Press Conference on Biodiversity & Climate:

Livestock causing 60-80% of biodiversity loss and 80% of food related GHG-emissions

COP27 Press Conference
17h November 2022 9.30h
Speaker: Jeroom Remmers, Director TAPP Coalition
(former forest campaigner at Greenpeace Netherands)

COP27 SHARM EL-SHEIKH EGYPT 2022

United Nations Climate Change

TAPPC True Animal Protein Price Coalition

Special guest speaker: Brent Loken, Global Food Lead Scientist for WWF

Lead author on the EAT-Lancet Commission on Food, Planet, Health

Agenda

Time

1. What?   FAO: livestock main driver for bioversity loss / deforestation

9.30

2. What?   Meat/dairy main driver food related GHG-emissions

9.40

3. Solutions Reducing meat/dairy consumption by taxation

9.45

9.50

4. Other options: Climate Agreement on Food and Farming – 30% reduction 2030

9.55

4. Questions

5. End: 19h

My background: True Animal Protein Price Coalition (TAPP)

Forest campaigner at Greenpeace Netherlands

Ca. 60 Partners TAPP Coalition: **companies**, **farmer** organizations, **health** organizations, **animal welfare**-, **environmental**-, **youth**- and **food** organizations

Partners in USA and EU countries

We represent 0,6 million people; 3000 (EU) companies

Over 5000 companies & NGO's in >100 countries
supported our Carbon Pricing Food Campaign in 2021

Mission: making healthy, sustainble food the cheapest option;
True pricing meat/dairy, including external environmental costs

https://tappcoalition.eu   https://futurefoodprice.org   Climateagreementfoodfarming.org

Why the UN Biodiversity Summit should also focus on meat reduction
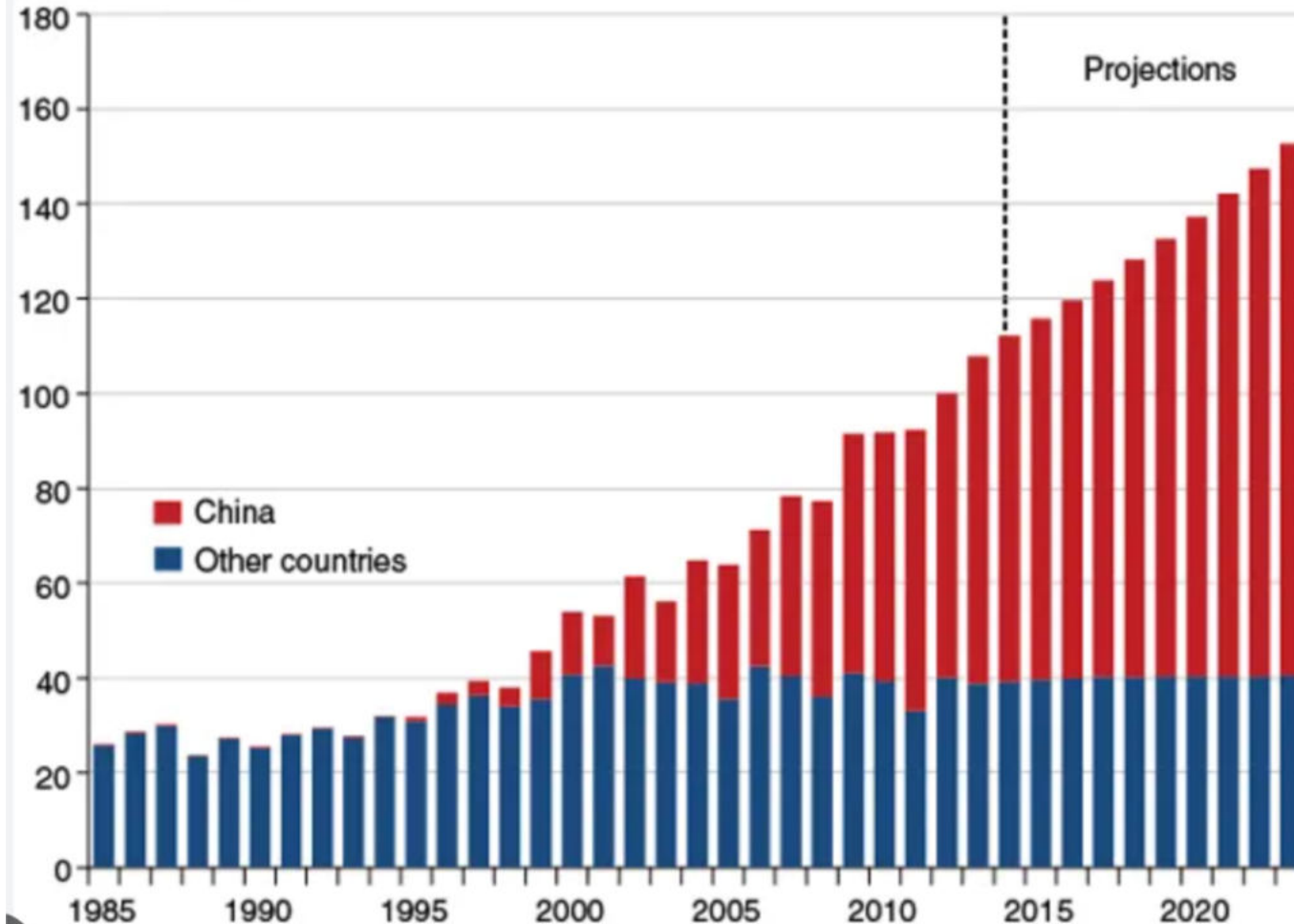
Before   and after ….

FAO: livestock main driver bioversity loss/deforestation

- Remote sensing (**FAO, 2020) showed agricultural expansion is causing 90% of global deforestation:** 52% by cropland (also for animal feed like soy and maize) and almost 40% by livestock grazing at grasslands.

- FAO, 2020: **livestock grazing causes 75% of deforestation in South America**.

- Livestock/animal feed: ca. 80% of global agriculture land

- WWF UK (2017): Meat/dairy causing ca. 60% global biodiversity loss

80% of the Amazon's deforestation is directly connected to beef.

China will continue to be dominant global soybean importer

China largest soy importer South America and largest (new) driver behind deforestation

Source: USDA Production, Supply and Distribution database and projections.

