

New sustainability report template complements Structural Plan of Work

To help engineers design sustainably and communicate this to their clients, the **IStructE Sustainability Panel** and **Climate Emergency Task Group** have worked together to publish a sustainability report template and sustainability checklist under wider updates to the Structural Plan of Work.

Introduction

With increased focus on the climate and biodiversity emergencies, structural engineers are now expected to hold a much broader and deeper knowledge of sustainability and the environmental impacts of their work. Associated client needs are also continuing to increase.

To help structural engineers manage these growing demands, a structural **sustainability report** is included in the Structural Plan of Work (SPoW) deliverables.

The SPoW, based on the widely used RIBA Plan of Work, was launched in 2020 and indicates project-stage deliverables to aid structural engineers in providing consistent services to clients.

The new sustainability report, along with the supporting guidance outlined in this article, will enable structural engineers to consistently consider, report and inform on sustainability measures and impacts of their projects.

Although the SPoW is focused on the UK, the sustainability report and checklist will be of use to engineers around the world, who can apply or adapt them to their own locations.

Sustainability report

A sustainability report template (available under 'Access resource' at: www.istructe.org/spow) has been developed to:

- provide a standard scope and structure for structural sustainability reporting to ensure alignment across the profession and encourage adoption by clients
- drive best practice with signposted IStructE guidance and other publications
- highlight opportunities to alter the project brief to enable more sustainable solutions
- record design decisions, principles and opportunities that enable low-carbon designs,

construction and use, while supporting circular economy principles

- inform those constructing, using, retrofitting and deconstructing the structure, to unlock every environmental benefit of the design
- promote the sustainable specification and procurement of materials, and sustainability considerations in tendering processes.

The report has five key sections, summarised in **Table 1**.

The template is available as a Word document, allowing companies to use it with their own company branding. It features:

- general narrative text to give a consistent message to clients and save authoring time
- boxes for engineers to add project-specific information under key headings
- guidance in the comments column to help the engineer complete project-specific information. *The engineer should print without comments to omit guidance from the report when publishing.*

The report should be started at the earliest possible stage, updated throughout the design and construction process, then passed on to relevant parties as necessary. The report may be issued as a standalone document or incorporated into the engineer's design report. It is important

in the latter case that key report information is included in an executive summary to ensure effective communication.

Sustainability checklist

The report is accompanied by a sustainability checklist (www.istructe.org/sustainability-checklist). Mirroring the sections of the sustainability report, the checklist prompts actions throughout each design stage in support of key sustainability requirements. This will guide engineers towards a design process that supports sustainable solutions while prompting material to populate the sustainability report. The checklist may also aid planning of project-stage deliverables and activities; ensuring that time and resource are made available for pursuing sustainable designs.

Conclusion

Although good progress has been made towards a more sustainable built environment, the climate emergency is accelerating and we, as engineers, must do more. By adopting the sustainability report as a standard deliverable across the industry, supported by the checklist to guide the design, we can all take meaningful action towards delivering sustainable structural engineering solutions.

Table 1: Key sections of sustainability report

1. Introduction	This section introduces key terminology around the UNSDGs, climate emergency and net zero. It outlines project targets based on relevant policy, regulations, standards, accreditation schemes, and client goals.
2. The brief	This section documents the engineer's input to the brief, considering key factors such as the circular economy, adaptation and flexibility while setting carbon targets.
3. Carbon calculations	Carbon calculations are reported here, promoting consistency, transparency and the use of tools available such as The Structural Carbon Tool.
4. Design considerations	Here, all efforts to reduce carbon in the design stages are recorded and communicated to the client, design team and contractor, to ensure key decisions made are carried forward through to construction.
5. Construction considerations	The final section outlines efforts made in the specification and procurement stages to achieve the design intent and continue to search for sustainable outcomes and further carbon savings on site.