

Climate Change

Task and Finish Group

March 2020



****“If we want things to stay as they are, everything will have to change”***

*spoken by young aristocrat Tancredi – in the novel *The Leopard*, by Tomasi di Lampedusa (*published 1958*)

Contents

Background and Committee Membership	3
Task and Finish Group Work Programme	4
Acknowledgements	4
Executive Summary	5
Recommendations	8
Foreword	13
The Report	17
Annex A: Glossary of Terms and List of Acronyms	60
Annex B: Terms of Reference and Scoping Document	70
Annex C: The Evidence and Witnesses	75
Scrutiny – An Explanation	76

Background and Group Membership

Approval to proceed with the Climate Change Task and Finish Group was confirmed by Scrutiny Management Committee in June 2019.

The purpose of the Task and Finish Group was to review the work currently being undertaken by Milton Keynes Council (the Council), including the Sustainability Strategy Action Plan, to achieve the Climate Emergency/*Making Milton Keynes the World's Greenest City* Resolutions passed by Full Council in January 2019. The Group was also to identify any further actions that could be taken to deliver this resolution and to meet the pledge to make Milton Keynes carbon neutral by 2030. It should be noted that this report and recommendations has been produced **without** sight of the Council's Sustainability Action Plan.

Terms of Reference for the Group may be found at Annex B.

The Task and Finish Group provided a dedicated, cross party scrutiny of the issues and was composed of Councillors Brackenbury, Brown, P Geary, D Hopkins, Minns and Trendall. Mr Alan Francis was co-opted as a member of the Group.

Roslyn Tidman served as the Overview and Scrutiny Officer.

The purpose of this report is:

- (i) to outline the work the Group carried out to scrutinise the additional actions the Council needs to take to meet its resolution to be the *Greenest City in the World* and to be carbon neutral by 2030; and
- (ii) to present the Group's recommendations to Cabinet on 10 March 2020.

This report is the result of the Group's deliberations following a number of public evidence sessions and review of documents ranging from submissions from other local authorities, other relevant organisations and agencies and responses received from the public call for evidence. On behalf of the Task and Finish Group, I commend it to Cabinet and the wider Council.

Councillor David Hopkins
Chair, Climate Change Task and Finish Group
March 2020

Task and Finish Group Work Programme

The Group met on a number of occasions to consider the substantial amount of written evidence submitted, develop and draft the final report and recommendations as well as holding four public oral evidence sessions to consider evidence on the following themes:

Date	Subject
17 October 2019	Scene Setting
6 November 2019	Planning and Housing
23 January 2020	Energy
13 February 2020	Transport

The Group also reviewed an extensive amount of written evidence including best practice from other local authorities, reports by other agencies and submissions received as a result of the public 'Call for Evidence'.

The written evidence, along with the agenda, reports, presentations for each of the above meetings are available on the Council's website at:

<https://www.milton-keynes.gov.uk/climatechangetfg-evidence>

Acknowledgements

The Group would like to thank the officers and invited witnesses who assisted with preparing documents and presentations, giving up their time to speak at the meetings and their assistance in supplying supplementary information when requested to do so.

In particular, the Group is grateful for the diligence and patience of Roslyn Tidman in managing the Group through an intense workload, and to Neil Allen for his technical knowledge and support to the Group.

The Chair would also like to thank those individuals who attended the oral evidence sessions and made substantial contributions at these sessions and those who presented to the Task and Finish Group and who submitted written evidence.

Executive Summary

Milton Keynes Council has responded to the climate and environmental crisis by setting an ambition to become one of the first carbon neutral cities in the UK by 2030. In line with Milton Keynes ambitions to lead on the responses to the climate emergency, the council established a Task & Finish Group to take evidence and report back on its recommendations to achieving sustainable carbon neutrality.

At the heart of this report is a suggested series of approaches that not only positively address wider environmental challenges, but which set out to improve the quality of life of Milton Keynes residents and build a new form of clean growth for our economy through a green, technical based industrial revolution. We have done so under four broad headings, namely;

- Areas Milton Keynes Council can influence directly through its own estate management and policy making powers;
- Areas where the Council can work with contractors, suppliers and delivery partners;
- Areas where the Council can work locally with residents, businesses and other organisations such as Parish Councils and the universities; and
- Areas where the Council can lobby such as other governments (national and local government and its agencies) both locally and nationally.

The report sets out ways in which the Council can address these ambitions under the following broad topic headings:

Housing

- Carbon neutral housing;
- Replacement of gas heating;
- Renewable energy;
- Smart homes – energy control; and
- Using mains water efficiently.

Transport

- Larger share of journeys via walking and/or cycling;
- Larger share of journeys via public transport;
- Moving the council fleet to zero carbon vehicles;
- Improving the vehicle charging and refuelling infrastructure(s);
- Sharing of vehicles; and
- Reducing the need for travel.

Waste

- Reducing the climate impact of domestic waste; and
- Reducing the climate impact of waste from businesses and other organisations.

Businesses and Business Buildings

- Carbon neutral organisations across Milton Keynes;
- Low carbon heating and cooling;
- Energy efficient workplaces;
- Renewable energy;
- Travel & transport plans;
- World class Superfast broadband infrastructures;
- Low carbon production;
- Waste management; and
- The Council leading by example.

Land Use and Planning

- A forest for Milton Keynes and tree planting borough-wide for canopy cover;
- Ensuring new homes and other new buildings are carbon neutral and climate adapted;
- Development designed to support zero carbon travel;
- Use of low carbon building materials; and
- Planning policies (MK 2050 and the new Local Plan) complying to building standards that address the climate emergency.

The science is clear; we need to act urgently to reduce our carbon emissions to limit global temperature rise to below 1.5°C, and so prevent the most damaging of impacts around the world and closer to home. It also shows we need to prepare for a changing climate. Climate Change is a long-term and universal problem that will affect everyone, particularly our most vulnerable residents. It is also one that significantly impacts the young of today and for generations to come. Our generation, elected by our local residents and entrusted to deliver a future that is sustainable for us all, are the stewards for the world that our young people will inherit. It is an essential role of local governments, such as Milton Keynes Council, to protect the security and welfare of those citizens who depend upon us. We are continuing our work to create a prosperous, fair and resilient borough for today, tomorrow and future generations to come.

Milton Keynes Council is determined to be at the forefront of what local authorities can achieve. The Milton Keynes Council Climate Emergency Declaration and the emerging strategies for energy and MK 2050 are driving forward the Council's progress and hopefully will inspire others to do likewise. The recommendations contained in this report are designed to make a real difference to people's homes, businesses and transport, as well as to the way the Council itself operates.

The Task and Finish Group believes the approach it is taking could bring enormous benefits to the residents, businesses and organisations of Milton Keynes. This report to the Cabinet and Council sets out the principles, priorities and definitions of its suggested approach, considering the evidence (written and in person) provided to it in public meetings and state-of-the-art knowledge gathered from across the borough. This is one of the most important and complex challenges any society has faced, which is why the Council voted overwhelmingly to reconsider how it operates and why it is so pleased to be working with partners and residents to provide a genuine borough-wide response that can engage and encourage everyone across the borough to take action. Every resident, business and organisation across Milton Keynes has a role to play in this and we all have something to gain by finding more sustainable ways to live and work. Together with our partners, the report sets out ways of creating new Climate Change and Energy plans for the next decade, to help set in motion this ambitious work and turn the Council motion into actions.

However, this is only the beginning. Together this Council, its partners and residents must take forward the ambitions of a locally responsible green global city. The Task and Finish Group believe this report represents a way forward on this vital issue and we believe that by adopting the recommendations contained in this document Milton Keynes will be on the right track to fulfilling these challenging ambitions.

Recommendations

Governance

1. That the Council aligns all its strategies and policies to place its carbon neutrality and greenest city ambitions at the heart of all its work effectivity establishing a 'green/golden thread' throughout all its activity and ensuring that the reduction of carbon emissions is assessed as an impact in all reporting and decision making processes.
2. That the Council ensures that the appropriate staffing is in place to enable the delivery of the work programmes associated with its carbon neutral and greenest city ambitions.
3. That the Council establishes a permanent cross-party Council Advisory Group or Scrutiny Committee to provide ongoing oversight to the delivery of the Sustainability Strategy Action Plan.
4. That a climate change dashboard/scorecard is developed to report regularly the progress of the Sustainability Strategy Action Plan and on annual carbon budget and reduction targets.

Sub text:

The Task & Finish Group agreed that the council, in support of a new climate emergency support team, focuses on delivery of the necessary work programme to achieve its ambitions to address the climate emergency at a local level and establish an internal technical officer forum in support of those ambitions. In addition, it is suggested that all Council reports and strategy recommendations contain a detailed and topic specific Impact on Carbon Neutrality – Dealing with the Climate Emergency section/paragraph.

It was agreed that the Leader of the Council should be required to report annually to Full Council on the progress made with the implementation of the Climate Emergency Action Plan and that the Council develops annual or bi-annual targets for carbon reduction in each directorate so that progress can be monitored on that basis.

Communication, Engagement & Education

5. That the Council establishes a dedicated web and social media presence to provide information and news in support of its ambitions for a carbon neutral Milton Keynes.
6. That the Council establishes or supports the establishment of a climate change advice service for businesses and residents.
7. That the Council develops and delivers a climate change public engagement programme to engage and empower citizens, Town and Parish Councils, community groups, schools and businesses, possibly through a Citizens Assembly, to enable everyone across the borough to achieve the aim of being carbon neutral by 2030. This would include establishing a Green Champions Community across Milton Keynes.

Planning Policy

8. That when the relevant planning policies are reviewed, for example Section 106 Agreements, that the Council look to maximise what it can receive for carbon reduction projects.
9. That the Council place carbon reduction and the consideration of environmental impacts at the heart of the new Local Plan and associated planning policy documents.

Sub text:

The Task & Finish Group discussed ways in which the Council develop and implement new planning policies (as part of the current review of Plan:MK) to achieve the council's objectives for Zero Carbon buildings and that in particular the Council should integrate the need to reduce car use into the review of the Local Plan – this would require a range of possible measures, including: considering denser housing developments with quality walking & cycling; priority car parking provision for electric vehicles; the provision of transport & delivery hubs to enable the use of cargo bikes and similar for deliveries; and support for climate adaptation measures such as green space and green architecture (e.g. roofs, walls, etc.). The Task & Finish Group also suggested that the Council should encourage local food production by the provision of a greater proportion of land to be used as allotments and small holdings to reduce food-miles.

Procurement

10. That the Council include an agreed sustainability/environmental statement within tender documents and implement a percentage weighting of supplier environmental performance in its supplier/contractor selection process.

Sub Text:

In effect, the Task & Finish Group suggests that the Council conducts a review of the carbon footprint of materials/products/services the council procure and identifies options to reduce carbon emissions from the Council's supply chain

Staff & Councillors

11. That the Council defines an optimum flexible working pattern and develops an enabling programme to reduce carbon impact of staff travel.
12. That the Council develops and delivers a climate change skills/learning and development programme for staff and councillors to improve understanding of carbon reduction and the wider environmental context.

Energy Efficiencies

13. That the Council assesses the energy efficiency of all of its properties including offices, social housing and schools, and retrofit these properties to Energy Performance Certificate C or higher and that all new council owned or commissioned properties are built to at least this standard.
14. That the Council speed the progress of and complete the delivery of the switch to LED smart lights action across Milton Keynes.
15. That the Council develops a Strategy to tackle Fuel Poverty Borough wide.

Transport

16. That the Council undertakes a fleet review of all its vehicles (plus existing and/or potential supporting infrastructures to move towards a fleet of ultra-low emission vehicles.
17. That the Council utilise all measures open to it to ensure that bus services are convenient, frequent, accessible, affordable, reliable, punctual and low carbon emitting and that this ultimately leads to reducing the need for private car use across the Borough.
18. That the Council commit to pursuing franchising powers under the Bus Services Act 2017.
19. That the Council delivers a borough wide programme to increase the number of journeys taken by walking and cycling.
20. That the Council considers the introduction of ultra-low emission zones where the air quality evidence suggests this mechanism would be beneficial.

Sub text:

The Task & Finish Group were mindful of the representations made regarding safer cycling and suggests that the Council undertakes a borough wide programme of safer cycling – including school safety training, redway safety (and repairs to the redway) with improved wayfinding to help develop (at an early age) a cycle use culture within the community. Parents often cite the lack of safety of the cycling journey to and from schools to justify car use. The Council needs to increase walking and cycling by challenging this perception - Add e-scooters to this programme of training (if/when they become legal).

That the Council launch a consultation on introducing Low Emission Zones/Clean Air Zones in areas across the Borough when air quality monitors record levels which indicate it is appropriate.

Housing

21. That in the review of the new Local Plan, and any related planning policy documents and building regulations, the Council prioritises policies to ensure that all existing and new residential and non-residential dwellings are built or retrofitted to achieve zero carbon standards.

Sub text:

The Task and Finish Group recognised that retrofitting the existing building stock in the Borough is essential if Milton Keynes is to meet the ambition to be carbon neutral by 2030. The Group acknowledged that most of this work was outside of the Council's direct control and would instead rely on ways the Council could influence or incentivise private owners to carry out this work potentially by the use of grants, bulk purchase schemes, guidance and advice. The Group was of the view that all new dwellings should be built to the highest standards to ensure that the Council's carbon ambitions could be met. The Council should also ensure that the storage and efficient use of water was promoted, including grey water reuse, community water butts etc. and that the Council should consider the installation of low energy factory built housing units such as Zedpods.

Biodiversity

22. That the Council delivers on a commitment for a *Forest for the Borough of Milton Keynes* of (at a minimum) an additional one million trees.
23. That the Council include a greater commitment to deliver sustainable planting of trees and increasing biodiversity as part of any planning proposals for 11 dwellings or more including encouraging rewilding projects.

Working in Partnership

24. That the Council establishes a 'Climate Change Partnership' to include a wide range of organisations in the public, private and voluntary sectors to work together to achieve a carbon neutral Milton Keynes by 2030 and that the Climate Change Partnership be responsible for developing and delivering a borough wide carbon neutral action plan.

Sub Text:

The Task & Finish Group suggested that the Council facilitate and host an annual conference - Oxford/ MK /Cambridge wide - to broaden the climate change conversation and the co-designing of a future climate change programme. In addition, the group felt that the Council might work with main utility providers across Milton Keynes to establish effective working relationships to Define, Scope and Manage likely actions and ensure alignment with emerging Climate Change Distribution/ Energy / Objectives.

Consideration should be given to the Council engaging with our local Universities (The OU, Cranfield and future UMK) and Milton Keynes College to create an Advisory Committee on Climate Change to provide an annual report to Cabinet, and annually

to Council and that, in parallel, the Council engage with organisations such as Parish and Town Council's and the business community via the Chamber of Commerce, Federation of Small Businesses and other business support organisations to develop a joint medium/ long term action plan and to establish a vehicle to deliver the elements of that plan.

That given the importance of logistics and retail to the local economy that the Council should engage with hauliers/haulage clients and other large heavy vehicle fleet including rail freight operators and retailers to identify opportunities for addressing the issues identified within this report.

Waste

25. That the Council adopt circular economy waste policies as well as promoting residents and community sharing, reuse and recycling.

Energy Supply

26. That the Council explore the bulk purchase of renewable energy for example from offshore wind farms to provide lower cost sustainable energy options.
27. That the Council uses the carbon offset fund to establish a programme to deliver innovative and sustainable energy generation projects.

Sub Text:

Members of the Task & Finish Group were keen to see the Council consider establishing an energy supply company that develops district heating. The Council should develop district heating, ensuring it's from low carbon sources. Such a venture to be formed as a non-profit green energy company, and that the council investigate district heating networks including use of local parks and other innovative sustainable heating solutions. The Group agreed that all new developments should include the consideration of green energy generation schemes.

Given its reputation internationally as a Smart City and a City for Technological Innovation, the Task & Finish Group felt that the Council should monitor a wide range of technologies and how their use can help combat the impacts of climate change. For example, Collaborative Telepresence technologies, Use of Big data, Mobile Apps, Hackathons, Clean Energy and Internet of Things (IoT) smart energy, General Fusion Power Generation, battery powered transport, Beyond Meat foods, Carbon engineering powered manufacturing, smart city traffic modelling and management, Artificial Intelligence (AI) based energy efficiency and AI planning tools.

Flooding

28. That the Council invests in service provision in areas such as highways drainage clearance to deal with the increasing number of flash flooding rainfall incidents.

Foreword

The scale of the challenge with which climate change presents all humanity is unprecedented. The warming climate, due to anthropogenic (originating from human activity) emissions, coupled with rapid biodiversity and ecosystem loss, is combining to create a mass extinction event that threatens to severely impact all life on our planet.

This crisis is not something that anyone in Milton Keynes is insulated from, and the impact of climate change is already being felt across the globe. While major national and intercontinental organisations can plan for how they meet this challenge head on, remedial action is incumbent on us all, be it through governmental organisations, communities, action groups and individuals. Some suggest that only through breaking with traditional leadership models can we hope to tackle this existential threat, and Milton Keynes can and should be at the forefront of this place-based, smart, systems leadership approach. Milton Keynes can establish itself as the Greenest City in the world – but it cannot do so in isolation.

Science is now building a strong, some might say irrefutable, consensus on the need for action. The Intergovernmental Panel on Climate Change (IPCC) special report on Global Warming, published in October 2018, describes the enormous harm that a 2°C global average rise is likely to cause even when compared to a 1.5°C rise. The report went on to say that limiting Global Warming to 1.5°C may still be possible with ambitious action from national and regional/local authorities, civil society, the private sector, indigenous peoples and local communities. Additionally, the recent Intergovernmental Panel for Biodiversity and Ecosystem Services (IPBES) stated that around 25% of the world's species are now at threat of extinction due to habitat loss and the effects of climate change.

