

GREENWASHING PHENOMENON AND ITS IMPACT ON SUSTAINABLE DEVELOPMENT: CHALLENGES TO ACHIEVING SDG-12 ON SUSTAINABLE CONSUMPTION AND PRODUCTION

Alexandru-Cosmin APOSTOL¹

Abstract: Through this article, I propose a synthetic analysis of the greenwashing phenomenon and its impact on sustainable development, with a focus on sustainable or green consumption and production. This analysis is valuable in the context of the approaching year 2030, when the extent to which the targets set by the United Nations (UN) in the Sustainable Development Goals (SDGs) will be achieved will be debated. In the first part of the article, the trajectory of global concerns regarding sustainable development and sustainable consumption and production is described. The second part presents various scientific approaches to measuring responsible and sustainable consumption, highlighting the increasing tendency of people to adopt a lifestyle based on green consumption, thus becoming green consumers. The third part addresses the phenomenon of *greenwashing* and its implications for the SDGs. In short, *greenwashing* represents a misinformation strategy that hides (intentionally or unintentionally) certain information from consumers, which is used by various companies to create the image of organizations concerned about environmental issues and implementing sustainable production methods. This phenomenon can create major confusion among green consumers, who are oriented toward sustainable consumption practices. They may fail to recognize whether a product is truly sustainable, whether a company is genuinely committed to promoting green / sustainable consumption, or whether a transition is taking place from a linear to a circular economy. Furthermore, greenwashing can fuel increasing scepticism both among consumers, who lose trust in responsible consumption practices, and investors, who wish to support companies that implement environmentally friendly activities. Therefore, the greenwashing phenomenon proves to be a major challenge in achieving the targets set in the SDGs.

Keywords: greenwashing, sustainable development goals, SDG-12, sustainable consumption, green consumption

Résumé : À travers cet article, je propose une analyse synthétique du phénomène de greenwashing et de son impact sur le développement durable, en mettant l'accent sur la consommation et la production durables ou « vertes ». Cette analyse est précieuse dans le contexte de l'année 2030 qui approche, moment où l'on débattera de la mesure dans laquelle

¹ Lecturer, PhD, “Alexandru-Ioan Cuza” University of Iași, 700506 Iași, Romania, Faculty of Philosophy and Social-Political Sciences, Department of Sociology, Social Work and Human Resources, e-mail: cosmin.apostol@uaic.ro

les objectifs fixés par les Nations Unies (ONU) dans le cadre des Objectifs de Développement Durable (ODD) auront été atteints. Dans la première partie de l'article, la trajectoire des préoccupations mondiales concernant le développement durable et la consommation et la production durables est décrite. La deuxième partie présente diverses approches scientifiques pour mesurer la consommation responsable et durable, mettant en lumière la tendance croissante des individus à adopter un mode de vie basé sur la consommation verte, devenant ainsi des consommateurs verts. La troisième partie aborde le phénomène de *greenwashing* et ses implications pour les ODD. En résumé, le *greenwashing* représente une stratégie de désinformation qui cache (intentionnellement ou non) certaines informations aux consommateurs, utilisée par diverses entreprises afin de créer l'image d'organisations préoccupées par les enjeux environnementaux et l'implémentation de méthodes de production durables. Ce phénomène peut créer une confusion majeure chez les consommateurs verts, orientés vers des pratiques de consommation durables. Ils peuvent ne pas parvenir à reconnaître si un produit est réellement durable, si une entreprise est réellement engagée dans la promotion de la consommation verte/durable, ou si une transition a effectivement lieu d'une économie linéaire vers une économie circulaire. De plus, le *greenwashing* peut alimenter un scepticisme croissant, tant chez les consommateurs qui perdent confiance dans les pratiques de consommation responsable que chez les investisseurs qui souhaitent soutenir des entreprises mettant en œuvre des activités respectueuses de l'environnement. Par conséquent, le phénomène de *greenwashing* s'avère être un défi majeur dans la réalisation des objectifs fixés dans les ODD.