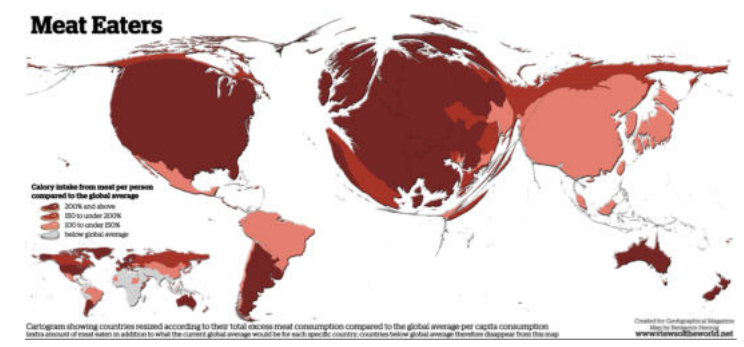A safe operating space for humanity | Nature
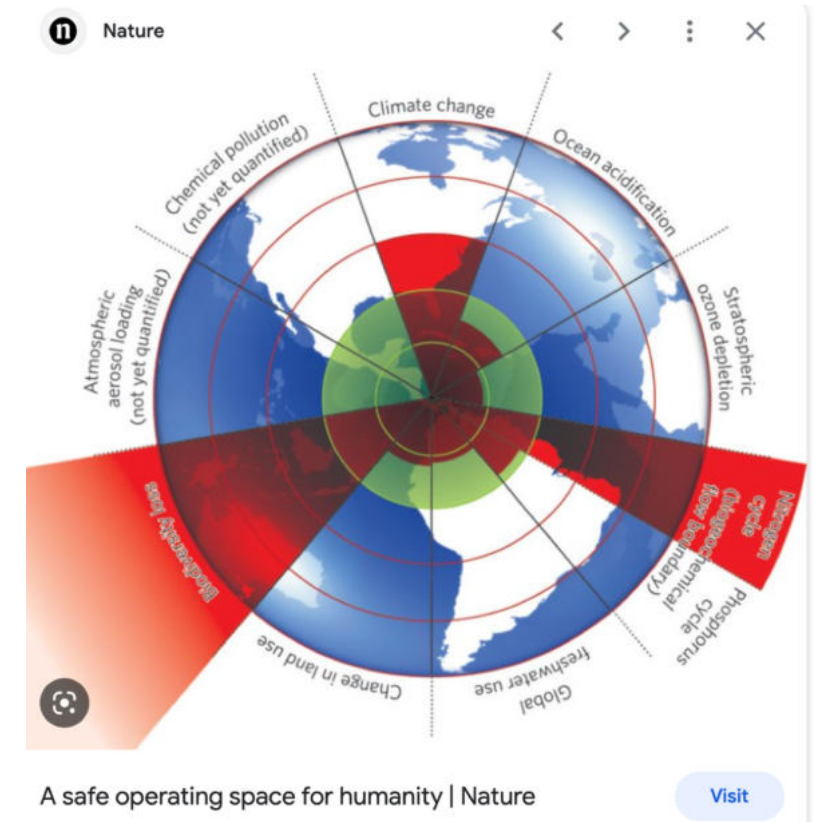
CBD biodiversity goals will never be realised ..... without global meat/dairy consumption reduction!

- **CBD has wrong strategy to protect nature**
- **Main driver behind biodiversity loss will contintue:**

high growing global demand for meat/dairy
**Nature organisations should start meat tax campaigns urgently**

2020 UN BIODIVERSITY CONFERENCE
COP 15 - CP/MOP10-NP/MOP4
Ecological Civilization-Building a Shared Future for All Life on Earth
KUNMING · CHINA

50 meat tax campaign target countries eating most meat

MEAT CONSUMPTION PER KG/CAPITA/YEAR
Source: https://ourworldindata.org/ EAT Planetary
Health diet: 16 kg meat/yr

Country	KG/YEAR
Hong Kong*	137
USA	124
Australia	122
Argentina	109
New Zealand	101
Brazil	100
Spain	100
Israel	97
Portugal	94
Poland	89
Germany	88
Mongolia	88
Austria	87
Canada	83
France	83
Chili	83
Czech Republic	83
Lithuania	82
Italy	81
Belarus	81
Serbia	81
UK	80
Hungary	80
Ireland	79
Taiwan	78
Russia	77
Sweden	77
Finland	77
Netherlands	76
Croatia	75
Greece	72
Bolivia	71
Denmark	71
South-Korea	71
Switzerland	68
Latvia	67
Norway	67
Belgium	66
Kazahkstan	65
Mexico	65
Romania	64
Estonia	64
Vietnam	63
United Arab Emirates	62
China	61
Slovakia	59
Colombia	56
Japan	49
Turkey	39

■ Meat Consumption per capita/year

Meat Eaters

Calory intake from meat per person
compared to the global average
■ 200% and above
■ 150 to under 200%
■ 100 to under 150%
□ below global average