The Committee on Climate Change¹ recently reported that for the United Kingdom to reach 'carbon net zero' by 2050, there will have to be a quadrupling of low carbon electricity, major scale carbon capture and storage, and a fifth of our agricultural land shifting to alternative uses. All of this would need to be matched by accelerated habitat restoration as well as a strategic overview of how the communities of Milton Keynes will function and enable a carbon neutral future.

The 'Climate Change Emergency' motion was put to full Council on 23 January 2019 (<https://milton-keynes.cmis.uk.com/milton-keynes/Calendar/tabid/70/ctl/ViewMeetingPublic/mid/397/Meeting/5918/Committee/1207/Default.aspx>)

The motion called on the Council to:

- (a) declare a 'Climate Emergency';
- (b) fully support making Milton Keynes the World's Greenest City;
- (c) support the pledge to make Milton Keynes carbon neutral by 2030 and carbon negative by 2050;

¹ The Committee on Climate Change (the CCC) is an independent, statutory body established under the Climate Change Act 2008. - <https://www.theccc.org.uk/>

- (d) call on Central Government to work with local authorities to provide the powers and resources to make ambitious targets possible;
- (e) develop with partners a unique Milton Keynes Clean Air Charter;
- (f) continue to work with partners across the city, region, nationally and internationally to deliver this new goal through all relevant strategies and plans;
- (g) ask Cabinet to ensure that the resources are in place locally to ensure the ambitious targets in the Sustainability Strategy can be met;
- (h) ask Cabinet to ensure the Sustainability Strategy Action Plan for the period 2019-2023, with clear and implementable actions, is brought forward as quickly as possible;
- (i) ask Cabinet to push recycling rates up to 70% by 2025;
- (j) arrange a Climate Emergency Conference in Milton Keynes this year (2019) to bring together local, regional, national and international agencies, business and stakeholders to help develop actions to ensure Milton Keynes can become the world's greenest city;
- (k) ask Cabinet to report to Council annually on the progress made in this area; and
- (l) adopt a consult first approach when proposing new environmental policies, understanding the need for wide ranging input and support from residents to tackle climate change.

The Council's motion to achieve carbon neutrality by 2030 is in line with that suggested by various organisations, for example by Extinction Rebellion (whose representatives have attended and contributed to each Climate Emergency Task and Finish Group meeting) and ahead of the UK Committee on Climate Change, along with the IPCC, who both reference dates of 2050 for carbon neutrality, the date which the UK Government announced that it would adopt in its announcement on the 12 June 2019. Therefore, for Milton Keynes to meet its target of 2030 will require local system changes that fall outside of the national legislative cycles being developed for a target of 2050; support from the Government will be vital in achieving Milton Keynes Council's accelerated ambitions and will need to be targeted in areas with most impact to unlock those ambitions. The way that communities live and operate is crucially bound up with infrastructure for transport, jobs and homes. The process of change for this is protracted but the Task and Finish Group recognises that this needs to begin immediately.

The Task and Finish Group recognises that it cannot be stated strongly enough that meeting the ambition of the full Council motion of 23 January 2019 by 2030 will be incredibly challenging. It is not yet clear whether it is an achievable goal, and the Council may, in time, conclude that it could prove to be impossible. However, it is an ambition the Council is prepared to pursue in good faith and in endeavouring to achieve this ambition it will require the Council to stand firm in its determination; no backing off nor ignoring the challenges ahead. The Task and Finish Group acknowledges that the available evidence shows that the scale of change is unprecedented. Global and national system change will be needed to enable local system change.

Therefore, this is not just another service performance goal more familiar to councillors and officer colleagues, where control and accountability is clear and supported through existing statute or policy and where increasing budgets or personnel alone can achieve the goal. This is a challenge where the totality of the solutions needed are not clear and the approach the Council takes will inevitably emerge and be refined over time.

The Task and Finish Group highlights that the Council will need to put in place appropriate governance arrangements to ensure accountabilities are clearly defined which adhere to the Council's constitution and decision-making processes.

However, the Task and Finish Group anticipate that the extent of the challenge, potential solutions and community opinion are all things that need to inform the evolution of the Council's actions and decisions moving forward.

The Task and Finish Group acknowledges that the Council cannot be expected to provide all the solutions in isolation but can directly impact, influence or help guide some of the changes required across the Borough, recognising that combating climate change needs system-wide change that will involve communities, business, individuals and stakeholders across all sectors of the local economy. The Task and Finish Group feels that the Council has an opportunity to address this challenge through the development of a far more ambitious, longer-term vision and spatial strategy for Milton Keynes – currently being progressed under the banner of the *MK Futures 2050 Project* and through the review of the local plan (Plan:MK).

The Task & Finish Group acknowledges in its recommendations that the Council is best placed to lead this work only through a co-creation process.

It will require major investments, changes to processes and practices in the ways in which the Council uses and interacts with energy and changes to the way all residents live their lives and define success. It will also redefine how we all manage and interact with our environment. Above all, it will involve a collective leadership and shared ambition to deal with this challenge head on, and this report suggests (through a series of recommendations), a framework for how the Council can define and develop future actions. Milton Keynes Council's direct control over the emissions from the whole of the Borough is minimal, estimated at around 2%. In the broadest terms, across Milton Keynes as a whole, 36% of emissions can be attributed to Industrial & Commercial sources, 34% to transport and 30% to domestic.

The Council's most powerful lever is partnership, and leadership where appropriate, enabling action and galvanising a collective approach to tackling the most fundamental challenge of our time. The Task and Finish Group has begun the process of identifying what it thinks is needed and this report suggests that future Council actions work to a comprehensive system based leadership approach, although the Task and Finish Group recognises there is more to do in defining that process and that these new ways of working will emerge as the Council moves to the implementation of the full suite of policies.

This report begins the process of setting out the scale of the challenge that the Council faces if we are to meet the expectations of the January 2019 climate emergency motion. It reflects on the work that has been done both before the Council Motion was passed and since it was declared. It sets out a series of recommendations and leadership ideas that it considers are needed to work towards achieving the ambitions of the Council Motion. To inform this work we have captured evidence from a wide range of stakeholders both in person and via written submissions, all of which has created a substantial evidence base.

This report outlines the journey that, as a society, we will need to embark on together. It is impossible to capture within this document the totality of the solutions that may be required to deal with a challenge of this magnitude and the report is sensibly grounded by the principle that it considers only those issues that Milton Keynes Council can deliver directly or in some way can influence.

The Report

Milton Keynes Council – Principles and Approach to the Climate Emergency

Following the debate and series of amendments agreed at the January 2019 full Council meeting, the Council's response to the climate emergency is understood to align to the following principles:

Support a just transition: Milton Keynes Council is committed to building a carbon-neutral Milton Keynes that is fair for all. The UN Sustainable Development Goals provide foundational frameworks for both planning and assessing the Council's actions in the future. Milton Keynes Council's response to the climate emergency should therefore be guided by the focus of the UN's Sustainable Development Goals on addressing climate change whilst also being influenced by agreed issues of social justice locally and globally. The Council should be looking to:

- Plan, invest and implement a transition to environmentally and socially sustainable jobs, sectors and economies, building on the strengths and potential of Milton Keynes, in line with the principles set out in the MK Futures 2050 report. Companies in Milton Keynes are well positioned to be at the forefront of developing technologies that address some of the challenges the climate emergency poses;
- Create opportunities to develop resource efficient and sustainable economic approaches to growth;
- Design and deliver low carbon investment and infrastructure, and make all possible efforts to create modern, technology based future employment opportunities in line with the opportunities presented as part of the Oxford/Cambridge Arc, in a way which does not negatively affect the current workforce and overall economy.

Transparency: The Task and Finish Group emphasised through its deliberations the need to ensure that the Council displays transparent principles for the different aspects of working required to be undertaken with its partners and residents to create a constructive and inclusive environment for these plans and for the future, often challenging, decisions that will need to be made. During the development of, and at various parts of, this report the Task and Finish Group has briefly outlined some suggestions of the work required in sharing this challenge.

During development of the report, the Task and Finish Group has considered that the following approaches should play an important role:

The Milton Keynes Conversation: create facilitated spaces for safe and constructive conversations.

The Task & Finish Group considered representations made to it regarding establishing ongoing dialogue through:

- Shared Values – to navigate challenging conversations;

- Shared Principles – to approach creating solutions that are participative, localised, equitable;
- Shared Resources – to optimally deploy the resources Milton Keynes has locally;
- Shared Goals – to generate mutual understanding of responsibilities and actions;
- Shared Outcomes – to share impacts fairly.

What does Climate Change Mean for Milton Keynes?

Climate change is already upon us. While there are visible impacts of this in increased flooding, wind, rain and storm intensities and frequency, there are also hidden impacts such as droughts (the 2019/20 Australian bush fires being the most recent, high profile, dramatic example), biosecurity with the risk of invasive species, and seasonal changes to the food chains. The summer of 2018 was the joint hottest ever recorded in England, and summer temperatures could increase by up to 10 degrees centigrade in parts of England if the current trajectory of global warming continues. Milton Keynes tends to enjoy a drier climate than many more westerly and northern parts of the UK, and generally is not particularly susceptible to flood risk from intense rainfall, although low lying areas adjacent to the Rivers Great Ouse and Ouzel (Lovat) are seemingly becoming more susceptible to flooding.

The Task and Finish Group observed that the Council needs to be considering how its drainage regime (highways drainage in particular) is resourced to address the increasing incidents of torrential rainfall.

While certain parts of the world will have more severe and imminent impacts (such as low lying areas in South East Asia), Milton Keynes and the wider UK are not immune. These impacts only highlight the need to act now on reducing our emissions. The UK Climate Impacts Programme (UKCIP) published its revised UK Risk Assessment in 2018; this is now being applied by the Environment Agency at a regional level which could provide Milton Keynes with updated figures (replacing those from 2009) on the risks faced in Milton Keynes in the coming months. The Task and Finish Group assess that the Council's response in addressing the local aspects of the climate emergency included the requirement to make good decisions about what to invest in and the Task and Finish Group emphasises that the Council must understand the consequences of climate change with and without action, both of which will result in consequences to Milton Keynes. It is the severity of these consequences that the Council must seek to address through its mitigation and adaptation investments.

World Health Organisation – Setting the Context

The World Health Organisation identifies climate change as the greatest threat to global health in the 21st century (<https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>). Potentially, the impacts for Milton Keynes, although less than for some other parts of the world, will still be significant. There will be an increase in heat wave days and a longer heat wave season. Increasing temperatures will cause additional heat-related mortality and ill health, including heat stress, cardiovascular disease, and kidney disease. There are currently 2000 heat related deaths per year in the UK and this is predicted to rise to 5000 by 2050, with the elderly and those with health conditions

most vulnerable, placing stress and demands for increased resources on Adult Social Care services and related budgets from the Council and its health sector partners. Small changes in temperature and precipitation can result in large changes in the suitability for transmission of important vector-borne and water-borne diseases. Some diseases that have not previously been transmissible in the UK, such as malaria and dengue fever, could become established as well as an increase in the prevalence of existing infections such as Lyme disease. Flooding events present an immediate risk to life and a risk of water-borne infection, but there are longer-term impacts on health, particularly mental health. Following the Somerset floods there was a significant increase in depression, anxiety and PTSD. Stagnant water causes poor air quality, whilst thunderstorms increase the effect of allergens, causing 'thunderstorm asthma'. People will also be exposed to new allergens, which may increase respiratory disease. Unpredictable and changing weather patterns may reduce crop yields and rising temperatures could threaten marine fishing as a food source. The resulting increase in food prices puts those on low incomes at risk of under-nutrition. Drinking water supplies may also be compromised with significant associated health risks.

The Task & Finish Group recognises that the Council's Emergency Planning Resources need to be enhanced in line with these emergency challenges and Safer:MK briefed on the likely consequences of extreme climate events.

There are the obvious physical environmental impacts from climate change. As well as the health impacts noted above, there will also be significant social impacts if food, resource or medicine availability changes due to disrupted supply chains and this could all have a societal consequence due to the impacts on the globalised system we are all reliant upon. In anticipation of such changes, many people across the generations are reporting feelings of anxiety, fear and grief due to the changes that are happening now across the world and how that will in due course impact on the UK too. The Task and Finish Group received evidence from witnesses emphasising that very issue. These impacts will intensify in future, as the acute effects of climate chaos creating storms, flood events heat waves and droughts impacts to varying degrees on different communities.

It is the change in the balance of the scale and distribution across geographies of the demand and supply for resources around the world, which will have a local expression. In Milton Keynes we have specific vulnerabilities. Once famous for its young demographic, Milton Keynes now faces the challenges of an ever aging population; therefore, caring requirements are likely to increase, as vulnerable people need additional support to cope as the climate becomes more chaotic; delivering this care may also become more complex as local authorities have to redesign housing, community buildings and schools, transportation and other social systems to become carbon neutral. Digital technologies offer some avenues of opportunity, but this must not be at the expense of maintaining, and in some cases re-establishing, community level cohesion and systems across Milton Keynes, which will be essential to providing resilience to climate change effects.

Milton Keynes is also notably economically more prosperous than other areas of the country and climate change will be amplifying the challenges already faced by communities elsewhere. In other parts of the UK climate change will exacerbate these challenges and Milton Keynes Council must ensure the actions it takes are sensitive to the existing predicaments of individuals and communities nationwide, as well as those potentially being faced by us all in the future.

What has the Council Already Done to Address these Issues?

Context - Key Facts

Milton Keynes overall energy use is 1,177ktCO₂ split as follow;

- **Domestic 30% or 353.1ktCO₂**
- **Transport 34% or 400 ktCO₂**
- **Industrial Commercial 36% or 423.7ktCO₂**

In the period from 2005 to 2017 the Milton Keynes per capita emissions have dropped from 7.8tonnes to 4.4 tonnes per person, equivalent to a reduction of 44%

Milton Keynes Council emissions 23.5kt or 2% of the overall total

The Task and Finish Group received evidence from officers (and others) emphasising that Milton Keynes Council is not starting from scratch on its journey towards becoming net carbon neutral or on adapting to climate change impacts. There has been a transformation of our energy sector that now provides around 37.4% of our electricity from renewables, significantly higher than the national average of 33% in 2018, and up from around 5.5% in 2008.

Milton Keynes Council's Sustainability Strategy (2019 – 2050) was published in 2019 and represents the council's long-term vision to create a world leading sustainable city which embraces innovation, creates high quality jobs and recognises the Council has a vital role in tackling the global challenges of climate change.

Milton Keynes prides itself in being Different by Design and has always faced challenges such as:

- The world's first modern energy efficient housing at Home World 1981, Energy World 1985 and Future World 1994;
- The first UK city to have kerbside recycling 1989; and
- The first public electric vehicles charging points in 2010.

The Milton Keynes Carbon Offset Fund (administered by the National Energy Foundation) pioneered the way when it was launched by Milton Keynes Council in 2008. The Borough has always been famous – infamous, really – as an innovator in the design and construction of new buildings and the methods and approaches supporting them. Therefore, it seemed natural that it should be the location for a model of carbon financing not yet seen elsewhere in the UK.

<http://www.nef.org.uk/service/existing-buildings/energy-management/carbon-offset-services>

Milton Keynes also takes pride in being a location where nothing has ever stood still, and innovation is embraced.

As per the Council resolution, Milton Keynes will strive to be carbon neutral by 2030 and carbon negative by 2050, while creating one of the world's most truly sustainable economies and models for growth; a daunting but achievable challenge.

The Council's three priorities as outlined in its Sustainability Strategy are:

- a green energy revolution;
- to ensure the most efficient and low impact use of our resources; and
- to create a prosperous circular economy.

These priorities aim to ensure that as Milton Keynes grows, it takes advantage of the opportunity to do so responsibly, creating energy resilience, maximising the use of renewable energy, reducing our water usage, minimising transport emissions, ensuring clean air, and an economic system that promotes a sustainable economy that addresses the challenges of climate change.

Milton Keynes has already made significant moves to reducing the carbon emissions, achieving a 44% reduction in emissions since 2005. This figure includes the emissions from transport, industry and agriculture and the initiatives being undertaken by all individuals, groups and businesses will continue to feed into the nationally monitored figures.

Milton Keynes has the first Electric Vehicle (EV) experience centre in Europe and has an extensive EV charging infrastructure across the city, with over 250 charging posts and around 70 rapid chargers.

Combined with the first of a kind electric bus route and the first UK site for an electric, dockless bike scheme, we can continue to build a city that is fit for the future.

Encouraging bio-diversity across the city is underway as landscaping grid road corridors is graded to ensure the grass is managed to encourage more plants to grow and more animals to live there.

The Council has reduced the amount of single use plastics it uses itself while our pioneering Materials Recycling Facility already increases the level of waste salvaged for recycling that would have otherwise ended its useful life.

Milton Keynes has world-leading businesses, such as Bridgman & Bridgman, that highlight that there is no need to compromise sustainable principles for economic growth.

The Council has installed photovoltaic (PV) arrays on the Civic Offices and Wolverton Depot, producing electricity and therefore reducing the amount of electricity the council has to buy.

Combined heat and power (CHP) plants have been installed in Putnam House and Lincoln Court which are sheltered housing blocks.

