

Our Climate, Our Health

*"You must take action.
You must do the impossible.
Because giving up can never ever
be an option"*

- Greta Thunberg, September 2019



Annual Public Health Report 2019-20

Place and Wellbeing Department, The London Borough of Southwark

Acknowledgements

A very special thank you to the young people from across Southwark who have contributed to this report. In sharing your ideas, concerns and hopes about the climate emergency, you have helped us to shape our collaborative plan to safeguard our future and our health.

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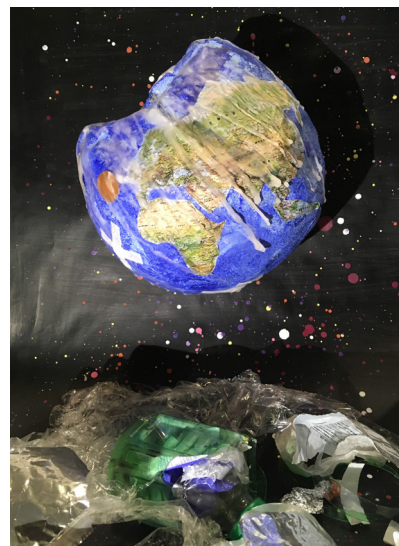
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Definitions	4
Foreword	5
1. Introduction	6
1.1 Why is the climate emergency dangerous for our health?.....	6
1.2 What is the climate emergency?	7
2. Health and the Climate Crisis – How does the climate affect our health?	9
2.1 Pollution and air quality – <i>Clean air please</i>	9
2.2 Extreme weather – <i>Is it hot in here?</i>	11
2.3 Flooding – <i>Wet, wet, wet</i>	13
2.4 Food shortages – <i>Eat well Southwark</i>	14
2.5 The meat industry – <i>Meat-free-me</i>	15
2.6 Conflict and migration – <i>Strong communities</i>	16
2.7 A healthy and sustainable Southwark – <i>Take care Southwark!</i>	17
3. Our Climate and Health Action Plan – What can we do together?	18
4. Conclusion – Time for action	20

Definitions

Sustainability:

The combination of feeling good and functioning well. This encompasses good physical and mental health, as well as feelings of connectedness, purpose, and belonging.

Carbon dioxide (CO₂):

A gas which is involved in lots of chemical and biological processes; one of the most important greenhouse gases.

Carbon footprint:

How much carbon goes into the environment because of the actions of people.

Carbon neutral:

Ensuring no net release of carbon dioxide into the environment, especially through the use of carbon offsetting.

Carbon offsetting:

A way to reduce release of carbon dioxide (and other greenhouse gases) to compensate for emissions made elsewhere.

Emissions:

Release of toxic gases, such as from motors in factories and transport vehicles (in the context of the climate crisis).

Fossil fuels:

Fuels that our made from old life forms that have decomposed over a long period of time. The most widely used are coal, petrol and natural gas.

Green Energy:

Energy that comes from renewable sources such as wind power, water power and solar energy.

Greenhouse Gases:

These gases trap heat rays released from the earth and stop them being lost into space.

Pollution:

Adding harmful substances into the environment which lead to damage.

Renewable resource:

A resource that can be used lots of times but is replaced by a natural process, e.g. using wind power in wind farms.

Sustainability:

Avoiding damage to the natural world in order to protect our planet for future generations.

Throughout the report where we can, we have used the terms 'climate emergency' or the 'climate crisis' and not 'climate change'. We are also using 'global heating' instead of 'global warming'. This is in line with decisions taken by various other public and private bodies. It is thought this language better conveys the urgency of the issue.

See: <https://www.theguardian.com/environment/2019/may/17/why-the-guardian-is-changing-the-language-it-uses-about-the-environment>.

<https://www.cleanenergywire.org/blog/climate-change-or-climate-crisis-whats-right-lingo>

Foreword

Each year, Directors of Public Health in local authorities across England fulfil a statutory requirement to write an annual report on the health of their population. The Annual Public Health Report (APHR) is a vehicle for informing our partners and residents about the health of our community, as well as providing information and evidence on key health and wellbeing needs that should be prioritised in the forthcoming year. This year we have focused on the impact of the climate emergency on health.

The climate crisis is a global issue with potentially devastating consequences for health and wellbeing. This crisis must be addressed now. In preparing this year's report, we have purposefully chosen to engage with children and young people from across our borough, identifying that this is an issue of immense importance to their future. As we have seen over the past year, it is their voices which have moved older generations to act. As such, in creating this report and our recommendations, we have engaged with local schools, run a borough-wide competition to engage children and young people in the topic, and have worked with them to create a video and workbooks highlighting the issue in the context of our borough.

