PLANT-BASED UNIVERSITIES SUSTAINABILITY FORUM

Plant-Based Universities & DPFS

30th January 2025

WHAT ARE WE DOING TODAY?

SESSION STRUCTURE

1. INTRO — *10 mins*
2. VALUES & DISCUSSION — *15 mins*
3. LEARNING
    1. CLIMATE — *10 mins*
    2. HEALTH — *10 mins*
    3. COST & OPINION — *10 mins*
4. DELIBERATION — *20 mins*
5. COALESCING — *15 mins*

WHAT SHOULD IMPERIAL DO TO SERVE SUSTAINABLE, HEALTHY, AND AFFORDABLE MEALS ON OUR CAMPUSES BY 2030?

VALUES

The question: **What should Imperial do to serve sustainable, healthy, and affordable meals on our campuses by 2030?**

POORLY-FORMED VALUES STATEMENTS

I think that we should charge less for rent.

I represent people who think…

In this case, I think …, but in this similar case I believe …

WELL-FORMED VALUES STATEMENTS

I believe that housing is a right [because…].

I think that eating delicious food is important, and that meat tastes nice.

MY VALUES (FOR THE SAKE OF EXAMPLE)

I think all people's lives are equal, and that what I do should reflect that. While there are specific people I would prioritise over someone I've never met, I would not prioritise someone's life over a minor inconvenience. The climate and nature crises are causing and will cause a lot of harm to lives and livelihoods.

I also think universities – especially ours – have a moral obligation to address the planetary crises and that people should have access to healthy, sustainable food options.

DISCUSSION

Potential questions in threes. Write answers to the ‘why’ bits on post it notes:

- How urgent are the climate and nature crises, why?
- How important are each of these to you, why?
- What does it mean for food to be sustainable/healthy/accessible, is this important, why?
- Is there anything else you believe that’s important to this discussion, what and why?

The question: **What should Imperial do to serve sustainable, healthy, and affordable meals on our campuses by 2030?**

SUSTAINABILITY

Oscar Mitcham

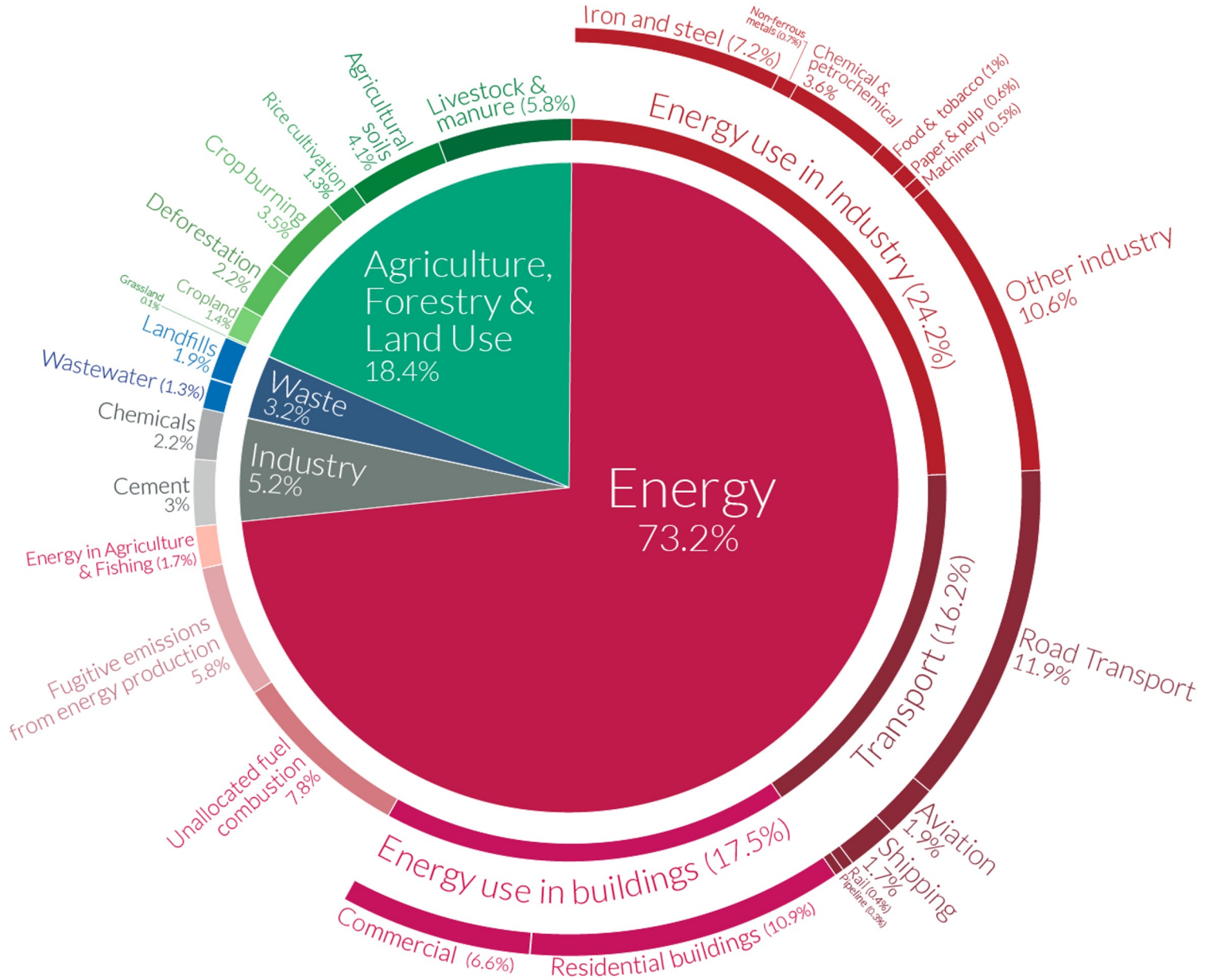
30th January 2025

The question: **What should Imperial do to serve sustainable, healthy, and affordable meals on our campuses by 2030?**

Global greenhouse gas emissions by sector

This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO_2eq.

