



# Footprint e Certificazioni alla Base di un nuovo Green Marketing “Science-based”: Come si Muovono le Imprese? Cosa Pensano i consumatori?

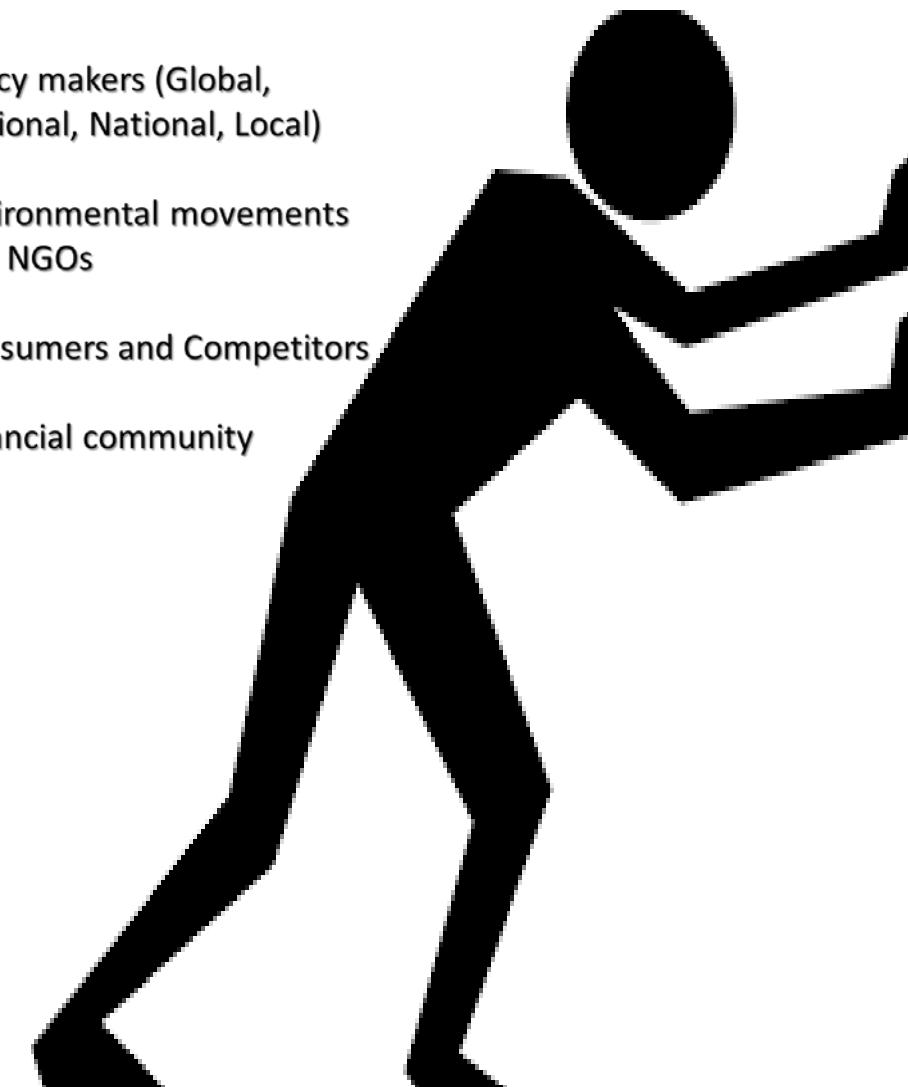
Francesco Testa  
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# La nuova sfida per una reale green transition



- Policy makers (Global, Regional, National, Local)
- Environmental movements and NGOs
- Consumers and Competitors
- Financial community



*Green champion*



*License to operate*





*Quali condizioni sono necessarie lato domanda e offerta?*



# Le imprese e la loro comunicazione

- Be clear, accurate, verifiable, relevant and not misleading
- Be based on an exhaustive and complete **scientific methodology**, which produces accurate and reproducible results (e.g. LCA)
- Have **available information** (on environmental aspects and procedures/ methodology) to interested parties (buyers or potential buyers) and indicate whether it is a self-declared claim (ISO 14021) or based on independent validation (e.g. EPD)
- Take into account **all relevant aspects of the product life cycle**

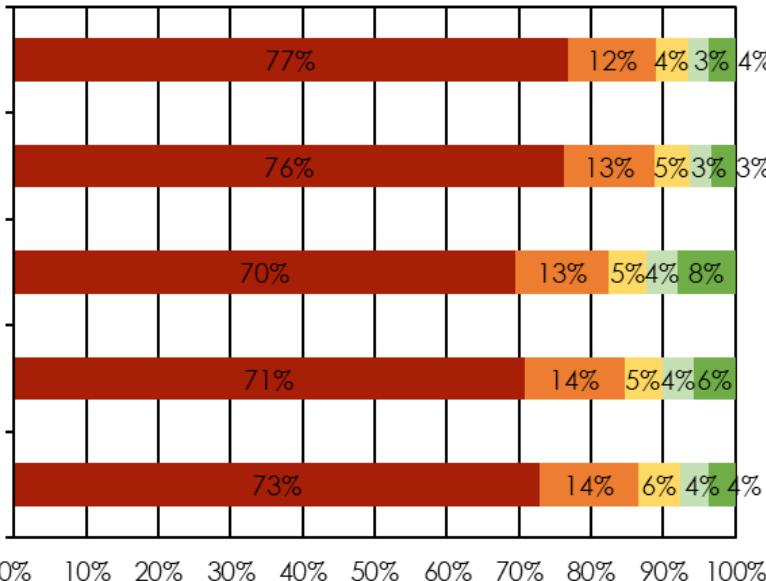


Norma contenuta nell'Opera "Tutto Sicurezza e Ambiente" ex accordo del 01/05/2012 tra UNI e Wolters Kluwer Italia.  
Riproduzione vietata.

# Per comunicare in maniera affidabile bisogna prima misurare

Indicare il livello di attuazione delle seguenti iniziative di monitoraggio delle proprie emissioni di gas ad effetto serra

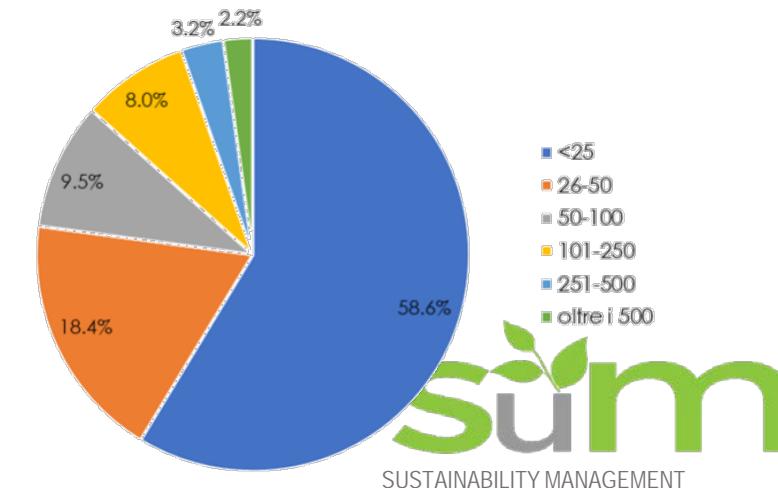
Carbon footprint di uno o più prodotti (ad esempio attraverso studi di Life Cycle Assessment di prodotto – LCA)



