Welcome to Carbon Awareness

Leicester City Council

NAEE
NATIONAL ASSOCIATION FOR ENVIRONMENTAL EDUCATION (UK)

RCE
REGIONAL CENTRE OF EXPERTISE ON EDUCATION FOR SUSTAINABLE DEVELOPMENT

ACKNOWLEDGED BY

UNITED NATIONS UNIVERSITY

Manchester Metropolitan University

House Keeping

Aims for today

- You will feel more empowered to act on climate change, at school and in own life through
  - Knowledge – understanding more
  - Motivation – want to make change
  - Shared ideas with others
- Create actions which are
  - Meaningful
  - Achievable

Introductions

Climate Action Bingo

- How many different names in the room can you find to fill your sheet?

Who grows their own fruit and/ or vegetables at home or at school? 	Who cycles to school? 	Who takes showers rather than baths? 	Who is a member of an Eco-Club? Eco-Schools
Who has a meat free meal at least one day a week? 	Who recycles at home?	Who's had only holidays in the UK this year? 	Who has a compost heap/bin at home or school? 

What is Carbon Literacy?

"An awareness of the carbon costs and impacts of everyday activities and the ability and motivation to reduce emissions, on an individual, community and organisational basis"

Summary of Training

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Section 1

- Climate Change – The Facts
- Greenhouse gases and their sources

Break

Section 2

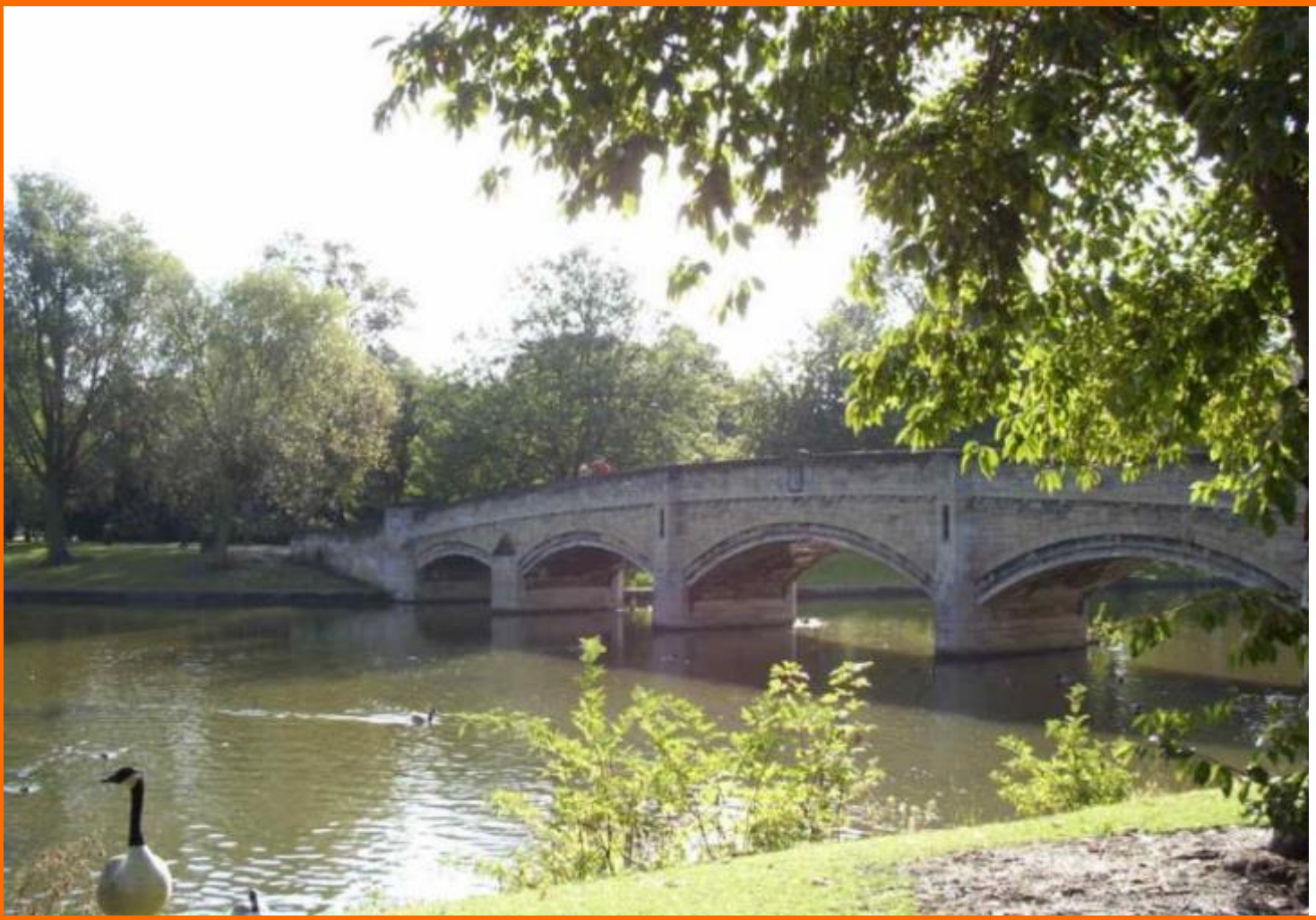
- Exploring Carbon Footprints
- A Zero Carbon World

Lunch

Section 3

- A Zero Carbon School & City
- Communicating Climate Change
- Taking Action

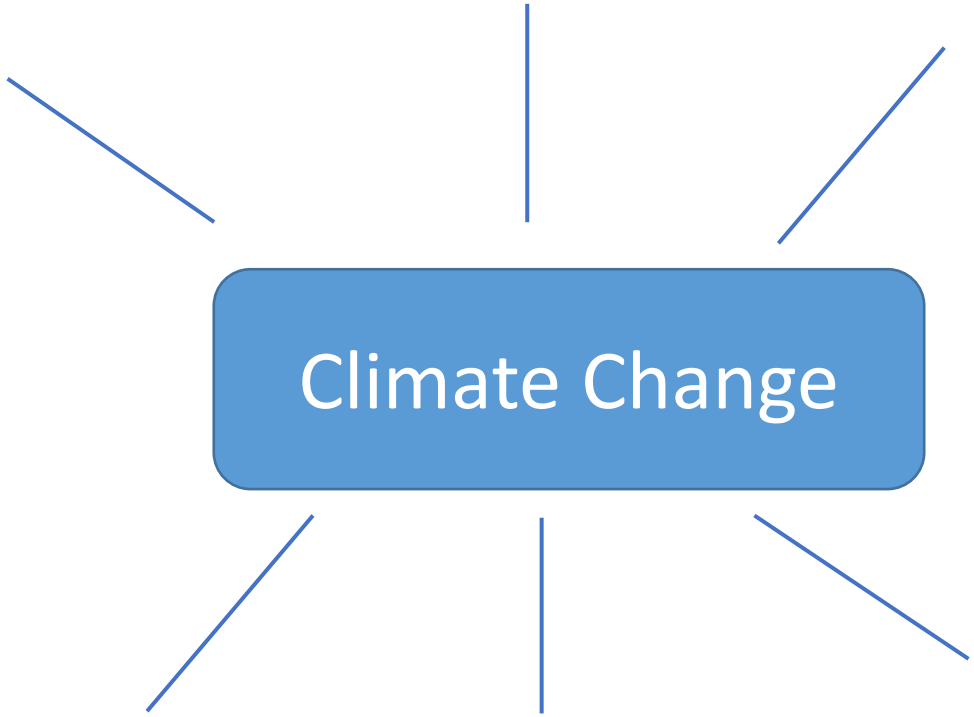
Leicester: Britain's first Environment City



Sustainable LEICESTER

…now aiming to be a Carbon Neutral city

What is Climate Change? – What do you know?



Greenhouse gases and their sources

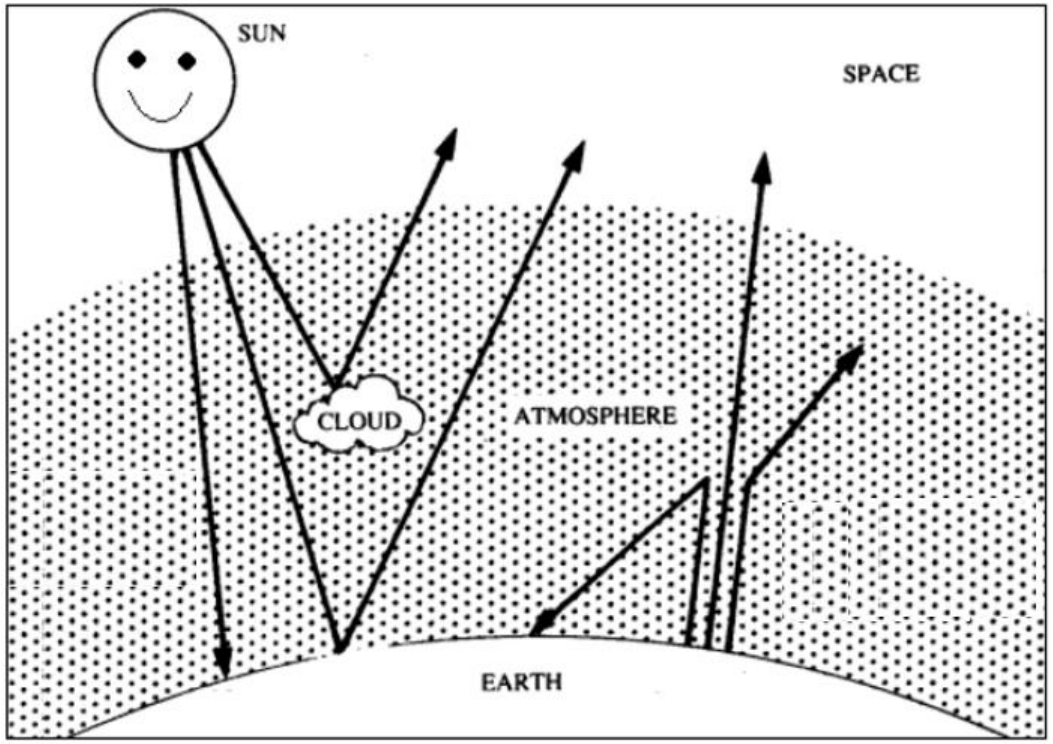
Climate Change in a nutshell…

Why is the Earth getting warmer?


The Greenhouse Effect
Atmosphere
climate.nasa.gov

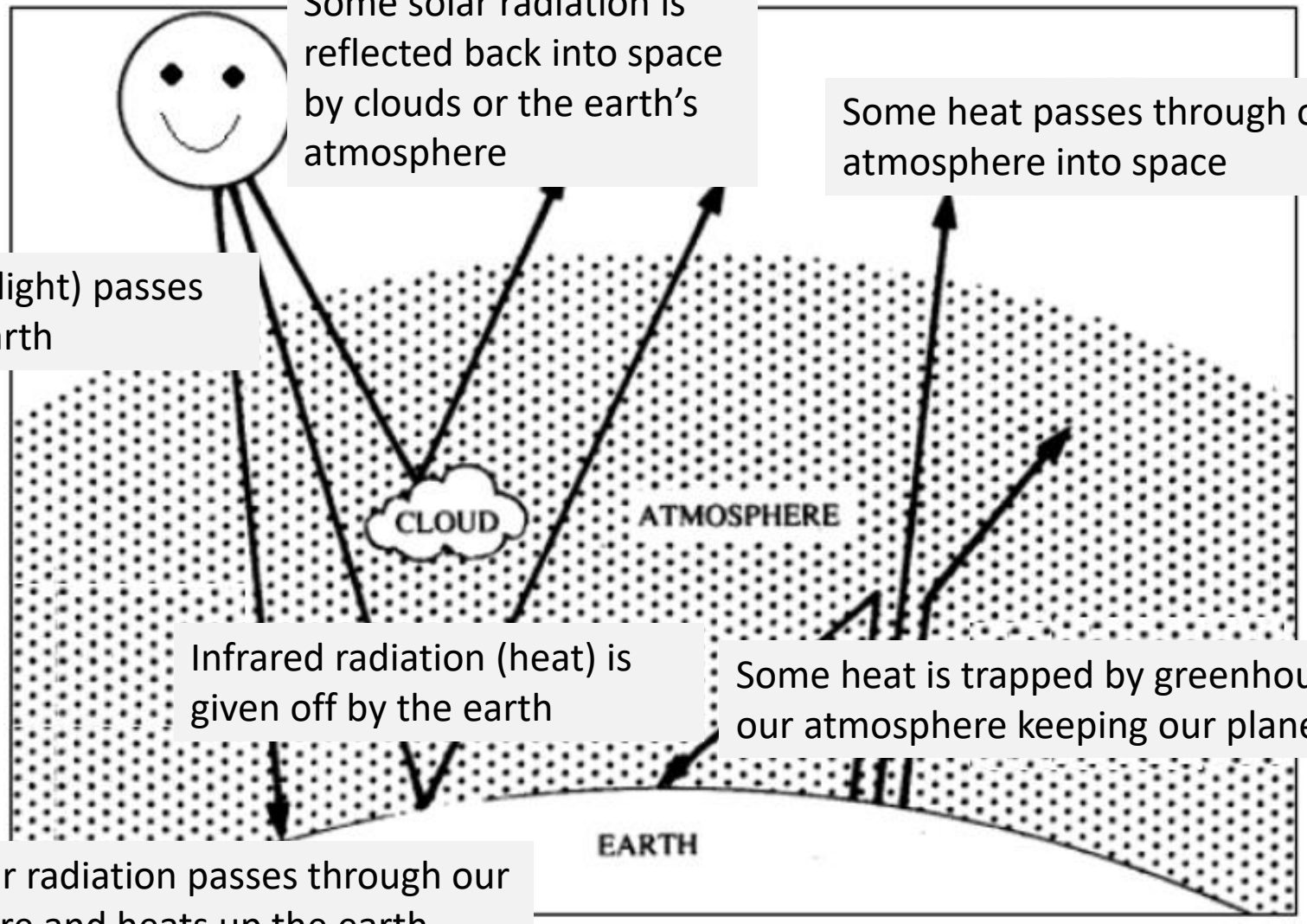
The Greenhouse Effect

1. **Sort the statements into the order they happen**
2. **Place them where you think they go on the diagram**
3. **More greenhouse gases are being added to our atmosphere (more on this soon). What effect will this have on our planet and why?**



Some heat is trapped by greenhouses gases in our atmosphere keeping our planet warm	Some solar radiation is reflected back into space by clouds or the earth's atmosphere
Solar radiation (sunlight) passes through space to earth	Infrared radiation (heat) is given off by the earth
Some solar radiation passes through our atmosphere and heats up the earth	Some heat passes through our atmosphere into space

The Greenhouse Effect



Some solar radiation is reflected back into space by clouds or the earth's atmosphere

Some heat passes through our atmosphere into space

Solar radiation (sunlight) passes through space to earth

Infrared radiation (heat) is given off by the earth

Some heat is trapped by greenhouses gases in our atmosphere keeping our planet warm

Some solar radiation passes through our atmosphere and heats up the earth

The Enhanced Greenhouse Effect

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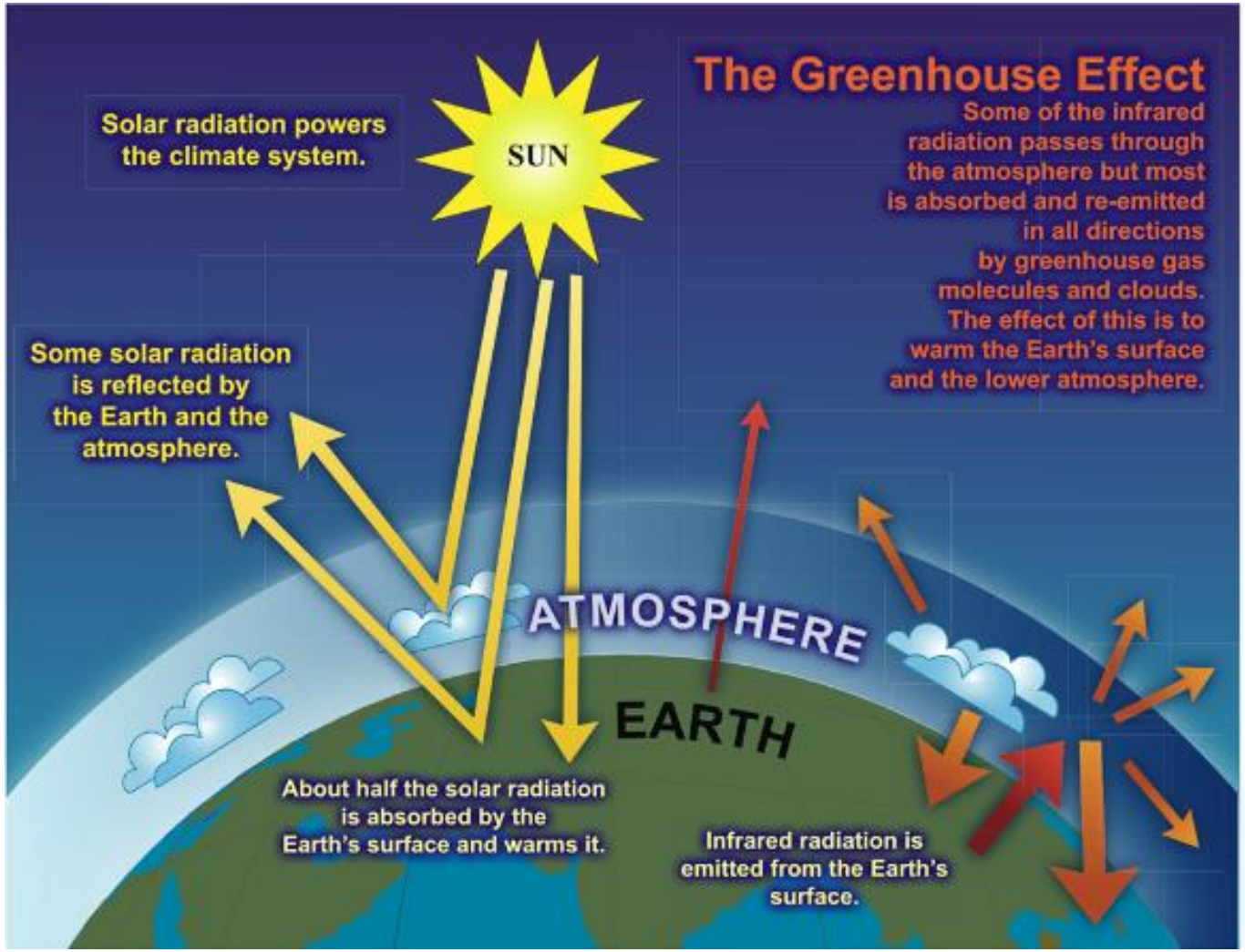

