

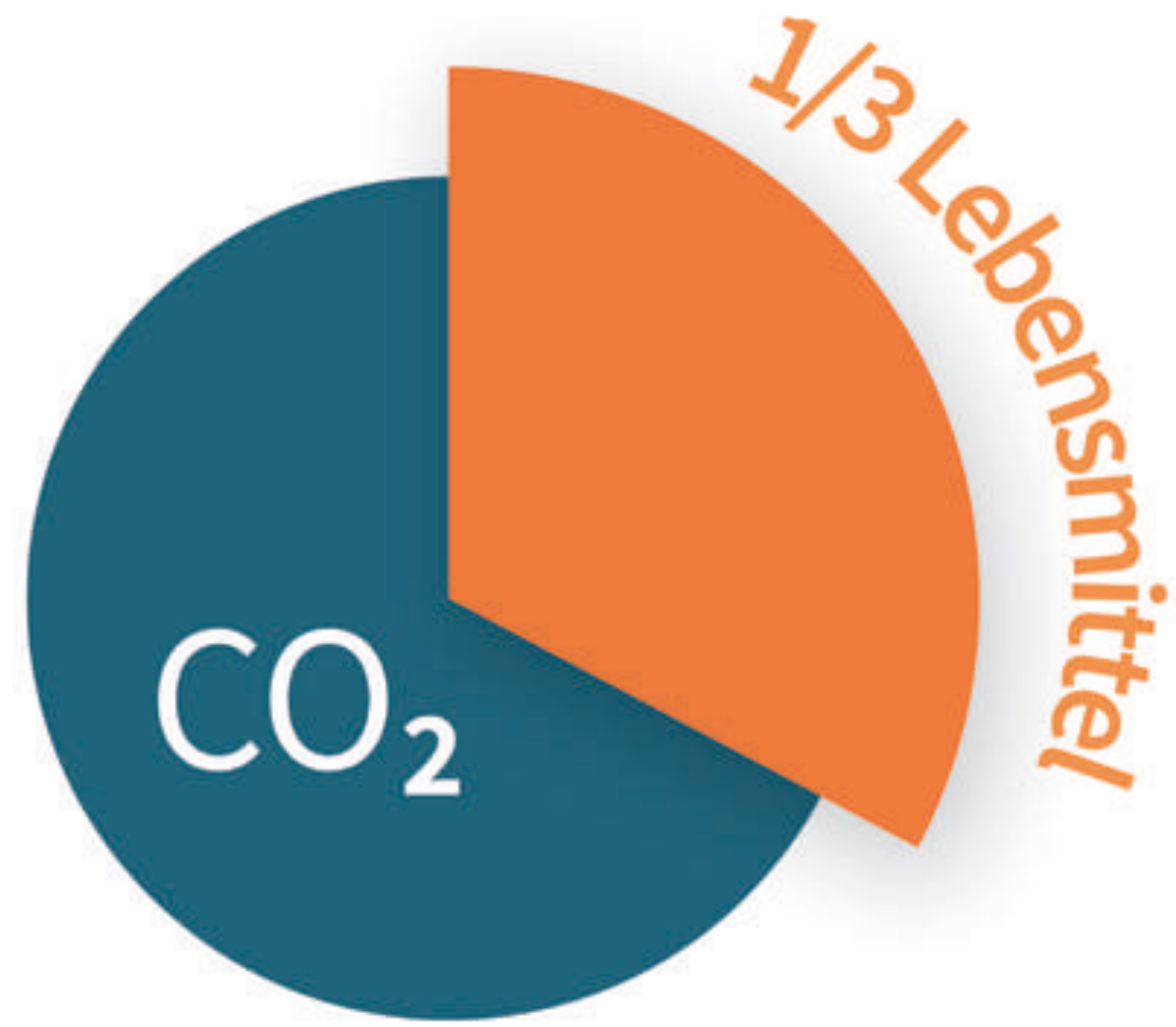
# Pionierarbeit: Klima & Ernährung



Manuel Klarmann

29. August 2018

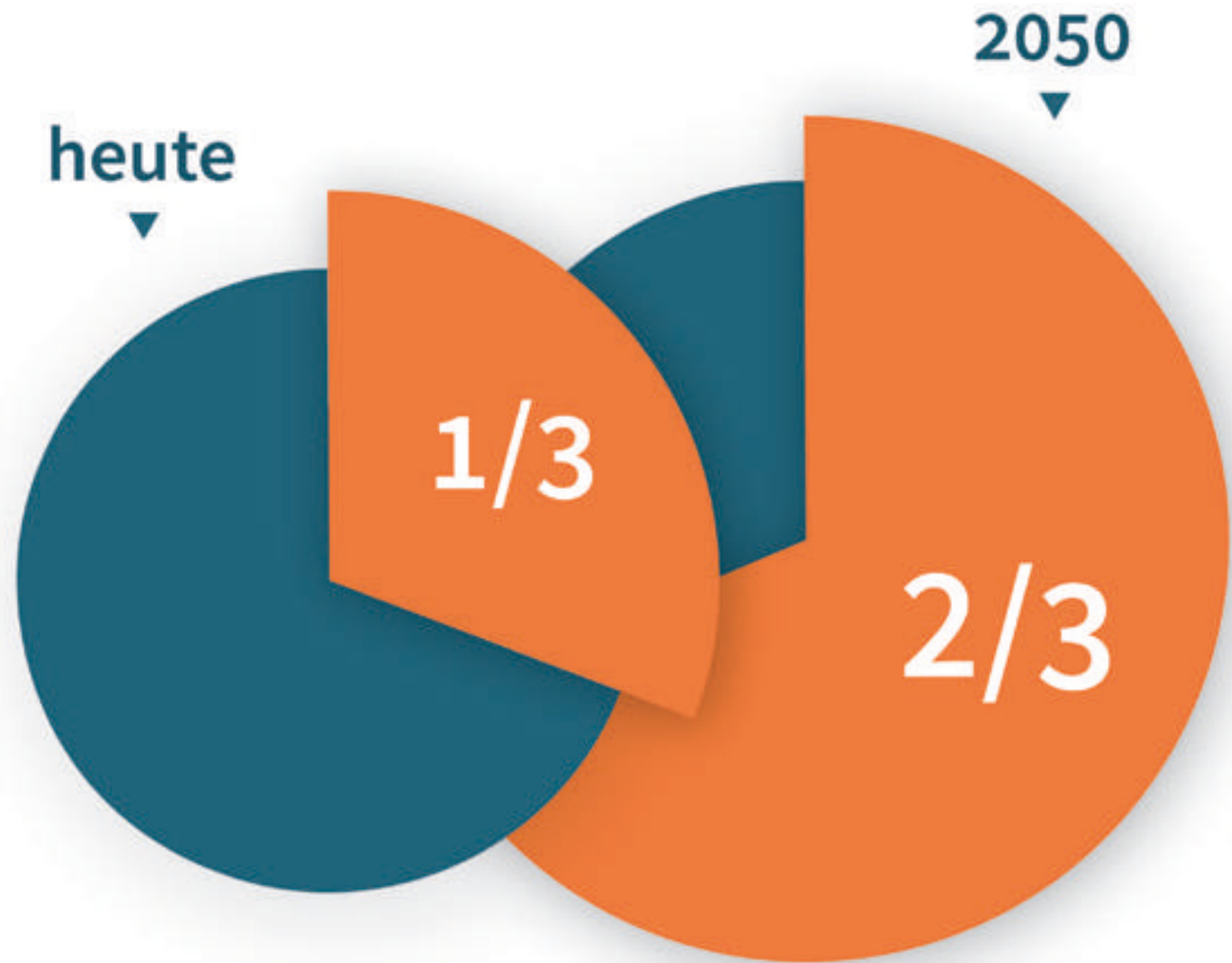
[www.eaternity.org](http://www.eaternity.org)  
[mklarmann@eaternity.ch](mailto:mklarmann@eaternity.ch)  
+41 77 44 66 981  
@mklarmann





