



Unlocking new value from urban biowaste

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Urban Circular Bioeconomy Webminar Series

5. SAFETY AND ACCEPTANCE OF BIOBASED PRODUCTS

Methods for evaluating social acceptance

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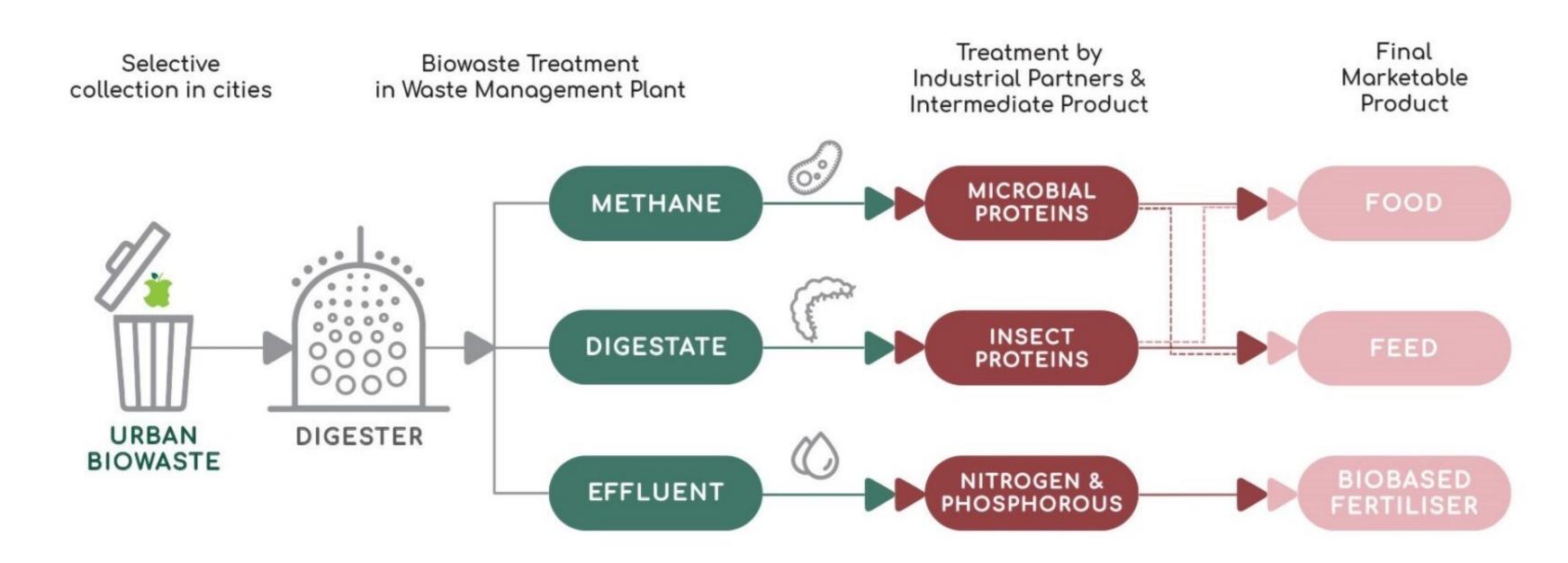
CONTENTS:

Methods to evaluate the social acceptance of new bioproducts



THREE VALORISING LINES

Of urban biowaste



SAVONIA: Leader of WP8 Social Acceptance of new bioproducts



The objective of task 8.3 is to create joint understanding on the social acceptance and awareness s of new bioproducts, like food or feed ingredients, or plant-based recycled nutrients

The work is connected to other WPs, like WP6 on Social Life Cycle Assessment (S –LCA), Lead CETENMA, and business model development at WP7, Lead SAVONIA, and WP on Communication and dissemination



