

Appendix

1. Top 30 site energy performance and bottom 5 performance overview

Weather Corrected Data: Performance comparison by top 30 sites: Q2 2022/23 with Q2 2021/22 and 2019/2020

Row Labels	Sum of Sep-19	Sum of Sep-20	Sum of Sep-21	Sum of Sep-22
Animal Reception Centre	753,064	790,647	730,373	725,880
Barbican Arts Centre	17,643,695	17,882,745	13,009,509	15,679,147
Baynard House Car Park	165,691	168,669	169,216	164,448
Billingsgate Market	3,729,305	3,614,165	3,384,626	3,355,744
Bishopsgate Police Station	3,237,801	3,537,908	3,303,153	3,170,568
Central Criminal Court	7,044,390	6,040,558	6,373,024	6,338,929
City of London Crematorium	3,071,720	3,669,385	2,981,801	2,115,635
City of London Freeman's School	4,725,165	4,122,824	3,904,391	4,976,234
City of London School	3,317,852	2,916,539	3,137,425	3,324,176
City of London School For Girls	2,271,961	2,198,419	1,842,297	1,592,163
GSMD	2,138,839	1,267,610	1,863,112	2,027,217
GSMD - Milton Court	3,481,745	2,638,283	3,006,343	4,608,607
GSMD - Sundial Court	1,834,285	1,462,352	1,614,073	1,572,020
Guildhall Complex	17,575,251	16,068,127	14,427,588	13,319,212
London Central Market (Smithfield)	15,380,518	11,738,325	9,975,333	10,716,873
London Metropolitan Archives	1,297,017	1,360,602	1,598,249	1,203,726
London Wall Car Park	220,442	221,542	215,080	207,609
Mansion House	2,172,318	2,107,401	1,985,616	2,322,501
Mayor's Court	233,554	244,595	287,635	256,514
New Spitalfields Market (Landlords)	6,806,493	6,454,378	5,783,149	5,828,812
New Street (21)	1,662,171	1,274,043	1,550,393	2,260,912
Open Spaces East Heath & Kenwood	206,558	192,348	195,720	167,353
Open Spaces Epping Forest	751,816	1,566,930	1,543,647	735,860
Open Spaces Golders Hill & Extension	376,604	399,906	344,473	408,963
Open Spaces Hampstead Heath Leisure	672,703	594,168	597,984	656,222
Open Spaces Parliament Hill	280,139	287,234	252,382	270,285
Streetlighting	3,530,204	2,666,328	2,090,006	1,943,943
Tower Bridge	2,248,615	2,220,735	1,822,349	2,265,241
Tower Hill Coach & Car Park	547,524	521,933	356,043	587,220
Walbrook Wharf Cleansing Depot	1,568,005	1,906,243	1,865,230	2,147,750
Grand Total	108,945,446	100,134,940	90,210,222	94,949,762

2. Bottom 5 performing sites

Weather Corrected data

Bottom 5 Performing Sites Weather Corrected	Sep-19	Sep-21	Sep-22	Difference kWh 21 vs 22	Difference % 21 vs 22	Potential Rationale
Barbican Arts Centre	17,643,695	13,009,509	15,679,147	2,669,638	21%	Increased occupancy suspected. Still lower than Baseline year
GSMD - Milton Court	3,481,745	3,006,343	4,608,607	1,602,264	53%	Increased occupancy suspected, still lower than baseline year
City of London Freeman's School	4,725,165	3,904,391	4,976,234	1,071,842	27%	Philip House was unoccupied during B/L year. Emphasis on increased ventilation
London Central Market (Smithfield)	15,380,518	9,975,333	10,716,873	741,540	7%	Increased occupancy suspected. Still significantly less than Baseline year
New Street (21)	1,662,171	1,550,393	2,260,912	710,519	46%	Refurbishment from 2017 to 2019 would account for the lower consumption. Late 2021 has seen an increase in occupancy from approximately 30% to 70% due to recruitment drive