**500 Millionen Menschen**





20%

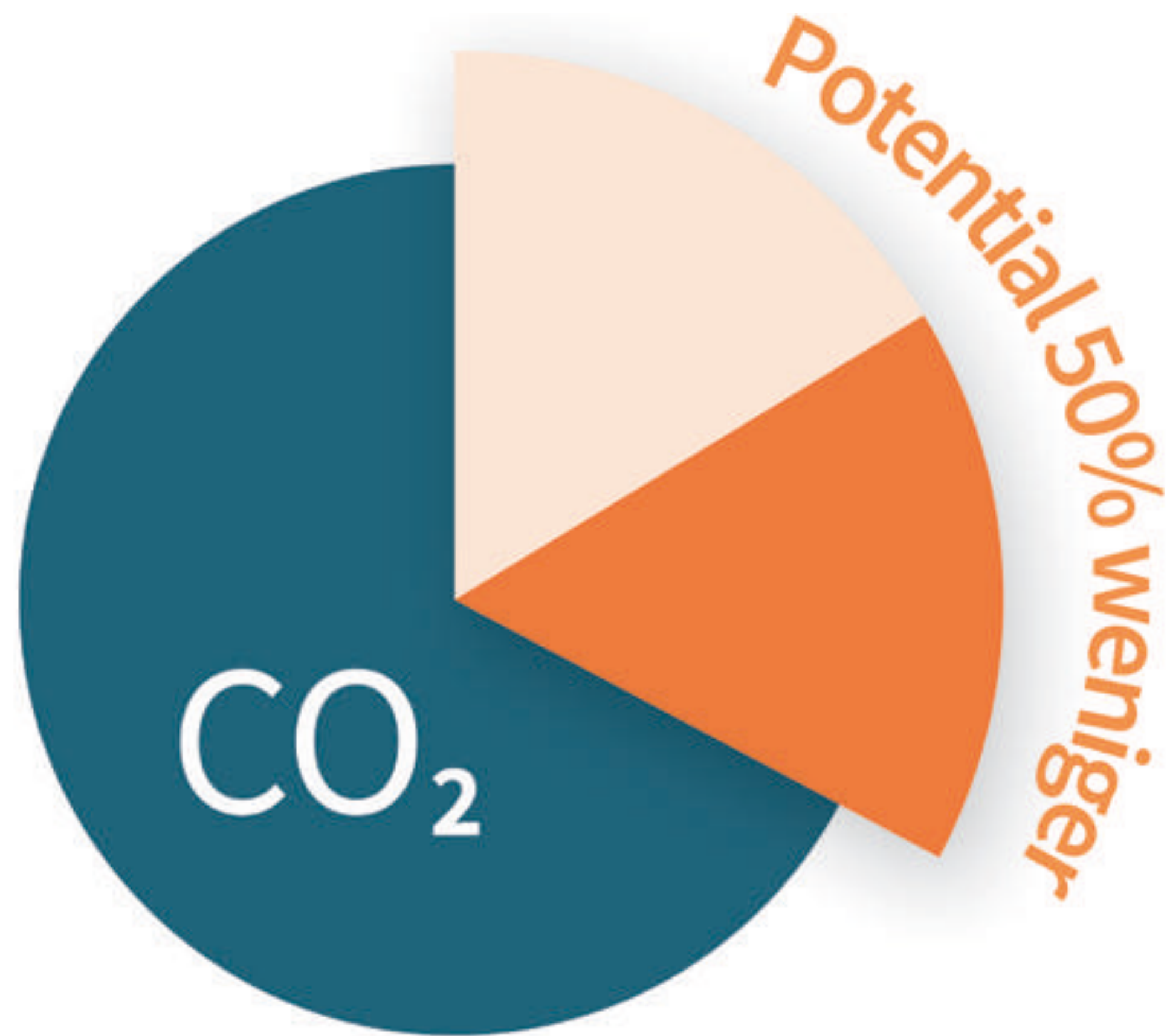
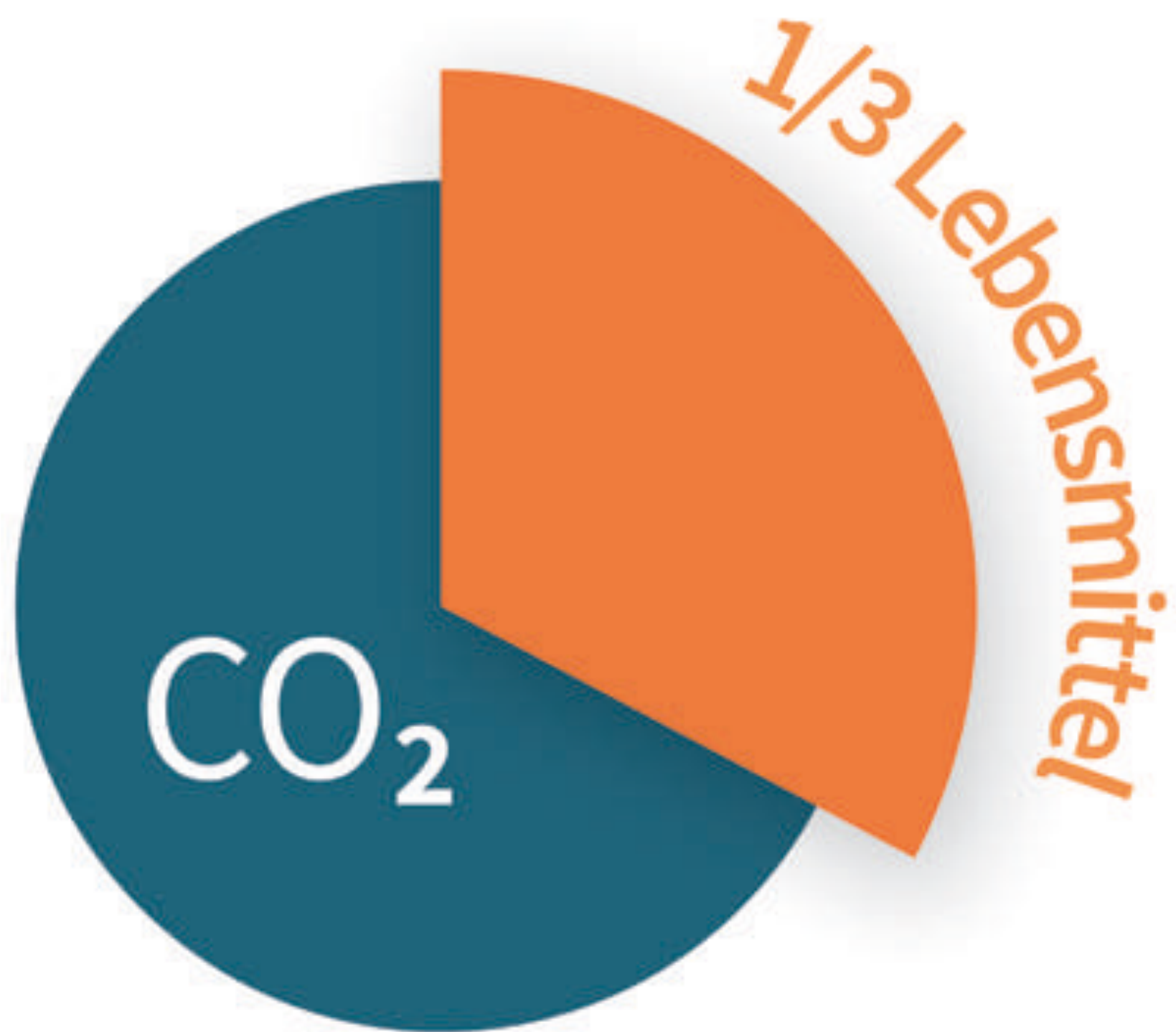
weltweiter Bevölkerungszuwachs in 30 Jahren

A row of 10 human icons. The first 8 are orange, and the last 2 are green. The text '20%' is positioned to the right of the green icons, and the text 'weltweiter Bevölkerungszuwachs in 30 Jahren' is written below the row.

