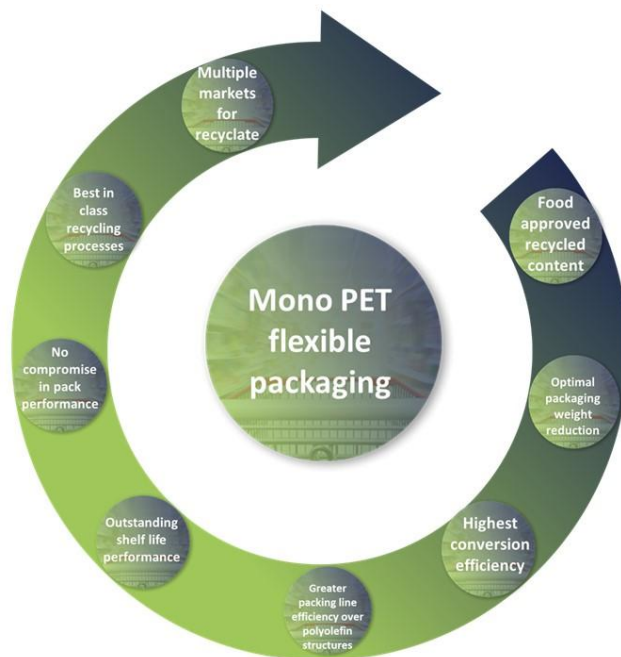


Introducing the Vita Nova Initiative, promoting mono PET flexible packaging for a circular economy

BOPET FILMS EUROPE, Brussels, Belgium

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Vita Nova is a new consortium of industry players promoting the use of mono-PET flexible packaging in the circular economy. BOPET Films Europe and Searious Business are launching the initiative and invite interested parties to join and contribute to this important work. The consortium welcomes players from throughout the industry including producers, sorters, recyclers, machine manufacturers and brand owners.



Mono PET packaging structures deliver on all four of the European Plastic Pact targets. Commercially available with high levels of recycled content, compatible in best in class recycling processes and with multiple economically viable end markets for the recycled material.



Circularity Goals

Although flexible packaging is extremely resource efficient, it is challenging to recycle due to its size and the complex mix of materials, inks and adhesives. Current research into the recycling of flexible plastic packaging waste focusses mainly on the mechanical recycling of polyolefins which in isolation will not achieve European circularity goals. Although mechanical recycling is a well-established process for rigid packaging, it is unlikely to be scalable for flexible polyolefin structures due to the lack of end markets for low quality recyclate which are not suitable for use in food packaging. Feedstock recycling does offer a future end of life strategy for mono polyolefin and mixed plastic recycling but is a high cost and high carbon option and may not always lead to closed loop recycling of plastics back to plastics.

The Vita Nova consortium promises to deliver valuable results which will enable the European flexible packaging market to respond to growing pressures from both the public and

governments to improve the recyclability of flexible packaging. BOPET Films Europe vice chair Michael Kreuter commented,

“We cannot achieve these goals in isolation, and through this Vita Nova initiative we hope to pull together knowledge from across the value chain to improve the circularity of flexible packaging”

Why focus on mono PET flexible packaging?

At least 25% of all flexible packaging applications rely on the material properties provided by PET, and in many cases moving to a polyolefin alternative will lead to an increase in material usage and a drop in packing efficiency without improving the end of life outcome for the packaging. Broadening the scope to include mono PET structures opens up more end markets for mechanically recycled material rather than simply focussing on one solution. It also enables the option of monomer recycling, which is a lower cost and lower carbon form of chemical recycling, with a more realistic possibility of closed loop recycling of flexible packaging waste into new packaging products.

PET films are the only commercially available option for the use of food contact approved recycled content and therefore are a key element of delivering on the sustainability goals of the industry.

The benefits of PET films include:

- Commercially available with high levels of food contact approved recycled content
- Inherent stiffness and stable temperature range which enable high speed packing processes
- Strong odour barrier, preserving flavours and preventing cross-contamination
- Ideal substrate for functional barrier layers due to its stiffness, flatness and stable response to temperature
- Ease of ink adherence making it the printers' choice of substrate
- Better suited for mechanical recycling due to its inherent resistance to contamination and ability to maintain material properties over repeated extrusion cycles

Mono PET packaging structures have the potential to deliver on all 4 [European Plastic Pact targets](#) and enable retailers and brand owners to meet their sustainability pledges. Notably, when using recycled content in flexible packaging used for food applications, PET films are the only current viable option.

Replacing mixed plastic flexible packaging with mono PET solutions would enable better recyclability, improve resource-efficiency and lead to greenhouse gas emission reductions.

Challenges

Like the majority of flexible packaging, PET-films are not currently sorted and recycled in Europe at scale. Vita Nova aims to address this. Steven Davies, Chair of BOPET films Europe commented:

“It’s a sad fact that currently virtually all flexible packaging is being incinerated. Vita Nova comes from the Latin for new life, and this is exactly what we are trying to give to flexible packaging by developing a model for true closed loop recycling. Mono PET structures offer the packaging industry the best in class option in terms of material usage and recycling processes, and are a key element if the industry is to hit the collective goals we have signed up to by 2025”.

Key deliverables for Vita Nova

The aim of the Vita Nova Initiative is to ensure that the use of flexible PET packaging structures reach their full potential as a circular material; keeping it in the economy and out of incinerators.

Over the next 12 months the Vita Nova consortium aims to develop and present:

- Material redesign options moving from mixed plastics to mono PET
- Quality sorting guidelines
- Recycling pathway for PET films (considering both mechanical and monomer recycling)
- Design for recycling guidelines for mono PET packaging
- Research viable end markets for mechanically recycled flexible PET and prove a closed loop recycling process for monomer recycling

Find out more

For more information about joining the Vita Nova initiative, please contact Rosemarie Wuite:
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[BOPET Films Europe](#) is a membership-based trade association, with a mission to promote the value of BOPET films in applications and long life technically demanding industrial applications. Activities focus on the research and promotion of end of life options in order to boost the circularity of all the end markets they participate in.

[Searious Business](#) are game-changers in the plastics industry. A social enterprise business founded in order to prevent plastic pollution, their work involves systemic change on an international level, and accelerating brands towards circular plastic use.