The Residual Waste Treatment Facility (RWTF) built and operated by the Council processes around 110,000 tonnes of residual waste and produces enough energy to power between 10 to 12,000 homes.

Milton Keynes Council promotes renewables in our new build projects, supports a revolving energy efficiency scheme (SALIX) and supports projects aimed at retrofitting existing buildings.

Where is Milton Keynes Now?

Baseline evidence – Greenhouse Gas (Carbon) Inventory

The breadth of evidence the group has received has been persuasive, but as lay members we are not in a position to apply the academic rigour and testing that a firm evidence base would need. If we are to revolutionise our approach to carbon and ensure efficiency in our actions, the rigour an evidence base would provide is vital.

The Task and Finish Group recommends that a local University be commissioned to provide an initial evidence base to help it ensure that the Council's response to the climate emergency is informed by science (evidence) based targets and expert guidance to ensure it deploys the most effective solutions to help it tackle climate change.

It is, of course, incredibly important to understand which sectors the Council should collectively be focussing its efforts on, informing system wide approaches to technology transitions, different approaches to land management, food and waste systems, lifestyle and behavioural change, sector specific requirements and the mitigations it will need in place, either through natural climate or technology solutions. Many of these requirements will not be in the gift of the Council to deliver, but it is important that, as a key leader in the local community, the Council has the information required to help shape this transition with its local, regional and national partners.

The Task and Finish Group recommends that an initial piece of academic work to be commissioned by the Council should provide the authority with an updated Milton Keynes Greenhouse Gas Inventory, using the World Resources Institute's Global Protocol for Community-Scale Greenhouse Gas Inventories (GPC) -

<https://www.wri.org/publication/global-protocol-community-scale-greenhouse-gas-emission-inventories>.

As well as carbon dioxide emissions, the Milton Keynes new Greenhouse Gas Inventory should include methane and nitrous oxide emissions and an estimate of its F-gas emissions.

The research should indicate just how much Milton Keynes has reduced its carbon footprint in the 14 years since the last Greenhouse Gas inventory was produced

Carbon Emission per capita (tonnes) - Milton Keynes

(Source - BEIS)

YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Industry & Commercial	3.7	3.5	3.5	2.9	2.9	2.5	2.8	2.7	2.25	1.89	1.7	1.6			
Domestic	2.3	2.3	2.2	2	2.1	1.8	1.9	1.9	1.52	1.47	1.4	1.3			
Transport	1.7	1.8	1.7	1.6	1.5	1.5	1.5	1.4	1.48	1.48	1.5	1.5			
Total	7.7	7.5	7.4	6.5	6.5	5.8	6.2	6	5.2	4.9	4.6	4.4	0	0	4.7
															40% redn
Population (000's)	227.2	231	235.6	240.2	245.5	249.9	252.8	256.4	260.2	263.2	266.2	267.5			
Percentage change	2.60%	5.10%	16.70%	16.70%	25.60%	21.80%	23.10%	32.05%	38.46%	41.03%	43.59%				
updated		Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Jun-18	Jun-19			

It should be noted that emissions from vehicles on the M1, A5 and Railway are not counted in the emissions figures, and so are not in the then and now comparisons. They are outside the control of the Council.

At least two thirds of the emission reductions having been achieved by decarbonising electricity; beyond decarbonisation of electricity, the remaining reductions came from reduced energy use associated with the heating of homes and businesses. With minimal reduction having occurred in transport, this is now Milton Keynes' largest emitting sector, making up 34% (approx. 1 MtCO₂). Although there have been emissions reductions in the sector, agriculture is also growing proportionally in its percentage contribution to Milton Keynes' carbon footprint even as other sectors reduce their proportional contribution (such as the production of electricity).

Balancing out some of our emissions, an amount of carbon dioxide approximately equivalent to 3.5% of Milton Keynes' total emissions footprint, was captured by land use and forestry activities in 2016. The ability of these natural carbon sinks to draw down carbon is increasing by about 0.2% of our carbon footprint each year. Given this growing contribution to Milton Keynes carbon footprint and availability of grassland suitable for afforestation, it is possible that natural land use changes could draw down around 9% of current total emissions by 2050. Important to note is this figure will proportionally increase as the overall size of our footprint falls.

Where does Milton Keynes Council Need to Get to and How Could it Do It?

The Task and Finish Group suggests that to better understand the possible pathways towards achieving carbon neutrality, Milton Keynes Council should commission additional work to analyse what a carbon neutral future for Milton Keynes could look like and what the Council will need to do in order to reach that future.

The first stage of this work should investigate different scenarios for Milton Keynes, achieving carbon neutrality by different timescales, using the UK Committee on Climate Change's (CCC) Net-Zero UK standard scenario to provide an illustration of a:

- Milton Keynes baseline: a 'do-nothing' counterfactual scenario that will be used to illustrate the business-as-usual baseline emissions reduction from which carbon neutrality by 2030/2050 can be contrasted;
- Carbon neutral Milton Keynes by 2030: a scenario showing the changes the Council needs to make to achieve carbon neutrality by 2030 (in line with the ambition set in the full Council motion);
- Carbon neutral Milton Keynes by 2050: a scenario showing the changes it may need to make to achieve a carbon neutrality by 2050 (in line with the proposed target set out in the full Council Net-Zero report, the UK Parliament's 'climate emergency' declaration) and any more recent government commitments.

The Task and Finish Group recommends that once this initial set of three scenarios has been assessed, they should form the basis for discussions with stakeholders and further research work commissioned, to consider the different potential intervention mixes which could be deployed to enable Milton Keynes to become carbon neutral.

The outcome of this phase of work should provide a suite of published, bespoke, Milton Keynes specific emission reduction pathway options, which would cover all sectors and which would provide an outline of the different strategies Milton Keynes could take in order to respond to the climate emergency.

Task and Finish Group Observations for a Milton Keynes Council's Journey to Carbon Neutrality

Setting a 'Blueprint' for a Carbon Neutral Life in Milton Keynes

The Task and Finish Group recommends that using the outcomes of the Council commissioned Carbon Neutral Scenario work, the Council should work with

communities to identify the changes that need to be made to the way it operates and how people generally live their lives in Milton Keynes to create a shared, agreed blueprint for the future.

This should closely link to the Milton Keynes Futures 2050 work programme which will refresh the Council's spatial approach to the delivery of its strategies across Milton Keynes and which will bring together the:

- Existing strategies which already form a positive suite of Council policy, including ('Plan:MK', The Council Plan 2016-2022) and the 'Milton Keynes Economic Development Strategy 2017-2027);
- Emerging reviews of policies such as the (2019 – 2050 Sustainability Strategy, Strategy for 2050, Housing Strategy 2019 – 2024 and The Joint Health and Wellbeing Strategy for Milton Keynes 2018-2028 – and others), will enable Milton Keynes Council to make tangible the features of a carbon neutral life in Milton Keynes.

For example, the Council is likely to develop further policies that favour the increased use of public transport over continuing to support car-based lifestyles achieved through a variety of complimentary policies.

Milton Keynes Council should be seeking a clear vision of the system change outcomes it will want to achieve that cannot be achieved through one decision or investment. The types of changes that require a concerted focus over several years to achieve can only be achieved if contradictory decisions are not made to undermine the resolute pursuit of 'the vision'. This approach should also require the Council to hold its integrity of vision and the flexibility to realise the vision through agile responses to opportunities.

Creating a 'Road Map' to Guide the Council's Journey

The Task and Finish Group recommends that the Council's 'blueprint' should provide the vision for a carbon neutral Milton Keynes but recognises that this cannot be achieved in one step.

Creating indicative illustrations of the transformations needed in the Council's different sectors, it is important for the Council to understand in more detail the magnitude of change, the interdependencies between different sectors and the changes themselves. It should also demonstrate that a linear route to this outcome is difficult to define exactly, and that the Council's 'road map' will have to evolve as it makes decisions and progresses towards carbon neutrality.

Importantly, both the blueprint and road map(s) should help the Council to appraise its choices when decision making so that it can ensure it is also making progress towards its new vision, even if this might seem tangential.

Challenges and Opportunities for Milton Keynes

The Task and Finish Group recognises that all parts of the local economy will need to play a significant role in achieving what is required to get to carbon neutrality and that this goes beyond the contribution of any single organisation or community. It will, for example, require significant changes to the way the Council chooses to operate, from the

energy it uses, to the products and food that it purchases. It will also require leadership at multiple levels, and a new way of thinking. Climate change does not work to organisational boundaries or thinking. It will require decision makers to connect and properly consult with communities, businesses and individuals in ways that previously have not been done, working towards joint solutions that can create the critical mass to reach the step-change required. This will involve hard choices and understanding of a complex landscape.

The difficult realities of this transition will need to be addressed. The Task and Finish Group anticipates that the scenarios should indicate, whichever path or approach the Council takes, some clear deliverables and clear challenges about how to achieve these. Electricity will need to become zero carbon, road vehicles will need to be running on near zero carbon, and virtually no buildings should be using oil, gas or coal to heat them. Planes (at least for the foreseeable future) are still likely to run on oil, so other sectors will need to compensate, agriculture will need to reduce fertiliser use, reduce emissions and capture methane.

The population at large will need to collectively consume less, and the way the Council manages its land will need to change to absorb more carbon dioxide. There will be a need to build in longer-term perspectives on how we build homes that are more thermally efficient, not building in or close to flood plains and designing roads and a transport infrastructure that is climate resilient.

The Task and Finish Group recognises that not all such decisions will be popular, and this is a primary reason why the Council should be consulting all interested parties, but if it is to be successful, those decisions will be unavoidable. The Council needs to ensure a prosperous and sustainable society that recognises an individual's need for travel for work or leisure activities; by harnessing (and adopting) society's appetite for future technological advances, carbon neutrality should be easier to achieve. Councillors will be attacked on one side for being too radical and from the other for not being radical enough.

The Task and Finish Group emphasises that it is important to recognise that there will also be multiple benefits to the carbon neutral journey. To do nothing comes at a significant cost, which will be more fully demonstrated through the further ongoing work that it is suggested should be commissioned after this report, outlining varying scenarios on the way climate change might impact on Milton Keynes. There should be health benefits from better air quality, warmer homes, increases in walking and cycling and healthier diets. This has the potential to reduce health inequalities and lessen the demand on the NHS and social care. The Lancet Commission concluded, "tackling climate change could be the greatest global health opportunity of the 21st century" (<https://www.thelancet.com/climate-and-health>).

There is an opportunity to create a more resilient economy through better energy security and there will be opportunities to stimulate the economy with new green industries and practices. These are opportunities that Milton Keynes should already be advancing and can continue to do so within the wider framework of the carbon neutral journey.

According to the Office for National Statistics (ONS) figures, the growth in the environmental goods and services sector was 27% between 2010 and 2015, contributing £30.5 billion to the UK economy, and employing 335,000 people (up 10% from 2010). Recent examples of activity in other parts of the UK (such as retrofitting homes) have proved there are positive impacts on the extensive supply chains involving large numbers of SMEs, which make up the core of the local economy.

The ONS also estimated that the UK low carbon and renewable energy (LCRE) economy grew by 6.8% in 2018, significantly outpacing the 1.8% growth of the wider economy. Performance of this sector has been strong over the last decade with the low carbon economy having grown over the period on all three key economic measures of employment, turnover and GVA.

The Council's Role in Moving Towards a Carbon Neutral Milton Keynes

In moving towards a carbon neutral Milton Keynes, key considerations have been defined as being:

- **The need for holistic decision-making**

The Task and Finish Group recommends that a decision-making framework should be developed to crystallise a policy of holistic decision-making into all future strategy and policy development.

It is important to note that in many instances, meeting the Council's climate change and social equity ambitions are not mutually exclusive, but care must be taken to ensure that any measures to tackle climate change do not disproportionately impact on the more vulnerable members of society. All existing policy documents should be reviewed in the light of the Council's climate emergency motion.

- **Milton Keynes Council's Spheres of Influence**

The Task and Finish Group recognises that the Council's role is as a leader of a whole system approach. Milton Keynes Council only has direct control over a small proportion of the total emissions of Milton Keynes. Its more significant role should be how the Council works within a systems leadership landscape to enable, influence, communicate and develop requests of Government that collectively will facilitate the journey towards a carbon neutral Milton Keynes and drive a conversation with our partners and communities about a strong vision and strategy for a collective, carbon neutral future. The spheres of influence that the emerging Tackling Climate Emergency policy documents should consider fall into five categories;

- Areas the Council can directly control / guide;
- Area the Council can enable through funding;
- Areas the Council can enable through policy;
- Areas the Council can influence locally; and
- Areas the Council can influence or lobby for nationally.

The Task and Finish Group emphasises the need to align the Council's programme of actions with its span of influence. Reflecting these spheres of control, Milton Keynes Council is recommended to develop three programmes of work.

Suggested working titles might be:

- Milton Keynes Council's Operational Plan (through its direct control of services and guidance of its group of companies and contracts);
- Milton Keynes Council's Facilitation Programme (through its funding, policy and local influence activities);
- Milton Keynes Council's Regional and National Programme (through its regional and national relationships and influencing role in organisations such as SEMLEP or via the LGA).

The Task & Finish Group recommends that the Council approaches the development of the Climate Change Strategy as set out in the January 2019 Council Motion through a series of phases, namely:

- **a detailed discovery phase in partnership with an academic body, that includes developing more deeply its evidence base, the case for change, options for mitigation and the potential quick wins (so called, 'low hanging fruit');**
- **a define phase, which includes the development of an implementation programme, wider engagement through the development of a 'Milton Keynes Conversation' and integrating with the wider systems leadership on the co-design principles required to deliver change;**
- **a delivery phase, including large scale mobilisation to deliver projects, drive behavioural change and the monitoring and evaluating of measurable progress.**

Given the scale, complexity and urgency of responding to climate change, **it is recommended that a Cabinet / Council 'Implementation Plan' is seen as something that is iterative in nature.** While setting out the medium to long term roadmap to carbon neutrality, it is also likely that an annual update will be needed, to capture the rapid changes being delivered under the Implementation Plan, and to ensure it is reflective of the likely rapidly changing national and international context.

The Task and Finish Group suggests that the number of responsible council directorates, outside organisations and individuals charged with delivery should expand and become clearer as the approach to tackling climate change develops during the coming months and years, and they should become responsible for reporting progress against an agreed, shared programme. **A core Climate Emergency team at Milton Keynes Council should oversee and report into the appropriate governance structures, although the Task and Finish Group emphasises that the responsibility for a change programme of this scale should not reside with any one individual directorate or organisation.**

Categories of Intervention

In addition to the Council's sphere of influence, it also needs to be aware of the differing types of interventions that are required to both mitigate and adapt to climate change. In broad terms, these fall under three categories of intervention that could reduce

emissions, increase carbon capture or increase adaptation to the impacts of climate change, namely:

- Ecological - natural climate solutions – delivering sustainable environmental growth;
- Technological interventions – enabling carbon neutral lives and evolving quickly; and
- Social - cultural and behavioural interventions – choosing carbon neutral lives.

Balancing Interventions

The Task and Finish Group recommends that plans to address the challenges of the climate emergency should reflect all three types of intervention noted above (Ecological, Technological & Social) and ensure that the Council carefully evaluates the balance of what it delivers in terms of the relative return on investment in both the short, medium and long term as well as the specific impacts.

Milton Keynes Council should also consider carefully the balance between investing in incremental change to 'business as usual' through mitigation measures and those which adapt Milton Keynes to climate change, some of which will require what may be seen, initially, as radical changes. For example, the Council needs to be aware of the balances between pursuing:

- Social / behavioural changes that prevent emissions or substantially reduces them through the mass uptake of individually small actions. These can quickly make a huge difference to carbon consumption and emissions but are not easy to achieve without specific interventions which could be 'carrot or stick' approaches. These approaches often need substantial political support, policy changes and sustained revenue investments e.g. plastic bag tax, subsidising public transport, changes to the waste collection contract, differential pricing for sustainable options.
- Major capital investments in infrastructure change. These investments do provide assured changes to the structure of how we live our lives and societal patterns but have a medium to long-term delivery timescale, often requiring high levels of investment. They are also often subject to diminishing levels of return, as infrastructure only has a set lifespan before needing maintenance or replacement. Thus, further investment is required which is often not from a capital source, e.g. major renewable energy installations, transport infrastructure changes.
- Natural climate solutions. These interventions are often societally and politically challenging to deliver, as they involve changing land use management or the character of places. However, many provide long term and sustained benefits for relatively affordable investment levels e.g. tree planting and the rewilding of previously managed land.

The Task and Finish Group recommends that the mitigation programme(s) will need to include a mixed portfolio of investments that will provide a suite of outcomes in which the council control or influence the magnitude of change and the length of benefit is clearly forecasted.

Milton Keynes Council's Operational Plan to Address the Climate Emergency

The Task and Finish Group recommends that the key areas to which the Council should commit to deliver should directly include changes to its governance, infrastructure, strategies and policies, how it works, what and how it procures and its financial models.

Examples could include the development of carbon accounting and a carbon budget, minimum carbon standards on its properties, driving down emissions through its procurement approaches, changing staff working patterns, increasing biodiversity and tree coverage on its directly owned or managed land holdings, and appropriate taxation and charges to reinvest into the wider change programme. Specific commitments for actions within the Council's direct control or where it can guide contractors or suppliers should include:

A climate emergency organisational change programme

The Task and Finish Group recommends that Milton Keynes Council begins a process of aligning the Council's policies and governance to ensure that the whole organisation rises to the challenge of the climate emergency.

