



Challenges in Communicating Energy and Climate Change: Trust, Saliency and Social License to Operate

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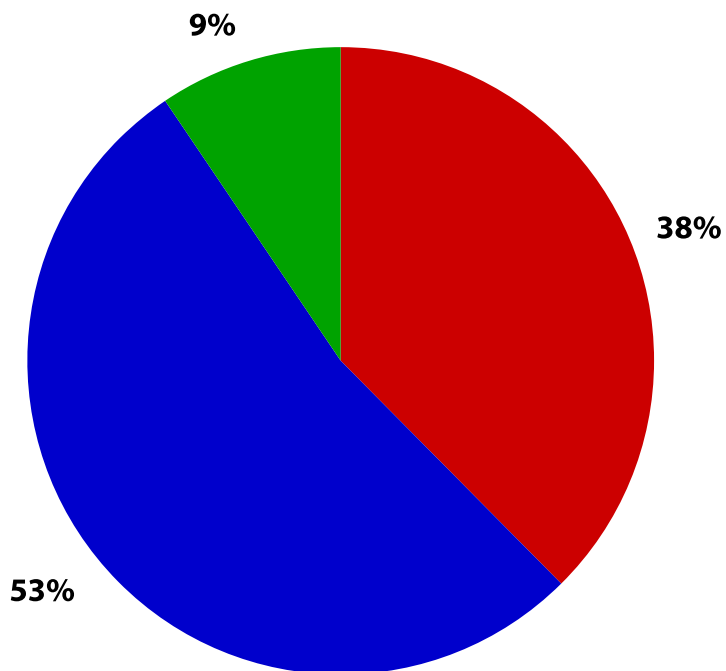


Some Opening Points

- *Techno-optimism?* Most analysis has not taken behaviour change and the challenge of politics of the energy transition seriously
- *Changing Context* The issue of climate change and the low-energy transition has risen rapidly up the agenda
- *Trust Matters* The public has low levels of trust in most traditional advocates who might be expected to lead the energy transition so who might inspire trust?



CCC Net Zero Report



- Low-carbon technologies or fuels not societal / behavioural changes
- Measures with a combination of low-carbon technologies and societal / behavioural changes
- Largely societal or behavioural changes



Net Zero The UK's contribution to stopping global warming

Committee on Climate Change
May 2019



CCC on Communications and Behaviour Change I

- If the public are to become engaged with the climate challenge and contribute to achieving net-zero emissions then the wider policy context will also need to be more supportive. New, compelling narratives will be needed to inspire and mobilise mainstream participation in solutions, adoption of technologies and change in behaviours.
- Government must create a wider context which nurtures public engagement with action on climate change and must also enable consumers to take specific concrete actions that deliver large emissions reductions.
- These changes need not be expensive and can deliver large co-benefits, to health and beyond, but they are unlikely to happen rapidly unless policy first removes obstacles to change in markets and different consumer choices.

