

SUSTAINABLE SURFACE PROTECTION BY GLASS-LIKE HYBRID AND BIOMATERIALS COATINGS

## Consumer Acceptance of PFAS Substitutes: The case of BIO-SUSHY



BIO-SUSHY

### BBBC project PFAS-FREE Webinar

Dr. Jesse de Pagter,  
Centre for Social Innovation (ZSI), Vienna, AT  
depagter@zsi.at



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Horizon's Europe GA number: 101091464

15-04-26

# TABLE OF CONTENTS

## **1.** Introduction to the BIO-SUSHY project

## **2.** Social Acceptance & Willingness-to-Pay

## **3.** Willingness-To-Pay Study

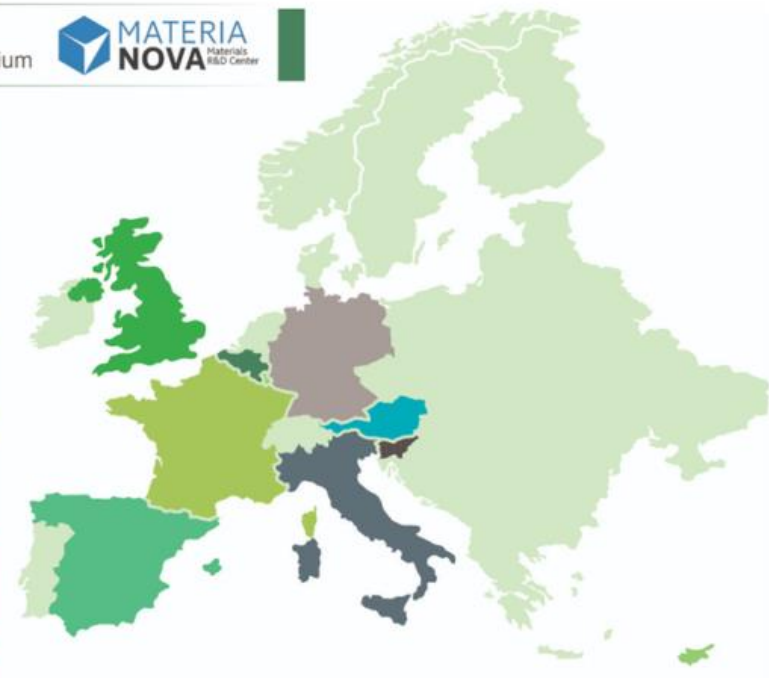
## **4.** Conclusion & Discussion

# BIO-SUSHY

## Sustainable surface protection by glass-like **hybrid** and **biomaterials** coatings (2023-2026)



BIO-SUSHY COORDINATOR:  Materia Nova, Av. Nicolas Copernic 3, 7000 Mons, Belgium



## Objective: Develop **3 SSbD PFAS-free bio-based coatings**



- Development of **3 novel SSbD coatings materials** with water and oil repellency
- BIO-SUSHY **methodology** based on 3 pillars:
  - R&I coating development
  - Safe and Sustainable by Design (SSbD)
  - Computational modelling (e.g. toxicology)

# TABLE OF CONTENTS

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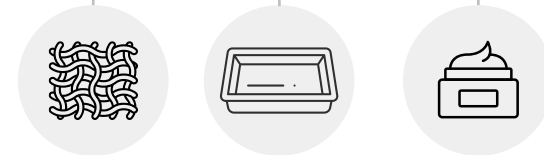
**3.** Willingness-To-Pay Study

**4.** Conclusion & Discussion

# Social Acceptance in BIO-SUSHY



## Applications



## Social Acceptance

### Strengthening social acceptance:

- Focus on linking **technological development** ↔ **societal & regulatory dynamics**
- Aim to proactively enable **ethical, sustainable, and socially acceptable** solutions

→ Operationalising the social dimension of Safe and Sustainable by Design (SSbD) framework, e.g. through:

- Social Life Cycle Assessment (sLCA) to capture social impacts across the value chain
- Systematic inclusion of diverse value chain actors in value chain analysis
- **Willingness to Pay (WTP) as an indicator of market-oriented social acceptance**



Source: SSbD Hub (INTEGRANO project)

# TABLE OF CONTENTS

**1.** Introduction to the BIO-SUSHY project

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**3. Willingness-To-Pay Study**

**4.** Conclusion & Discussion

## Willingness-To-Pay for BIO-SUSHY solutions in a nutshell

### Core aspects

- Aim to **quantify the price premium** consumers would accept for safer, more sustainable options
- Help **prioritise attributes** (e.g., durability, recyclability, health & safety)
- Strengthen understanding of **consumers as a stakeholder group**
- Higher TRL can help to strengthen future WTP studies



