

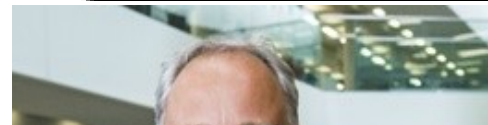


**ROCHDALE**  
BOROUGH COUNCIL

DRAFT

# Our plan of action for the planet

**2020 - 2025**



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Lead member for Climate Change

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Chief Executive

Pollution is having a major impact on the natural environment and our health. It is causing the planet to get hotter which is leading to rising sea levels, warmer and acidic oceans, more rain and heatwaves. These environmental changes bring a threat of flooding, drought, land erosion, loss of habitation for wildlife and an increase in heat and cold related illness. Our borough has already suffered terrible flooding which has caused disruption to essential services, transport and loss of income for local businesses, so we know the devastation it can bring. In the UK, 40,000 people die annually from air pollution. Around 10% of Rochdale's population have a respiratory disease and it is estimated that around 4.2% of deaths in Rochdale are related to respiratory diseases caused by air pollution. The climate emergency is threatening our existence and we must act quickly. Pollution mostly comes from human activity so we must all increase our efforts to reduce our own impact on the planet.

Our borough is facing major environmental challenges. The Council must help to limit the rise in global temperatures, reduce greenhouse gas emissions, reduce the amount of waste that is produced and ensure places and spaces are resilient to the shocks and stresses of climate change. This plan identifies the urgent action we need to take to achieve environmental sustainability and enhance the prosperity of people and the planet. This includes using renewable sources of energy for powering transport and heating buildings, being more efficient and responsible when we are making, buying and using goods and services, protecting and maintaining the natural environment and ensuring that our infrastructure can withstand expected and unexpected situations. Taking climate action will improve lives, not diminish them. It can deliver additional benefits such as improved health, job opportunities and bringing people together. Most of all it will secure a future for the next generation.

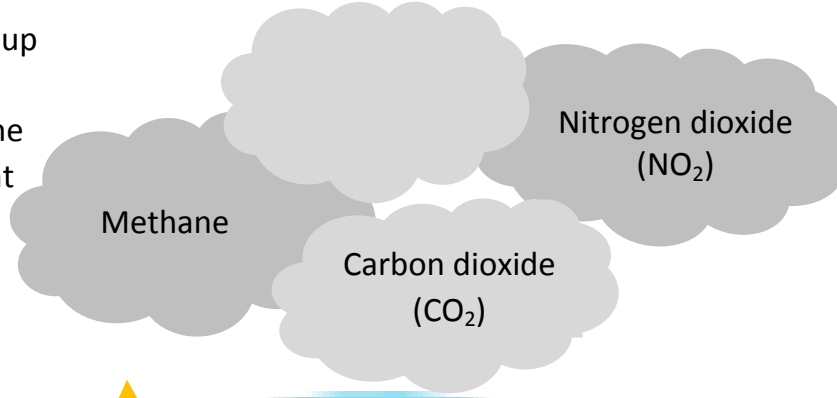
## Effects of climate change

harmful greenhouse gases are in the atmosphere. They come from human activity and natural processes





The planet is heating up which is having a negative effect on the natural environment



Methane

Carbon dioxide (CO<sub>2</sub>)

Nitrogen dioxide (NO<sub>2</sub>)



