



UvA-DARE (Digital Academic Repository)

Divergent views and common values

Comparing sustainability understandings across news media, businesses, and consumers

Lock, I.; Wonneberger, A.; Steenbeek, P.

DOI

[10.1080/17524032.2024.2327063](https://doi.org/10.1080/17524032.2024.2327063)

Publication date

2024

Document Version

Final published version

Published in

Environmental Communication

License

CC BY-NC-ND

[Link to publication](#)

Citation for published version (APA):

Lock, I., Wonneberger, A., & Steenbeek, P. (2024). Divergent views and common values: Comparing sustainability understandings across news media, businesses, and consumers. *Environmental Communication*, 18(7), 891-911. <https://doi.org/10.1080/17524032.2024.2327063>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

RESEARCH ARTICLE



Divergent Views and Common Values: Comparing Sustainability Understandings Across News Media, Businesses, and Consumers

Irina Lock^a, Anke Wonneberger^b and Penny Steenbeek^b

^aInstitute of Communication Science, Friedrich Schiller University Jena, Jena, Germany; ^bAmsterdam School of Communication Research (ASCoR), University of Amsterdam, Amsterdam, The Netherlands

ABSTRACT

Sustainability has become a widely used term in public discourse, yet it is connected to a variety of meanings with diverging implications for possible societal, political, and economic solutions. This study identifies and compares how sustainability is constructed by news media, businesses, and consumers to reveal gaps that may hinder mutual understanding when striving for sustainable development. A quantitative content analysis of 282 Dutch news articles, 74 business websites, and 5473 consumer responses finds that news media fails to host a variety of different sustainability understandings. While businesses and consumers appear to mainly follow a sustain-centric view and acknowledge a long-term perspective, news articles are unspecific about their understanding of sustainability or focus on the aspect of energy. The ethical value of caring potentially unifies the diverging worldviews. The article discusses the implications if mainstream news media fail to provide an arena for diverse viewpoints on sustainability.

Key policy highlights

- In the Netherlands, sustainability understandings diverge between news media, businesses, and consumers. Yet, this variety is not reflected in news coverage on sustainability, which implies that mainstream news does not provide an adequate picture of the public debate.
- Environmental aspects of sustainability are overall more prominent than societal concerns, which are only addressed by businesses.
- Consumers and businesses acknowledge a long-term perspective on sustainability, showing the influence that political definitions of such a complex public issue can have over decades.
- The results pertain to the Dutch context, but the diversity of viewpoints on sustainability is expected to be observed in other Western democracies with a pluralist media system.

ARTICLE HISTORY

Received 1 September 2022
Accepted 29 February 2024

KEYWORDS

Sustainability; content analysis; news; values; business; consumers

Introduction

The scientific evidence is clear that current economic trajectories of continuous growth, overproduction, and overconsumption lead to increasing environmental degradation threatening the

CONTACT Irina Lock  irina.lock@uni-jena.de  Institute of Communication Science, Friedrich Schiller University Jena, Ernst-Abbe-Platz 8, 07743 Jena, Germany

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

livelihood on our planet (e.g. Lade et al., 2020; UNEP, 2019). While sustainability has thus become a widely used term, it is connected to a variety of meanings with diverging implications for possible societal, political, and economic pathways (e.g. Kemper et al., 2019; Whyte & Lamberton, 2020). Clarity on these different meanings and underlying assumptions can therefore be considered an important precondition for an effective debate on needed solutions.

Previous research has assessed the diversity of conceptualizations of sustainability for specific domains, including marketing (Kemper et al., 2019), education (Alexander et al., 2021), policy (Fuchs, 2017), consumption (Hanss & Böhm, 2012), media (Fischer et al., 2017; Holt & Barkemeyer, 2012), and corporations (Landrum & Ohsowski, 2018; Meuer et al., 2020). The current study is the first to compare key societal domains. We identify and compare sustainability perspectives taken by consumers, businesses, and news media. Moreover, given the inherently moral nature of sustainability (Gladwin et al., 1995), we assess the ethical values attached to the issue by these actors. Such a direct comparison can reveal existing gaps between domains that may hinder mutual understanding in the larger public discourse on sustainability. This research adds to the ongoing endeavor of communication scholars to unravel the construction of sustainability norms in society from a diversity of perspectives (Weder et al., 2019a).

RQ: (1) Which understandings of sustainability do consumers, businesses, and news media hold, (2) to what extent do they diverge, and (3) on which ethical values are they based, and?

Theoretical background

The communicative constitution of sustainability in the public sphere

The concept of sustainability has become a central anchor in political, media, and economic discourses concerning pathways of coping with main contemporary environmental and societal crises, such as climate change, biodiversity loss, social inequalities, and poverty. Sustainability is here understood as an equilibrium of human needs and biospheric processes allowing to maintain or improve human welfare and the vitality of ecosystems (Peterson & Norton, 2007). The state of sustainability may be reached by processes that have been coined as sustainable development (Ruggiero, 2021). While on the one hand often criticized as blurry concepts that have reached a stage of trivialization (Ott et al., 2011), this semantic openness may create a possibly false impression of common ground and mutual understanding. It has been argued that when used in various forms of public discourses, sustainability is often not scrutinized; underlying, intended meanings and goals not questioned or challenged (see Hulme, 2009). Ziemann (2011) describes this trend as normalization of sustainability which coincides with a de-moralization of the issue. Yet, a comprehensive empirical assessment of how sustainability is applied in public discourses is missing.

Understanding sustainability in public discourses requires to see the concept as socially constructed. Hence, social relevance and meaning of an issue are inherently tied to communication processes (Cox, 2010). Via public discourses, various actors produce and promote claims that contribute to a continuous negotiation of what constitutes sustainability as a social issue (Hansen, 2015; Ziemann, 2011). While the field of sustainability communication acknowledges the key role of communication in furthering sustainable development and agreeing on adequate solutions, less attention is paid to the communicative constitution of sustainability across social realms (Ramsey, 2015). Godemann and Michelsen (2011), for instance, foreground the goal of mutual understanding when defining sustainability communication as a process of negotiating societal solutions and developments based on a common “vision of sustainability” (p. 6). We take a step back and start questioning the very basis of sustainability as a common ground by asking what constitutes the understanding of sustainability and how does this differ across social realms, that is, specifically, across consumers, businesses, and news media.

Scholarship on public spheres, i.e. spaces where societal issues are identified and discussed, has frequently emphasized the crucial relevance of public discourses in democratic societies (Habermas,

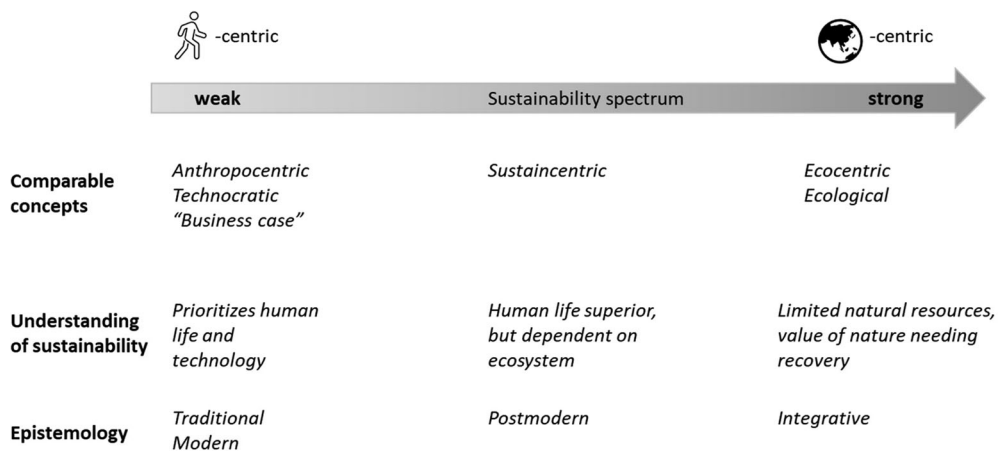
2006). Specifically, for collective and complex issues relating to the environment or sustainability societies dependent on public spheres allowing for an exchange between the diversity of oftentimes conflicting viewpoints (Cox, 2010; Peterson & Norton, 2007). Following the contested nature of public spheres (Rauchfleisch, 2017), different theoretical perspectives emphasize either the representation of existing views (Voakes et al., 1996), ideal forms of negotiating or also deliberation to support decision-making processes (Habermas, 2006), or the possibilities for alternative, often minority viewpoints to oppose hegemonic positions (Mouffe, 2000).

Comparing sustainability views across domains serves the greater purpose of contributing to a better understanding of possible implications of a diversity of sustainability understandings for the broader public discourse on sustainability (Ramsey, 2015). Considering a high agreement concerning the underlying visions or aims of sustainability as implied by Godemann and Michelsen (2011), public discourses may focus on negotiating adequate and just solutions. With greater variety or an even more conflicting nature of sustainability understandings as described, for instance, by Peterson and Norton (2007), in contrast, discourses need to focus first on visions and aims related to sustainability to create a common basis for collective solutions. As news media sustain a key role as platforms of public discourses, it is important to examine to what extent media representations of sustainability views coincide with the range of views that can be found in the other domains (e.g. businesses and consumers). Hence, we can ask to what extent are the media capable of representing an issue arena where different stakeholders can present and negotiate their sustainability views (Luoma-aho & Vos, 2010)? In addition to news media, we consider businesses and consumers as major actors whose actions directly influence sustainable development and related policymaking. Moreover, we can expect reciprocal interactions between these three social realms or agendas (Wang et al., 2021) as, for instance, the reputation and success of businesses rests on consumers who, in turn, are influenced by related media coverage, and vice versa (Vogler & Eisenegger, 2021). Thus, the first research question asks:

RQ1: Which understandings of sustainability do consumers, businesses, and news media hold?