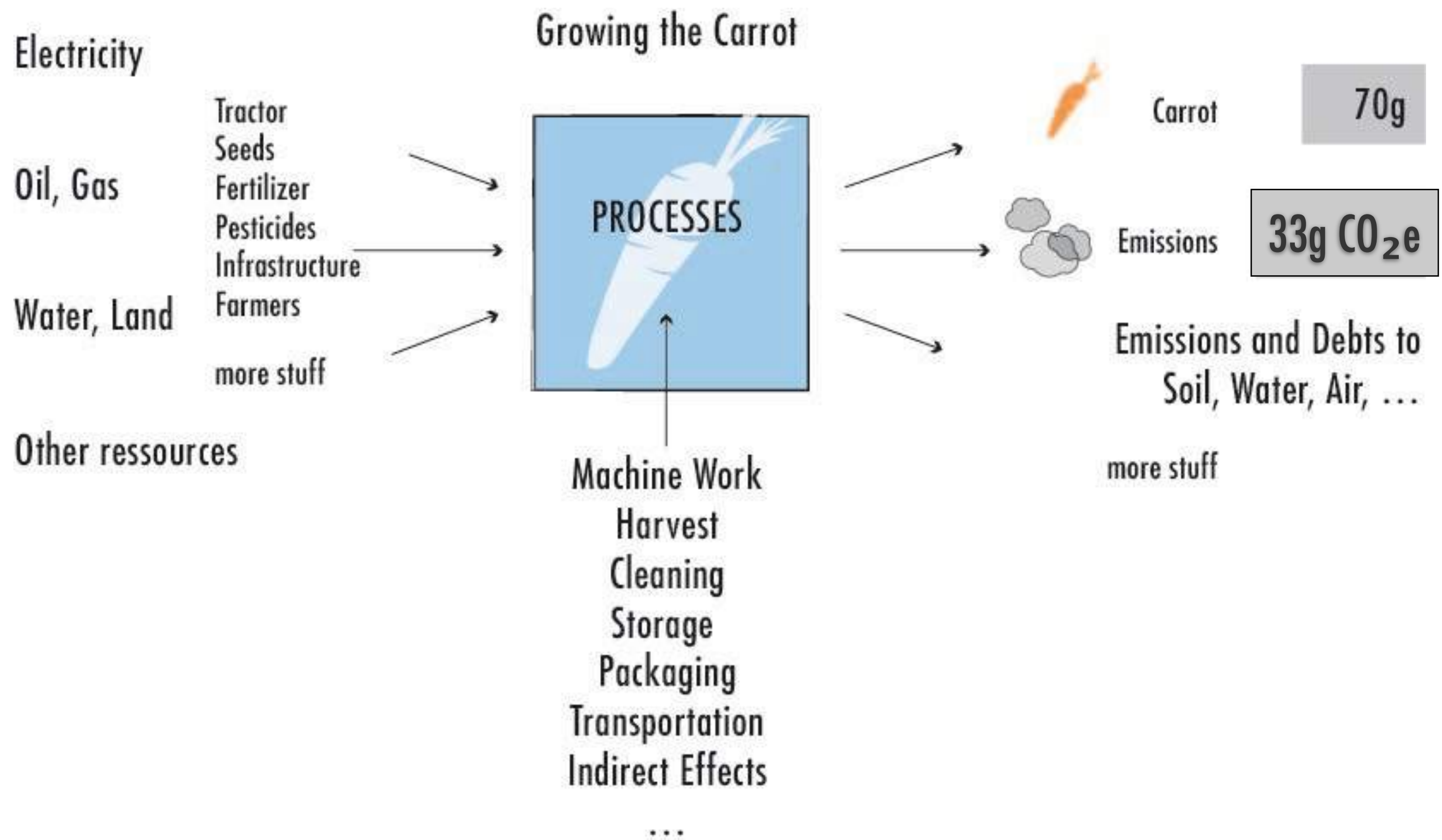
20%

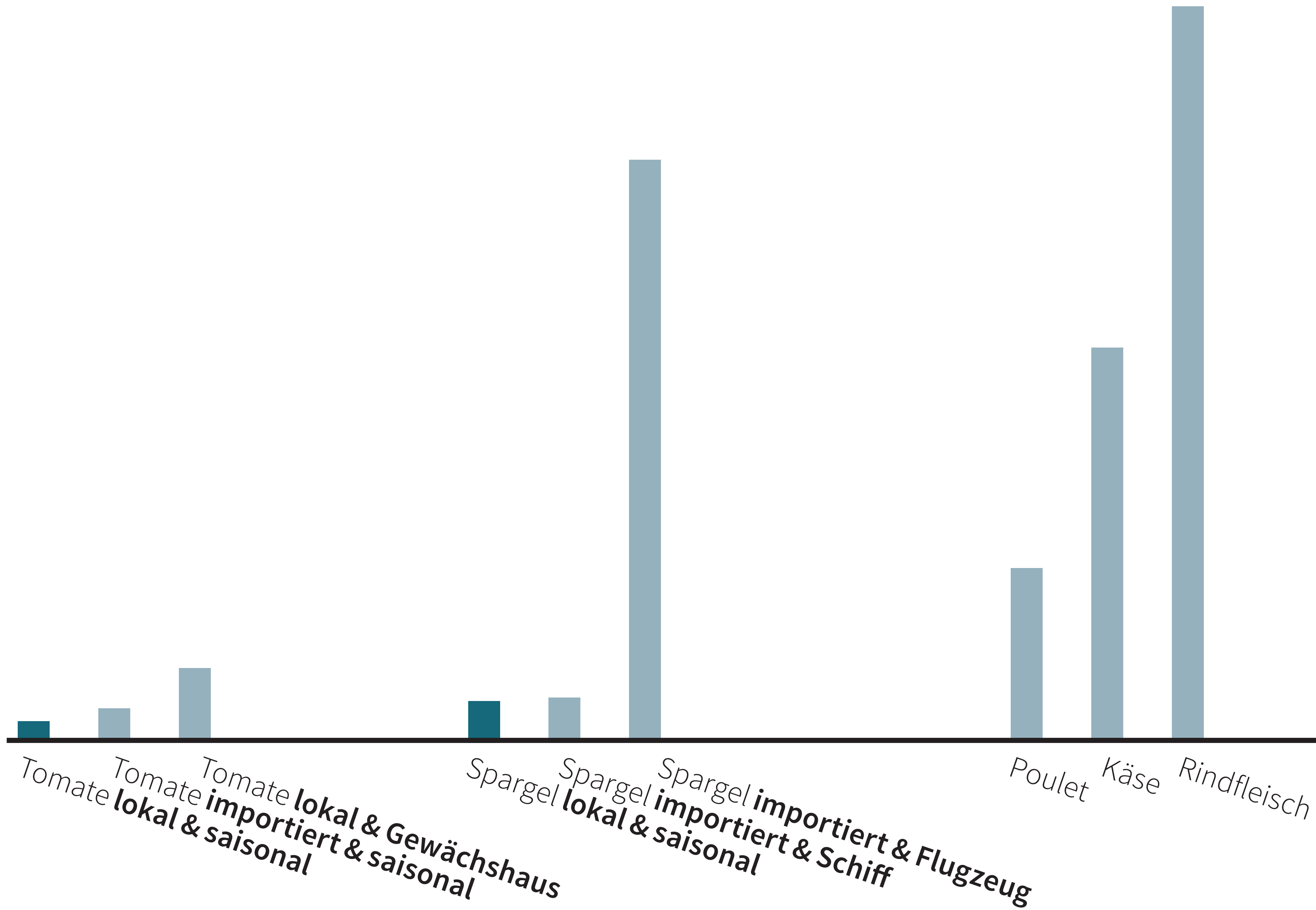
Potentielle, durch den Klimawandel verursachte Ertragseinbuße bei Grundnahrungsmitteln

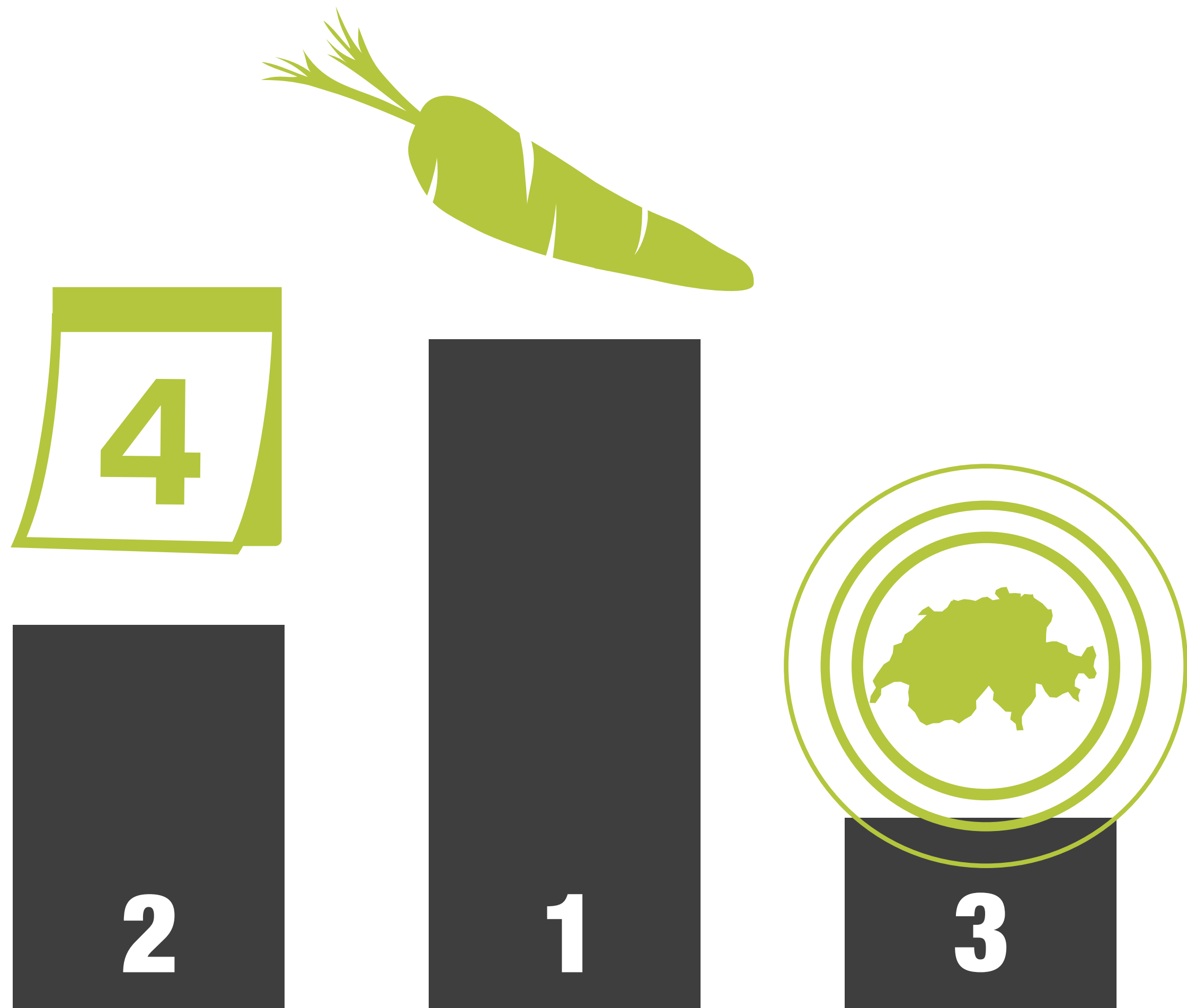
A row of 10 wheat stalk icons. The first 8 are green, and the last 2 are grey. The text '20%' is positioned to the right of the grey stalks, and the text 'Potentielle, durch den Klimawandel verursachte Ertragseinbuße bei Grundnahrungsmitteln' is written below the row.