WHAT

Key components of social acceptance

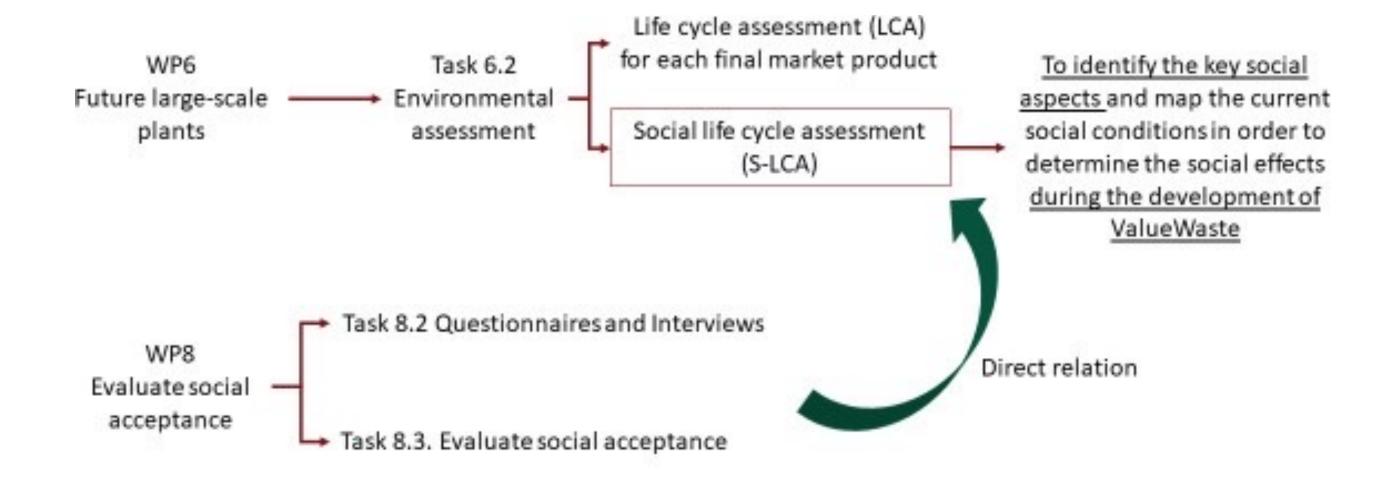
Socio-political acceptance: This is more general level of social acceptance. Socio-political acceptance effectively fosters and enhances market and community acceptance, for example opening many options for new investors and context based planning systems.

Community acceptance: This can be explained by the fact that people support new products as long as it is not in their own backyard-NIMBYism. It significantly brings strong sense of ownership in the process of energy policy and decision-making.

Market acceptance: Social acceptance can also be interpreted as the process of market adoption of an innovation. It focuses on consumer's level of satisfaction. A market acceptance view is not just on consumers, but also investors.



Social LCA





HOW:

- 1. INTERVIEWS WITH FOCUS GROUPS AND STAKEHOLDERS
- 2. SOCIAL ACCEPTANCE AND S-LCA WORKSHOP
- 3. SURVEY QUESTIONNAIRE AT MURCIA AND KALUNDBORG



BACKGROUND QUESTIONS

- Country of residence
- Education
- Gender
- Age



THE SURVEY QUESTIONNAIRE 17 QUESTIONS IN 3 LANGUAGES

Survey questionnaire on Social acceptance (Valuewaste)

(1) Mandatory fields are marked with an asterisk (*) and must be filled in to complete the form

Our societies are facing big challenges which are related to high production of The valorisation chains are not sustainable. Furnne is not self- sufficient in nro

affecting our climate is the valorising models, and the waste generated in cities a expected environmental, s

We are talking about new models. Our project aims a order to counteract climate very different European lo

This invitation to participat acceptance of the new bio new products, services, or Spanish, Danish, or Englis distributed by the Murcia a data management (GDPR individual persons. The reto the European Commiss conditions.

VALUEWASTE has receiv

traffic, energy, and housing Er du parat til fremtiden. Spørges af l

(1) Mandatory fields are marked with an asterisk (*) and

Vores samfund står over for store udfordringer, forårsag særlig udfordring er at Europa ikke er selvforsynende m påvirker vores klima, er udledning af drivhusgasser, son fødevareproduktion, landbrug, trafik, energi og boliger. /

Der er brug for nye løsninger, og VALUEWASTE-projek byer og kommuner bliver grundlag for værdifuld produkt bæredygtige løsninger som er muligt at gennemføre mil Projektet viser nye veje at producere protein og gødning økonomi. I Europa produceres der ca. 200 kg bioaffald udnyttelse af denne ressource, for at modvirke klimaæn ressourcer.

I projektet ValueWaste indsamles bioaffald. Forskellige insektprotein, Uniprotein, gødning og biogas. Aktiviteter

Cuestionario y encuesta sobre la aceptación social (Valuewaste

(i) Mandatory fields are marked with an asterisk (*) and must be filled in to complete the form.

Nuestra sociedad se enfrenta a grandes desafíos relacionados con la alta producción de residuos y el uso ineficie nuestros recursos. Europa no es autosuficiente en la producción de proteína para consumo humano (alimentos) y animal (piensos).

Un factor importante que afecta nuestro clima son las emisiones de gases de efecto invernadero, que se produce muchos procesos de alimentación y agricultura, el tráfico, el consumo de energía y las viviendas. Nuestros residu también son una fuente importante de gases de efecto invernadero.

Respecto a esto último, cada ciudadano europeo genera una media de 200 kg de residuos orgánicos al año, sien objetivo principal de nuestro proyecto VALUEWASTE mejorar la utilización de los residuos orgánicos, con el fin de contrarrestar el cambio climático y reducir nuestra dependencia de recursos finitos.

