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Consumer Communication and Engagement in Circularity

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Transitioning to Circularity

- It is accepted that different societal actors, including consumers, have an important role to play in the transition to a circular economy (CE) ^[1]
- The transition to circularity may affect the consumers in several levels, including the social dimension:
 - Enhance and encourage one's recycling activities
 - Provide new circular products and services to adapt with
 - Encourage to alter one's consumption processes
 - Lead to reconsider one's needs and values
 - Promote acquiring knowledge and skills



Transitioning to Circularity

- As a consequence, consumers may have different roles in a CE and may become more active participants in the transition
 - Examples of different consumer roles in a CE have been proposed, for example, by Maitre-Ekern and Dalhammer (2019) [2]. These roles for a consumer include a purchaser, maintainer, repairer, seller, sharer/collaborator and sorter/recycler



Transitioning to Circularity

- However, according to the recent report by the EC ^[3], few consumers are engaged in CE practices because lack of information
- Therefore, communication is an important factor to engage consumers to the circular transition in order to achieve the behavioural change
- The key questions are:
 - How to communicate?
 - How to engage?



How to communicate and how to engage?

- This presentation presents four different cases how consumers may be engaged to circular activities
 - The cases represent different sectors

Case 1, consumer adaptation to circularity in Norway shows how a “Awareness to Action” framework can help in an individual change for CE actions

Case 2 presents a study of how businesses, who provide circular products or services, are communicating with consumers to market their circular offerings.

Case 3 assesses different packaging labels and claims used in communication to guide consumers’ circular actions

Case 4 gives recommendations to cosmetics packaging sector how to market sustainability through labels and claims



Case 1: Consumer adaptation to circularity in Norway

- Circle Economy. 2020. Circularity Gap Report Norway. <https://www.circularity-gap.world/norway> ^[4]
- Norwegian businesses and government were recognised as changemakers to promote circular consumption and to adapt consumers to a CE in different circular strategies
- This study introduced recommendations of interventions to achieve individual change for circularity



Case 1: Consumer adaptation to circularity in Norway

Background

- Consumption in Norway shows in the socio-economic status of the consumers (high income & high spending power)
- The consumers have not adapted to circularity due to misconceptions or low level of familiarity of the concept of a CE
 - The term sustainability was more familiar and many of the consumers (26%) stated that they were willing to make more sustainable buying decisions