## Methodological aspects

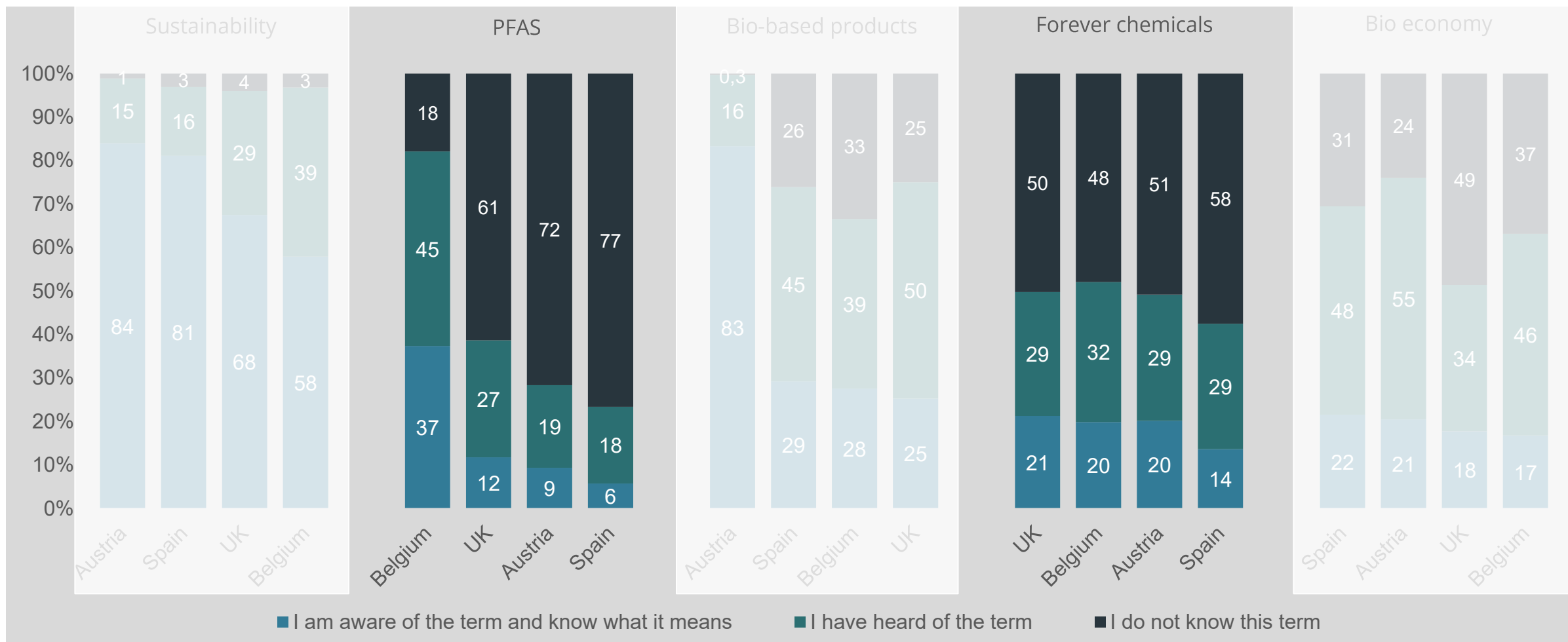
Data collection method:	Online Interviews (CAWI - Computer-assisted web interviewing)
Sample size:	AT: n=204; BE: n=201; ES: n=203; UK: n=203
Target group:	Total population representative for sex & age (minimum age 18 years old)
Field time:	December 2nd – 12th 2025
Countries:	Austria, Belgium, Spain, UK

## Sample structure

	Austria		Belgium		Spain		UK	
	Absolute	%	Absolute	%	Absolute	%	Absolute	%
<b>TOTAL</b>	204	100	201	100	203	100	203	100
<b>SEX</b>								
Male	100	49	98	49	98	48	98	48
Female	104	51	103	51	105	52	105	52
Other	0	0	0	0	0	0	0	0
<b>AGE</b>								
18 - 29 years	34	17	36	18	31	15	38	19
30 - 49 years	67	33	65	32	70	34	67	33
50+ years	103	51	100	50	103	51	97	48
<b>AREA OF RESIDENCE</b>								
Urban	103	50	69	35	153	75	78	39
Suburban / Periphery of a city	22	11	53	26	19	9	76	38
Rural	79	39	79	39	31	15	49	24
<b>HOUSEHOLD SIZE</b>								
1 person	53	27	44	22	27	13	50	25
2 persons	67	34	78	39	70	35	49	24
3 persons	39	20	38	19	47	23	40	20
4 persons or more	37	19	40	20	58	29	62	31
<b>Non-adults (under 18) in household</b>								
Yes	68	46	52	33	79	45	81	53
No	82	54	104	67	96	55	71	47

