

Appendix

Figure 1. Top 30 site energy performance

Weather Corrected Data: Performance comparison by top 30 sites: Q4 2023/24

Row Labels	Sum of Mar-19	Sum of Mar-20	Sum of Mar-21	Sum of Mar-22	2024 vs 20	2024 vs 21	Sum of 24 vs 23
London Central Market (Smithfield)	17,056,397	10,476,244	11,421,698	9,114,934	-46.6%	-20.2%	2,306,764
Guildhall Complex	17,540,526	14,277,626	12,714,405	10,907,092	-37.8%	-14.2%	1,807,313
Bishopsgate Police Station	3,420,144	2,774,868	3,021,376	2,328,910	-31.9%	-22.9%	692,465
Central Criminal Court	7,838,884	6,627,954	5,569,876	4,952,395	-36.8%	-11.1%	617,481
New Street (21)	1,807,820	2,545,050	2,640,699	2,173,557	20.2%	-17.7%	467,143
City of London School	3,229,652	3,155,942	3,333,962	2,908,698	-9.9%	-12.8%	425,264
City of London Crematorium	2,814,256	2,298,816	2,324,356	1,926,270	-31.6%	-17.1%	398,086
City of London Freeman's School	4,861,012	4,586,349	4,941,273	4,695,987	-3.4%	-5.0%	245,287
Tower Hill Coach & Car Park	542,795	537,209	549,299	378,301	-30.3%	-31.1%	170,998
Walbrook Wharf Cleansing Depot	1,727,475	2,124,381	2,225,102	2,062,211	19.4%	-7.3%	162,891
Streetlighting	3,800,664	2,050,107	1,963,794	1,836,293	-51.7%	-6.5%	127,501
Animal Reception Centre	746,828	747,981	717,364	664,704	-11.0%	-7.3%	52,660
Open Spaces Golders Hill & Extension	361,287	454,348	239,530	191,738	-46.9%	-20.0%	47,792
Open Spaces Epping Forest	640,887	731,112	638,059	614,182	-4.2%	-3.7%	23,877
Tower Bridge	2,191,939	1,944,603	2,154,450	2,141,032	-2.3%	-0.6%	13,418
Baynard House Car Park	165,216	151,627	172,377	159,043	-3.7%	-7.7%	13,334
Billingsgate Market	3,580,013	3,461,014	3,274,393	3,267,796	-8.7%	-0.2%	6,597
London Wall Car Park	219,171	214,973	205,523	208,929	-4.7%	1.7%	3,406
Open Spaces East Heath & Kenwood	213,111	193,746	141,113	145,014	-32.0%	2.8%	3,902
Open Spaces Hampstead Heath Leisure	655,991	670,971	649,493	657,170	0.2%	1.2%	7,678
Mayor's Court	313,093	253,760	262,489	289,877	-7.4%	10.4%	27,388
Open Spaces Parliament Hill	268,166	279,111	292,829	321,984	20.1%	10.0%	29,155
City of London School For Girls	2,250,462	1,742,594	2,010,810	2,044,198	-9.2%	1.7%	33,388
GSMD - Sundial Court	1,776,176	1,648,327	1,450,305	1,595,964	-10.1%	10.0%	145,659
London Metropolitan Archives	1,344,258	1,265,552	1,162,774	1,312,428	-2.4%	12.9%	149,655
Mansion House	2,289,797	2,250,048	1,725,984	1,956,294	-14.6%	13.3%	230,310
New Spitalfields Market (Landlords)	6,800,091	5,826,230	5,858,179	6,094,266	-10.4%	4.0%	236,088
GSMD	2,174,718	1,981,535	1,937,272	2,227,662	2.4%	15.0%	290,389
GSMD - Milton Court	3,873,643	3,823,398	3,942,392	4,365,415	12.7%	10.7%	423,023
Barbican Arts Centre	17,460,062	14,518,316	16,290,506	16,911,035	-3.1%	3.8%	620,529
Grand Total	111,964,532	93,613,793	93,831,683	88,453,381	-21.0%	-5.7%	5,378,301

