

Annual update on progress with decarbonisation commitments

July 2020

Executive Summary

This annual update summarises the practical steps that the Council has taken over the previous 12 months to deliver on our commitment of a 45% reduction in carbon dioxide equivalent emissions against 2010 levels by 2030 and net zero emissions by 2040 across the local authority's full range of functions. In addition it includes an update on how we are progressing a wider range of contributing actions that were outlined in the Climate Emergency Motion in June 2019, as well as the key practical actions we will be taking over the next 12 months to ensure we maintain momentum with our plans and objectives. The update is not the complete picture of our activities to address the climate crisis but concentrates on key headlines which are likely to make a significant contribution to our ambitions or respond to existing Manifesto Commitments.

Our approach is driven by science, evidence-based and purposefully ambitious. It seeks to balance the need to undertake actions at pace whilst building a robust local evidence base (incorporating robust challenge) to inform future key decisions to deliver activities that maximise impact. Our actions respond to the urgent need for both mitigation and adaptation in order to address the climate crisis. Key work we have commissioned or are undertaking to underpin our future plans includes:

- Energy Strategy;
- Green Infrastructure Strategy;
- Air Quality Action Plan; and
- Local Nature Recovery Plan informed by a review of our Sites of Importance for Nature Conservation.

Our work programme contains the following priorities, the annual update is organised along these lines. Each priority section of this annual update includes a short summary with headlines at its beginning.

- Reduce the borough's carbon emissions - including the target of net zero carbon emissions by 2040 for the Council's own functions;
- Improve local resilience to impacts of climate emergency;
- Promote active travel and public transport;
- Reduce waste and promote the circular economy; and
- Reduce and remove pollution

We are committed to the development of a Climate Emergency Action Plan for approval in 2021. Future annual updates will align with this.

Priority 1: Reduce the borough's carbon emissions - including the target of net zero carbon emissions by 2040 for the Council's own functions

This priority primarily focuses on progress to deliver our net zero target by 2040 by increasing the diversity of our energy supply, reducing emissions from our existing and future assets, as well as a range of wider actions that seek to influence and support the local community to reduce their emissions. Headlines include:

- securing 100% renewable electricity through the purchase of Renewable Energy Guarantee of Origin Certificates (REGO) as of 1 April 2020;
- launching our new publicly-owned energy services company - Hackney Light and Power, owned, run, and managed by the Council to play a key role in delivering our ambitious decarbonisation targets;
- commissioning a number of studies including an Energy Strategy to determine our pathway to net zero by 2040 based on evidence plus developing performance measures to monitor our progress robustly in the future;
- replacing circa 7000 existing street lights located across the entire borough with LEDs, scheduled over the next 3 years plus further plans to replace 3,500 lights on our housing estates;
- procuring 57 new Heavy Goods Vehicles (HGV) that will see our whole HGV fleet at Euro VI (a high emissions standard for NOx and particulates) and using Hydrotreated Vegetable Oil (HVO) in all non electric vehicles, giving us the potential for our fleet to be 100% 'fossil fuel free' by 2021;
- incorporating heat pump technology into a number of new developments within our own housing portfolio and completing an assessment as to how we can make this more common place in the future;
- securing funding for a programme over 12 months to improve F & G rated homes (the lowest two grades of the EPC energy efficiency standard) in the private rented sector with a focus on those in our selective licensing areas;
- launching our £1 million Green Homes programme, the first boroughwide thermal efficiency programme designed primarily to offer insulation measures, such as: cavity, loft and floor to all privately owned/rented households;
- approving a further two corporate solar electricity (PV) schemes for implementation; at the West Reservoir centre (starting early July 2020) and London Fields Lido, plus plans for a further 9 on our commercial estate, subject to funding and feasibility; and

- from a lobbying perspective, the Council has written to formally oppose expansion at both City Airport and Heathrow; formally responded to the Government's Waste and Resources Strategy consultation, calling for the introduction of a 'producer pays' tax on packaging manufacturers/retailers, and the introduction of broad-spectrum 'reverse vending', to increase recycling rates.

- Developing an Energy Strategy to achieve net zero by 2040 or earlier

An Energy Strategy was commissioned in January 2020 to inform the delivery of the Council's commitments on energy and carbon management. The work is producing 2 distinct outputs which will both deliver our immediate priorities but also set out a longer-term road-map for the Council to meet its energy and emissions commitments within the climate emergency motion. It is being steered by a wide group of stakeholders across the Council to ensure it aligns with our other capital plans and proposals such as the recently updated Housing Services Asset Management Strategy.

Phase 1:

- Scoping: defining which emissions sources are in scope for the carbon neutral target, as well as setting out which scoping decisions are: required now, preferable now, or can and should be taken at a later stage.
- Carbon Baseline: developing a baseline for the Council's own estate (covering Scope 1, 2 & material quantifiable Scope 3 emissions) as well as a baseline for the borough (covering Scope 1 & 2 emissions);
- Pathway Modelling: a high-level evaluation of the economic costs and benefits of a range of possible pathways to achieving carbon neutrality within the Council's own estate by 2040 at the latest; and
- Gap Analysis: ascertaining the interaction between the identified opportunities together with current and planned initiatives, policies etc. across the Council. The analysis will assess how these will interact to help the Council reach its goal. The potential role of offsetting in mitigating the residual emissions will also be explored.

Phase 2:

- Programme Delivery Plan: identification of a range of prioritised carbon reduction opportunities (e.g. renewable generation, low carbon heat, transport etc.). An outline of the costs and benefits and a route to implementation for prioritised

interventions. Identification of the delivery vehicles that can be adopted to deliver agreed projects; and

- Monitoring and Evaluation: requirements and governance procedures that should be established to oversee the delivery phase, including a mechanism to adjust the ambition of existing targets should more rapid decarbonisation become within reach.

The Phase 1 report from the consultants has been completed and is being reviewed internally and includes the following:

- an evaluation of a comprehensive list of emissions to select emissions categories that are most suited to a Strategy that aligns with our ambition to achieve net zero emissions across Council functions by 2040. The longlist includes both territorial emissions (those associated with processes that occur within Hackney's boundaries) and consumption emissions (emissions generated outside of Hackney's boundaries but in support of activities of the people and activities of Hackney);
- analysis of core categories which fall across Scope 1, 2 and 3 emissions. These are Homes (gas/heat), Buildings (gas/heat), Buildings (electricity), Renewables/ Transport/ Embodied Energy - a preliminary baseline against 2016/17 financial year confirmed the above emissions make up a sizeable proportion of the overall emissions inventory; and
- a modelled pathway to net zero emissions. Initial modelling of the energy demand and carbon emissions of Hackney assets up to 2050 demonstrates that it is possible to achieve the challenging target of 45% reduction by 2030 and net zero carbon by 2040.

Proposed initiatives to achieve the target reductions are currently expected to include:

- decarbonisation;
- renewable energy power purchase;
- reducing consumption;
- reducing embodied carbon; and
- electrification of vehicles and a shift to active and sustainable modes.

Based on current modelling and scope, by 2040 embodied emissions could be the only remaining significant emissions from our operations. We believe that including embodied carbon is a bold step that signals our ambition to tackle significant emissions from consumption and in particular development. This aligns with the increased

emphasis put on Life Cycle Assessment (LCA) and the circular economy by the new draft London Plan. Design that will strongly reduce embodied energy of new builds against today's levels together with industry net zero guidance is key to limiting the emissions from this category. There would however still need to be some offsetting of residual emissions.

Phase 2 is underway and will be finalised by September 2020 and will incorporate:

- refinement of the pathway model (reviewing existing data for inclusion), as well as modelling co-benefits. Work to date has been underpinned by a number of assumptions about how energy is being used and hence a more nuanced picture of how emissions can be reduced is required. Initiatives including the Street lighting LED Programme, Electric Vehicle (EV) charging Study and Decentralised Energy Network Assessment etc also need to be incorporated;
- evaluation and modelling of the impact of a stepped change in government decarbonisation policy in line with its Clean Growth Strategy;
- development of appropriate carbon metrics; and
- development of the reporting framework.

- Increasing our decentralised energy network

We aim to deliver strategic heat network infrastructure in the Borough as part of our overall objectives to reduce carbon emissions, help lower energy costs and promote energy security. District heating networks have a key role to play in supporting our ambition to reduce greenhouse gas emissions, particularly for new developments but also where it is feasible for gas heating to be replaced with heat pump technology within existing housing stock.

We commissioned an assessment whose key objective was to explore the potential of district heat networks in Hackney, identifying the key opportunity areas for district heating and developing a longer-term vision to support Hackney's growth and low carbon transition using decentralised energy. It also provides an evidence base for the development of district heating network schemes in Hackney, informing both policy and delivery. A number of clusters have been shortlisted for consideration. Work is progressing in determining which areas are most feasible. Once completed an implementation plan will be developed for those which are prioritised.