Mots-clés : *greenwashing*, objectifs de développement durable, ODD-12, consommation durable, consommation verte

Rezumat: Prin intermediul acestui articol, propun o analiză sintetică asupra fenomenului de *greenwashing* și a modului în care acesta afectează dezvoltarea durabilă, cu accent pe consumul și producția verde. Această analiză este utilă în contextul apropierii anului 2030, când se va dezbate măsura în care țintele propuse de Națiunile Unite (UN) în Obiectivele de Dezvoltare Durabilă (SDGs) au fost atinse. În prima parte articolului este descrisă traiectoria preocupărilor globale referitoare la dezvoltarea durabilă și consumul și producția sustenabilă. În cea de-a doua parte sunt descrise câteva abordări științifice referitoare la modalitățile de măsurare a consumului responsabil și sustenabil, fiind evidențiat faptul că oamenii sunt tot mai mult tentați să adopte un stil de viață bazat pe consumul „verde”, ei devenind practic consumatori „verzi”. În a treia parte este tratat fenomenul de *greenwashing* și implicațiile pe care le are asupra SDGs. Pe scurt, *greenwashing* reprezintă o strategie de dezinformare, de ascundere a unor informații (voită sau nu) în rândul consumatorilor, la care apelează diverse companii în scopul de a crea imaginea unor entități organizaționale preocupate de grija față de mediu și implementarea unor mijloace de producție sustenabile. Acest fenomen poate crea confuzii majore în rândul consumatorilor verzi, orientați spre practici de consum sustenabil. Ei ajung să nu mai realizeze dacă un produs este sau nu este sustenabil, dacă o companie este sau nu este preocupată de promovarea consumului verde, dacă într-adevăr are loc o trecere de la o economie liniară la una circulară. Mai mult decât atât, *greenwashing* poate alimenta creșterea scepticismului pe de o parte în rândul consumatorilor care ajung să nu mai aibă încredere în practicile de consum responsabil, iar pe de altă parte în rândul investitorilor care doresc a susține companii care implementează activități prietenoase cu mediul. Prin urmare, fenomenul de *greenwashing* se dovedește o provocare majoră în calea atingerii țintelor propuse prin SDGs.

Cuvinte cheie: greenwashing, obiective de dezvoltare durabilă, SDG-12, consum sustenabil, consum verde

1. Introduction. From sustainable development to sustainable consumption and production

As we approach the year 2030, discussions about achieving the targets outlined in the United Nations (UN) Sustainable Development Goals (SDGs) are becoming increasingly intense and gaining broader visibility in the public sphere. One of the 17 objectives included in the SDGs focuses on sustainable consumption and production, categorized under Goal 12 of the United Nations Agenda: „Ensure sustainable consumption and production patterns” (<https://sdgs.un.org/goals/goal12>). Before detailing what achieving this goal entails, it is appropriate to briefly revisit how concerns regarding sustainable development have evolved, as well as the practices of sustainable consumption and production.

Sustainable development was defined as early as 1987 by the World Commission on Environment and Development (Brundtland, 1987) as „development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (p. 43).

Seven years later, in 1994, one of the first definitions of sustainable consumption and production was developed during the Oslo Symposium. Sustainable consumption and production are defined as „the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of further generations” (Baker, 1996).

Subsequently, the concept of sustainable consumption and production gained recognition as a major social priority within the Johannesburg Plan of Implementation, adopted in 2002 during the World Summit on Sustainable Development (WSSD). In this context, sustainable consumption and production were identified as one of the three overarching objectives and essential requirements for ensuring sustainable development, alongside poverty eradication and the efficient management of natural resources to foster socio-economic development (Hens & Nath, 2003).

In summary, „sustainable consumption and production” is an umbrella concept that encompasses a range of key issues, including:

- Meeting the needs of consumers and producers;
- Improving people's quality of life;
- Increasing resource-use efficiency;
- Enhancing the use of renewable energy sources;
- Reducing waste.

Thus, the focus is on providing goods and services that meet basic needs while simultaneously reducing negative environmental impacts and health risks. Additionally, attention is directed toward delivering less harmful consumption

patterns by promoting the use of more efficient and less polluting goods and services, without compromising the volumes of goods and services consumed (Oslo Roundtable, 1994).

