

A vibrant green illustration featuring various eco-friendly symbols. At the top left, a hand holds a water droplet. Next to it is a globe, a lightning bolt, and a small plant. To the right is a recycling symbol. Below these are wind turbines, a car with a plant growing out of its roof, and a gear with a plant inside. The central text 'SUSTAINABLE PACKAGING' is in a dark green rounded rectangle.

SUSTAINABLE PACKAGING

DEFINITION OF SUSTAINABILITY

Sustainability in packaging refers to **designing, producing, and using** packaging in a way that **minimizes** its environmental impact while still meeting functional requirements like product **protection, safety, convenience and hygienic standards**.



Circularity

Made from recycled content and recyclable back into products of the same quality. i.e., food packaging back into food packaging – tray-to-tray.

EXTENDED PRODUCER RESPONSIBILITY (EPR) REGULATIONS

- Focus on practical implementation of sustainability drivers.
- Area/Country specific.
- ERP levies will be based on recyclability.

IMPLICATION FOR EXPORTERS

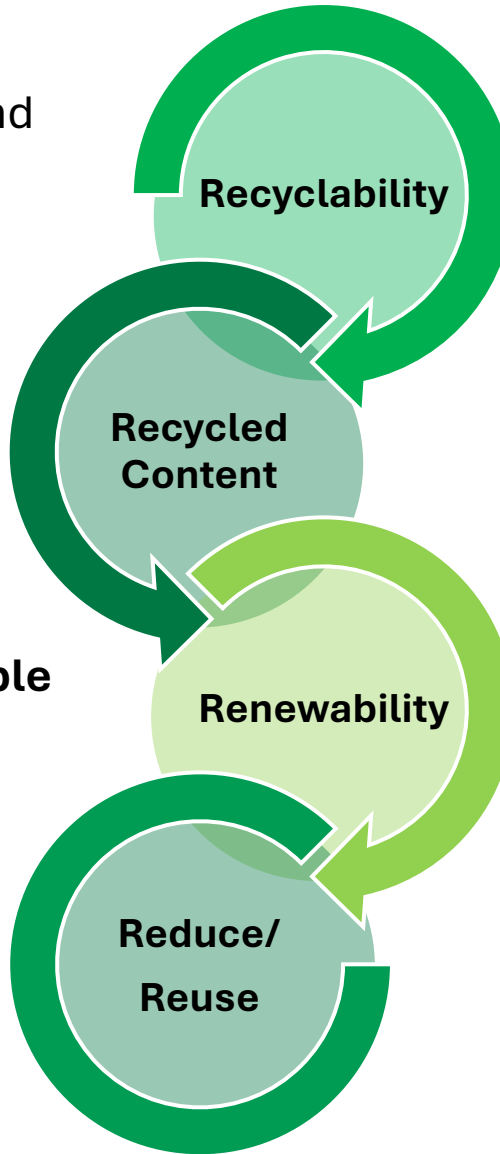
Ensure cross-border compliance.



KEY DRIVERS OF SUSTAINABILITY

Ensures materials can be **recovered** and **reused**, reducing landfill waste and resource extraction.

