ELLEN MACARTHUR FOUNDATION

FLEXIBLE PACKAGING:

MOVE AWAY FROM SINGLE-USE FLEXIBLES:

Innovative Elimination and Reuse

Deepdive

This document is a strategy deepdive with detailed insights, analysis and actions. For a high-level overview of the work, see the executive summary.

WEBSITE

Easily digestible overview of the different strategies for flexible packaging, and the key insights and actions for each.

Click here

EXECUTIVE SUMMARY

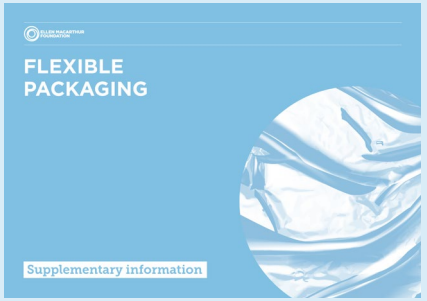
Short, high-level strategy document. Doesn't contain any analysis, reasoning or details for the key actions.

STRATEGY DEEPDIVES

Detailed insights and analysis, and detailed key actions for the different strategy options.

SUPPLEMENTARY INFORMATION

Supporting data and references.



OVERARCHING STRATEGY

(this deepdive relates to only one part of this overall flexible packaging strategy)

Click here for the executive summary.

CONTEXT

Flexible packaging is the fastest-growing plastic packaging category. Because it is almost uniformly single-use, with very low recycling and high leakage rates, it is also by far the most challenging market segment to address on the journey towards a circular economy for plastics.

OVERARCHING STRATEGY

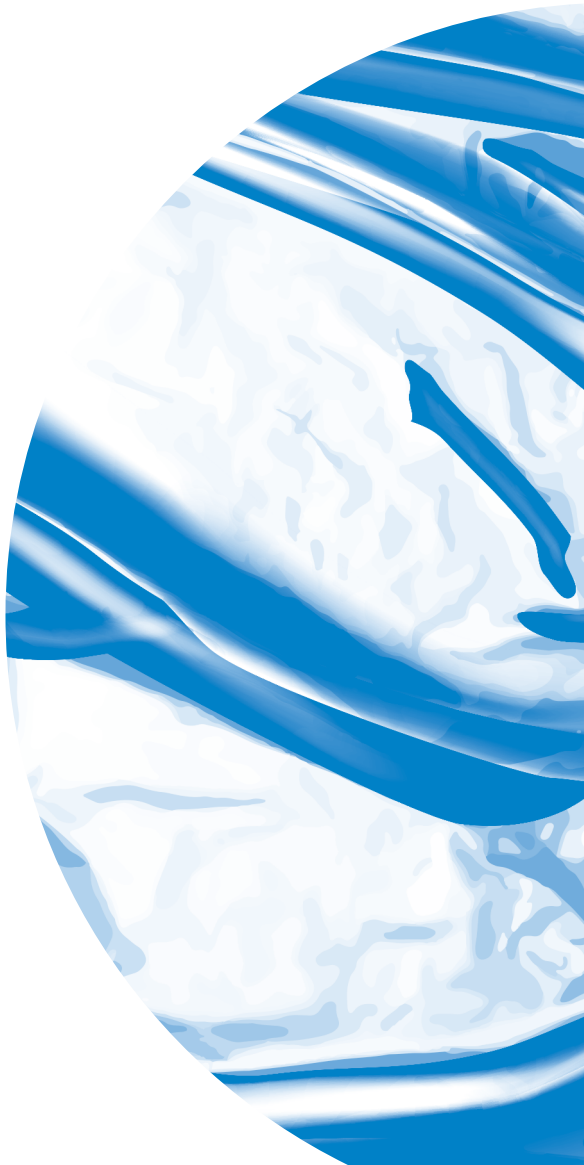
Eliminating and innovating away from single-use flexible packaging must be the first and foremost part of any flexible packaging strategy — because as soon as single-use flexible waste is generated, regardless of material or geography, it is very hard to deal with. Current efforts are only just scratching the surface and a step-change in the level of commitment and effort across direct elimination of unnecessary packaging and exploration of upstream innovation solutions, such as reuse, is required from ALL stakeholders.

For the single-use flexible packaging items that cannot currently be eliminated without unintended consequences, unprecedented efforts are required to ensure they can be circulated. This can include staying with a conventional plastic and scaling recycling systems, or substitution to a different material (such as paper or compostable plastics where relevant) and then scaling those systems. Either way, what is clear is that unless simultaneous, unprecedented efforts across packaging design, infrastructure, and policy are begun immediately — efforts that push far beyond the level of activity we are currently seeing — the circulation of flexible packaging in practice and at scale is unlikely to happen in the foreseeable future.

While they are currently a necessary part of the solution, the inherent quality and yield limitations of recycling and substitution strategies mean that staying with single-use flexible packaging will always present a challenge from a circular economy perspective. This is why we need to keep driving a strong upstream innovation agenda (in line with the first part of the overarching strategy) in order to find ways to eliminate ever-increasing single-use flexible packaging over time.

URGENT ACTIONS

This work has identified 21 specific and urgent actions for flexible packaging that need to be commenced immediately by businesses and policymakers in order to make significant progress towards 2025 targets and beyond.



KEY ACTIONS FOR INNOVATIVE ELIMINATION & REUSE

INNOVATIVE ELIMINATION AND REUSE: single-use flexibles are eliminated through innovations that remove the need for these formats altogether.

INNOVATIVE ELIMINATION & REUSE

KEY ACTIONS

Businesses to:

Introduce a high-priority and well-resourced R&D agenda to make upstream innovation the major component of every flexibles strategy — acknowledging that existing efforts are well below where they can and need to be

Set up sector-specific collaborative initiatives with specific objectives (such as facilitating rollout of an existing innovation or answering a key question for a more nascent solution)

See page 6 for details

Policymakers, collaborative cross-sector initiatives, and businesses (through advocacy) to:

Create a supportive policy landscape for innovation (e.g. Introduce subsidies, bans, EPR)

See page 7 for details

Businesses to:

Introduce a high-priority and well-resourced R&D agenda to make upstream innovation the major component of every flexibles strategy — acknowledging that existing efforts are well below where they can and need to be

All businesses with flexibles in their portfolio (e.g. retailers and FMCGs) to make upstream innovation a core part of their flexibles strategy by setting ambitious short-, mid-, and long-term innovation agendas. This includes:

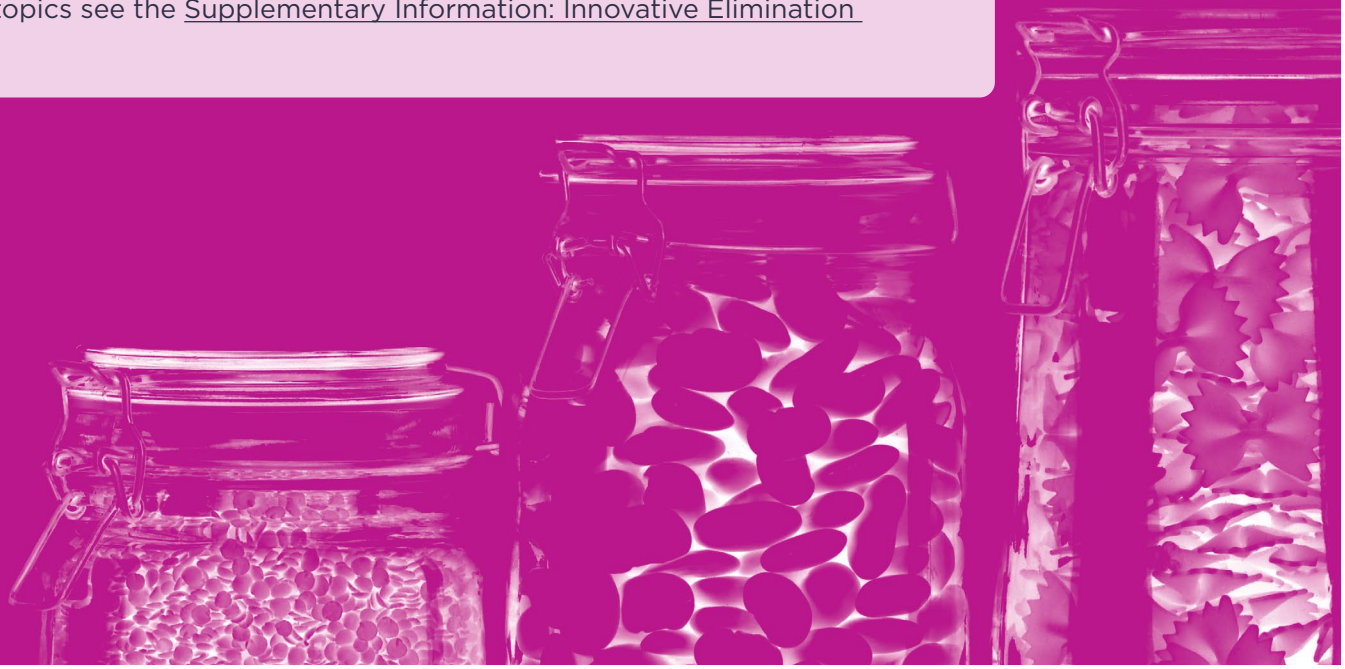
- Dedicating the internal resources required for innovative elimination and reuse (refill and return) to be a major component of a flexibles R&D strategy by the end of 2022 (which would mean that significant progress on understanding opportunities could be made by 2025 and impact on material flows could be visible by 2030).
- Identifying specific research questions and mapping a process to answer them by 2025, in order to further the understanding and therefore development of innovative solutions (especially reuse systems).
- Setting internal targets for innovative solutions, such as innovative elimination and reuse, to support the above efforts (and, preferably, communicating these targets externally). These targets could take a variety of forms, for example, they could be volume/mass targets, or funding/investment targets, etc.

Businesses to:

Set up sector-specific collaborative initiatives with specific objectives (such as facilitating rollout of an existing innovation or answering a key question for a more nascent solution)

Businesses with flexibles in their portfolio, together with innovators, universities and NGOs as relevant, to set up sector- and solution-specific collaborative initiatives/consortia by the end of 2023 to:

- Roll out upstream innovations that have already proven to be successful at pilot scale (for example, refill for dried foods and edible coatings for fresh fruit and vegetables).
- Explore and develop more nascent solutions (for example, refill piloting of home/personal care between multiple brands in SE Asia) with the aim to understand if and how they might scale, and to collectively help lower the barriers (for specific questions to be addressed through collaborative actions, see pages under key insight 4. For an overview of some of the innovators already working on these topics see the Supplementary Information: Innovative Elimination and Reuse – "What does good look like?").



Policymakers, collaborative cross-sector initiatives, and businesses (through advocacy) to:

Create a supportive policy landscape for innovation (e.g. Introduce subsidies, bans, EPR)

National and regional policymakers to set a geographically relevant, ambitious innovation agenda to facilitate innovative elimination and reuse solutions. This includes legislation to support these solutions (for example, subsidies for infrastructure, bans on certain single-use alternatives where appropriate, EPR policy design); phase out legislation that actively hinders these solutions (for example, phase out legislation that does not differentiate between refilling packaging and manufacturing new packaging and product); and, public R&D funding for innovation (for example, funding for early-stage research as well as industrial-scale pilots).

INNOVATIVE ELIMINATION & REUSE

SECTORS AND GEOGRAPHIES OF PARTICULAR RELEVANCE

Opportunities for reuse and innovative elimination should be explored across all sectors, but in particular, a few categories were identified by our panel of experts as either being categories in which progress could be made fast (i.e. within 2-5 years) or categories of specific potential in the longer-term.

For example:

PERSONAL CARE - HYGIENE
Solid products, dissolvable packaging, and refill/return

HOME CARE
Solid products and refill

DRIED FOOD & CEREALS
Refill

FRUIT & VEG
Edible coatings

Innovative elimination and reuse is of key importance across all geographic archetypes given the limitations of substitution and recycling systems.

Note: Innovation is of particular importance in geographies serviced by the informal sector, where the uncertainty, risk, and timeframes associated with pursuing a recycling strategy are particularly significant, lowering the barriers to pursuing an innovation strategy (see the informal recycling deepdive).

Geographic Archetype 1: Geographies with low volumes of mismanaged packaging waste, and advanced waste management systems.

For example: Established recycling systems producing high-quality recyclate; mandatory EPR.

Proxy geography: Europe

Geographic Archetype 2: Geographies with low volumes of mismanaged packaging waste, but less advanced waste management systems.

For example: Recycling systems are limited in scale or have considerable loss of material quality; emerging, limited or voluntary EPR.

Proxy geography: USA

Geographic Archetype 3: Geographies with high volumes of mismanaged packaging waste and limited/no waste management systems.