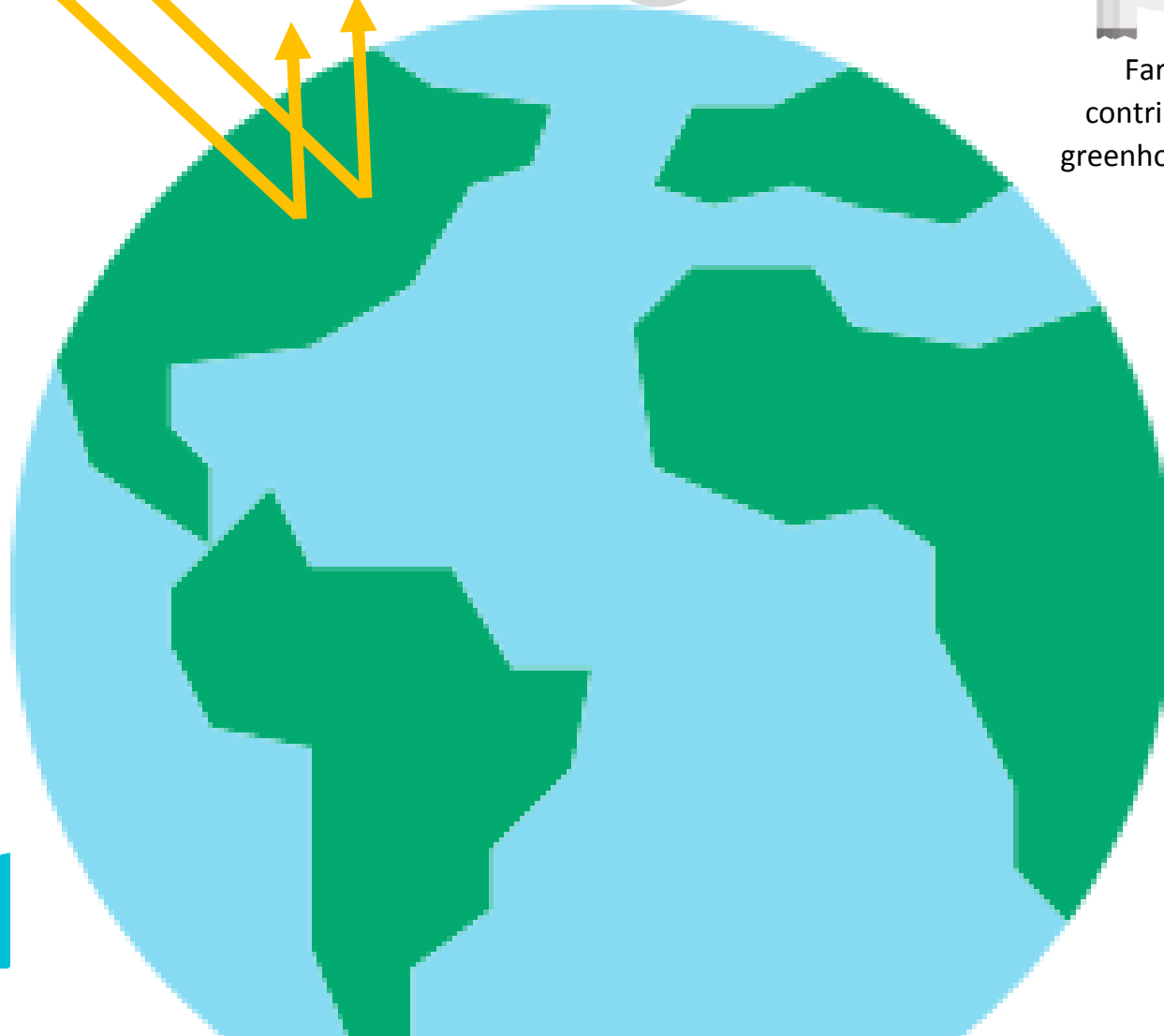
Farming contributes to greenhouse gases

Burning fossil fuels contributes to greenhouse gases



Decomposing waste creates carbon dioxide and methane

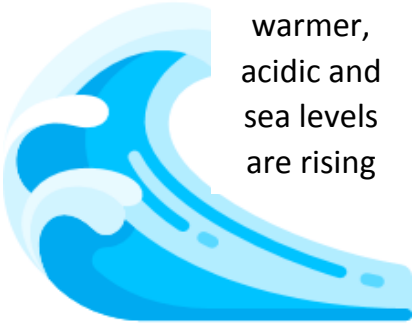
Deforestation means there are less trees to absorb carbon dioxide



