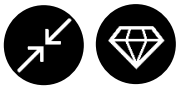
Evaluating Product Circularity

This guidance has been provided by Environmental Sustainability to support teams and individuals to make sustainable purchasing decisions by evaluating the circularity of the products that they procure, including assets, objects, materials and consumables.

A series of questions are provided to encourage consideration of the entire product life cycle and to instigate discussions with suppliers. These can be applied, and certain questions weighted, as necessary and relevant to the product in question.

A complementary slide deck has also been prepared to support teams wishing to work through the questions collaboratively as part of a workshop.

1. **Is a new product required?**
    a. Is it necessary in order to achieve your end goal?
    b. Can it be sourced internally from within the University?
    c. If you are replacing an existing product, might there be options to instead refurbish or repair this before buying new?
    d. Can the product be leased or accessed temporarily?
    e. Is it possible to pay-per-use or for the product's utility, rather than purchasing a product outright?
    f. Are there opportunities for shared ownership?



2. **What information is available?**
    a. Can the supplier evidence their commitment to sustainability, by providing a sustainability strategy, CSR policy or equivalent?
    b. Can the supplier evidence sustainability performance by providing data, sustainability reports or equivalent?
    c. Is the supplier accredited by any third parties in relation to their sustainability performance, such as ISO14001 or B-Corp
    d. Can the supplier provide product-level sustainability data for their products, such as Life Cycle Assessments (LCAs)?
    e. Can the supplier provide information on their supply chain, including the sourcing of raw materials and product manufacture?

3. **What are the raw materials?**
    a. Is the product designed to minimise the consumption of raw materials, including packaging?

    Are the raw materials used in the product -

b. Renewable?
c. Recycled?
d. Recyclable?
e. Compostable?
f. Non-toxic?
g. Ethically sourced?

4. How is it manufactured?

a. Is the manufacturing process powered by renewable energy, such as wind, solar or hydro power?
b. Does the manufacturing process incorporate measures to reduce waste?
c. Does the manufacturing process minimise emissions to land, air and water?
d. Does the manufacturing process adhere to ethics and labour standards, such as Fairtrade or Real Living Wage?

5. How far has it travelled?

a. Is the product sourced, manufactured and dispatched locally?
b. Is renewable energy used in the transport of the product, such as (renewable) electric vehicles?
c. Can the product be ordered in bulk (where appropriate) to minimise transportation requirements?

6. How does it function?

a. Does the product perform a sustainable function, such as energy saving devices?
b. Does the product minimise resource consumption, pollution and waste generation in its operation and maintenance, including energy and consumables?

7. How long will it last?

a. Does the supplier provide a warranty or guaranty on the functional life-span of the product?
b. Is the expected shelf-life or life-span of the product appropriate and justified for the required end use?
c. Is the product designed to be upgraded over the course of its life-span?
d. Is the product designed for ease of repair, such as incorporating modular components or the absence of adhesives?
e. Does the supplier support the repair of products, such as through the provision of replacement parts, instructions and repair services?

8. Where will it go?

a. Can the product be reused elsewhere within the University?
b. Can the product be resold externally?
c. Does the supplier offer a take-back scheme?
d. Is the product easily disassembled into its component parts and recycled or returned to natural cycles, such as composting?
e. Is the supporting infrastructure for recycling, including collection, storage and transportation, readily available?
f. Can any remaining resources, such as nutrients, chemicals or energy be extracted from the remaining product?

Circular Economy Principles

Efficient Resource Use

Maximising Value & Utility

Closing the Loop

Regeneration, Renewability & Wellbeing

Data & Information Transparency

Circular by Design

Leadership & Influence