

## Expert Evaluation Information Sheet

### 1. Introduction

Thank you for participating in this expert evaluation. This study aims to assess the quality, relevance, and effectiveness of AI-generated Sustainability Awareness Messages (SAMs) in customer decision-making. Your expertise in Natural Language Processing (NLP) and/or Sustainability is invaluable in ensuring that these messages provide meaningful insights for customers.

The evaluation consists of three batches, each containing **24 messages** and requiring approximately **30 minutes** to complete per batch.

### 2. Task and Evaluation Criteria

These messages were generated by a Large Language Model (LLM) using product descriptions and sustainability context. Specifically, the model was provided with the context as described in the \*Product Information\* column:

- Product title and description
- Product category
- Terms from the sustainability taxonomy relevant to the sustainability aspect the message targets (e.g., health, environment, society, and economy), highlighting positive aspects as *what to look for* and negative ones as *what to avoid*

You will evaluate each AI-generated sustainability message based on three criteria using a Likert scale (1-5):

Evaluation Criteria	Question	Scale (1-5)
Readability	How easy is the message to understand?	1 (Very difficult) → 5 (Very easy)
Relevance	How relevant is the message to the product context provided?	1 (Not relevant) → 5 (Highly relevant)
Helpfulness	How helpful is this message for a customer's decision-making?	1 (Not helpful) → 5 (Extremely helpful)

### Instructions for Evaluation

1. Read the Product Information to understand the context.
2. Review the AI-generated sustainability message for that product.
3. Rate the message based on the provided criteria (1-5).

4. Provide additional comments if necessary, especially if you notice:

- Clarity issues
- Misleading information (facts not supported by product context)

### Contact

If you have any further questions or encounter any issues during the evaluation, please contact:

**[scah@leeds.ac.uk](mailto:scah@leeds.ac.uk)**

Thank you for your valuable contribution to this research!

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## Expert Evaluation Form

## Instruction Sheet

<p><b>Instructions</b></p> <ol style="list-style-type: none"> <li>1. Read the <b>Product Information</b> to understand the context.</li> <li>2. Review the <b>AI-generated sustainability message</b> for that product.</li> <li>3. Rate the message based on the provided criteria (1-5).</li> <li>4. Provide additional comments if necessary: <ul style="list-style-type: none"> <li>- Clarity issues</li> <li>- Misleading information (facts not supported by product context)</li> </ul> </li> </ol>	
<p><b>5-point Likert Scale</b></p>	
<p>Higher scores mean better quality.</p>	
<b>Scale</b>	<b>Helpfulness / Relevance / Readability</b>
1	Not helpful at all / Not relevant / Very difficult to read
2	Slightly helpful / Slightly relevant / Somewhat difficult
3	Moderately helpful / Moderately relevant / Neutral
4	Mostly helpful / Mostly relevant / Mostly easy to read
5	Extremely helpful / Extremely relevant / Very easy to read
<p>For any questions, contact: <a href="mailto:scah@leeds.ac.uk">scah@leeds.ac.uk</a></p> <p>Thank you for your valuable contribution!</p>	

## Sample Batch of SAMs

A	B	C	D	E	F	G
Message ID	Product Information	LLM-Generated Sustainability Awareness Message	Understandability How easy is the message to understand?	Relevance How relevant is the message to the product context provided?	Helpfulness How helpful is the message for a customer's decision-making?	comments
1	PRODUCT TITLE: Haribo Pirische	This product, Haribo Pirische gezuckert 200g, offers a healthy option for consumers. It does not contain added sugars, making it a great choice for those managing their sugar intake. As it is free from artificial flavors and preservatives, this product aligns with the U.S. Food and Drug Administration's (FDA) recommendation to avoid products or crunchy topping, as it is low in fat and saturates. It also aligns with a vegetarian diet, making it suitable for those who avoid animal products. With only 3.6g of sugars per 100g, it is also a good choice for those watching their sugar intake. This product's nutritional value supports a balanced diet, free from artificial additives and excessive salt.				
2	PRODUCT TITLE: 2x 400g GOL	These two bags of natural potato chips offer a healthy and natural option. Made with real potatoes, it contains only 1g of fat and no artificial additives, colours, or flavours. The mix is also free from GMOs, pesticides, and herbicides, ensuring a safer and more natural choice. With its natural ingredients and absence of artificial preservatives, you can feel good about what you're serving your family.				
3	PRODUCT TITLE: 5x 200g MAS	This product, Lorenz Pomsticks Sour Cream, has raised health concerns due to its high fat content and presence of added sugars. It also contains milk products, salt, and sugar, which may be problematic for those with dietary restrictions. Furthermore, it has preservatives, which may be linked to various health issues. This combination makes it less suitable for a sustainable health choice.				
4	PRODUCT TITLE: LORENZ POM	This lollipop may not be the best choice for those who prioritize health due to its high sugar content and presence of vegetable fat from palm, which may be linked to deforestation. Additionally, it contains emulsifiers and a raising agent that some studies have raised health concerns about. It also contains skimmed milk powder and whole milk powder, making it unsuitable for those with dairy allergies or intolerances. It is essential to consider these factors before consuming this product.				
5	PRODUCT TITLE: Fazer Dumle	This chocolate bar contains refined sugar, glucose syrup, and condensed milk, making it high in added sugars. It also contains egg white powder, an allergen, and an emulsifier (lecithin), which may be				