

May 16-18
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CONFERENCE

10th Anniversary Edition

ENGAGING THE PUBLIC WITH CLIMATE CHANGE:
PUBLIC COMMUNICATION & BEHAVIOUR CHANGE
TO ACHIEVE NET ZERO

Prof. Lorraine Whitmarsh MBE - Director, Centre for Climate Change & Social Transformations

University of Bath, UK

www.ibtnetwork.org

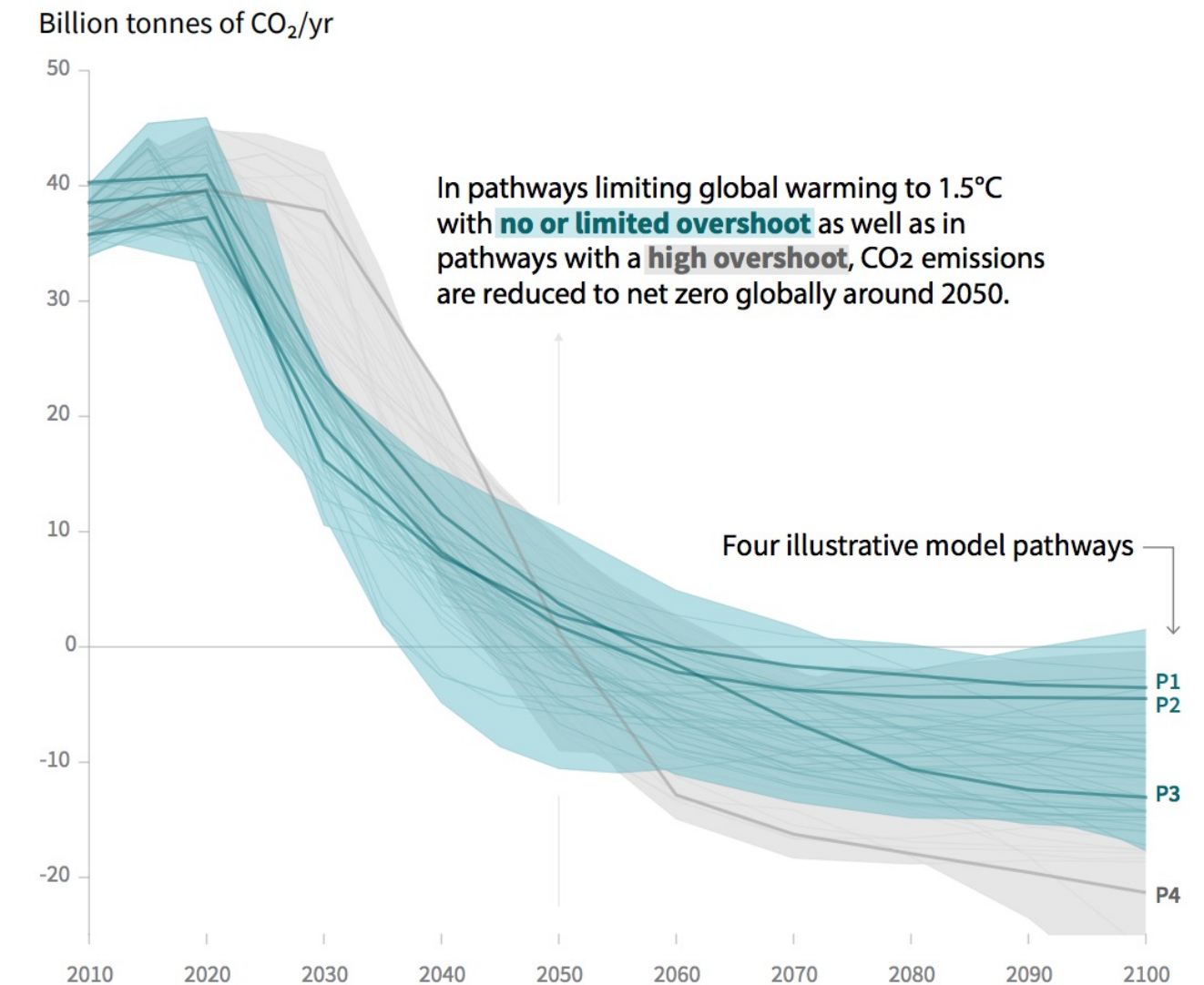
ibtn
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Tackling climate change > societal transformation

Societal **transformation** is required to reach 'net zero' emissions by 2050 (IPCC, 2018)

*"...**systemic** change involving alterations in the overall configuration of transport, energy, and agri-food systems, which entail **technology, policy, markets, consumer practices, infrastructure, cultural meaning and scientific knowledge**"*
(Geels, 2011)

We're not on track... CO₂ emissions have been cut from energy supply but hardly from demand