For example: Limited systems even for collection; No/limited EPR

Proxy geography: South and South-East Asia

4 KEY INSIGHTS SUPPORTING THE KEY ACTIONS

INNOVATIVE ELIMINATION & REUSE

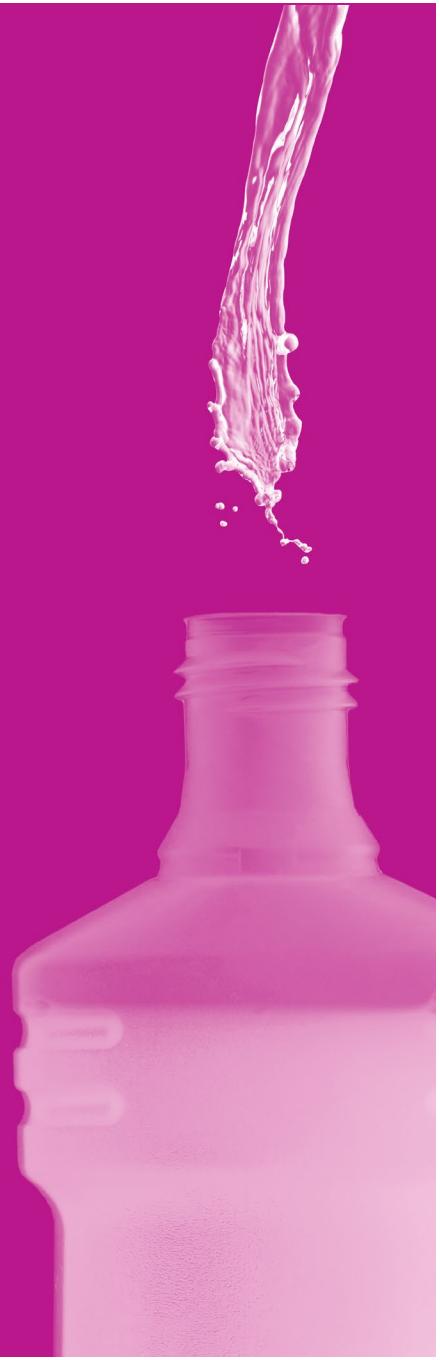
4 KEY INSIGHTS

1 Solving the challenge of flexibles will require continuous, ambitious innovation — to move away from ever-increasing single-use flexible formats over time.

2 Upstream innovation (namely, innovative elimination and reuse) provides a promising approach.

3 There are innovative elimination and reuse solutions that could already have impact by 2025, while others show strong potential but will require longer timeframes and collaboration.

4 Individual and collaborative innovation efforts need to be urgently ramped up to explore and scale these opportunities in both the short and medium timeframe — current efforts are not sufficient.



INNOVATIVE ELIMINATION & REUSE

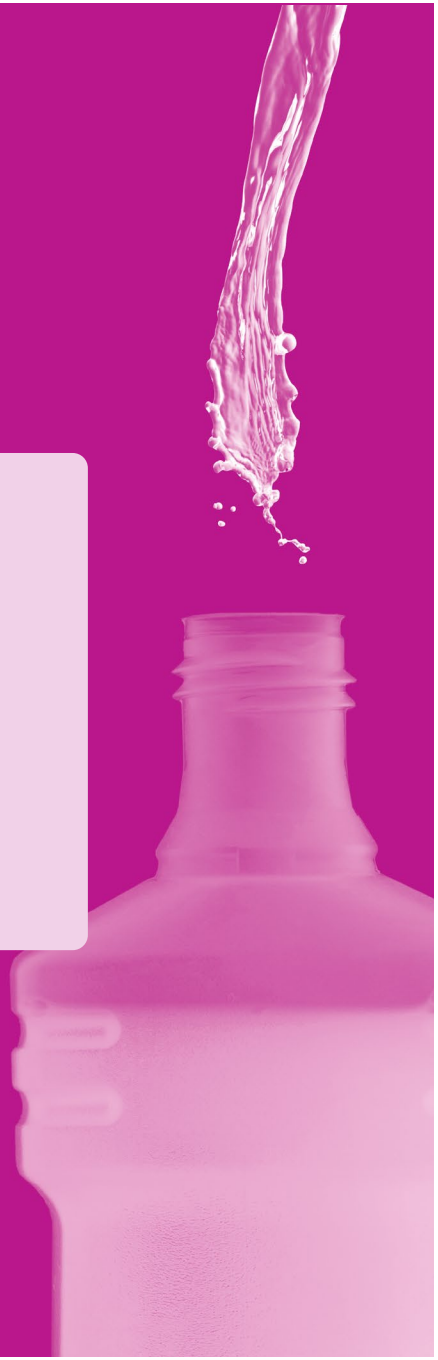
4 KEY INSIGHTS

1

Solving the challenge of flexibles will require continuous, ambitious innovation — to move away from ever more single-use flexible formats over time

Without innovation to move-away from single-use flexibles, we will not achieve a circular economy for plastics. Many flexibles can't be directly eliminated without unintended consequences and both recycling and substitution, while needed, have inherent limitations meaning they will always present a challenge from a circular economy perspective. A broader range of solutions is needed.

See following page for details and references



Many flexibles can't be directly eliminated without unintended consequences and both recycling and substitution, while needed, have inherent limitations meaning they will always present a challenge from a circular economy perspective.

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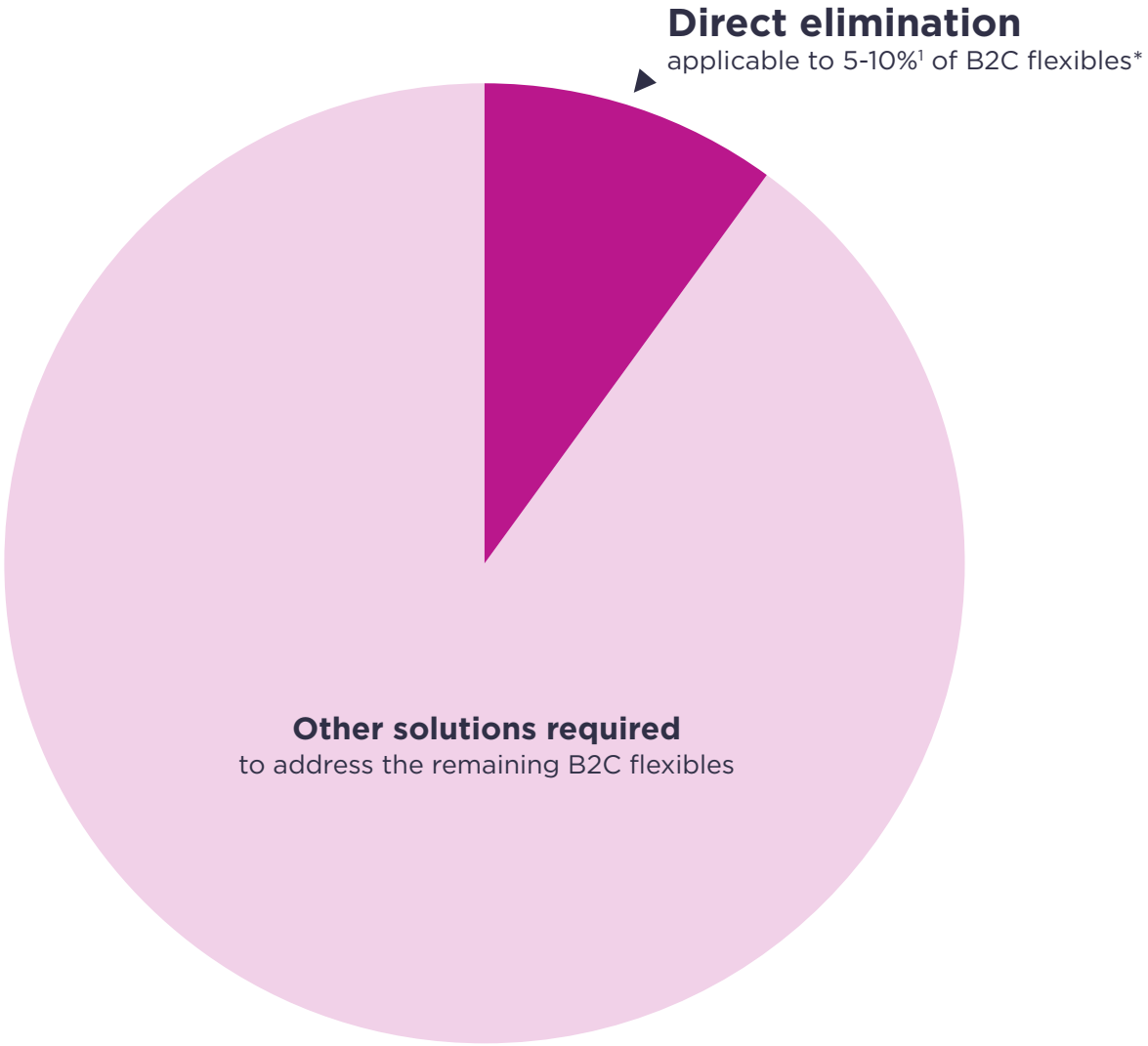


