

Cabinet report



7 February 2023

SUSTAINABILITY STRATEGY ACTION PLAN UPDATE

Name of Cabinet Member **Councillor Jennifer Wilson-Marklew**
Cabinet member for Climate & Sustainability

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Exempt / confidential / not	No
Council Plan reference	Section 8 - para 8.1 and 8.3
Wards affected	All wards

Executive summary

In 2018 Milton Keynes Council made the commitment to become Carbon Neutral by 2030 and Carbon Negative by 2050. Since then, (as well as becoming a City) we have provided an update to cabinet each year demonstrating the work that has been done over the last year and setting out our ambitions going forward.

An area of focus for the team has been understanding our current position and working on projects that will help us to achieve our target of zero carbon by 2030. As we begin to see this work come to fruition, with carbon neutrality mapped out by 2030, we can expand the work we have been doing in other areas for residents and businesses, looking at ways we exercise influence outside of the council's direct control. This could be extending the support we are providing to private homeowners to make their homes more energy efficient, amplifying businesses who are aiming for a 2030 carbon neutrality goal through a sustainable business accreditation and using our interest in things like our pension fund to push for investments that will deliver world class initiatives to make our geographical area better.

This report highlights these key areas of focus and progress:

- Update on our 2021/22 carbon emissions
- Key Council projects
- City-wide activity and support
- Action plan update

Whilst other authorities may find themselves in the position of considering reducing their sustainability commitments to find savings in their budgets, Milton Keynes City Council sees it as a key part of its strategy to make life better for residents. From helping everyone live in a more energy efficient home, finding ways to generate energy to making it easier for people to leave their cars at home, sustainability isn't a nice to have but an essential part of our medium and long-term strategy to make Milton Keynes an even better place to live.

1. Decision/s to be made

- 1.1 That Cabinet acknowledges the progress to date and continues to support the direction of travel set out within this update.
- 1.2 That yearly progress updates continue to be brought to Cabinet, targeting Q4 of 2022/23 in line with the Cabinet meeting for that period.

2. Update on our 2021/2022 carbon emissions

- 2.1 We continuously work through the sustainability action plan and develop key projects to meet our carbon zero 2030 goal. Local Partnerships provide us with expert support for the measurement of carbon emissions, as well as specialist input on key projects. Local Partnerships have updated our emissions reporting for 2021/22 and pathway to carbon zero by 2030 for our operational emissions. The emissions reporting uses the Local Partnerships/LGA Greenhouse Gas Accounting Toolkit. A summary of the emissions reporting and the refreshed pathway to net zero is included in Annex A.
- 2.2 The 2021/22 emissions reporting includes the same emissions sources as the 2018/19 baseline. Our operational emissions for 2018/19 were 24,000 tCO₂e. Our 2021/22 emissions were 16,400 tCO₂e. Our net zero pathway modelling has been updated with this figure, as well as reprofiling the interventions that are programmed for delivery between now and 2030. After all our proposed interventions have been modelled, the pathway is showing that in 2025 there is a residual 10,445tCO₂e to be removed from our operations to reach net zero by 2030.
- 2.3 Should the existing projects in the plan not reach implementation, alternative projects will need to come forward in their place. Please refer to Annex B for the Sustainability Strategy Action Plan report.

- 2.4 The breakdown of the 2021/22 emissions shows that most of our operational emissions are from providing heat and power to our buildings and schools, which make them a priority for either rationalisation (our operational estate) or decarbonisation projects. Retrofit and transition to low carbon heating will be the focus for the coming year, to understand the scale of the investment required and the pace at which this can be delivered via either a retrofit programme approach or specific project schemes, working with our Property and Facilities team and other service areas.
- 2.5 The transition to a low carbon fleet is a key project within the pathway modelling. Additional projects to be added to the model, when the data becomes available later this financial year, will be the additional LED upgrades in residential grid squares and carbon sequestration from our proposed additional tree planting.

3. Key Council Projects

- 3.1 Several of our key projects contributing to our 2030 net zero target are described below.

(a) Street Lighting LED conversion programme (phase 2)

In 2014 we started our programme to modernise and upgrade our street lighting stock to low energy LED to reduce energy costs and carbon, extend the life of our assets and reduce maintenance. To date we have converted 38,000 units, with a reduction of 8.089 million Kwh of electricity and 8,522 tonnes of carbon per annum, a cumulative saving of 29.2 million Kwh and 38,268 tonnes of carbon.