- More Greenhouse Gases in our atmosphere means more heat is trapped, making the earth warmer
- Just like putting an extra layer of clothes on makes you warmer

Greenhouse Gases and their Potency

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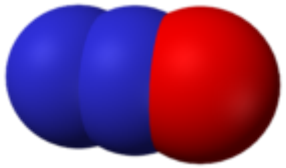
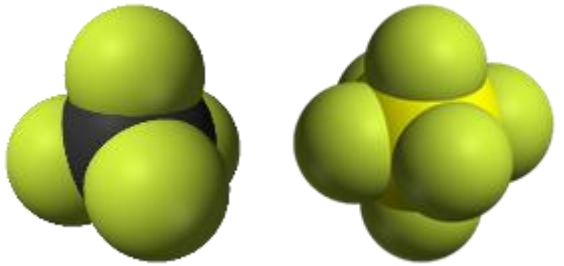
carbon dioxide CO_2	methane CH_4	nitrous oxide N_2O	F gases (various)
			
1	**28**	**265**	**10s-10,000s**

mass x Global Warming Potential → common currency tCO_2e

Current contribution of Greenhouse Gases (2015)

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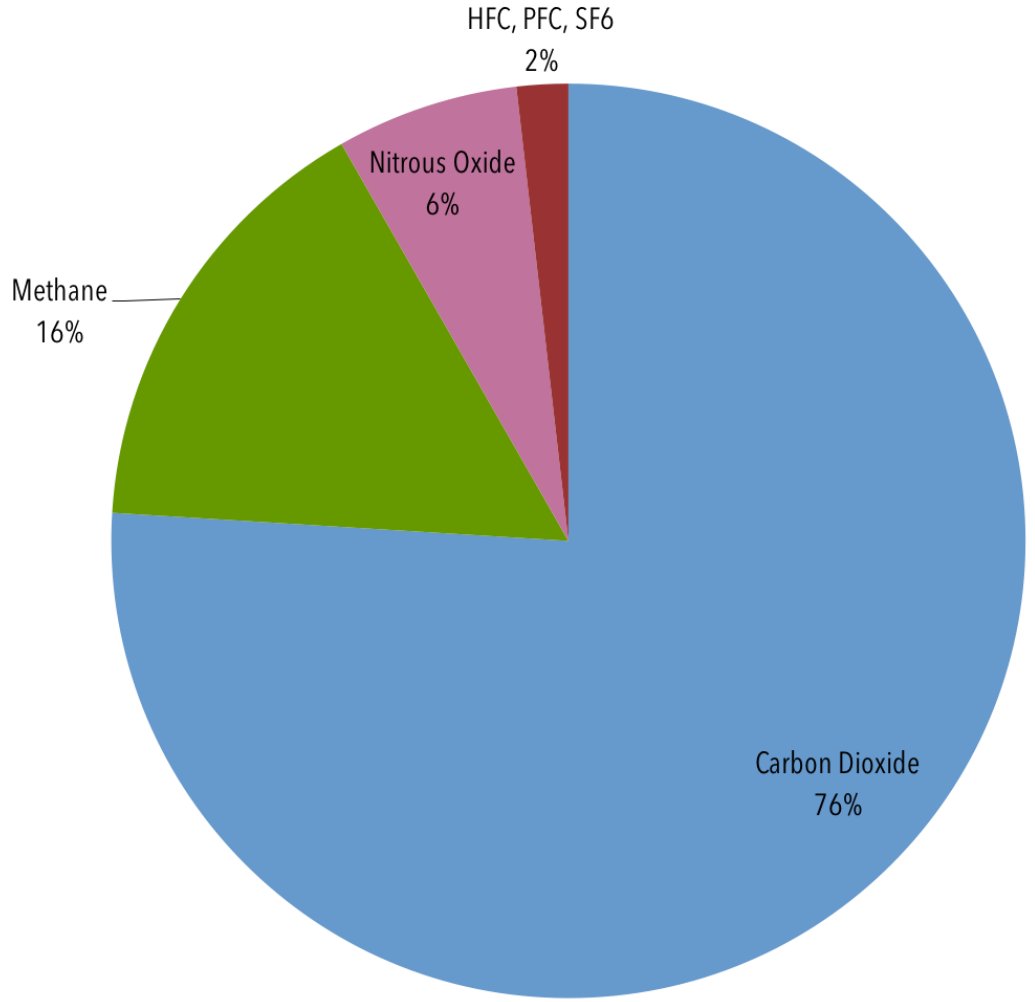
- Carbon dioxide has the greatest contribution at present
- Methane second largest



Which activity releases which GHG?

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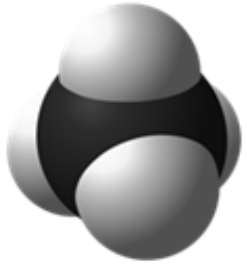
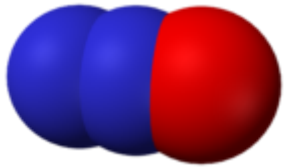
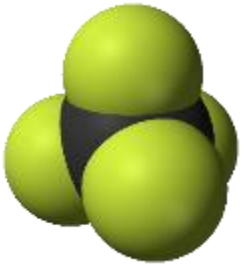
- Match the greenhouse gases with their sources!









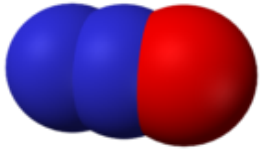

Summary

CO_2

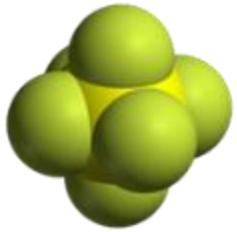




CH_4

N_2O



F gases


Carbon Footprints

What is a Carbon Footprint?

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- A measure of the amount of **greenhouse gases** released to the atmosphere as a result of our activities.
- We can calculate the carbon footprint of anything – countries, cities, organisations, individuals, projects, products…

International Carbon Footprints & Vulnerability to Climate Change

International footprints & vulnerability

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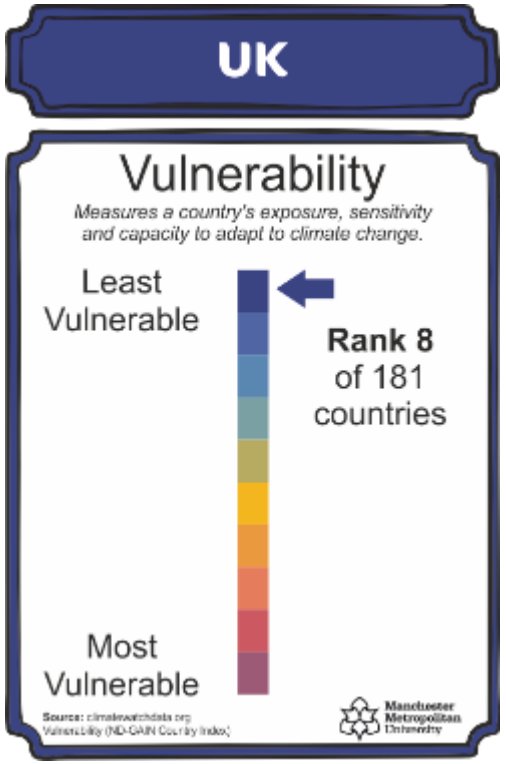
- **<u>Production</u> based footprints**
- Line up from the countries from the one with the highest footprint to the one with the lowest footprint



Data freely available from **cait.wri.org** & **www.climatewatchdata.org**

National Carbon Footprints

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Production Based

GHG emissions within national boundaries

UK: 7.8 Tonnes

Consumption Based

Accounts for the balance of trade

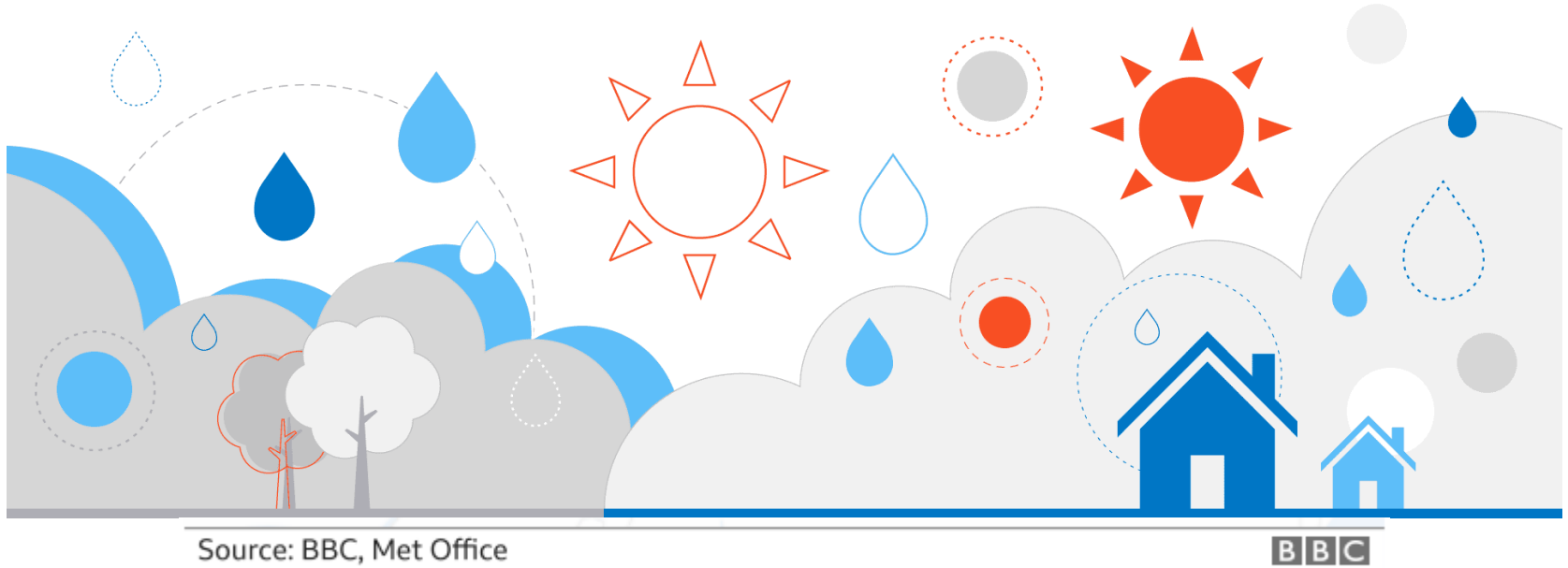
- Exports

+ Imports

UK: 13.2 Tonnes

Climate Change and Leicester

- What will climate change look like near me?

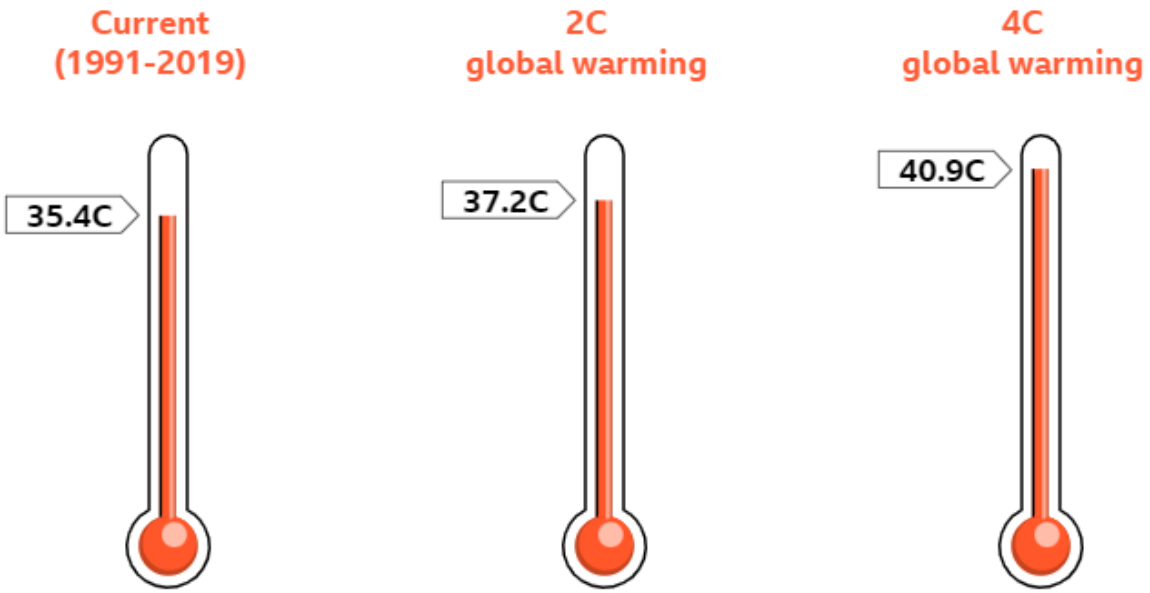


Climate Change and Leicester

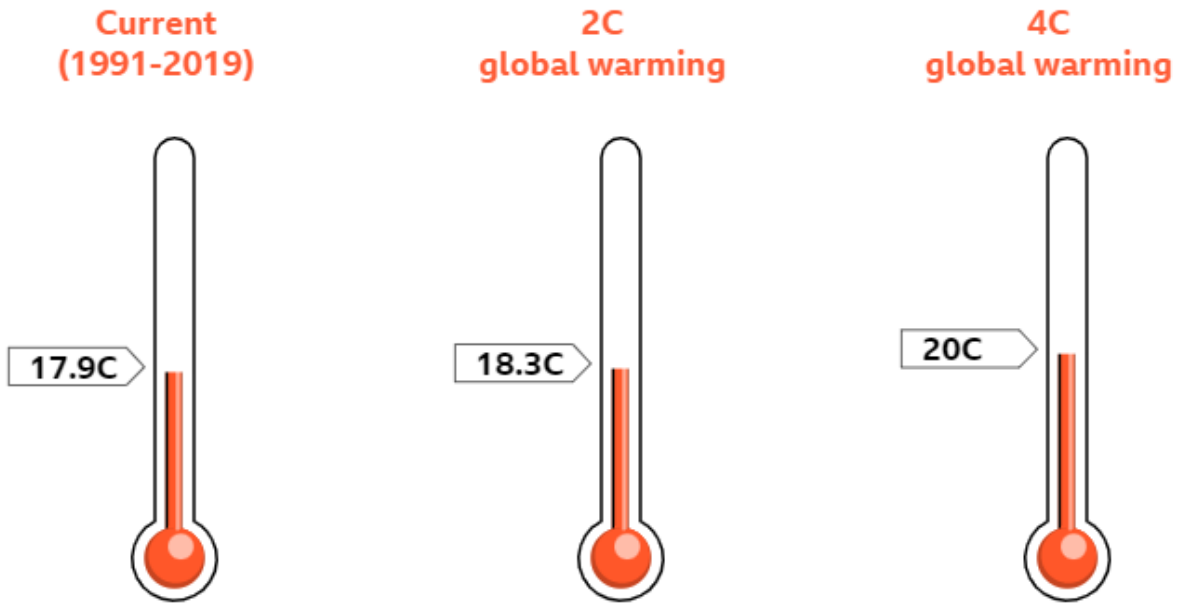
- As the world warms, the UK is likely to have hotter, drier summers and warmer, wetter winters, according to the Met Office.
- Extreme weather events such as heatwaves and heavy downpours could become more frequent and more intense.

Hottest days

The hottest summer day of the past 30 years near you was **35.4C**. If global average temperatures increase 2C above pre-industrial levels, the hottest summer day could be about **37.2C**. If global temperatures rise by 4C, it could be about **40.9C**.



The warmest winter day of the past 30 years near you was **17.9C**. If global average temperatures increase 2C above pre-industrial levels, the warmest winter day could be about **18.3C**. If global temperatures rise by 4C, it could be about **20C**.



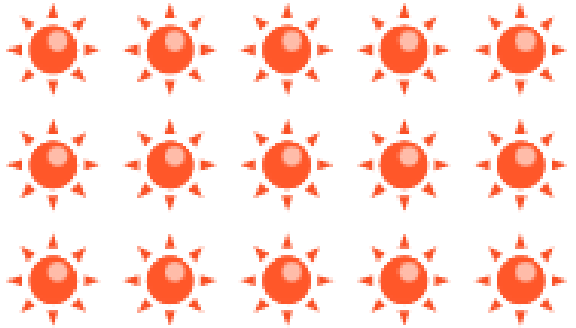
Summer days

In the past 30 summers, there were **3 days** above 25C per month on average. If global temperatures rise by 2C, there could be **7 days**. With a 4C rise, there could be **15 days**.

Current (1991-2019)

2C global warming

4C global warming



Rainy days

In the past 30 years, there were **9 rainy days** on average per month in summer. If global average temperatures rise by 2C, this could be **8 days** per month. At a 4C rise it could be about **7 days**.