Diverging views on sustainability?

Worldviews on sustainability differ as to what extent they interpret the world as centering on humans, with nature serving humans, or understand humans as part of nature, not superior to it



Adapted from: Landrum, 2018; Whyte & Lamberton, 2020; Kemper et al., 2019

Figure 1. Integrated worldviews on sustainability.

(see Figure 1). This anthropo – to ecocentric spectrum aligns with weak to strong sustainability meanings (Landrum, 2018; Landrum & Ohsowski, 2018; Ott et al., 2011; Ruggiero, 2021). The traditional and modern epistemology underpin the anthropocentric idea of sustainability, while ecocentrism is built on integrative paradigms (Kemper et al., 2019). Weak sustainability refers to a technocratic, “business case” understanding of sustainability, which is based on the traditional neo-classical paradigm that prioritizes human needs and technology (Kemper et al., 2019; Landrum, 2018; Whyte & Lamberton, 2020). In this view, sustainability refers to exploiting the environment or at best adjusting and accommodating to environmental demands while remaining to perform “business as usual.” The other side of the spectrum ends in strong sustainability, or the ecocentric/ecological worldview, which is based on a strong ecological ethic and regards nature as a subject rather than object of sustainable development (Kemper et al., 2019; Whyte & Lamberton, 2020). Strong sustainability proposes that a sustainable state cannot be reached in combination with an economic growth orientation and requires “degrowth” (Hickel & Kallis, 2020).

In the middle of the spectrum is a sustaincentric meaning that integrates the technocratic with the ecocentric view, yet still starting from the human (Whyte & Lamberton, 2020). The sustaincentric view recognizes the limits of natural resources under which humans strive and relies on a postmodern epistemology (Kemper et al., 2019).

These different viewpoints have enabled a lively public debate and promoted learning on sustainability (Van der Byl & Slawinski, 2015). Yet, the vague meanings of sustainability underlying these worldviews have been used strategically by different societal actors such as business or politics to advance their goals, which has also been hindering sustainable development (Ott et al., 2011) because a common understanding of the problem (lacking sustainability) and of its solution (sustainable development) is missing. This may manifest in different specific issues and levels (individual versus societal) being related to sustainability across social realms (Hanss & Böhm, 2012; Ramsey, 2015). Whether consumers, businesses, and news media hold a common or diverging understanding of sustainability is discussed in the following.

Consumer understandings on sustainability

Individuals as consumers and media users are exposed to diverging perspectives amongst others communicated via the media and corporations. Based on individual histories and everyday experiences, consumers engage in sense-making processes resulting in individual perceptions of the meaning and relevance of sustainability (Weder et al., 2019a). Similarity of individual perceptions and attitudes may allow to discern specific consumer segments that are rather homogeneous in their sustainability views. So did Haan et al. (2018) identify four distinct segments ranging from Convinced Sustainers to Non-Sustainers that differed in their beliefs concerning sustainability, adequate solutions, and consumer choices. A growing area of research shows that intentions of sustainable or environmentally friendly behaviors are in addition to sustainability or environmental considerations (Paswan et al., 2017) influenced by a broad variety of factors, including social (Hanss & Böhm, 2012) and health considerations (Meijers et al., 2022; Pieniak et al., 2016) as well as social identities and interactions (Collins, 2015; van Dam & van Trijp, 2011). Several studies showed that consumers actively discern multiple dimensions of sustainability, for instance, pertaining to the triple bottom line (Hanss & Böhm, 2012; van Dam & van Trijp, 2011). To adequately grasp and describe consumers’ understandings of sustainability it is thus important to take a broad range of distinct sustainability elements into account and to investigate how positively or negatively consumers communicate about sustainability.

Business understandings of sustainability

Sustainability has become a standard practice for organizations when communicating about environmental and social responsibilities (Seele & Gatti, 2017; Landrum, 2018). Since companies are expected to do more than increase their financial performance, sustainability is often associated

with the triple bottom line, considering the social and economic consequences of doing business (Smith & Sharicz, 2011).

Both in academic literature and in corporate communication, sustainability and CSR are used interchangeably (Seele & Lock, 2015) to communicate responsibilities toward the environment businesses operate in (Schwartz & Carroll, 2008). Corporate websites and CSR reports are often seen as tools for communicating CSR activities and therefore reflect businesses' understandings of sustainability (e.g. Seele & Lock, 2015). Since CSR reports are used as a tool to gain legitimacy (Seele & Lock, 2015), companies often communicate their CSR activities more positively than their actual CSR performance (Einwiller & Carroll, 2020).

Landrum and Ohsowski's (2018) analysis of CSR reports revealed that businesses refer mostly to weak sustainability, or to "do less bad" (Landrum, 2018). This firm-centric worldview is instrumental in focusing on financial growth, while viewing environmental and social issues as something that can and should be managed to maintain long-term organizational viability (Kemper et al., 2019).

News media understandings of sustainability

The media are an important actor in the sustainability debate due to their role as observers of society and by providing platforms to balance different perspectives on sustainability issues. However, as Newig et al. (2013) pointed out, media are not neutral observers and journalists writing about the topic have varying backgrounds and expertise (Brüggemann & Engesser, 2014). Due to the selection processes of what constitutes news and its interpretation, news media play a key role in setting the agenda for sustainability issues (Ryghaugh, 2011) and in disseminating scientific developments to the general public. News media also evaluate the contribution of other societal actors to sustainability (Newig et al., 2013). Businesses' CSR engagement is mostly covered negatively, if at all (Vogler & Eisenegger, 2021). This is in line with news media's general tendency to cover news negatively in addition to over-simplifying complex issues such as sustainability (Van der Meer et al., 2019).

How news media cover sustainability is culture-specific (Newig et al., 2013). Overall, studies showed an increase in the usage of sustainability terminology over the years (Holt & Barkemeyer, 2012; Weder et al., 2019b). Fischer et al. (2017) performed a trend and in-depth analysis of German newspapers over a period of 20 years up until 2015 observing that abstract or non-specific uses of sustainability decreased, and the concept became more sophisticated over time. Yet, more research is needed due to the evolving and conflicting nature of sustainability understandings expressed in the media (Newig et al., 2013), the regional differences (Holt & Barkemeyer, 2012), and the variety between newspapers (Fischer et al., 2017).

The reviewed literature indicates that sustainability understandings, including the differences in positive and negative sentiment, across societal domains may differ. Thus, research question 2 asks:

RQ2: To what extent do sustainability understandings diverge among consumers, businesses, and news media?

In addition to diverging normative views on sustainability, our review showed that the scope of the concept exceeds a single, well-defined issue. Our comparison will therefore discern different sustainability dimensions including environmental, social, economic, temporal, and developmental (Hanss & Böhm, 2012) allowing us to understand in which issue-specific contexts discourses about sustainability are embedded. Moreover, to account for varying levels of application, we include elements relating to the individual and societal level (e.g. van Dam & van Trijp, 2011; Kemper et al., 2019).

Ethical frameworks and sustainability views

How sustainability is understood relates to moral values one attaches to humans and nature, thus, interpretations of sustainability are normative. This "moral thickness" (Gladwin et al., 1995, p. 876)

surrounds sustainability and renders communication around it moralized (Castelló et al., 2013) in that it touches on ethical values. Such values are constantly re-negotiated in public spheres. From an ethical perspective, the debated norms are justified by referring to universal ethical values (Schwartz, 2011). The way societal actors in the public sphere ethically justify their stances on sustainability helps explain the different worldviews these actors have as it touches on the core of norm construction. In business terms, sustainability has often been managed and communicated under the label corporate social responsibility (CSR). The motivations and justifications of (not) engaging in CSR and sustainability have been explained in terms of universal ethical theories (Schwartz, 2011). Central are the ideas that four ethical values exist (i.e. trustworthiness, responsibility, caring, and citizenship) that are universal across cultures, religions, and time (Schwartz, 2005). Thus, people commonly agree that these moral values are important and should be followed. This perspective dates back to Aristotele's virtue ethics who was convinced that only a person with a moral character can act morally right (Schwartz, 2011). Another ethical perspective is that humans possess inalienable moral rights such as health or safety, which translate into duties that other actors have to fulfill to safeguard these moral rights. For instance, a business has to take care of the safety of its workers or a nation state ensures that its citizens can be cured from disease (Schwartz, 2011). Consequentialist ethics, on the contrary, holds that actions need to be ethically assessed, for instance, whether they contribute to the prosperity of the majority (Mill, 1863) or to see whether they lead to fair and just outcomes (Rawls, 1958). Last, egoism views one's self-interest as the guiding principle for moral decisions; thus, an action is morally right if it serves the goals of an actor, be it a person or a business (Schwartz, 2011). Thus, it is proposed that ethical assessments of sustainability views need to rely on the articulation of the ethical values trustworthiness, responsibility, caring, citizenship, the reference to moral rights and justice/ fairness, and the degree of egoism. Actors will justify their views on sustainability by communicating these values (Schwartz, 2011), which can also aid in understanding their different viewpoints on sustainability.

