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Finnish and Italian consumers' perceptions of sustainable fresh food packaging

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Package Testing & Research



SusPack (<https://www.sus-pack.eu/>)

AIMS:

- project activities aim to promote sustainable consumption habits
- and build a positive attitude towards sustainable fresh food and takeaway packaging
- by improving consumers' knowledge about the level of sustainability of food and take-away packaging

ORGANIZERS:

- ADOC – National Association for Defense and Consumer Orientation
- Package Testing & Research (PTR) consultancy and research agency
- MARTHA association specialized in home economics



Schedule of the training

14.- 21.3. Pre-survey

19.4. (FIN), 20.4. (ITA) time: 18-20, Session 1: Packaging of fresh food

26.4. (FIN), 27.4. (ITA) time: 18-20, Session 2: Packaging of takeaway food

3.5. (FIN) time: 17-21, (ITA) time: 16-20, Session 3: Sustainable food packaging

10.5. (FIN) time: 17-21, (ITA) time: 16-20, Session 4: Future food packaging

10. -12.5. Post-survey

17.5. (FIN) , 18.5. (ITA) time: 18-20, Summary and evaluation of the learnings



SusPack

Target group of education

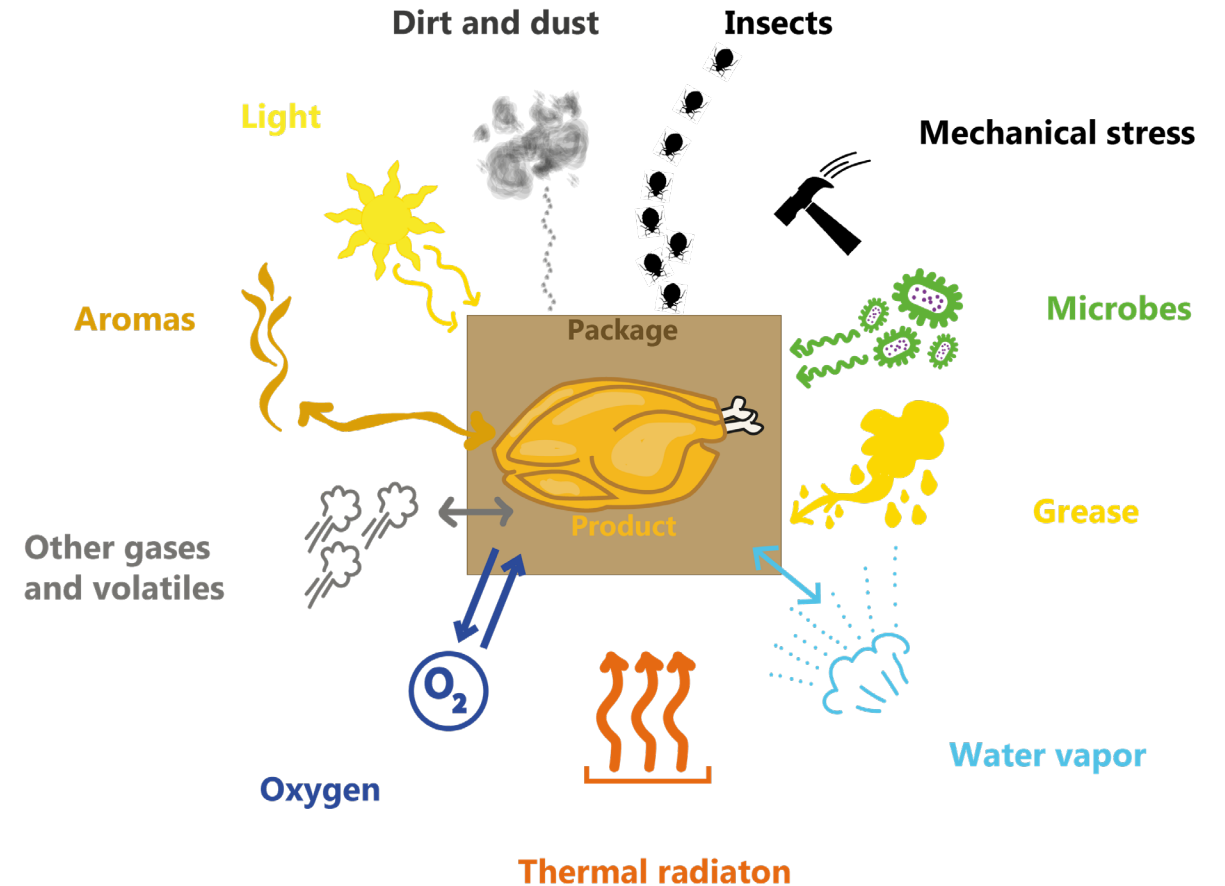
The target group consisted of 20 consumers: 10 from Italy, 10 from Finland.

- A diversity of social/professional and educational backgrounds
- Purchase takeaway from restaurants and fresh food from supermarket.
- Score above an average of 5 on the following scale (1= not at all; 7=very much):
 1. I strive to eat healthily.
 2. My personal wellbeing is important for me.
 3. I pay attention to the ethics and ecology of products.
 4. I pay attention to the environmental sustainability of packaging.
 5. In my household, packaging waste is sorted as accurately as possible.
 6. I feel guilty of producing too much packaging waste.



