

MK Sustainability Strategy 2019-2050



Version 2
December 2018

Foreword

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

Milton Keynes is Different by Design and has always faced challenges with new and exciting projects 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;
- The first public electric vehicles charging points in 2010.

Milton Keynes is a place where nothing has ever stood still, and innovation is embraced. We are ambitious for the future of Milton Keynes and recognise that being a truly sustainable city will require us to work cooperatively with our customers, businesses and partners, while setting pioneering but achievable goals with a clear framework on how to accomplish them.

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.

Our three priorities as outlined in this 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 ensure that as Milton Keynes grows we take 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.




Councillor Peter Marland
Leader, Milton Keynes Council



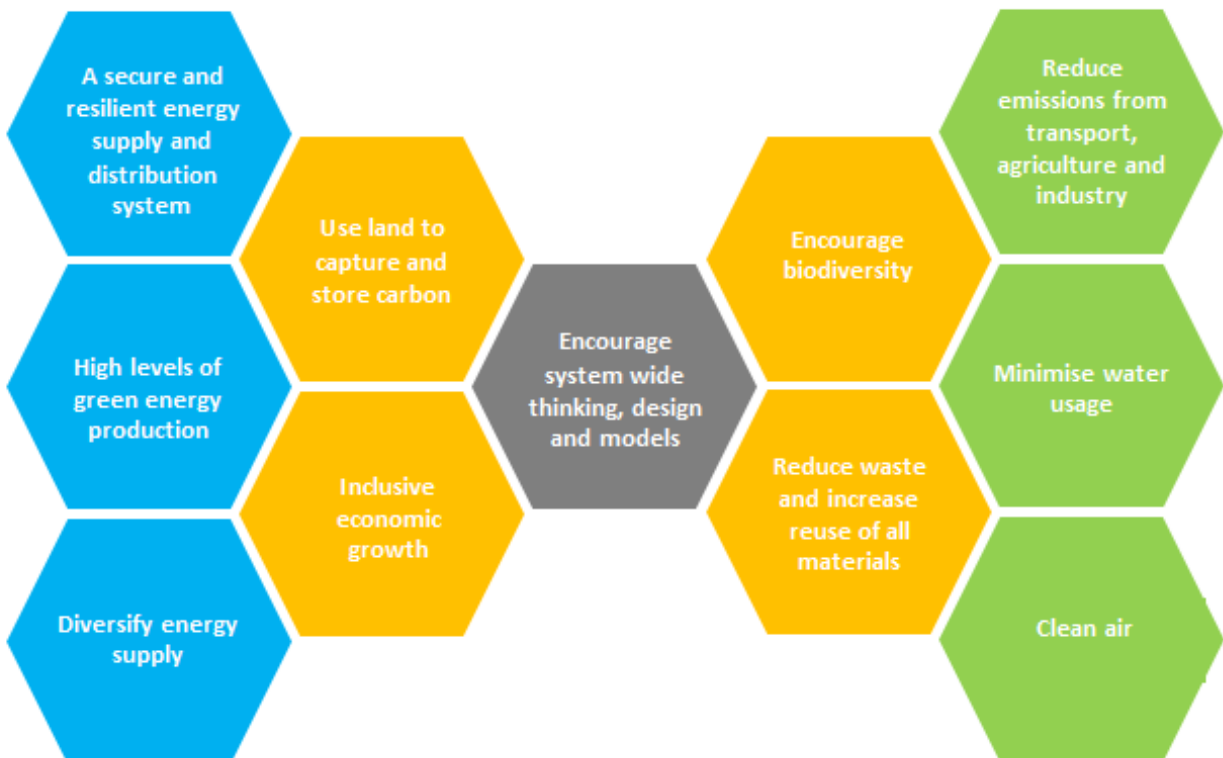
Strategy vision, principles and priorities

Vision Milton Keynes can be the world’s greenest and most sustainable city, using the opportunities of growth to tackle the challenges of climate change and resource competition to create a more prosperous city for all our people and future generations which is carbon negative by 2050

Sustainable principles

-  **Green energy**
Maximising the use of renewable energy, reducing carbon and providing resilience to the grid
-  **Circular economy**
Increasing the efficient use of resources to reuse materials, use less water, and ensure the best use of land
-  **Low emissions**
Reducing the level of emissions from transport, industry and agriculture and ensure clear air

Priorities for action by 2050



Objectives

Milton Keynes is the most successful new town, with a thriving economy and a high standard of living.