CCC, Net Zero, Box 6.4, pp. 194-195

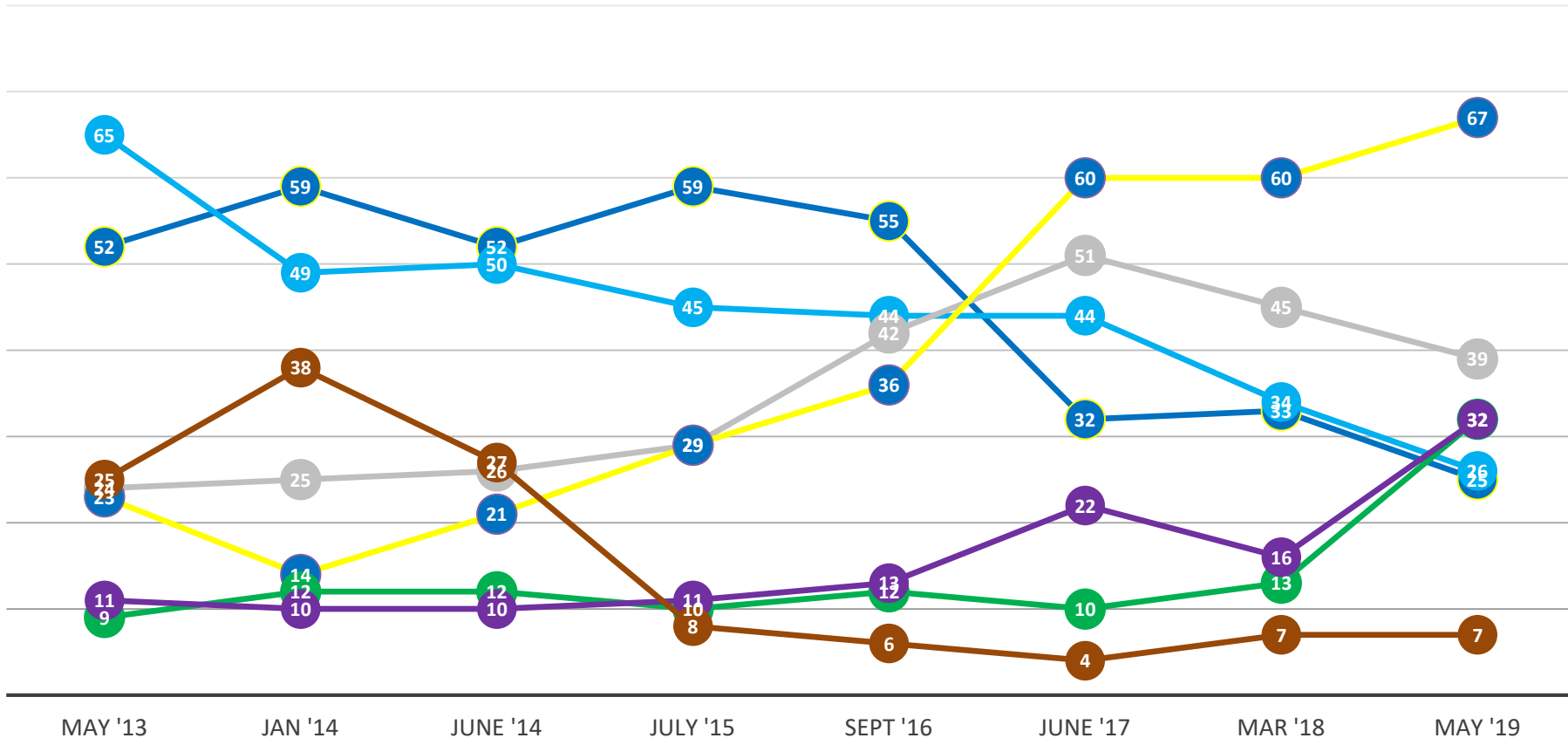


CCC on Behaviour Change II

- Predicting the levels of change that will be delivered by these interventions is very difficult. Policy to deliver rapid societal change and technology adoption is uncharted territory and inherently subject to uncertainty. Government will need to take a pragmatic approach and learn by doing.
- Policies will need to work together and in sequence to deliver change in behaviours and markets, avoid negative outcomes and build public acceptance. Access to attractive and affordable products and services, and support for informed choices and for new industry practices, should be in place wherever possible before interventions which raise prices for essential goods
- Data and information and communications technology (ICT) have emerged as important assets and tools for enabling consumers to make informed decisions about technology adoption (e.g. electric cars and hybrid heat pumps). There is potential across both energy and food for providing consumers with product information and feedback on purchasing habits (e.g. on diet) and for delivering change at the system level.

Changing Saliency

Most Important Issues Facing the UK Today (Top 3)



● Immigration & Asylum
● The economy
● Health
● Europe/Brexit

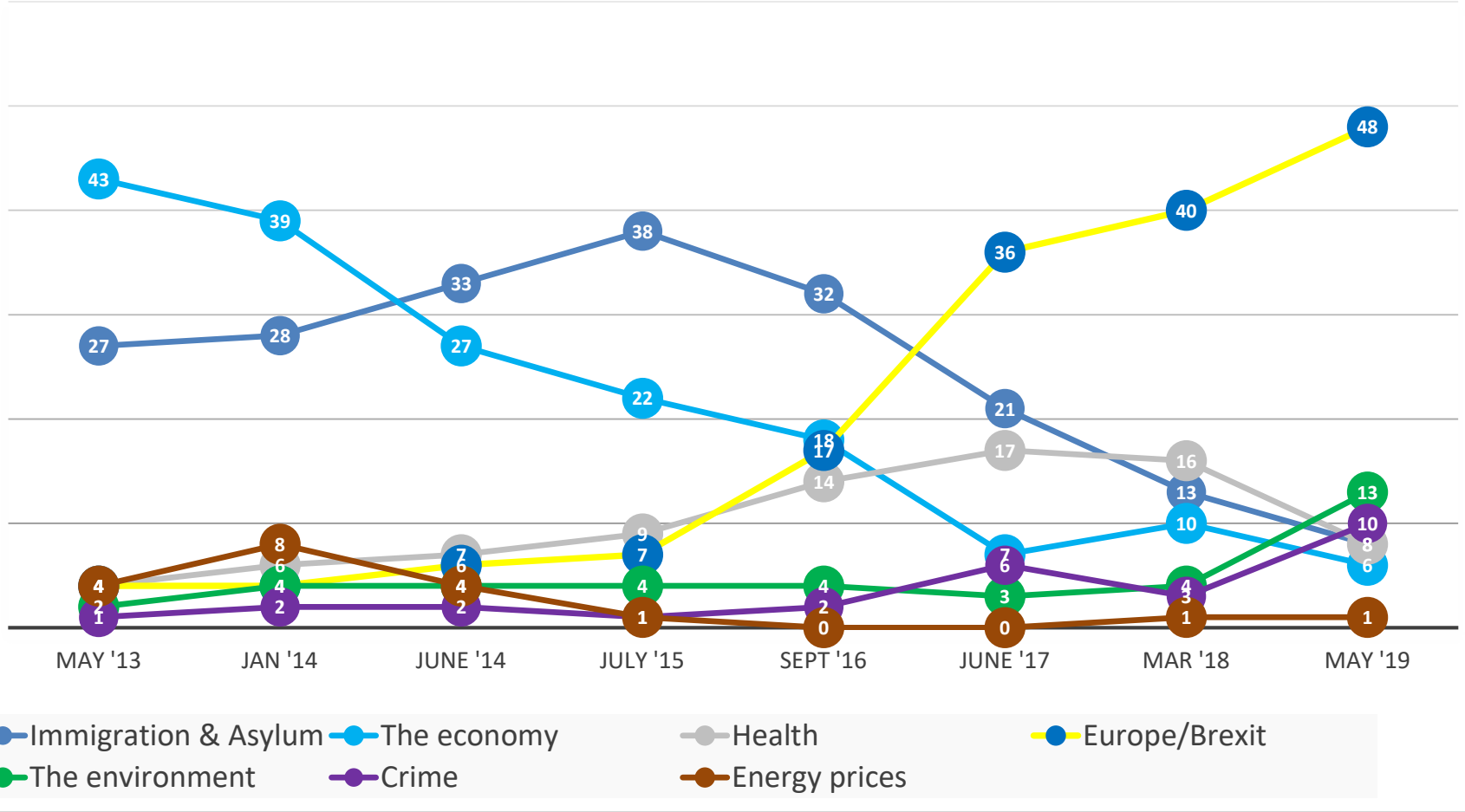
● The environment
● Crime
● Energy prices

