



Centre for **Climate Change** and **Social Transformations**



Economic and Social Research Council

ENGAGING PEOPLE IN CLIMATE ACTION

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Climate change risks



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• Wildfires in LA (Jan 2025)



European
 flooding
 (May 2024)

• **Developing countries** more vulnerable





 2022 saw record temperatures in and beyond Europe



EUROPE Extreme Maximum Temperature (C) July 3 - 9, 2022

Techno-optimistic climate policy framing





Net Zero Strategy: Build Back Greener

Foreword from the Prime Minister



Over the last three decades we have already reduced our emissions by 44 per cent - while growing our economy by over 75 per cent – and this strategy sets out our plan for going the rest of the way. We will meet the global climate emergency but not with panicked, short-term or self-destructive measures as some have urged. Instead we will unleash the unique creative power of capitalism to drive the innovation that will bring down the costs of going green, so we make net zero a net win for people, for industry, for the UK and for the planet.

This strategy sets out how we will make historic transitions to remove carbon from our "For years, going green was inextricably bound up with a sense that we have to **sacrifice** the things we love. But this strategy shows how we can build back greener, **without so much as a hair shirt in sight.**

In 2050, we will still be **driving cars, flying planes and heating our homes**, but our cars will be electric gliding silently around our cities, our planes will be zero emission allowing us to fly **guilt-free**, and our homes will be heated by cheap reliable power drawn from the winds of the North Sea.[...]

We will unleash the unique **creative power of capitalism to drive the innovation** that will bring down the costs of going green."

Tackling climate change > behaviour change



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

Technological change is <u>not enough</u>: most/all measures needed to reach net zero require **behaviour change**

We're not on track... CO₂ emissions have been cut from energy supply but hardly from <u>demand (CCC, 2024)</u>

Current policy approach to changing behaviour is 'seriously inadequate' (House of Lords, 2022)





Which behaviours need to change?



Reduction of average UK carbon footprint by 2030 from **8.5t to 2.5t** CO_2 to stay within 1.5°C warming (Akenji et al., 2021)



Ivanova et al., 2020

Whose behaviour needs to change?



"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 **four times** that of people at the lower end of the income distribution"

In the US, it's **16 times** more.



House of Lords, 2022

Whose behaviour needs to change?





Akenji et al., 2021

Globally unified targets for the lifestyle carbon footprints

But people are not only consumers



We have multiple roles, and many contexts in which to change behaviour



Have a conversation

'Pluralistic ignorance'

 People under-estimate climate concern and policy support







- **1.** Find common ground why does it matter to you (e.g. your children, interests)?
- 2. Share solutions and why they're good for us in lots of ways

People are worried

- 48% willing to donate 1% income to tackle climate change
- 87% in UK think we should fight climate change

• 83% say UK government is not doing enough





Government inaction is reducing wellbeing



- Majority of young people around the world are extremely/very worried about climate change and 45% say this is impacting on functioning ...
- "A perceived failure by governments to respond to the climate crisis is associated with increased distress" (Hickman et al., 2021)



How can government change our behaviour?

Downstream – influencing individuals' choices

- information / advertising (e.g. labels)
- education
- social approaches
 - * and exacerbates inequalities... but important 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



2-3%

effective*









Although there are information gaps...

10

No impact at all



'To what extent do you feel that the following actions have an impact in terms of protecting the environment?'



CASPI/CO, 2019

...but information can polarise opinion



We gave a group of people (some climate sceptics and some not) two newspaper editorials on climate change (one sceptical, one advocating action) to read and then asked:

"Did you become more or less convinced about climate change?"



... or simply be ignored



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Information is filtered through biases



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e.g. 'Confirmation bias':

select information that affirms existing beliefs and values



Reducing red and processed meat is good for environment *and* for health – which message works best?