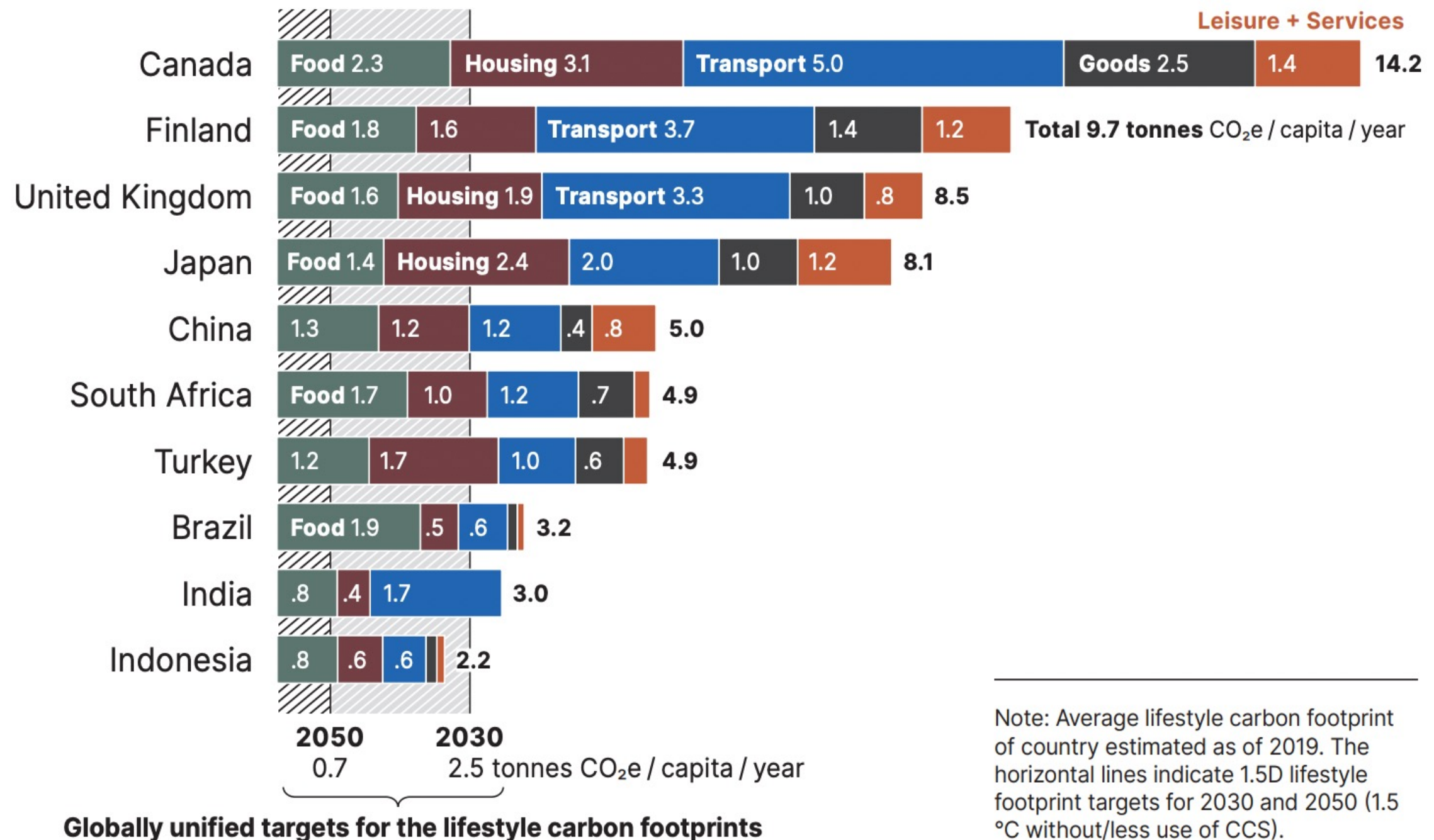


Behaviour change is critical

Technological change alone is not enough to reach carbon targets

- Most measures need some **consumer behaviour change** (IPCC, 2022; CCC, 2020)
- The remainder requires **behaviour change by businesses and leaders** (i.e. to implement technologies)











Reduction of average Canadian carbon footprint by 2030 from **14t** to **2.5t** CO₂ to stay within 1.5°C warming (Akenji et al., 2021)



Top mitigation behaviours



Top 10 options for reducing your carbon footprint

1		2.04	Live car-free
2		1.95	Battery electric vehicle
3		1.68	One less flight (long-haul return)
4		1.6	Renewable electricity
5		0.98	Public transport
6		0.895	Refurbishment and renovation
7		0.8	Vegan diet
8		0.795	Heat pump
9		0.65	Improved cooking equipment
10		0.64	Renewable-based heating

Median potential reduction (tCO₂eq/cap)

Recycling saves
0.01 tCO₂ per
year

Ivanova et al., 2020

Whose behaviour needs to change?