EPRG Surveys 2013-19



Environment has risen to top of agenda

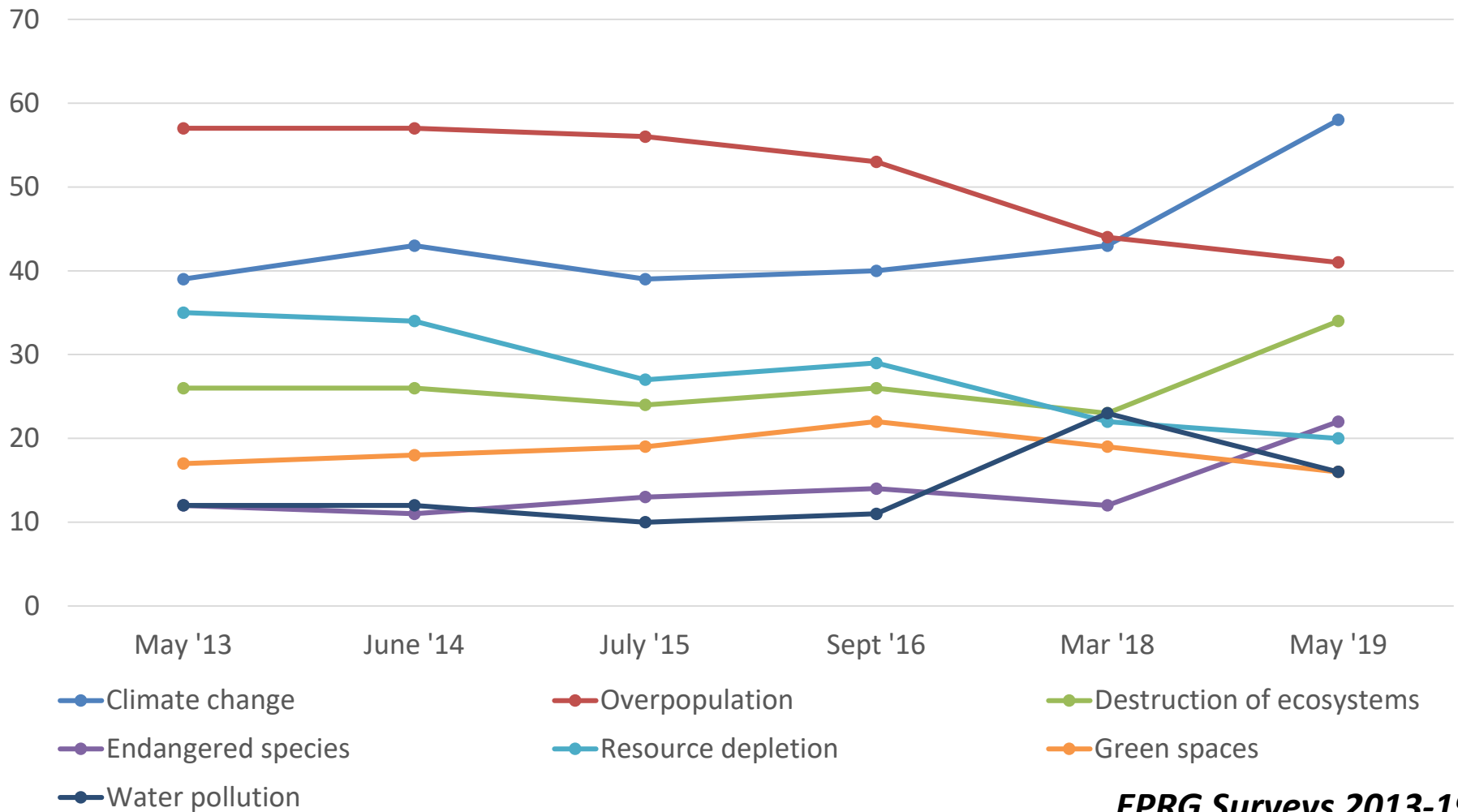
Single Most Important Issue Facing UK



EPRG Surveys 2013-19

Change in environmental priorities

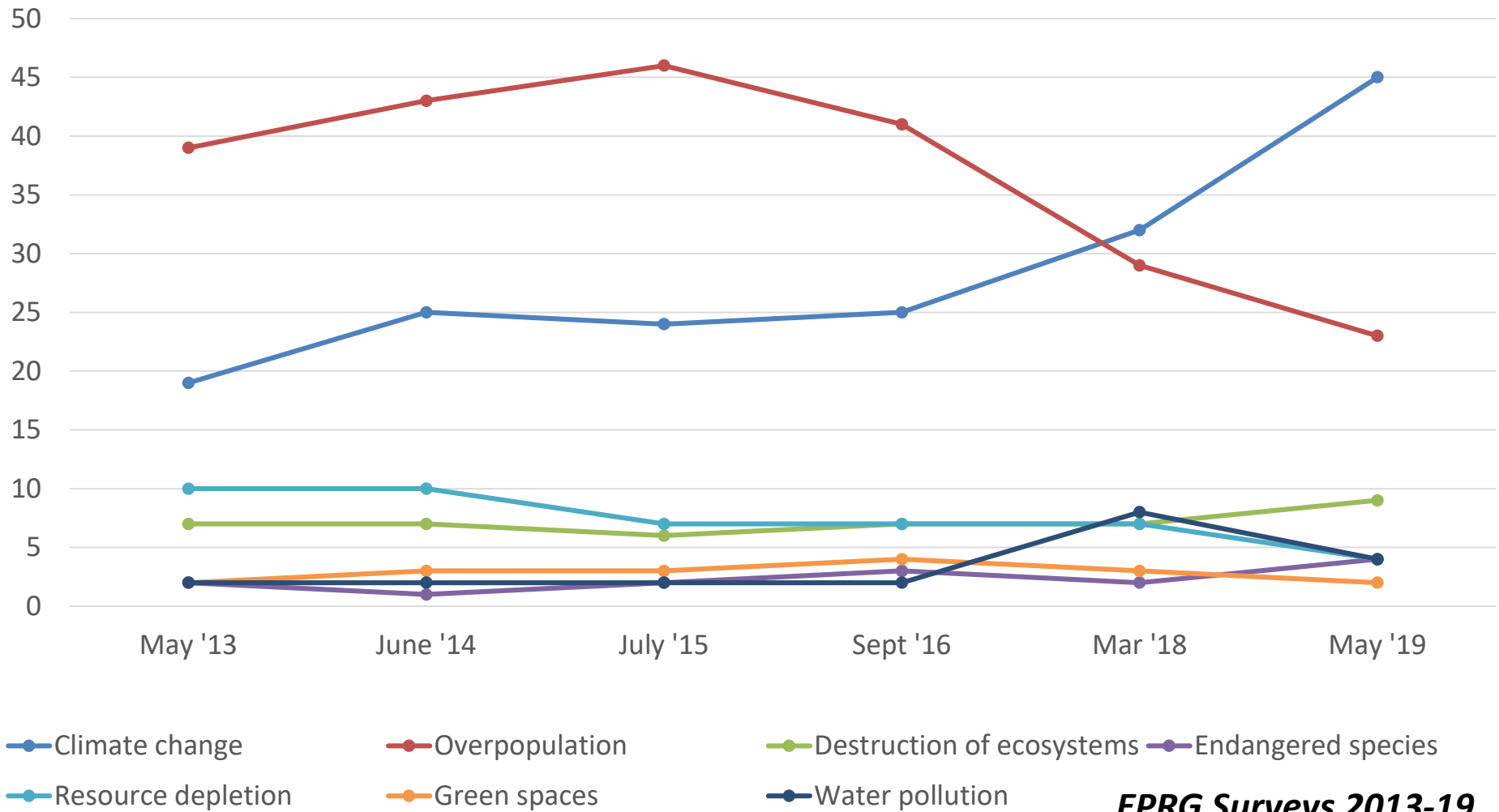
Most Important Environmental Problems Facing the UK today (top 3)



EPRG Surveys 2013-19