Not all B2C flexibles are unnecessary and therefore eligible for direct elimination

See the direct elimination deepdive for further details

*For additional information and references, see the **Supplementary Information:** Innovative Elimination and Reuse – "What is the opportunity to work towards?"

1. **The PEW Charitable Trust and Systemiq**, Breaking the plastic wave: a comprehensive assessment of pathways towards stopping ocean plastic pollution (2020).

Even in a maximally optimised recycling scenario for B2C flexibles, there will be significant unavoidable material quality and quantity losses, and therefore considerable virgin input requirements.

MECHANICAL RECYCLING comes with significant and inherent QUALITY losses:

- Even if radical design changes are made across all flexibles, a mechanical recycling process will always produce non-virgin quality recyclate.
- Given the material properties required to produce high-performance flexibles, it was broadly agreed by our expert panel that an average of 30% mechanically recycled content is pushing the upper limit for B2C flexibles.
- **This quality loss thus limits the amount of mechanically recycled content that can go back into B2C flexibles.**

CHEMICAL RECYCLING comes with significant and inherent YIELD losses:

- Even if radical design changes are made across all flexibles, a chemical recycling process will always have significant yield losses.
- Polymer yield from a chemical recycling process (i.e. the amount of polymer obtained after polymerisation relative to the amount of polymer going into the pyrolysis unit) is generally found to be between 30-50%, (i.e. there is a 50-70% loss of material from the plastic packaging system).
- While it is technically possible to make a food contact B2C flexible from 100% chemically recycled plastics, to do so across all B2C flexibles would require significant chemically recycled content to be brought in from other sectors/industries, simply transferring rather than solving the issue of ‘yield losses’.

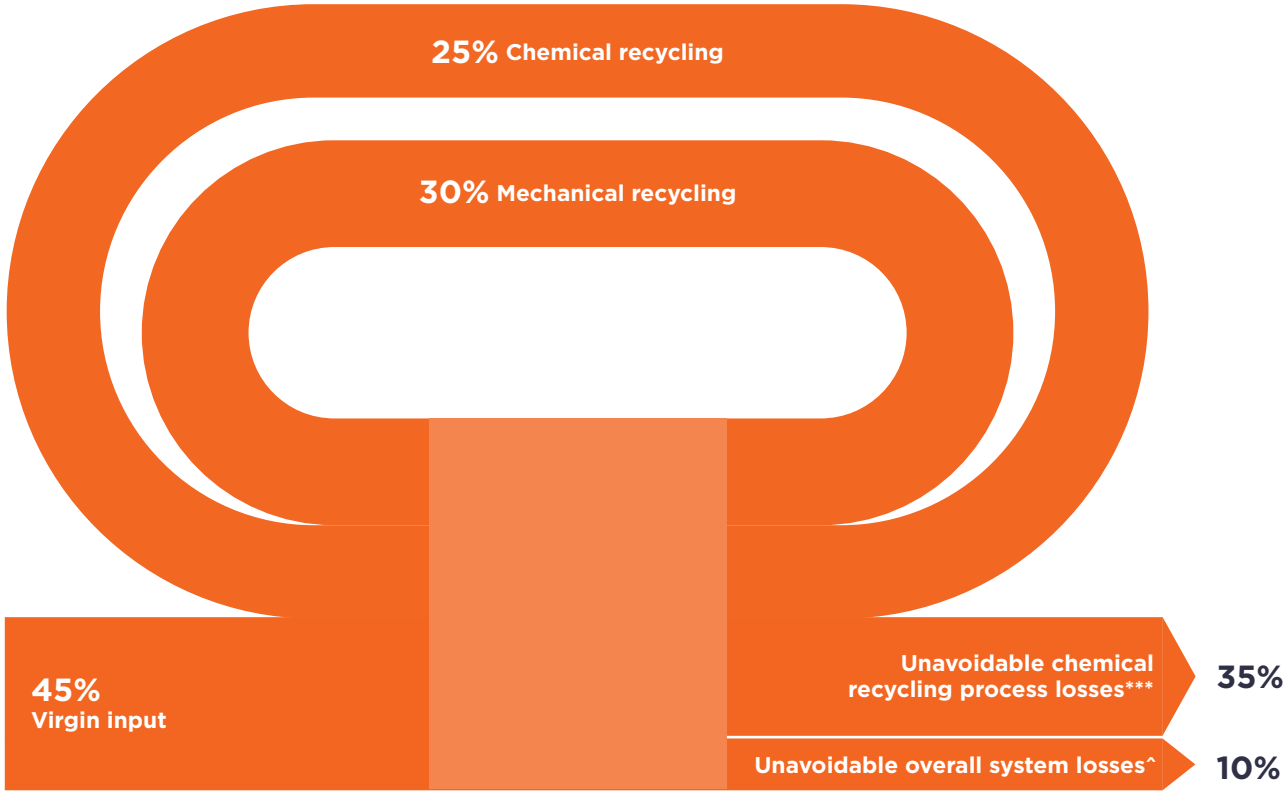
*Expert interviews and Lodestar project publication: https://www.newplasticseconomy.org/assets/doc/Lodestar.pdf

Even in a maximally optimised recycling scenario for B2C flexibles, there will be significant unavoidable material quality and quantity losses, and therefore considerable virgin input requirements.

Maximally optimised recycling system for plastic B2C flexibles**

What the global flows for plastic B2C flexibles would look like assuming:

- All B2C flexibles are collected and recycled via highly optimised mechanical and chemical recycling processes.
- The amount of plastics going back into B2C flexibles is maximised.



NOTES

**What the global flows for plastic B2C flexibles would look like assuming: a) All B2C flexibles are collected and recycled via highly optimised mechanical and chemical recycling processes; b) The amount of plastics going back into B2C flexibles is maximised; c) All flexible packaging (including food packaging) would contain 30% mechanically recycled content; d) The average yield for chemical recycling was 40%.

***Assuming a 60% loss of material from the plastic packaging system (as gasses and waxes) in a chemical recycling process, as per yield discussion above.

^Losses such as those that occur through collection and sorting processes as well as packaging production processes. 10% is highly conservative.

NOTE: Here chemical recycling refers to pyrolysis of polyolefins, this being the predominant technology in use/being considered for scale-up.