To deliver on policies that reflect the declaration of a Climate Emergency, the Council should undertake the following actions to ensure all Council and Cabinet decisions are informed by perspectives of the climate emergency.

The Task & Finish Group recommends that the Council's climate emergency organisational change programme should involve work to align Milton Keynes Council strategies and policies including:

- Redesigning internal strategies and policies to ensure alignment with the climate change emergency;
- Embedding environmental/ carbon priorities within the Council's core internal and external communications and narrative;
- Embedding carbon management, and environmental stewardship/ responsibility, within the core values of the organisation and include within behaviours/ performance management cycles;
- Alignment of all relevant outwardly focused strategies to facilitate a co-ordinated approach to reduce emissions and responses to climate risk.

The Task and Finish Group recommends work to align the Council's governance structures by strengthening its assessments of climate and environmental impacts in all decision making and reporting, with early initiatives including:

- Introduction of carbon/ environmental impact and climate risk assessments procedures to guide Council decision making, including the development of a report template – involving the inclusion of:
 - carbon/ environmental impact and climate risk assessments within the Investment;

- carbon /environmental and climate risk assessments specifically within the Council's Comprehensive Impact Assessments which should also have an increased application across all Council decision making processes;
 - carbon/ environmental impact and climate risk assessments during the phases of major project developments to ensure that decisions on whether to implement projects take this impact fully into account;
 - full review of the Corporate Leadership Team to include assessment of how carbon and wider climate impacts will be reviewed within each board process and the development of a relevant template.
- Introduction of climate related metrics into the Council's performance monitoring framework involving the:
 - immediate development of a climate and environmental scorecard, together with wider reporting for the organisation, to be reported up to Corporate Leadership Team, politically at Cabinet level, as KPI's to Scrutiny Management Committee and embedded within service targets. Reporting should include carbon and energy performance alongside paper usage and single use plastic consumption to take a wider view on environmental performance of the organisation;
 - requirement for all organisational projects to track climate/carbon and environment specific benefits;
 - integration of carbon accounting procedures at both an organisation-wide and directorate level. Incorporating carbon accounting and budgeting reporting encompassing energy, fleet, grey fleet and wider travel.

The Task and Finish Group recommends work to improve the Council's procurement processes to ensure that its suppliers support the Council's carbon neutral ambitions through:

- Including an agreed sustainability/ environmental statement within its tender documents, which should be provided to suppliers to ensure they prioritise sustainability within their proposals. Work needs to be undertaken to agree percentage weighting of supplier environmental performance in the Council's selection process;
- Reviewing the carbon footprint of materials / products / services it procures and to identify options to reduce carbon emissions from the Council's supply chain.

For example,

The Task and Finish Group recommends that the Council considers prioritising suppliers for future school transport contracts based on the emissions performance of the vehicles they use.

This may increase the cost of school transport but should take some of the most polluting vehicles off Milton Keynes roads, improving air quality around schools as well as helping the Council to become carbon neutral.

The Task and Finish Group recognises that the Council is a contracting authority and as such is required to comply with both its own Contract Procedure Rules and (where contracts are over the relevant value threshold) the requirements of any Public Contract Regulations.

The Task and Finish Group understands that the Public Services (Social Value) Act 2012 imposes a legal duty on the Council to ensure that, where the Council is carrying out a procurement, to consider how what is being proposed might improve the economic, social or environmental well-being of the relevant area and how, in concluding the process of procurement, the Council could act with a view to securing that improvement. When considering these issues, it is important to understand that only matters that are relevant to what is to be procured are considered and in so doing, the Council must consider the extent to which it is proportionate in all the circumstances to take those matters into account. The Task and Finish Group recognises that this now needs to be considered in the context of the Council declaring a Climate Change Emergency and the statutory framework referred to above.

According to evidence received from the LGA, local authorities across the UK spend more than three-quarters of a billion pounds on energy alone.

*Sheffield City Council has recently committed to only buying green electricity which it says will not cost much more than its existing source. (*Big Stamp of Approval, 2019, the council commits to purchasing electricity generated from 100% renewable source, <https://sheffield.bigstamp.uk/labour-commits-the-council-to-purchasing-electricity-generated-from-100-renewable-sources/>). However the Task and Finish Group notes that it is important that such a shift increases the amount of renewable energy produced, for example through a Power Purchase Agreement (PPA - A PPA is a long-term purchasing contract with a developer which gives the developer the necessary confidence to build the renewable power plant. Power Purchase Agreements could also be used to support the development of community-owned energy schemes).

On food procurement, Milton Keynes Council could consider developing with partners a sustainable food procurement policy to be delivered through schools, hospitals, nurseries, care homes and Woodhill prison. Public menus should be aligned with healthy and sustainable eating advice set out in the Eatwell Guide (<https://www.gov.uk/government/publications/the-eatwell-guide>), including less and better quality meat. Milton Keynes Council could consider adopting a sustainable and Healthy Food Policy designed to *Support and promote higher quality, higher welfare meat, whilst seeking to encourage reductions in overall meat consumption.*

There is undoubtedly significant scope for Milton Keynes Council to improve procurement processes to deliver on environmental and social goals.

A Carbon Neutral Council Programme

The Task and Finish Group observes that Milton Keynes Council should demonstrate leadership through ensuring that its operations will be carbon neutral by 2030. The carbon neutral Council programme should involve:

Delivering a carbon neutral estate by 2030:

The Task and Finish Group recommends that this is initially delivered through an investment of a significant proportion of a Milton Keynes Council Renewable Energy Investment programme into deployment of renewables across its estate, increasing its installed capacity of renewable energy, targeting (for example) enough to power between 3,500 and 4,000 homes.

Such an investment should also deliver operational cost reductions to the Council over (for example) a 25 year lifetime projects programme and an additional income in PPA and export payments. A pipeline of projects should be developed.

Carry out a review of all Milton Keynes Council office estate assets (within the Council's ongoing Property Transformation Programme) to understand current carbon / energy performance and to underpin a programme of improvement works to improve insulation/ carbon efficiency of this estate. The Bleak Hall offices are suggested for carbon efficiency transformation.

A project is already underway to switch the 54,000 streetlights in Milton Keynes to low energy LED smart streetlights. This could deliver annual carbon saving of 4500 tCO₂, equivalent to almost half of Milton Keynes Council's current estate carbon footprint, as well as annual savings of between £900k-£1m. The estimated capital cost of the project is between £12.4m-£15.76m.

Accelerating the transition of Milton Keynes Council fleet to ultra-low emissions vehicles by 2030:

The Task and Finish Group recommends that the 107 vehicles operated on the Council's behalf by Serco, the vehicle fleet operated by Ringway and the 90 vehicles directly owned by the Council, migrate over to ultra-low emission vehicles expanding any existing plans by 2023.

This work should be accelerated further by early retirement of diesel pool cars and vans, replacing these to 100% electric pool cars and vans and being mindful that the Government (4 February 2020) has brought forward the end of sales of petrol, diesel and hybrid cars to 2035. The Task and Finish Group notes that the current review is looking at ways Milton Keynes Council can produce its own energy for vehicles as well as purchasing:

- Electricity – zero tail pipe emissions, increasing vehicle availability; and
- Bio-methane (renewable gas) – used for waste fleets globally which can be produced from waste or bought from grid (noting as well that the Council already has an Anaerobic Digester).

The Council should develop electric vehicle charging for its van fleet, local electric buses and potentially bio-methane refuelling hubs for heavy vehicles and buses. A provisional cost estimate for delivery of the first 'super depot' facility should be prepared which should include the electric charging facilities as well as service facilities for bus operators.

The Task and Finish Group recommends that Milton Keynes Council should investigate generating carbon neutral fuel sources through both the development of, initially, bio-methane and (in time) hydrogen fuelling:

The Task and Finish Group notes that bio-methane should be generated locally from council grass cuttings, local farms, and working with the Parks Trust as well as with private sector partners. Small pilot refuelling stations should be deployed initially to power a small number of vans operated by Milton Keynes Council, and its partners. Longer term, these stations could fuel buses and hauliers.

The Task & Finish Group recommends that Milton Keynes Council makes its transport infrastructure and transport offer increasingly sustainable.

Measures that are under the direct control of the Council to make transport more sustainable could, over time, include:

- All future major transport projects should have a carbon impact assessment included in their business case;
- Carbon reduction percentage - ensure that the proposed Oxford – MK – Cambridge Expressway (if taken forward) demonstrates an exemplary model of green infrastructure with biodiversity net gain built in as standard to this, and every transport capital scheme (including construction of Redway extensions to the unique MK cycle and walking network), with a percentage of the budget of each project dedicated to the delivery and maintenance of green carbon offsetting infrastructure;
- Milton Keynes Council should examine ways in which it can invest and own an increasing part of the public transport fleet and network (e.g. operating Ultra Low-Emission buses) to acquire greater control of the delivery of local transport policy and operations;
- Replacing bus operators' diesel buses servicing Park and Rides with zero emission buses. Electric buses could be recharged by electricity generated on site with solar panels and battery back-up at a network of the current and future Park & Ride facilities.

The Task and Finish Group notes that Milton Keynes Council has the potential to reduce emissions through encouraging and enabling staff to adopt sustainable practices by:

- Strengthening flexible working within the organisation, enabled by a refreshed 2020's Working Differently Programme, but underpinned by clear targets and leadership team sponsorship and trust;
- Updating the Corporate Travel plan by ensuring that infrastructure measures and incentives (in addition to demand restraint) are in place to support a staff modal shift.

The Task and Finish Group recommends that Milton Keynes Council should develop, as a priority, a green travel plan for staff.

This plan should promote:

- Optimum working locations for staff to minimise journey time (primarily through encouraging home working);
- Opportunities for more sustainable travel between offices and partner offices, to include ultra-low emission pool cars, bike/ e-bike hire schemes and business mileage incentives;
- A review of the Bleak Hall site and an assessment of its 'fit for purpose' status;
- Options around managing Central Milton Keynes car parking for staff to encourage usage of alternatives to their own petrol/ diesel cars;
- Subsidising public transport use, such as free use of park and ride buses and city shuttle bus solutions for travel between offices;
- Rolling out a climate change skills / learning and development programme for staff to improve understanding of carbon and the wider environmental context. The skills programme should include:
 - Encouraging personal responsibility through the support for the Climate Emergency pledges and roll out of a staff *Green Champions Network;
 - Base level training for all employees;
 - More targeted / intensive training for Senior Management Team decision-makers to enable them to adequately assess carbon impacts in their decisions;
 - Immediate inclusion of 'climate change response' as one of the systems leadership challenges in a *2020 Leading Differently by Example* Programme.

Milton Keynes Council should deliver a cultural and behavioural change programme, focused on enabling staff to reduce their carbon impact at work whilst also reducing their carbon impact in their home lives. Recommendation that (in time) this is a Milton Keynes Council and contractors/partners behavioural change programme to ensure that the Council is demonstrating leadership on this initiative for Milton Keynes.

*Everyone has a role to play to help make Milton Keynes climate resilient and a greener place to live.

The establishment of a Green Champions Network would gather a list of actions that every employee could take to contribute to the Council's ambitious target.

The role of this group would be to promote resource efficiency in the Council and to support the Energy & Climate Change Team to ensure that sustainability is embedded in all operations and policies.

The network would contribute towards achieving its defined future goals, spreading a culture of change and improving collaborative working. The group would comprise of voluntary staff members from all services and seniority levels

Where is Milton Keynes Now?

The Council's Environmental Growth Assets and Services – Generating Natural Climate Solutions

The Task & Finish Group recommends that Milton Keynes Council reviews the management of its environmental assets to optimise their role in creating a carbon neutral Milton Keynes.

The Council's Environment Service(s) manage a range of assets and provides advice and guidance on many projects and initiatives across the Borough and beyond. There are some specific opportunities for environmental growth through natural climate solutions which the Council should develop and deliver:

- **Reducing emissions, increasing carbon sequestration** – the Council should work with its partner contractors to review how it manages its environmental assets to optimise the balance between management interventions that generate emissions and the opportunity for carbon sequestration through increased vegetation growth or changed land management patterns.
- **Making space for nature** - where appropriate, the review of Plan:MK should extend the implementation of the approaches delivered through the Green Infrastructure as part of the review of the local area growth programme.
- **Biodiversity Net Gain in Development** – Milton Keynes Council should work via its Strategic Planning Service (through the review of Plan:MK) to introduce the requirement for 'net gain' in biodiversity in all major new developments.
- **Landscape Character Assessment** – Milton Keynes Council should review and refresh its assessments to provide the context for the character and capacity for landscape change to deliver its environmental growth and carbon neutral ambitions sensitively to the Borough's local heritage and landscape.
- **Accessing nature and active travel** – Milton Keynes Council should establish how it can increase the use of the Redway network and other Public Rights of Way for active travel and increase the connection and understanding residents have with nature through their ability to access natural spaces in urban, rural, Ouse Valley and Greensand Ridge areas. The first step for this project could be a mapping exercise to inform and develop some form of focused accessing nature strategy document.
- **Natural flood management** – the Council should identify where natural flood management approaches can be used to increase carbon sequestration and deliver improved catchment management. This should be initiated by an opportunity mapping exercise and be driven by the needs of the climate emergency and not by the developer lobby!
- **Flood risk reduction** – the Council should work with the Environment Agency and allocate capital match funds to help increase the leverage of national funds available to manage flood risk in vulnerable communities across Milton Keynes.

- **Heritage** – the Council should work locally and with Historic England to explore how to appropriately adapt its heritage buildings to reduce carbon emissions and how the heritage Greensand Ridge and other important landscapes can adapt to climate change and play a role in negating the impacts.
- **Climate impacts** –the Council should ensure that it is managing the variety of increasing impacts of climate change on its assets to keep communities safe, to support its ambitions for change and deliver long term adaptation outcomes.
- **Sharing our knowledge** – the Council should provide capacity to share its learning and approaches with others, such as Town and Community/Parish Councils and other community groups.

Ensuring Sustainability is Prioritised in the Council’s Capital Projects

Milton Keynes Council should demonstrate leadership through ensuring that climate impacts are considered when it leads capital builds, by including the adoption of a Net Zero Buildings Commitment within all capital build project assessments. In order to ensure the sustainability of each project, including new school build and community facility projects, the Council should apply the steps to achieving net zero buildings in line with the UK Green Business Council’s framework:

- Mandating projects to be built to a certain standard;
- Voluntarily conduct sustainability / carbon impact assessments to consider whole lifecycle carbon impact of construction / delivery, as well as the in-use carbon footprint once buildings / projects are developed and operational. Making decisions on whole life costs / carbon impacts, rather than solely on immediate capital costs;
- Recognising that the costs of sustainable developments / materials are often higher on implementation but offer lower long-term costs in terms of maintenance and energy. This could require a major cultural shift for organisational decision makers to prioritise sustainability against cost;
- Consider how to reduce travel requirements and promote sustainable travel alternatives when planning major capital projects.

The Task and Finish Group recommends that Milton Keynes Council acts as housing pioneers in a whole-house retrofit programme of council owned social housing.

Working through the Council’s housing team and social housing partners, Milton Keynes Council should demonstrate how the existing social homes in Milton Keynes can be made as near as is practicable ‘zero carbon’.

Milton Keynes Council’s Housing Service has an estate of approximately 11,000 homes. Work on whole-house retrofits suggests that economies of scale could reduce costs in 2025 by over 50%.

The Task and Finish Group recommends that the Council should undertake a detailed investigation to ensure that the most appropriate retrofit approach is adopted.

In the short term, the Council should investigate the possibility of securing part funding for retrofitting an achievable and realistic proportion of social homes to near zero carbon standards through BEIS' forthcoming Whole House Retrofit competition. Milton Keynes Council should consider applying to secure funding from this competition, working with an ECO Concession partner (such as SSE Energy Solutions). This project will build on the BRE-led Home Works 'Each Home Counts' BEIS pilot currently ongoing in other parts of the country.

Milton Keynes Council Pioneers Building Zero-carbon Council Homes

Milton Keynes Council should demonstrate leadership in the development of zero-carbon council homes.

It has been estimated that zero carbon social homes could be built at scale for in the order of 20% extra per home over and above building to current building regulations. A social housing provider in Wales is already piloting these homes. Building 1000, such homes would avoid adding an additional 80 ktCO₂e of carbon emission - equivalent to about 2% of the Milton Keynes annual carbon footprint.

These homes also reduce energy consumption by around 60%, saving the average household up to an estimated £600 per year. Milton Keynes Council should also be able to develop an industry building zero-carbon homes in the Borough, using modern methods of construction and thus future proofing and safeguarding jobs in the local construction sector.

Milton Keynes Council's Delivery Programme

Specific Commitments for actions where the council can influence wider change across Milton Keynes

The Task and Finish Group recommends action enabling the Council to reduce its transport emissions by making Milton Keynes a place where it is easier and more affordable for the public to avoid the need for car journeys.

Transport is a crucial aspect of the Climate Change emergency as this sector is responsible for nearly one fifth of Milton Keynes GHG emissions. One of the six core goals in the "Local Mobility Strategy", the current Local Transport Plan, is linked directly to managing the impact of transport on the climate and there are several policies throughout the strategy around modal shift and protecting the environment, which all play a key role.

Increasing the mode share of active travel in Milton Keynes is supported through the identification of town-wide walking and cycling networks and the Council's ambition to deliver transformational cycle networks through funding commitments, such as the Highways England Designated Funds programme, announced early in 2019. Major construction schemes already include measures to offset the impact of transport infrastructure on the environment by including green infrastructure to achieve biodiversity net gains, such as for the A421 dualling project (being managed by Central Bedfordshire Council) connecting junction 13 of the M1 with south Milton Keynes. In addition, building on the relative success of Milton Keynes Council's Public Transport

programme in increasing bus patronage (patronage is up although as a proportion of trips it remains flat because of the growth in population) and reducing emissions from buses.