Change in environmental priorities

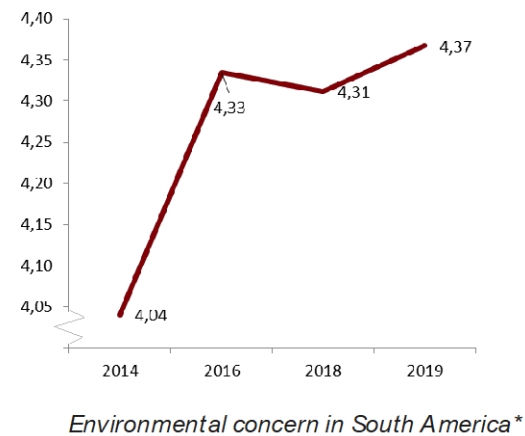
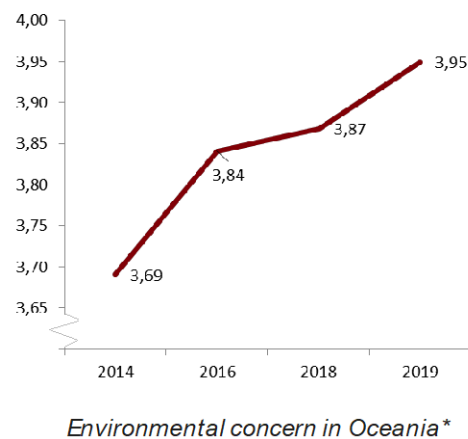
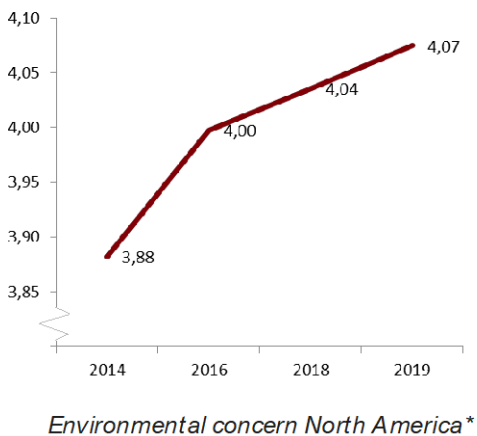
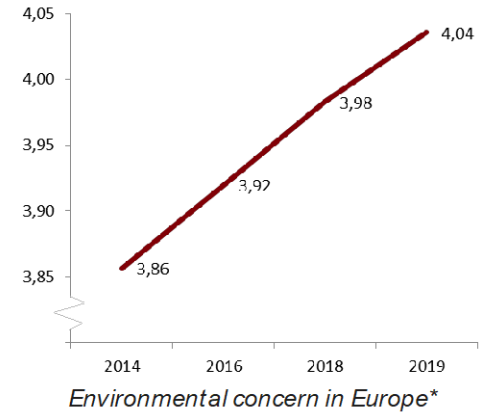
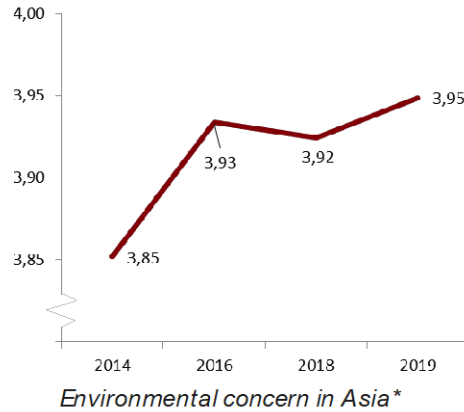
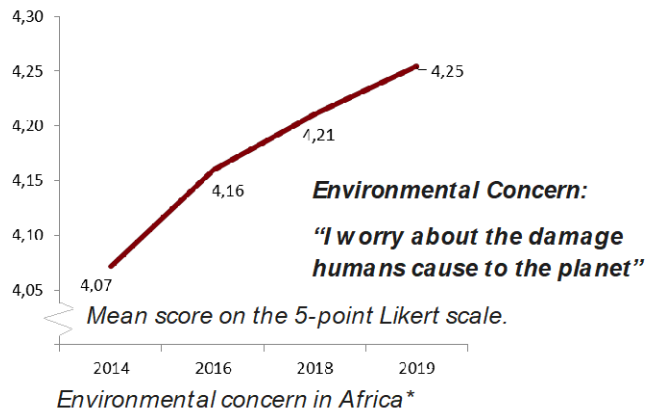
Most Important Environmental Problem Facing the UK today



