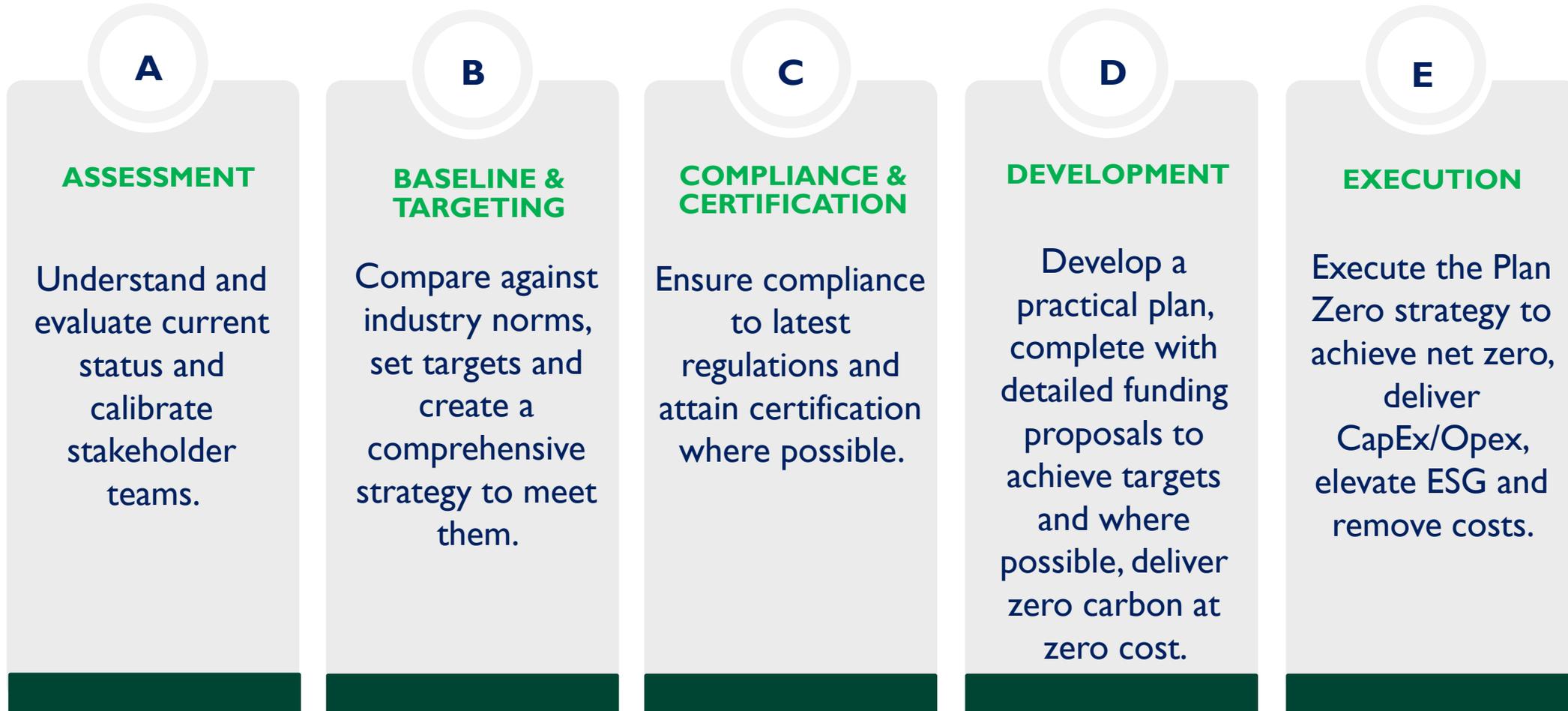


Net Zero in Buildings Making it Happen

Simon King



Take a holistic approach to decarbonising and delivering energy efficiency



- | | | | | |
|---|------------------------------------|--------------------------------------|-------------------------------------|--------------------------------|
| 1 NET-ZERO PATHWAY | 1 CONNECTIVITY & MONITORING | 6 FABRIC & INSULATION | 1 EV CHARGING INFRASTRUCTURE | 1 INCREASE BIODIVERSITY |
| 2 CARBON ENVIRONMENT MANAGEMENT SYSTEM | 2 CONTROLS & METERING | 7 RENEWABLE HEATING & COOLING | 2 ELECTRIC FLEET | 2 REDUCE WASTE |
| 3 OPTIMISE ENERGY CONSUMPTION | 3 WORKPLACE COMFORT | 8 SOLAR PV | 3 100% RENEWABLE ENERGY | 3 CONSERVE WATER |
| 4 WORKPLACE COMFORT | 4 LOW CARBON SOLUTIONS | 9 POWER TO GRID | 4 SMART ENERGY PROCUREMENT | |
| 5 LOW CARBON SOLUTIONS | | 10 MAINTENANCE VISITS | | |

“The willingness to set emissions targets of genuine ambition contrasts with a reluctance to implement the realistic policies necessary to achieve them”

