SCELTA 4

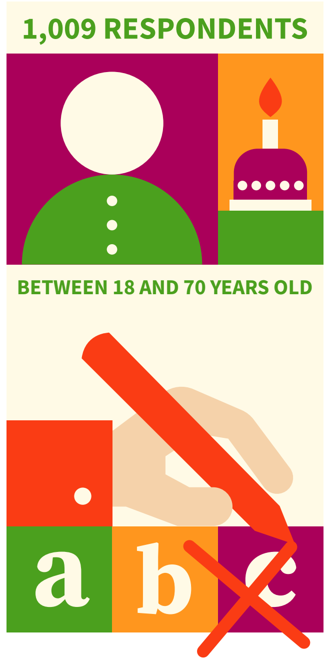
Developing the Circular Economy by Leveraging Purchasing Trends

Extended Abstract 2024

CONAI

ISTITUTO DI MANAGEMENT

Sant'Anna Scuola Universitaria Superiore Pisa



In 2023, the Institute of Management at the Scuola Superiore Sant'Anna conducted a survey as part of the "SCELTA 4 Project - Developing the Circular Economy by Leveraging Purchasing Trends" promoted by CONAI. This project, which is part of a long-term collaboration, aims to:

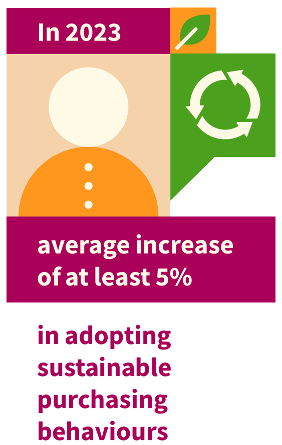
1. Analyse pro-environmental consumption trends in line with the circular economy;
2. Understand the impact of inflation and greenwashing on purchasing behaviour;
3. Ensure continuity in the topics covered with previous surveys to continue the "observatory" activity on environmentally responsible consumption.

The survey

The questionnaire for the SCELTA 4 project was launched in August 2023 to a sample of 1,009 respondents through an online survey. The sample, representative of the Italian population between 18 and 70 years old, was reached through an external provider.

A GROWING AWARENESS

The survey highlights **a growing orientation towards sustainability, the circular economy, and responsible consumption practices.** Italian consumers are increasingly aware of the consequences of human activities on the planet and the depletion of natural resources, such as water, to the detriment of future generations. This concern and awareness lead most of the population (about 90%) to have a positive predisposition towards circular economy themes and a greater perception of the effectiveness that individual actions can have in fighting against climate change. Consequently, **Italian consumers are ready and willing to contribute to the green transition through their daily choices.**



The most entrenched behaviours in the italian's routine range from **preventing waste** – by wisely using consumer goods and avoiding buying excessive quantities of food – to favouring **local supply chains**, choosing **durable clothing items**, and properly **separating waste at home for recycling.**

The comparison between 2022 and 2023 shows **an average increase of at least 5% in adopting sustainable purchasing behaviours** across all product categories. **Products with a low environmental impact** and with **recycled and recyclable packaging** are also frequently purchased – a trend that has been strongly growing over the last four years. Attention is also growing towards products that report information on the use of **renewable energy** and activities related to the reduction and compensation of **CO_2 emissions** by companies. The positive response of consumers to products bearing carbon claims represents a clear signal about the growing awareness of these issues..

However, some habits are still not widespread, such as the purchase of second-hand clothes, renting, and other purchasing and consumption models. Although sociocultural barriers persist, there is a positive trend towards reuse and a gradual openness to new forms of consumption, which can reduce waste and the use of new resources.

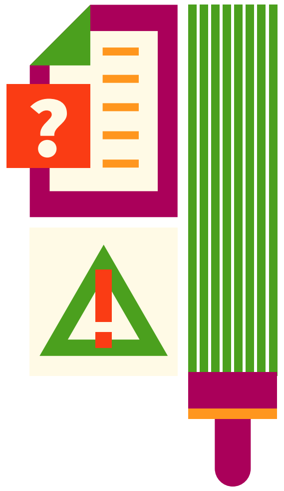
Digitalization and online purchasing emerge as a significant factor, with a marked increase in the use of e-commerce for shopping and home delivery meals, as well as the use of QR codes to access detailed product information, including their environmental impact. These behaviours reflect not only a change in the way consumers approach purchasing but also **a growing demand for transparency** for more informed choices.