Calory intake from meat per person compared to the global average

- 200% and above
- 150 to under 200%
- 100 to under 150%
- below global average

countries resized according to their total excess meat consumption

compared to the global average per capita consumption

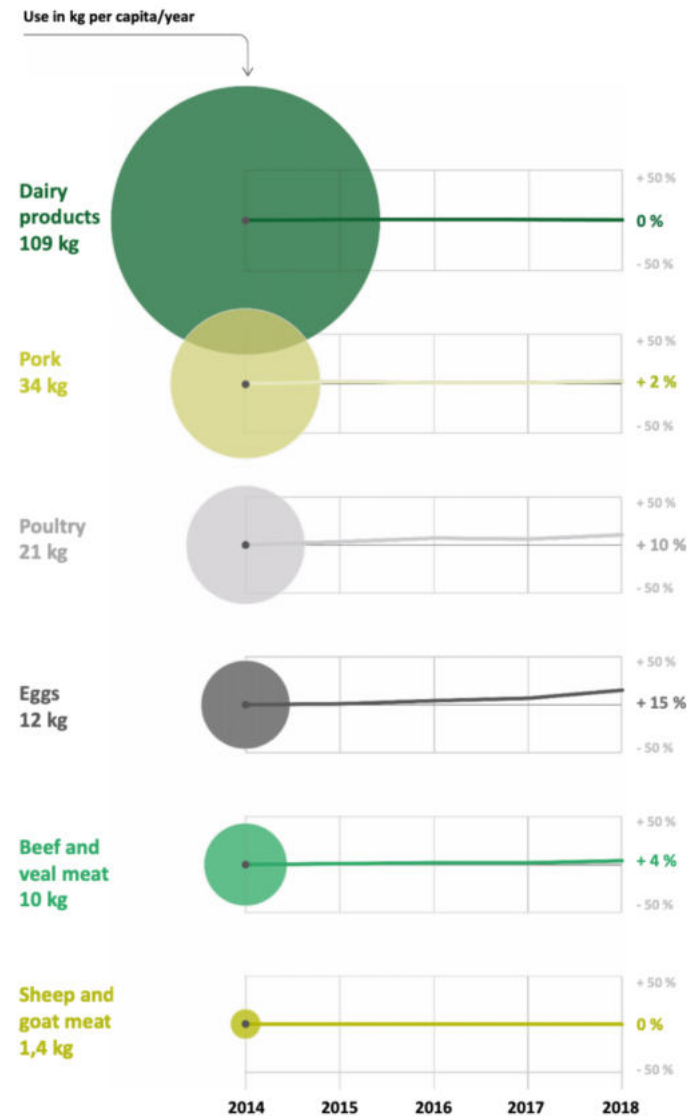2011, www.viewsoftheworld.net

Meat : highest CO2 eq emissions/kg food
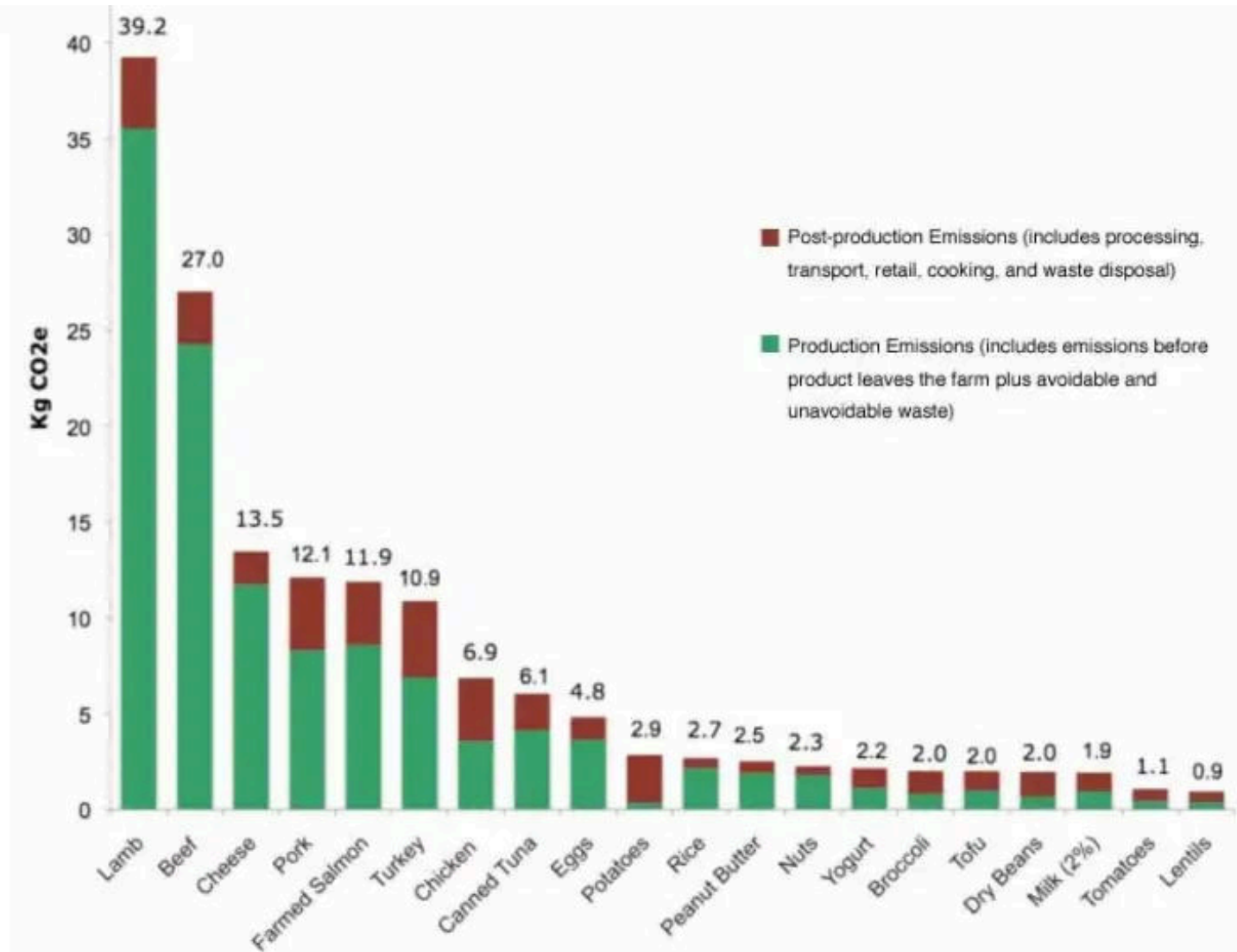
Food related GHG-emissions of meat/dairy

- **food systems responsible for 33 percent of all global GHG-emissions (19,6 Gton CO2 eq)**

- **In the EU, meat and dairy are responsible for 80% of food emissions**

- **Globally, livestock is responsible for 57% of food emissions (meat/dairy)**

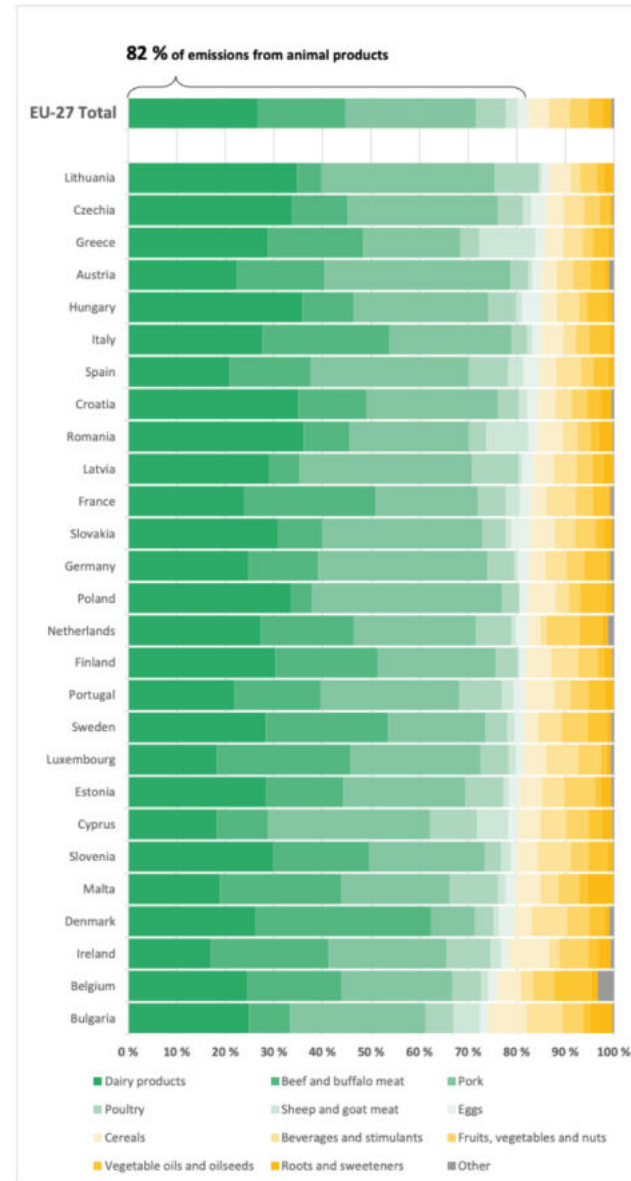Meat accounts for nearly 60% of all greenhouse gases from food production, study finds

The Guardian

Figure 11 – EU annual consumption per capita of animal products not declining

Use in kg per capita/year

Dairy products 109 kg — 0 %
Pork 34 kg — + 2 %
Poultry 21 kg — + 10 %
Eggs 12 kg — + 15 %
Beef and veal meat 10 kg — + 4 %
Sheep and goat meat 1,4 kg — 0 %

2014 2015 2016 2017 2018

Source: ECA based on data from the Commission Prospects for Agricultural Markets in the EU 2020-2030, 2020.

Figure 13 – Carbon footprint of foods in EU diet

82 % of emissions from animal products

EU-27 Total

Lithuania
Czechia
Greece
Austria
Hungary
Italy
Spain
Croatia
Romania
Latvia
France
Slovakia
Germany
Poland
Netherlands
Finland
Portugal
Sweden
Luxembourg
Estonia
Cyprus
Slovenia
Malta
Denmark
Ireland
Belgium
Bulgaria

0 % 10 % 20 % 30 % 40 % 50 % 60 % 70 % 80 % 90 % 100 %

- Dairy products
- Poultry
- Cereals
- Vegetable oils and oilseeds
- Beef and buffalo meat
- Sheep and goat meat
- Beverages and stimulants
- Roots and sweeteners
- Pork
- Eggs
- Fruits, vegetables and nuts
- Other

Source: Sandström, V. et al.: The role of trade in the greenhouse gas footprints of EU diets, 2018, p. 55 (constructed with data received from V. Sandström).
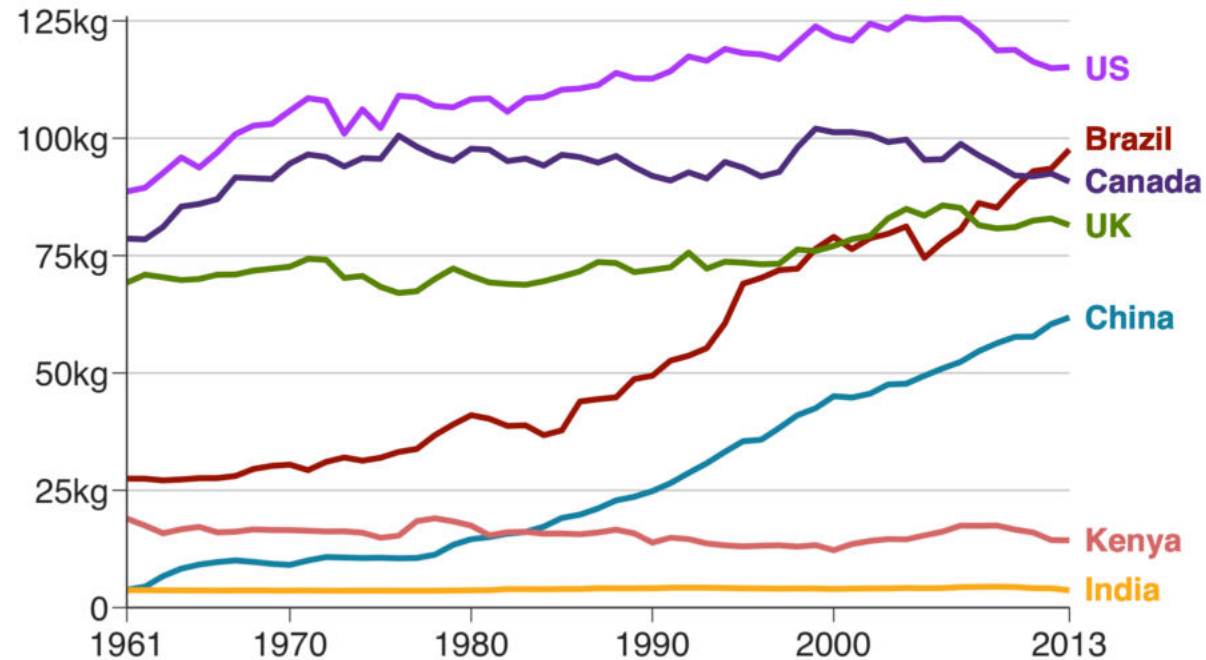
EU Court of Auditors (2021):