Our World in Data



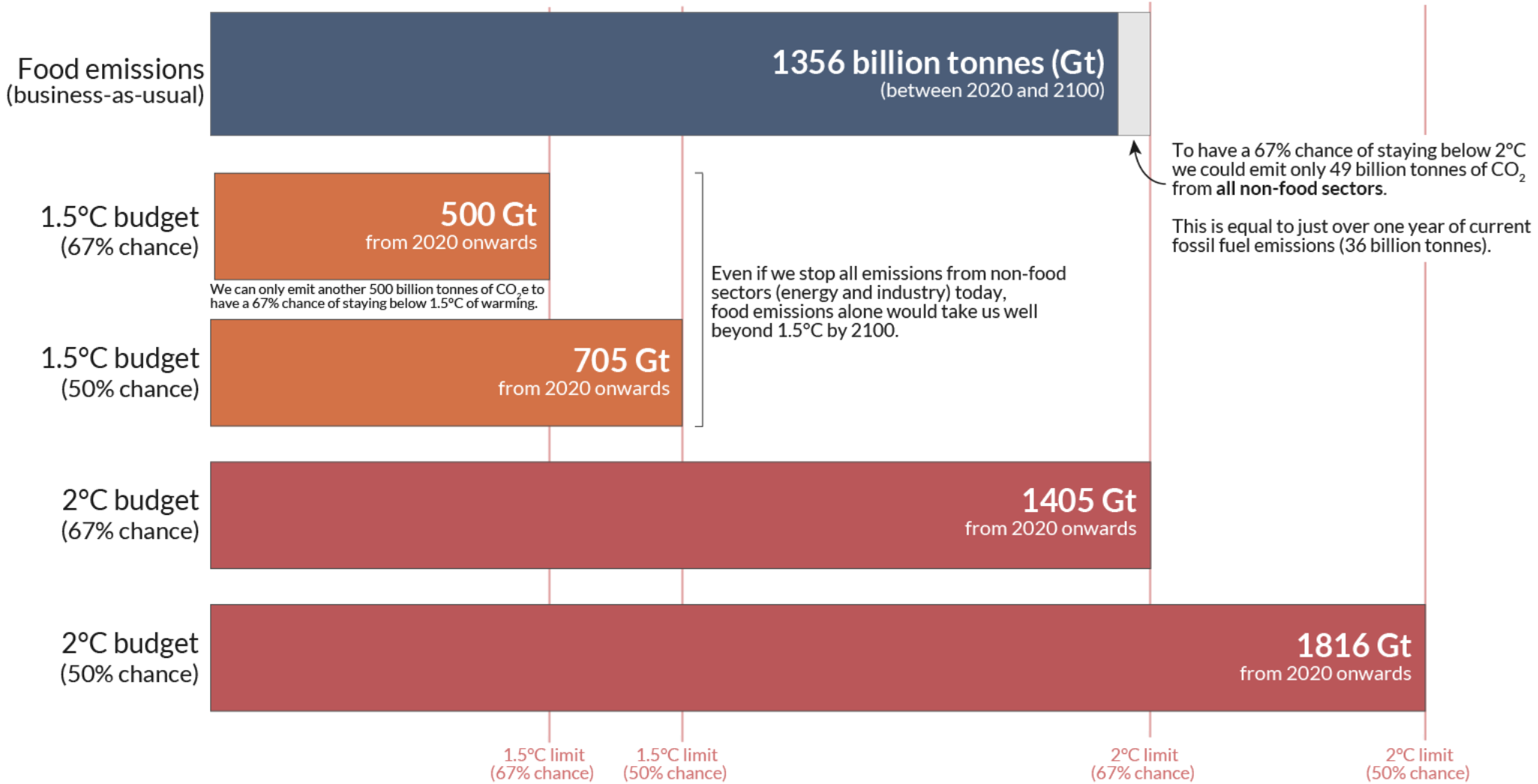
OurWorldinData.org – Research and data to make progress against the world's largest problems.

Source: Climate Watch, the World Resources Institute (2020).

Food emissions could consume most of our 1.5°C or 2°C carbon budget

Shown are estimates of cumulative greenhouse gas emissions from food production from 2020 to 2100 based on population, dietary and agricultural trends in a business-as-usual scenario. This is shown relative to total cumulative emissions to keep global average temperature rise below 1.5°C or 2°C by 2100.

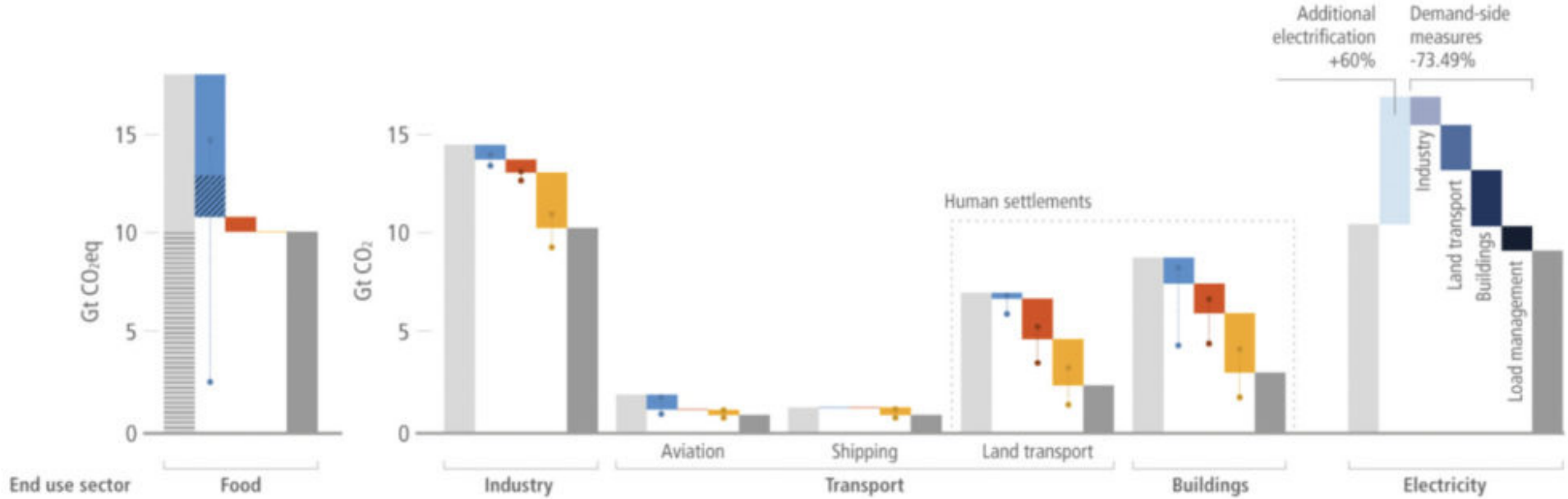
Our World in Data



Note: This is measured in global warming potential (GWP*) CO_2 warming-equivalents (CO_2-we).