Consumers primarily trust information released by universities/research centres, consumer associations, and NGOs. Less than half of them trust statements made by private companies. However, the belief that companies practice **greenwashing** is decreasing. Undoubtedly, the presence of certified environmental labels (i.e., ecolabels) and access to further product information through digital tools (e.g., QR codes), are important mechanisms that can increase consumer trust and guide purchasing choices.

LET'S BE CLEAR

If, on one hand, information and labels have a positive impact in shifting demand towards circular and sustainable products, on the other hand, **the messages conveyed must be clear and easily understandable.** To date, significant challenges remain. Most Italians are confused about definitions such as "recycled", "recyclable", "carbon neutral" and do not understand the meaning of ecolabels, thus becoming potential victims of greenwashing.

From the experiment conducted, it emerged that, failing to recognize deceptive environmental assertions, consumers' choices often lean towards products claiming exaggerated and unsubstantiated slogans, such as "100% sustainable" or "zero impact," rather than products bearing legitimate claims with explanatory statements on the actions companies take to foster a circular and sustainable economy.



The fight against greenwashing and **the need to educate consumers** are fundamental to ensuring informed and truly sustainable choices, based on the recognition of "substantiated" environmental assertions that imply virtuous corporate practices.

The current lack of standardization and clarity in environmental statements makes it difficult for consumers to distinguish between authentic environmental initiatives and greenwashing. In response to this phenomenon, the European Commission has initiated several regulatory initiatives aimed at combating misleading claims by emphasizing transparency and rigor to facilitate informed purchasing choices.

WHAT IF CIRCULAR PRODUCTS ARE MORE EXPENSIVE?

Economic factors such as inflation or the too high cost of some green products represent significant obstacles that can limit consumers' choice capacity. Most consumers believe that **packaging made from recycled materials costs more than others**, and **the willingness to pay** for such packaging **has decreased** compared to previous years, as shown by the second experiment conducted within the survey.

This trend is in line with the increase in inflation in recent months (peak in December 2022 at +11.8%). About half of the Italians indeed report having suffered income reductions, cutting non-essential purchases (travels, hobbies, restaurants, etc.), and experiencing anxiety related to the costs of utilities, transport, housing, or healthcare.

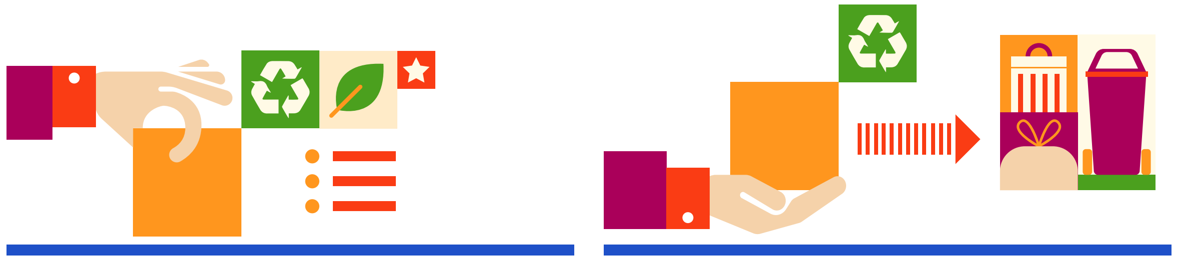
However, the experiment shows that, **in the case of "contained" price increases, the effect of inflation is more than offset by the growing attention to sustainability.** This means that, despite the country's not-flourishing socio-economic framework, the urgency to adopt behaviours in favour of the planet persists undiminished.

In this context, **the role of policymakers** in economically supporting circular products is crucial. For example, through differentiated taxation, they may shift environmental costs onto more polluting products and those not conforming to the principles of the circular economy.

