

Disposal Urgency Report 2026



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1. Introduction



Litter is commonly approached as a problem of individual responsibility, with public campaigns and environmental initiatives primarily focused on consumer behaviour and waste disposal practices. While important, this perspective may overlook how **packaging design itself can contribute to litter-prone behaviour after use.**

Central to this report is the concept of **disposal urgency**, a term coined by **Merlijn Tinga** (“The Plastic Soup Surfer”), referring to the immediate pressure consumers may feel to discard packaging after consumption due to its unpleasant characteristics after use. Emerging research by TU Delft researcher **Wouter van Dam** further suggests that such **post-consumption experiences may influence litter behaviour** in public environments.

Current packaging systems largely prioritise branding, functionality, and recyclability, while post-consumption packaging experience remains structurally overlooked. As a result, litter risk is often addressed downstream through waste-management and behavioural interventions rather than at the stage where packaging decisions are made.

This advisory report therefore approaches litter as a **broader packaging and systems challenge**, identifying realistic leverage points through which disposal urgency may gradually become more recognised within packaging design, producer discussions, public awareness, and future policy conversations.

Research Approach & Methodology

To understand where disposal urgency is currently overlooked within packaging systems, a qualitative exploratory approach combining stakeholder interviews, desk research, and systems analysis was used to identify key bottlenecks, leverage points, and intervention opportunities across policy, design, and public awareness contexts.

Stakeholder Interviews

Semi-structured interviews were conducted with stakeholders involved in litter prevention, packaging systems, policy implementation, and design research to explore how litter risk is currently understood, where responsibility is placed, and which actors may hold leverage for change.

Public & Systems Stakeholders

- **Merijn Tinga** - Environmental activist and founder of “Disposal Urgency” concept.
- **Christine Swankhuisen** - Director of Nederland Schoon, focused on litter prevention and public behaviour campaigns.
- **Peter d'Angremond** - Advisor and systems thinker specialising in sustainability and public infrastructure.

Research & Design Stakeholders

- **Hilde Beugelink** - TU Delft researcher focused on litter risk, packaging systems, and policy gaps.
- **Wouter van Dam** - TU Delft researcher investigating measurable litter-risk characteristics in packaging.

Policy Implementation Stakeholders

- **Laure Willemen** - Senior Project Manager at Verpact, focused on packaging systems and EPR implementation.

