

# Energy and Carbon Proforma

## Non-residential

Major development (+1,000m<sup>2</sup>)

Version 1.0

Project Name: 85 Rochdale Road - Phase 2

Application ref:

Date: 18/03/2026

|                            |                                                                                                                                                 | Ref. name                 | Communal        |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------|
|                            |                                                                                                                                                 | Area (m <sup>2</sup> GIA) | 2,855           |
|                            |                                                                                                                                                 | Target values             | Building 1      |
| Minimise energy demand     | Space heating demand (kWh/m <sup>2</sup> GIA/yr)                                                                                                | ≤ 15                      | 6.13            |
|                            | Space cooling demand (kWh/m <sup>2</sup> GIA/yr)                                                                                                | ≤ 15                      | 0.1             |
|                            | Calculation methodology used to calculate space heating demand and confirmation that this covers all homes/blocks                               | Predictive energy model   | BRUKL           |
|                            | Form factor per building                                                                                                                        | ≤ 2                       | 0.53            |
|                            | Average external wall U-value (W/m <sup>2</sup> K)                                                                                              | ≤ 0.15                    | 0.17            |
|                            | Average window U-value (W/m <sup>2</sup> K)                                                                                                     | ≤ 1 (triple)              | 1.3             |
|                            | Air permeability rate (m <sup>3</sup> /h/m <sup>2</sup> @ 50 Pa)                                                                                | ≤ 1                       | 3               |
| Maximise energy efficiency | BREEAM Ene 01 rating                                                                                                                            | Excellent                 | Excellent       |
|                            | Energy use intensity (kWh/m <sup>2</sup> GIA/yr)                                                                                                | -                         | 16.7            |
|                            | Calculation methodology used to calculate energy use intensity and confirmation that this covers all homes/blocks                               | Predictive energy model   | BRUKL           |
| Use renewable energy       | PV footprint area (% of ground floor space)                                                                                                     | -                         | 18              |
|                            | Annual renewable energy generation (kWh/m <sup>2</sup> building footprint/yr)                                                                   | -                         | 3.57            |
|                            | Renewable energy balance (%)                                                                                                                    | -                         | 21              |
|                            | Total energy used (kWh/yr)                                                                                                                      | -                         | 33,742          |
|                            | Total energy generated on-site (kWh/yr)                                                                                                         | -                         | 7,213           |
| Use low carbon energy      | Fossil fuel free (yes/no)                                                                                                                       | Yes                       | Yes             |
|                            | Heat source                                                                                                                                     | Electric                  | Electric        |
|                            | Low Carbon Heat Appraisal completed                                                                                                             | Yes                       | yes             |
|                            | Heat network suitability                                                                                                                        | -                         | n/a             |
|                            | Exemption requested                                                                                                                             | -                         | n/a             |
|                            | Efficiency of heating system (SCOP)                                                                                                             | ≥ 3.5                     | 4               |
|                            | Carbon content of heat (gCO <sub>2</sub> /kWh)                                                                                                  | ≤ 100                     | <100            |
| Reduce overheating risk    | Has CIBSE TM52 been used to calculate overheating and does the building pass?                                                                   | Yes                       | Yes             |
|                            | What percentage of spaces are cooled? (% of GIA)                                                                                                | -                         | 100             |
|                            | Has a CIBSE TM52 assessment been carried out using DSY2 and DSY3 weather files? Have any additional passive measures been included as a result? | Yes                       | DSY 1,2,3       |
| Minimise embodied carbon   | Upfront embodied carbon (kgCO <sub>2</sub> e/m <sup>2</sup> GIA)                                                                                | -                         | 309             |
|                            | List top three materials with the highest upfront embodied carbon emissions (kgCO <sub>2</sub> e/m <sup>2</sup> GIA): Material 1                | -                         | situ concrete m |
|                            | Material 2                                                                                                                                      | -                         | situ concrete m |
|                            | Material 3                                                                                                                                      | -                         | precast concret |
|                            | Lifecycle embodied carbon (kgCO <sub>2</sub> e/m <sup>2</sup> GIA) - for large major developments only                                          | -                         | 437             |
| Offsets                    | Offset contribution (£)                                                                                                                         | -                         |                 |