In October 2022 we saw energy prices increase by 88%, with further increases forecast over the medium term. This has resulted in a revenue pressure for 2023/24 of £1.635m. Our annual lighting energy consumption is currently 13.127 million Kwh and 3,037 tonnes of carbon. We have brought forward our planned second stage of street lighting conversion, so that all our lighting assets are fully modernised to LED and operating in the most carbon-efficient manner. Through 2023 and into 2024 at a cost of £10M, we will install, test and commission the final 20,000 management system-controlled LED streetlights, as well as carry out management system upgrades on all of our existing 38,000 LED street lighting lanterns.

(b) Re:Fit Programme

Our Re:fit programme will see the completion of works at Everglade House and Granby Court. These schemes were funded by the BEIS Green Homes Grant Local Authority Delivery scheme. Residents at Everglade House now benefit from fabric improvements, solar panels and more efficient heating and hot water provision. Granby Court residents will benefit from low carbon heating supplied by communal Air Source Heat Pumps, solar PV and individual heating controls.

Our Re:fit provider is currently developing further Investment Grade Proposals (IGP's) for a selection of corporate buildings (including Civic and the Crownhill Crematorium) and several schools. The detailed design documents are due to be submitted for review, with the projected carbon savings from these projects will be added to the emissions pathway analysis.

(c) Milton Keynes Waste Recovery Park (MKWRP) private wire for vehicle charging of fleet

Electricity generated at the MKWRP will power the Waste Transfer Station, the new environmental services waste fleet, as well as hopefully new electric buses in the city in the future. The waste collected from across MK provides energy via a gasification process in the Advanced Thermal Treatment Facility to power the environmental services vehicles, including household waste collection. This enables a cyclical economy from waste collection from our residents to produce energy. Heat from the plant could also form part of the proposed city-wide heat network (see below).

(d) Renewable Energy Generation, Solar Farm

As the pathway to net zero modelling shows, from 2025 there will be at least 4,213tCO₂e of scope 2 (grid supplied electricity) to remove from the operational footprint. As there will be increasing electricity demand across the estate as we move to the electrification of heating and electric fleet vehicles, the scope 2 emissions will increase and the only available option to remove these emissions is through the supply of renewable energy. A detailed review and evidence report has been undertaken to explore the potential for the Council to develop large scale solar PV (photo-voltaic) scheme on its own land holdings within the borough.

The lack of suitable available land and grid constraints mean that within the borough boundary there is limited opportunity for large scale solar to meet our 2030 net zero target, therefore options for investment in schemes outside the boundary are being actively appraised. Engagement with CIPFA has taken place to understand the requirements and implications of the updated prudential borrowing rules, and preparation for an outline business case adhering to the HM Treasury Green Book Five Case model has been completed, supported by Local Partnerships. This has been presented to the Corporate Portfolio Board (CPB) will follow up action in respect of legal and financial advice.

To ensure that all options for decentralised energy generation and storage have been explored, a further review of the potential for wind generation and co-located battery storage is underway. We are working towards a 'non-binding' offer for a solar farm soon. Depending on viability and risk, a purchase power agreement (PPA) will be considered as a back-up option.

4. City-wide Activity and Support

4.1 The 2022/23 Corporate Delivery Plan commits us to delivering on our ambition to the leading sustainable city. The priorities within the delivery plan will contribute to reducing our area-wide emissions, increasing biodiversity and adaptation to unavoidable climate change.

(a) Sustainable Construction Supplementary Planning Document

As our city continues to grow, it is critical that new developments (both residential and commercial) reflect our vision of being a leading sustainable city. 2022 has seen the Sustainable Construction Supplementary Planning Document (SPD) drive up the standard of planning applications for new developments. The SPD has also been recognised nationally as an exemplar guidance document for developers. The Planning Awards 2022 awarded the SPD a Highly Commended status, and the Royal Town planning Institute (RTPI) awarded the SPD as Best Plan and Best in Region.

(b) Resident energy support, with local partners

Supporting our residents with the dual challenge of the cost-of-living crises and carbon reduction is a key priority. The Cost-of-Living Crisis Winter Plan was approved by Cabinet in November 2022. A free to use helpline 0800 107 0044 has been set up by the National Energy Foundation (NEF) for free energy advice and the funds set aside for energy reviews and surveys of properties by both the NEF and Wolverton Community Energy (WCE).

