

# STARPACK STUDENTS

# **Competition 2025**

### **BRIEF H**

# SUSTAINABILITY IN PACKAGING MATERIALS

## Packaging Group

I.M3

#### Sponsored by IOM3 Packaging Group

The IOM3 Packaging Group (formerly the Packaging Society) traces its roots back to the Institute of Packaging. This network provides people with knowledge, information and best practices on all aspects of packaging materials and technologies enabling considered choices, good design and more sustainable packaging. The group helps provide an understanding of the key role packaging materials have in reducing food waste and in working towards a netzero society.

bit.ly/3zbTn8y

#### **Prize**

Winner: £500.00 cash prize

Runner-up: £100.00 cash prize

IOM3 presents trophies to Gold, Silver and Bronze and certificates to Highly Commended entries.

#### Helpline

For enquiries or guidance on the brief, please contact Jude Allan

## www.starpack.uk.com

The Starpack Competition is organised by the Institute of Materials, Minerals & Mining (IOM3) and endorsed by the IOM3 Packaging Group (formerly the Packaging Society)

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#### Introduction

Packaging is one of the largest global consumers of materials (Global packaging materials market size was estimated at just under USD 1.1 trillion dollars in 2022 (source: Global Market Insights)) and one which impacts upon everyone.

Packaging plays a crucial role in ensuring that the vast majority of products, from delicate fresh produce to large pieces of industrial equipment, reach their destination in pristine condition and can be traced throughout the supply chain on their journey from manufacturer to consumer. Fundamentally, materials selection for packaging relies on having a good understanding of the structure, and properties of materials, and their performance during their first life and beyond and how they can be applied to deliver pristine products.

In recent years greater emphasis has been placed on sustainability and circularity; materials selection and design are key in ensuring that packaging is fit for purpose and environmentally responsible. There is increased emphasis on making packaging that can be easily recycled, with an emphasis on reducing the use of difficult to recycle materials and designs.

#### The Brief

The challenge for this brief is to select any packaged product in a difficult to recycle packaging:

- Explore the materials and format used and explain why it is difficult to recycle.
- Design an alternative packaging format where the shape, materials and functionality
  can provide at least the same level of convenience for the consumer while improving its
  sustainability credentials.
- Explain the sustainability improvements that you have made.

You can select any packaged product that you would consider to be not as good as it could be for the environment.

Identify where the packaging is in need of improvement, thinking about:

- · its carbon impacts
- · the manufacture of the packaging,
- the consumers use of the packaging and
- the eventual end of useful life scenario for the packaging.

#### Points to consider

In the course of research, you should consider the following:

- How the current design of the packaging is influenced by the material choice.
- What the carbon impacts of the current packaging are.
- How the current packaging is manufactured.
- · How the current packaging flows through the supply chain.
- · What the consumers experience of using the current packaging is.
- How the current packaging is treated in the existing waste management infrastructure.
- The priorities for sustainable packaging design Remove, Reduce, Reuse, Recycle.
- The material, format and manufacturing process of the new packaging.
- · How the new packaging flows through the supply chain.
- The consumers experience of using the new packaging.
- The way in which your new packaging will be treated in the existing waste management infrastructure.