

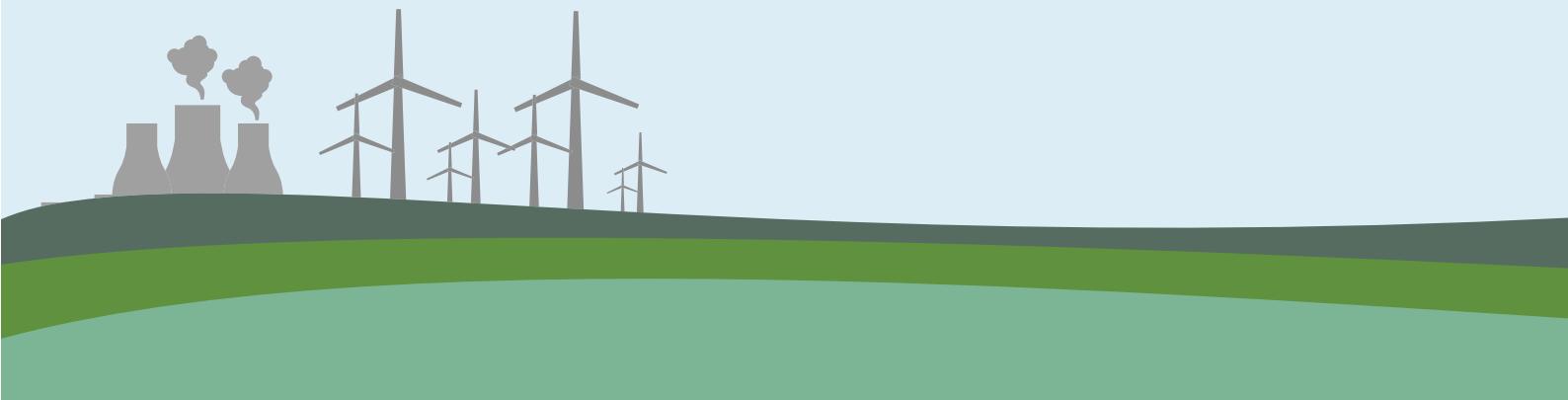
Bolton Climate Change Strategy

A Joint Framework for Bolton to Act on the Climate Emergency (2021-2030)



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1 Setting the scene: Bolton, the UK and globally

Bolton Responds to the Climate Emergency

Climate change is happening now. It is already having devastating impacts on people's lives, homes and businesses, and for the natural world on which we depend. These impacts are felt both globally and locally and urgent action is required to avoid further and more catastrophic effects.

The landmark report from the UN Intergovernmental Panel on Climate Change, published in August 2021, was described as a "code red for humanity" by the UN General Secretary. While providing the strongest of reality checks for political leaders and the fossil fuel industry, the report is nevertheless clear that with a commitment to cut global greenhouse gas emissions in half by 2030 and to reach net zero greenhouse by the middle of this century, we can halt and possibly reverse the rise in temperatures.

In June 2021, shortly before the UN report was published, the UK government set in law the world's most ambitious climate change target: to cut emissions by 78% by 2035 compared to 1990 levels. The target recognises the importance of the 2020s as a decisive decade for climate action if we are to reach net zero greenhouse gas emissions by 2050 and ensure we keep global warming below 1.5°C.

In July 2021, the UK State of the Climate Report highlighted that 2020 was:

- The UK's third warmest year since 1884; all the years in the top ten are since 2002
- The UK's sunniest on record, and sunnier than most UK summers
- The UK's fifth wettest year on record; six of the ten wettest years have been since 1998
- One of the least snowy years on record; any snow mainly affected upland and northern areas

In the UK, we have already seen warming of around 1.2°C from pre-industrial levels and we need to act now, together.

In August 2019, a motion was brought before Bolton Council to declare a climate emergency and to produce a plan that addresses it.

Bolton's response to the climate emergency is set out in this strategy. To succeed, we must address important issues and we will need to act collaboratively across our partnerships, businesses and communities in a way that delivers real change in attitudes, knowledge and action on climate change.

This strategy makes commitments that align with what is happening on climate change globally, nationally and regionally. These commitments

support the Greater Manchester Five-Year Environment Plan, which aims to achieve net zero carbon emissions by 2038.

Climate change is not the only challenge we face. The uneven impact of the Coronavirus pandemic has shone a light on inequalities across the UK and locally. It has also, however, reminded people of things that are important to them, like local green space, traffic-free roads, clean air and access to nature.

We know this because our Big Climate Conversation, a consultation held between December 2020 and January 2021, allowed people in Bolton to tell us. What they said has informed and influenced our plan.

COP26

In the autumn of 2021, the UK will host the 26th UN Climate Change Conference of the Parties (COP26). COP26 will bring people together to accelerate action towards the goals of the Paris Agreement and the United Nations Framework Convention on Climate Change.

The UK is committed to working with all countries and joining forces with civil society, companies and people on the frontline of climate change to inspire climate action ahead of COP26.

The key goals of this landmark global meeting will be to:

- Secure global net zero greenhouse gas emissions by mid-century and keep 1.5°C within reach
- Adapt to protect communities and natural habitats
- Mobilise finance
- Work together to deliver action on climate change

Change in National Policy

The accelerating impact of climate change is of profound public concern in the UK and around the world. So too is the disappearance of cherished wildlife.

In response, the UK government launched its Ten Point Plan for a Green Industrial Revolution in November 2020, aiming to build back better from the pandemic, support green jobs and accelerate the path to net zero.

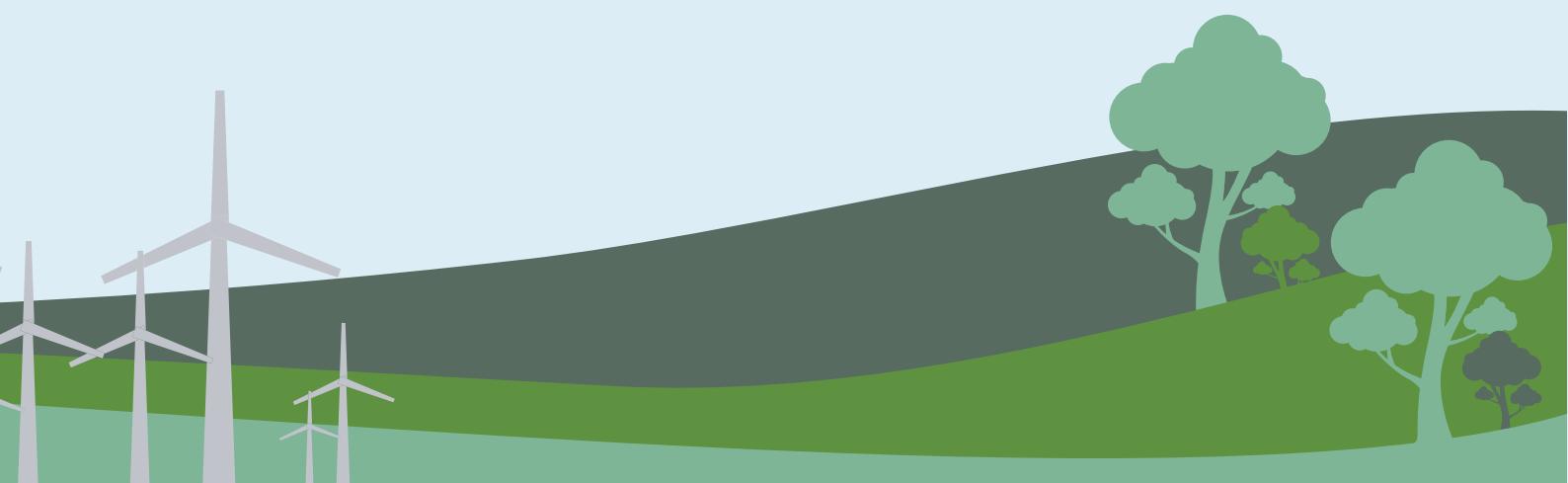
More recently, the Environment Bill aims to deliver the most ambitious environmental programme of any country on earth. It paves the way for serious action on biodiversity loss, climate change and environmental risks, and draws a clear link between these issues and public health. It is part of the wider government response to the clear and scientific case, and growing public demand, for a step-change in environmental protection and recovery.

“Bolton shouldn’t wait for consensus around the right opportunity - we need to act decisively now.”

“Communities will respond to action and despite some of the negativity around this agenda, I believe the majority of Bolton residents care and are willing to take action.”

“Children understand the need for urgent action and we owe it to them to protect our town and our planet for future generations to come.”

Comment from the Bolton Big Climate Conversation survey.



2

Our strategy, purpose and shape

Our Climate Change Strategy has been brought together by the Bolton Vision Partnership and you, the people of Bolton, and is a direct and collaborative response to the climate emergency motion brought before the council in August 2019.

Its central purpose is to reduce carbon emissions that contribute to climate change and lessen the impact of our collective activities on the environment. However, we also know that action on climate change opens a host of additional opportunities and potential benefits. For example, upgrading vehicles dependent on fossil fuels not only helps to reduce carbon emissions, but also contributes to cleaner, healthier air.

Because the causes of climate change are many, action to tackle them must be wide-ranging and multifaceted. This will require the support of many people, working together – national and local government, businesses, academia, community groups and residents, to name but a few. By working together, we can also share resources and ideas.

This Climate Change Strategy also links directly to the ruling administrations 20-Point Plan, which sets out the town's priority actions for 2020-21 as it recovers from the pandemic.

In addition, we have put in place strong governance processes so that the delivery of the strategy is measured and reported openly and transparently.

The good news is that we are already on a cleaner, greener pathway, with better communication and awareness, because so many people in Bolton responded to the Big Climate Conversation (refer to section 3).