EPRG Surveys 2013-19



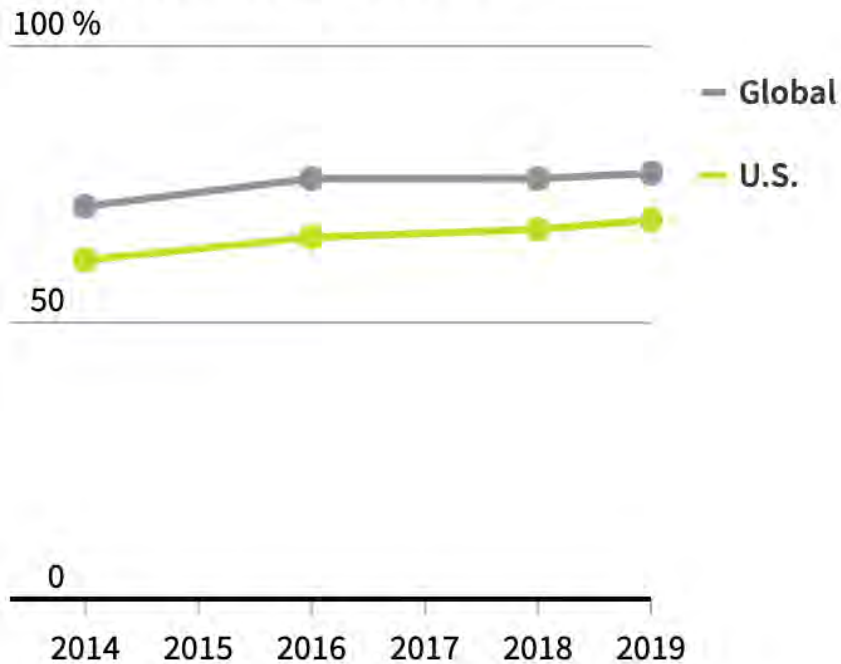
Rising Concern Globally



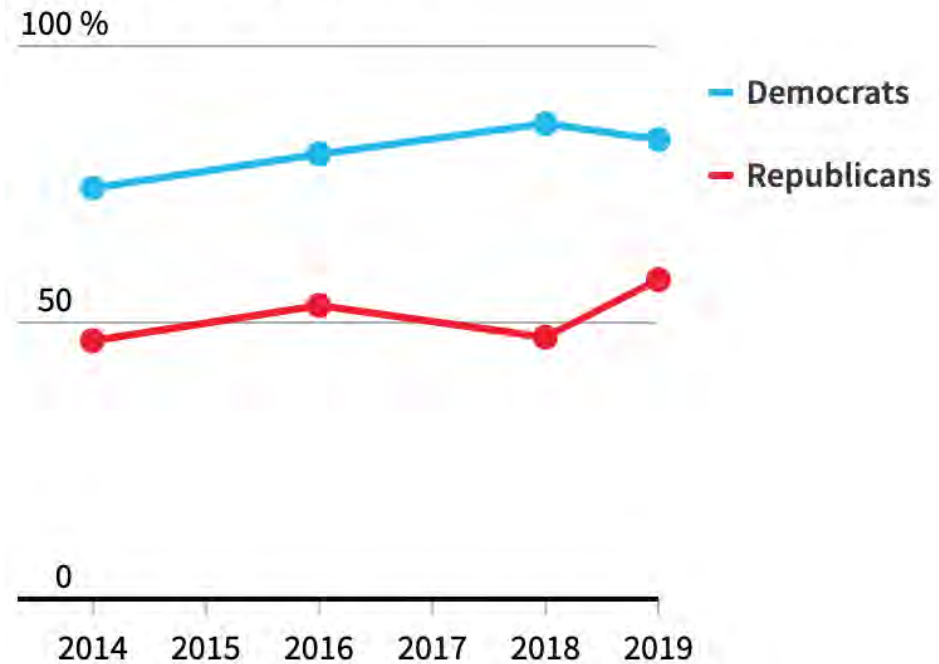
Rising concern is not partisan but is across the board

Percentage of respondents that agreed or strongly agreed with the statement "I worry about the damage that people cause to the planet."

