



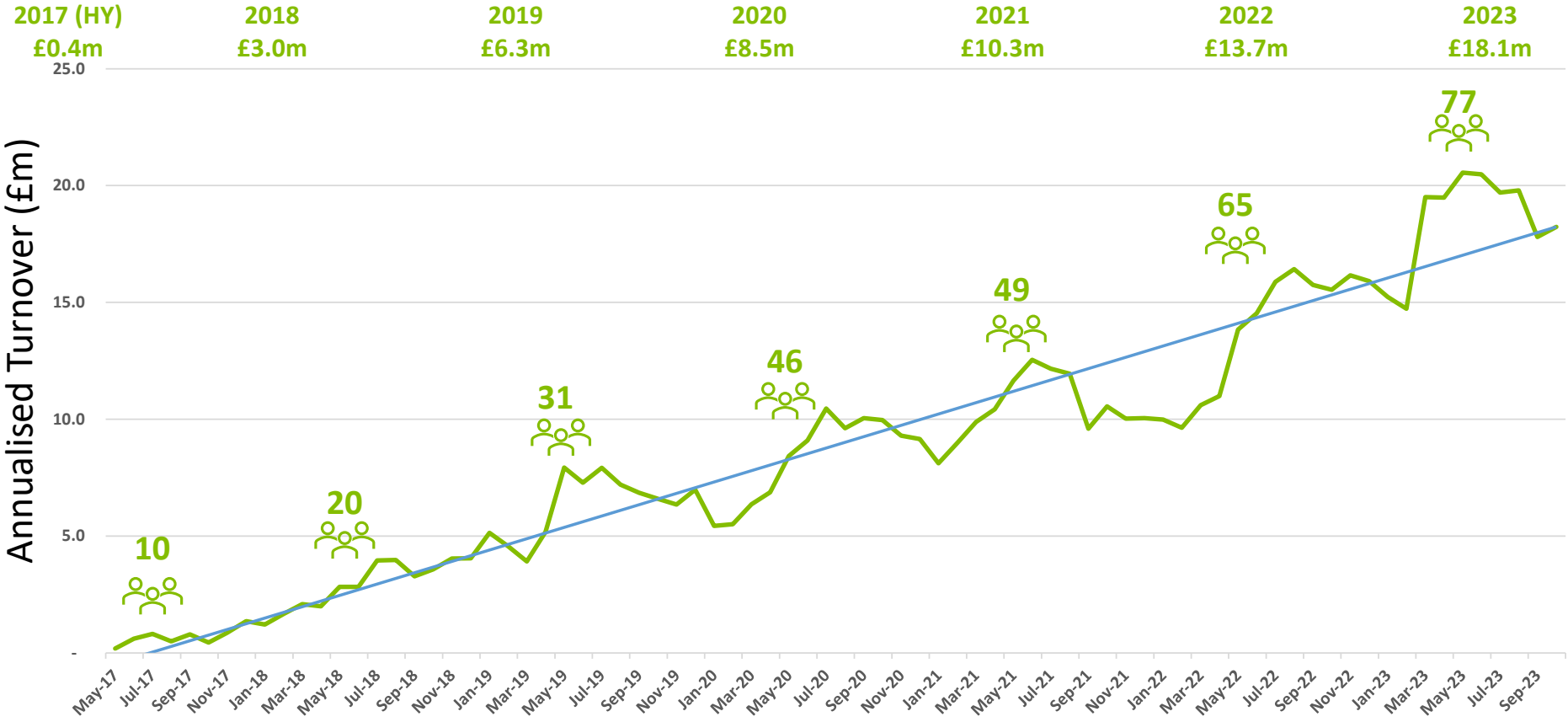
THE PLASTICS CHALLENGE

THE SOLUTION NOT THE
PROBLEM

iPac General Overview

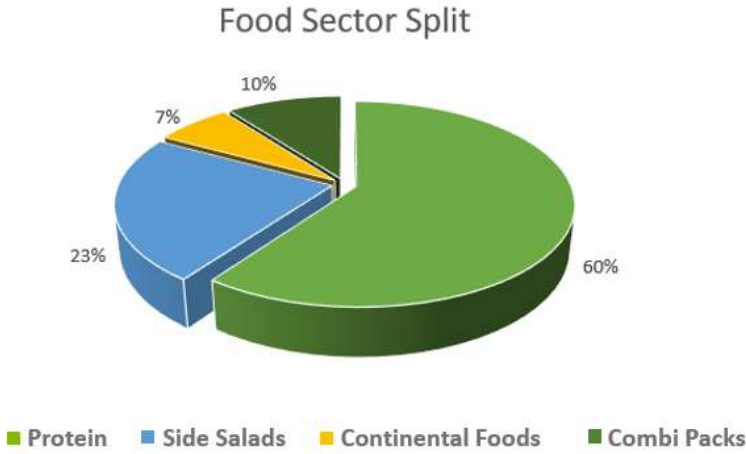
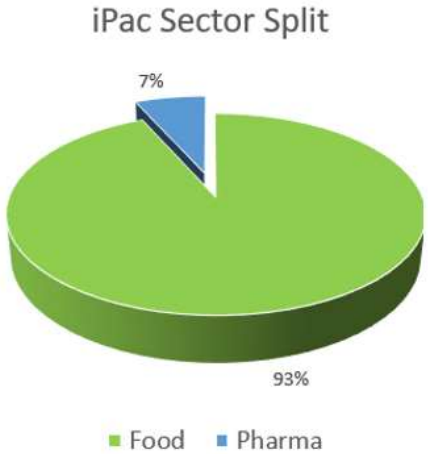


