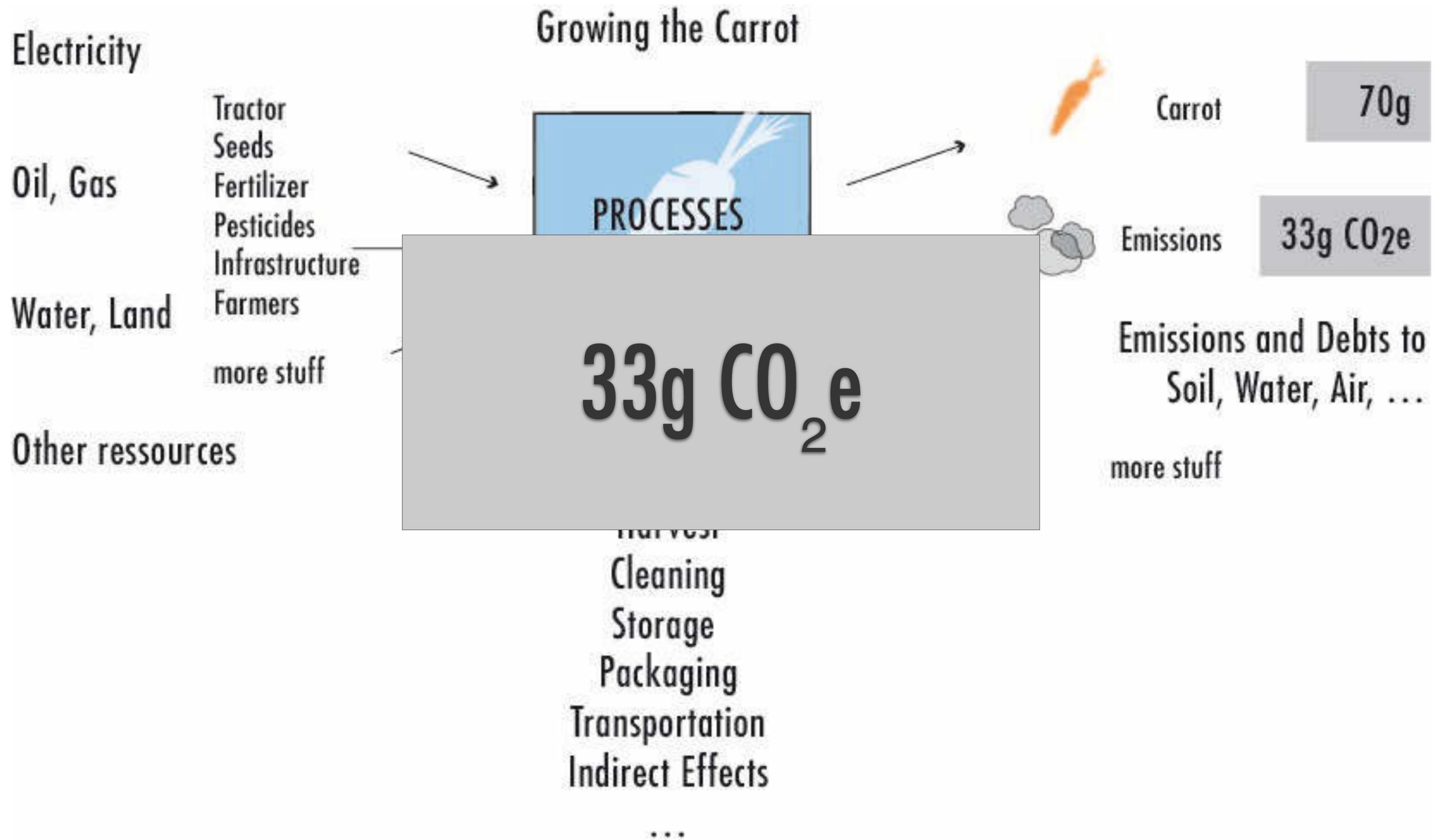


von: <https://philipp-bruck.de/2021/02/ernaehrungswende-klimaschutz/>

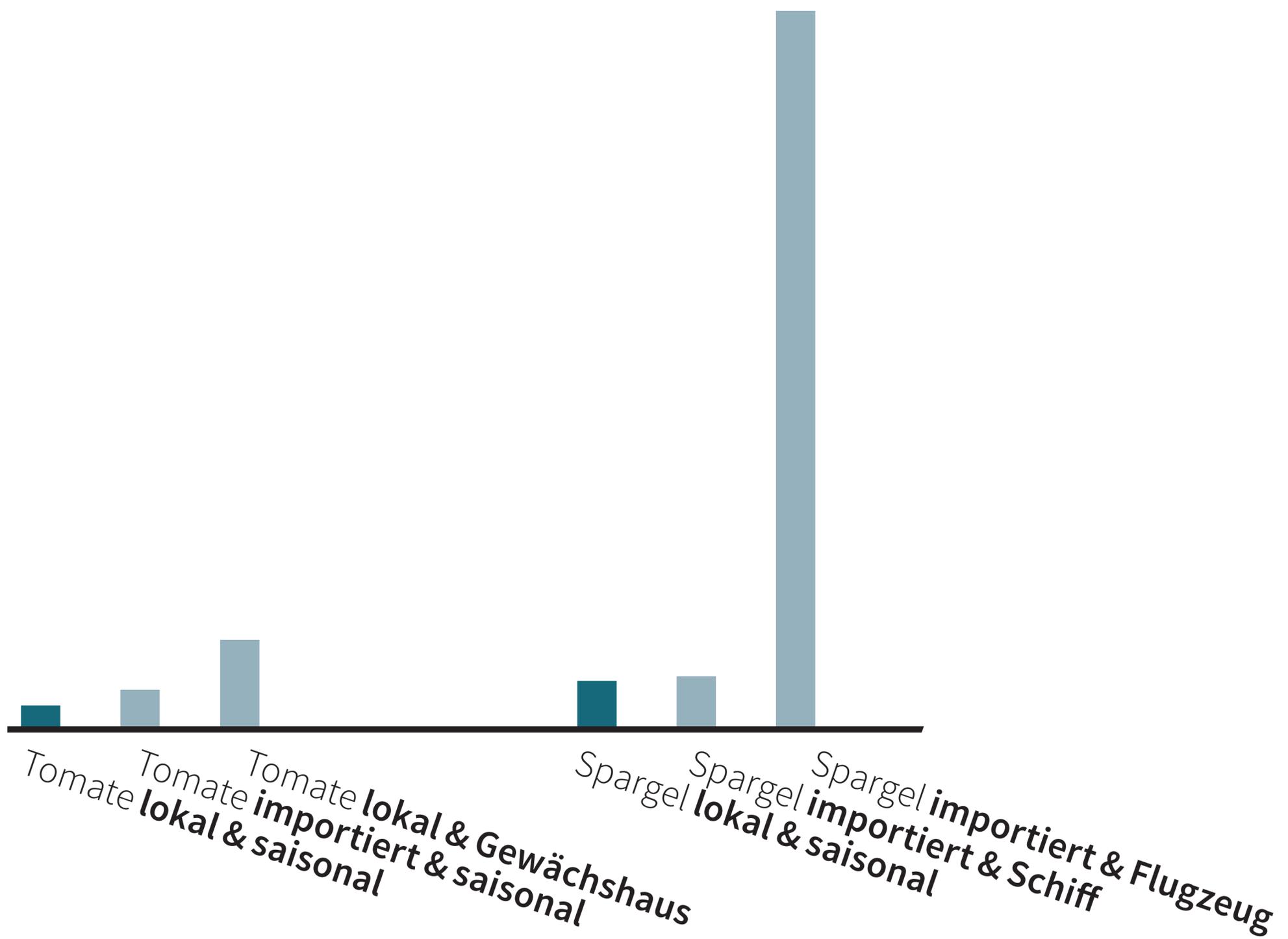
Berechnungsgrundlagen

