Fibre Drums – Recycling and Reuse
Ghent 2023

Presented by:
Robert Lee – SEFFI President – Industrial Packaging Ltd. Ireland
Lacy Winchell – IFDI Board Member – Greif
Phil Pease – SEFFI & SERRED Secretary – Boval Consulting

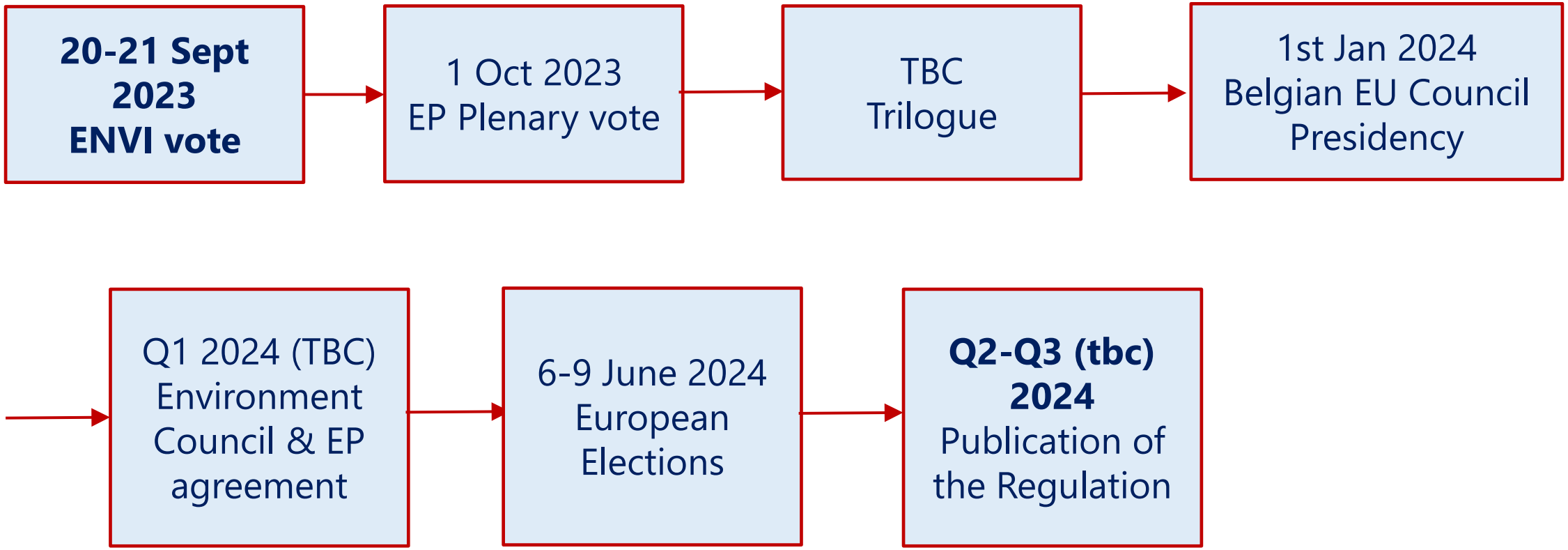
Agenda

- Presentation Goals (Rob)
- Packaging Reuse & Recycling Legislation (Phil & Lacy)
- Fibre Drum materials of construction (Lacy)
- Fibre Drum Applications (Lacy)
- Overview of the market size (Rob)
- Reuse & Reconditioning of Fibre Drums (Rob)
- Recycling of Fibre Drums (Rob)
- Conclusion (Rob)
- Questions

Why?

- Delegates better informed on fibre drums and their applications
- Reconditioners and manufacturers are awoken to opportunities in fibre drum reconditioning & recycling
- Inspiration to test this business model locally

PPWR (EU Packaging Waste Legislation): Current Timeline



Current lobbying by SERRED for used / empty, uncleaned Industrial Packaging to be regarded as ‘non-waste’ when consigned for reuse or reconditioning. Currently differing interpretations across EU.

PPWR (EU Packaging Waste Legislation): Select Points

Packaging & Packaging Waste Regulation	Potential Impact on Fibre Drums
All packaging to be fully recyclable / Designed for Recycling by 2030	Minimal impact: Fibre drum materials can be recycled
Recycled content targets for plastic packaging for 2030 and 2040.	Potentially Difficult – recycled Kraft Fibre can have reduced strength
Reusable / Refillable packaging – targets for 2030 and 2040	Need to ensure Fibre Drums are classed as reuseable packagings
Labelling scheme on packaging materials: Inc; recycled content plus instructions to consumers	Labelling schemes to be determined – probably similar to Italy's
Mandatory DRS to be set up by 1 January 2029 Applies to single-use plastic and metal drink containers < 3 litres.	Only retail packagings?... to monitor

US Packaging Waste Legislation

- Several states passing sustainability laws, but mostly applicable to **single use** food packaging.
- Global customers that purchase from US packaging manufactures require packaging to pass **country specific laws** (ex. Italy, Spain, UK) along with broad-scoping laws coming from the EU.
- **European legislation** and laws are dictating how manufactures comply in the US.
- Sourcing-wise, the US has numerous groups that manage **forestry protections-** PEFC, SFI, & FSC