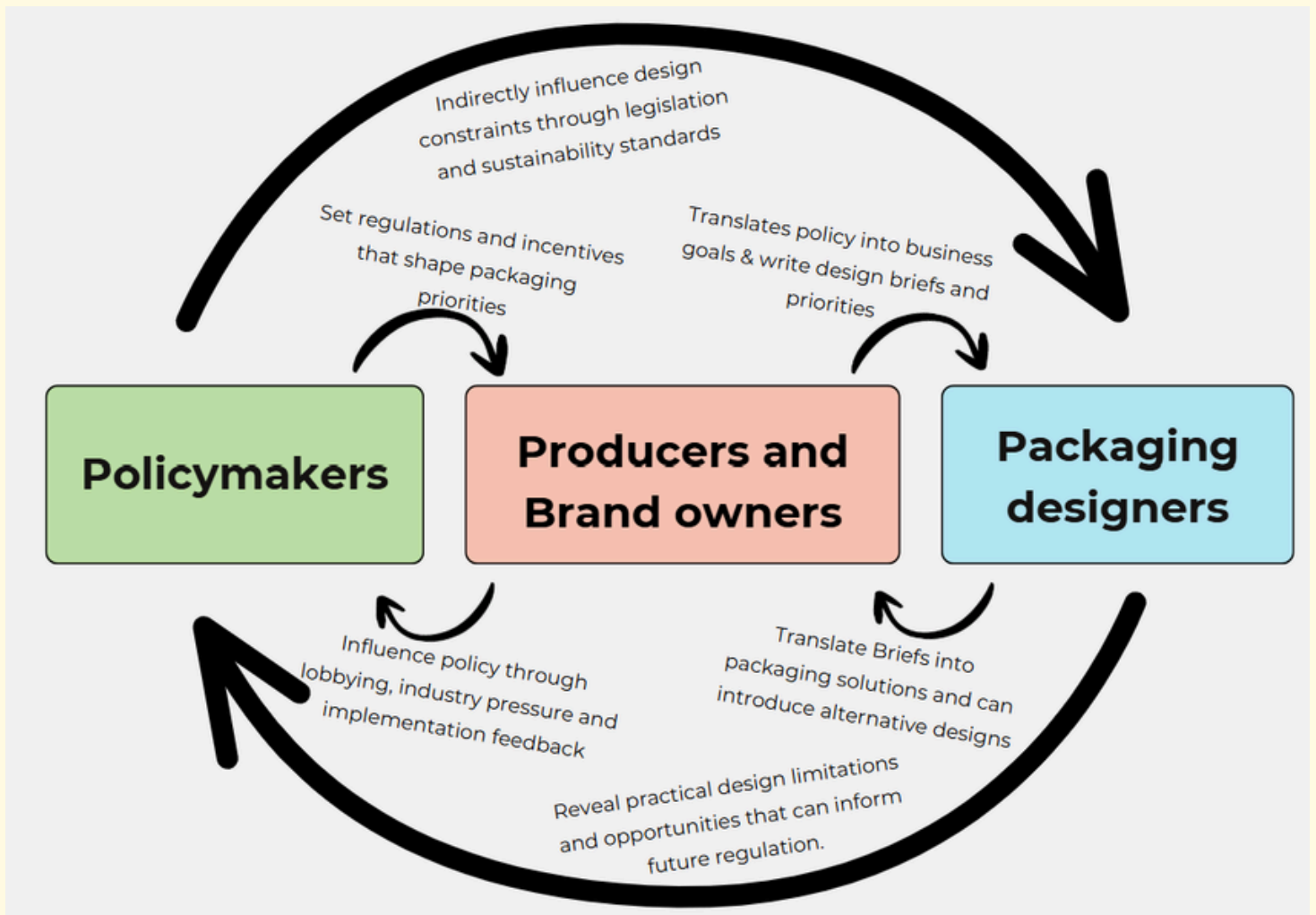
Desk Research & Systems Analysis

Desk research was used to explore existing packaging systems, litter prevention strategies, packaging design processes, and EPR structures, with particular attention placed on how post-consumption packaging experience and litter risk are currently overlooked within existing sustainability frameworks.

Stakeholder & Leverage Mapping

Stakeholder mapping was used to analyse how influence flows across the packaging system, helping identify where disposal urgency is currently absent and where interventions may be most effective (Appendix A).

2. Diagnosis



Systems Flow Diagram - Main actors

Diagnosis revealed that **disposal urgency is currently overlooked across multiple stages of the packaging system** despite potentially influencing litter behaviour after use. While litter is often addressed downstream through consumer behaviour campaigns and waste management, **upstream factors such as policy frameworks, producer incentives, packaging briefs, and post-consumption design experiences receive significantly less attention.** The following sections therefore explore how current policy structures, producer incentives, and packaging design processes may contribute to the limited recognition of disposal urgency within existing packaging discussions.

Policymaker & Policy Gap

Current packaging policy frameworks primarily evaluate packaging through material-based indicators such as weight, recyclability, and item count. While these criteria support waste-management goals, they provide **limited insight into how packaging behaves after use in public environments.**

Recent exploratory research by TU Delft researcher Wouter van Dam suggests that certain post-consumption packaging characteristics, including stickiness, leakage, awkward carrying experiences, and holdability after use, may contribute to increased disposal urgency. The research aims to identify and operationalise measurable litter-prone packaging characteristics that could eventually support future packaging evaluation and policy discussions surrounding litter behaviour.

At the same time, stakeholder interviews with Hilde Beugelink and Laure Willemen suggested that introducing disposal urgency into policy discussions currently remains difficult because **disposal urgency still lacks a solid definition, shared terminology, measurable indicators, and broader stakeholder awareness.** Insights from Extended Producer Responsibility (EPR) systems such as *Verpact* highlighted that responsibility for packaging policy and implementation is distributed across multiple actors across governmental frameworks, making integration of emerging concepts such as disposal urgency more difficult when formal evaluation criteria are still absent.

As a result, introducing disposal urgency into policy and EPR systems currently remains challenging. Before formal policy integration becomes realistic, **the concept first requires greater visibility, shared language, stakeholder recognition, and practical experimentation within existing packaging and design structures.**

Key Insight

Before disposal urgency can realistically influence future packaging policy, the concept first requires shared terminology, measurable characteristics, and broader public and stakeholder awareness.

Producer & Brand Owner Gap

Public discussions around litter primarily frame the issue as a matter of consumer responsibility and disposal behaviour. As a result, the role packaging design itself plays in creating litter-prone behaviour often remains largely invisible within producer and public discussions.

Stakeholder interviews suggested that **companies are often more responsive to reputational pressure and strategic risk** than to voluntary environmental appeals alone. This is reflected in visibility-based campaigns by activists such as Dirk Groot (Zwerfinator) and Merijn Tinga, where specific forms of litter were publicly linked to identifiable producers and brands. One example includes the Anta Flu campaign, in which repeated documentation of littered candy wrappers contributed to producer Pervasco replacing plastic wrappers with paper alternatives (Universiteit Leiden, 2021).

At the same time, **disposal urgency currently lacks widely shared terminology and producer-oriented frameworks** that could realistically support integration into existing packaging discussions and decision-making processes. Interviews additionally suggested that large-scale producers may be less likely to prioritise disposal urgency when profitability, scalability, and existing production systems dominate packaging decisions. **More accessible entry points may instead exist within smaller organisations, sustainability-oriented stakeholders, and innovation-focused environments** that are more open to exploratory packaging approaches and new design considerations to build momentum in the industry.

Key Insight

Early implementation may depend on using reputational visibility to position disposal urgency as a strategic packaging risk while identifying lower-threshold organisations, partnerships, and innovation environments that are open to considering new post-consumption packaging approaches.

Packaging Designer & Briefing Gap

Stakeholder interviews revealed that packaging designers rarely define packaging priorities independently. Instead, **producers, brand owners, and external clients largely shape project briefs and design requirements before packaging concepts are developed.**

Current packaging evaluation systems mainly focus on performance before and during use, including branding, functionality, transport, cost, and recyclability. In contrast, **post-consumption experiences such as leakage, stickiness, awkward carrying, temporary portability, or discomfort after use are rarely structurally evaluated** despite potentially influencing litter behaviour in public environments.

Insights from TU Delft stakeholders further suggested that introducing disposal urgency solely through classroom education may have limited impact if **post-consumption experience** is not also embedded into the evaluation and briefing structures shaping real design projects. Within large engineering and design programmes such as TU Delft, **external partners often retain substantial freedom in defining project requirements and evaluation criteria**, meaning **post-consumption considerations are unlikely to influence outcomes unless they are explicitly integrated into these briefs.**

Additionally, **increasing exposure to disposal urgency within educational, innovation, and packaging-related environments** may help build broader recognition around the concept and encourage more consistent discussion of post-consumption packaging behaviour across stakeholders.