# Awareness of relevant terms

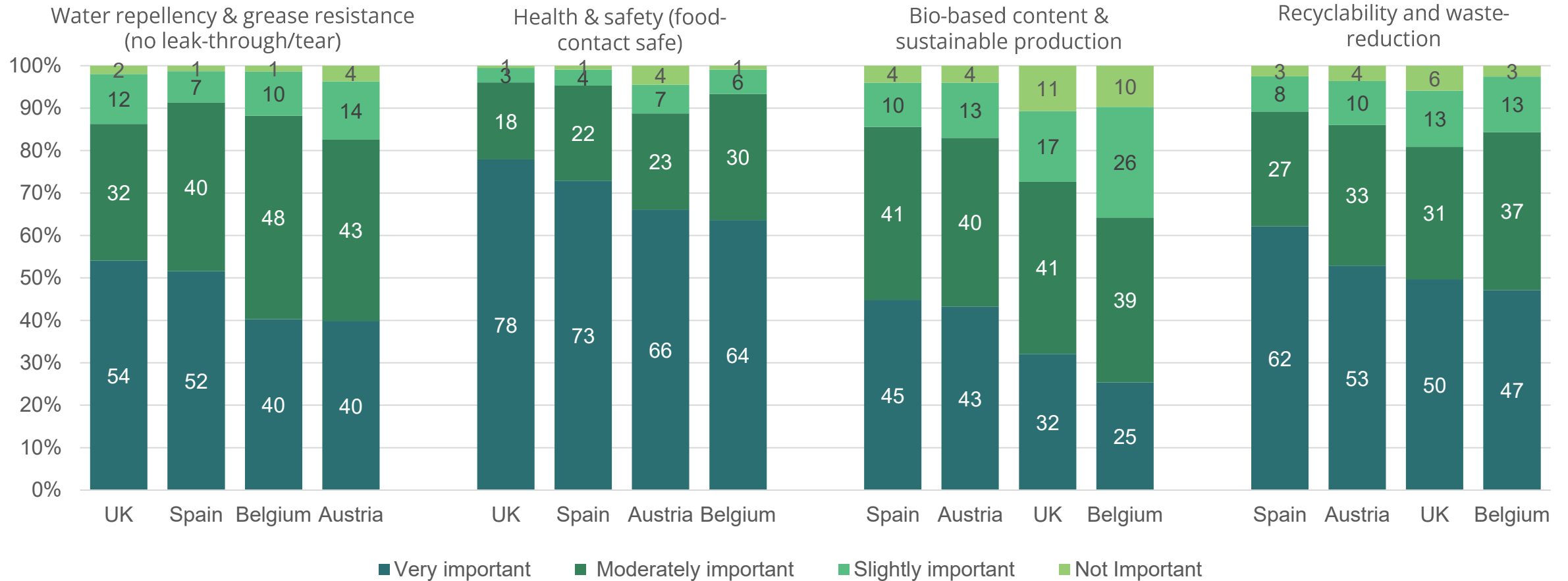
QUESTION: WHICH OF THE FOLLOWING TERMS ARE YOU AWARE OF?



Base: All Respondents (AT: n=204, BE: n=201, ES: n=203, UK: n=203)

# Importance of key criteria for paper food packaging coatings

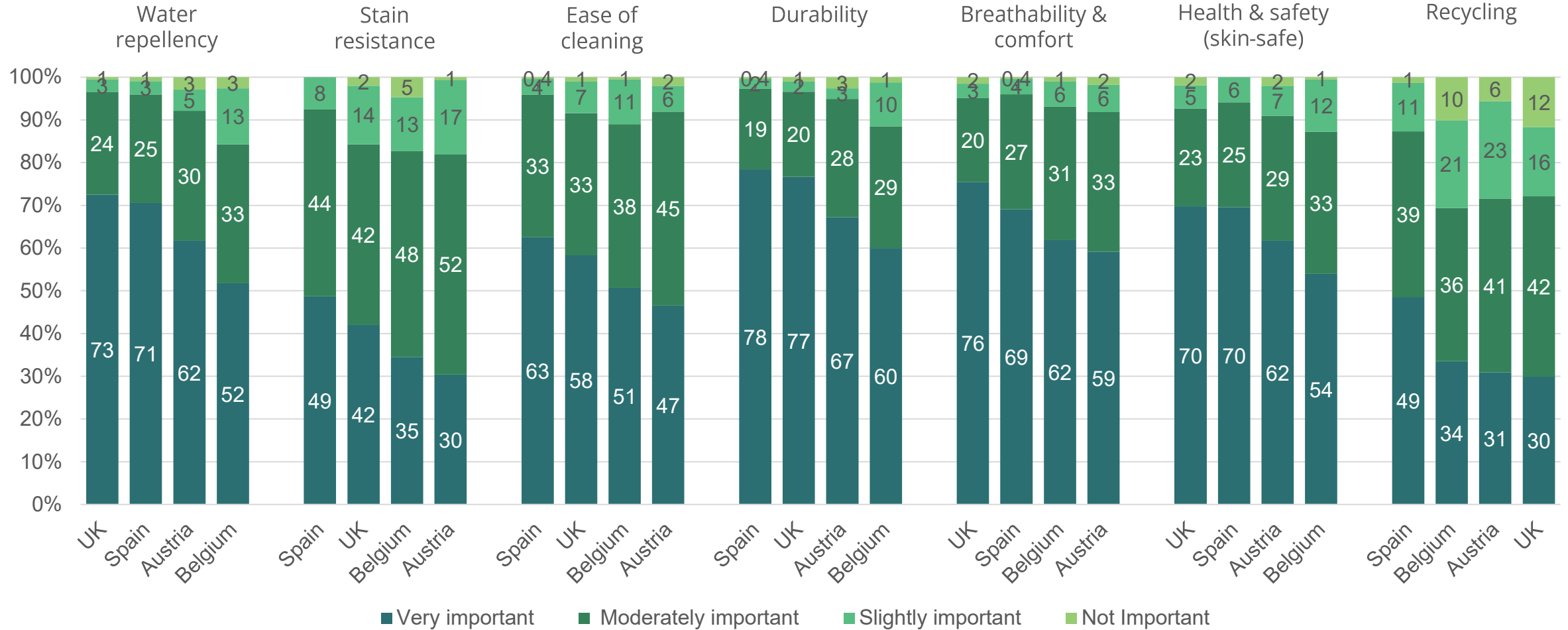
QUESTION: HOW IMPORTANT ARE THE FOLLOWING CRITERIA FOR YOU WHEN IT COMES TO FOOD PACKAGING?



