

# Consumer perspectives on plastic packaging



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Gesa Marken

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Research



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# Consumers' perception of the plastic packaging problem

# Most consumers care about plastic in the environment

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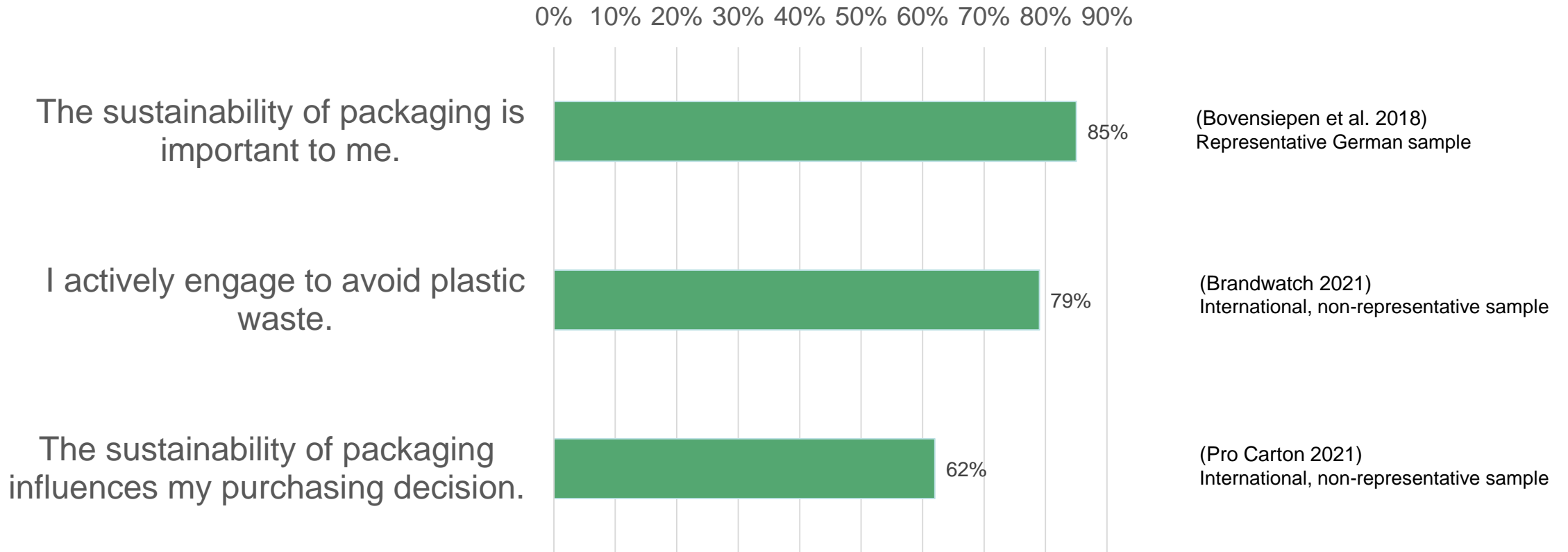
96% of Germans agree that human-made environmental problems - such as plastic in the world's oceans - outrage them  
(BMU & UBA 2019)

# Packaging is the main area of plastic usage in europe (EU 28) (2017)



- In europe, the biggest share of plastic production is used in the packaging sector (39,7%)
- Compared to: 19,8 % in building and construction, 10,1 % in the automotive industry, 6,2 % in the electrical and electronic sector, 4,1 % in household, leisure and sports and 3,4 % in agriculture (PlasticsEurope 2018, p. 24).

# Environmentally-friendly packaging is important for consumers



Packaging waste reduction is number one perceived issue in food supply and production (UBA 2021).



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# Consumers' willingness to reduce packaging



# Willingness to reduce packaging

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Over 60% of German consumers would...

... change the shop or switch the brand in order to reduce packaging (Ipsos 2019, representative sample).

Almost 90% of German consumers would ...

... purchase products without packaging or in reusable packaging if they had the possibility (Bovensiepen et al. 2018, representative sample).

Over 70% of German consumers ...

... would bring their own containers for filling them with products at the supermarket or zero-packaging store (Splendid Research 2018, representative sample).

Over 70% of German consumers ...

... are willing to pay a deposit for reusable packaging (Bovensiepen et al. 2018, representative sample).

... are willing to pay extra for sustainable packaging (brandwatch 2021, Pro Carton 2021, Popovic et al. 2020, Lindh et al 2016).