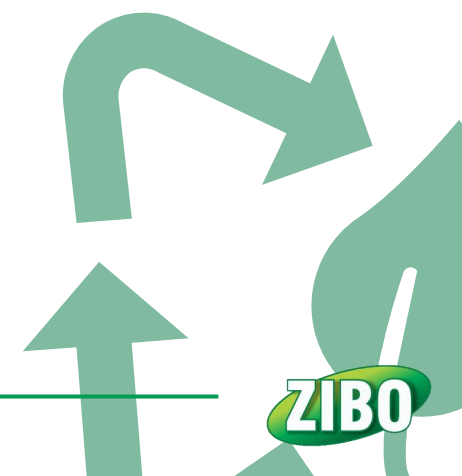
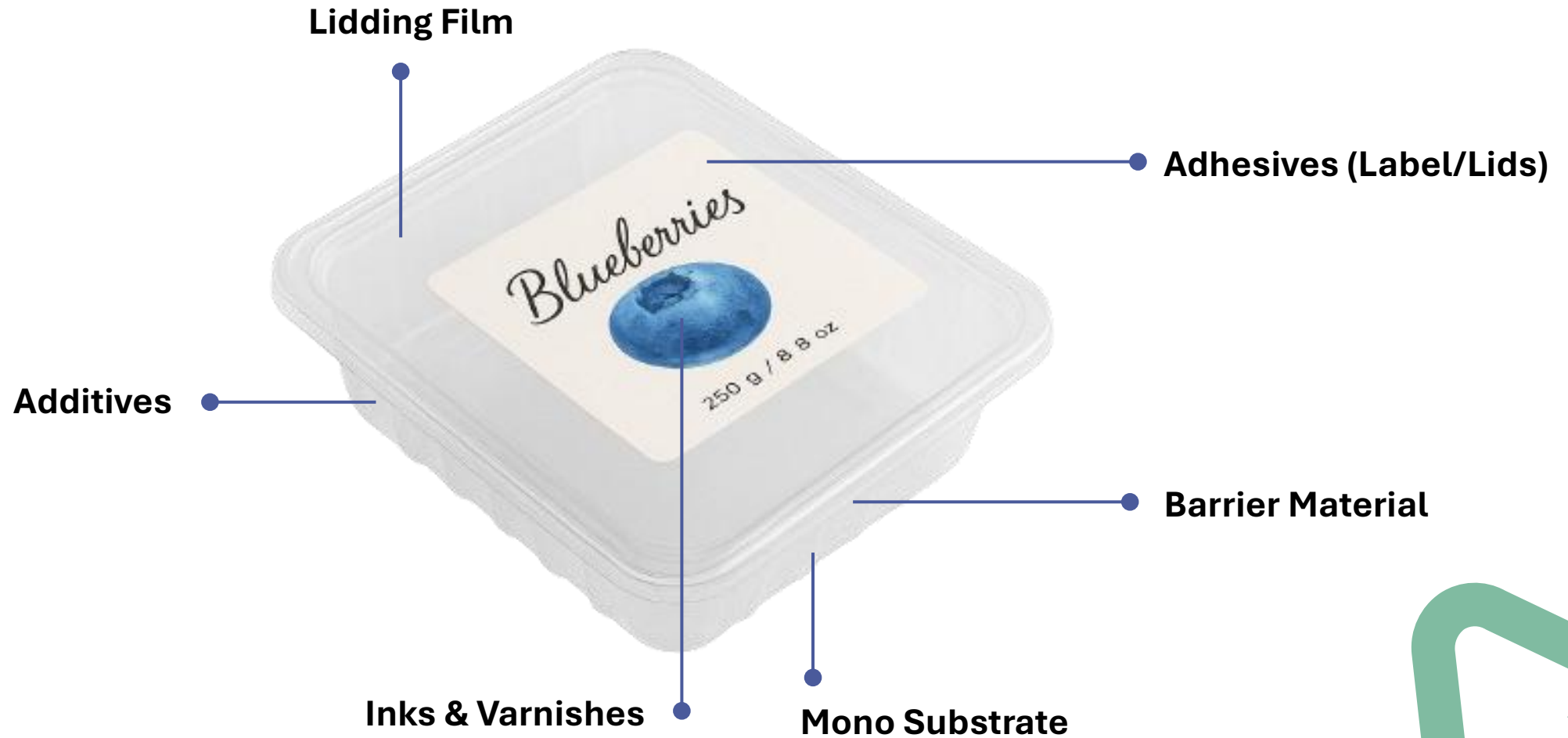
Minimize dependance on **non-renewable** materials.



Decrease the dependance of **virgin** materials and lower the **carbon** footprint.

Optimize packaging over the **life cycle** of packaging.