We know that the climate emergency will disproportionately affect the health of the most vulnerable in our borough. Knowing this, we have sought to specifically consider how we can work to protect these families and individuals from harm throughout the report. We are already working to tackle the climate emergency and the impact on health including through protecting, improving, and creating more green spaces; making active travel safer and the easier choice; increasing access to affordable and sustainable food; emergency planning; and improving air quality. As a Council we are committed to be carbon neutral by 2030, and will strongly lobby key national and international bodies to ensure this crisis is stopped as soon as possible.

The report begins by explaining the impacts of the climate crisis on health, then explores these issues in the context of Southwark and makes some recommendations. The report, workshop booklets, educational video, science review and artwork are intended to be used to help individuals, families, businesses and schools to explore and understand the climate crisis and its impact on health.

This report reflects the Council's commitment to tackling the climate crisis and will contribute towards discussions to inform the development of the Council's Climate Change Strategy.



Professor Kevin Fenton

Strategic Director of Place & Wellbeing (including the statutory function of the Director of Public Health)

Southwark Council

We look forward to receiving your feedback on the report at PublicHealth@southwark.gov.uk.

1. Introduction

1.1 Why is the climate emergency dangerous for our health?

The focus of this year's Annual Public Health Report is on the climate emergency and its effect on health. Research has shown that the climate emergency is not just an issue for the future; it is already affecting our health, our communities, our weather and our environment. In 2014, the World Health Organization declared that "the evidence is overwhelming: climate change endangers human health"¹.

The UK government has also recognised that the climate crisis will have a serious impact on our health, and many health organisations such as the Department of Health and the NHS are increasingly thinking about how to protect the public from danger. Researchers and climate scientists have described how the health of a child born today will be affected by the climate crisis throughout their whole life if we do not do something now. On the other hand if we take action, that child's health could be transformed for the better.

The health effects of the climate emergency will and are affecting everyone. However, people living in countries where there is less money are more likely to experience the worst impacts of the climate emergency like food shortages, diseases and war. Within Southwark, we also know that the most vulnerable people are the most likely to be affected by the climate crisis. They may not be able to afford food if it is in short supply, they may live in houses that are less well adapted to temperature changes and they may be more likely to suffer from poorer health and wellbeing exacerbated by the climate crisis. The strategies that we take in the UK, and in Southwark are an opportunity to reduce these inequalities in our society as well as to protect our planet from damage.

An important focus of this report is the different ways the climate emergency is affecting our health and wellbeing in Southwark. It investigates issues such as air pollution, flooding, food shortages and migration. We have engaged with local children and young people to ask them what they think we should do to combat the climate emergency. We also ran a competition for local school children and young people asking them to submit art, poetry or a media file which encourages the whole borough to combat the climate crisis and protect their health. We received over 70 entries to the competition, incorporating the work of children and young people from all over the borough. In response to this we have created a set of Climate Crisis action points, an animation, an overview of climate science and workbooks. The report will also contribute to the upcoming Climate Change Strategy for Southwark. We will launch the report and present the competition entries at a showcase event where we will welcome local schools, businesses and public figures to Southwark Town Hall.

We hope you will use this report to recognise that we must work together to combat the climate emergency, and consider how you can help us to protect and promote health now and in the future.

¹Dr Margaret Chan, WHO Director-General: <https://www.who.int/globalchange/global-campaign/cop21/en/>

1.2 What is the climate emergency?

The earth's climate has changed throughout history. There have been seven ice ages over the past 650,000 years, and many times when the temperature has risen above what is normal. However, in recent years, climate scientists have noticed worrying changes. The earth's temperature is rising faster than predicted, and this is because of what humans are doing to the world.

The sun is the earth's biggest source of energy, and most of the solar energy that reaches the earth is trapped by 'greenhouse gases'. These gases are very important because without them the earth would be too cold for humans, plants and animals. Greenhouse gases are produced by lots of things we do like burning fuel for cars and heat, growing lots of animals for meat and cutting down forests. However, this human activity means that more greenhouse gases are being released into the environment. As a result, the world is now getting too hot from this extra 'insulation'.

This global heating is making ice caps melt, causing plants and animals to lose their habitats and leading to an increase in disease. Global sea levels have risen by approximately 20cm in the last 100 years, meaning some seaside towns are at high risk of flooding or erosion. In the UK, annual temperature records show that all of the ten warmest years have occurred since 2002. The UK's Environment Agency has warned us that many species of bird are reducing in number, mostly related to reductions in food supply in response to extreme weather.

If we do not change our behaviour, it could be devastating for our world. Experts say that even if we stopped releasing greenhouse gases immediately, global heating would continue for at least another 70 years. If things do not change, it will affect our world in dramatic ways. We could see more extreme weather, rising sea levels, more people dying from disease and wars caused by poor food supply. It is time for action.