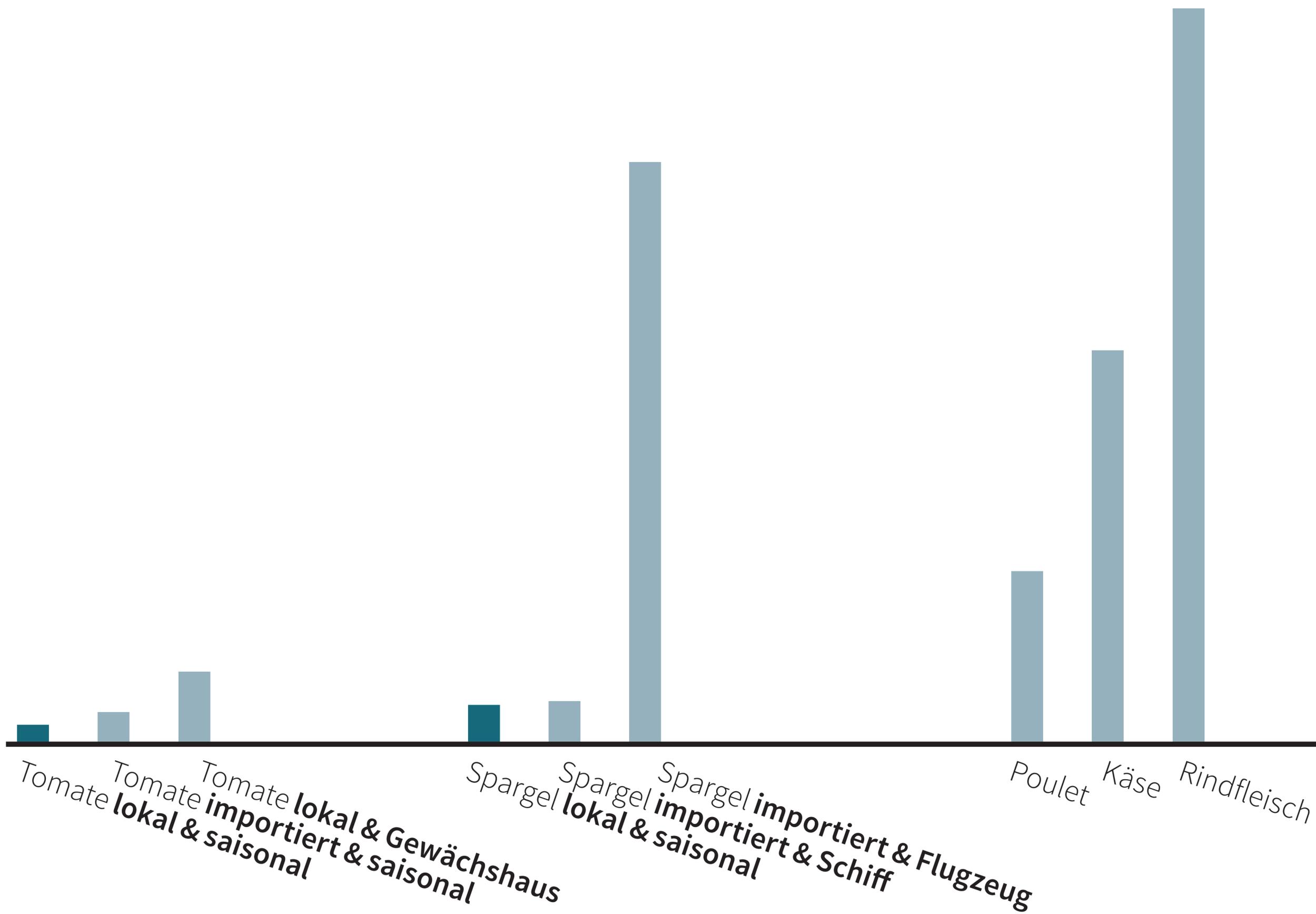












EDB

Eaternity Database



Versandort: 14.51978004632611 /
76.81640625

Zusammenfassung: 7.479,79 km

Export als KML-Datei (Google Earth)