For additional information and references see the Deepdive: Plastic B2C flexibles: Design and recycling in the formal sector

For paper recycling systems and composting systems (plastic or paper) there is also significant unavoidable material quality and quantity losses, and therefore considerable virgin input requirements.

PAPER RECYCLING for flexibles: Significant and inherent quality losses

- Mechanically recycled fibres have reduced fibre strength compared to virgin fibres.
- Given the material properties required to produce high-performance paper flexibles, an average of 10-50% mechanically recycled content is generally agreed to be the upper limit for paper B2C flexibles.
- In addition, many use cases for paper B2C flexibles require virgin content for safety (such as in food-grade).
- **As is the case for plastics, loss of quality within a mechanical recycling process limits the amount of mechanically recycled content that can be used in paper B2C flexibles and means that substitution to paper comes with significant, unavoidable virgin input requirements (e.g. between 50-100% of the fibres used in paper B2C flexibles will need to come from virgin sources).**

COMPOSTING SYSTEMS for flexibles: Inherent loss of the packaging material from the packaging system

- Composting a material involves breaking it all the way down into fundamental building blocks — for the most part, carbon dioxide and water.
- This means that for any packaging that is composted, the equivalent amount of virgin material is then required to make new packaging.
- Compostable packaging is most often designed as single-use.
- **Shifting to compostable packaging, while relevant in some applications, means shifting towards 100% virgin input requirements and is still ‘single-use’ in the same way that conventional Plastic and Paper B2C flexibles are.**

For additional information and references see the **Deepdive:** Substitution to paper B2C flexibles, and Substitution to compostables B2C flexibles

INNOVATIVE ELIMINATION & REUSE

4 KEY INSIGHTS

2

Upstream innovation provides a promising approach

A promising way to find a broader range of solutions is by investing in upstream innovation (such as innovative elimination and reuse). This means exploring the opportunity that exists in rethinking not only the packaging, but also the product and the delivery models. Inspiration can be found in the Upstream Innovation Guide.

See following page for details and references

A promising way to find a broader range of solutions is by investing in upstream innovation that rethinks how products are delivered to users (such as innovative elimination and reuse).

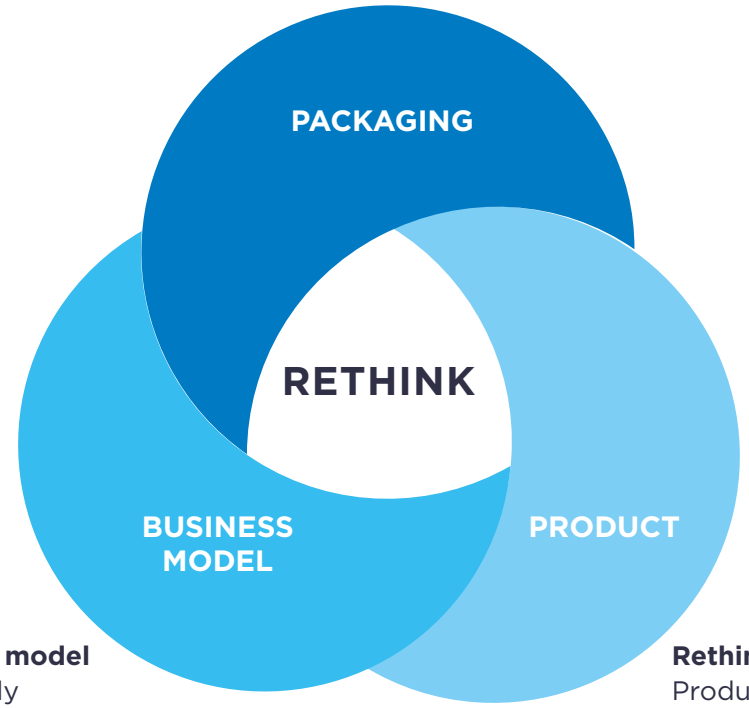
Upstream innovation is about preventing waste from ever being created in the first place.

To unlock the full opportunity of upstream innovation, it is necessary to move beyond focusing on incremental packaging improvements, towards **fundamentally rethinking how to best deliver products and services to a user**.

This involves rethinking not just the packaging itself, but also the product and the broader business model, with the aim being to identify new ways of delivering value to users, while **designing out waste** and avoiding unintended consequences.

See the Upstream Innovation Guide pp. 28-31 and 182-183 for more details

Rethink the packaging
Packaging concept, format, components, material choice
E.g. edible coatings

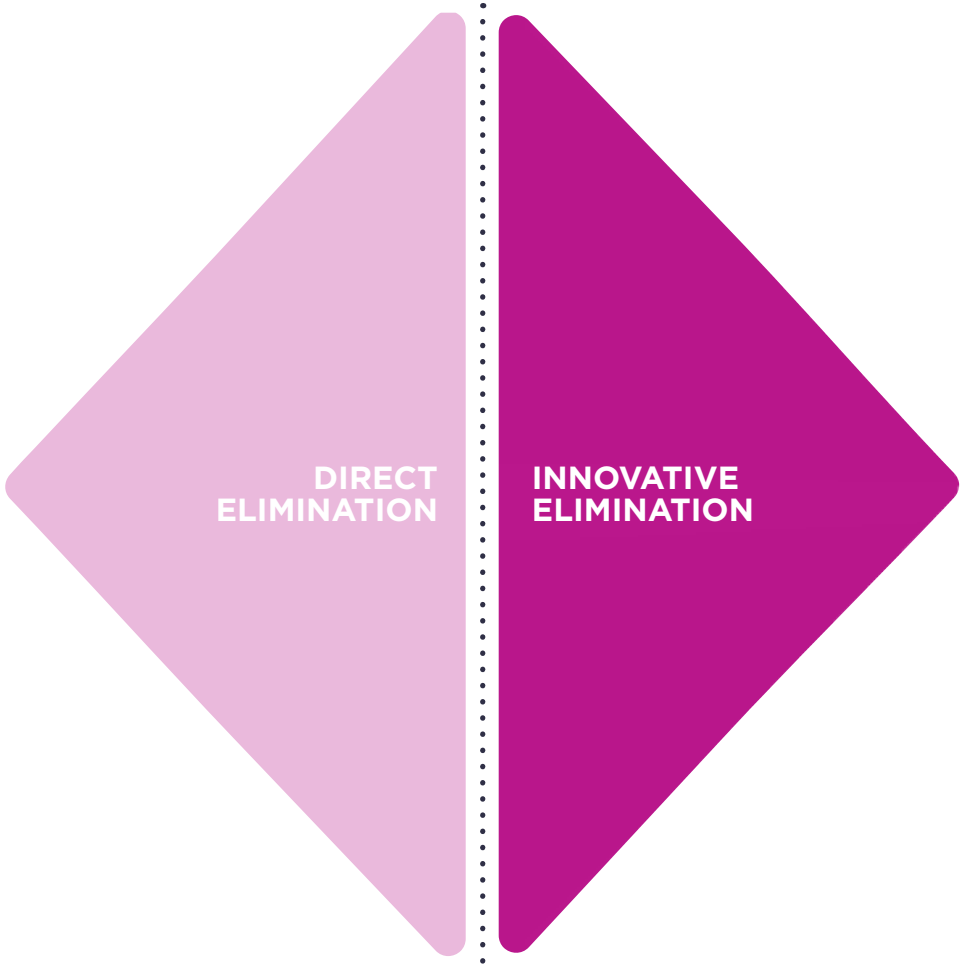


Rethink the business model
Delivery model, supply chain, location of production, revenue streams
E.g. refill home care products

Rethink the product
Product formulation, concept, shape, size
E.g. edible coatings

Packaging that **does** serve an essential function is **indirectly eliminated through innovation**, with the function being achieved in a different way.