UK Annual Temperature

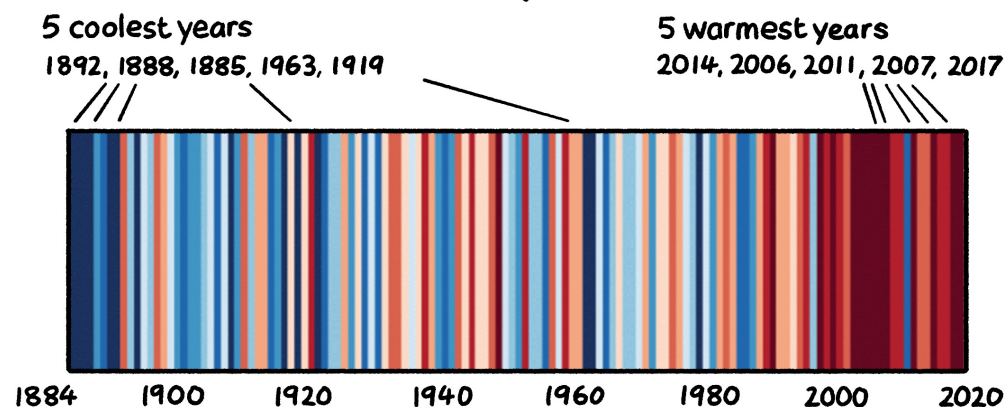


Figure 1: The 5 warmest years on record have all occurred since 2006. The five coldest years were between 1885 and 1963.

Adapted from UK Met Office by Rachel Sale, F.A.T. Studio.

<https://www.metoffice.gov.uk/weather/learn-about/climate-and-climate-change/climate-change/index>

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Save our planet:
Plant more trees!



2. Health and the Climate Crisis - *How does the climate affect our health?*

2.1 Pollution and air quality – *Clean air please*

Every year in Southwark, pollution causes 90 people to die earlier than they should. This is a higher rate per person than in London or England, but the good news is that the rates in Southwark have been falling since 2010². Every year in Southwark a much larger number of people are affected by sicknesses made worse by pollution including lung and heart diseases. As well as causing sickness, we know that gases produced by burning fossil fuels add to the amount of greenhouse gas in the atmosphere. Although Southwark Council is working with partners to reduce the amount of dangerous polluting gases in our air, there is much more to be done.

The air contains very small pieces of material called particles. Most of these particles are too big to pass through a human nose and into the body. However, there are some very small particles that can pass into the nose, down into the lungs and into a person's bloodstream. These particles can cause disease in the lungs and if they get into the blood can lead to obesity, heart disease and cancers.

Many things that humans do every day cause pollution. One of the biggest causes is burning fossil fuels for electricity, cars and aeroplanes. When farm animals digest their food they produce lots of a gas called methane. Methane is a greenhouse gas which means it leads to an increase in global heating. High pollution levels are also caused by burning wood for fires and smoking cigarettes. All of these add to global heating and can affect people's health.

Southwark Council has managed to reduce our release of polluting gases by 37% since 2010, and we have committed to being carbon-neutral by 2030. We are also working hard to encourage people to walk to school and work, reduce the number of vehicles on our roads and make sure that cars waiting in traffic turn off their engines. We are encouraging people with health conditions sensitive to air quality such as asthma to be aware of, and to be prepared with, the correct inhalers on poor air quality days. We are offering advice to people who are struggling to heat their homes in an environmentally friendly way. We are also working with lots of businesses, schools and workplaces to help reduce the amount of pollution they cause. We are encouraging hospitals and GPs to use more environmentally friendly inhalers and anaesthetic gases, as well as encouraging them to use less plastic and fossil fuels. Our hope is that together we can work to make Southwark's air fresh, healthy and environmentally friendly.