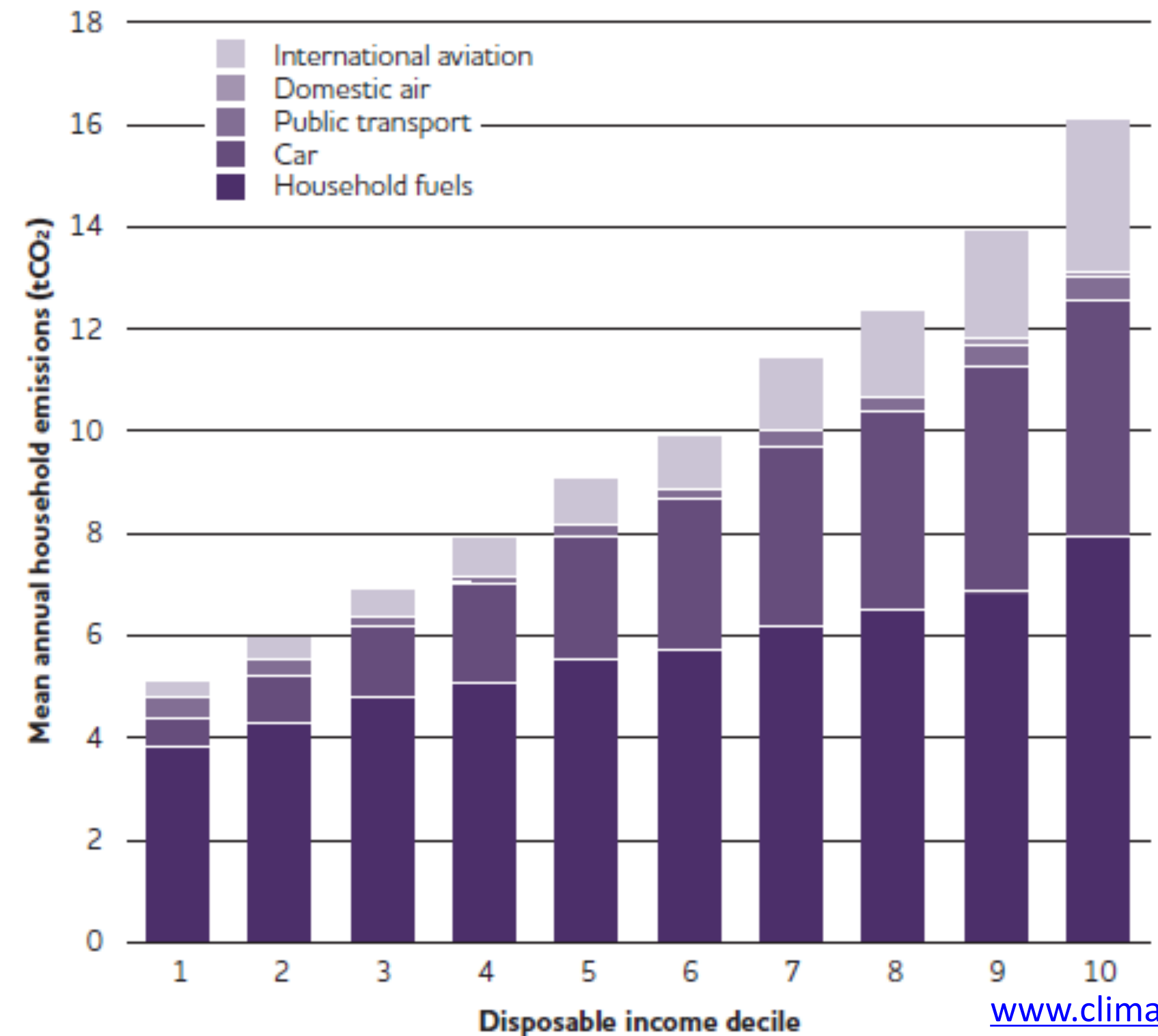


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“Not all households will need to—or be able to—adopt behaviour changes to the same extent, and that policies should take into account the needs of **different groups** [*rural, disability, gender, income, etc.*] and fairness.

... The **wealthiest 10%** have a carbon footprint more than double the national average and more than **four times** that of people at the lower end of the income distribution”