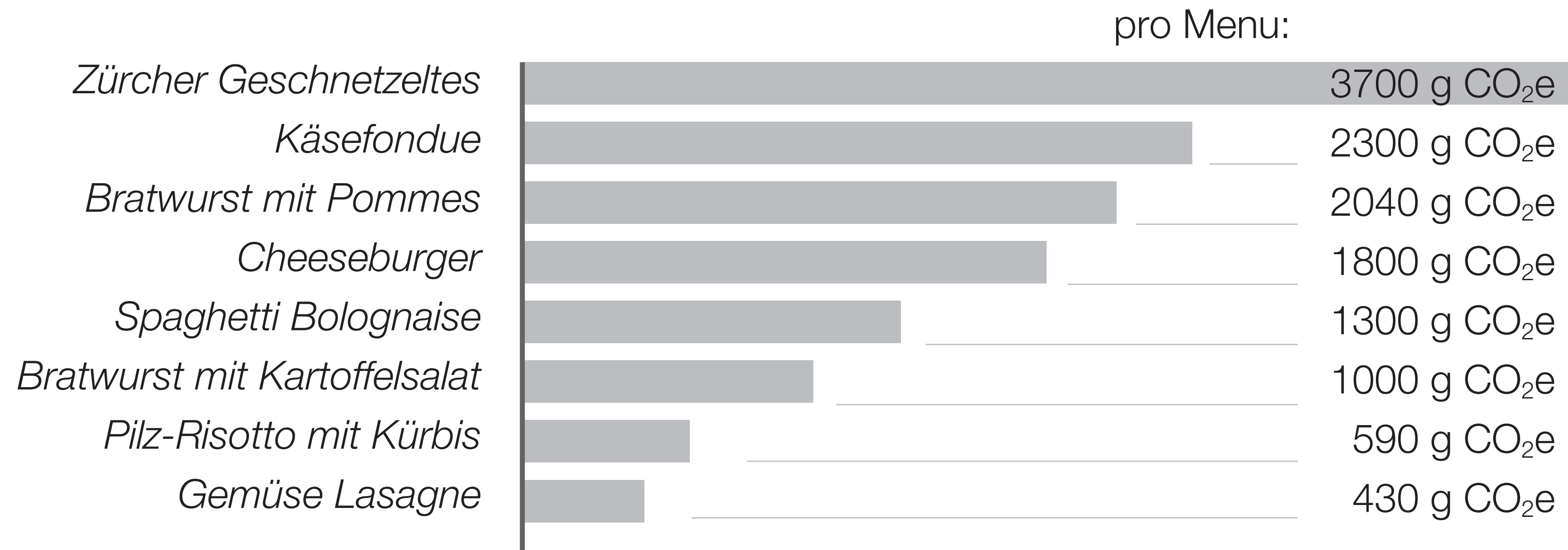








## Die Klimabilanz von Cheeseburger, Fondue und Co.





EDB

Eaternity Database



**6%**  
LESS CO<sub>2</sub>-Emissions

awarded 😊 😊

**GOOD** 😊

more CO<sub>2</sub> than an average



This restaurant  
**37,200 kg<sup>CO<sub>2</sub></sup>**

All restaurants  
**39,500 kg<sup>CO<sub>2</sub></sup>**



Ø meals of this restaurant  
**1,930 g<sup>CO<sub>2</sub></sup>**

Ø meals of all restaurants  
**1,715 g<sup>CO<sub>2</sub></sup>**



Ø climate-friendly meals  
**528 g<sup>CO<sub>2</sub></sup>**







Spezialitäten



Gesund und gut

A woman in a black and white striped long-sleeved shirt stands in the foreground, looking towards the buffet line.

A woman in a black jacket over a red and white striped shirt is selecting food from the buffet counter.

A woman in a black puffer jacket over a red shirt is selecting food from the buffet counter.

A woman with blonde hair is selecting food from the buffet counter.

A man is selecting food from the buffet counter.

A chef in a white uniform and hat is working in the kitchen area.

Stacks of white plastic containers and black plates on the buffet counter.

A white plate on the buffet counter.

Stacks of white plates on the buffet counter.

Stacks of yellow plates on the buffet counter.

A grey cloth on the buffet counter.



I EAT FOR A HEALTHY WORLD!

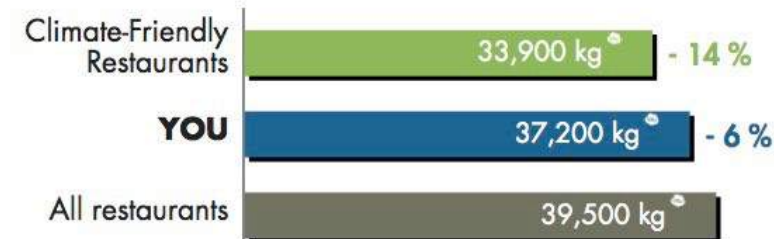
Monthly CO<sub>2</sub> - report  
YOUR RESTAURANT



### Restaurant CO<sub>2</sub> - Emissions February 2016

This month you caused **6% LESS** CO<sub>2</sub> emissions than the average restaurant in your category – you are one of the most climate-friendly restaurants.

**6%**  
LESS CO<sub>2</sub>-Emissions



awarded 😊 😊

▶ **GOOD** 😊

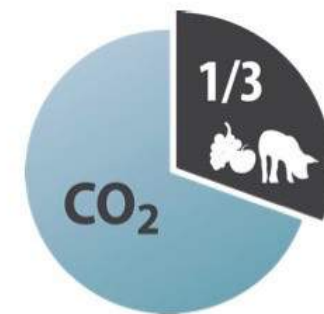
more CO<sub>2</sub> than an average

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 CO<sub>2</sub> - emissions?

Burning half a litre of petrol creates 1kg of CO<sub>2</sub> emissions. An oak tree binds up around 20kg of CO<sub>2</sub> per year. By eating climate-friendly food three times a week for a year, one person reduces CO<sub>2</sub> emissions by the same amount as ten oak trees could in the same period.



Food causes 1/3 of our CO<sub>2</sub> - emissions.



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

I EAT FOR A HEALTHY WORLD!

Meal certificate  
SIEMENS



### Meal CO<sub>2</sub> - Emissions February 2016



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



∅ climate-friendly meals  
**528 g<sup>CO<sub>2</sub></sup>**



∅ meals of this restaurant **1,930 g<sup>CO<sub>2</sub></sup>**  
∅ meals of all restaurants **1,715 g<sup>CO<sub>2</sub></sup>**



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** CO<sub>2</sub> than the average meal.