iPac is a producer of recycled plastic packaging for the food and pharmaceutical industries. Established in 2017 with a focus on Innovation, Quality, Customer Service and Sustainability, iPac has grown rapidly from a standing start to turnover of over £20m, producing over 400 million PTTs and have a team of over 85 within 7 years.



2024
 £20.5m (f)
 Turnover
 87 employees
 450 million PTTs
 manufacture
 8,604 tonnes of
 material converted
 - 97% being
 Polyethylene
 terephthalate (PET)

Customer & Sector Profile



- Within 12 months of production iPac launched food packaging products into all of the major UK retailers
- We are heavily weighted towards the retail food sector with a focus on protein products.

Thermoformed Packaging

Thermoformed packaging pervades modern society, with tens of billions of units sold in the UK each year. Whether it be a blister pack to hold batteries, a pot to contain yoghurt or a salad container for lunch products, thermoformed packaging has become the much preferred packaging medium for retailers and packer-processors.

The North-East is a major hub and driver within this sector with many of the market leaders (UK based) incorporating over the years.

Examples of thermoformed packaging:

Food Packaging (PTTs)



Health and Beauty



DIY Blisters



Pharmaceutical



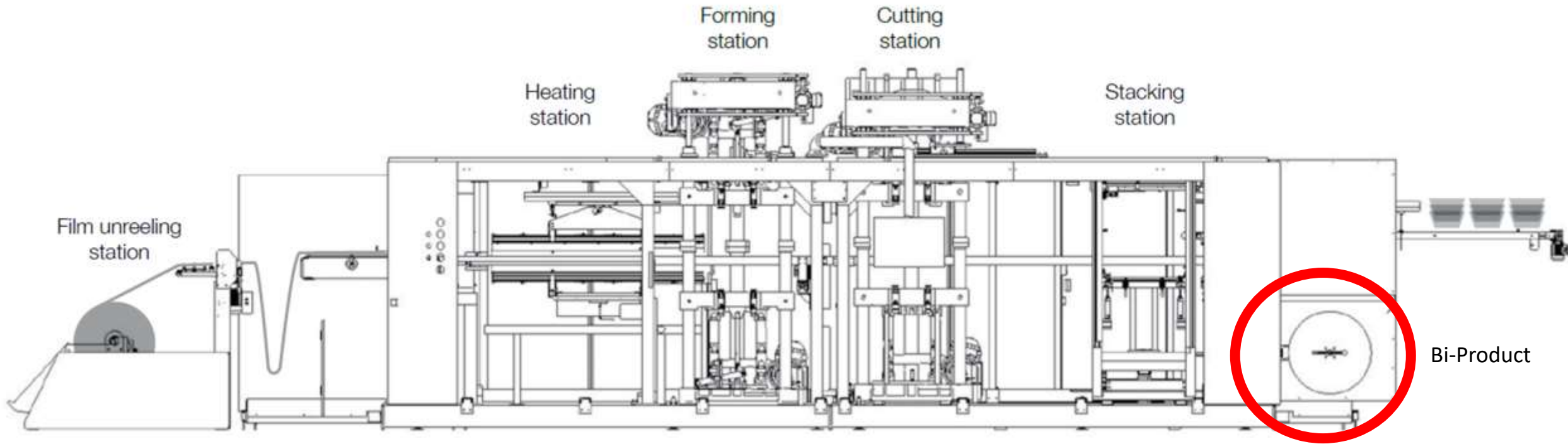
Collation



Industrial



Thermoformed Packaging



Thermoforming is a manufacturing process where a thermoplastic sheet or film is heated to a pliable forming temperature, formed in a mould to a specific shape with the assistance of vacuum and pressure and trimmed to create a usable product.

Product-specific tooling is inserted into a thermoforming machine to produce the end-product, and with increasingly efficient change-overs (driven by technological improvements) a thermoforming machine can run multiple products per day if required.

