CONSUMER ATTITUDES, **PERCEPTIONS &** WILLINGNESS TO PAY FOR BIO-BASED PLASTICS



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OBJECTIVES

- Fossil-based plastics contribute to global warming through CO₂ emissions.
- Consumers need to become aware of the benefits of innovations such as bio-based plastics, in order to create demand and a willingness to initially pay more.

OVERVIEW OF STUDIES



STUDY 1 (*N* = 97) investigated whether people have different attitudes towards conventional and bio-based plastics.

STUDY 2 (*N* = 52) replicated Study 1 & examined behavioural factors such as willingness to pay and perceived importance to recycle.

STUDY 3 (N = 508) replicated Study 2 & assessed participants' most common misconceptions towards bio-based plastic.

STUDY 4 (N = 304) experimentally manipulated knowledge about bio-based plastic and measured the effect of this manipulation on attitudes, importance to recycle, willingness to pay, and objective proenvironmental behaviour.



CONSUMERS & **BIO-BASED PLASTIC**

COVENTIONAL > BIO-BASED PLASTIC

Study 4 Specific Results

Depending on condition, participants received different information about bio-based plastic...

Condition Control (Baseline) Negative Control condition inf Bio-based plastic is entirely or partially made from biomass and based plastic is not n is similar in appearance and biodegradable. function to conventional plastic. (aim: remove any misconceptions abou biodegradability) No misconceptior Misconceptions about biodegradability No knowledge about No knowledge abo CO₂ benefit CO₂ benefit Negative attitude Positive attitude



When educating consumers about the properties and benefits of bio-based plastics, they remained positive and were willing to pay a price premium.



WILLING TO PAY MORE



	Balanced
fo + bio-	Negative condition info
necessarily	+ description of what
	makes bio-based plastic
	more sustainable (i.e.,
	a smaller CO ₂ footprint)
ut the	
ns	No misconceptions
out	Knowledge about
	CO ₂ benefit
е	Somewhat positive attitude

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RESULTS

- Participants...
 - ...hold very favourable attitudes and are willing to pay more for bio-based products.
 - ...harbour misconceptions, especially overestimating bio-based plastic's biodegradability
-find it less important to recycle bio-based than fossil-based plastic.
- Study 4: Educating consumers about the properties of bio-based plastic....
- -> dispel misconceptions,
- -> favourable attitudes
- -> willingness to pay price premium

DISCUSSION

- To transition to more sustainable plastic products we need:
- 1) companies to provide these environmentally friendly products
- consumers to accept and to be willing to purchase them

We showed that...

- consumers are very positive towards biobased plastics and are willing to pay a price premium.
- consumers lack knowledge about bio-based plastics.
- Simply educating consumers about bio
 - based plastics' actual properties and benefits, keeps attitudes positive and
 - willingness to pay high.



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