House of Lords, 2022



www.climatejust.org.uk

People are not only consumers

We have multiple roles, so can be **agents of change** in *lots* of ways

**Direct CO₂
reduction**



**Indirect CO₂
reduction**



Hampton &
Whitmarsh, 2023;
Nielsen et al., 2021

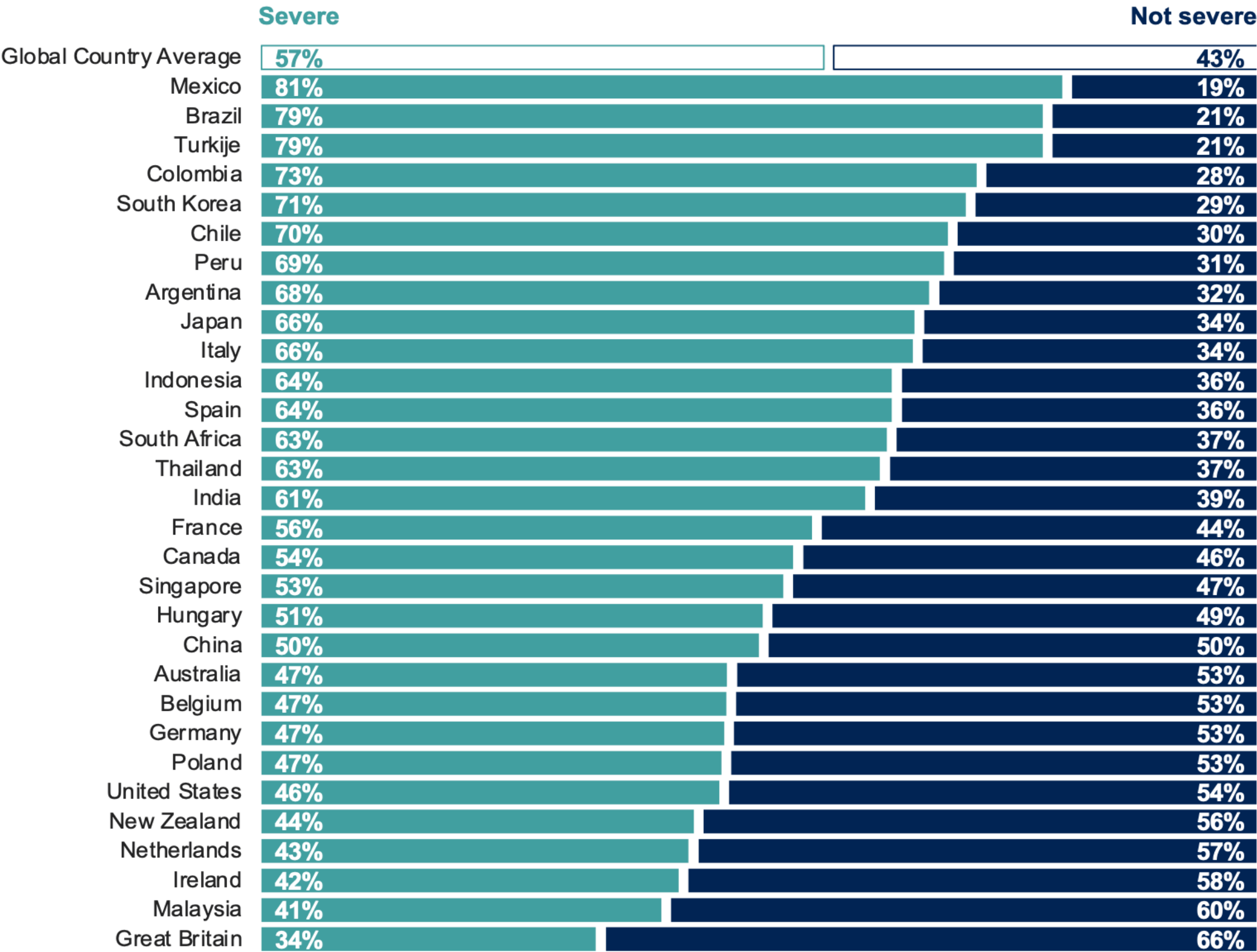
Concern about climate change has grown



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How severe an effect would you say climate change has had so far in the area where you live?

- Most see climate change already affecting their area
- Over a third globally** expect to be displaced because of climate change in the next 25 years (Ipsos, 2023)
- Climate change concern not dented by COVID-19
- Growing willingness to shift travel, dietary and consumption habits
- But behaviour change is lagging – emissions rebounding since COVID



How can we change behaviour?



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Downstream – influencing individuals' choices

- information / advertising (e.g. labels)
- education
- social approaches

2-3%
effective*
(Nisa et al., 2019)

