


<p style="text-align: center;">Overview and Scrutiny</p> <p style="text-align: center;">27th March 2023</p>	 <p style="text-align: center;">TOWER HAMLETS</p>
<p>Report of: Dan Jones –Director Public Realm</p>	<p>Classification: Unrestricted</p>
<p style="text-align: center;">Climate Emergency: Tower Hamlets Council Net Zero Carbon</p>	

Executive Summary

In response to the LBTH Climate Emergency Declaration in 2019, the Council produced a high-level Zero Carbon Roadmap in 2020 which set out the intent to deliver the ambitious target of becoming a net zero carbon Council by 2025. The Net Zero Carbon target in the Climate Emergency declaration relates to LBTH energy use from buildings, external uses (street lighting) and fuel for transport. The analysis is showing that at best and at most sensible expectations, LBTH should be targeting a 75% reduction by 2025, with a plan to offset the remaining 25% of residual carbon emissions from buildings and transport. Reducing our CO₂ emissions further than the 75% is constrained by the lack of technological options for some of the fleet to move to electric vehicles and the Council will still be utilising gas in several buildings.

The Council is also a member of UK100 which is a network of local leaders who have pledged to lead a rapid transition to net zero with clean air in their communities ahead of the government’s legal targets. The London Borough of Tower Hamlets Boroughwide Net Zero carbon target is 2045 or sooner.

In February 2023 the Mayor launched the “A Cleaner and Greener Future for Tower Hamlets” programme. The programme has two main strands to deliver on the green agenda.

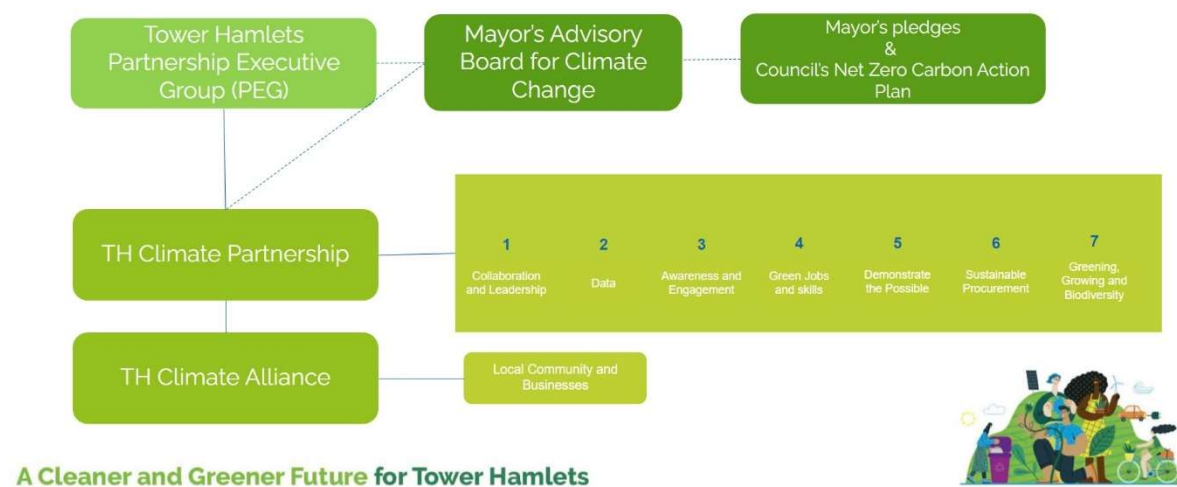
- **The Mayors Energy Fund.** To provide help and support to our residents with the cost-of-living crisis and to promote the greening of energy, buildings and homes in the borough.
- **Mayors Advisory Board for Climate Change.** The Mayors Advisory Board for Climate Change will work alongside other existing bodies to ensure delivery of the Mayoral pledges on climate emergency and provide support and advice on policy to the Climate Partnership Board as and when required and vice versa.

The Net Zero Carbon Council by 2025 target is very ambitious and this became more challenging when our waste services came in house increasing our transport emissions, this target will become even more challenging when Tower Hamlets Homes and our leisure services come inhouse further increasing our direct emissions,

the Council in consultation with the Mayors Advisory Board for Climate Change will need to take a decision on if they wish to keep the 2025 target or make revisions in line with changes in our baseline emissions with the additional buildings.