Latest generation machinery can allow cycle speeds approaching one cycle per second, with each cycle producing multiple units (as determined by tool size and product size)

Supply Chain

- We see the value of plastic – so much so we tell our staff not to call it scrap – it's a bi-product – a valuable commodity
- 8604 tonnes consumed and converted an average of 35% goes back into the process known as Post Industrial Waste (PIW)
- Over recent years the quality of materials has declined due to multiple factors
 - Bottle Flake (Post Consumer Waste- PCW)
 - Contamination within recycled PET – kerb side yields
 - Skilled labour shortage
- User and supplier of Prevented Ocean Plastics - where RPET recycling is significantly needed in order to prevent these bottles from entering the ocean and environment – usually low income countries



The perception of plastic

The Blue Planet II Effect

- Identification
- Ocean Clean-up advances and data sources
- Attention to problematic areas
- Would the UK public have reacted in the same manner if they had been presented with the facts?



- **The Future**

- Global production of plastics estimated to be 400 million tonnes
- Over the next 20 years it is forecast to triple

- **The Growth**

- It has been estimated that the average European currently consumes over 3 times more plastic than the average Asian however, there are 5 x more Asians than Europeans

- **The Opportunity**

- Let's respect, educate and value plastic more than we currently do

Why do we use plastic in food packaging

- Versatility
- Ease of recyclability
- Preservation and protection of goods
- The 'availability' of recyclable materials



rPet skin tray

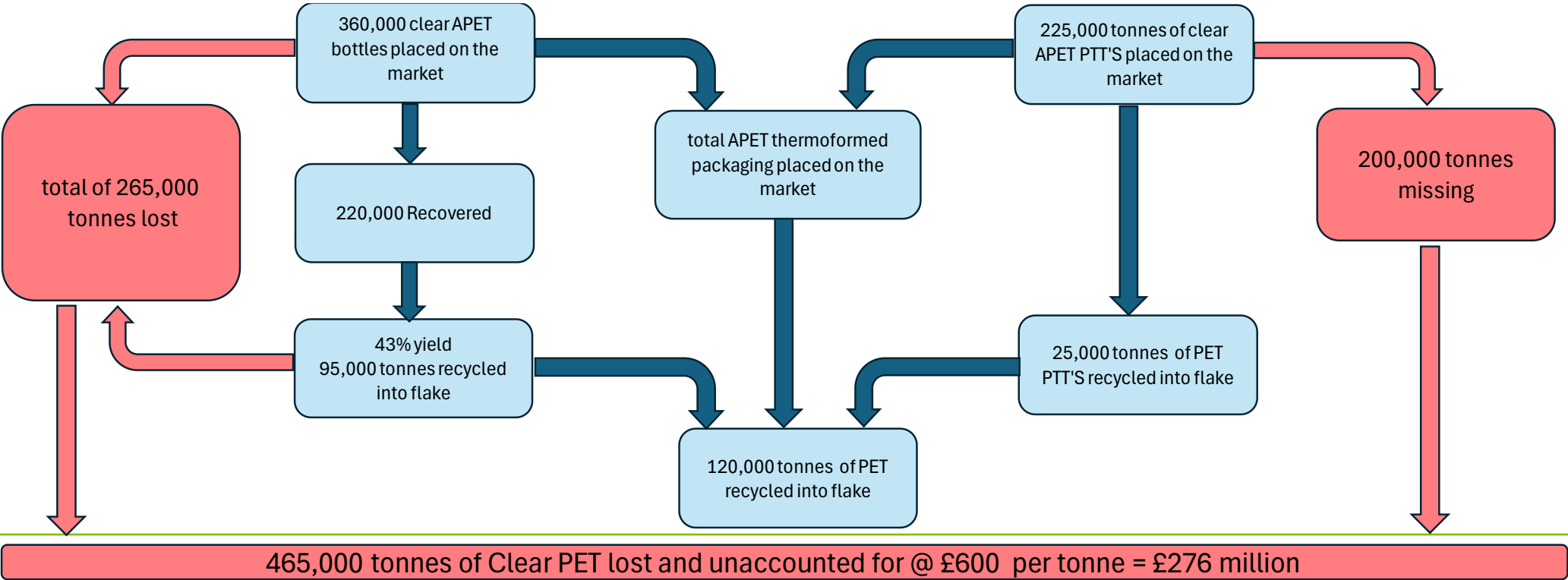


Paperboard (Multi layered) skin tray

- **Let's say tomorrow** - if every piece of food grade PTT packaging made from PET was transferred to paper board (multi layered/material) the resources required would take up to 24 trees per tonne just the paperboard – last year the consumption of the UK PET thermoformed PTTs market is estimated at 225,000 tonnes this could equate upto **5.4 MILLION** trees!!

Re-aligning the agenda

- The UK and Europe has to lead by example in tackling this issue
- Expose Greenwashing
- Education – how to recycle
- Avoid confusion
- Maximise the commercial and financial benefits





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