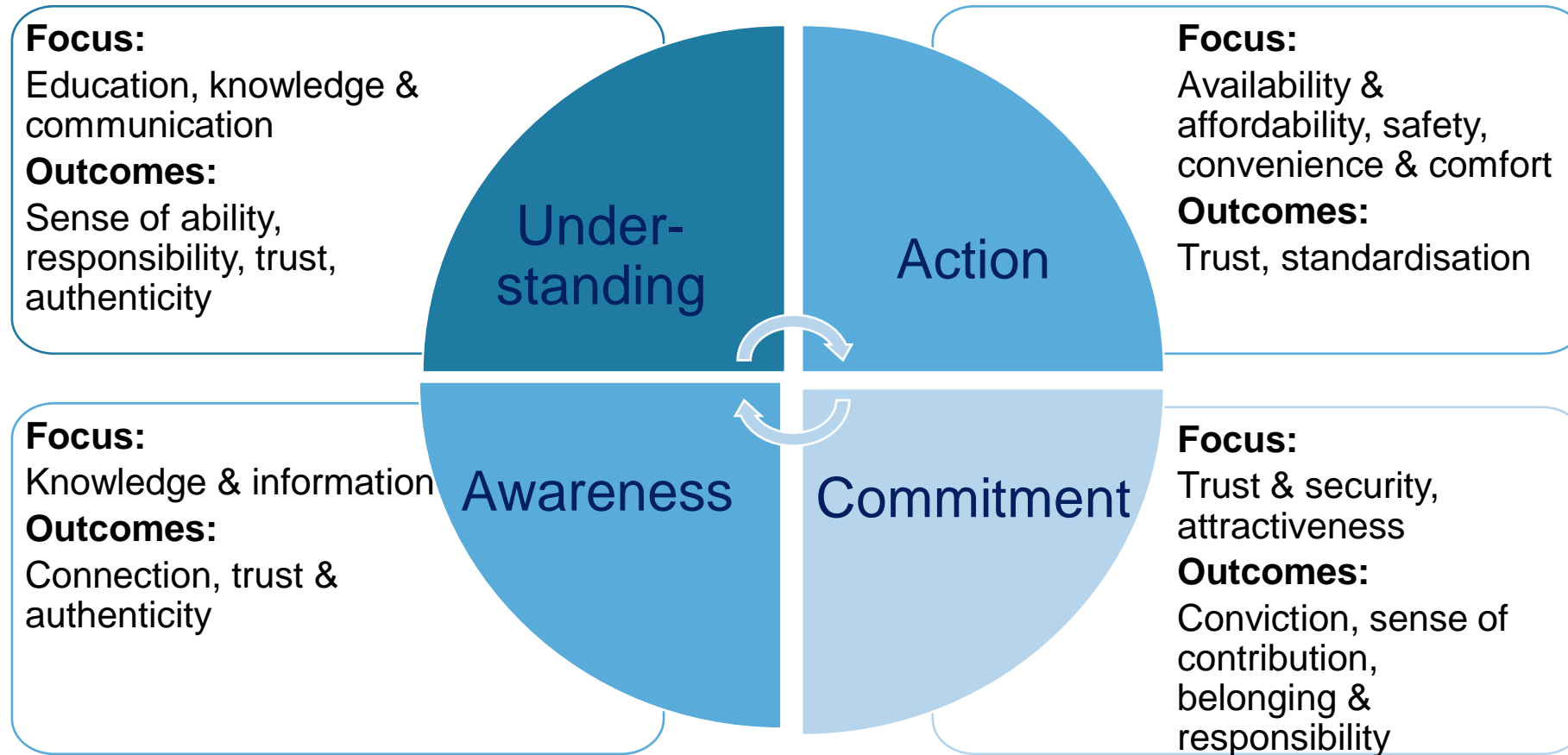


Case 1: Consumer adaptation to circularity in Norway

- In general, consumers may have to take a series of steps for an individual change to circularity. These steps are:
 - awareness,
 - understanding,
 - commitment, and
 - action
- In the analysis, these steps were used to generate the framework for consumer commitment, “Awareness to Action” model that provides recommendations of interventions to take to engage consumers to circularity



Case 1: Consumer adaptation to circularity in Norway



Case 1: Consumer adaptation to circularity in Norway

- The steps of the awareness to action model rely much on proper communication
 - Awareness for circularity requires knowledge and information sharing
 - Understanding of circularity requires education, knowledge, and communications
 - In commitment and action to circularity the consumers are engaged by showing how the circular choices provide convenience, ease, comfort, and quality over the linear ones



Case 1: Consumer adaptation to circularity in Norway

• Examples of circular strategies

1) Extending product lifetimes

- For example, changemakers may encourage the consumers to avoid buying products made from virgin materials and communicate the benefits of the extended product lifetimes

2) Using less materials, energy, and components in production

- For example, changemakers may encourage the consumers to share and rent instead of owning



Case 1: Consumer adaptation to circularity in Norway

• Examples of circular strategies

- 3) Avoiding hazardous substances, using renewable energy, and regenerating natural systems
 - For example, changemakers may communicate the consumers to choose carbon-neutral choices
- 4) Recycling and reusing materials and products
 - For example, changemakers may encourage the consumers to be active players in the material supply streams by recycling



Case 1: Consumer adaptation to circularity in Norway

- **A case from clothing industry: Bergans of Norway**

- <https://www.bergans.com/en/sustainability>

- “Long live the product” concept where the consumers are engaged to the circularity by repair, rental, reuse, and redesign of the outdoor equipment and clothing



Case 2: How to Communicate Circularity to Consumers

- Chamberlin, L. & Boks, C. 2018. Marketing Approaches for a Circular Economy: Using Design Frameworks to Interpret Online Communications. Sustainability 10, 2070. <https://doi.org/10.3390/su10062070> ^[5]
- The article discusses how businesses, who provide circular products or services, are communicating to consumers to market their circular offerings.