***But more effective for political / social change** (Weiss & Tschirhart, 1994)

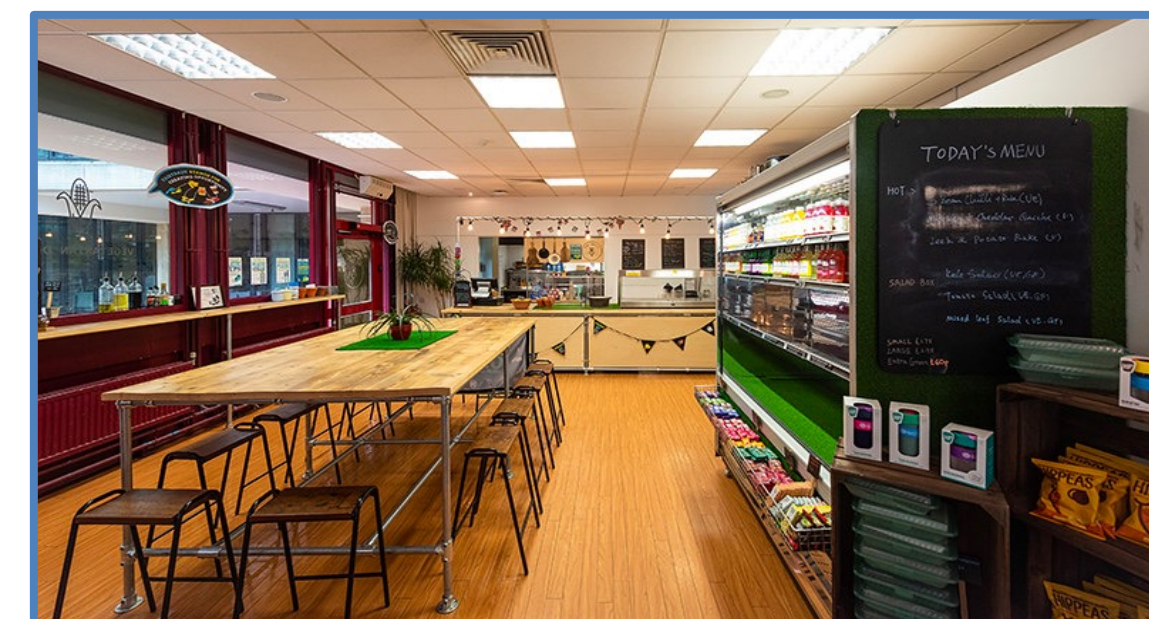


Upstream – influencing context/situation of action

- economic measures
- changes to available products and services (nudges, regulation)
- changes to built environment