Key Insight

If disposal urgency is not repeatedly integrated into real design briefs, evaluation criteria, and professional packaging discussions, post-consumption experience is unlikely to become a structurally recognised consideration within future packaging development.

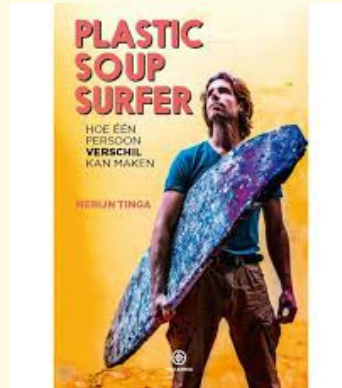
Leadership Lens: Why change is difficult

Hierarchical Taxonomy of Leadership Behaviors

Task-oriented	Clarifying
	Planning
	Monitoring operations
	Problem solving
Relations-oriented	Supporting
	Developing
	Recognizing
	Empowering
Change-oriented	Advocating change
	Envisioning change
	Encouraging innovation
	Facilitating collective learning
External	Networking
	External monitoring
	Representing



Government of the Netherlands

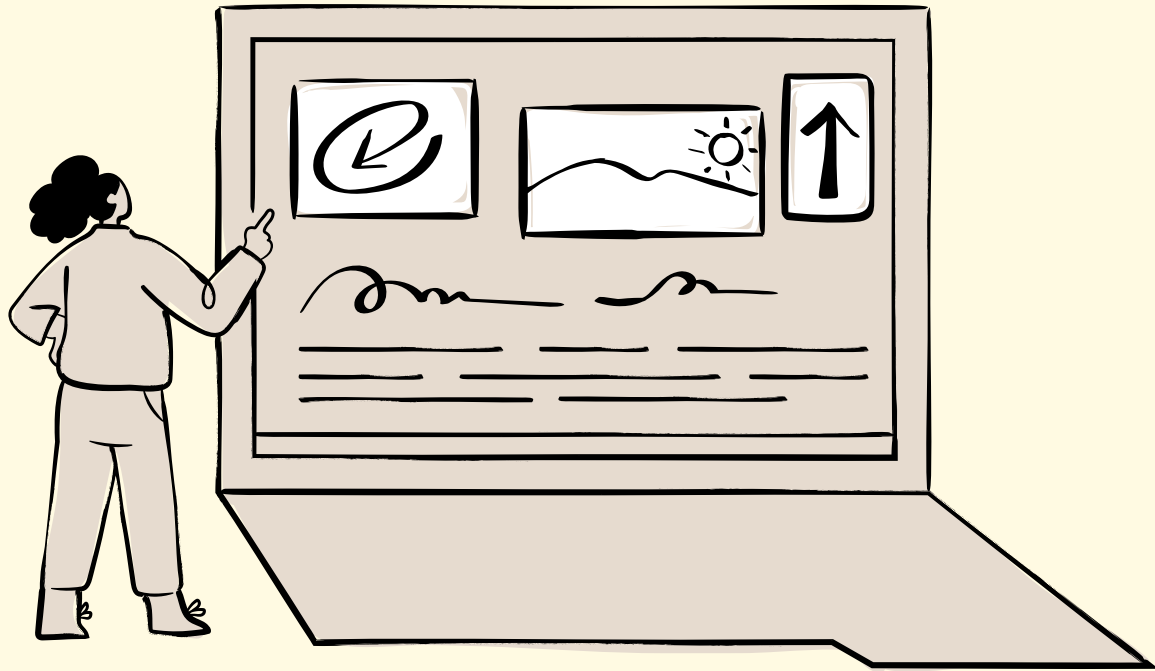


The diagnosis reveals that disposal urgency is not only a packaging challenge, but also a **leadership challenge within a fragmented system**. Responsibility for litter risk is distributed across designers, producers, policymakers, and implementation organisations, yet no actor currently treats post-consumption experience as a core responsibility. As a result, disposal urgency falls between existing structures, making coordinated change difficult.

Using **Yuki's taxonomy of leadership behaviours (2002)**, the difficulty of change becomes more visible. **Change-oriented leadership** is necessary because disposal urgency challenges the dominant framing of litter as solely a consumer responsibility issue and instead positions it as partly a design and systems issue. However, existing systems continue prioritising branding, functionality, and recyclability, making new behavioural considerations difficult to introduce.

The diagnosis also highlights the importance of **relations-oriented leadership**. Disposal urgency is not yet widely recognised by designers, producers, or policymakers as a relevant packaging consideration, resulting in **limited shared language** and **stakeholder alignment** surrounding the issue. Insights from Verpact additionally suggested that companies often approach litter primarily as a reputational issue rather than a packaging design issue, making awareness and shared understanding important preconditions for broader system change.

3. Design



Strategic Recommendations & Intervention Opportunities

The diagnosis suggested that disposal urgency currently remains difficult to integrate into packaging systems because the concept still lacks broader visibility, recognition, shared language, and structural integration within packaging-related environments. The following strategy therefore focuses on two complementary pathways:

- (1) **building broader recognition around disposal urgency** and post-consumption packaging experience, and
- (2) gradually **embedding these considerations into existing packaging, briefing, and design processes** before broader policy integration becomes realistic.

1. Building Recognition Around Disposal Urgency

A) Reposition Disposal Urgency as a Post-Consumption UX Issue

Stakeholder interviews suggested that positioning disposal urgency solely as a sustainability issue risks the concept becoming diluted within broader environmental discussions. A key strategic opportunity therefore lies in **reframing disposal urgency as a form of post-consumption user experience failure**, where packaging becomes sticky, uncomfortable, difficult to hold, unstable, or unpleasant after use.