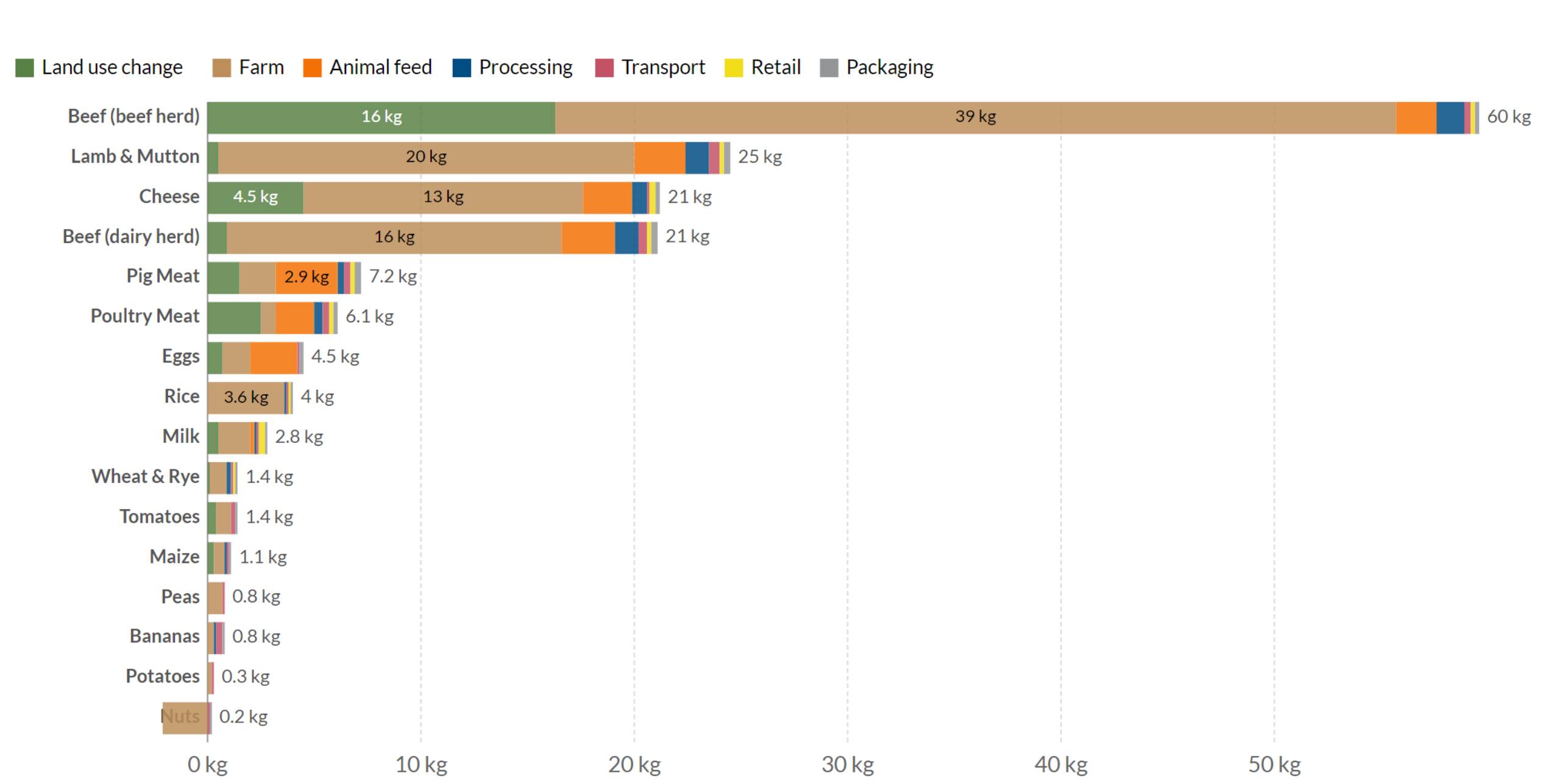
Source: Michael Clark et al. (2020). Global food system emissions could preclude achieving the 1.5° and 2°C climate change targets. *Science*.

OurWorldinData.org – Research and data to make progress against the world's largest problems.



Demand for service	Nutrition	Manufactured products	Mobility	Mobility	Mobility	Shelter
Socio-cultural factors	Shift in dietary choice with reduced animal protein; avoid food waste; avoid over-consumption	Avoid short life span products	Avoid long haul flights; shift to trains wherever possible	Currently not applicable	Teleworking or telecommuting; active mobility such as walking and cycling	Social practices in energy saving; and lifestyle and behavioural changes
Infrastructure use	Enhance the role of choice architectures & information; financial incentives; waste management; recycling infrastructure	Reuse and recycling	Currently not applicable	Currently not applicable	Public transport; shared mobility; compact city; spatial planning	Compact cities; built environment; living floor space rationalisation; architectural design; feedback control systems
Technology adoption	Currently not applicable	Access to materials-efficient services; access to energy-efficient and CO_2-neutral materials	Adoption of energy-efficient technologies; technologies with improved aerodynamics	Adoption of energy-efficient technology/systems	Electric vehicles; efficiency technologies	Adopting energy-efficient solutions; shift to renewables

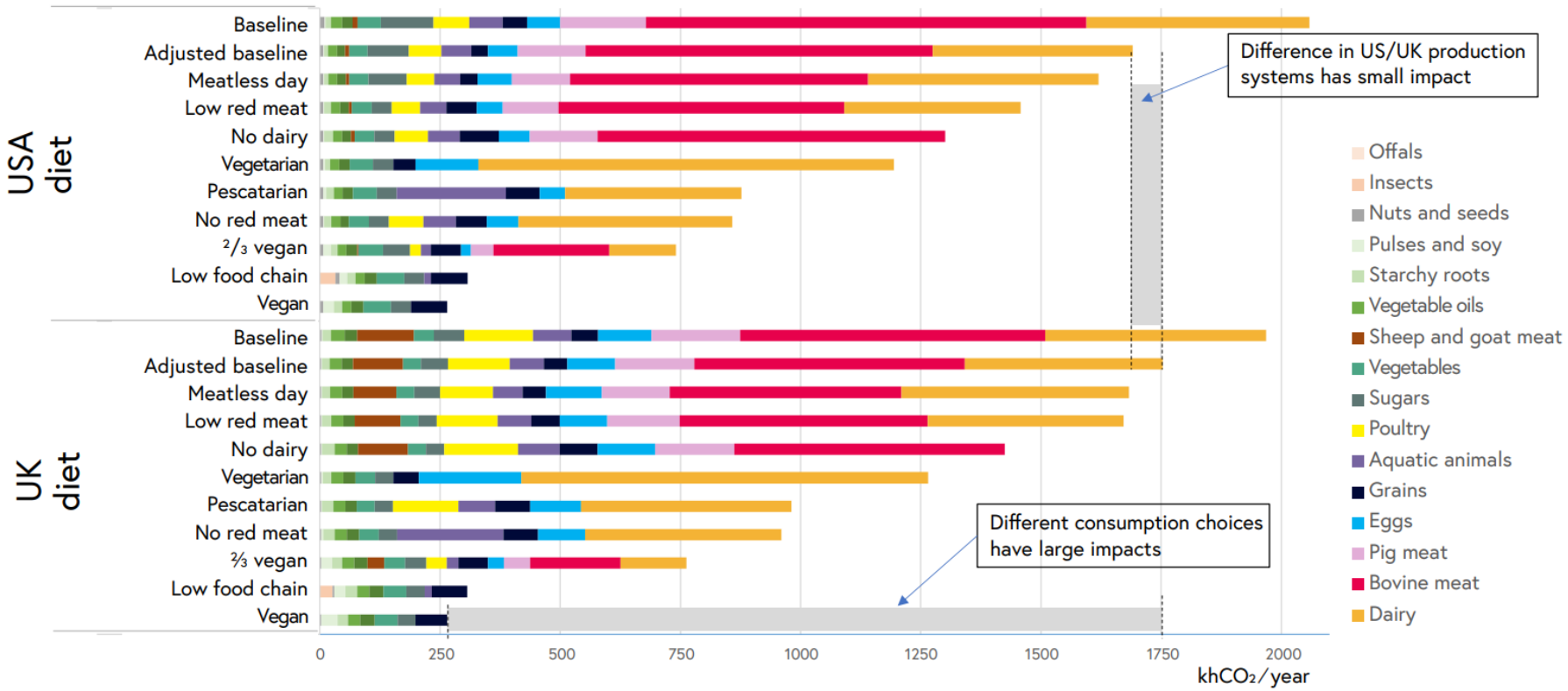
Total emissions 2050
Socio-cultural factors
Infrastructure use
Technology adoption
Emissions that cannot be avoided or reduced through demand side options
Deforestation and land-use change
Economic potential without considering LUC