²Public Health England, Public Health Profiles: <https://fingertips.phe.org.uk/>



2010

2020

2030

2.2 Extreme weather – Is it hot in here?

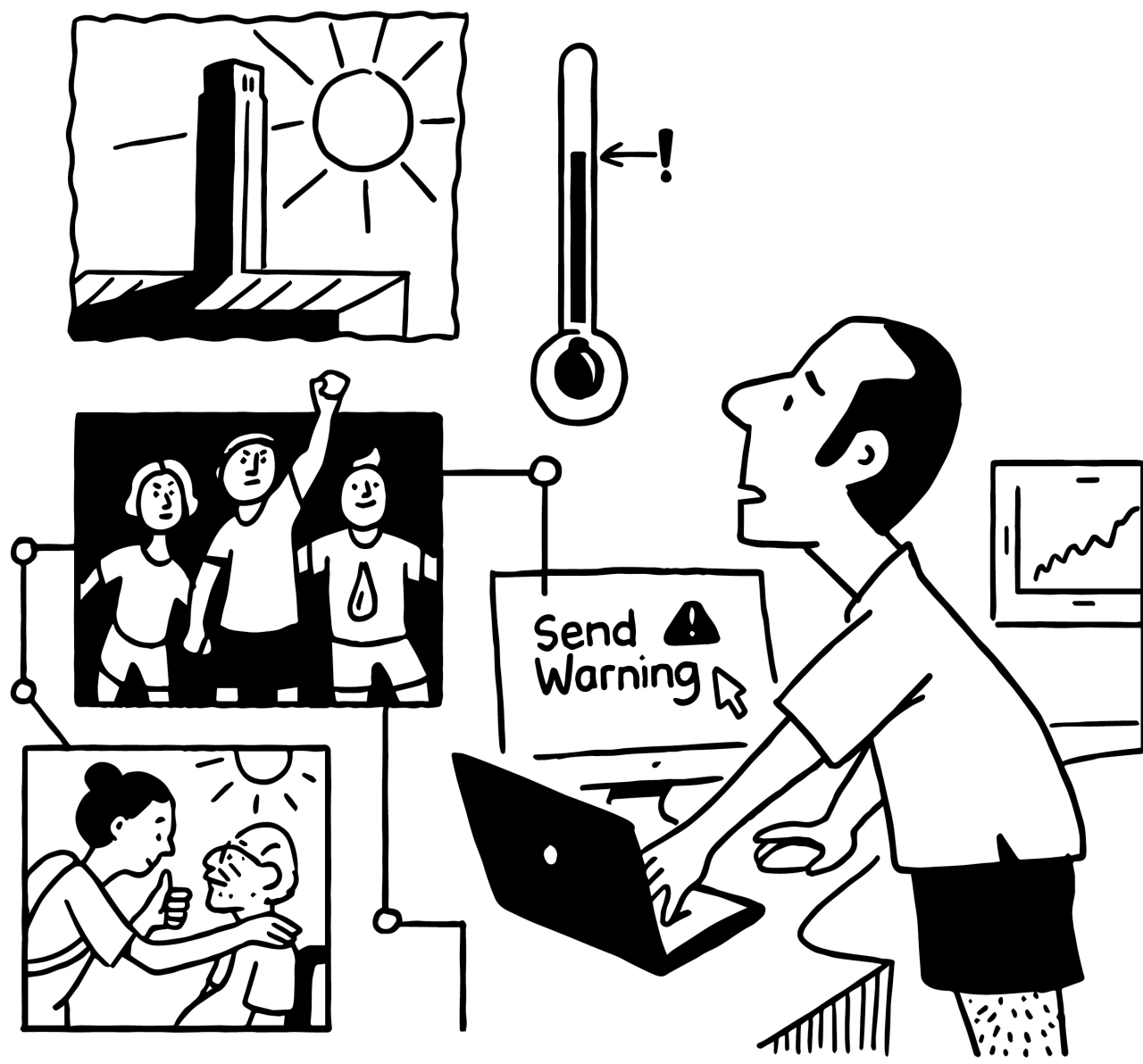
Extreme weather is likely to become a big problem in Southwark in the coming years as average temperatures rise. Weather systems around the world have been affected and we are seeing more “extreme” types of weather. Cities like London will be affected more than the countryside because of something called the “urban heat island” effect. Buildings and man-made surfaces keep in heat, which means that cities can be five to ten degrees warmer than areas that are nearby. Southwark is a busy urban area with lots of buildings and man-made surfaces that trap and reflect heat, particularly in the north of the borough.

But what does this mean for everyone's health? Very hot weather is dangerous. As well as the illnesses we usually think of, like heat stroke, high temperatures can also increase the likelihood of becoming unwell with conditions affecting the heart or the lungs. This happens much more often in people who are older and have long-term health conditions. As average temperatures increase, the number of people in the UK who die due to the effects of heat could go up by two thirds in this new decade. Hot weather may also increase the risk of getting food poisoning as bacteria can multiply faster in the heat. It is also predicted that we will have more mosquitos, household flies and ticks which may spread disease.

Cold weather already has a big impact on people's health in the UK. More people become unwell over the winter months when temperatures are low and our local hospitals have to work even harder to care for everyone. There are many reasons for this, including the effects of cold on heart and lung health, a higher chance of catching flu, and more slips and falls.

Many people, particularly older people, may struggle to cope with extremes of temperature. In Southwark, we are encouraging local people to keep up to date with weather forecasts and be aware of vulnerable neighbours who may need extra help. We are asking people to prepare for hot weather by keeping well hydrated, using insect repellents, wearing cool clothes, and ensuring food is stored properly. We are also working closely with local GPs and hospitals to ensure our emergency weather plans are kept up to date, and that we are ready to protect the health of our residents in the event of any extreme weather events.