AROUND THE WORLD



WITH U.S. VOTERS



Republican voters aged 18-34 who are worried about the issue rose by 18 percentage points to 67%



An 'Easy' Case Study: Peterhead

- Town of 18,000 north of Aberdeen
- Largest fishing community in the UK (only Leave constituency in Scotland), former site of Peterhead Prison (Scotland's Alcatraz)
- Poorer than Aberdeenshire overall (£25,800 versus £37,000)
- Large gas-fired power plant in the center of town run by SSE



Can you name either of the CCS demonstration projects or any of the companies involved? (2014)

No answer, don't know, no response 96.5%

White Rose	Peterhead	SSE	Shell	Drax	Humber	Correct
4	8	4	5	11	2	1.54%

Sample incorrect answers

N=2080

Longannet	6
Kingsnorth	1
Hatfield	1
BP	2
Ferrybridge	2
British Gas	3
EDF	4
Eon	1
SCCS	1
fracking	2
Q/Kuadrilla	2

EPRG Survey (2014)



Peterhead and CCS

- In 2002, BP proposes ‘decarbonized fossil’ plant (DF-1) at Peterhead
- Leader of SNP and local MP Alex Salmond, was enthusiastic backer
- Cancelled by BP in 2005 when UK Government refuses to ‘pick winners’
- Government cancels first £1 billion CCS Competition in October 2011
- New competition launched in 2012, four projects shortlisted in Oct 2012, and ultimately narrowed to one in Yorkshire at Drax (White Rose) and a new Peterhead project led by Shell
- Second competition cancelled in November 2015



Did Peterhead notice?



Peterhead
Town Centre

Pre-Focus Group Knowledge

We conducted four focus groups in Scotland in January 2017 (followed by two citizens' juries)

	Peterhead 1	Peterhead 2	Aberdeen	Edinburgh
Knowledge of Energy in Scotland				
Not at all	0	1	1	1
Not very	5	4	3	4
Fairly	5	4	4	3
Very	0	0	0	1
Not sure	0	0	0	0
Knowledge of CCS				
Never heard of it	2	3	2	3
Heard of it, but don't know what it is	3	5	3	3
Know a bit about it	1	1	1	2
Know a lot about it	1	0	0	0
Don't know	3	0	0	1