The Council Plan 2016 – 2020 seeks to ensure Milton Keynes remains a city of opportunity for all, a place where it is affordable to live in a good home and everyone is able to live a healthy, active and fulfilled life.

However man-made climate change and the over use of global resources is stretching the planet's ability to continue to provide a safe, hospitable environment for mankind in the long-term.

The UN Paris Climate Agreement (COP21) agreed to seek to limit a global temperature rise to 1.5°C. Limiting man-made temperature increases to this level will likely limit the most severe impacts of climate change globally. Temperature rises above this level would likely result in severe and profound changes to the environment, driving extremes such as drought and famine in some areas and flooding in other. Such circumstances would drive global turmoil, increase uncontrolled migration of populations, devastate economies and undermine a safe, prosperous future for future generations.

Other factors are already driving significant change, such as high levels of species extinction and over intensification of land use reducing the availability of water.

Milton Keynes cannot stand aside from the potential impact of such issues.

The IPCC's Special Report on Global Warming of 1.5°C, published in November 2018, describes the enormous harm that a 2°C rise is likely to cause compared to a 1.5°C rise, yet told us that limiting Global Warming to 1.5°C may still be possible with ambitious action from national and local government, cities, civil society, the private sector, and local communities.

Cities are uniquely placed as both potential drivers of global climate change, but as pioneering agents of change. Cities such as Milton Keynes cannot wait for national governments to agree international terms of for action, and Milton Keynes cannot just act now, but needs to do so in an ambitious and globally defining way to show that a sustainable future is possible.

Sustainable outcomes we are seeking

- Use less carbon than we are able to capture;
- Contribute positively to action on climate change;
- A more sustainably designed city;
- A transition to low-cost renewable energy sources;
- A sustainable green economy with well-paid jobs;
- Reduce the consumption of resources without sacrificing economic development;
- A diverse, green and bio-diverse environment;
- Less use of water;
- Clean air;
- A healthier and more sustainably conscious population.

The objective of this strategy is to set out our intentions to be the Greenest City in the World, and set a framework for how to intend to do this.

Green energy

Energy is essential in our everyday lives whether at home or at work or in leisure. We expect continuous and reliable energy connections and, regardless of the physical infrastructure, where we are and the supply networks that create them.

With the ever increasing energy costs to the homeowner, tenants and businesses, it is paramount that Local Authorities ensure that investment in the energy infrastructure of the city is maintained. Milton Keynes Council is committed to enabling and securing private and public investment in the energy infrastructure within the borough.

The resilience of the national energy infrastructure is one area where we can focus on delivering alternative and renewable sources of energy rather than the current reliance on fossil fuels. We will ensure that we are proactive in taking forward comprehensive, credible initiatives to secure funding and continuing the drive to improve the energy efficiency of the existing buildings across the city. Our commitment to delivering renewable energy sources is evidenced in a number of projects.

Maximise use of renewable energy from a variety of sources and provide greater resilience to the national grid locally

New developments across the city should have photo voltaics to create their own electricity; battery storage facilities within houses and commercial buildings will secure energy resilience; we can ensure all waste created is reused to create alternative forms of energy

What we've done

The council has installed a photo-voltaic (PV) arrays on the Civic Offices and Wolverton Depot producing electricity and therefore reducing the amount of electricity it 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) which the council built processes around 110,000 tonnes of residual waste and produces enough energy to power between 10 to 12,000 homes.