Base: All Respondents (AT: n=204, BE: n=201, ES: n=203, UK: n=203)

# Importance of key criteria for textile coatings

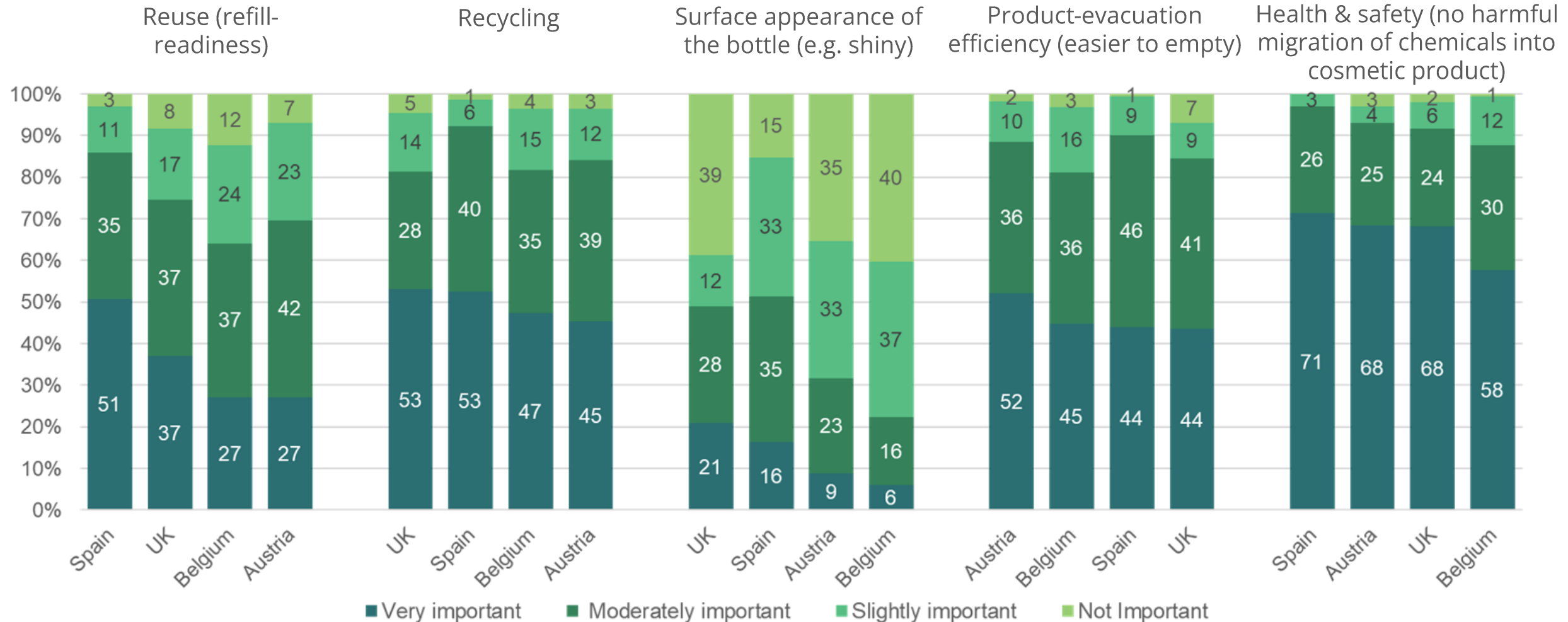
QUESTION: HOW IMPORTANT ARE THE FOLLOWING CRITERIA FOR YOU WHEN IT COMES TO TEXTILE COATINGS?



Base: All Respondents (AT: n=204, BE: n=201, ES: n=203, UK: n=203)

# Importance of key criteria for cosmetic packaging coatings

QUESTION: HOW IMPORTANT ARE THE FOLLOWING CRITERIA FOR YOU WHEN IT COMES TO COSMETIC PACKAGING COATINGS?

