

EU Green Deal:

Fibre-based packaging and the pursuit of a circular economy

An analysis of the impact of the EU Green Deal and its implications on the European packaging industry



PRO CARTON
PACKAGING FOR
A BETTER WORLD

During EU Green Week 2022, Pro Carton, in association with Packaging Europe magazine, hosted a roundtable discussion comprising industry experts from every stage of the supply chain. The objective? To discuss how the European Green Deal is impacting the packaging industry and the role of fibre-based packaging in the pursuit of a circular economy.

Taking part in the discussion were:

- Elisabeth Skoda, Editor, Packaging Europe
- Tiina Pursula, SVP Sustainability, Division Packaging Materials, Stora Enso
- Monika Romenska, Regulatory & Public Affairs Manager, EXPRA
- Klaus Hockl, Managing Director, Cardbox Packaging
- Winfried Muehling, General Manager, Pro Carton

This paper offers a summary of key discussion points and opinions.



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EU GREEN DEAL: ROUNDTABLE

THE PATH TO CIRCULARITY

The European Green Deal sets out key guidelines to ensure all packaging in the EU market is reusable, and recyclable in an economically viable manner by 2030. Experts joining the Pro Carton EU Green Week roundtable were asked for their perspectives on the biggest challenges faced by the industry to achieve this.

Welcoming the main objectives of the Deal, Tiina Pursula stressed it was important to consider the practicality of implementing it. "One key thing is access to separate collection of all packaging... that is the only thing that allows recycling to happen and also to be economically viable.

"This means the development of collection systems at national, regional, and local level... and also targeting reuse. So the issue needs to be looked at holistically," she said, pointing not only at the packaging itself but also at the wider infrastructure such as transportation and hygiene requirements.

Hockl agreed with Pursula's comments, adding that the system also needed to be consistent and understood across each member state. "We have seen over the last two years that many countries have applied many different rules... which makes maybe the European Green Deal not visible and not reachable for everybody," he said.

Romenska made the point that in many territories there was "no official definition of recyclability".

She also pointed out the importance of considering not only the CO2 impact of packaging but also considering it from a holistic perspective, which includes its functionality and purpose. "If the packing is not functional, the product deteriorates. It's very important to have this holistic approach and to coordinate all the different policies because we see that some policies are not compatible."

She also underlined that not all member states had yet implemented waste legislation and that by 2025 there would be new legislation, creating a "totally different picture".

Muehling stressed that when it came to re-use versus single-use, it was important to undertake a "proper lifecycle analysis" of packaging alongside trying to come up with Europe-wide solutions: "Whenever we have solutions that are done differently in each country, we are simply losing credibility. And we are losing the understanding of the consumers who will need to implement those solutions."



"There are a lot of opportunities to create products that are truly circular and to further improve the fibre recycling system."

TIINA PURSULA, STORA ENSO

A collaborative approach

Skoda echoed the need for countries to work together and then asked the panellists whether they thought the Green Deal could be a boost for the packaging industry and where the biggest wins and opportunities might be.

Pursula said she thought there were "a lot of opportunities to create products that are truly circular and to further improve the fibre recycling system. "Paper and packaging have the highest recycling rate of all materials according to the statistics...and the industry has already set even more ambitious targets, such as the 4evergreen Alliance with its 90% recycling target for the fibre-based packaging by 2030. It's very important that the Green Deal can provide the opportunity to have this improved and increase collection."

Muehling stressed that taking recycling from 82%, where the industry is today to 90%, would be tough. "This would be the most difficult one...it is a lot easier to go from 50% to 60%". He added that it would take the entire value chain to work together to achieve this.

Romenska cited initiatives in various countries, such as Malta, where the Internet of Things is being used to sort containers; and sorting projects such as Holy Grail 2.0 where different innovations in packaging sorting, are being tested.

"So innovations in digitalisation are another perspective that I think will be promoted by the Green Deal...it is already set to reach the new targets and in some countries, it will go beyond the minimum European targets.

Hockl said the Green Deal had been a catalyst for the innovation of more sustainable, new fibre systems, coatings, and packaging solutions, but once again stressed the need for the industry to consider consumer needs. "I think it's also extremely important that we keep it simple."

Muehling agreed this was "critical", adding: "The consumer needs to have a credible, easy-to-understand system in place because if they don't understand it, they will not do what we need them to do...if you make it too complex, the whole thing will fail in the long run."

Understanding the supply chain

What is required for the guidelines to be implemented, and embraced by the industry, and what are the challenges?

Pursula said challenges differ at each point in the supply chain. "We need to start from the products and their end uses and understand the complexity. Packaging is there to protect the product."

"So functionality is the starting point and the different solutions to fit different needs and end uses in relation to the materials used in the manufacturing...it's also quite important that there is also the involvement of the industry in thinking of this."