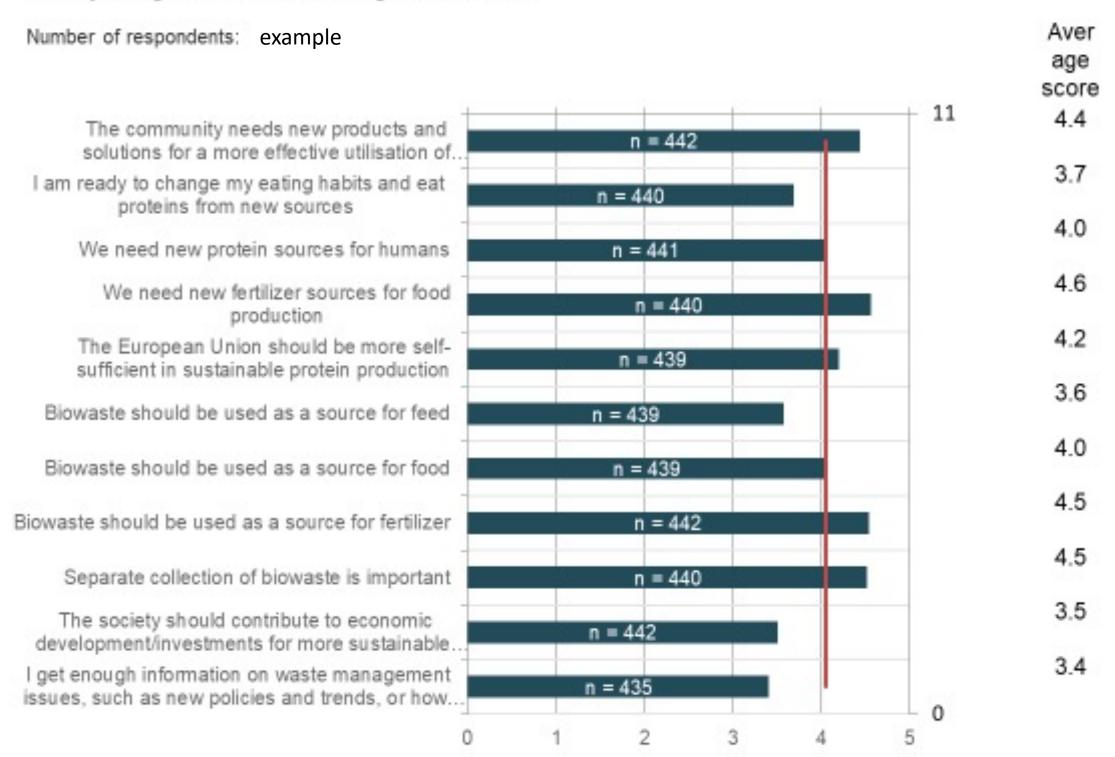
VALUEWASTE se está llevando a cabo en dos ciudades muy diferentes, Murcia (España) y Kalundborg (Dinamai con un total de 17 socios de 6 países europeos.

Esta invitación para participar en la presente encuesta tiene como objetivo conocer la aceptación social de los nu bioproductos. Las respuestas se utilizarán para diseñar nuevos productos, servicios o modelos y políticas comercial sobre la nueva economía circular. Puede dar sus respuestas en español, danés o inglés. La encuesta tiene 17 preguntas y un tiempo estimado de 10 minutos para su realización.

Esta encuesta se distribuye en las ciudades de Murcia y Kalundborg. Los resultados de la encuesta se manejan d acuerdo con la legislación europea sobre gestión de datos (GDPR) y las normas éticas. Las respuestas se dan de forma anónima y no se pueden conectar los resultados a personas individuales. Los resultados se gestionarán po Universidad de Ciencias Aplicadas de Savonia, CETENMA, coordinador de VALUEWASTE, informará a la Comis Europea de los resultados. Al dar una respuesta, acepta estas condiciones.