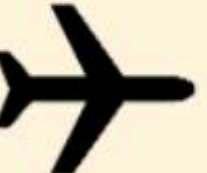
# Die 6 Personalrestaurants

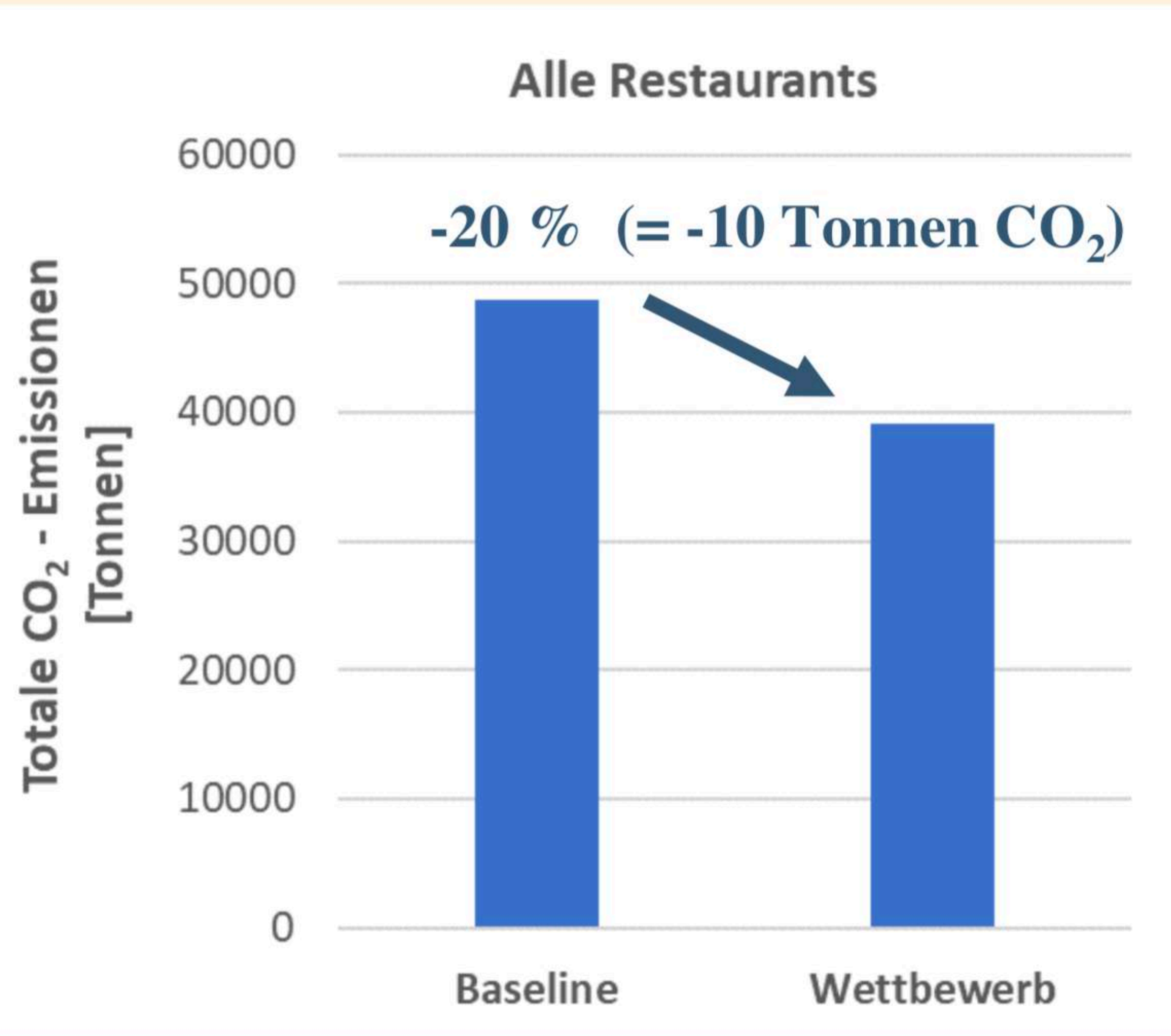


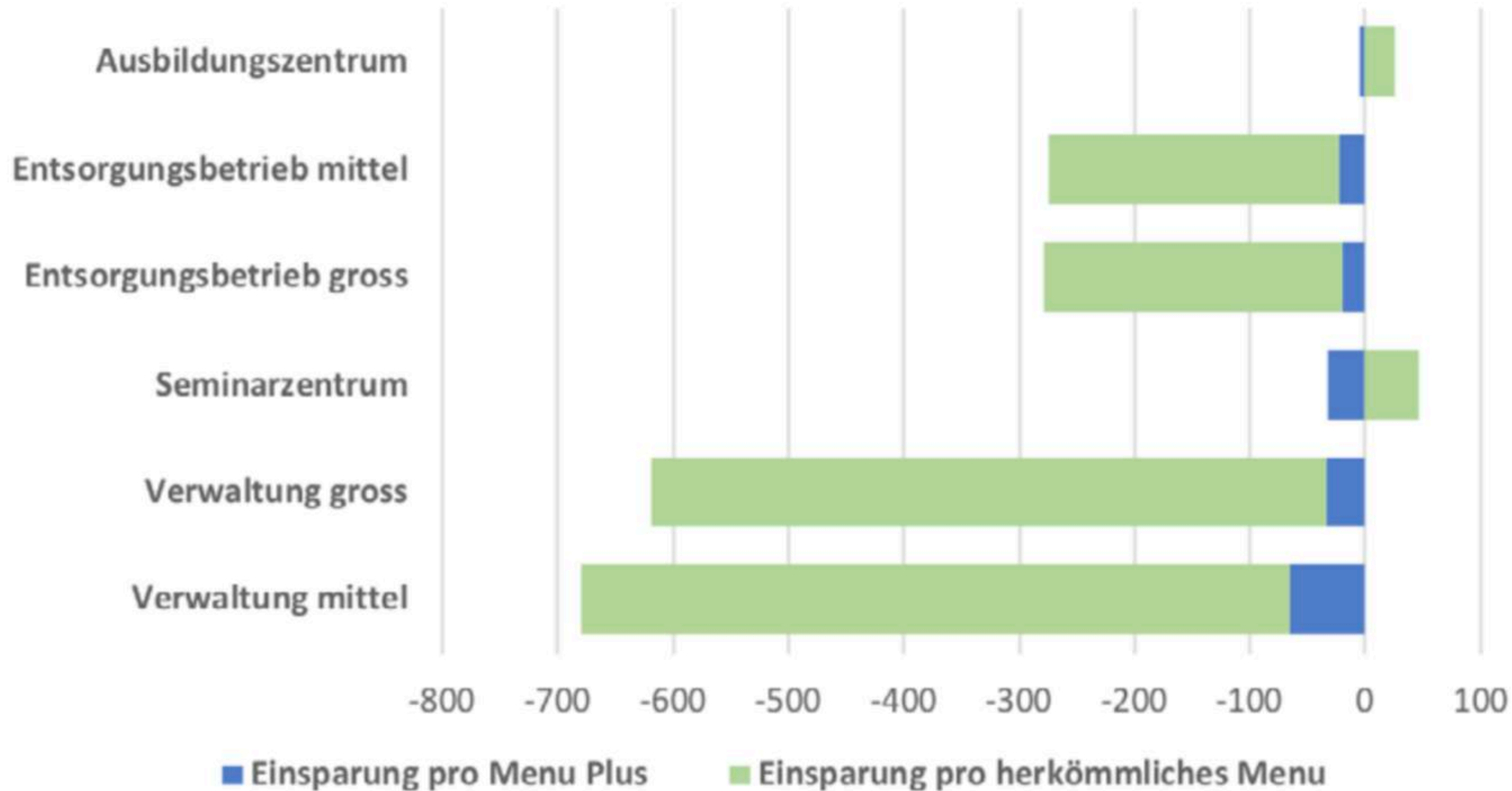


**Wir haben gemeinsam 10  
Tonnen CO<sub>2</sub> eingespart!**

**10 Tonnen CO<sub>2</sub> sind  
gleichviel wie...**

-  Ein Polizeiauto das während  
des Wettbewerbes jeden Tag  
1800 km fährt
-  4 Mal eine Autofahrt von  
Kapstadt bis zum Nordkap
-  Hin- und Retourflug New York -  
Zürich für 4 Personen