Thus, we propose that the different sustainability worldviews also follow different ethics (Landrum, 2018, see Figure 1). Weak, technocentric sustainability relies on the idea that nature serves the needs of humans or their organizations, thus, the egoistic understanding that what serves oneself is the right thing to do, no matter if other(s) suffer. The sustaincentric view incorporates ethics of caring for other humans, e.g. intergenerationally, and relies on institutions' trustworthiness and responsibility in achieving sustainability. Its anthropocentric focus also implies an ethic of human moral rights and justice for humans (Landrum, 2018). Ecocentrism follows the ethical logic of caring for natural life (Washington et al., 2017).

The main societal actors debating sustainability will likely adopt different views on sustainability with its differing underlying ethics.

Consumers' worldviews are strongly shaped by social norms, sustainability-related attitudes, and behaviors (Jayaratne et al., 2015). Hedlund-de Witt et al. (2014), for instance, found that sustainable lifestyles were associated with more intrinsically oriented worldviews compared to extrinsic worldviews. Intrinsic value aspirations are considered more prosocial or other-focused compared to extrinsic values being more self-focused (Weinstein et al., 2009). Generally, pro-environmental attitudes have been associated with self-transcendence, biospheric, and altruistic values as opposed to self-enhancement or egoistic values (Schultz et al., 2005).

Egoism has been viewed as the guiding force behind neoliberal capitalism (Schwartz, 2011). Thus, it is not surprising that egoistic values also guide the instrumental take on CSR that focuses on economic competition. Yet, a competing corporate worldview exists that acknowledges the tensions between balancing financial, environmental, and social concerns (Castelló et al., 2013; Hahn et al., 2014). Hahn et al. (2014) argue that not all managerial decision making regarding social and environmental development is guided by profit maximization, but that decisions prioritizing environmental or societal concerns are made because they are "the right thing to do". This political-normative view stresses the role that organizations play in creating norms such as

human rights (Wettstein, 2012) and negotiating legitimacy with their stakeholders (Seele & Lock, 2015), being based on principles of moral rights and considerations of justice (Whelan, 2012). Nevertheless, both approaches tend to have the firm and thus humans as their central focus.

For news media, an analysis of the linkage of sustainability representations and underlying ethical values is currently lacking. It could be argued that different political leanings of newspapers are reflected in the values that are reported in terms of sustainability (Fischer et al., 2017). It could also be assumed that news media reflect the predominant values of the cultural context (Newig et al., 2013), of businesses (Vogler & Eisenegger, 2021), or of their audiences.

Previous research points to fundamental differences in sustainability perspectives between news media, business, and consumers (e.g. Haan et al., 2018; Holt & Barkemeyer, 2012; Landrum & Ohsowski, 2018), but none has so far compared them in a single study. Linking sustainability world-views to underlying ethical values allows us identify communalities and differences across domains and adds a unified framework to the extant, relatively scattered literature. Therefore, research question 3 asks:

RQ3: In how far do sustainability understandings of consumers, businesses, and news media relate to different ethical values?

Method

A quantitative content analysis was conducted to identify and compare sustainability understandings between consumers, businesses, and news media. To facilitate the comparative design, culture and time were held constant, as the research was conducted in the Netherlands during the first half (January till June) of 2019.

Samples

Consumers: Self-reported online survey data of a professional panel company was used that asked a representative sample of Dutch consumers ($N = 6513$) an open-ended question about what sustainability means to them. The question was part of a larger survey on sustainable consumer behavior. The age of respondents ranged from 18 to 70 years ($M = 44.7$, $SD = 15.0$); 50.4% were categorized as female, 49.6% as male. 16% of the responses did not include a sustainability element (e.g. “nothing,” “no idea”). These were excluded from the analysis resulting in a remaining sample of $n = 5473$.

News media: Articles that mention “sustainability” from five Dutch newspapers (*het Algemeen Dagblad*, *Trouw*, *Volkskrant*, *Telegraaf*, *NRC Handelsblad*) with the highest circulation available via NexisUni were sampled ($N = 2271$). *De Volkskrant* and *Trouw* can be considered left-wing, *NRC Handelsblad* as liberal, *het Algemeen Dagblad* is positioned politically neutral while *De Telegraaf* is considered right-wing. In addition, *De Volkskrant*, *Trouw* and *NRC Handelsblad* are considered “quality” newspapers, while the other two are considered popular newspapers (Bakker & Vasterman, 2007). Roughly 10% of all articles were selected for the analysis ($n = 282$) via stratified proportionate sampling according to month and outlet.

Businesses: The business sample consisted of website data from the 100 biggest Dutch companies selected based on revenue. The Wayback Machine was used to gather webpages from 2019. Each website was systematically searched for sustainability mentions using the following steps: (1) the home page, menu bar, and footer were checked for sustainability pages, (2) if sustainability was not mentioned, the home page, menu bar, and footer were checked for a CSR, (3) if this was not the case, the webpage “about” was examined and lastly (4) the mission, vision or strategy webpage was examined. Screenshots of all relevant websites of one business formed the unit of analysis for the content analysis. A total of 26 companies were excluded because the Wayback Machine did not provide any data ($n = 11$), or no sustainability terminology was not found ($n = 15$) resulting in a final sample of 74 websites.

Codebook

A codebook¹ was developed deductively from the literature and inductively adapted during coder training. It included sustainability elements, sentiment measures, and ethical values (Appendix Tables A1 and A2).

Sustainability elements: We derived a typology of 42 sustainability elements grouped into six categories Environment (e.g. water, biodiversity), Economy (e.g. production, transportation), Society (e.g. politics, community), Individual (e.g. health, convenience), Development (e.g. research, technologies), and Time (long-term, future generations) based on Hanss and Böhm (2012). Some additions were included from van Dam and van Trijp (2011) mainly referring to individual and intrinsic elements, such as taste, health, and convenience. Degrowth was added as an element to capture the transformative, post-modern views (Kemper et al., 2019). In addition to these six main categories, the element “buzzword” was added capturing the vague use of the term or inflation of meaning (e.g. expressed as “hype,” “nonsense,” or “fraud” in consumer responses or if no further explanation was provided in news articles or website texts).

Sentiment: Three coding categories negative (0), neutral or balanced (0.5), and positive (1) measured the degree of positivity toward sustainability. As measuring sentiment for news articles and websites was more complex, a rule-based sentiment analysis was performed in Wordstat to extract their overall valence. The Dutch sentiment dictionary created by Chen and Skiena (2014) was used with some subject-related alterations to increase accuracy. Comparable to the coded measure, a scale from 0 to 1 represents the percentage of positive words per case.

Ethical Values: The typology proposed by Schwartz (2011) was condensed to the four value categories Trustworthiness (indicating trust or no trust in actors or sustainable solutions, including products or behaviors), Caring, responsibility & citizenship (practices/behaviors that relate to protecting nature, animals, etc. or taking responsibility to improve the environment or society), Egoism (any monetary considerations, such as referring to higher prices, or other instrumental considerations), Moral rights, justice & fairness (referring to human rights, fair trade, or safety).

Coding procedure

Coding was conducted in two phases. First, two student coders were trained and coded the consumer sample. Second, another two student coders were trained to code the news and business texts. Accordingly, separate pretests were conducted for each pair of coders using random sub-samples (80 consumer responses; 20 news articles).

For the consumer sample, the coders determined a maximum of five sustainability elements per answer to the open-ended question (Krippendorff's alpha [weighted average of five elements] = .75), followed by the coding of sentiment (Krippendorff's alpha = .89), and the ethical values (Krippendorff's alpha for trustworthiness = .63; caring, responsibility, citizenship = .80; moral rights & justice = .86; egoism = .87).

Due to higher textual variation within news articles only the primary sustainability element could be coded reliably (Krippendorff's alpha = .72). The coding of the primary sustainability element started in the paragraph where sustainability was mentioned. If no indication for an element was present, coders consulted the remainder of the article starting with the title and lead paragraph. Ethical values were coded considering the entire article (Krippendorff's alpha for trustworthiness = 1; caring, responsibility, citizenship = .79; moral rights & justice = 1; egoism = .63).; For business websites, typically containing a range of sections on different sustainability issues, ethical values and a maximum of six sustainability elements were coded by one of the coders that had coded the news articles and participated in the intercoder-reliability test.

Data analysis

The analysis consisted of four steps: First, individual sustainability elements were examined per domain. To compensate the number of coded sustainability elements per domain, the elements were divided by the number of coded elements per case to obtain comparable shares across domains. Second, we grouped the individual weighted elements for a more nuanced picture of their relevance and co-occurrences. For this purpose, cluster analyses were conducted for the consumer and business data. To explore the cluster structure and determine an appropriate number, hierarchical cluster analysis using Ward's method was applied. Based on interpretability in comparison to neighboring solutions in addition to examining the dendrograms, five-cluster solutions were selected for consumers and businesses. Next, we applied k-means clustering and interpreted the resulting solutions. Since the clustering approach could not be applied to the media data, we examined the seven main sustainability categories with respect to the representation of individual sustainability elements. The category time had a relative frequency of <1% (with $n = 1$) and was excluded. Next, we were interested in the sentiment levels of the three different domains and groups. Finally, we examined how different values were represented in the three different domains and compared the value distributions across clusters or main sustainability categories in the case of the media.