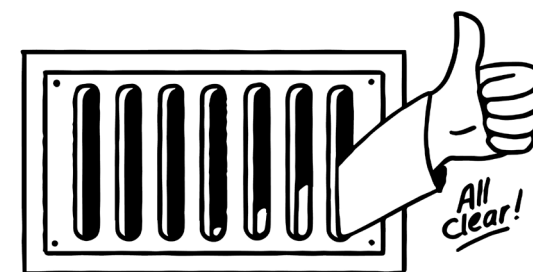
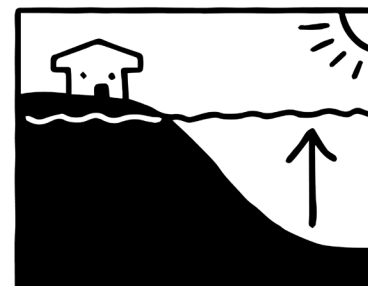
2.3 Flooding – Wet, wet, wet

Parts of the borough of Southwark are at risk of flooding, and this will get worse if global heating continues, causing sea levels to rise and making extreme weather events more likely. Reports which look at how the UK will be affected by the climate crisis put flooding and water shortages high up the list of issues that many of us will face.

Flooding has lots of effects on health. While it is happening people can drown or get injured. The damage to people's belongings, homes, and businesses affects people's mental health and some people may even have to move out of their homes for a while. Flooding also means people lose money because they have to clean and replace what has been damaged and because their work and lives are disrupted. These things have a knock-on effect on people's health and wellbeing. At the moment, people living near the Thames are protected from flooding by the Thames Barrier. Much work is being done to make sure that the barrier is able to cope with the changes in the sea and tides that are expected this century. Flooding is likely to pose a risk to the health and wellbeing of people living in Southwark in the future. Southwark Council and partners work closely to ensure we are well prepared for any flooding emergencies.

The other type of flooding that can happen is surface flooding. This happens when there is heavy rain or a burst water pipe and the water cannot drain away fast enough. This can be because the drains are blocked but can also be because there are not enough drains or the sewer pipes are full. If an area has lots of tarmac and concrete then the water cannot get through it and can only escape through a drain. This is another reason why green spaces are important, because water can drain away through the soil. It is also important to make London's pipe and sewer network better able to cope with increased rainfall.

Southwark Council is working to ensure we are prepared to support local people in the event of emergencies, including severe flooding. We have plans to provide psychological support to people who may be severely affected by flooding and are working closely with the council and wider partners to ensure regeneration and planning regulations are prepared to cope with severe flooding³. As well as there being too much water, it is possible that there may be too little at other times of the year. In London this is partly because there are more and more people living in the city. We know that water is sometimes wasted by leaving taps running, leaks and excessive use in gardens and sometimes we experience reduced rainfall. Southwark Council is working to encourage local people, schools and businesses to conserve water, as well as ensuring all our Council buildings are adapted to use water wisely.



³Flood Risk Management, London Borough of Southwark: <https://www.southwark.gov.uk/environment/flood-risk-management>

2.4 Food Supply – Eat well Southwark

There are approximately 330,000 people in Southwark and we all need a continuous supply of safe and nutritious food so that we can be healthy. Unfortunately, we already know that many people in Southwark cannot always afford enough food. Our Food Insecurity Strategy work has shown that as many as 75,000 people in the borough may have to skip meals, eat less, or eat less balanced meals due to food poverty. We also know it is cheaper to eat unhealthy food than healthy food. Processed food, takeaways and ready meals are sometimes easier to find and cheaper, especially if you live in certain areas in the borough. These meals often use more processed meat which is bad for the environment and for our health, as well as lots of packaging. We know this is a big problem in Southwark and we are working with local restaurants and supermarkets to make meals more healthy, affordable and environmentally-friendly.

The climate crisis is going to affect the supply of food around the world, including in Southwark. In the UK, it will become more difficult to grow the types of crops we grow now due to extreme high and low temperatures and changes in rainfall. In the UK we import about 40% of our food from abroad, so changes in other countries will affect us too. If there is not enough food, then prices will rise. This is likely to make food poverty even worse, especially for the most vulnerable people in Southwark. The other thing we must think about is the effect of our food on the environment. Research shows that it should be possible for everyone in the world to have a healthy, nutritious, and sustainable diet. This is what we must aim for, but we must all change our behaviours to protect our health and our environment.