SESSION 1. PACKAGING OF FRESH FOOD

- Results of the Pre-survey (Virpi Korhonen, Package Testing & Research)
- Packaging of fresh food and its value chain (Hanna Koivula, University lecturer, University of Helsinki)
 - Basic functions of food packaging
 - Basic types of food packaging
 - Basic materials of food packaging



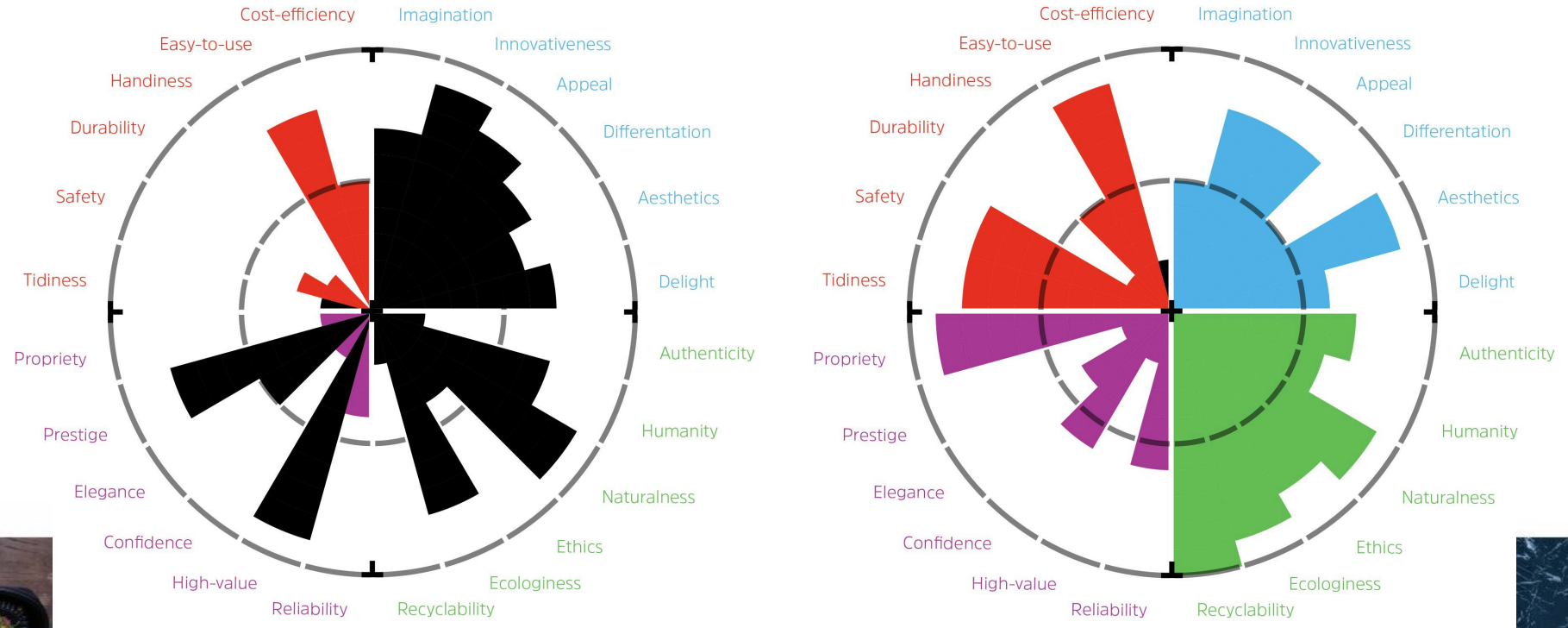
SESSION 2. PACKAGING OF TAKEAWAY FOOD

- Discussion of takeaway packaging based on a video (evaluation of Smart Set & PP trays)
- Basic requirements for takeaway packaging and its value chain (Leena Kauppi, LK Consultants)
 - Basic requirements and challenges in takeaway packaging
 - Factors influencing choice of takeaway packaging materials



https://www.youtube.com/watch?v=GkXqCla87aI&a_b_channel=PackageTesting%26Research