The helpline was launched in November 2022 and is included on our Cost-of-Living factsheet, which has had c.16,500 hits on our web page. Reminders were published on the 2 and 7 December during the extreme cold temperatures and Fuel Poverty Awareness Day and the factsheet will also be sent out with the council tax bills in March 2023.

287 calls have been made to the helpline up to the end of December 2022, resulting in 112 warm and well assessments; 50 referrals to other agencies/charities; 60 emergency fuel vouchers issued and 22 home visits to provide advice and guidance to our residents. A greater number of home energy visits will be available in February once an additional Home Visit Advisor has completed their training.

WCE have attended two community money saving events in Fullers Slade and Fishermead to raise awareness of the available energy efficiency actions and possible grants under the national Sustainable Warmth scheme. They have also had meetings with community organisers in Stony Stratford, Woughton, Fishermead and Great Linford and have discussed the provision of a future retrofit skills training programme with MK College.

(c) Support for Businesses

Since 2020 the Council's [Economic Recovery Plan](#) has been delivering a green business recovery scheme that has directly supported 54 Milton Keynes businesses on their sustainability journey. Four different schemes have been delivered, including a Green Roof for Saxon Court with Bridgman and Bridgman, a ready for net zero programme through Cranfield University, sponsoring the Parks Trust to develop skills in green landscaping for young people in MK, providing free online resources to businesses looking to make their first steps in developing environmental policy.

Additional work in progress includes:

- The [Net Zero MK](#) programme which will ultimately support up to 180 businesses in Milton Keynes
- Working with the established green business networks across the city to spread news of business focussed initiatives MKC is running
- Working to deliver a business recognition scheme to celebrate MK businesses taking pledges to be Net Zero by 2030
- Through the [Milton Keynes Accelerator](#) programme, running a trial with Skenario Labs to explore scenarios for decarbonising the Councils' buildings

(d) Carbon Offset Fund; Support for Parish and Town Councils, and Community Organisations

New developments should comply with the requirements of Plan:MK. Through Section 106 agreements developers who are unable to achieve a carbon zero development with on-site measures must pay into the Carbon Offset Fund (COF). This creates a fund which can be invested in measures elsewhere within the city via an approved business case at the Council's Carbon Offset Board. Residual carbon emissions are calculated after on-site mitigation is implemented, and payment to the fund is based on a set amount per tonne (currently £200 per tonne).

The current value of the COF is more than £2.5M. Some Town and Parish Councils have applied to use this fund for schemes they are delivering, such as energy efficient lighting and insulation which following evaluation of the carbon savings, have been approved. The COF is open to the Council, Parish and Town Councils and Community Organisations. Guidance to access the COF and contact details are contained in Annex C

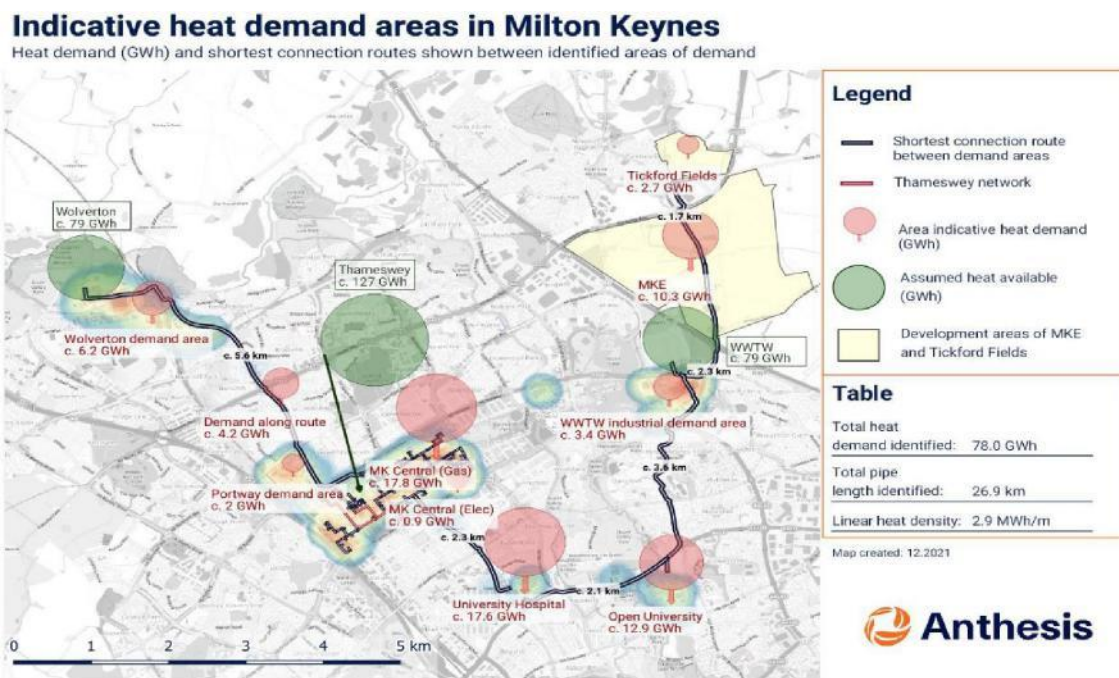
(e) City-wide Heat Network for Residents and Businesses