The Tower Hamlets Climate Change Partnership was established to work across the Council, with partners and residents to reduce greenhouse gas emissions (carbon emissions) and deliver on the borough Net Zero Carbon commitment made, reporting into the Partnership Executive Group. Through strategic leadership, co-ordination and collaboration, the Climate Partnership will deliver the Partnership Action Plan for Net Zero and develop and implement a Borough Net Zero Carbon Action Plan.

The diagram below shows the Climate Emergency Governance Arrangements



DETAILS OF THE REPORT

Overview of the Climate Crisis and our declarations and commitments

- 1.1 In 2018, the Intergovernmental Panel on Climate Change (IPCC) published a special report on Global Warming, describing the devastating impact a global temperature rises of 2°C would have on our food security, water supply, human security, and economic growth in comparison to 1.5°C. The report called for immediate and unprecedented action to cut greenhouse gas emissions to net zero by 2050, and limit global warming to 1.5°C.
- 1.2 The seriousness of this message re-ignited a global movement of climate action to raise awareness and demand governments at all levels take action. Following this renewed attention and on the recommendation of the Committee on Climate Change, the UK government became the first major global economy to set a net zero greenhouse gas target for 2050.
- 1.3 In 2019, the Council formally declared a Climate Emergency, recognising the threat of climate change and committed to make Tower Hamlets a net zero carbon council by 2025.

- 1.4 The definition of our zero-carbon target attempts to reduce all of the carbon dioxide emissions associated with fuel consumption the Council by 2030. This focuses on the emissions associated with gas, electricity and transport fuels and are referred to as direct emissions. The Council aspires to do this through meaningful action with a minimum reduction of at least 75% with the remaining residual carbon emissions offset through a recognised scheme such as power purchase agreement.
- 1.5 This target does not address the emissions resulting from our consumer choices and business supply chain activities outside the borough. These emissions, referred to as indirect, are too complex to track and monitor accurately; however, we have committed to complete a study to explore this in more detail, and we will review local targets which could help reduce these emissions.
- 1.6 On the 23rd of February 2023 the Mayor publicly launched the “A Cleaner and Greener Future for Tower Hamlets”. The event also launched the Mayors Advisory Board for Climate Change set up to deliver the Mayoral pledges and build upon the existing work taking place within the Council.
- 1.7 The Mayoral pledges are as follows.
- Establish the Mayor’s Advisory Board for Climate Change.
 - Create green jobs whilst cutting living costs
 - Make council carbon neutral
 - Make our homes energy efficient
 - Work with private and social landlords to improve insulation standards in our homes
 - Install green heating systems on our estates, including the use of solar panels, wind turbines and heat and power schemes
 - Tree-planting
 - Improving parks and other open spaces
 - Tackle air pollution in Tower Hamlets
 - Research the causes of poor local air quality

Our achievements so far

- 1.8 The Council has an established Carbon Fund through the offset of carbon emissions from new build developments through s106 agreements, these projects have been delivered so far.
- **Sustainability Education Packs (£15,000)** - Sustainable education pack provided to schools including support of educational resource rollout to schools in the Borough. 27 Schools benefited from the pack including teacher training events.
 - **Boiler Replacement Programme (£840,000)** - The scheme replaced old inefficient gas boilers and faulty radiators as well as upgrading heating controls. The scheme was eligible for homeowners on low income and in receipt of a qualifying benefit. To meet carbon reduction targets the scheme was only open

to residents with inefficient non-condensing boilers and replaced them with high efficiency, low NOx condensing boilers.

- **Schools Carbon Emission Reduction (£940,000)** - supported 32 schools with carbon reduction project to reduce energy consumption and improve energy efficiency of the buildings, install renewable and low carbon technology resulting in lower energy costs, consumption and related carbon emissions.
- **SME Energy Efficiency Grants Programme (£845,000)** - Project provided SMEs across the Borough with grants to deliver energy efficiency improvements, heating upgrades and renewable energy technologies. Outcomes included lower energy costs, consumption and related carbon emissions The programme is a match funding programme and has therefore seen a significant amount of private investment generated in the borough for the delivery of the projects.
- **Public Sector Retrofit (£350,000)** - The project replaced gas boilers with air source heat pumps in four Council buildings to provide decarbonised heating. The project secured £720,00 of Salix funding.