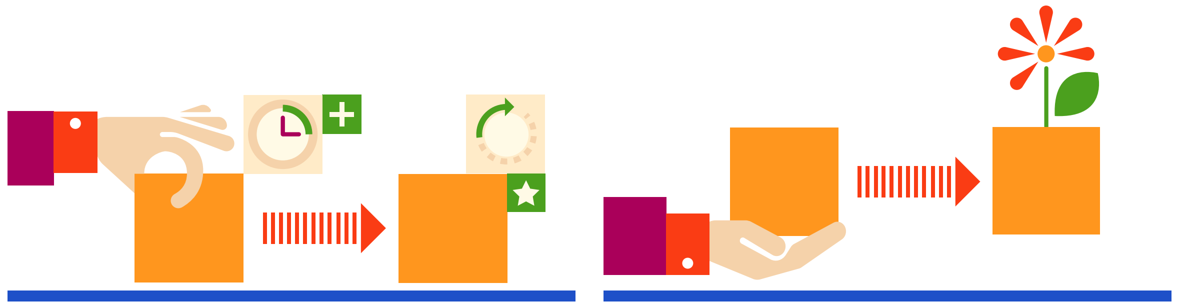
CLUSTER ANALYSIS: THE CIRCULAR CONSUMER

Despite existing challenges, the data collected indicate a positive and significant change in purchasing and consumption behaviours, providing a solid foundation on which to build.

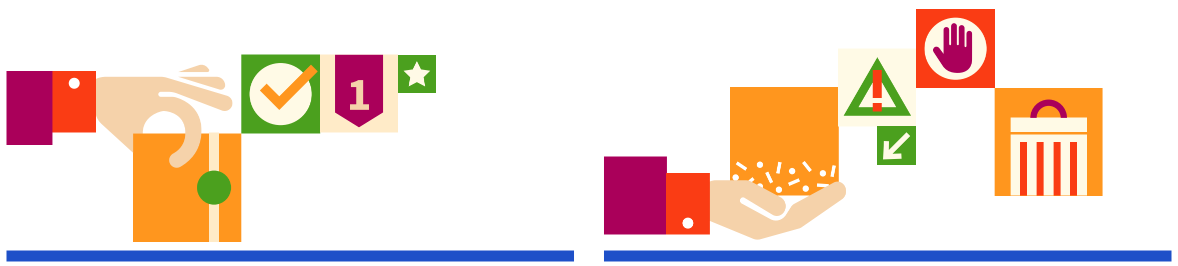
A cluster analysis was conducted to identify different types of consumers and investigate the existence of a "circular par excellence" consumer, namely a consumer able to combine behaviours aimed at:



- **Generating circular value**, for example by choosing products or packaging made from recycled material and striving for quality waste separation;



- **Preserving circular value**, for example by preferring, at the time of purchase, products designed to be durable and reusable, and then committing, during the usage phase, to fully exploiting their useful life by reusing them instead of unnecessarily replacing them. Likewise, opting for the purchase of second-hand goods or for renting;



- **Optimizing circular value**, for example by purchasing products with minimal and mono-material packaging (thus not using excessively large and complex packaging) and reducing waste during consumption.

Cluster analysis is an analysis that allows for the identification of homogeneous and mutually exhaustive groups of consumers. In other words, each cluster is composed of members who share similar characteristics, while significantly differing from members of other clusters. Thanks to clustering techniques, consumers were therefore grouped into four groups (consumer types) based on the frequency with which they adopt the various circular behaviours.

1

CIRCULARS par EXCELLENCE

They very frequently adopt behaviours related to the creation, preservation, and optimization of circular value, both in the purchasing phase and in the usage and end-of-life phases.

2

CIRCULARS in PROGRESS

In the post-purchase phases, they implement actions of generation, preservation, and optimization with high frequency, while in the purchasing phase, virtuous behaviours are adopted with a medium frequency.

3

CIRCULARS by NECESSITY

They very rarely adopt circular behaviours in the purchasing phase, but are more engaged in the post-purchase phase, where the benefits are also linked to economic utility (e.g., they avoid waste during consumption and perform recycling).

4

LAZY and INDIFFERENT

They show low commitment to adopting circular behaviours, which occur only occasionally in all phases (purchase, use, and end-of-life). This is the only group that does not regularly perform recycling – a behaviour now very ingrained in the population.

The implementation of cluster analysis in previous surveys (2020 and 2022) has enabled intertemporal comparisons to capture the evolution of the groups over time.

CLUSTER EVOLUTION compared to 2022

-3%

The share of "Circulars Par Excellence" consumers – increased since 2020 (+10%) – experienced a slight decline compared to last year (-3%).

+6%

As of 2020, **the largest consumer group is the "Circulars in Progress" (40%).** Compared to last year, there is an increase of +6%.