Weather is more extreme



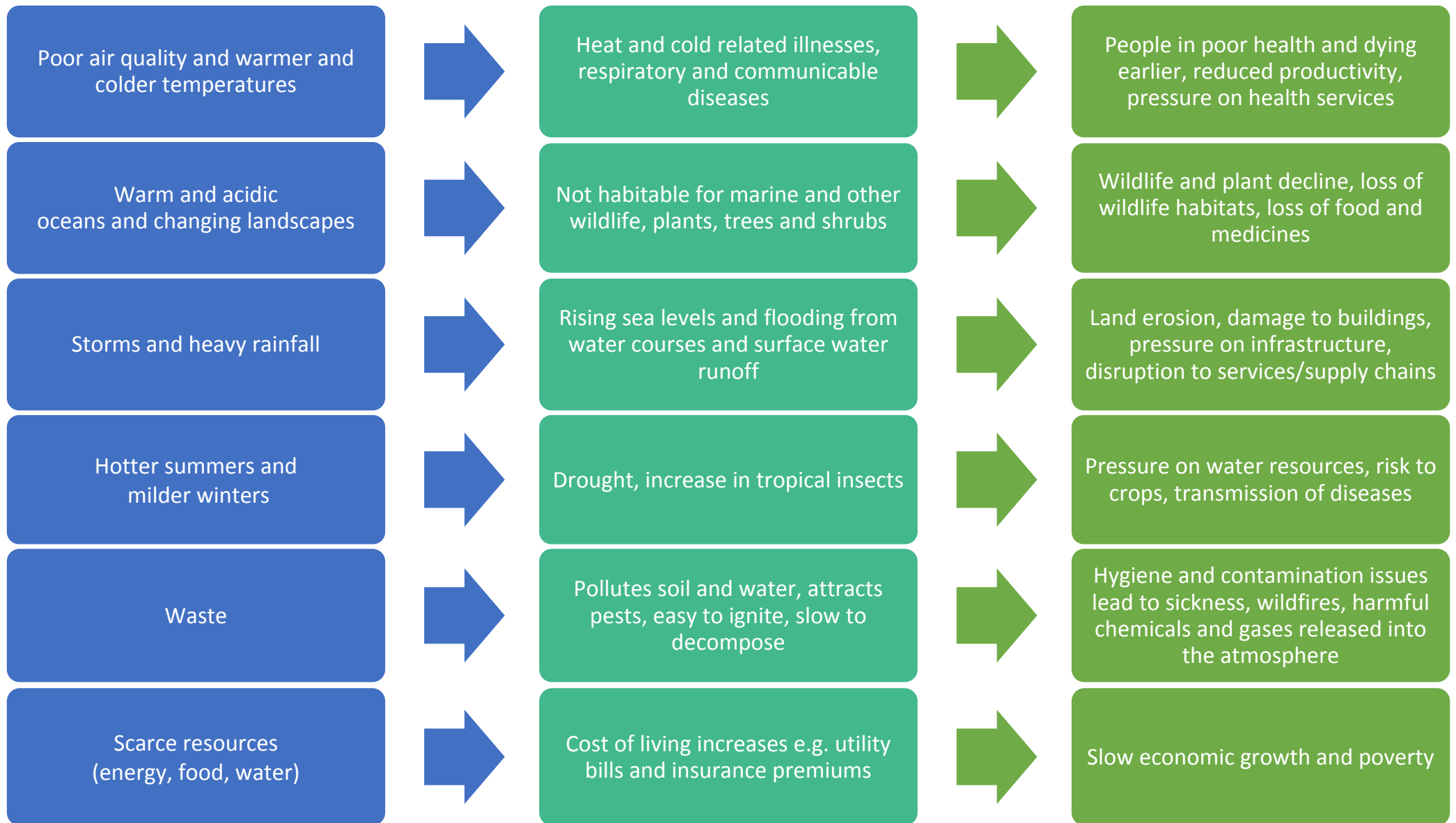
Oceans are warmer, acidic and sea levels are rising



Antarctic ice and glaciers are melting

**Impact**





## European and UK climate change policy and targets

The European Union and UK Government have set targets for reducing the impact of climate change