'Combined' condition message (Chatbot)

Wolstenholme et al., 2020

Climate action is good for us



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Health co-benefits are best evidenced

Effects of demand-side options on wellbeing in 19 categories (Creutzig et al., 2022)

	SDGs	2	6	7, 11		6	7	11	11	4		1, 2, 8,10	5, 10, 16	5, 16	10, 16	11, 16	8	9,12	
Sectors	Mitigation strategies/well-being dimensions Legend High positive inpact (<2) Los positive inpact (<2) Los positive inpact (<1) Overall results No impact Los regulive inpact (<1) Medium regulive inpact (<2) Confidence level	Food	Water	Air	Health	Sanitation	Energy	Shelter	Mobility	Education	Communication	Social protection	Participation	Personal security	Bockal cohesion	Political stability	Economic stability	Material provision	
2	Sufficiency	(+1) ====	(-4)	(-4)	(I-0)	(+1) *	(-3)	(+1) #	64	(*0	(2+) ***	(r-1) **	0-1) **		(-4)		(-0)	140	
Buldir	Efficiency	*	(-d)	(-2/-1)	(-0/-1)	(=1) *	(-0)	(cl)		(+1)	(+1)		(+1)	1+1	(-0-1)		(+2)	(42-1) ****	
	Lower carbon and renewable energy	(+21-1) ***	(-21-1)	(-0) 	0-80 +++++		0-80 •••••	(+1) +++	(+1) +++	(+1)	6-0		0-0	(+1) ***	(-8/-1)		(+2-1)	148	
Food	Food waste	0.0	(40	(40	(H)	(+1) **	(+1)				(1-1) ++	(-5)-1)	0-0				0.0		
	Overconsumption	(+1) •	(+\$1-1) *	(+8/-5) •	0-80 ++++		(-1)-1) •						0-8			•		· 1	
	Animal-free protein	1421	(48)		0-80						0-0	0-8	0-0 		•	1-21 •			
	Teleworking and online education system	(a)) **		(-B)	(-2) •••••		6-0	**	641	0-0	(5-0) *****	0-0	6-0	p-8-0	(5-0) *****	1-21	112		
port	Non-motorized transport	1-21	(1)	(+0)	0-30		0.00		1-31	(-1)	(-3) ***	0.0	0.0	1-21	(-2)	1-21	1+2)		
BUB	Shared mobility	(1)		(-0)	(-2)		0.0		(12)		0.0	(12)	0:10	(+11-1)	(-1/-1)	H0	(12)	141	
F	BEVs	(+1)		(-0)	(+1)	(-1)	0.0		(+2)			(-2)	(-2)				(+2)	(-0	
	Compact city	(+21-1)	(+1)	(-2/-1)	(-0-1)	(+1)	(-0-1)	(-1)	103	(+1)	(-1/-1)	(14)	(r1) **	(+1)	(+1-1)		64	(+1)	
Urban	Circular and shared economy	(-0)	(-1)	(-0)	(-4)		(-0)	(<21-1)	(+2)	(+1)	(+1)	(+1)	(+1)	1-10	(-1)	(+1)	(+2)	1-28	
	Systems approach in urban policy and practice	(+1)	(-0)	(+0)	(-0)	(-1)	(-0)	(+8	1+30		(+1)	(-1)	0-10	1-8	(~1)		64	1-01	
	Nature-based solutions	(-01	(+1/-1) *****	(-2/-1)	(-0)	(+1)	(-0)	(+1/-1) ****	0.0	(-0)		(+8) **	(-0) +	0-10 	(-0/-2)		1+30	(et) **	
Industry	Using less material by design	(-0)	(-0)	(-0)	(+d)	(-4)	(-0)	(<2)	(+2)	(*1)	(+0)	(+1)	0-10	1-11	(+1) ++	(+1)	1-21	148	
	Product life extension	(42)	(-0)	0-00	(-E) ++	(40	0-00	(+8)	64	(*0 **	(48)	(+1)	(-1)	1-11	0-0 ++	1+11 **	64	1-01	
	Energy efficiency	1421	(40)	6-8	0-0	040	0-80	643	641	(+1)	6-0	6-0	0-80	1+11		1-11	641	148	
	Circular economy	1421	(48)	4-8	0-0	040	0-80	1-21	(1-2)	6-0	(5-0)	0-10	0-0	1-21	0-0		1+21	143	
				_	_	_				_	_	_			_		_		

Climate action improves wellbeing



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- Studies show that climate action can improve health, economy, equality, biodiversity, etc. (IPCC, 2022)
- Those with 'green' lifestyles tend to have higher wellbeing (Capstick et al., 2022)
- Materialism negatives affects wellbeing (Dittmar et al., 2014)
- Going green is not about 'sacrifice' far from it; it can improve quality of life



Visions of low-carbon society



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Public workshops in several countries explored desirable low-carbon futures:

'In the UK, visions were dominated by ideas around green space and healthy lifestyles ... Home working, reduced traffic, and cleaner air, combined with discussions of green urban regeneration evoked visions of urban life centred on wellbeing, leisure and community.'