The work supports our draft Local Plan which encourages lower carbon solutions as part of the energy efficiency hierarchy - an element of which relates to supporting

decentralised energy networks. We expect the work to help inform future development activity by providing guidance on the location of existing and future networks to developers.

- Establishing a publicly owned energy company

In Spring 2020 we launched our new publicly-owned energy services company. Called Hackney Light and Power, the new company - owned, run, and managed by the Council will play a key role in delivering our ambitious decarbonisation targets.

- Reducing the carbon exposure of the pension fund

In 2016, the Pensions Committee pledged to reduce carbon exposure in the Fund's equity portfolio by 50% over 6 years agreeing that the Fund should:

- reduce its relative exposure to future emissions from fossil fuel reserves (measured in MtCO₂e – million tonnes of CO₂ emissions) by 50% over 2 valuation cycles (6 years); and
- measure the reduction relative to the Fund's position as at July 2016 and adjusted for Assets Under Management (£AUM).

The latest results, which have been determined by an independent carbon risk audit completed in September 2019 demonstrate it is well over halfway to its target of 50% over 6 years, with 60% of the target reduction already achieved. The Fund is therefore on track to achieve its target ahead of time and could even outperform it.

We will use these results to help set our investment strategy for the next 3 years and to make sure we meet or exceed our overall target. This is especially important in the light of the IPCC Special Report on Global Warming of 1.5 °C and we will aim to bring our new investment strategy in line with this. We are determined that we will remain at the forefront of Pension Committees taking action to tackle climate change risk to our Fund as the world moves towards a fossil fuel free future.”

Increasing the diversity of our energy supply

- Increasing renewable electricity provision for our operations

Further to switching to a minimum of 50% renewable electricity on 1 April 2019, we have secured 100% renewable electricity through the purchase of Renewable Energy Guarantee of Origin Certificates (REGO) as of 1 April 2020. REGO certificates are a major step forward in delivering against our ambition to transform the way we purchase wholesale energy to increase the generation of renewable energy beyond Hackney's borders, using our corporate spending on gas and electricity to increase investment in sources of clean energy.

Next steps will be to explore the potential for a Power Purchase Agreement (PPA) with a specific generation facility to provide greater transparency and certainty regarding the provenance of our - and other bodies that procure energy jointly with us, such as local schools - electricity. Securing such an agreement, and exploring ways of reducing the global warming impact of our gas consumption will provide a clear indication that our corporate spending on renewables is contributing to the delivery of new sources of clean energy, rather than solely sending a signal to the market that more renewable energy is required, which is the role that the purchase of REGO certificates currently perform.

- Increasing local renewable energy generation

We have previously installed Solar PV systems at administrative buildings with potential savings of over 1,000 tonnes of CO2 savings over the lifetime of these installations. The estimated yield on the 2018/19 renewable generation across the corporate sites was 137,981kWh which is equivalent to 39 tonnes of carbon. In addition we have supported the development of community led projects to increase the production of renewable energy at a local level. One example is the 120kWp Solar PV project at Banister House which is estimated to generate 900MWh of electricity over its 20 year lifetime.

We are building on this foundation to extend installation to other commercial and residential buildings within our property portfolio. To support this, an aerial assessment has been completed for both residential and commercial sites, with 9 commercial sites identified for schemes of around 1MW in size.

Business models for residential assets are now being explored to either support the provision of EV charging infrastructure on selected estates or through a corporate Power Purchase Agreement. Next steps are to commission a technical feasibility study, agree on the financial model and develop an implementation plan. Engagement with housing services is also required, so as to align with their latest Asset Management Plan and the development of their own roadmap to 2030 to achieve Energy Performance Certificate (EPC) C rating. We are also investigating the installation of solar electricity panels in the suitable Council properties with £250k funding from our Carbon Offset Fund. Two corporate schemes have been approved for implementation; at the West Reservoir centre (starting early July 2020) and London Fields Lido.

- Encouraging residents to invest in renewable technology

We continue to support and promote the Solar Together scheme. In the last round of applications Hackney had the highest level of interested sign ups. 210 applications have been approved and circa 60 schemes have been completed. Total generation is estimated to be around 800kWh. We will be promoting the annual auction later in the year when it opens.

- Implementing our Carbon Offset Fund

The London Plan requires Local Planning Authorities to set carbon offset funds that are ring-fenced to secure delivery of carbon reductions. Carbon Offsetting policy has had a redraft in the new draft London Plan as well as in our own Local Plan LP33, both of which are expected to be adopted soon. More recently the GLA's publication 'Carbon Offset Funds: Greater London Authority guidance for London's Local Planning Authorities on establishing carbon offset funds' October 2018, provides further advice for boroughs on setting up funds, collecting payments and guidance on how to spend the funds.

In line with guidance set out within the London Plan, we have established a Carbon Offset Fund to receive contributions from developers, coupled with a new application process for evaluating the deployment of its funds. Where it is demonstrably not feasible to achieve a zero carbon development on-site, evidenced by an energy statement, any shortfall should be provided through a payment in lieu contribution to the Hackney Carbon Offset Fund, and/or off-site, provided that an alternative proposal is identified and delivery is certain.

Payments towards the Carbon Offset Fund are secured through Section 106 agreements and based on a cross London cost of Carbon proposed by the GLA. To avoid the practical burden on very small-scale residential development where zero carbon is unlikely to be feasible, we are providing the option to either pay a flat carbon offset fee or to submit an energy statement and, if necessary, make a carbon offset payment. The Carbon Offset Fund is used for projects that deliver tangible carbon savings in Hackney.

Further details of the current mechanism for the collection of financial contributions and the administration of the fund are set out in Hackney's Planning Contributions Supplementary Planning Document (SPD) which was adopted in 2015. An update of the Planning Contributions SPD is expected to be adopted in the near future.

Reducing emissions from Council assets

- Increasing the energy efficiency of our existing housing portfolio

Maximising the energy efficiency of Council housing is key to our aim to no longer let properties rated lower than an EPC of 'C' by 2030 (within technical and financial limits). As a landlord and freeholder of a substantial housing portfolio with properties that are incredibly varied in type; ranging from Victorian street properties and pre-war mansion blocks to tower blocks on large estates we recognise that this presents a significant challenge.

Following the preparation of a new Asset Management Strategy in March 2019 we are now developing a roadmap to the EPC C target, which aligns with the 7-year capital programme and identifies the most effective strategies in the context of our varied building typology (i.e. construction types), tenure types (leaseholders, tenants etc), finances, and other council commitments on housing improvements (e.g. fire safety). The work will also take direction from the recommendations in the Energy Strategy.

The initial strategic work to develop this roadmap (to be completed by March 2021 or earlier) involves:

- acquiring improved software to measure and model the RdSAP rating of existing homes (this is the methodology that is used behind an EPC which technically is the banding certificate for sale or rent);
- undertaking a key SWOT analysis of energy improvements incorporating leasehold implications, extent of council influence on RdSAP input parameters,

technical limitations, conflicts with other ambitions to improve (e.g. high performing insulation products are no longer suitable in 18m+ buildings), changes in legislation, resident engagement etc This will identify the technical strategies (both active and passive) most likely to be effective; and

- completing a typology analysis of various key building types, and identifying the optimal means to improve their energy efficiency taking into account their specific construction styles, listed/conservation status, massing, tenure mix, estimated cost.

- Implementing ISO 50001

We have committed to implementing the ISO 50001 Energy Management Standard, helping to identify efficiency savings measures that can be delivered through energy projects and more energy efficient practices. An assessment to achieve accreditation has been made and an action plan is currently being reviewed to allocate resources for delivery. To support this, energy audits of our buildings are being scheduled to identify opportunities for energy savings through lighting upgrades, electricity and heating control initiatives. The work will align closely with the findings/recommendations from the Hackney Energy Strategy. We aim to have accreditation in place by April 2021.

- Corporate property

We continue to actively look to ensure that energy use in our buildings is efficient as possible and also make the most effective use of under-utilised buildings with a view to further rationalising our corporate estate. We intend to help reduce the carbon emissions from Council property occupied by the voluntary sector operating within the borough as a future objective.

- Public realm infrastructure

We are upgrading circa 7000 existing street lights located across the entire borough, scheduled over the next 3 years. The work consists of the replacement of traditional High Pressure Sodium Lights with modern LED street lighting technologies. Detailed design is complete and works have commenced. A further programme is in development which will upgrade the 3,500 existing communal lights on estates to a similar standard.

- Leisure centres

Our operator Better Leisure undertakes a range of activities each year to improve energy efficiency and reduce unnecessary consumption. Examples include water saving shower heads, water saving tap reducers, inverters on motors as well as Building Management Service reviews and upgrades. As part of wider projects and remedial works, replacement equipment and lighting are upgraded to more efficient versions as these works are completed.

- Parks buildings

A Nesta-funded 'Powering Parks' project has assessed the feasibility of deploying ground and water source heat pumps to generate low carbon energy and income for 5 parks across the Borough. In the short term one of the locations has been prioritised and will involve the trial of a heat pump at Abney Park as part of the Heritage Lottery Fund restoration scheme.