## Global warming

### **The Paris Agreement 2015**

Keep global temperatures well below 2°C and aim for 1.5 °C

## Carbon dioxide emissions

### **The Paris Agreement 2015**

Reduce global greenhouse gas emissions to below 1990 levels by second half of the 21<sup>st</sup> century

### **Climate Change Act 2008**

Bring UK carbon dioxide emissions to net zero by 2050

## Nitrogen dioxide emissions

### **The Air Quality Standards Regulations 2010**

NO<sub>2</sub> emissions to comply with EU Limit Values in the shortest possible time

- The hourly mean value may not exceed 200 micrograms per cubic metre (µg/m<sup>3</sup>) more than 18 times in a year
- The NO<sub>2</sub> annual mean value may not exceed 40 micrograms per cubic metre

## Renewable energy

### **Renewable energy directive 2018**

32% of energy is fulfilled by renewables by 2030

10% of transport fuels come from renewable sources by 2030

## Waste management

### **The Waste Framework Directive 2008**

Cut the amount of waste going to landfill by 10% by 2035

65% of municipal waste to be recycled by 2035

70% of packaging waste to be recycled by 2030 (85% of paper and cardboard, 80% of Ferrous metals, 80% aluminium, 75% glass)

Halve per capita, food waste at the retail and consumer level

## Regional policy and targets

**The Greater Manchester Combined Authority has set targets for Greater Manchester, aligned with European and national policy**

## Carbon dioxide emissions

### Greater Manchester Environment Plan 2019

Bring carbon dioxide emissions to net zero by 2038

10% reduction in heating and cooling demand by 2025 with a 22% total reduction by 2038

38% reduction in industrial emissions by 2025 with a 50-77% reduction by 2038

Retrofit 61,000 homes per year by 2024

Public buildings to obtain an average Display Energy Certificate (DEC) rating of D or better by 2024 and C by 2030

## Nitrogen dioxide emissions

### Greater Manchester Clean Air Plan 2019

Reduce NO<sub>2</sub> emissions on road links where modelling has identified exceedances beyond 2020 (152 stretches of road identified across GM)

### Greater Manchester Environment Plan 2019

100% of all cars are zero emissions by 2035

100% of all buses are zero emissions by 2035

## Renewable energy

### Greater Manchester Environment Plan 2019

Add 45MW of local renewable electricity generation by 2024

Add 10TWh of low carbon heating by 2024

Add another 45MW of energy supply through other sources

20% renewable energy generation at new developments

## Waste management

### Greater Manchester Environment Plan 2019

Limit any increase in the quantity of waste produced to 20%

Achieve a recycling rate of 65% by 2035

## Natural environment

### Greater Manchester Environment Plan 2019 - 2024

Plant 3 million trees by 2035 and a further 1-2 million by 2050

Restore 50-75% of peatlands by 2038

## Local policy and targets

On 17th July 2019 Rochdale Council passed a motion on climate change



## The Council resolves to:

- Declare a climate emergency
- Work towards ensuring that the borough is carbon neutral by 2050, in line with the Mayor and the Government's targets. Achieving this will require significant investment and policy initiatives from the Government, and Council hopes it would be achieved earlier than 2050
- Work towards ensuring that the Council is carbon neutral by 2038, recognising the leadership role it has in the borough
- Develop a working group to support the Council move from declaration to delivery drawing in cross sector expertise, capacity and capability. The working group should draw on existing expertise within the borough as well as including residents who are representative of the borough as a whole
- Set in place a process of engagement and collaborative action that enables an action plan to be considered by Cabinet and Council in early 2020, based on achieving the aforementioned targets

## The climate emergency in Rochdale

Friends of the Earth have said that Rochdale is only 72% climate friendly





Rochdale has 10 stretches of road (road links) where concentrations of nitrogen dioxide are forecast to exceed legal limit values beyond 2020.



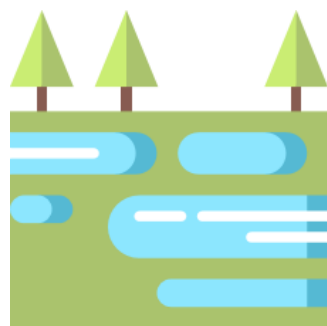
Only 37% of homes in Rochdale are well insulated and 13% of households can't afford to heat their homes properly.