Examples of functions that may be considered essential include necessary protection, containment, convenience, communication, and efficiency. Applying an upstream innovation mindset can uncover innovative ways in which such essential functions may be achieved in a different way.*



For packaging that **does not** serve an essential function

See direct elimination

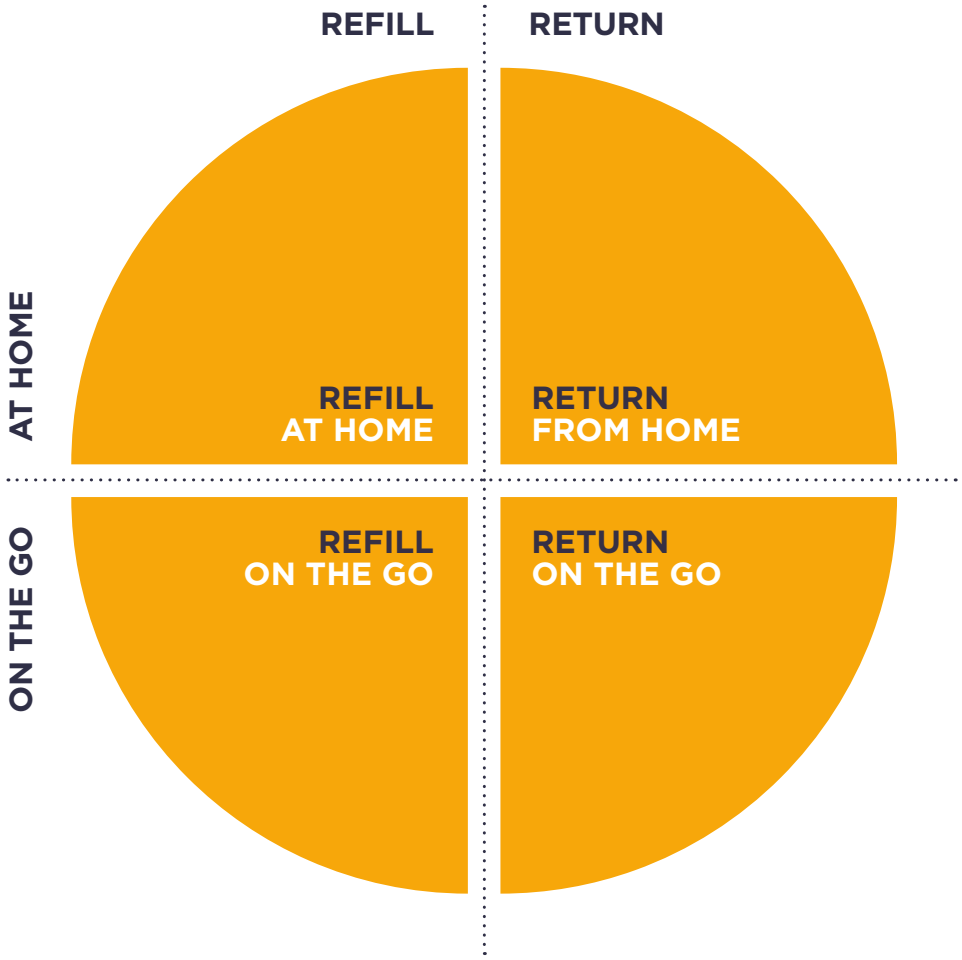
For packaging that **does** serve an essential function

See the Upstream Innovation Guide pp. 40-43 and 50-71 for more details and inspiration

See the Upstream Innovation ideation workshop template for tools to support your upstream innovation journey

*While upstream innovation can also include actions related to material and packaging design (e.g. minimising head space, material choices, reduction of material through lightweighting, etc.) these are not considered to rethink how a product is delivered to a user, and as such, are not covered here. More information can be found on pp. 50-71 and 78-115 in the Upstream Innovation Guide.

Reusable packaging is **designed to be used multiple times**, for its originally intended purpose, **as part of a dedicated system for reuse**. Reusable packaging is brought back into the economy through the washing of the entire intact packaging.*



See the Upstream Innovation Guide pp. 76-115 for more details and inspiration

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INNOVATIVE ELIMINATION & REUSE

4 KEY INSIGHTS

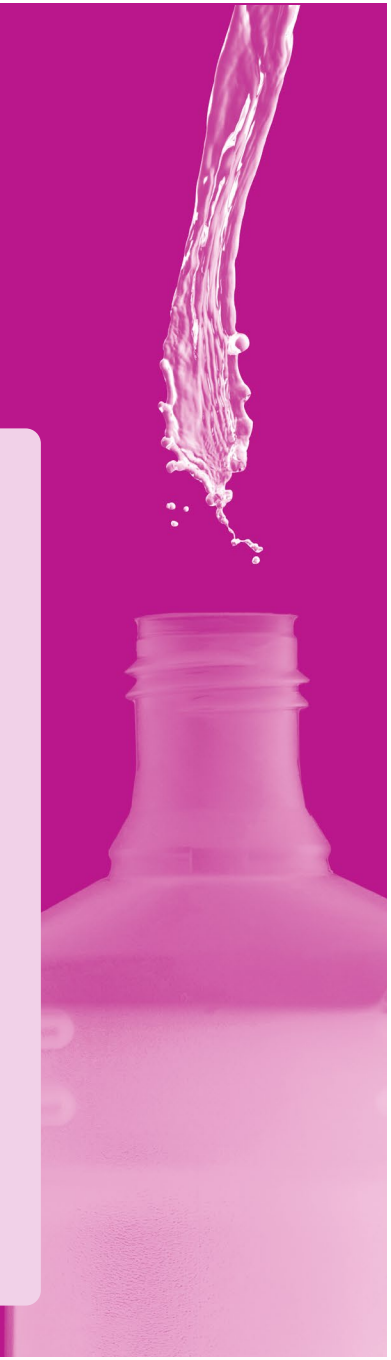
3

There are innovative elimination and reuse solutions that could already have impact by 2025, while others show strong potential but will require longer timeframes and collaboration

Many upstream solution opportunities for flexibles have already been identified. A few of these solutions can be worked on relatively independently by businesses and could be scaled for relevant product categories by 2025, while others show strong potential as the systems of the future and may require collaboration over longer timelines to be realised. Both types of solutions are needed. According to our panel of experts, solutions that can scale fast and achieve impact by 2025 include **edible coatings** (for fresh fruits and vegetables), **dissolvable packaging, and solid products** (for many home care and personal care products). In addition, **reuse for dried food products in Europe, and for personal care and home care products in SE Asia** were highlighted as of particular interest and an opportunity for collaborative action.