'Pen portraits' for car use reduction



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Working with Scottish Government, CAST used desk research, focus groups and surveys to develop and test 6 'pen portraits' reflecting different Scottish public segments and highlighting that car use reduction is **possible** and **desirable**:

- Mary and Jonathan, an older couple living in a rural area
- Alex, a young adult living in an urban area
- Nia and John, middle-income parents
- Kim, a parent on lower income
- Yasmin, a small business owner
- Mike, a disability rights campaigner

Toolkit: www.cast.ac.uk/reports



Get the timing right...





Habits are a major barrier to lifestyle change

Habits are weaker during 'moments of change' (e.g. moving house)

• Tailored bus info and 1-day pass to promote bus use given 6-weeks post-relocation was more effective (inc. from 18% to 47%) than when given to those not relocating





The limits of information...



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THE TIMESToday's sectionsPast six daysExploreTimes Radio

Climate experts fly more often than other scientists

Ben Webster, Environment Editor

Tuesday October 20 2020, 12.01am, The Times



- 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

Changing the <u>context</u> of action



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Nudging

- Doubling vegetarian options in canteens inc. plant-based sales by 40-80% (Garnett et al. 2019)
- Default green energy tariff inc. uptake from 3% to **80-90%** (Liebe et al. 2021).

Economic (dis)incentives

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

Changing infrastructure

 Reallocating road space reduces traffic by mean of 22% (Cairns et al., 2002)







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

		%			
0	20	40	60	80	10
	68%			1	6%
	62%			17	7%
	62%			17	7%
	62%			19	9%
	56%			1	2%
	55%			21	%
	500/			0.0	0/
	53%			28	\$%
	470/			20	0.0.4
	47%			32	290
	1	1	1		

Not applicable

Oppose

Support

- 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, cobenefits, trade-offs and fairness
- Replicated in summer 2022 and 2024 (similar levels of support)

Predictors of policy support



	Low-traffic n'hoods	Frequent flyer levy	EV subsidies	Veg/vegan provisioning	Meat/ dairy tax	Env. pricing	Phase out gas boilers	Sustainable pensions
	В	В	В	В	В	В	В	В
Gender (M=1, F=2)	001	.014	021	.053**	.018	.07***	009	.02
Age	.059**	.098***	012	.018	.005	.038	.007	026
Econ. deprivation (IMD quintile)	004	01	.048*	.061**	.028	.06**	.008	042*
Rurality	.047*	.013	026	.008	.008	.057**	.013	.024
Political orientation (L-R)	021	101***	034	064**	046	03	027	093***
Communitarian (1) vs individualistic (2)	095***	048	123***	119***	114***	089***	131***	131***
Climate worry	.249***	.261***	.307***	.276***	.327***	.379***	.333***	.295***
Policy fairness	.446***	.356***	.369***	.426***	.433***	.326***	.382***	.329***
R ²	.37	.29	.37	.45	.46	.38	.40	.39

How can we make climate policies fairer?

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Perceived fairness predicts 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 <u>better</u> 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



- Climate Assembly UK was first UK citizens' assembly on climate change
- Commissioned by six Select Committees of the House of Commons to look at how the UK should reach its legally-binding target of net zero emissions by 2050
- 108 assembly members were representative of UK population in terms of demographics, geography and levels of climate concern
- Spent 6 weekends in Jan-May **2020** learning about climate change and net zero policies, deliberating and making recommendations
- Covered range of topics inc. energy supply, food, travel, heating, consumption
- Strong support for various net zero policies



Principles for net zero policies:

- Fairness (regions, incomes, sectors, preferences);
- Taking advantage of **co-benefits** for local high streets, health and the economy;
- Maintaining freedom and choice where possible;
- Much better information and education;
- Strong leadership from government and a crossparty approach to change.

Conclusions





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

Rapid and ride-ranging behavioural change is essential for tackling climate change – but also to *improve wellbeing*

Achieving this requires people playing an *active* role in decision-making and action, and governments removing barriers to behaviour change (upstream + downstream measures)

People have multiple roles – not only as consumers, but also parents, citizens, professionals, investors, community members... *cut your carbon footprint, but also use your voice*



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