Case 2: How to Communicate Circularity to Consumers

- In the consumer engagement it is critical for the circular companies to recognise how the consumer behaviour can be changed at both purchase and use phases of the offering
- Consumers' perceptions and acceptance of circular products or services were studied from scientific literature. The most prevalent factors were grouped in several themes termed “consumer factors”



Case 2: How to Communicate Circularity to Consumers

- In addition, different communication strategies were selected from the marketing communications of four case businesses (fashion retailers)
- Based on these findings, communication strategies for consumers' acceptance of circular products or services were proposed
- The summary of the outcomes is tabulated in the following slides



Case 2: How to Communicate Circularity to Consumers

| Consumer Factor | Communication Design Strategies |
|---|---|
| Contamination / disgust / newness | Importance, playfulness, rephrasing and renaming, emotional engagement, empathy, personality, framing, choice editing |
| Convenience / availability | Encouragement, direction, simplicity, assuaging guilt, worry resolution |
| Ownership | Meaning, anchoring |
| Cost / financial incentive / tangible value | Encouragement, rewards, importance, first one free, scarcity, framing |

Adopted from Chamberlin, L. & Boks, C, 2018 ^[5]



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Case 2: How to Communicate Circularity to Consumers

| Consumer Factor | Communication Design Strategies |
|--|--|
| Environmental impact | Transparency, simplicity, empathy, obtrusiveness, meaning, framing, emotional engagement, importance, assuaging guilt, direction |
| Brand image / design/ intangible value | Meaning, storytelling, empathy, mood, color associations, importance, emotional engagement, scarcity, prominence, obtrusiveness, expert choice, social proof |
| Quality / performance | Provoke empathy, meaning, storytelling, personality, importance, scarcity, expert choice, direction, emotional engagement, worry resolution |

Adopted from Chamberlin, L. & Boks, C, 2018 ^[5]



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Case 2: How to Communicate Circularity to Consumers

| Consumer Factor | Communication Design Strategies |
|---|--|
| Customer service / supportive relationships | Encouragement, tailoring, transparency, emotional engagement, metaphors, provoke empathy, assuage guilt, reciprocation, importance |
| Warranty | Reciprocation, assuaging guilt, worry resolution, obtrusiveness, metaphor, importance |
| Peer testimonials / reviews | Social proof, storytelling, provoke empathy, expert choice, importance, worry resolution |

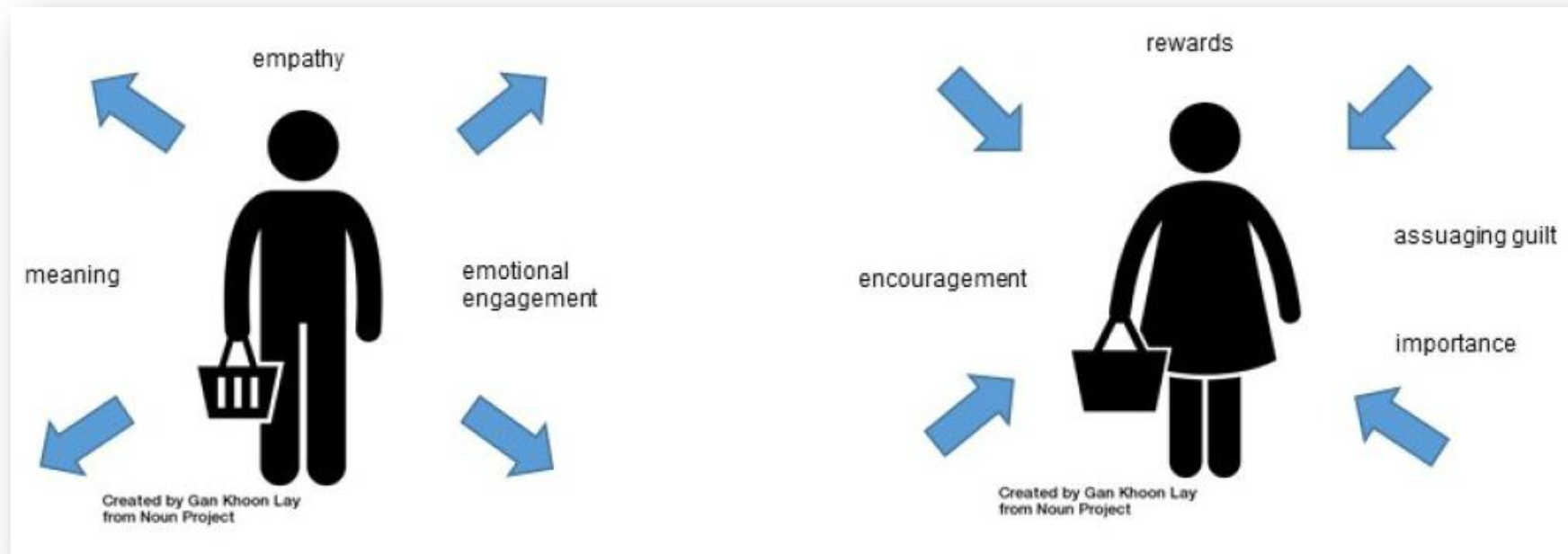
Case 2: How to Communicate Circularity to Consumers