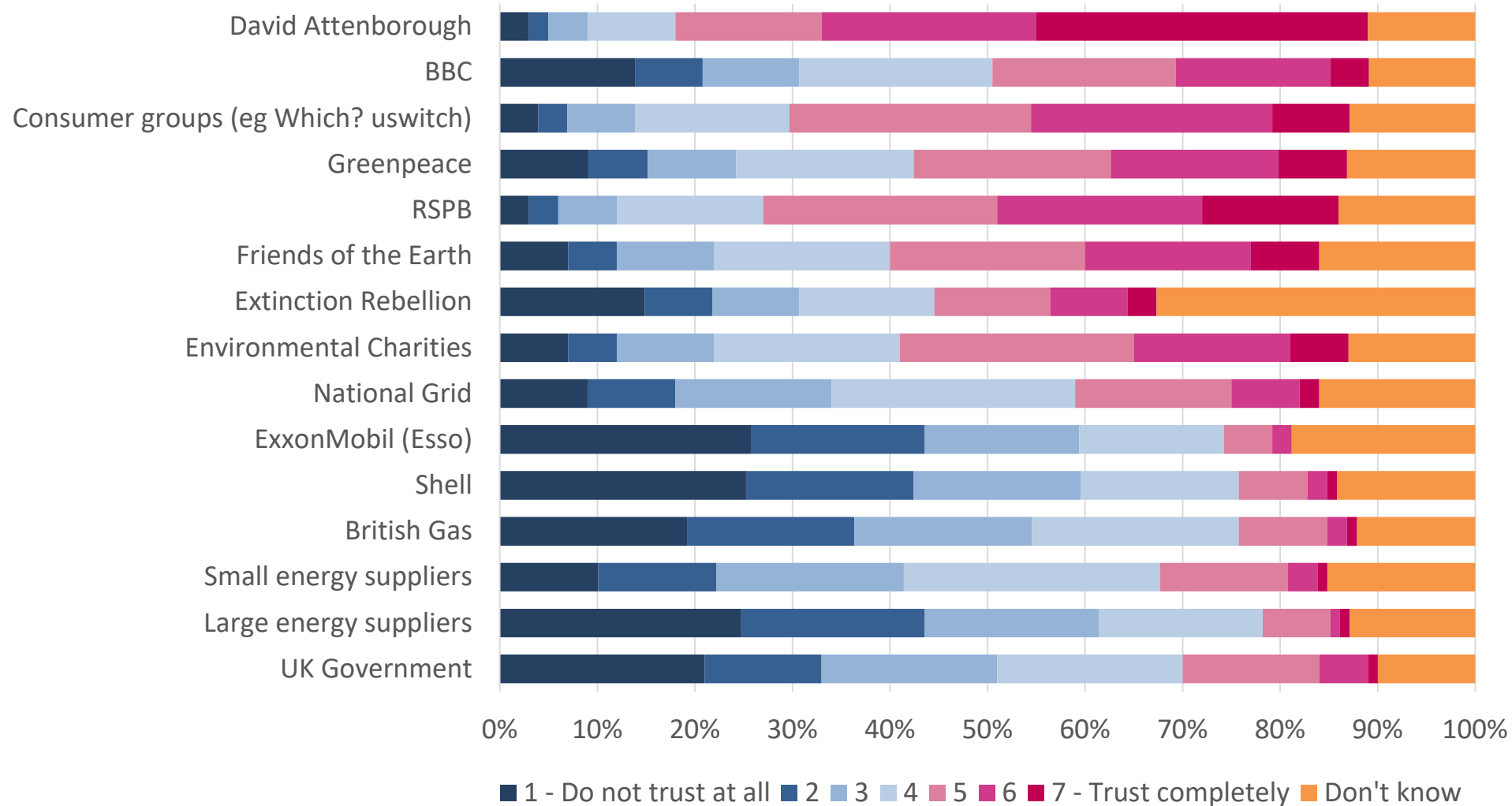
Post Focus Group Views

	Peterhead 1		Peterhead 2		Aberdeen		Edinburgh	
	Scot-land	Peter-head	Scot-land	Peter-head	Scot-land	Peter-head	Scot-land	Peter-head
View on CCS in:								
Very bad idea	0	0	0	0	0	0	0	0
Fairly bad idea	0	0	0	0	0	0	0	0
Neither bad nor good	0	0	1	0	0	1	0	1
Fairly good idea	3	5	1	2	3	2	3	1
Very good idea	7	5	7	7	5	4	6	7
Not sure	0	0	0	0	0	0	0	0

Major Drawbacks of CCS	Peterhead 1	Peterhead 2	Aberdeen	Edinburgh
Increased prices for electricity	0	2	1	0
Would prefer greater use of renewables	4	0	1	1
Makes us too reliant on fossil fuels	1	1	1	0
Risks from CO2 leaking	1	3	3	4
Not sure	3	1	1	3

Ostfeld & Reiner (2019)

Trust in information on energy-related issues



EPRG Survey (2019)



May hails 'Golden Age' with China over tea with President Xi as they seal £9bn of trade deals - and she hands him Blue Planet DVDs as a gift

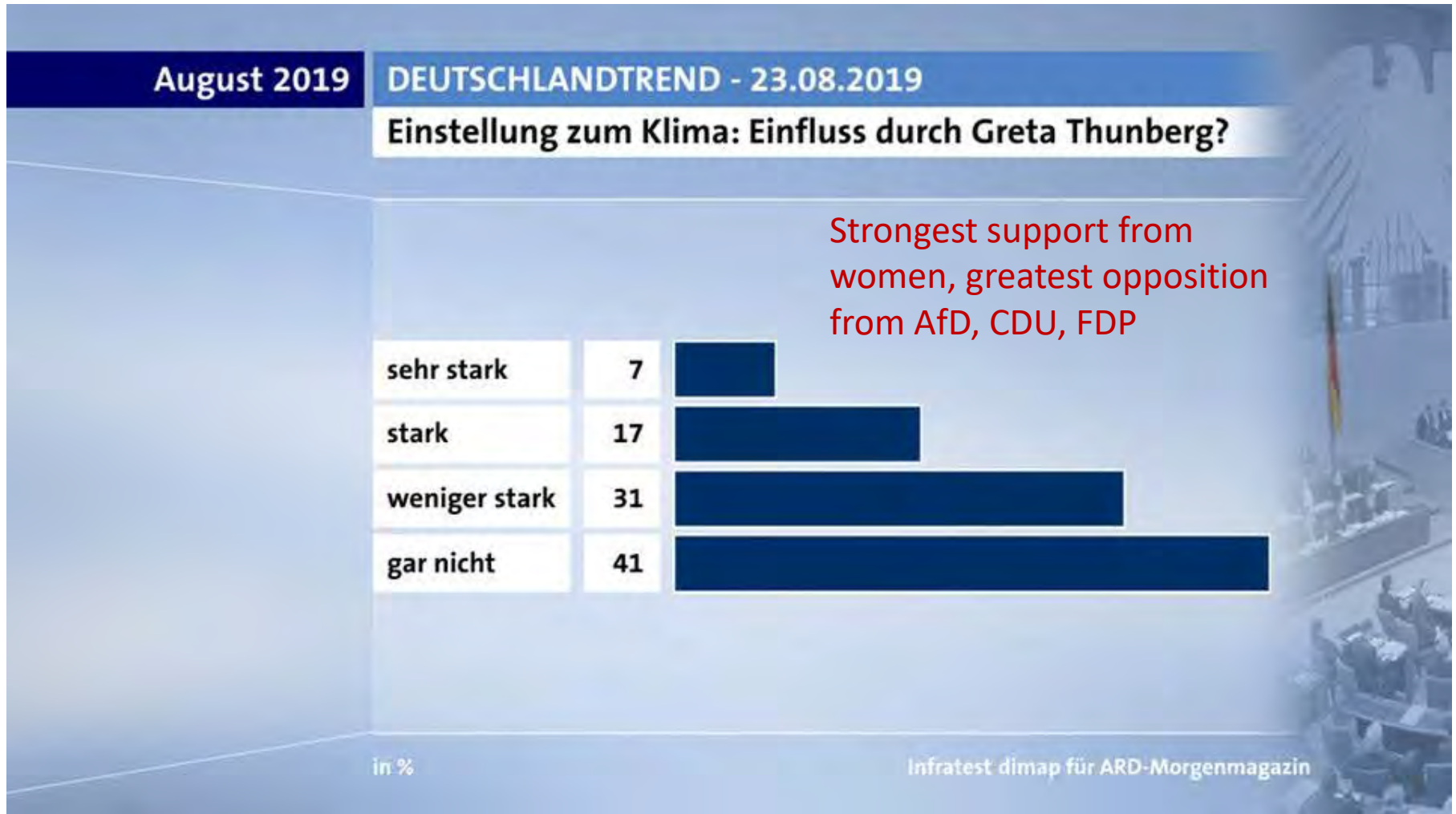
- Theresa May has been banging the drum for British business during a three-day official visit to China
- The Prime Minister has held crucial talks with President Xi Jinping on trade and issues such as North Korea
- Mrs May brought a gift of a DVD of BBC Blue Planet and a personal message from David Attenborough