Source: Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. Science.

Note: Data represents the global median greenhouse gas emissions of food products based on a large meta-analysis of food production covering 38,700 commercially viable farms in 119 countries.

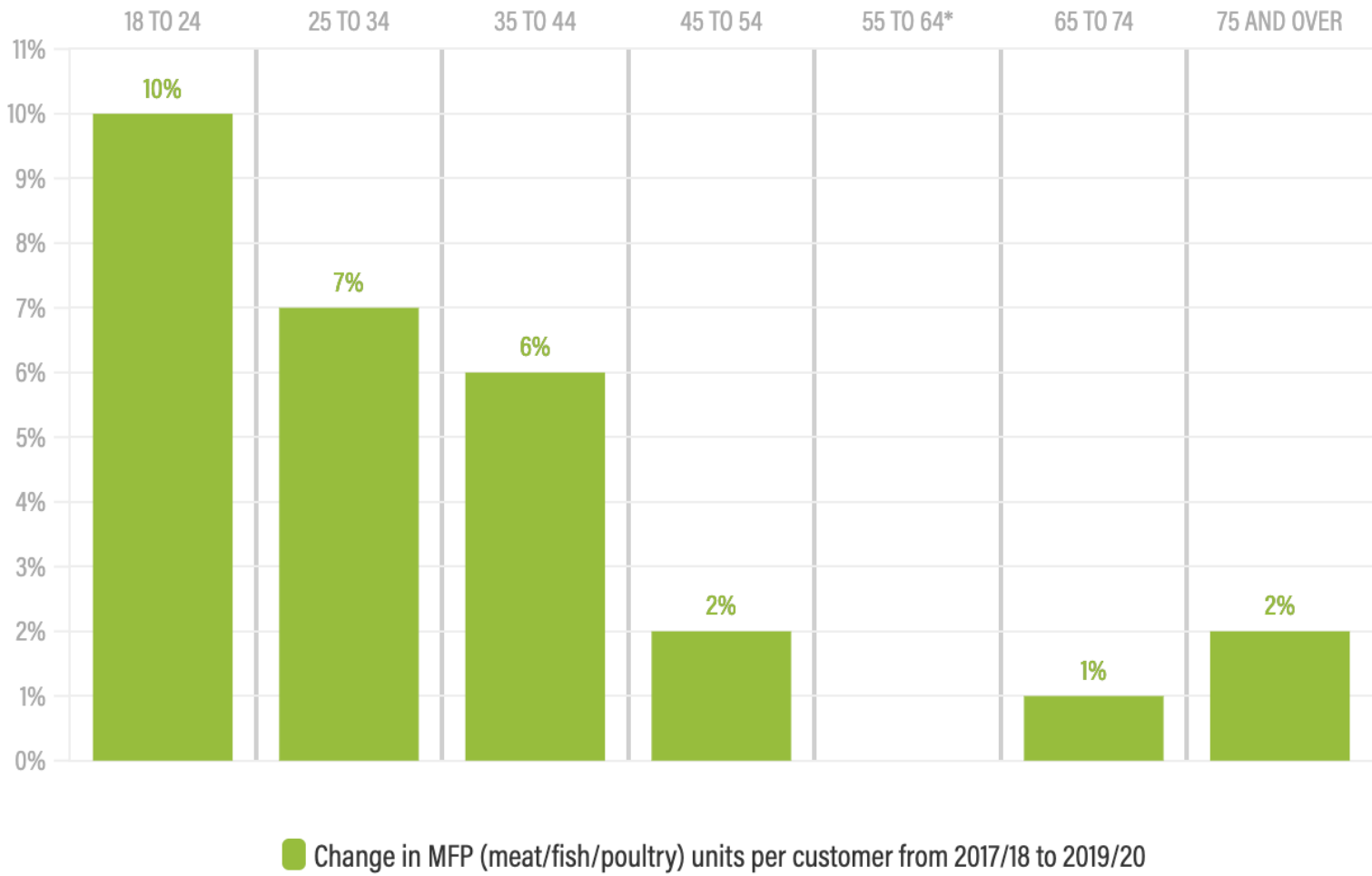
It's what we farm, more than how we farm, that causes the environmental impact of our diet



SOURCE: Kim,B.F. Santo, R.E. Scatterday, A.P. Et al. (2020). Country-specific dietary shifts to mitigate climate and water crises, Global Environmental Change, Volume 62

Percentage change in average number of weekly units of meat, fish or poultry purchased per buyer by age group.

Sainsbury's shoppers, 2017-2020.