In the past 30 years, there were **11 rainy days** on average per month in winter. At both 2C and 4C rises, the number of rainy days per month could be roughly the same.

Climate Change and Leicester

- Agriculture
  - Wet winters prevent plants from developing healthy roots and a hot dry summer stunts their growth.
  - The Met Office projects rainy winters, which keep the soil wet into spring, and dry summers of infrequent rainfall will become the norm.
- Floods
  - Summer rain is likely to become less frequent but could be heavier. Without regular rainfall, the ground has a harder time absorbing water when it finally does come, leading to a greater risk of flash flooding.
  - Floods will likely become a staple of warming winters as well.

Flooding in Leicester

The impact of Climate Change how do we respond?

The impact of Climate Change how do we respond?

BREAK

Your Footprint

Try to calculate your own footprint – and check out the top tips for how to reduce it. Record your answers on the worksheet

https://footprint.wwf.org.uk

Other calculators offering more detail:
https://www.carbon-cap.com/climate-solutions-/carbon-footprint-calculator
https://www.resurgence.org/resources/carbon-calculator.html

Visualising the UK consumption based footprint

Visualising Carbon

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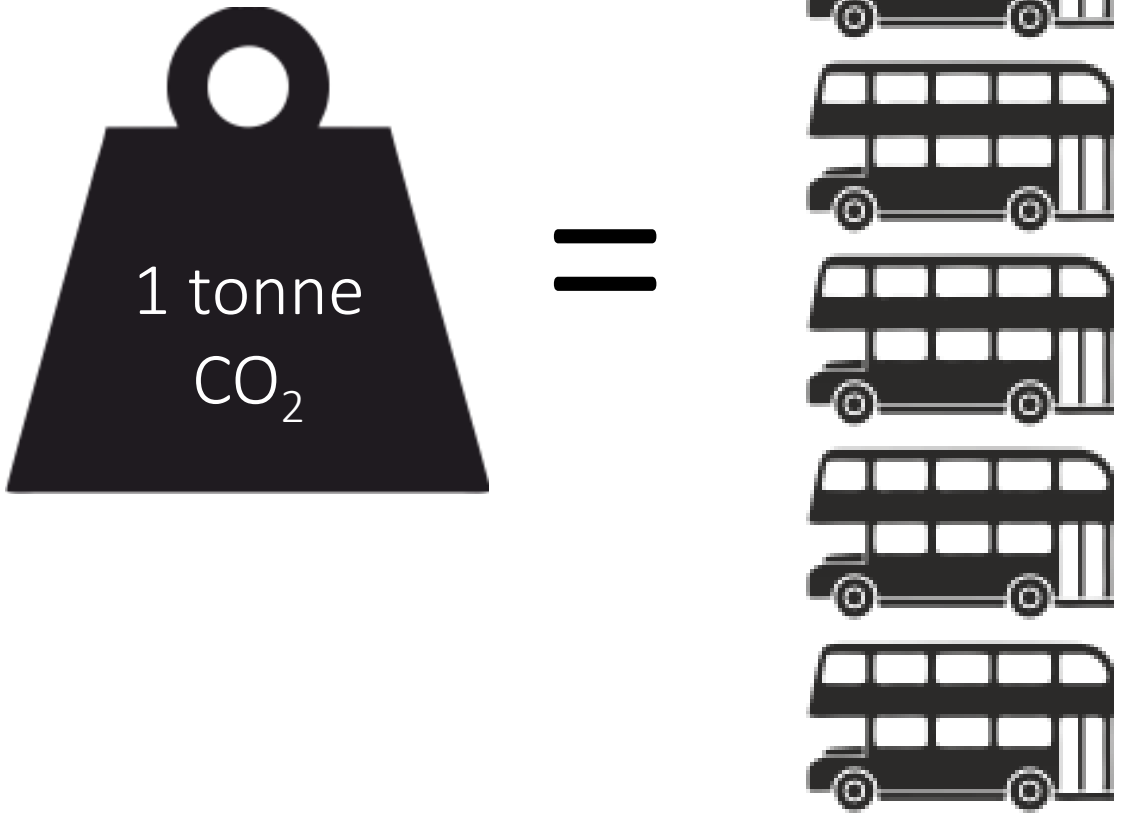
1 tonne of CO_2

would fill up

5 double decker buses



Average UK Footprint (13.2 tCO_2e)

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Home | Travel | Food | Purchases | Public Services

Average UK Footprint (13.2 tCO_2e)

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Average UK Footprint (13.2 tCO_2e)

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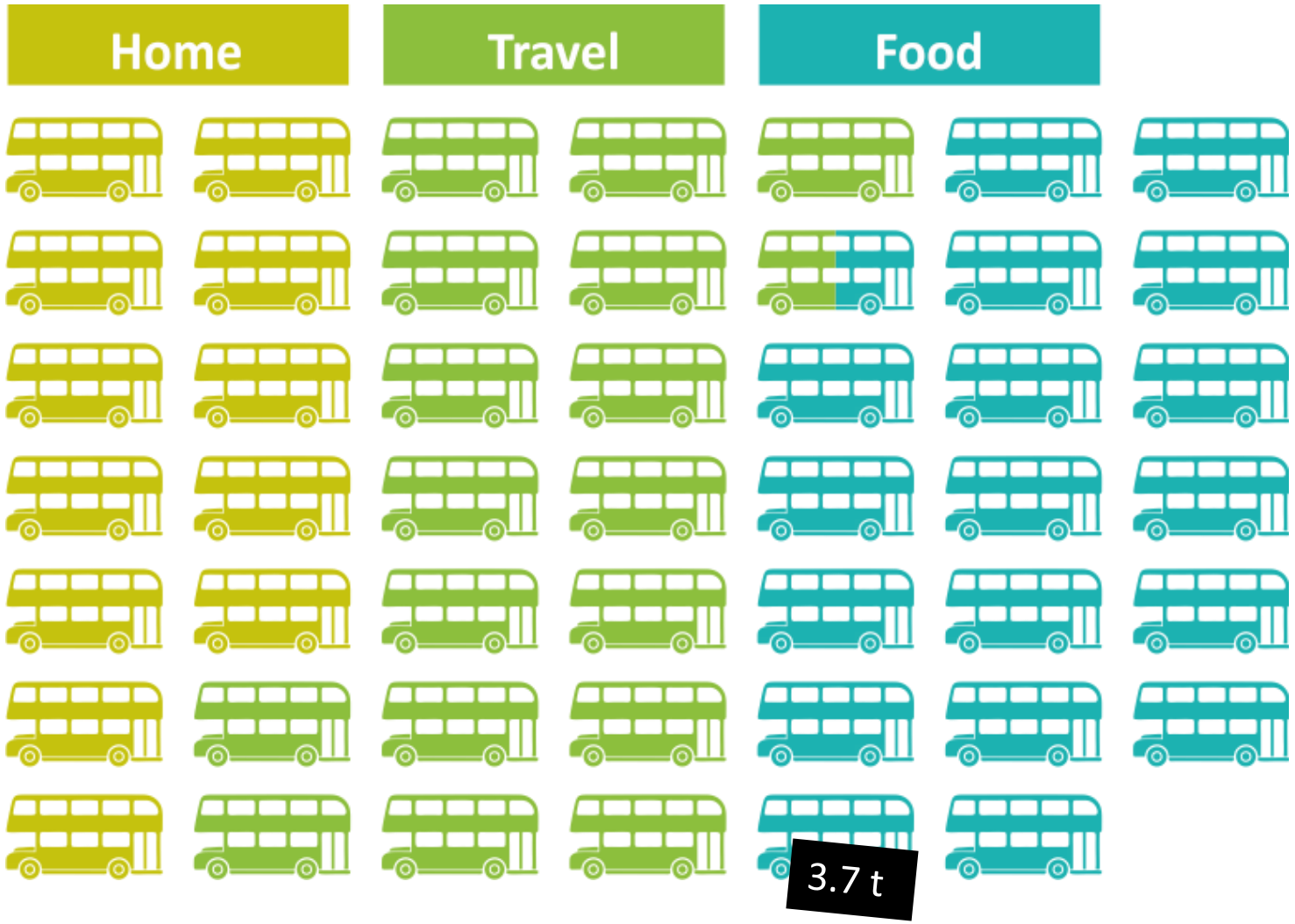

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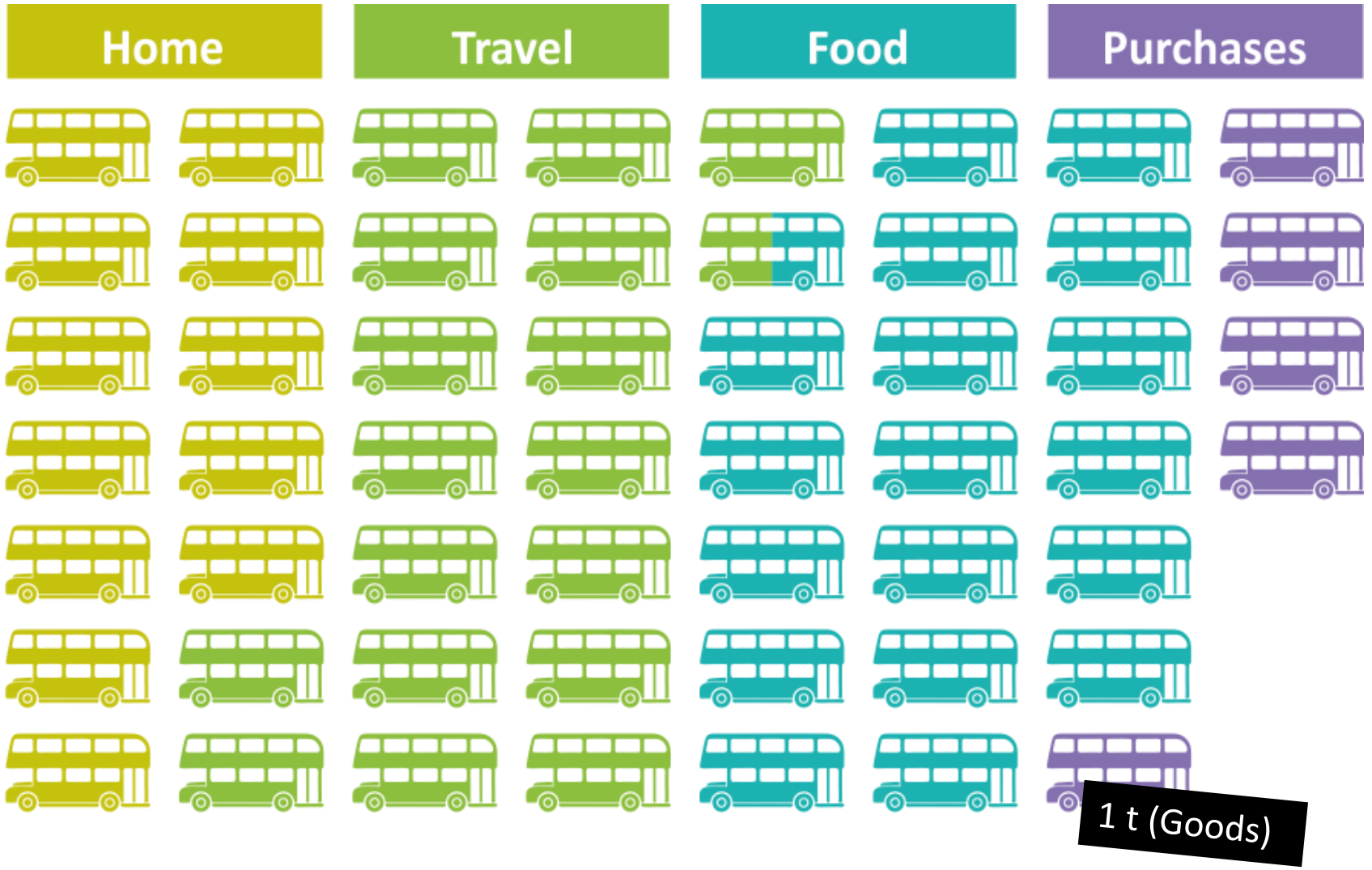

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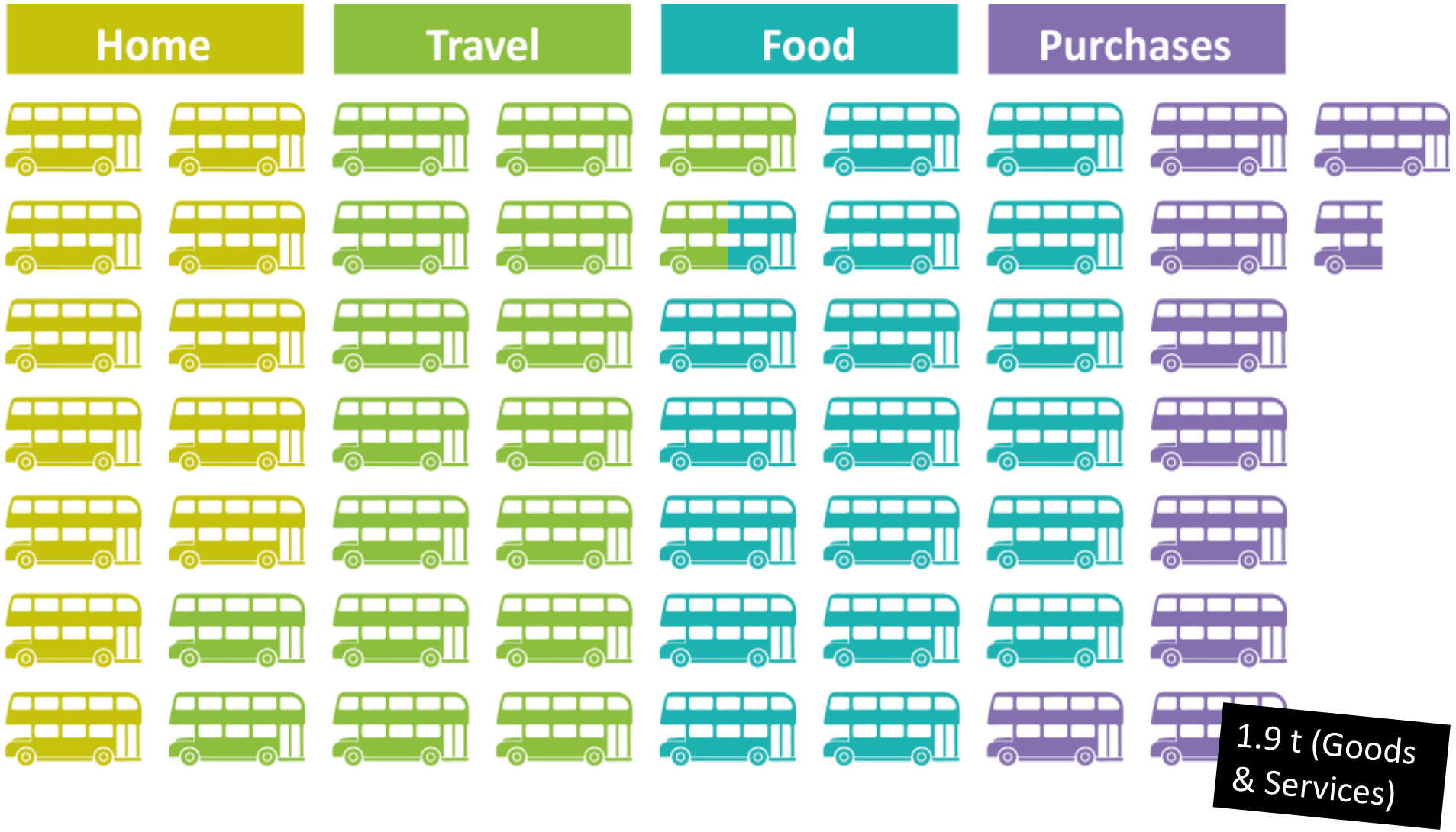