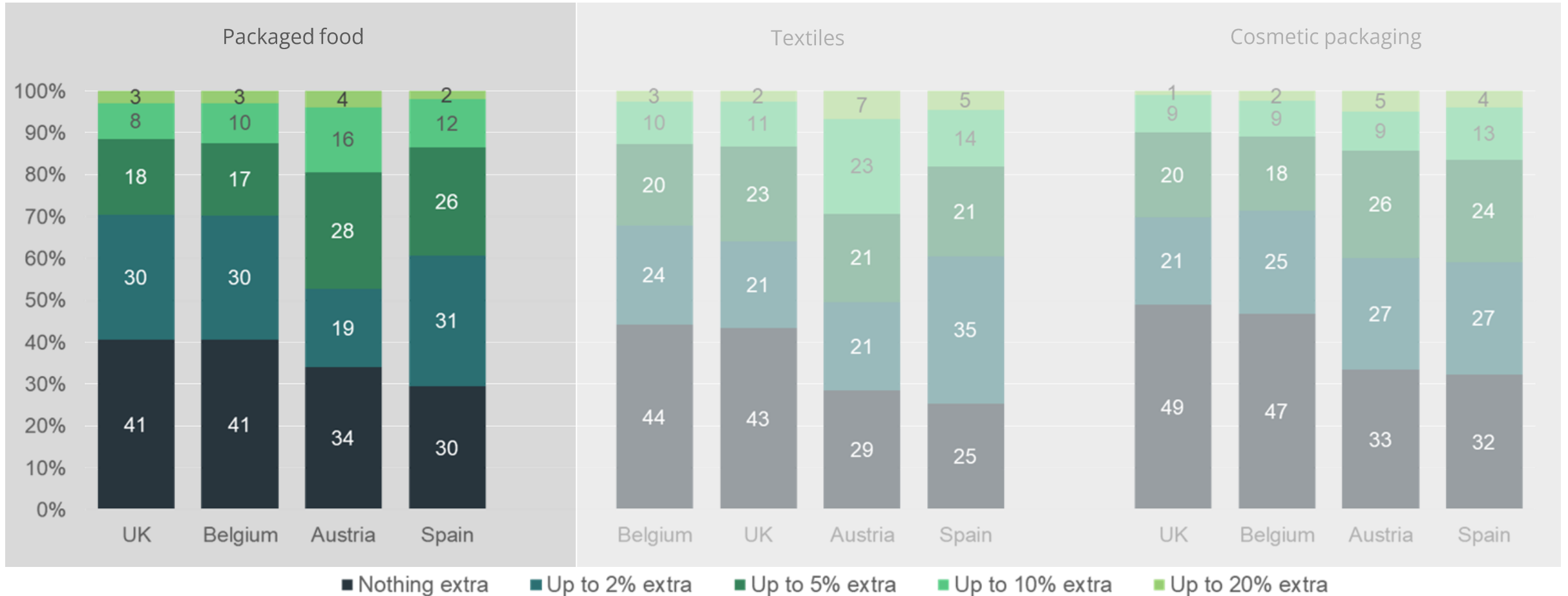


Base: All Respondents (AT: n=204, BE: n=201, ES: n=203, UK: n=203)

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# Willingness to pay more

QUESTION: HOW MUCH EXTRA WOULD YOU BE WILLING TO PAY FOR PRODUCTS IF THEY CONTAIN MORE SUSTAINABLE, SAFE ALTERNATIVES TO PFAS BASED COATINGS?