1.9 The Following projects are currently in delivery.

- **Renewable Energy Generation (PV Council Asset) (£950,000)** - Project to install Solar PV panels onto council offices and leisure centres is directly delivering a manifesto pledge to 'install green heating systems on our estates, including the use of solar panels'. The delivery of PV across our estates is a key action in delivering the councils carbon neutral aspirations and will have a significant financial benefit to the operating costs of the buildings through the on-site generation and use of renewable energy, instead of purchasing grid electricity.
- **Residential Energy Efficiency Project (£1,000,000)** - It is proposed that households can receive measures costing up to £10,000, including:
 - Replacement boiler (non-condensing) / radiators / controls and associated works
 - Heat Pumps
 - Electric heating upgrades
 - Renewable energy generation (PV array)
 - Insulation and Double Glazing
 - Low energy lighting

The project will assist residents fuel poverty and ensure housing is efficient and affordable to heat. This has the potential to positively impact on health inequalities and reduce the number of heat and/or cold related deaths through ensuring housing is at comfortable temperatures all year round.

- **Carbon Reduction Community Grants (£700,000)** - Funding made available to community groups to install low carbon heating and energy generating technologies, energy efficiency retrofit and learning and behavioural projects. The initial phase of the project has seen renewable energy technology projects supported to Bromley-By Bow Centre, Stepney City Farm, Hermitage Community Moorings and Development Through Challenge (Mile End Climbing Wall). The scheme has also assisted a number of community organisations with

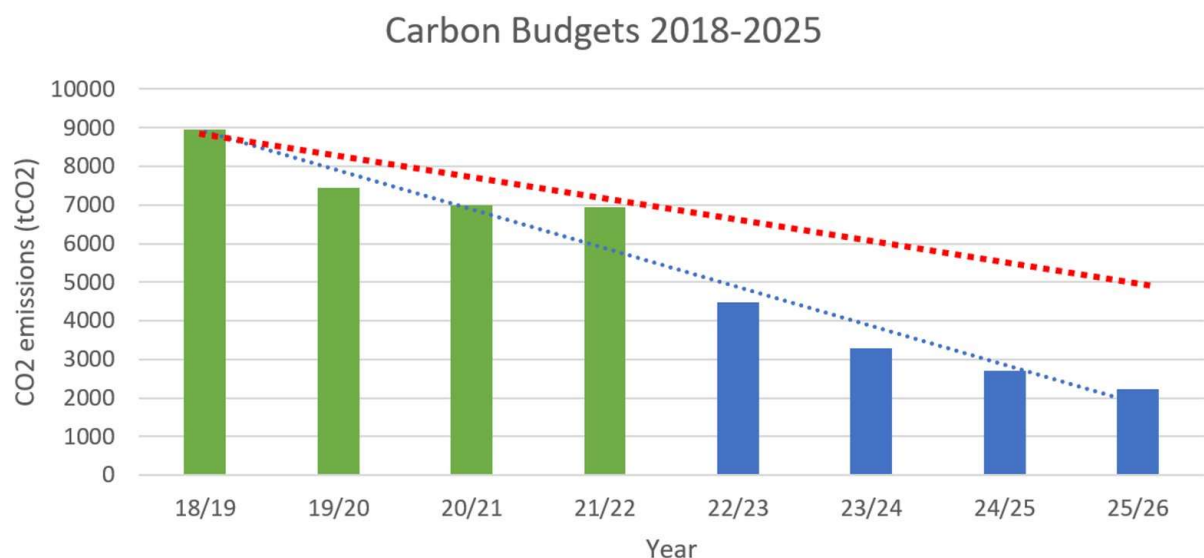
energy efficiency retrofits including LED lighting and insulation projects and improved the waste and recycling facilities through funding the expansion of the SOURCE anaerobic digestion plant in Poplar.

- **Bio-solar Project (£500,000)** - Project to deliver biodiverse roof area and renewable energy generating technologies to buildings across the Borough. Current ongoing scheme with initial scoping complete with THH and pilot projects in final design stage. Initial review of 10 blocks identified potential for 144 tonnes CO2 saving per year.
- **Sewardstone road assisted housing refurbishment (£252,000)** - Providing funding to an assisted housing scheme to ensure refurbishment is undertaken to meet councils zero carbon requirements. Funding provided for heat pumps, PVs and insulation /energy efficiency measures. The measures delivered will reduce the energy needs of the buildings and therefore the energy bills of the scheme.
- **Community Tree Planting (£175,000)** - Proposal to deliver tree planting to community land owned and managed by Tower Hamlets Homes.