70%

Vitality

70%

water scarcity

biodiversity

animal welfare



Environment

1/3

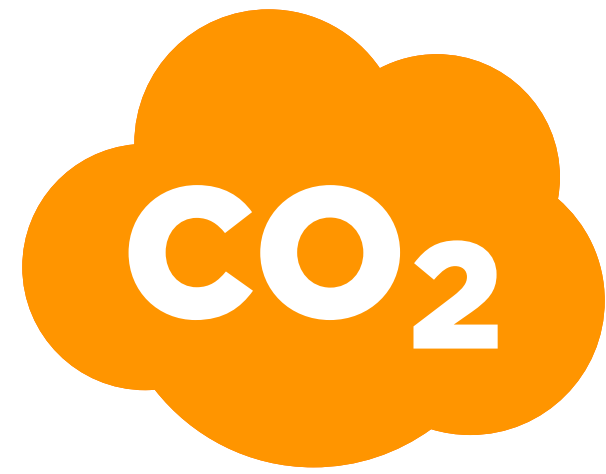
Climate



20%

CO<sub>2</sub> CO<sub>2</sub>





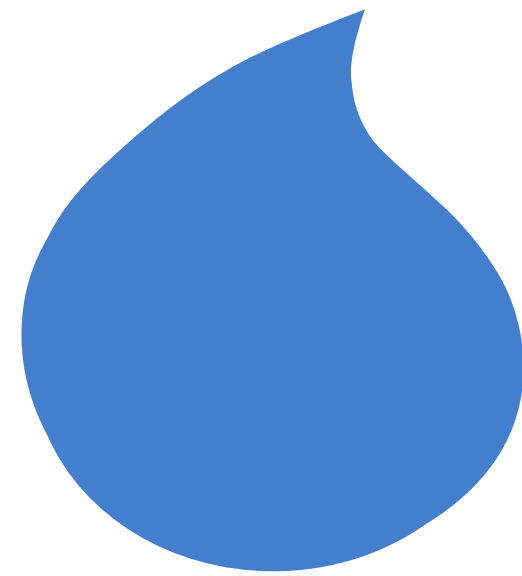
Klima Score



Vita  
Score



Nährwerte



Knappes  
Wasser



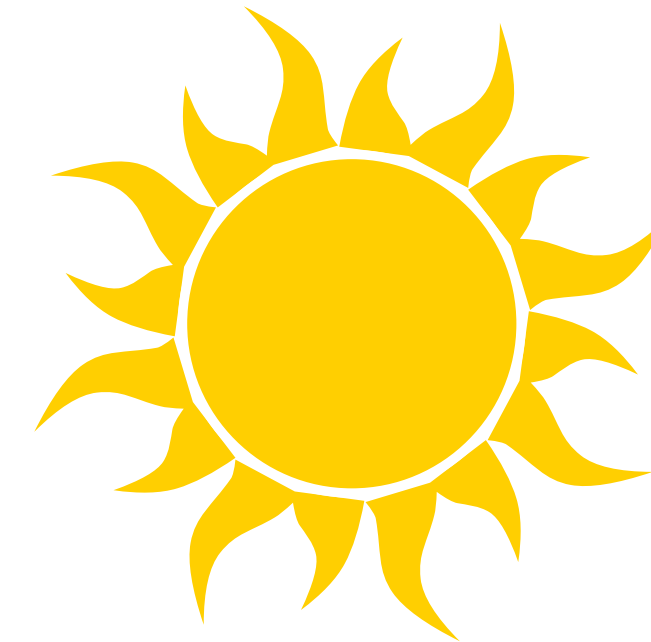
Regenwald



Tierwohl




Regional



Saisonal

# Eaternity Web-App



**Brie Fondue, Apricots, Gingered Chicken**

Gingered Chicken	Chicken, skin-on	2 breasts
	Rosemary	2 sprigs
	Fresh ginger root	1 cm
	Salt	1/2 tsp.
	Butter	1 Tbsp.
	Honey	2 Tbsp.
	Water	1/2 Tbsp.
Grilled Apricots	Apricot (can be frozen)	1
	Champagne vinegar	1 tsp.
	Chilly flakes	1/8 tsp.
	Honey	1/2 tsp.
Brie Fondue	White wine, dry	1/2 cup
	Brie, Swiss	120 g
	Mascarpone	80 g
	Black pepper, whole	
	Nutmeg	
	Mint	1 sprig

VALUES PER PORTION

**Cost** not available >

**Profit** 1 1 1 1 1 >

**Nutritional Value** 632 kcal 🔥 >

**Vita Score** ♥♥♥♥♥ >

**Climate Score** ☁️☁️☁️☁️☁️ >

**Environment** 💧🌳🐄📍☀️ >


**Climate Score (rating: 2 of 5)**

CO<sub>2</sub> 1572 g CO<sub>2</sub>eq per portion  
1% better than average.

**Water Footprint (rating 5 of 5)**

💧 2.4 liter per portion  
89% better than average.

**Vita Score**



13% worse in comparison to an average menu.

**Score** 2 von 5 >

**Risk points** 375 >

**Award** < 260  

♥ Menus with at least 20% less diet related risk points earn the Vita Score Award.





À LA CARTE

WOCHE

TAG



# April 2017



Mo. 17.

Di. 18.

Mi. 19.

Do. 20.

Fr. 21.

Sa. 22.

So. 23.



Menü 1

+	+	+	+	+	+	+	+
---	---	---	---	---	---	---	---

Menü 2

+	+	+	+	+	+	+	+
---	---	---	---	---	---	---	---

Vegetarisch

+	+	+	+	+	+	+	+
---	---	---	---	---	---	---	---



← Menüplan

Rezept

Fertig



### Hummus

Zutaten	Gewürz-Öl	24 g
Sauce	Tomaten-Ketchup	10 g
Gericht	Veggie Hack vom Feins...	120 g
	Mehl	40 g
	Paprika (Pulver)	4 g

Zeile hinzufügen

NOTIZEN UND PORTIONEN



Vita Score



53% BESSER im Vergleich mit einem durchschnittlichem Menu.

Bewertung



Risiko Punkte

54 >

Award

< 89



Vita Score Award

Menus mit mindestens 20% weniger Gesundheits Risiko Punkte verdienen den Vita Score Award.

← Menüplan

Rezept

Fertig



# Hummus



Zutaten

Gewürz-Öl 24 g

Tomaten-Ketchup 10 g

Kichererbsen 320 g

Kümmel 3 g

Paprika (Pulver) 4 g

Zeile hinzufügen

NOTIZEN UND PORTIONEN

10 Personen

−

+

3

MK

Letzte Aktion

Restaurant Viadukt

← Zu "Hummus" hinzufügen

🔍 Paprika (Pulver) ✕

**Paprika (Pulver)**

0.02 CHF / 4 g

würzig – Saviva

Pa

Paprika (...)

Bearbeiten

**Haltbarkeit** 2 Jahre

**Kochverlust** 90 %

**Aufwand** 10 s

**Produzent** Saviva

**Einheiten** Priesse, Löffel

**CO<sub>2</sub> - Wert** 2.3 g / 4 g

ALTERNATIVEN

**Cayenne Pfeffer**

1.20 CHF

**Paprika (frisch)**

4.20 CHF





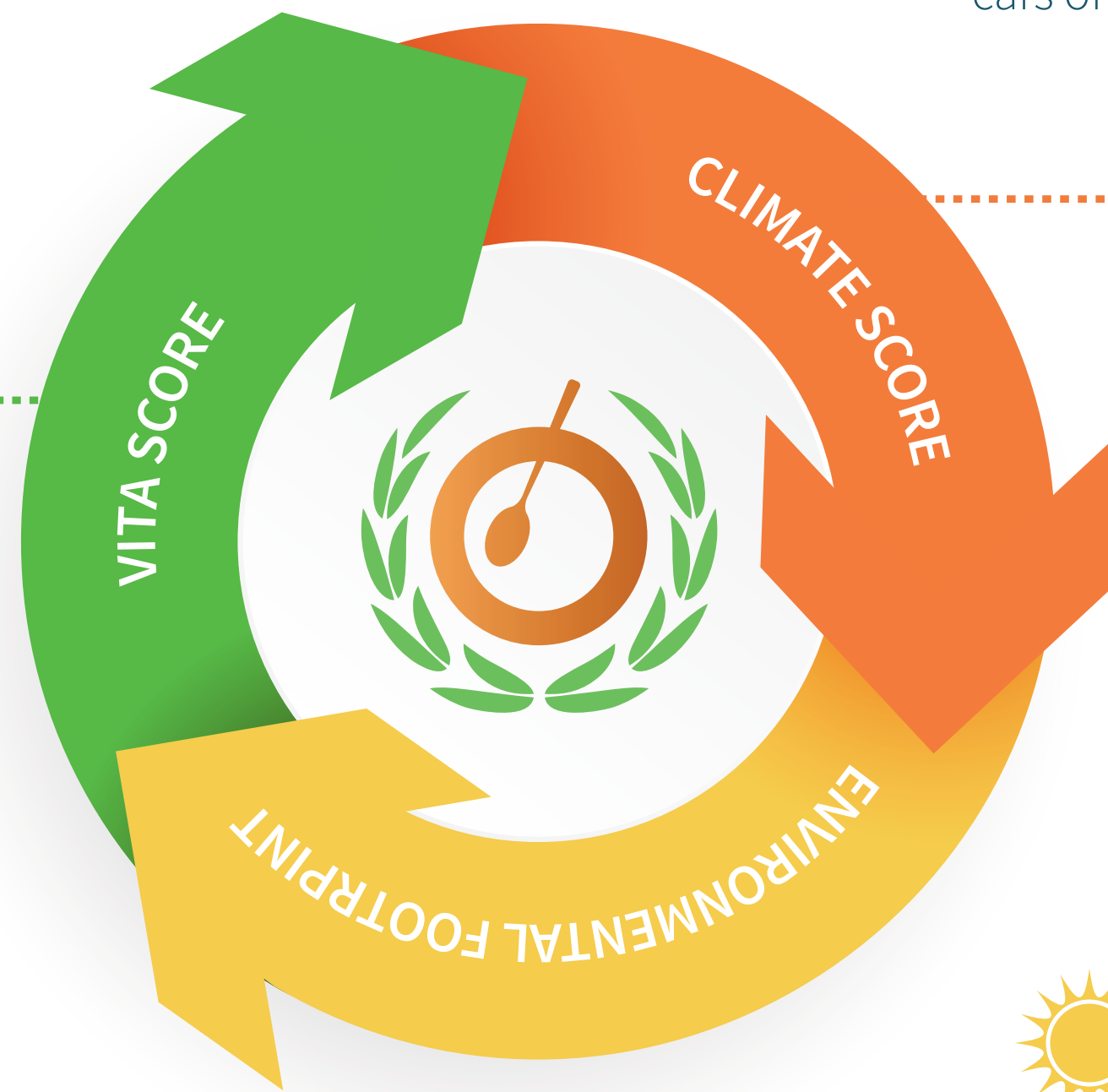
Reduce the risk of food related diseases.