Southwark Council and partners are working to plan for food shortages and to ensure that the most vulnerable will always be able to access healthy and nutritious food. We already have cookery classes to help local people cook low cost, environmentally friendly meals, and we support the work of various food banks across the borough. We are also expanding the number of “community fridges” available to local residents. These are fridges where individuals and businesses can place leftover food for anyone to take. We are increasing the number of community growing spaces such as allotments, to help local people grow their own food. In order to reduce plastic use, we have created a “water-only policy” in schools. Children and young people will be encouraged to use reusable bottles and water fountains to reduce the number of single-use plastic bottles in the borough. The good news is that this also reduces the consumption of fizzy and sugary drinks and protects people from dental cavities and obesity. Many Southwark initiatives are encouraging local people to think responsibly about food shopping, to choose less packaging, to only buy what is needed and to consider sharing any extra food with those in need.



2.5 The Meat Industry – Meat-Free-Me

At Southwark Council we are committed to addressing all causes of the climate crisis, and this includes thinking about what we eat. Across the world the meat industry produces more greenhouse gas emissions than all our cars, planes, trains and ships combined! Animals like cows need lots of space and water to survive, and in many places in the world they are using up large amounts of land and water, and also emit lots of greenhouse gas when they break down their food. As well as this, fossil fuels and plastics are used to package and transport the meat across the world. In 2019 an international panel of experts called the Intergovernmental Panel on Climate Change asked businesses, governments and people to carefully consider where their meat is coming from and to consider eating less of it. They recommended eating more plant-based foods and supporting more sustainable farming.

Southwark Council and partners are encouraging local families to cook with more plant-based proteins such as beans and lentils, and to buy locally produced food with less packaging. Some people may struggle to afford food, so we are working to expand our local foodbanks and to work with local businesses and restaurants to encourage them to share leftover food. We are also working with local restaurants and takeaway vendors to encourage them to reduce the amount of meat on their menus and to increase sustainable vegetarian options. We are working with schools and nurseries to ensure our free school meals are made using less meat, whilst still being nutritionally rich. The great news is that eating less meat is something we can all try to do that is great for the environment and our health!



2.6 Conflict and Migration – *Strong communities*

Southwark is one of the most diverse boroughs in London. Around 330,000 people call it home, and they come from all kinds of different faiths, cultures and backgrounds. Approximately one third of all Londoners were born in a different country, and we pride ourselves in being one of the most welcoming cities in the world. However, there are likely to be many more migrants, asylum seekers and refugees in Southwark as more people get displaced due to the effects of the climate emergency on food and life opportunities in their home countries.

If things do not change and our world continues to get hotter, land will become dry and crops will not be able to grow. Not having enough food or water, can lead to civil unrest and people are forced to leave their homes to keep their families safe. People who have to do this are called “climate refugees”. Researchers have already shown that some wars that are happening today are partly caused by the climate emergency, and they predict things might get worse. When people move to a new country or “migrate” they often find it hard to settle in.

It is likely that the UK will be a key receiving country for climate refugees in the near future. Southwark Council and partners are working to plan for this.