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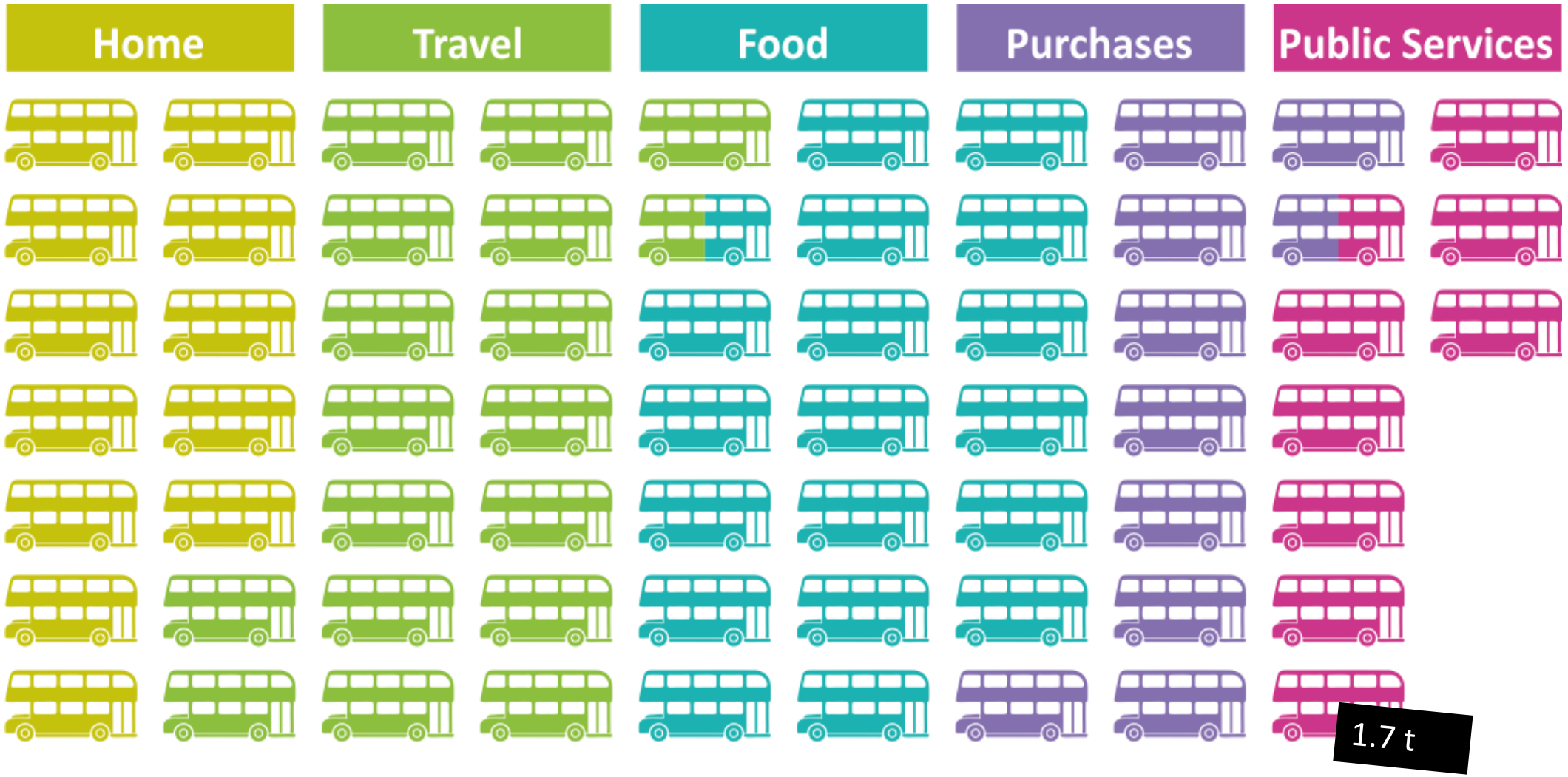

Average UK Footprint (13.2 tCO_2e)

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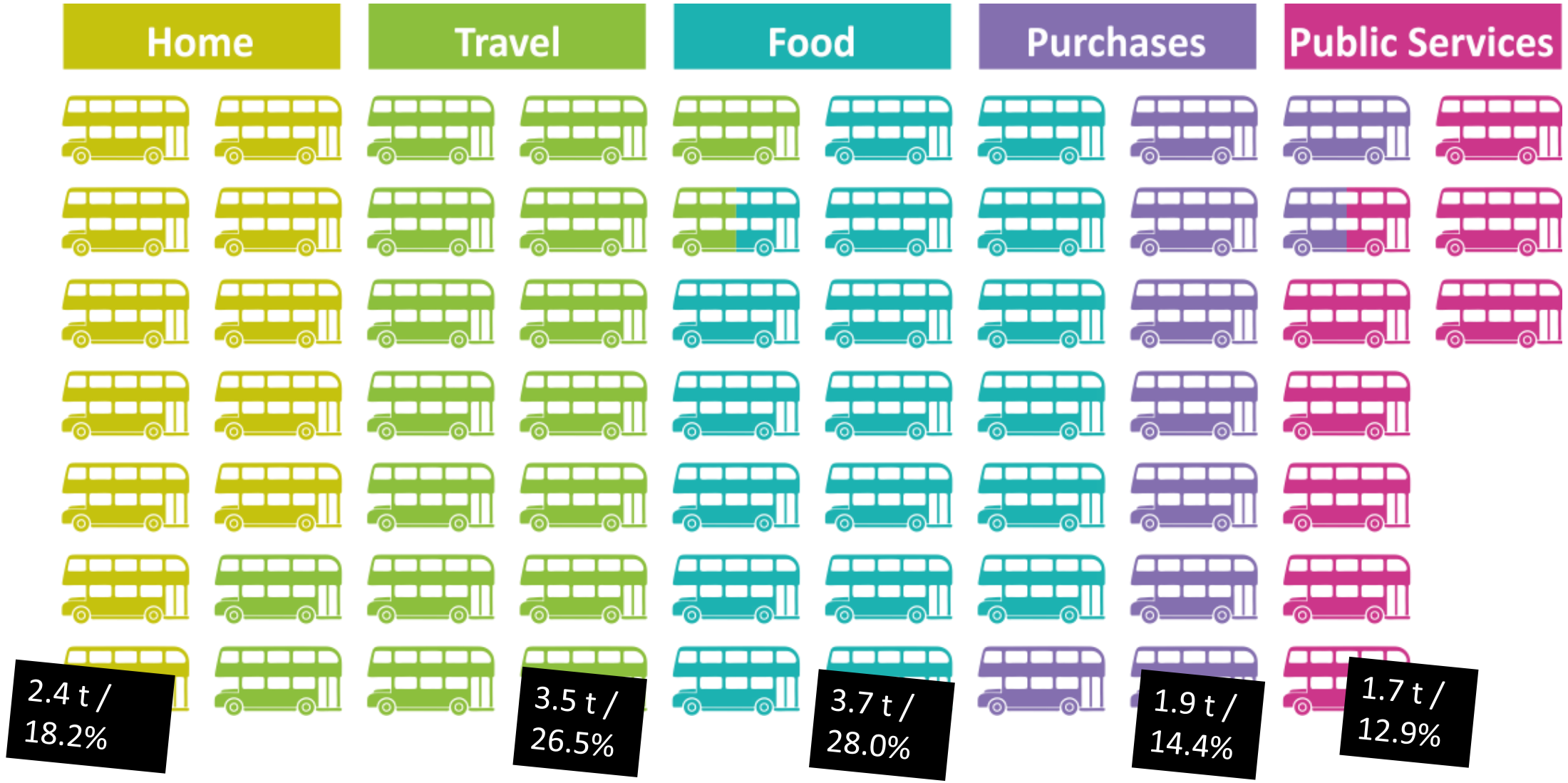
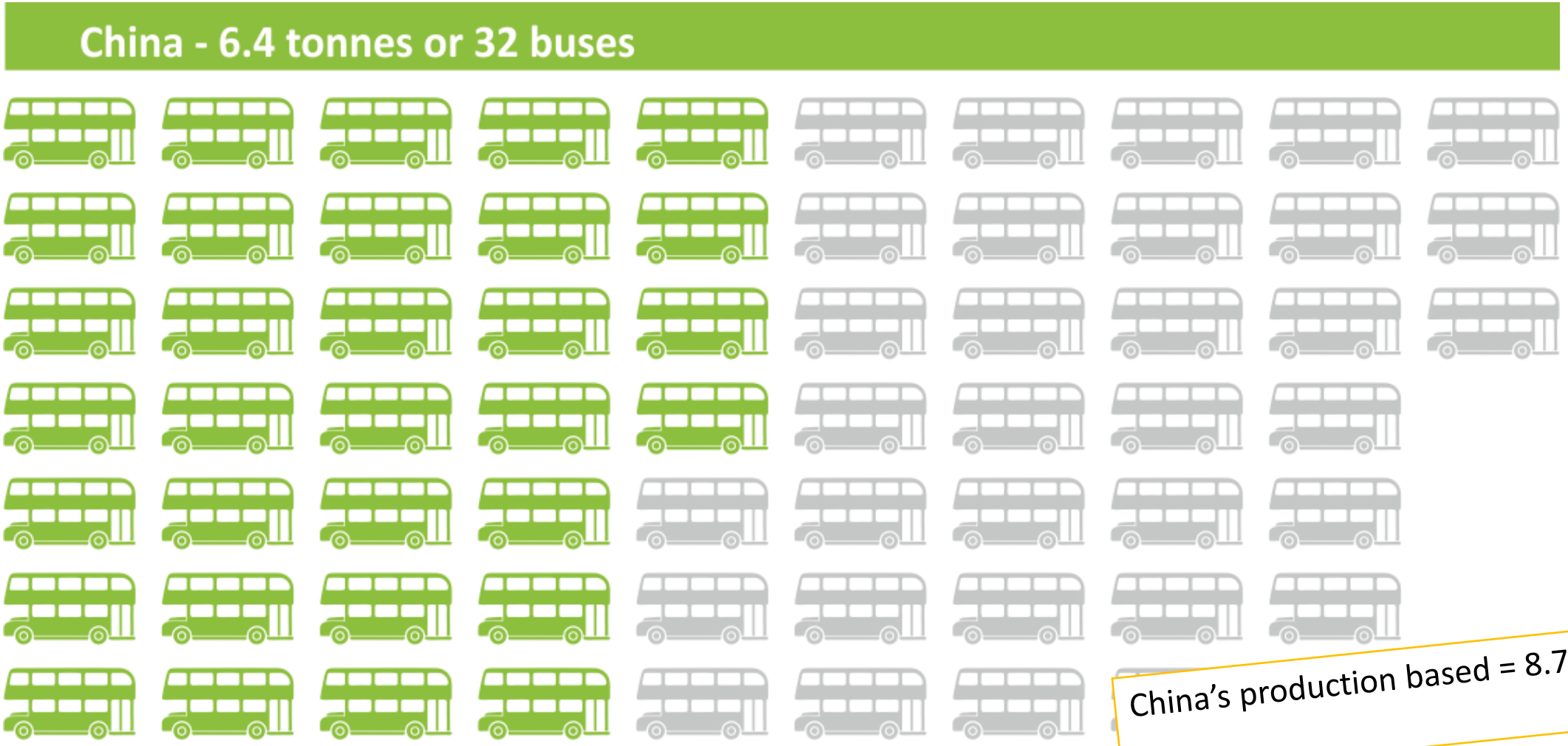


Comparing consumption based footprints
China 6.4: UK 13.2 tCO_2e (2.1x)



Comparing consumption based footprints
India 1.3: UK 13.2 tCO_2e (10.2x)

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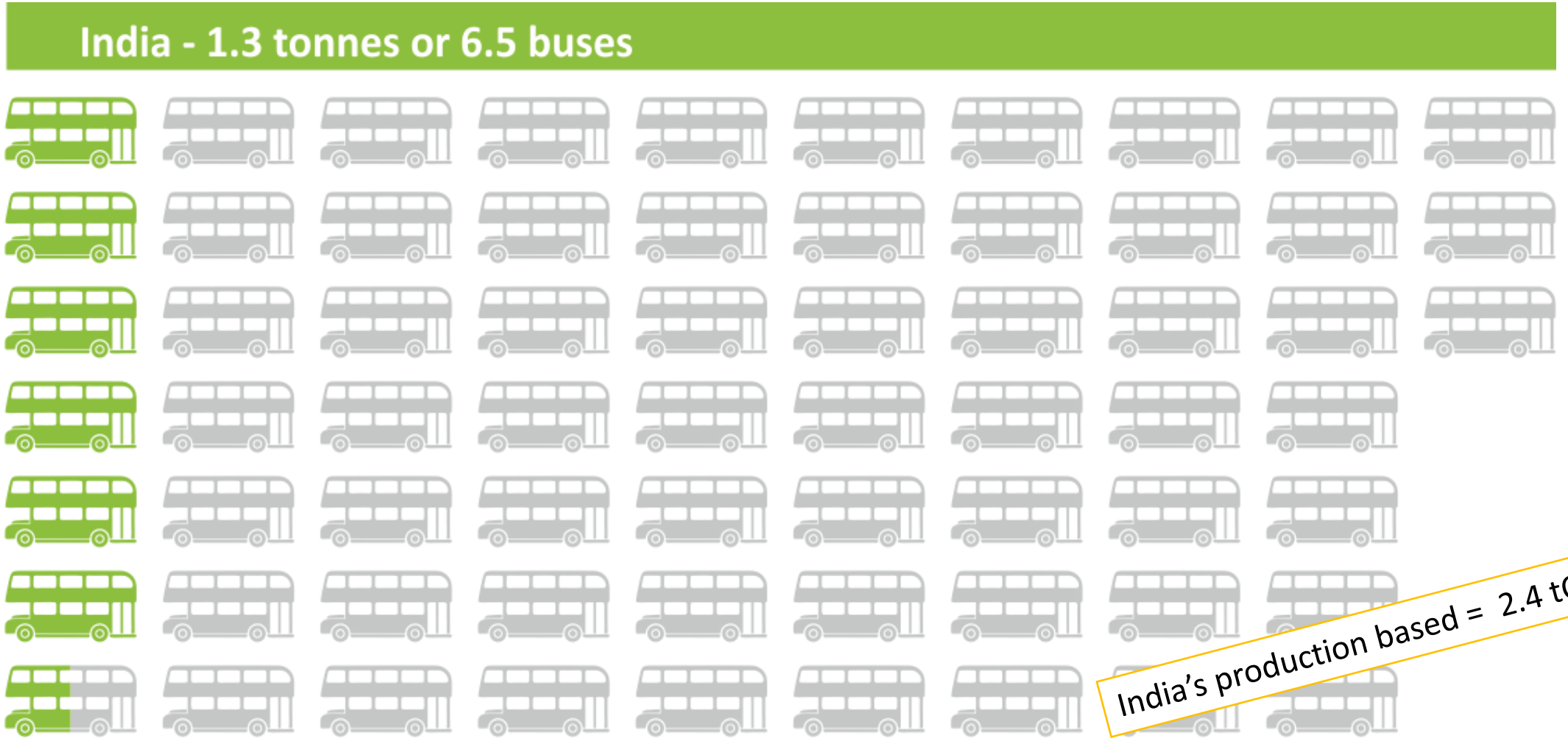

The Carbon Footprint of Food

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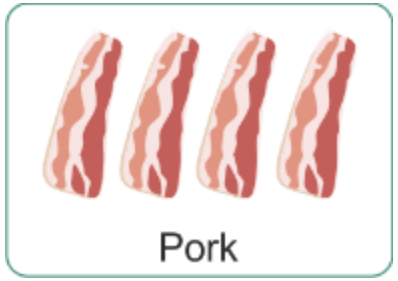
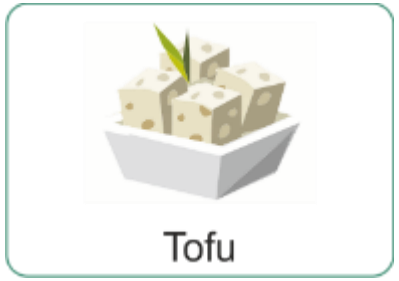
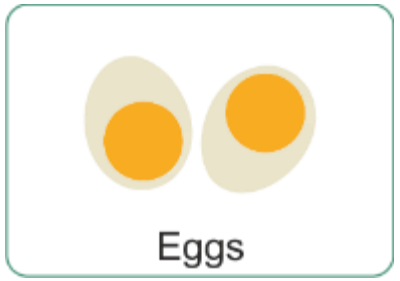
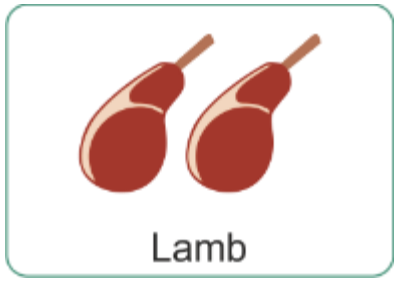
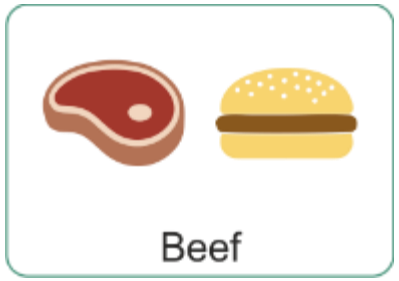
- Put the food protein cards in order from the one with the highest footprint to the one with the lowest…(full life cycle emissions)

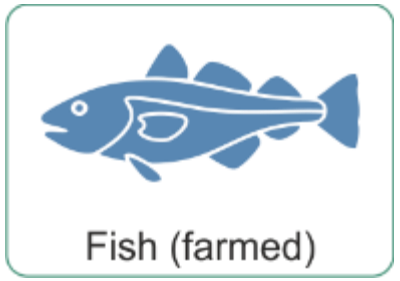












The Carbon Footprint of Food

Manchester Metropolitan University

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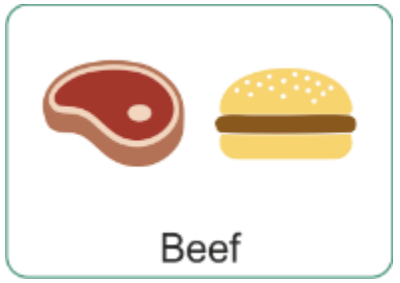
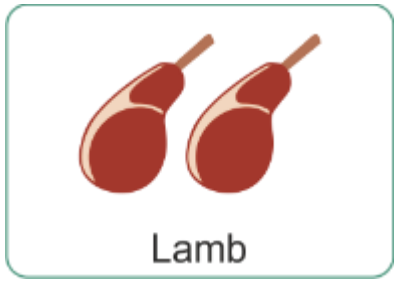
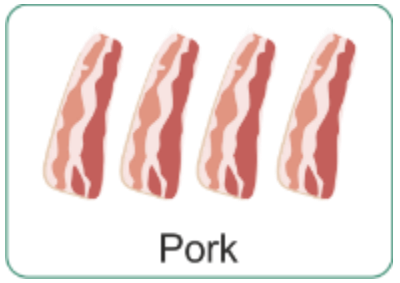