80% of heart disease, stroke and diabetes type II and 40% of cancer could be avoided.



Reduce food-related carbon emissions by 50%.

If every Swiss ate 3 climate friendly meals per week, the impact would equal 750.000 cars off the street.



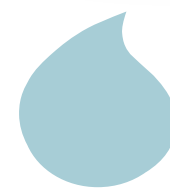
Choose local, to avoid transports.



Eat seasonal produce.



Minimize land use change.



Cut down water footprint by 50%.



Promote better animal treatment.

# Water Scarcity



663 million people in the world live without clean water.

Water scarcity affects humanity and the ecosystem.

Humans travel long distances for fresh water.

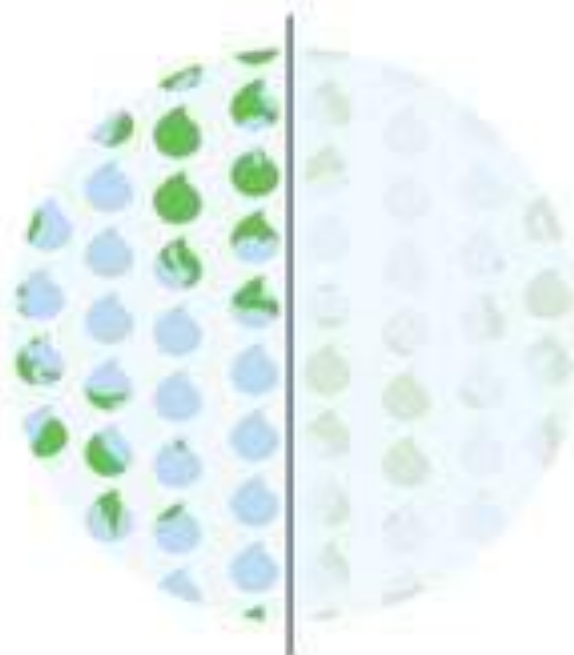
LABOR

Poor water quality is a disease risk.

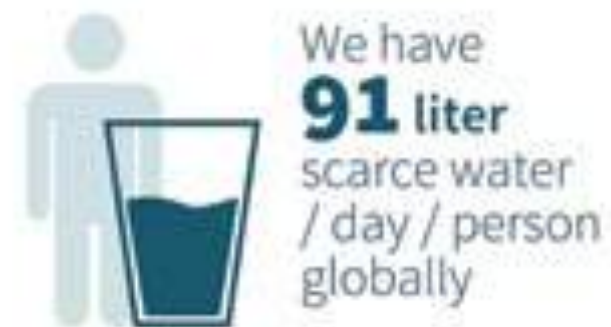
HEALTH

Fresh water supply is needed to grow food.

FOOD



To help we need to reduce world wide dependency on scarce water by 50%.



Scarcity is different per region.

**Switzerland**

0.01

**Spain**

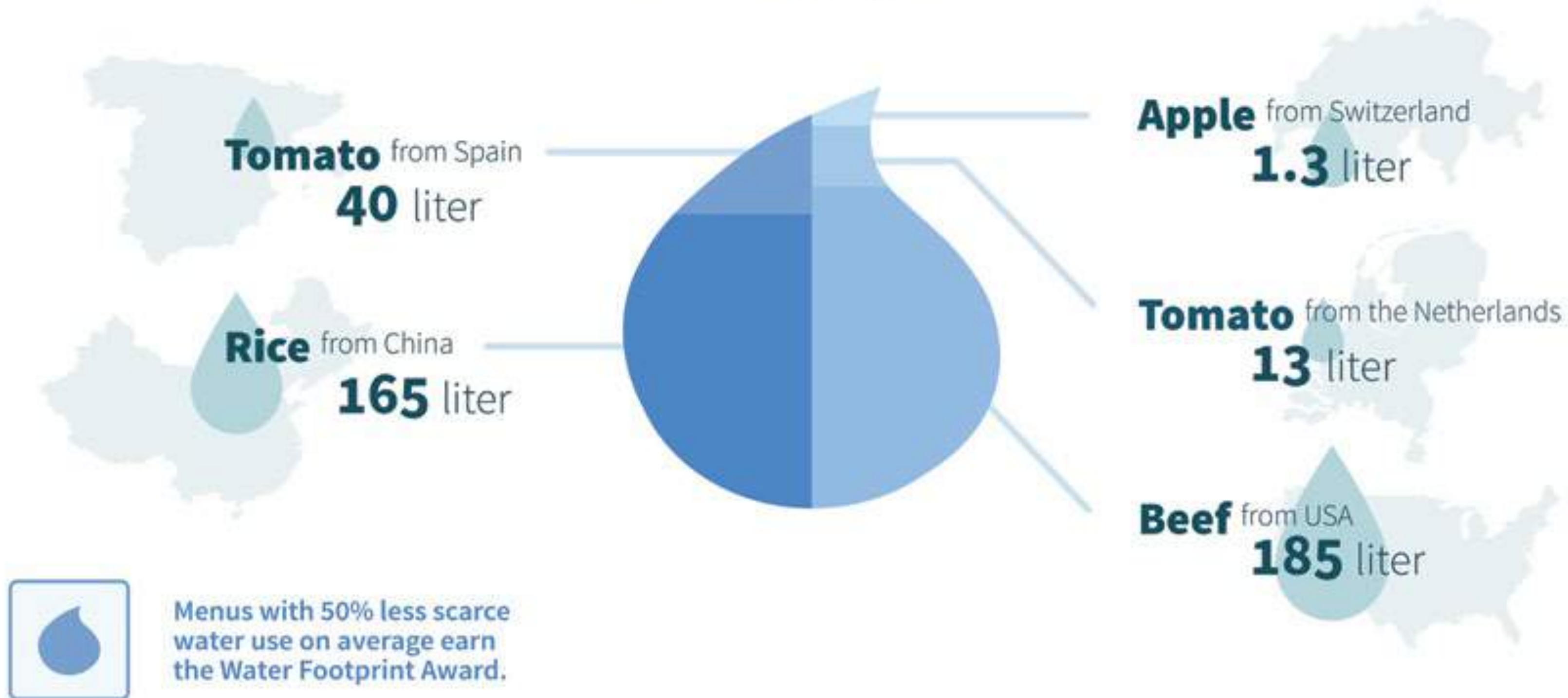
0.63



## Water demand for produce



Water scarcity strongly depends on locality.





# Nutrition

**671 Million people** are obese, making obesity the number one health problem in the world. Direct results are: diabetes, cardiovascular diseases, cancer, joint injuries among others.

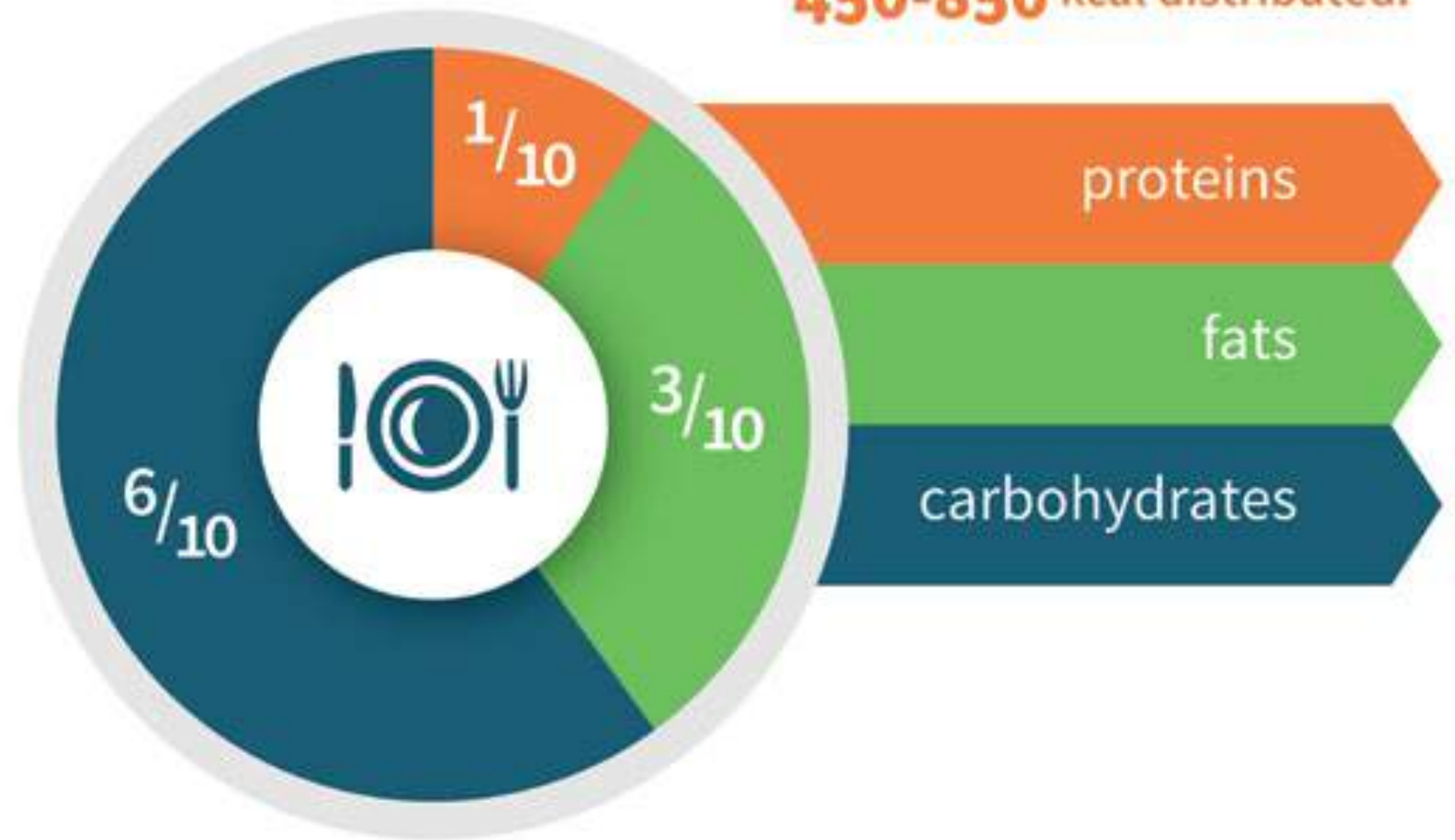
At the same time **795 Million people** suffer from hunger.

