Matter 3: Viability testing and assessment

Issue

Are the policy requirements of the Plan, in terms of development viability, reasonable, justified, effective and consistent with natinal policy?

Questions

1. Specifically, is the identified 3% uplift in build costs for homes from the current standards to the proposed build specifications, as set out in the Council's viability assessment work, based on reasonable and robust evidence?

SAP modelling

- To provide clarity on the building performance uplift required by the proposed policy, we have carried out a notional SAP calculation on a typical 3 bed detached house (see Appendix 1). Iterations of the assessment have been provided to show the building specification uplift required to meet compliance with Part L 2013, Part L 2021, and the proposed Net Zero DPD policy. This includes the provision of renewable technologies, and calculation of the estimated Carbon Offset payment where required.
- 1.2 Table 2 of Appendix 1 compares the Gas Boiler led Part L 2021 compliant specification from Table 1 to the building specification that would be required to meet the proposed Net Zero DPD policy. Two options are presented: option 1 is based on achieving a minimum 63% on-site carbon emissions and a 10% improvement over the Target Fabric Energy Efficiency (TFEE) as per NZC1 and NZC2(A) respectively. Option 2 also meets the additional renewable requirement and achieves full on-site operational net zero carbon standard as per policies NZC2(B) and NZC2(C).
- 1.3 The Net Zero DPD has been written assuming that heat pump is the favourable technology to provide domestic heating and hot water, and it is not feasible to achieve compliance with policy NZC2(A) with the use of a gas boiler. The required uplift from Part L 2021 compliance to DPD option 1 therefore includes a heat pump heating system and the provision of triple glazing windows with a U-Value of 1.1 W/m2K. This specification achieves a 71.2% reduction in carbon emissions over Part L 2021, and the resulting carbon offset payment to achieve compliance with NZC2(C) would be approximately £2,140 for a 100 m² house. It should be noted that this building specification would only be acceptable by the DPD policies if it were demonstrated that the provision of PV is not feasible or viable. It would also have to be demonstrated that the full onsite operational net zero carbon standard was also not feasible or viable using off site existing or planned zero, low carbon or renewable energy generation or by heat network provision.
- 1.4 Appendix 1 shows the building specification that would be required to meet all requirements of NZC1 through NZC3, achieving on-site operational net zero carbon performance. As the net zero standard is achieved, there is no carbon offset payment requirement. The building specification uplift from Part L 2021 compliance includes providing a heat pump, triple glazing, and 3 kWp of south facing PV which covers approximately 40% of the total roof space. The viability testing documentation assumes that the build cost uplift from current standards to this specification is 3%. It is considered that this has been underestimated, particularly in relation to the fabric energy efficiency which requires the uplift from double to triple glazed windows.

Barton Willmore, now Stantec on behalf of: IM Land, Persimmon and Taylor Wimpey

1.5 It is suggested that the viability testing should include an assessment of the available infrastructure capacity needed to support the extra electrical demand of homes with electric heating and hot water systems.