- Non è stata considerata l'adozione
- Stiamo solo valutando l'opportunità di adottarla
- Stiamo considerando di implementarla
- E' in corso di implementazione
- L'azione è stata adottata con successo

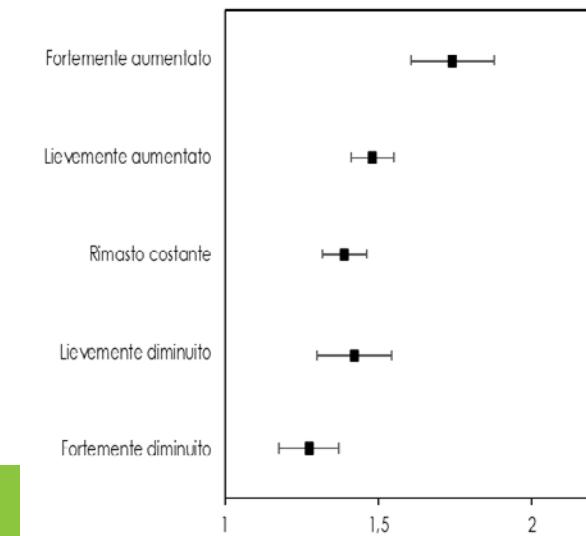
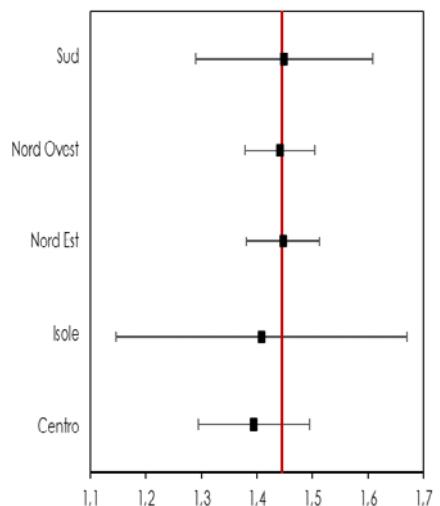
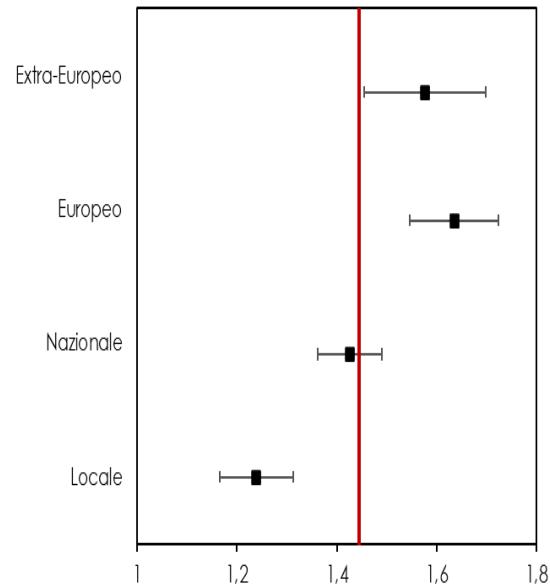
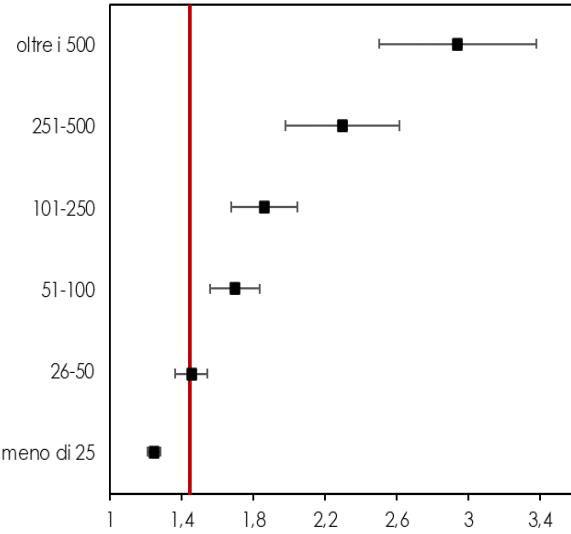
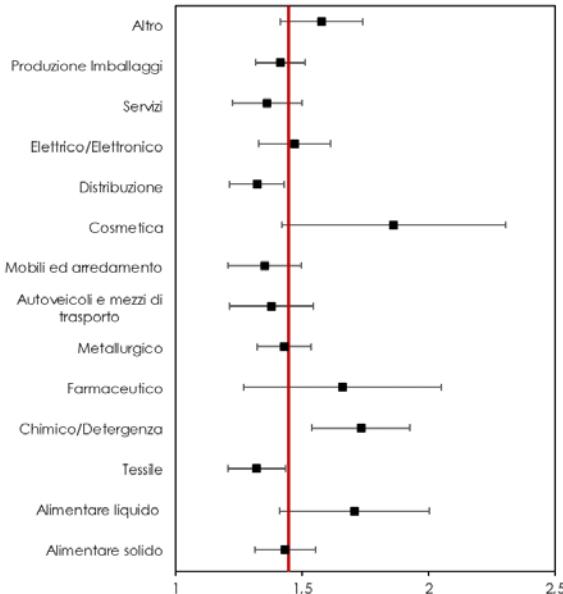
Fonte: Indagine CONAI Sant'Anna 2022

- **41 Domande**
- **85 Items**
- **32 Giorni di raccolta dati**
- **43566 Popolazione**
- **4376 Rispondenti**
- **2142 Risposte valide**





# Quali aziende stanno adottando studi LCA per i propri prodotti?





# I consumatori....

- *Dare valore alle caratteristiche ambientali dei prodotti*
- *Essere disposti ad essere informati*
- *Fiducia nei confronti delle informazione*
- *Comprensione delle informazioni*