80% carbon footprint of foods in EU diet are from meat and dairy

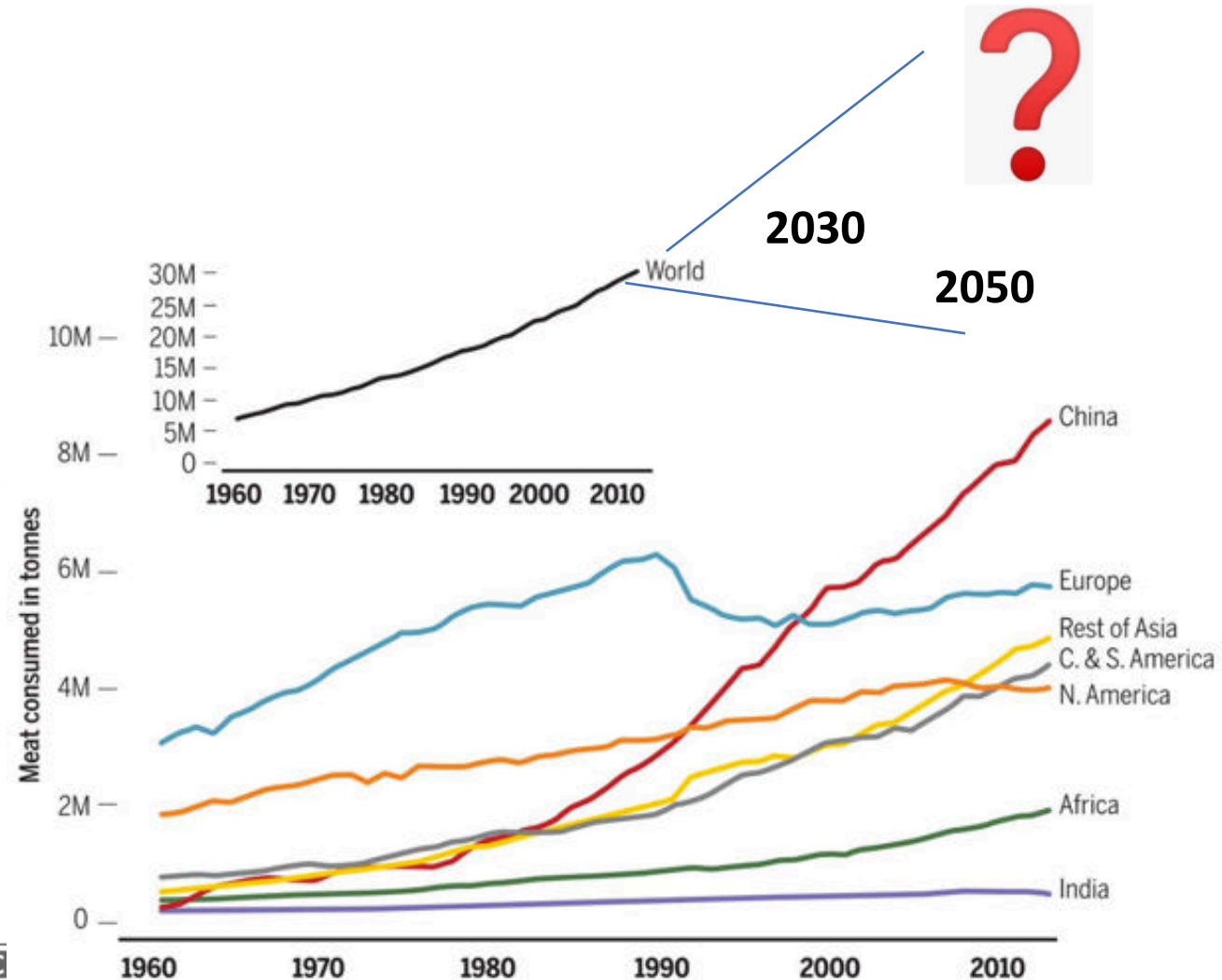Meat consumption per capita 2014-2018 still increasing