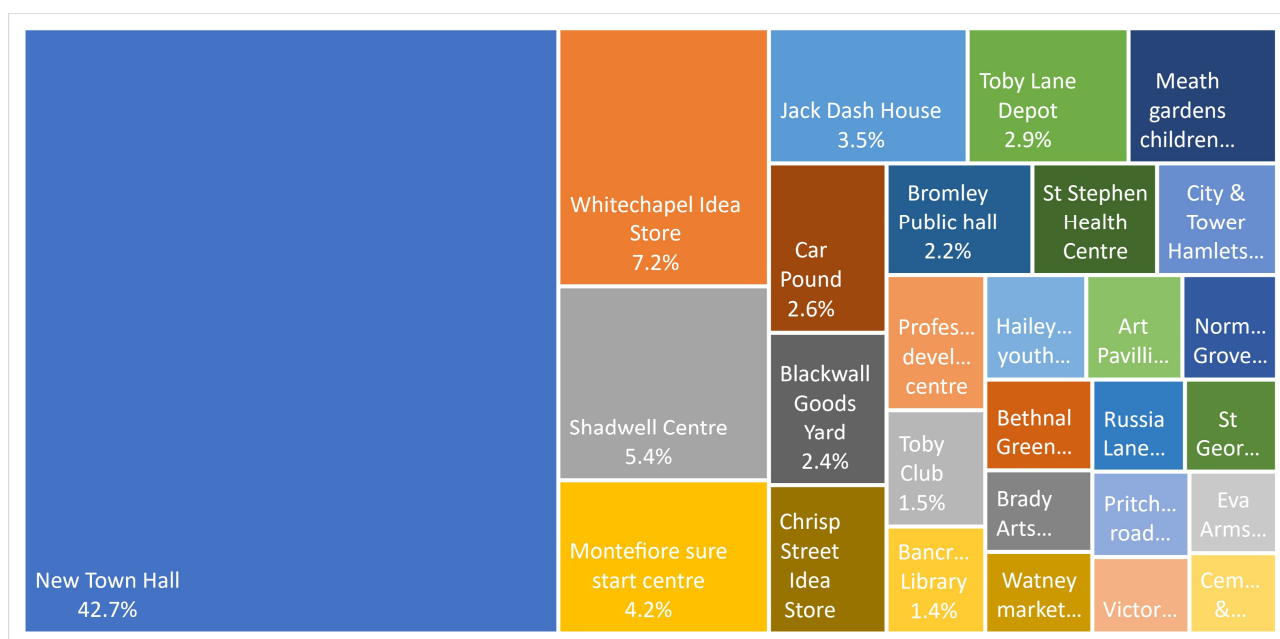
1.10 Since the Council declared climate emergency in 2019 and set a target to become net zero carbon Council by 2025/26 with a 75% reduction in emissions with the residual emissions being offset. The table below shows the annual progress made against that target.

Year	Carbon emissions	% reduction
2018/2019	8,964	Baseline
2019/2020	7,444	17%
2020/2021	7,000	22%
2021/2022	6,930	23%

1.11 The Council needs to make real progress in the next few years to achieve the target set.



- 1.12 To meet our 2025 net zero carbon target, funding is required to undertake site-specific surveys across our estate, and to engage with our supply-chain, to develop costed action plans which will dramatically reduce carbon emissions.
- 1.13 Significant funding will latterly be required to implement the costed action plans, the exact costs will be determined by the site-specific surveys and action plans. It is recommended that an open-ended fund is established with the Council to firstly pay for energy and carbon reduction measures, the savings from which are returned to the fund to be reinvested in further measures.
- 1.14 LBTH will need to continue to set challenging goals and produce longer term plans to reduce the 25% residual emissions. The diagram below shows the breakdown of carbon emissions from our buildings.



Zero Carbon Borough 2045

- 1.15 In addition to the Council's direct carbon emissions, as part of the Council's membership of the UK100, there is a commitment to achieve Net Zero Carbon by 2045 across the borough. Tower Hamlets Council should use its powers, influence and leadership to put the Borough on the right track to achieve this and has established the Tower Hamlets Climate Partnership to collaborate and speed the delivery of Net Zero Carbon across influential organisations based in the borough.
- 1.16 The key features of delivering carbon reductions across the borough are:
- Education and behaviour
 - All new buildings, from now, are built to be highly energy efficient and use a heat pump as the primary heat source.
 - Road transport rapidly converts to electric. Road journeys are reduced.

- Incentives and regulation to result in significant reduction in commercial, industry and residential emissions.