The Rochdale area currently has only 13MW of renewable power.

Rochdale is producing 0.9 million tonnes of carbon dioxide emissions (MtCO<sub>2</sub>) as at 2019. 42% of emissions come from housing, 26% from transport, and 32% are industrial and commercial emissions.



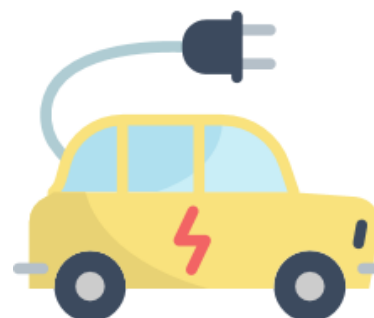
In Rochdale only 12% of people commute by public transport, 1% cycle and 10% walk. Only 12% share their car.



Blanket bog is important for habitat and provides a carbon store, helping to reduce flood risk. 5.4% of the borough is blanket bog but not all is in good condition.



Only 5% of the Rochdale area is woodland



Rochdale only has 10 public electric vehicle charging points



Rochdale reuses, recycles and composts 48% of its household waste.

Source: <https://takeclimateaction.uk/climate-action/how-climate-friendly-your-area-enter-your-postcode-see-results-your-community>

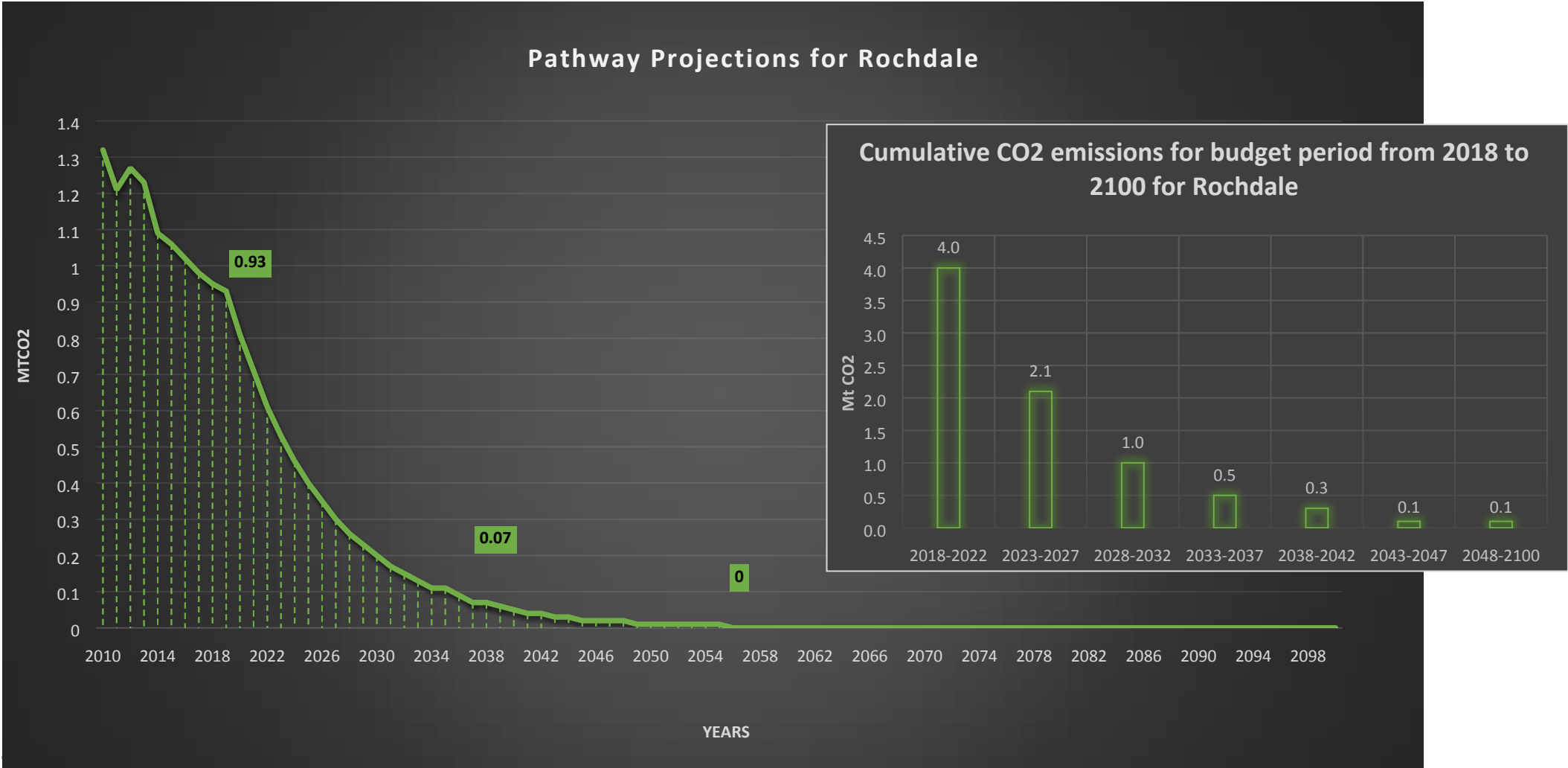
## as emissions

**Greenhouse gases are the biggest threat to our planet. The Council has committed to reducing carbon emissions by 2038**



The Tyndall Centre at Manchester University has said that we must make a fair contribution to reducing carbon dioxide emissions to achieve net zero by 2100. A fair contribution in Rochdale means reducing emissions by at least 13% per year, staying within a maximum carbon budget of 8.1 million tonnes (MtCO<sub>2</sub>) from now until 2100. However, it is recommended that Rochdale stays within a recommended budget of 6.2 million tonnes (MtCO<sub>2</sub>) to achieve as near as possible to zero by 2038. To be wholly carbon neutral by 2038, an even smaller carbon budget, with accelerated reduction rates is required over the next 18 years.

### Pathway Projections for Rochdale



The Council has committed to bringing nitrogen dioxide emissions to within legal limits

The Greater Manchester Combined Authority has said that we must implement clean air measures for the highest polluting vehicles to ensure that the 10 stretches of roads in Rochdale that are modelled to exceed EU legal limit values beyond 2020, will comply as soon as possible.

- Phase 1: Buses, taxis and commercial vehicles by 2021
- Phase 2: Long Goods Vehicles (LGV's) by 2023

Summary of exceedances in Rochdale before and after clean air measures