RECYCLABILITY

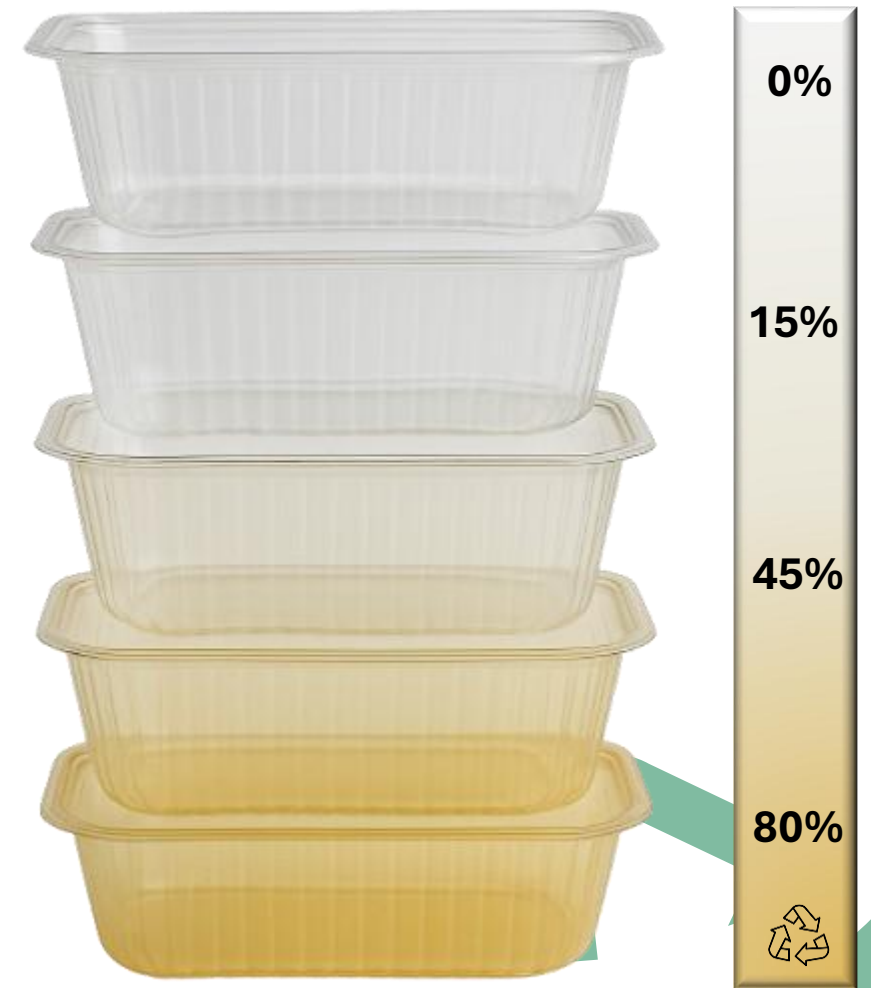


RECYCLED CONTENT

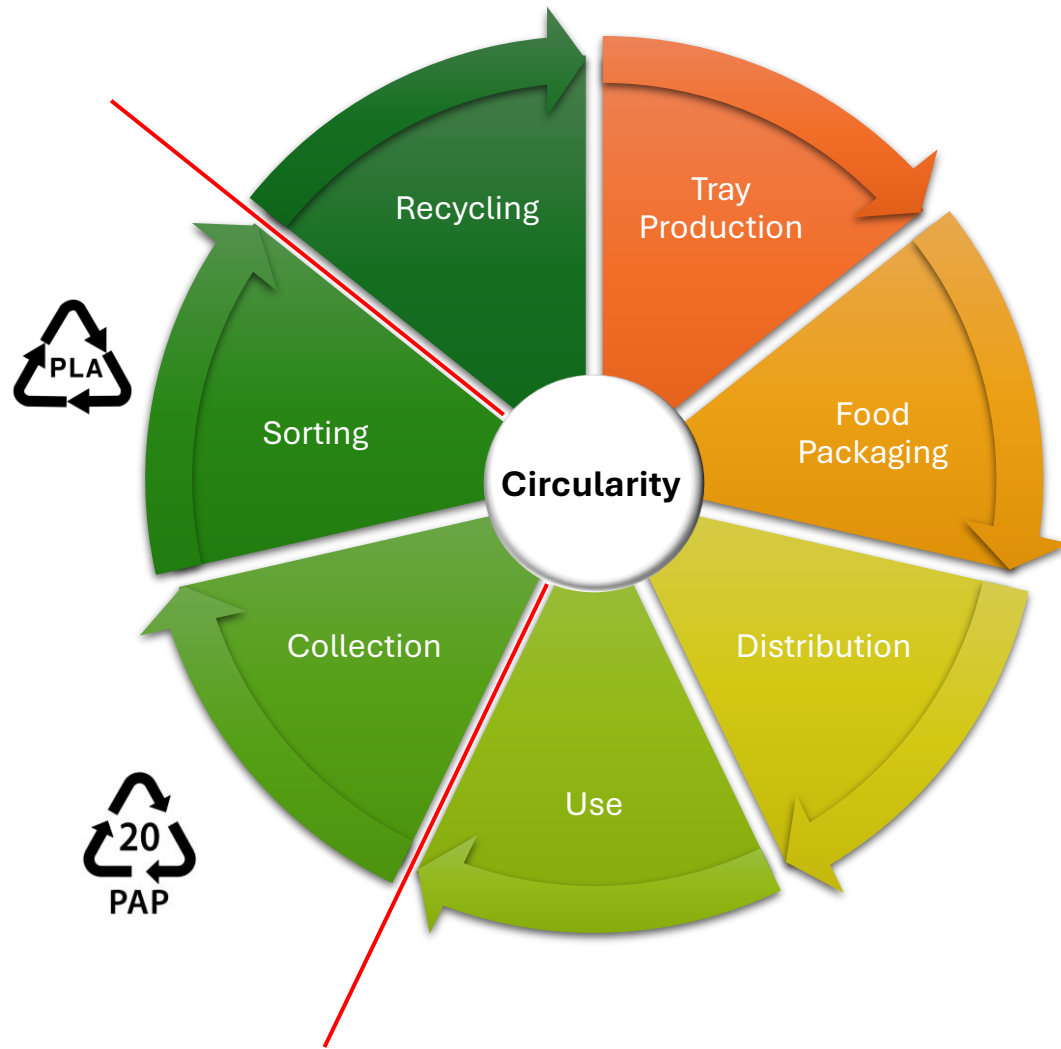
WHAT IS PCR (POST-CONSUMER RECYCLING)