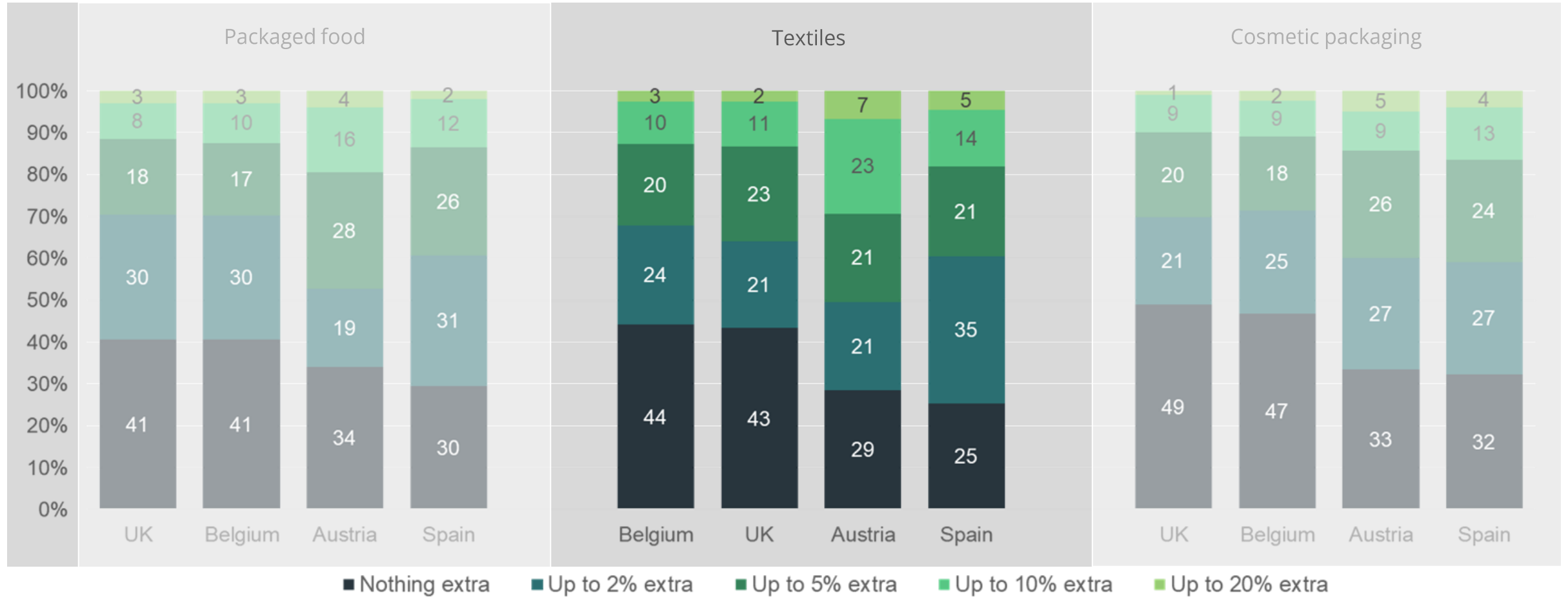


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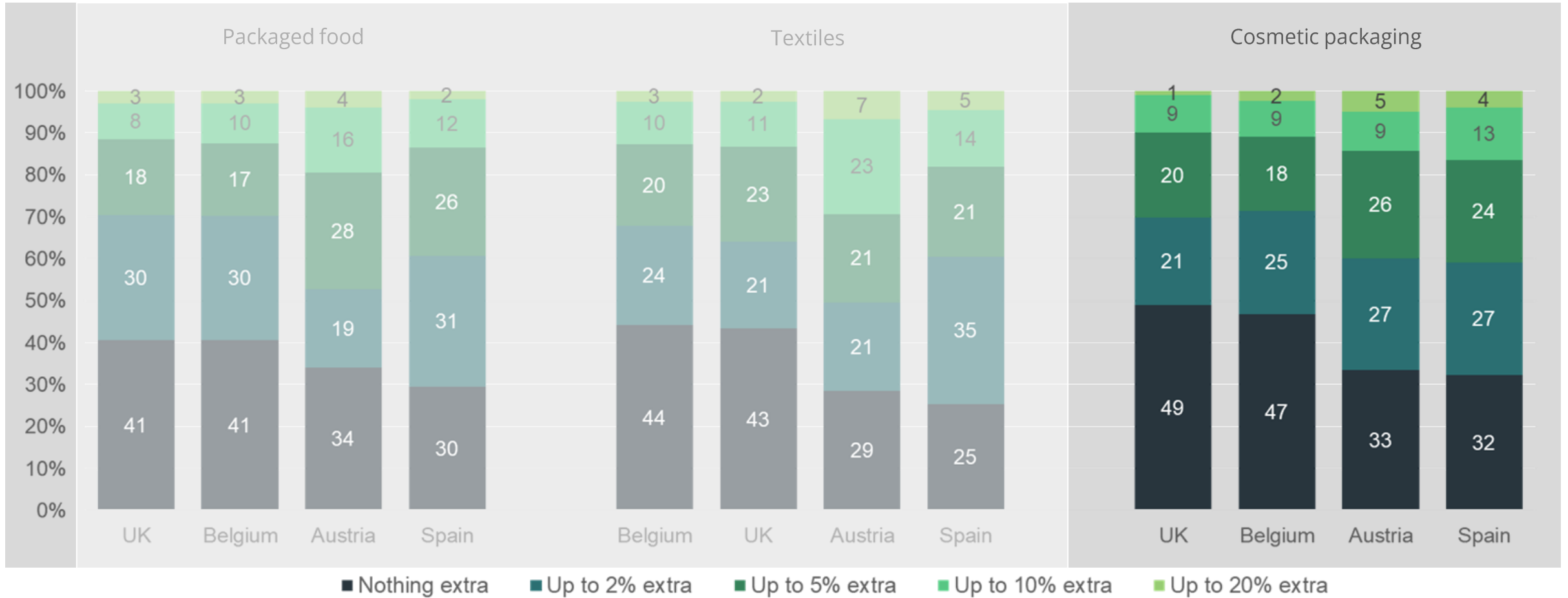


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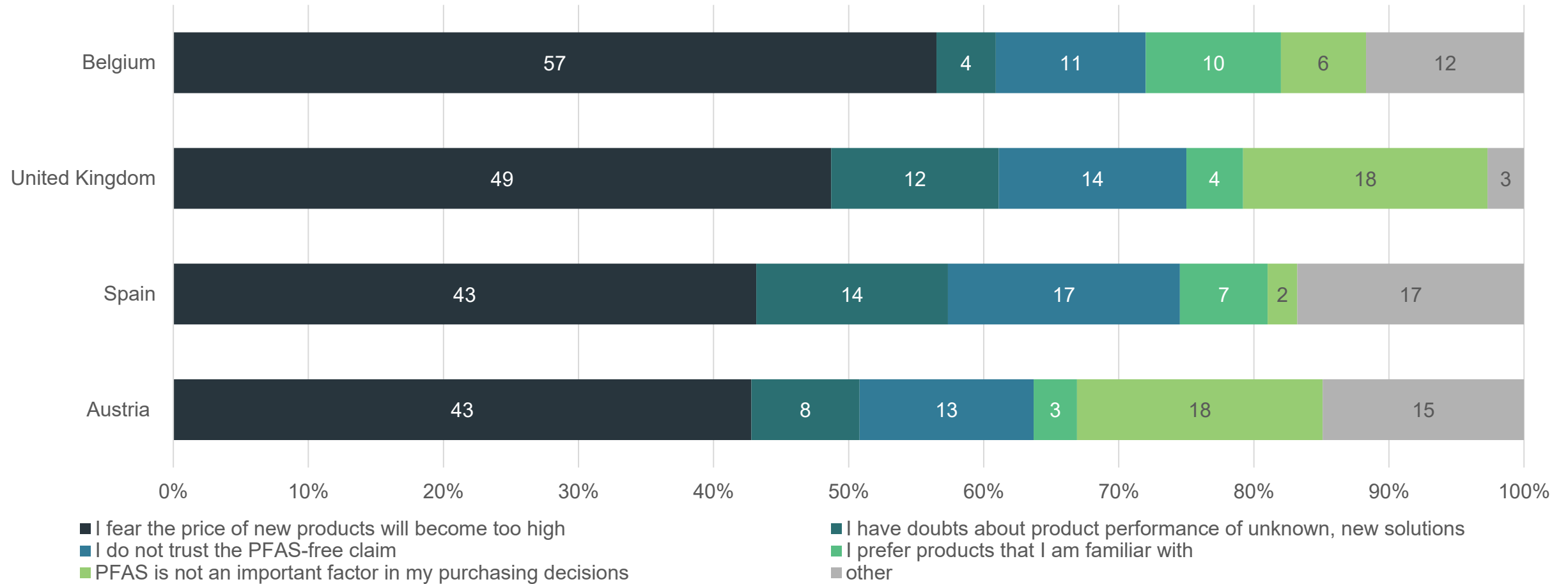