- Intrinsic and extrinsic dimensions of marketing communication
 - Intrinsic factors seem to be addressed by eudaimonic dimensions (i.e. pursuing happiness by finding meaning and purpose) and extrinsic factors are addressed by hedonic dimensions (i.e. connected with feelings of pleasure).
 - The case CE businesses (fashion retailers) appeared to use a combination of these.



Case 2: How to Communicate Circularity to Consumers

Intrinsic and extrinsic dimensions of marketing communication



Case 3: Can I recycle this?

United Nations Environment Programme & Consumers International (2020). “Can I Recycle This?” A Global Mapping and Assessment of Standards, Labels and Claims on Plastic Packaging.

<https://www.oneplanetnetwork.org/resource/can-i-recycle-global-mapping-and-assessment-standards-labels-and-claims-plastic-packaging> ^[6]



Case 3: Can I recycle this?

- The decisions consumers make during the product purchase phase and disposal have a great influence on circular transition (e. g. production processes and levels of plastic leakage to environment)
- As consumers are more aware of plastic pollution, on-package communication through labels and claims is becoming an important tool for guiding consumers to circularity



Case 3: Can I recycle this?

- To communicate sustainability to consumers, UNEP and International Trade Centre ^[7] recently published guidelines for consumers sustainability information for businesses. For a video summary of the report outcomes, see:
https://www.youtube.com/watch?v=wOOBn_RUKVE
- These communications often reflect what changes companies have done for sustainability, and guide consumers towards, for example, proper disposal options



Case 3: Can I recycle this?

- However, communications on the sustainability information on the plastic packaging may be confusing and misleading, and not necessarily clearly communicated to consumers
- Therefore, guidelines for consumer communication were generated by UNEP and Consumers international in order to activate the consumers for circularity of plastic packaging
 - A global perspective and assessment of standards, labels, and claims on plastic packaging from the fast-moving consumer goods and food and beverage packaging was carried out



Case 3: Can I recycle this?

- The report provides recommendations for improving the communication, which activates consumers in purchasing, using, and disposing the plastic packaging properly and helps to contribute to the circularity of plastic packaging.



Case 3: Can I recycle this?

Landscape of sustainability communications

1) Communications on packages

- Label space is mostly reserved for marketing purposes and legal and regulatory statements
- A voluntarily label is expected to increase some value for the company
- Research indicated that the majority of consumers expect to see recyclability information on packaging



Case 3: Can I recycle this?

Landscape of sustainability communications

2) Understanding the sustainability information (1/2)

- Consumer awareness of sustainability in their purchasing habits is rising. Plastic pollution is the major concern
- Consumers are confused by different plastic types and their end-of-life options
 - On-package labelling only helps if recycling infrastructure is available
 - Terms 'biobased', 'biodegradable', and 'compostable' and their implications are not clear to the customers
 - Biobased packages may be disposed incorrectly



Case 3: Can I recycle this?

Landscape of sustainability communications

2) Understanding the sustainability information (2/2)

- Consumer education and information is needed to increase consumer understanding
 - E.g. using more precise and informative labels and claims



Case 3: Can I recycle this?