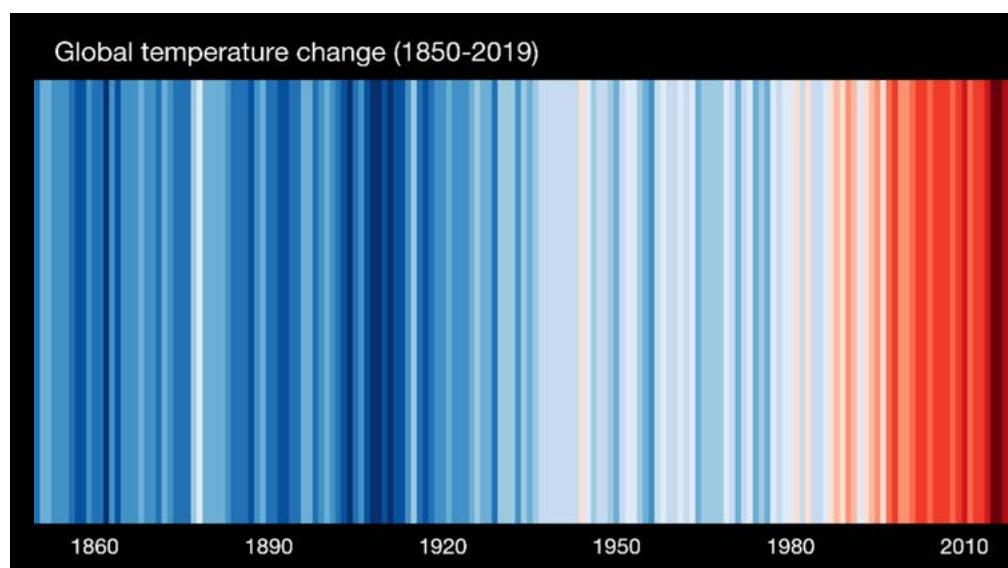
As the graphic below shows, time is running out. It is important that we act immediately and collectively to implement the changes necessary across our society. Everyone will need to play their part.

Our Climate Change Strategy consists of six strategic pillars and five cross-cutting themes.

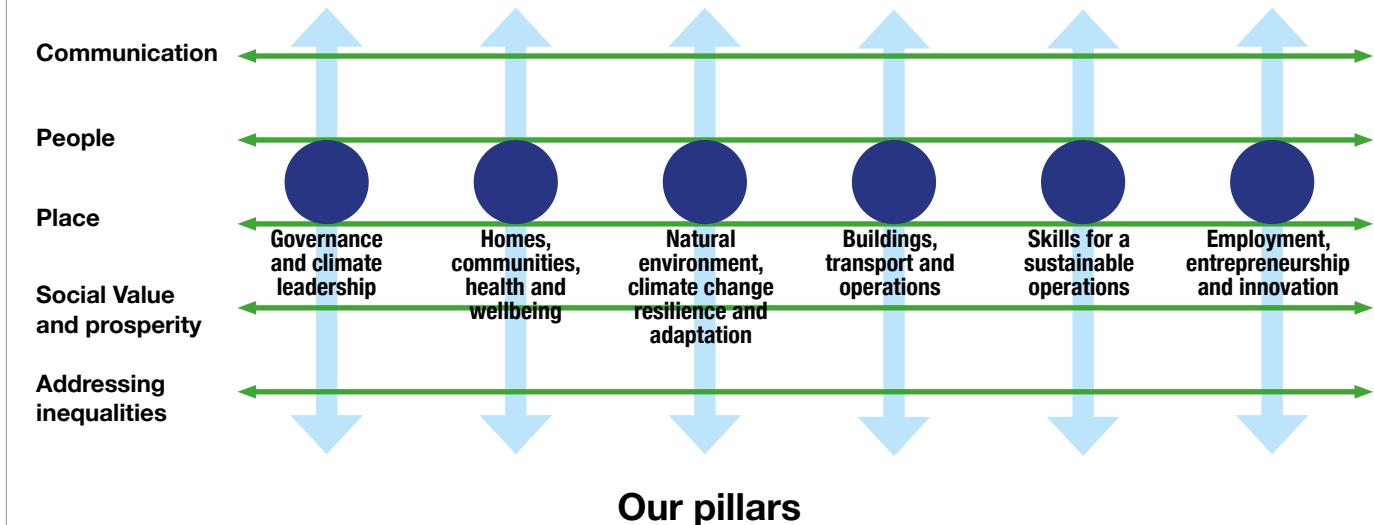
The pillars reflect key structural components across Bolton, its communities and businesses, while the cross-cutting themes reflect key issues that are important to the success of the strategic pillars.

The strategy also works towards a focused set of aims and objectives and is underpinned by a delivery plan with shared priorities and specific responsibilities for partners. For instance, improvements to social housing or the reduction of carbon emissions from the council's waste collection vehicle fleet.

We recognise that a whole host of complex and interconnected issues contribute to climate change. There are, however, common issues and opportunities that everyone can relate to. These include being more energy efficient, generating



Climate change strategy structure



clean energy, making better use of resources, reducing the amount of waste we produce in the first place and recycling more, planting trees and caring more for our green spaces, improving air quality and being socially responsible.

This is particularly important when it comes to addressing societal inequalities. For example, issues such as fuel poverty and deprivation will only worsen under the impact of climate change. That is why this strategy aims to not only address climate change and improve the natural environment in Bolton, but also commits to tackling issues of inequality.

Investment and development programmes delivered through the strategy will have a green core, so they do not impact the climate detrimentally but seek to benefit the environment. For example, by funding the planting of more trees we can reduce the risk of flooding. It is important that we understand the impact of the decisions we take and that what we do is affordable.

Across the Bolton Vision Partnership, we must also ensure that people receive training that enhances their understanding of climate change and allows them to play a positive role in achieving

the goals of the strategy. Platforms to grow the awareness, skills and knowledge of the community will likewise be key, as will harnessing the enthusiasm of our young people and the strength of local volunteers under the Bolton Green Umbrella Group and the wider community and voluntary services sector.

Additionally, in a resource efficient environment, it is important that we understand the experience and knowledge of our people and build capacity throughout the workforce and within the communities of Bolton. This will also enhance the skills and knowledge of our young people as the next generation responsible for taking action on climate change.

The success of this Climate Change Strategy will ultimately depend in a large part on the ability of leaders to raise awareness and build support for positive action on climate across Bolton's communities.

Effective communication is therefore essential.

This key area of communication is the most important factor in measuring the strategy's success and this is reflected in our top three key performance indicators (see page 34).

As our strategy is delivered across the partnership and with the assistance of Bolton's communities, we will measure and report our success through 32 key performance indicators (KPIs) that everyone can relate to. In addition, we will indicate how strongly we have made progress on each KPI.

We recognise that this climate change strategy will not be delivered by the actions of just a few people, but of many. Some actions will be more difficult than others. But at the heart of this strategy are the real changes we can all contribute to in Bolton.

Progress Assurance Level



3 The Bolton Big Climate Conversation: Your voices driving action on climate change

In declaring a climate emergency and producing a Climate Change Strategy for Bolton, it has been important to understand and align our thinking with your views and opinions.

We wanted to share these with you so that you can see how we have taken these on board and built a strategy where you can see a difference being made in your town. Your action and support on these very important issues will mean that the strategy will be a shared success.

What you said

The Big Climate Conversation, a consultation that ran from December 2020 to January 2021, had over 1,180 responses. People across a wide range of ages took part, with a quarter of responses from young people of school age. While the majority of responses came from the community (92.8%), we were delighted that 80 of Bolton's businesses also contributed to the consultation.

Here's what you said about climate change:

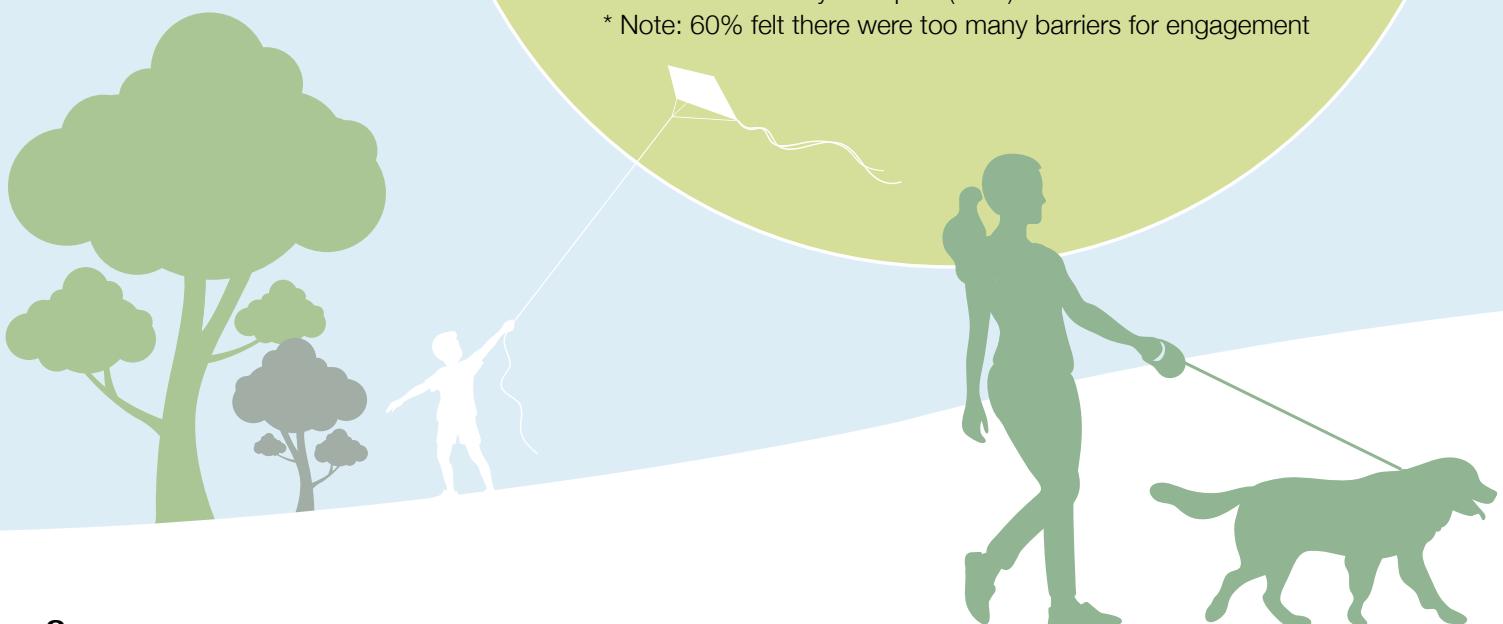
- 84% of respondents think climate change is important and 64% are more worried now than last year