Why? Meat consumption growth 58% in last 20 years

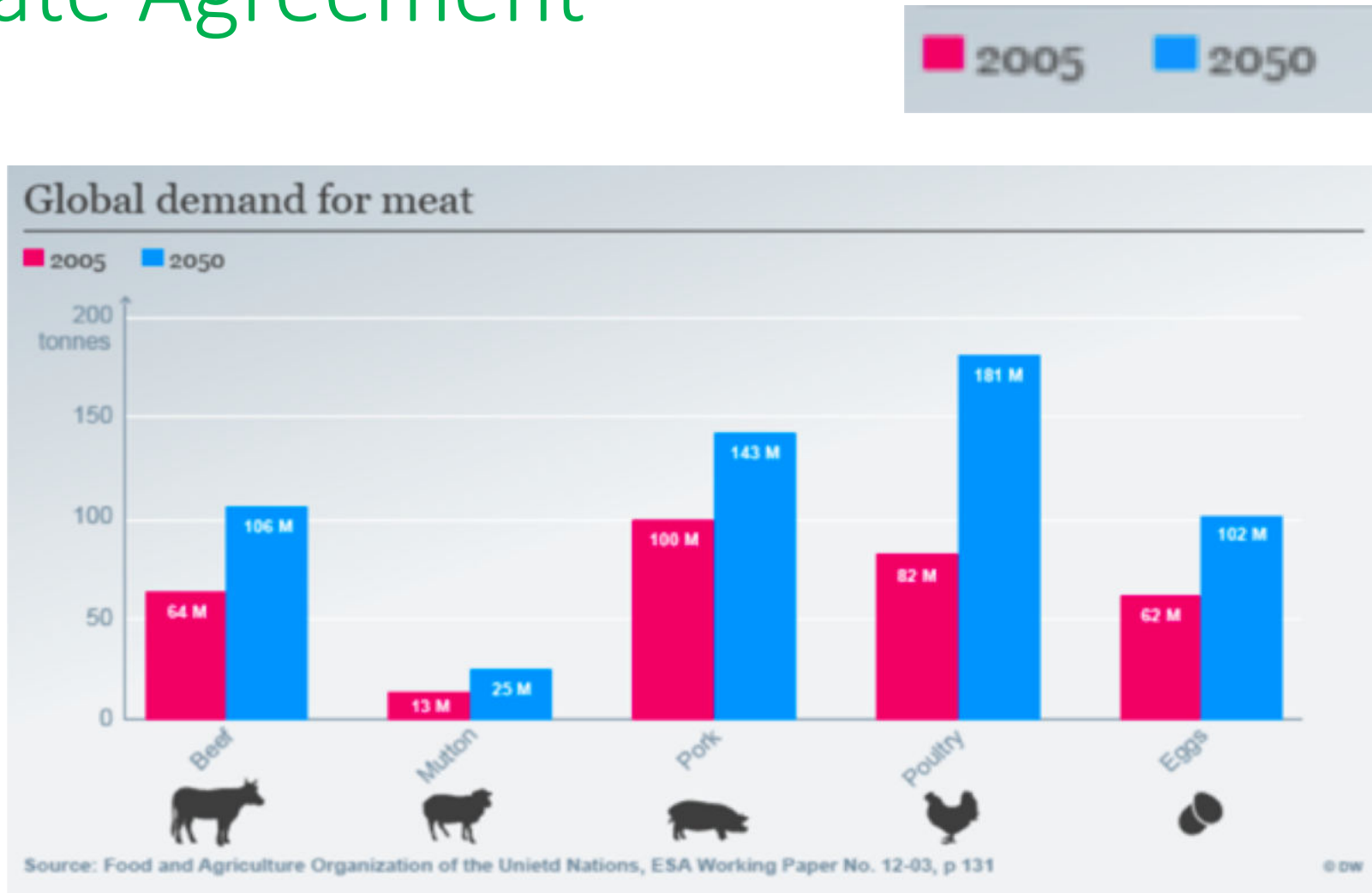

Meat consumption by selected country
Average annual consumption per person

US, Brazil, Canada, UK, China, Kenya, India

Source: UN Food and Agriculture Organization / Our World in Data BBC

2030
2050

World, China, Europe, Rest of Asia, C. & S. America, N. America, Africa, India

Growing meat consumption conflicts with Paris Climate Agreement

Global demand for meat

■ 2005 ■ 2050

	Beef	Mutton	Pork	Poultry	Eggs
2005	64 M	13 M	100 M	82 M	62 M
2050	106 M	25 M	143 M	181 M	102 M

Source: Food and Agriculture Organization of the Unietd Nations, ESA Working Paper No. 12-03, p 131

© DW

BUSINESS AS USUAL (BAU) GROWTH OF MEAT AND DAIRY PRODUCTION MAKES THE PARIS AGREEMENT IMPOSSIBLE AND CLIMATE CATASTROPHE INEVITABLE
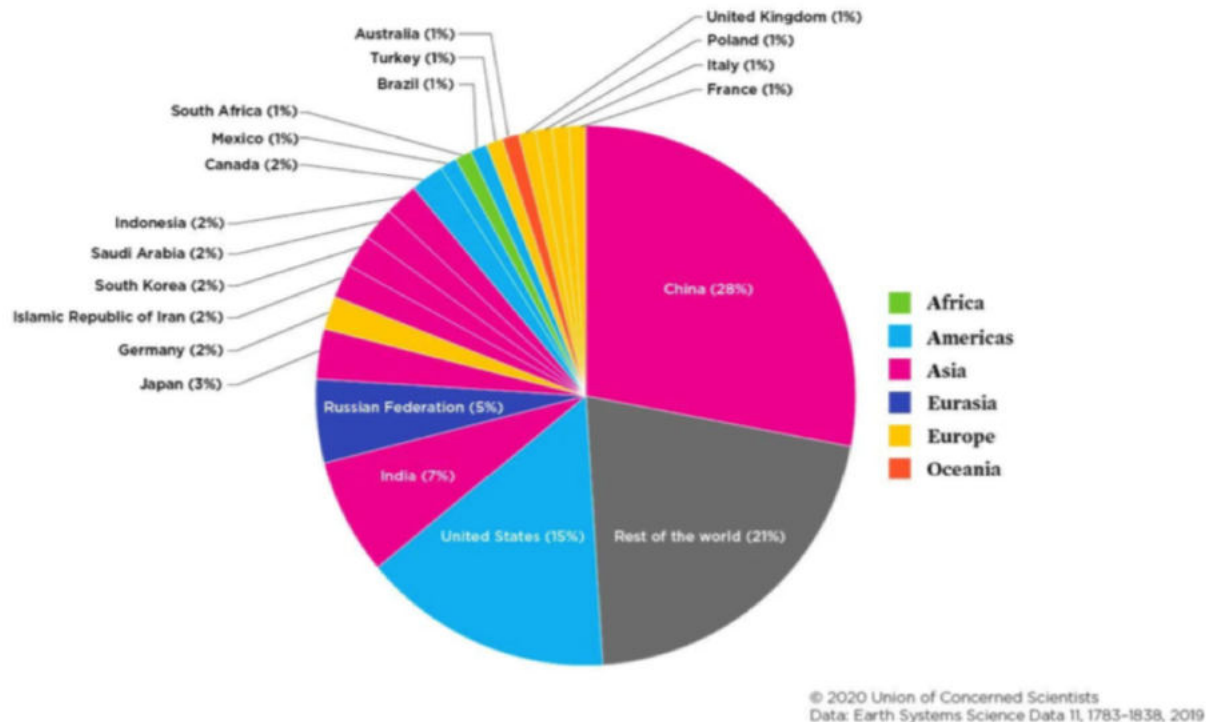
ESTIMATED GHG EMISSIONS SCENARIOS FOR 2 C° AND 1.5 C° COMPARED TO THE BAU GROWTH OF MEAT AND DAIRY EMISSIONS
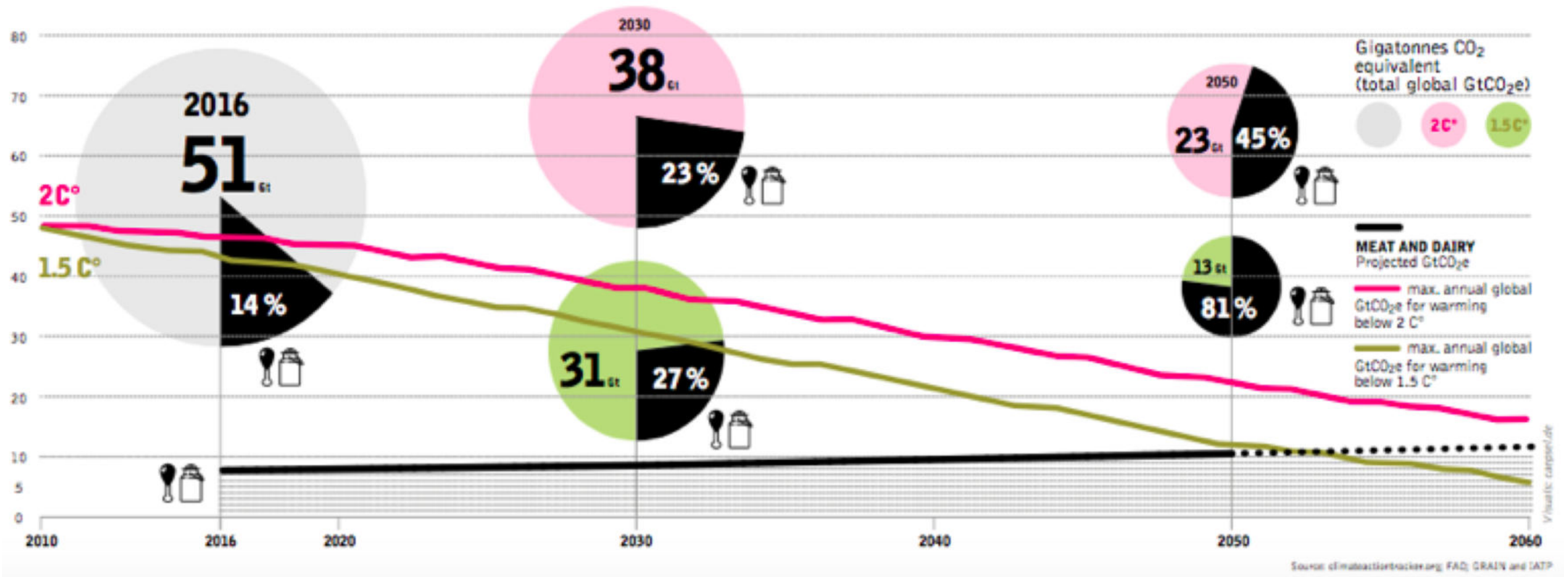
- Meat and dairy cause 60% of global **biodiversity loss** (WWF UK); deforestation S-America
- **low income farmers** – environmental costs are not (fully) included in price
- **Meat overconsumption in high meat consuming countries lead to negative health impacts**

Meat, dairy, eggs cause 20% of global GHG-emissions, a study finds. This is equal to GHG emissions from USA and Russia combined!