- Reviewing the suite of Local Transport Plans and its investment priorities. The road, public transport, rail and active travel modes funding split should be reviewed and rebalanced in line with carbon-neutrality objectives. The earliest possible delivery of East-West Rail should be the priority, with a recommendation that funding identified for the Expressway be focused instead on that important rail project (preferably electrified) together with locally identified, strategic road solutions.
- Ceasing the promotion of measures that increase greenhouse gases – for example, increasing road capacity with schemes such as an Oxford-MK-Cambridge Expressway. There are many years of evidence that show that new road capacity simply encourages more traffic and therefore increased greenhouse gas emissions. For example, see Campaign for Better Transport, 2019, Major Road Building is failing to deliver, <https://bettertransport.org.uk/blog/roads/major-road-building-failing-deliver> .
- A review of each Town and Parish Transport Plan to identify truly local solutions to reach carbon neutrality. For example, using publicly funded, new generation school minibuses as community transport vehicles when not in use by the school.
- Developing a Milton Keynes Council Supplementary Planning Document (SPD) and Highway Design Guide to support a more sustainable infrastructure, encouraging more modal shift and carbon neutrality (e.g. introduction of more electric vehicle and autonomous vehicle infrastructure or reduction of a car-centric streetscape).
- Delivery of a Milton Keynes wide walking and cycling trails network including town-wide safe cycling networks for the whole of the Borough.
- A new subsidy system to enable more affordable bus trips (aligned with current London fare standards) and, in addition, extending free bus travel from older persons to also include children and young adults.
- Delivery of more Park & Ride facilities to support public transport uptake, reduce congestion and pollution and increase the vitality of all retail areas across the Borough.
- Reduce emissions further by targeting switching to a zero-emission bus fleet by 2030 and campaigning for zero-emission trains by promoting the electrification of the East-West Rail initiative. Milton Keynes Council should work with operators to review options for switching to zero-emission buses across all routes. There may be options for electrification of some of the shorter routes, however, in order to transition longer distance bus journeys, Milton Keynes Council should work with bus operators to help enable them to switch to zero emission buses by 2030. Milton Keynes Council should enable this by providing alternative fuelling infrastructure and financial support to bus operators to switch their fleets over to ultra-low emission buses. Options include bio-methane buses, hybrid buses and,

in the future, hydrogen buses. This should be undertaken in tandem with other local authority partners across the Oxford – MK – Cambridge arc.

Enabling Residents and Businesses to Switch to Ultra-low Emission Vehicles

The Task and Finish Group feels that Milton Keynes Council should be working with partners to access grant funding to increase the number of electric vehicle charging over the next 3 years from around 346 public charge points currently (of which 88 are rapid chargers) to over 450 charge points by the end of 2020. Milton Keynes Council expects to install around 100 more over next 12 months.

Whilst Milton Keynes already has the one of the highest deployments of charge points by any local authority, our charging facilities are still insufficient, both in respect of geographic coverage and (in particular) charge speed. In order to make electric vehicles a viable option for many drivers, the charging capacity needs to be enhanced. The Council should investigate opportunities to deploy electric vehicle recharging forecourts along Milton Keynes arterial routes (A421 etc.) and in our major towns and villages which would substantially improve charging facilities for residents, businesses and our visitors.

Building a Sustainable Bio-methane Supply Chain

Local derived fuel generated by farmers and land managers across Milton Keynes as two thirds of the Borough remains rural in character and would assist Milton Keynes in its transition towards carbon neutrality, with the farming community generating its own fuel on-farm to replace the red-diesel used in their farm machinery and vehicles. This fuel could also potentially be used as heating fuel, replacing oil and LPG on-farm and in any off-gas rural areas. On-farm bio-methane production and use is being showcased by the national ERDF funded Energy Independent Farm project.

Milton Keynes Council should explore opportunities to work to extend and improve the efficiency of existing anaerobic digestion operations for processing food waste from Milton Keynes Council provided food waste collections.

Milton Keynes Council should also explore opportunities to develop a Milton Keynes commercial scale bio-methane refuelling station which could fuel multiple numbers of heavy vehicles (MK Council contractor buses and trucks) per day. Fuelling stations should be located where there are high volumes of truck movements. Other local authority areas (e.g. Plymouth City Bus) are operating Bio-methane buses and haulage companies are currently running dual-fuel gas / diesel trucks into Milton Keynes but, to date, there is a lack of refuelling infrastructure planned to refuel these trucks on gas within Milton Keynes.

Piloting Hydrogen Refuelling

Over time, hydrogen refuelling stations should be developed along major arterial routes and in urban areas. Initially, small-scale hydrogen refuelling stations could be developed. Stations are available in other parts of the country that should be capable of providing fuel for up to 16 light vehicles (cars/ vans) per day at a development cost of c£1.3m and £60k per year running costs per station. A station could be developed, potentially working with an academic partner such as Cranfield University or the OU, to assist in its design effectiveness and efficiency.

Developing a Forest for Milton Keynes

Milton Keynes should develop a mass woodland tree planting programme. Once fully planted, a 'Forest for Milton Keynes', would cover approximately 1000 hectares (10 sq. kilometres) – predominately in the north of the Borough - or about approaching 2.5% of Milton Keynes land mass.

Natural climate solutions such as this offer an important opportunity to deliver environmental growth in Milton Keynes that could both mitigate and help the area's adaptation to climate change. A flagship project should be to deliver a substantial increase of the overall canopy cover in Milton Keynes, through the planting of trees on our streets and as part of the planning requirements in the expansion areas, renewing and replacing damaged, existing hedgerows and through the creation of a new woodland and forested area in the north of the Borough.

Over time the Forest for Milton Keynes could sequester potentially in the order of 1% of Milton Keynes annual carbon footprint. As our carbon footprint decreases to near zero levels, this carbon draw-down would become critical. The rate of draw-down increases as the trees grow, making it imperative that Milton Keynes Council plants the Forest for Milton Keynes urgently, as, according to the Forestry Commission, net emission reductions are not likely to be accounted for within the first five years.

Calculations on the cost of the headline Forest for Milton Keynes proposal and sub-schemes need to be assessed but an early estimate is the cost for delivery of the 1000ha could be in the region of £5-£10m (taking other areas of the country as examples) when all costs are factored in.

Bids to government supported national tree planting schemes would need to be prepared. The Council should also consider developing a voluntary carbon offset scheme for Milton Keynes to help fund tree planting through the sale of Woodland Carbon Units to organisations wishing to evidence carbon neutral operations; this could involve partners such as the Local Nature Partnership, landowners, the Parks Trust, the National Trust, the Greensand Trust, Anglian Water and the Forestry Commission.

Supporting Householders and Landlords to Reduce Emissions from Homes and Community Buildings

The Council should support residents, landlords, and community buildings to reduce emissions in our homes through:

1. **Exploring opportunities for encouraging solar panel installations on suitable roofs in combination with energy storage solutions** (note the London Borough of Waltham Forest initiative in this area as best practice);

Models under consideration by the Council should include:

- A Council supported collective buying scheme for solar. This could be modelled on the 'Solar Together' schemes operated by local authorities elsewhere. A Milton Keynes based 'Solar Together' scheme could build on the work of the successes of collective switching campaigns operated elsewhere;
- Community energy financing loans and / or a 'carbon neutral community grant competition' targeted at supporting community carbon neutral projects / buildings.

2. **Exploring opportunities for delivering a whole house retrofit programme:**

The Task and Finish Group notes that by offering loan funding for Whole-House Retrofit and other home energy improvements to private sector landlords, the Council would help address private sector rented homes in Milton Keynes which do not meet the Minimum Energy Efficiency Standard (MEES), building on the experience of Council Private Sector Housing teams elsewhere and developing on a variety of BRE-funded MEES pilot initiatives.

3. **Supporting the transition to zero carbon electricity by:**

Working with local power distribution companies to strengthen the distribution grid and support the transition to a smart grid capable of meeting the requirements of a carbon neutral Milton Keynes.

Supporting emerging renewable technologies, such as wind turbine and deep geothermal technologies, to mature and provide zero-carbon power.

Supporting the transition of Milton Keynes Council's food and farming sector towards becoming an exemplar of low carbon and regenerative agriculture.

Working with the Milton Keynes Agri-Food community, the NFU, and the farming community at large to help reduce and draw-down emissions from agriculture, build resilience and increase productivity from the sector.

Working through and with national strategies and frameworks, the Task and Finish Group notes that the Council can also influence the definition of local priorities in areas such as energy, climate, transport, planning, waste, and environment.

The Council can act through its:

- Planning function to put in place policies that will facilitate a move towards zero-carbon homes and generation and it can also exercise its leverage over public

transport and encouraging modal shift, encouraging education and promoting the circular economy.

- It's role working with SEMLEP to develop a Local Industrial Strategy that promotes opportunities to deliver productivity improvements for the Milton Keynes economy through Clean Growth.

The Task & Finish Group notes that the role of the Council to influence partners locally is of fundamental importance, with its relationships with Town and Parish Councils, voluntary and community groups, universities and other major organisations all being critical. Working across sectors through combined leadership should form a key part of the transition, potentially creating critical mass in the transformation towards a low carbon society.

The relationship with Central Government will be important in unlocking Milton Keynes Council's aspirations. While local system leads should not be defined nor restricted by Government pace or ambition, there are significant areas, such as access to 'green' finance, permissive and supportive legislation (that is supportive of areas such as clean generating technologies), higher quality buildings (including building regulations) and mass retrofit. Additional areas of focus include unlocking the constrained grid system, redefining transport and energy infrastructure, and supporting curriculum and skills programmes.

Electrification of the East-West railway and the potential to develop a climate levy are both issues about which Milton Keynes Council should lobby the Government hard to help realise its aspirations.

Education for a Climate Emergency

The Task and Finish Group accepts that responding to the climate emergency and promoting sustainable development is the shared responsibility of us all. Education is of fundamental importance in enabling an understanding of the local and global effects of climate change. Education for sustainable development empowers learners with the tools and knowledge to act effectively to mitigate the effects of climate chaos. Schools, Milton Keynes College and the new University for MK present opportunities to engage beyond the immediate student cohort into families and communities using the following three areas:

- Curriculum - to inform;
- Campus – as venues for family and community-based public engagement events; and
- Community – providing an informed network to support action

From evidence provided to the Task & Finish Group, we know that the Youth Cabinet has climate change as a top priority. The Task & Finish Group is also aware from this evidence that the effects and predicted changes as a result of climate change are causing distress, or 'eco-anxiety', among young people, in terms of anxiety, stress and depression. The danger is that apocalyptic dialogue leads to fear and inertia. This is true for us all, not just young people.

Climate change is also a social issue. As evidenced to the current Child Poverty Commission in Milton Keynes, Child Poverty rates are rising, as is the number of in-work families seeking support from Food Banks in Milton Keynes. Milton Keynes Council should ensure that a call to action considers social justice and does not become divisive. The Task & Finish Group was asked to consider that some carbon reduction pledges, such as 'reduce number of flights being taken', can alienate those who are not in a position financially to 'take a flight'. Not all members of our community have the privilege of making eco-friendly consumption choices because those choices are often out of reach of their income or the products that are affordable are sometimes those produced at most expense to the environment and humanity.

Young people are responding through activism, demonstrated through the recent climate school strikes. Based on discussions with education leaders, the Council's declaration of a climate emergency has been received positively. Schools in Milton Keynes have a good track record of promoting sustainability in the delivery of the curriculum and engaging with initiatives such as 'Eco-schools' and other related national school's programmes.

Milton Keynes Council should build a picture of what actions schools are taking to reduce their carbon footprint, what is currently on offer to schools that enhance this and critically, how they can access investment to improve buildings and heating systems, which will make a bigger, quicker impact than behaviour-based initiatives. There are 114 schools across Milton Keynes, of which 73 are maintained or special schools (where the Council has direct responsibility); the remainder (as academies) are no longer part of the Council's estate. Consideration is needed regarding carbon-reducing investment for all schools to benefit from energy and cost-reduction options. Schools should be requested to participate in a survey at the earliest opportunity to help build a picture of existing carbon reducing activity and identify the priorities for further action. Initial feedback from evidence of such an initiative elsewhere in the country suggests the following:

Campus: Existing school buildings to be made energy efficient. New builds to use sustainable materials and embed green technologies to reduce carbon footprint, increase efficiency and be future proofed for use. A detailed analysis of each site would be needed to identify where carbon-reducing interventions could be introduced.

Curriculum: Many schools feel that they are already embedding Education for Sustainable Development into their curricula and are willing to work together to improve and learn from each other. There is potential for this learning to be disseminated to the wider community and inform an action-based behaviour change programme for Milton Keynes, perhaps through the Schools Forum.

Community: Milton Keynes Council should invite a Milton Keynes Secondary School to host a Sustainability Conference at the earliest opportunity, to respond to the youth climate strikes and generate pledges/charters for schools and families. The Task & Finish Group suggests that Milton Keynes Council provides an easy to use portal, which can then be shared locally and nationally to enable young people to protest locally rather than traveling to London and that would instead upload evidence of their environmental and sustainable development works as well as being a platform for their voice. There are

several advantages to this over attending demonstrations in London, not just the safety of students, but more of an educational slant on activism, in the form of art, drama, performance, poetry etc., and of course the carbon savings in not taking coach loads of students to London and back.

Co-ordination: galvanising action on this scale, by working with all education settings, is a significant task requiring a dedicated resource. This could build on existing skills and expertise in the Education Service, and could also facilitate a join-up between curriculum, careers and the Enterprise Business Partnership. There are considerable resources available to schools via a range of local and national organisations, including carbon-footprint tools and a range of national and international competitions and awards. These could position Milton Keynes as a leader in galvanising the education sector and young people to make a step change in leading behaviour change in their communities. Whilst schools are willing to participate, they do not have the capacity, or remit, to work on a Milton Keynes wide plan. Governor training courses on the topic of Climate Change and the management /governance of schools should be included as part of the governor Continuing Professional Development offer.

The Task & Finish Group is keen to promote youth engagement and participation in Milton Keynes activities to tackle the climate emergency having heard from young people at each of the evidence sessions. Discussions are already taking place with youth groups and the Council's Youth Cabinet support team to enable young people to shape the future vision as part of the ongoing engagement with the Youth Cabinet on this subject. This should also act as a mechanism for integrating the climate emergency ambitions.

Strategic Planning for a Climate Emergency

As mentioned earlier in the report, the Task & Finish Group recommends that Milton Keynes Council, whilst focusing on a refresh of the Local Plan (Plan:MK) the Council's Strategic Planners should be responding to the Climate Change Emergency through the production of a Climate Change Development Plan Document to complement and strengthen the delivery of the policies in the existing Local Plan adopted in 2019 and that this should incorporate further, far reaching requirements.

This review should include guidance on:

- Delivery of renewable energy installations;
- Delivery of environmental growth – net gain, a forest for Milton Keynes in the north of the Borough; and
- Delivery of carbon neutral homes.

Transport

Impacts

Transport has been and remains a critical aspect of the response to the Climate Change Emergency, as this sector is responsible for around a fifth of Milton Keynes Greenhouse Gas (GHG) emissions. One of the six core goals in the *Milton Keynes Mobility Strategy 2018-2036*, adopted in 2018, is the delivery of our current Transport Infrastructure Delivery Plan. In brief the areas covered include:

Public Transport	Bus strategy (2008) & Bus Information Strategy (2013)
Cycling & Walking	Cycling Strategy (2013) & Walking Strategy (2003)
Smarter Travel	Smarter Choices Strategy (2015)
Parking	Parking Strategy (2012) CMK Transport & Parking Statement of Intent (2016)
Road Safety	Road Safety Strategy (2013-18)
Traffic Management & Intelligent Transport Systems	Intelligent Transport Systems Strategy (2016)
Freight Management	Lorry Management Strategy (2009)

Collectively, these set out transport policies and proposals. Currently these plans do not need to be in-line with the Climate Change Act and do not need to have a carbon audit to identify the climate change impact. But, as the Task and Finish Group heard during its evidence sessions, transport planning is also changing, with the formation of Sub-National Transport Bodies (*Institute of Civil Engineers, 2017). The growing importance of sub-national transport bodies (<https://www.ice.org.uk/news-and-insight/the-infrastructure-blog/june-2018/growing-importance-of-sub-national-transport-bodie>) is noted and the role of LEP's (Local Enterprise Partnerships) in current and future policy making is also recognised.

This represents a very progressive series of strategies, linked directly to managing the impact on transport on the climate, and there are relevant policies throughout the strategy around modal shift, and protecting our environment, which all play a key role.

The Task and Finish Group recommends that one brief, synopsis, detailing all currently relevant strategic policies and objectives, be produced to deliver a single, coherent transport based policy document for the Borough of Milton Keynes.

Major flagship projects have resulted from the Strategy, which have made (or will make) fundamental impacts on the accessibility of public transport in Milton Keynes. For example, Real Time Passenger Information displays at bus stops, authority-wide Smart Ticketing (most local bus services), Santander Cycles MK, progress on the development of the Urban Transport Management & Control System (UTMC), implementation of new parking enforcement and technology and work on the Bletchley station initiative as part of East West Rail are all such examples.

