



# WPS INSIGHTS

**Flexible Packaging Industry**

OCTOBER 2026

## EDITORIAL

Flexible packaging developments this month reflect a range of priorities, from product protection and production performance to material selection and recyclability. The initiatives covered also sit at different stages, from products in validation to frameworks still seeking adoption.

Tetra Pak's paper-based ice cream wrap is being validated with producers ahead of a planned Q4 2026 rollout, and PepsiCo and P&G are named as charter members of the PaperFlex Consortium, which plans trials of paper-based alternatives. ACG's polypropylene blister targets oxygen and moisture protection for sensitive drug formulations. Nespresso's move towards aluminium brings coffee quality and shelf life into focus, with the reasons cited differing across sources. In Japan, DIC and artience have set out a common protocol for evaluating deinking and delamination and are inviting wider adoption.

Together, the stories show packaging decisions weighing material design, product performance and end-of-life considerations, with the stage of development and the evidence available varying across initiatives. The articles that follow set out where each one stands.

## EXECUTIVE TAKEAWAYS

Four themes run across this month's five stories.

### 01 Packaging developments are progressing at different stages

Tetra Pak's wrap is being validated with producers ahead of a planned Q4 2026 rollout. PepsiCo and P&G are named as charter members of PaperFlex, which plans collaborative trials, while DIC and artience are inviting Japanese industry stakeholders to adopt their recyclability protocol. For buyers and suppliers, understanding each initiative's current stage helps clarify what it means for packaging specifications and future planning.

### 02 Product protection is central to material choice

Nespresso's move towards aluminium brings taste and aroma into focus, with one report also citing shelf life, alongside a company comparison describing the two formats' footprints as comparable. ACG's polypropylene blister targets oxygen and moisture protection, with stated transmission rates of less than 0.60 g/m<sup>2</sup> per day for water vapour and less than 0.20 cm<sup>3</sup>/m<sup>2</sup> per day for oxygen. These examples highlight the importance of matching material choices to product requirements.

### 03 **Recyclability involves both design and evaluation**

ACG positions recyclability as a design aim for its blister, while DIC and artience have set out a common method for evaluating deinking and delamination. The developments address different parts of the recyclability question, from packaging structure to the assessment of recycling performance.

### 04 **Material alternatives bring multiple considerations into the decision**

Paper-based formats feature in both Tetra Pak's wrap development and the PaperFlex Consortium's planned work. Nespresso's move towards aluminium illustrates a different material choice, one the company ties to product quality considerations. Across these stories, material selection involves weighing product needs, production requirements and recyclability objectives.

## IN THIS ISSUE

- 01 Nespresso's Exit from Paper Capsules Comes with Reasons That Vary Depending on Where They Appear
- 02 A Paper-Based Ice Cream Wrap Is Planned for Q4 2026, but Validation Is Still Under Way
- 03 PepsiCo and P&G Are Charter Members of the New PaperFlex Consortium, but Its Work Remains Aims and Planned Trials
- 04 ACG's Polypropylene Pharma Blister Targets the Oxygen Gap, with Barrier Figures Supplied by the Maker
- 05 DIC and artience Set Out a Common Recyclability Test Protocol for Films in Japan, but Adoption Is Still an Invitation

## Nespresso's Exit from Paper Capsules Comes with Reasons That Vary Depending on Where They Appear

### WHY IT MATTERS

Nespresso is ending its home-compostable paper capsule to concentrate on aluminium. The company's own stated reasons centre on protecting coffee quality and, in one wire report, short shelf life after opening, which places product protection rather than end-of-life at the centre of the decision.

## 79 g vs 81 g

Estimated CO2 per espresso, paper vs aluminium capsule. Company figures, given as CO2 equivalent in the wire report

## 14

European markets in which the capsules had been tested, per the wire report

## 82%

Paper pulp content of the capsules, per the Packaging Europe account

### HIGHLIGHTS

- Nespresso is dropping its Paper-Based Collection in favour of aluminium. Neither the FAQ on Nespresso's website nor Packaging Europe gives an end date.
- The FAQ points to customer feedback and to coffee taste and aroma, while Packaging Europe points to consumer feedback and to product quality. Only the Swiss wire report adds short shelf life and the wider 'product experience'.
- In the FAQ, the two capsule types are presented as comparable in footprint, with no gram values. Those figures (79 g for paper, 81 g for aluminium) surface only in trade and wire coverage.

