### **RIBA Plan of Works: Carbon Overlay**



Mitigation Hierarchy

**AVOID** by removing carbon impacts at the outset of the project.

**MINIMISE** by reducing carbon impacts wherever possible.

**RESTORE** by repairing existing carbon stores and creating new carbon stores.

**OFFSET** by compensating for carbon impacts with preference to on-site over off-site measures.



#### **Project Stages**

The Landscape Institute's Carbon Overlay sets out the range of actions landscape practitioners can take at each work stage to reduce the carbon impacts of their projects.

The following 9 work stages reflect the RIBA Plan of Works.

#### **0 Strategic Definition**

#### **1 Preparation and Briefing**

The initial stages present the greatest potential for avoiding and minimising carbon impacts through influencing the siting, scope and lifecycle of the project.

#### **2 Concept Design**

#### 3 Spatial Coordination 4 Technical Design

The design stages present opportunities to deliver key actions such as protecting existing carbon stores, working with natural systems, minimising hard and maximising soft landscape design and specifying low carbon materials and processes.

#### **5 Construction**

6 Handover

Management at the construction stage ensures that the implementation of the project fulfils low carbon objectives.

#### 7 Use

Design for low maintenance and low resource use will reduce operational impacts.

#### 8 End-of-life

Opportunities to retain, reuse and recycle materials must be inbuilt from the start.

#### THINK LIFECYCLE

Consider reuse and recycling at every stage of the project to minimise waste and embed circularity into the project.

# 5

Choose low carbon options for both hard and soft landscapes considering carbon impacts over the full lifecycle.

**SPECIFY** 

**LOW CARBON** 

### **ACTIONS**

# PROTECT CARBON STORES

LESS HARD

**MORE SOFT** 

The carbon impact of hard

landscapes is significantly

greater than soft

landscapes - minimise

hard and maximise soft.

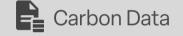
The simplest and most effective way to reduce CO2 emissions is to keep carbon locked into our soils, woodlands and wetlands.

# DESIGN RESPONSIVELY

Working with natural and human systems reduces the need for additional resources which reduces carbon impacts.

## Measuring Carbon

To measure carbon in a landscape project you need **quantities** and **values**. Quantities can be calculated from plans or other data sources for the project. Values can be found in databases or embedded in carbon tools.



Suppliers produce **Environmental Product Declarations** (EPDs) setting out the carbon calculations associated with their product. The Landscape Institute has prepared an **EPD Databank Database Summary Report**.



The Landscape Institute has prepared a **Landscape Carbon Tools Database**, which compares 14 publicly accessible tools used to assess the carbon impacts of landscape projects.

The Database is designed to help landscape practitioners select the tool that best matches their needs in terms of project stages, project type, and required outputs.