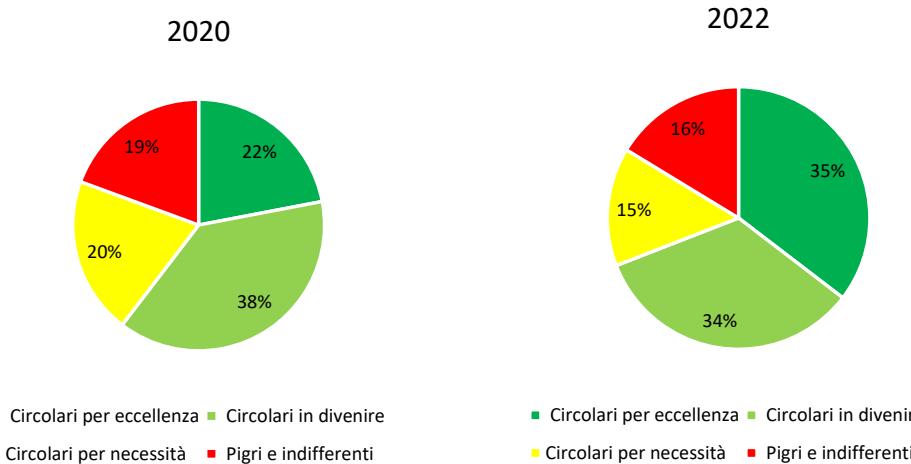
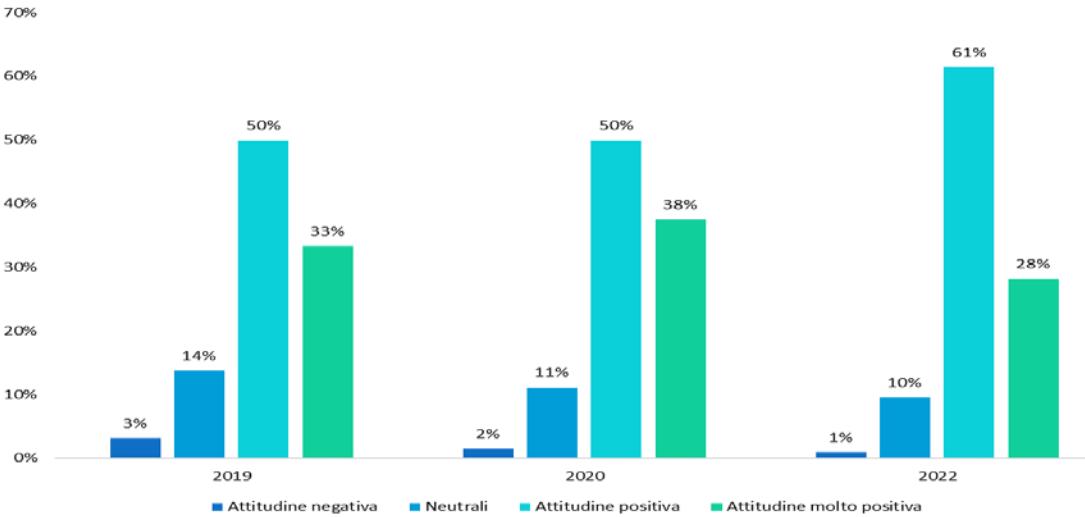


Ref. Sant'Anna CONAI 2018. I Driver all'acquisto di prodotti green e prodotti circolari: un'analisi sistematica della letteratura

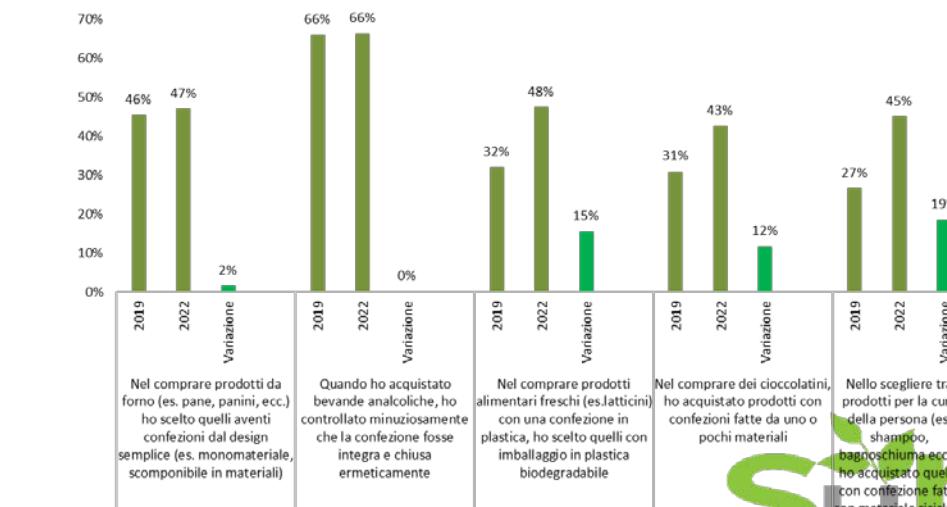
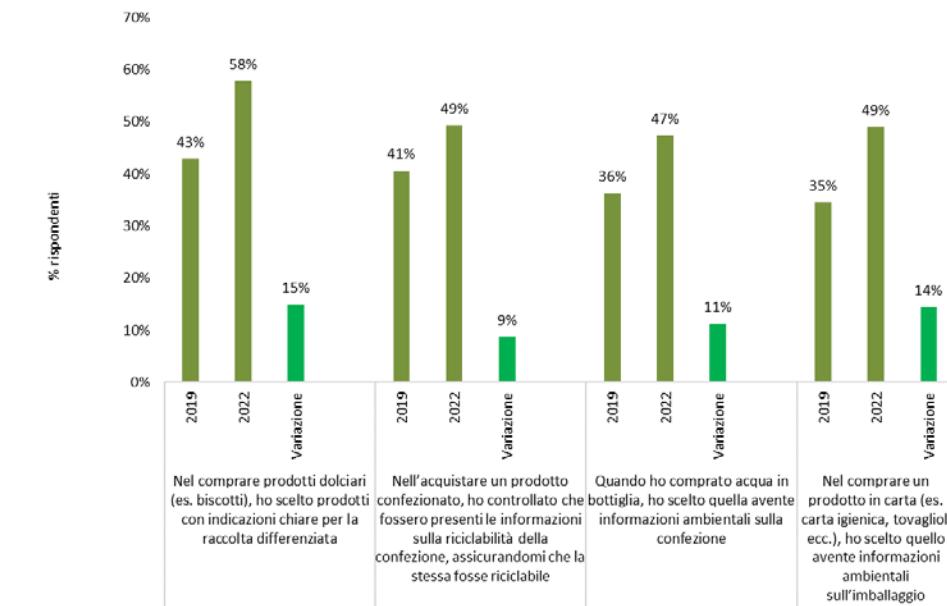


# Dare valore alle caratteristiche ambientali dei prodotti

## Una visione ormai radicata



Fonte: Indagine CONAI Sant'Anna 2022





# Ma le scelte sono complesse perché gli obiettivi sono molteplici

## Basic Functions of Clothing:

- Protection
- Identification
- Modesty
- Status
- Adornment



## Attitude - Behaviour Gap



Dichiararsi e/o pensare di essere un consumatore "responsabile"

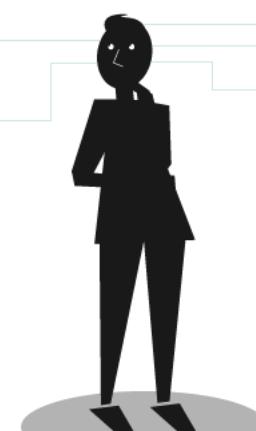
Attuare compo scelte "respo



Include price and other associated costs (e.g. running costs, maintenance costs, disposal costs, upgrade costs, time investment and emotional costs), but also include income and how a consumer values future costs and benefits in comparison with the current costs and benefits. Moreover, the perception of risks and uncertainties also form part of this group of factors.