Up to 100%
effective

Verplanken & Wood, 2006



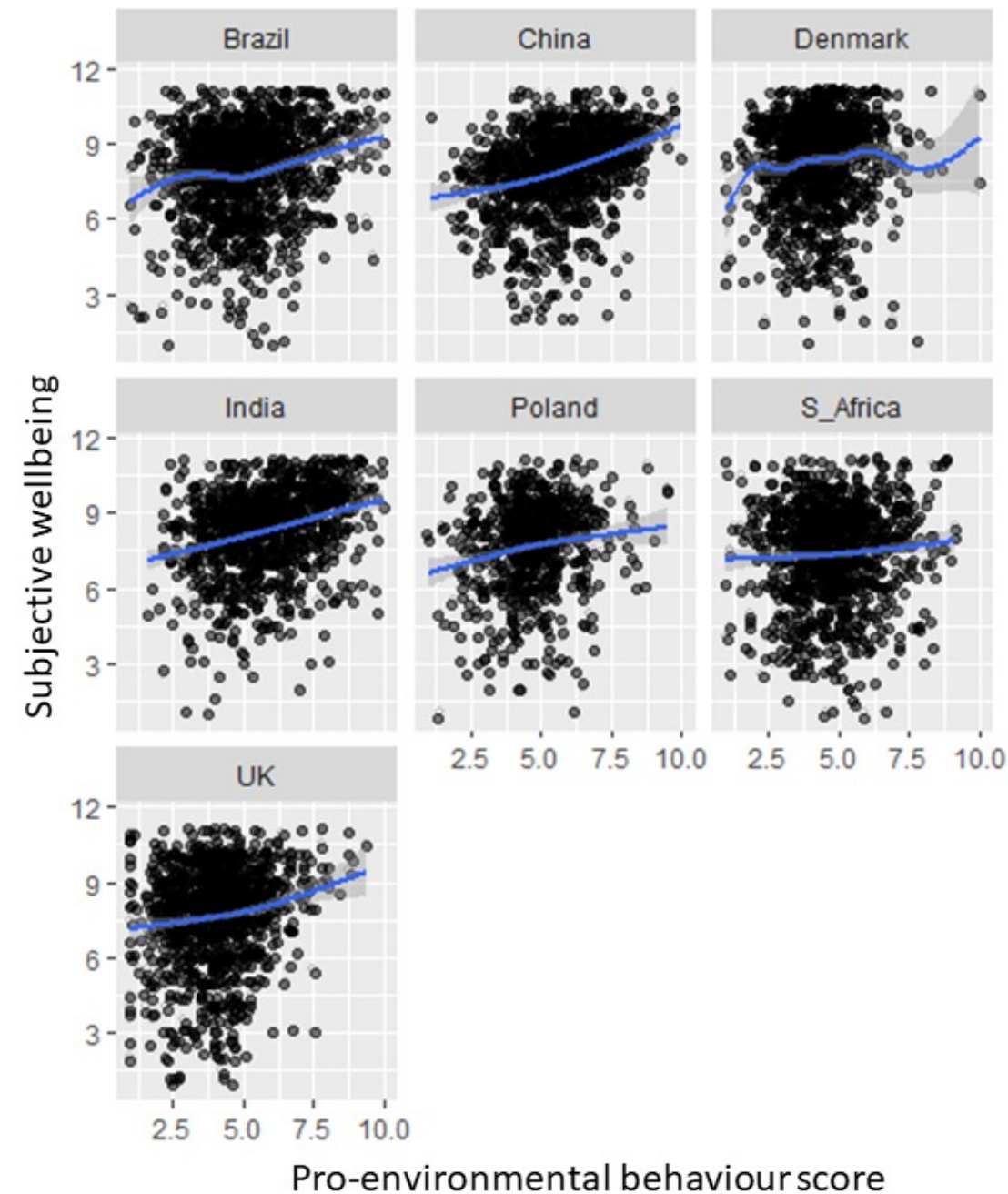
Giving people information

- We do need to raise awareness about **what is effective** to tackle climate change – incl. dietary choices
- **Target place and time** of action (e.g., light switch, fuel pump)
- Communication is most effective when it targets **what people care about** – e.g., saving money / time, being healthy, helping community / family
- **Most** things we can do to tackle climate change can **benefit us** in other ways – e.g., walking / cycling and eating less red meat is healthy, can create 'green' jobs (like installing insulation or heat pumps) (IPCC, 2022)

*Sainsbury's, Lidl, M&S, etc.
trialing climate labels*



Climate action improves wellbeing



- Materialism negatively affects wellbeing (Dittmar et al., 2014)
- Those with 'green' lifestyles tend to have higher wellbeing (Capstick et al., 2022)
- **Going green is not about 'sacrifice' – far from it; it improves quality of life**
- Spending time in nature improves wellbeing – and motivation to be green (White et al., 2020)

The limits of information...

Climate experts fly more often than other scientists

Ben Webster, Environment Editor

Tuesday October 20 2020, 12:01am,
The Times



Climate scientists take about five flights a year on average for work

- Climate change experts took median **2-3 flights** per year; non-experts took **two** flights per year
- Both groups took similar no. of personal flights (1-2 per year)
- Climate change professors fly the most!
- **Knowledge doesn't lead to behaviour change**

Whitmarsh et al., 2020

Changing the context of action



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Downstream interventions (labels, feedback, norms, goal-setting, etc.) = 2-3% effective

Nudges (changing choice architecture) = ~25% effective

Nisa et al., 2019



**Doubling vegetarian options in UK canteens
– from one in four to two in four – increased
plant-based sales by 40-80%**

Garnett et al (2019)

**Using green energy as default tariff by
Swiss energy co. with almost quarter
million customers increased uptake from
3% to 80-90%, lasting 4+ years**

Liebe et al (2021)