This reframing creates stronger alignment with designer language and existing packaging and innovation priorities where usability and consumer experience already play central roles.

B) Public Awareness & Behavioural Communication Campaign

To increase recognition around disposal urgency and post-consumption packaging experience, a **behavioural communication campaign** is proposed, focused on familiar “moment after use” situations involving unpleasant or awkward takeaway packaging.

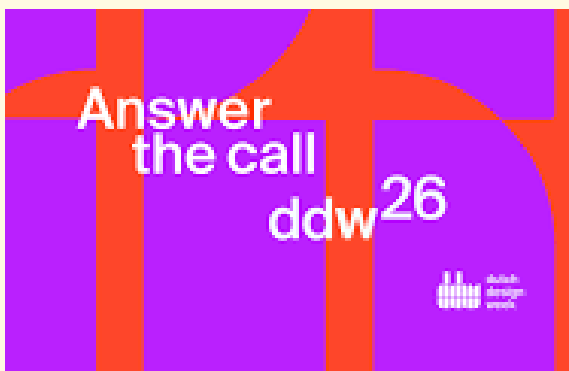
The strategy uses simple, recognisable messaging and repeated exposure inspired by behavioural public communication principles described by Pol and Swankhuisen (2020). Two complementary slogans are proposed: *“Would You Hold This for 5 Minutes?”* and *“Some Packaging Is Designed to Become Litter.”* Together, these slogans aim to make post-consumption discomfort more visible and easier to recognise within everyday public environments.

The campaign additionally draws on visibility-based communication approaches used by activists such as Dirk Groot and Merijn Tinga, where **repeated public exposure** to identifiable litter patterns may stimulate broader packaging discussions and **reputational awareness** surrounding high litter-risk packaging formats. **Shareable campaign formats** such as short-form videos, repostable social-media visuals, and hashtags including #5MinuteChallenge and #Designed2BeLitter are proposed to support repeated exposure and wider public engagement with the concept.

C) Repeated Exposure & Stakeholder Engagement

Because disposal urgency is still relatively unfamiliar within packaging-related environments, repeated exposure may help build broader recognition around post-consumption packaging behaviour across public, educational, and professional settings.

To support this, a shared calendar of workshops, educational activities, innovation events, and awareness campaigns is proposed to maintain continued discussion surrounding disposal urgency across different stakeholder environments. Repeated use of the term within packaging-related discussions may gradually contribute to stronger recognition of disposal urgency as a packaging consideration across stakeholders.



2. Embedding Disposal Urgency into Packaging Processes

A) Introduce Disposal Urgency into Design Briefs

To embed disposal urgency into existing packaging processes, the strategy proposes a producer- and designer-facing **Post-Consumption Experience Brief**. The brief introduces litter-risk prompts, post-use reflection questions, and packaging considerations focused on experiences after consumption, including awkward carrying, stickiness, leakage, temporary portability, and discomfort after use.

Rather than positioning disposal urgency solely as an environmental issue, the brief **reframes post-consumption packaging behaviour as part of packaging usability and consumer experience**. The tool is designed to integrate into existing briefing and evaluation structures already used within packaging and innovation projects, allowing disposal urgency to become part of real design discussions and project requirements.

To support **lower-threshold implementation**, the strategy additionally proposes a shorter **“brief add-on” paragraph** that can be inserted directly into existing producer or external-partner design briefs without requiring complete redesign of briefing structures. This creates a **more accessible integration pathway** for organisations open to introducing post-consumption considerations into existing projects.

Because Wouter van Dam’s research is still ongoing, the current materials function as model briefing tools that can later be refined using the finalised disposal urgency characteristics and terminology identified within the research.

B) Lower-Threshold Entry Pathways

To support practical integration of disposal urgency into existing packaging processes, the strategy focuses on lower-threshold implementation environments where external organisations already collaborate on real packaging and design challenges. University-partnered design projects, such as external collaborations within TU Delft programmes, were identified as a particularly realistic entry pathway because external partners often retain flexibility in defining project requirements, evaluation criteria, and briefing structures.

The strategy therefore proposes introducing disposal urgency through the prior proposed briefs and brief add-ons. Because TU Delft final master projects typically occur twice yearly, updated lists of participating partner organisations may provide recurring opportunities to identify new organisational entry points and sustainability-oriented collaborators. Therefore, a contact list of university external-partnership coordinators and participating partner organisations are recommended to have established in order to explore the integration of disposal urgency into existing partnership agreements, briefing structures, and collaborative design projects.