- School buildings

Energy efficiency improvements to date are generally a result of cyclical replacement of key items such as heating systems, other works include converting to LED lights. Funding however continues to be an issue due to excessive and competing repair demands on a portfolio of older schools properties. Our future focus is likely to be on community schools and childrens' centres where we have the greatest levers and influence.

- Improving the sustainability of our transport fleet

We continue to replace our fleet to the latest emissions technology 'practically' available. Most of our light commercial vehicle (LCV) fleet are now Euro 6 compliant with the last few remaining awaiting delivery. We operate one of the largest electric vehicle fleets of the London local authorities with 59 electric vehicles (EV's) in use. Our EV's are supported by a charging infrastructure of 48 depot based charge points.. By September 2020 all our fleet vehicles will be Ultra Low Emission Zone (ULEZ) compliant. We are one of the first organisations to sign up to the 'Clean Van Commitment' aiming to have all our light commercial vehicles ultra low emissions vehicles (ULEV) by 2028.

Our fleets' environmental strategy is contributing to our decarbonisation target through a number of measures but predominantly through the use of alternative fuels - Hydrotreated Vegetable Oil (HVO). We have approximately 200 light commercial vehicles that utilise high street forecourts for refueling via fuel cards equating to approximately 300,000 litres of fuel annually. Through the use of HVO in all non electric vehicles, our fleet has the potential to be 100% 'fossil fuel free' by 2021.

We have concluded a procurement exercise for 57 new Heavy Goods Vehicles (HGV's) that will see our whole HGV fleet at Euro VI. (Euro 6 for cars & light commercials and Euro VI for truck; bus & coach are the highest vehicle emissions standards dictated by the EU). Our bus fleet is already at Euro VI. We have invested £12 million to bring our fleet up to the latest Euro 6 emissions standards. Our new compact mechanical sweepers delivered in September 2019 are 'stage 5' - the highest emission standards available for mobile plant. Our new Euro 6 LCV's and non electric cars are fitted with 'stop/start' systems meaning the engines will automatically switch off when stationary after a few seconds and switch back on again as soon as the driver needs to move off.

Most of our HGV vehicles have specialist bodies requiring powered energy supplied by the motive engine. 'Stop/start' does not work particularly well for our HGV's because when the engine automatically switches off it also automatically disengages the power supply to the specialist body causing major operational delays to re-engage. Therefore, all our new HGV's have been ordered with automatic shut off, a system that automatically switches a vehicle off if it is idle for more than a few minutes (this time lag will be different for different vehicle types) but will not automatically switch vehicles back on again. It is our intention to continue to develop our electric vehicle fleet, particularly for cars and LCV's but also to include HGV's when technology develops sufficiently.

Our overall fleet strategy is to reduce its carbon footprint and improve local air quality from fleet operations by:

- eventually electrifying the whole fleet;
- installing appropriate charging infrastructure to support these electric vehicles to include provision of proper back office data;
- minimising the number of vehicles that are taken home by drivers;
- considering replacing vehicles with electric bikes where appropriate;
- considering clean energy production from wind/solar/other at key Council sites/depots; and
- continuing to investigate alternative technology.

- Maximising energy performance of our new build housing portfolio

We have an extensive development portfolio through which we deliver a minimum 35% improvement of carbon emissions over current Building Regulations, increasingly incorporating heat pump technology within designs. We are currently including heat pump technology (from an increasingly de-carbonised Grid) into the designs of emerging housing, pre-empting forthcoming change of Part L & F of Building Regulations (expected Autumn 2020). A number of developments are progressing to the planning stage that include heat pump technology: Fairbank Estate (May 2020); Buckland & Wimbourne Estate (May 2020); De Beauvoir Estate 1 (Sept 2020); De Beauvoir Estate 2 (Nov 2020); Lincoln Court (Nov 2020). On site completions are expected by January 2024.

We have recently completed a study assessing the options for heat pump technology reviewing their relative efficiencies and appropriateness, recognising that it will play a major role in our future designs. We are however concerned that the current Future Homes Standards draft proposal issued by central government is for local authorities to lose the power to act autonomously over and above Building Regulations - and hence our aspiration of future new build programmes may be more restricted.

Reducing emissions through the Council's procurement and commissioning activities

We have adopted a Sustainable Procurement Strategy for 2018-22 that addresses plastic use in all our offices, removing single use drinking cups and bottles, encouraging reduced packaging of products and the preferential use of recycled and recyclable packaging over more damaging alternatives, such as polystyrene. The Strategy also targets less well-known sources of plastics and microplastic dust, such as those from street cleaning equipment. Internal catering services are now plastic-free, and the cafe uses VegWare and these policies are applied across all our office based catering functions.

Influencing and supporting the local community to reduce their emissions

- Improving energy efficiency in the private rented sector

Domestic properties within the private rented sector are amongst the most energy inefficient in Hackney and house some of our most vulnerable residents. We already undertake ongoing annual programmes that seek to improve their energy efficiency, responding to service requests (complaints) from tenants of cold and damp homes with enforcement action taken where a Category 1 Excess Cold hazard is identified under the Housing Health and Safety Rating System (HHSRS). This is being supplemented by an externally funded (BEIS) programme over 12 months to improve F & G rated homes. The start date has been delayed to July 2020 owing to COVID-19 restrictions although it will run through to the end of the financial year 2020/21. Properties in our new selective licensing areas will be prioritised so as to support the wider objectives of those schemes.

- Delivering our Green Homes thermal efficiency programme

Thermally efficient homes are the first step to secure long term benefits, such as: lower energy bills, damp and mould reduction, improved health and well-being and addressing fuel poverty. Green Homes is the first boroughwide thermal efficiency programme designed to offer primarily insulation measures, such as; cavity, loft and floor to all privately owned/rented households in Hackney. Other measures, such as ventilation, windows replacement, renewable heating upgrades will be available subject to available funding from Energy Company Obligation and GLA Warmer Homes Fund. We will also install 3 new innovative fuel-cell hydrogen boilers and 10 air-to-air heat pumps, which will be available for eligible and suitable households, that are sufficiently insulated and have existing heating systems that need replacement.

The £1 million programme is funded through a combination of our Carbon Offset Fund and Energy Company Obligations and will run for 2 years. It is part of Hackney Light and Power, our energy services company. There is no set target for the number of installations, but we aim to insulate as many homes as possible. Recruitment of eligible households, survey and the installation of measures is being undertaken by the Hackney SHINE referral network, delivery partner Happy Energy, and a self-referral system via a web form. 10% of every 100 households with measures installed will be selected for a case study and post-occupancy questionnaire to measure the success of the programme. After its first year in delivery, the programme will be reviewed to

capture the lessons learned and reevaluate the funding allocations if necessary. The programme was launched in February 2020 and to date we have received 47 referrals. Due to COVID-19 the follow-on surveys needed are currently on hold.

- Helping businesses reduce emissions

Our Zero Emissions Network (ZEN) is a multiple award-winning air quality business liaison initiative. The network is free to join and helps businesses and more recently, residents in London's City Fringe area save money, reduce emissions and improve local air quality. The network offers free advice and services to switch to low emission energy and travel options with the goal of making the City Fringe a better place to live, work and visit.

Since it was established in 2012, the Zero Emissions Network has gained close to 1500 business members and over 1000 residential members from across Bunhill, Shoreditch and Spitalfields wards. The scheme addresses the growing problems of air pollution by raising awareness and encouraging positive behaviour change. To date, the network has delivered over 1400 emission reducing initiatives and continues to deliver improvements in air quality. The programme is a partnership project between the London Boroughs of Hackney, Islington and Tower Hamlets and it is supported by the Mayor of London and Defra. We are now expanding the network in Hackney to businesses in Stoke Newington and Hackney Central.

- Supporting our residents

Our SHINE energy advice service has been operating for a number of years and helps residents keep well and warm throughout the year and avoid cold-related conditions during winter and anxiety over paying the fuel bills, which can lead to ill health, extra visits to the GP and hospital admissions. The service is mainly for people over 65, low income families with children under 5, the disabled and people with respiratory and cardiovascular conditions, but anyone who thinks that they need help can contact the service. Free energy advice visits are provided for private tenants and homeowners by Groundwork London. For Council housing tenants, energy advice visits are completed by housing services officers with additional capacity depending on demand provided through LESS, (London Energy Saving Squad). This is supplemented by regular exhibitions, and workshops held on our council estates where we provide products such as energy saving light bulbs, shower heads, radiator reflectors, toilet cistern blocks, and humidistats.

The Council has a duty to install heat meters for properties connected to our communal heating systems, under The Heat Network (Metering and Billing) Regulations 2014 and we aim to have 90% of them with heat meters installed. About 10% are not suitable for heat metering due to pipework layouts. Post installation we provide training to residents who are unfamiliar with their Heat Interface Units and metering systems, helping them to feel more confident with their purpose and use.