This is what you said about climate change in Bolton:

- 40% of respondents had not seen a change in Bolton's approach to tackling the climate emergency
- 32% had made personal changes
- 13% can see community changes
- 15% heard things but saw no action

These were your top ideas for reducing Bolton's carbon footprint:

- Package-free shopping from local providers (67%) *
 - Increased options for upcycling (63%)
 - Information on energy efficient homes (54%)
 - Greener community transport (52%)
- * Note: 60% felt there were too many barriers for engagement





These were your top priorities for becoming carbon neutral and doing things differently:

- Raising awareness and educating people (58%)
- Increase investment into renewable energy (51%)
- Action by businesses (39%)

Note: Figures in brackets indicate level of support

These were the actions that got most support:

- There was overwhelming support for all the measures outlined in the consultation with the suggestion of planting trees, providing more green space and re-wilding being the most popular (93%)

These were your top priorities where you think Bolton can make a difference and take action:

- Renewable energy generation from solar and wind
- Planting more trees and rewilding areas to improve biodiversity and the quality of our green spaces, reduce flood risk and improve air quality
- Better recycling facilities to increase Bolton's recycling rate
- Improved cycle routes and more charge points for electric vehicles to support cleaner air and active travel
- A shared heat network, aimed at increasing the efficiency of heat in the town centre and reducing the use of fossil fuels

It is important that in delivering this climate change strategy, we take visible action and tell you about how we are doing. In the survey, 72% of respondents said that they hear things but don't see things happen and see no difference.

We will change that.



The strategy set out in this document reflects the feedback received through the Big Climate Conversation and the input of the Bolton Vision Partnership. It aims for Bolton to take proactive action on climate change and to show leadership in Greater Manchester. We hope you support it, play your part and make it a success.

4

Climate change and health

Bolton Council supports the recommendation outlined in the 2021 report by the Greater Manchester Inequalities Commission, The Next Level – Good Lives for All of Greater Manchester. This aims to tackle the wider inequalities brought to light by the pandemic. Through our overarching objectives, wellbeing and equity will be central outcomes to our future policy interventions.

Tackling inequalities in the health of people and our planet goes hand in hand with action on climate change. Recent work on health inequalities and climate change published by University College London's Institute of Health Equity, demonstrates that the impacts of climate change are likely to widen existing health inequalities in the UK.

If health equity is not considered when developing policies to reduce greenhouse gas emissions, there is a risk that their benefits, such as cleaner air, healthier diets and lower home energy bills, will be unequally distributed.

The direct impacts of climate change on physical and mental health are created by changing exposure to heat and cold, increased exposure to the sun's radiation, air pollution, pollen, emerging infections, flooding and associated water-borne diseases, and the impacts of extreme weather events such as storms and floods.

The indirect impacts occur because of climate change's impacts on the livelihoods of individuals; on prices of food, water and domestic energy; on utilities and supply chains that are at risk from extreme weather conditions; on global security; and on the increasingly complex interactions between these factors.

Equality



The assumption is that **everyone benefits from the same supports**. This is equal treatment.

Equity



Everyone gets the supports they need (this is the concept of "affirmative action"), thus producing equity.

Justice



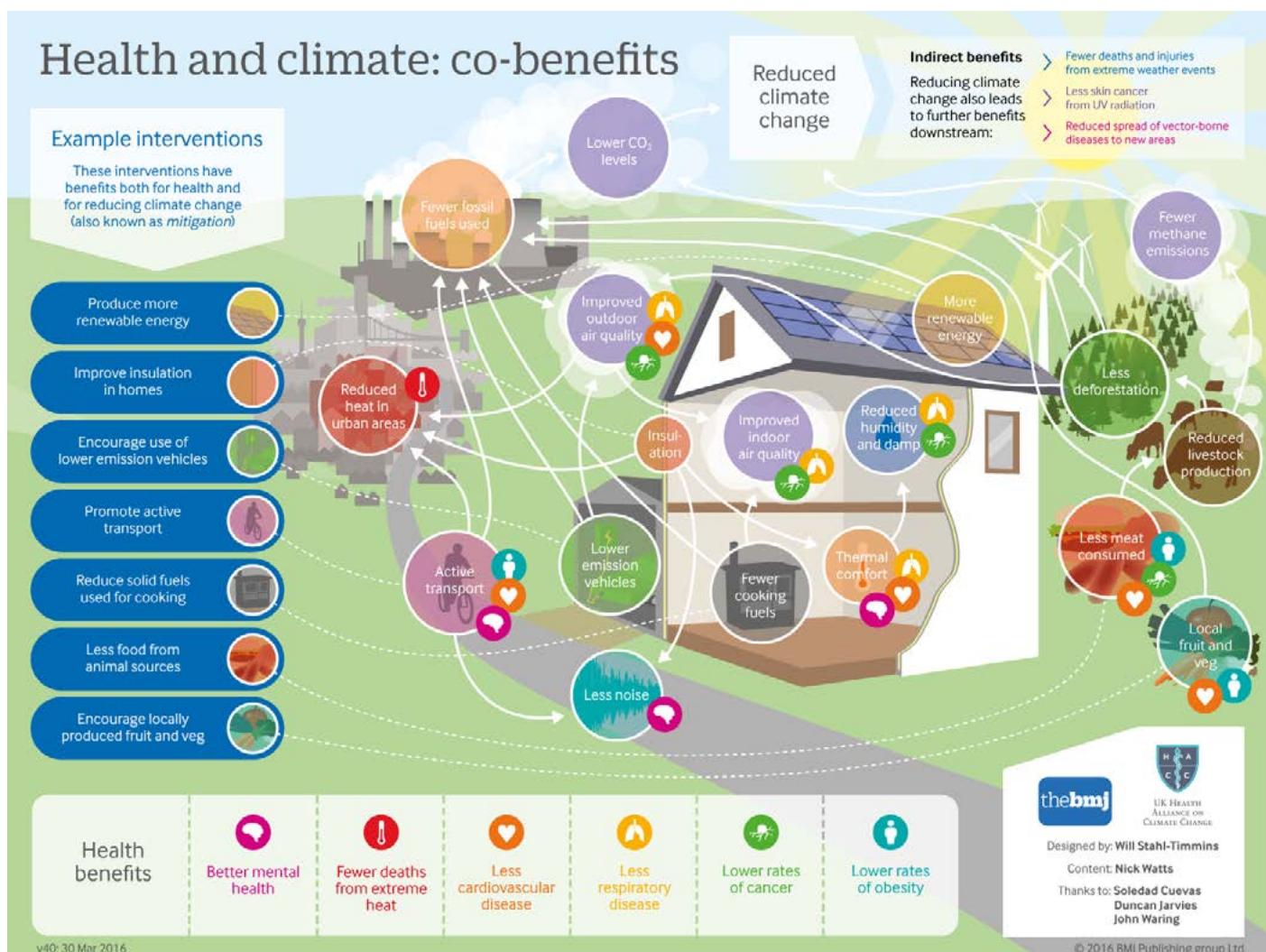
All 3 can see the game without supports or accommodations because **the cause(s) of the inequity was addressed**.
The systemic barrier has been removed.

Action to improve health equity can be consistent with measures to reduce greenhouse gas emissions. But this requires careful consideration of who benefits and who pays for different policy measures. The costs must not be unfairly borne by people on low incomes, who bear least responsibility for the emissions that cause climate change.

To avoid this, health equity must be an explicit policy goal of achieving net zero emissions by 2050 (as recommended by the Committee on Climate Change, the UK's independent climate advisory body). If we are to achieve a green recovery, we need to switch emphasis from GDP to wellbeing in measuring our country's economic success. (UCL IHE, 2020).

Therefore, addressing inequalities locally is a real priority and will influence the success of our climate strategy over the longer term through our health indicators. The positive interplay and interaction of these complex factors is shown below.

Read the report by UCL.
[Sustainable Health Equity: Achieving a Net Zero UK](#)



5

Our six pillars

Bolton's climate change strategy is supported by six themes, or 'pillars', that will be critical to its success.

Governance and Climate Leadership

This pillar sets a structure for governance and reporting on delivery of the Climate Change Strategy. It focuses on the role of leaders as excellent communicators, driving awareness and supporting training to enhance positive action on climate change. Of equal importance will be support for sustainable development and air quality improvements (achieved through strategic planning and use of local planning policies), the push towards zero carbon development and support for community renewable energy projects. Achievement in this pillar will be measured by the level of awareness of climate change issues and the perception of change among people in Bolton.

Homes, Communities and Wellbeing

There will be improvements to social housing to ensure that they meet minimum standards for building efficiency. This will improve the quality of our homes and thus the health and wellbeing of residents, as well as reducing carbon emissions and cutting energy costs. Improvements in active travel and access to green spaces will support better community wellbeing. Together with improvements in air quality, action within this pillar will result in improved outcomes for community health and associated health indicators.



Buildings, Transport and Operations

This is the pillar with the most potential to drive down carbon emissions in Bolton.

Carbon management plans will be developed for the buildings belonging to the Bolton Vision Partnership, including social housing. The resulting improvements in carbon emissions will be tracked and measured, and will be reported at a partnership level. We will look at purchasing greener electricity and will also develop options for a partnership approach to purchasing energy to bring better value for money.