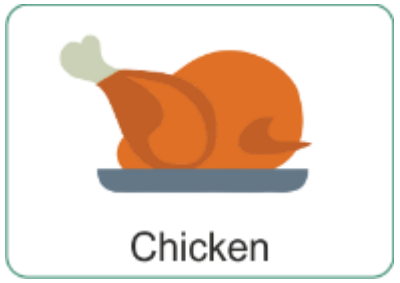
10.5 kg



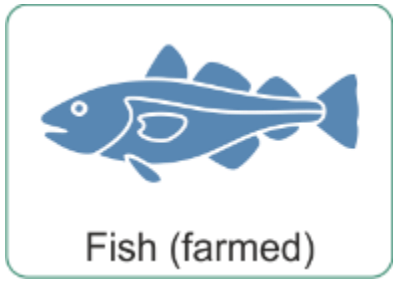
5.6 kg



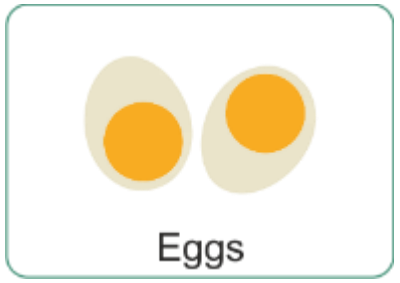
2.3 kg



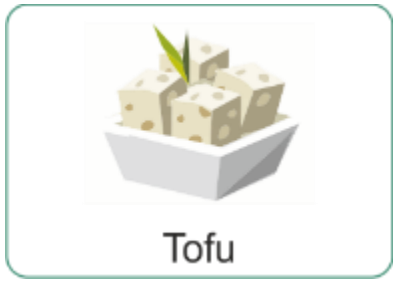
1.7 kg



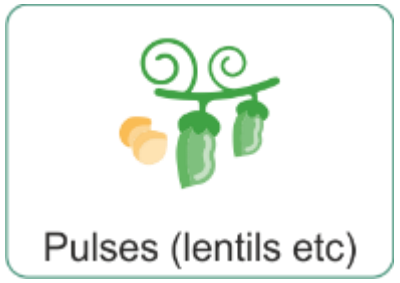
1.5 kg



0.6 kg



0.3 kg



0.2 kg

Data Source: Poore & Nemecek 2018 (Conversion to footprint per protein portion size & graphics - R Dunk)

The Carbon Footprint of Food

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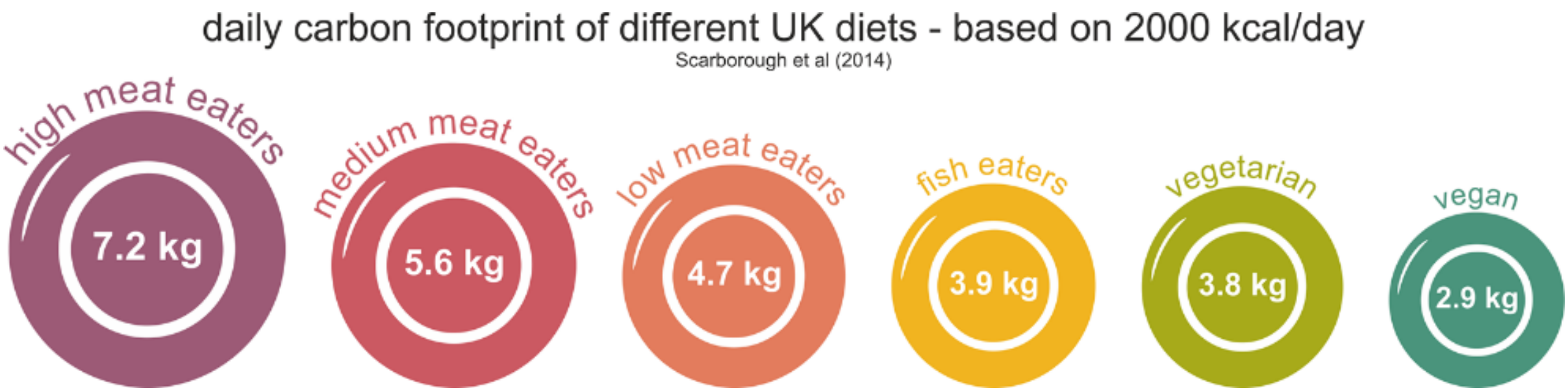

Travel

One way trip to Glasgow

310 miles from the Centre of Leicester

What ways to travel?

- Motorbike
- Aeroplane (from East Midlands Airport to Glasgow Airport)
- Plug-in Hybrid
- Coach
- Average Petrol Car
- Train

Travel

Things to note:

- Air travel / coach / bus / train is based on average occupancy of the vehicle
- Covers electric train not diesel
- Cars / motorbike the vehicle regardless of passenger number

Travel

Smallest emissions

Largest emissions

Travel

Smallest emissions

Largest emissions

0.01 tCO_2e

0.02 tCO_2e

0.03 tCO_2e

0.04 tCO_2e

0.09 tCO_2e

0.19 tCO_2e

+ car travel to airport 0.02 tCO_2e

www.carbonfootprint.com/calculator.aspx

Summary: Holiday Travel

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- Consider carbon footprint of mode – e.g. alternatives to flying
- Full cars share out the per person footprint
- Combine trips, travel for longer instead of short trips
- Consider more local versions of desired experience
- Useful sources: seat61.com; loco2
- Don’t look at cost comparison to flight

QUIZ: The Urgency of Taking Action on Climate Change

Quick Quiz

- Coming up are some multiple choice questions
- I will read the question.
- You will then have 30 seconds in your groups to discuss and agree the answer and hold up your flash card…

Weather and Climate

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- https://www.bbc.co.uk/news/science-environment-46398057

Question 1: The Scientific Consensus

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What proportion of climate scientists do you think support the consensus opinion that human activities are causing climate change?

A 65-75%

B 75-85%

C 85-95%

D >95%

1: The Scientific Consensus

Manchester Metropolitan University

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D >95%

The Scientific Consensus

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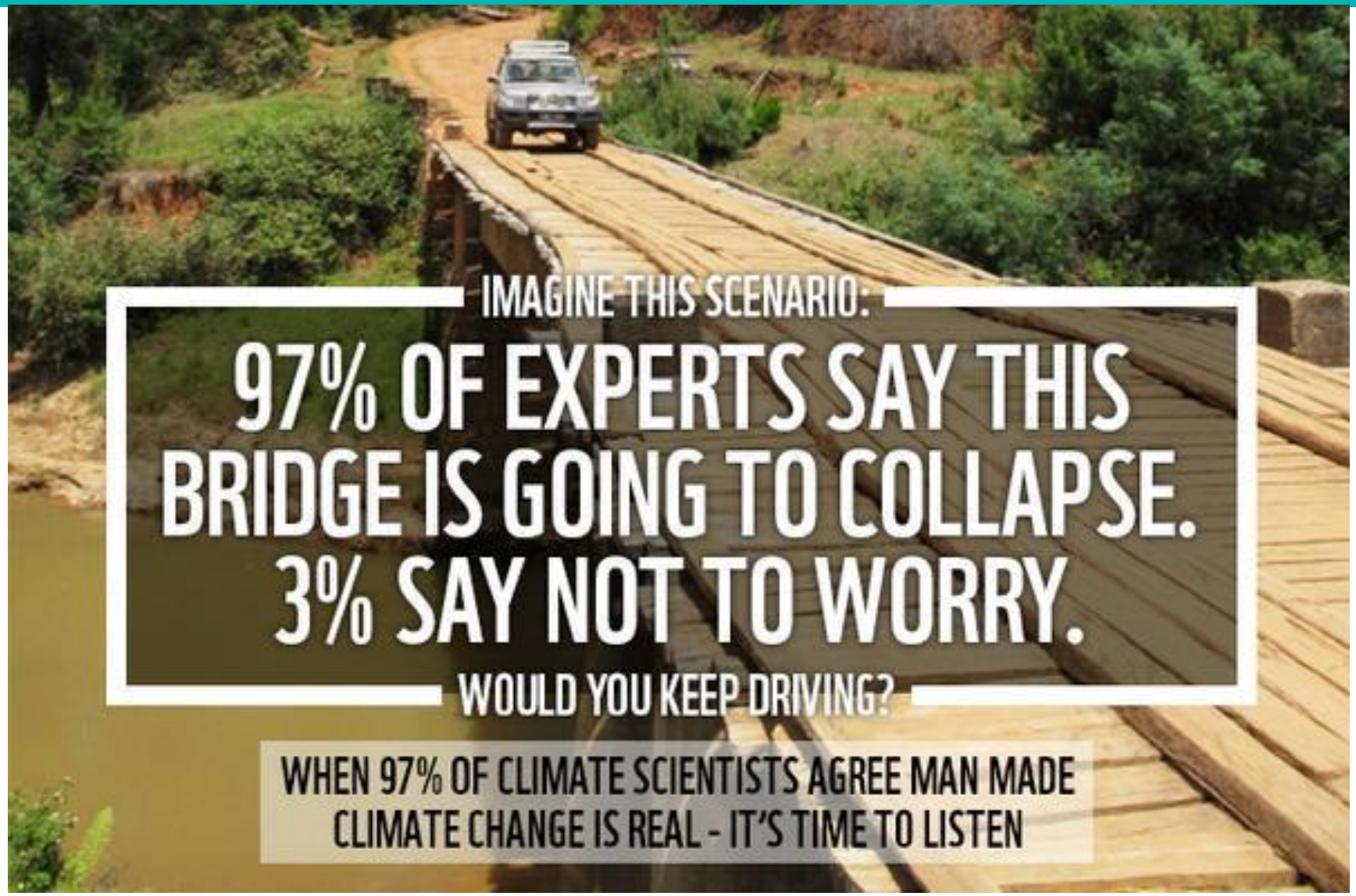


2: The Story So Far…

So far we have experienced around ____ of warming…

A 1°C

B 1.5°C

C 2°C

D 2.5°C

2: The Story So Far

Manchester Metropolitan University

So far we have experienced around ____ of warming…

A 1°C

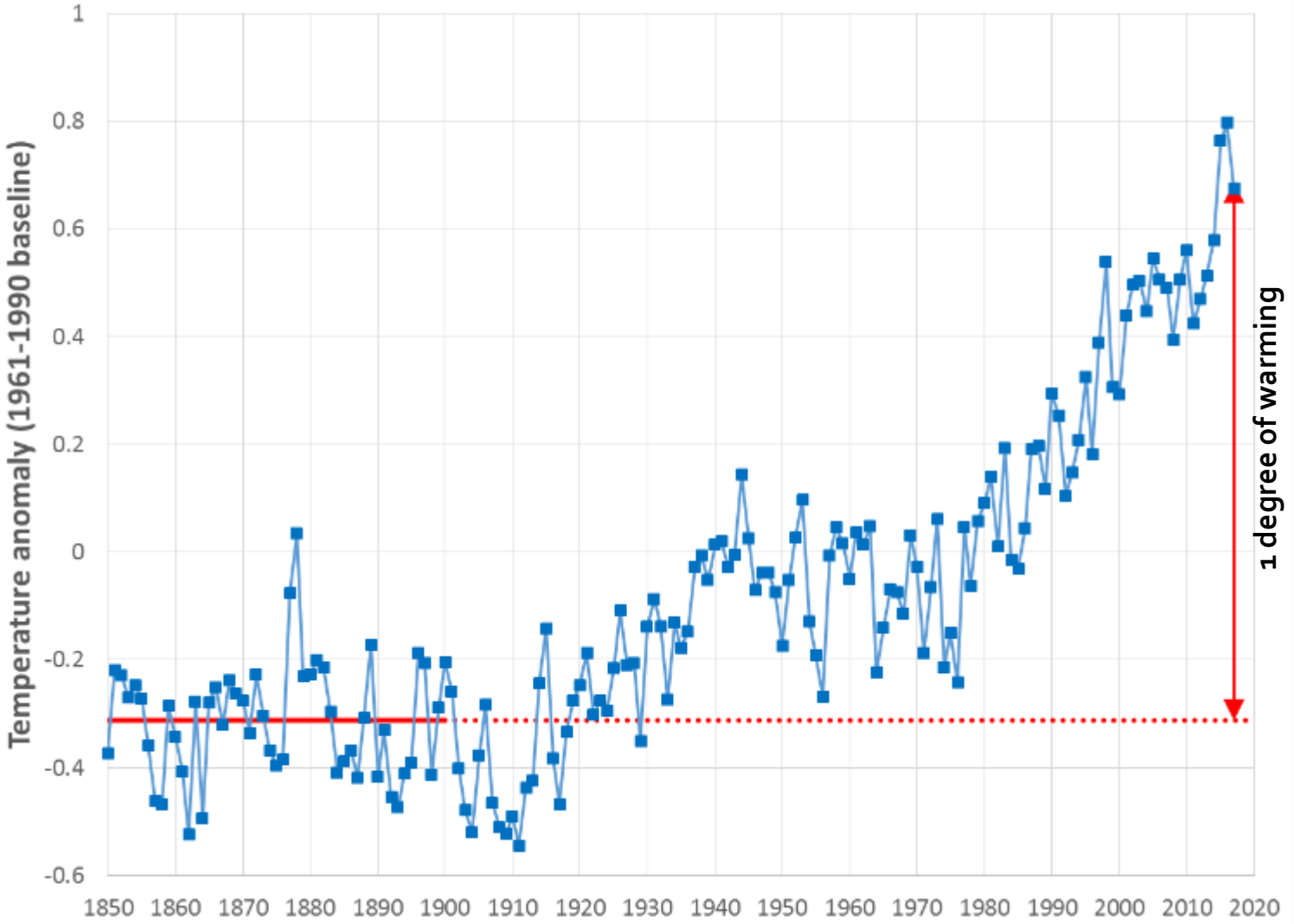
B 1.5°C

C 2°C

D 2.5°C

The Story So Far…1°C of Warming

Manchester Metropolitan University



Data from the Climate Research Unit (CRU) HadCRUT4 - combined land and marine temperature anomaly (global annual average)

Relative to average T from 1850-1900, 2017 was ca. 1°C warmer

3: Safe Limits

The Paris Agreement aims to keep the rise in global temperatures well below ___ and to pursue efforts to limit it to ____

A 2 & 1°C

B 2 & 1.5°C

C 3 & 2°C

D 2.5 & 2°C

3: Safe Limits

The Paris Agreement aims to keep the rise in global temperatures well below ___ and to pursue efforts to limit it to ____

A 2 & 1°C

B 2 & 1.5°C

C 3 & 2°C

D 2.5 & 2°C

Five Reasons for Concern

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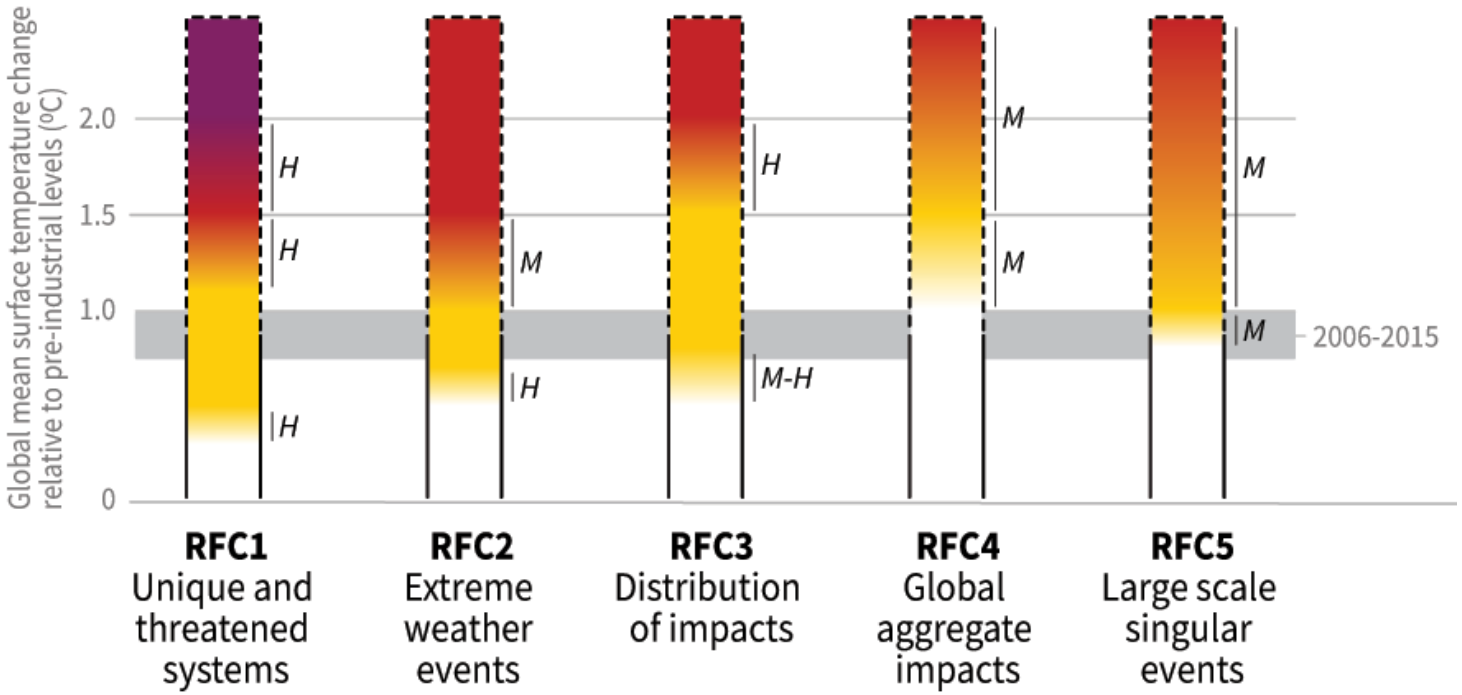
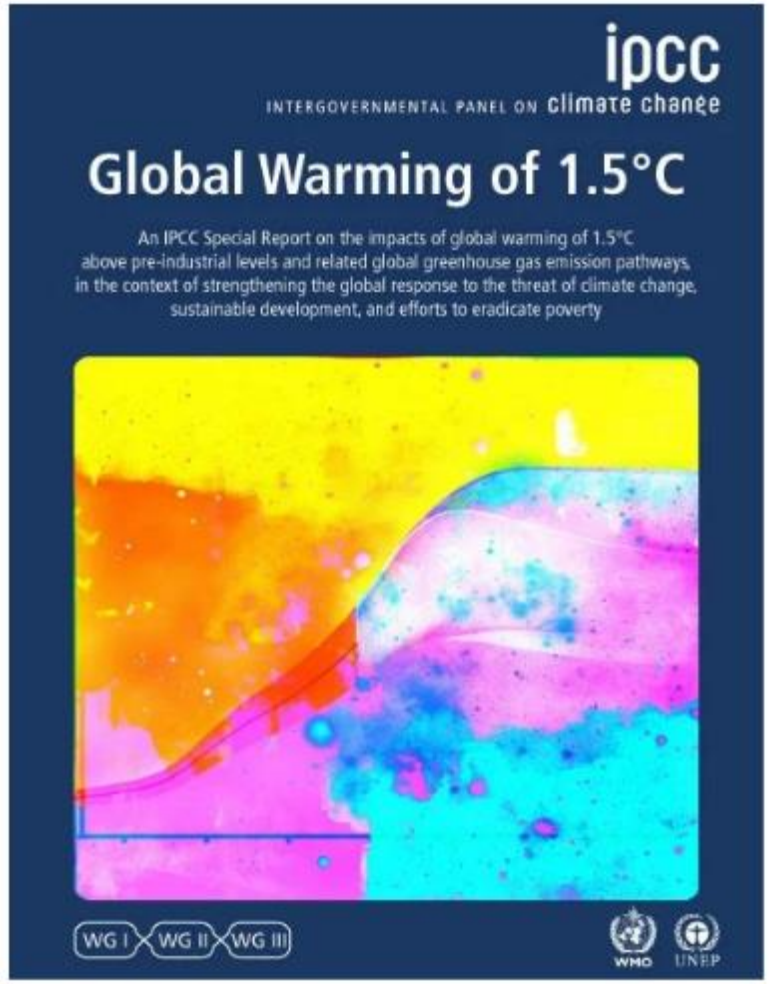