Or: the CO2-emissions combined from UK, France, Germany, Italy, Poland, Turkey, Australia, South Korea, Mexico, Canada, South Africa, Indonesia, Saudi Arabia and Iran!

United Kingdom (1%)
Poland (1%)
Italy (1%)
France (1%)

Australia (1%)
Turkey (1%)
Brazil (1%)

South Africa (1%)
Mexico (1%)
Canada (2%)

Indonesia (2%)
Saudi Arabia (2%)
South Korea (2%)
Islamic Republic of Iran (2%)
Germany (2%)
Japan (3%)

China (28%)

Russian Federation (5%)

India (7%)

United States (15%)

Rest of the world (21%)

- Africa
- Americas
- Asia
- Eurasia
- Europe
- Oceania

© 2020 Union of Concerned Scientists
Data: Earth Systems Science Data 11, 1783–1838, 2019

Share of countries CO2 emissions
https://www.ucsusa.org/resources/each-countrys-share-co2-emissions
https://www.theguardian.com/environment/2021/sep/13/meat-greenhouses-gases-food-production-study

Animal-based food production contributes to the most emissions

Annual global emissions from the top 10 contributing animal- and plant-based foods

Animal-based	Plant-based
Beef	Rice
Cow milk	Wheat
Pork	Sugarcane
Chicken meat	Maize
Sheep meat	Cassava
Buffalo meat	Potato
Chicken egg	Soybean
Buffalo milk	Bean
Goat meat	Rapeseed & mustard
Horse meat	Sunflower

0 1 2 3 4 5bn   0 1 2 3 4 5bn

GHG emissions (metric tonnes)

Guardian graphic. Source: Xu, et al., 2021, "Global greenhouse gas emissions from animal-based foods are twice those of plant-based foods"

The food system causes 35% of global GHG-emissions; livestock contributes 57%; this equals 20% of global GHG-emissions

Source: Illinois University, publication in Nature Food, 13 sept 2021 in the Guardian

A global switch to veganism would deliver the largest emissions savings
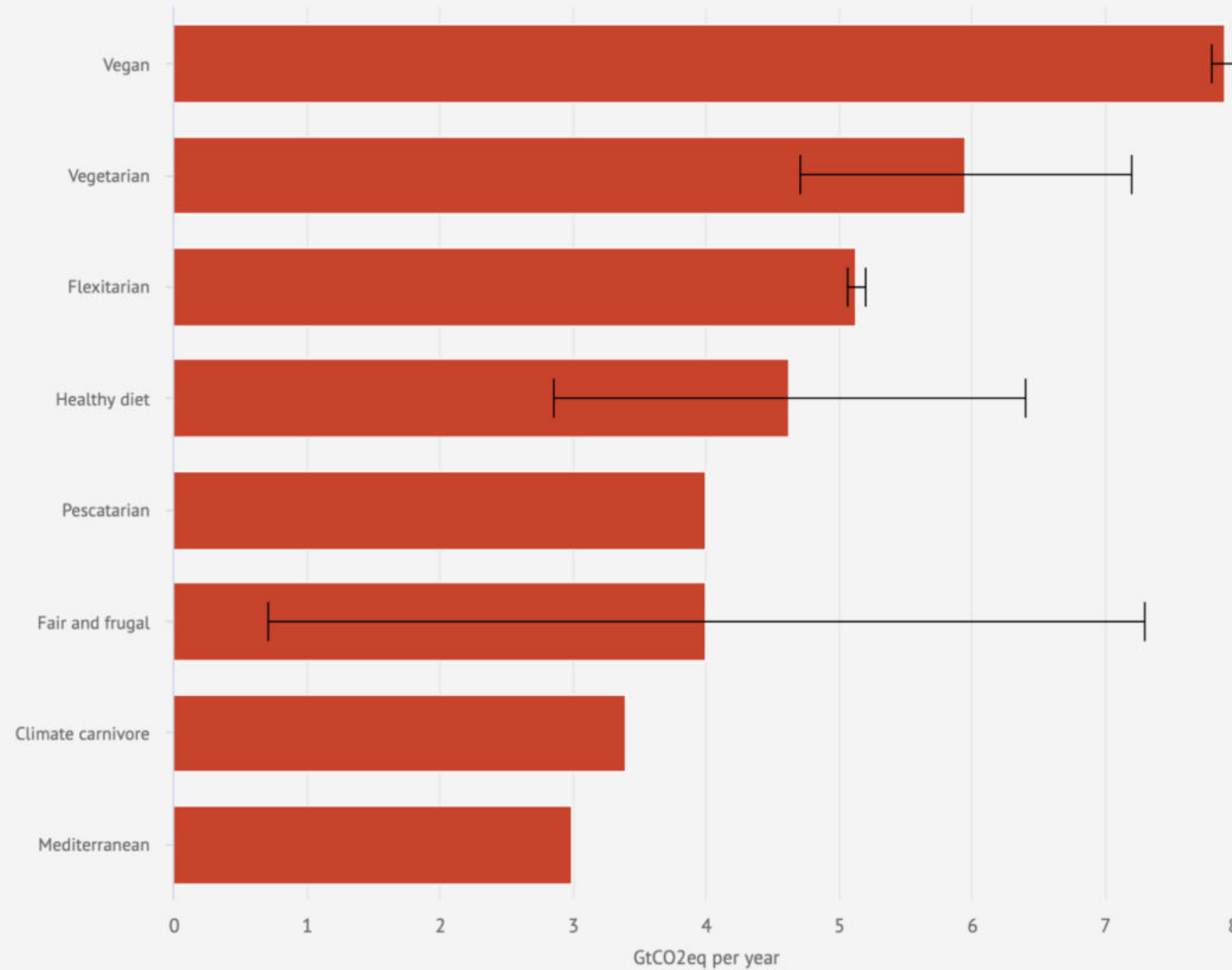
Greenhouse gas savings potential from the global adoption of various diets. Error bars show the spread of results from different studies. Data without error bars are from one study only. Adapted from IPCC (2018). Chart by Carbon Brief using Highcharts.