The Council wishes to promote active travel in Milton Keynes and is doing that by enhancing its unique town and borough-wide walking and cycling networks (Redways). The Council also aims to deliver transformation cycle networks through funding commitments such as the recently announced Highways England Designated Funds programme. Major construction schemes already include measures to offset the impact of transport infrastructure on the environment by including green infrastructure to achieve biodiversity net gains, such as for the A421/M1 link road. Reducing the Council's own environmental impact is also being progressed through its Corporate Travel Plan and through its transitioning the Milton Keynes Fleet to ultra-emissions as set out in the policy document.

The current fleet of vehicles emit an estimated 2,600 tonnes of greenhouse gases per annum, 2,000 of which emanate from 'bin lorries' alone. For comparative purposes, overall road transport emissions across MK are estimated at 480,000 t/yr but as we must lead by example working directly and with partners (Ringway and Serco), we must be aiming at using less carbon than we capture.

Milton Keynes Council is taking a whole system perspective by looking at all the ways Milton Keynes can produce its own energy for vehicles as well as purchasing electricity, bio-methane (renewable gas) and biofuels. The Council has set itself a timeline of a five phased approach during 2020 to start this process of transitioning its fleet to ultra-low emissions, this being summarised as;

Phase 1 – Fleet Option Appraisal	February 2020
Phase 2 – Air Quality Modelling	March 2020
Phase 3 (part 1) – Industrial Symbiosis (Infrastructures)	April 2020
Phase 3 (part 2) – Commercial hub	May 2020
Phase 4 – Financial Assessments	June 2020
Phase 5 – Presentation of Findings/Recommendations	July-September 2020

Milton Keynes Council is making positive steps in the right direction. However, in the city designed for the private motor car and for growth built on that USP, like much of the UK, Milton Keynes has also been subject to policies and models of growth which have increased the extent of fossil-fuel based lifestyles. Our homes, jobs and transportation still predominantly rely on fuels that produce carbon emissions. There will be some extremely difficult choices ahead, which will need all of us to revise the way we live; requiring redesign of existing societal systems and infrastructure as well as reviewing the impacts of plans the Council has been developing for future delivery of housing, infrastructures and growth. The Task and Finish Group recognises a critical choice point for Milton Keynes has been reached on the type of society, economy and environment the Council wants to promote and create for future generations. Each choice it makes will matter and needs to be taken in the context of all the other decisions it makes; Milton Keynes Council will have to think and act in a system-based approach.

The Transport Infrastructure Delivery Plan (2019) can be summarised as follows;

Executive Summary

The grid road network in Milton Keynes, along with its rural sub-region, has contributed to a reliance on car use for travel within and into the Borough. The dispersed residential and employment locations within the Borough have resulted in difficulties in providing attractive and reliable public transport. The established segregated Redway pedestrian and cycle route network has also struggled to encourage walking and cycling due to concerns over personal safety, route directness and the ease of private car travel for short journeys.

To support continuing population and economic development and the needs of existing residents, the draft Milton Keynes Council Local Plan (Plan:MK) identifies a need to deliver at least 26,500 new dwellings and 28,000-32,000 new jobs within the Borough over the course of the plan period (2016 to 2031). The majority of the planned growth is focused in strategic urban extensions of Milton Keynes. In the longer term, it is predicted that Milton Keynes will potentially grow to a city with a population of 500,000 by 2050.

*Transport improvements are fundamental to achieving sustainable growth in Milton Keynes, tackling inequality, improving health and supporting business and community needs. Improving walking, cycling and public transport will enable existing and future residents, visitors and employees to **choose cleaner and healthier ways to travel**.*

Milton Keynes Council's Mobility Strategy 2018-2036 (LTP4) sets out the strategic framework for the Milton Keynes transport system along with a series of interventions needed to achieve the growth ambitions outlined in Plan:MK and support the longer-term growth planned by MK Futures 2050.

This Transport Infrastructure Delivery Plan (TIDP) builds on the Mobility Strategy and sets out the transport vision for Milton Keynes, highlighting the challenges and opportunities, along with the transport infrastructure that needs to be delivered within the short and medium term, to enable growth to come forward sustainably as well as supporting the existing local communities.

This transport infrastructure presented in the TIDP has been sifted from an initial list of schemes which have been subject to stakeholder challenge and appraisal and prioritisation using a bespoke Strategic Assessment tool and a Department for Transport's (DfT) based Early Assessment and Sifting Tool (EAST). An Action Plan has then been produced to take forward the recommended options along with a series of next steps.

The plan is described within its text as being a 'Living Document'. For this reason, the TIDP will need to be agile to change. This TIDP will therefore be a 'living plan' that will be regularly reviewed throughout the plan period as further studies are undertaken and as more detail on proposed schemes becomes available.

The Task and Finish Group agrees that just such an early review be undertaken and revisions made in the light of the declaration of the Climate Emergency by Milton Keynes Council, the policy papers that have emerged from that declaration, and the contents and recommendations of this report.

Community Engagement and Empowerment

The Task & Finish Group acknowledges that stakeholder and community engagement will be integral to the success of the Council's detailed action plan to counter the climate emergency in Milton Keynes. Starting an ongoing Milton Keynes Climate Conversation will help the Council strengthen and develop the solutions required that will require buy-in and leadership from each and every organisation, business and resident.

Milton Keynes Climate Conversations

The Task & Finish Group suggests that the Council facilitates a long-term programme of 'Milton Keynes Climate Conversations' that could allow the Council to capture the voice of the Borough on an issue that impacts all parts of the communities we serve.

This will build on the stakeholder and resident engagement that has been developed during the evidence phase of the work of the Task & Finish Group, continuing throughout the further (academic led) evidence gathering phase and into the delivery phases. This should include conversations with stakeholders and residents with expertise across a range of disciplines to enable the co-creation of solutions to feed into each and every stage of the Council's response to the climate emergency. It would be expected that regular and ongoing dialogue will be needed across the Borough as the Council strives to achieve its carbon neutral goal. It is essential that Milton Keynes Council makes best use of the skills, talents and creativity within all our communities to enable this monumental change.

Milton Keynes Council should utilise existing platforms and networks, such as via Town & Parish Councils, various community network panels and residents associations, the Youth Cabinet and the Council's proven scrutiny process to ensure that solutions come from all sections of society. This will also dovetail into other initiatives such as the Council's MK Futures 2050 planning engagement programme and public sessions of the review of Plan:MK. The Council should also host an annual conference of interested stakeholders from across all the MK communities and beyond (chaired by the Mayor) to engage as a deliberative forum to develop the ideas and solutions to the complex and systems-based challenges that the climate emergency presents.

The Task & Finish Group also recommends that Milton Keynes Council enhances its online engagement and should look to develop additional networks to engage with new audiences. Milton Keynes Council should also continue the direct conversation with residents that has started via this Task & Finish Group / Select Committee process, broadening the audience via Annual Town and Parish (Council) meetings and the like.

Milton Keynes Council should also aim to ensure that it capture views from, and provide opportunities to contribute, to people and communities across the Borough who would

not normally be involved. The Council should ensure that the Milton Keynes Conversation provides a genuine, deliberative, inclusive, challenging and open debate on what the options and solutions are through co-design, collaboration and trust. The cross-party Scrutiny Management Committee (SMC) should be involved in advising on and refining the precise nature of the Council's engagement with residents.

Empowering Communities and Working with Partners

Just how Milton Keynes Council interacts on this important subject with Town, Community and Parish Council's should be an area of work considered in both Milton Keynes Council's Operational Plan and via its facilitation processes, ensuring that the right capacity and skills, communication channels, levels of decision making and resources are available to support the transition to a carbon neutral society.

Working with the Milton Keynes Association of Local Councils (MKALC) and via the Parishes Forum the Council should seek to identify how it can work together with its parish partners optimally on this challenge, reflecting the wishes of all the communities and residents it represents. Given the level of interest there has been, with an increasing proportion of Town, Community and Parish Councils also declaring climate emergencies, this will be a crucial partnership in ensuring that it can work towards its wider Milton Keynes ambitions, by the local production of emergency plans and establishing a facilitation fund for communities – co-designed and locally managed.

Engaging experts: the Council should continue to build the relationship it has with the academic institutions located or working in Milton Keynes to provide evidence and expert advice on all aspects of the climate emergency work programme. Engagement conversations have already been conducted at varying scales with Cranfield University and the Open University. Further engagement is planned with the Milton Keynes College and the future University MK.

Milton Keynes Council's Regional and National Programme

Regional Collaborations:

The Task & Finish Group notes that working with other Local Authorities across the Oxford – Cambridge Arc will be crucial if Milton Keynes Council is to deliver against the aspirations within the original Council motion, and in the coming months Milton Keynes Council should be continuing to seek dialogue with all its neighbouring authorities and (those throughout the UK) who have also declared Climate Emergencies. There is already a growing appetite amongst our regional authorities to work together on this agenda, and we will support the principle that the climate change work should be one of the key priorities for the wider Oxford/MK/Cambridge Arc. The Council has a series of existing partnering mechanisms that it can use to enable these conversations and work streams. This includes engagement with partnerships such as England's Economic Heartland's Strategic Transport Forum and involvement with all existing and evolving partnerships such as this should be encouraged to ensure mutually beneficially outcomes as Milton Keynes and its neighbours pursue our carbon neutral ambitions.

Lobbying Central Government

Milton Keynes Council should engage with Central Government to call for increased ambition from the centre in order to help Milton Keynes achieve its carbon neutral ambitions and it should work in conjunction with both local Members of Parliament to achieve this aim.

The Council's ambitions to support Milton Keynes to meet the target of Carbon Neutrality in the coming decades, is to a large extent dependant on Government action to support the required actions. New legislative, regulatory, policy and financial conditions are required to reform the UK system to a carbon neutral society whilst retaining a prosperous economy and healthy environment.

The public pressure that has resulted from the publication of the climate science from the Intergovernmental Panel on Climate Change and supported by the Committee on Climate Change is creating significant 'expectations' of local authorities. It is reasonable to expect that Government considers financial support for local authorities in this scenario, and Milton Keynes Council should be discussing with other local authorities and the Government ways in which that support can be delivered.

Milton Keynes Council's lobbying of Government should include:

Government giving greater priority to addressing the Climate Emergency:

- Put climate change impact as a key consideration of all government policy, regulation and investment decisions, including setting explicit decarbonisation objectives for Ofgem;
- Announce a commitment for the UK to reach at least 117 GW renewable electricity generation capacity installed by 2030. This could be achieved with continued support for offshore wind and the removal of the artificial barriers to onshore wind and solar. Capitalising on Milton Keynes and the wider UK's untapped solar power potential, reinforcing the UK's onshore wind industry and further harnessing the UK's world leading offshore wind resource by unlocking floating offshore wind, as well as fixed offshore wind opportunities;
- Bring forward the commitment to ban the sale of new diesel and petrol vehicles to 2030 and introducing a scrapping scheme for existing vehicles;
- Bring forward legislation in the form of wider carbon taxation to incentivise behaviour change based on the 'polluter pays' principal. As a proxy the Government's re-introduction of the historic luxury tax through the Vehicle Excise Duty in 2017 could form a model for a carbon tax, which should be designed to ensure it is targeted at those who are most responsible for the emissions.

Government launching a UK New Green Deal:

The Task & Finish Group recommends that Milton Keynes Council calls for a Green New Deal for the UK, which will enable Milton Keynes, and the wider UK to achieve its carbon neutral ambitions as soon as possible. This programme to deliver a green industrial revolution could include a:

- Strategic grid reinforcement programme to ensure that Milton Keynes and the wider UK's electricity infrastructure meets the needs of a fully decarbonised

electricity system enabling distributed renewables and the electrification of heat and transportation. The Milton Keynes grid should enable at least 3GW of additional zero-carbon generation capacity to be deployed in-line with the approach already outlined by the Council that this should be proposed in its Climate Change DPD;

- Make every home warm, dry, healthy and affordable by establishing a whole house retrofit programme, supported by a retrofit skills development and apprenticeship programme with education pathways, to ensure there is a sufficiently skilled workforce to respond to the challenge of retrofitting existing homes across Milton Keynes (and the UK) to a near zero carbon standard. A proportion of Milton Keynes Council's older housing stock contains some solid wall properties which would be difficult to adapt and the current support mechanism may be insufficient to address this issue. The Council and Government should work together to dramatically increase the number of properties that can be retrofitted across Milton Keynes and should be incorporated as a part of the broader Regeneration Programme;
- Reinstating of the Zero Carbon Homes for new homes through legislation outlining a trajectory towards the introduction net-zero targets for all new homes and near zero-carbon for commercial buildings at the earliest opportunity. Require that new developments should respect the highest standards of sustainability in every aspect (design, drainage, green infrastructure, transport);
- Zero carbon energy off-gas grid pilots aimed at providing an alternative approach to the current singular option of all electric heating;
- Extension of the Renewable Heat Incentive Scheme beyond its current end date of 2021 to accelerate the uptake of low carbon heating technology. The Renewable Heat Incentive (RHI) is a UK Government scheme set up to encourage uptake of renewable heat technologies amongst householders, communities and businesses through financial incentives. It is the first of its kind in the world and the UK Government expects the RHI to contribute towards the 2020 ambition of 12% of heating coming from renewable sources;
- Learn lessons from the Green Deal and develop an interest free loans programme for homeowners to enable them to install renewable energy technologies and energy efficiency measures. This scheme could build on the example of the Scottish Government's Home Energy Efficiency Loan Programme for Scotland (HEEPS); and
- Legislation for revised financial or progressive tax incentives which support elements of the residential market and businesses to incentivise the take up of deep retrofit deployment of energy efficiency measures in UK homes and businesses, saving both carbon and energy costs.

Government Supporting a Move Towards a Regenerative Agriculture System

The Task & Finish Group received evidence recommending that Milton Keynes Council lobbies government to reform the post-Brexit equivalent of the Common Agriculture Policy (CAP) in that it should deliver public goods through the highest environmental standards and climate ambitions in order to promote low carbon and regenerative

agriculture. Any future agricultural policy (with regards to subsidies in particular) should be designed to:

- Improve farming's productive efficiency, including the health and vitality of animals and plants and changes in established practices;
- Target measures to increase and manage carbon storage on UK farms; and
- Boost production of land-based renewable energy, including bioenergy for processes coupled to carbon capture, storage and utilisation and Green House Gas removal.

Increase the budget for research and innovation (R&I) in food, agriculture, rural development and the bio-circular economy. This being to help support the development and deployment of technologies that are directly relevant to farmers and land managers, that can contribute towards reducing agricultural emissions, whilst improving the quality and productivity of food at the same time as improving the environmental resilience and security of the food production sector.

Government Supporting Sustainable Transport Options for Rural Areas

- That the Department for Transport issues ring fenced funding for sustainable transport solutions that will encourage modal shift and the promotion of the electrification of transport; and
- New legislative measures to support a modal shift towards public transport and active travel which should include scrappage schemes for internal combustion engine cars in favour of ULEV. Car tax should be discounted for ULEV. Mandatory installation of bike racks should be provided on all buses and trains and an employers' subsidy of a part of the public transport tickets of their employees when travelling to and from their place of work.

Big Challenges and Grand Challenges – Future Direction

The Task & Finish Group notes that there are many short-term actions where solutions are in place and barriers are capable of being overcome. Whilst these actions should contribute to genuine progress in addressing the fundamental issues they may not provide the scale of change needed to fully respond to the climate emergency. Dealing with a systems wide leadership issue such as climate change involves overcoming 'big challenges', where solutions to issues may be known but significant barriers exist.

Addressing climate change requires our whole way of life to change; this is a complex or 'wicked problem'. Milton Keynes Council should be viewing these wicked problems as 'grand challenges', where the complexity of the issues can be said to be substantial and the solutions are (in reality) unknown. Such examples include:

- Short-term actions: increasing electric car charging, scaling up of woodland creation as a Forest for MK, transforming the council property estate and fleet;
- 'Big challenges': agricultural and food systems change, mass home retrofitting, enabling more use of renewable energy generation and mass modal shift in transport; and

- ‘Grand challenges’: devising a long-term, multi-year plan plus vision and spatial strategy for Milton Keynes that considers the spatial implications of the location of our communities, mass behavioural and lifestyle change, redefinition of economic models and definition of success, redesign of supply chains and developing a circular economy and the role of new technologies.

The Task & Finish Group recommends that the Council’s climate emergency response would need to focus on the above areas and should be seen as a linked and underpinning document produced as a consequence to this and other evidence gathering reports, but many of these will need further significant work across multiple systems before solutions and actions can be finally formulated. However, all of the areas identified must be focussed on, no matter how hard they may be, if genuine progress and transformation is to be achieved. They also will require changes at a national level to provide the policy, legal or financial framework within which solutions can be designed and delivered. Therefore, the council’s actions in partnership with its regional partners and its lobbying of Government forms the third element of this Task & Finish Groups recommended response(s) to the Climate Emergency.

The Task & Finish Group recommendations for resourcing the climate change programme

The Task & Finish Group concludes that the resource implications to achieve carbon neutrality could be significant. For some of the changes identified in this Task & Finish report indicative costs have been estimated. However, this should continue to be an evolving process for the Council planning for addressing the climate emergency. Whilst the Task & Finish Group hope that this report represents a significant milestone, it recognises that further substantial planning work is required to provide a robust (evidence based) plan for tackling the ‘big’ and ‘grand’ challenges. The Task & Finish Group also recognise that, if the Council wishes to be successful, wider engagement with communities, businesses, schools, our public sector partners, the voluntary sector and others will be critical in gaining input to and support for the Councils collective programme to deliver carbon neutrality by 2030.