Klasse: Dry

Route Transport service 2 Schließen

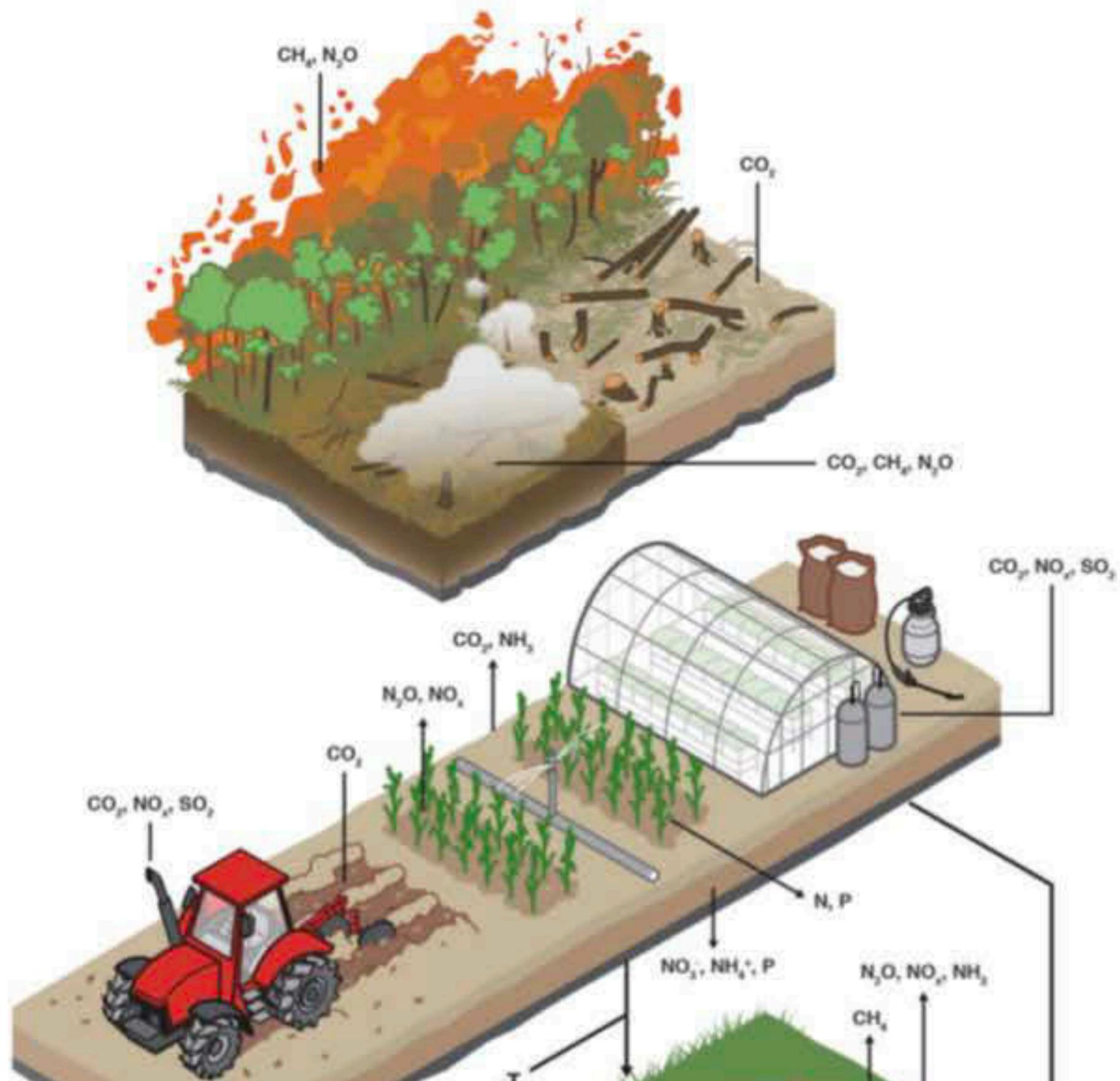


- Lkw
- Zug
- Flugzeug
- Seeschiff
- Binnenschiff

Landerspezifische Distanzen in [km]

