

CASE STUDY

PROJECT BACKGROUND - Energy Surveys

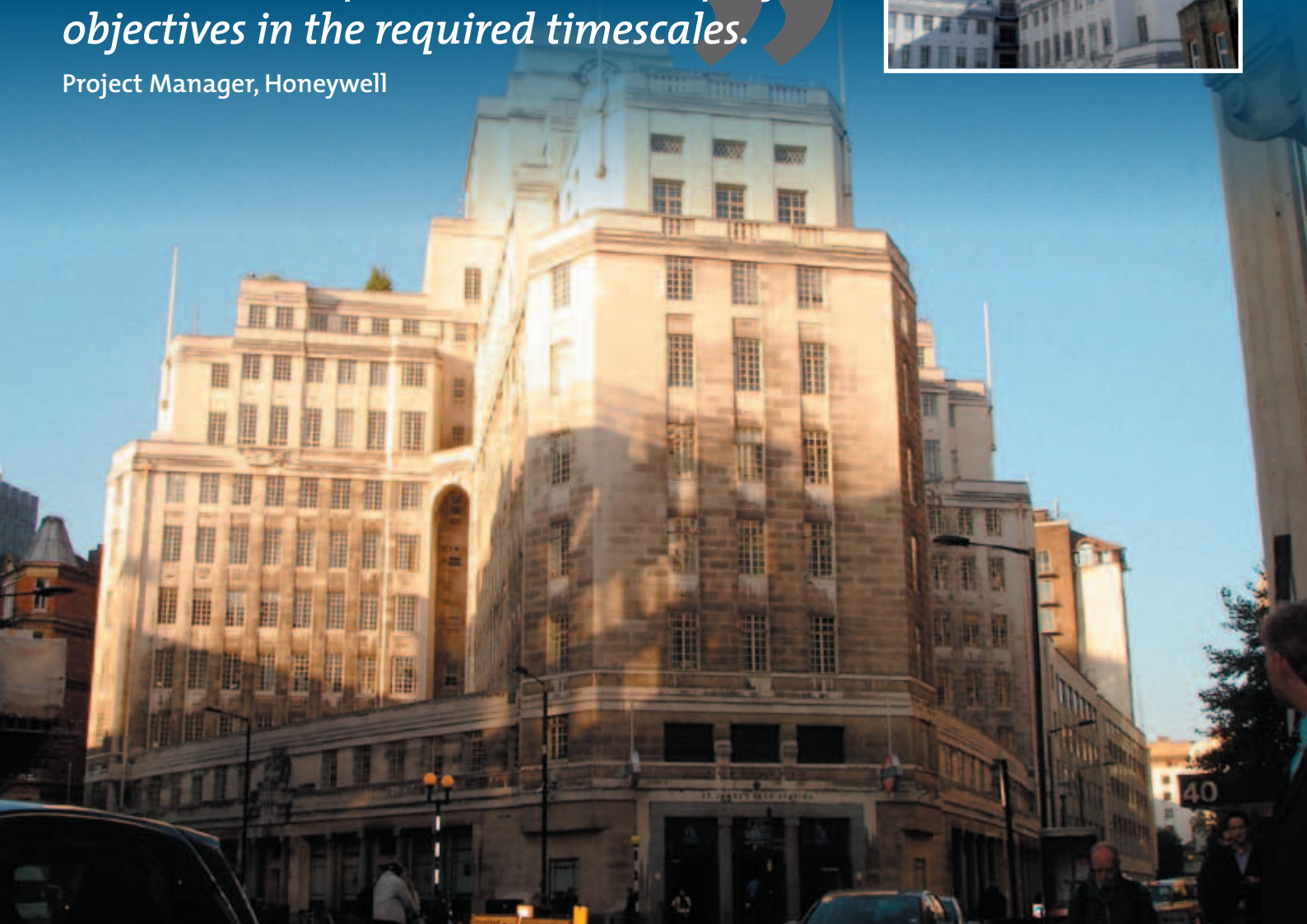
CSR Sustain were contracted by Honeywell to carry out a comprehensive programme of energy surveys and issue compliance certificates for the Transport for London property portfolio. The portfolio of properties covered a total floor area of over 100,000 m² across a total of 22 commercial buildings. CSR Sustain completed the project on time and on budget producing in depth reports that exceeded expectations.