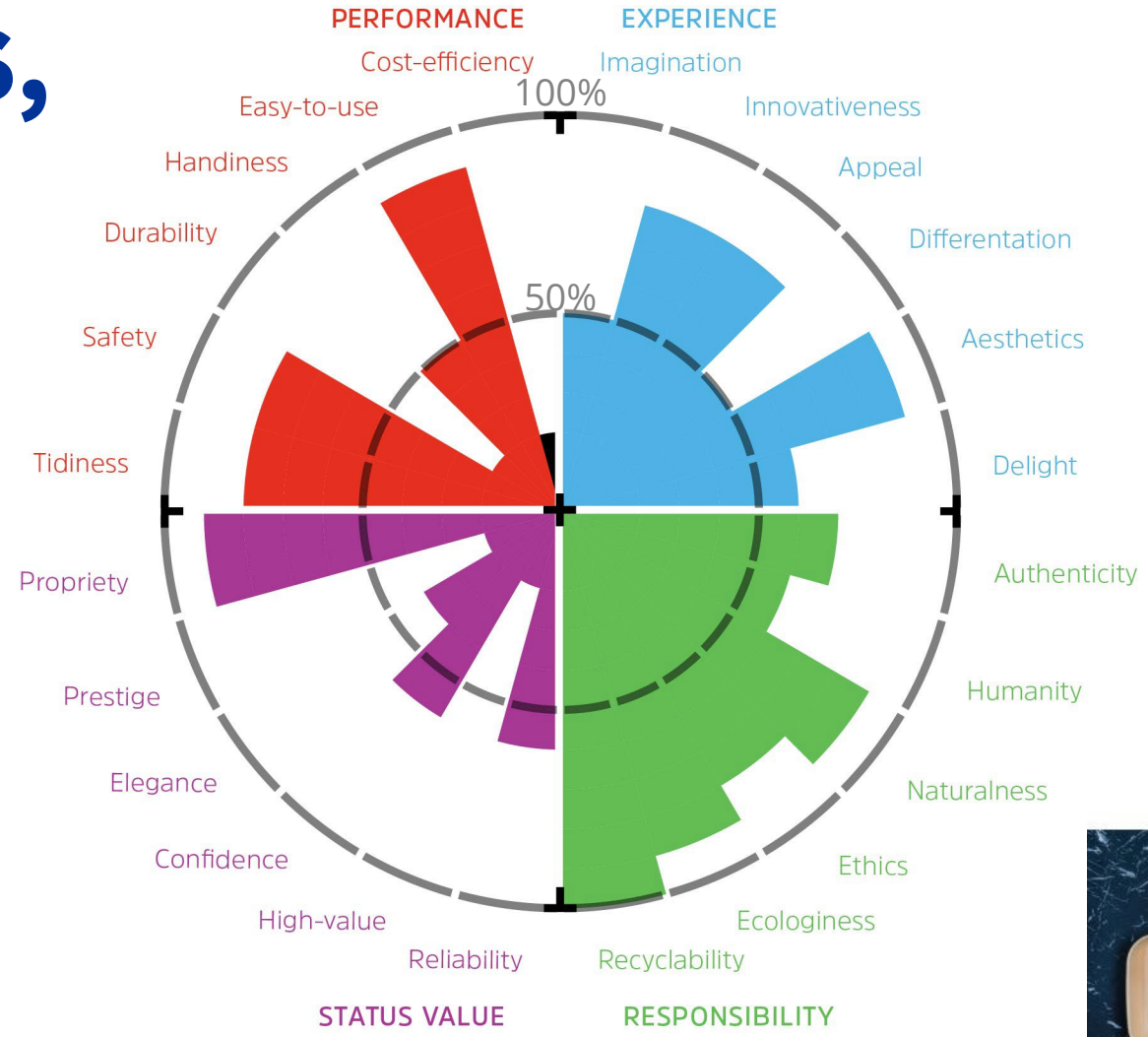
SMART SET PERFORMED STRONGLY IN ALL DIMENSIONS



PERFORMANCE ● EXPERIENCE
 STATUS VALUE ● RESPONSIBILITY
 ● NEGATIVE

Smart Set TOP ATTRIBUTES, n=17

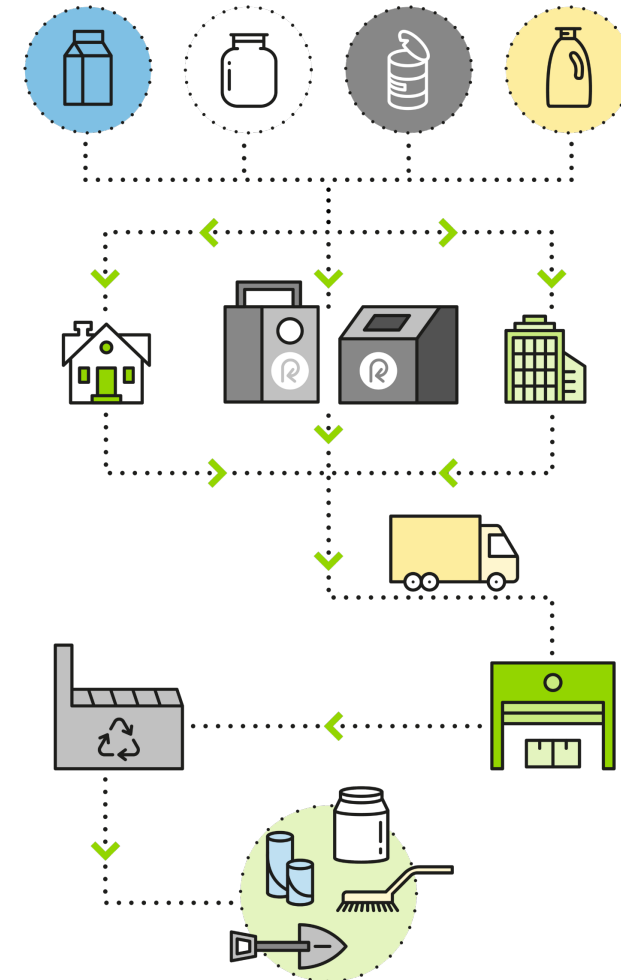
Easy-to-recycle	100 %
Easy-to-use, Aesthetic, Appropriate, Natural, Ecological	94 %
Tidy, Safe	88 %
Innovative, Appealing, Ethical	82 %
Handy, Delightful, Authentic, Humane	71 %
Imaginative, Elegant, Reliable, Confident	65 %
Distinguishable, Prestigious, High-value	59 %
Durable	53 %



SESSION 3. SUSTAINABLE FOOD PACKAGING

Packaging material recycling in Finland and Italy (Heli Satuli, Rinki & Fabio Scorza, CONAI)