India: 525,61

International: 8 475,36



Included

Excluded

Land Use Change

- Above ground C stock change (CO_2)
- Below ground C stock change (CO_2)
- Forest burning (CH_4 , N_2O)
- Organic soil burning (CO_2 , CH_4 , N_2O)

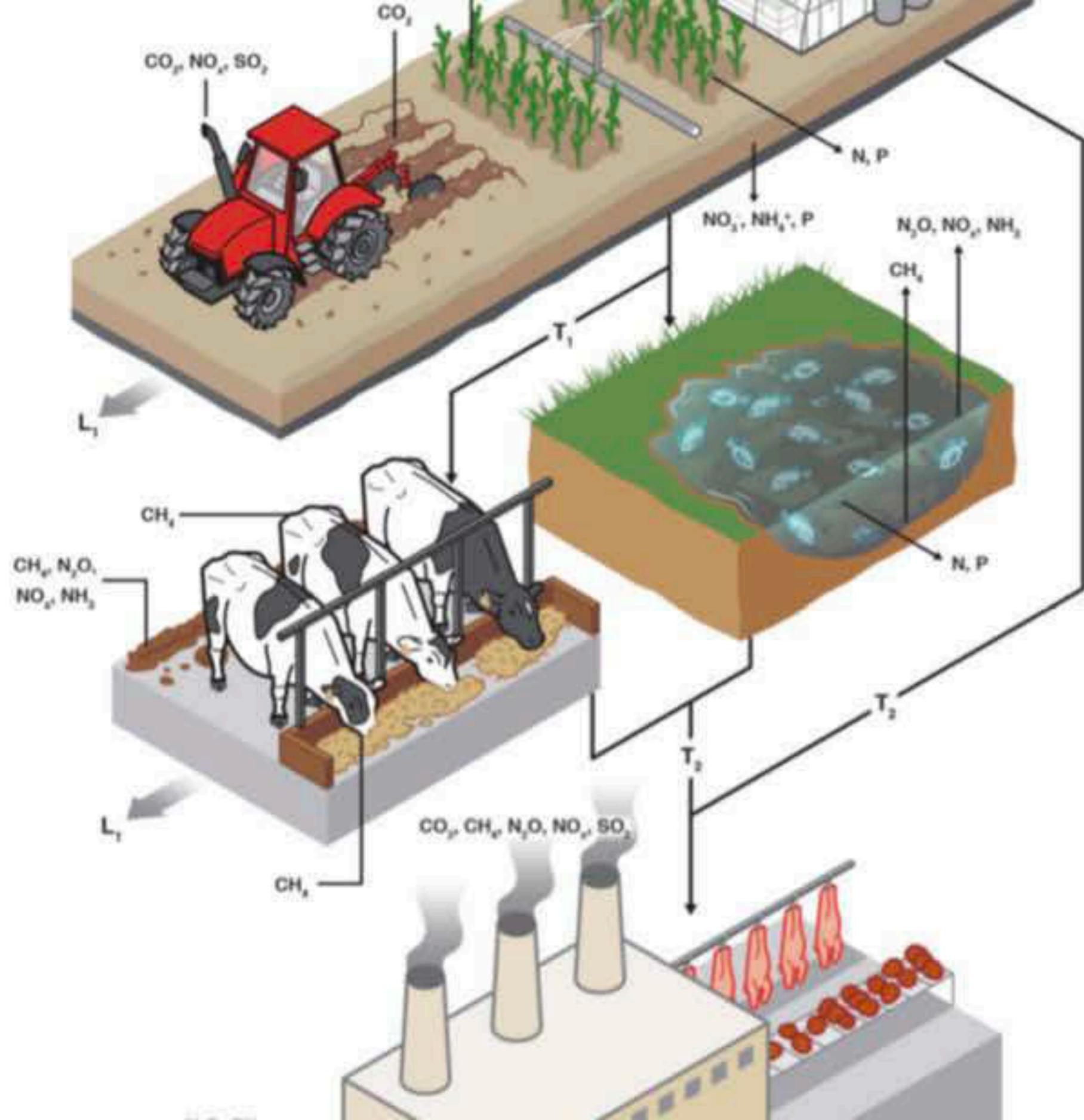
- Leaching, runoff and induced non- CO_2 emissions

Crop Production

- Seed & nursery
- Inputs production
- Machinery
- Greenhouse & trellis infrastructure
- Electricity & fuel
- Fertilizer & retained crop residue (N_2O , NH_3 , NO_x , NO_2 , NH_4^+ , P , N)
- Urea & lime (CO_2)
- Flooded rice (CH_4)
- Residue burning (CH_4 , N_2O , NH_3 , NO_2)
- Cultivation of drained organic soils (CO_2 , N_2O)
- Drying / grading
- Irrigation water consumption