# Willingness to reduce packaging

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## However:

- Only 8% of German consumers have purchased products in a zero waste store before (Splendid Research 2018).
- Only 20% actually engage in reuse systems (Greenwood et al. 2021).
- Almost 80% of consumers state they buy dairy and meat products mostly in plastic packaging (Wiefek et al. 2021).
- And still 50% of consumers purchase fruits and vegetables mostly in plastic packaging (Wiefek et al. 2021).



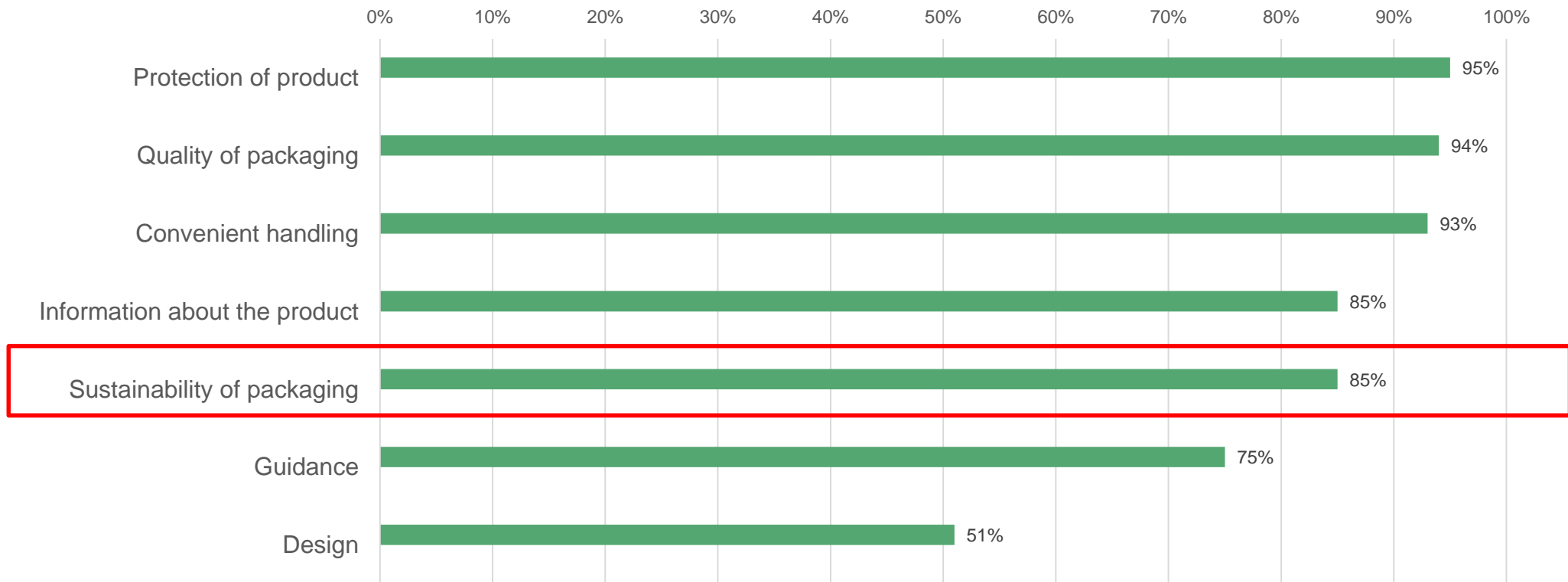


# Consumers' barriers for reducing packaging



# Barrier 1: Sustainability is not the priority

Important attributes of packaging



(Bovensiepen et al. 2018)

(See also: Oloyede & Lignou 2021; Otto et al. 2021; Ketelsen et al. 2020)