Packaging materials are only considered post-consumer once they have been in the hands of the end user, reached the end of their intended use, and are regarded as waste. Post-consumer packaging is collected through kerbside programs and other recovery systems, then sorted and processed for recycling. Where possible, these materials are converted back into food-grade recycled content, allowing them to be used again in the production of new food packaging.

3rd party audits to confirm the PCR content and certification to support these audits of PCR content – currently no laboratory testing methods to determine PCR.



RENEWABILITY



- **Compostable** (heat, oxygen, humidity)
- **Bio-degradable** (contamination of waste stream)
- **Post Consumer Recycle** rates (collection rates depends on economic value)

REDUCE/REUSE

- Fill Rates.
- Double/Triple layers.
- Hygiene (Up/Down Cycle)



RECYCLING



UPCYCLING



DOWNCYCLING

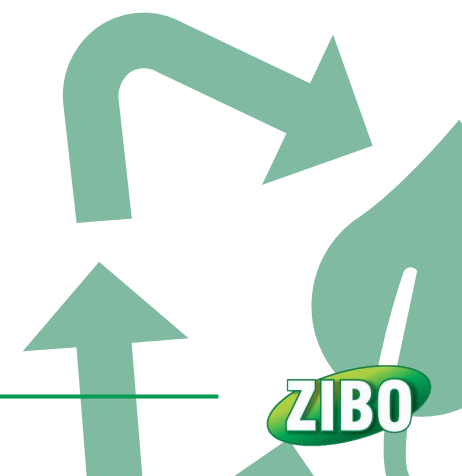
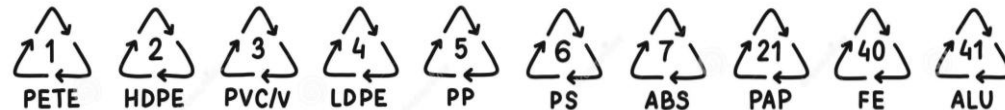
SUBSTRATE VS SUSTAINABILITY

Best practice choice depends on factors such as:

- **Cost**
- **Retail Conditions (Moisture/Protection)**
- **Value Perception**

No single substrate is inherently more sustainable than another in the long run. **Sustainability depends on context** - cost feasibility, product protection under retail conditions, and consumer value perception. The best packaging choice is the one that delivers **optimal protection with minimal total environmental footprint**, not just the one that looks “greener” in isolation.

Base packaging criteria on actual information suited for specific applications.



PET – MATERIAL OF CHOICE FOR BERRY PACKAGING

PET plastic is the preferred packaging for blueberries because it provides excellent product **visibility**, **durability**, and **protection** while being **lightweight** and **fully recyclable**, ensuring both freshness and **sustainability**.

Majority of blueberries are packed in PET (**Heatseal, Clamshell or tubs with lids**)

Heatseal



Clamshell

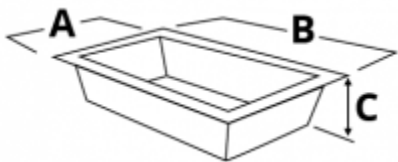


Tubs/Lids



DESIGN FOR RECYCLING

What can producers/packers of blueberries do to achieve better consumer acceptance and recycle rates on PET packaging and be ERP compliant?



Increase Pack Size



Reduce Weight
(Minimum gauge)



Labels
Water soluble/detachable



MONO Materials



Post-Consumer
Recycle



ZIBO

THANK YOU
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