Carbon emissions from the manufacture of goods and services will be measured and reported and a social value policy framework will be adopted and shared across the partnership. Metrics will be developed to measure success. In the built environment, we will use environmental design principles to set standards and options for new buildings, refurbishments and town centre redevelopments.

The partners will investigate the potential for their buildings to install solar power generation to support Bolton's share of the Greater Manchester solar generation target of 45 MW by 2024, as set out in the Greater Manchester Five-Year Environment Plan. Wind energy generation will be considered, as well as opportunities for community energy projects across available land and non-domestic stock.

New building development will move towards zero carbon before 2028, targeting the reduction of fossil fuels and growth in the use of renewable and clean electricity. Aligned with the actions in the Environment Bill, these investments will also improve green infrastructure, reduce flood risk, increase habitat availability and result in biodiversity net gain.

The council will align its waste targets with those of Greater Manchester and adopt a new waste management strategy when a new one is agreed across Greater Manchester. All partners will develop waste management plans and adopt a target of zero waste to landfill across their operations.

The council will work with Transport for Greater Manchester to reduce carbon emissions from transport and travel. The Greater Manchester 2040 Transport Strategy Delivery Plan promotes the "Right Mix" target of one million more sustainable journeys per day by 2040 with zero net growth in motor vehicle traffic. This relies on providing infrastructure that will allow increased active travel, greater use of public transport and a shift to electric vehicles. The council will regularly review its local implementation plan to ensure transport contributes to improvements in climate change, carbon emissions, air quality and health.





Natural Environment and Climate Resilience

Nature based solutions will be at the heart of supporting the natural environment and building resilience to the effects of climate change. New woodland will be created, with tree planting targeted at areas of greatest need where the environmental, green infrastructure and climate change benefits can be maximised. New links to existing and new woodland will be created, while avoiding the loss of, or harm to, other priority habitats.

Bolton will develop a plan to improve local air quality. It will support investment in cleaner vehicles and active travel, promote clean air zones and support the requirements and opportunities of the Greater Manchester Clean Air Plan (endorsed by the cabinet in July 2021). Clean air zones will aim to reduce nitrogen dioxide levels in Greater Manchester, with implementation expected in spring 2022.

Partners will work with the Bolton Green Umbrella Group and community and voluntary services sector to promote community action on climate change and the local environment and to recognise its value.

We will take opportunities to improve and rewild areas of green space. We will also support areas that have the potential to be allotments for the community, which will build

knowledge around natural capital and the value of the environment.

We will contribute to achieving and maintaining good river quality. And we will highlight the impacts of fly-tipping (and other environmentally irresponsible behaviour) on our local environment and the costs of dealing with it.

Skills for a Sustainable Future

Investing in our people is the most important action of this climate strategy for it to be delivered successfully.

We will train and develop our employees in climate change awareness and support the delivery of carbon literacy across the partnership. We will add climate change awareness to our induction for new staff, as part of our climate conversation with colleagues, and during staff professional development reviews.

The views of young people can strengthen the delivery of this strategy and we will continue to engage with the Bolton Youth Council so that their voice can be strongly heard. This is reflected in the Youth Council's generally favourable view of Bolton's actions on the climate emergency.

Bolton's Fund (see case study, page 18) will also provide opportunities for our young people to develop their

experience, knowledge and wisdom and through their ideas present opportunities to act innovatively on climate change.



Employment, Entrepreneurship and Innovation

Partnerships and engagement with businesses will play a key role as we aim to build back better from the pandemic.

We will develop a Bolton Business Hub digital platform that will become the go-to place for employment, procurement, contracting and business development, and which engages and connects with local businesses. In addition, it will enhance opportunities for environmental and energy-based projects, skills and knowledge for social value.

We will create a new Green Business Hub called Greenworks, which will act as centre of excellence. It will engage with businesses, Bolton University and colleges to realise new skills and capacity through environmental technologies and innovation and take positive action on climate change.



{ Investing in our people is the most important action of this climate strategy for it to be developed successfully. }

6

Our five cross-cutting themes

The strategy proposes five themes that run through the strategy pillars.

People

We will improve and enhance awareness and training, taking responsibility and ownership for decisions that affect climate change. This will enhance engagement opportunities, drive health benefits, grow skills to enable our workforce to offer a competitive edge and enhance jobs and business opportunities.

Place

We will ensure that decisions on urban regeneration and development have a green core for our buildings and homes. We aim to improve housing and access to green space, whilst also improving the environment, air quality and resilience to the effects of climate change.

Social Value and Prosperity

We will drive social value through our procurement and business processes. This will help to improve the health and wellbeing of our residents, so that they can live healthy, fulfilling lives for longer, while developing stronger, cohesive, more confident communities in which people feel safe, welcome and connected.

It will also give our children the best possible start in life, so that they have every chance to succeed and be happy. We will support older people in Bolton to stay healthier for longer, and to feel more connected with their communities.

Our policies will help to attract businesses and investment into the borough, matching our workforce's skills with modern employment opportunities, while at the same time protecting and improving our environment, so that more people enjoy it, care for it and are active in it.

Communication

We will be clear and relevant in our communications to resonate with colleagues and the community and we will be transparent about our progress towards our climate change targets.

Our communication and engagement will augment partnerships, assist in service design, boost awareness and positively impact the growth of capacity, skills and jobs, increasing the effectiveness of our climate change strategy.

Addressing Inequalities

In addressing inequalities we will take a balanced approach, which will be a combination of universal and targeted interventions, with intensity of action based on need.

7

What we are going to do

The following six sections set out what we aim to achieve under each of the strategic pillars, with actions, a baseline measurement, targets and metrics.



Governance and Climate Leadership



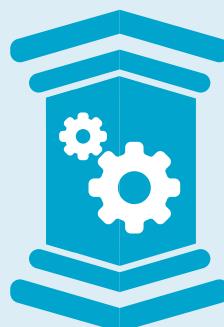
Homes, Communities and Wellbeing



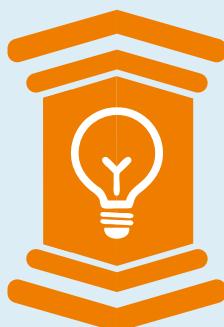
Buildings, Transport and Operations



Natural Environment and Climate Resilience

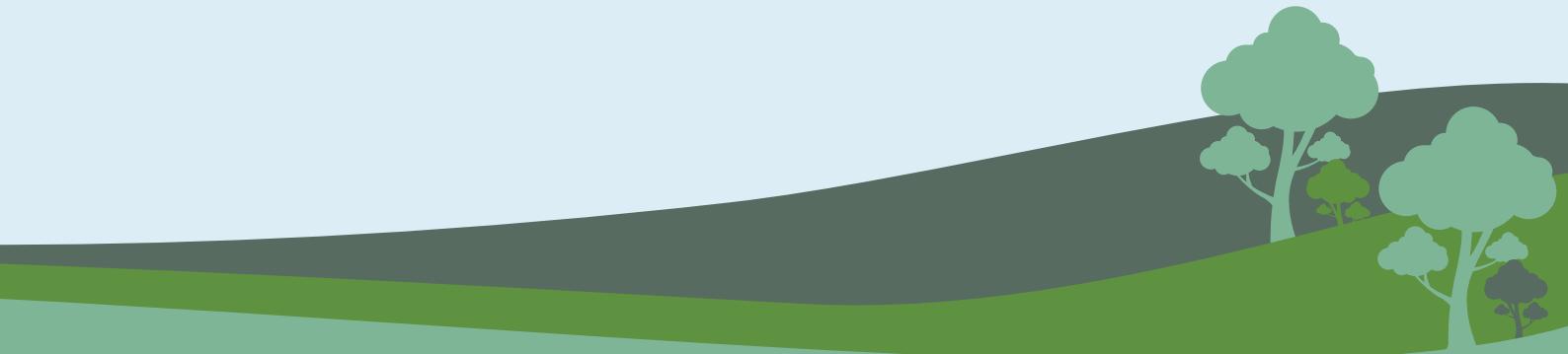


Skills for a Sustainable Future



Employment, Entrepreneurship and Innovation

{ Each pillar has an accompanying high-level delivery plan that has been developed, shared, and owned by the Bolton Vision Partnership. }





Governance and climate leadership

The Bolton Vision Partnership will be responsible for leading and delivering the Bolton Climate Change Strategy. It will ensure that there is strong ownership and accountability, and a measurable response to meeting our commitments.

Key priorities will be:

- Effective delivery and communication, positively impacting on awareness of the climate change strategy and highlighting the actions and contributions of the council and its partners, stakeholders, communities and businesses
- Making the messages we share relevant, meaningful and practical, so that they resonate with our varied and diverse local communities
- Supporting national targets and Greater Manchester's climate plans and associated strategies with our own delivery plan
- Demonstrating visible and tangible achievements towards our targets for Bolton and its communities. This means protecting health and wellbeing and reducing inequalities for residents, while enabling and promoting activities that protect the environment and disincentivising those activities that harm it
- Reporting clearly through our climate dashboard, describing the progress towards achieving our environmental and climate change targets
- Achieving progress in short, medium and long-term timescales. Priority actions will be completed early and assurance given, so they do not need to be replaced by actions of greater impact in the future

What you said...

“Prioritise it as council business and cascade it to town councils. Encourage town councils to be involved as they reach grass roots. Link with religious organisations to cascade further. Encourage everyone to take part making even small changes. Publicise initiatives.”

“Learn from other councils and share best practise. Have a regular column in local news and media to highlight the issues and show people what can be done. Work through schools and partners to ensure that this is a higher priority than increasing consumption. Make sure that an energy audit is in place in all council buildings and housing associations so that progress can be measured and success can be celebrated. Work on this with faith groups and become a beacon of hope.”

“Better communication from Bolton Council, Bolton at Home and other large institutions on what they are doing and why i.e. how these actions will be effective. Build partnerships with residents, supporting and recognising voluntary groups who contribute massively to environmental improvements.”