- Soil emissions (CH_4)
- Organic fertilizer application (CH_4)
- N fixation emissions
- C sequestration in crop residue
- Runoff (N)
- Residue burning indirect emissions (N_2O)
- Human labour

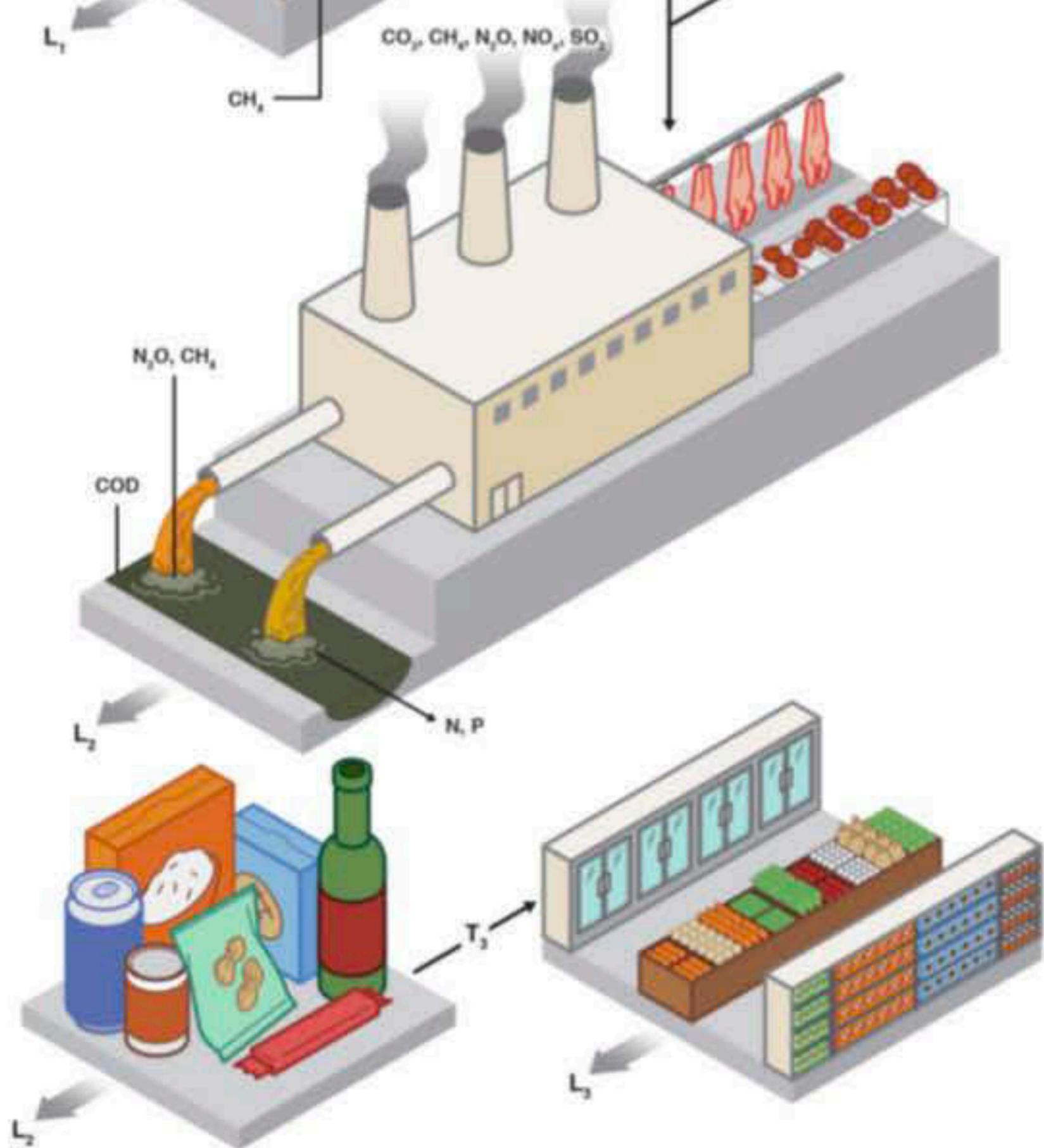
Land use: seed; fallow; arable and permanent crops



- $(\text{N}_2\text{O}, \text{NH}_3, \text{NO}_x, \text{NO}_3^-, \text{NH}_4^+, \text{P}, \text{N})$
 - Urea & lime (CO_2)
 - Flooded rice (CH_4)
 - Residue burning ($\text{CH}_4, \text{N}_2\text{O}, \text{NH}_3, \text{NO}_x$)
 - Cultivation of drained organic soils ($\text{CO}_2, \text{N}_2\text{O}$)
 - Drying / grading
 - Irrigation water consumption
 -
 - Land use: seed; fallow; arable and permanent crops
- Runoff (N)
 - Residue burning indirect emissions (N_2O)
 - Human labour

- ### Livestock/Aquaculture
- Pasture management (same as for food/feed)
 - Feed processing
 - Housing energy use
 - Enteric fermentation (CH_4)
 - Manure management ($\text{N}_2\text{O}, \text{NO}_x, \text{NH}_3, \text{CH}_4$)
 - Aquaculture ponds ($\text{N}, \text{P}, \text{N}_2\text{O}, \text{NO}_x, \text{NH}_3, \text{CH}_4$)
 - Drinking & service water
 -
 - Land use: permanent pasture; temporary pasture; aquaculture ponds
- Infrastructure
 - Pasture residue (emissions or burning)
 - Pasture N fixation emissions
 - Pasture runoff (N)
 - Manure management (P)
 - Human labour