3.CO_{2e} targets for City of London Corporation

City of London (own operations)	Units	Scope	2018	2019	2020	2021	2022	2023	2024	2025	2026	2030	2035	2040
Corporate Properties and Landlord Area	ktCO _{2e}	Scope 1 & 2	36.4	33.9	30.4	24.4	22.8	19.4	18.1	17.0	14.85	7.2	4.5	3.1
Carbon Removals and Land Management (Scope 1)	ktCO _{2e}	Scope 1	-16.2	-16.2	-16.2	-16.2	-16.2	-16.2	-16.2	-16.2	-17.64	-17.6	-17.6	-17.6
Total net zero emissions	ktCO_{2e}	Scope 1 & 2	20.2	17.7	14.2	8.19	6.54	3.18	1.83	0.76	-2.79	-10.5	-13.1	-14.6
Net (negative removed)	ktCO _{2e}	Scope 1 & 2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	17.6			
% reduction against baseline year	%	Scope 1 & 2	0%	-7%	-16%	-33%	-37%	-47%	-50%	-53%	-59%			
Target amount to reduce in period	ktCO _{2e}	Scope 1 & 2					13.6		4.7		3.2			
% of target to deliver in that period	%	Scope 1 & 2					63%		22%		15%			
Total target amount to reduce	ktCO _{2e}	Scope 1 & 2									21.5	To be reduced by 2026/7		

4. PSDS Project update

The Guildhall ventilation project is mostly complete with final installations taking place in November to reduce the risk to maintaining internal space conditions to protect the artwork and manuscripts.

5. List of key sites in an energy performance partnership with Vital Energi

Guildhall Complex	City of London School	London Metropolitan Archives
Barbican Arts Centre	City of London School for Girls	Tower Hill Car Park
London Central Market (Smithfield)	Walbrook Wharf Cleansing Depot	GSMD – Sundial Ct
Central Criminal Court	Tower Bridge	
New Spitalfields Market	GSMD - Milton Court	
City of London Freeman's School	Mansion House	

High Level Assessments of all the above sites have been completed, with further surveying in progress for the remainder. Projects are now being selected for investment grade proposals with initial work on this well underway. These projects will be presented for gateway approval and are not affected by the review of the capital programme. Projects under consideration will include (but not be limited to):

- Energy efficient lighting and controls
- Improvements to HVAC systems
- Optimisation and improvement of BMS controls
- Hydraulic and pumping optimisation
- Low carbon heating
- Renewables
- Fabric measures and draught proofing

6. Cumulative Forecast Carbon Savings

		Carbon Savings - Cumulative (tCO ₂ e/yr)								
		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9
		2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
PSDS	Gas	0	0	0	0	358	357	355	354	353
	Elec	0	0	0	0	595	622	579	585	548
	Citigen Heat	0	0	0	0	93	88	83	78	73
	Citigen Coolth	0	0	0	0	88	92	85	86	81
Phase 1 & 2	Gas	0	0	0	0	7	7	7	7	7
	Elec	0	0	0	0	93	97	91	91	86
	Citigen Heat	0	0	0	0	18	17	17	16	15
	Citigen Coolth	0	0	0	0	4	5	4	4	4
Energy Saving Loan scheme	Elec	23	21	19	15	14	14	13	13	12
GHC Chillers	Elec	0	0	0	0	0	179	166	168	157
Operational management	Gas	0	348	347	349	365	387	409	431	453
	Elec	14	355	351	277	290	348	367	413	427
	Citigen Heat	0	0	120	71	86	104	119	132	143
	Citigen Coolth	0	14	362	278	271	301	297	316	312
CAS	Gas				0	153	598	885	1,170	1,451
	Elec				0	356	1,192	1,527	1,963	2,233
	Citigen Heat				0	50	188	266	334	392
	Citigen Coolth				0	38	145	196	259	300
Total		37	738	1,200	991	2,879	4,740	5,467	6,421	7,045

7. Tenant consumption

Note: This table has been newly created due to feedback from stakeholders requesting information about tenant and landlord consumption.

		April - June 2021	July - Sept 2021	Oct - Dec 2021	Jan - March 2022	Total 21/22	April - June 2022	July - Sept 2022
Tenant Consumption figures (kWh)		Q1	Q2	Q3			Q1	Q2
Electricity	Billingsgate Market	31,845	373,310	303,367	768,811	1,477,333	362,744	374,611
Gas	Billingsgate Market	202,690	50,789	190,709	65,883	510,071	129,255	29,220
Electricity	London Central Market (Smithfield)	1,193,433	1,777,086	1,340,800	1,288,375	5,599,694	1,732,696	878,211
Electricity	New Spitalfields Market (Landlords)	1,262,768	1,507,878	1,177,265	1,031,986	4,979,897	1,234,481	1,779,709
Electricity	Walbrook Wharf	20,110	28,023	29,760	23,641	101,534	23,912	23,869

8. Operational properties only

The black bars represent operational portfolio carbon. The grey bars represent projected carbon. The black line shows actual carbon and projected carbon for the City's entire portfolio, including operational, investment and housing.