Comment from the Bolton Big Climate Conversation survey.

Aims and targets

Cross Cutting Theme	Aims	KPI	Target	Baseline	Base Year
Communication	The Bolton Vision Partnership will be strong and inclusive to effectively deliver, embed and enhance communication of the Climate Change Strategy to increase awareness, action and contribution of its colleagues and stakeholders.	Overall % of colleagues	65% of colleagues agree that action is being taken to reduce environmental impact and help mitigate climate change.	Baseline in place by 2021.	2021
Communication	Effectively consult with the Bolton community to encourage a growing and overall favourable view that Bolton is acting positively on climate change and that clean, green and environmental attributes of the borough are reflected.	% view	50% of the community agree that they are seeing evidence that Bolton is acting positively on climate change and that clean, green and environmental attributes of the borough are reflected.	Baseline in place by 2021.	2021
Communication	To ensure that Bolton Youth Voice is effectively communicated with, so that they have good awareness and can access evidence to see that Bolton is responding positively to the climate emergency.	% view	50% of the Bolton Youth Voice agree that Bolton is responding proactively to the climate emergency.	Baseline in place by 2022.	2022
Place	Bolton businesses are responding to the climate emergency and have plans in place.	% businesses	25% of Bolton businesses that respond to the Green Business survey are putting in place plans to reduce emissions and environmental impacts.	Baseline in place by 2021.	2021
Communication	Bolton's Climate Change Strategy and its progress will be clearly reported and its metrics accessible and visible to colleagues and stakeholders. The strategy will connect to, support and align with the Greater Manchester Five-Year Environment plan. The Bolton Vision Partnership plan will be reviewed and updated to fully embed the climate change targets.	Assurance level	Annual climate change report is produced and shows overall substantial or reasonable progress on the climate change strategy delivery plan and its targets.	First report due 2022.	2021
People	Build internal capacity for roles to have environmentally focussed responsibilities as part of overall responsibilities and that they are included in the role profile of the recruitment drive.	Full time equivalent (FTE) staff	Total FTE role equivalent with environmental responsibilities reported as a Vision Partnership total of at least one FTE/1000 employees.	Baseline in place by 2021.	2021
Place	The new Bolton Local Plan will respond to the Places for Everyone strategy and produce a new planning guidance that is aligned to zero carbon targets for new development and housing, protects the local environment and is resilient to climate change.	Average EPC rating of new development	Pathway for zero carbon new development and new housing by 2028.	Current planning and building compliance regulations.	2022

Case Study

Funding community action



Bolton's Fund is an investment programme for the voluntary, community and social enterprise sector in Bolton, established to test new and innovative ways of investing in and valuing our communities.

The fund brings together funding from Bolton Council, NHS Bolton Clinical Commissioning Group, Bolton at Home, Bolton Community and Voluntary Services, the GP Federation and local businesses.

Hall'ith Wood

Hall'ith Wood Community and Environment Group were awarded £775 to organise a climate change walk, activities and wildflower planting.

Their flagship project is their community garden located in the heart of Hall'ith Wood, which they started to create from a derelict area of land in 2013. They improve and maintain it each year for the benefit of the community and usually hold two to three events on it each year.



Halliwall Environmental Ramblers

Halliwall Environmental Ramblers is a community volunteer group that was awarded £1,475 by the Bolton Fund to engage with 60 families and run weekly conservation tasks involving six to twelve people in each session.

People learn about habitats and biodiversity and the ways these can be managed. Practical conservation activities, including planting trees and plants, are partnered by educational activities such as pond dipping and bug hunting, throughout the seasons.

Family activities have included tool use and maintenance, outdoor cooking and creating bug hotels and habitat piles.



Homes, communities, health and wellbeing

Those people already experiencing challenges caused by climate change are expected to be hit hardest by them, thereby exacerbating existing health and broader inequalities.

The Bolton Vision Partnership will prioritise policies that address and reduce the impacts of the climate crisis, alongside reducing inequalities amongst people from all groups and those from more deprived socio-economic backgrounds.

Priorities in this area this will be:

- Facilitating safe and accessible active travel for all and promoting alternative travel options
- Building a comprehensive and coordinated approach to enabling active travel that incorporates planning, infrastructure, transport, engagement and communication
- Access to and use of high-quality green and natural spaces, including high density built-up areas of the borough
- Improving air quality, especially in our most deprived communities
- Increasing the supply of energy efficient, affordable homes in both new and existing stock, and over the longer-term, decarbonising domestic heating without increasing inequalities

What you said...

“Massively improving public transport, alongside deprioritising cars in favour of walking and cycling would be a good step - making public transport green within the current system misses the point.”

“Our borough appears to currently be stuck in the past prioritising free car parking and more parking/drop off places with more petrol stations and drive throughs when we should be looking at changing our relationship with these modes when the future is away from these. If we pioneer public transport and active travel now, we will reap the rewards as everywhere will need to do this in time to come.”

Comment from the Bolton Big Climate Conversation survey.

Aims and targets

Cross Cutting Theme	Aims	KPI	Target	Baseline	Base Year
Addressing Inequalities	A housing strategy for Bolton that delivers a decrease in heating needs and increases the energy efficiency of fuel poor homes and supports the upgrade of privately rented property in line with government targets.	Average EPC	All fuel poor homes to be upgraded to Energy Performance Certificate (EPC) Band C by 2025 where practical, cost-effective and affordable. All new build to be zero carbon by 2028.	2025 2028	2019/2020
Addressing Inequalities	The physical, economic and social characteristics of housing, places and communities have an important influence on people's physical and mental health and wellbeing. Health indicators of the community are improved with warmer, better homes.	Improved health outcomes health indicator.	Monitor and report the health outcomes of improved living environments especially in areas of fuel poverty and deprivation.	TBC	2019/2020
People	A measurable increase in active travel within the borough and people are able to better access green spaces.	% journeys	Increase the proportion of journeys of less than 5km made by walking or cycling.	TBC	2019/2020
People	Better air quality is achieved and has overall beneficial outcome to population health.	Mortality rate perceived from air pollution health effects.	Monitor and report the mortality rate attributable to health effects of air pollution.	TBC	2018/2019



Case Study

Improving lives with low carbon heating



Local housing association Bolton at Home worked in partnership with Greater Manchester Combined Authority to deliver an innovative heating solution for some of its customers who were struggling to heat their homes affordably.

When the Green Lane estate in Horwich was built in 1975, there was no gas mains connected to the development and so the homes have been heated with inefficient electric heat storage systems ever since.

Over time, electricity prices have risen dramatically. This led to high running costs and an out-dated form of heating. Many customers chose not to put the heating on.

In winter 2019, Bolton at Home installed 69 air source heat pump systems in customers' homes. These systems extract heat from the air outside for heating and hot water. They use conventional radiators and controls, which appeals to customers and are easy to operate.

The project has multiple benefits and has made a real difference to people. It will save an estimated 70 tonnes of carbon emissions per year from heating the properties and it has also significantly lowered the running costs for customers, helping to address inequalities and reduce the risk of fuel poverty.

The heat pumps cost between £1.50 and £2.00 to run per day. Customers said that their storage heaters could easily cost over £4.00 a day during the winter. Bolton at Home is considering installing similar systems in more of its all-electric properties.

“It’s lovely to have a warm flat and hot water. Very satisfied. Thank you.”

Green Lane resident.



Buildings, transport and operations

Development and investment in Bolton, including buildings, public spaces and infrastructure, will make a key contribution to our aim of achieving net zero carbon emissions by 2030.

What you said...

"Increase access to renewable energy options....everybody I know would happily have solar panels on their houses but nobody can afford to buy them! Council buildings should be setting an example and Bolton at Home etc. should be adding solar panels to all of their properties. There's no excuses. We are past the point of small token changes...action on a grand scale is needed now."

"Better recycling facilities - make it easier for people to recycle without too much effort."

"Change planning policy so that all new houses in Bolton must be carbon neutral and reduced water measures over current standards."

"More cycle lane provision and ensure they are fit for purpose."

Comments from the Bolton Big Climate Conversation survey.

Key priorities in this area will be:

- Making decisions on asset management and development, including private development, that take into account the council's targets on climate change, maximising local renewable energy opportunities, supporting biodiversity, and increasing green infrastructure. This will reduce impacts such as flood risk and increase resilience to climate change
- Ensuring that town planning and regeneration align with zero carbon building targets and do not add to climate change
- Developing investment and operational plans that align with and contribute to our goal of being carbon neutral by 2030, so far as is practically possible. New investments and efficiency improvements in our buildings will shape our understanding of carbon emissions and efforts to reduce future emissions, while also sustaining a local green economy and attracting new business investment
- Increasing the amount of renewable energy generated by solar panels on buildings, to contribute Bolton's fair share of the Greater Manchester solar target and support community energy projects
- Improving air quality through the development of a local air quality plan, which will focus on reducing vehicle emissions, progressing towards a cleaner, greener vehicle fleet, creating clean air zones, reducing dependency on vehicles, promoting active travel and, where possible, embracing the principle of '15-minute neighbourhoods' for urban development
- Improving waste and resource management across the borough to deliver on objectives and targets identified in regional and national resource and waste management strategies including elimination of single use plastics in the supply chain
- Building on the new culture of flexible working to enable a rationalisation of property assets and allow as many staff as possible to avoid the rush hour commute and promote family benefits
- Making use of digital meetings for formal and informal meetings, minimising the need for travel while promoting inclusion and access for all

