

Committee(s): Markets Board	Dated: 13/03/2024
Subject: Markets Climate Action Strategy update	Public
Which outcomes in the City Corporation's Corporate Plan does this proposal aim to impact directly?	5, 11, 12
Does this proposal require extra revenue and/or capital spending?	N
If so, how much?	£
What is the source of Funding?	
Has this Funding Source been agreed with the Chamberlain's Department?	Y/N
Report of: Paul Wilkinson	For Information
Report author: Graeme Low (Operations Group, City Surveyors), & Damian Coffey (Markets, City Surveyors)	

Summary

This paper is to update the Markets Board on Markets' progress in supporting the City of London Net Zero targets for 2027 and 2040. Good progress has been made to-date, with a 52% reduction in Markets Operations greenhouse gas emissions since 2019. Going forward we need to focus on Value Chain emissions which are much larger than our Operations emissions, and outside our immediate control.

Recommendation(s)

Members are asked to:

- Note progress made reducing landlord emissions on the Markets sites
- Note plan to review value chain emissions for Markets
- Note on-going efforts to minimise emissions

Main Report

Background

1. CoL has set Net Zero targets for two types of greenhouse gas emissions:
 - a. Operations Emissions, also referred to as Scope 1 & 2 are emissions from operations under the control of CoL. In 2018/19 CoL generated 36 ktCO₂e of gross Operations Emissions.
 - b. Value Chain Emissions, also referred to as Scope 3 emissions include the Operations emissions of tenants and a range of other emissions not under our direct control. In 2018/19 CoL generated 484 ktCO₂e of gross Value Chain Emissions.

2. Markets is a significant contributor of CoL greenhouse emissions. In 2023, Markets Landlord site emissions of 1.3 ktCO₂e represented 6% of City Corporation's Operations Emissions. Tenant site emissions are not included in this measure, but at 3.1 ktCO₂e they equate to 13% of City Corporation's current Operations Emissions.
3. CoL has a target to reach Net Zero on its Operations Emissions (Scope 1 and 2) by 2027, which will be achieved by reducing gross emissions by 55% compared to the 2018/19 baseline and including carbon sequestration from parks etc. CoL also has a long-term target to achieve net zero across the Value Chain (Scope 1, 2 and 3) by 2040.
4. CoL Operations Emissions include Markets Landlord site emissions which have reduced by 52% since 2018/19, 14% due to decarbonisation of the national electricity grid and 38% due to changes in site occupancy and projects to improve the efficiency of the buildings.
5. CoL Value Chain Emissions include Markets Tenant site emissions which are 2.4 times as high as Markets Landlord emissions. They also include other currently un-measured tenant controlled emissions such as transport, but they do not include the much higher Tenant Scope 3 emissions such as supply chain emissions of produce sold at the market.

Current Position

6. CoL is on track to hit Net Zero on its own operations by 2027 through a mixture of CO₂ reductions and carbon sequestration from our open spaces. With a 52% reduction, Markets have already contributed significantly to meeting the overall target, but we continue to seek further opportunities to reduce emissions.
7. Moving forward, the focus needs to be on the total impact of the markets, including Tenants' emissions and other value chain emissions.
8. We have a number of identified initiatives linked to the Markets Collocation Programme which will help reduce emissions going forward:
 - a. Site move to Dagenham will deliver a more energy-efficient building meeting CoL standards, including BREEAM excellent.
 - b. Provision for electric vehicle charging at the new site
 - c. Establishing consolidated delivery services to reduce vehicle numbers, mileage and emissions
 - d. Exploring options to move freight from road to rail or river
9. The climate action plan had assumed a move of all three markets to the new site at Dagenham in 2026/27. The current plan moves just two of the markets in 2028/29. This delay will potentially create some pressure to identify additional CO₂ savings ahead of 2027 to ensure the CoL target is met. The site move will still contribute to the CoL 2040 Net Zero target for Value Chain emissions.
10. However, we do not yet have an understanding of the full Value Chain impact of the markets, or how far the planned initiatives will take us towards the target net zero in 2040.
11. We will map out total Markets Value Chain emissions and build a plan to help CoL reach net zero by 2040, which we will report back in September 2024. This will depend on support from Tenants who will need to share information about transport and other emissions in order to build a complete picture of CoL Scope 3 emissions.