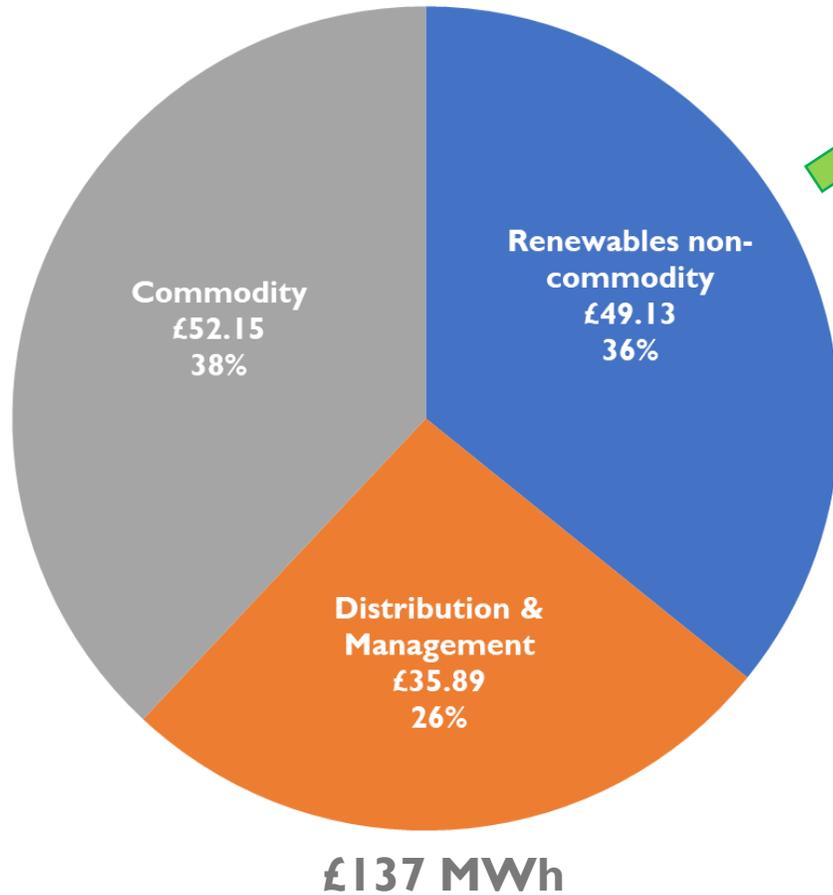
“Businesses must be encouraged, and in some cases required, to invest in solutions and make low-carbon climate resilient choices”

“Building emissions fell 7% between 2009 and 2016 [when policy package for reduction in place] but have risen since”

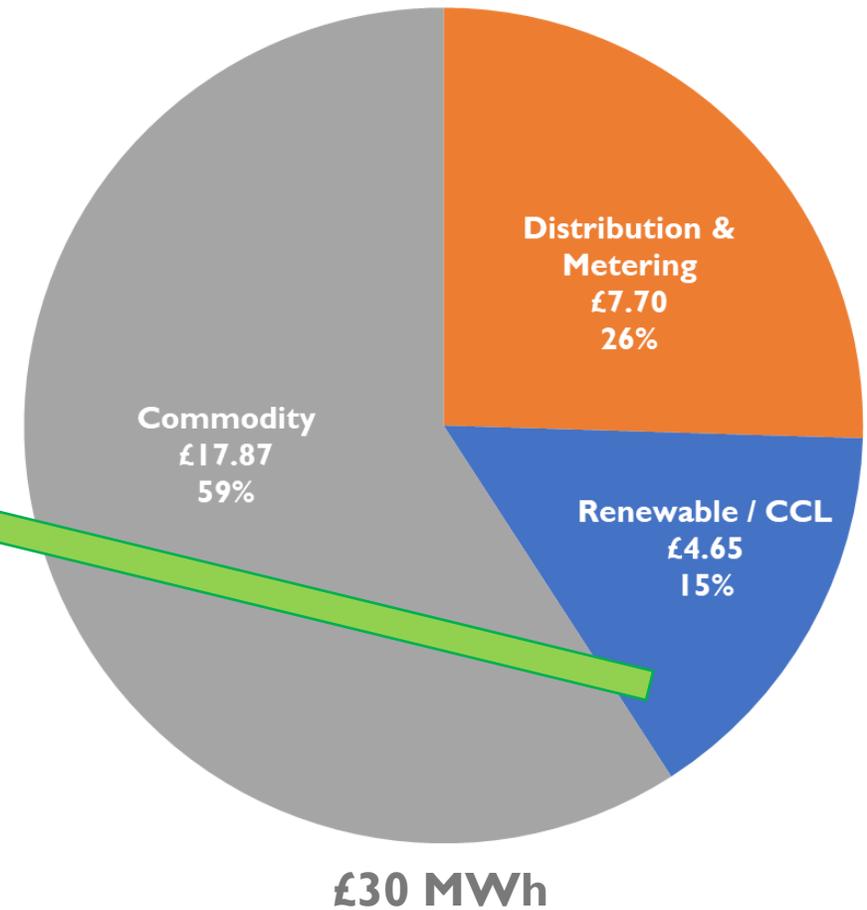
- Building decarbonisation policy package required
- Heat pumps well behind target
- “Little evidence for reduced energy demand at present”
- “Lack of ambition of future levels of electrification”

Cost of Energy comparison

Electricity



Gas



~£210 / tonne
CO₂e

**x10
higher!**

~£20 / tonne
CO₂e

- Energy optimisation makes sense to do now, but low uptake
- Policy interventions have worked historically
- Leading organisations committed to making it happen
- But still huge challenges – regulator framework important to overcome