Results

Sustainability elements and clusters

We first compared the distributions of sustainability elements across domains. Grouping the elements into six main categories (see also Codebook, Appendix) in addition to the buzzword category revealed several differences (Figure 2). Consumers most often referred to environmental aspects followed by economic ones. In addition, consumers stood out with references to individual, developmental, and temporal aspects while references to society or buzzword were less relevant. Corporations also addressed environmental elements most often but spent more attention on societal aspects in addition to economic and temporal aspects. Moreover, corporations put considerably less emphasis on individual and developmental aspects compared to consumers. News

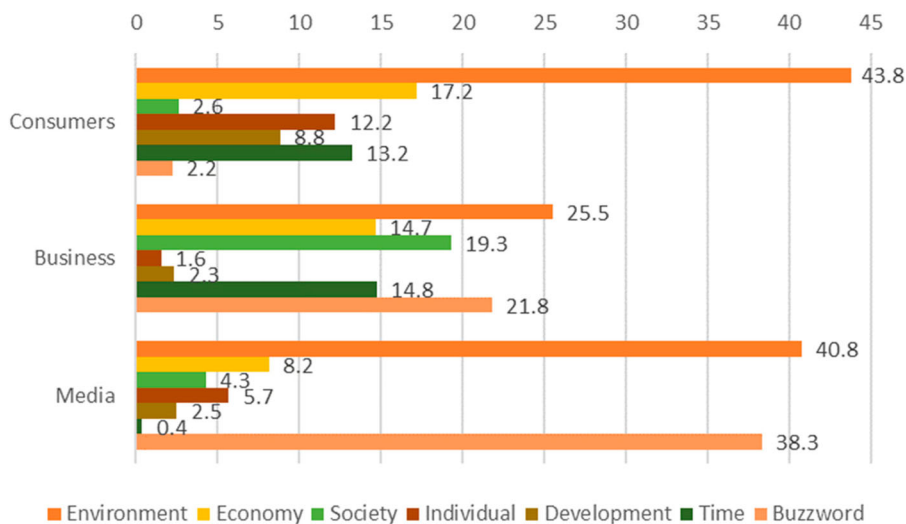


Figure 2. Relative share of main sustainability categories per domain (in %).

media showed a strikingly clear focus on environmental elements. Remarkably, the buzzword category ranked second for both business and media.

Consumers

Among the five resulting clusters of the consumer responses (Figure 3) one cluster stood out as most dominant (64.3%), combining elements of environment and consumption. Consumer responses within this group often linked references to nature conservation and product characteristics. So did consumers refer to products that are sustainable, do not harm the environment, or save energy; or to production with low environmental impact that does not cause harm or saves natural resources. The two aspects of environment and consumption were each separately reflected by the next two clusters: one with a strong environmental focus (e.g. environmentally friendly), the other focusing on long-term aspects of consumption (e.g. long-lasting products). Two very small and thus less relevant clusters emphasized quality and individual behaviors other than consumption. In sum, the clusters revealed that consumer perspectives strongly focused on various aspects of consumer behavior and environmental aspects – in most cases linking these two.

Business

The five clusters for businesses’ sustainability views revealed a different variation of elements (Figure 4). The largest cluster, labeled Society & buzzword, reflected an emphasis on societal aspects which were linked to environmental and economic elements. In addition, the vague, not further specified use of the term of sustainability was a prominent element within this group. The second cluster, in contrast, displayed a strong emphasis on energy-related aspects in combination with taking a long-term perspective. But again, sustainability occurred as a buzzword. The buzzword prevailed the third cluster in combination with long-term references. The fourth cluster showed a more equal distribution between environmental, economic, and societal aspects and was therefore labeled Triple bottom line. Finally, a smaller cluster focused on long-term aspects, often linked to production. Quite plausibly thus, corporations focused more strongly on economic aspects but also linked these to environmental and societal ones following the triple bottom line. Notably, buzzwords and long-term perspectives were present – albeit to a different extent – in almost all clusters.

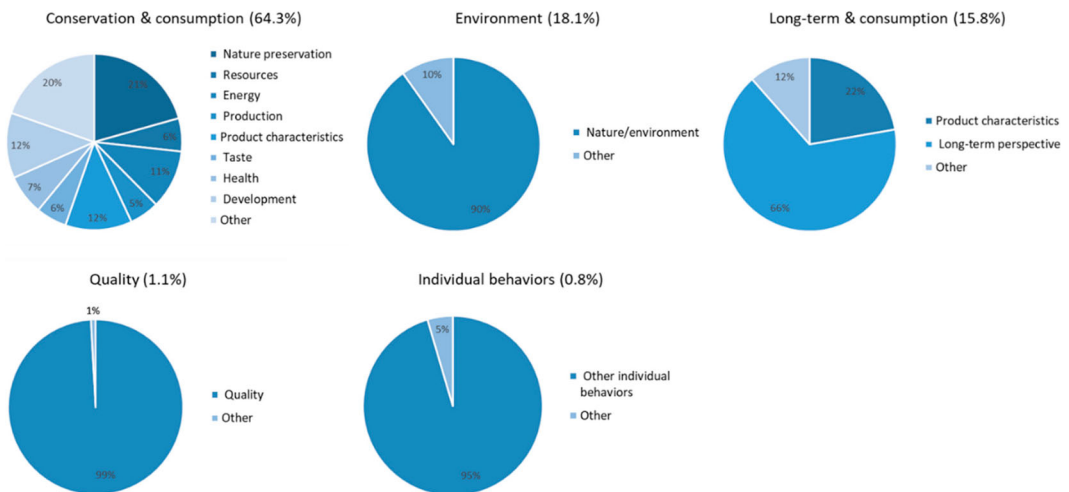


Figure 3. Consumer sustainability views – share of sustainability elements per cluster.

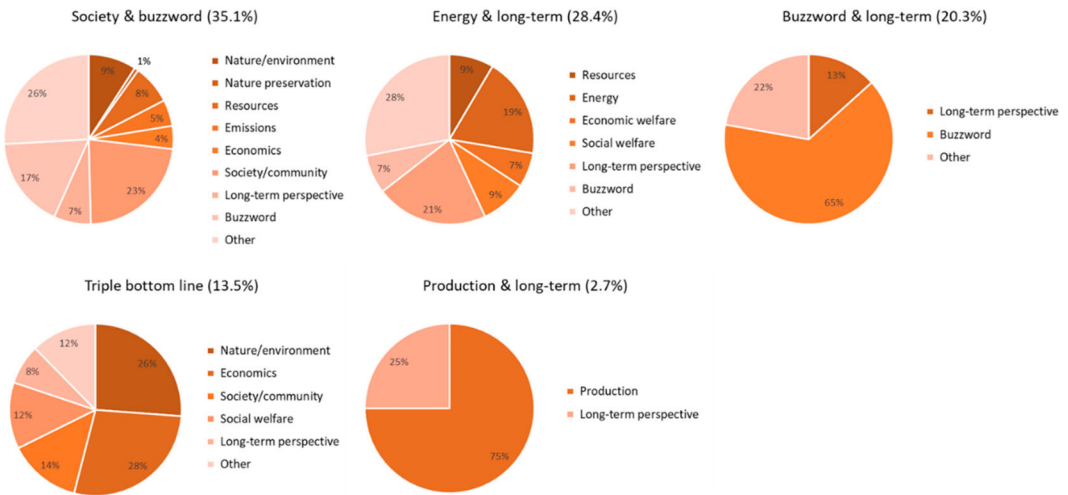


Figure 4. Business sustainability views – share of sustainability elements per cluster.

News media

We examined the news media by comparing the weighted sustainability elements used within the six main sustainability categories in addition to the buzzword category (Figure 5). The two most prevailing categories were environment and buzzword. News articles taking an environmental perspective had a clear focus on energy (47%). Less often occurring other environmental aspects included nature and environment in general, resources, soil or land, and forests. Surprisingly, a substantial share of the articles (38%) merely included unspecific references to sustainability. The other four main sustainability categories determined the primary sustainability perspective in less than 10% of the articles. This included economic references that showed a focus on economic welfare and sustainable manners of production. Articles focusing on individual aspects were dominated by the issue of food. The represented societal aspects were more diverse ranging from social welfare, to politics, fair trade or the global scope of the issue. Articles with a development perspective either focused on technologies or were more problem oriented.

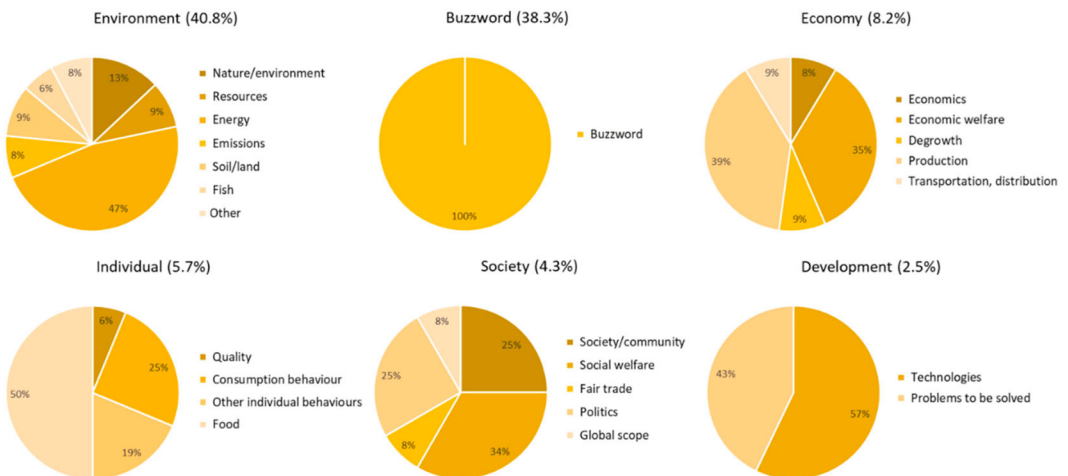


Figure 5. News media sustainability views – share of sustainability elements per main category.