Refer to the social norms in respective communities, common practice and examples given by role models and reference groups.



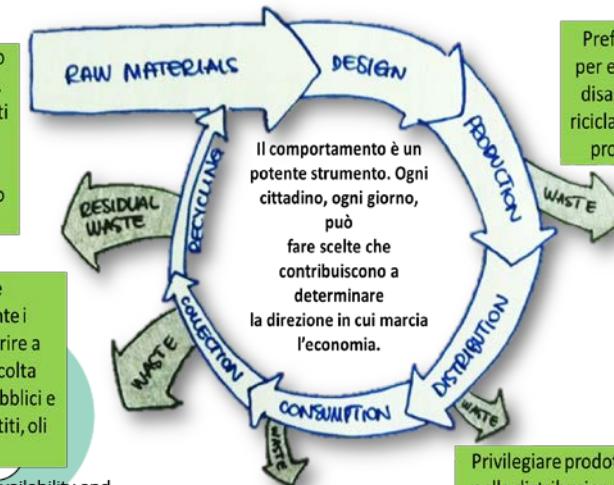
Supportare il mercato dei materiali riciclati, preferendo i manufatti prodotti con materie prime seconde. Supportare il mercato dell'uso.

Conferire correttamente i materiali, aderire a sistemi di raccolta differenziata pubblici e privati (es. vestiti, oli ecc.)

Refers to the availability and comprehensibility of circular solutions and consumer demand. Only if consumers understand the characteristics of a product or service they are willing to purchase. Utilizzare i prodotti in modo efficiente, evitare gli sprechi, limitare i prodotti usa e getta, condividere, riparare, riutilizzare, comprare solo ciò che si riesce a consumare. Per far la spesa utilizzare la shopper. Greenwashing can distort consumers' understanding of the impact of their choices.



Reflect all dimensions of consumer needs, such as comfort (convenience), prestige, value assigned by the consumer to environmental characteristics, brand loyalty, as well as other personal values (e.g. materialism). This makes some individuals and groups more prone to use or adopt circular solutions than others. These factors are difficult to shift without changing cultural norms, which happens gradually.



Preferire prodotti progettati per essere durevoli, riparabili, disassemblabili, riutilizzabili, riciclabili e recuperabili. Evitare prodotti «over-packaged»

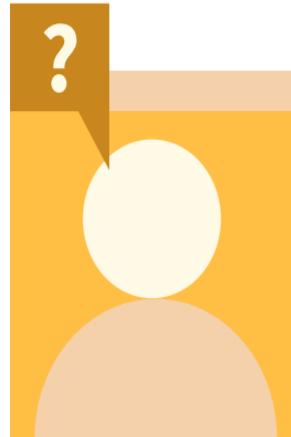
Privilegiare prodotti che rispettano standard ambientali nella produzione

Privilegiare prodotti con impatti ridotti nella distribuzione (es. prodotti locali). Se consumabili, acquistare prodotti alimentari con scadenza a breve per contribuire a limitare gli sprechi nella fase di distribuzione.

## Intention - Behaviour Gap

# QUANTO IL PREZZO INCIDE SULLE NOSTRE SCELTE CIRCOLARI?

Immagina di trovarsi al supermercato.  
Sei alla ricerca del tuo detersivo preferito  
e lo trovi in due imballaggi diversi.



Un flacone  
non riciclabile.



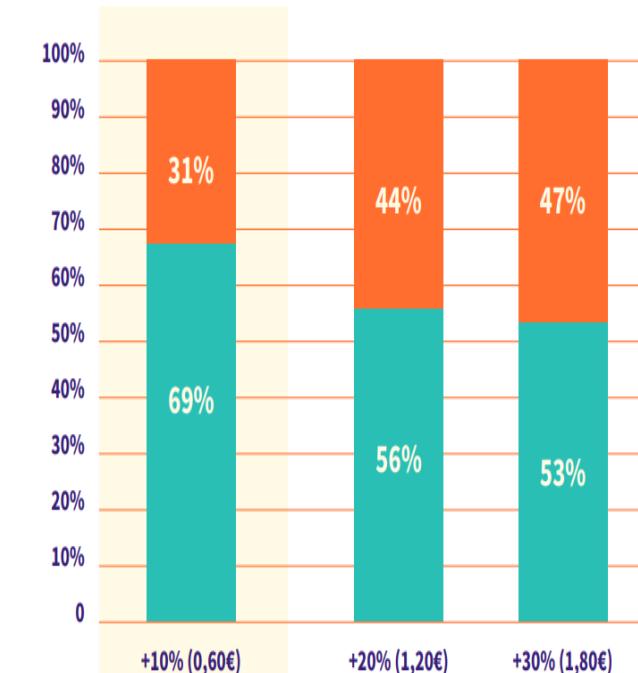
Un flacone riciclabile  
che costa di più  
(+10% o € 0,60).

Incrementi maggiori del 10%  
riducono la percentuale  
di quelli che pagherebbero  
per l'imballaggio "circolare".



Non riciclabile

Riciclabile



INCREMENTO DEL PREZZO

a stessa situazione si verifica quando  
cerchi un bagnoschiuma:  
lo trovi in due imballaggi diversi.



Un flacone fatto  
di materiale  
non riciclato.



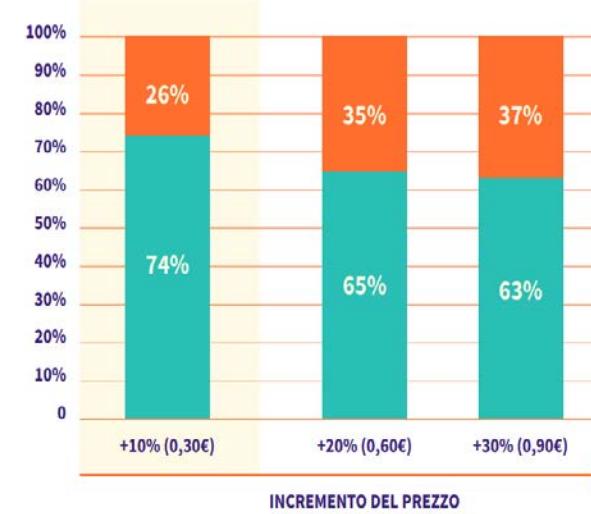
Un flacone fatto di **materiale**  
**riciclato** che costa di più  
(+10% o € 0,30).