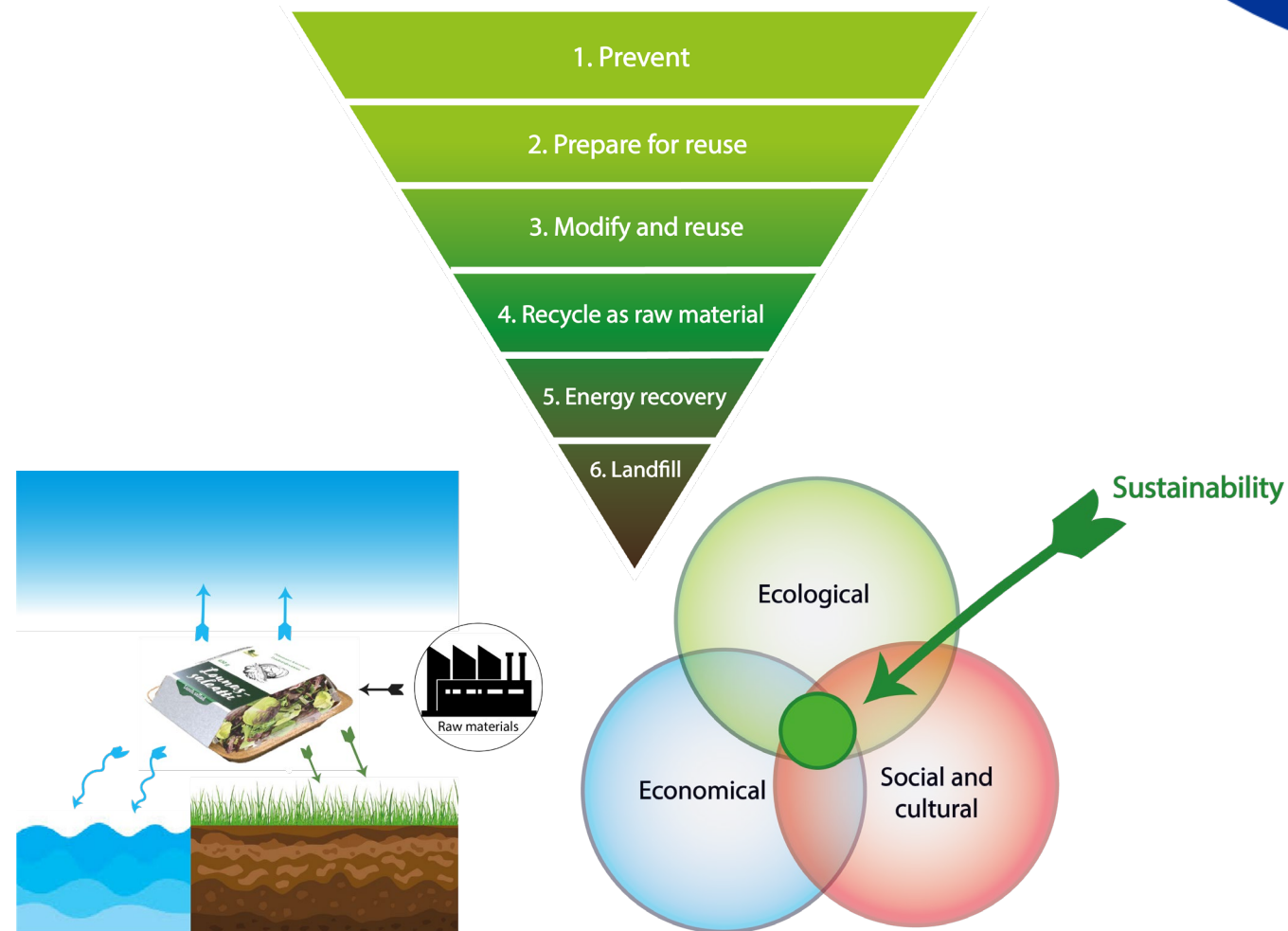
- EU legislation regarding packaging recycling and how it is typically organized in the EU Member States
- What happens to recycled packaging materials
- How much packaging material is recycled in Finland/Italy



SESSION 3. SUSTAINABLE FOOD PACKAGING

Circular economy and evaluation of packaging sustainability (Liisa Lehtinen, Turku University of applied sciences)

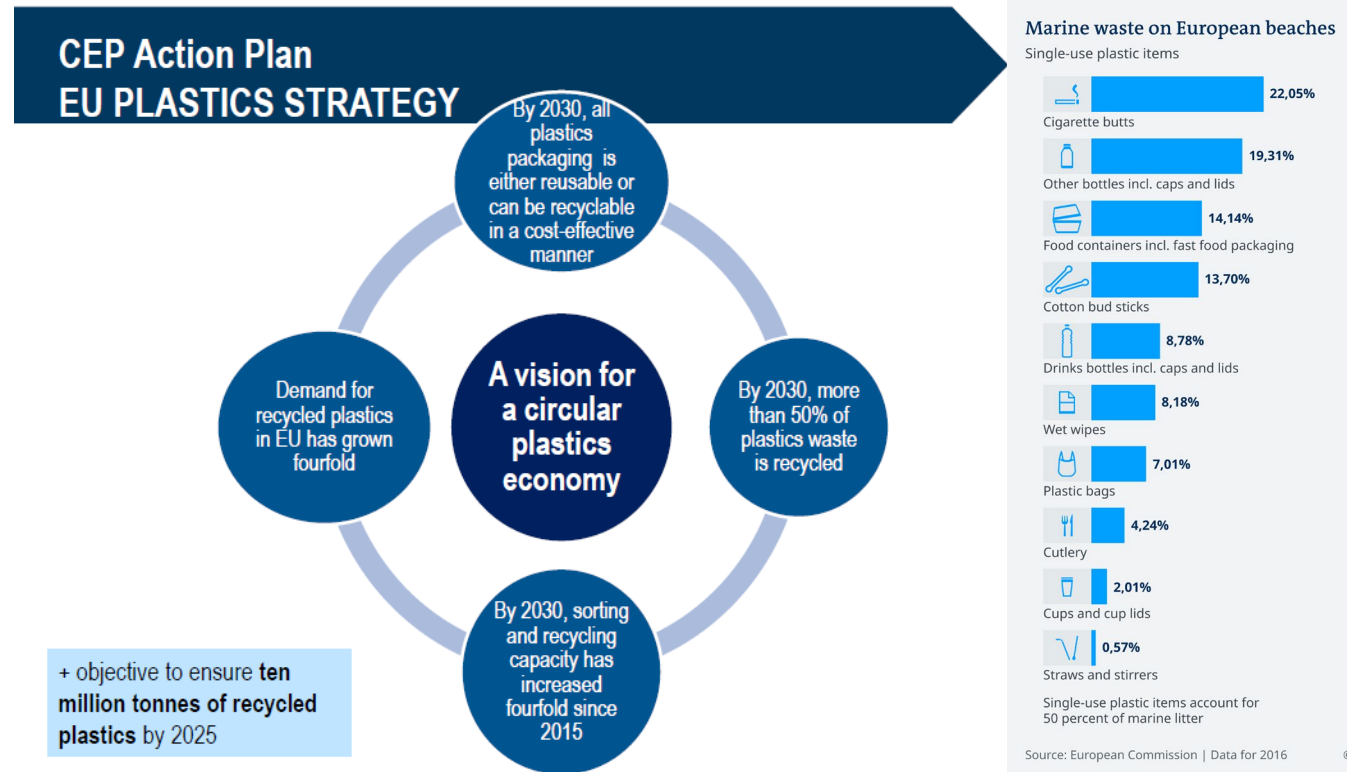
- Principles of circular economy
- Sustainable development and the role of packaging in it
- The role of packaging logistics in circular economy and sustainability