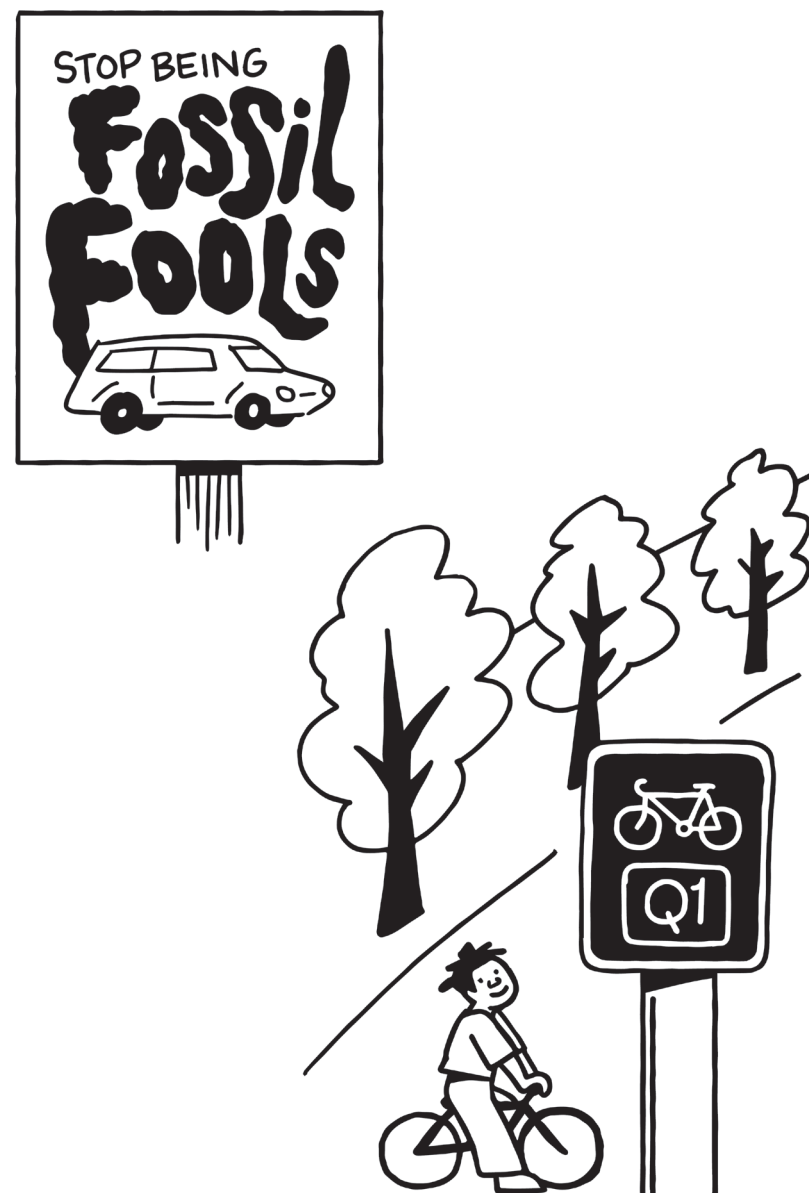


2.7 A healthy and sustainable Southwark – *Take care Southwark!*

Southwark Council and our partners are committed to working to improve the health and wellbeing of all the people in the borough. The great news is that living in a more environmentally friendly way can also mean living more healthily! People usually think of cities as being unhealthy and bad for the environment but there are lots of ways to make them both healthy and sustainable.

We can change the way we do things in Southwark to reduce our carbon footprint, protect the environment, and improve everyone's health. If we make it easier for people to walk or cycle to where they need to get to, then we can reduce the number of cars on the road. This would mean less carbon dioxide would be produced. It would also mean there would be less air pollution and residents would get more exercise while going about their daily lives. If we build homes which are insulated to stay warm in the winter and which can stay cool in the summer then we can use less energy for heating and fans and also protect against the illnesses caused by hot and cold weather. If we create new green spaces and protect the ones we already have, then we can help local wildlife, protect against flooding, and keep the area cooler. These same spaces can be used for social and recreational activities, including outside play and exercise.

As well as thinking about what happens in homes and communities, we can think about businesses and public organisations like the NHS. The NHS has a large carbon footprint and much work is going into making health care more sustainable as well as better and safer.



3. Our Climate and Health Action Plan – *What can we do together?*

This section of the Annual Public Health Report adopts a focus on health and wellbeing. It is not stand alone and it must be considered alongside the more comprehensive commitments and actions in Southwark Council's upcoming Climate Change Strategy.

Healthier greener suggestions for you

- Walk or cycle instead of driving. Not only will you reduce emissions, you will be more active and healthier.
- Eat a healthy balanced diet based on the Eat-well guide. We tend to eat too much meat and not enough vegetables. Better still, try growing your own vegetables.
- Get to know your neighbours. Check on vulnerable neighbours, such as older people, during periods of extreme hot or cold weather.

Together with our NHS partners

- We will work with GPs and NHS trusts to ensure our emergency weather plans and cascade alerts are effective so that the local system and local people are better prepared for adverse weather events.
- We will promote greater awareness, with medical professionals, of sustainable greener practice, such as prescribing inhalers and using anaesthetics with a low carbon footprint.
- We will work with NHS Trusts to reduce the impact that Southwark's hospitals are having on the environment by reducing plastic use, opting for green energy suppliers, consolidating deliveries and moving over to cycle courier services wherever possible.

Our public health commitments

- We will continue to support the improvement of the environment around schools. School Superzones are a London initiative to improve the air quality around schools, promote active travel and make health, sustainable food choices easier for children, young people and their families. We are creating these areas in Southwark to ensure our local children can be active and healthy, and protected from pollution.
- We will be the first borough in London to implement a 'Water Only Schools Policy', which will increase use of reusable drinking bottles and water fountains and reduce single-use plastic.
- We will continue to work with local and national surveillance agencies to monitor any potential disease risks caused by insects, and cooperate fully in the response to any disease outbreak.
- We will work closely with partners to ensure community preparedness by:
 - Providing information on the health effects of poor air quality and extreme weather events, and
 - Support the delivery of first aid in the event of an incident.
- We will work with Southwark schools and nurseries to improve the sustainability of their food and commit to promoting a meat-free menu at least once a week.
- We will work with fast-food outlets to add more plant-based options to their menus and offer smaller portions to reduce food waste.
- We will continue to implement the Council's Food Insecurity Action Plan and commit to increasing the numbers of community fridges in the borough to reduce food waste.
- We will improve the way we support vulnerable fuel-poor households by increasing the uptake of energy efficiency improvements such as insulation and boiler replacements.