Landscape of sustainability communications

3) Sustainability communications landscape

- In addition to on on-package communications, consumers also experience other forms of communication of plastic packaging from companies and other stakeholders
- For example,
 - QR codes to provide disposal options
 - Smartphone apps for promoting recycling
 - Improved sorting technology



Case 3: Can I recycle this?

The plastic landscape

- The plastic landscape (materials and circular use, e.g. recyclability and recycling) is often confusing and contradictory to consumers



Case 3: Can I recycle this?

The plastic landscape - Materials

- Consumers often falsely think that the plastic resin identification codes are labels for whether the plastic is recyclable or not
 - This may be due to the “chasing arrows” resembling the universal symbol for recycling



Source: Wikimedia Commons



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Case 3: Can I recycle this?

The plastic landscape - Materials

- The original ASTM plastic resin identification codes were updated to reduce misconceptions
- No labels are required for plastic additives



Source: Own work



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Case 3: Can I recycle this?

The plastic landscape - Recyclability

- The definition for recyclable packaging according to Ellen Mac Arthur Foundation (2020) ^[8]
“A packaging or packaging component is recyclable if its successful post-consumer collection, sorting, and recycling is proven to work in practice and at scale”



Case 3: Can I recycle this?

The plastic landscape - Recyclability

- Some key considerations for recyclability of plastic packaging:
 - Plastic resin and additives used
 - Size, shape, and colour
 - Liners, labels, components
 - Contamination
 - Infrastructure available for recycling
 - Economics and markets



Case 3: Can I recycle this?

The plastic landscape - Recycling

- Policies and regulations concerning recycling activities vary
- Some common policies for packaging (in the EU)
 - disposal is the least favourable action, according to the waste hierarchy
 - national targets for recycling and recovery are set
 - circularity or life cycle approaches are favoured



Case 3: Can I recycle this?

The plastic landscape - Recycling

- Retailers have a role in facilitating recycling
 - Globally, some retailers have implemented standardised labels and have taken actions for recycling, for example:
 - Walmart: How2 Recycle, playbooks of sustainability for packaging suppliers
 - Marks & Spencer: On-Pack Recycling label, in-store plastic recycling bins
 - Woolworths: Australasian Recycling Label, On-Pack Recycling label
 - These serve as collection points for packaging materials not recycled through local recycling infrastructure



Case 3: Can I recycle this?

Standards and guidance

- Several standards are available for plastic packaging with different scopes:
 - Recycled content
 - Biobased content
 - Materials & recyclability
 - Compostability & biodegradability
 - General environmental labels and declarations



Case 3: Can I recycle this?

Standards and guidance

- Several guidance documents are available for plastic packaging
- The guidance has been generated by governmental and intergovernmental agencies, non-governmental organisations, and industry associations



Case 3: Can I recycle this?

Labels

- At best, visual labels are used to promote consumer communication compared to for example, claims
- However, the label design may also create confusion among consumers



Case 3: Can I recycle this?

Labels

- Categories of labels of
 - recycled content
 - biobased plastics
 - recycling guidance
 - recycling financing
 - compostability and biodegradability
- were identified in this study and were assessed by multidisciplinary stakeholders



Case 3: Can I recycle this?

Labels – summary of the assessments

The best reviews

- recycling guidance labels

The worst / mixed reviews

- biodegradability and compostability labels

Visuality of the labels

- has a key role in communicating info and should help to understand (symbols, colours)
- “Chasing arrows” symbol should be reserved for recyclability



Case 3: Can I recycle this?