#### → What Has Been Decided

- Packaging Europe reports that paper-based capsules will stop being offered by Nestlé under the Nespresso brand. Per the wire report, press reports were confirmed by a Nestlé subsidiary spokesperson in response to the AWP news agency.
- Company FAQ, discontinuation entry. A decision has been taken to end the Paper-Based Collection, with the company's capsule work centring on aluminium from now on.
- No source gives a firm end date. Per the wire report, as of 30 September 2026, some Swiss boutiques were expected to keep the capsules for around a month, with the exact timing set by remaining stock.
- Testing of the product covered 14 European markets, per the wire report. The FAQ is undated and names no affected markets.

#### → Reasons on Record

- The company's own experience is presented as confirming that aluminium best protects coffee quality from roasting to cup, which is the stated basis for ending the range. Taste is put first, and the paper capsules are framed as an extra option that was intended not to cost any flavour.
- In the FAQ on Nespresso's website, aluminium is judged the best way to keep the coffee's taste and aroma, a view the entry ties to a careful look at customer feedback.

**four weeks once opened**

*The reported window for using an opened pack of paper capsules, set against up to a year of stated protection for aluminium.*

## LESSONS & ACTIONABLES

Teams weighing compostable against aluminium formats may want to ask suppliers for opened-pack shelf-life data and for any assessment behind the 79 g and 81 g figures, including whether they are CO<sub>2</sub> or CO<sub>2</sub> equivalent, before using either a protection or a footprint argument in a format decision.

# A Paper-Based Ice Cream Wrap Is Planned for Q4 2026, but Validation Is Still Under Way

## WHY IT MATTERS

Paper-based formats are being positioned for a category where cold-chain performance and line reliability matter. The article relays the product claims without independent data, marking only the thinness figure as reported, and gives no recyclability claim, barrier data or price.

### up to 85%

Maximum paper share of the wrap, from FSC-certified or other controlled sources, company figure

### 53 GSM

Stated weight of the wrap, reportedly up to 50% thinner than some paper-based options

### 24%

Global consumer share seeing sustainability as important in ice cream packaging, from Innova surveys 2024

## HIGHLIGHTS

- Tetra Pak Ice Cream Wrap remains in validation with European producers. The plan is a staged start in Q4 2026, opening in Europe and widening to other markets later.
- The material reviewed gives no recyclability claim, barrier data or pricing for the wrap.

### → Material and Design Claims

- Up to 85% of the material is stated to be paper, from FSC-certified forests and other controlled origins. Polymer, ink and lacquer form the balance, layered to help the pack perform while keeping material use efficient.
- Its thin, multi-layer structure, labelled 'advanced', is designed to combine a paper-based barrier with further protective layers.
- Weight is given as 53 GSM, and the wrap is reportedly up to 50% thinner than certain paper-based options, which are not named.
- It is intended to run dependably in ice cream plants, keep material use lean and protect the product, with the design shaped around how ice cream factories actually work.
- Cold-chain performance and shelf visibility for brands are the stated aims, along with a wider set of packaging choices for ice cream producers.

**up to 50% thinner** *At 53 GSM, the wrap is reported to be up to 50% thinner than some paper-based alternatives.*

---

#### → Validation and Rollout

- Among the European producers taking part in validation is the Swedish company Triumf Glass.
- Two goals are set for the trials, learning from consumers and checking how the wrap behaves on working production lines, both ahead of broader commercial sale.
- Commercial introduction is planned in stages from Q4 2026, with Europe first and other markets to follow later. This is a plan, not a confirmed date. Packaging Europe's own headline describes a launch, while the article body places the wrap in validation with producers.