A balanced diet secures the means to live healthy without wasting food along the way.



Balanced menus with a good energy value score the Nutrition Label.

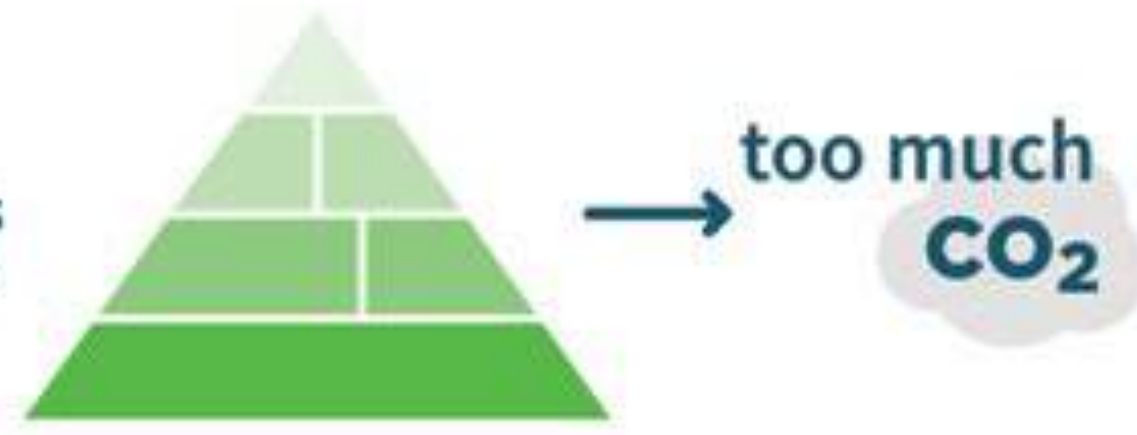
A balanced meal has an energy value of **450-850** kcal distributed:





# Health

Current health recommendations disregard climate change.



Using existing indicators for meals, only 30% were both healthy and climate friendly.



**229 Million** disability adjusted Life Years are lost due to unhealthy diets worldwide.



**CARDIOVASCULAR**



**DIABETES**



**CANCER**

Your diet related risk for: **Cardiovascular, Diabetes, Cancer** differs per country, age and gender.

## WHAT IS DALY?

### DALY

Disability Adjusted Life Year is a measure of overall disease burden, expressed as the cumulative number of years lost due to ill-health, disability or early death.

$$= \text{YLD Years Lived with Disability} + \text{YLL Years of Life Lost}$$





## VitaScore

**A NEW APPROACH.** Meal related risk indicator based on the Global Burden of Disease project's results.

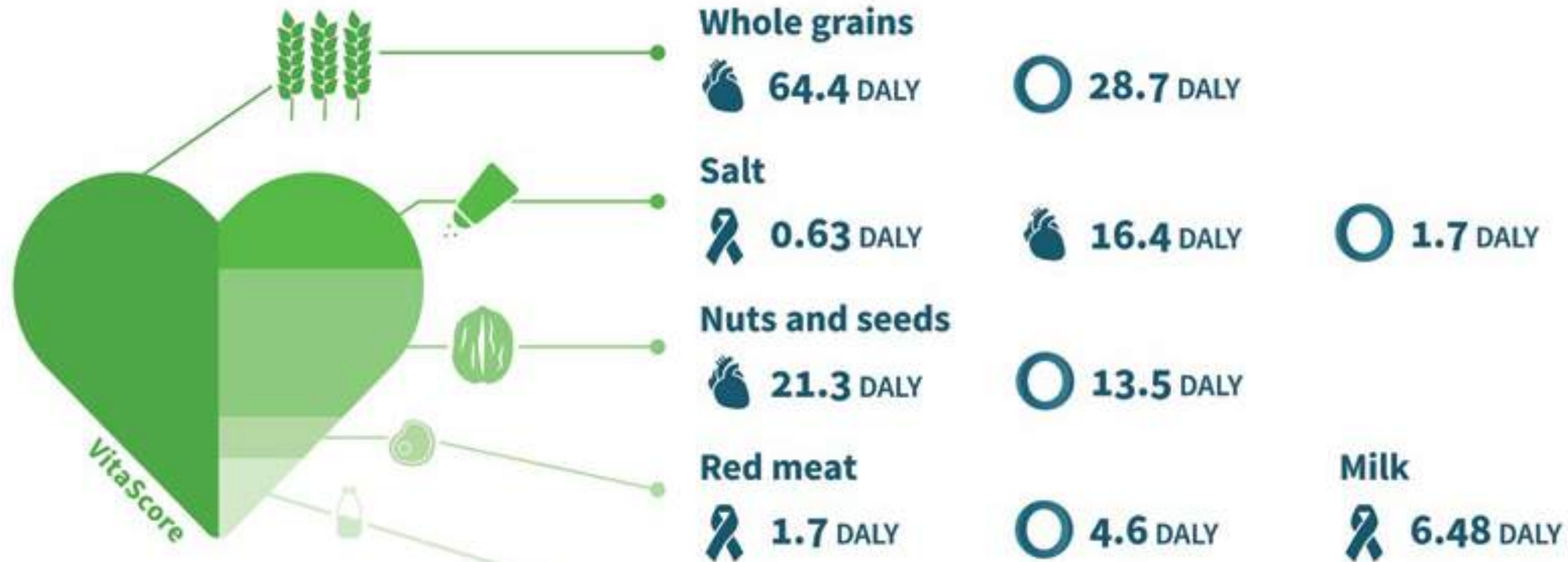


Menus with at least 20% less diet related risk points earn the VitaScore Award.

## Dietary Risk Factors

Each meal counts. We look at 8 diet related risk factors. Better ingredients score less risk points.

-  **Diet low in Whole Grains**  
between 100 g and 150 g per day
-  **Diet low in Fruits**  
between 200 g and 300 g per day
-  **Diet low in Nuts and Seeds**  
between 16 g and 25 g per day
-  **Diet high in Salt**  
between 1 g and 5 g per day
-  **Diet low in Vegetables**  
between 290 g and 430 g per day
-  **Diet high in Processed Meat**  
between 0 g and 4 g per day
-  **Diet high in Red Meat**  
between 16 g and 25 g per day
-  **Diet low in Milk**  
between 350 g and 520 g per day



For a Swiss woman between 15-49 years.  
DALY are given per 100'000 people.



# Vegetarische **PROFIKÜCHE**









A cluster of fresh raspberries is centered in the image, set against a solid teal background. The raspberries are vibrant red and appear to have a slight white frost or dew on their surface.

**APPETITE**  
for change?





APPETITE  
for change.













live

Indigenous Rights  
RESPECT YOUR RIGHTS

IDLE NO MORE  
PROTECT GRANDMOTHER EARTH

FIRE

WATER

BIKE LANE

KEEP THE OIL IN THE GROUND

RESPECT INDIGENOUS PEOPLES RIGHTS

ROUTINES OF CRISIS TO REFRONT IF CHANGE

FOR CLIMATE

CLIMATE JUSTICE NOW NOW NOW

root

PEOPLE POWER

PEOPLES CLIMATE MARCH









3 climate-friendly meals per week =

**1 Billion Tons less of CO<sub>2</sub>**  
a year



Cook smart for the ones you love.

---