Leadership Approaches

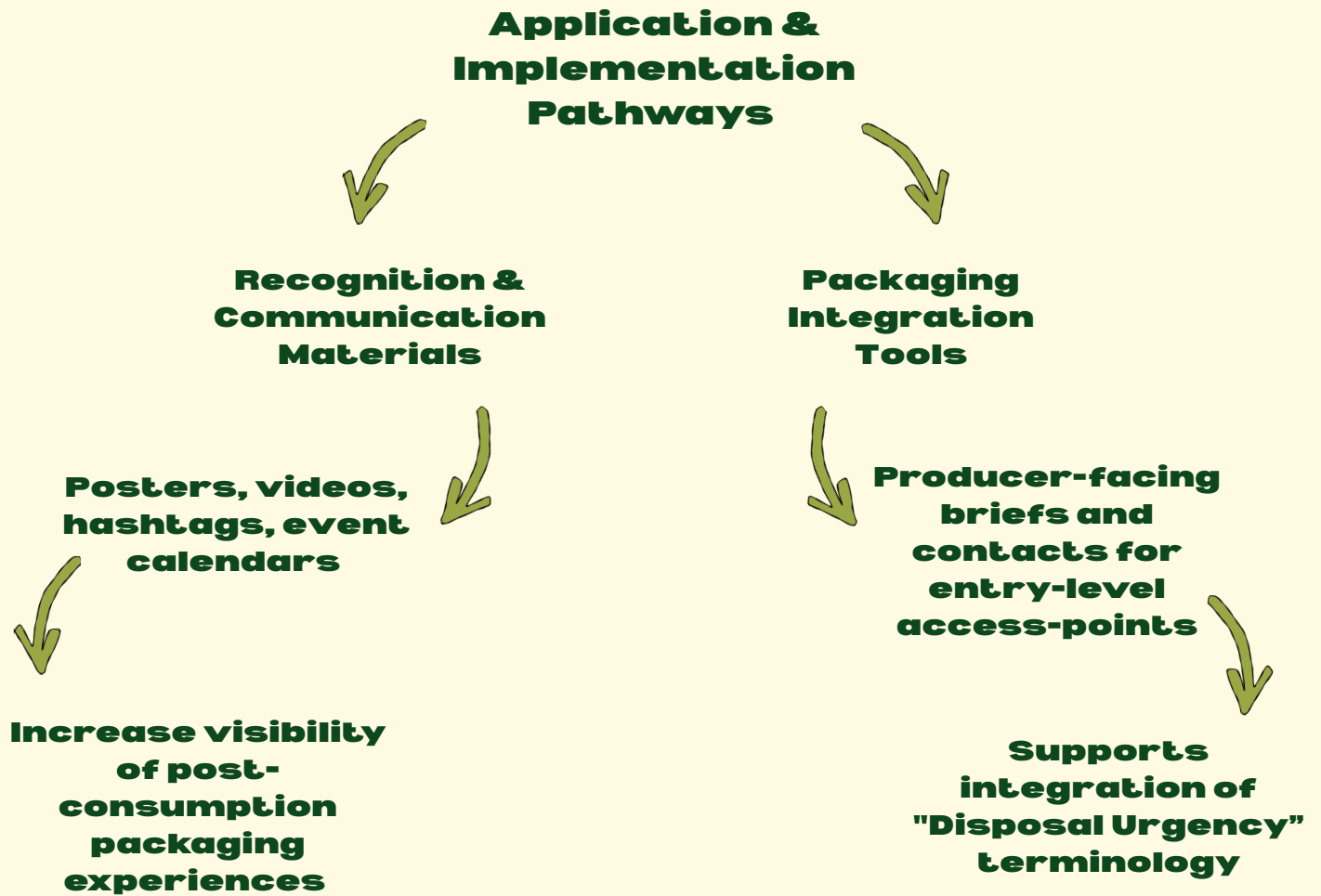
Leadership Approach	Definition	Relevance to Project
Change-oriented	Challenging existing assumptions and ways of working	Reframing litter as a systems issue
Relations-oriented	Building awareness, trust and stakeholder engagement	Building stakeholder awareness and engagement
Adaptive Leadership	Addressing challenges that require mindset and behaviour shifts	Shifting assumptions around packaging and responsibility
Systems Leadership	Coordinating change across interconnected actors and systems	Coordinating fragmented actors across the packaging system
Task-oriented	Translating ideas into practical tools and actions	Developing practical tools and implementation pathways

Building on the diagnostic finding that litter risk is distributed across multiple actors, the strategy focuses less on assigning blame and more on **aligning stakeholders** operating with different priorities and expertise.

The project reflects principles of **adaptive** and **systems leadership**. Heifetz et al. (2009) argue that adaptive challenges require shifts in stakeholder perspectives rather than purely technical solutions, while Senge et al. (2015) emphasise systems leadership when responsibility is fragmented across interconnected actors. This is reflected in the project's focus on **connecting designers, producers, policymakers, researchers, and implementation organisations through shared tools, language, and awareness strategies**. **Task-oriented leadership** is additionally reflected in the project's focus on **translating broad systems challenges into practical implementation tools**, including briefs, campaigns, stakeholder pathways, and communication materials.

Rather than relying on large-scale structural reform, the intervention prioritises **lower-threshold entry points** within existing packaging, educational, and public communication structures.

4. Development



This section outlines how the proposed recognition and integration strategies were translated into practical communication materials, briefing tools, and stakeholder implementation pathways. The development phase focused on creating lower-threshold formats capable of fitting within existing public communication, packaging, educational, and collaboration environments rather than requiring entirely new structures.

Recognition & Communication Materials

Campaign Materials

Example campaign strategy (Appendix B) materials (Appendix C and Appendix D) demonstrate how disposal urgency may be communicated through posters, short-form videos, and social-media content centred around recognisable post-consumption packaging experiences such as stickiness, leakage, awkward carrying, and discomfort after use.

The campaign uses the slogans “Would You Hold This for 5 Minutes?” and “Some Packaging Is Designed to Become Litter” alongside hashtags including #5MinuteChallenge and #Designed2BeLitter to support recognisability and social-media engagement.



Repeated Exposure & Stakeholder Engagement

A shared stakeholder calendar and engagement structure (Appendix G) were additionally developed to support continued visibility of disposal urgency across public, educational, and packaging-related environments. The calendar includes workshops, presentations, awareness activities, and packaging-related events aimed at maintaining ongoing discussion surrounding post-consumption packaging experience.