In this context, the 12th goal included in the United Nations 2030 Agenda for „Sustainable Development” was formulated, which refers to „Ensuring sustainable consumption and production patterns.” Thus, sustainable consumption is viewed as a sectoral component of sustainable development (Rumpala, 2011). This goal, along with the other 16 objectives, is considered a key area in supporting the well-being of both current and future generations. Specifically, the aforementioned Goal 12 was established in response to projections regarding the significant population growth, expected to reach 9.8 billion people by 2050, with implications for access to the natural resources needed to sustain current lifestyles and consumption patterns.

Against this background, the issue of changing consumption habits and sustainably reducing consumption levels arises. Concerns about ensuring sustainability are evident, as we witness a rise in the number of sustainability reports, indicating an increasing awareness that sustainability should be at the core of business practices. As such, the number of sustainability reports has tripled from 2016 to the present day. Additionally, between 2019 and 2022, a total of 485 policies supporting sustainable consumption were developed, according to the UN, across 62 countries from around the world and the member states of the European Union.

Food waste is a sign of overconsumption at the global level. Reducing food waste can be achieved through the implementation of appropriate policies and, more importantly, by allocating funds for investments in new technologies, infrastructure, education, and monitoring. According to United Nations data, 931 million tons of food are wasted annually - which is equivalent to 120 kilograms of food being discarded by each person every year, even though a large number of people face hunger.

Specifically, the UN Agenda 2030 highlights that government authorities can actively engage by developing and implementing policies and regulations that set precise targets for reducing waste generation or promoting the circular economy over the linear economy. The transition to a circular economy involves creating durable, repairable, and recyclable products. Additionally, it focuses on promoting practices such as reusing, refurbishing, and recycling to minimize waste quantities and prevent the depletion of resources. From the consumer's perspective, individuals can adopt sustainable lifestyles, which involve reducing consumption, selecting products with a low environmental impact, and reducing their carbon footprint in daily activities.

The business sector can also make a significant contribution through investments in innovation and by identifying solutions that inspire consumers to adopt sustainable lifestyles, ultimately leading to an improvement in well-being.

At the same time, consumers can contribute to achieving Goal 12 of the UN Agenda by reducing the amount of waste generated, as well as by becoming aware that there are sustainable alternatives for the goods, products, and services

they consume. Through simple actions such as using reusable bags, using containers made from recycled plastic, making informed purchases, and buying products from local and sustainable sources, even an ordinary person can make a difference, exerting pressure on the business sector to implement sustainable production practices.

2. Research on Responsible and Sustainable Consumption Behaviour. Transition to Green Consumerism in the Context of SDG-12

Scientific concerns regarding the analysis of responsible and sustainable consumption behaviours in the context of sustainable development have become increasingly evident, as a rapidly expanding body of literature has emerged in recent decades. Moreover, research and efforts to define concepts in this field have a history spanning more than half a century, arising in response to environmental degradation and the depletion of natural resources.

Two pioneers in the study of sustainable and responsible consumption behaviours were John H. Antil and Peter D. Bennet (1979), who, in the late 1970s, developed a definition of „socially responsible consumption” building on a similar definition proposed by Henion & Wilson (1976). Socially responsible consumption refers to consumption behaviours and purchasing decisions associated with environmental and resource-related issues, driven not only by the desire to meet personal needs but also by a concern for enhancing societal well-being at a broader level. Antil & Bennet (1979) also referred to other contributions in their work, indicating a growing interest in this field: *responsible consumption* (Fisk, 1973), *socially conscious consumer* (Anderson & Cunningham, 1972), and *ecologically concerned consumer* (Henion & Wilson, 1976).

More recently, Quoquab et al. (2019) proposed an operationalization of „sustainable consumption behaviour” divided into three dimensions focused on: quality of life, concern for environmental well-being, and care for future generations. According to the authors mentioned above, sustainable consumption behaviour refers to the ways individuals purchase, use, and dispose of goods and services, considering social and environmental aspects. By adopting such a model of consumption behaviour, which emphasizes the efficient use of goods and services, individuals demonstrate increased attention to improving quality of life, show concern for environmental issues, and address the personal needs of future generations.