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# Reason for not willing to pay more

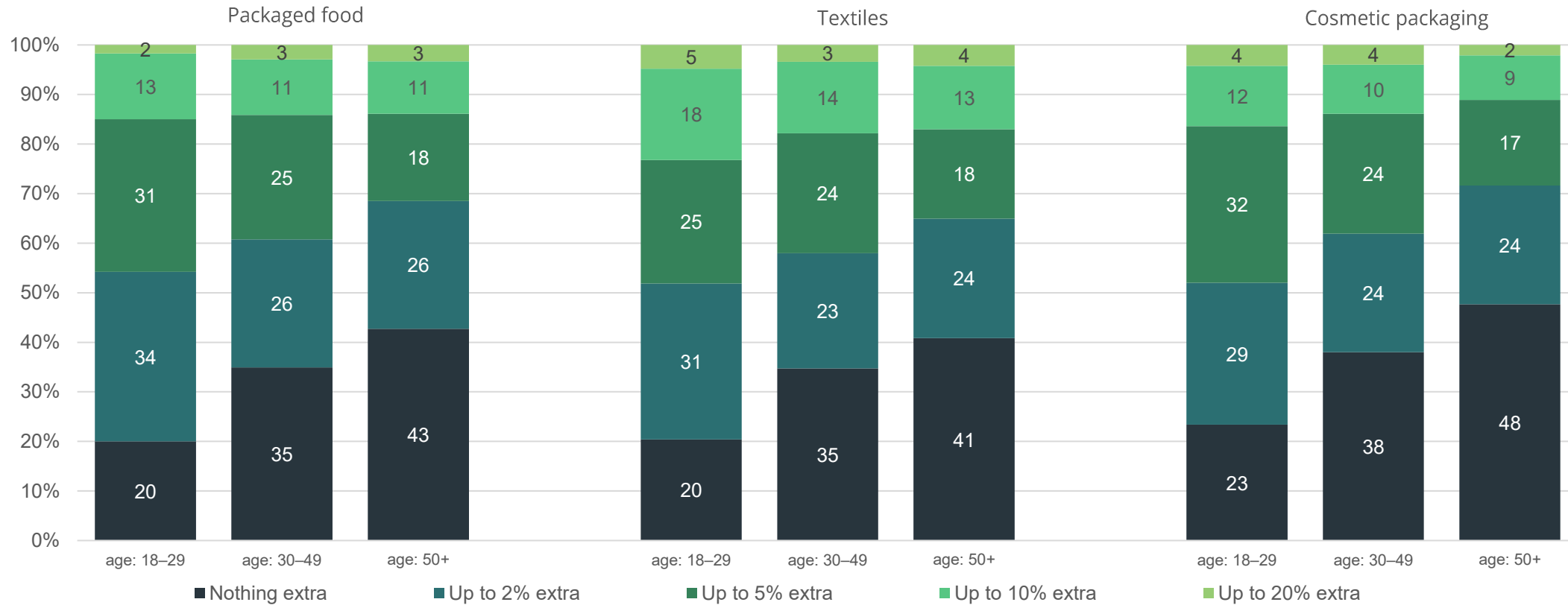
QUESTION: YOU STATED THAT YOU ARE NOT WILLING TO PAY MORE IN ANY OF THE PRODUCT CATEGORIES MENTIONED ABOVE. WHICH IS THE MAIN REASON?