Packaging Integration Tools

Post-Consumption Experience Brief

Example producer-facing materials (Appendix E and Appendix F) demonstrate two implementation formats for integrating disposal urgency into existing packaging and design processes: (1) a model **Post-Consumption Experience Brief** containing litter-risk prompts and post-consumption design considerations, and (2) a shorter **brief add-on** designed for direct insertion into existing client briefs and project requirements.

The materials aim to introduce post-consumption packaging experience into existing packaging discussions and evaluation structures without requiring complete redesign of existing briefing processes.

University & Stakeholder Integration Pathways

To support implementation, TU Delft's external-partner coordinator contacts and related parties were identified as realistic lower-threshold integration environments because external organisations already collaborate on real packaging and innovation challenges through existing briefing structures (Appendix H).

The strategy therefore proposes introducing disposal urgency into these collaborations through external-partner design briefs, project requirements, and post-consumption evaluation prompts. Because TU Delft final master projects occur twice yearly, updated lists of participating organisations may provide recurring opportunities to identify new stakeholder entry points and potential collaborators.

A contact list of university external-partnership coordinators and participating partner organisations would therefore support future integration of disposal urgency into existing partnership agreements, packaging projects, and briefing processes.



Leadership Considerations & Conclusion

Disposal urgency currently remains largely overlooked within existing packaging discussions despite potentially influencing litter behaviour after use. The findings of this report suggest that meaningful integration of post-consumption packaging experience may depend less on immediate large-scale reform and more on gradually embedding disposal urgency into existing packaging, educational, and public communication environments.

Within the development phase, the strategy prioritised practical and lower-threshold implementation pathways capable of fitting within existing packaging and design structures. This is reflected in the development of producer-facing briefing tools, university-partnered implementation pathways, stakeholder engagement opportunities, and public communication materials designed to introduce disposal urgency into ongoing packaging discussions and workflows.

Together, these interventions aim to create realistic pathways through which disposal urgency may gradually become a more recognised consideration within future packaging design, producer decision-making, and public discussions surrounding litter-prone packaging.

5. Conclusion

Disposal urgency currently remains largely overlooked within existing packaging discussions despite potentially influencing litter behaviour after use. The findings of this report suggest that meaningful integration of post-consumption packaging experience may depend less on immediate large-scale policy reform and more on gradually increasing recognition and **embedding disposal urgency into existing packaging-related environments.**

The proposed strategy therefore focused on two complementary pathways: **building broader recognition around disposal urgency** through behavioural communication and stakeholder engagement, and **embedding post-consumption considerations into existing packaging briefs, educational collaborations, and design processes** through practical integration tools. Together, these interventions aim to create **realistic and lower-threshold pathways** through which disposal urgency may gradually become a more recognised consideration within future packaging development and public discussions surrounding litter-prone packaging.



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Yukl, G., Gordon, A., & Taber, T. (2002). A Hierarchical Taxonomy of Leadership Behavior: Integrating a half century of Behavior research. *Journal of Leadership & Organizational Studies*, 9(1), 15–32. <https://doi.org/10.1177/107179190200900102>

Calendar Registration Links:

- EU Green Week : https://green-week.event.europa.eu/3-4-june-conference_en
- Dutch Design Week : <https://ddw.nl/login>
- Sustainable Packaging Summit:
<https://www.packagingsummit.earth/event/d66d241d-085d-41f3-90e8-ac135fa07043/summary>
- Packaging Innovation and Empack: <https://www.packagingbirmingham.com/>

Appendix A - Stakeholder Table

Target group	Effectiveness (Leverage)	Strategies to influence	Realism (Accessibility, feasibility)	Timeframe
Policy Makers	● Very high ▾	<ul style="list-style-type: none"> Introduce disposal urgency into policy language 	⊖ High (bureaucratic) ▾	Long-term
Producers/ Brand owners (/clients)	● High ▾	<ul style="list-style-type: none"> Introduce disposal urgency into design briefs, Reputational campaigns, ESG/Future regulation framing 	✎ Medium ▾	Mid-term
Packaging Designers	● Medium ▾	<ul style="list-style-type: none"> Provide design heuristics (stickiness, hodability), Frame as “post-use experience” (good design), Integrate into design norms/culture 	✎ Medium ▾	Mid/Long-term
Design Educators (ex: universities)	● Medium ▾	<ul style="list-style-type: none"> Guest lectures, Design challenges/assignments, Integrate sustainability as a bigger design consideration 	⦿ Medium-Low ▾	Long-term
Ecosystem actors	● Medium ▾	<ul style="list-style-type: none"> Advocate for litter-risk-based fee modulation, Introduce “Disposal Urgency” into evaluation tools 	⊖ High (systems) ▾	Long-term
Public / Media	● Medium ▾	<ul style="list-style-type: none"> Awareness campaigns, “Name & Shame” litter-heavy products 	✓ Medium-High ▾	Short-Mid term

Appendix B - Public Campaign Strategy Framework

Rather than framing litter as irresponsible consumer behaviour, the campaign visualises how some packaging create post-consumption discomfort and disposal pressure.

1. Make the problem immediate and relatable

Focus on recognisable “moment after use” experiences rather than abstract environmental harm

Model: Overheidscommunicatie (Pol & Swankhuisen, 2020)

2. Visualise everyday friction

Show sticky, leaking, uncomfortable to-go packaging in public situations in visual mediums

Model: Behavioural design and anti-litter campaigns

3. Reframe instead of blame

Position litter partly as a packaging design issue rather than solely consumer irresponsibility

Model: Systems-oriented public communication

4. Repetition through simple public language

Repeated use of “Would you hold this for 5 minutes?” across media formats.