In summary, Quoquab et al. (2019) emphasize that *quality of life* is associated with a wise and mindful consumption model that involves the efficient use of goods and services to increase resource efficiency while meeting the basic needs of individuals. This includes reducing overconsumption associated with excessive purchases. Concern for „*environmental well-being*” involves considering the effects of overconsumption on the environment by minimizing the use of toxic materials and reducing waste and pollutant emissions throughout a product's lifecycle. *Care for future generations* can be expressed by avoiding the excessive use

of natural resources, ensuring that these generations retain the means to meet their personal needs.

Consumers' attention to sustainable products is increasingly evident in contemporary society. A large-scale global study conducted by Nielsen (2018) revealed that 81% of respondents place high importance on companies implementing activities and programs to support environmental protection. Additionally, 73% acknowledged that they could adopt responsible consumption behaviours to reduce their environmental impact (e.g., purchasing organic products, goods labelled „grass-fed” or „free-range,” or clean-label products in the beauty sector). These shifts are also becoming increasingly visible in the advertising messages of major companies. For instance, the Nielsen Global Report (2023) shows that, between the beginning of 2022 and May 2023, over 18,000 sustainability-focused advertising campaigns were launched in Germany. These campaigns emphasized promoting sustainable technologies and innovations in production cycles, creating an emotional connection with consumers by addressing environmental concerns, and highlighting corporate efforts to genuinely support the circular economy. Practices such as reuse, recycling, and repairing purchased products were actively promoted among consumers.

Another report, titled Sustainable Market Share Index™ (Kronthal-Sacco & Whelan, 2024), highlights that products marketed as sustainable hold an 18.5% market share, a figure that has been steadily increasing since 2013. For instance, the growth recorded between 2015 and 2023 was 4.8%. The largest contribution to the rise in sales of sustainably marketed products comes from individuals with high incomes, higher education, urban backgrounds, and primarily from the millennial generation. However, a significant contribution is also observed among middle-income individuals from Generation X and Baby Boomers. This trend reflects the emergence of a niche of consumers referred to as „green consumers” who prefer products or services that minimize environmental harm and support social justice. These consumers are contrasted with „grey consumers” described as „consumers who generally do not have green values or lifestyles” (Young et al., 2010, p. 21).

In the context of debates surrounding the SDGs, increasing the number of individuals adopting sustainable consumption patterns, or green consumption, proves to be a challenging target, as the literature extensively addresses the *green gap* – the discrepancy between intention and action. Studies indicate that a favourable attitude toward sustainable products does not necessarily translate into corresponding purchasing behaviours (Gleim & Lawson, 2014; ElHaffar et al., 2020; Kim et al., 2016). Thus, while the share of people expressing positive attitudes toward consuming such goods and services is rising, this does not necessarily correlate with an increase in the volumes of sustainable products and services purchased. Decision-making in buying processes is complex, involving internal factors such as personal motivations, which complicate a deeper understanding of the specifics of this process. Moreover, researchers have found that ethical purchasing principles are often secondary, overshadowed by other factors that significantly influence purchasing decisions, such as prices, promotions, lifestyle,

and perceptions of product quality. The green gap can also be explained by the fact that individuals tend to choose products based on their benefits, purchasing them to meet specific needs or for immediate personal interest.

In conclusion, such research and analyses contribute to the perception that society is genuinely and concretely concerned with achieving the targets set by the SDGs. However, this raises the question: are there specific challenges to meeting Goal 12 of the Agenda? The answer is undoubtedly yes. These challenges include obvious ones, such as the *green gap*, and more subtle ones, such as the phenomenon of greenwashing, which will be addressed in the next part of this article.

3. The Phenomenon of Greenwashing and Its Impact on SDG-12

As highlighted in the previous section of this paper, in recent years, consumers have become increasingly concerned about the environmental issues caused by excessive consumption, leading to the emergence of so-called *green consumerism*. This specific type of consumption is closely tied to the attention people pay to environmental problems, paving the way for *ecological marketing*, which focuses on whether products are genuinely environmentally friendly (Zhu & Sarkis, 2016). At the same time, organizations have taken note of consumers' needs, desires, and expectations, entering this market through various practices designed to attract this growing niche of environmentally conscious customers.