- ### Processing
- Energy ($\text{CO}_2, \text{NO}_x, \text{SO}_2$)
 - Wood burning ($\text{CH}_4, \text{N}_2\text{O}, \text{NO}_x, \text{SO}_2$)
 - Wastewater ($\text{CH}_4, \text{N}_2\text{O}, \text{P}, \text{N}, \text{COD}$)
 - Incineration ($\text{CH}_4, \text{N}_2\text{O}, \text{NO}_x, \text{SO}_2$)
 - Processing water consumption
- Miscellaneous inputs
 - Human labour
 - Infrastructure
 - Land use



Processing

- Energy (CO₂, NO_x, SO₂)
- Wood burning (CH₄, N₂O, NO_x, SO₂)
- Wastewater (CH₄, N₂O, P, N, COD)
- Incineration (CH₄, N₂O, NO_x, SO₂)
- Processing water consumption

- Miscellaneous inputs
- Human labour
- Infrastructure
- Land use

Packaging

- Materials
- Material transport
- End of life disposal

- Human labour
- Infrastructure
- Land & water use

Retail

- Energy use

- Human labour
- Infrastructure
- Land & water use

Losses

- L₁ - Storage and transport
- L₂ - Processing and packaging
- L₃ - Wholesale and retail

Transport (CO₂, NO_x, SO₂)

- T₁ - Feed
- T₂ - Food
- T₃ - Processed food



Eaternity App

The screenshot displays the Eaternity App interface on a mobile device. The top navigation bar includes a back arrow, the text "Collection", a "Recipe" tab, a blue "Done" button, and a share icon. Below the navigation, there is a recipe card for "THE DELIGHTFUL CLASSIC" with a photo of a banana and a green leaf. The ingredients list, labeled "Zutaten", includes: Cashews (India/organic) 88 g, Coconutoil (organic) 33 g, Yeasts 2.5 g, and Rose crystal salt 2.5 g. An "Add new row" button is located at the bottom of the ingredients list. On the right side, a "Sustainability Rating" panel is open, showing a grid of four categories: Climate (565 g CO₂, 5 stars), Water (845 liter, 4 stars), Animal Welfare (vegan, 5 stars), and Rainforest (protected, 5 stars). Below this, a "VALUES PER PORTION" section lists: Costs (€ 5.99), Nutrients (670 kcal), Allergens (Cashews), Climate (5 CO₂ icons), Water (5 water drop icons), Environment (5 icons: cow, tree, sun, location pin, heart), and Weight (125 g).

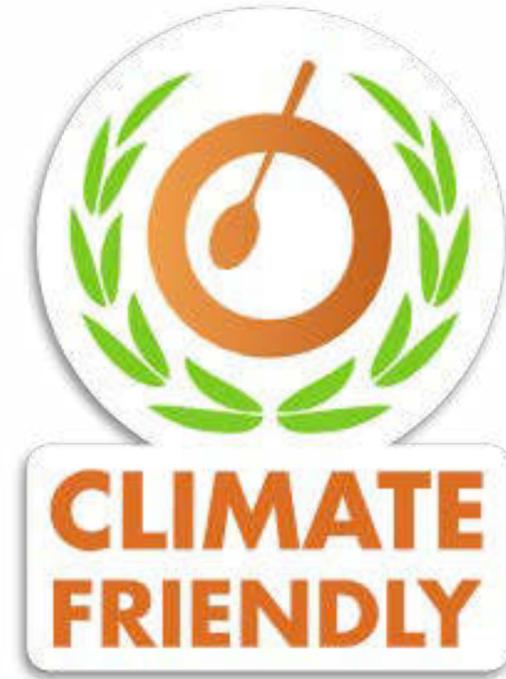
app.eaternity.ch

6%
LESS CO₂-Emissions

awarded 😊 😊

GOOD 😊

more CO₂ than an average



This restaurant
37,200 kg^{CO₂}

All restaurants
39,500 kg^{CO₂}



∅ meals of this restaurant
1,930 g^{CO₂}

∅ meals of all restaurants
1,715 g^{CO₂}



∅ climate-friendly meals
528 g^{CO₂}



I EAT FOR A
HEALTHY
WORLD!

Monthly CO₂ - report
YOUR RESTAURANT



Restaurant CO₂ - Emissions February 2016

This month you caused **6% LESS** CO₂ emissions than the average restaurant in your category – you are one of the most climate-friendly restaurants.

6%
LESS CO₂-Emissions



awarded 😊 😊
GOOD 😊
more CO₂ than an average

Which restaurants are you compared with?

■ All restaurants

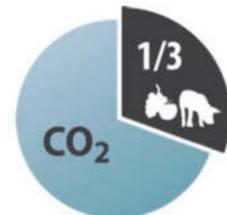
135 comparable restaurants, categorized by the size of the business in regard to the total number of guests (basis of 830kcal per guest).

■ Climate-Friendly Restaurants

The top 20 percent of the "All Restaurants" group.

What is 1 kg CO₂ - emissions?