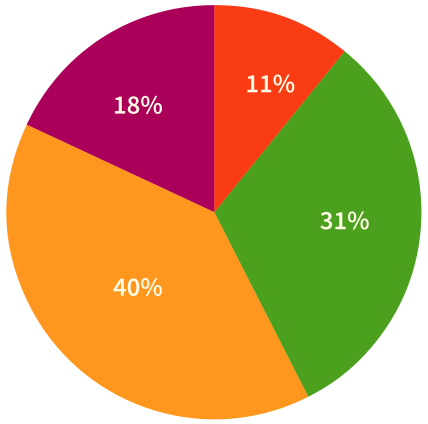
+3%

The share of "Circulars by Necessity" slightly increased compared to 2022. Members of this cluster very rarely adopt circular behaviours during the purchasing phase, while behaviours that are also linked to an economic benefit – such as waste prevention during use, reuse, and proper disposal at end-of-life – are more frequent. Therefore, the increase in this cluster (+3%) **aligns with the rising inflationary trend that has led to price increases for many food products and consumer goods.**

-5%

The "Lazy and Indifferent" are in constant decline (-5% compared to 2022 and -8% compared to 2020), showing that in recent years consumers are nevertheless committing to more circular behaviours.

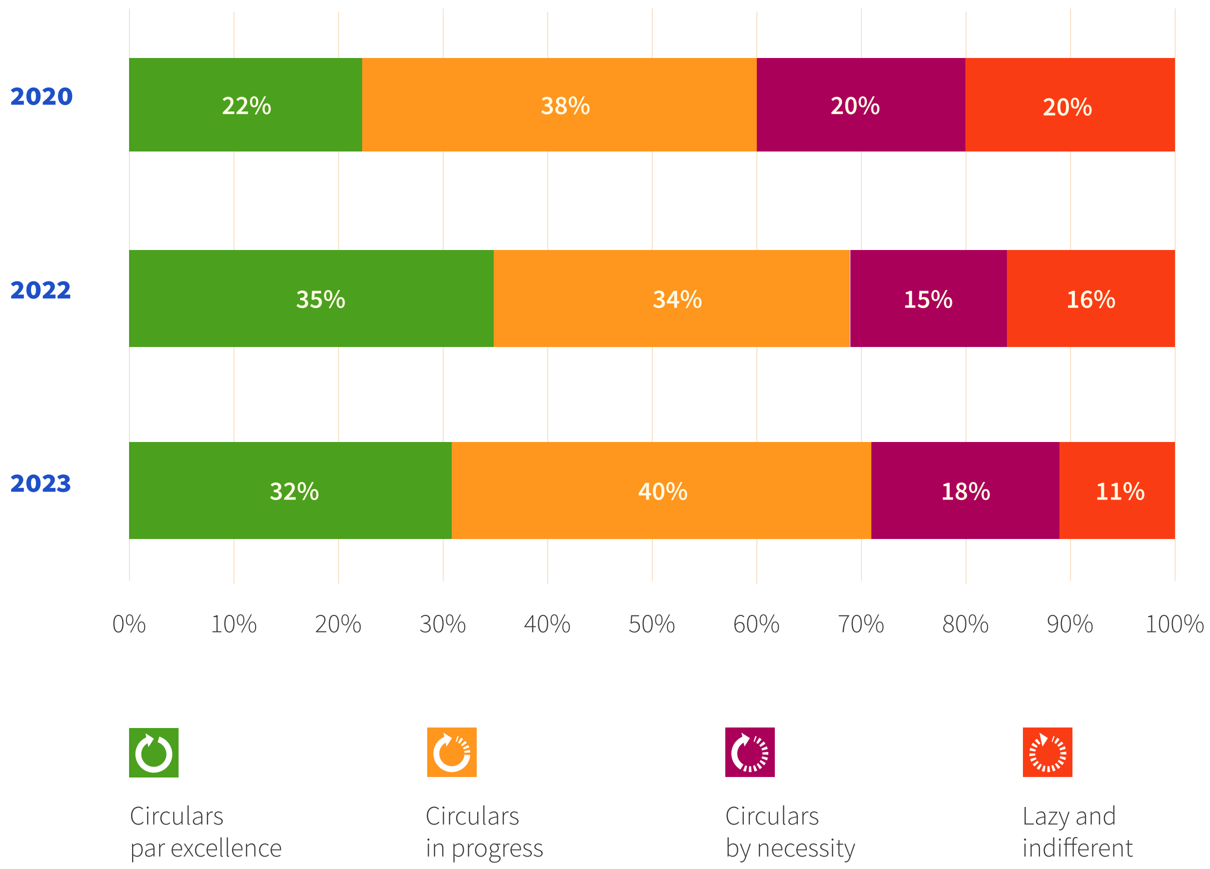
THE FOUR CLUSTERS in 2023



Analysing behaviours across all clusters, **the average frequency** of all actions related to the **generation, preservation, and optimization of circular value has increased** compared to last year.