Level of additional risk/impact associated with climate change



4: Safe Limits

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To have a reasonable chance of achieving this, global emissions would need to reach net zero emissions by…

A 2040

B 2045

C 2050

D 2055

4: Safe Limits

To have a reasonable chance of achieving this, global emissions would need to reach net zero emissions by…

A	2040
B	2045
C	**2050**
D	2055

Safe Limits – Net Zero Globally by 2050

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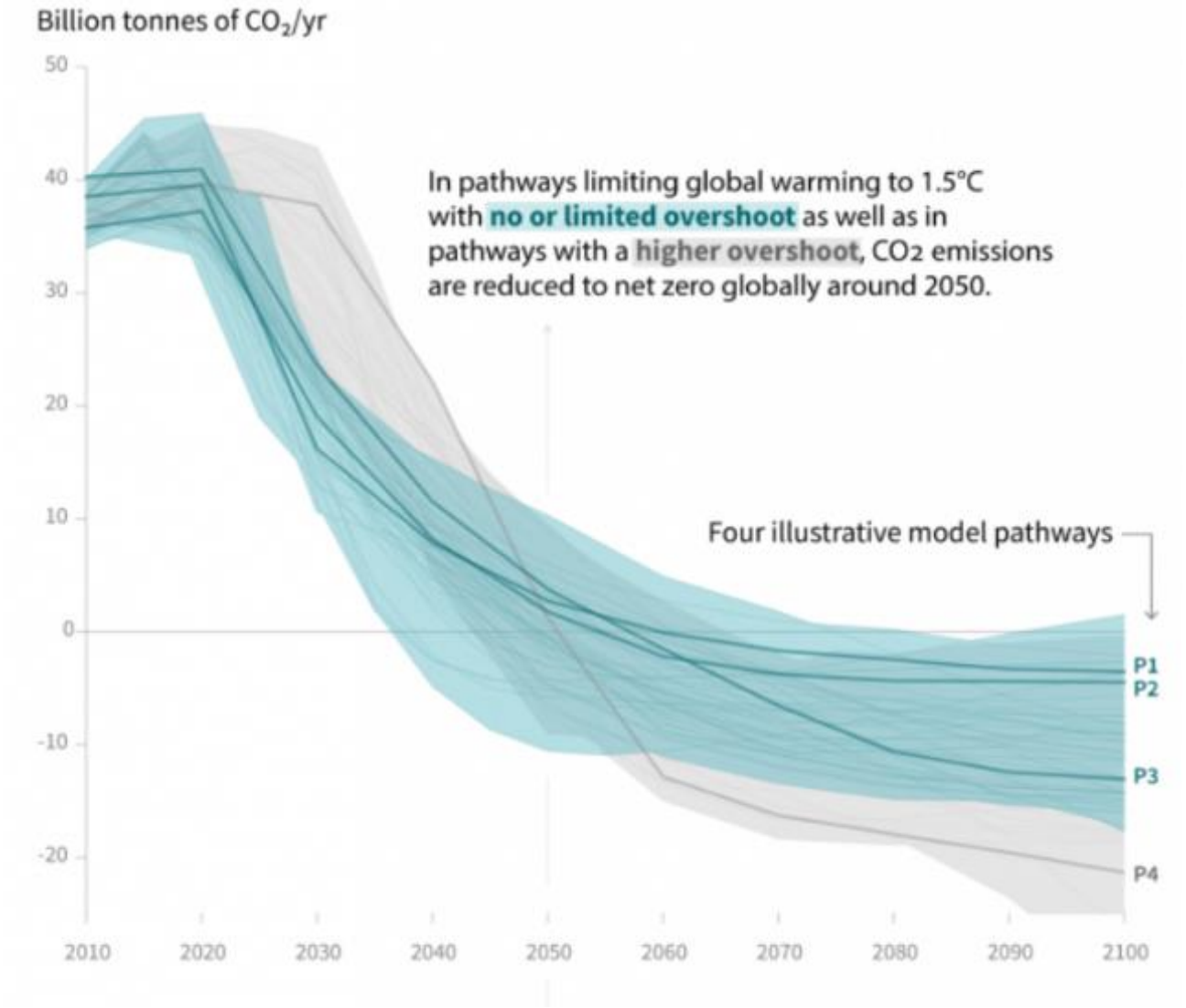
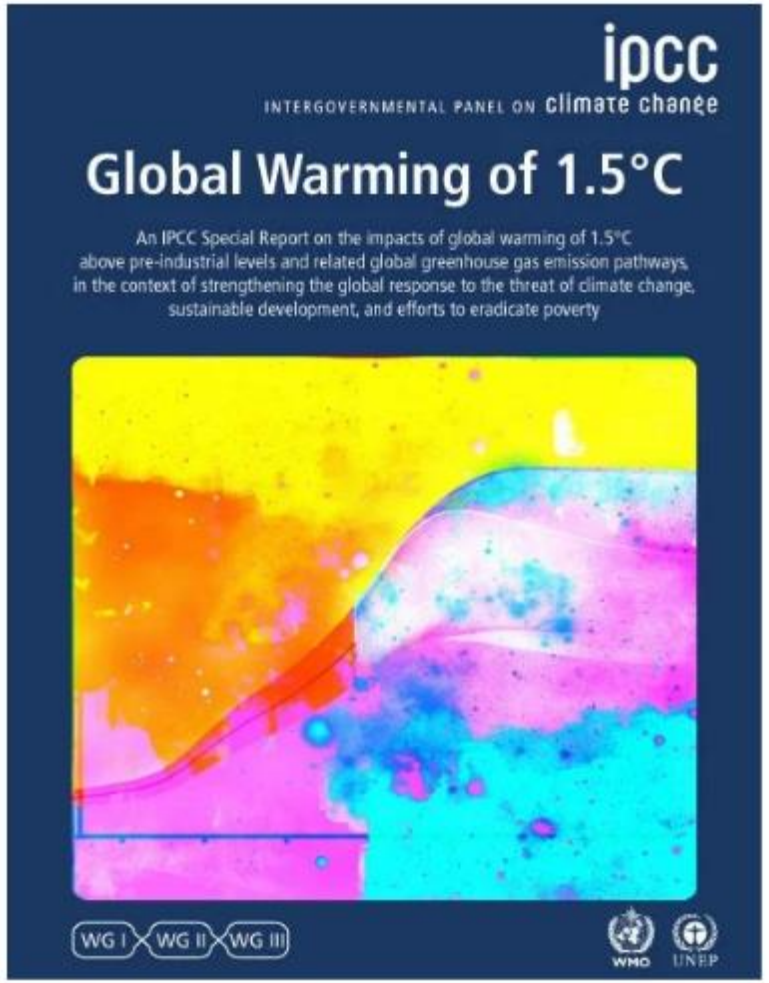




5: Safe Limits

Manchester Metropolitan University

The UK has set a target to reach net zero carbon by…

A 2040

B 2045

C 2050

D 2055

5: Safe Limits

The UK has set a target to achieve net zero carbon by…

A 2040

B 2045

C 2050

D 2055

UK Climate Change Act (2008)

Manchester Metropolitan University

Original Goal:

80% reduction from 1990 levels by 2050

Revised Goal:

Net zero carbon by 2050

Our Fair Share?

Prof Sir David King (ex-chief scientist) has called for the UK to advance its climate targets by 10 years – bringing the date for cutting emissions of greenhouse gases to almost zero from **2050** to **2040**.

Source: BBC (2019) "Faster pace of climate change is 'scary', former chief scientist says"
https://www.bbc.co.uk/news/science-environment-49689018

Imagining a Zero Carbon World: Postcards from the Future

What does a Zero Carbon World look like?

Food

Buildings

Energy

Transport

Postcards from the Future - Carbon Neutral Leicester

Leicester City Council's plans address the six themes below

1. What needs to happen to make the vision reality?

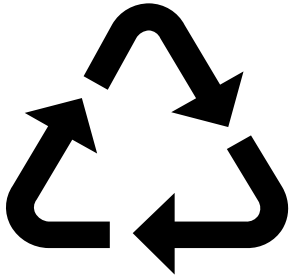
We are going to focus on three key ones…

At School

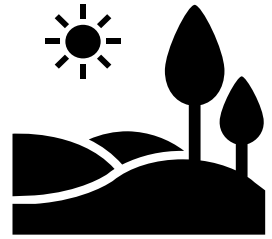
At Home

Our Consumer Choices

Travel and Transport



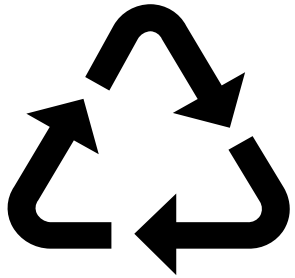
Waste and Recycling



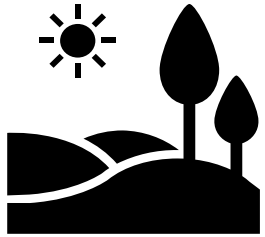
Land Use, Green Space & Development

What can we do in these areas?

Travel and Transport



Waste and Recycling



Land Use, Green Space & Development

Create a mind map to show what you think we need to do in your section to reach ‘carbon neutral’. You can include pictures and diagrams if you would like!

Travel and Transport

Context: Travel and transport are a large source of carbon emissions in Leicester. These emissions come from petrol, diesel and LPG vehicles. Leicester's population is expected keep growing, so more people will need to access work and facilities. If changes are not made this will add to Leicester's carbon emissions.

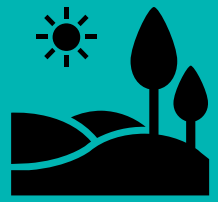
- A much greater share of journeys will need to be made by walking, cycling and public transport. A city-wide network of walking and cycling routes, along with improved public transport, will be among the improvements needed to make this possible.
- Journeys that can't be taken by walking, cycling or public transport will need to be made by ultra-low emission vehicles. These will mainly be electric vehicles, although new HGVs may need to be hydrogen-powered.
- Electric charging-points will need to be widely available across the city. The electricity grid in Leicester may need upgrading to allow this. More solar panels will help provide some of the electricity needed.
- Some electric cars will need to be part of 'vehicle-to-grid' systems. These store surplus renewable electricity from solar panels in electric car batteries. They help the electricity grid by selling it to the grid when demand is high.
- Alternative travel and transport services, such as ride-sharing, electric car clubs and e-bike share could be used more instead of private car journeys.
- Services and facilities will need to be easy to access without car journeys. This includes making them accessible online, and available nearby within communities.

Waste and Recycling

Context: Disposal and treatment of waste uses a lot of energy, which causes carbon emissions. Things that are sent to landfill also produce greenhouse gases when they decay. More emissions come from producing new things to replace what is thrown away. The best way to reduce waste is to follow the 'Waste Hierarchy': avoid making waste, and then re-use anything that is made. Things that can't be re-used should be recycled. If there is anything left it is better to recover energy from it, with sending it to landfill the worst option.

- Households will need to produce less waste. This will mean not buying things that will be wasted, buying products and services that are produced sustainably and re-using and repairing what they already own.
- Businesses and organisations will need to produce less waste from what they make and sell and the services they provide. Products and packaging will also need to be easier for consumers to re-use, repair and recycle.
- As much waste as possible will need to be recycled. The council will need to support homes to do this through the city's waste collection service. Businesses and organisations will need make sure their waste is disposed of responsibly. Food and garden waste will need to be composted.
- Where waste can't be recycled, it will need to be used for energy instead of landfilled. This includes a small amount of Energy-from-Waste and biogas.

Land Use, Green Space, Development



Context: Leicester's population is expected to keep growing. An estimated 29,104 homes will need to be built by 2036, along with more employment sites, schools, facilities and infrastructure. This could add to Leicester's carbon footprint unless new development is designed to be carbon neutral. The climate is also expected to change, with more chance of heatwaves and long dry spells, but also more frequent intense rainfall. New buildings will need to be designed to cope with these challenges.

- All new buildings will need to be designed and built to be carbon neutral. This means they will need to be very highly insulated and use low-carbon heating instead of gas heating. Renewable energy such as solar panels will need to be installed.
- New buildings will need to keep cool in hotter weather without using air conditioning, as it uses a lot of electricity. They will also need to use less water. To reduce the risk of flooding they will need to disperse heavy rainfall without overwhelming drains and rivers.
- Building materials made with much less energy, or with renewable energy, will need to be used. To prevent deforestation, all timber used for construction will need to come from sustainably managed forests.
- Travel to and from new developments will need to be easy, convenient and safe on foot, by bike and on public transport. There will need to be charging points for electric vehicles too.
- Tree cover will need to be maintained and increased where possible. New planting will need to provide for recreation, wildlife, flood prevention and respite from heatwaves. It will also need to absorb carbon emissions.

At Home

Context: Heating of homes and the use of electricity for lighting, appliances and gadgets causes about a third of carbon emissions in Leicester from our direct fuel and energy use. To reduce these emissions, housing will need to be made a lot more energy efficient and heating will need to change. A big increase in renewable energy will be needed too. Many people will need help to make these changes.

- Homes will need to be very highly insulated to keep warm using much less energy. This will mean that fewer people get health problems from cold homes.
- Everyone will need to replace gas heating and hot water with low-carbon alternatives. Most often this will mean using heat pumps. They use electricity to extract heat from the ground or air.
- In areas with denser housing, low-carbon heat networks will be the best answer. These provide heat and hot water to whole neighbourhoods through underground pipes. In the future hydrogen could also replace gas as a fuel for boilers.
- The move away from gas will increase electricity demand. Homes will need to have their own renewable energy like solar panels. These will provide power to the house and owners could get money for selling back excess electricity.
- Houses will need ‘smart’ systems such as remote control for heating and lighting, and batteries to store extra energy from solar panels. They will also need to be able to charge electric cars.
- Homes will also need to be kept cool without air conditioning, as this uses a lot of energy. This might mean fitting shades and shutters, or planting trees for shade.
- Water use will need to fall, as low rainfall could become more of a problem.

Our Consumer Choices

Context: As well as the carbon emissions we produce within the city, we are also responsible for emissions elsewhere produced from making and delivering the products and the services we buy in from outside. They could add at least another 40% to the total. For the city to become carbon neutral we have to do something about them too..

- All of us will need to become well-informed about the climate impacts of what we buy – so that we can make climate-friendly choices.
- Customer demand for climate-friendly products and services will need to convince shops, manufacturers and suppliers to provide them.
- Customer demand will need to convince manufacturers to produce long-lasting products which can be repaired. Disposable and short-lived products cause extra carbon emissions when they have to be replaced.
- The overall consumption of beef, lamb and other meat, eggs and dairy produce will need to be a lot lower than today. There will need to be much more emphasis on plant-based ingredients. ‘Food miles’ will need to reduce too.
- Air travel will need to reduce a lot unless zero-carbon flights become possible.

At School

Context: The gas and electricity used by businesses and other employers is one of the largest sources of carbon emissions in the city. Commuting by employees, travel for work, and the transport of goods causes carbon emissions too. The materials bought and used by businesses also have a carbon footprint. To reduce these emissions employers' buildings will need to be much more energy efficient and heated differently. They will need to have renewable energy sources fitted. Employers will also need to make sure their products and services are sustainable. This includes using recycled materials and making products easier to reuse and recycle.

- Businesses and other employers will need to use low or zero carbon heating and cooling systems and generate their own renewable electricity wherever possible. Workplaces will also need to be more highly insulated to reduce their heating need.
- Business processes and equipment will need to be much more energy and resource efficient. Production processes will need to be carbon neutral – using renewable energy generated on-site where possible.
- All items and materials procured by businesses and organisations will eventually need to come from sustainable sources, for example using recycled materials.
- Customers will expect the good and services they use and buy to be sustainable and zero carbon, so businesses and organisations will need to achieve this to stay competitive.