- Ensuring new build housing and commercial developments are sustainable

We submitted our draft Local Plan (LP33) to the Secretary of State on 23 January 2019. LP33 includes a series of new policies with a plan for the growth of the borough. In accordance with manifesto commitments, it plans to do this while ensuring a reduction in carbon emissions, mitigate climate change, promote green infrastructure and minimise adverse noise. The new policies will help enable us to become a low carbon and carbon resilient borough and include a requirement for major commercial development to generate at least 10% of their energy needs from renewable sources on site or in the local area; reduce car dependency and favour development near transport nodes; promote sustainable modes of transport; and to work with developers to make sure air quality conditions are met. Our Local Plan has been subject to an examination in public by an independent Planning Inspector and their report has been received. It is scheduled for adoption at Full Council on the 22nd July.

A zero carbon policy has already been adopted for major developments in line with the London Plan which has required all new major residential developments to be net zero carbon since 2016. This has driven greater emissions reductions beyond Building Regulations with an expectation that this will be achieved on site.

The requirement for zero carbon development is also to be expanded to apply in the future to minor schemes – and carbon reduction is expected in existing buildings too. Almost half of housing delivery in Hackney is on small sites; analysis of the 2019 pipeline for housing identifies that 41% of planning permissions that have been granted are for sites of 9 units or fewer. To make a real difference to carbon emissions in the borough the cumulative impact of smaller development needs to be addressed – and so the zero carbon emissions requirement will apply to all scales of development.

We have a Sustainable Construction Supplementary Planning Document (SPD). The document describes the type and form of interventions that can reduce the impact of new development on climate change, our local environment and enhance the quality of our lives. Its focal point is on ensuring that the development is designed with the

appropriate sustainability strategy in place to minimise environmental impacts. For major applications we require a 'Sustainability Statement' and an 'Energy Statement' including an overheating risk assessment, to be submitted in order to allow verification that the design of the proposal complies with the corporate and planning objectives of the Council.

Existing planning requirements include:

- non domestic developments achieve the BREEAM 'Excellent' rating;
- major non domestic achieving a minimum 35% regulated carbon emission reductions beyond baseline Part L2A 2013; and
- major domestic developments to be zero carbon with a minimum 35% regulated carbon emission reductions beyond baseline Part L1A 2013.

The existing SPD is set to be replaced by a new Sustainable Design and the Built Environment SPD which we expect to be adopted in Spring 2021. It will reflect new London Plan requirements (once adopted) such that all strategic developments will need to submit a whole life-cycle analysis carbon assessment (embodied carbon) - the 'be seen' step in the energy hierarchy, and to monitor the performance of defined units reporting to the GLA via an online portal for at least 5 years after construction. Developments will also need to embrace circular economy principles as it applies to the built environment.

Once our Local Plan is approved requirements are to be expanded to ensure:

- all buildings are built to be zero-carbon;
- major domestic and non-domestic developments need to achieve a 10 and 15% reductions with energy efficient measures alone, respectively; and
- major non-domestic buildings should generate at least 10% of their energy needs from renewable sources onsite or in the local area.

Priority 2: Improve local resilience to impacts of the climate emergency

This priority covers progress to ensure our local environment adapts to the impacts of the climate crisis by making it more resilient. It includes actions to protect and enhance biodiversity, addressing the challenges of biodiversity loss. Alongside our practical activities we are undertaking a number of pieces of work to bring together our strategies and plans for green infrastructure, building on the evidence base prepared for our Local Plan submission. Headlines include:

- planting 5,000 new street trees by 2022 increasing the street canopy from 20% to 30% in the single largest investment in trees in the history of the borough, 725 planted in the first year of the scheme;
- planting 31,000 park trees by 2022 (1,000 mature trees and 30,000 young saplings) in our parks and green spaces - 10,500 planted in 2019/20;
- developing a Green Infrastructure Strategy to identify options to increase the resilience of the borough and inform our policies in urban greening and biodiversity net gain;
- ongoing major improvements programme to parks and green spaces maximising their value to Hackney's communities eg Springfield Park, Abney Park Cemetery and Shoreditch Park;
- adapting our public realm by delivering rain gardens - more than 10 rain gardens completed diverting 2000sqm of highway runoff from the public sewerage system. This excludes sustainable urban drainage schemes (SuDS) incorporated in larger highway improvement schemes;
- delivering our '21st Century Streets' programme that looks at how we can bring together new sustainable and healthy streets elements to the streetscape. Our first scheme will be delivered in Dalston adjacent to Ridley Road Market and others are in development;
- developing a new Parks and Green Spaces Strategy and commissioning a Local Nature Recovery Plan, setting out in greater detail how the objectives of the Green Infrastructure Strategy will be implemented through the way we manage our parks and green spaces, whilst protecting and conserving biodiversity; and
- reviewing our Sites of Importance to Nature Conservation to ensure the biodiversity of our highest quality spaces have sufficient protection for the future.

- Developing a Green Infrastructure Strategy

To identify options to make better use of green Infrastructure so as to increase the resilience of the borough we commissioned the preparation of a Green Infrastructure Strategy in February 2020. The purpose of the Green Infrastructure Strategy is to provide the vision, principles, strategic objectives and key initiatives and projects to inform the delivery of supplementary plans and strategies including, for example, the borough's new Parks and Green Spaces Strategy, Local Nature Recovery Plan, Air Quality Action Plan, Surface Water Management Plan and elements of the Transport Strategy. It will also inform and refine policies within the borough's Local Plan that enable the delivery of green infrastructure, including, for example, policies in urban greening and biodiversity net gain.

Hackney has a relatively high ratio of open space compared to other inner London Boroughs; 1.36 ha of parks and gardens, natural and semi-natural green space and amenity green space per 1,000 head of population. A significant amount of the open space is Hackney Marshes, which substantially influences the ratio of open space to head of population. It is also unevenly spread, with some wards in the Borough having no provision of public parks, for example Hackney Central and Dalston. It is estimated that an additional 97.9 ha of open space will be required by 2041 to maintain the current ratio, the work will explore and identify solutions to this challenge.

The main study area covers the administrative areas of the London Borough of Hackney, although the strategy has regard for existing strategic green infrastructure provision in the surrounding areas and future plans for their enhancement and delivery. The work is also informing the guidance on preparing Green Infrastructure Strategies being developed for London by the GLA. A draft of the strategy is scheduled for completion by October 2020.

Consideration is also being given to the value of developing a stand alone Urban Forest Plan to set out how we intend to manage and expand our tree assets both now and in the future.

- Reviewing our Sites of Importance for Nature Conservation (SINCs)

London Wildlife Trust (LWT) were commissioned in March 2020 to undertake a review of the borough's SINCs. It has been over five years since the last review, and it is likely that there may have been changes, not only to the current SINCs but also other land potentially worthy of designation as a SINC. The assessment is following the

methodology set out for all London SINC reviews as required in regional planning guidance, in which existing SINC's status are reviewed, alongside changes in habitat quality and/or boundaries, species information, and the potential for new sites to be designated or existing sites to be de-designated.

There are 24 Sites of Importance for Nature Conservation (SINC's) in Hackney, that have been identified from surveys first carried out in 1984 and periodically updated since then. SINC's form part of the Local Plan; their protection is a material consideration in planning decisions by the Council, and their presence forms a critical component of the Local Biodiversity Action Plan and other actions to enhance wildlife in the borough. There are currently 1605 SINC's designated across London; examples in Hackney include Abney Park Cemetery, Napoleon Road Railway Cutting, the New River, and Springfield Park. SINC's may also be afforded or lie in land with other planning designations, but they do not, however, include private gardens.

Site surveys of all existing and proposed SINC's have been planned, but have been affected by the COVID-19 restrictions. Data gathering (e.g. obtaining species and habitat data from Greenspace Information from Greater London GIGL - London's environmental records centre and other recorders), assessing recent reports, and analysis of aerial imagery is being completed. This is being supplemented by a call for information to local groups/individuals in Hackney with expertise in biodiversity. The information used in the review will help update the evidence base for Hackney's emerging Local Plan policies and more directly underpin the recommendations provided in the development of the Local Nature Recovery Plan and the new Green Infrastructure Strategy. A draft of the SINC review is scheduled for completion by September 2020.

- Developing a Local Nature Recovery Plan

To identify options to maintain and enhance local biodiversity, London Wildlife Trust (LWT) were commissioned in March 2020 to develop a Local Nature Recovery Plan (LNRP). A Local Nature Recovery Plan (LNRP) is a shift in approach from our earlier Biodiversity Action Plan (BAP) and operationalises the nature conservation, biodiversity and ecology objectives of the Green Infrastructure Strategy.