The most frequent behaviours involve **the generation and optimization of value during use** (namely, proper disposal and efficient use of products). These results also confirm that, due to the current socio-economic situation and the very high inflation in recent months, consumers have increasingly adopted behaviours that offer both an economic and an environmental advantage.

AVERAGE FREQUENCY OF BEHAVIOURS* – Time comparison



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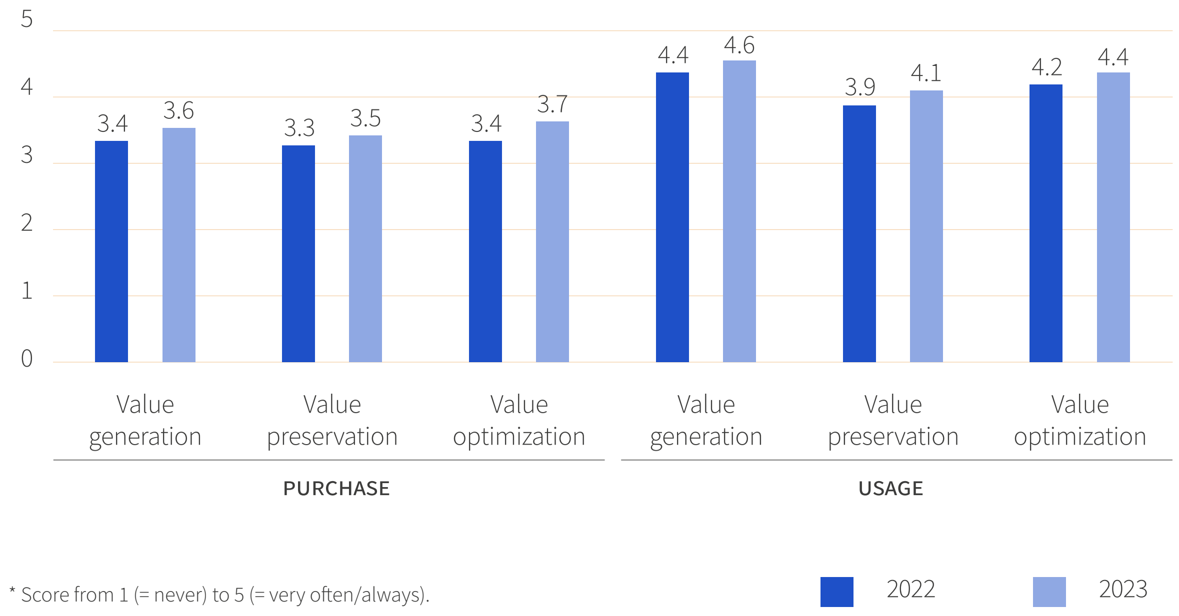
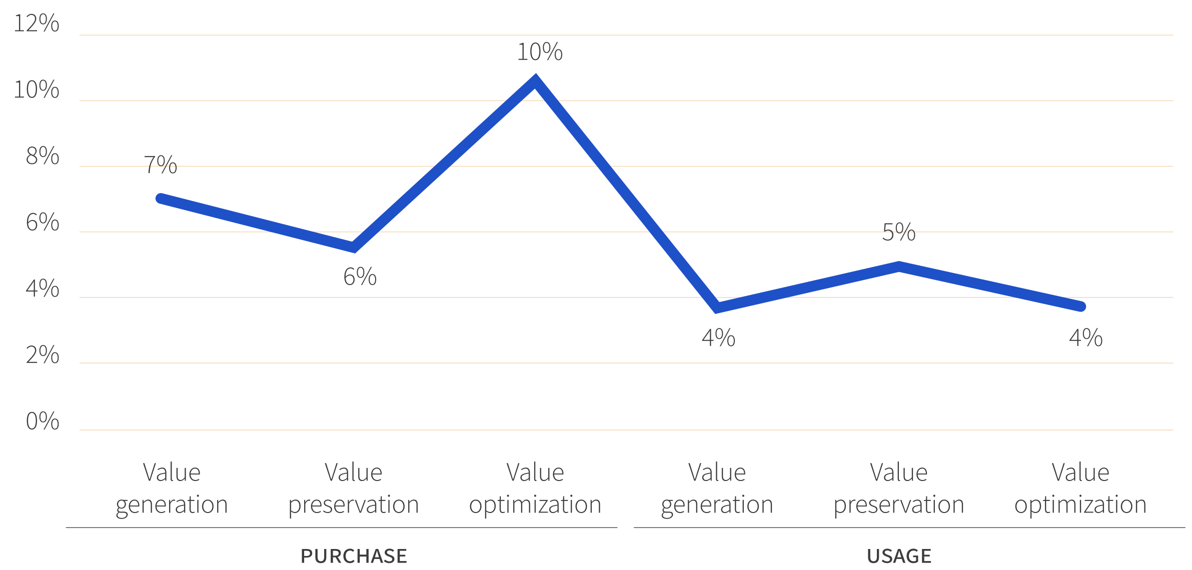