Aims and targets

Cross Cutting Theme	Aims	KPI	Target	Baseline	Base Year
Place	The use of green infrastructure opportunities provided by new development will reduce the causes and impacts of flooding (where appropriate using natural flood management techniques) so that new development will not increase flood risk and that opportunities are taken to use nature-based solutions.	Hectares	Increase resilience to flood risk through any new development and nature-based opportunities.	TBC	2021
Place	The Bolton Vision Partnership will work collaboratively to procure a long-term, value-for-money power purchase agreement that secures carbon free electricity for the partnership.	% of electricity supply that is carbon free.	Carbon neutral electricity by 2022.	10,042	2018/2019
Place	Produce or revise carbon management plans that set out targets to reduce energy and carbon emissions for Scope 1, 2 and 3 for operations emissions, in line with trajectory and carbon neutral 2030 target, and align with the strategic asset management plans.	Tonnes CO2e	14,455 T by 2022 10,908 T by 2024 7272 T by 2026 3636 T by 2028 Aspiration for carbon neutrality by 2030.	Property portfolio building energy 19,516 Fleet vehicles 2300 F-Gas refrigeration emissions Tbc (So Far) Total CO2e - 21,816	2018/2019
Place	Understand and monitor the Scope 3 carbon footprint of purchased goods and services. Scope 3 emissions are the indirect carbon emissions that are not under the direct control of the consumer, such as emissions associated with the manufacture of goods and services EG. bricks, clothing, food.	Tonnes CO2e	Scope 3 carbon emissions footprint is defined for procured goods and services.	Baseline to be established.	2022
Place	Bolton Vision Partners will aim to improve the efficiency of their building stock through their strategic asset management plans and investment programmes, at or above the average Greater Manchester targets set out in the Five-Year Environment Plan and aligned to their carbon management plans.	Average DEC letter and score (weighted by area).	Average Display Energy Certificate improved to D by 2024 C by 2027 B by 2030	TBC	2018/2019
Place	Produce new renewable energy that is used by buildings within the borough.	Megawatts	Five megawatts of new generation on buildings and land owned by Bolton Vision Partners by 2024.	0	2018/2019
Place	Support partnerships for community energy and produce renewable energy that is used by communities and businesses in Bolton.	Megawatts	Two megawatts of renewable energy projects from community energy projects.	0	2018/2019

Cross Cutting Theme	Aims	KPI	Target	Baseline	Base Year
Place	<p>Deliver against objectives set out within the Greater Manchester Waste Management Strategy and the Resources and Waste Strategy for England.</p>	% Tonnes	Municipal waste total Rate per household Landfill NI 191 - Residual Waste NI 192 - Recycling 50% by 2020 52% by 2022 54% by 2024 56% by 2026 58% by 2028 60% by 2030 65% by 2035	86,776 T 637.07 Kg/House	2018/ 2019
Place	<p>Develop waste management plans that support the GM Waste Management Strategy and the Resources and Waste Strategy for England.</p> <p>Zero waste to landfill aim and to maximise recycling with interim targets.</p>	% Tonnes	Zero waste to landfill. Residual waste to be in line with GM targets or better. Recycling rate to be in line with GM targets or better. 52% by 2022 54% by 2024 56% by 2026 58% by 2028 60% by 2030 65% by 2035	TBC	2018/ 2019
Social Value and Prosperity	<p>Social Value Policy is adopted across the Bolton Vision Partnership and an agreed and effective metrics framework is in place to monitor outcomes across the partnership.</p>	TBC	All Vision Partners adopt the Bolton Social Value Policy and Framework.	Metric framework and baseline to be established.	2021



Case Study

Reducing waste, raising recycling



With over 125,000 households in Bolton, the council's Waste and Recycling Collection service empties around 14 million bins every year.

The service has won national awards recognising its hard work and dedication in raising the town's recycling rates, reducing the amount of waste sent to landfill and improving the environment for the benefit of the Bolton community.

In 2016 the service replaced all large residual waste bins with smaller ones. Following this, the percentage of household waste sent for recycling or composting increased from 39% to 48% and the amount of residual household waste decreased from 469 kg per household to 411kg.

All the garden waste collected is processed in the UK to make soil improver, while 66% of plastic and 51% of paper and card are sold to UK markets. All glass bottles and jars, aerosol cans, foil and food and drinks cans are sold for reprocessing in the UK.

The service has recently invested in 21 new refuse collection vehicles with the most efficient Euro six diesel engines. These will replace the oldest vehicles on the fleet, reducing carbon emissions and allowing the department to comply with the Greater Manchester Clean Air Plan. Collection routes are also optimised to ensure they are economical and help reduce carbon emissions.

The council is also aiming to become plastic free, with a target of eradicating single use plastics by the end of 2024.

Over the past six years, the service's efforts have contributed to a change in the attitudes and behaviours of Bolton's residents towards minimisation and recycling of waste. It works with residents to promote recycling via door-to-door visits, waste audits, advice, social media, stickers and council communications.

It also works with schools to promote waste minimisation and recycling from a young age. Work with Bolton College and the University of Bolton promotes exhibitions of art created from unwanted waste.

Together with other council departments, landlords and management companies, the service also organises action days that bring people together to carry out litter picks and rubbish removal, and to provide education and support for residents about recycling.



Natural environment and climate resilience

Investing in the natural environment and nature-based solutions will improve the environment in the borough and its surroundings and increase resilience to climate change. For residents, it will improve physical health and mental wellbeing and reduce inequalities.

Key priorities in this area are:

- Improving and enhancing the tree and woodland areas around the borough through the Greater Manchester Tree Strategy and Trees for Climate plan, focusing on greater action in disadvantaged areas to reduce inequalities. For example, boosting street trees in the urban environment
- Improving and enhancing green infrastructure to reduce surface water run-off and flood risk, particularly through urban regeneration and planning
- Using development opportunities to increase areas of urban tree planting in order to reduce air pollution, extremes of temperature and flood risk, and to contribute to reducing social inequalities
- Maintaining river quality and enhancing wildlife, habitats and natural capital, including taking opportunities arising from urban regeneration and the Greater Manchester Natural Course Project
- Recognising and promoting community volunteering and action on the climate emergency. Taking opportunities to rewild areas, increase community growing space and benefit health and wellbeing

What you said...

“Engage with local environmental groups, I know the council can't afford the changes so get local groups on side.”

“Off-setting our carbon emissions by planting as much, in as many places, around Bolton as possible.”

“Planting fruit trees in public spaces to allow people to pick them, community allotments, increasing green spaces.”

“More local food production, agroforestry and wild space for diversity. Incentivize sale of local food and other production to reduce road/air miles.”

Comments from the Bolton Big Climate Conversation survey.

Aims and targets

Cross Cutting Theme	Aims	KPI	Target	Baseline	Base Year
Place	An increase in biodiversity area across the borough and opportunities are taken associated with new developments.	% change in biodiversity area.	Increase biodiversity area associated with any new development and there is no net loss.	-0.2	2018/2019
Place	Increase the awareness of fly-tipping to bring attention to the cost and the damage to Bolton's environment.	Tonnes	Zero incidents of fly-tipping with zero impact on council budget.	993.23	2019/2020
Place	Deliver and promote air quality improvements across the borough aligned with the Greater Manchester Clean Air Plan. The plan will lead to a reduction in sources of air pollution from road traffic to meet or exceed compliance levels and in particular focus on more deprived areas, to improve health outcomes.	Micrograms/M3	Meet legal compliance as agreed with government in the GM Clean Air Plan.	TBC	2018/2019
Place	Support the Greater Manchester tree and woodland strategy, All Our Trees, and target tree planting at the areas of greatest need where the environmental, green infrastructure and climate change benefits can be maximised. Enhance linkages to existing and new woodland and reduce flood risk, while avoiding the loss of, or harm to, other priority habitats.	Hectares	Plant 15 hectares of new trees by 2025.	0	2018/2019
Place	Support the Greater Manchester tree and woodland strategy, which aims for a net increase of leaf area across the borough.	Hectares	No net loss of leaf area.	9300	2018/2019
Place	Prevention of pollution and increase in green infrastructure will ensure that Bolton's rivers are in good condition and that flood risk is reduced.	%	Rivers remain in good condition.	90	2018/2019

Case Study

Planting 1,000 trees



Manchester, Bolton & Bury Canal Society helped the Canal & River Trust to apply for a grant of £8,800 to fund the planting of over 1,000 trees to help reduce soil erosion. The trees were planted on two hectares of sloping land between the canal and the River Irwell at Nob End Basin.

The project included 50 fruit trees to create a community orchard and local conservation volunteers will help to look after the trees and involve the local community.

The grant was awarded by DEFRA and administered by the Environment Agency.

Canal & River Trust ecologist, Tom King, said: "This is a fantastic natural solution to improving the local environment and protecting the area from flooding. Roots from the trees will help to bind the soil together and absorb run-off, slowing down the flow of water during periods of heavy rainfall. It will also help to improve biodiversity along the two waterways and eventually provide free fruit to local residents – a win-win project for everyone!"

Adam Chapman, from the Environment Agency, commented: "Prestolee Locks, adjacent to Nob End Site of Special Scientific Interest in Bolton, was selected as part of a nationwide programme of tree planting to protect the water environment. One thousand trees have been planted at the Nob End Community Woodland, which will help to reduce erosion of the riverbanks, act as a sponge to soak up rainwater and improve the visual impact of the landscape."

"This is a great example of the environmental benefits for our local community which can be achieved when the Canal & River Trust and the Canal Society work together on a project."

Chris Nash, fundraising officer at Manchester, Bolton & Bury Canal Society



Skills for a sustainable future

This strategy will drive awareness of climate change among individuals, the community and businesses to encourage collaboration on, and enhancement of, skills aimed at reducing environmental impacts.

Key priorities in this area will be:

- Promoting the application of knowledge and skills in Bolton and its strategic partners
- Fostering an environment in which everyone can take a proactive role in practical and positive action on climate change, leading to social and economic benefits

Cross Cutting Theme	Aims	KPI	Target	Baseline	Base Year
Communication	Sustainability and climate awareness is made a skills priority within the adult education service to enhance sustainability skills and employability.	% of courses.	Increase % of adult education courses run with environment and climate change skills emphasis.	0	2019/2020
Communication	Work with the Bolton Green Umbrella Group to capture the true extent of environmental volunteering and community action in Bolton, bringing community action into the heart of the strategy and its communication.	Community environmental action volunteer hours.	Understand the tangible impact of the Bolton Green Umbrella Group.	TBC	2019/2020
Communication	Help meet the skills gap for retrofitting properties with green technologies and transitioning to the electrification of heating systems, by enhancing the training and development of property maintenance teams.	Number of projects completed	Engineers are trained in new skills for green technology in homes.	0	2021

What you said...