Feedback

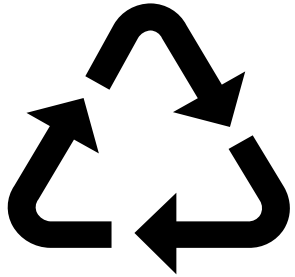
1. What are the top 3 things you think should happen in Leicester?
2. What can you do yourself and as a class to make this happen?

At School

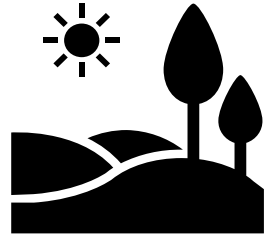
At Home

Our Consumer Choices

Travel and Transport



Waste and Recycling



Land Use, Green Space & Development

A Zero Carbon School and City…

HIGH

LOW

Construction

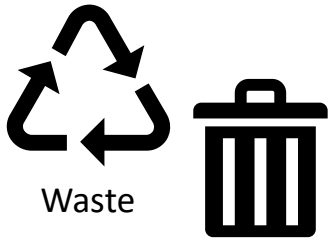
School transport

Staff travel

Services

Gas Consumption

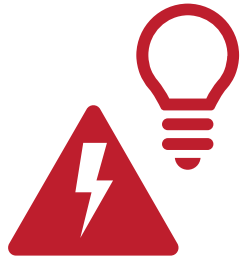
Pupil travel



Waste

Products

Food

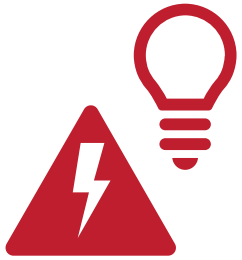


Electric Consumption

Answers

Products

25%



Electric Consumption

20%

Gas Consumption

19%

Construction

7%

Services

7%

School transport

7%

Pupil travel

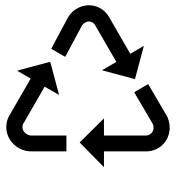
7%

Food

4%

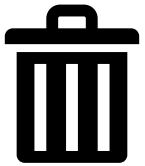
Staff travel

2%

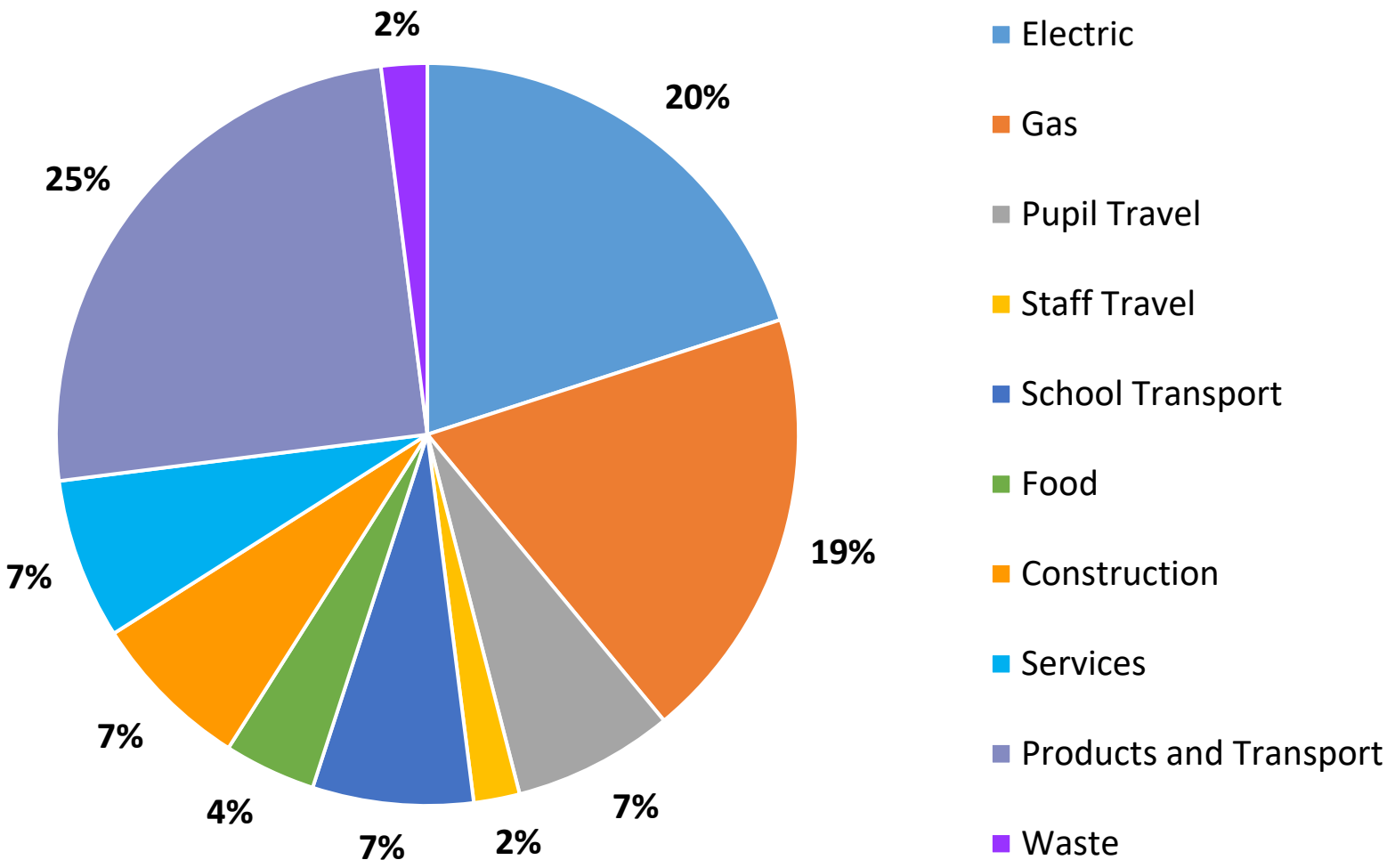


Waste

2%

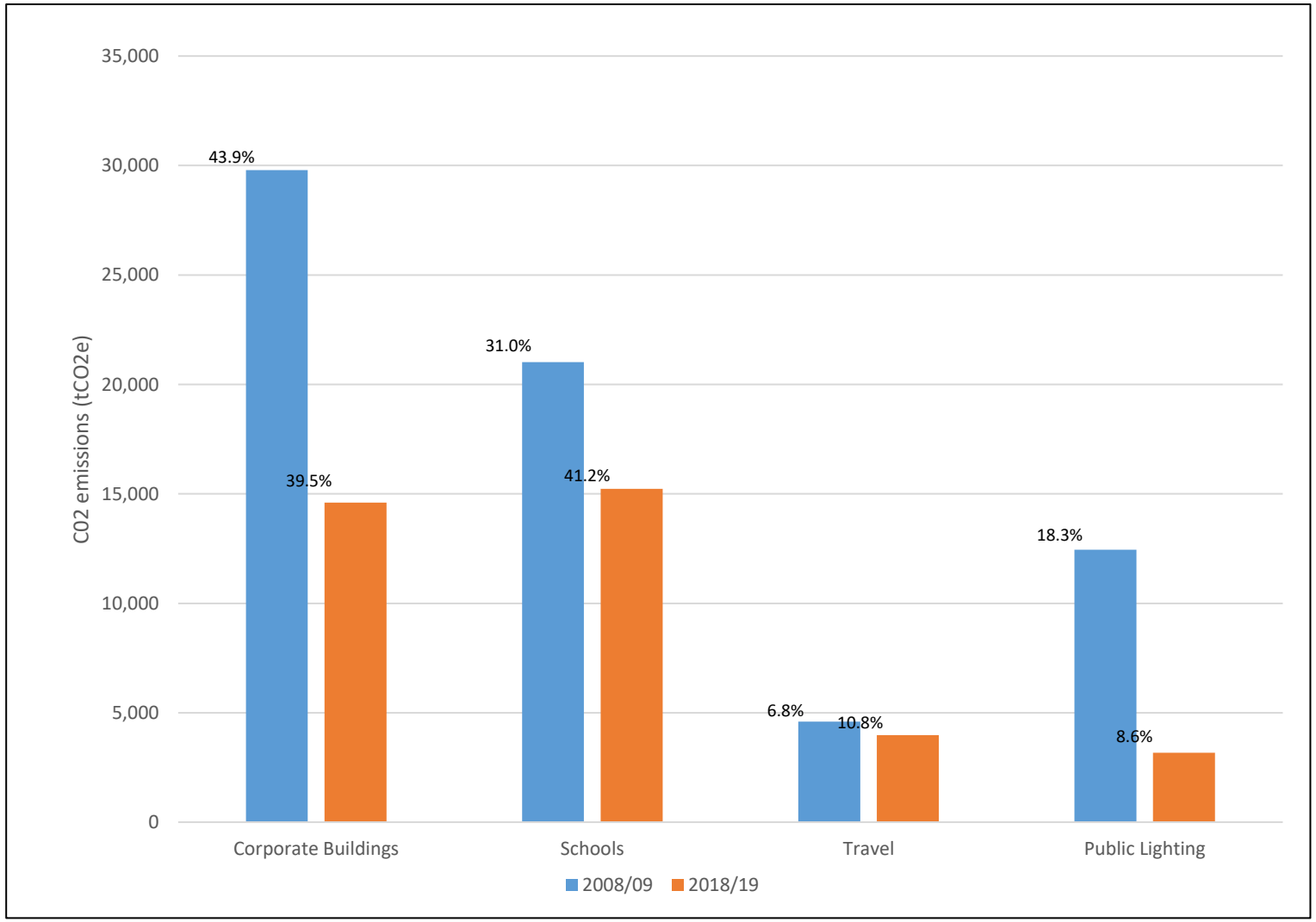


A typical school's emissions…



Changes in Leicester City Council Gross Emissions

	2008/09	2018/19	% reduction
Corporate Buildings	**29,794**	**14,598**	**51%**
Schools	**21,018**	**15,233**	**27.5%**
Travel	**4,597**	**3,986**	**13%**
Public Lighting	**12,445**	**3,172**	**75%**



A Cleaner Grid

What is happening in Leicester?

District heating, largest municipal network in UK

Green BELLE – grants to 93 businesses

Euston Street Stores 179.9 kWp PV system

Marriott School has had a new Net Zero block build with 4 classrooms, toilets and break out rooms

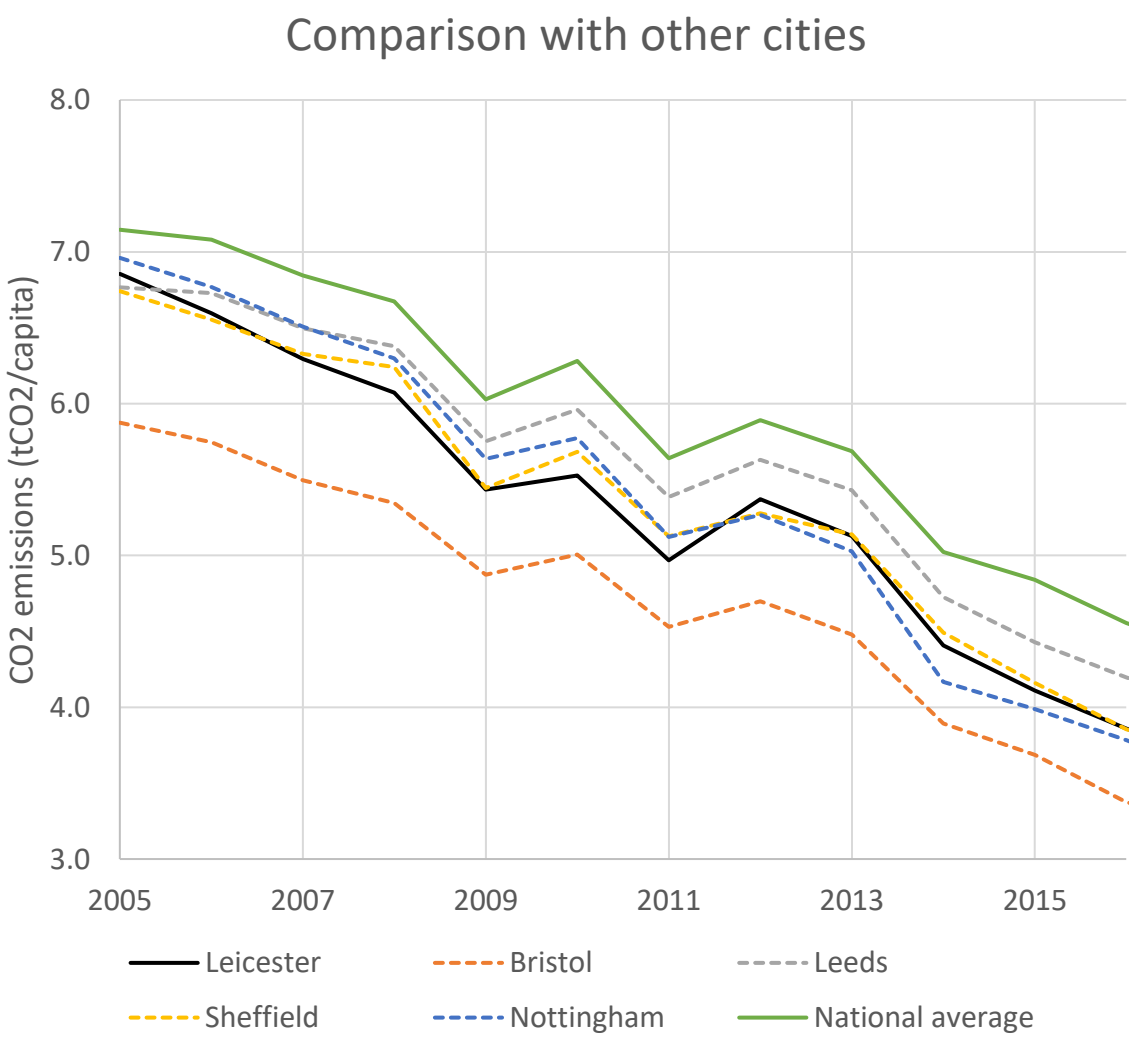
What is happening in Leicester?

Green Fox Community Energy - Green Lane Infant School, Highfields Primary, Sparkenhoe Community Primary School and Uplands Infant School

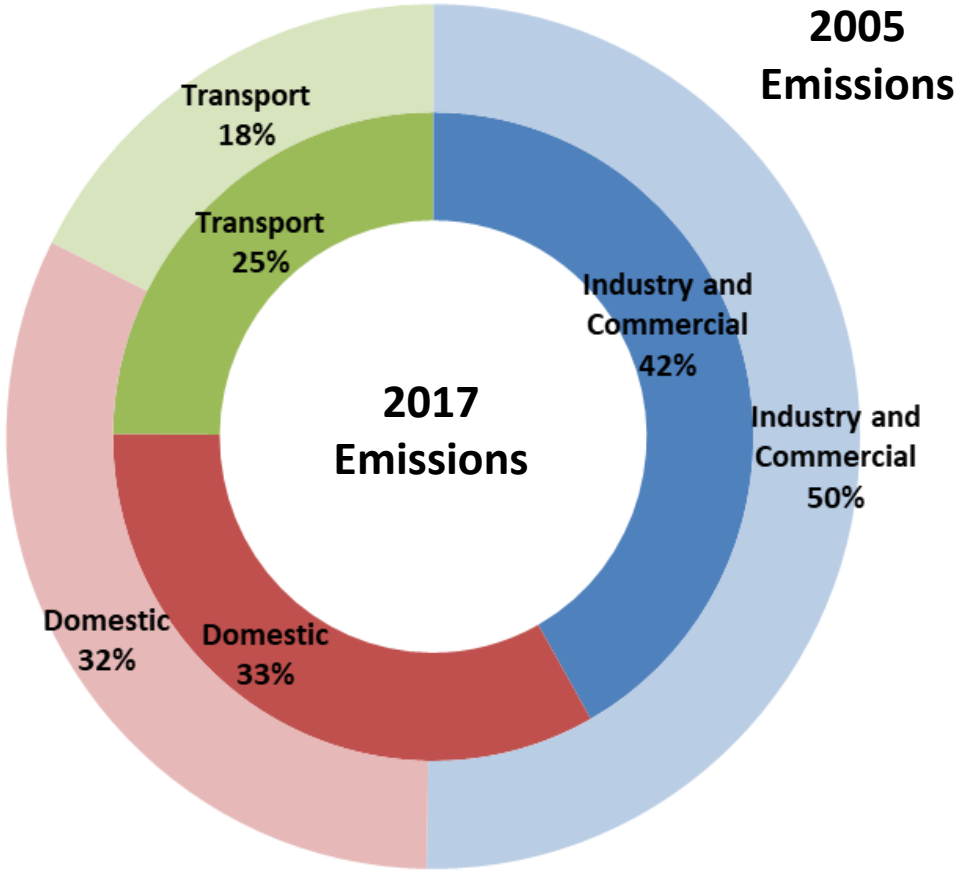
634 kWp PV systems on council buildings generating 524,954 kWh/y

Electrification of bus network

The carbon footprint of the City



Leicester City Carbon Footprint Comparison between 2005 and 2017



Examples of what schools are doing in Leicester….