* Score from 1 (= never) to 5 (= very often/always).

Although behaviours related to the usage phase are more entrenched and frequent among the population, **a particularly positive trend is observed for purchasing-related behaviours,** with a **+10% change for optimization, +7% for generation,** and **+6% for preservation.**

% VARIATION (2022–2023) IN THE AVERAGE FREQUENCY OF BEHAVIOURS



After grouping consumers into clusters, it's possible to profile each group concerning other relevant variables (sociodemographic, psychographic, cognitive, and behavioural). **The clusters tend to be transversal to sociodemographic categories,** meaning that behaviours related to the generation, preservation, and optimization of circular value are **not explained by sociodemographic differences but are rather expressions of personal and value dimensions.** However, some slight differences (statistically significant with p>0.05) have been found in the sociodemographic distributions related to gender, age, and geographical origin:

CIRCULARS par EXCELLENCE	CIRCULARS in PROGRESS
• Female predominance (58%)	• Waek female predominance (52%)
• Generation X (43-55 years) is more present (+4%) compared to the distribution of the sample	• Baby Boomers (56-70 years) are more represented (+4%) compared to the distribution of the sample
• More from the South and the Islands (43%). This result also emerged in the cluster analysis conducted in 2022	• Even distribution by geographical area

CIRCULARS by NECESSITY	LAZY and INDIFFERENT
• Male predominance (64%)	• Female predominance (61%)
• All generations are evenly distributed: Millennials (27-42 years) have a slightly higher representation (+2%) than the sample distribution	• Generation Z (18-26 years) is over-represented (+10%), while Baby Boomers are under-represented (-8%) compared to the sample distribution
• Origin predominantly from Northern Italy (61%), mainly North-West	• Even distribution by geographical area

Although **the attitude towards the circular economy** characterizes a good portion of the population (all clusters present relatively high values), it distinguishes "Circulars Par Excellence" and "Circulars in Progress" the most. This result highlights the existence of a consistent relationship between personal beliefs and actual action.

The two most polarized groups – "Circulars Par Excellence" and the "Lazy and Indifferent" – report the highest values in the use of **online purchasing** and **search for digital information** (via website, app, QR code) about products purchased both in-store and online. Although this may seem counterintuitive, there could be differences in motivations. The "Circulars Par Excellence" might shop online and seek product information driven by the desire to find more sustainable products that they can't find locally. In contrast, the "Lazy and Indifferent" might be motivated by economic convenience and the lesser effort required by online purchases. Moreover, considering that the demographic composition of the "Lazy and Indifferent" predominantly includes individuals from **Generation Z**, their frequent use of online services becomes more understandable, being digital natives and thus more inclined to integrate technology into their daily lives.

All groups show relatively high scores regarding **the appreciation of additional product information.** This appreciation is particularly strong among the "Circulars Par Excellence". In general, access to information remains a relevant aspect for most consumers as it increases their trust, reducing scepticism and concern about product quality.