Source: Sainsbury's, 2017-2020

* Note: 55 to 64 is 0%

WORLD RESOURCES INSTITUTE

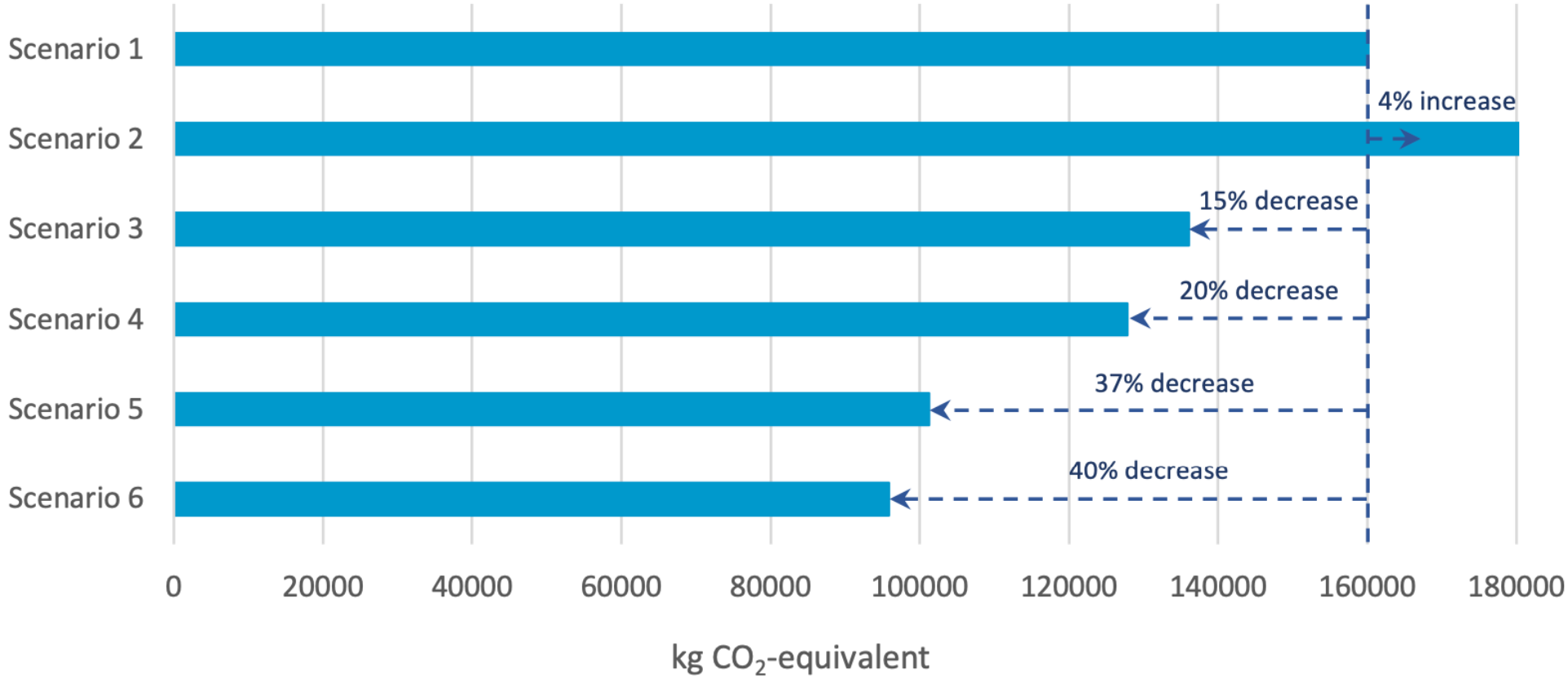
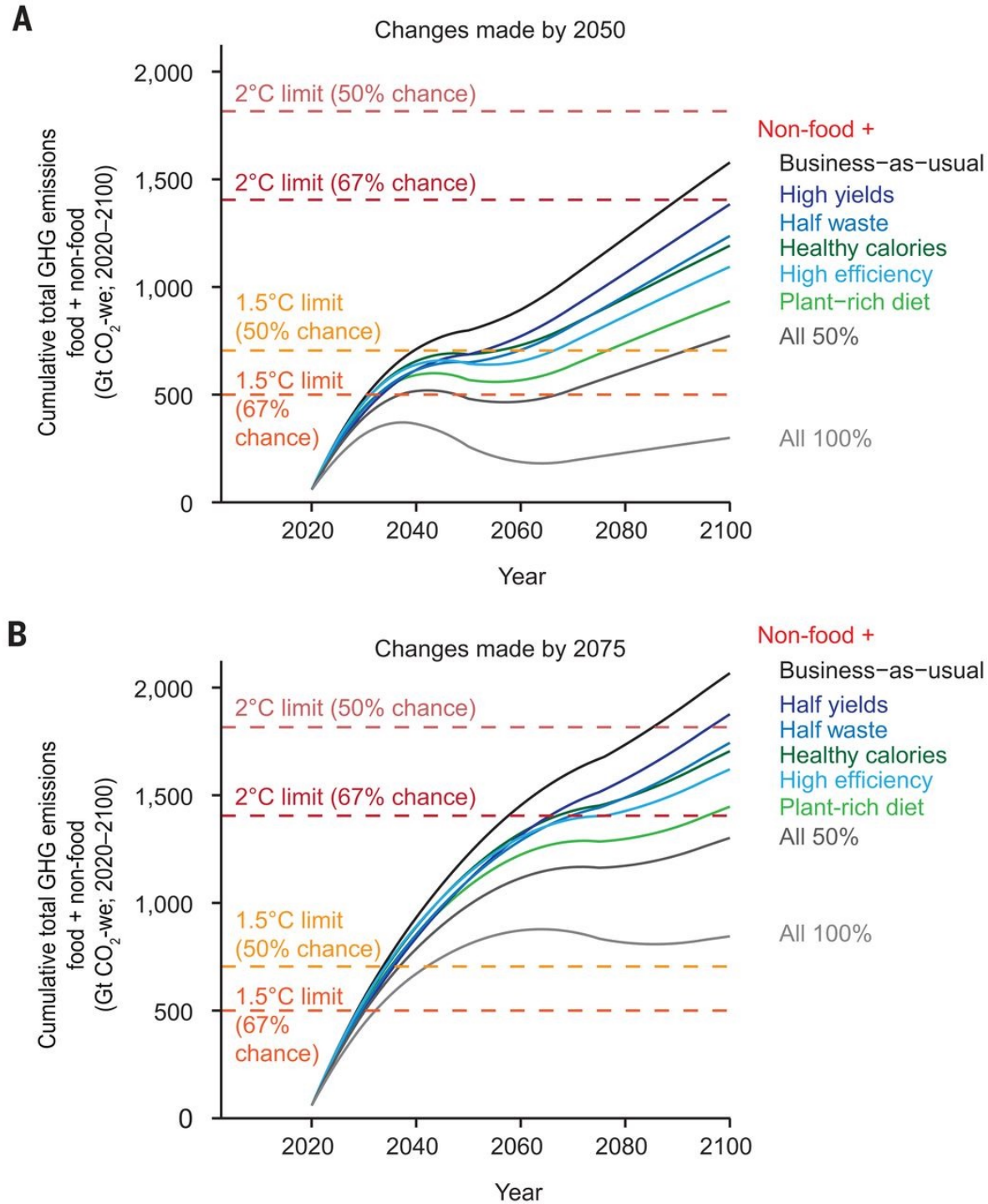
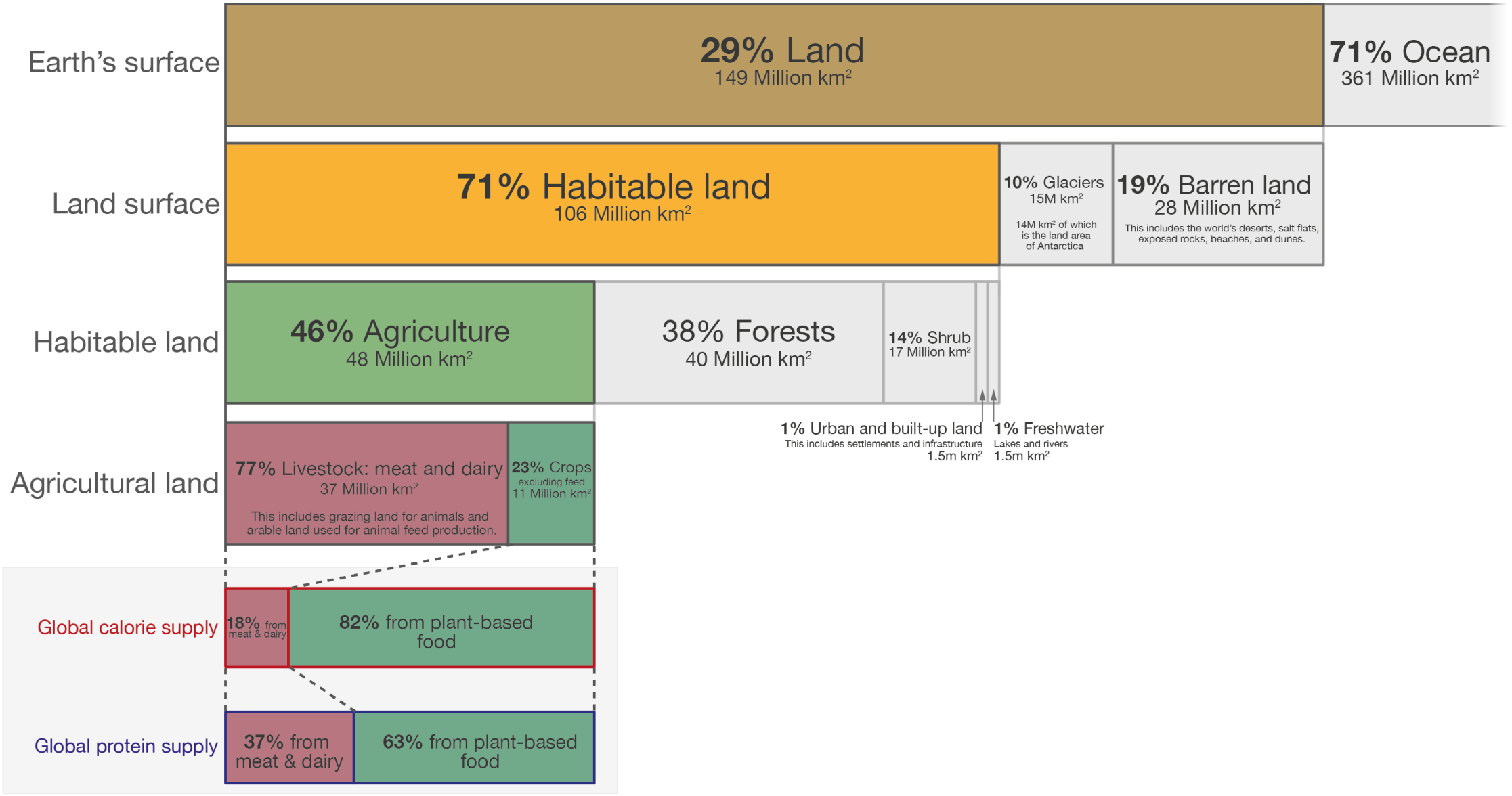