Figure 2. Bottom 5 performing sites

Bottom 5 Performing Sites Weather Corrected	Mar-23	Mar-24	Difference kWh 23/24 vs 22/23	Potential Rationale
Barbican Arts Centre	16,290,506	17,135,361	620,529	The site believes this increase in consumption over 23/24 compared with 22/23 is due to a rebound in visitor numbers following COVID-19. Compared to the baseline year, the BACs consumption has decreased by 3%.
GSMD - Milton Court	3,942,392	4,365,415	423,023	The increase has been caused by an increase in heat consumption. The site has had ongoing issues with meter readings with many recent readings needing to be estimated. This metering issue is still being investigated.
GSMD	1,937,272	2,227,662	290,389	Like GSMD – Milton court, this increase in total consumption has been caused by just an increase in heat consumption. This has been flagged to the site to investigate further. It might be that occupancy levels have increased since 22/23 or there could potentially be a leak.
New Spitalfields Market (Landlords)	5,858,179	6,094,266	236,088	This increase in consumption accounts for only a 4% increase in total. Additionally, this increase in consumption has come from the tenants that occupy the market and could be explained by an increase in the number of tenants. Compared to the 18/19 baseline, this site's consumption is over 10% less.
Mansion House	1,725,984	1,956,294	230,310	Recent changes were made to the BMS to reduce water heating time but this may have caused an increase in consumption. The BMS is now under review to see why this happened.

Figure 3. Current CAS Capital Programme Projects

Number	Site	Scope of works	Description
1	Barbican Arts Centre	Pump replacement	Project completed (with one pump being free issued to be installed during summer shutdown) with the Operation and Maintenance Manuals (O&M) being finalised and the Monitoring and Verification (M&V) programme being developed before project handover.
2	Barbican Arts Centre and Guildhall School of Music and Drama	EC fans replacement	On-site works commenced in February following asbestos surveys.
3	Barbican Arts Centre	Lighting replacement	On-site installation works are partially complete, snagging and commissioning are ongoing.
4	Guildhall	Lighting replacement	Work on site has commenced with the staircase completed before moving to the Gallery. The Amphitheatre and Great Hall still require approval from all parties.
5	Tower Hill Coach and Car Park	Lighting, Ventilation and BMS	The lighting project was completed. Ventilation and BMS projects started and are on track to be commissioned by the end of February.
6	Multiple	BMS optimisation: Phase one	Site visits were completed at four properties (21 New Street, Bishopsgate Police Station, Heathrow Animal Reception Centre and Cemetery & Crematorium) with a Draft Investment Grade Audit report issued. The two police sites require dilapidation surveys to be completed and this is being discussed concerning the level of investment against the buildings closure schedule.
7	Multiple	BMS optimisation: Phase two	Site visits are planned at the remaining properties (Central Criminal Court, Tower Bridge and London Metropolitan Archives) for February 2024.
8	London Metropolitan Archives	Solar PV	Installation of Solar PV on building roof. This project is now live.

Number	Site	Scope of works	Description
9	Guildhall School of Music and Drama	LED, BMS, EC Fan	The project scope is being refined before the submission of the GW3-5 paper.
10	Barbican Arts Centre	Specialist Lighting	On hold whilst the Barbican Capital Works discussion is ongoing.
11	Guildhall Hall	EC Fans	On hold until Guildhall Yard East refurbishment options are confirmed.
12	Mansion House - phase 1	Draught proofing, LED lighting, fan replacements, ventilation improvements, pipework insulation, BEMS Optimisation	This project is now live with a Capital Project number in place. The draught proofing element now requires Listed Building consent which will increase its delivery time if the consent is approved or remove this Energy Conservation Measure (ECM) is rejected.
13	Mansion House - phase 2	ASHP and PV installation	GW 3&4 paper approved with Capital Code requested to allow Planning Permission process to start.
14	The Warren	LED lighting, pipe insulation and ASHP	GW3-5 approved with Capital Code requested and detailed design ongoing following stakeholder feedback.
15	Walbrook Wharf - phase 1	EC Fans, pipework insulation, pump replacement, BEMS Optimisation	Project is live with kick off meeting scheduled.
16	Walbrook Wharf - phase 2	ASHP installation	GW3-5 paper to be completed for consultation following completion of internal conversations.
17	Open Space PV – Parliament Hill Lido	PV installation	The project is live with the Planning Permission document pack being put together.
18	Heathrow Animal Reception Centre – Phase 1	Solar PV, LED Lighting, EC Fans	Investment Grade Proposal has been commissioned with the report due end of June 2024. Ongoing conversations with the minor works project team about roof repairs and the proposed PV installation.
19	Heathrow Animal Reception Centre – Phase 2	ASHP to replace existing boilers	Investment Grade Proposal has been commissioned with the report due end of June 2024. Ongoing conversations with the FM project team with regards to refining the DHW requirement for the entire site.

Number	Site	Scope of works	Description
201	Barbican Arts Centre	The second phase of pump replacement	The project is being instigated to replace the next set of pumps that are of a bigger capacity but fewer in number than the previous project to complete during the summer shutdown.