Recycling Capability of Release Liner

Alex Knott, Dow Chemical

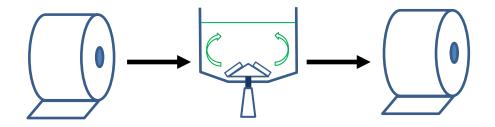
Technical Review - Liner & Matrix Recycling

- VISION "Create a sustainable pressure sensitive labeling industry by offering solutions and providing education to enable matrix and liner recycling."
- Liner recycling
 - Already exists at 'some' scale in Europe (Market Study)
 - Relatively narrow range of materials.
- Matrix recycling
 - Very limited examples of recycling currently.
 - Broad range of raw materials used.
- Different sources for two waste streams.
- Initial focus has been on LINER recycling



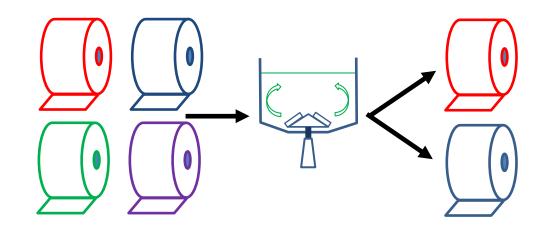
Technical Review - Current liner handling options

1. Release Liner recycling in separate stream. (e.g. C4G/UPM)



CURRENT SITUATION

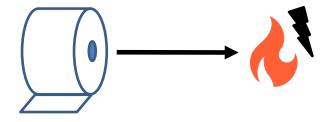
2. Liner recycling in current 'waste paper' recycling stream (multiple grades of paper)





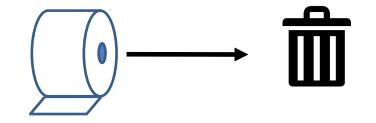
Technical Review - Current Liner handling options

3. Release Liner incinerated (maybe for energy generation)



CURRENT SITUATION

4. Liner to landfill





Technical Review - Growing the portion of recycling

- Understand the existing recycling technology and "bust" some of the existing 'myths' in the market
- Gather information on current recycling processes, understanding of limitations on;
 - Process limitations
 - Equipment limitations
 - Paper end use limitations
- Prepare communication on technology of recycling of liner to share with the wider label industry.
 - White Paper on Paper Liner Recycling
 - White Paper on Filmic Liner Recycling



Technical Review - Recycling actions

- White Paper on Paper Liner Recycling
- Included input from
 - Raw Materials producers (paper and silicone)
 - Recycled Paper producers
 - Recycling companies (collection)
 - Industry organisations (especially paper producing)
- Understand impact of release liner not only on final recycled paper product but also impact on paper process.
- Provide basic technical information on recycling on a 'global' basis, without sharing 'proprietary' process information.



Technical Review - Current Priorities

- White Paper on Paper Liner Recycling <u>Share it as widely as possible</u>
- Share within the current Label industry Presentation for industry events
- Share at adjacent industry events Where the labels are *used* and the liner waste is being generated



Technical Review - Other actions

- White Paper on Filmic Liner Recycling In process
- Set-up of Industry Liner Grade Definitions
 - Make it easier for different liners to be recycled with the most appropriate stream
 - Separate list of definitions for papers and films
 - Modify to suit variations across the globe (Glassine Europe, SCK USA).
 - On Hold
- Gather and share case studies of where/how release liner can be recycled.