Our aims - what we will do by 2050

- All new developments to include green energy generation schemes;
- MK Council to produce and distribute energy;
- Council procurement to drive low carbon suppliers;
- Use energy efficient and carbon passive technology on new and existing buildings;
- Drive lower and more efficient energy use.

Circular economy

Milton Keynes Council's vision to have a sustainable future means we need to rethink the way our economy uses resources. A circular economy is one which seeks to maximise the use we get from our resources by reducing waste from leakage, ensuring better use of materials, more refurbishing and recycling, and producing less waste.

We are passionate about delivering a sustainable future for the city, which can continue to be prosperous, but where we can work with our partners and producers to ensure that resources are used wisely. This will mean we are able to continue to be a prosperous and successful place, ensuring we continue our heritage of sustainable green space.

The challenge of climate change reaches all our lives, where simple solutions can help solve major issues.

The world faces a global crisis where entire species are facing extinction, not just of prestige mammals, but biodiversity on local land of insects and creatures such as bees, hedgehogs and birds. We can use the green and rural environment of Milton Keynes to the advantage of our aims, using land to capture carbon and increase biodiversity. Population growth and increased industrial usage also places pressure on the provision and level of water use.

We will use our successful economy to encourage change from a place of strength, transitioning to a green economy to create jobs and base more production locally, while the reuse of materials and the ability to reduce waste is something everyone can contribute to.

The council fleet of vehicles could become gas powered and be fuelled from the output from the green/garden waste collection that is currently undertaken. The migration to gas powered vehicles improves the air quality and if excess gas is created from the waste collection it can also be used to drive a turbine to produce electricity for wider use.

What we've done

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.

Circular economies will encourage the re-use of all resources. The use of land to capture and store carbon will be a key driver in the future

Our aims - what we will do by 2050

- Focus on encouraging green jobs and inward investment;
- Encourage more local food and materials production;
- Continue the green heritage of Milton Keynes;
- Ensure excellent sustainable design;
- Use more land to capture and store carbon;
- Work with all landowners to encourage biodiversity;
- Promote low impact and sustainable building methods and materials;
- Continue to encourage waste reduction, reusing and recycling;
- Ensure better water management and usage.

Low emissions

Carbon Dioxide (CO₂) is the primary cause of man-made global climate change. Industrialisation, increased energy usage from fossil fuels and the destruction of natural carbon-sinks such as rain forests increase the risk of global temperatures increasing more than the 1.5°C ceiling by 2050 unless sustained and direct action is taken to cut emission levels.

However the contribution to climate change and a liveable environment is about all emissions, not just carbon.

Carbon dioxide, emissions that contribute to global warming and other pollutants which harm the environment not only have a high-level impact, but directly affect the health and wellbeing of our local population.

We want to eliminate all harmful emissions to drive a better environment, from reducing emissions that contribute to the warming of the planet, to reducing particulates that drive poor air quality.

Milton Keynes will be the world's greenest and most sustainable city by becoming carbon neutral by 2030 and carbon negative by 2050

What we've done

Milton Keynes already has made significant moves to reducing the carbon emissions, achieving a 38% reduction in emissions since 2005. This figure takes into account 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 electric dockless bike scheme, we can build continue to build a city that is fit for the future.

Our aims - what we will do by 2050

- Seek to be a carbon neutral by 2030, and carbon negative by 2050;
- Reduce transport emissions by promoting low-emission vehicles and public transport;
- Ensure the source of transport power is sustainable;
- Have the best urban air-quality in the UK, especially around public buildings;
- Robustly monitor emissions and air quality

Corporate actions to implement this strategy

- Work across systems to ensure sustainability is designed into our city-wide thinking;
- Review the strategy and consult widely to produce a Sustainability Delivery Plan every four years;
- Bring together all partners across the city to implement the desired outcomes;
- Provide local, national and global leadership for cities on climate action;
- Establish a robust and effective monitoring system to ensure outcomes are achieved.