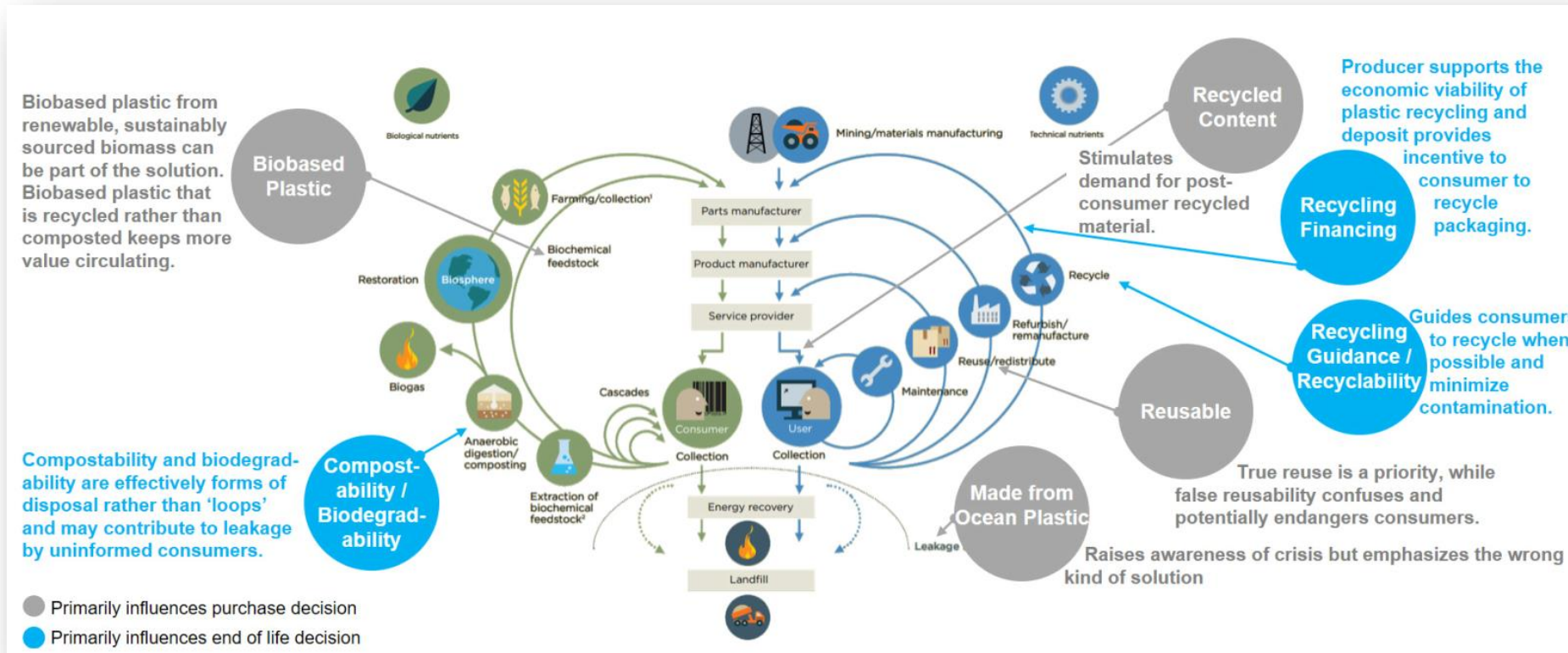
Claims

- Claims tend to be less credible than labels
 - Labels are more likely to be supported by certifications and standards to provide reliability and transparency
- Five main claim categories were identified in the study:
 - Made from recycled plastic
 - Made from ocean plastic (and similar variations)
 - Biobased
 - Compostable and biodegradable
 - Recyclable



Case 3: Can I recycle this?

How can labels and claims support circularity?



Case 3: Can I recycle this?

Recommendations of effective consumer communication

Businesses should follow the previously published Guidelines for providing product sustainability information

Terms such as content or reusability of plastic packaging should be harmonised globally

Standards, labels, and claims should reflect the actual conditions better



Case 3: Can I recycle this?

Recommendations of effective consumer communication

The symbol “chasing arrows” should be restricted to only indicate recyclability

Informative and verified recycling labels should be used and their proper use strengthened



Case 3: Can I recycle this?

Conclusions (1/2)

- The current landscape may lead to consumer confusion regarding the sustainability of plastic packaging, which may hamper consumers' decision making for circular actions.
- Improvements to aid consumers engagement through communication:
 - improving the definitions and terms in labels and claims
 - improve the standardisation supporting the labels and claims
 - design of the labels and claims



Case 3: Can I recycle this?