Sentiment

Business websites displayed the highest degree of positive valence ($M = .79$, $SD = .15$), followed by consumers ($M = .62$, $SD = .29$) and the news media ($M = .55$, $SD = .15$). The five business sustainability view clusters were relatively homogenous in their tendency toward a mainly positive sentiment ranging from $M = .76$ ($SD = .13$) for the Production & long-term cluster to $M = .81$ ($SD = .21$) for the Buzzword & long-term cluster. Similarly, the three largest consumer clusters were rather similar in their slight tendency toward a positive sentiment (Environment: $M = .58$, $SD = .20$; Long-term & consumption: $M = .60$, $SD = .20$; Conservation & consumption: $M = .63$, $SD = .28$). Finally, for the media clusters a bit more variation was observed with moderate levels tending toward positive sentiment ranging from $M = .53$ ($SD = .15$) for the environment category to $M = .62$ ($SD = .17$) for development.

Ethical values representations

Comparing the appearance of ethical values across domains yielded a relatively homogenous picture (Figure 6). In all domains the value of caring, responsibility & citizenship was referred to most often.

Notably, businesses generally made use of more value references compared to citizens and news media with, especially, a greater visibility of caring.

In a final step, we were interested in how these value representations compared across the different sustainability clusters and categories. Figure 7 displays the value distributions for the clusters or categories per domain. Caring consistently appeared as the most prevalent value in all groups within each domain. Overall, the value representations of the groups within a domain were relatively homogeneous. For consumers, the focus on caring was most pronounced. In addition, trustworthiness was relevant in most clusters. The largest cluster also showed the highest diversity of represented values. The corporate websites, in contrast, showed a slightly greater diversity of value representations. Here, the Energy & long-term cluster in addition to the smallest cluster Production & long-term displayed the highest level of moral rights while the cluster Triple bottom line was more strongly connected to egoism. The two largest sustainability categories found for the news

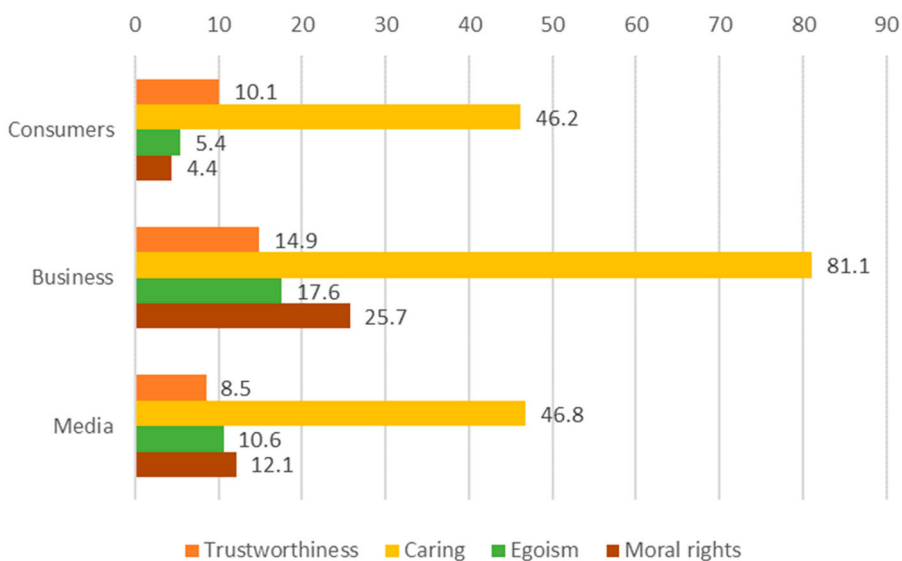


Figure 6. Share of value types per domain (in %).

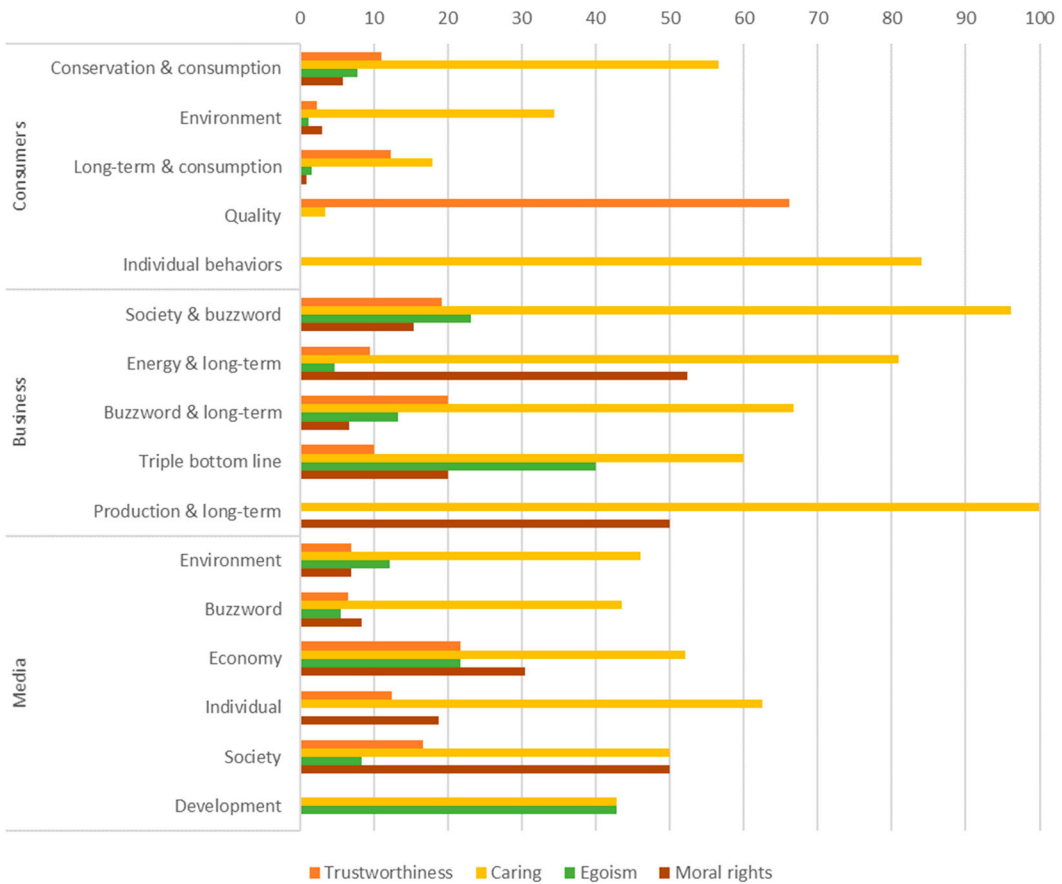


Figure 7. Share of values per cluster and domain (in %).

media, again, showed a clear focus on caring with a relatively low relevance of other values (+/−10%). Interestingly, coverage taking either an economic, individual, or societal perspective referred more strongly to moral rights in addition to caring. For the economic view also trustworthiness and egoism were more relevant. These results allowed, together with the cluster descriptives, to interpret the sustainability worldviews that the three societal domains display (as visualized in Figure 8 and argued in the discussion).

Discussion

This study questioned whether different societal domains – consumers, businesses, and news media – operate with a common understanding of sustainability as a prerequisite that solutions to our unsustainable world can be formulated (Godemann & Michelsen, 2011). The openness of the concept allows different stakeholders to fill it with meaning and articulate specific aspects of this complex issue, which carries the danger of trivialization (Ott et al., 2011), but also makes space for alternative perspectives against majority opinions (Mouffe, 2000) and thus opens the possibilities of exchange between conflicting viewpoints (Cox, 2010; Peterson & Norton, 2007). Thus, differing worldviews of sustainability can be considered to diverge or a representation of a diverse public sphere. In the Dutch public sphere three central societal actors hold different yet coherent perspectives on sustainability.

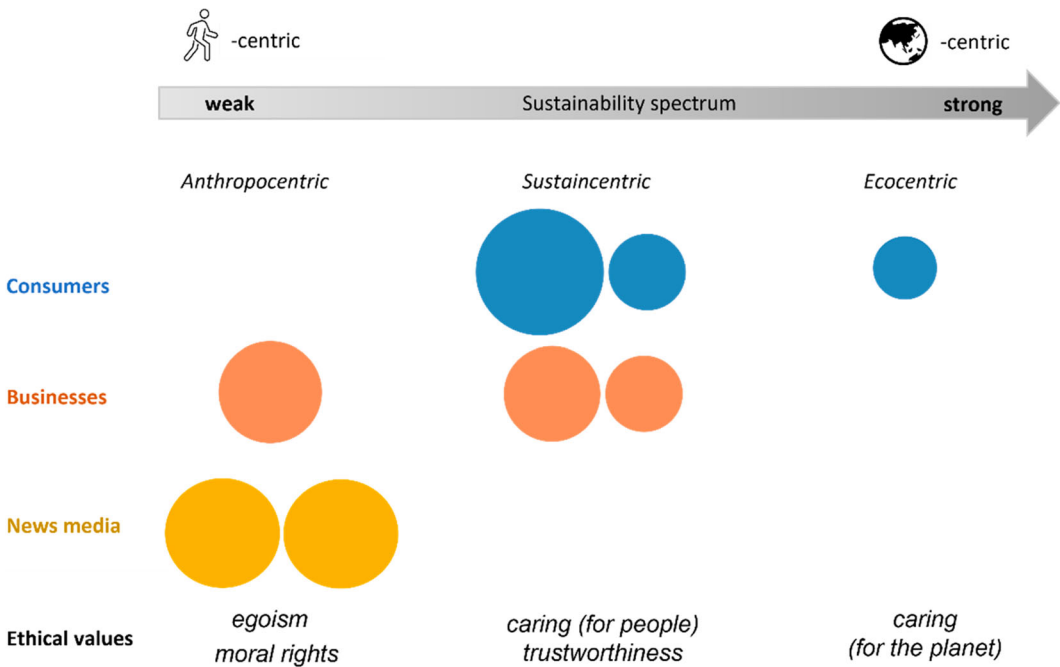


Figure 8. Diverging sustainability worldviews based on ethical values of consumers, businesses, and news media (clusters/dimensions above 10% depicted).