	Local Model point exceedances on Pollution Climate Modelling (PCM) links	Additional Local Model point exceedances on local roads (non PCM links)	Total Local Model point exceedances
<b>2021</b>			
Without Clean Air Measures	10	0	10
Clean Air Phase 1	2	0	2
Change in exceedances	-8	0	-8
<b>2023</b>			
Without Clean Air Measures	2	0	2
Clean Air Phase 2	0	0	0
Change in exceedances	-2	0	-2

## Our sustainability goals and outcomes

The Council's goals and outcomes align with the Sustainable Development Goals and Greater Manchester Environmental Plan



### **Deliver the following co-benefits in tackling climate change**

Social sustainability

Economic sustainability

Environmental sustainability



### **Build the resilience of those most vulnerable to climate-related events**

Access to adequate, safe and affordable housing and basic services

Less exposure to environmental shocks and disasters, in particular flooding from rivers and surface water

Less people living in poverty (including fuel poverty)



### **Support sustainable food production and practices that can withstand climate change**

More local food production

More eating of healthier and plant-based food, with less and better reared meat

More resilient agricultural practices



### **Relieve the burden of climate related illness and disease**

Less air, water and land pollution and contamination

Less respiratory and communicable or infectious diseases

Healthier lifestyle habits, working environments and green spaces



### **Build knowledge and skills in sustainability**

School pupils educated in sustainable development and sustainable lifestyles

Education and vocational training programmes to support careers in a green economy

Workforces equipped with the right skills for working in greener industries and sectors



### **Empower women and girls to support economic growth and development**

More girls and young women participating in Science, Technology, Engineering and Maths (STEM) subjects

More women working in the clean tech sector

Women as stewards of natural and household resources are involved in climate action



### **Manage demand for water and threats to water security resulting from climate change**

Better water-use efficiency

Better management, protection and restoration of water-related ecosystems, rivers, lakes etc.