The LNRP will have the advantage of being set within our wider Green Infrastructure Strategy whose aims and objectives apply to all of the green infrastructure within the borough and are informed by our other duties and responsibilities. It also reflects the direction of travel set out in the draft Environment Bill. Our LNRP will focus on spatially specific actions and recommendations that are founded upon the conservation of

habitats and species of Principal Importance present in the borough and others of local value. This is primarily through the protection of a core nature network (the Sites of Importance for Nature Conservation) and the ways in which this network can be conserved and enhanced through application of the recommendations in the 'Making Space for Nature' report 2010, which advocates a landscape-scale approach to conservation, to create "a coherent and resilient ecological network". It is informed by a core set of aims for local nature recovery (Protect, Connect, Create and Enhance, and Engage and Promote) which in turn will identify the necessary policies, spatially specific actions, partnerships and communications needed to deliver local nature recovery. A draft of the LNRP is scheduled for completion by October 2020.

- Preparing a new Parks and Green Spaces Strategy

We are producing a new Parks and Green Spaces Strategy (PGS) to replace our earlier Parks Strategy and have been engaging widely with stakeholders to create an ambitious and comprehensive approach to managing our parks and green spaces. It will have four general themes and embed our response to the Climate Emergency, ensuring that the spaces we manage are secure and resilient for the future. Consultation on the draft PGS (which is being produced internally) is scheduled for October 2020.

- Sustainability and climate change;
- People, including events and sports;
- Place, including design and play areas; and
- Staff, including training and volunteers.

This is supported by our ongoing major improvements programme to parks and green spaces maximising their value to Hackney's communities which include amongst others:

- restoration of Abney Park Cemetery using HLF grant;
- improvements to Fairchilds Garden in Shoreditch;
- improvements to Shoreditch Park;
- restoration of Springfield Park using HLF grant; and
- undertaking a feasibility study into opening up West Reservoir to wide public use and increasing leisure activities.

Improving the resilience of the Borough's infrastructure and maximising the contribution of green infrastructure and biodiversity

- Increasing tree canopy cover on our streets

We have started our ambitious plan to deliver 5,000 new street trees by 2022 increasing the street canopy from 20% to 30% in the single largest investment in trees in the history of the borough. The first year of the programme is underway and we are currently increasing the size of our arboricultural team to manage the increased planting requirements for years 2 and 3. The commitment significantly expands our existing promise to plant 1,000 trees by 2022 and will see an increase in street tree provision by 50%.

The programme is taking a science-based approach to tree selection and distribution, going beyond trees purely for aesthetic purposes, to ensure that considerations about carbon dioxide capture, biodiversity, and resilience to man made global warming are at the very forefront of our investments in green infrastructure. Through shading and evaporative cooling, trees are increasingly recognised as the number one tool for the delivery of sustainable cooling; mitigating against the impact of both the Urban Heat Island effect and warming due to the emission of greenhouse gases. By increasing on-street canopy cover from 20% to 30% by 2022, we are beginning to build-in resilience to future respiratory, heat-related hospital admissions and reduce energy consumption for air conditioning and moderate areas in cooling. As trees can also play an important role in filtering polluted air and provide mental health and wellbeing benefits, our forthcoming programme also represents a new focus on trees as public health infrastructure. New trees will be a circa 50/50 mix of native and non-native trees, ensuring that trees are appropriate for their setting and resilient to pests and the changing climate.

- Increasing tree canopy cover in our parks and green spaces

We are planting 31,000 park trees by 2022 (1,000 mature trees and 30,000 young saplings) in our parks and green spaces. In 19/20 we planted with volunteers an Edible Forest and also a Carbon Offsetting Woodland on East Marsh totalling 10,500 trees. The Edible Woodland has a mix of 6,500 fruit and nut trees, broadleaf specimens, and shrubs which also seek to encourage the local community to learn more about foraging. The trees and shrubs were funded by Honest Drinks through the charity Trees for Cities, which works with volunteers, schools and local communities to enhance green

spaces in urban neighbourhoods. The Council, Trees for Cities, and the Tree Musketeers are set to continue working together by planting over 20,000 additional trees on this and other green spaces, aimed at improving tree canopy coverage and tackling the climate emergency by capturing carbon.

Improving the resilience of the Borough's systems

- Incorporating Sustainable Urban Drainage into design

As the lead local flood authority, we are responsible for developing, maintaining and applying a strategy for local flood risk management in our area and for maintaining a register of flood risk assets. As a part of this, we are shifting from conventional drainage systems to more environmentally sustainable systems (SuDS) to drain public spaces, including use of tree pits, rain gardens, blue roofs and bioretention. We are encouraging our residents to reuse water (from roof run-off for reuse) and collaborating to incorporate more SuDS within the borough. Major planning applications such as Woodberry Down are legally obligated to incorporate SuDS in their design, however, minor applications are not currently required but we will continue to encourage private developers to consider the use of SuDS in their designs.

More than 10 rain gardens were constructed in the past year, depaving over 150sqm of the existing underutilised highway spaces both within the footway and in the form of build-outs in the carriageway (this excludes SuDS incorporated in larger highway improvement schemes), and diverting over 2000sqm of highway runoff into these SuDS away from the public sewerage system.

- Delivering 21st Century Streets

The reallocation of road space in our streets brought about by the reduction of car parking spaces and the installation of permeable filters and road closures brings an opportunity to completely reimagine the design of local streets. Our '21st Century Streets' programme looks at how we can bring together new sustainable elements to the streetscape such as greening, sustainable urban drainage, tree-planting and community parklets, on-street cycle parking and cycle hire bays including access to community cargo bikes and electric vehicle charging points for both private and car club use. We are looking to pilot this approach in Colvestone Crescent in Dalston where the aim is to increase tree cover to at least 40% of the street; reduce unnecessary car parking; introduce a School Street and boost on-street secure cycle parking and electric vehicle charging.

- Undertaking a Parking and Enforcement Plan review

We are developing as part of our Parking and Enforcement Plan review, a hierarchy of kerbside space, which will help us to prioritise the reallocation of road space through parking zone consultations and reviews at the design stage. We expect to have prepared a draft of our PEP for public consultation in Spring 2021.

- Replacing our existing Sustainable Construction SPD

Hackney's existing Sustainable Design and Construction Supplementary Planning Document adopted in Autumn 2016 is to be replaced by a new Hackney's Sustainable Design and the Built Environment SPD. We expect it to be adopted in Spring 2021.

- Maximising food growing and urban foraging initiatives on estates and across Hackney

We support the development of food growing initiatives across a range of sites, some within our ownership and/or management (Parks and allotments) as well as some managed by others (schools and our housing estates). Food growing opportunities are also being looked at as part of the development of the Green Infrastructure Strategy.

We are responsible for some over 30,000 properties in the borough including over 250 housing estates which often have open spaces and currently have 48 'grow your own' areas on our own housing estates. A number of our growing schemes on estates are keen to extend their existing areas building on their success. There are several more on the borough's Tenant Management Organisation and housing association estates.

Each year a number of our estates are identified for the Green Estates programme which takes a holistic approach to supporting the development of greener behaviours on individual estates which extends to including community food growing where there is locally led interest. Estates in the programme for 2019/20 included: Cranston Estate, Fairbank Estate, Gascoyne Estate, Lincoln Court, Suffolk Estate, Trowbridge Estate, Wenlock Barn Estate and the Yorkshire Grove Estate.

We are the freeholders for nine allotment sites with a total of 125 full plots (some split into half plots). Our green spaces don't just accommodate fruit and vegetables; there are beehives on a number of sites too.

Priority 3: Promote active travel and public transport

This priority covers our activities to encourage and enable walking and cycling, minimise the impacts of private vehicle use and road freight vehicles and improve our public transport systems so we continue to provide clean, safe and affordable sustainable transport for our residents and reduce car dependency in line with our Transport Strategy. Headlines include:

- expanding our School Streets programme to every primary school in the borough - an additional 40 this year (in addition to the existing 9), improving air quality at the school gates and providing greater safety for children walking and cycling to school;
- delivering cycle infrastructure schemes (Queensbridge Road, Wick Road and West Bank) as well as progressing a number of strategic cycle routes (3 Cycle Future Routes schemes - Dalston to Lea Bridge, Hackney to Isle of Dogs and Camden to Tottenham Hale) that will see 85% of our residents living within 400m of a cycle route;
- launching our Dockless bike scheme with plans to expand extend the network to about 180 locations and offering about 400 bikes for hire;
- continuing installation of secure on-street cycle hangars (Hackney has the most in London and will install a further 120 in 2020) and providing cycle training to novice riders;
- securing funding to create or improve 12 Low Traffic Neighbourhoods enabling a step change in their delivery;
- increasing our on-street electric vehicle charging infrastructure so the 80% of residents are within 500 metres of a charging installation by 2022. 2019 performance is 67% and we are exploring a more ambitious programme beyond this target;
- progressing detailed planning for two major public realm improvements schemes (Hackney Central Liveable Neighbourhoods and Stoke Newington gyratory) to enable future delivery once funding is reconfirmed;
- progressing detailed planning for the Stoke Newington Low Emissions Neighbourhood that will improve area-wide walking and cycling;
- progressing future improvements at our two busiest rail stations: involving a new entrance for Hackney Central on Graham Road scheduled for 2021 and a multi year programme at Hackney Downs where funding has been secured for installation of lifts;

- preparing our 2019 Transport Strategy Annual Monitoring Report attached in Appendix 2 (please note that many of the key transport indicators are by nature a year old at publication). The next Annual Monitoring Report for 2020 is in production. We expect this to be available on our website by September 2020; and
- completing our Freight Action Plan.

