



# Circular business models and social acceptance

Tuomo Eskelinen  
Business models and innovation for  
sustainability transition conference  
Kuopio, Finland. 02/06/2022



Horizon 2020  
European Union Funding  
for Research & Innovation

*"This project has received funding from the  
European Union's Horizon 2020 research and innovat  
programme under Grant Agreement No 818312"*



The HOOP project has received funding from the  
European Union's Horizon 2020 research and innovation  
programme under grant agreement N°101000836

# Business models development in the ValueWaste project

---



- Circular business models are developed in three value chains producing new bioproducts from biowaste: protein ingredients and recycled organic fertilizers
- Business model is also made on the overall solution
- The first complete and out-of-the-box solution to fully valorise urban biowaste, and to support Ecosystem Development in Green Transition
- Business model Canvas framework is used
- CBMs are made as part of Commercialisation Plan to exploit the project results
- Social Acceptance and Awareness are seen as a crucial matters when developing new bioproducts from biowaste. Biowaste is the largest waste category (up to 44% of all global waste); This is a widespread issue that causes wastage of resources, such as water, labor and energy that is used in the production of food.

# The approach and methods

---



1. Input : Getting information. Context definition and understanding
  - Define the research context for the social acceptance and the consumer perspective study, interviews and questionnaire, focus group discussion
  - Interviews and questionnaire to the target groups
  - A future-oriented workshop on impacts
  - Structured tailored questionnaire tailored to the research context of the project
  - Social acceptance is studied parallelly with S-LCA (social impacts)
2. Analysis of socio-economical, community, and market acceptance
3. Output: Determining social acceptance level by applying Thomson and Joyce (2008), and Thomson and Boutilier (2011): Withdrawal, Acceptance, Approval, Psychological identification

# What we expect to learn

---



- Learning on the consumer willingness to adopt new technologies, products and services.
- Developing and applying systematic approaches when developing CE business models.
- Gaining on the new insights on aspects of social acceptance when developing new businesses on CE of urban biowaste.
- Gathering of information on the changing needs: needs, wants and demands are different in different mindsets and cultures (Moula, 2021).