5. Public participation & visibility

Street-interview style public challenge videos visualising disposal pressure

Model: Dirk Groot + social media behavioural campaigns

6. Social amplification

Encourage audiences, creators, and public figures to share recognisable “5-minute problem” packaging examples to increase visibility and normalise discussion around disposal urgency

Strategic Rationale

- **Making the Invisible Moment Visible:** Rather than focusing only on littering itself, the campaign highlights the uncomfortable moment immediately after consumption, where packaging may create disposal pressure before littering occurs.
- **Reframing Rather Than Blaming:** Inspired by systems-oriented behavioural campaigns, the strategy avoids portraying consumers as irresponsible and instead reframes litter risk as partly shaped by packaging design and post-consumption experience.
- **Why the Slogan Works:** The slogan “Would You Hold This for 5 Minutes?” is intentionally simple, concrete, and socially recognisable. Inspired by communication approaches discussed by Christine Swankhuisen, it encourages immediate emotional recognition rather than abstract environmental reasoning.
- **Public Participation as Visibility Strategy:** The use of street-interview and social-media challenge formats is partly inspired by the visibility strategies used by Dirk Groot, where repeated public exposure helps create awareness and recognisable discussion around specific forms of litter.

Appendix C - Public Campaign Poster Mock-Up

This mock-up illustrates how the “Would You Hold This for 5 Minutes?” campaign message could appear in public environments such as transit stations or as online share-able content.

WOULD YOU HOLD THIS FOR 5 MINUTES?

If the answer is no, it will probably end up on the ground.

Some packaging is hard to hold. Sticky. Smelly. Uncomfortable. It creates the urge to get rid of it – fast.

That's **disposal urgency**.

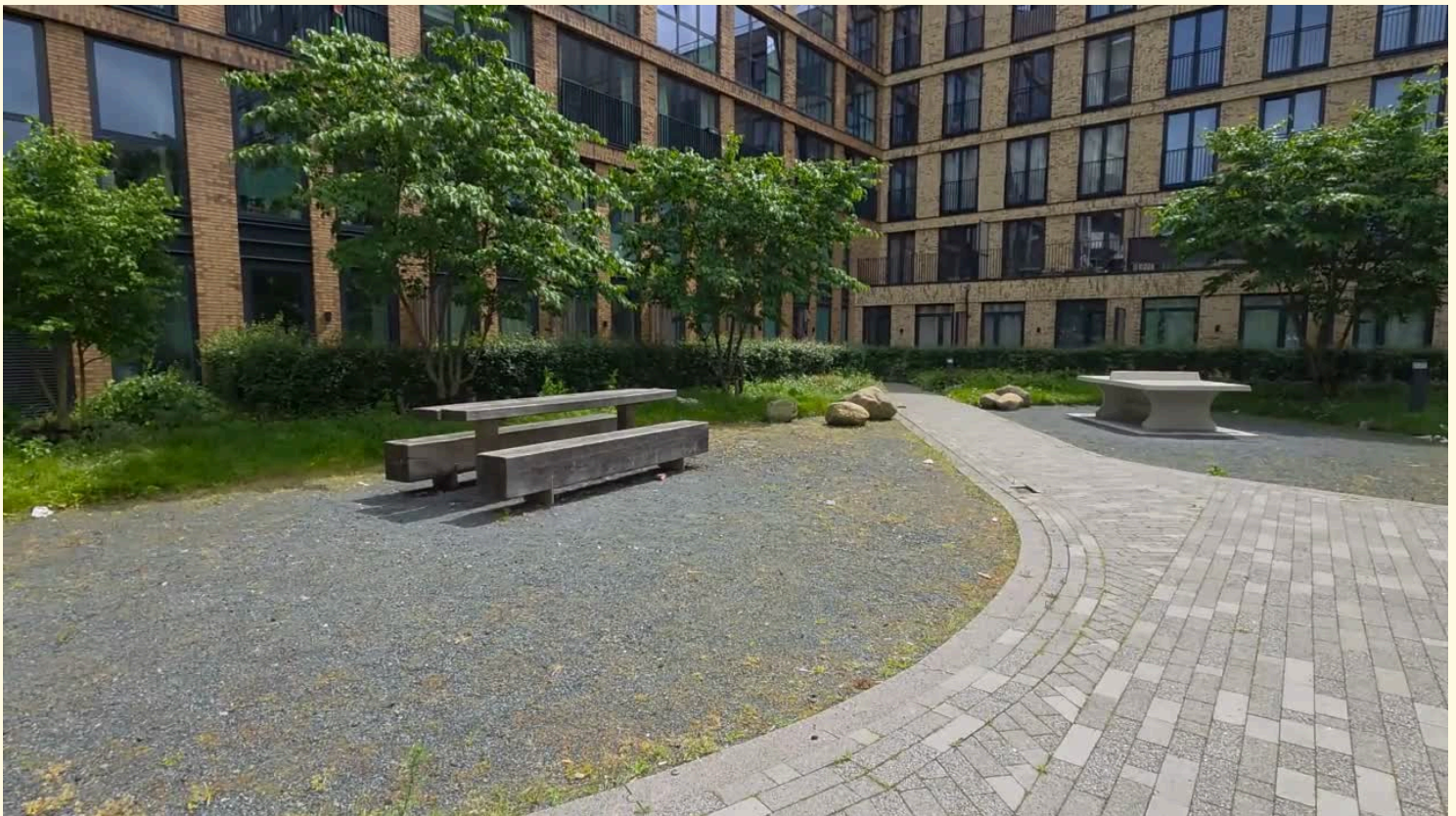


Some things are designed to become litter.