"We need to keep it easy and understandable for the consumers. But then we need to manage all the complexity within the value chain and the industry to make it work. So, we have these two layers that need to work well together," she added.

Food safety was mandatory, said Hockl, saying: "Maybe it's better not to find a new solution if you're not able to achieve food safety: I think it's important for our credibility to bring packaging to market, and to the consumer, which is best for its application and purpose."

"This means not every packaging should be fibre-based. I'm convinced that our colleagues in plastic packaging have great applications and great developments."

Muehling agreed it was "not a discussion of replacing, for replacing sake".



"It is not a discussion of replacing, for replacing sake."

WINFRIED MUEHLING, PRO
CARTON





"How realistic is it that we can achieve a harmonised solution? I would say it's not realistic. But it is still desirable."

WINFRIED MUEHLING, PRO CARTON

The future of waste regulations

Picking up on Romenska's point that in May the European Commission presented details of developments of its Packaging Waste Regulations, Skoda acknowledged it was important to bear in mind the full picture, asking panellists if they thought such a waste collection system was realistic; what would be required to achieve it and what benefits it might offer to the industry.

Romenska responded that this was part of EXPRA's discussions with local authorities. "We believe, and I think that it's shared by other stakeholders, such as Municipal Waste Europe and Grand Recyclage Centrum (GRC), that this is a very ambitious objective. And we're not sure how much benefit it will bring because obviously, you cannot collect packaging in Malta, the same as in Norway."

She stressed that there was also the issue of changing consumer habits. "It takes two to four years for people to adapt, so this means in this period the packaging will not be sorted in the best way because people have to learn." She also cited the significant investment needed to implement changes in collection and sorting systems.

Muehling added: "How realistic is it that we can achieve a harmonised solution? Looking at the discussions we have at an EU level, I would say it's not realistic. But it is still desirable."

He said even just being able to separate fibre-based packaging from other waste would be "a fundamental benefit".

Pursula agreed: "Absolutely. Keep it simple, keep it local and focus on the impact. To make the separate collection work, it needs to be easy for the consumers to understand and follow. Labelling and conveying the right information to consumers is the key. It doesn't mean that the system needs to be the same everywhere, but maybe it can be harmonised with QR or other codes in addition to other information on the box."

Muehling echoed Romenska's earlier point about breaking current consumer habits but said removing complications was the key. He explained that in his home country, Switzerland, each community had separate recycling stations for different types of packaging and paper.

Hockl added that 4evergreen was compiling a European map of collection systems because the infrastructure was so different in each country and in different regions. "You see big deviations between the east and the west and north and south. And you also have big differences within one country," he said.

“You can’t recycle what you don’t collect”

Skoda then turned the discussion back to the importance of sorting, asking the panellists what role they believed sorting would have in driving the quality of recycled raw materials and how they saw the role of the European Commission.

Romenska said there was a lot of focus on plastics, with the collection and sorting thought about “in silos” rather than holistically. She said EXPRA was supporting members to exchange best practice and improve percentages, to keep sorting losses to a minimum, while at the same time collecting high-quality material.

She cited one Italian EXPRA member, which has introduced different fees for different types of paper and packaging. This, she said meant that traceability was important. “So that’s why I mentioned the Holy Grail 2.0 project...to ensure traceability of the packaging.”

Pursula added: “Yes, I agree, you really cannot recycle what you don’t collect... It cannot happen without really high separate collection rates of post-consumer packaging waste... So to scale up recycling from the current situation even further and not to lose any valuable raw materials, it should include out-of-home consumption, that also needs to have access to separate collection infrastructures to meet this high target.”

Romenska again stressed the importance of engaging consumers. “They have to have the information and then they have to be motivated to believe that their efforts are contributing to the environmental impact in general.”



25 loops: The benefits of cartons

Skoda cited new research that fibres can be reused more than 25 times with little or no loss of integrity, asking if panellists believed this would change the perception of cartonboard in the minds of industry and consumers.

Pursula said it was certainly a positive that discarding packaging didn't mean the end of life for its fibres but added that it was still important to bear in mind that fresh fibres are still needed.

And Muehling added that consumer studies clearly show the importance of environment-friendly packaging credentials with more than 60% of consumers considering the environmental impact of the purchasing decisions they make. "So, packaging being the first touch point for the consumer, it is a very critical moment for making a decision to buy, or not to buy, a product.

"And if we look at the perception of cardboard, consumer studies clearly show there is a strong preference for cardboard material. It is seen as a natural material...renewable."

Hockl expressed the need to be transparent in consumer communications, using Pursula's point about the use of virgin fibres as an example of something consumers might not know, but needs to be communicated.