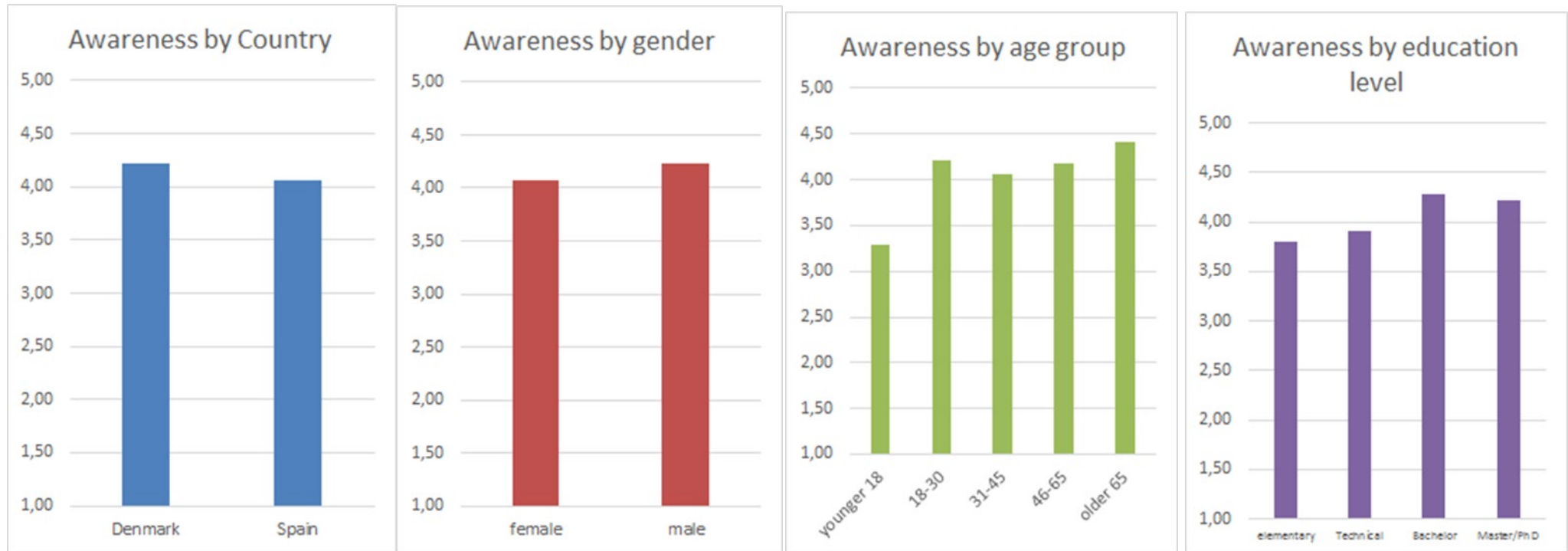
# Practical Implications

---



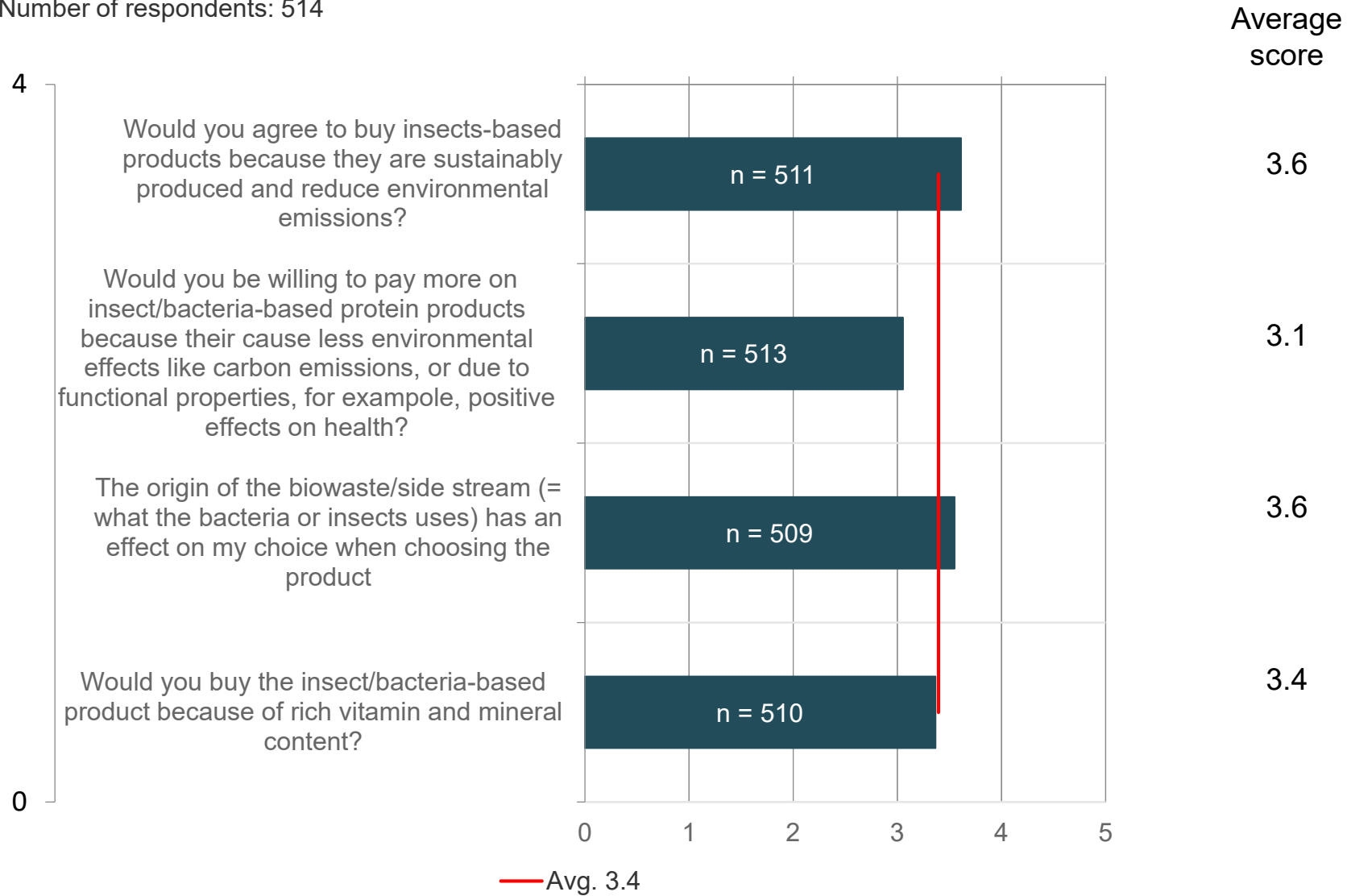
- Understanding of social acceptance and its limitations is needed when designing better products, services and business models on CE.
- Understanding people's perceptions of biowaste and their utilization as a new resource on CE - their thoughts, feelings and expectations - is a key component of the project.
- The participants' values will influence industry practices and government policy and contribute to one of the most important project outcomes: guidelines for industry, government and communities on how to work together and ensure a more responsible biowaste management and their utilization as a sustainable resource for protein or fertilizer production.