“Education is critical - many people are not aware of the impact that global warming is having - and how soon it will affect them and their families.”

Comments from the Bolton Big Climate Conversation survey.

Case Study

Bolton's youth-led climate fund



Bolton Youth Voice worked in partnership with Bolton Council and Bolton Community and Voluntary Services to create a youth-led climate fund.

The fund gives groups of young people aged 13-21 the chance to apply for up to £500 to develop projects that help combat climate change and raise awareness of environmental issues among young people in Bolton.

Bolton Youth Voice created a virtual event that enabled young people to pitch their ideas to a mixed panel of adults and Youth Voice members.

The event ran very smoothly, with six groups presenting on the evening. All the presentations were excellent and really well received by the panel. All six groups were awarded the money that they applied for, which was an excellent result.

- Kings Church, to raise awareness of the importance of trees to our environment by hosting a tree planting festival
- AFC Masters football club, to raise awareness about the impact of plastic on the environment and reduce the use of players' drinking bottles
- Bolton School, to raise awareness about food waste and encourage young people to waste less food

- Eden Boys School, to raise awareness about eco-friendly food by setting up a Fairtrade tuck shop to promote environmentally friendly Fairtrade products
- Westhoughton High School, to learn about the importance of biodiversity by creating a sustainable and biodiverse memorial garden
- Bolton Youth Voice, to set up a clothing swap for teenagers in Bolton to promote sustainable fashion and raise awareness about the impact of fast fashion on the environment

"It was great to see so many young people all over Bolton with ideas and projects around the environment and it's amazing that I was able to be part of the panel, it was so empowering."

Isabel, Youth Voice panel member



Employment, entrepreneurship and innovation

Taking action on climate change will present us with opportunities to grow Bolton's economy, create new jobs and enable people to learn new skills.

Key priorities in this area will be:

- Using the Business Hub digital platform and the Greenworks project to foster the interaction of local businesses and drive enterprise, growth and innovation
- Collaborating with education providers to build skills capacity and deployment to drive economic prosperity
- Enabling businesses to reduce their carbon footprint and environmental impacts through an innovative digital platform, created in Bolton, for Bolton
- Promoting digital business engagement and supporting the development of community digital infrastructure to support employment and entrepreneurial activity

Cross Cutting Theme	Aims	KPI	Target	Baseline	Base Year
Social Value and Prosperity	Develop the Bolton Business Hub digital platform as the go-to place for employment, procurement, contracting and business development, in order to engage local businesses and enhance opportunities for environmental and energy-based projects, skills and knowledge.	Businesses engaged.	Local businesses engaged in the Digital Business Hub and Greenworks.	TBC	2022
Social Value and Prosperity	Create a centre of excellence by working with Bolton University, Bolton College and the University Technical College, to explore environmental technologies and innovations and promote the deployment of technology and skills developed in Bolton, for Bolton. The Greenworks project will be an excellent opportunity to showcase this way of working, improve training, engage with businesses and take positive action on climate change.	Enterprise and innovation projects.	Deploy technology developed in Bolton, for Bolton, that has a positive environmental impact.	TBC	2021

What you said...

“Businesses also have a great chance in reaching out to the citizens so they should also be encouraged to do their bit.”

Comments from the Bolton Big Climate Conversation survey.

Case Study

Bolton's first low carbon business park



Greenworks will be Bolton's first low carbon business park and is set to become a hub for green technology, business and skills in Greater Manchester.

Greenworks

People, power and technology

The project is transforming the existing Trinity Retail Park, close to Bolton town centre. It aims to help achieve a sustainable net zero carbon future and support people into jobs in the construction and energy sectors, becoming an environmental centre of excellence for the region.

Plans for the site include developing a training centre where staff can learn the latest skills in green technologies, which will be in demand for retrofitting and building homes and commercial properties.

A range of office, meeting and networking spaces are planned to support existing companies and start-up businesses that specialise in low carbon industry.

Founded by social housing provider Bolton at Home in partnership with local charity Urban Outreach, Greenworks will be a not-for-profit enterprise. Any surplus made from commercial rents will be reinvested into local community projects and initiatives.

The first phase of development includes initial works to convert the space into a training facility and install three new training rigs to deliver technical training.

8 Climate dashboard

Our climate dashboard is the way we will measure and demonstrate the success of the Climate Change Strategy.

The dashboard consists of 32 key performance indicators, each with a target, aim and measure of progress. It has been developed from a variety of data sources across the breadth of the Bolton Vision Partnership. Some indicators do not exist yet, such as a full measure of colleague awareness of climate change or a measure of social value, but data sets will be available in the future and will help to provide baselines against which progress can be measured.



9

Appendix 1: Summary of key performance indicators

KPI	Pillars	Cross-cutting themes	Measure	Target
KPI 1	Communication	Governance and climate leadership	Overall % of colleagues.	65% of colleagues agree that action is being taken to reduce environmental impacts and help mitigate climate change.
KPI 2	Communication	Governance and climate leadership	% view	50% of the community agree that they are seeing evidence that Bolton is responding positively to the climate emergency and that clean, green and environmental attributes of the borough are reflected.
KPI 3	Communication	Governance and climate leadership	% view	50% of Bolton Youth Voice agree that Bolton is responding proactively to the climate emergency.
KPI 4	Place	Governance and climate leadership	% view	25% of Bolton businesses that respond to the Green Business survey, are putting in place plans to reduce emissions and environmental impacts.
KPI 5	Communication	Governance and climate leadership	Assurance level	Annual climate change report is produced and that it has overall substantial or reasonable progress on the climate change strategy delivery plan and its targets.
KPI 6	People	Governance and climate leadership	FTE	Total FTE role equivalent with environmental responsibilities reported as a Vision Partnership total of at least one FTE/1,000 employees.
KPI 7	Place	Governance and climate leadership	Average EPC rating of new development.	Pathway for zero carbon new development and new housing by 2028.
KPI 8	People	Homes, communities, health and wellbeing	EPC letter	All fuel poor homes to be upgraded to Energy Performance Certificate (EPC) Band C by 2025. New developments to be carbon neutral by 2028.
KPI 9	People	Homes, communities, health and wellbeing	Improved health outcomes health indicator.	Monitor and report the health outcomes of improved living environments especially in areas of fuel poverty and deprivation.
KPI 10	People	Homes, communities, health and wellbeing	% of journeys.	Increase the proportion of journeys of up to 5km made by walking or cycling.
KPI 11	Place	Homes, communities, health and wellbeing	Levels of PM 10 PM 2.5 Nitrogen Dioxide	% improvement in air quality.
KPI 12	Place	Buildings, transport and operations	Hectares	Increase in green infrastructure associated with new development and no net increase in flood risk.
KPI 13	Place	Buildings, transport and operations	% of electricity supply.	Carbon neutral electricity by 2022.
KPI 14	Place	Buildings, transport and operations	Tonnes CO2e	Carbon neutral by 2030.
KPI 15	Social value and prosperity	Buildings, transport and operations	Tonnes CO2e	Scope 3 carbon emissions footprint is defined for procured goods and services.
KPI 16	Place	Buildings, transport and operations	Average DEC letter score	Average Display Energy Certificate improved to D by 2024 C by 2027 B by 2030

KPI	Pillars	Cross-cutting themes	Measure	Target
KPI 17 	Place	Buildings, transport and operations	Megawatts	Five megawatts of new generation on buildings and land owned by Bolton Vision Partnership by 2024.
KPI 18 	Place	Buildings, transport and operations	Megawatts	Two megawatts of renewable energy project by community energy projects.
KPI 19 	Place	Buildings, transport and operations	% Tonnes	Municipal waste total rate per household landfill. NI 191 - Residual waste NI 192 - Recycling 50% by 2020 54% by 2024 52% by 2022 56% by 2026
KPI 20 	Place	Buildings, transport and operations	% Tonnes	Zero waste to landfill (TBC). Residual waste to be in line with Greater Manchester targets or better. Recycling rate to be in line with Greater Manchester targets or better. 52% by 2022 56% by 2026 60% by 2030 54% by 2024 58% by 2028 65% by 2035
KPI 21 	Social value and prosperity	Buildings, transport and operations	TBC	All Bolton Vision Partners adopt the Bolton Social Value Policy and Framework.
KPI 22 	Place	Natural environment and climate change resilience	Hectares	Increase biodiversity area associated with any new development and there is no net loss.
KPI 23 	Place	Natural environment and climate change resilience	Tonnes	Zero incidents of fly-tipping with zero impact on council budget.
KPI 24 	Place	Natural environment and climate change resilience	Micrograms/M3	Meet legal compliance as agreed with government in the GM Clean Air Plan.
KPI 25 	Place	Natural environment and climate change resilience	Hectares	Plant 15 hectares of new trees by 2025.
KPI 26 	Place	Natural environment and climate change resilience	Hectares	No net loss of leaf area.
KPI 27 	Place	Natural environment and climate change resilience	%	Rivers remain in good condition.
KPI 28 	People	Skills for a sustainable future	%	Increase % of adult education courses run with environment and climate change skills emphasis.
KPI 29 	People	Skills for a sustainable future	Volunteer hours and projects completed.	Understand the tangible impact of the Bolton Green Umbrella Group.
KPI 30 	People	Skills for a sustainable future	Number of engineers.	Engineers are trained in new skills for green technology in homes.
KPI 31 	Social value and prosperity	Employability, entrepreneurship and innovation	Number of businesses.	Local businesses engaged in Digital Business Hub.
KPI 32 	People	Employability, entrepreneurship and innovation	Number of projects.	Deploy technology developed in Bolton, for Bolton, that has a positive environmental impact.