"Packaging being the first touch point for the consumer, it is a very critical moment for making a decision to buy, or not to buy, a product."

WINFRIED MUEHLING, PRO CARTON





A growing desire for sustainability

The panel was then asked if anyone had noticed a marked increase in interest in cartonboard since the introduction of the European Green Deal.

Muehling said perhaps more important was consumer pull in looking for truly recyclable packaging materials. “One of the biggest challenges that a brand owner faced today is to make sure that they put products on the shelves that will not have a negative impact on the environment...One of the biggest risks is being attacked by consumer organisations about this. So it is keeping everybody busy and this year: 2025 I think offers a big, big challenge for everybody to ensure all packaging materials will be recyclable.”

Hockl added his business was seeing “very strong interest”, particularly in its alternative to plastic spoons in yoghurt cartons, plus a strong interest in its development of coatings for different applications.

However, Romenska warned that the Single-Use Plastic Directive could prompt some migration towards “multilayer with the fibres” to avoid the term “single-use”. However, Pursula responded that systems already existed for recycling barrier coating and the challenge would be in ensuring the correct collection and sorting infrastructure was in place.

Romenska also pointed out that the Directive centred on instructed consumers to ensure they bin products when they’re out-of-home but failed to address that many of those products – such as drinks cups, could be recycled. “They are suggesting that a coffee cup with a plastic lining should be thrown in the normal garbage, which is crazy because it can be recycled. And we argued with the commission that it is not viable to put a sign that it should be put in the garbage. The answer was that the Directive concerns littering and not recycling. So this is one of the best examples, I would say, for communication with citizens.”

Best practice examples

Panellists were then asked to cite examples of what they consider to be a good innovation.

Hockl said his company's cardboard spoon, in the market for one and a half years, had been well received. He said Cardbox Packaging had also developed eco-trays to replace plastic ones used for herbs in the Austrian market, while at the same time working on the development of different coating for grease and water resistance.

Muehling added that the key innovation with Cardbox' cartonboard spoon was the way it was folded – an application not considered previously. He also cited multipacks of drinks cans, many of which now feature cartonboard holding them together instead of plastic.

"The next level is perhaps a tube shape. If I go to a cosmetics aisle today, there is a lot of plastic... Are there ways we can look at a lipstick coming in in a renewable cardboard package? There are a lot of exciting developments for fibre-based material."

And Romenska told panel members about a pilot project running in Italian coffee shops where separate containers are provided for disposal of the cup and stirrer. "The whole process is organized and the collected are taken to recycling facilities; so the circle is kind of closed. It's a small scale, but I think it's a very simple and useful exercise to ensure that all packaging, even if not recycled in usual recycling facilities, can be collected, and recycled."



"There are very interesting projects by some of our members, such as Circular Lab, which is looking at how the circular economy is working in one small village in Spain."

MONIKA ROMENSKA, EXPRA

Realising the goals of the EU Green Deal

To summarise Skoda asked what panellists thought were the steps the industry needed to take to realise the goals of the EU Green Deal?

Pursula said it would need investment. "We have set ourselves quite ambitious targets - fully regenerative solutions by 2050, and in the longer-term net positivity when it comes to biodiversity and carbon, and full circularity is also our target."

"We are really focusing on some flagship projects. When we think about circularity, for example, one of our flagship projects is our collaboration with Tetra Pak, in which we are jointly investing in recycling capacity for beverage cartons.

"In Poland, this recycling line will triple the annual recycling capacity of used beverage cartons from 25,000 tonnes to 75,000 tonnes. It will allow the recycling of the entire volume there and also in some neighbouring countries.

"So it's important to invest in recycling... it's a good example of how by working together with Tetra Pak we ensure that not only the fibres are recycled, but also the barrier materials. So it's a full recycling solution that's significantly increasing the recycling capacity.

Added Hockl: "As a company, we are also investing strongly in new developments and sustainable solutions. I mentioned before our coating development, and we have just invested in a new coating line to support the development of special, recyclable, and sustainable coatings. But the whole industry has to invest in the new packaging solutions.

"We need to invest in collection systems. And I think from the EU side, it's important we have a legal system, which is clear and common throughout the European Union."

Muehling added it was also important to look at the raw materials and sustainable forest management. "I think every member of Pro Carton would put sustainable forest management very, very high on the top of the agenda today." He referenced the value of the forests in capturing carbon and the fact that 100% of materials from trees are used by industry.

Romenska added that while her association was not directly involved in investing systems and infrastructure, it was there to support members to exchange best practice and innovation. "There are very interesting projects by some of our members, such as Circular Lab, which is looking at how the circular economy is working in one small village in Spain."

EXPRA also offers an online tool that allows companies to check if their packaging is collected, sorted, and recycled in different European states.