Responding to the coronavirus crisis by seizing opportunities

The coronavirus crisis has however made a huge impact on the context for our transport related activities where we have witnessed a dramatic change in the use of the transport network as many people work from home or are not working at all. In London use of the tube and bus has plummeted with Transport for London (TfL) estimating 95% reduction in tube use and 85% reduction in bus journeys.

The massive drop in fares revenue has led to TfL suspending projects. This has had a corresponding impact on the funding allocated annually through our Local Implementation Plan (LIP). TfL has suspended funding for boroughs for 2020/21 with a London Streetspace Plan (LSP) used as a mechanism for boroughs to bid for funding to lock in the benefits of the current much reduced volume of traffic, whilst supporting more walking and cycling and maintaining social distancing through reallocation of road space. The Plan aims to make it easy and safe for Londoners to choose to walk and cycle as an alternative to public transport use. It has three main objectives:

- reallocation of road space - where pedestrian crowding and social distancing is an issue such as town centres and key hubs;
- delivery of strategic cycle routes - using temporary materials such as light segregation, temporary barriers and traffic restrictions; and
- low traffic neighbourhoods - on borough roads to give space and security for local walking and cycling and an enhanced ability to maintain social distancing.

The LSP is very much focused on the delivery of projects that meet these objectives in the short term. However, there is also a recognition that longer term projects will be needed to support the COVID-19 recovery period. Both our existing and future plans have had to respond to these circumstances, although we are well placed to benefit from this funding.

To inform our bids we have produced a Lockdown Exit Transport Strategy. Our strategy sets out how we will address COVID-19 pandemic in the short to medium term.

Although not all of our proposed interventions are likely to be funded by TfL through the LSP, all are supportive of the Hackney Transport Strategy 2015-2025.

Our Lockdown Exit Transport Strategy comprises:

- Space for Public Transport Users;
- Healthy Town Centres - Hackney Central, Stoke Newington Church Street, Broadway Market, Chatsworth Road;
- Healthy Neighbourhoods - building on our existing aspiration for Low Traffic Neighbourhoods (LTN) to be delivered across the whole borough;
- Strategic Cycle Routes;
- School Streets - a major expansion has already been approved to cover all schools in the borough by September 2020;
- Supporting Measures - cycle training, travel planning, road safety education and cycle parking; and
- Connection to wider workstreams - 21st century streets, tree planting programmes, SUDs, road user charging and electric vehicle charging.

Encouraging and enabling walking and cycling

We are London's leading walking borough with a mode share of 44.2%, ahead of Camden and Islington (41.5% and 41.4% respectively). While the historic trend shows a degree of fluctuation in this measure, we are on course to maintain (or possibly exceed) our Transport Strategy target of maintaining a 40% walk mode share.

- Delivering School Streets

As a result of our successful LSP bid we are expanding our Schools Streets programme to include every primary school by September 2020. We will deliver 40 this year (in addition to the existing 9), improving air quality at the school gates and providing greater safety for children walking and cycling to school. The 2018 Manifesto committed us to deliver 12 new School Streets and this represents a significant step change in delivery.

- Delivering key cycle infrastructure improvements

Our medium to long term plan to deliver cycle routes is set out in our existing Local Implementation Plan. We aim to continue to deliver elements of this in the short term through the LSP and as part of the strategic Cycle Future Route (CFR) programme.

Completion of this network would see 85% of our residents living within 400m of a cycle route.

We have progressed or delivered a number of key schemes, although the extent of some of these schemes has been affected by TfL's current funding position in the short/medium term.

- CFR3 - Dalston to Lea Bridge - initial design complete. Consultation completed in Sept 2019. TfL analysing consultation results. Elements will be delivered through the LSP programme;
- CFR5 - Hackney to Isle of Dogs - TfL currently analysing responses to consultation;
- CFR3 - Camden to Tottenham Hale - consultation delayed to 2020 due to other sections of the route requiring redesign and remodelling;
- Cycle Superhighway 1 interventions;
 - a) Balls Pond Road, from Culford Road to Kingsbury Road - secured £400k funding through LSP
 - b) West Bank - implementation completed in July 2019
 - c) Englefield Road - funding currently withdrawn due to COVID-19
 - d) Wilson Street/Paul Street/Worship Street - funding currently withdrawn due to COVID-19
- Queensbridge Road (Phase 1) Hackney Road and Whiston Road - largely completed;
- Queensbridge Road (Phase 2) - LSP proposal to install light segregated cycle lanes on a 600-metre stretch of the key north-south Queensbridge Road;
- Wick Road - completed August 2019;
- Green Lanes - LSP proposal to install light segregated cycle tracks on a 2km stretch of this road which is an important connector route between Hackney and the neighbouring borough of Haringey;
- CLCG (Phase 2) - Nuttall Street complete; and
- East to West route - Consultation for Micawber Street and Dunloe Street complete.

Cycling uptake in the borough is also being supported through infrastructure, training and promotional measures. These include:

- installation of secure on-street cycle hangars (Hackney has the most in London and will install a further 120 in 2020);

- installing permeability filters to stop rat-running of traffic in residential areas (110 installed so far);
- delivering cycle routes (Quietways 2, 13, 6 and 11; Cycle Superhighway 1, Wick Road cycle route and Greenways in parks); and
- providing cycle training (over 45,000 people trained since 2010). There is a proposal to provide training to novice adult cyclists within our LSP bid.

- Launching a dockless bike scheme

We launched our dockless scheme in December 2019 with two selected operators, Beryl and Jump. An initial 73 locations were identified as designated parking areas for the bikes. Working with the operators, we are planning to extend the network to about 180 locations and offering about 400 bikes for hire.

- Hackney Central Liveable Neighbourhoods

Hackney Central is a busy and thriving town centre and an important transport hub which suffers from busy roads that carry high traffic volumes and pavements that are already crowded such as on Amhurst Road between Hackney Central station and the Narrow Way. We have previously been successful in a bid to TfL for a Liveable Neighbourhood (LN) scheme for Hackney Central. The objectives of the LN scheme are:

- to reduce traffic in the area
- to improve pedestrian facilities
- to enhance cycle access into and through the area
- to improve bus service speed and reliability
- to enhance public realm in the area
- to improve access to Hackney Central station
- to improve air quality
- to improve the sense of place for Hackney Central
- to reduce road user casualties

Substantial background work has been undertaken including extensive traffic modelling of the initial ideas, economic surveys, a public perception survey, analysis of pedestrian and cyclist movement and a delivery and servicing study. Public engagement was undertaken in 2019 which established the views of the public on the challenges and aspirations for the area.

The above scheme in its entirety is currently on hold as a result of TfL's funding position, however as part of our Lockdown Exit Strategy strategy we have made proposals to achieve as many of the Liveable Neighbourhood objectives as possible in the short term, although funding is not secured. We are continuing to develop the larger scale plans for Hackney Central to enable applications to be made for future rounds of funding.

- Stoke Newington gyratory improvement project

The gyratory is an extensive one-way system that was originally introduced in the 1960s to reduce congestion through, and on the approaches, to Stoke Newington High Street. A major improvement scheme (led and to be delivered by TfL) was proceeding to detailed design with construction scheduled for 2021, before the COVID-19 pandemic, however it is now subject to available funding. It aims to improve the quality of life in the area by:

- transforming the town centre by creating a single unified retail location with an enhanced environment for pedestrians and cyclists;
- improving the public transport interchange, achieved through two-way bus operation - reducing congestion, and simplifying bus stops;
- improving cycling facilities and access through the A10;
- encouraging more journeys by walking, cycling or public transport to/from the High Street; and
- reducing rat-running in residential streets.

Facilitating public transport systems

- Improving our main rail stations

Plans are in place for our two busiest stations which involve:

- delivery of a new entrance on Graham Road for Hackney Central station (currently scheduled for implementation in 2021); and
- a comprehensive programme of improvements at Hackney Downs station over a longer period to 2024 that will involve making it accessible for all. Funding has recently been confirmed for the installation of lifts at the station.

Minimising the negative impacts of private vehicles

We have one of the lowest levels of car ownership in the country with 70% of households having no access to a car. Traffic passing through the borough on its way to other places however, makes a major impact on quality of life in the borough and accounts for circa 44% of traffic based on a study completed in 2018, with local trips accounting for circa 15% of traffic.

- Increasing our Electric Vehicle Charging Infrastructure to encourage transition

Our 2015 Transport Strategy goal is for 80% of residents to be within 500 metres of a charging installation by 2022. Based on 2019 performance this is now well on its way to being met (67%) with 116 publicly accessible electric vehicle charging points at 91 locations. We are also currently exploring a more ambitious programme beyond this target perhaps installing up to two charging installations on every street.