Base: Respondents who are not willing to pay more in either category (AT: n=50, BE: n=74, ES: n=42, UK: n=72)

# Willingness to pay more by age group

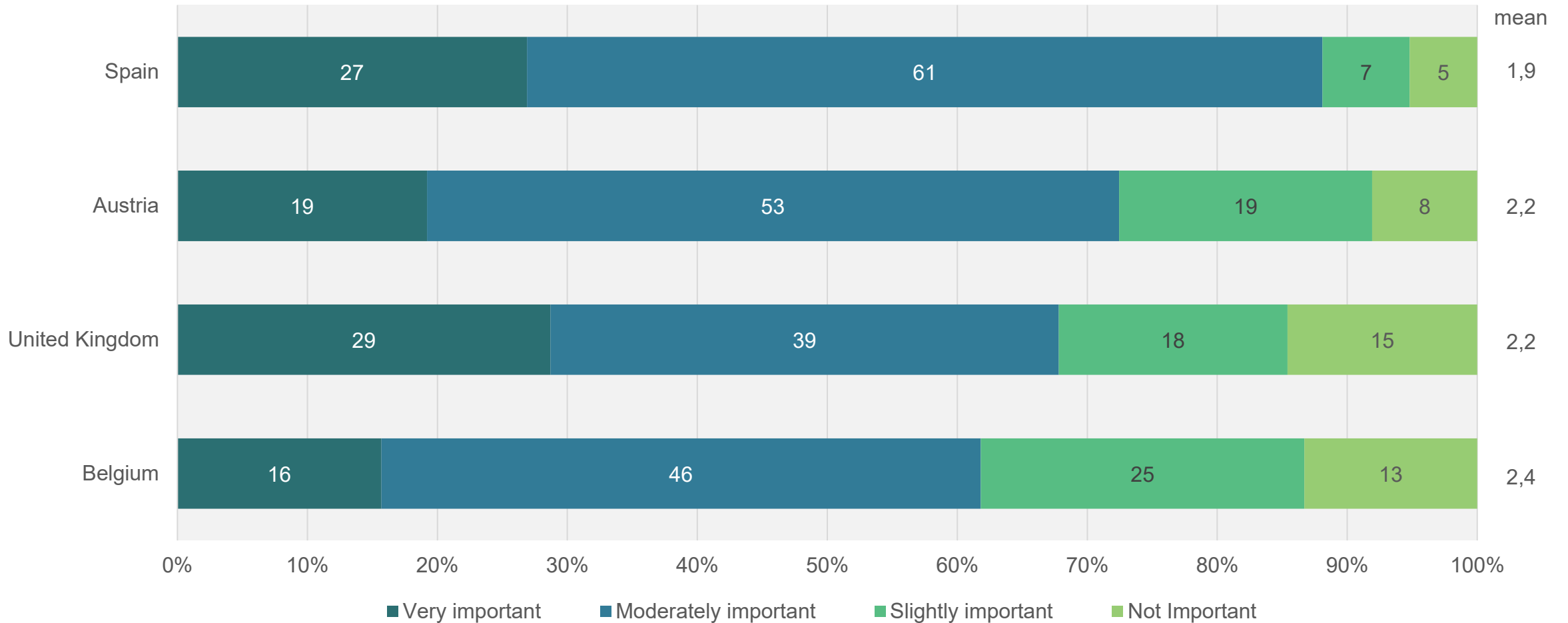
AGGREGATED FROM ANSWERS TO THE FOLLOWING QUESTION: HOW MUCH EXTRA WOULD YOU BE WILLING TO PAY FOR PRODUCTS IF THEY CONTAIN MORE SUSTAINABLE, SAFE ALTERNATIVES TO PFAS BASED COATINGS?



Base: Aggregated data across countries from all Respondents (AT: n=204, BE: n=201, ES: n=203, UK: n=203)

# Importance of independent labels

QUESTION: HOW IMPORTANT ARE INDEPENDENT (THIRD-PARTY) LABELS OF ENVIRONMENTAL CLAIMS FOR YOU WHEN CHOOSING PRODUCTS?



Base: All Respondents (AT: n=204, BE: n=201, ES: n=203, UK: n=203)



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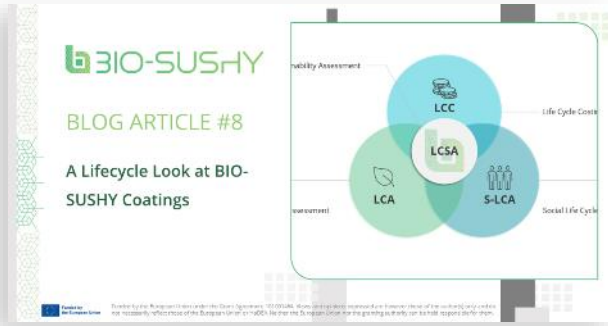
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## Core findings

- **Currently in most countries still a low PFAS awareness** → opportunity for clear communication that strengthens public knowledge about PFAS-free products and link it to concrete benefits.
- **What people value is practical and actionable for projects like BIO-SUSHY** → strong focus on safety and real use-phase performance across all three domains.
- **WTP is mostly modest but present** → with credible proof and no perceived performance trade-off, BIO-SUSHY can position PFAS-free solutions for broad uptake.

Base: Respondents who are not willing to pay more in either category (AT: n=50, BE: n=74, ES: n=42, UK: n=72)

# Stay Updated



[www.bio-sushy.eu](http://www.bio-sushy.eu)



[info@bio-sushy.eu](mailto:info@bio-sushy.eu)



@BIO-SUSHY Project



@BIO-SUSHY Project





NAME: Jesse de Pagter

EMAIL: [depagter@zsi.at](mailto:depagter@zsi.at)

COMPANY: Centre for Social Innovation (ZSI)

THANK YOU!