Consumption focus of consumers

Consistent with earlier research (Haan et al., 2018), consumers show a clear focus on consumption-related sustainability that can largely be subsumed under the sustaincentric worldview. While environmental considerations play a prominent role, particularly, in the most prevailing understanding these are often linked to aspects such as taste, health, or other product characteristics, that are directly relevant for individual consumption experiences (Meijers et al., 2022; Pieniak et al., 2016). Explicit social and identity considerations found in previous studies (Collins, 2015; Hanss & Böhm, 2012) are, in contrast, less relevant. However, consumers emphasize the long-term aspect of sustainability, which to some extent included social considerations such as referring to future generations. It is thus striking that the social aspect of the Brundtland definition of sustainability is echoed by consumers while other social dimensions, including challenges with respect to inequality or social welfare, seem less important.

Strategic diversity of business views

Businesses, likewise, show a focus on long-term sustainability. Moreover, businesses appear to communicate the most balanced understanding of sustainability covering societal, economic, and environmental aspects (Elkington, 1998) in the sustaincentric worldview. This observation speaks to more variety in businesses' understandings of sustainability that, next to the functional paradigm where sustainability strategies are implemented to maximize returns, allows space for a more political-normative notion of the role of business as an actor to help solve public issues, underlined also by the appeals to moral rights and justice (Hahn et al., 2014; Seele & Lock, 2015). Still, the frequent use of sustainability as a buzzword in the three largest clusters together with the positive language applied can be interpreted in the strategic and egocentric notion of sustainability strategies and does not come as a surprise given the co-existence of strategic

sustainability communication (Einwiller & Carroll, 2020) and the long-observed tactics of greenwashing (Seele & Gatti, 2017).

Environment and energy as journalistic focus

Surprisingly, news media frequently use the word sustainable, but neither explain nor go in depth as to what is meant by it. This is noteworthy given that journalists' role is to present facts critically and those writing about sustainability topics tend to be more ecologically aware, thus also closer to the topic, than the general public (Brüggemann & Engesser, 2014). This buzzwording of sustainability can be interpreted as a form of trivializing the concept (Ott et al., 2011), not scrutinizing its meaning or explaining to the audience what is meant by it (Hulme, 2009), even though this is one of the main functions of journalism: translating complex issues to a lay audience (Newig et al., 2013). An alternative interpretation is that sustainability has become normalized (Ziemann, 2011) to such an extent that it has entered the normal use of language unprompted by journalists or that journalists who are not experts of the topic write about it (Brüggemann & Engesser, 2014). This can give the false impression of a common understanding of the term shared by all of society, which is neither found here nor present in academic debate. News media's reporting also diverges from the other domains in that it neither focuses on the long-term aspects of sustainability nor on societal aspects but rather covered energy-related topics (Van der Meer et al., 2019). Yet, the balanced sentiment in news articles, as opposed to the overly positive corporate communication, points to a rather critical reporting on the issue. Thus, we may conclude that Dutch news media do not represent an issue arena for sustainability that allows for multiple actors and viewpoints. Rather, journalistic scrutiny manifests itself in rather balanced reporting of events related to the environment and the energy transition, less frequently the economy. This opens the question whether in this media-tized public sphere common solutions to sustainability can be discussed if important aspects of the issue are not covered.

Values provide common ground

Thus, sustainability worldviews in the Dutch public sphere on sustainability appear to diverge, even though overlap exists between the societal domains that cover the full spectrum from weak to strong sustainability understandings (see Figure 8). Consumers' and businesses' understandings meet in the sustaincentric middle. News media representations partially coincide with businesses' viewpoints, which could be interpreted as a form of successful agenda-building, even though news media does not take over the positive corporate language and reports in a more balanced manner (Vogler & Eisenegger, 2021).

That both actors often operate with a shallow understanding of sustainability as a buzzword allows above all organizations to implement the concept of sustainability freely into their ways of doing business without being criticized by the journalistic watchdog. News media further do not show overlap with consumers' ideas of sustainability, neither in the eco-centric worldview that for consumers centers more on preserving nature, and for the news rather on energy. The three societal domains, however, are united by similar ethical stances toward sustainability as the consistent emphasis on "caring" shows (Landrum, 2018).

Theoretical implications

Summarizing, the main theoretical implications are fourfold. First, we observe a normalization of sustainability in the Dutch public sphere, where consumers and businesses discuss different aspects of sustainability from a coherent worldview that centers on how humans can live sustainably on the planet (Ziemann, 2011). Second, news media do not appear to constitute the issue arena where this public debate mainly takes place (Luoma-aho & Vos, 2010), as news focus more on the well-being of

humans given the constraints imposed by lacking sustainability (Kemper et al., 2019; Landrum, 2018; Whyte & Lamberton, 2020). Thus, third, it appears that sustainability in the public sphere is communicatively constructed in meaning negotiations between businesses and consumers, which legacy news media do not necessarily reflect (Wang et al., 2021). Particularly consumers' minority viewpoints regarding ecocentrism are not reflected in media coverage. Yet, fourth, the different societal domains appear to agree on the importance of the ethical value of caring, rendering it, as ethical theory suggests (Schwartz, 2011), a universal value also in sustainability. Together with a shared postmodern epistemology as contained in the sustaincentric view (Kemper et al., 2019), this can be seen as a fertile common ground for norm negotiations as to what sustainability is and how it can be reached in the future.

Practical implications

These findings also hold implications for the practical reality in the three studied domains. The sustainability understanding of consumers is very much confined to the environment coupled with the aspect of future generations. Thus, companies can – and do – symmetrically respond to this orientation by emphasizing the environmental footprint of their products. Focusing, for instance, on social welfare in their marketing might provide a more unique positioning in an otherwise normalized sustainability debate that is geared toward safeguarding the environment. Journalists are called to provide a more varied perspective on sustainability, focusing not only on energy issues or corporate misconduct, but providing a nuanced and substantive picture of this transformative concept that includes more than planetary considerations. For democratic institutions and policymakers, these findings provide insights into how pluralistic the debate on sustainability is in Dutch society, pointing to potential avenues for activating publics to become active change agents in rendering society more sustainable.

Limitations and future research

The study was designed to compare sustainability understandings across different societal domains, holding culture constant by focusing on the Netherlands. The transition to renewable energies has only become salient in recent years in the public and news media, which might explain the focus on energy in the news coverage. Despite this specificity, we do not have indication that Dutch consumers behave completely differently than in other well-off Western economies (Haan et al., 2018). The studied businesses are internationally operating companies with sustainability communication audiences stretching far beyond the Netherlands. Therefore, this study provides a solid basis to formulate more general assumptions on clashing sustainability understandings in mediatized democratic societies and provides a starting point for future comparative research that illuminates cultural specificities.

In the news sample, we coded the main sustainability element per article, providing less variety on potential other sustainability elements contained in the article than for businesses and consumers. The underlying assumption is that news articles tend to center on one main topic, even though others might be discussed briefly in the article but not as main focus. Importantly, the buzzword category was only coded if sustainability or its adjective were not further explained or referred to in the text. Thus, we are confident that for this main code there were no other elements present in the articles. While this study focused on news media, including social media may be a fruitful endeavor for future research. With news media – and related media organizations – we have studied an actor group that actively shapes the sustainability debate and thus also contributes to sustainability discourses on social media, whereas social media may be considered additional platforms where interaction between social realms can be studied (Wang et al., 2021). Similarly, environmental organizations or advocacy groups form a distinct actor type that actively contributes to shaping the debate on sustainability (Cox, 2010). While the most effective forms of advocacy can be considered to receive media attention and thus influence journalistic sustainability understandings studied here (Newig et al., 2013), future research could take this additional actor into account.

Coding ethical values is, by their nature, more prone to interpretation than, for instance, sustainability elements. That is why the intercoder reliability for the ethical values, as well as for the other variables in the codebook, can be considered relatively high, except for trustworthiness for consumer responses and egoism for news and business websites that need to be interpreted with caution. Likewise, the reliability of the business website data has not been separately tested. As the coder who was involved in the news article coding was the same as for the business sample, we are confident of the quality of the coding also for the business websites. Future studies could replicate the coding of the business websites and try applying automated methods to extract ethical values from text, even though dictionary-based approaches might be too shallow in their conceptualizations of ethics as to allow for meaningful results.