An additional 185 electric vehicle charging points are set to be installed in 2020. Of the new charging points 130 are set to be installed on lampposts - with dedicated charging bays created on the road - which will bring the total number of chargers in Hackney to 301. Funded by the Department for Transport's Go Ultra Low City Scheme, with match-funding from the Council, the lamppost chargers make use of the existing power supply to lampposts to provide additional charging points, and will help people make the switch to electric vehicles, reducing their impact on air quality. Residents and businesses are being asked to suggest locations for the new charging points that will best support people to switch to electric vehicles.

To inform future delivery, we commissioned a study to assess the feasibility of providing lamp column charge points on all of the borough's residential roads, as part of a broader programme to drastically reduce motor vehicle pollution without increasing car ownership overall. A number of scenarios have been looked at including the provision of up to two charge points in each street, which would see up to 2000 charge points installed across the borough. The study also looked at how our new publicly-owned, low carbon energy services company, Hackney Light and Power could be used to power the new chargers. The report was received internally in June 2020 for consideration and we are preparing to soft test the market as a next step - this will be done between July and September 2020.

- Low Traffic Neighbourhoods (LTN)

Low Traffic Neighbourhoods (LTN) are groups of residential streets, bordered by main or “distributor” roads (the places where buses, lorries, non-local traffic should be), where “through” motor vehicle traffic is discouraged or removed. We have implemented a number of road restrictions over the years including: traditional closures with physical measures, bus gates, timed closures such as School Streets and Ultra Low Emission Vehicle streets.

We hope to accelerate this programme significantly if we are successful with our recent LSP bid. Our TfL LTN submission proposes measures to create or improve 12 Low Traffic Neighbourhoods. The locations have been selected under the following principles:

- deliverability;
- impact on adjacent LTNs - the proposals fill in crucial gaps between other existing or planned LTNs, creating large continuous coverage;
- impact on strategic cycling routes;
- access to green space - as per LSP guidance; and
- impact on through-traffic.

We were also successful in a bid to the Mayor for Good Growth Funding Round 3 for works to Broadway Market. This funding is to be used for electric vehicle charge points to support market traders, cycle parking [hangars, dockless bike bays], traffic flow restrictions in the London Fields area and setting up a Cargo Bike hub.

- Stoke Newington Low Emissions Neighbourhood (LEN)

The delivery of the Stoke Newington LEN will improve area-wide walking and cycling and reduce polluting traffic. To enable this we were successful in securing funding through the Mayor’s Air Quality Fund (MAQF) Round 3 bid for a Low Emission Neighbourhood on Stoke Newington Church Street and the surrounding streets. The project, named LEN16, has four main themes:

- transition away from Internal Combustion Engine vehicles (through initiatives such as cargo bike hire, ULEV uptake);
- improving air quality (anti-idling, traffic calming, supporting the Zero Emissions Network (ZEN) Satellite hub);

- delivering Healthy Streets (improved pedestrian crossings, junction redesign and improved public realm); and
- transitioning to a zero emissions future (potential Zero Emission Zone restricting polluting traffic on Stoke Newington Church Street).

The allocation of £500,000 of MAQF funding would have delivered these projects over a three year period. Initial public engagement took place in January/February 2020 through a workshop and on-line Commonplace platform which identified the volume and speed of traffic, air pollution and the lack of pavement width as issues. Our LSP funding application seeks to deliver many of the LEN16 proposals.

- Considering options for future road user charges

We are at an early stage to explore options to consider traffic reduction schemes such as workplace parking levy, or road user charging in partnership with TfL and neighbouring boroughs. Our earlier assessment of road traffic volumes is being used to inform options for managing demand on the road network, such as road pricing, and to meet objectives and targets set out in our Transport Strategy and Local Implementation Plan. The study identified:

- 41% of weekday car and taxi traffic on Hackney's roads is through traffic rat running through the borough;
- 18% of weekday car and taxi traffic comes from local traffic beginning and ending its journey in Hackney; and
- for goods vehicles alone the percentage of weekday through traffic is considerably higher (56% from HGVs and 50% from LGVs).

Further areas to be considered include developing a better understanding of the data requirements required to rigorously assess feasibility.

We will continue to review our pay and display pricing structures that encourage people to consider using sustainable transport instead of driving in and parking within the borough. As part of our Parking and Enforcement Plan review, we are proposing emissions based charging for pay and display bays. Alongside this, we review maximum stays to ensure pay and display bays are not used for all day commuter parking.

To align with our residential parking permits charging structures we will implement estate based emissions permits on our housing estates during the next 12 months.

- Minimising the negative impacts of road freight vehicles

We are implementing Low Emissions Neighbourhoods' and Zero Emission Networks' working with businesses to reduce the volume of freight deliveries and emissions through conversion to more sustainable routes. A Freight Action Plan was completed in 2020 which identified actions to help reduce the negative impacts of freight in the borough through consolidation and the retiming of goods vehicle trips. We are assessing the need for a toolkit for freight managers for launch with a large business.

We continue to deliver interventions that provide alternative options for small scale deliveries such as Cargo Bikes and promotion of our Scooter Switch scheme.

Priority 4: Reduce waste and promote the circular economy

This priority includes our activities to minimise waste and reduce the impact of consumption, improve reuse and recycling and promote the application of circular economy principles with a focus on reducing carbon emissions. Headlines include:

- delivery of our new GLA approved Hackney Reduction and Recycling Plan stating how the borough will deliver against the pressing waste and recycling targets of the Mayor of London's Environment Strategy, with a stretching recycling target of 31%;
- committing to the implementation of fortnightly black bag waste collections for street properties which are scheduled to start from March 2021, eliminating circa 5,000 tonnes of waste from incineration annually, resulting in a 10% decrease in emissions from the Hackney waste system;
- continuing to deliver our Estate Recycling Programme by improving infrastructure on estates that generally doubles recycling levels as a result;
- increasing take up of the schools food waste service with 24 new schools added;
- becoming the first Council in the UK to introduce a reverse vending machine - launched on a Hackney estate, the reverse vending machine rewards residents for depositing cans and plastic bottles;
- selected as the preferred provider of commercial collection services for the Old Street District Partnership - the programme aims to cut costs for businesses and increase commercial recycling amongst its objectives;
- introduced the first of our reuse and repair (zero waste) hubs to give residents the opportunity to donate items that they don't use, take items they do and repair electrical items, textile items and bicycles for free;
- launched our Library of Things service in March 2020, due to open to users in the Autumn, a service to residents to hire tools and other equipment for their personal use - the service will be delivered at Dalston Library; and
- announcement of the largest free drinking water fountain programme in the U.K to install 26 new public water fountains by 2022 (9 currently installed).

- Delivering our Hackney Reduction and Recycling Plan

We are implementing our comprehensive Reduction & Recycling Plan (RRP), which has been approved by the Mayor of London, setting out our actions for reducing and minimising waste, maximising recycling, reducing our environmental impact of waste and maximising our waste sites.

The Mayor of London's Environment Strategy requires London authorities to write a Reduction & Recycling Plan. The RRP was submitted to the Greater London Authority (GLA) in June 2019, and set out actions on restricting residual waste and to consult on such. Following amendments based on more up to date analysis of data, the RRP was 'signed-off' in December 2019 by the Mayor of London, and has been approved as being in general conformity with the London Environment Strategy. The GLA noted that they were particularly pleased to see food waste remaining weekly and that we had committed to meeting a stretching recycling target of 31%.

- Restricting residual waste for street properties

Residual waste restriction will play an important role in helping the Council achieve its decarbonisation targets. Our current recycling rate of 27.9% is at an all time high, but is now plateauing. Hackney is in 8th position of the 13 inner London boroughs, and 25th when compared to all 33 boroughs.

Consultation was undertaken with residents in 43,000 street properties between September and December 2019 as to how we might reduce the amount of waste we send to be incinerated. Having identified some concerns, mitigation measures will be put in place, and as a result we will be moving to fortnightly collections of residual waste. This is scheduled for implementation from March 2021 and will deliver:

- reduction of approx. 4,400 tonnes of street level black bag waste being incinerated against current levels by 2022, which is a 21% reduction of waste per household;
- increase in recycling rate to 31% by 2022/23. This will see Hackney move from position 8 of 13 inner London borough's recycling rates to 4th (based on current data); and
- reduction in emissions associated with incinerating black bag waste, contributing to achieve the 45% reduction in emissions against 2010 levels by 2030 and net zero by 2040. Using Zero Waste Scotland's Carbon Metric Publications, directing 4,400 tonnes of black bag waste to recycling/composting, shows a benefit of -661

to -610kg CO₂eq per tonne of material recycled/composted. This would indicate a potential benefit of around 2,910 to 2,680 tonnes CO₂eq savings.