Incrementi maggiori del 10%  
riducono la percentuale  
di quelli che pagherebbero  
per l'imballaggio "circolare".



Non riciclato

Riciclato

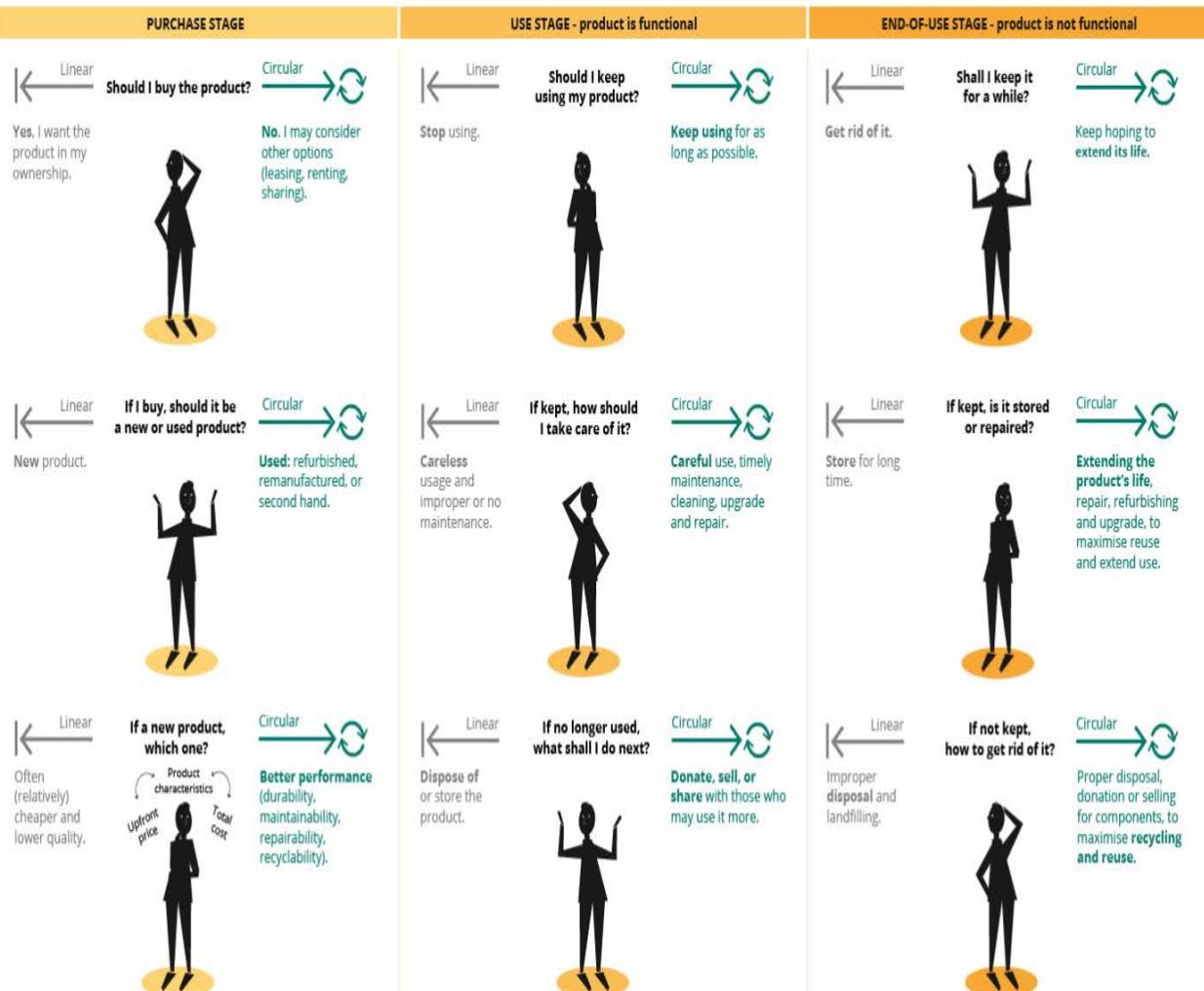


INCREMENTO DEL PREZZO



# Ma i Trade-offs possono essere anche tra obiettivi ambientali

Sergio Cugnasco  
Sant'Anna



Treatment 1: this NORTH FACE backpack is made entirely of fabric obtained from recycled material (polyester) coming from the collection of plastic bottles and bottles.



Treatment 2: this backpack is made entirely of fabric obtained from recycled material (polyester) coming from the collection of plastic bottles and bottles.



Treatment 3: this NORTH FACE backpack is made of virgin polyester.

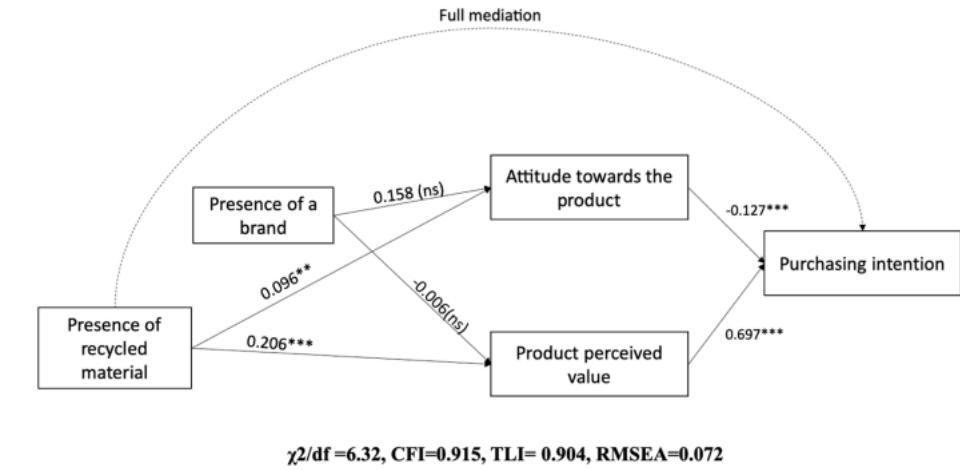


Treatment 4: this backpack is made of virgin polyester.