Note: Innovation is of particular importance in geographies serviced by the informal sector, where the uncertainty, risk, and timeframes associated with pursuing a recycling strategy are particularly significant, lowering the barriers to pursuing an innovation strategy (see the informal recycling deepdive).

See following page for details and references



There are solutions that could already be scaled by 2025 for their relevant product categories and others that show strong potential but require significant collaboration.

Five promising short and medium timeframe innovation opportunities as identified by an expert panel

Solutions that can be scaled fast and achieve impact by 2025

1. Water-soluble packaging
Approximate implementation time*: < 2 years
Particularly relevant for: home care products

2. Solid products
Approximate implementation time: < 2 years
Particularly relevant for: personal and home care products

3. Edible coatings
Approximate implementation time: 4-5 years
Particularly relevant for: fresh fruits and vegetables

See the Upstream Innovation Guide for more details, examples, and inspiration!

2022 | 2023 | 2024 | 2025

Solutions that are considered particularly promising opportunities for collaborative action**

4. Refill for dried foods in EU/US

5. Reuse for personal care and home care products in SE Asia

*The expert panel's assessment of how long it takes large companies to bring different innovative solutions to market for the relevant product categories. Implementation time meaning the time it takes to go from project initiation to the solution being widely available to consumers. Elimination of unnecessary packaging can be done in 1-3 years.

**Based on factors such as the suitability of the products for alternative delivery models, the potential for regulatory barriers, the extent of existing knowledge/work to build from, and the potential for having significant impact on material flows (i.e. significant reduction potential)

INNOVATIVE ELIMINATION & REUSE

4 KEY INSIGHTS

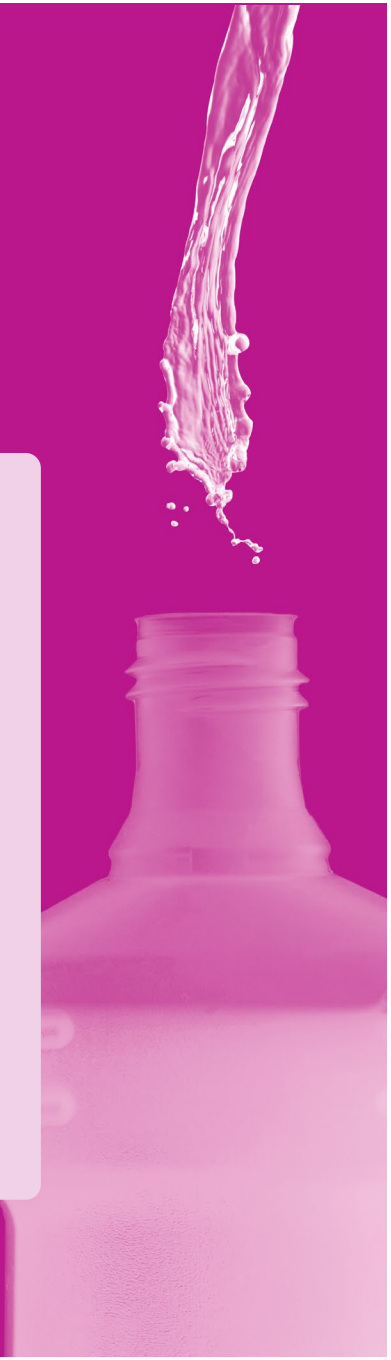
4

Individual and collaborative innovation efforts need to be urgently ramped up to explore and scale these opportunities in both the short and medium timeframe — current efforts are not sufficient

Inclusion of upstream innovation as a serious part of companies' flexible packaging strategies is currently not visible. Current innovation efforts to develop and scale solutions that eliminate the need for single-use flexibles are extremely small-scale. For example, of the sachets used to deliver personal care and home care products in SE Asia, **<0.001%** are currently being displaced by reuse models and scaling this percentage does not appear to be a core part of many companies' flexibles strategy.

Upstream innovation efforts, such as innovative elimination and return and refill reuse models, need to have a central role in any flexibles strategy and will have the greatest chance of succeeding if driven by ambitious targets and participation in collaborative action (see page 25 for full details)

See following page for details and references



Inclusion of upstream innovation as a serious part of companies' flexible packaging strategies is currently not visible.

Across packaging categories, efforts on innovative elimination and reuse are minor, showing that upstream innovation is not yet appearing to be a serious part of the industry's strategy for reducing the need for single-use packaging.[1]

For example, according to our calculations, innovative elimination and reuse solutions for personal care and home care products in SE Asia are still minor in comparison to flexible plastic packaging and this doesn't appear on track to change:

TODAY

Plastic sachets
Currently almost **146 billion plastic sachets**[2] are used per year to deliver personal care and home care products in SE Asia*

Reuse
Currently **<0.001%** of sachets used for personal care and home care products in SE Asia are being displaced per year through reuse efforts

This amounts to only **900,000 sachets**.*

*For additional information and references, see the **Supplementary Information:** Innovative Elimination and Reuse – "What does good look like?"

1. **New Plastics Economy**, Global Commitment 2021 Progress Report

2. **GAIA**, Sachet Economy: big problems in small packets (2020)

Upstream innovation efforts need to have a central role in any flexibles strategy. Implementation of supportive policy landscapes, ambitious targets, and collaborative action is needed.

For example, to get innovative elimination and reuse for personal care and home care products to scale in SE Asia:

TODAY

Plastic sachets

For additional information and references, see the Supplementary Information: Innovative Elimination and Reuse – "What is needed to achieve this?"

Note: size of circles are not indicative of future market share

STARTING NOW

Reuse

Put supportive policy landscapes in place

- Remove policies that actively hinder innovative elimination and reuse
- Build off existing policies or establish new policies that can make the economics work
- Other measures (e.g. mandate elimination/reuse in certain applications, change public procurement practices)

Set an ambitious long-term innovation agenda

- Set quantitative targets and dedicate internal resources for innovative elimination and reuse

Take collaborative action (see next page)

- Gather the right stakeholders
- Identify and address the most pressing research and innovation needs
- Fully engage in collaborative actions to develop the systems that can scale

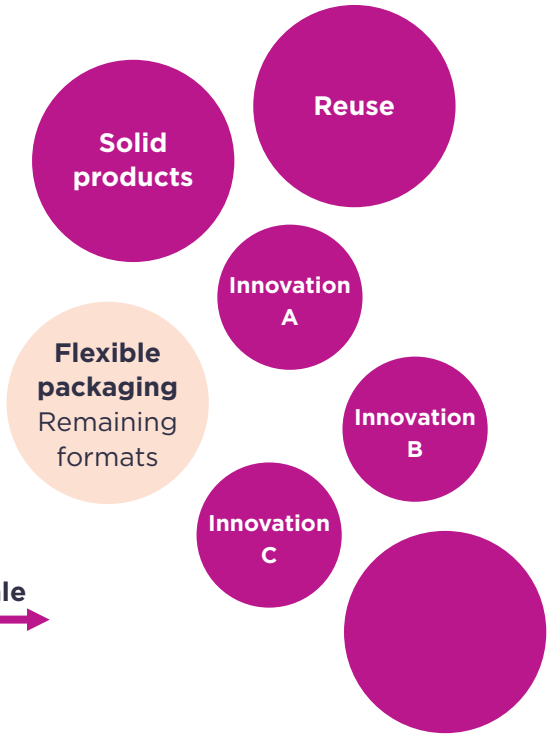
Invest into the systems that work to deliver at scale