***Figure 3**: Mass in kilograms of CO_2-equivalent emissions for different scenarios, and the percentage difference from 2019 'Business as usual' scenario.*


A
Changes made by 2050
Cumulative total GHG emissions
food + non-food
(Gt CO_2-we; 2020–2100)
2,000
1,500
1,000
500
0
2°C limit (50% chance)
2°C limit (67% chance)
1.5°C limit
(50% chance)
1.5°C limit
(67%
chance)
2020
2040
2060
2080
2100
Year
Non-food +
Business−as−usual
High yields
Half waste
Healthy calories
High efficiency
Plant−rich diet
All 50%
All 100%
B
Changes made by 2075
Cumulative total GHG emissions
food + non-food
(Gt CO_2-we; 2020–2100)
2,000
1,500
1,000
500
0
2°C limit (50% chance)
2°C limit (67% chance)
1.5°C limit
(50% chance)
1.5°C limit
(67%
chance)
2020
2040
2060
2080
2100
Year
Non-food +
Business−as−usual
Half yields
Half waste
Healthy calories
High efficiency
Plant-rich diet
All 50%
All 100%

Global land use for food production

Our World in Data



Data source: UN Food and Agriculture Organization (FAO)

OurWorldinData.org – Research and data to make progress against the world's largest problems.

Date published: November 2019.

HEALTH

Hollie Meyers

30th January 2025

The question: **What should Imperial do to serve sustainable, healthy, and affordable meals on our campuses by 2030?**

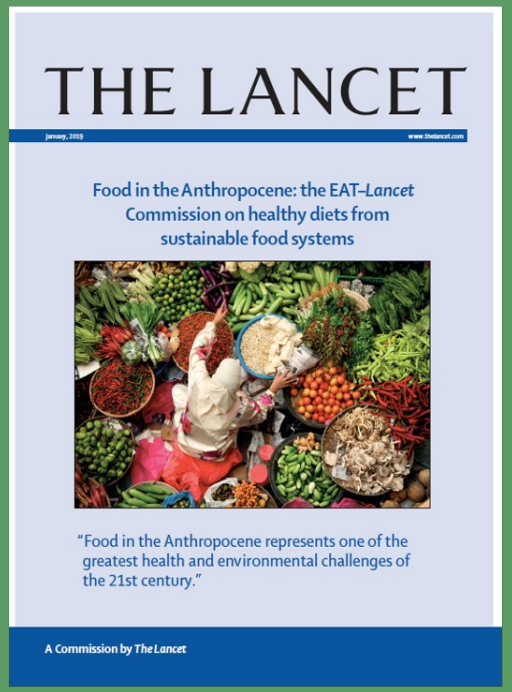
"Plant-based diets can support healthy living at every age and life stage."