**Table 5**  
Three-stage least-squares regression.

| Equation           | Obs  | Parms  | RMSE     | "R-sq" | chi2   | P                    |
|--------------------|------|--------|----------|--------|--------|----------------------|
| Attitude           | 1037 | 4      | 0.860    | 0.039  | 43.08  | 0.0000               |
| Quality perception | 1037 | 4      | 0.700    | 0.109  | 126.83 | 0.0000               |
|                    |      | Coef.  | Std. Err | z      | P>  z  | [95% Conf. Interval] |
| Attitude           |      | 0.079  | 0.075    | 1.05   | 0.293  | -0.068 0.226         |
| Leg_1              |      | 0.190  | 0.075    | 2.52   | 0.012  | 0.042 0.338          |
| Leg_3              |      | 0.219  | 0.075    | 2.89   | 0.004  | 0.070 0.368          |
| Leg_4              |      | 0.355  | 0.059    | 5.92   | 0.000  | 0.237 0.472          |
| Plastic concern    |      | -0.131 | 0.053    | -2.46  | 0.014  | -0.235 -0.026        |
| Constant           |      | 0.048  | 0.061    | -0.78  | 0.433  | -0.168 0.072         |
| Quality perception |      | 0.231  | 0.061    | -3.76  | 0.000  | -0.352 -0.110        |
| Leg_1              |      | 0.295  | 0.061    | -4.78  | 0.000  | -0.416 -0.174        |
| Leg_3              |      | 0.493  | 0.048    | 10.11  | 0.000  | -0.588 -0.397        |
| Plastic concern    |      | 0.156  | 0.043    | 3.60   | 0.000  | 0.071 0.241          |



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Full length article

The role of consumer trade-offs in limiting the transition towards circular economy: The case of brand and plastic concern

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SUSTAINABILITY MANAGEMENT



# E le informazioni stimolano comportamenti circolari

## Uso di informazioni digitali

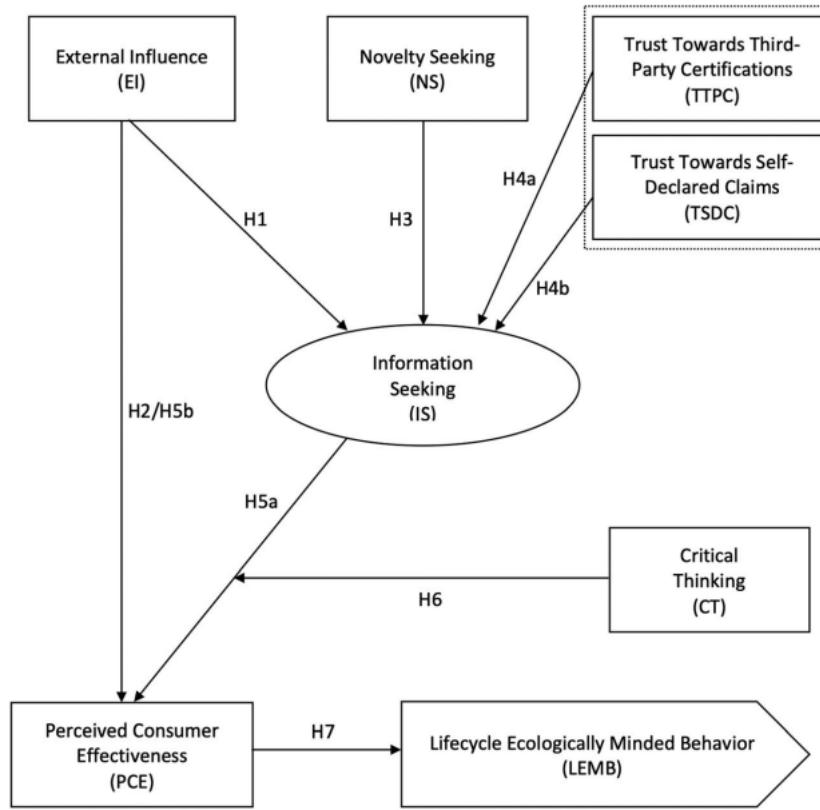
(da 1=mai a 5=sempre/tutte le volte che ne ho la possibilità)

| Cluster                    | Uso di info digitali (media) |
|----------------------------|------------------------------|
| 1 Circolari per eccellenza | 2,97                         |
| 2 Circolari in divenire    | 2,35                         |
| 3 Circolari per necessità  | 1,96                         |
| 4 Pigri e indifferenti     | 2,66                         |

## Accessibilità delle informazioni

(da 1=mai a 5=sempre/tutte le volte che ne ho la possibilità)

| Cluster                    | Accessibilità info (media) |
|----------------------------|----------------------------|
| 1 Circolari per eccellenza | 4,46                       |
| 2 Circolari in divenire    | 4,07                       |
| 3 Circolari per necessità  | 3,53                       |
| 4 Pigri e indifferenti     | 4,01                       |

**TABLE 6** Summary of hypotheses and results

| Hypotheses   | Results             |
|--|---------------------|
| H1: External influence has a positive impact on consumer's information seeking.                                | Supported           |
| H2: External influence has a positive impact on perceived consumer effectiveness (PCE).                        | Supported           |
| H3: Novelty seeking has a positive impact on information seeking.  | Supported           |
| H4a: Trust towards third-party certification inhibits information seeking.                                     | Inversely Supported |
| H4b: Trust towards self-declared claims inhibits information seeking.  | Not supported       |
| H5a: Information seeking positively influences PCE.  | Supported           |
| H5b: Information seeking mediates the impact of external influence on PCE.                                     | Supported           |
| H6: Critical thinking moderates the relation between information seeking and perceived consumer effectiveness. | Not supported       |
| H7: Perceived consumer effectiveness positively affects the lifecycle ecologically minded behavior (LEMB).     | Supported           |

**Curious about the circular economy? Internal and external influences on information search about the product lifecycle**