Honeywell



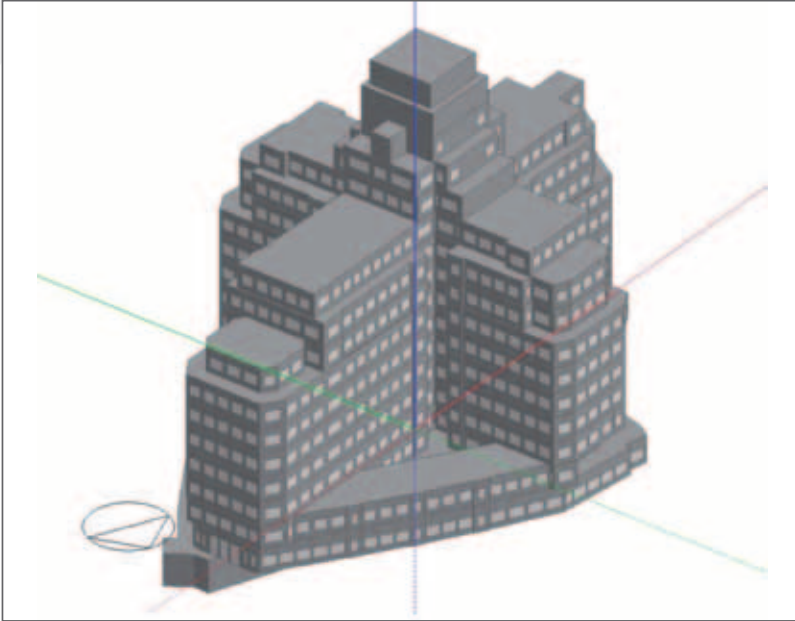
“CSR Sustain provided an extremely responsive, cost effective and trusted service that helped us achieve our project objectives in the required timescales.”

Project Manager, Honeywell



PROJECT SPECIFICATION

- CAD building modeling to calculate the building fabric areas and volumes together with the Heating Ventilation and Air Conditioning (HVAC)
- Bench marking of the buildings against current building regulations
- Complete set of reports and strategic recommendations



NUMBER	PROPERTY TYPE	AREA M ²
1	9 floor office block	8621
2	10 floor office block	16125
3	6 floor office block	3090
4	6 floor office block	4002
5	5 floor office block	8772
6	4 floor office block	1994
7	4 floor office block	882
8	3 floor office block	1335
9	6 floor office block	4746
10	2 floor office block	837
11	2 floor office block	937
12	1 floor office block	531
13	5 floor office block	1229
14	6 floor office block	6722
15	2 floor office block	1622
16	7 floor office block	3702
17	19 floor office block	13179
18	7 floor office block	8303
19	2 floor warehouse	7409
20	4 floor office block	4693
21	6 floor office block	2239
22	9 floor office block	3907
TOTAL		104,877

THE RESULTS

CSR Sustain was given a very tight schedule to work to; one month to carry out the physical surveys which were completed on time and within the budget. The quality of the statistics and overall reporting far exceeded the expectations of the client.

We carried out Energy Surveys on over 104,000m² of buildings at the end of a 3 year programme of building upgrades which included a combination of the following improvement works:

1. Improved building Fabric
2. Lighting Retrofit Luminaires
3. Lighting Replacement
4. Lighting Controls
5. Replace Boilers
6. Boiler Piping and OPT
7. CHP
8. AHU Replacement
9. Add AHU Heat Recovery and Ctrl's
10. Add Valves and Controls to Chillers
11. Add VFD's and Controls on Fans
12. Add Zoning with Controls
13. BMS Controls, Upgrade Existing
14. Change 100% OA to Mixed Air + Ctrl's
15. Decommission Toilet Exhaust Fans
16. Add VFD's and Controls on Pumps
17. Install Time Clocks on DHW Boilers
18. Solar Domestic HW
19. Domestic Water Conservation
20. PC Software
21. Humidifier Optimisation
22. Install voltage optimization



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