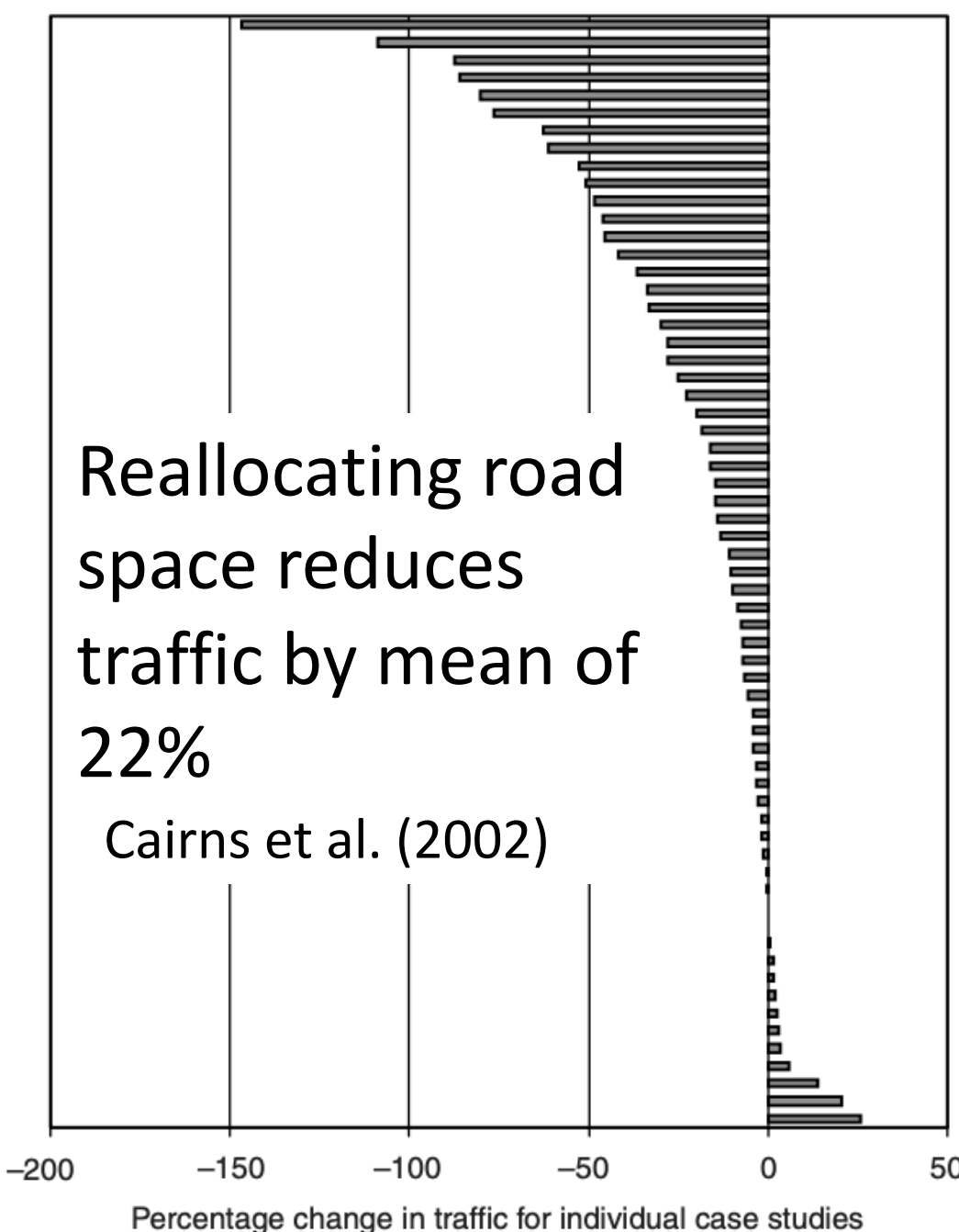
Changing the context of action

Germany eases cost of living crisis with
€9 a month public transport ticket

Millions set for summer of cheap travel on all modes of transport



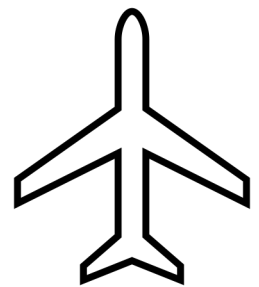
Changing infrastructure (e.g. built environment)



Using economic (dis)incentives

- Congestion charging is most effective at cutting car use (up to **33%**, London; Kuss & Nicholas, 2022)

There is broad support for net zero policies



Policy support

Frequent flyer levies

Changing product pricing ...

Phasing out gas and coal boilers

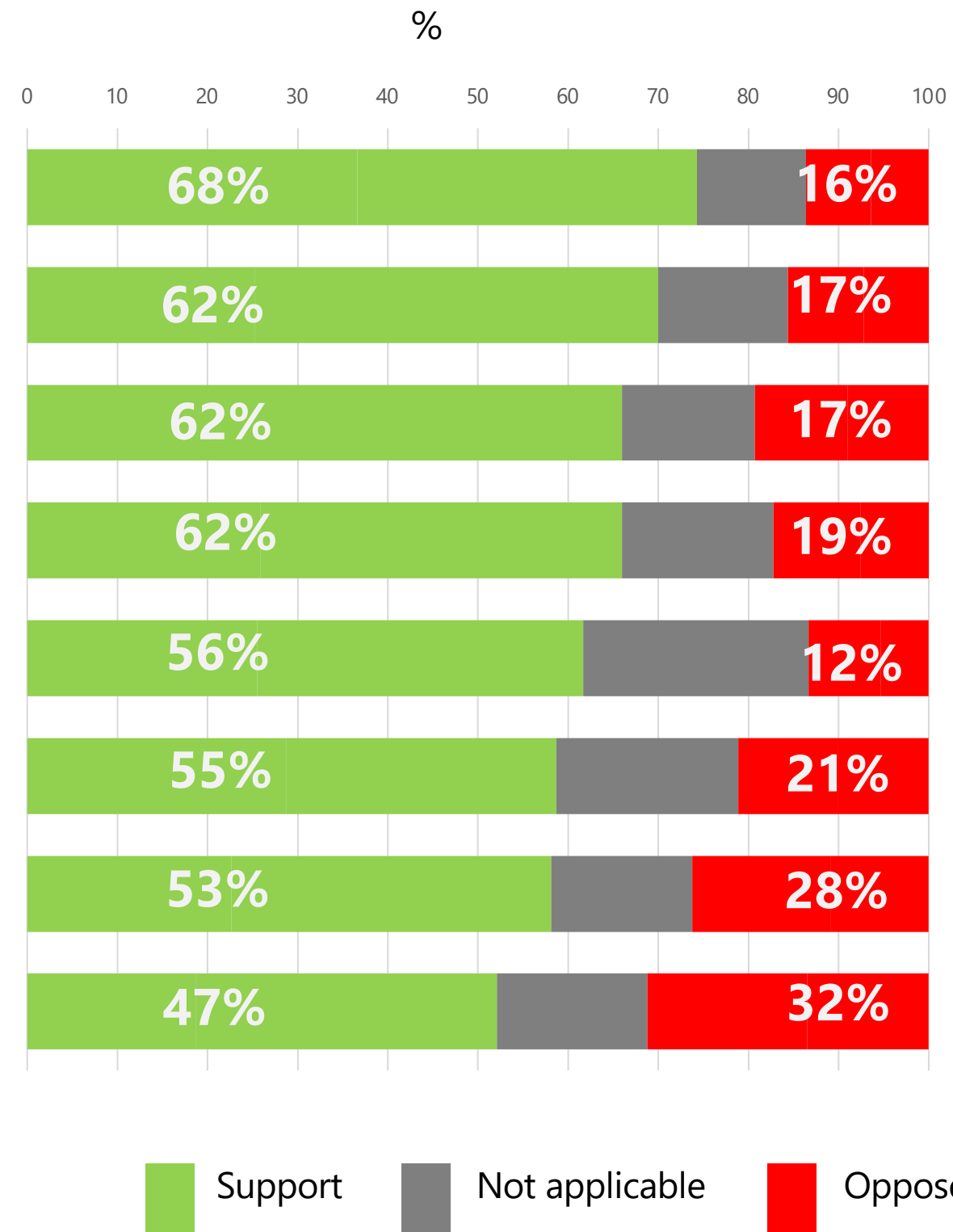
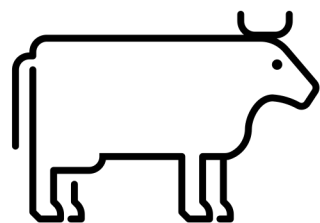
Electric vehicle subsidies