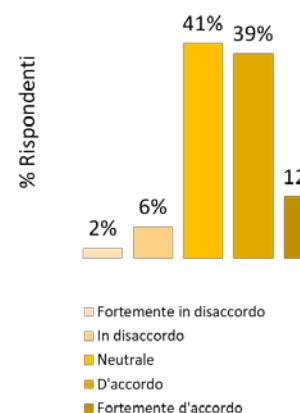


# OCCORRE FIDUCIA VERSO LE FONTI DI INFORMAZIONE

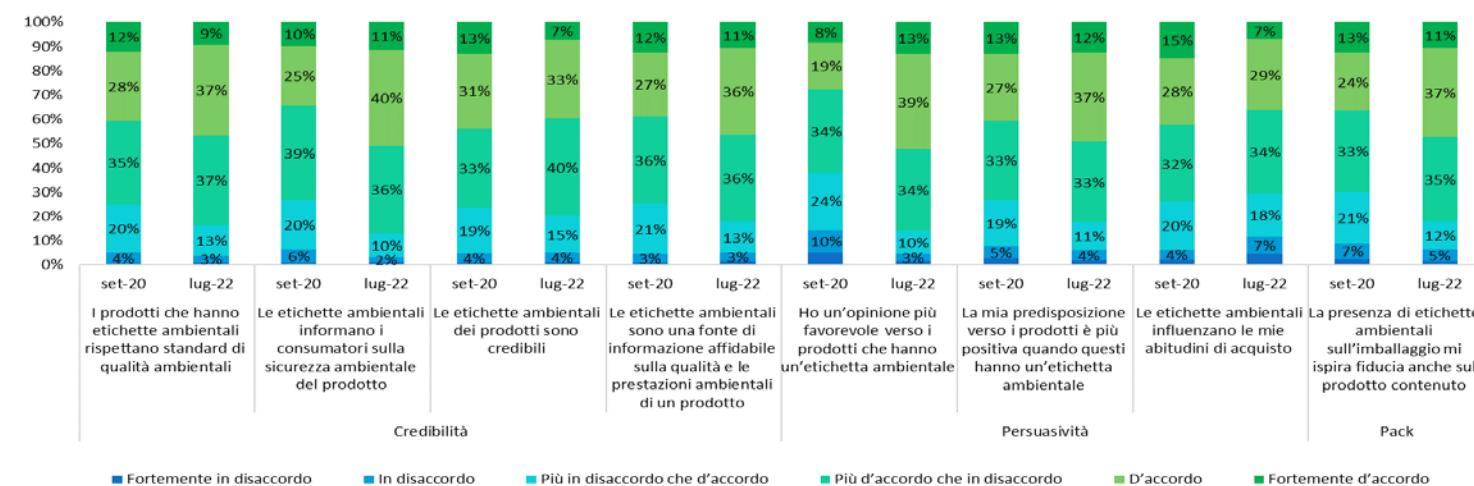
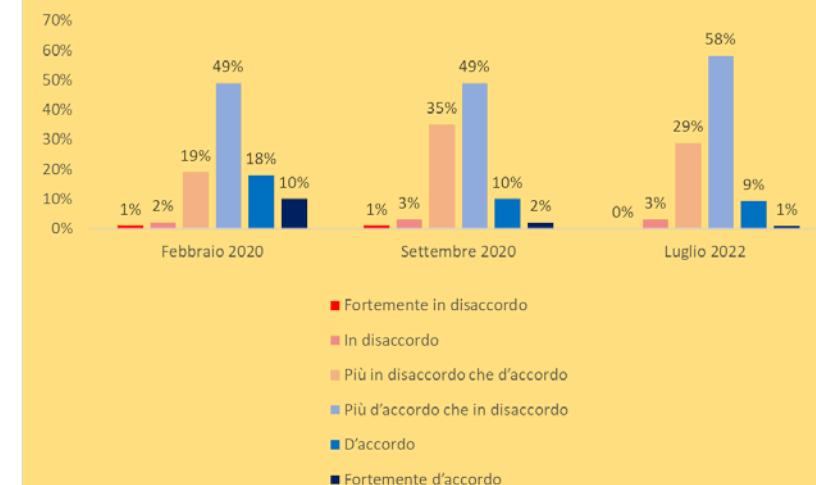
labels will be addressed in section 2.2.3 below. A recent Commission study on environmental claims found that 80% of webshops, webpages and advertisements surveyed contained green claims<sup>55</sup>. 45% of the total were implicit claims (imagery and colours suggesting environmental benefit), 35% were explicit claims (logos, labels and textual claims) and 21% were vague, general claims. Such a high prevalence was also identified in the mystery shopping carried out for this Impact Assessment<sup>56</sup>.

The aforementioned study assessed 150 environmental claims and found that a considerable share (53.3%) of them provide vague, misleading or unfounded information on products' environmental characteristics across the EU and in a wide range of product groups (both in advertisement as well as on the product). These results have also been confirmed by the outcome of a recent "sweep"<sup>57</sup> carried out by the Consumer Protection Cooperation authorities<sup>58</sup>. Out of the 344 sustainability claims assessed throughout November 2020, authorities had at least a reasonable doubt that the claim may be false or deceptive in almost half of the cases (42%), and therefore that these could potentially amount to an unfair commercial practice under the UCPD. CPC authorities considered

