MAKING BUILDINGS DELIVER MORE EFFICIENTLY

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INTRODUCTION

- I have led energy reduction across our portfolio since 2009
- Multi-let office portfolio: 16 buildings, 4 million square feet
- London, in prime locations and top quality space
- Almost all built in last 20 years, half in last 10
- average lettable space per building 25,000 sq metres, majority with central plant
ENERGY REDUCTIONS IN OUR BUILDINGS: WHO IS RESPONSIBLE?

Energy use in our multi-office buildings

- Landlord has greatest influence in common parts and central plant
- Occupier has greatest influence in their own space
- In our buildings 50:50 split
- I will focus on landlord influenced energy reductions
OBJECTIVES FOR TODAY

1. To show how we have achieved energy reductions of 39% over 4 years
2. How much more we can reduce, now and in the future
3. How we can achieve market transformation by making all buildings deliver energy efficiently
By March we had achieved a 39% reduction saving £1.7 million and reducing carbon by 21,265 tonnes.

We aim to achieve a 40% energy reduction from landlord services by 2015:

The four most effective measures:

1. **15% reductions aligning central plant run times**
2. 10% eliminating heating and cooling conflicts and increasing intake of external ambient air
3. 5% adjusting set points
4. 5% light sensors or replacing lighting in common parts
5. 1% still to achieve
CASE STUDY: EXCHANGE HOUSE AT BROADGATE

- 37,000 m² net internal floor area over 10 floors
- 3 occupiers, traditionally running central plant 24/7, significant opportunities to save energy
- Needed to resolve occupier management issues first:
  1. We had never agreed core operational hours
  2. Occupiers not billed for out of hours energy
  3. Very easy to heat or cool own space out of hours
CASE STUDY:
EXCHANGE HOUSE AT BROADGATE

1. We gave 6 months notice of introduction of out of hours energy billing
2. We agreed core operational hours for the building for all occupiers
3. We weaned occupiers off over-ride switches for heating/cooling
4. Implemented additional energy saving strategies e.g. when unoccupied at night

SO WHAT DID WE DO?
CASE STUDY: EXCHANGE HOUSE AT BROADGATE

• Initial resistance from our building engineers, now fully on board
• Internal energy league tables

Universal lessons to be learned
1. Very little emphasis on good engineering management
2. Too much emphasis on retrofit
3. Good management practices and adequate resource for building management = energy reduction
CHALLENGING OURSELVES TO GO EVEN FURTHER

- Over last 4 years **landlord influenced energy reductions** of 39%
- Our 2015 target is 40% reductions
- But we can do even **better**
- We can do even better and this is how…
FOUR MEASURES TO ACHIEVE FUTURE ENERGY SAVINGS

At our head office, York House, we have achieved 50% energy savings and we believe this is achievable across our office portfolio

• 350 Euston Road occupiers approved £25k service charge for free cooling, recovered in one year

• Variable speed drive on chiller at Exchange House, projected 40% energy savings, exceeded 50%

50% energy across our portfolio

- Working with BMS partners to drive more functionality, moving to full automation
- We plan to re-commission central plant in every building every 5 years
- Work with occupiers to deliver plant and lighting replacements, monitoring benefits with meters
- Long term asset replacement plans for each building, reducing capital costs by reducing plant capacity

39% energy savings to date

WITH EFFORT AND COMMITMENT WE CAN GO FURTHER
THE TIME FOR ACTION IS NOW

- Frustratingly difficult to demonstrate energy efficiency to the market
- No market incentives for landlords
- BREEAM, LEED and EPC’s best we have but not good enough
- Display Energy Certificate step in the right direction but not far enough
- Real market gap: how to show landlord’s operational performance in multi-let office building?

SO WHAT DO WE DO ABOUT THIS MARKET GAP?
A PRACTICAL AND EFFECTIVE SOLUTION

- Working with Better Buildings Partnership to introduce operational rating scheme for landlords, LER
- This single initiative will transform the market
- LER will become to new lettings in existing spaces, what BREEM is for new space
- A landlord energy rating system will bring about market transformation

LER WILL LAUNCH IN THE NEXT FEW MONTHS