#### → Consumer Context

- The Innova Lifestyle & Attitudes Survey 2024 and Innova Packaging Survey 2024 put the share of consumers globally who see sustainability as an important part of ice cream packaging at nearly a quarter (24%). Paper is the preferred format in this category for 16%.

#### LESSONS & ACTIONABLES

Brands considering the wrap for frozen lines may want to ask for recyclability evidence, barrier data and the named benchmarks behind the up to 50% thinner figure, and to treat Q4 2026 as a plan until validation results are shared.

## PepsiCo and P&G Are Charter Members of the New PaperFlex Consortium, but Its Work Remains Aims and Planned Trials

### WHY IT MATTERS

Two brand owners have become charter members of a group aiming to find paper-based replacements for flexible plastic packaging, which is a signal worth tracking for anyone selling or buying multi-layer formats. The information comes from an advocacy organisation's own release, and the release gives no dates, full member list or results for the consortium. The favourable reading of the move is that organisation's judgement and not an independent finding.

**47%**

Share of leaked plastic mass attributed to flexible plastic packaging, Pew study as cited in the release

**26 million metric tons**

Pew's estimated global avoidance potential for flexible packaging, as cited in the release

**15.6%**

Backing for As You Sow's 2025 shareholder proposal at PepsiCo (14% at P&G)

## HIGHLIGHTS

- Convened by the Ellen MacArthur Foundation, the new PaperFlex Consortium has PepsiCo and Procter & Gamble as charter members. Its target is paper-based replacements for flexible plastic packaging that would break down if they escape into nature, with recyclability tied to how far collection improves.
- Joint trials are planned, with biodegradable coatings and the line performance of paper-based materials among the areas named. No dates or results are given.
- Five companies faced As You Sow shareholder proposals in 2025 before the two joined, though the release stops short of saying the proposals led to the membership.

### → The Consortium and Its Planned Work

- The As You Sow release, dated October 1, 2026 with an El Cerrito, California dateline, names PepsiCo and Procter & Gamble as charter members of the PaperFlex Consortium. In its own words, the release presents the membership as following its earlier engagement with both companies, though it gives no company evidence linking the two.
- The Ellen MacArthur Foundation convenes the group, whose stated design goal is materials that biodegrade if they accidentally reach the environment and whose recyclability rises as collection systems get better.
- The group is to run the trials together, and the areas listed include how paper-based materials behave on the production line as well as biodegradable coatings.

### → The Scale of the Flexible Plastic Challenge

- Breaking the Plastic Wave, a Pew study, is cited in the release as finding that flexible plastic packaging represents 47% of plastic mass entering the environment through leakage.
- The same Pew work is cited as ranking flexible plastic packaging as the single largest chance to reduce or remove plastic. Its estimate, again as cited, puts avoidable flexible packaging worldwide at 26 million metric tons through substitution, redesign and innovation, with no year given.
- Two market points are the release's own, not Pew's. It describes flexible packaging as the quickest-growing packaging type with mostly unrecyclable volume, and it singles out multi-layer laminates, found in items such as sealed pouches and potato chip bags, as difficult to recycle or not recyclable at all.

**47%**

*If the Pew figure as cited holds, flexible plastic packaging is a leading target for substitution, the same format the 2025 shareholder proposals focused on.*

### → Shareholder Pressure and What Comes Next

- Amazon, Kraft Heinz, Mondelez, P&G and PepsiCo each received a shareholder proposal from As You Sow in the 2025 proxy season, calling for a transition off flexible plastic packaging.
- PepsiCo's proposal drew 15.6% backing and P&G's drew 14%, while results for the other three companies are not given.
- Charter membership came after those proposals, but the release does not state that one caused the other. Crediting engagement with the companies is As You Sow's own framing.
- Active backing for the consortium from Amazon, Kraft Heinz and Mondelez, the three remaining proposal recipients, is something As You Sow plans to encourage, with PepsiCo and P&G held up as the model. The release does not show any of the three as having joined.
- The release describes the move as positive steps, which is advocacy judgement. Material from the companies or the convener confirming the move was not part of what was reviewed.