10 Appendix 1: Supplementary case studies

Case Study

Friends of Firwood Fold



Firwood Fold is a little hamlet by the side of Bradshaw Brook. Once surrounded by industry in the form of bleachworks, today it is a picturesque and peaceful retreat with a very famous former resident – the inventor Samuel Crompton.

This conservation area has woodlands and three fishing lodges, but they had become neglected and overgrown due to cutbacks and staff reductions at the council over a period of years.

The local community group, Friends of Firwood, has worked to make this beautiful area more accessible for local people. The group has made the path that leads down to the Fold much less slippery by improving the drainage. They have also planted 300 bulbs alongside it.

Friends of Firwood has worked in partnership with Bolton Conservation Volunteers, who rebuilt a whole section of the dry-stone wall along the path. They also helped enormously in cutting back

undergrowth, relaying large sections of the path and digging drainage channels to prevent the paths becoming muddy and impassable.

Fences have been built and repaired to direct walkers along established paths rather than trampling fresh growth elsewhere. Native trees have been planted and Himalayan balsam bashing is an annual activity. The latest activity is planting wildflowers with Lancashire Wildlife Trust.

Many local walkers have commented that they now use this much-loved area far more as they feel safer, with greatly improved visibility as a result of cutting back the undergrowth.

Case Study

Bolton Conservation Volunteers



National Tree Week is the UK's largest tree celebration, launching the start of the annual winter planting season. Bolton Conservation Volunteers applied to the Tree Council for a grant of £1,000 to enrich the biodiversity of the woodland in Longsight Park and take part in National Tree Week.

Due to the pandemic, two separate events were organised over consecutive weekends in December 2020. The first event was for families and children and the second was for young people. Volunteers planted 640 trees on a hectare of land in a neglected corner of the park, planting a mix of field maple, silver birch, goat willow, blackthorn, hawthorn and sessile oak.

The families who took part in the first event enjoyed it so much that they were keen to take part in any similar activities. It was something that they hadn't done before and they enjoyed the opportunity to learn something new. The parents wished that there were more opportunities like this for them and their children to take part in.

COVID restrictions meant it was only possible to have six young Bolton Conservation Volunteers at the second event, but they did a brilliant job, planting 300 trees in dreadful weather.

Bolton Conservation Volunteers will maintain the area in the coming months and years and will check to see if the trees have taken and replace any that have been damaged.

The Tree Council were so impressed with the young children's work that they asked for permission to use the photos for their publicity.

The young volunteers who took part said that they felt like they were giving something back by planting the trees and they are now a core part of the group.

Case Study

Over Hulton Community Group



When organisers started the Over Hulton Community Group in 2008, they describe the area as a disparate and “shut the door and stay behind it” place with not much going on.

As recently as 2016 very few residents considered or referred to Over Hulton as a “village.” Now everyone does.

The group was founded to fulfil a need for increased sport and leisure opportunities for residents to promote health and wellbeing, community spirit and social interaction.

Proof of the group’s success is shown by its wide range of activities and impressive list of achievements:

- Starting a ladies rounders team, a crown green bowling competition, a walking group and a running club, plus organising three 5km runs.
- Sponsoring a male junior football team and a ladies senior netball team
- Tidying up various “grot spots” in the village to create areas of civic pride and get more volunteers involved with other residents
- Running an allotment with over a dozen volunteers, who sell their produce and are hoping to brew their own beer
- Organising a very well-supported litter picking team to tidy and clean up the environment
- Putting on coach trips for all age groups but most particularly elderly residents, which have proved so popular that the group increased them to two per month

- Holding community activities like Christmas carol singing and Burns Nights, a scarecrow festival with 65 entrants, and a competition to grow the tallest sunflower (the winner was 11 feet 7 inches)
- Starting a very successful folk club with local singer-songwriter Corrie Shelley
- Holding an exhibition of Bygone Over Hulton, which was visited by almost five hundred people in four hours, many of them young residents amazed at the local history and heritage
- Staging regular walking lectures with mining historian Alan Davies on the Pretoria Mining Disaster, when 344 local men and boys were killed in an underground explosion at the Hulton Colliery
- Creating an email newsletter with over 700 subscribers
- Starting a crime detection and prevention group on WhatsApp with over 900 subscribers

“The only time I get to go out is on your coach trips and you have taken me to lovely places I have never been to before and probably would never have visited.”

Over Hulton resident.

Case Study

Bolton and Bury Swifts



© Piotr Szczypta

Bolton and Bury Swifts was founded in 2016 to reverse the decline of swifts, house martins and other bird species that depend on buildings for their nest sites. Based in Bolton, the group works across Greater Manchester.

Swifts and martins are a sign of a healthy environment. They not only eat insect pests, but also brighten our summer skies and delight people with their flight displays.

Both species return year after year to their nest sites. They are therefore vulnerable to roofing renovations that can lead to the permanent loss of breeding sites.

New-build homes and buildings do not offer the deep eaves or nooks and crannies that the birds prefer.

The group's aims are:

1. To survey Bolton and establish the location of important migratory bird colonies. Submit records to Greater Manchester Local Records Centre
2. Raising awareness amongst communities by engaging schools, community groups and residents
3. Make and install swift nest boxes across the borough
4. Encouraging Bolton Council to embrace national planning policy and guidance by requiring the inclusion of integrated swift bird bricks and provision for similar building-dependent species
5. Engage with developers and Bolton at Home, as their properties host important colonies of migratory swifts and martins

Key achievements:

- Swift boxes and house martin bowls installed at over 120 locations
- A regular newsletter engaging 300 people locally
- Presentations to over 60 groups around the Northwest, raising awareness and encouraging people to engage with nature
- Community engagement in Smithills area of Bolton, with several residents and businesses hosting swift boxes on their homes and properties
- Close links and an on-going project with three local schools, Eagley Junior, Cleveland Prep, Bolton Muslim Girls School
- An important colony of swifts and martins in Salford saved from destruction by re-roofing, by working in collaboration with For Housing Association
- Engagement with Bolton at Home with the goal of doing the same in Horwich and Daubhill
- Support and advice to other NGO's (RSPB/LWT) both locally and nationally - in one case resulting in the installation of bespoke swift accommodation at the renovated Irlam train station
- Presentations to Salford and Wigan planning departments
- Close links with Greater Manchester Ecology Unit and the development of a swift database to map colonies across Greater Manchester
- Collaboration with local a developer, who is installing swift bricks at new-build in Smithills

Case Study

Bolton Green Umbrella Group



When Bolton Council won the Best Service Delivery category in the prestigious Local Government Chronicle Awards in 2020, special mention was made of the contribution of volunteers through Bolton Green Umbrella (BGU).

BGU was formed in 2016 by a small group of like-minded people who wanted to make Bolton cleaner and greener. The group acts as an independent umbrella organisation that recognises and supports volunteer and community groups who look after the environment in Bolton. It provides a communication hub via its website, Facebook, Twitter, YouTube and regular newsletters. As of June 2021, 113 voluntary groups were registered with BGU, which estimates the value of the work carried out by them at well over £1m per year.

The group has also distributed £25,500 in 99 separate grants to registered groups, with the original funding provided by Bolton Council.

One reason for forming BGU was due to the difficulties people have when they want to join environmental activities but don't know where to start or who to talk to. BGU brings people together to form groups, and also brings groups together for mutual working and support.

Another reason was to harness the power of networking to support, inform and encourage people. BGU has established links with, among others, Bolton University, Bolton College, Bolton Lads and Girls Club, the Social Business Collective, Bolton Church Unity Group and the Girl Guides, plus schools and young people's groups.

BGU brings people together to form groups, and also brings groups together for mutual working and support.

Case Study

Litter Pickers of North Bolton



The Litter Pickers of North Bolton was formed in 2015 by four people who were appalled at the litter in their area and around the town.

The group has helped to inspire litter picking volunteers right across Bolton and there are now 37 groups registered on the Bolton Green Umbrella website, resulting in the army of people now taking responsibility for clearing litter and fly-tipping.

The Litter Pickers estimate that their group has collected around 60,000 bags of litter and rubbish, while the estimate for all the groups combined is over 100,000 bags.

Hazardous chemicals can leak out of the litter and pollute the soil and nearby water. These toxins can eventually enter the human body via the food chain and the contaminants can also inhibit plant growth and cause health issues in animals. Clearing green spaces of rubbish also helps to restore wildlife habitats.

Bolton's litter picking groups have established excellent networking and communication and often join forces to tackle grot spots and provide mutual support and encouragement.

As well as making streets, parks and green spaces cleaner, safer and healthier, the efforts of the groups have been massively beneficial for wellbeing and improved mental health in whole communities, which are now taking pride in where they live.

Case Study

Woodland Trust



Smithills Estate is the largest site the Woodland Trust has ever acquired in England, steeped in history and shadowed by the famous Winter Hill TV mast.

The site is a mix of grassland, farmland, moorland, wooded cloughs and bog habitats, crisscrossed by dry-stone walls and with panoramic views over Bolton to Manchester.

The project aimed to double woodland cover from 10% to 20% of the 686-hectare estate. So far, over 90,000 trees have been planted with the help of over 1,000 members of the public, creating 90 hectares of new woodland, with 40 more hectares left to plant by the end of 2022.

A large-scale project to rewet the moorland on the estate has seen 170 hectares restored. Leaky dams have been installed to slow the flow of water off the moor and over 70 hectares of sphagnum moss has been planted to soak up and retain the moisture.

Additionally, the project was funded to encourage local people to access the site and learn about its habitats. Volunteers have been involved in all the activities and young people have visited for Explorer Days, learning about the Countryside Code and the Woodland Trust's work at Smithills. A social enterprise forest school is based on the estate and educates young people on the environment.