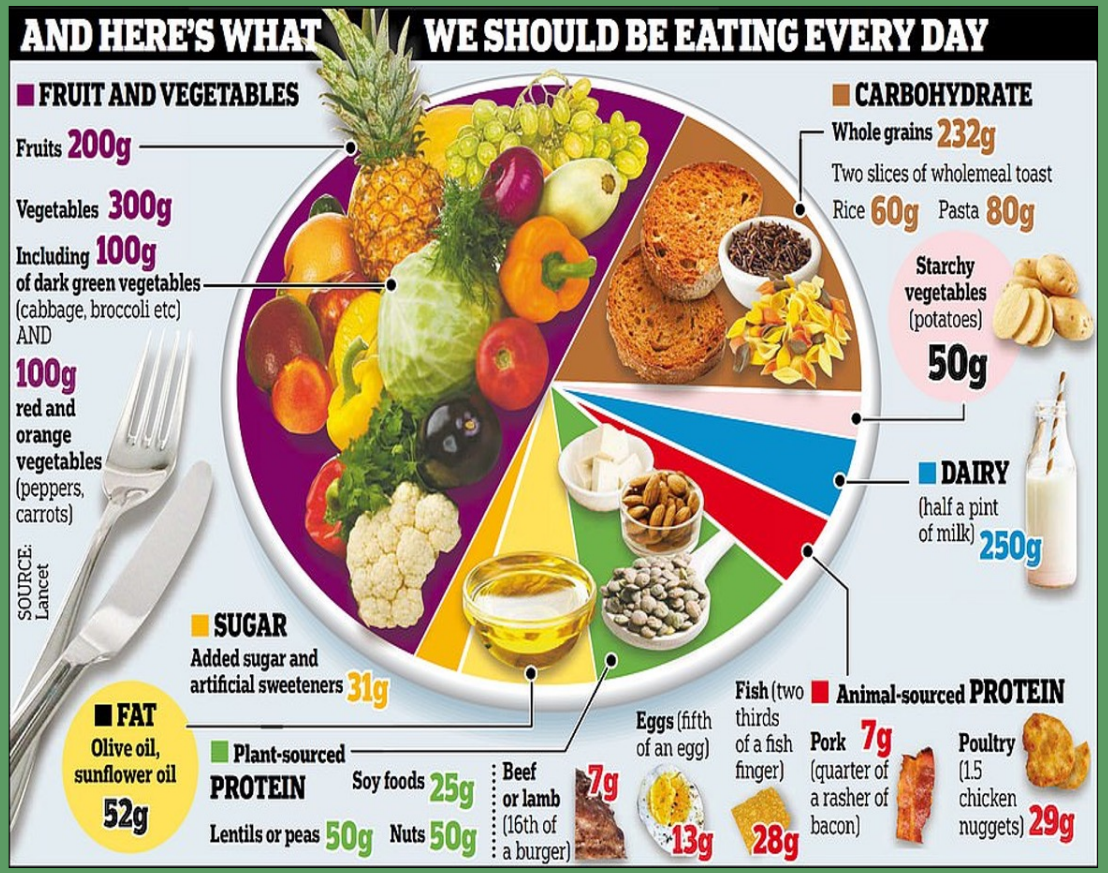
- British Dietetics Association

BDA The Association of UK Dietitians

The question: **What should Imperial do to serve sustainable, healthy, and affordable meals on our campuses by 2030?**

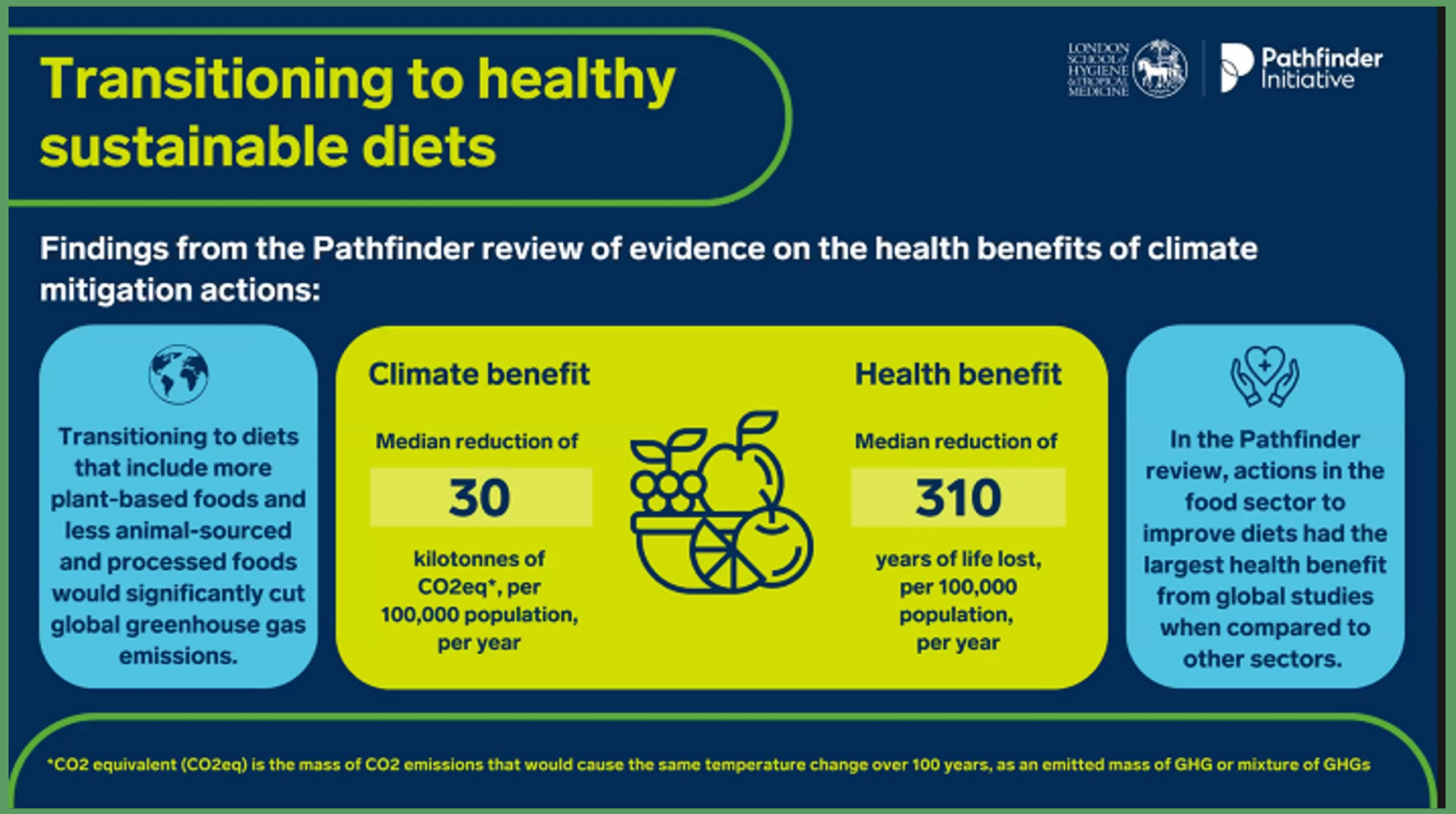
The EAT-*Lancet* Commission - planetary health diet and targets for sustainable food production that can prevent 11 million premature adult deaths per year and lead to a sustainable global food system by 2050.