Eating less meat can reduce global GHG-emissions 3-6 Gton CO2 eq/year

Emission gap 2030 is 19-23 Gton CO2 eq
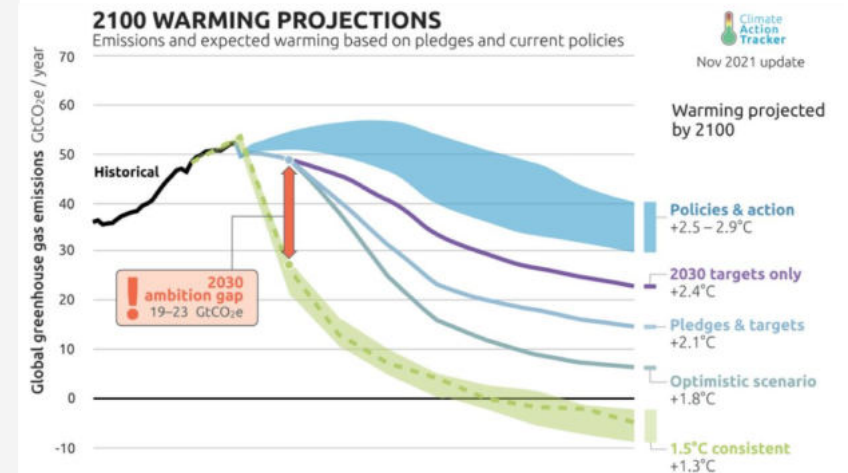
Why we need to reduce consumption

Global GHG-emissions in 2019 were 59 Gton CO2eq and food systems are responsible for 33 percent (19,6 Gton CO2 eq), up to 42 percent.
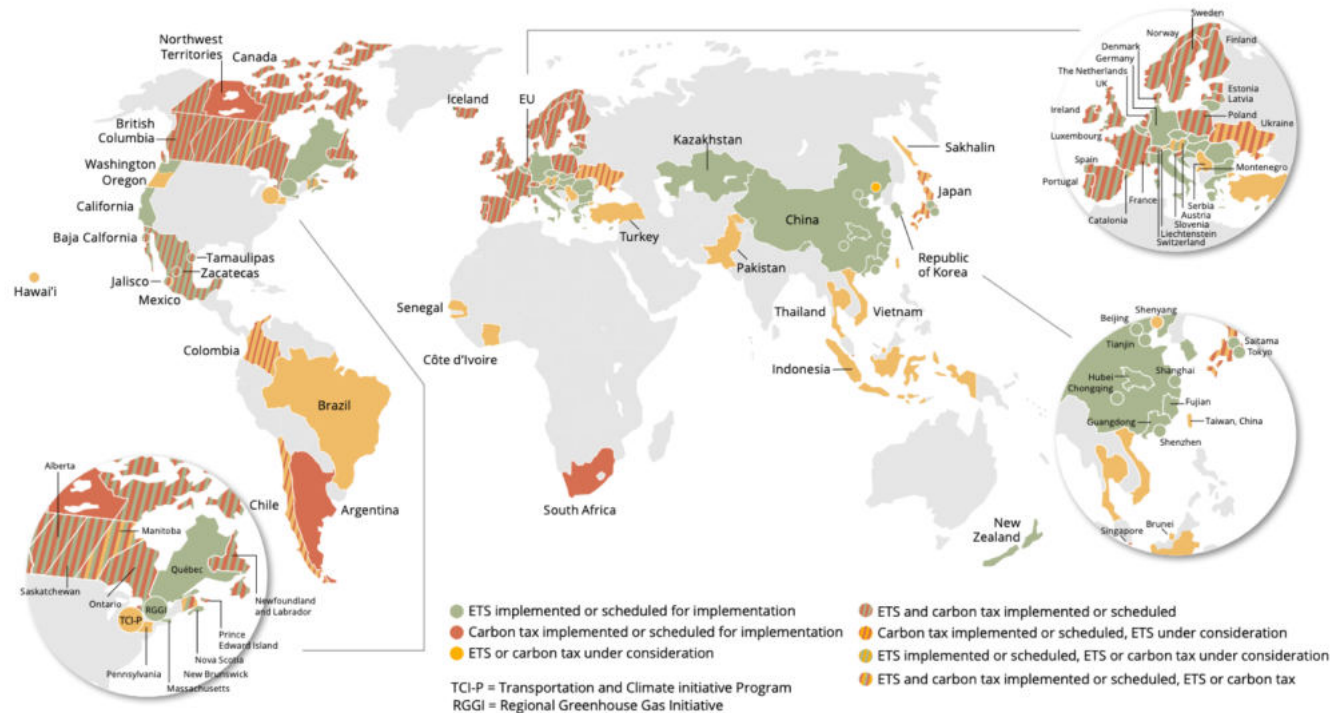
Reducing food system related GHG-emissions by 30% by 2030 compared to 2018-2020 levels means a reduction of 5.9 Gton CO2 eq.

(Methane Pledge goal is 8 Gton reduction)

If global food system emissions are reduced 30% by 2030, this eliminates 0.2°C warming by 2050.

# Policy options at global level

- Carbon pricing on fossil fuels now accepted worldwide

- Carbon pricing / true pricing of food products next step (including external costs)

CARBON PRICING MAP (2021)

ETS implemented or scheduled for implementation
Carbon tax implemented or scheduled for implementation
ETS or carbon tax under consideration

ETS and carbon tax implemented or scheduled
Carbon tax implemented or scheduled, ETS under consideration
ETS implemented or scheduled, ETS or carbon tax under consideration
ETS and carbon tax implemented or scheduled, ETS or carbon tax

TCI-P = Transportation and Climate initiative Program
RGGI = Regional Greenhouse Gas Initiative

Implementation of fair meat price: impact on consumption

Beef prices and sales Netherlands (2015-2030), effect ecotax on meat starting 2021

— Beef price in euro/kg   Trend - Beef price in euro/kg   ■ Beef sales in kg per person/year
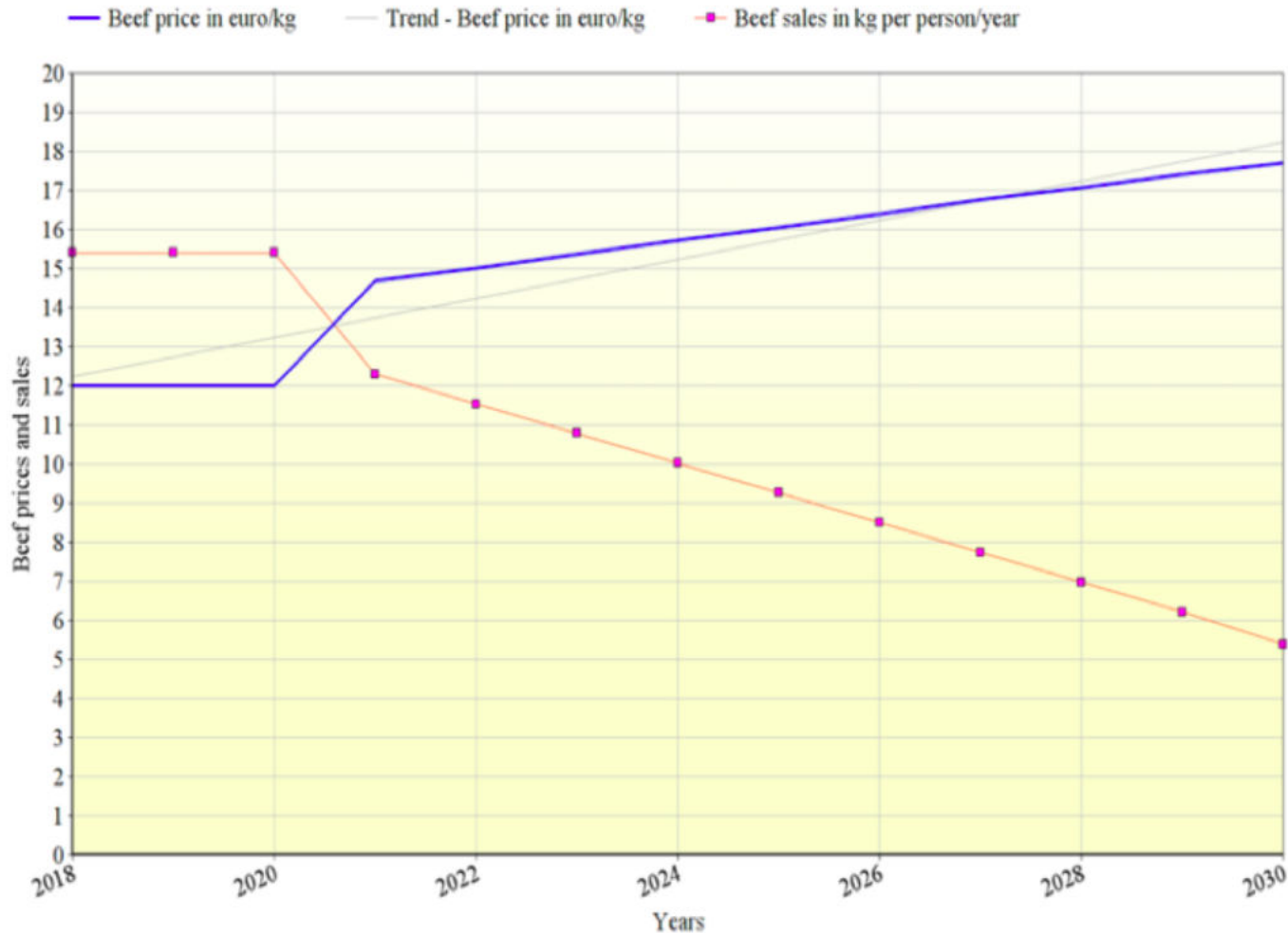
Source: CE Delft , The Netherlands