PEFC™

SUSTAINABLE FORESTRY INITIATIVE

FSC®

Materials of Construction

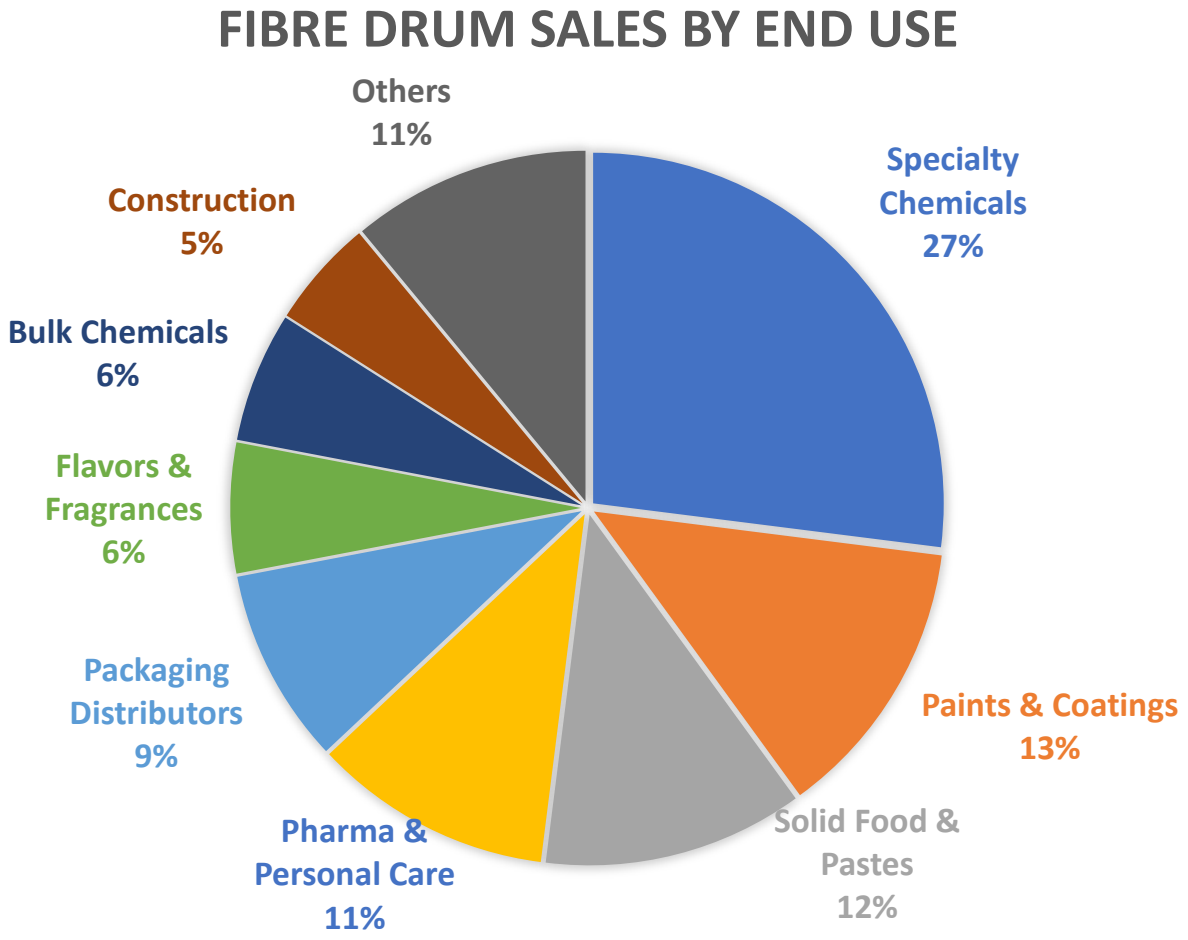
Drum Part	Material
Body	Kraftliner (70/30 virgin/recycled), Steel Chimes
Lid or Base	Kraftliner, Plastic, Steel, Wood
Leverclamp	Steel or Plastic
Integrated Liners or Coatings	Paint, PE, Alufoil, Vinyl
Components	Caulking Material, Adhesives, Drop-in Liners, Silicate

Why Fibre Drums & Applications

Why Fibre Drums:
- Wide range of applications
- High value-for-money
- Lightweight & Easy Handling