SESSION 4. FUTURE FOOD PACKAGING

EU legislation on packaging (Antro Säilä, The Finnish Packaging Association)

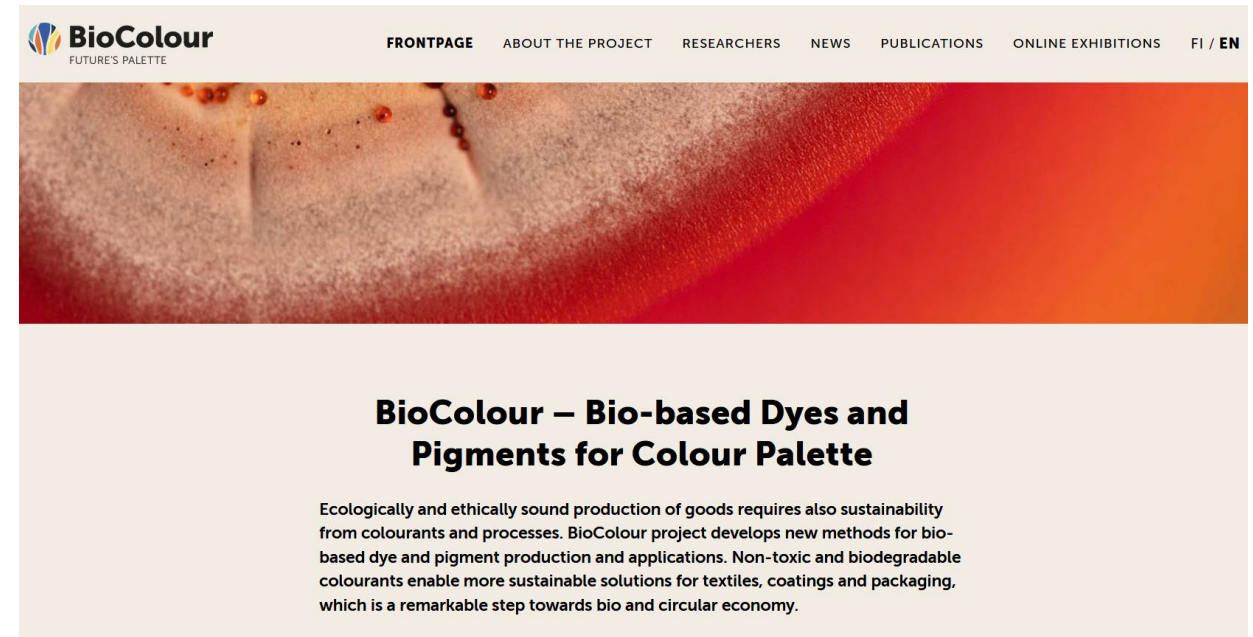
- Why is the EU proposing so much environmental regulation on packaging?
- What are the main objectives for packaging regulation?
- What are the implications to EU citizens?



SESSION 4. FUTURE OF FOOD PACKAGING

Packaging communication through colour
(Minna Autio, Professor, Home Economics
Science, Faculty of Educational Sciences,
University of Helsinki)

- Understanding the role of packaging in the context of consumers' everyday life
- The meaning of packaging colour for consumers; The visual vs. material aspect of colour



BioColour
FUTURE'S PALETTE

[FRONTPAGE](#) [ABOUT THE PROJECT](#) [RESEARCHERS](#) [NEWS](#) [PUBLICATIONS](#) [ONLINE EXHIBITIONS](#) [FI / EN](#)