Appendix D - "Would you Hold this for 5 Minutes?" Campaign video concept

This appendix contains an example campaign video concept demonstrating how disposal urgency may be communicated through relatable post-use takeaway packaging situations. The video uses before-and-after packaging comparisons and a "5-Minute Challenge" format to visualise how certain packaging characteristics may unintentionally contribute to rapid disposal pressure and litter-prone behaviour.



Appendix E - Model Design Brief

This appendix contains the proposed design-brief intended for packaging producers and designers. The brief operationalizes the concept of disposal urgency by prompting consideration of post-consumption litter risk during product development.

POST-CONSUMPTION EXPERIENCE BRIEF

Packaging Design Add-On

Intended for use during early-stage packaging ideation and briefing processes.

Purpose: This exploratory design brief encourages consideration of how packaging behaves after use. Beyond branding and functionality, certain packaging characteristics may create discomfort or immediate disposal pressure, increasing litter risk in public environments. **Disposal urgency** refers to packaging characteristics that create discomfort or pressure to dispose of an item quickly after use.

Post-Consumption Design Objective: Reduce packaging characteristics that may unintentionally increase disposal urgency after consumption, including leakage, residue, awkward carrying experiences, or instability in public settings.

Consumption → Post-use experience → **Disposal Urgency** → Litter risk

Post-Consumption Experience Prompts

Holdability After Use	Can the packaging comfortably be carried after consumption?
Leakage/ Residue	Does the package leak, smear, or leave residue after use?
Stickiness / Wetness	Does the packaging create physical discomfort after consumption?
Temporary Portability	Can the packaging realistically be stored temporarily until disposal?
Disposal Pressure	Does the packaging create pressure to dispose immediately after use?

5-Minute Carry Test

Would a user realistically continue carrying this packaging comfortably for five minutes after use?

Reflection questions

Which packaging characteristics create the most discomfort after use?

At what point after consumption does disposal pressure begin?

Which design adjustments could reduce post-consumption inconvenience or rapid disposal pressure?

How does this packaging behave in public or on-the-go environments?

Appendix F - Model Design Brief Paragraph Add-on

*The listed characteristics are to be solidified after the exact characteristics have been verified with metrics through Wouter van Dam's research

Post-Consumption Experience Consideration

*In addition to branding, functionality, and recyclability, this project should also consider the **post-consumption experience** of the packaging. Designers are encouraged to evaluate whether characteristics such as stickiness, leakage, smell, discomfort after use, or limited temporary portability may create immediate disposal pressure in public or on-the-go environments. Consider how the packaging behaves not only during consumption, but also in the minutes immediately after use.*

Appendix G - Events Calendar

This appendix presents a calendar with scheduled events that offer opportunity to spread awareness of the term “Disposal Urgency” to relevant stakeholders and consumers. The events cover variability of social media visibility, public engagement activities, and community participation strategies.

Date	Event	Location	Target Audience	Goal
3-4 June 2026	EU Green Week	Brussels	Policymakers, EU institutions, civil society	Europe's leading environmental policy conference. follow policy developments and engage.
5 June 2026	World Environment Day	Worldwide (Media)	General Public	Raise awareness on the topic worldwide
17-25 October 2026	Dutch Design Week (DDW)	Eindhoven, The Netherland	Designers and design researchers	Interacting with designers that directly shapes packaging decisions presenting the work on disposal urgency
10th - 12th November 2026	Sustainable Packaging Summit	Utrecht, The Netherland	Producers, Packaging industry professionals	Opportunity to introduce Disposal Urgency as a significant industrial criteria when designing
24 & 25 February 2027	Packaging Innovation and Empack	Birmingham, United Kingdom	Packaging Industries professionals, Big industry companies	Gain access to connect with industry actors who influence packaging design and production

Appendix H - Contact Opportunities

Delft Design Lab (DDL)

A platform within TU Delft Faculty of Industrial Design Engineering that connects students, researchers, and external partners around real-world societal design challenges. DDL supports in the brief approval and requirements across sub-labs.

The most relevant sub-lab: **Circular Design Lab (CDL)**, specifically focuses on circular product systems, design interventions and external stakeholder collaboration, but has a gap of focus on post-consumption experience.

Contact pathways

- DDL General Coordinator: delftdesignlabs-io@tudelft.nl
- CDL Coordinator **Dr. Yumiko Henneberry**: cdl-io@tudelft.nl (+31152781663)
- CDL Professor and academic partner: C.A.Bakker@tudelft.nl (+31 15 27 89822)



Dr. Y.K.C. (Yumiko)
Henneberry

TU Delft Faculty of Industrial Design Engineering

The faculty partners with external stakeholders, including industrial organizations that create edible-product design briefs. With the faculty, there are specialized courses including *Sustainable Design Engineering* that integrate sustainability and circular design into the coursework and requirements for external-partner collaboration, but often lack product post-consumption considerations.

The Joint Master Project, which is the design project given to students twice a year, may be contacted for the list of upcoming partners for the next (half) year.

Contact pathways

- Course Coordinator Janus Keller: a.i.keller@tudelft.nl (+31 (0)6 22512224)

Responsible Marketing and Consumer Behaviour (RMCB)

The RMCB section aligns with our project because disposal urgency can be understood as a design for sustainable behavior challenge: packaging characteristics influence how consumers interact with products after use, shaping disposal decisions and potential litter outcomes.

Contact pathways

- Dr. ir. S. Wu: S.Bakker-Wu@tudelft.nl

