

Misperceptions about climate change and the natural environment

For more information, contact:

Bobby Duffy

bobby.duffy@kcl.ac.uk

We're very wrong on many climate change and environmental facts...

A new study conducted by Ipsos among the general public in the US on misperceptions of climate change and environmental issues shows how much we get wrong about the challenges facing our planet...

- We **underestimate how record-breaking global temperatures now are**: we guess 14 of the last 22 years are among the hottest 20 on record since 1850 – when *all 20 hottest years* have been in the last 22 years. Only 15% of the public correctly guess that it's all 20, including only 9% of Republicans.
- We **overestimate how much plastic waste has been recycled**: we think 54% of plastic waste is still in the environment when it's actually 79%; and we think that 26% has been recycled when it's only 9%.
- We **overestimate the impact of air travel on global greenhouse gases**: we think air travel contributes 16% of global greenhouse gases when it's 2%.
- **BUT we don't realise how much skipping just one transatlantic flight would save in greenhouse gases**, only 10% correctly pick it out in the top 3 of actions individuals can take.
- **Only a quarter of people correctly guess that animal populations have declined by 60%** since 1970, including only 16% of Republicans.

...many of us agree there is a serious climate threat – but there are big differences between Republicans and Democrats

But our attitudes show most of us recognise the seriousness of the threat to the global climate, even if views are often divided along party lines:

- Most Americans **reject Donald Trump's past assertion that global warming is an expensive hoax** (60% disagree), although one in five do agree (22%).
- And most of us **agree that we're facing a climate change emergency** (62% agree), although again 20% do not agree.
- But there are very large differences in views between Republicans and Democrats: **70% of Democrats strongly disagree that global warming is an expensive hoax, compared with only 17% of Republicans.**
- And **48% of Republicans disagree that we're facing a climate change emergency, compared with only 6% of Democrats.**

We underestimate just how unusual global temperatures have become...

We asked people how many of the hottest 20 years on record have been in last 22 years, based on World Meteorological Organization estimates that go back to 1850...

On average we guess that 14 of the 20 hottest years on record were in the last 22 years

... while actual data shows that all 20 of the hottest years on record have been in the last 22 years

Only 15% of the US public correctly guess 20...

...and only 9% of Republicans correctly guess 20, compared with 23% of Democrats

We underestimate how much plastic waste is still in the environment

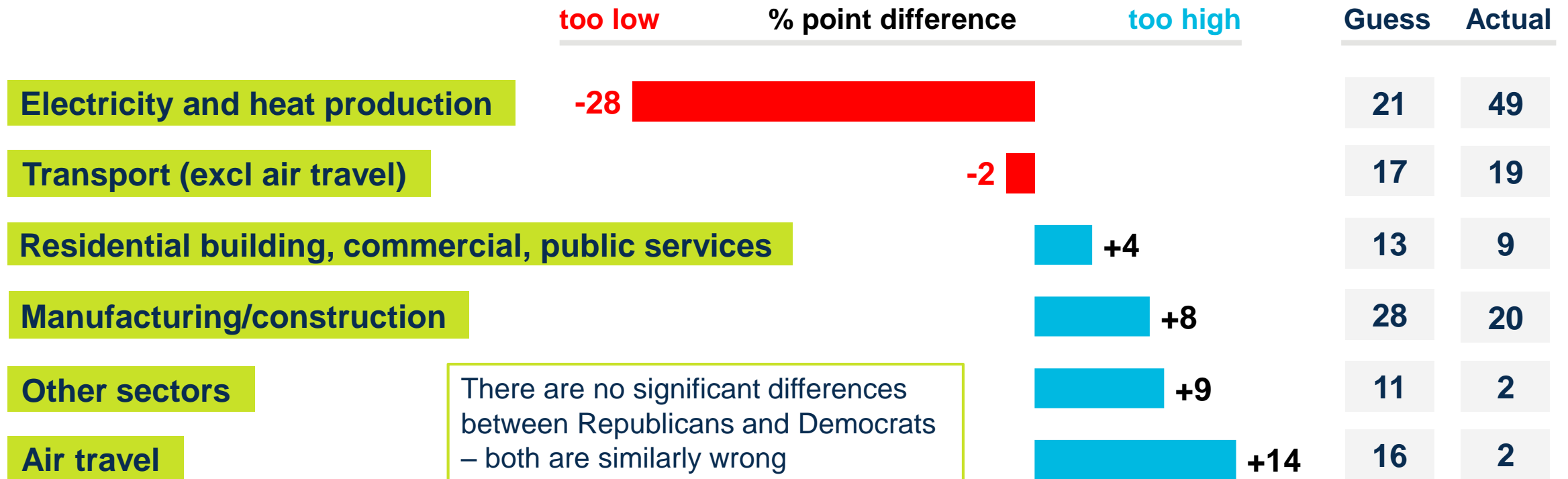
We asked people, of the 6.3 billion tonnes of plastic waste that have been created globally, what percentages have been recycled, incinerated or are in the environment in landfill or as litter...

	too low	% point difference	too high	Guess	Actual
Recycled			+17	26	9
Incinerated			+10	22	12
In the environment	-25			54	79

There are no significant differences in how wrong Republicans and Democrats are about plastic waste

... and we are very wrong about the source of greenhouse gas emissions

We asked people what percentage of total greenhouse gas emissions around the world they thought a range of sectors contributed in 2014... **and we hugely underestimate electricity and heat production, and overestimate air travel**



We are also very wrong on how much impact different actions have on greenhouse gas emissions. We particularly **overestimate the impact of recycling and underestimate the impact of flying, and of having children**

THE
POLICY
INSTITUTE

KING'S
College
LONDON



Ipsos MORI

Base: 1,150 online interviews with the American public aged 16-75 September 2019

Q. From this list of options, which three do you think would most reduce an individual's greenhouse gas emissions?

		Actual rank	CO ₂ Tonnes saved
Recycling as much as possible	47%	7	0.2
Replacing a typical car with a hybrid	38%	6	1.1
Buying green energy	34%	4	1.5
Living car free	28%	2	2.4
Eating a plant-based diet	20%	5	0.8
Hang-drying their clothes	14%	8	0.2
Replacing lightbulbs	14%	9	0.1
Having one fewer child	11%	1	58.6*
Avoiding one transatlantic flight	10%	3	1.6

Democrats and Republicans are equally wrong on the most CO₂ saving actions: only 9% of each pick transatlantic flights, and 49% of each (wrongly) pick recycling

* This is calculated by quantifying future emissions of descendants based on historical rates, based on heredity
Source: Institute of Physics, 'The most effective individual steps to tackle climate change aren't being discussed', July 11, 2017: <https://phys.org/news/2017-07-effective-individual-tackle-climate-discussed.html> and <https://iopscience.iop.org/article/10.1088/1748-9326/aa7541>

Only 24% of the public correctly think that the population sizes of mammals, birds, fish and reptiles in the world has fallen by 60% since 1970, which is the WWF estimate – although only 11% think populations have stayed about the same

Only 16% of Republicans correctly guess 60%, compared with 29% of Democrats

Q. Which of these do you think is correct: between 1970 and 2015 the population sizes of mammals, birds, fish and reptiles in the world...?

Fell by 60%

24%

Fell by 25%

45%

Stayed about the same

11%

Increased by 25%

4%

Don't know

17%

Despite our misperceptions, our attitudes show most do think we're facing a climate change emergency...

.... but there are big differences between Republicans and Democrats

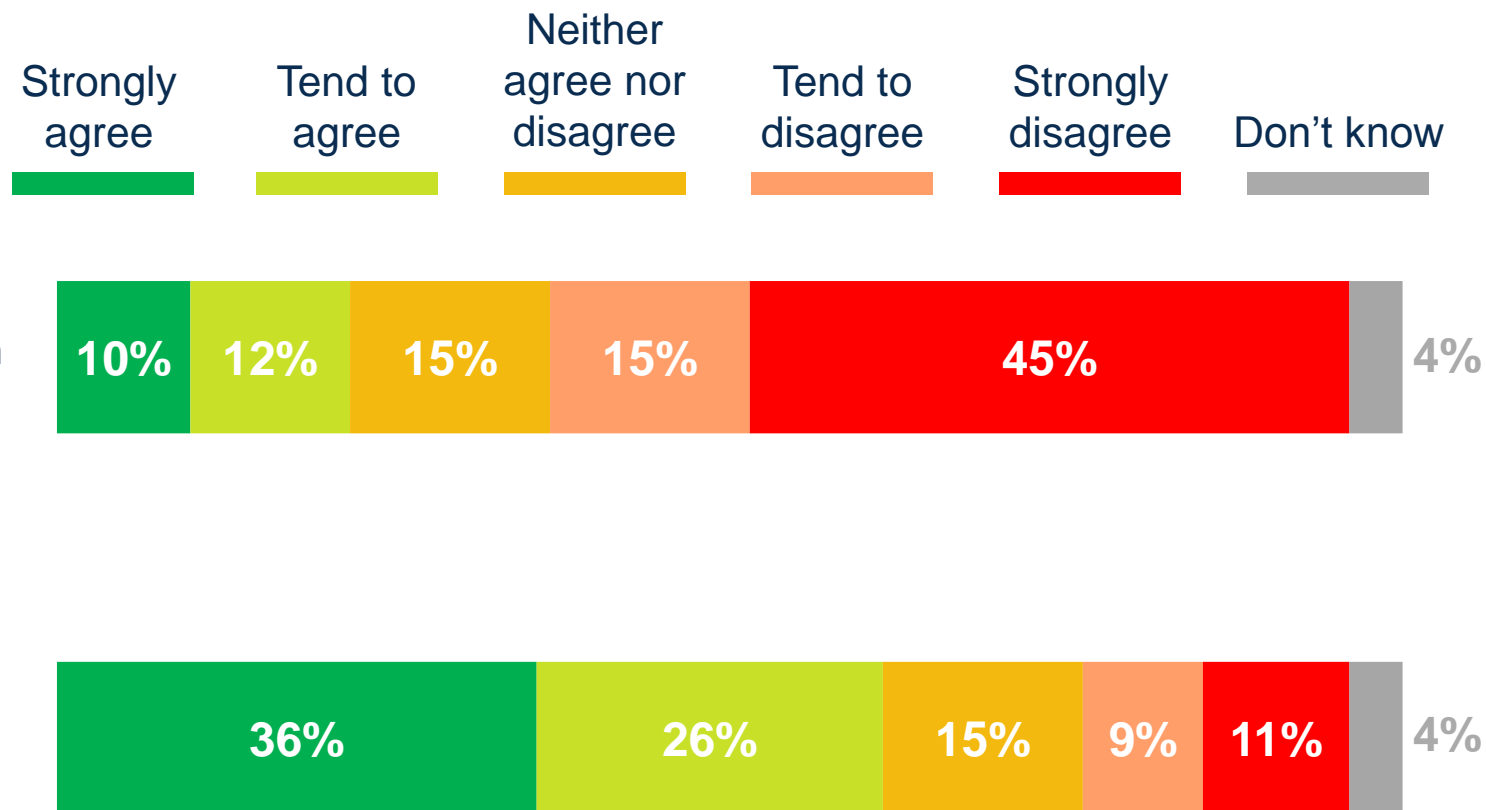
...

22% of Americans agree with Donald Trump's statement that 'global warming is an expensive hoax' – while 60% disagree, **including 45% who strongly disagree.**

In contrast, 62% agree that we're facing a climate change emergency, with 20% disagreeing

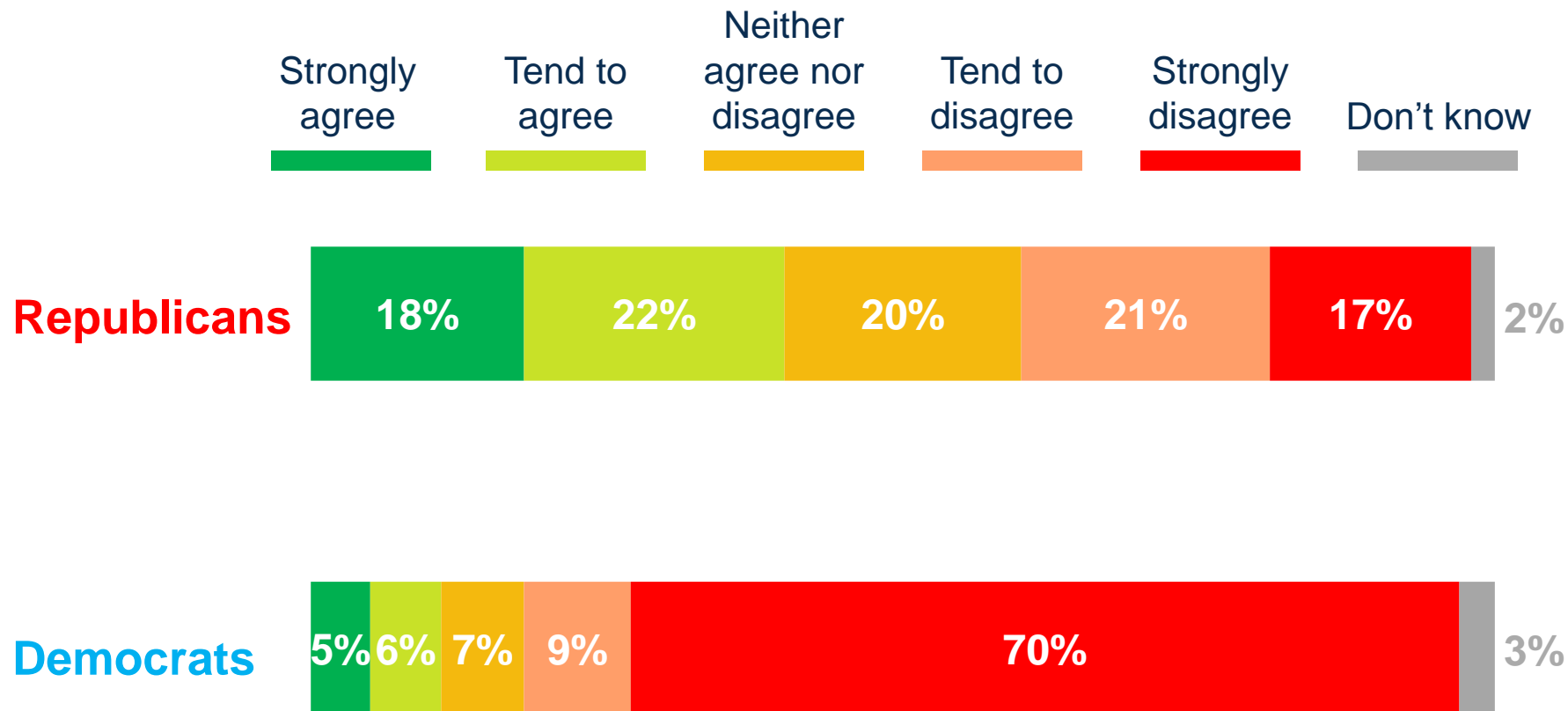
Global warming is an expensive hoax

We are facing a climate change emergency, with the threat of the irreversible destruction of the environment within our lifetimes



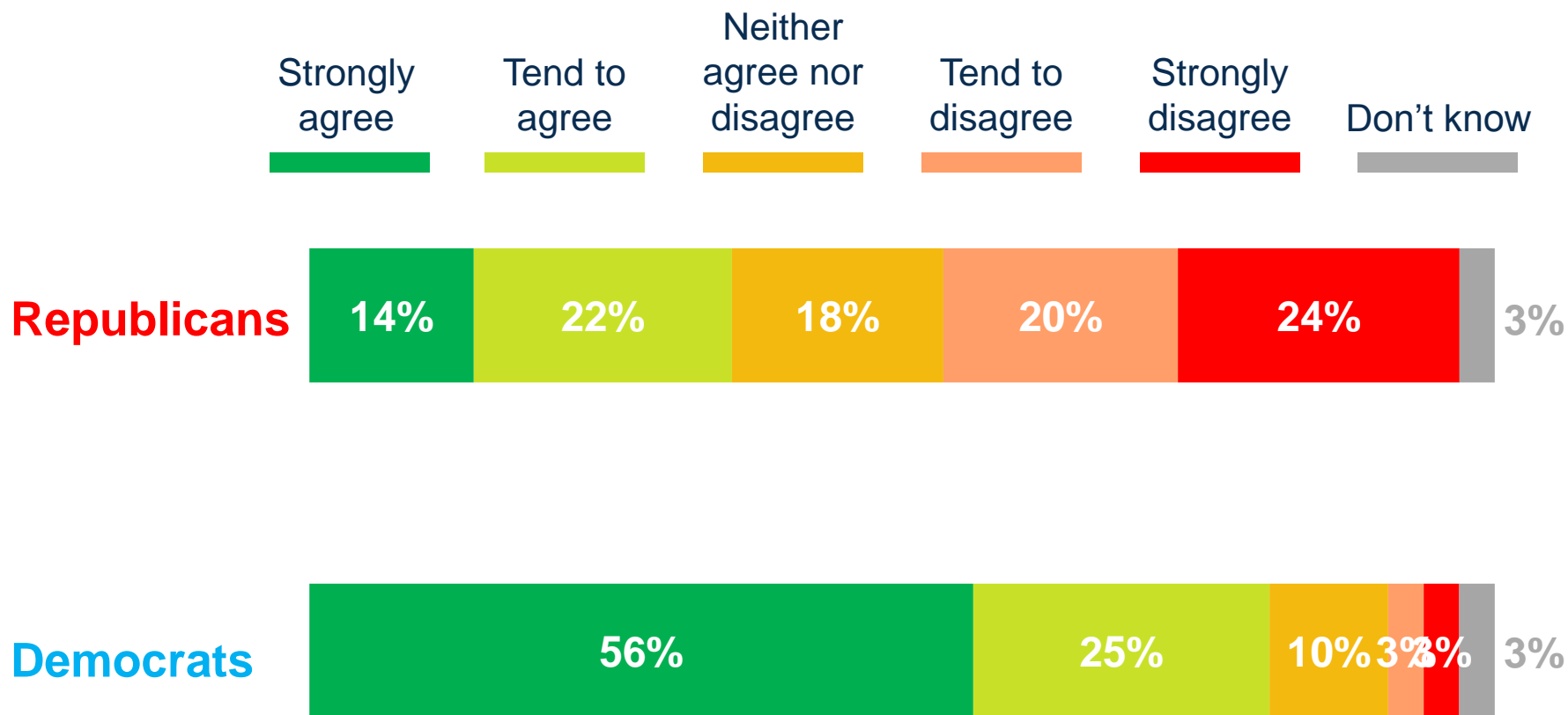
Republicans (40%) are **almost four times as likely** as Democrats (11%) to agree that global warming is an expensive hoax, while Democrats (70%) are **more than four times as likely** as Republicans (17%) to strongly disagree with this statement

To what extent do you agree or disagree with the following statements?
Global warming is an expensive hoax



Democrats (81%) are significantly more likely than Republicans (36%) to agree we're facing a climate change emergency, while **half of Republicans (48%) disagree**, compared with only 6% of Democrats

To what extent do you agree or disagree with the following statements?
We are facing a climate change emergency, with the threat of the irreversible destruction of the environment within our lifetimes



Technical details

- Survey results based on 1,150 online interviews conducted by Ipsos with representative sample of the American public aged 16-75 between 25th-27th September 2019.
- Samples weighted by key demographics to be representative of the American public.
- Sources for actual data included on each slide.
- Contact: Professor Bobby Duffy, bobby.duffy@kcl.ac.uk

THE POLICY INSTITUTE

For more information, contact:

Bobby Duffy

Director

The Policy Institute

King's College London

bobby.duffy@kcl.ac.uk

[@bobbyduffyking](https://www.facebook.com/bobbyduffyking)

Connect with us

🐦 [@policyatking](https://twitter.com/policyatking) 🖱️ [kcl.ac.uk/policy-institute](https://www.kcl.ac.uk/policy-institute)