The Heat Network Delivery Unit (HNDU) funded feasibility study (£130k) for a city-wide heat network has demonstrated that there is potential for a low carbon

district heat network linking the Wolverton Waste Recovery Park to the existing Thameswey network in CMK.

The results of this study have led us to submit a further application to HNDU for grant funding for a Detailed Project Development plan (DPD), £250k for the study and £100k for project management and stakeholder engagement. We have committed £83k as match funding and we now await the decision on award of the grant funding in February 2023. The DPD is the in-depth planning phase for the spending proposal; during this stage the project should move from a concept to an investable opportunity, with a business case.

A heat network of this scale will have a significant contribution to reducing city-wide emissions to our residents and business by providing low carbon heat. A more detailed summary of the network can be seen in Annex D. There may be the potential to expand a network out to the eastern flank of the city and down to the MK University Hospital.



(f) Transport

MK Connect has been successful in providing over 400,000 journeys per year, with half of the fleet (13 vehicles) electrically powered. A recent survey has also suggested that around 13% of all trips on MK Connect would previously have been taken by personal car so there is evidence of modal shift evident, as well as there being around 60,000 new journeys created by access to MK Connect, which otherwise would have not been undertaken. Additionally, feedback from users suggests that disabled users who did not have access to affordable public transport previously now actively use this service.

Under the new shelters procurement system, coming into place in June 2023, a rolling replacement of infrastructure will begin which requires solar or green roofs

to be included wherever viable and will seek more sustainable design and materials.

(g) Retrofit Social Housing Decarbonisation Fund (SHDF)

With our housing repairs, maintenance and planned programme provider, Mears, we were successful with a Social Housing Decarbonisation Fund wave 1 bid for £3.6m which, with funding through the Housing Revenue Account (HRA), will seek to upgrade c.303 properties on Netherfield in a c.£11.3m overall project, linked to the planned maintenance programme. This will focus on improvements to the fabric of the dwellings, to reduce space heating demand for residents. The project has required an application for planning permission, which was granted on 23 January 2023, and we are due to start works on site in April 2023. We have adopted a 'worst first' approach to our housing retrofit activities and these projects are forecast to save their residents around £390/yr. from their energy bills at current prices.

We will continue to work with Mears to target additional funding to deliver similar improvements to council housing stock on other grid squares, such as our ambitious bid for over £22M of funding from SHDF wave 2 for over 1,600 homes, with award notification due late February / March 2023. Annex E contains more detailed information on the wave 1 and 2 proposals.

(h) Biodiversity and recycling

Work on the MK grid roads, called the Golden Grids programme, has seen the planting of wildflowers to increase biodiversity, and gully maintenance and clearance to reduce the risk of surface water flooding from heavier rainfall events.

Additional tree planting across the city continues and there are pilot projects underway to plant urban trees in tree pits, which will provide better water retention to minimise surface water flooding and increase the shade cover and urban cooling in these areas. The forthcoming 'City of Trees' strategy will further set out efforts and the benefits of tree planting across the city and how this will provide benefit for carbon offsets and climate adaptation efforts.

In 2020 the Council undertook a public waste consultation where it was agreed following a successful trial to implement wheeled bins. The containerisation of residual waste increases in capture of material, material segregation will increase both quality and quantities of recyclate produced. This will reduce the carbon footprint of the waste disposal programme in Milton Keynes as well as drive value of commodities up the supply chain.

(i) New Construction Projects

In September 2022 we completed our largest school build to date (£32M). Glebe Farm School is an exciting net zero all-through school in Wavendon. Energy measures included within the build are solar panels, LED lighting throughout and air source heat

pumps. 1530 pupils from ages 4 to 16 (with an additional 39 place nursery setting) will attend the school at full capacity.