The "Circulars Par Excellence" and "Circulars in Progress" understand fairly well **the meaning of carbon claims** – namely, claims related to companies' actions of compensation and reduction of emissions to fight the climate crisis. The "Circulars by Necessity" and the "Lazy and Indifferent" show a greater potential for improvement. However, compared to last year, even the less virtuous groups are becoming more informed about the impact of products on climate change.

Finally, the "Circulars Par Excellence" are **increasingly willing to invest in sustainable options** – for example, paying more for packaging made of recycled material. In contrast, the "Lazy and Indifferent" have reduced their willingness to bear additional costs, despite initially being willing to do so. This likely reflects a more coherent alignment with their consumption priorities.

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CONCLUSIONS

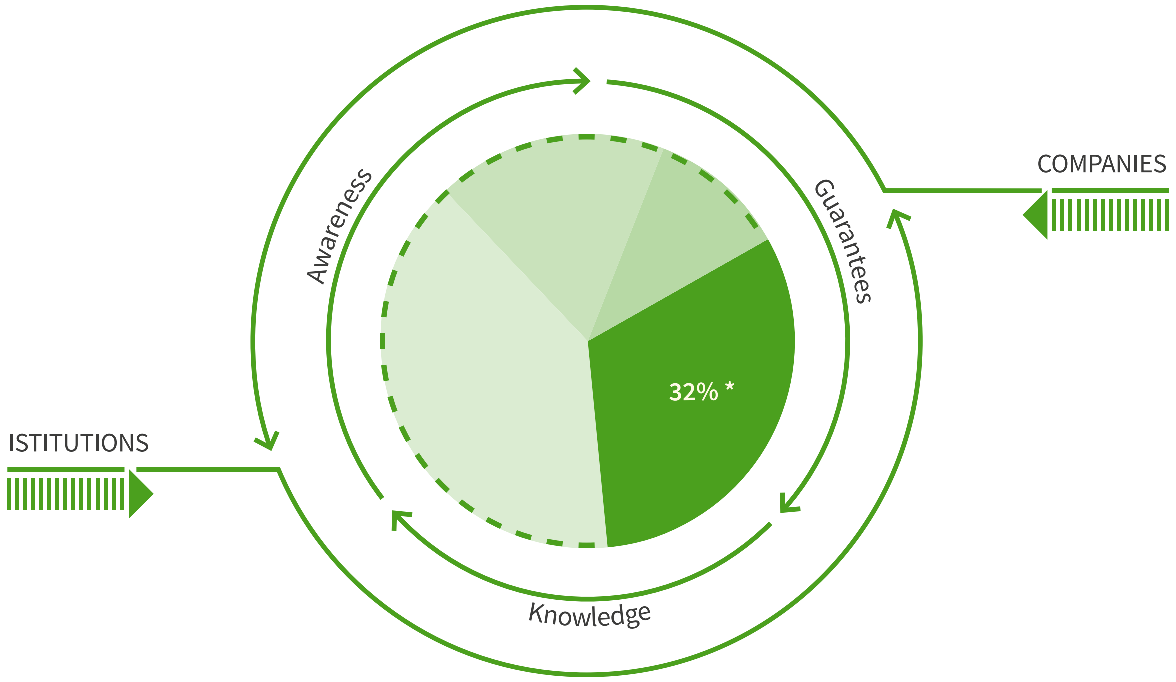
In conclusion, the analysis reveals that **the "circular consumer par excellence" exists and represents a third of the Italian population.** This share can be increased by leveraging enabling factors that can stimulate virtuous behaviours.

In this period of regulatory transition, where directives have not yet been approved, **companies need to provide clear, accurate, and verifiable information** on the environmental performance of products to increase consumer trust and knowledge. It is crucial to **educate and instruct the population** also through extensive educational campaigns and to raise awareness of the need for a radical change compared to the current consumption model.

Finally, companies should offer guarantees on the quality and performance of **reconditioned and second-hand products as well as sharing and rental services**, effectively communicating the environmental benefits associated with adopting these new models.

Only through a **holistic approach**, considering the variety of factors that can influence purchasing and consumption decisions, is it possible to transform the growing consumer attention to sustainability into concrete behaviours.

A HOLISTIC APPROACH TO INCREASE THE SHARE OF "CIRCULAR CONSUMERS PAR EXCELLENCE" IN ITALY



***Circulars par excellence in 2023**

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