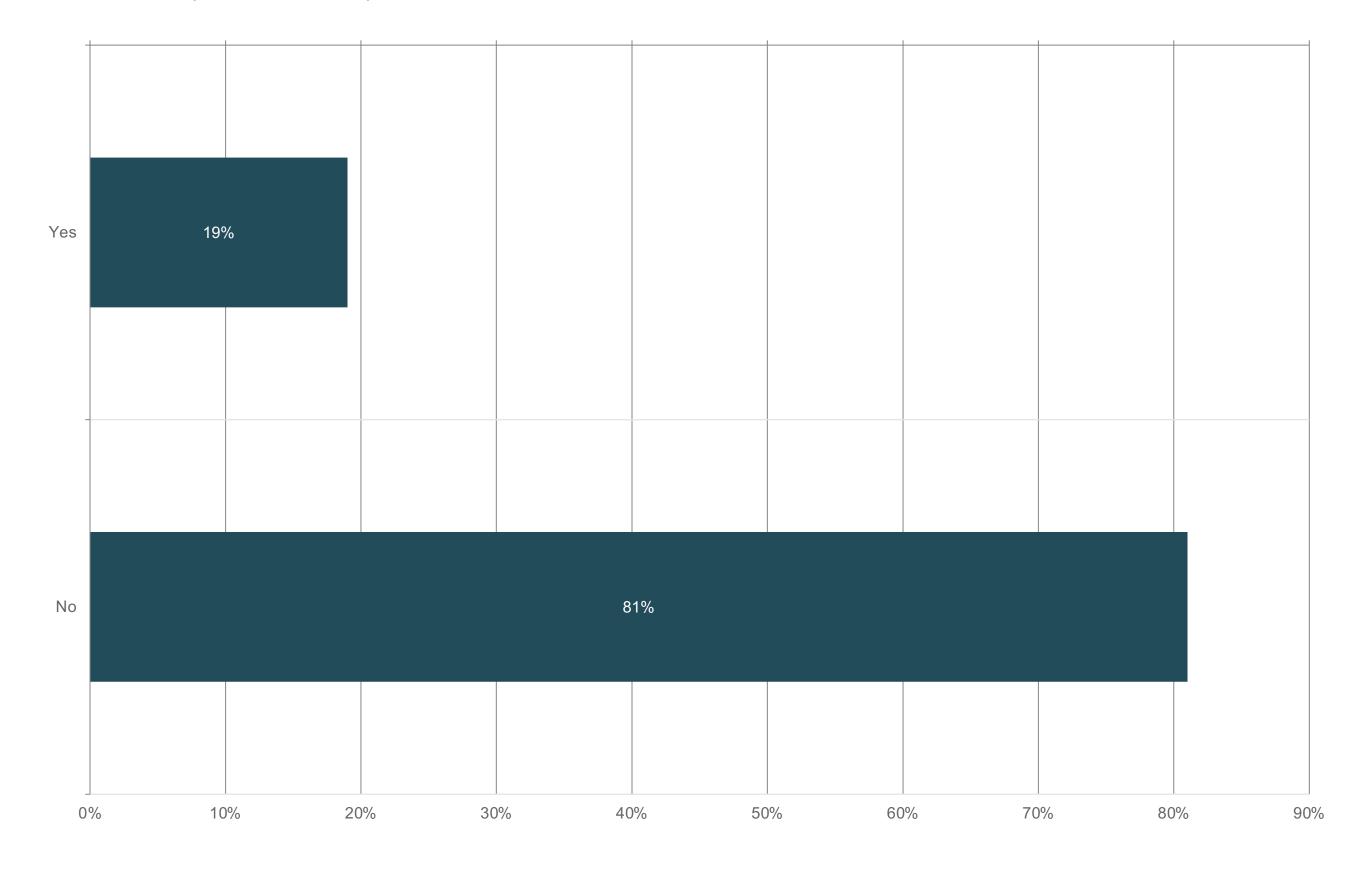


6. Do you agree on the following statements?



11. Have you bought products which contain insect/bacteria-based products, for example, protein bars or protein powder

Number of respondents: Example





Output: Determining social acceptance level.

In the survey, the scales for answering is Yes/No, or 5-scale Likert from (1) Strongly disagree ...(5) Strongly agree, which will be applied when determining public acceptance. The scale cannot be directly used to derive the social acceptance levels of Thomson and Joyse, 2008, and Thomson and Boutilier (2011), but it gives indication whether the citizen acceptance is withdrawal, acceptance, approval, or psychological identification



EXPECTED RESULTS

Insights on citizen perceptions & social acceptance, and awareness on environmental aspects

We will get insights on the acceptance of citizens, including customer and end user, on new circular economy products and services related to food, feed protein with insects or bacteria, or biofertilizers in relation to the value chains of VALUEWASTE.

We will learn on the consumer willingness to adopt new technologies, products and services. We will also develop and apply systematic approaches when developing circular economy business models. We will gain new insights on three aspects of social acceptance when developing new businesses on circular economy of urban biowaste. We also gather 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 will help us to design better products, services and business models on circular economy. Understanding people's perceptions of biowaste and their utilization as a new resource on circular economy - their thoughts, feelings and expectations - is a key component of the project. By participating, 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.



In conclusion....

- In order to help the new bioproducts to enter to market, and make new circular economy busines models, the social acceptance and S-LCA need to be understood
- Our report on the first insights of social acceptance to be published at the end of June, 2021