12. In the meantime, we continue to review further opportunities to reduce emissions which pay back within the anticipated life of the sites. This includes maintenance across critical items to avoid refrigerant leaks, as well as end of life replacement and new energy saving opportunities. We will include in the September 2024 paper a summary of the proposed prioritised investment, taking account of CWP funding etc.

Key Data

Summary of Carbon Reduction Actions for Markets

13. Landlord carbon emissions have reduced by 38% since 2018/19 across the markets due to on-site reduction in energy consumption. In 2018/19 Smithfield market accounted for 75% of the landlord carbon emissions across the markets and hence was a particular focus for the City Surveyor's Energy Team. Smithfield's energy consumption has reduced by 43% so far, but there have also been significant reductions of 20% at New Spitalfields and 13% at Billingsgate. The following is a summary of the actions led by the Energy Team or undertaken by others which we believe has made a significant contribution to these reductions and further actions which are either underway, planned or identified as opportunities to consider.

	Past actions	Future actions
Smithfield	<ul style="list-style-type: none"> • Complete review and reset of all building control settings and schedules, alongside improved strategies and graphics to facilitate ongoing monitoring and adjustment. This alone contributed 20-30% reduction for the site. • Various circulation (chilled/hot water) and cold water booster pump replacements/ refurbishments • LED lighting upgrades to the car park (basement level), west market trader areas (incl. buyer walk), east market WCs/showers • Various ventilation unit replacements • Condenser water pipework replacement 	<ul style="list-style-type: none"> • Underway: control upgrades for Smithfield West Market, and planned upgrades for East Market • Following upgrades, further control setting/strategy improvements • Underway: further pump replacements • Planned: Fixing heating pipework leaks in tenant areas • Opportunity: LED lighting and control upgrades to car park mezzanine level, west market and basement areas
New Spitalfields	<ul style="list-style-type: none"> • LED lighting upgrades to all CoL/communal areas as well as free installation for tenants • Ban on white diesel being used in FLT's and onsite supplier now offering FLT compatible biofuel. 	<ul style="list-style-type: none"> • Opportunity: Solar PV on main market roof the 4x CSB unit roofs . • Opportunity: replacement of end-of-life Allen House gas boiler with low carbon alternative (such as Air Source Heat Pump)
Billingsgate	<ul style="list-style-type: none"> • LED lighting upgrades to 95% of common area and all emergency lighting units. 	<ul style="list-style-type: none"> • Opportunity: further LED lighting upgrades

	<ul style="list-style-type: none"> • Boiler controls changed to enabling a reduction in gas consumption. • More efficient pump units in Communal Showers and sump pumps. • Consolidated delivery trials 	
--	--	--

14. Realising the full opportunity for further reduction is likely to be limited by investment decisions considering the future life of the sites. Smithfield is still c.70% of the Market landlords carbon emissions and hence should remain a focus for action in order to sustain and build-on the control improvements already implemented. Achieving good control over the heating/cooling/ventilation is dependent on the condition of those system and there are challenges with ongoing maintenance issues related to these mostly end-of-life systems.

Conclusion

15. Markets have a key part to play in helping the City of London achieve its net zero targets.

16. Good progress has been made to date, but the scale of the challenge will increase as we extend the focus to include Value Chain emissions under the control of Tenants.

17. Reducing Scope 3 emissions will depend on support from the market tenants.

Appendices

- N/A

Background Papers

- 9/11/22 – Markets Board Energy Update
- 20/9/23 – Markets Board Energy Update
- 8/11/23 – Markets Board Energy Update

Report authors:

Graeme Low

Head of Energy and Sustainability

City Surveyor's Department

E: graeme.low@cityoflondon.gov.uk

Damian Coffey

Assistant Director Markets Operations, Performance and Logistics

City Surveyor's Department

T: 07709 716 269

E: damian.coffey@cityoflondon.gov.uk