March 2019

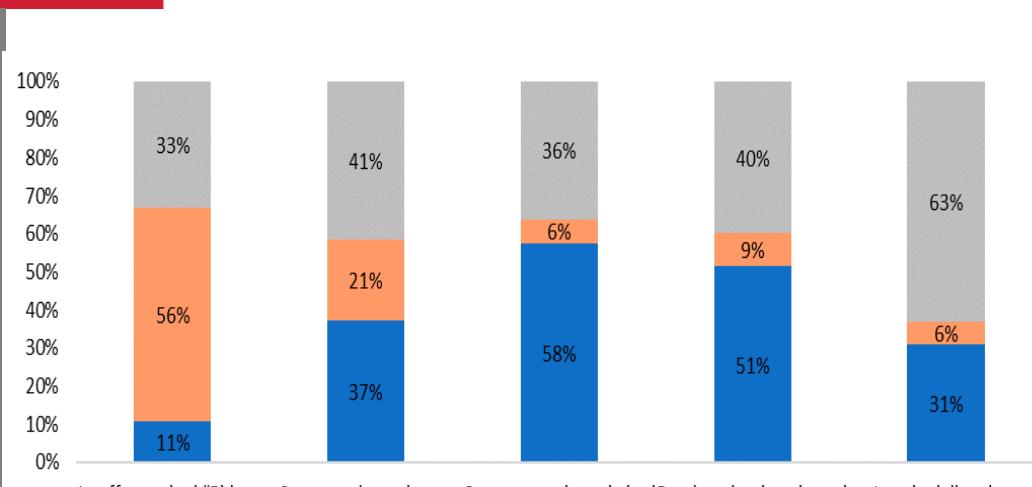


**The suspicion that companies practice greenwashing is reducing**





# Ma le informazioni devono essere comprese...



■ VERO ■ FALSO ■ NON SAPREI

**Table 2** Outcomes of the multivariate logistic regression

| Features                          | n   | Accuracy | OR     | p      | 95% CI        |
|-----------------------------------|-----|----------|--------|--------|---------------|
| <b>Communication style</b>        |     |          |        |        |               |
| LCA standard units                | 297 | 60.61%   | 1.0000 |        |               |
| Year versus Year                  | 301 | 49.17%   | 0.6179 | 0.006  | 0.4397 0.8684 |
| Mapped values                     | 323 | 43.34%   | 0.4766 | <0.001 | 0.3413 0.6656 |
| <b>Data gap pattern</b>           |     |          |        |        |               |
| Water only                        | 312 | 50.96%   | 1.0000 |        |               |
| Non-renewable energy only         | 309 | 51.46%   | 1.0221 | 0.897  | 0.7331 1.4249 |
| CO <sub>2</sub> emissions only    | 300 | 50.00%   | 0.9195 | 0.624  | 0.6575 1.2860 |
| <b>Gender</b>                     |     |          |        |        |               |
| Female                            | 464 | 50.00%   | 1.0000 |        |               |
| Male                              | 457 | 51.64%   | 1.0976 | 0.504  | 0.8353 1.4421 |
| <b>Age</b>                        |     |          |        |        |               |
| 18-24                             | 93  | 48.39%   | 1.0000 |        |               |
| 25-34                             | 147 | 46.26%   | 1.0577 | 0.847  | 0.5977 1.8717 |
| 35-44                             | 182 | 46.70%   | 0.9471 | 0.848  | 0.5531 0.0165 |
| 45-54                             | 219 | 56.16%   | 1.6048 | 0.086  | 0.9357 2.7524 |
| 55-70                             | 280 | 52.50%   | 1.4547 | 0.164  | 0.8576 2.4675 |
| <b>Area</b>                       |     |          |        |        |               |
| Northwest                         | 243 | 55.56%   | 1.0000 |        |               |
| Northeast                         | 174 | 52.87%   | 0.9345 | 0.745  | 0.6209 1.4066 |
| Center                            | 208 | 54.81%   | 0.9181 | 0.671  | 0.6191 1.3618 |
| South                             | 296 | 42.91%   | 0.5372 | 0.001  | 0.3741 0.7718 |
| <b>Level of education</b>         |     |          |        |        |               |
| Middle-school                     | 60  | 33.33%   | 1.0000 |        |               |
| High-school ( <i>unfinished</i> ) | 52  | 40.38%   | 1.7575 | 0.175  | 0.7783 3.9688 |
| High-school                       | 365 | 46.85%   | 1.9502 | 0.029  | 1.0703 3.5533 |
| University ( <i>unfinished</i> )  | 124 | 64.52%   | 4.9960 | <0.001 | 2.4760 1.0081 |
| University                        | 320 | 55.00%   | 3.0524 | <0.001 | 1.6443 5.6663 |
| <b>Environmental concern</b>      |     |          |        |        |               |
| Critical thinking                 | ..  | ..       | 1.2252 | 0.013  | 1.0429 0.1439 |
| Greenwashing belief               | ..  | ..       | 0.9287 | 0.251  | 0.8187 1.0537 |
| <b>LCA knowledge</b>              | ..  | ..       | 0.8687 | 0.013  | 0.7771 0.9711 |

Note:  $\chi^2 = 84.16$ ;  $p < 0.0001$ ; pseudo  $R^2 = 0.0659$ ; Log likelihood = -596.18; vif = 1.19



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Fonte: Indagine CONAI Sant'Anna 2022, progetto Life EFFIGE

Towards a sustainability facts panel? Life Cycle Assessment data outperforms simplified communication styles in terms of consumer comprehension

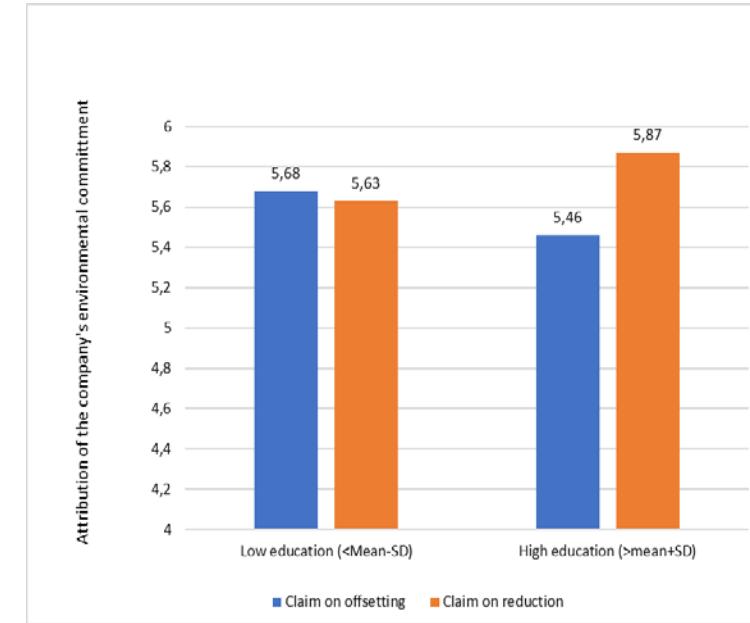
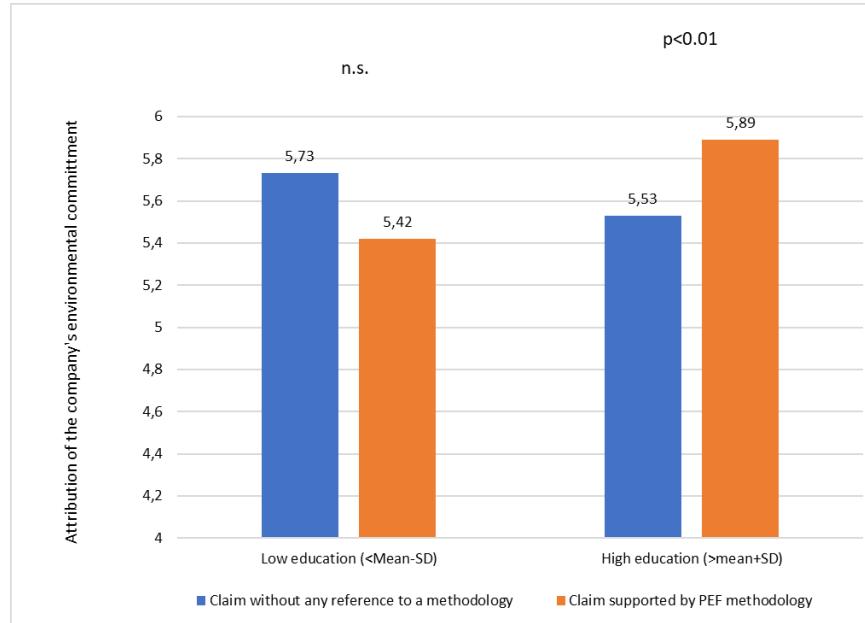
Felipe Vizzoto\*, Francesco Testa, Fabio Iraldo





# Ma le informazioni devono essere comprese...

Scuola Superiore  
Sant'Anna



Fonte: Iovino, Testa, Iraldo 2022. Do consumers understand what lies behind different green claims? An experimental approach in Italy. International Journal of Advertising. Forthcoming





## In sintesi...

- Per garantire una vera competizione green le informazioni hanno un ruolo fondamentale
- Evitare semplificazioni eccessive e riconoscere la complessità del processo decisionale
- Evitare falsi green champion e costruire una comunicazione robusta e metodologicamente solida con un approccio lifecycle
- Il consumatore sta aumentando la propria conoscenza ma rimane fragile di fronte ad una proliferazione di marchi e tecnicismi
- Il ruolo di una regolamentazione chiara è cruciale per sostenere un reale mercato green ed evitare forme di greenwashing più o meno consapevole





**Grazie!**

**Prof. Francesco Testa**  
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