

# SUSTAINABLE PROCUREMENT

PRACTICAL GUIDE

**This Practical Guide** will cover the key principles of sustainable product procurement in the built environment.

### 🗿 IN A SNAPSHOT

Sustainable product procurement involves buying materials and products in a way that minimises impact to the environment, the climate and people. Sourcing products should be done responsibly and ethically by considering not only the impacts of the materials across the lifecycle – during extraction, processing and transport, but also consideration for the wellbeing of all workers and building users and the ethical and evironmental standards demonstrated by the supplier.

#### Why is it important?

Much of the environmental impact of building projects occurs offsite, through the extraction, processing and transport of building materials It causes GHG emissions (see our <u>Embodied Carbon Bitesize Guide</u>) may contribute to habitat and biodiversity loss(see our <u>Embodied Ecological</u> <u>Impacts work</u>), generate pollutants, or exploit labour in the supply chain if sourced from countries with low labour protection standards. Certain chemical components can have negative health impacts on construction workers (such as silicosis) or building users (such as VOCs) and should therefore be minimised.

Environmental procurement also contributes to a <u>circular</u> <u>economy</u>. Using lower quality materials results in more materials being disposed of at the end-of-life stage instead of retaining value and bring recovered for reuse.

Built environment professionals have a responsibility and duty of care to avoid these negative impacts when procuring materials and products. Clients should support sustainable procurement practices and seek information from their design teams on the environmental credentials of the building products.



# Principles of sustainable product procurement in the built environment

Key considerations for sustainable procurement should include the embodied carbon, material ingredients, impact on the environment throughout the lifecycle, impact on human health, its reuse and recycling potential, and the labour standards and impact across the supply chain. Finding reliable information on these criteria can be difficult, and more so as the complexity of the supply chain increases. This is why sourcing locally from known producers typically offers greater transparency. Design teams should take care to provide clear product specifications to avoid lower quality and less sustainable substitutions being used.

#### How can it be done?

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Responsibly sourcing materials takes time. Having an early led time for procurement gives ample time to verify sourcing of materials, critically examine organisational commitments and engage with suppliers to ensure transparency. Sustainable product procurement should be thought of throughout the design process. Gathering reliable and relevant information on the products as well as the supplier organisation is the key challenge and should be tackled from various angles.

Many material suppliers or product manufacturers publish <u>Environmental Product Declarations</u> (EPDs), which provide information on a product's environmental impact throughout its life cycle. EPDs include information on the product category, the lifecycle stages, the material composition, and a range of environmental impacts including include global warming potential (GWP) informing the Lifecycle Assessment. These are a useful starting point; however, their quality varies widely, and they often do not compare across material categories. They also do not tell the whole story of all environmental and ethical factors.

Certification schemes like the Forest Stewardship Council (FSC) aim to promote sustainable resource management. Where timber is being sourced from regions with stronger governance and oversight such as Europe, their certification may carry more weight. Specifiers should therefore always critically examine the broader context instead of relying on labels only.

There are various databases that have begun to compile EPD data to support better comparison across various sustainability and ethical indicators. For example, 2050 <u>Materials</u> concentrating on GHG or <u>FirstPlanit</u> which provides information on a list of key impact indicators that rate the impacts of social, environmental, health and monetary factors.



#### PRACTICAL GUIDE

The Living Building Challenge Red List lists the chemicals that pose risks to the health of humans and the environment. In the EU, companies are required to register substances considered particularly harmful under the REACH legislation (Registration, Evaluation, Authorization and Restriction of Chemicals), and demonstrate how to manage the risks associated with those substances. A list of substances restricted under REACH is available here.

To gauge the commitment of the organisations in the supply chain to environmental and ethical standards, it can be useful to look for accreditations or voluntary commitments. The ISO 14001 is a quality assurance process that covers environmental management aspects and impacts across the whole life cycle. Being signed up to the <u>SBTi</u> (Science Based Targets Initiative) means an organisation has developed a pathway to cut down their carbon emissions. Smaller suppliers may struggle to resource accreditations and should not be excluded on that basis, and instead be assessed on the data they provide.

Reaching out directly to suppliers to enquire about the credentials of their products is highly recommended, in particular where EPDs or other information is missing. Their response is the best way to gage their commitment to sustainability and labour standards. Interior Design Declares has created a <u>sustainability supplier questionnaire</u> that proposes useful questions to ask. These questions cover social and ethical responsibilities, materiality and chemical content, certifications, declarations, and standards, lifecycle impacts, and product circularity and waste. Some questions you might ask include:

- Does the company have a statement on labour standards?
- Can the supplier provide a materials ingredient list?
- Can the supplier provide an Environmental Product Declaration (EPD)?
- Has a Lifecycle Assessment or Whole Life Carbon Assessment been carried out?
- Does the supplier have a statement on circularity?

Once designers have identified the most sustainable products having weighed up the varying strengths across the different parameters, they should explain the benefit of specifying these products to the client to get their buy-in. To prevent inferior products being substituted by a contractor, setting out clear performance criteria is essential.





#### Case Study: Enterprise Centre

The design team for the Enterprise Centre at the University of East Anglia prioritised local supply chains for the timber used in the building. By maintaining a <u>detailed timber trace</u> <u>map</u> they ensured that much of the material was sourced from local Thetford Forest pine. Commissioning client, Prof John French, says timber traceability is critical and urges "your whole professional team to be sharp-eyed and to double down on the specification (to avoid substitution)".

Source: UKGBC



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#### IN SUMMARY

Designers should consider the environmental, ethical, and social impacts when sourcing products. One should compare and contrast the information that may come from certification schemes, declarations, standards, databases, or directly from the supplier before making a decision on which product is best for a particular project. Once the designer has selected and specified a product, they should present the reasoning to the client and the contractor to gain buy-in from both parties.

## FURTHER RESOURCES

Perkins & Will transparency Interiors Declares WELL standard materials category LBC materials petal Eight pathways to best practice Manifesto for ethical sourcing in construction