Eco-Schools: 107 registered - 90 Bronze, 79 Silver, 52 Green Flag – highest in England for local authorities

- LED and Solar Panel (PV) projects
- Ashden LESS CO_2 and BESS Energy
- Active Travel and Transport projects (Sustrans and Living Streets)
- Recycling
- City catering – ‘meat free day’

Taking Action on Climate Change

Taking Action: Know Your Power

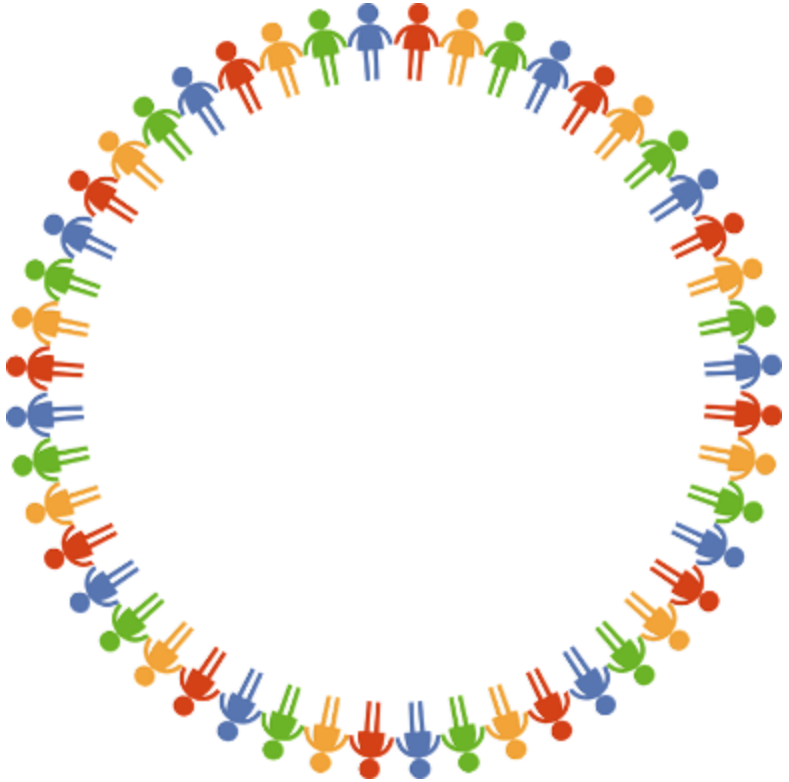
One person is enough to create great change!

- 2018 - On her own at the age of 15 Greta Thunberg began sitting outside the Swedish parliament on Fridays holding a sign saying “School strike for climate”
- 2019 - The school climate strike movement known as ‘Friday’s for Future’ has grown to the point where millions of children and adults have attended the strikes all over the world
- Greta has also been nominated for the Nobel Peace Prize & won the Gulbenkian prize for humanity

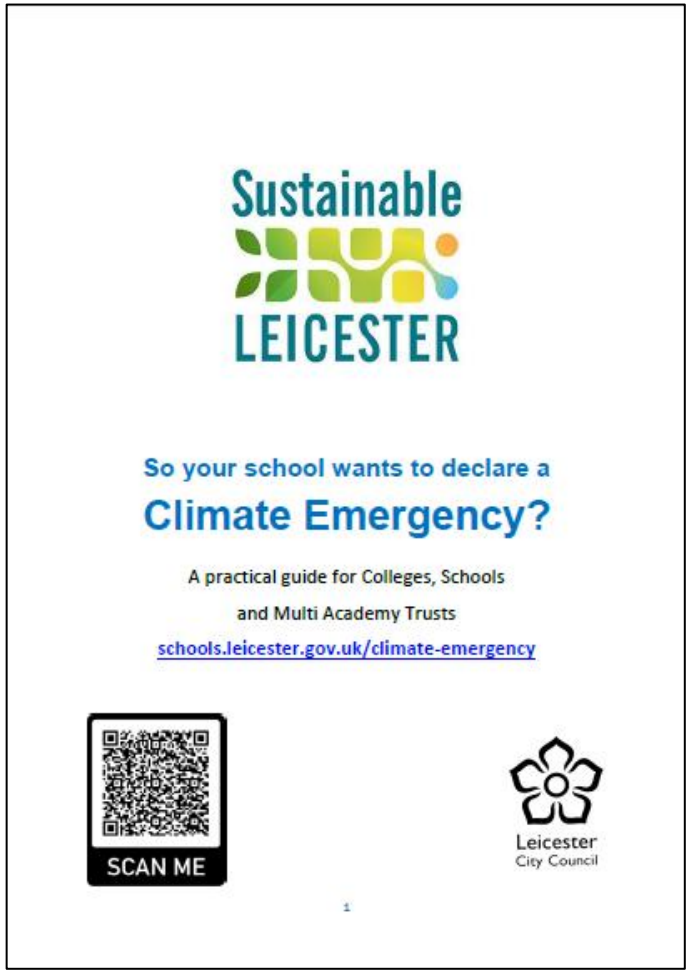
We all have unique opportunities to take a lead in our role or community, or to support and follow others. See: TED: How to Start a Movement

Spheres of Influence

- **Who** can you influence to take action on climate change?
- **How** would you influence these people?
- **What systems** could you influence?
  - Think about changing rules, policies, norms, purpose or enabling people to act
  - See: "How to Change a System"



Declaring a Climate Emergency



A practical guide for Colleges, Schools and Multi Academy Trusts

- List of potential actions for your school
- Climate Emergency - action plan
- Declaration of Climate Emergency
- Local support for the climate emergency

schools.leicester.gov.uk/climate-emergency

What does declaring an emergency mean?

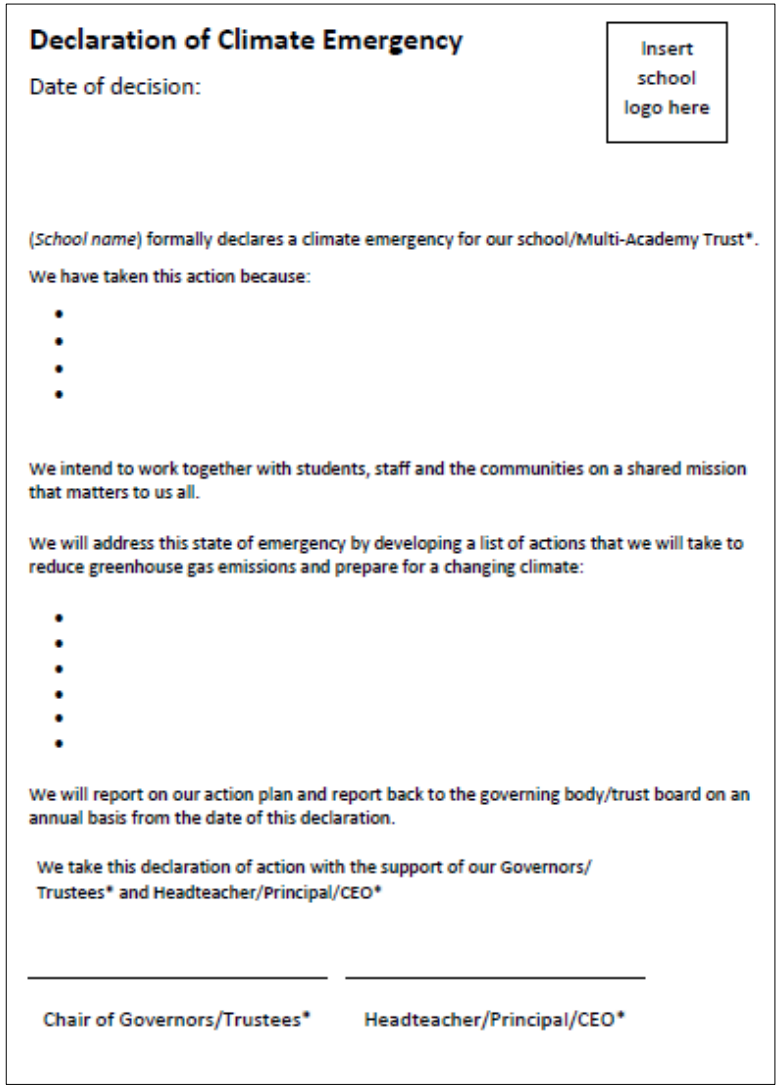
- On 1 February 2019 Leicester City Council declared a Climate Emergency. The declaration is an acknowledgement that:
  - climate change is happening, and threatens the wellbeing of everyone in Leicester and worldwide
  - the speed and scale of global and local action to tackle the problem needs to be dramatically increased.

- In its declaration, the Council committed to developing a new action plan to address the emergency through our own services and projects

What happens next?

- Discuss your plans with students and staff.
- Select actions which you plan to achieve, make them manageable but also remember we are in a Climate Emergency.
- Make sure your actions have a duration, responsibilities and an evaluation.
- Take your action plan to the Governing Body or Trustees to ensure that you have their support.
- You can submit your action plan to the City Council which we will publicise as part of our wider action plan.
- Start your action plan!
- Review regularly to check and maintain your progress.

Templates and documents



Declaration of Climate Emergency

Date of decision:

Insert school logo here

(*School name*) formally declares a climate emergency for our school/Multi-Academy Trust*.

We have taken this action because:

-
-
-
-

We intend to work together with students, staff and the communities on a shared mission that matters to us all.

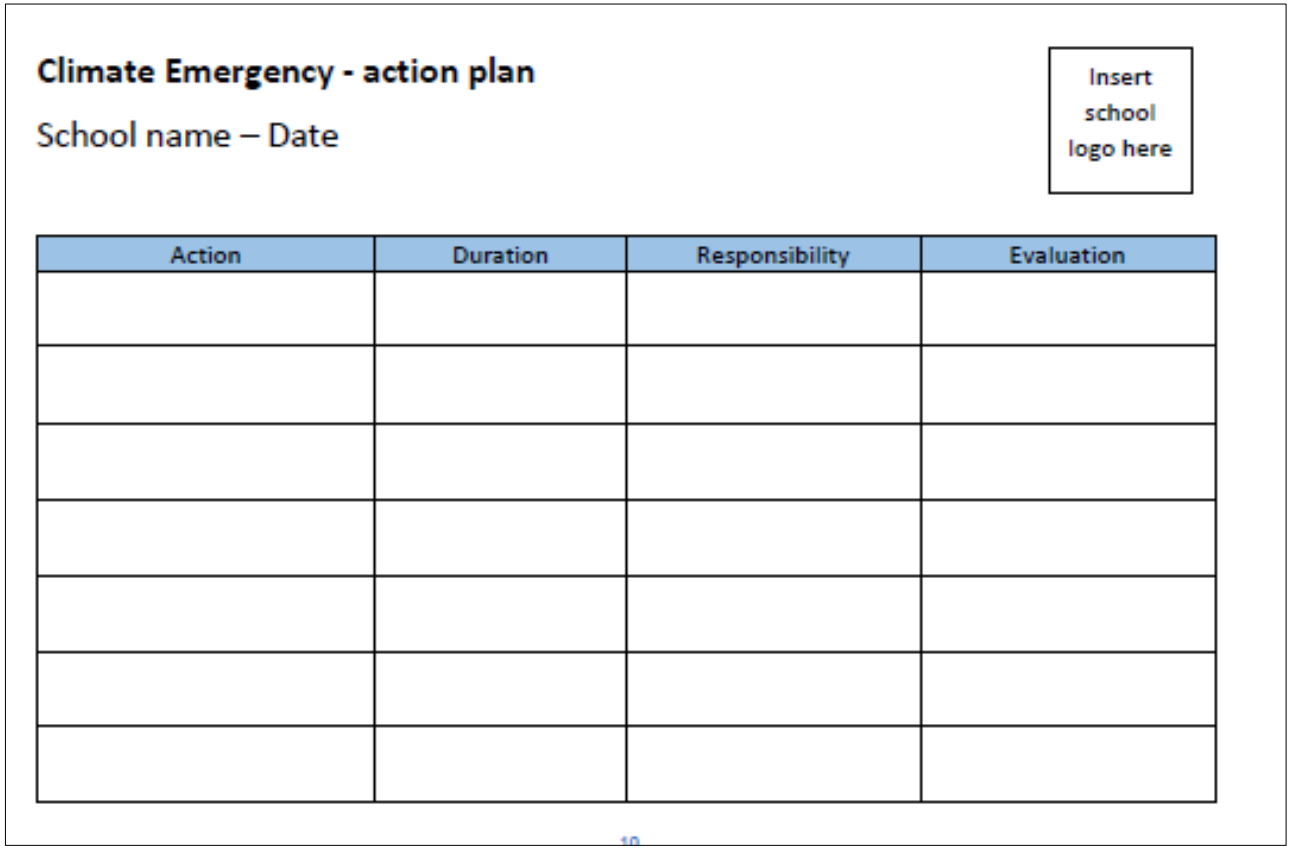
We will address this state of emergency by developing a list of actions that we will take to reduce greenhouse gas emissions and prepare for a changing climate:

-
-
-
-
-
-

We will report on our action plan and report back to the governing body/trust board on an annual basis from the date of this declaration.

We take this declaration of action with the support of our Governors/ Trustees* and Headteacher/Principal/CEO*

Chair of Governors/Trustees* Headteacher/Principal/CEO*



Climate Emergency - action plan

School name – Date

Insert school logo here

Action	Duration	Responsibility	Evaluation

10

Available at:

schools.leicester.gov.uk/climate-emergency

Individual actions

Communicating Climate Change

Why is it important to be able to communicate and influence others about climate change?

Adapt your message to your audience

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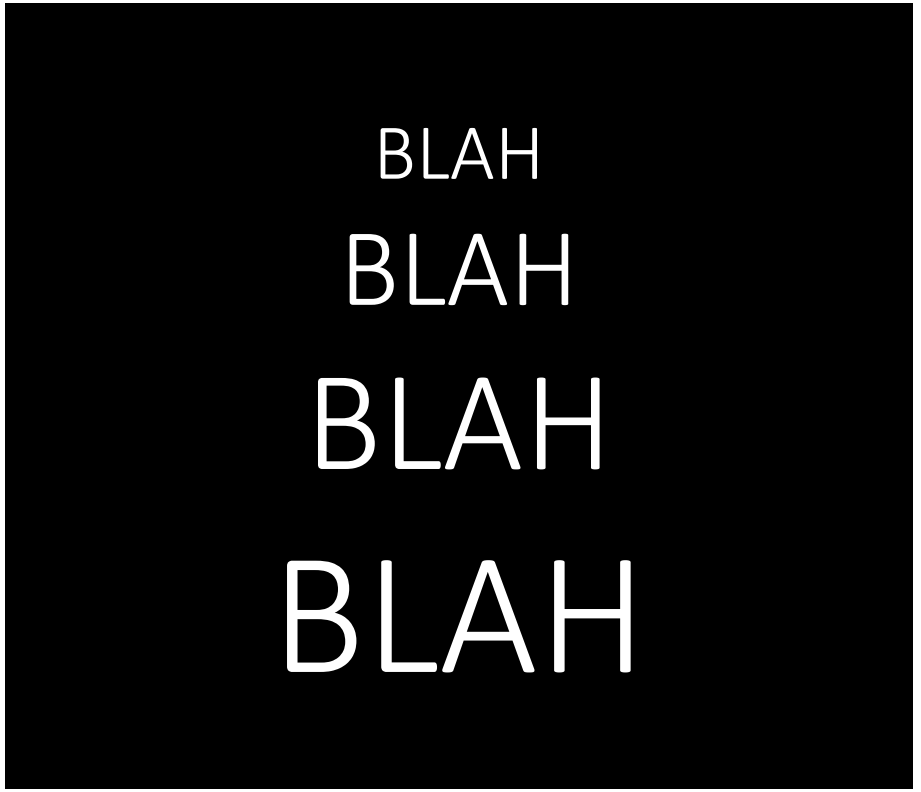
- Use appropriate language
- What type of message is most suitable for your audience?

Avoid information overload

- Information on its own won't change people's mind or behaviour
- People don’t absorb information they don’t think is relevant to them
- Can you create a setting where people are interested and willing to listen?



Climate change can feel distant

- Relate it to people's lives & experiences
- Flooding in Bangladesh and Manchester

Appeal to peoples values

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Acknowledge the value-action gap

- We all have an ongoing conflict between what we believe in and what we actually do
- Help people to acknowledge and explore these complexities

Be careful with every little helps

- If everyone does a little, we'll achieve only a little" (MacKay, 2008)
- Try to frame small steps as the beginning of a long journey

Be careful with moneysaving appeal

- It may not work in the long term

Avoid Scare Tactics

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- Scary stories can make us shut down and ignore the subject altogether
- Paint a vision of a desirable future!

Illustrate with Stories & Examples

- Stories can inspire and bring life to dry facts
- Use your own story to inspire others
- Speak from the heart

Listen ☺

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Top 10 Tips

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1. Information on its own won't change minds or behaviours
2. Adapt your message to your audience
3. Connect climate change to lives and experiences
4. Appeal to values
5. Acknowledge and explore the value – action gap
6. Be careful with 'every little helps'
7. Be careful with money saving appeals
8. Avoid scare tactics – paint a vision of a desirable future !
9. Illustrate with stories and examples
10. Listen

Consider some scenarios…

- Headteacher
- Business manager
- Teacher
- Premises officer
- Governors
- Other students
- The council (and local MPs)
- Businesses which work with the your school e.g. catering, waste management, energy suppliers, contractors

WHAT could you say?
HOW would you say it?
WHY use those ideas?

The Climate Classroom

- At the end of this course we are expecting you to communicate with others in a ‘Climate Classroom’

- This could be staff meeting, parents event/evening, STEM event, in a public space, after school

  - Activities
  - Presentations/projects
  - Leaflets
  - Flyers
  - Pledge wall

You have 40 minutes to design and make an activity which will be presented back to the group

Your Final Take Home Feelings / Messages

Find Out More

- Climate Library reading list

- Skeptical Science - This website presents the broader picture of climate change by explaining the peer reviewed scientific literature.

- Young People's Trust For the Environment - resources that help to teach children about the importance of looking after our environment and the need to develop and live by sustainable methods.

- NASA Climate Kids - tells the story of our changing planet through the eyes of the NASA missions studying Earth. The site is full of games, activities and articles that make climate science accessible and engaging.