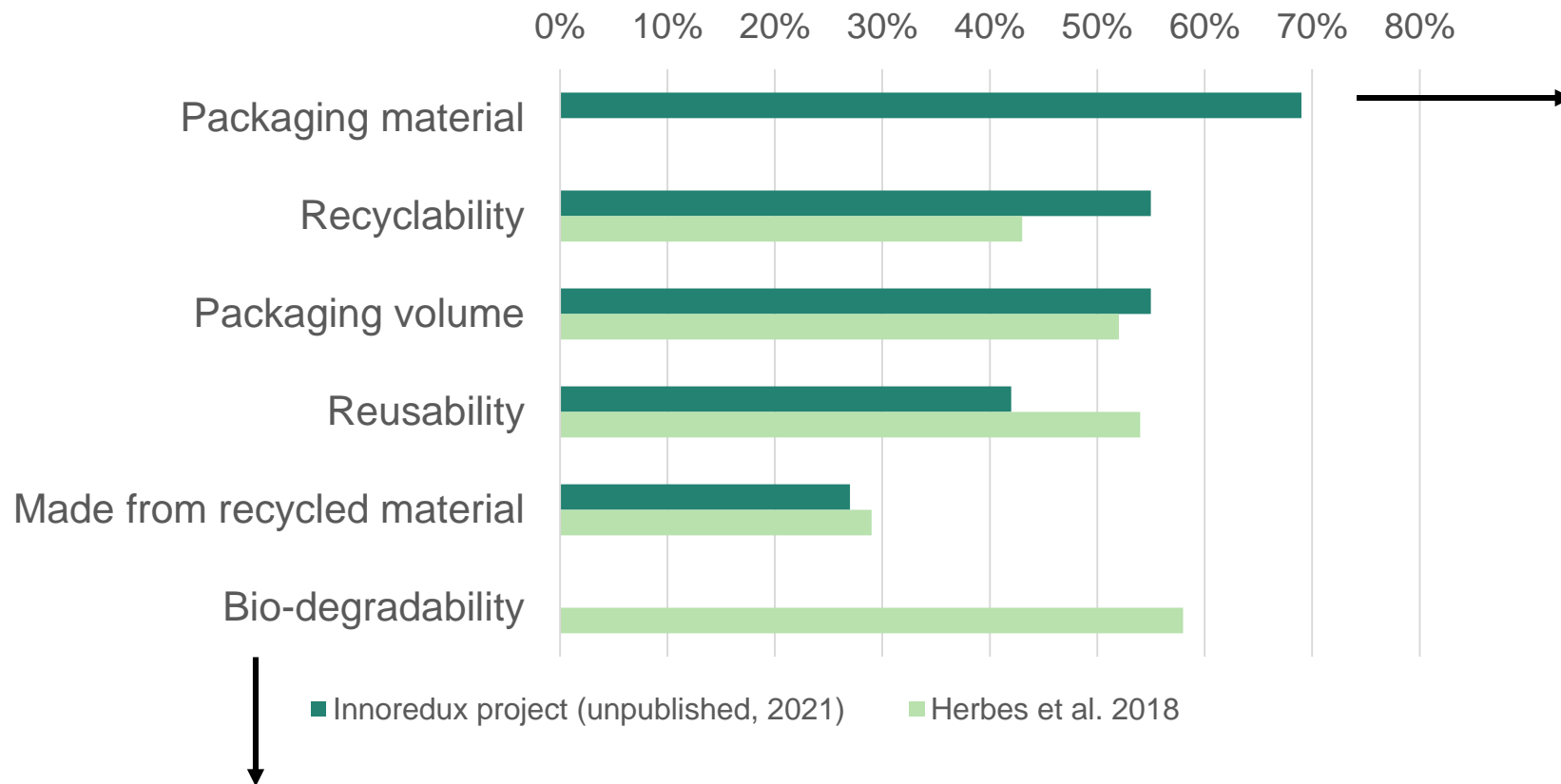
# Barrier 2: Lack of knowledge

## Sustainable packaging –What do consumers think?



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### Attributes that are perceived as sustainable by consumers



Materials that are perceived most sustainable:

1. Glass, paper and cardboard
2. Renewable and degradable materials
3. Plastics and metals

(Oloyede & Lignou 2021; Pro Carton 2021; Rewe Group 2021, Otto et al. 2021; Heidbreder et al. 2019; Steenis et al 2017; Lindh et al. 2016;)

Consumers focus primarily on end-of-life attributes (Herbes et al. 2018, non-representative sample)



## Barrier 2: Lack of knowledge – Material

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- Perception of sustainability is not in line with actual LCA (Detzel et al. 2021; Decker et al. 2021; Otto et al. 2021; Boz et al. 2020; Steenis et al. 2017)
  - Plastic packaging is underestimated (e.g. for cheese or almonds)
  - Glass, biodegradable packaging or unpackaged solutions are (partially) overestimated
  - Ecological impact always dependent on packaging volume, prevented food waste, environmental impact of the product, CO<sub>2</sub> emissions, washing processes, return transport → contextual, usage and productions factors are neglected by consumers
- Confusion among consumers regarding
  - Bio-based vs. bio-degradable (Ketelsen et al. 2020; Heidbreder et al. 2019)
  - Difficult distinction between single-use and reusable containers (Bovensiepen et al. 2018; Greenwood et al. 2021)
  - Environmental impact of the product and sustainability of the packaging (Innoredux)
- Consumers evaluate packaging based on affective feelings rather than referring to the scientific fact. They therefore behave less sustainable than intended (Otto et al. 2021; Innoredux)