Navigating the future of sustainable packaging

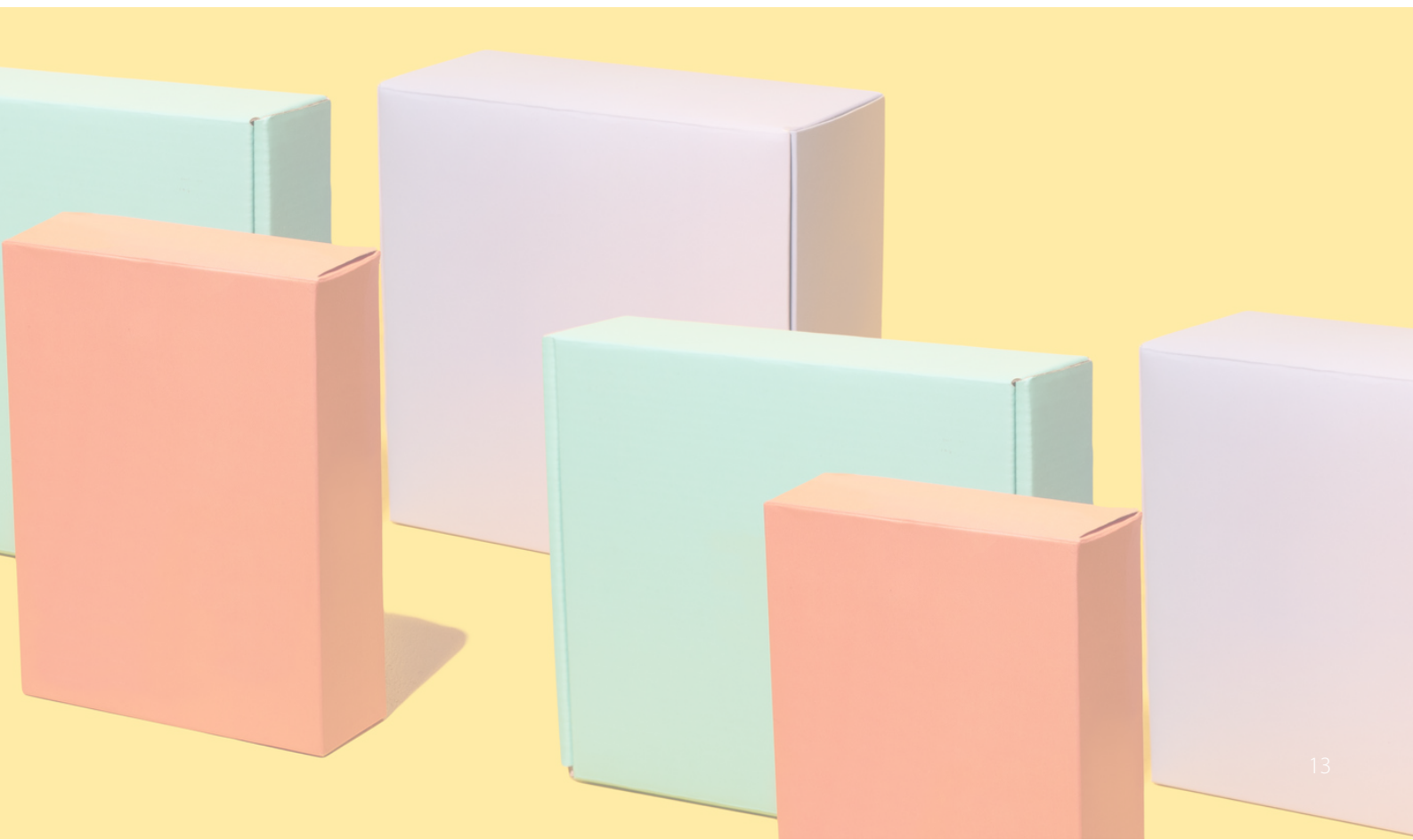
Finally, Skoda asked how brands can best navigate the packaging industry and if there are guidelines or support to help them understand the capabilities of fibre-based packaging?

Pursula said 4evergreen was seeing many brand owners across the value chain working together on the design guidelines. She also again pointed to the importance of making things very clear for consumers, to help them understand the role they can play by putting information onto packaging.

Hockl agreed that "consumer participation is 100% key to success, and to further increase the already high recycling rates."

"I think there are many good examples of how brand owners understand their responsibility in the supply chain and for fibre-based packaging and sustainable solutions."

Summing up, Muehling stressed this cross-industry collaboration. "You cannot solve today's problems just by yourself. It takes the involvement of all stakeholders in the value chain to meet the challenges that are in front of us... I think discussing things openly and defining the best solutions, is what the industry needs and what the environment needs. I'm sure that the fibre-based packaging industry will play its part to solve the challenges that are ahead of us."



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