BioColour – Bio-based Dyes and Pigments for Colour Palette

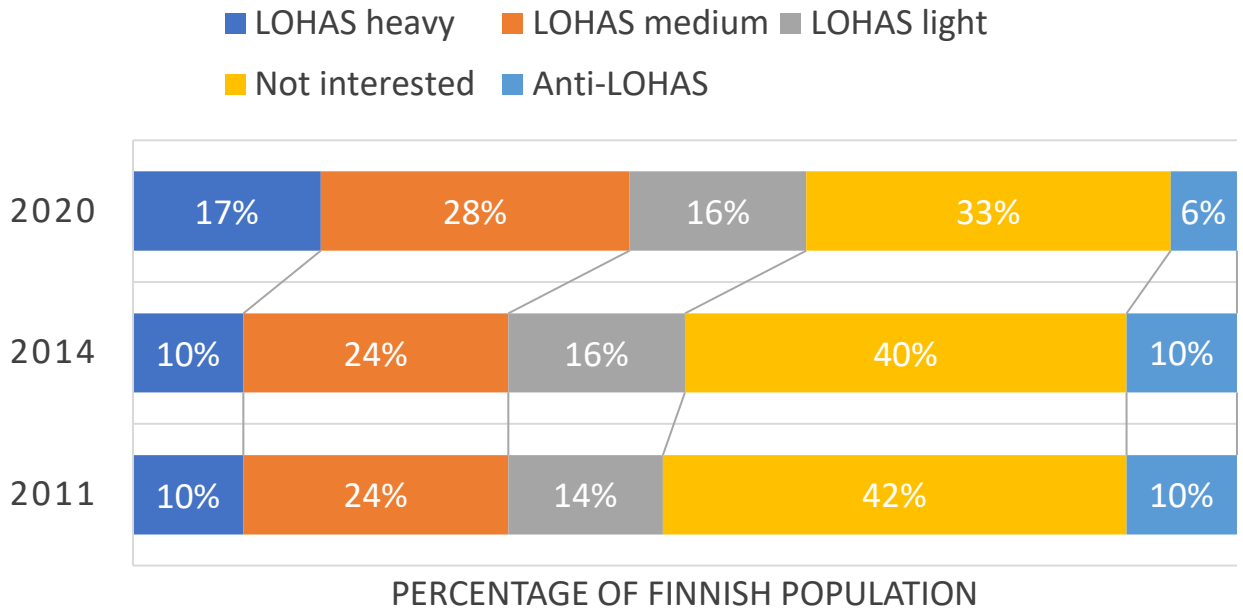
Ecologically and ethically sound production of goods requires also sustainability from colourants and processes. BioColour project develops new methods for bio-based dye and pigment production and applications. Non-toxic and biodegradable colourants enable more sustainable solutions for textiles, coatings and packaging, which is a remarkable step towards bio and circular economy.

SESSION 4. FUTURE OF FOOD PACKAGING

Consumer value for packaging and future applications (Virpi Korhonen, Package Testing & Research)

- What do future consumers value in packaging?
- What kind of value can the new packaging applications offer to consumers?

The share of LOHAS heavy and medium groups has increased from 34% to 45% in the Finnish population



TRAINING CONDUCTED ON HOWSPACE PLATFORM

SESSION 3: SUSTAINABLE FOOD PACKAGING

SPEAKER 1: Heli Satuli, Finnish Packaging Recycling RINKI Ltd
Topic: Packaging recycling in Finland

SPEAKER 2: Fabio Scorza, CONAI Consorzio Nazionale Imballaggi Attività Internazionali
Topic: Packaging recycling in Italy

SPEAKER 3: Liisa Lehtinen, Turku University of Applied Sciences
Topic: Circular economy & evaluation of packaging sustainability

Virpi Korhonen: The results of the Pre-Survey - Recycling



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Sustainability of packaging Findings of the pre-survey