During the next phase of the programme, the Task & Finish Group recommends that the Council continue to work (through an academic partner) with stakeholders to fully evaluate the options and their associated benefits, impacts, risks and barriers for each of the ‘transformational challenges’ described in the series of recommendations contained within and at the conclusion of this report. In parallel the Council should mobilise a delivery programme to accelerate the planning and delivery of the projects for early implementation, a number of which will need to be detailed within the council’s Operational Programme (Business Plan), but should also include the acceleration of the due diligence and planning for a forest for Milton Keynes, and the bidding for funding to support the first wave of the Council’s housing retrofit programme. It is recommended that this should be outlined in further detail in whatever form the Councils climate emergency remedial measures implementation plan appears.

Programme staffing

The Task & Finish Group assess that there is insufficient resource within the Council to effectively deliver the programme leadership that will be required to manage the delivery of council managed actions at the necessary speed and to work with partners to co-design the system wide changes necessary for achieving the original Council motion. The Task & Finish Group recommends the establishment of a programme office, which will act as the backbone of the programme. The Programme Office would provide the strategic leadership and direction for achieving the desired outcomes from the original motion and provide the glue to hold all elements of the programme together, in accordance with the council's overall change delivery framework and governance. From a political perspective a Cabinet member with the dedicated (sole) portfolio of overseeing the cross-cutting impacts of delivering the Councils response to the climate emergency is essential. Likewise, to ensure council wide scrutiny of the response, a dedicated select committee needs to be established to monitor progress.

Next Steps

Delivery of the first substantial phase of the programme alone has significant resource implications and should be subject to securing the necessary revenue and capital budget via the council's annual budget setting process. It is recommended that resourcing the council's climate emergency response plan should take a phased approach:

Phase One –It is recommended that the necessary revenue funds are identified to recruit a core team to deliver the design of a whole council agreed action plan and commence delivery of the priority projects for early implementation during 2020/21. This should include some early investments in a whole house retrofit pilot; phase one of the Climate Change Development Plan Document and phase one of the delivery of a Forest for Milton Keynes including an application to the national Urban Tree Challenge Fund.

Phase Two – Funds for 2020/21 & 2021/22 – Subject to further action plan development, a climate change resourcing proposal should form a defined part of the decision making for the 2021/22 budget and revision to the Medium Term Financial Plan that accompanies the yearly budget setting process.

Milton Keynes Council Budget Review Committee should consider the most effective way for financing Milton Keynes response to the climate emergency, options for consideration could include loan funded Council investments as well as climate levies.

Recommendations for a Milton Keynes Council approach to Governance

The Task & Finish Group recommends that governance structures reflect the journey that the council is embarking on. Initially, the Scrutiny Management Committee is recommended to undertake or delegate a series of inquiry sessions that should provide both oversight of progress and capture new ideas for governance as the programme develops.

Of course, the role of the Milton Keynes Council Cabinet will be crucial in ensuring that there is Milton Keynes - wide organisational support, emphasising that the original

climate emergency motion is not reliant on any one organisation and will require a unique degree of partnership working to be effective. The Task & Finish Group recognise that it will be crucial that these formal governance structures work symbiotically with the wider engagement approaches encapsulated in the developing 'Milton Keynes wide conversation' which should capture many of the massive challenges that communities and individuals can help resolve, creating an overarching governance and engagement approach that covers all systems and creates joint responsibility across all of the council's partnerships and communities.

Communications

One of the key priorities of the 'Task & Finish Groups evidence gathering phase' has been to enter into a community engagement process in order to gauge the spectrum of opinion across many residents and stakeholder groups and help to provide insight to inform the work of the select committee.

Ongoing engagement activity with residents has been effectively launched through the activities of this Climate Emergency Task & Finish Group. This activity has provided data on what some people believe the Council should be doing to tackle the issues, as well as the steps individuals are taking themselves. It is recommended that the findings of this Climate Emergency Task & Finish Group should help shape an integrated communication strategy.

Milton Keynes Council's span of direct influence over the reduction in carbon is limited. Given the scale of the climate emergency and the number of audiences the council needs to reach, it is recommended that the Council attempts to establish a 'Team MK' approach to delivering a strong vision through its communications strategy. The communication objectives should therefore be achieved through using direct means available to the council, as well as via indirect means, through growing its networks of influence, and building advocacy through partnerships and collaborations.

In broad terms, it is recommended that the Council's strategy should cover the delivery of communications, based on a strong vision of a climate resilient and carbon neutral future for MK to:

Improve understanding of the climate emergency, the overall target and the imperative for everyone in Milton Keynes to play their part by acting now.

Communicate actions Milton Keynes Council is taking to directly combat the climate emergency, as well the opportunities available to enable others to do so – the suggested 'Team MK' approach

- Build a strong community approach to the communications, developing compelling and useful content that audiences will share through use of social media and digital channels
- Promotion of a sense of motivation, project ownership and empowerment, across all audiences in Milton Keynes, to change behaviours and encourage individuals, organisations to take positive action on the climate emergency.
- Work with relevant stakeholders (including local Town, Community & Parish Councils), community and business groups, charities and individual 'influencers'

who can more effectively reach specific audiences than the council can in isolation.

The Task & Finish Group recommends that the Council's strategy should aim to deliver changes in mind-set and subsequent changes in behaviour, with emphasis on those actions that will make the most positive impact on the local environment.

It is recommended that a Council strategic plan to address the challenges of the climate emergency (containing suggested timescales) should inform the detail of the communications strategy and delivery plan. The Task & Finish Group envisage there should be a series of communication streams/sub-strategies for each of the pre-defined audience groups. These communications should deliver messages relevant to each audience using the method/channel the audience uses most often, promoting actions and decisions that are within their scope.

It is recommended that the council undertakes a series of engagement activities which should provide invaluable insights addressing community concerns and current motivations (A Climate Change Engagement Feedback Report). A (plain English) 'house style' of terms should be developed to ensure agreement and standardisation of the language used, both internally and externally, to describe key environmental concepts. A glossary and references table forms a part of this report.

This Task & Finish Group report aims to establish and define the scale of the challenge, and the nature and scope of the recommended focus for the Council for the coming months and years. A considerable amount of work needs to be done to understand and engage with partners and residents to ensure that the major challenges the council faces can be overcome. The resourcing requirements to undertake systems leadership and the change programme required will be significant. **The scale of change required is unprecedented.**

The staffing, revenue and capital requirements to establish a programme to tackle elements of the climate emergency within the Council's influence are the responsibility of the Cabinet.

The next steps for the Council's delivery and development climate emergency action plan are identified as being:

- Account for changes proposed through the Cabinet consideration of the Task & Finish Group report and publish its first iteration of a cross cutting plan in response;
- Align the proposals to the 2020/21 Budget process and assign resourcing reflecting the Council's / Cabinet's priorities for action;
- Continue a research element via an academic partner to establish an organic planning mechanism continually learning from international, national, regional and local initiatives aimed at combating the elements of climate emergency;
- Mobilise resources to deliver elements of the programme aimed at addressing the low hanging fruit elements of the recommendations as soon as is practicable; and
- Continue work with and consult partners, central and local neighbouring governments, stakeholders, businesses and residents on an ongoing basis

In conclusion, this report offers recommendations and suggestions for the start of the journey; suggestions and recommendations on what could be delivered quickly and what is possible through immediate direct action and an emphasis on a commitment to work and engage with others across systems to co-design solutions to the challenge of climate change. The report also recognises there are many difficult decisions ahead as we reimagine and redesign how we live together in Milton Keynes through this unprecedented period of change.

Annex A: Glossary of Terms and Acronyms

Abatement	Refers to reducing the degree or intensity of greenhouse-gas emissions
Adaptation	Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities
Afforestation	Planting of new forests on lands that historically have not contained forests
Anthropogenic greenhouse emissions	Greenhouse-gas emissions resulting from human activities
BEIS	The Department for Business, Energy and Industrial Strategy (BEIS) is a department of the government of the United Kingdom formed in 2016 through a merger between the Department for Business, Innovation and Skills (BIS) and Department of Energy and Climate Change (DECC).
Biodiversity	The variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable
BRE - led	BRE experts provide impartial advice on the performance of new lighting technologies or innovative strategies, and on integrating electric lighting with daylighting
CO ₂	Carbon dioxide.
Carbon Budget	As low-carbon policies and technologies continue to advance, companies, investors and policymakers are increasingly turning to carbon budgets as a core component for analysing the potential implications of a carbon constrained future.
Carbon neutrality	achieving net zero carbon emissions by balancing a measured amount of carbon released with an equivalent amount sequestered or offset
Carbon Offsetting	The process of trying to reduce the damage caused by releasing carbon dioxide into the environment by doing other things that remove carbon dioxide, for example, by planting trees
Carbon sequestration	The process of removing carbon from the atmosphere and depositing it in a reservoir
CHP	Combined heat and power system
Circular Economy	A circular economy (often referred to simply as "circularity") is

	<p>an economic system aimed at eliminating waste and the continual use of resources. Circular systems employ reuse, sharing, repair, refurbishment, remanufacturing and recycling to create a close-loop system, minimising the use of resource inputs and the creation of waste, pollution and carbon emissions. The circular economy aims to keep products, equipment and infrastructure in use for longer, thus improving the productivity of these resources. All 'waste' should become 'food' for another process: either a by-product or recovered resource for another industrial process, or as regenerative resources for nature, e.g. compost. This regenerative approach is in contrast to the traditional linear economy, which has a 'take, make, dispose' model of production.</p>
Climate	<p>Climate is typically defined as the average weather (or more rigorously a statistical description of the average in terms of the mean and variability) over a period of time, usually 30 years. These quantities are most often surface variables such as temperature, precipitation, and wind. Climate in a wider sense is the state, including a statistical description, of the climate system.</p>
Climate extreme (extreme weather or climate event)	<p>A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forces, or to persistent anthropogenic changes in the composition of the atmosphere or in land use.</p>
Climate Change	<p>A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcing, or to persistent anthropogenic changes in the composition of the atmosphere or in land use.</p>
Climate change risk	<p>Additional risk to investments (such as buildings and infrastructure) and actions from potential climate change impacts.</p>
Committee on Climate Change	<p>The Committee on Climate Change is an independent body established under the Climate Change Act (2008) that advises the UK Government on setting and meeting carbon budgets and on preparing for the impacts of climate change.</p>

Climate scenario	A plausible and often simplified representation of the future climate, based on an internally consistent set of climatological relationships that has been constructed for explicit use in investigating the potential consequences of anthropogenic climate change, often serving as input to impact models. Climate projections often serve as the raw material for constructing climate scenarios, but climate scenarios usually require additional information such as about the observed current climate.
Climate Offsetting	In its most straightforward form, offsetting means buying carbon credits equivalent to your carbon impact. This means you compensate for every tonne of CO2 you emit by ensuring there is one tonne less in the atmosphere. And because one unit of CO2 has the same climate impact wherever it is emitted, the benefit is the same wherever it is reduced or avoided too.
DPD	The Local Plan consists of a number of Development Plan Documents (DPD) which set out the spatial planning policies for the local authority area.
Emissions scenario	A plausible representation of the future development of emissions of substances that are potentially radioactively active (e.g., greenhouse gases, aerosols), based on a coherent and internally consistent set of assumptions about driving forces (such as technological change, demographic and Socio-economic development) and their key relationships. Concentration scenarios, derived from emissions scenarios, are used as input to a climate model to compute climate projections.
England Economic Heartland Strategic Transport Body - EEH	<p>Transport Action Network is a new organisation set up in 2019 with funding from the Foundation for Integrated Transport. Its purpose is to help support people and groups press for more sustainable transport in England and Wales. This often involves fighting cuts to bus services, particularly in rural areas and opposing damaging road schemes and large unsustainable developments. Twelve key themes have been identified to set the framework on which EEH needs to act in order to strengthen the transport strategy. These are:</p> <ul style="list-style-type: none"> • The imperative to respond to the climate emergency • Harness technology and innovation • Work closely with planning authorities • Put environment at forefront of strategy

	<ul style="list-style-type: none"> • The need to be bold - not business as usual • Reduce the need to travel • Increase emphasis on sustainable modes • Support health outcomes • Place greater emphasis on wider strategic linkages • Use nudges and demand management • Remember smaller schemes and maintenance • Show how EEH will deliver
European Regional Development Fund - ERDF Farm project	The Growth Programme is supporting the shift to a low carbon economy by promoting renewable energy production and the development of low carbon technology. Milton Keynes was one of eight European cities that successfully bid for European funding to encourage energy reduction projects across Europe. Departure from the EU places this funding at risk.
EV	Electric Vehicle
Fluorinated gases (F-gases)	Fluorinated gases (F-gases) are man-made gases that can stay in the atmosphere for centuries and contribute to a global greenhouse effect. There are four types: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF6) and nitrogen trifluoride (NF3).
Flood	The overflowing of the normal confines of a stream or other body of water, or the accumulation of water over areas that are not normally submerged. Floods include river (fluvial) floods, flash floods, urban floods, pluvial floods, sewer floods, coastal floods, and glacial lake outburst floods
Global Protocol for Community-Scale Greenhouse Gas Emission Inventory	Cities are the global centres of communication, commerce and culture. They are also a significant, and growing, source of energy consumption and greenhouse gas (GHG) emissions. A city's ability to take effective action on mitigating climate change, and monitor progress, depends on having access to good quality data on GHG emissions. Planning for climate action begins with developing a GHG inventory. An inventory enables cities to understand the emissions contribution of different activities in the community.
Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC)	The Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC) is the result of a collaborative effort between the GHG Protocol at WRI, C40, and ICLEI. The development of the GPC began in June 2011 as a result of a Memorandum of Understanding between C40 and ICLEI. In 2012, the partnership expanded to include WRI and the Joint

	Work Program of the Cities Alliance between the World Bank, UNEP, and UN-HABITAT.
Green Champions	<p>Milton Keynes Council staff who are passionate about being sustainable in the workplace.</p> <p>It is important to give MKC staff the chance to develop the Green Champions role, so the council should host workshops to explore the concept and develop the role among like-minded people.</p> <p>Participants at the workshops should come from all areas of the authority representing all the Directorates and sites, and the role should vary from person-to-person, where they work, how much time they might have to commit and what they would like to get involved in. It should be up to each individual to choose how they take on the responsibility.</p>
Greenhouse gasses (GHGs)	The atmospheric gases responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO ₂), methane (CH ₄) and nitrous oxide (N ₂ O). Less prevalent --but very powerful -- greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF ₆).
GVA	In economics, gross value added (GVA) is the measure of the value of goods and services produced in an area, industry or sector of an economy. In national accounts GVA is output minus intermediate consumption
Hackathons	An event, typically lasting several days, in which a large number of people meet to engage in collaborative computer programming. BRAINSTORMING events have been started by environmental activists to help communities find ways to tackle the climate change crisis.
Idling	<p>The term idling refers to the continuous operation of a vehicle's main propulsion engine while the vehicle is stopped. Idling is common in traffic conditions, especially during urban driving, such as at traffic lights, railway crossings or in stop-and-go driving during traffic congestion. However, idling periods in traffic are relatively short. There is more concern over long periods of idling of heavy-duty diesel engines while the vehicle is parked and not in active service. This may have more of an adverse environmental impact and be a source of significant additional—and often unnecessary—fuel consumption.</p> <p>A suspected major source of idle emissions are Heavy Good Vehicles which are routinely idled overnight, mainly to provide</p>

	<p>cab heating and air conditioning. In addition to heat and air conditioning, truck accessories such as stereos, interior lights, televisions, computers and refrigerators demand power and can motivate idling even if climate control is not needed.</p>
LCRE	<p>The UK's low carbon and renewable energy (LCRE) economy grew by 6.8% to £44.5 billion in 2017.</p> <p>The ONS defines the LCRE as economic activities that deliver goods and services generating significantly lower emissions of greenhouse gases.</p>
LGA Local Government Association	<p>The LGA is the national voice of local government, working with councils to support, promote and improve local government</p>
ONS Office for National Statistics	<p>The Office for National Statistics is the executive office of the UK Statistics Authority, a non-ministerial department which reports directly to the UK Parliament</p>
Scottish Government Home Energy Efficiency Loan Programme	<p>The Scottish Government's Home Energy Efficiency Programmes for Scotland (HEEPS) Equity Loan is a pilot programme designed to help homeowners and private landlords make energy improvements and repairs to their properties.</p>
Materials Charter	<p>Raw materials will be essential for manufacturing the products of the future. They form the basis of modern societies, our cities, digitalisation and the UK energy transition. With the emergence of a new demand for raw materials, both in terms of volume and complexity, it is accepted that now is the right time to look at how stakeholders can come together to respond to this change.</p>
MEES	<p>The minimum energy efficiency standard (MEES) was developed to improve the energy efficiency of the UK's older building stock, helping deliver carbon reduction targets for 2020 and 2050. The Building Regulations ensure new properties conform to current energy efficiency standards, while MEES focuses on the existing stock</p>
Minimum Energy Efficiency Standard MEES	<p>The minimum energy efficiency standard (MEES) was developed to improve the energy efficiency of the UK's older building stock, helping deliver carbon reduction targets for 2020 and 2050. The Building Regulations ensure new properties conform to current energy efficiency standards, while MEES focuses on the existing stock.</p> <p>MEES was introduced by the Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015. At the time, the government estimated that 18% of commercial properties</p>