Burning half a litre of petrol creates 1kg of CO₂ emissions. An oak tree binds up around 20kg of CO₂ per year. By eating climate-friendly food three times a week for a year, one person reduces CO₂ emissions by the same amount as ten oak trees could in the same period.



Food causes 1/3 of our CO₂ - emissions.



Apply the Eaternity Award to encourage a climate-friendly meal choice.

I EAT FOR A
HEALTHY
WORLD!

Meal certificate
SIEMENS



Meal CO₂ - Emissions February 2016



Take notice of the Eaternity Award when you choose your meal.



∅ climate-friendly meals
528 g^m



∅ meals of this restaurant
1,930 g^m

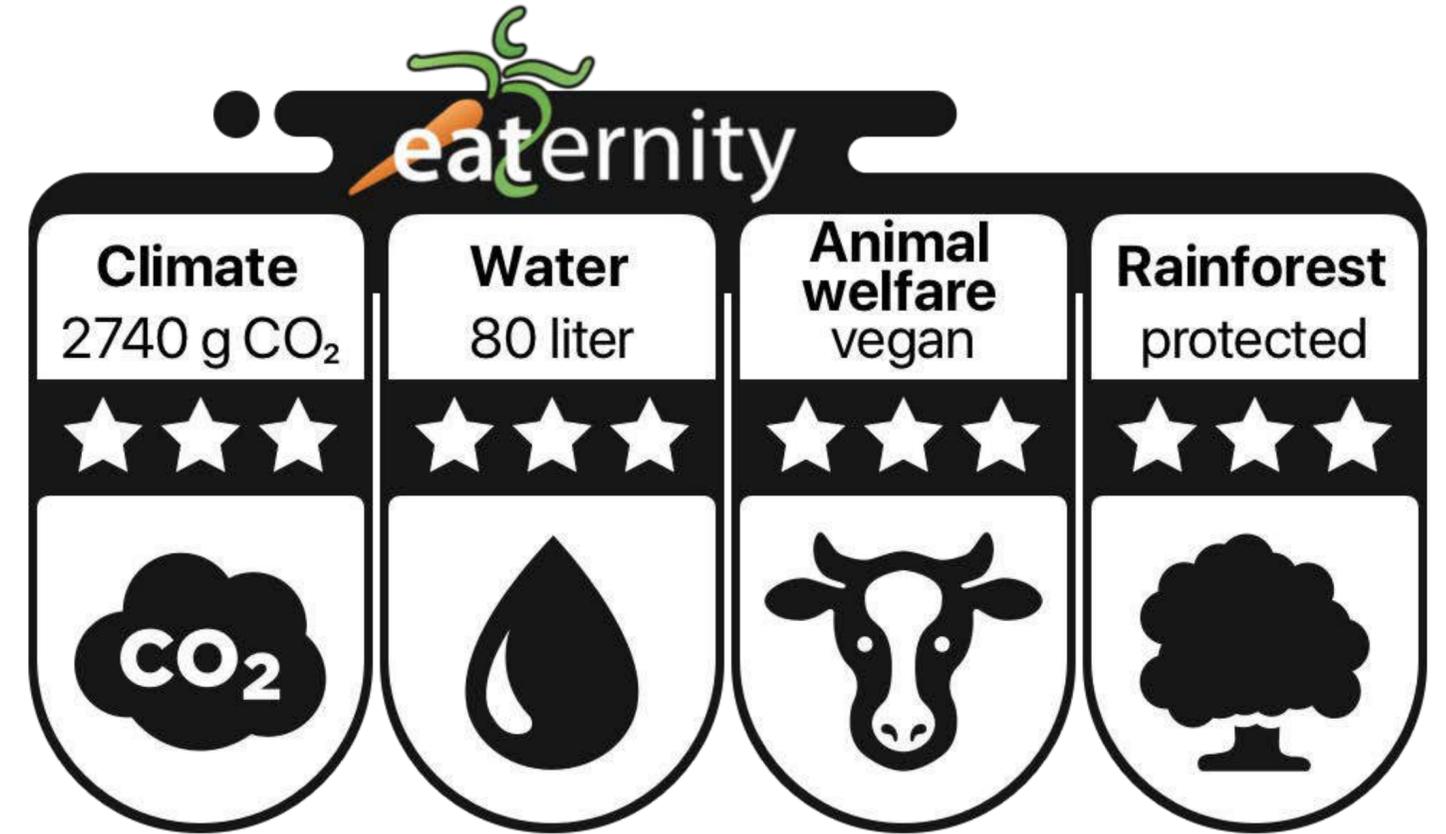
∅ meals of all restaurants
1,715 g^m



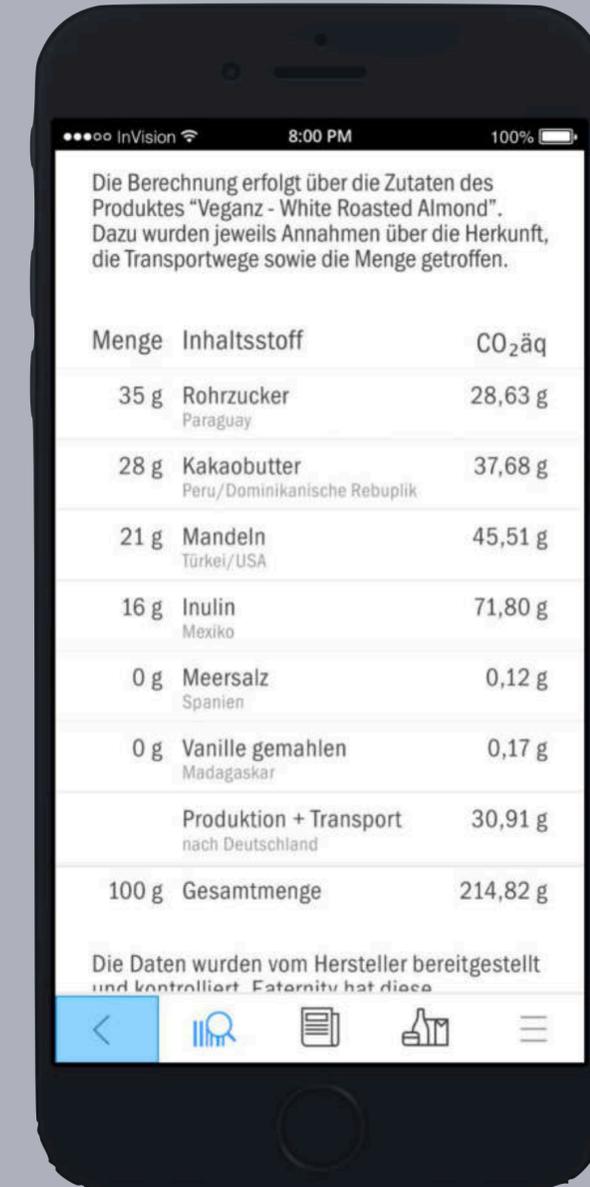
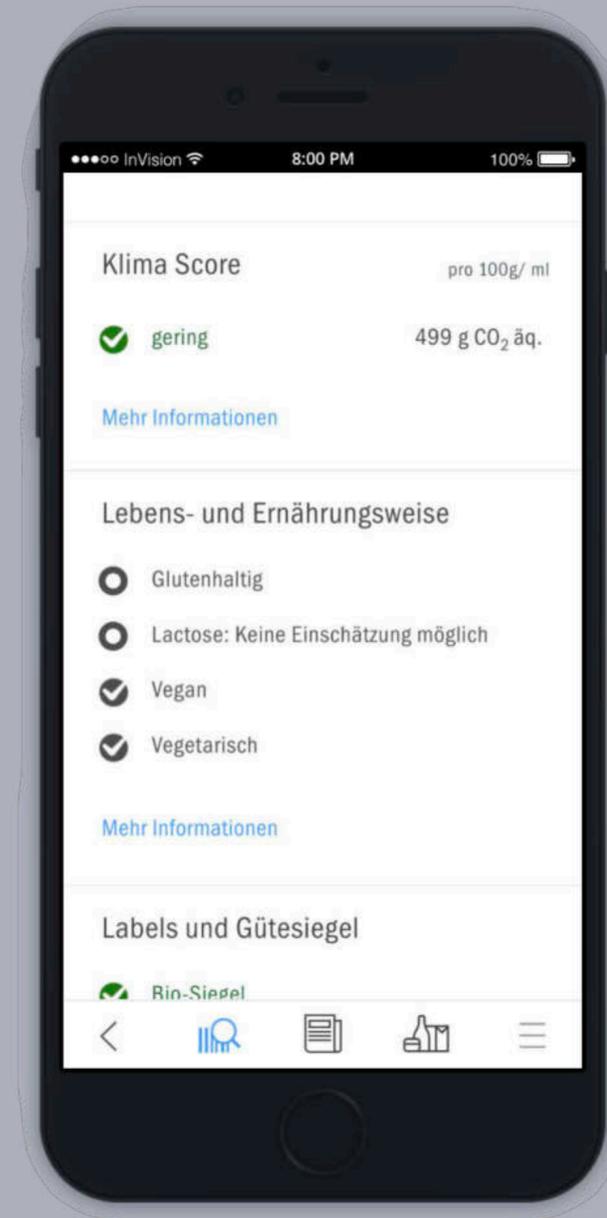
Meals are awarded as climate-friendly if they belong to the top 20% of all meals being served. In this restaurant the climate-friendly meals have **69% LESS** CO₂ than the average meal.

eaternity
Appetite for Change

Supermarkt



Supermarkt



Scanne den Barcode mit der Codecheck App - 2020



Apfelmus
Fruchtsalate & gesch...
★★★★★
Bewerten

Inhaltsstoffe

- 1 Übermäßiger Verzehr kann problemat...
- 1 Unbedenklich

Mehr Informationen

Nährwert-Ampel

gering	Fett	pre 100g/ml (FSA)
gering	Gesättigte Fette	0.5 g
hoch	Zucker	18 g
gering	Salz	0.5 g

Klima Score

gering

pre 100g/ml
70 g CO₂ äq.











„Wir übernehmen Verantwortung, nicht weil wir zuständig sind. Sondern weil wir können.“



3 klimafreundliche Gerichte pro
Woche =

1 Millionen
Tonnen CO₂
weniger in CH
pro Jahr

Koche clever für deine Liebsten.