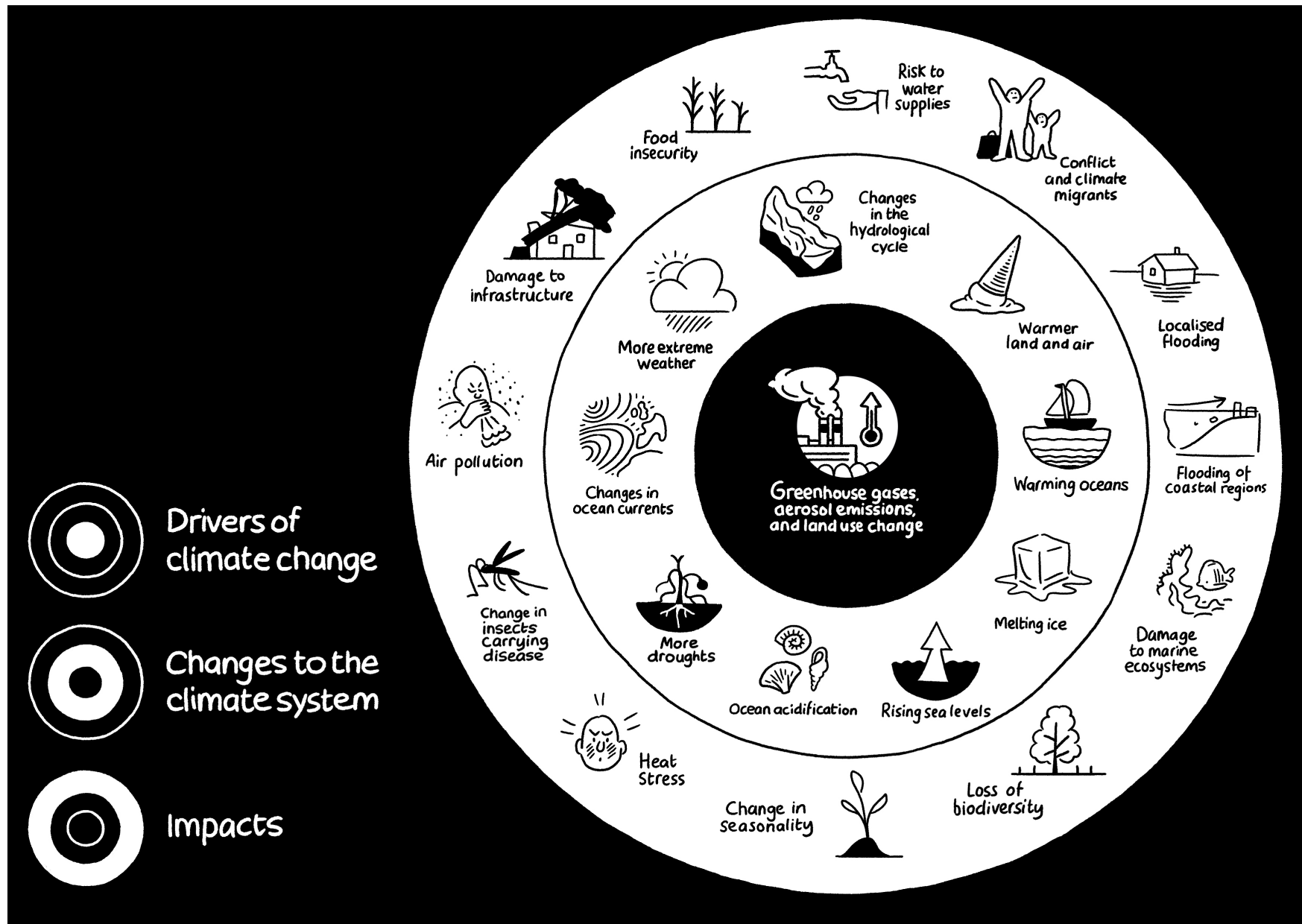


Figure 3: The Effects of the Climate Crisis. Adapted from Met Office by Rachel Sale, F.A.T Studio

<https://www.metoffice.gov.uk/weather/learn-about/climate-and-climate-change/climate-change/impacts/infographic-breakdown/impacts-of-climate-change-in-the-uk>

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4. Conclusion – *Time for action*

We hope that our report will encourage you to think about what you can do to stop the climate emergency, and also to think about how some of these things might improve your health. We also hope that you will better understand how Southwark Council and partners are working to protect your health from the effects of the climate crisis.

We really believe that the time for action on the climate emergency is now. We know that the climate crisis is an urgent health emergency for the whole world as well as for us in Southwark. We are committed to taking action and we welcome you to join us in order to protect our world and our health, for this generation and the next.

This is our world



Breaking NEWS
Sahara desert grows by 10% due to global warming
The death rate in the USA is rising

Daily Metro
UK Government agrees to spend an extra £17bn on climate change
Climate change reversed by 2050



AND

IT'S FATE IS IN OUR HANDS

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