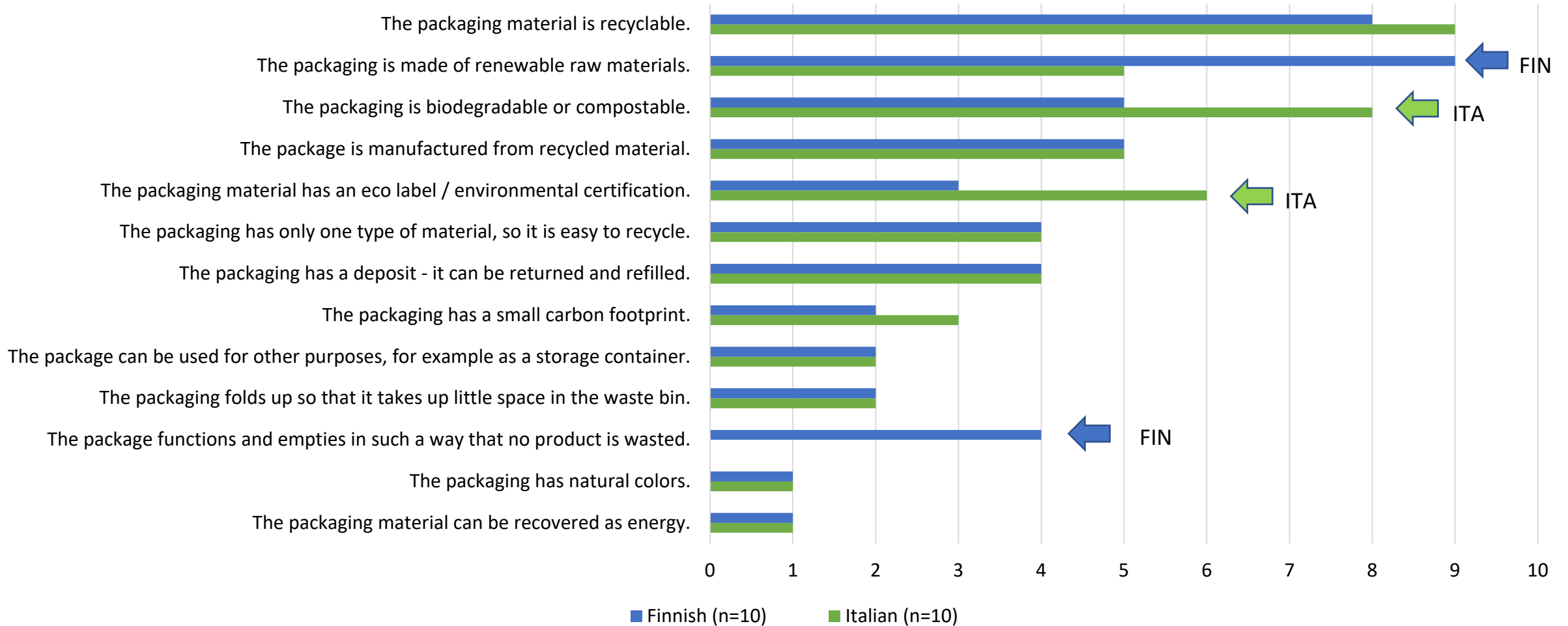
Research data

Data was collected through individual evaluations of 10 Finnish and 10 Italian SusPack participants.

- Of the Finnish participants, 100 % were female. The average age of the Finnish participants was 44 years, ranging from 31 to 65 years, and 90% ordered takeaway at least once a month.
- Of the Italian participants, 80 % were female. The average age of the Italian participants was 35 years, ranging from 22 to 52 years, and 60% ordered takeaway at least once a month.

Finns emphasised renewable materials and decreased food waste, Italians biodegradability and eco labels

Top 5 characteristics of sustainable packaging



Evaluation of packaging materials for fresh food

Photo by [Raghavendra Mithare](#) on [Unsplash](#)

Evaluated materials for fresh food



PP



rPET



PLA (plant-based)



Wood-based plastic



Bagasse



Paper



Paperboard



Formed fibre



Carton+bioPE



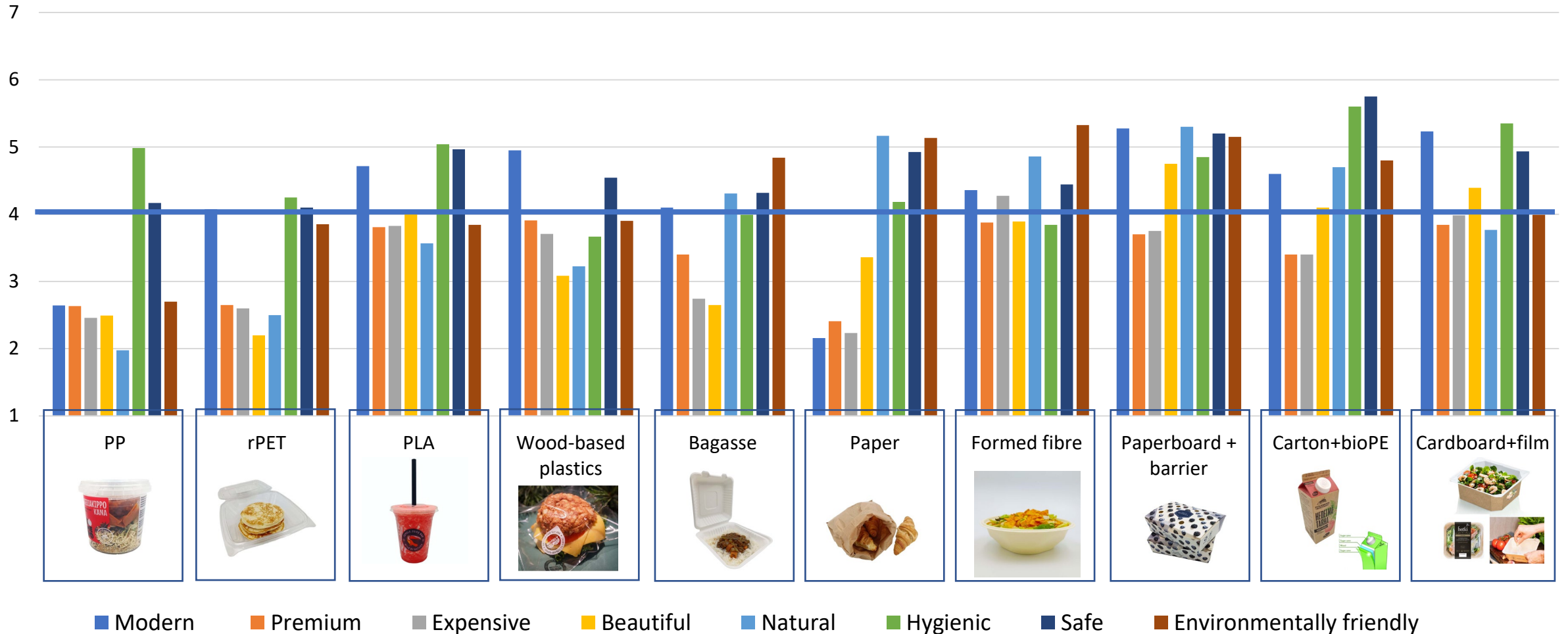
Cardboard+film

Evaluated attributes (7-point scale):

- Old-fashioned - Modern
- Everyday - Premium
- Inexpensive - Expensive
- Ordinary - Beautiful
- Unnatural - Natural
- Unhygienic - Hygienic
- Unsafe - Safe
- Environmentally harmful - Environmentally friendly

Plant-/fibre-based materials were perceived as more modern, natural, safe and environmentally friendly