### LESSONS & ACTIONABLES

Suppliers of multi-layer flexible packaging to PepsiCo or P&G may want to ask those customers what charter membership commits them to, since the release gives no timeline, and to wait for published trial results on coatings and line performance before reading it as a specification change.

## ACG's Polypropylene Pharma Blister Targets the Oxygen Gap, with Barrier Figures Supplied by the Maker

### WHY IT MATTERS

The launch is aimed at a gap ACG's news page identifies in polypropylene blisters, where moisture needs are within reach but keeping oxygen out may still prove difficult.

**less than 0.60  
g/m<sup>2</sup> per day**

Stated water vapour transmission rate, company figure

**less than 0.20  
cm<sup>3</sup>/m<sup>2</sup> per day**

Stated oxygen transmission rate, company figure

**PP/EVOH/PP**

Forming structure of RecycloPod PP Ultra

### HIGHLIGHTS

- RecycloPod PP Ultra, a polypropylene blister system, is aimed at high protection against both oxygen and moisture, with recyclability treated as a design aim.
- Its forming structure of PP/EVOH/PP comes with stated barrier figures of less than 0.60 g/m<sup>2</sup> per day for water vapour and less than 0.20 cm<sup>3</sup>/m<sup>2</sup> per day for oxygen.

- Neither test conditions nor independent testing accompany the barrier figures, and the page attaches no recyclability rating.

### → Product Design and the Gap It Targets

- The system is meant to give pharmaceutical blisters high barrier performance against oxygen and moisture alike, within a design aimed at recyclability.
- Aimed at vulnerable drug formulations, the product is intended to give a fuller barrier against both oxygen and moisture. The market gap behind it is oxygen, with polypropylene blisters positioned as already handling moisture but possibly falling short there.
- Its forming structure stacks polypropylene, ethylene vinyl alcohol and polypropylene (PP/EVOH/PP).
- On pharma production lines the blister is intended to thermoform and seal dependably, and adding PP lidding film is designed to leave a structure that is mostly polypropylene.
- Development involved customers, who are not named.

### → Stated Barrier Performance

- Water vapour transmission is given as less than 0.60 g/m<sup>2</sup> per day.
- Oxygen transmission is given as less than 0.20 cm<sup>3</sup>/m<sup>2</sup> per day.
- Both figures are ACG's own. The page does not specify temperature, humidity or sample thickness for the tests, and no independent testing is cited.

**less than 0.20  
cm<sup>3</sup>/m<sup>2</sup> per day**

*The stated oxygen transmission rate, aimed at the barrier gap the blister is designed to close.*

### → Recyclability, Regulation and the Pod Family

- The page frames recyclability as a design aim only. It names no rating, no certification, no recycling stream and no recycling percentage, so the blister should not be treated as confirmed recyclable.
- The page places the development against two pressures, the EU Packaging and Packaging Waste Regulation (PPWR) that manufacturers are getting ready for, and a sharper focus on whether packaging can be recycled.
- Taking its cue from a pea pod and how it keeps its contents safe, a new ACG 'Pod' line of packaging begins with this product. Sustainability, shifting regulation and the packaging needs of the future are its stated design drivers, and the line is pitched as sustainable packaging.
- The page appears to carry text first published in European Pharmaceutical Manufacturer.

## LESSONS & ACTIONABLES

Pharmaceutical packaging teams may want to obtain the temperature, humidity and sample thickness behind the stated less than 0.60 g/m<sup>2</sup> per day and less than 0.20 cm<sup>3</sup>/m<sup>2</sup> per day values, plus any independent test data, before comparing the blister with current structures, and to ask which recycling stream it is designed for before counting it toward recyclability goals.

# DIC and artience Set Out a Common Recyclability Test Protocol for Films in Japan, but Adoption Is Still an Invitation

## WHY IT MATTERS

DIC and artience have set out a shared way to test deinking and delamination in Japan, targeting results that until now came from each company's own conditions and criteria and are positioned as hard to compare. The aim is a single yardstick for converters, brand owners and recyclers. The protocol is not yet an adopted standard, and the industry-first label depends on a survey of public information carried out by the two companies themselves.

