

The background is a vibrant yellow. It is decorated with several abstract geometric shapes in shades of blue, teal, and white. These include circles, semi-circles, and rounded rectangular shapes, some of which are layered or overlapping. The shapes are scattered across the page, with a concentration in the top right and bottom left corners.

# Appendix A8.1

## Embodied Carbon

## Appendix A8.1: Construction Phase Embodied Carbon

This Appendix provides the key parameters and greenhouse gas (GHG) outputs associated with embodied carbon emissions during the Construction Phase, as shown in Table 1. The most significant contributor to the embodied carbon emissions is ground granulated blast slag (GGBS) which accounts for 47% of total embodied carbon emissions followed by precast concrete at 20% as listed in Table 1.

**Table 1: Embodied Carbon Emissions During Construction of the Proposed Scheme**

| Embodied Carbon Material | Tonnes CO <sub>2eq</sub> / Total | % Contribution |
|--------------------------|----------------------------------|----------------|
| Asphalt                  | 1,832                            | 15%            |
| Aggregates               | 396                              | 3%             |
| Precast Concrete         | 2,455                            | 20%            |
| GGBS                     | 5,845                            | 47%            |
| Steel                    | 1,107                            | 9%             |
| Other                    | 511                              | 4%             |
| Transport of Materials   | 212                              | 2%             |
| Total                    | 12,358                           | 100%           |