# Awareness of Citizens



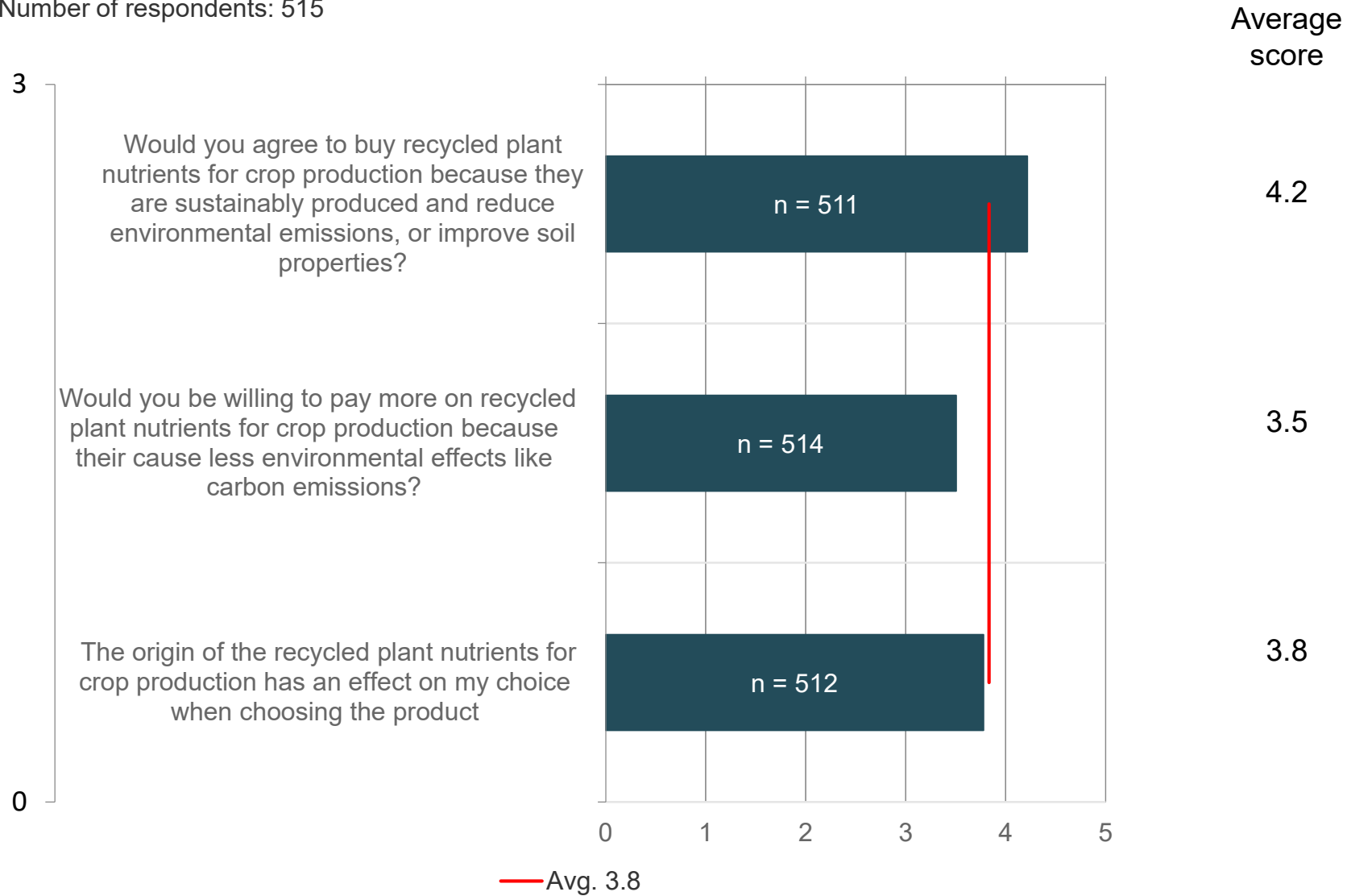
## 14. Please, rate the following statements on insect/bacteria-based recycled products

Number of respondents: 514



# 15. Please, rate the following statements on new, innovative recycled plant nutrients which are aimed at plant production

Number of respondents: 515





# Reference

---



- Tuomo Eskelinen, Miika Kajanus, Sergey Sidorenko, Miguel Mitsou, David Fernandez-Gutierrez, Jose Martin Soriano-Disla, Manuel Vals-Sevilla, Johan Ib-Hansen, Munjur E. Moula. Circular Economy Business Models addressing Social Acceptance, under preparation.