- Delivering our Estate Recycling Programme

Improving recycling on estates is a key challenge in ensuring Hackney is a sustainable borough. We are supporting behaviour change so residents increase their use of the recycling and food waste services on estates, with the overall aim of reducing waste and increasing the recycling rate. Average recycling rates of estate based properties is circa 10%, in comparison the rate of street level properties is circa 30%. The outcome of the programme is to double existing recycling rates on our estates to circa 16% as a minimum although this will vary depending on the nature of the estate, coupled with the ability to make optimal infrastructural improvements.

The overall programme has been running for a number of years and involves improving the infrastructure on our housing estates by closing bin chutes and building bespoke bin chambers. Phase 4 of the programme is underway, relocating bin stores on 7 estates which have 57 binstores in total. 75 chutes will be closed, 336 hoppers are to be sealed (chutes and hoppers installation is planned post the pandemic), and 24 x 1100 litre recycling bins added. Works are expected to be completed in September 2020. This will be followed by a Phase 5, subject to funding being approved.

Alongside this are measures we have already taken to both encourage and facilitate increased recycling on some of our estates such as:

- introducing larger sized recycling bin lid openings for improved ease of use;
- introducing additional recycling bins across our housing estates;
- reviewing the removal of one the three scheduled waste collections per week, at sites where there is sufficient capacity;
- launching our Green Champions scheme to support residents with recycling on housing estates; and
- becoming the first Council in the UK to introduce a reverse vending machine - launched on a Hackney estate, the reverse vending machine rewards residents for depositing cans and plastic bottles.

- Helping schools to better manage their waste

We've continued our work with schools - 130 education sessions were delivered in 2019/20 by Ecoactive involving around 3,000 students, 24 new schools were added to

the food waste service and 4 schools are currently engaged in the EcoSchool Programme. An options paper has been produced and a new approach will be adopted for the 2020/21 academic year. This will involve the service being brought in-house, working with more schools to achieve EcoSchools status and encouraging the uptake of our waste services.

- Helping businesses to better manage their waste

We are the largest commercial waste operator in the borough, with over 3,000 customers, and offer the most comprehensive waste and recycling service in Hackney. To incentivise recycling amongst businesses, we offer favourable rates for recycling collection. We provide recycling sacks and/or bins to allow businesses to separate glass, paper, metal, plastic and cardboard from non-recyclable rubbish prior to collection. Our commercial waste team also provides advice to businesses on how to reduce the amount of waste they produce. Our commercial waste & recycling services have recently been selected as the preferred provider of collection services for the Old Street District Partnership - the programme aims to cut costs for businesses, increase commercial recycling, reduce large vehicle traffic and associated air pollution and improve local environment quality.

The service reviews its delivery quarterly to increase efficiencies and maximise recycling from local businesses annually. Targets are to improve the commercial recycling rate to 23.9% by 2020/21 and 27.3% by 2024/25 as well as increase glass tonnages collected for recycling by 100 tonnes by 2020/21 and by 500 tonnes by April 2024/25, noting that these may need to be reviewed based on the substantial impact of COVID-19 on our commercial waste activities.

- Promoting the circular economy and its principles

To maximise the growth of the circular economy we have introduced the first of our reuse and repair (zero waste) hubs. Delivered with the Forest Recycling Project, Hackney Fixers, TRAIID and Hackney Dr Bike team, these hubs give residents the opportunity to donate items that they don't use, take items they do and repair electrical items, textile items and bicycles for free.

We launched our Library of Things service in March 2020, it is due to open to users in the Autumn. This will provide a service to residents to hire tools and other equipment for their personal use and cut down on the need for individuals to purchase their own equipment - the service will be delivered at Dalston Library.

Hackney's existing Sustainable Design and Construction SPD adopted in Autumn 2016 is to be replaced by a new Hackney's Sustainable Design and the Built Environment SPD. We expect it to be adopted in Spring 2021. It will robustly promote circular economy approaches.

Work is ongoing to install 26 new water fountains by 2022. New fountains have already been installed at Clapton Library (bottle filling and drinking), Clissold Leisure Centre (bottle filling), Dalston CLR James Library (bottle filling and drinking), Hackney Marshes Pavilion (bottle filling), Hackney Marshes Centre (bottle filling), Homerton Library (bottle filling and drinking), London Fields Lido (bottle filling), Mabley Green (bottle filling), Shoreditch Library (bottle filling and drinking).

We ensured that Hackney Half Marathon did not give out water bottles, providing refill sites instead, eliminating 225,000 bottles in just one day.

Priority 5: Reduce and remove pollution

This priority covers our activities to reduce and remove pollution that has a co benefit of reducing carbon emissions. Headlines include:

- minimising the emissions from our transport fleet with a knock on benefit to our carbon emissions (see Priority 1);
- expanding our existing Green Screens programme to a further 29 schools;
- delivering our DEFRA Fuel burning project to highlight the impact fireplaces and wood burning stoves have on local air quality;
- working with the pan London idling group to roll out projects and initiatives taking enforcement action where required; and
- finalising a new draft Air Quality Action Plan for 2020 to 2025, to be consulted on in Autumn 2020. Some of the relevant actions being considered are set out below:
 - increasing the supply of zero and low emissions vehicles in car clubs;
 - restricting the number of visitor vouchers per month to reduce the number of visitors who come to Hackney by car; and
 - reviewing our Parking and Enforcement Plan to give more weight to air quality considerations.

- Developing a new Air Quality Action Plan 2020 to 2025

The preparation of a new Air Quality Action Plan (AQAP) is well advanced and outlines the actions we will take to improve air quality in Hackney between 2020 and 2025. It replaces the previous AQAP which ran from 2015 to 2019 and includes actions on emissions from buildings and developments, public health, cleaner transport, including our own fleet, and working with schools and communities on localised solutions. The AQAP is produced as part of the Council's duty to London Local Air Quality Management (LLAQM) and has regard to the Greater London Authority's (GLA) guidance on air quality.

Our new AQAP will not only build upon the achievements of past actions, but establish ambitious new targets that align with our wider corporate sustainability agenda. With an ever increasing attention of the impact we are having on the planet, we are approaching environmental management holistically, and with increased emphasis on collaboration. Our new air quality priorities, and actions resulting from them, have been informed by the work that has been undertaken in a number of recent Council strategies and plans including the Health & Wellbeing Strategy, draft Energy Strategy, Transport Strategy,

Parking and Enforcement Plan, emerging Green Infrastructure Strategy and emerging Local Nature Recovery Plan. We will consult on the draft AQAP in Autumn 2020.

Hackney has been successful with regard to tackling air pollution in recent years and notable achievements include:

- established one of the most comprehensive air quality monitoring networks in the country, currently with over 200 diffusion tubes monitoring NO₂;
- operating one of the most sustainable vehicle fleets in London with 59 electric vehicles currently representing 12.3% of our total fleet, and 19% of Hackney's light vehicle fleet;
- partner in the Zero Emissions Network (ZEN) which offers sustainable transport initiatives to businesses and residents including cargo bike trials, bike maintenance workshops and scooter switches. At present 1,500 business members and over 1000 residents are part of ZEN;
- launched the Low Emissions Neighbourhood (LEN) in the City fringe in 2017. This programme, in collaboration with Islington and Tower Hamlets, only allows Ultra Low Emission Vehicles (ULEV) in the scheme area at certain periods throughout the day;
- pioneered the School Streets programme, and further launched a School Streets Toolkit to support councils nationwide to implement their own School Streets;
- lobbying national and regional government, as well as responding to consultations, in particular recent consultations on airport expansions, to ensure that air quality issues are addressed.

- Delivering an expanded Green Screens programme

Our ambitious green screens programme has been given the green light for expansion at a further 29 schools across the borough in the latest bid to tackle the health effects of poor air quality. Green screens provide a barrier between the air pollution from busy roads and the school, blocking air pollution reaching the school and improving local air quality within the school grounds. Following the installation of the first green screens at William Pattern, St Dominics and Queensbridge primary schools the next 29 schools have been carefully selected due to their proximity to a main road and the ability for the green screen to have the most effect on the pupils. To inform the installation of green screens at different school locations a 'Green Screens Recommendations Report' was jointly commissioned by our Air Quality and Sustainable Transportation teams, authored by the engineering firm Arup. The report makes a series of recommendations, backed

by scientific evidence, to identify the most effective low-cost options for greening the school boundary.

- Delivering our DEFRA Fuel burning project

We have launched a campaign to highlight the impact fireplaces and wood burning stoves have on London's air quality. The campaign, which is supported by the Department for Environment, Food and Rural Affairs (Defra), is run by the Zero Emissions Network and has seen staff door knocking at homes around the borough to explain why wood and coal-burning is a problem. Research shows that just one modern wood stove emits the same amount of particulate matter - known to cause heart and lung disease - every hour as 18 diesel cars, with between 23 and 31% of urban particulate matter in London derived from wood burning. Our staff will also be visiting businesses around the borough that use wood or charcoal cooking equipment to check that appliances are Defra compliant and encourage them to switch to gas or electric, which are less polluting.