Note

1. The codebook will be made available publicly after peer-review on the authors' institutional data repository.

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

- Alexander, R., Jacovidis, J., & Sturm, D. (2021). Exploring personal definitions of sustainability and their impact on perceptions of sustainability culture. *International Journal of Sustainability in Higher Education*, 1467–6370. <https://doi.org/10.1108/IJSHE-11-2020-0426>
- Bakker, P., & Vasterman, P. (2007). The Dutch media landscape. In G. Terzis (Ed.), *European media governance: National and regional dimensions* (pp. 145–168). Intellect.
- Brüggemann, M., & Engesser, S. (2014). Between consensus and denial: Climate journalists as interpretive community. *Science Communication*, 36(4), 399–427. <https://doi.org/10.1177/1075547014533662>
- Castelló, I., Morsing, M., & Schultz, F. (2013). Communicative dynamics and the polyphony of corporate social responsibility in the network society. *Journal of Business Ethics*, 118(4), 683–694. <https://doi.org/10.1007/s10551-013-1954-1>
- Chen, Y., & Skiena, S. (2014). Building sentiment lexicons for all major languages. *Proceedings of the 52nd Annual Meeting of the Association for Computational Linguistics*, 2, 383–389. <https://aclanthology.org/P14-2063.pdf>
- Collins, R. (2015). Keeping it in the family? Re-focusing household sustainability. *Geoforum; Journal of Physical, Human, and Regional Geosciences*, 60, 22–32. <https://doi.org/10.1016/j.geoforum.2015.01.006>
- Cox, R. (2010). *Environmental communication and the public sphere* (2nd ed.). Thousand Oaks: Sage.
- Einwiller, S. A., & Carroll, C. E. (2020). Negative disclosures in corporate social responsibility reporting. *Corporate Communications: An International Journal*, 25(2), 319–337. <https://doi.org/10.1108/CCIJ-05-2019-0054>
- Elkington, J. (1998). *Cannibals with forks: The triple bottom line of sustainability*. Gabriola Island: New Society Publishers.
- Fischer, D., Haucke, F., & Sundermann, A. (2017). What does the media mean by 'sustainability' or 'sustainable development'? An empirical analysis of sustainability terminology in German newspapers over two decades. *Sustainable Development*, 25(6), 610–624. <https://doi.org/10.1002/sd.1681>
- Fuchs, C. (2017). Information technology and sustainability in the information society. *International Journal of Communication*, 11, 2431–2461.
- Gladwin, T. N., Kennelly, J. J., & Krause, T.-S. (1995). Shifting paradigms for sustainable development: Implications for management theory and research. *Academy of Management Review*, 20(4), 874–907. <https://doi.org/10.2307/258959>
- Godemann, J., & Michelsen, G. (2011). Sustainability communication – An introduction. In J. Godemann, & G. Michelsen (Eds.), *Sustainability communication: Interdisciplinary perspectives and theoretical foundation* (pp. 3–11). Springer Netherlands. https://doi.org/10.1007/978-94-007-1697-1_1
- Haan, M., Konijn, E. A., Burgers, C., Eden, A., Brugman, B. C., & Paul Verheggen, P. (2018). Identifying sustainable population segments using a multi-domain questionnaire: A five factor sustainability scale. *Social Marketing Quarterly*, 24(4), 264–280. <https://doi.org/10.1177/1524500418794019>
- Habermas, J. (2006). Political communication in media society: Does democracy still enjoy an epistemic dimension? The impact of normative theory on empirical research. *Communication Theory*, 16(4), 411–426. <https://doi.org/10.1111/j.1468-2885.2006.00280.x>

- Hahn, T., Preuss, L., Pinkse, J., & Figge, F. (2014). Cognitive frames in corporate sustainability: Managerial sensemaking with paradoxical and business case frames. *Academy of Management Review*, 39(4), 463–487. <https://doi.org/10.5465/amr.2012.0341>
- Hansen, A. (2015). Communication, media and the social construction of the environment. In Hansen A. & Cox R. (Eds.), *The Routledge handbook of environment and communication* (pp. 26–38). Milton Park: Routledge.
- Hans, D., & Böhm, G. (2012). Sustainability seen from the perspective of consumers. *International Journal of Consumer Studies*, 36(6), 678–687. <https://doi.org/10.1111/j.1470-6431.2011.01045.x>
- Hedlund-de Witt, A., de Boer, J., & Boersema, J. J. (2014). Exploring inner and outer worlds: A quantitative study of worldviews, environmental attitudes, and sustainable lifestyles. *Journal of Environmental Psychology*, 37, 40–54. <https://doi.org/10.1016/j.jenvp.2013.11.005>
- Hickel, J., & Kallis, G. (2020). Is green growth possible? *New Political Economy*, 25(4), 469–486. <https://doi.org/10.1080/13563467.2019.1598964>
- Holt, D., & Barkemeyer, R. (2012). Media coverage of sustainable development issues—attention cycles or punctuated equilibrium? *Sustainable Development*, 20(1), 1–17. <https://doi.org/10.1002/sd.460>
- Hulme, M. (2009). *Why we disagree about climate change: Understanding controversy, inaction and opportunity*. Cambridge University Press.
- Jayarathne, M., Sullivan Mort, G., & D’Souza, C. (2015). Sustainability living in a carbon-priced economy: “shoulds” and “woulds,” making amends and sustainability guilt. *Journal of Nonprofit & Public Sector Marketing*, 27(3), 285–306. <https://doi.org/10.1080/10495142.2015.1053343>
- Kemper, J. A., Hall, C. M., & Ballantine, P. W. (2019). Marketing and sustainability: Business as usual or changing worldviews? *Sustainability*, 11(3), 1–17. <https://doi.org/10.3390/su11030780>
- Lade, S. J., Steffen, W., De Vries, W., Carpenter, S. R., Donges, J. F., Gerten, D., & Rockström, J. (2020). Human impacts on planetary boundaries amplified by earth system interactions. *Nature Sustainability*, 3(2), 119–128. <https://doi.org/10.1038/s41893-019-0454-4>
- Landrum, N. E. (2018). Stages of corporate sustainability: Integrating the strong sustainability worldview. *Organization & Environment*, 31(4), 287–313. <https://doi.org/10.1177/1086026617717456>
- Landrum, N. E., & Ohsowski, B. (2018). Identifying worldviews on corporate sustainability: A content analysis of corporate sustainability reports. *Business Strategy and the Environment*, 27(1), 128–151. <https://doi.org/10.1002/bse.1989>
- Luoma-aho, V., & Vos, M. (2010). Towards a more dynamic stakeholder model: Acknowledging multiple issue arenas. *Corporate Communications: An International Journal*, 15(3), 315–331. <https://doi.org/10.1108/13563281011068159>
- Meijers, M. H. C., Smit, E. S., de Wildt, K., Karvonen, S.-G., van der Plas, D., & van der Laan, L. N. (2022). Stimulating sustainable food choices using virtual reality: Taking an environmental vs health communication perspective on enhancing response efficacy beliefs. *Environmental Communication*, 16(1), 1–22. <https://doi.org/10.1080/17524032.2021.1943700>
- Meuer, J., Koelbel, J., & Hoffmann, V. H. (2020). On the nature of corporate sustainability. *Organization & Environment*, 33(3), 319–341. <https://doi.org/10.1177/1086026619850180>
- Mill, J. S. (1863). *Utilitarianism*. Ryerson University.
- Mouffe, C. (2000). Deliberative democracy or agonistic pluralism? *Political Science Series*, 72, 1–17. <https://doi.org/10.2307/40971349>
- Newig, J., Schulz, D., Fischer, D., Hetze, K., Laws, N., Lüdecke, G., & Rieckmann, M. (2013). Communication regarding sustainability: Conceptual perspectives and exploration of societal subsystems. *Sustainability*, 5(7), 2976–2990. <https://doi.org/10.3390/su5072976>
- Ott, K., Muraca, B., & Baatz, C. (2011). Strong sustainability as a frame for sustainability communication. In J. Godemann, & G. Michelsen (Eds.), *Sustainability communication: Interdisciplinary perspectives and theoretical foundation* (pp. 13–25). Springer Netherlands. https://doi.org/10.1007/978-94-007-1697-1_2
- Paswan, A., Guzmán, F., & Lewin, J. (2017). Attitudinal determinants of environmentally sustainable behavior. *Journal of Consumer Marketing*, 34(5), 414–426. <https://doi.org/10.1108/JCM-02-2016-1706>
- Peterson, T. R., & Norton, T. (2007). Discourses of sustainability in today’s public sphere. In S. May, G. Cheney, & J. Roper (Eds.), *The debate over corporate social responsibility* (Vol. 178, pp. 351–364). Oxford University Press.
- Pieniak, Z., Zakowska-Biemans, S., Kostyra, E., & Raats, M. (2016). Sustainable healthy eating behaviour of young adults: Towards a novel methodological approach. *BMC Public Health*, 16(1), 1–9. <https://doi.org/10.1186/s12889-016-3260-1>
- Ramsey, J. L. (2015). On not defining sustainability. *Journal of Agricultural and Environmental Ethics*, 28(6), 1075–1087. <https://doi.org/10.1007/s10806-015-9578-3>
- Rauchfleisch, A. (2017). The public sphere as an essentially contested concept: A co-citation analysis of the last 20 years of public sphere research. *Communication and the Public*, 2(1), 3–18. <https://doi.org/10.1177/2057047317691054>
- Rawls, J. (1958). Justice as fairness. *The Philosophical Review*, 67(2), 164–194. <https://doi.org/10.2307/2182612>