	<p>held the lowest EPC ratings of F or G.</p> <p>The regulations stipulate that from April 2018, existing tenancies cannot be renewed nor new tenancies granted if a building has less than the minimum Energy Performance Certificate (EPC) rating of E. After April 2023, landlords will not be allowed to let any buildings which have an EPC rating worse than</p>
Mitigation	<p>In the context of climate change, a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples include using fossil fuels more efficiently for industrial processes or electricity generation, switching to solar energy or wind power, improving the insulation of buildings, and expanding forests and other "sinks" to remove greater amounts of carbon dioxide from the atmosphere.</p>
MtCO2	<p>A metric measure used to compare the emissions from different greenhouse gases based upon their global warming potential (GWP). The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by its associated GWP</p>
National Urban Tree Challenge Fund	<p>The Urban Tree Challenge Fund (UTCf) has been developed in response to HM Treasury releasing £10 million in the 2018 Autumn Budget announcement for planting at least 20,000 large trees and 110,000 small trees in urban areas in England.</p>
Organisational Change Programme	<p>Change can be defined as the means of transforming the way an organisation functions with new structures, systems, procedures, products or services as well as where improvements are made.</p>
PV	<p>Photo-voltaic array (solar panels)</p>
Power Purchase Agreement	<p>A power purchase agreement (PPA), or electricity power agreement, is a contract between two parties, one which generates electricity (the seller) and one which is looking to purchase electricity (the buyer).</p>
Protocol	<p>An international agreement linked to an existing convention, but as a separate and additional agreement, which must be signed and ratified by the Parties to the convention concerned. Protocols typically strengthen a convention by adding new, more detailed commitments.</p>
Residual Waste Treatment	<p>Residual waste refers to the material that remains after the process of waste treatment has taken place. Such treatment can include agricultural, industrial and mining. It can also be applied in a more domestic sense, referring to the household rubbish not able to be recycled, re-used or composted.</p>

Resilience	The ability of a social or natural system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity of self-organisation and the capacity to adapt to stress and change.
Section 106 Agreements	Section 106 (S106) Agreements are legal agreements between Local Authorities and developers; these are linked to planning permissions and can also be known as planning obligations.
SEMLEP	Its role as the (South East Midlands) Local Enterprise Partnership is to help economic growth thrive across the South East Midlands, including Milton Keynes.
Sink	Any process, activity or mechanism which removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas from the atmosphere. Forests and other vegetation are considered sinks because they remove carbon dioxide through photosynthesis.
SME's	Small and medium-sized enterprises (SMEs) The main factors determining whether an enterprise is an SME are: 1.staff headcount 2.either turnover or balance sheet total
Solar Together	The Solar Together group-buying scheme would be open to all Milton Keynes residents who own their own house (or have permission from the landlord to install a solar PV system). Small and medium-sized enterprises (SMEs) and some Commonhold Associations are also eligible for the scheme.
Systems based leadership	Systems Leadership is about how you lead across boundaries – departmental, organisational or sector. It's how you lead when you're not in charge, and you need to influence others rather than pull a management lever. It describes the way you need to work when you face large, complex, difficult and seemingly intractable problems; where you need to juggle multiple uncertainties; where no one person or organisation can find or organise the solution on their own; where everyone is grappling with how to make resources meet demand which is outstripping them; and where the way forward therefore lies in involving as many people's energies, ideas, talents and expertise as possible
UN Sustainable Development Goals	The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and

	<p>prosperity by 2030.</p> <p>The 17 SDGs are integrated—that is, they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability.</p> <p>Through the pledge to Leave No One Behind, countries have committed to fast-track progress for those furthest behind first. That is why the SDGs are designed to bring the world to several life-changing ‘zeros’, including zero poverty, hunger, AIDS and discrimination against women and girls.</p>
UKCIP	UK Climate Impacts Programme
Urban Traffic Management and Control System - UTMC	<p>The Urban Traffic Management Control or UTMC programme is the main initiative in the UK for the development of a more open approach to Intelligent Transport Systems or ITS in urban areas. Originating as a Government research programme, the initiative is now managed by a community forum, the UTMC Development Group, which represents both local transport authorities and the systems industry.</p> <p>UTMC systems are designed to allow the different applications used within modern traffic management systems to communicate and share information with each other. This allows previously disparate data from multiple sources such as Automatic Number Plate Recognition (ANPR) cameras, Variable Message Signs (VMS), car parks, traffic signals, air quality monitoring stations and meteorological data, to be amalgamated into a central console or database. The idea behind UTMC is to maximise road network potential to create a more robust and intelligent system that can be used to meet current and future management requirements.</p>
Vector-borne diseases	Vector-borne diseases. Vector-borne diseases are human illnesses caused by parasites, viruses and bacteria that are transmitted by mosquitoes, sandflies, triatomine bugs, blackflies, ticks, tsetse flies, mites, snails and lice
Vulnerability	The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity.
Whole House Retrofitting	This Whole House Retrofit (WHR) cost reduction trajectory competition is a key early step in accelerating a reduction in

Competition (BEIS)	domestic retrofit costs. It supports: <ul data-bbox="496 212 1414 510" style="list-style-type: none"><li data-bbox="496 212 1414 302">•our ambition to halve the cost of retrofitting existing buildings to the same standard as new builds by 2030<li data-bbox="496 313 1414 403">•the government’s Fuel Poverty target to bring as many fuel poor homes as reasonably practicable to EPC band C by 2030<li data-bbox="496 414 1414 510">•our aspiration for as many homes as cost effective, practical and affordable to reach the same standard by 2035
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Annex B Terms of Reference and Scoping Document

Review Topic	
Climate Change (Climate Emergency)	
Origins of Review Group	Review Group Membership
Scrutiny Management Committee Approval to proceed confirmed by the Scrutiny Management Committee on 11 June 2019	Membership across the political groups on a 2:2:2 basis <ul style="list-style-type: none"> • Cllr Brackenbury (LD) • Cllr Brown (L) • Cllr P Geary (C) • Cllr D Hopkins (C) • Cllr Minns (L) • Cllr Trendall (LD) • 3-4 external co-optees
Overview & Scrutiny Officer	Initial Scoping of Review
Roz Tidman	August 2019
1. Purpose	
<p>To review the work currently being undertaken by the Council, including the Sustainability Strategy Action Plan, to achieve the Climate Emergency/<i>Making Milton Keynes the World's Greenest City</i> Resolution passed by Full Council in January 2019 and to identify any further actions that could be taken to deliver this resolution and to meet the pledge to make Milton Keynes carbon neutral by 2030.</p>	
2. Rationale	
<ul style="list-style-type: none"> • What does the Review hope to achieve <p>To report to Cabinet a review of the work currently being undertaken by the Council to reduce carbon emissions and to identify any further actions that could be taken to meet the pledge for Milton Keynes to be carbon neutral by 2030. To prepare a comprehensive assessment of the work done to date and the work in progress to mitigate and adapt to climate change in Milton Keynes. This will draw together the actions Milton Keynes Council is already taking and, where possible, outline partners commitments to move towards a carbon neutral Milton Keynes.</p> 	

- Why is the Review taking place?

The Task and Finish Group is being established as a direct result of the Council motion agreed in January 2019 (*Making Milton Keynes the Greenest City in the UK*). The impact of climate change requires immediate and ambitious action. The Task and Finish Group working with responsible officers, stakeholders and partners will identify the actions required to support the Council, its partners, local businesses and residents to achieve carbon neutrality by 2030.

- What is the community importance and benefit?

Action on climate change is required to safeguard the quality of life of current and future generations.

- How does it fit in with the Council's corporate priorities/scrutiny priorities?

Action on climate change and sustainability is a key priority for the Council and a number of commitments with regard to this have been made in the Council Plan. Allocation of officer support to manage the Task and Finish Group has been prioritised by Scrutiny Management Committee.

- What are the opportunities to make a distinctive impact?

The implementation of the changes required to ensure the Council meets its commitment for Milton Keynes to be carbon neutral by 2030 and carbon negative by 2050 will require a significant shift in the current practices and behaviours of individuals and organisations.

- How will the review influence what the Council does?

The recommendations of the Task and Finish Group have the potential to significantly influence how the Council operates in terms of the actions it will need to undertake to meet the reduction in carbon emissions goal.

3. Proposed Outcomes

- To report to Cabinet a review of the work currently being undertaken by the Council to reduce carbon emissions and to identify any further actions that could be taken to meet the pledge for Milton Keynes to be carbon neutral by 2030.

4. Background

- Is the review looking at existing policy or a new policy?

Existing – the Sustainability Strategy and climate change resolutions were agreed by Council in January 2019.

- How does it relate to existing policy?

The review will assess the existing work being undertaken to meet the carbon emissions goal, including the work being undertaken on the Sustainability Strategy Action Plan. The review will also identify any further actions that should be taken alongside current initiatives.

- Has the need for the review come about from an issue arising from national or local events?

Climate change is a global challenge with this work specifically looking at making Milton Keynes the World's Greenest City.

- How does the issue relate to the Scrutiny Work Programme?

Work on this issue has been prioritised by the Scrutiny Management Committee and is cross-cutting across all of the Scrutiny Committees.

- Are there any relevant community views to refer to? e.g. any previous consultation?

There will be a wide range of evidence on community views to draw from including earlier work on the Imagine MK2050 Strategy – A roadmap for a sustainable Milton Keynes.

- What is the gap between provision and need?

This will be identified as part of the review.

5. Timetable

- The Task and Finish Group will aim to meet at least once a month in August, October, November, December, January and February.
- The Task and Finish Group will report to Cabinet in March 2020.
- Who needs to see the analysis? Directors, Head of Regulatory Services and Scrutiny Management Committee
- Proposed end date of the Task & Finish Group is March 2020.

6. Methodology / Approach

What method of enquiry will be most suitable for the review?

- Desk-based review of papers.
- Site visits/observations.
- Comparisons with other authorities.
- Interview officers.
- Calling witnesses to give evidence.

7. Evidence Sources

What types of evidence will be needed?

- Government guidance/legislation
- Service plans
- BEIS carbon reduction figures
- Independent research articles and papers
- Public consultation

Are there any stakeholders or interest groups the Task and Finish Group wants to hear from in addition to inviting them to the meeting?

- Call for Evidence – request for information from residents, partner organisations and businesses

8. Witnesses

Witnesses to consider inviting to its meetings include:

- Academic Expertise
 - The Open University
 - Cranfield University
- Stakeholders / Interest Groups
 - Campaign Groups
 - Citizens (following a call for evidence in local media)
- Cabinet Member
 - Councillor Marklew
- Frontline staff
 - Directors & Heads of Service
- External partners
 - SEMLEP
 - Parks Trust
 - MKDP
 - Good practise and expertise from other local authorities
- Professional business expertise

9. Site Visits / Observations

There is scope for potential site visits/observations but the work of this group should be carried out in a sustainable manner as possible.

10. Public Meetings

Meetings will be held in public.

11. Officer Support

Identify any Council officers that will be influential in the review process.

- Michael Bracey – Chief Executive
- All Directors and Heads of Service
- Neil Allen – Head of Regulatory Services

12. Resource Requirements

Estimate the amount of 'person' time required and the potential costs involved.

- Attendance by a number of Council Officers at evening meetings and pre-meeting preparation work
- Overview and Scrutiny Officer (max 1 day/week)
- Fee for witness attendance or professional support if required
- Site visits if required

13. Risk Assessment

Identify potential obstacles to an effective review, including:

- Limited councillor/officer availability due to already busy workloads
- Lack of co-operation/availability from external witnesses
- Resources available to develop the Action Plan and service the Task and Finish Group
- Ensuring that the timetable for the development of the Sustainability Strategy Action Plan is not unduly delayed by the work of the Task and Finish Group
- Electoral process and/or other national events
- Maintaining cross party support for the Sustainability Strategy

14. Background Papers

1. MK Sustainability Strategy 2019-2050
2. [A Councillor's workbook on acting on climate change](#)
3. Imagine MK2050 Strategy – A roadmap for a sustainable Milton Keynes
4. Carbon emissions graph since 2005

Annex C: Witnesses & Evidence

The Group would like to record their appreciation to all those who attended as witnesses or submitted evidence in response to the public 'Call for Evidence'. Copies of the submissions received are available at <https://www.milton-keynes.gov.uk/climatechangetfg-evidence>

Neil Allen, Milton Keynes Council	D Patel
MK Youth Cabinet	Dr Lynch and Greetham
Jo de Montgros, Extinction Rebellion/Everoze/DestinationØ	L Gilbert
Dr V Patent, The Open University	L Morgan
Catherine Rose, MK Green Party	M Flood
Andrew Turner, Milton Keynes Council	N Beckett
Alan Budden, Eco Design Consultants	P Housego
Neil Cutland, Cutland Consulting Ltd	Prof Lanyon-Hogg
Mike LeRoy,	Project Etopia
Hayden Scarborough, Engie	R Grindley
Stuart Turner, Architecture & Urbanism	R Paton
Ian Byrne, IBECCS	T Allen
Jane Grindley, Wolverton Community Energy	T Humble
Paul Johnston, Wolverton Community Energy	The Fuzzy Rebel
Gabby Mallett, National Energy Foundation	Transition Town MK
Steve Hayes, Milton Keynes Council	Unison MK Area Branch
Nicholas Hannon, Milton Keynes Council	V Skelton
Craig Broadbent	Extinction Rebellion, The Lobbying Group on behalf of
A Wilson	C Schmid
Bletchley & Fenny Stratford Town Council	Community Action MK
Broughton & Milton Keynes Parish Council	J Whild
C Barac	Low Carbon Vehicle Partnership
C Coppock	MK Bus Users Group
C Ritson	P O'Toole
D Forster	Possible
	Thornton & Mcpherson

Scrutiny – An Explanation

As Milton Keynes Council has a Cabinet (Executive) system it is required by law to have a Scrutiny function to support and scrutinise its executive decision making arrangements.

Scrutiny committees and scrutiny task and finish groups are not “decision making” bodies, but are bodies which monitor and influence the decision makers. The committees and task and finish groups are made up of non-Cabinet members, and are designed to support the work of the Council in the following ways:

- assisting the executive in research, policy review and development and thus helping drive improvements in public services;
- reviewing and scrutinising decisions to be taken, or ones which have been taken by the Cabinet and officers, also known as acting as a “critical friend”, challenging policy and decision makers;
- considering the Council’s performance;
- reviewing the work of external organisations operating in the Borough to ensure that the interests of local people are enhanced by collaborative working; and
- enabling the voice and concerns of the public to be heard and listened to.

Each scrutiny committee or task and finish group has its own terms of reference. The scrutiny committees / task and finish groups consider issues by receiving information in a number of ways including by receiving presentations and taking evidence from councillors, Council officers and external witnesses or partners to develop an understanding of proposals or practices. As scrutiny committees and scrutiny task and finish groups have no decision making powers they can present their recommendations to the Cabinet, full Council, Council officers, or external partners. The committees will often request a formal response and progress report on the implementation of recommendations that they have provided to various parties.

Attending Meetings of Scrutiny Committees / Task and Finish Groups

Meetings of scrutiny committees and task and finish groups are held in public and are generally open for everyone to attend. If you would like to attend then please just turn up.

If you would like to make a representation to councillors on behalf of yourself or others on one or more the items on the agenda, let us know you are attending before the meeting so that the Chair can be advised in advance, either by calling 01908 691691 (ask for the Scrutiny Team in Democratic Services) or by emailing scrutiny@milton-keynes.gov.uk. You will have up to 4 minutes to address the meeting.

On occasions there are specific issues that the meeting must consider in private so all but members of the committee / task and finish group and key officers will be asked to leave.

If you want to speak on a matter that is not scheduled to be discussed by a scrutiny committee or task and finish group then please either call or email the address above and we will contact you to discuss how best to take this forward.

Meetings are generally held at the Civic Offices, Central Milton Keynes, the Chair of the meeting will try and make the meeting as informal as possible, but, by their nature, local authority meetings must retain a degree of formality, with the meeting being controlled by the Chair.

If you are to speak on an agenda item you will be able to speak when the item is considered. The Chair of the meeting will either call out your name when it's your turn if you have given prior notice, or ask if any members of the public wish to speak.

You will either be invited to come forward to speak or remain in your seat – the Chair will let you know.

Depending on the room in which the meeting is being held the committee / task and finish group may be using microphones. If so and you are asked to come forward to sit at the table provided, a microphone will already be there, if you are asked to remain in your seat, a colleague will bring a hand held microphone to you.

When asked to speak, please give your name and let us know if you are representing any organisation or speaking in your own right.

The maximum time you will have to speak is four minutes. If there are lots of people wanting to speak, then the Chair might reduce the time per person to one or two minutes to enable everyone to have their say. Please try not to repeat what has been said before.

If you have been invited to give evidence to the scrutiny committee or task and finish group you will have been contacted by one of the Council's scrutiny officers who will have briefed you on what the committee and task and finish group would like you give evidence on and what to expect at the meeting. You will be allowed sufficient time to speak to give your evidence. You will not be limited to 4 minutes.

Dates for the Council's public meetings, together with the papers for the meetings, are available on the Council's website at:

<http://milton-keynes.cmis.uk.com/milton-keynes/Committees.aspx>

If you have any questions about the scrutiny process please send them to:
scrutiny@milton-keynes.gov.uk, The Scrutiny Team, Democratic Services, Milton
Keynes Council, Civic, 1 Saxon Gate East, Milton Keynes, MK9 3EJ or call 01908 691691
and ask for the Scrutiny Team in Democratic Services.



Overview and Scrutiny
Milton Keynes Council
Civic Offices
1 Saxon Gate East
Central Milton Keynes
MK9 3EJ

E: scrutiny@milton-keynes.gov.uk