- 50% meat consumption in 2030

In high income countries a CO2 tax on meat needed: 5,79 USD/kg beef, 0,62 USD/kg pork

Figure 2: *Environment-related social costs from climate change and nitrogen pollution for selected meat types, in sum 5.76-9.21 USD/kg for beef, 3.71 USD/kg for lamb and mutton, 1.94 USD/kg for pork*
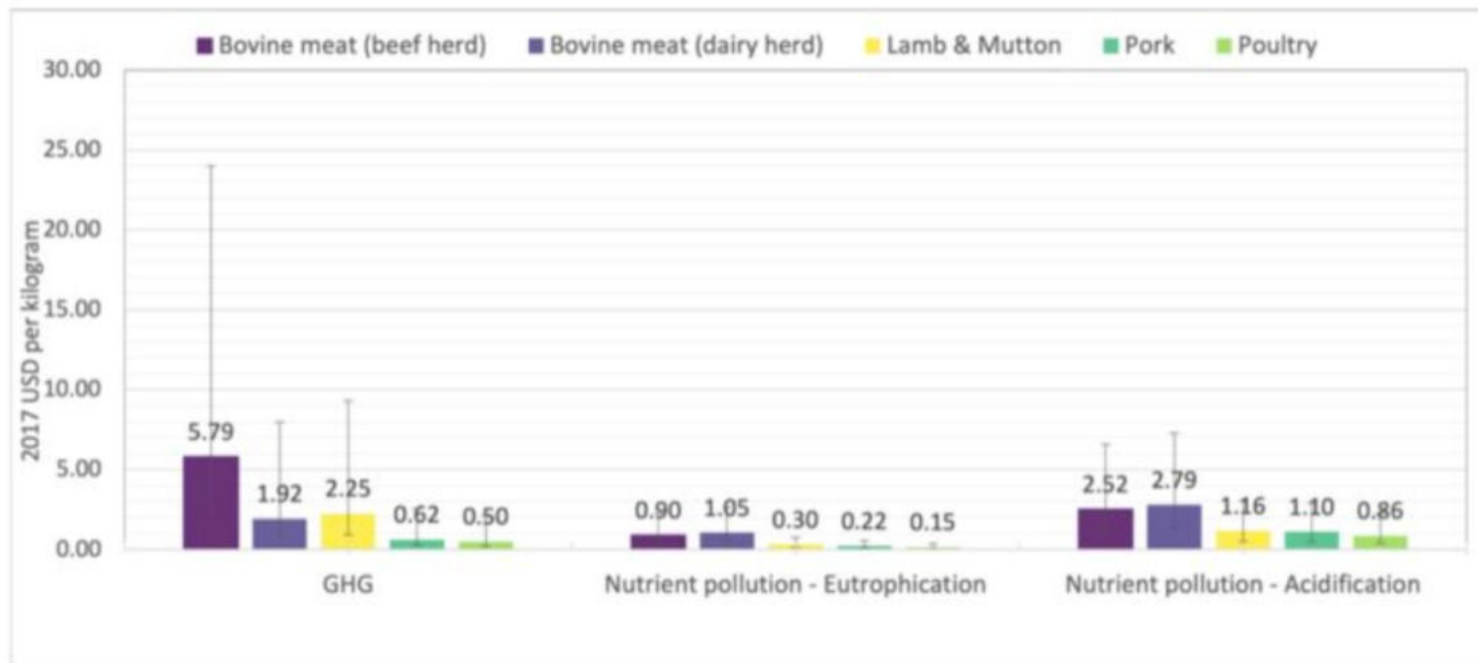
Source: Oxford University Report 2022 "Is meat too cheap? Towards optimal taxation of meat."

CO2? Tax food too!

Meat tax in OECD & China : 147 bln USD/year for climate funding and loss & damage

Closing the climate finance gap by taxing meat 10 cents?

Table: revenues from meat taxes in world regions available for climate finance

Country/region	Annual per capita meat consumption (beef, veal, pork, chicken) 2021	Inhabitants per country/region in million in 2021	Annual revenue from meat tax 1 dollar/euro per kg in billion USD/year or Euro/year	Available for Loss and Damage / climate finance in billion USD or Euro/year
USA	100,8	341	34,3 billion	34,3 billion
China	41,8	1387	57,9 billion	57,9 billion
EU-27	69,3	514	35,6 billion	35,6 billion
Brazil	78,3	207	16,2 billion	16,2 billion
Russia	61,8	141	8,7 billion	8,7 billion
OECD	69	1291	89 billion	89 billion
OECD + China			**146,9 billion**	**146,9 billion**
OECD + China + Brazil + Russia			171,8 billion	171,8 billion

Dear leaders of countries, regions and (food)companies

Will you reduce greenhouse gas emissions from food systems 30% by 2030?

Sign the COP27 Climate Agreement on Food and Farming to endorse or support this pledge now!

Goal of the Agreement

Reducing food and farm related greenhouse gas emissions with at least 30 percent by 2030 (compared to 2020 levels)

Help realise Paris Climate Agreement goals of 1,5 degrees C.

What? Commitments needed under the Climate Agreement Food/Farming (1)

Signatories can choose 3 options: reducing agriculture GHG-emissions 30 percent by 2030, or reducing food related (per capita) GHG-emissions 30 percent by 2030 or reducing both.

A. Taking **at least two actions on Food and two actions on Farming (agriculture)**, put in place by the end of 2025, that substantially help to realise the 2030 reduction goals

B. Updating the Climate Agreement on Food and Farming website annually with existing and new Food and Farm policies and National Determined Contributions.

Who can sign?

All countries can sign + States/regions with > 10 million inhabitants + food/retail companies

- We analyzed policies for 9 countries who comply with the Agreement :
- **Germany, Netherlands, China, New Zealand, United Kingdom, Sweden, Denmark, Belgium, Italy) and the European Union**
- https://climateagreementfoodfarming.org/existing-country-commitments/
- More countries can comply (to be analysed by themselves)

- **Signatory countries, states, regions, food/retail companies can sign here:**
  https://form.jotform.com/222742859990369
- Supporters like ngo's, financial institutes, local governments, UN organisations can sign here: https://form.jotform.com/222964663419364

Questions?

Please share & support:

https://climateagreementfoodfarming.org

Jeroom Remmers
Initiator Climate Agreement Food and Farming
Director TAPP Coalition /
Carbon Pricing Food Coalition
https://tappcoalition.eu and https://futurefoodprice.org

info@climateagreementfoodfarming.org
info@tappcoalitie.nl / https://tappcoalition.eu/donate

Subscribe our newsletter and social media

https://tappcoalition.eu/newsletter
https://www.linkedin.com/company/tapp
-coalition/

The Climate Agreement on Food and Farming is supported amongst others by: