

Welcome to The 2019 ASDC National Conference Vision 2030



Science and
Technology
Facilities Council



@sciencecentres
#ASDC19



Vision 2030



Inspiring National Strategic Change around Climate Dr Penny Fidler, CEO

Science Centres are in a privileged and powerful position in relation to climate. Working together, and with our communities we can inspire large national strategic change



The UK Science and Discovery Centres Network

www.sciencecentres.org.uk
@sciencecentres

20 million
people engage
in STEM every
year

385,000 each
week

Over 10 million
are girls and
women

Over 10 million
are school-aged
children



We have an amazing national infrastructure, with physical centres, staff on the ground, all running STEM programmes and embedded in your communities in your regions across the UK.



We already involve 2 million school-children in curriculum-linked science workshops and visits, & 10 million school-aged children participate



We have embedded science programmes across our local communities



And champions of families learning together, so the discussions continue



How can we do more to tackle climate change?

With this hugely powerful network, embedded in cities, towns and communities across the UK?

Where should we focus our efforts to inspire action?





“I have a dream ...”





Vision 2030



There really are some positive stories
out there,
and a plentiful planet that could
support us all



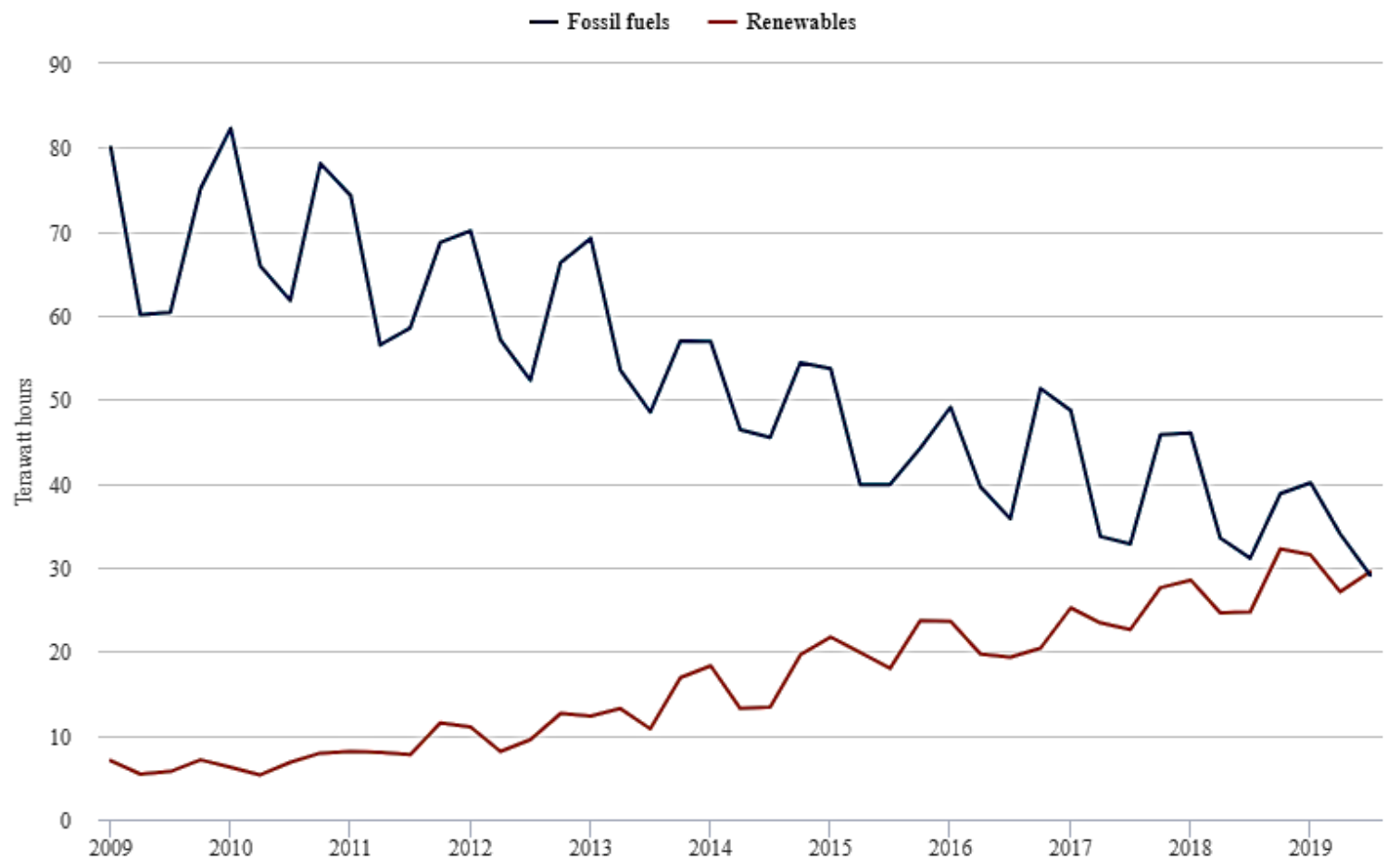
Fantastic news!

In the last quarter, (July, Aug, Sept 2019) the UK had more electricity generated from Renewables (windfarms, solar panels, biomass and hydro plants)

than the combined output from power stations fired by coal, oil and gas

UK renewables generated more electricity than fossil fuels for the first time

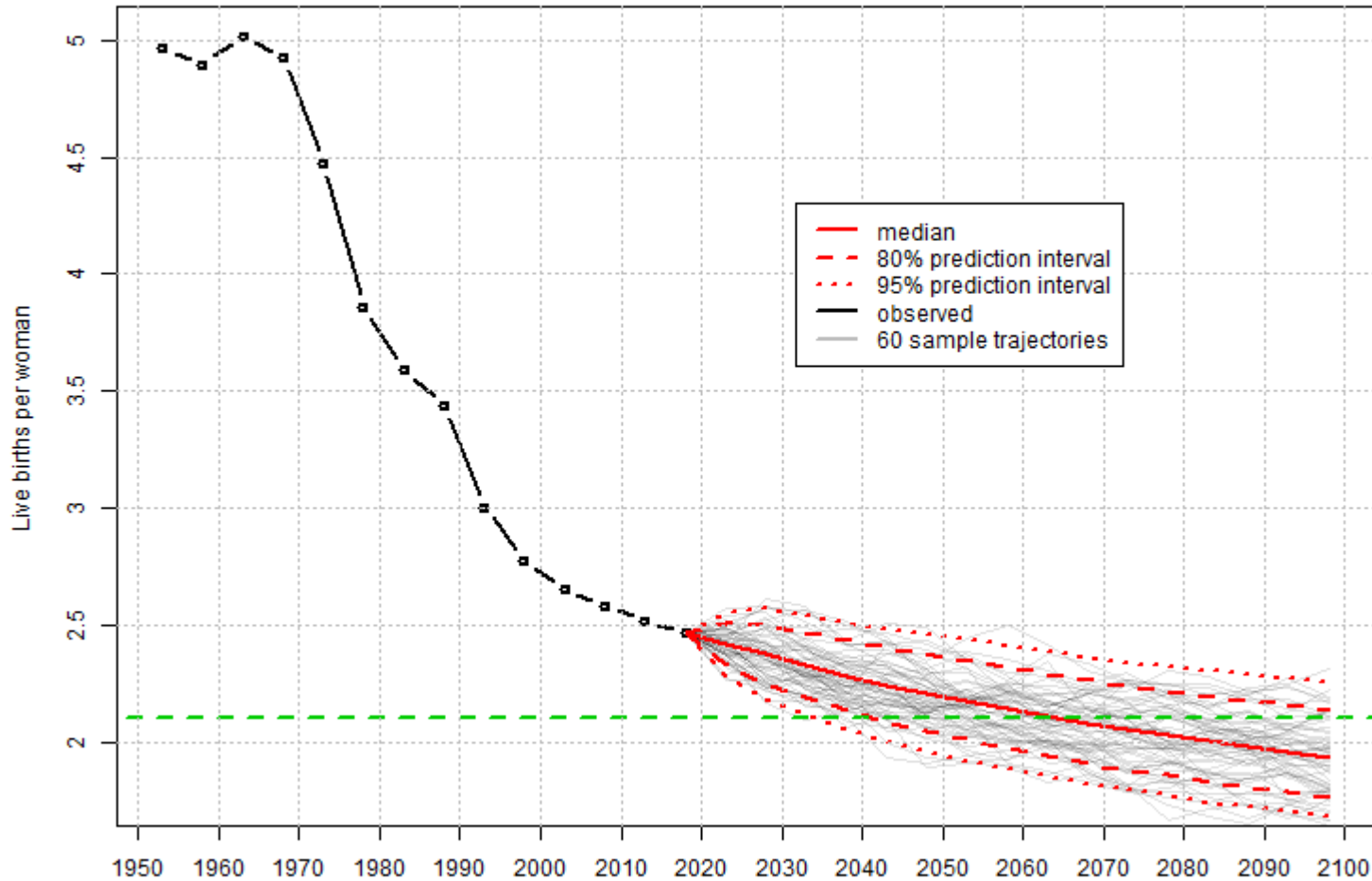
The third quarter of 2019 was the first ever to see this switch



Number of Children per woman world aggregated

(UK is around 1.75)

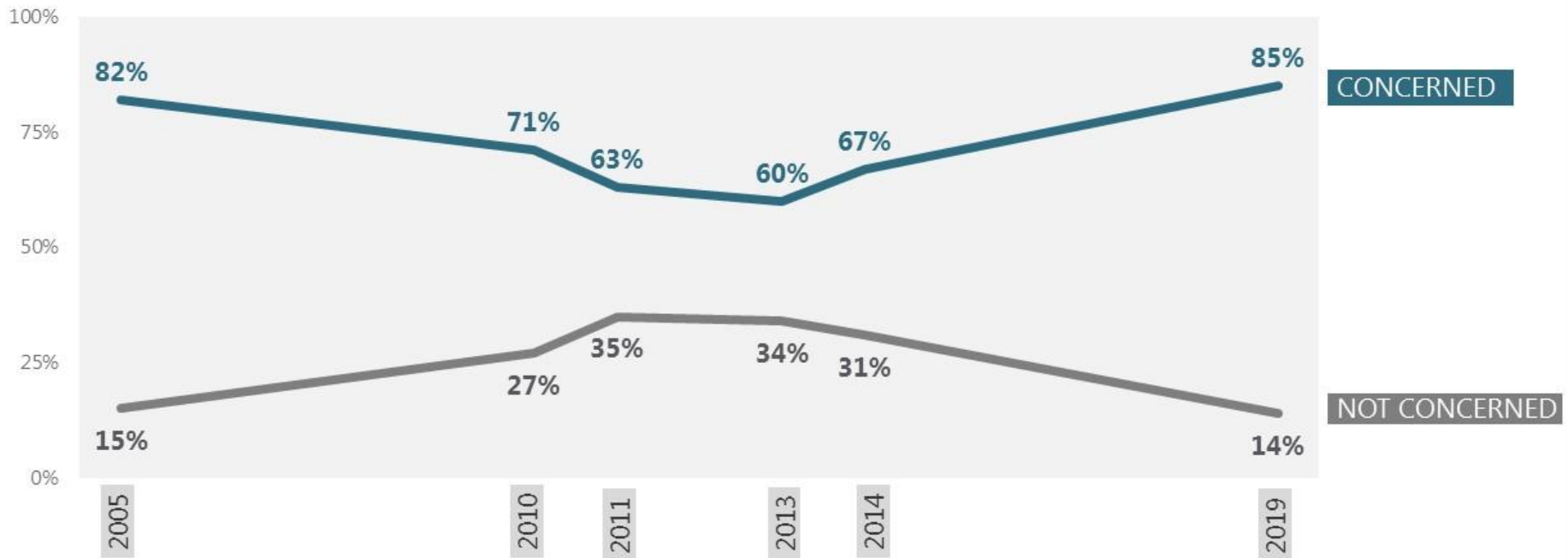
World



© 2019 United Nations, DESA, Population Division. Licensed under Creative Commons license CC BY 3.0 IGO.
United Nations, DESA, Population Division. World Population Prospects 2019. <http://population.un.org/wpp/>

Climate change concern

HOW CONCERNED, IF AT ALL, ARE YOU ABOUT CLIMATE CHANGE, SOMETIMES REFERRED TO AS 'GLOBAL WARMING'?



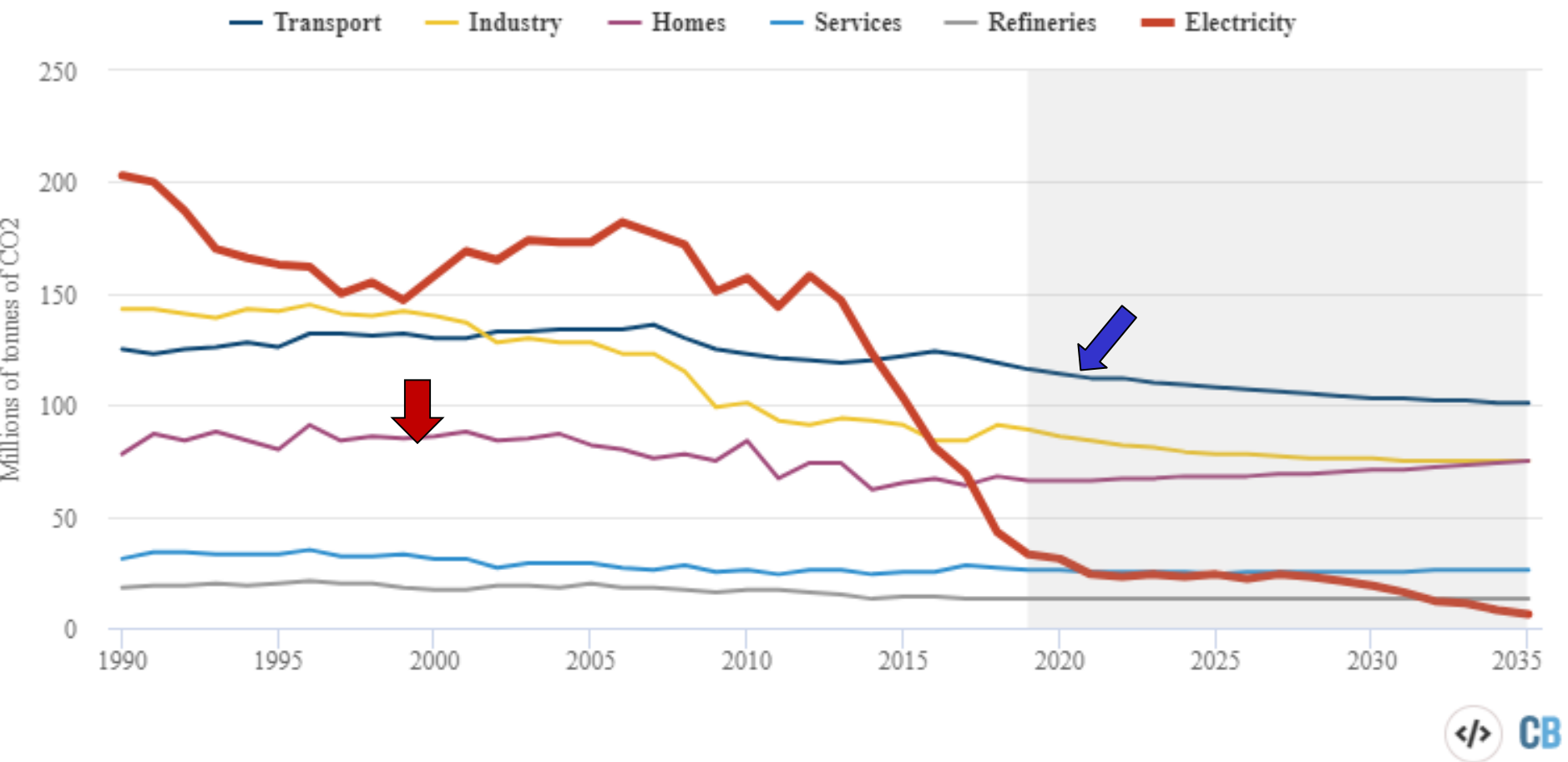
Base: c.1,000 British adults each month

Ipsos MORI

Source: Ipsos MORI Political Monitor

Cutting emissions in the power sector is not enough

The UK will have to cut CO2 across the whole economy to meet its targets



Projected future emissions in the UK, by sector, millions of tonnes of CO2. Projections are shaded grey. Source: [BEIS and emissions projections](#). Chart by Carbon Brief using [Highcharts](#).



We are not where we were a year ago



OPEN YOUR EYES

DENIAL IS NOT A POLICY

NO WATER NO LIFE NO ICE

CLIMATE PHASE

ZERO JOBS on a DEAD PLANET

THE DINOS THOUGHT THEY HAD TIME TOO!

MOTHER

SCIENCE DOESN'T GIVE A ABOUT OPINIONS THE CLIMATE EMERGENCY IS UNDENIABLE!

TO IT'S

THE WRONG AMAZON IS BURNING

STARTING WITH CLIMATE MATTERS

No fossil fuels

It's time.

YOU'LL DIE BY AGE 40 IF YOU DON'T ACT NOW

HOW GOOD IS YOUR REMEDY

IT WOULD BE LOCAL IF IT WERE ALIVE

WORLD IN SCARS BUTTING IN

THERE'S NO ESCAPE PLAN

DOES ANYONE CARE

WE'RE NOT CONCERNED

WE'RE NOT CONCERNED

WE'RE NOT CONCERNED

WE'RE NOT CONCERNED

WE'RE NOT CONCERNED

WE'RE NOT CONCERNED

WE'RE NOT CONCERNED

WE'RE NOT CONCERNED

WE'RE NOT CONCERNED

WE'RE NOT CONCERNED

WE'RE NOT CONCERNED

WE'RE NOT CONCERNED

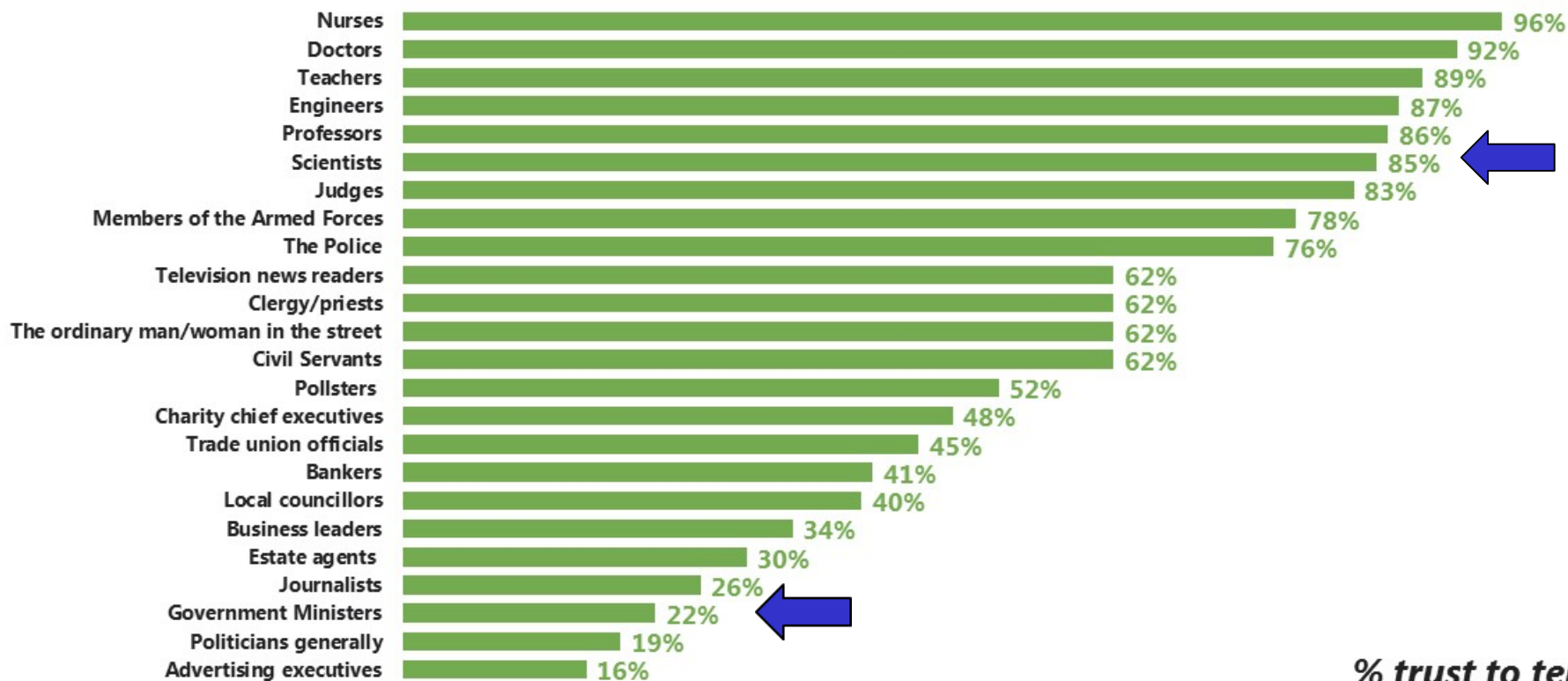
WE'RE NOT CONCERNED

WE'RE NOT CONCERNED



Veracity Index 2018 – all professions

“Now I will read you a list of different types of people. For each would you tell me if you generally trust them to tell the truth, or not?”



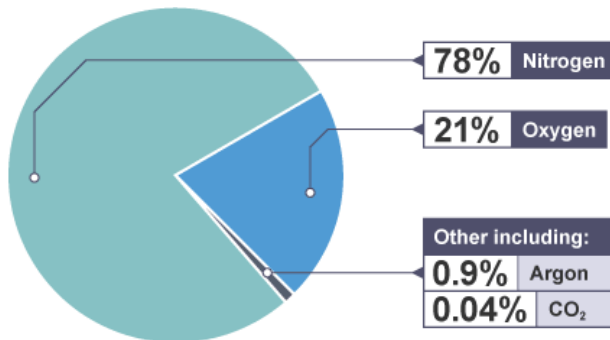
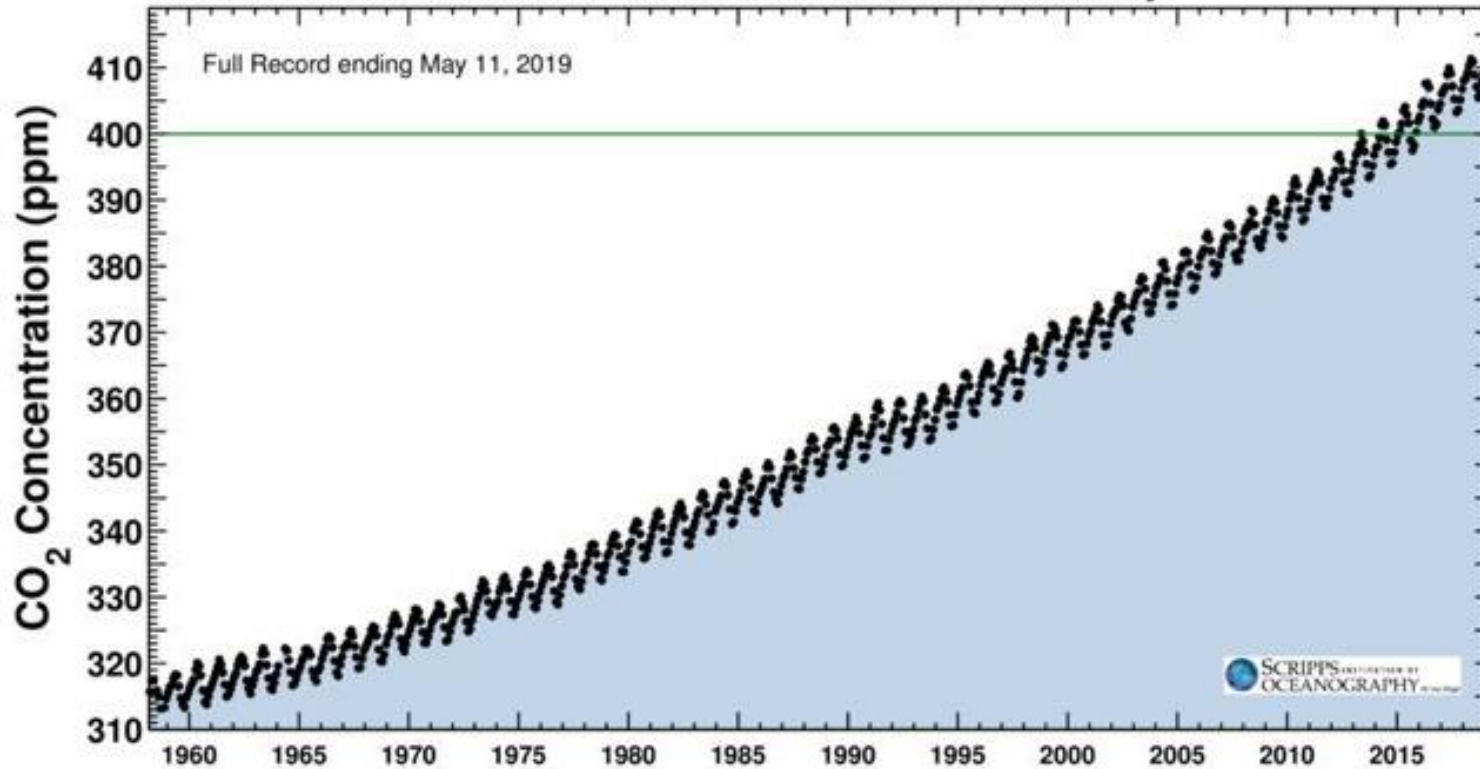
% trust to tell the truth

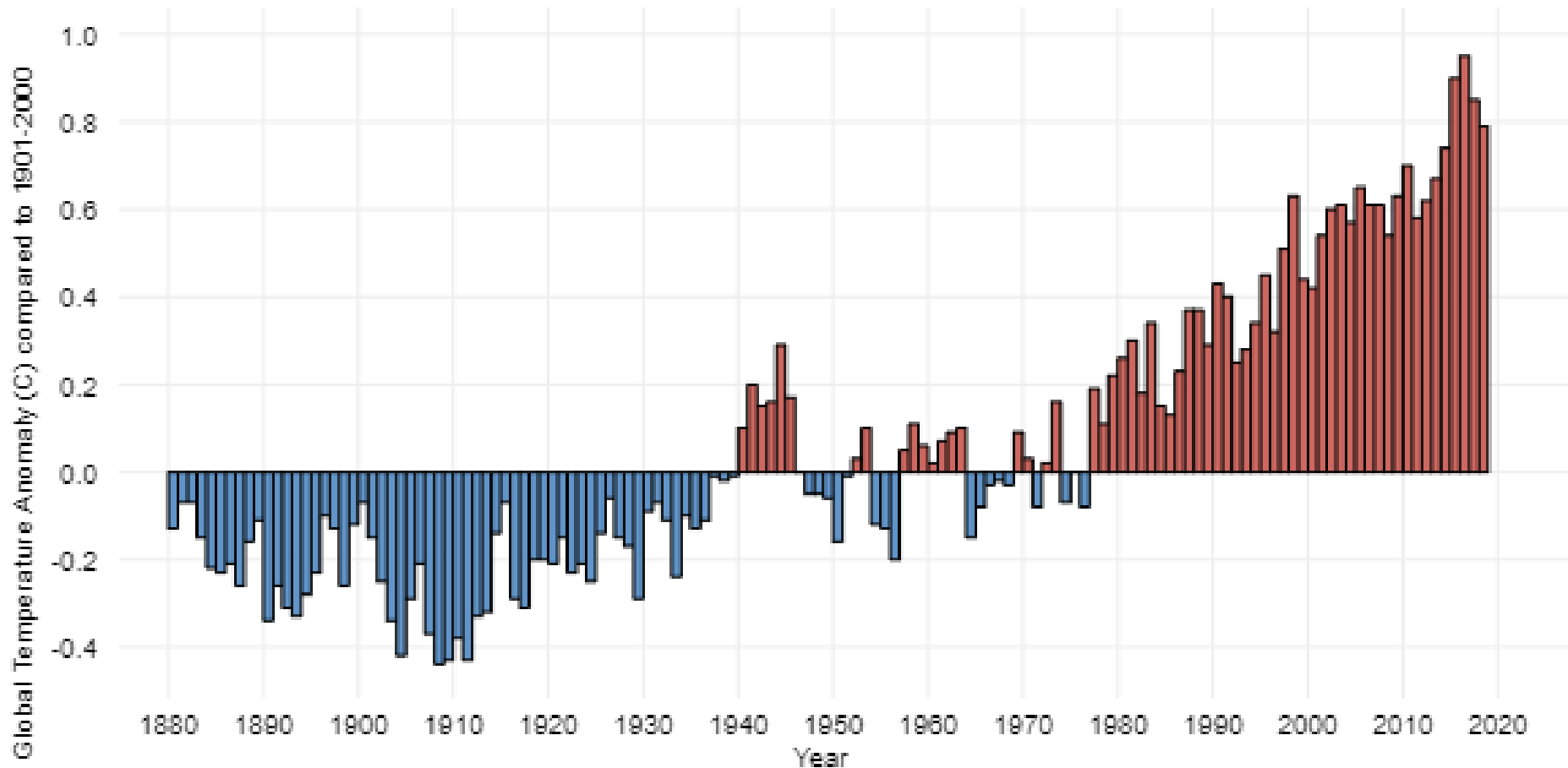
Base: 1,001 British adults aged 15+, fieldwork 12 - 21 Oct 2018

Latest CO₂ reading
May 11, 2019

415.26 ppm

Carbon dioxide concentration at Mauna Loa Observatory





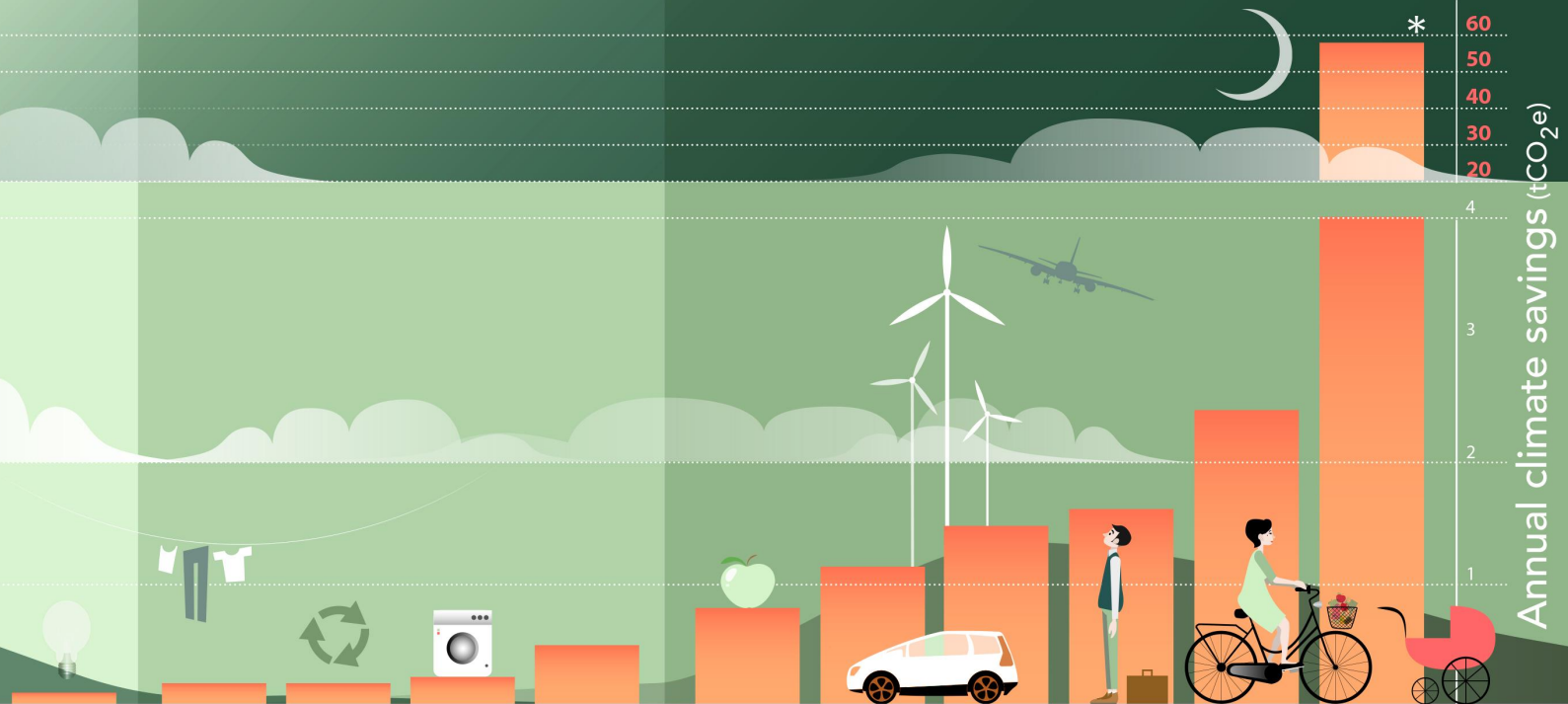
Average annual global temperatures since

The zero line represents the long-term average temperature for the whole planet; blue and red bars show the difference above or below average for each year.

Personal choices to reduce your contribution to climate change

* Cumulative emissions from descendants; decreases substantially if national emissions decrease.

Average values for developed countries, based on current emissions.



Low Impact

< 0.2 tCO₂e

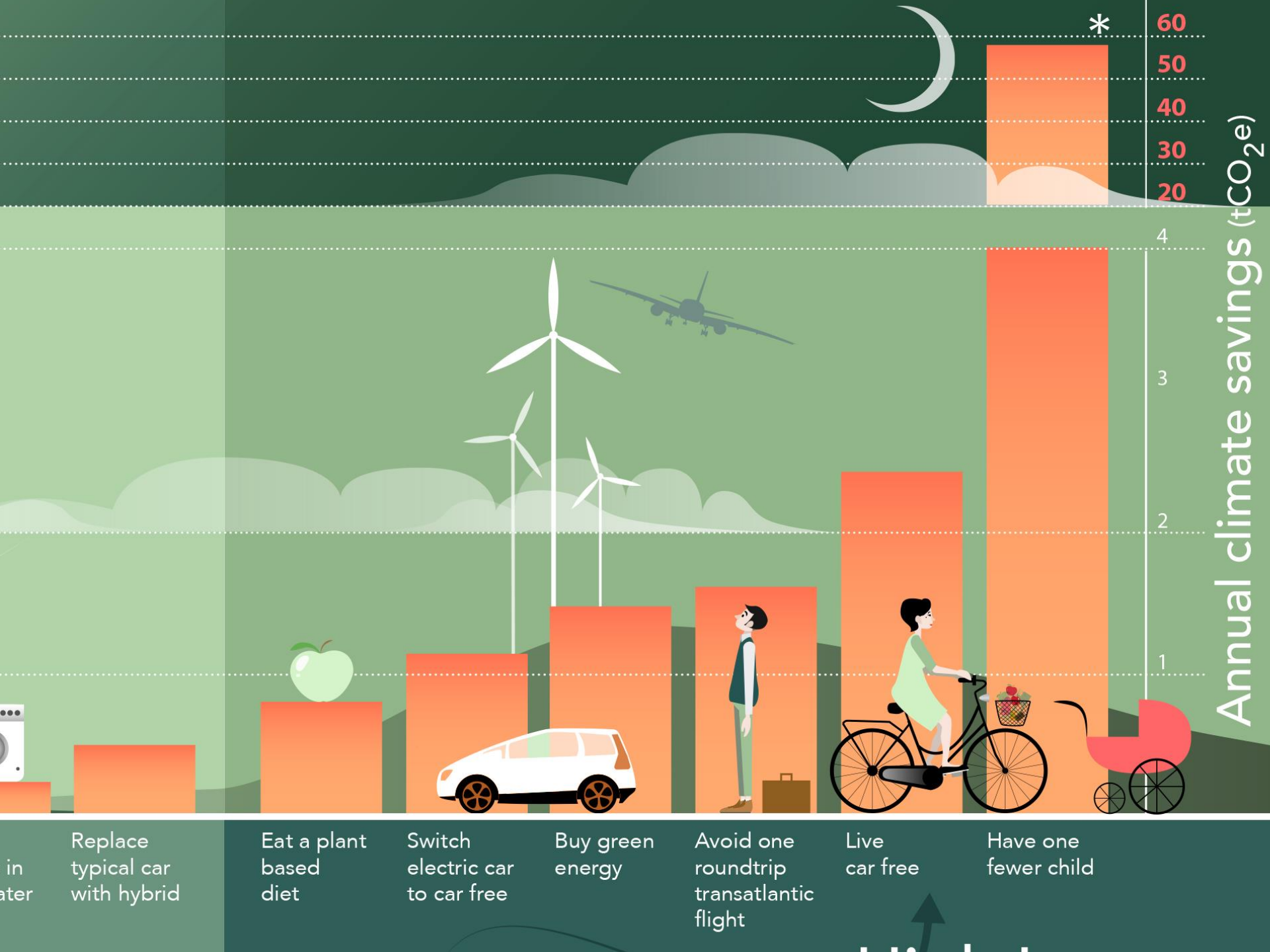
Moderate Impact

0.8-0.2 tCO₂e

High Impact

> 0.8 tCO₂e

Seth Wynes & Kimberly Nicholas, 2017, Environmental Research Letters



in
water

Replace
typical car
with hybrid

Eat a plant
based
diet

Switch
electric car
to car free

Buy green
energy

Avoid one
roundtrip
transatlantic
flight

Live
car free

Have one
fewer child

Annual climate savings (tCO₂e)

60
50
40
30
20

4
3
2
1

*

Who flies most?





- Over half of the British population don't fly at all in any given year,⁴
- and only 15% of us take three or more flights.⁵
- Only one in 20 people worldwide have ever flown
- Brits fly more than the people of any other nation – twice as much as Americans
- These aren't business flights. The Department for Transport says business travel by the UK public is in long term “general decline” and now makes up just 12% of our plane trips abroad,¹⁰
- Who are the main offenders? Is it us?

• 57% in 2012, to be precise. National Travel Survey 2013, DfT, Table NTS0316 [↗](#)

• Table ATT0601. Public experience of and attitudes towards air travel. DfT Statistical release. July 2014 [↗](#)







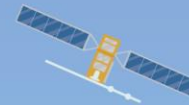
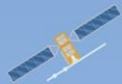


COP26



The 26th session of the Conference of the Parties (COP 26) takes place from 9-19 November 2020, in Glasgow, UK.





National Environment Programme 201,000 people









Operation Earth at Number 10



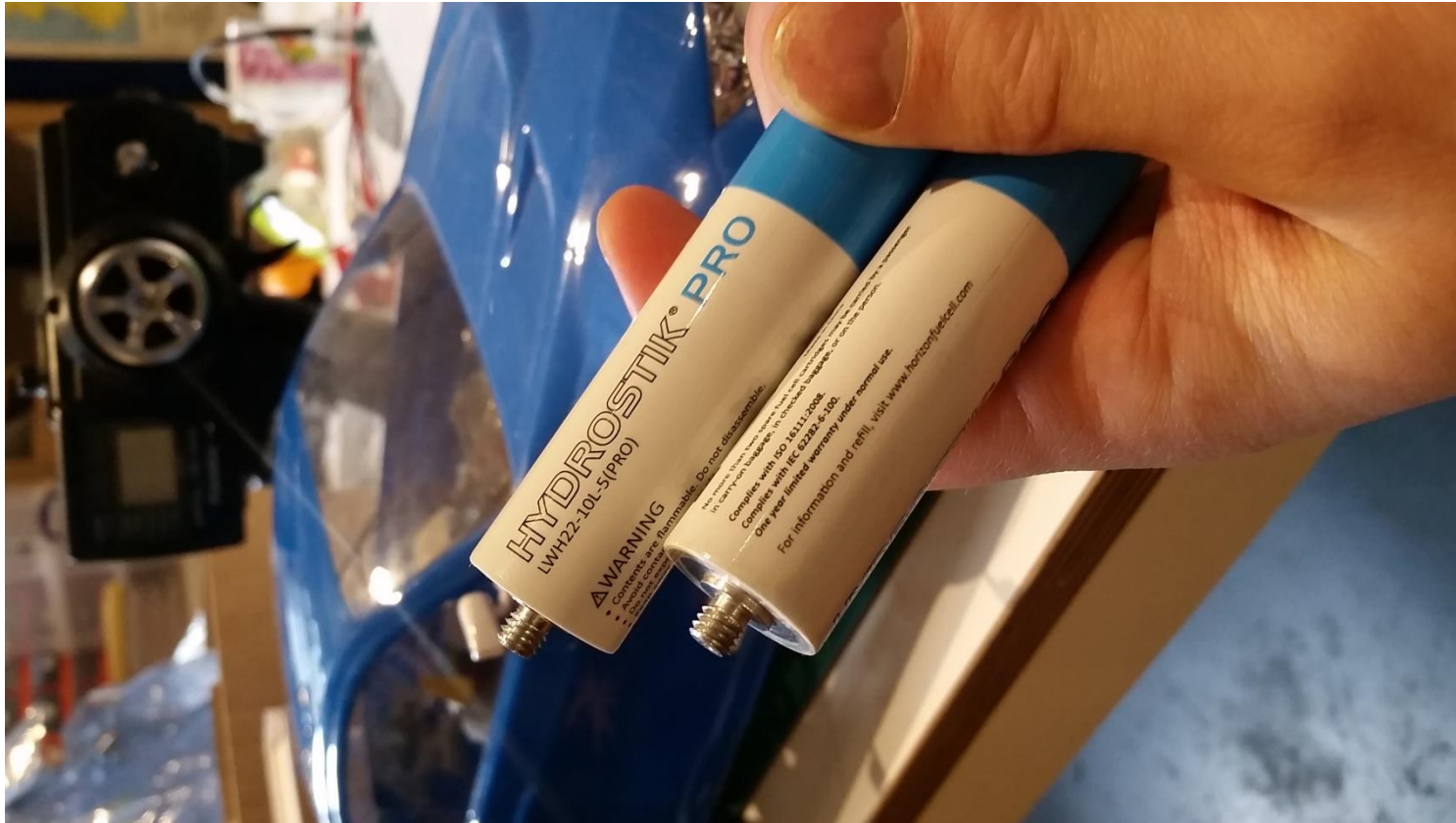




THE SECRET WORLD OF GASES

The Secret World of Gases 106,000

Hydrostiks – 10 Litres





EXPLORE

YOUR UNIVERSE

ATOMS TO ASTROPHYSICS







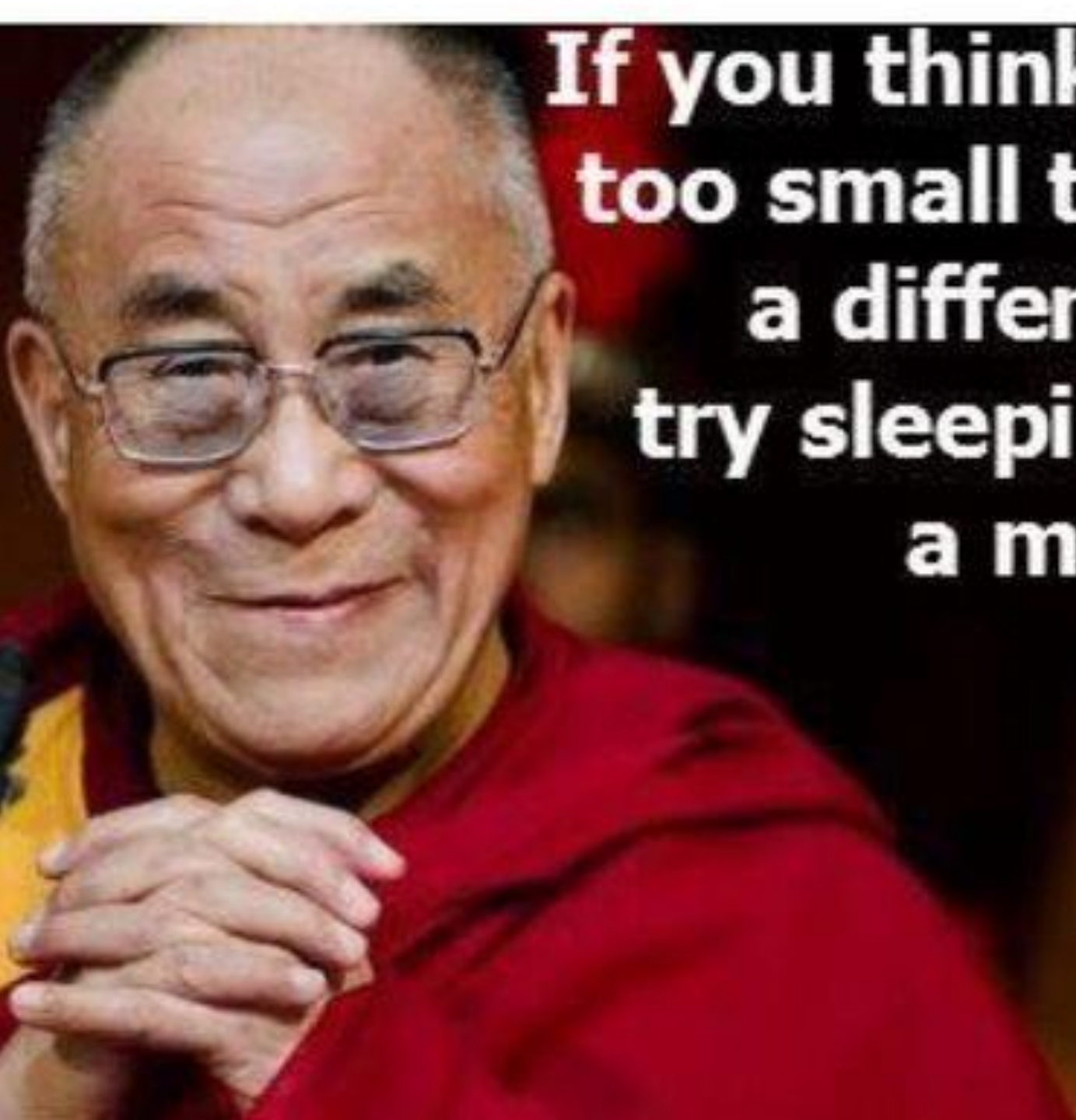
Inspiring Nationally

914,646 children and adults have taken part in schools workshops, family shows and special events

75,741 children and adults met and spoke with a space scientist or engineer

1,135,786 visited space exhibitions as part of the programme
= over 2 million in person
(Far more through social media and online)





**If you think you're
too small to make
a difference ...
try sleeping with
a mosquito
in the
room**

~Dalai Lama

Each of us has various spheres of influence.

1. Within our own organisations
2. With colleagues in partner organisations
3. With our millions of visitors, members, networks
4. With our local councils and regional policy makers
5. On social media (personally and professionally)
6. Through our organisational voices as honest and trusted science organisations.
7. With our thousands of staff
8. In what we sell in our cafes and buy for our shops and exhibitions.
9. through the collective voice of our many science-based organisations

The Question is...

What's your Superpower?

What do you, and your organisation find easy, that others find hard?

**MY SUPERPOWER
WOULD BE _____**





THIS CAN'T
WAIT UNTIL I
FINISH
SCHOOL

PLANET
FINISHING
TOP

SOCIALIST PARTY ONLINE
Socialist Party
TORIES OUT

I THINK ABOUT
THE CLIMATE
MATE!

CHANGE
THE
POLITICS

CLIMATE
CHANGE
IS ON



Our time is Right Now

Thank You



Dr Penny Fidler

The time is
always right
to do what
is right.

~ Martin Luther King Jr.