Strong surface water management to reduce risk of sewer flooding

Less water needing to be treated to improve water quality



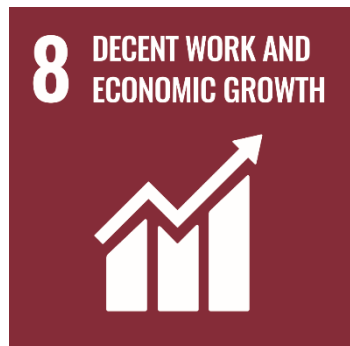
### **Reduce use of fossil fuels that are harmful to the environment**

More renewable electricity generation

More diversity and flexibility of energy supply including low carbon heating and hydro power

Fossil fuelled private vehicles, bus and other fleets replaced with zero emission capable alternatives

Freight transport shifted to rail and water transport



### **Support clean and green growth for a sustained economy**

New industries at the forefront of clean and green innovation e.g. advanced materials, digital technologies

More companies trading in low carbon environmental goods and services

New types of jobs supporting clean and green growth



### **Reduce the intensity of carbon emissions from the industry sector**

Circular and resource efficient production models that reduce waste and encourage recycling

More environmentally friendly equipment, technologies and processes

Infrastructure and industries upgraded or retrofitted

**Advance equal opportunity and reduce inequalities of outcomes in addressing climate change**

Enhanced representation and voice for young people

Diverse and vulnerable groups supported to move to cleaner and greener ways of living

Those most vulnerable to climate change benefitting first from climate action

**Make urban areas cleaner, greener and with climate responsive infrastructure**

Inclusive, sustainable, resilient and accessible buildings, roads, green and public spaces

Sustainable drainage plus measures for relieving heat stress/providing cooling

Well connected and sustainable public transport systems and active travel (cycling and walking)

The most polluting vehicles removed from town centres

The natural environment included in the design of urban areas (blue/green infrastructure)

Implementation of risk and disaster mitigation, adaptation and management measures

**Protect the loss of scarce resources through prevention, reduction, recycling and reuse**



Reduced waste, including food and plastic waste

Increased recycling of different types of materials e.g. paper, cardboard, aluminium, glass

Reduced heat demand from existing homes, new buildings and commercial and public buildings

Harvested rainwater used as a resource in combatting climate events (drought, flooding)



**Raise awareness to make it easy to identify and respond to the impact of climate change**

Carbon literacy for all

Good examples of energy saving behaviour

Volunteering opportunities for climate action and nature restoration projects



**Protect areas for aquatic biodiversity**

Aquatic habitats created or enhanced

Reduce and mitigate land and water activity that causes damage to aquatic habitats

Aquatic wildlife sustained by tackling destructive fishing practices and managing aquaculture and tourism



**Protect and restore vital ecosystems and species**

Achieving a net gain in biodiversity through new development

Increased tree and wildflower planting as part of sustainable drainage systems

Wildlife habitats created, enhanced or protected from harm, including managing and restoring peatlands

Increased and maintained green spaces, green belt and designated nature sites



### **Mobilise change through effective participation and governance**

Dedicated political and officer leads for climate change

Responsive, inclusive, participatory and representative decision-making at all levels

Environmental sustainability criteria embedded in policies, plans, processes e.g. procurement, planning etc.

Progress reported against achievement of climate change actions and targets



### **Deliver sustainability goals through cooperation, finance and data**

Multi-stakeholder partnerships that share resources including knowledge, expertise, technology, money

Funding to support work in reducing greenhouse gas emissions and nature restoration

High-quality, timely and reliable data to understand the current and future climate position