## Barrier 3: Contextual factors

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- Lack of alternative packaging options
- Convenience and necessary change of habits
- Higher prices of packaging alternatives
- Hygiene reasons

(Marken & Wagenfeld 2020; Bovensiepen et al. 2018;  
Splendid Research 2018; Marken & Hörisch 2019)

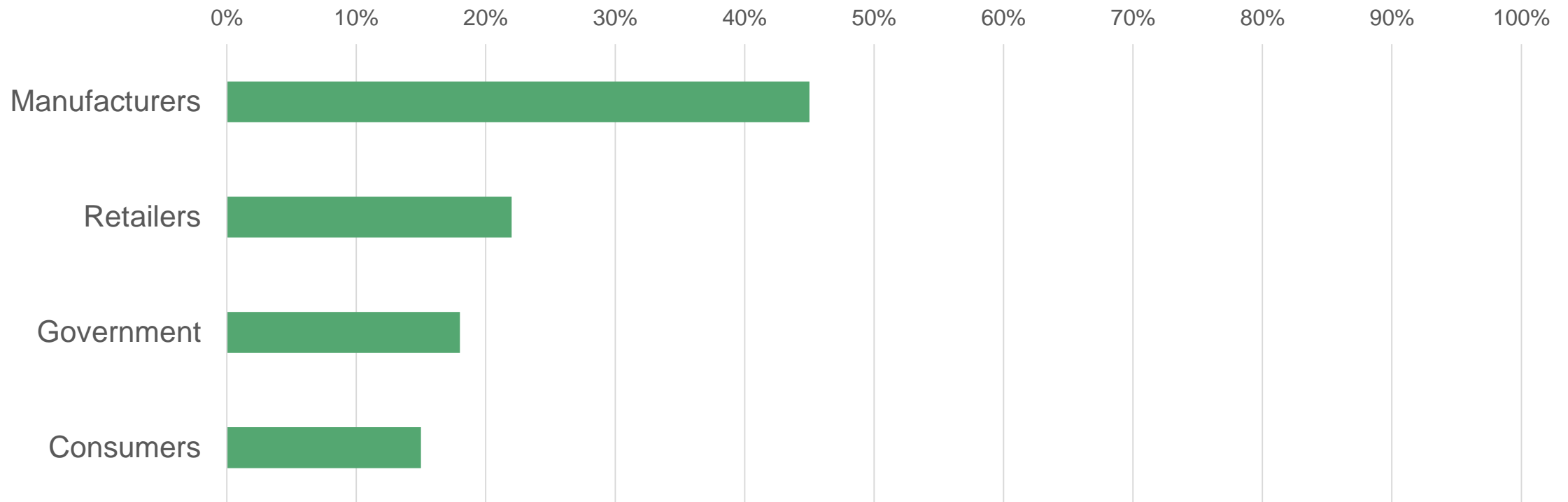


# Attribution of responsibility and preferred measures

# Who is mainly responsible for reducing packaging waste of all kinds?



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Single-answer choice (Bovensiepen et al. 2018)



# Consumers demand ...

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- From retailers and industry
  - Voluntary commitments of retailers and manufacturers (Bovensiepen et al. 2018)
  - Provision of information on environmentally friendly packaging and transparency (Ketelsen et al. 2020)
  - Extra charge for single-use packaging and goods (Decker et al. 2021, European Commission 2020)
- From the government
  - Bans, legal obligations and taxes (Marken & Wagenfeld 2020, Decker et al. 2021, Pro Carton 2021, Bovensiepen et al. 2018)
  - Establishment of reusable systems
  - Provision of information on environmentally friendly packaging and transparency (Pro Carton 2021)



# Conclusions

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- Overarching aim: limiting environmental impact → distinction between reasonable usage of plastic and avoidable plastic usage is essential
  - Consumer intention-behavior-gap
    - Sustainability is not the priority
    - Lack of knowledge and no one-fits-all solution
    - Contextual factors
- Interlinked responsibility of government and industry

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Thank you for your attention!

**Gesa Marken**

gesa.marken@ioew.de

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