Increasing veggie/vegan options

Access to sustainable pension funds

Creating low traffic neighbourhoods

Higher taxes on red meat and dairy



- Online survey of UK public conducted by Ipsos in August 2021
- N=5,665 (aged 16+)
- Broadly representative of UK public (slightly older)
- Each participant was randomly presented with **4 policies** from a total of 8 and asked about **support, co-benefits, trade-offs and fairness**
- Replicated in summer 2022 (similar levels of support)

Poortinga, Whitmarsh et al., 2024

How can we make climate policies fairer?



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Disruption to lifestyles and society mean **engaging with the public** is critical for acceptance (& effective policy design)

Perceived fairness is often strongest predictor of policy support:

- Fairness is **more important than effectiveness** of policies (Sweetman & Whitmarsh, 2015; Bergquist et al., 2022)
- **Procedural**, as well as **distributional**, justice (Jagers et al., 2010)

Participatory policy-making leads to better and fairer outcomes (instrumental rationale: Fiorini, 1990)

Citizen engagement is vital for building political mandate
(e.g., citizens assemblies and juries)

Howarth et al., 2020



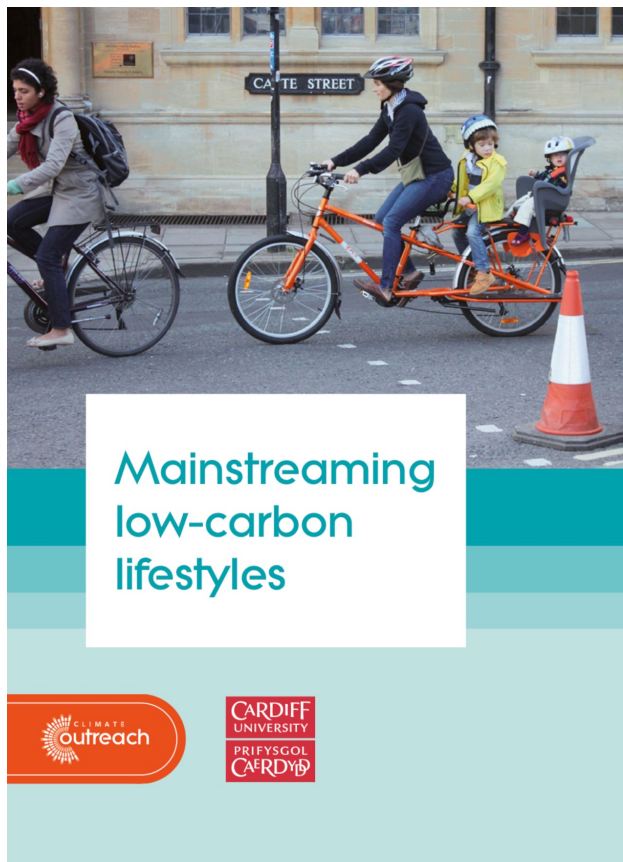
Conclusions



Radical social and behavioural change is essential for reaching net zero and increasing resilience to climate change impacts

How can we achieve net zero behavioural change?

1. **Focus on high-impact behaviours** – mobility, food, energy – not only consumer actions, but also professional, political & community actions
2. **Co-design interventions with communities/public (e.g. dialogues), which achieve wider benefits** – e.g., health benefits of active travel – and frame information around audience values/needs, as well as changing norms
3. **Implement upstream *and* downstream interventions** – e.g., social norms, pricing, city design – due to multiple influences on behaviour



<https://cast.ac.uk/publications/>



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@lwhitmarsh

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