In 2023/24 we plan to complete Watling Way Primary School, which will also have solar panels, LED lighting and air source heat pumps. The primary school will accommodate 630 pupils with a 39-place nursery. Design work is progressing for a Primary School on a new development area to the East of the M1 in Milton Keynes, the school will have similar features as others, with no gas being installed.

We have an ongoing programme of upgrade works to address key elements of our existing school buildings, including the replacement of windows and doors, heating systems and roof replacements. These elements are renewed with more energy efficient products.

The redevelopment of the Agora site in Wolverton is well underway and is due to commence work on site in Summer 2023. This scheme won a recent planning award and including a highly innovative microgrid to self-supply electricity to provide low carbon electricity to its future residents.

The redevelopment at the Lakes Estate continues to progress, with a contractor appointed. The new homes will embrace a fabric first, low carbon approach with external fabric performance more than that of building regulations and in compliance with PlanMK. The homes will benefit from air source heat pumps, solar photovoltaics, and electric vehicle charging.

5. Our progress against the Sustainability Action Plan

5.1 The MK Energy and Carbon Hub Board has ensured Council wide engagement and momentum on the delivery of the Sustainability Strategy Action Plan. The Board continues to monitor progress, risks and issues associated with:

- key workstreams in the Sustainability Strategy
- coordinating delivery of the proposals detailed in the Sustainability Strategy Action Plan and any technical evidence supporting such documents and review
- providing budgetary oversight for the Energy and Carbon Hub

5.2 The Action Plan in its original format had close to 400 individual actions, addressing the themes and priorities from within the Sustainability Strategy. The revised Sustainability Strategy Action Plan (Annex B) has been continually updated during the year with 13 actions being completed; 38 actions in progress and 56 actions being investigated further to ensure successful delivery.

5.3 The remaining actions are at various stages of delivery, with priority focus on those that have scored highly in terms of the impact of the intervention towards the 2030 target and increasing the resilience of the borough to the impacts of climate change.

- 5.4 After several unsuccessful recruitment exercises in a very competitive market, we are pleased to have now recruited a Senior Sustainability Officer to the team who joined us in November 2022. A further recruitment exercise is underway to secure further resources specifically for the contract management of gas and electricity. Both positions will also help in our greenhouse gas reporting and the delivery of the Sustainability Strategy Action Plan.
- 5.5 We also regularly scan for new funding opportunities, to understand the scopes of any grants, and our approach to have the best chance to secure them, where they align to our plans / target areas.
- 5.6 The Government has made several commitments for funding of energy efficiency works and carbon reduction initiatives and we have bid for several of them. We have been awarded £23k under the Sustainable Warmth initiative to publicise access to the £2.3m available to private homeowners to obtain energy efficiency measures for their home.
- 5.7 We were also given £10k by National Grid (formerly Western Power Distribution) to provide surveys to 20 buildings within the city to provide solutions to achieve net zero emissions to the properties. The information gathered will form a handbook for other owners on ways to achieve zero carbon emissions from their homes.
- 5.8 With the continued support of Local Partnerships, as well as our forming relationships with wider partners, we are looking to develop shovel ready projects to allow us to take advantage of the Government grants we are aware of that are due to come forward.

6. Implications of the decision

Financial	Y	Human rights, equalities, diversity	N
Legal	Y	Policies or Council Plan	Y
Communication	Y	Procurement	Y
Energy Efficiency	Y	Workforce	Y

(a) Financial implications

There are financial implications in delivering this action plan for revenue income and expenditure and for capital expenditure, which will be fully assessed at each stage. Each of the proposed actions will require its own business plan and be considered as part of the capital programme (where appropriate) or be assessed as part of the existing revenue budget process.

(b) Legal implications

The Council has general powers of competence under section 1 of the Localism Act 2011 to do anything which an individual can do subject to any limitations. The recommendations proposed within the report, if approved, will facilitate the Council's vision to create a world-leading sustainable city.

(c) Council Plan

Action on climate change and sustainability is one of the key commitments; number 8, of the current Council Plan 2016-2022 and the delivery of the action plan and the case for an energy company are two of the specific elements.

(d) Other implications

Procurement of partners, contracts and services will need to be undertaken as required.

7. Timetable for implementation

- 7.1 Following Cabinet's approval in December 2020 the actions were split into short, medium and long term targets; prioritised to deliver our 2030 target with confidence, whilst looking to take advantage of grant funding streams, our growing capacity in this area, our developing network of partners and technological advances, which continue to come at pace.