The question: **What should Imperial do to serve sustainable, healthy, and affordable meals on our campuses by 2030?**

Planetary health is undoubtedly linked to human health: a plant-based diet is better for both people and the planet



The question: **What should Imperial do to serve sustainable, healthy, and affordable meals on our campuses by 2030?**

COST & STUDENT OPINION

Ashwin Banerjee

30th January 2025

The question: **What should Imperial do to serve sustainable, healthy, and affordable meals on our campuses by 2030?**

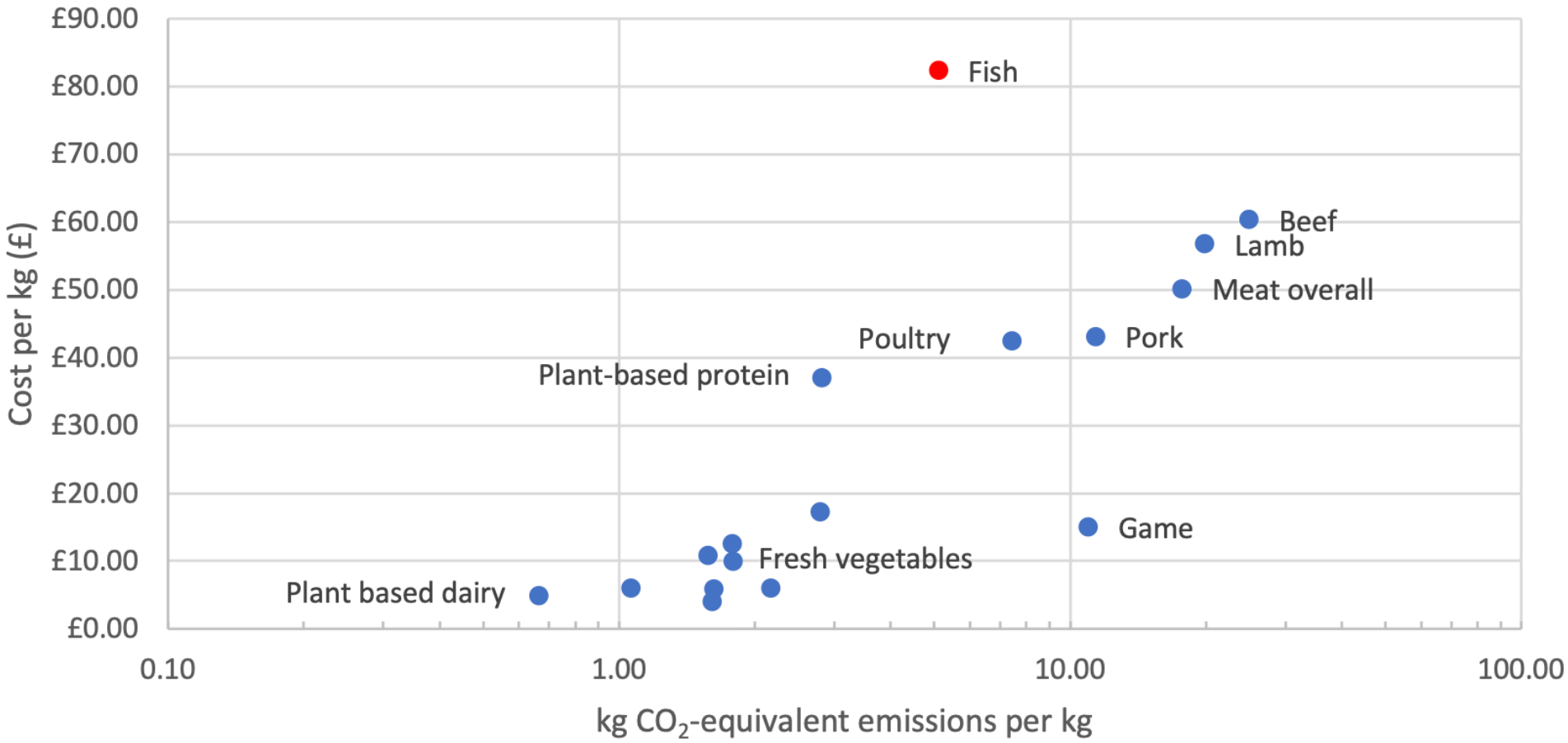


***Figure 4**: Carbon-equivalent emissions per kilogram of food category, compared to cost per kilogram of food category. A direct comparison of plant-based proteins and meat, and plant-based dairy and dairy can be found in Appendix III.*

DELIBERATION

The question: **What should Imperial do to serve sustainable, healthy, and affordable meals on our campuses by 2030?**

DISCUSSION

Bearing in mind what you've just learnt, try to answer the question. Here's a suggested layout for your notes:

	Sustainability	Price	Health	Opinion	Other
idea 1…	+ pros - cons	+ pros - cons	+ pros - cons	+ pros - cons	+ pros - cons
idea 2… etc.	+ pros - cons	+ pros - cons	+ pros - cons	+ pros - cons	+ pros - cons

The question: **What should Imperial do to serve sustainable, healthy, and affordable meals on our campuses by 2030?**

COALESCENCE

Noun: 1. The act or state of growing together

The question: **What should Imperial do to serve sustainable, healthy, and affordable meals on our campuses by 2030?**

WRAP UP

Thanks for participating!

Any questions, check our FAQ on our website (QR above) (it's detailed and fully cited!) or email/ask any of us.

Please please let me know any feedback on the session, it was my first time running something like this and I'm keen to improve!

If you haven't already, please fill out our survey (QR below).

If you are a councillor, you can read our motion in an email from Hollie, and please attend the Council on Tuesday if you can!

Take it away, Steph!