Material perceptions, scale 1-7, SusPack training 2022, n=20



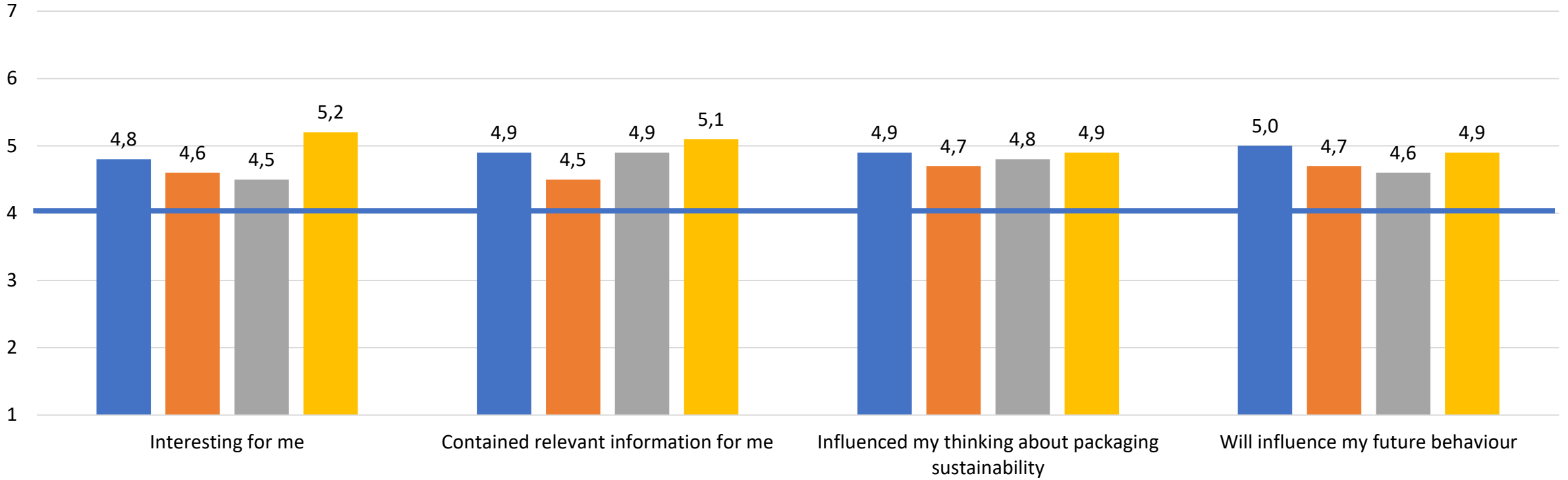
■ Modern
 ■ Premium
 ■ Expensive
 ■ Beautiful
 ■ Natural
 ■ Hygienic
 ■ Safe
 ■ Environmentally friendly

Evaluation of sessions

Photo by [Raghavendra Mithare](#) on [Unsplash](#)

Sessions 1 and 4 were found the most interesting

Evaluation of sessions, scale 1-7, SusPack training 2022, n=20



■ S1: Packaging of fresh food ■ S2: Packaging of takeaway food ■ S3: Sustainable food packaging ■ S4: Future food packaging

“The first thing that came to mind is that consumers are being blamed for plastic, that it’s terribly bad. In the beginning of the training, I learnt how much worse food loss is. I thought to myself that we should get out of this guilt somehow.

I live in a rural area where there is no plastic recycling. The sense of guilt is usually awful when you start talking about plastic recycling. Considering food waste, it is really important how the packaging is made, so that there is as little waste as possible.”

“It was an interesting view that if some of that food really stays in the package, it won’t even be eaten and will be lost. One should check at the time of purchase to see what kind of packaging it is in.”

“My perception of plastic has become more diverse. There is not just one type of plastic and it’s not all “bad plastic”. It has its place and there are a variety of plastics. When plastic is said to be “biodegradable” or “bioplastic,” I now know that it can mean quite a few different things.”

“I thought I was a relatively conscious consumer, but here was more information about how things can be emphasized, i.e., what should be given more and less weight. In the future, there will certainly be things that I would have passed in the past.”

“I think the training really gave me some new perspective about some things that I thought I knew (but I was wrong), and things that I didn't even think about. It was also interesting to hear about Finland and the differences there are between our countries. I really liked the practical example of the two different packages from the same restaurant that made me realize how I see the quality of the food based on the packaging. I also found interesting the statistical data showed.”

“I was expecting more technical lessons and I was a bit worried that I might not be able to follow along. However, even though we did see some technical aspects (both legal and of the materials), I found the lessons very well explained and accompanied by some more practical examples.”

“The training covered every argument way better than I expected, it was necessary because I think that food packaging has a lots of viewpoints and divided arguments. This training was able to explain every part with a high level of knowledge.”

Output

- 1. Training syllabus on sustainable fresh food and takeaway packaging.**
- 2. Learning resources on sustainable fresh food and takeaway packaging available in open access (Digital Handbook), also containing the main findings acquired through the dialogue with the target group.**
- 3. Communication and dissemination: closing seminar**

Gained experience

- 1. Improved consumer knowledge and acceptance of sustainable fresh food and takeaway packaging, enabling the implementation of green consumption habits and development of positive consumer attitudes toward sustainable packaging.**
- 2. Improved exchange of ideas and knowledge transfer among participating organizations (ADOC, PTR and MARTHA)**
- 3. Enhanced capacity of organizations to engage in transnational cooperation at European level. This is particularly valuable for the participating organizations which are motivated to work in the European dimension and are newcomers to the Erasmus+ Program.**
- 4. Strengthened affirmation of the European dimension at the local level, through cooperation among the participating organizations in the field of the environmental and green policies of the EU.**



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