### 3

Core elements of the protocol, from reporting format to evaluation criteria and test procedures

### September 2026

Cut-off of the two companies' own public-information survey behind the industry-first claim

### 14-16 October 2026

TOKYO PACK 2026 dates, when protocol-related work was due to be shown

## HIGHLIGHTS

- DIC Corporation and the artience Group, acting through Toyo Ink Co., Ltd., set up a common evaluation protocol covering deinking and delamination when film packaging is recycled as material in Japan.
- The intent is that recyclability can be judged against one common Japanese yardstick, with the protocol covering test procedures, evaluation criteria and a reporting format for converters, brand owners and recyclers.
- The companies invite Japanese industry stakeholders to adopt it, but no outside body is named as having done so.

### → The Problem the Protocol Targets

- Before this, Japanese deinking and delamination evaluations relied on in-house test setups and judging criteria, and the release links that to the difficulty of setting results from different companies or materials side by side.
- Design-stage recyclability checks and information exchange along Japan's supply chain are both described as having suffered from the missing common basis.
- Two steps are described as critical to high-quality material recycling, deinking to strip printed ink and delamination to pull layered films apart. Films, printing inks and laminating adhesives are among the materials that flexible packaging combines.
- The Japanese government ranks the circular economy among its key growth strategies, and demand is rising both for high-quality recycled plastics and for designs that make recycling easier.

### Proprietary test conditions

*Results that cannot be compared across suppliers limit what a design team can learn about recyclability at the specification stage, which is the problem this protocol sets out to address.*

### → What the Protocol Contains

- The protocol was developed jointly by the two companies, combining their know-how in recycling technology with that in printing inks and laminating adhesives.
- The protocol is built on three core elements. The first, its test procedures, aims at reproducible results in Japanese testing settings by fixing the equipment, conditions, material handling and operating steps.
- The second element covers evaluation, with deinking, delamination and the quality of the recycled plastic each judged against criteria presented as objective.
- The third element is a standard reporting format, which records how each test was run and what it found in one uniform layout, making results easy to compare and pass between stakeholders.
- The claim to be the first common protocol for the Japanese market rests on a check the two companies ran themselves. Using public information as of September 2026, they looked at whether film packaging associations or their members had published any industry-wide protocol in Japan.

| User group   | Stated benefit if the protocol is adopted                                                                |
|--------------|----------------------------------------------------------------------------------------------------------|
| Converters   | Easier decisions on printing and processing settings and on materials, with recyclability given priority |
| Brand owners | Data that is objective and dependable, to guide the choice of packaging materials that recycle well      |
| Recyclers    | Better recycled plastic quality, through processing conditions set to suit each material's properties    |

### → Adoption Status and Next Steps

- Helping to build a circular economy is one stated aim of the two companies, and speeding up material recycling for flexible packaging is the other.
- Further work is planned to make the protocol more accurate and practical, drawing on how real packaging materials behave in Japan's recycling processes.
- Adoption across Japanese industry is being sought, with the goal of making the protocol the benchmark for judging flexible packaging recyclability. Industry-standard status has not been reached.
- The release gives no recycling-rate figures or test results. It also leaves open whether access is public or free of charge.
- Protocol-related work was due to be shown on the DIC and artience stands at TOKYO PACK 2026 (Tokyo International Packaging Exhibition 2026), organised by the Japan Packaging Institute and held 14-16 October 2026 at Tokyo Big Sight.

## LESSONS & ACTIONABLES

Converters and brand owners with Japanese supply chains may want to watch whether recyclers and industry bodies take up the protocol, and to treat its results as comparable only once adoption extends beyond its two developers.



## For inquiries & market intelligence

- 11490 Westheimer Rd Suite 970, Houston TX 77077, United States
- +1 832-341-1222
- [info@webpackagingsolutions.com](mailto:info@webpackagingsolutions.com)
- [www.webpackagingsolutions.com](http://www.webpackagingsolutions.com)

Sources Packaging Europe, Nespresso, Swissinfo / Keystone-SDA, As You Sow, ACG, DIC Corporation