Conclusions (2/2)

- Other actions should also be taken for circularity
 - improvement of standardisation and legislation
 - reduction in unnecessary plastic packaging
 - improvement of plastic package design to better meet the goals of circular economy
 - reusable and recyclable packaging as well as packaging with increased recycled material content



Case 4: Cosmetics Packaging Claims

SPICE - Sustainable Packaging Initiative for Cosmetics.
2020. L'Oréal and Quantis. <https://open-spice.com/claims-guidelines> ^[9]



Case 4: Cosmetics Packaging Claims

- SPICE initiative launched by L'Oréal and Quantis aims at developing better communication of sustainability of cosmetics packaging
- This initiative is meant for cosmetics companies to
 - accurately communicate the environmental claims of packaging, which in turn can strengthen the positive perception of cosmetic brands amongst consumers
 - aid in developing more sustainable packaging



Case 4: Cosmetics Packaging Claims

- Generally, consumers' awareness of sustainable packaging is rising, for example, for
 - plastics in oceans
 - global warming
 - animal testing
 - chemicals
 - recycling
 - fair trade



Case 4: Cosmetics Packaging Claims

- Consumers

- say they are more conscious in their packaging material choices than they used to be five years ago
- see that it's important for the companies to design packaging for reuse or recyclability
- expect the brands to be transparent and honest when communicating about sustainability



Case 4: Cosmetics Packaging Claims

General criteria for the claims in communication guidance

- The claims should be
 - 1) Specific, complete, and accurate. LCAs make the claims stronger
 - 2) Measurable, substantiated, and clarified
 - 3) Relevant
 - 4) Understandable
 - 5) Accessible



Case 4: Cosmetics Packaging Claims

- The SPICE guidelines emphasise the use LCA approach in the communication
 - For example, communicating comparative claims of packaging materials or products as well as the reduction of the environmental impact should rely on the LCAs and should be done according to the recommendations



Case 4: Cosmetics Packaging Claims

- For the proper communication of improvements in the packaging and the comparisons, SPICE guidelines recommend to use equivalences

In addition to scientific units, equivalences with concrete examples

Equivalences should be locally relevant and appreciate national/regional differences

To simplify communication to the general public, equivalences should be rounded down

Case 4: Cosmetics Packaging Claims

- Greenwashing poses a legal risk for a business
- Some examples from other sectors

Keurig Recyclable Cups

<https://topclassactions.com/law-suit-settlements/consumer-products/beverages/905401-keurig-cant-escape-recyclable-k-cups-class-action/>

Coca-Cola's PlantBottle

<https://www.ibtimes.com/coca-cola-company-ko-busted-greenwashing-plantbottle-marketing-exaggerated-1402409>

Tetra Pak 100% recyclable packaging

<https://www.duh.de/presse/pressemitteilungen/pressemitteilung/tetra-pak-verliert-vor-gericht-gegen-duh-und-setzt-weiter-auf-greenwashing/>



Case 4: Cosmetics Packaging Claims

- Many types of claims are used in cosmetics packaging

**Environmental
footprint**

**Resource
optimisation**

**Renewable
materials**

**Recycled
content**

Recyclability

**Compostability
and
biodegradability**

**Reusability,
rechargeability
& refillability**

**“Absence of” &
“Free from”**



Case 4: Cosmetics Packaging Claims

- **Environmental footprint** refers to the impacts the packaging, product, company, or activity has on the environment. E.g. impact on
 - climate change
 - land use
 - water scarcity
 - resource depletion
 - ecotoxicity
 - human toxicity



Case 4: Cosmetics Packaging Claims

General communication guidelines for the environmental footprint

- Quantification of an environmental footprint needs a standardised LCA
 - Measurement units and the source study of the LCA should be specified
 - The scope of the LCA should be indicated in the claims
- The indicators of the environmental footprint should be defined in the claims by using concrete terms.