- Make available public and private funding for large-scale infrastructure development

Engage consumers

- Coordinate communication efforts across organisations, sending the same message at the same time
- Sustain communication efforts to position elimination and reuse as the new norm

FUTURE



Collaborative efforts to develop the systems that can scale entail (but are not limited to):

Gathering the right stakeholders:

Relevant businesses (e.g. retailers), innovators, and experts are involved

Funding for innovation is accessible:

Government, VC, philanthropic, and business funding available

Creating collaborative initiatives to (specifically for reuse):

- Define and align on standards (e.g. for reusable packaging design, data tracking, etc.)
- Align on how to best measure reuse in order to improve ability to set quantitative targets (e.g. weight vs share of business)
- Share learnings (e.g. through dedicated reuse consortiums or working groups)
- Use learnings to continue to iterate processes to refine a particular system set-up

Collaborative efforts to develop the systems that can scale entail (but are not limited to):

Identifying and addressing research and innovation needs (specifically for reuse) to identify the ideal system(s) for a particular product category including:

Consumer viability: what will consumers require to engage with a reuse model?

- **For refill-on-the-go specifically:** how to increase convenience and the overall user experience? (i.e. foldable vs stackable packaging? Shared vs single-brand packaging? Combine with returnable packaging option? IoT integrated and smart dispensing units vs "traditional" bulk units?), what (economic) incentives are required?
- **For return models specifically:** what return options and incentives are necessary to engage consumers? (i.e. pick-up vs drop-off? Location and frequency of return points?)

Product safety and hygiene viability

- **For refill-on-the-go specifically:** what level of technology in dispensing machines is required to guarantee safety, hygiene, and accommodate legal restrictions (and how might this influence required policy changes?)

Environmental viability: environmental impacts and unintended consequences

- **For refill-on-the-go specifically:** if a single-use option (e.g. paper bag) is also offered at the refill site, is the model still environmentally viable? How to ensure that refill does not cause increase in food waste/spillage? How does the B2B supply chain need to be organised for the system to be viable?
- **For return models specifically:** What level of standardisation (packaging formats and infrastructure) is needed for the model to be viable?
- What is the role of flexible packaging in reuse systems?

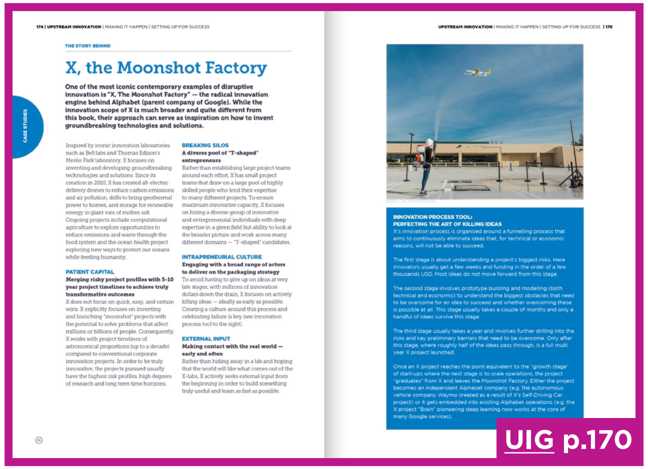
Economic viability

- **For return models specifically:** What level of standardisation (packaging formats and infrastructure) is needed for the model to be viable?
- What are the financial investments needed to scale a particular system in a particular context?

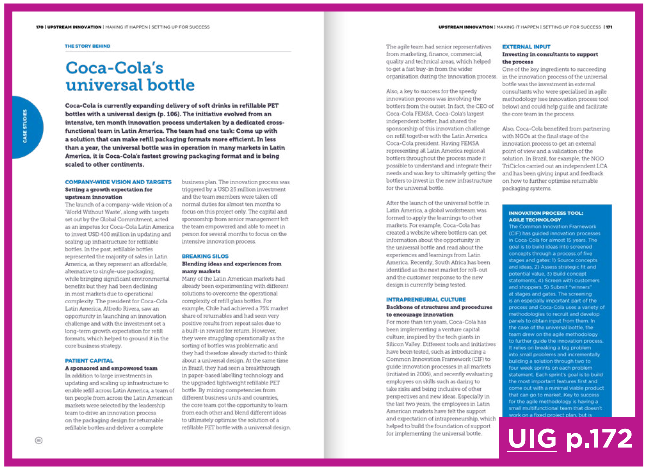
Learn more about setting yourself up for success with upstream innovation, through the stories of four different organisations.

See the Upstream Innovation Guide for more details!

UIG p.168



UIG p.170



UIG p.172

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This work has been developed in collaboration with an expert panel consisting of more than **100 organisations** including relevant expert organisations and NGOs, Plastics Pact lead organisations, and members of the New Plastics Economy initiative (which includes many of the leading producers of packaged goods, and many of the largest retailers and packaging producers).

We are deeply grateful to all collaborators and contributors for the time and expertise they have dedicated to this project.

These organisations are not responsible for any of the recommendations presented in this work. This report is the work of, and solely reflects the views of, the Ellen MacArthur Foundation. The Foundation's views have been formed on the bases of existing literature, expert interviews, workshops with the expert panel, and in-house analysis.

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ABOUT THE ELLEN MACARTHUR FOUNDATION

The Ellen MacArthur Foundation develops and promotes the idea of a circular economy.

The Ellen MacArthur Foundation is committed to the creation of a circular economy that tackles global challenges, such as climate change, biodiversity loss, waste, and pollution.

The Ellen MacArthur Foundation is an international charity that develops and promotes the circular economy in order to tackle some of the biggest challenges of our time, such as climate change, biodiversity loss, waste, and pollution. We work with our network of private and public sector decision-makers, as well as academia, to build capacity, explore collaborative opportunities, and design and develop circular economy initiatives and solutions. Increasingly based on renewable energy, a circular economy is driven by design to eliminate waste, circulate products and materials, and regenerate nature, to create resilience and prosperity for business, the environment, and society.

Further information:
www.ellenmacarthurfoundation.org | @circulareconomy

ABOUT THE PLASTICS INITIATIVE

Since 2016, the Ellen MacArthur Foundation's New Plastics Economy initiative has rallied businesses, governments, and other organisations behind the vision of a circular economy for plastic, in which it never becomes waste or pollution.

Focused on ambitious targets for 2025, the Global Commitment addresses plastic waste and pollution at its source, beginning with plastic packaging, while the Plastics Pact network of local and regional (cross-border) initiatives, endorses and implements circular economy solutions that work towards the vision.

Further information:
www.emf.org/plastics | @circulareconomy
Explore the vision for a circular economy for plastic