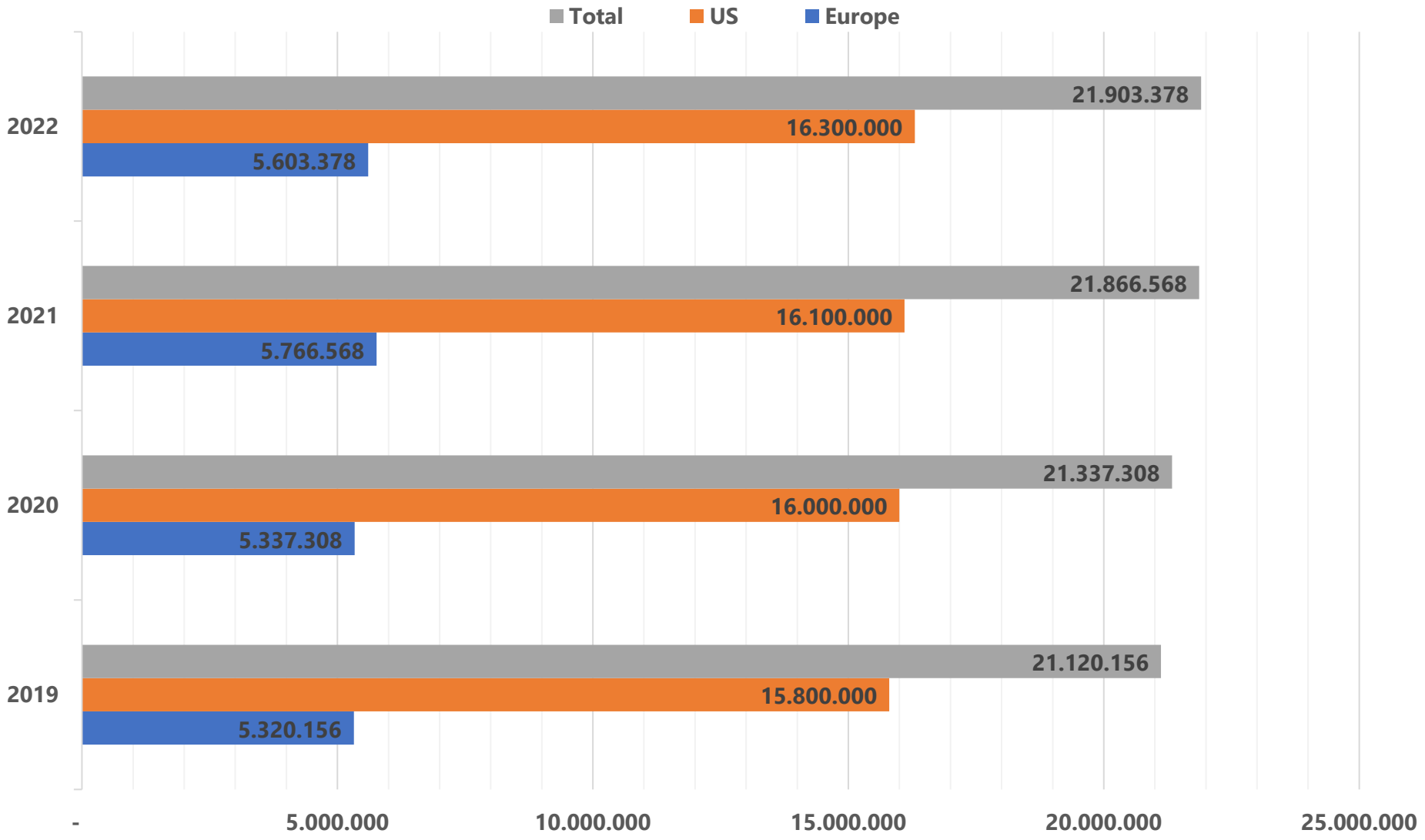
Largest Sectors:
- Specialty Chemical, Paints &Coatings, Food Industries

Fastest Growing Sectors:
- Food, Flavors & Fragrances and Pharma/Personal Care segments represent highest growth segments



Sources: Greif Data, Industry Reports, End Market Associations

Market Size US and Europe



Sources: SEFFI & IFDI Member statistics combined

Secondary Life Cycle- Fibre Drums

Fibre Drum manufactured and shipped to customer.

Fibre Drum filled at the customer, and shipped to their customer.

The end user then has the responsibility for what happens next…..

- Reconditioning & Reuse
- Recycle
- Incineration
- Landfill

Reconditioning & Reuse of Fibre Drums

How?

- Sort and de-label

When does Reuse work

- Local supply matches a local demand
- Waste licenced company has the commercial interest to facilitate reconditioning
- Cost of re-used drums is lower than cost of new

Barriers to Reuse

- Waste licencing & reconditioning network
- Demand for reconditioned Fibre drums
- Bespoke printing and logo's
- Fibre Drums used for viscous materials without a liner
- Number of different sizes

Recycling of Fibre Drums

How?

- Components separated by dechimber or shredder

When does Recycling work

- When drums can't be reconditioned
- It makes commercial sense

Barriers to Recycling

- Integrated liners can be difficult to separate, making the paper non-pulpable
- Machinery is required for drums with steel chimes
- Viscous hard to clean products filled without liner

Conclusion

- Fibre drums can be **reused**
- Fibre drums can be **recycled**
- Talk to your teams

Conclusion

- Fibre drums can be **reused**
- Fibre drums can be **recycled**
- Talk to your teams xxx
- Be alert to commercial opportunities to **reuse or recycle Fibre Drums**

Materials of Construction

Body: kraftliner (70/30 virgin/recycled), steel chimbs

Lid: kraftliner, plastic, steel, wood

Base: kraftliner, wood

Leverclamp: steel or plastic

Integrated Liners or coatings: paint, plastic, alufoil, vinyl

Fibre Drum Applications