1.17 To deliver the 2045 target, major investment in the electric infrastructure in the borough is necessary.

Action Plan

- 1.18 The revised and restructured Net Zero Carbon Action Plan will focus on the following areas of carbon intensity:
- Buildings – retrofit and refurbish council buildings to dramatically reduce energy and carbon
 - Transport – accelerate the replacement cycle of the council’s fleet to electric, and the associated electric grid capacity to enable this to happen.
 - Procurement - to consider carbon emissions of all procured goods and services

Organisational readiness and commitment

1.19 The goals of a Net Zero Council by 2025, and a Net Zero Carbon borough by 2045 are ambitious. The achievement of any ambitious goal requires strong commitment. There are three essential cornerstones to achieving the sustainability targets at Tower Hamlets:

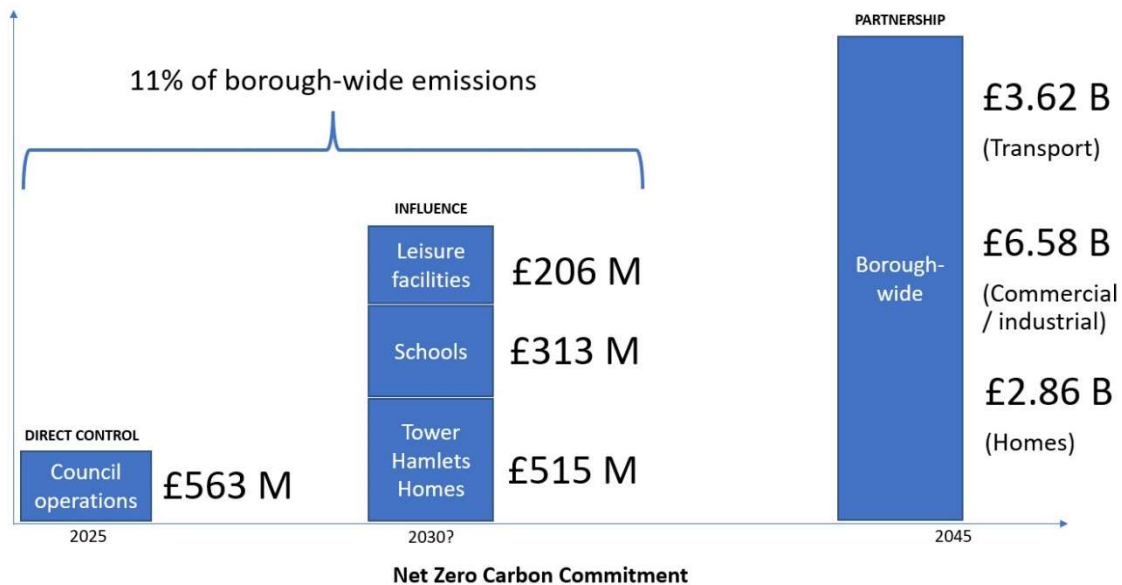
- Embed – Goals and targets should be embedded within the organisation’s ethos and culture. Strong leadership buy-in and a high-level of employee engagement are crucial.
- Action – Action towards the achievements of goals should be committed and sustained.
- Monitor – Monitoring of progress should be undertaken throughout.

1.20 To deliver the zero carbon proposals, the report identifies a number of considerations for organisational readiness and commitments. These include creating and resourcing a Zero Carbon team with responsibility for implementing the Zero Carbon Roadmap, including:

- Collect data on energy and CO2 from Council operations, reporting annually
- Develop the Carbon Reduction Action Matrix
- Implicate and involve all services for maximum impact and reach

1.21 The diagram below shows the cost to achieve net zero carbon council by 2025 and net zero carbon borough 2045.

Cost to get to Net Zero Carbon (i.e., to electrify)



Communication of Net Zero Carbon

- 1.22 The Tower Hamlet's Council target of Net Zero Carbon by 2025 is ambitious and the target date is ahead of any other London council. The publication of the scope, plans and progress for achieving Net Zero Carbon by 2025 is likely to receive significant interest from the press and other stakeholders.
- 1.23 It is recommended that all Council employees receive appropriate training on the climate emergency, the Net Zero Carbon Action Plan progress and next steps
- 1.24 There is an important communication piece that we need to do when delivering on the Net Zero Carbon Action Plan requirements to get people engaged including:
- Framing the discussion correctly, understanding the Council's employees and values that they have
 - Present the message with a sensible balance between fear and more positive (solution focused messages)
 - Importance of facts (Sometimes there is confusion between Air Quality and Carbon Emissions)
 - Importance of transparent and evidence delivery timescales
 - Try and make things relevant and comprehensible (appropriate imagery for the audience)
 - Be clear of the impacts that we will experience and adapt messages to suit audience.