Case 4: Cosmetics Packaging Claims

- **Resource optimisation** refers to reduction of materials, water, or energy used for production or distribution of the product or the packaging
 - Aims at reducing the environmental footprint of the package through its life cycle while maintaining the quality



Case 4: Cosmetics Packaging Claims

- Some general communication guidelines for resource optimisation
 - For example, claim on light-weighting should be stated for every material used and only if the reduction is more than 10% from the previous version
 - Claims should only be used if the resource optimisation leads to lower overall environmental impact



Case 4: Cosmetics Packaging Claims

- **Renewable materials** refer to materials that are made of biomass
 - E.g. paper, cardboard and bio-based plastics
- The term renewable is often confused with terms recyclable, biodegradable, or compostable



Case 4: Cosmetics Packaging Claims

- General communication guidelines for renewable materials
 - Renewable materials shouldn't be considered being better for the environment without an LCA
 - The amount of the bio-based content in the packaging should be indicated (%) and the origin stated
 - The use of third-party certifications of the bio-based content is recommended
 - For the bio-based plastics in packaging, information of the origin and the sourcing of the biomass should be indicated



Case 4: Cosmetics Packaging Claims

- **Recycled content** refers to recovered materials that are used in the packaging.
- According to ISO 14021 ^[10], these materials include both pre-consumer materials (post industrial recycled material; PIR) and post-consumer recycled materials (PCR)



Case 4: Cosmetics Packaging Claims

- General communication guidelines for recycled content
 - According to the SPICE guidelines, recycled content shall be mentioned only when it comes from post-consumer recycling.
 - The percentage of the recycled content should be mentioned with a reference to a third-party certification, if possible.
 - The percentage of the recycled content should be high enough
 - The claims should avoid a possible misconception between the terms “recycled content” and “recyclability”



Case 4: Cosmetics Packaging Claims

- **Recyclability** refers to packaging “that can be diverted from the waste stream through available processes and programmes and can be collected, processed and returned to use in the form of raw materials or products” (ISO 14021 ^[10])
- A rule of a thumb, the packaging can be claimed as recyclable, if it is recycled in practice, and at scale (see Ellen MacArthur Foundation 2020 ^[8])



Case 4: Cosmetics Packaging Claims

- General communication guidelines for recyclability
 - In general, claims on recyclability
 - 1) Help to engage consumers for proper end-of-life actions of the packaging
 - 2) Guide consumers for proper sorting of the packaging
 - 3) Show the brand's commitment for waste management system in the market
 - Only claims, which won't cause confusion in consumers, should be used
 - The package may not be recyclable in every country, if the recycling infrastructure is lacking



Case 4: Cosmetics Packaging Claims

- **Compostability** refers to material decomposition in a compost environment
- **Biodegradability** refers to material degradation by microorganisms to water, CO₂, CH₄, and biomass
- Certification is based on the harmonised standard EN 13432



Case 4: Cosmetics Packaging Claims

- General communication guidelines for compostability and biodegradability
 - The terms are advised to be used with caution on the packaging.
 - The term biodegradability will be banned in France in 2022 and is also banned in Belgium
 - If the packaging is compostable only in industrial facilities, on-pack claims about compostability shouldn't be made. Claims should be used to communicate about home-compostability
 - Certification compliant with standards should be used with the claims



Case 4: Cosmetics Packaging Claims

- The terms reusable, rechargeable, and refillable refer to packaging designed to be used several times
 - **Reusable:** packaging that will be used for the same purpose for several times
 - **Rechargeable:** packaging that will be “recharged” by a new component containing the formula (part of the packaging is replaced by a new product)
 - **Refillable:** packaging that will be refilled by liquid formula (new content added)



Case 4: Cosmetics Packaging Claims

- General communication guidelines for reusable, rechargeable, and refillable
 - According to the SPICE guidelines, the packaging is reusable only if it is used for the same purpose
 - The claims should be substantiated in practice (in case of recharging and/or refilling)



Case 4: Cosmetics Packaging Claims

- Terms “**absence of**” and “**free from**” refer to absence of substances that are potentially harmful for consumers’ health or to the environment



Case 4: Cosmetics Packaging Claims

- General communication guidelines for “absence of” and “free from”
 - The terms may be misleading and should be avoided, if e.g.
 - The packaging never contained the substance the claim states
 - The substance was replaced with another one whose impacts on human health or environment are not documented
 - The substance in the claim has not formally been proven to be harmful



Case 4: Cosmetics Packaging Claims

- Some other claims may be considered for packaging production
 - vegan
 - fair-trade
 - cruelty-free
 - animal-friendly
 - localisation



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