The Attenborough Effect

- David Attenborough's Blue Planet II first aired in 2017 after the introduction of the policy. Attenborough is widely considered a British icon and the series was the most watched show of 2017 in the UK.
- Our survey found almost two-thirds of respondents had seen the series.
- In introducing the Government's new policies on plastics, Prime Minister Theresa May argued 'Nobody who watched Blue Planet will doubt the need'.
- She also presented Chinese President Xi Jinping with a copy with a personal message from David Attenborough to signify their shared commitment to fighting plastics pollution (60M Chinese viewers of Blue Planet II)
- In our study (Ajayi and Reiner, 2019) looking at behavioural response in GB to the voluntary 5p levy, we find that a strong relationship between awareness (measured as having watched Blue Planet II) and support of the levy

Is there a Thunberg Effect?



<https://www.tagesschau.de/inland/deutschlandtrend-1765.html>

Anecdotal evidence/claims

- “Public concern about the environment has soared to record levels in the UK since the visit of Greta Thunberg to parliament and the Extinction Rebellion protests in April” [*The Guardian*, 5 June, 2019](#)
- Right-wing French MPs insult and boycott teenage climate activist, [*The Independent*, 24 July 2019](#)
- Greta Thunberg is inspiring climate action but in some countries her message is falling on deaf ears, [*CNN*, 7 June, 2019](#)



Some closing points

- Need to take behaviour change and the challenge of politics of the energy transition seriously in terms of creative analysis and experiments in policy design
- The issue of climate change and the low-energy transition has risen rapidly up the agenda but there is a question as whether this is ephemeral
- Even for the ‘easy case’ of Peterhead, it is striking how difficult it has been to generate attention and support
- Trusted sources are rare but how to take advantage of even the trusted few and what effect they can have on sometimes polarised politics is unclear



Thanks!

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Relevant Scientific Knowledge Remains Low

	July '15	Sept '16	Mar '18	May '19
'Roughly two-thirds of the energy used to produce electricity from fossil fuels is lost'				
TRUE	74	72	70	74
FALSE	26	28	30	26
'Climate change is caused by a hole in the earth's atmosphere'				
TRUE	41	39	41	35
FALSE	59	61	59	65
'Every time we use coal or oil or gas, we contribute to the greenhouse effect'				
TRUE	84	85	87	88
FALSE	16	15	13	12
'Oil and gas reservoirs are typically found 100 meters below the surface'				
TRUE	48	48	46	48
FALSE	52	52	54	52
'Dinosaurs were alive 1 million years ago'				
TRUE	46	43	46	46
FALSE	54	57	54	54
'Coal is produced from dead plants'				
TRUE	69	72	70	66
FALSE	31	28	30	34
'Oxygen is the main component of the smoke emitted from a smokestack or tailpipe'				
TRUE	15	16	12	12
FALSE	85	84	88	88

Which, if any, of the following activities have a significant impact on levels of carbon dioxide in the atmosphere?

Driving cars	May '13	June '14	July '15	Sept '16	Mar '18	May '19
Yes, increases carbon dioxide	76	83	83	83	81	85
Yes, decreases carbon dioxide	4	3	4	4	3	3
No impact	3	3	3	2	3	2
Not sure	16	11	11	11	13	10
Home heating						
Yes, increases carbon dioxide	62	68	68	68	64	70
Yes, decreases carbon dioxide	4	4	4	4	3	3
No impact	8	7	8	8	8	8
Not sure	25	21	20	20	24	19
Coal burning power plants						
Yes, increases carbon dioxide	75	80	80	79	78	81
Yes, decreases carbon dioxide	4	3	3	5	3	3
No impact	3	2	2	2	2	2
Not sure	18	15	14	14	17	14



Nuclear power plants	May '13	June '14	July '15	Sept '16	Mar '18	May '19
Yes, increases carbon dioxide	25	26	27	27	28	31
Yes, decreases carbon dioxide	16	13	11	11	11	12
No impact	26	35	37	34	32	31
Not sure	33	26	25	29	29	26
Windmills						
Yes, increases carbon dioxide	4	4	4	4	3	3
Yes, decreases carbon dioxide	26	22	16	17	25	32
No impact	47	61	64	63	52	48
Not sure	22	14	16	16	20	18
Trees						
Yes, increases carbon dioxide	7	6	8	7	7	5
Yes, decreases carbon dioxide	71	71	73	74	72	79
No impact	6	11	8	7	7	6
Not sure	16	12	11	11	14	10