- Ruggerio, C. A. (2021). Sustainability and sustainable development: A review of principles and definitions. *Science of The Total Environment*, 786, 1–11. <https://doi.org/10.1016/j.scitotenv.2021.147481>
- Ryghaug, M. (2011). Obstacles to sustainable development: The destabilization of climate change knowledge. *Sustainable Development*, 19(3), 157–166. <https://doi.org/10.1002/sd.431>
- Schultz, P. W., Gouveia, V. V., Cameron, L. D., Tankha, G., Schmuck, P., & Franěk, M. (2005). Values and their relationship to environmental concern and conservation behavior. *Journal of Cross-Cultural Psychology*, 36(4), 457–475. <https://doi.org/10.1177/0022022105275962>
- Schwartz, M. S. (2005). Universal codes of ethics. *Journal of Business Ethics*, 59, 27–44.
- Schwartz, M. S., & Carroll, A. B. (2008). Integrating and unifying competing and complementary frameworks: The search for a common core in the business and society field. *Business & Society*, 47(2), 148–186. <https://doi.org/10.1177/0007650306297942>
- Schwartz, M. S. (2011). The nuts and bolts of determining ethical responsibility. In M. S. Schwartz (Ed.), *Corporate social responsibility: An ethical approach* (pp. 29–50). Broadview Press.
- Seele, P., & Gatti, L. (2017). Greenwashing revisited: In search of a typology and accusation-based definition incorporating legitimacy strategies. *Business Strategy and the Environment*, 26(2), 239–252. <https://doi.org/10.1002/bse.1912>
- Seele, P., & Lock, I. (2015). Instrumental and/or deliberative? A typology of CSR communication tools. *Journal of Business Ethics*, 131(2), 401–414. <https://doi.org/10.1007/s10551-014-2282-9>
- Smith, P. A., & Sharicz, C. (2011). The shift needed for sustainability. *The Learning Organization*, 18(1), 73–86. <https://doi.org/10.1108/096964711111096019>
- UNEP (2019, March 4). *Global Environment Outlook 6*. UNEP - UN Environment Programme. <http://www.unep.org/resources/global-environment-outlook-6>
- van Dam, Y. K., & van Trijp, H. C. M. (2011). Cognitive and motivational structure of sustainability. *Journal of Economic Psychology*, 32(5), 726–741. <https://doi.org/10.1016/j.joep.2011.06.002>
- Van der Byl, C. A., & Slawinski, N. (2015). Embracing tensions in corporate sustainability: A review of research from win-wins and trade-offs to paradoxes and beyond. *Organization & Environment*, 28(1), 54–79. <https://doi.org/10.1177/1086026615575047>
- Van der Meer, T. G., Kroon, A. C., Verhoeven, P., & Jonkman, J. (2019). Mediatization and the disproportionate attention to negative news: The case of airplane crashes. *Journalism Studies*, 20(6), 783–803. <https://doi.org/10.1080/1461670X.2018.1423632>
- Voakes, P. S., Kapfer, J., Kurpius, D., & Chern, D. S.-Y. (1996). Diversity in the news: A conceptual and methodological framework. *Journalism & Mass Communication Quarterly*, 73(3), 582–593. <https://doi.org/10.1177/107769909607300306>
- Vogler, D., & Eisenegger, M. (2021). CSR communication, corporate reputation, and the role of the news media as an agenda-setter in the digital age. *Business & Society*, 60(8), 1957–1986. <https://doi.org/10.1177/0007650320928969>
- Wang, X., Chen, L., Shi, J., & Tang, H. (2021). Who sets the agenda? The dynamic agenda setting of the wildlife issue on social media. *Environmental Communication*, 245–262. <https://doi.org/10.1080/17524032.2021.1901760>
- Washington, H., Taylor, B., Kopnina, H., Cryer, P., & Piccolo, J. J. (2017). Why ecocentrism is the key pathway to sustainability. *The Ecological Citizen*, 1(1), 35–41. <https://www.ecologicalcitizen.net/article.php?t=why-ecocentrism-key-pathway-sustainability>
- Weder, F., Lemke, S., & Tungarat, A. (2019a). (Re)storying sustainability: The use of story cubes in narrative inquiries to understand individual perceptions of sustainability. *Sustainability*, 11(19), 1–15. <https://doi.org/10.3390/su11195264>
- Weder, F., Voci, D., & Vogl, N. C. (2019b). Environmental discourses and natural resource related claims in German, Austrian, Slovenian and Italian media. *Journal of Sustainable Development*, 12, 39–54.
- Weinstein, N., Przybylski, A. K., & Ryan, R. M. (2009). Can nature make us more caring? Effects of immersion in nature on intrinsic aspirations and generosity. *Personality and Social Psychology Bulletin*, 35(10), 1315–1329. <https://doi.org/10.1177/0146167209341649>
- Wettstein, F. (2012). CSR and the debate on business and human rights: Bridging the great divide. *Business Ethics Quarterly*, 22(4), 739–770. <https://doi.org/10.5840/beq201222446>
- Whelan, G. (2012). The political perspective of corporate social responsibility: A critical research agenda. *Business Ethics Quarterly*, 22(4), 709–737. <https://doi.org/10.5840/beq201222445>
- Whyte, P., & Lambertson, G. (2020). Conceptualising sustainability using a cognitive mapping method. *Sustainability*, 12(5), 1–20. <https://doi.org/10.3390/su12051977>
- Ziemann, A. (2011). Communication theory and sustainability discourse. In J. Godemann, & G. Michelsen (Eds.), *Sustainability communication: Interdisciplinary perspectives and theoretical foundation* (pp. 89–96). Springer Netherlands. https://doi.org/10.1007/978-94-007-1697-1_8

Appendix

Table A1. General sustainability meanings with their corresponding specific sustainability meanings and examples.

General sustainability meaning	Specific sustainability meaning	Examples
Environmental	Nature/ environment	General category if more specific meanings do not apply and always if general terms like “nature” and “environment” are included.
	Nature preservation	“The environment should be protected,” “how much we can produce without harming nature,” “taking care of the planet,” “no animal testing,” “no negative impact on the environment,” “reducing global warming,” “taking the environment into account”
	Biodiversity Resources	“Not only protecting species, but also the diversity” “Not using more resources than necessary,” “efficient use of resources”
	Water	All references to water, except for hydropower which is coded as <i>energy</i> .
	Energy	“renewable energies,” “hydropower,” “renewable,” “solar energy,” “wind energy,” “extraction of natural gas”
	Emissions	CO ² or GHG emissions in general
	Fossils (oil, coal, gas)	“Time is short and resources are limited, for example oil”
	Soil/land/agriculture	“not damaging soil,” “ecological farming,” “circular agriculture”
	Forest	“Taking care of the rainforest,” “reducing deforestation”.
	Fish	“Fishery without overfishing”
Economical	Economics	General category if more specific meanings do not apply.
	Economic welfare	“All get a job,” “job opportunities,” “working conditions,” “sustainable employability”
	Economic viability	“Economic viability,” “strong economy,” “economically resilient,” “economical growth”
	Degrowth Production	Limits of growth or change to degrowth. “Sustainably produced,” “produced completely degradable,” “produced with low environmental impact,”
Buzzword	Transportation/ distribution	“locally produced”
	Characteristic when no elaboration is given or when it is used as a buzzword	“sustainable wardrobe,” “sustainable packaging,” “sustainable investment policy,” “sustainable bank”
Societal	Society/community	General category if more specific meanings do not apply: “building up society,” “keeping down population figures”
	Developing countries	“Africa’s poverty and development,” “developing countries need help”
	Social welfare	“Enough educated people to keep society functioning,” “health,” “safety for citizens,” “quality of life”
	Distribution	“Fair distribution of goods,” “distribution of natural resources”
	Fair trade	“Fair-trade,” “fair wages,” “true pricing”
	Politics	“Something discussed in politics”
	Deliberation	“Need for different opinions”
	Engagement	“We have to do something,” “we have to take action together,” “it needs to happen now,” “only if we do it together we can slow down global warming”
Individual	National scope	“Important for the country,” “whole Norway”
	Global scope	“International solutions”
	Price	Prices for consumers only: “expensive” “
	Quality	Quality,” “good product”, “decent product,”
	Taste	References to good or bad taste
	Health	Advantages or disadvantages to personal health
	Convenience	Ease or difficulty of usage or consumption.
	Consumption behavior	Buying different or less products: “buying from small local entrepreneurs,” “minimalism”
	Other individual behaviors	“Saving,” “protecting,” “recycling”
	Food	

(Continued)

Table A1. Continued.

General sustainability meaning	Specific sustainability meaning	Examples
Developmental	Development	Food choices or habits: "plant-based food," "vegan," "reducing meat"
	Technology Research	General category if more specific meanings do not apply: "development that is balanced economically, socially and environmentally" "Environmentally friendly cars," "solar cells," "innovative technologies" "Research to promote development"
Temporal	Problems to be solved	"Food crisis," "changes in climate," "climate crisis," "saving the planet"
	Long-term perspective	"Something that will persist," "future possibilities," "foundation, something to build on," "durability"
	Future generations	"Reasonable usage of resources that takes future generations into consideration"

Table A2. Overview of the ethical values including an explanation and examples.

Ethical value	Explanation	Examples
Trustworthiness	Indicating trust or no trust in actors.	"greenwashing," "reliable," "honest," "transparent," "credible," "plausible," "dishonest," "unfair," "unreliable"
Caring, responsibility and citizenship	Focus on practices or behaviors that relate to protecting nature, animals, people or the planet or taking responsibility to improve the environment or society.	"recycling," "using less plastic," "respect for the planet," "produced while not harming the environment," "dealing responsibly with natural resources," "environmentally conscious," "improving quality of life"
Egoism	Considerations that are in the best interest of the mentioned actor, typically based on either perceived long-term profits or share value.	"acting only in the interests of the company," "sustainable changes only when it does not interfere with financial performance," "profit for shareholders more important than fair wages for farmers," "not to save the world, but as a strategic export product"
Moral rights, justice, and fairness	Referring to human rights, fair trade or safety.	"moral," "justice," "decent," "civilized," "fair wages," "safe," "noble," "human rights," "animal rights," "fair to future generations," "legal protection"