A significant challenge for green consumerism is posed by the phenomenon of *greenwashing*. As noted by de Freitas Netto et al. (2019), the term *greenwashing* is closely linked to the work of environmental activist Jay Westerveld, who observed in 1986 that the hotel industry promoted the practice of reusing towels under the pretext of environmental conservation. However, Westerveld pointed out that such policies stood in stark contrast to other practices in the hotel industry, which were far from environmentally friendly and were considered harmful. Moreover, the promotion of the „reuse” idea was actually driven by an attempt to reduce housekeeping costs rather than a genuine commitment to sustainability. Since then, the body of research and analysis surrounding *greenwashing* has grown significantly (Dahl, 2010), resulting in numerous and varied definitions related to this phenomenon.

Next, I will present the most commonly cited definitions related to *greenwashing*. According to the Oxford English Dictionary (2023), *greenwashing* refers to „the creation or propagation of an unfounded or misleading environmentalist image.” The Cambridge Dictionary (n.d.) defines *greenwashing* as „a behaviour or activities that make people believe that a company is doing more to protect the environment than it is,” while Merriam-Webster (n.d.) states that it is „behaviour or activities that make people believe that a company is doing more to protect the environment than it really is.” Additionally, another frequently mentioned definition in the literature is that of TerraChoice (acquired by UL), which describes *greenwashing* as „the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product

or service” (UL, n.d.). Also, according to another definition, „greenwashing is a co-creation of an external accusation toward an organization with regard to presenting a misleading green message.” (Seele & Gatti, 2015).

Thus, we are talking about an emerging concept that has been increasingly addressed in the academic literature and has sparked interest even from the United Nations (n.d.), which highlights that the phenomenon presents numerous obstacles in achieving the SDGs and combating the crisis caused by climate change and environmental issues.

According to Jakubczak & Gotowska (2020), consumers are directly exposed in their daily lives to a variety of „greenwashing” practices, including:

- **Promoting marketing messages claiming that an organization implements environmentally friendly measures**, while other activities contradict the mission they claim to support. For example, a sector heavily exposed to greenwashing is the fashion industry. A recent report highlights that 60% of sustainable practices promoted by major European players in this market are actually „unsubstantiated” and „misleading” (Arthur, 2023), which can create confusion among consumers about what is truly sustainable and what is not.
- **Delivering information about environmentally friendly practices** that lack scientific support or are based on fabricated data to demonstrate their beneficial environmental effects to the public.
- **Using abstract concepts** that could be interpreted as being correlated with environmental care but lack substantial backing or clear explanation.
- **Using „invented” or untrustworthy labels** (e.g., the eco-friendly label) to present products or services as environmentally safe, without meeting actual environmental criteria.
- **Using graphic images, colours** (such as green), symbols, or photographs that mislead consumers into thinking they are opting for environmentally friendly products, goods, or services when they are actually not.

These tactics can significantly undermine genuine efforts toward sustainability by creating confusion, eroding consumer trust, and making it harder for individuals to make informed, responsible choices.

Some companies, in order to maximize profits, resort to various greenwashing strategies (selective disclosure, attention deflection, deceptive manipulation, dubious authorizations and labels, etc.) in order to maintain the appearance that their production practices are environmentally friendly (Yang et al., 2020).

All these aspects can cause major confusion among consumers who claim to adopt „green consumption” through their personal purchasing decisions. In such a context, attitudes and beliefs associated with green consumption may suffer as there is no deep understanding of what constitutes a green good, product, or service. Therefore, consumer choices may ultimately prove to be superficial, influenced more by a preference for a certain brand (Braga et al., 2019).

One of the SDGs targets most profoundly affected by the phenomenon of „greenwashing” is 12.6: „Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle” (UN, 2024). Thus, even though companies are encouraged to implement sustainable practices and report their true environmental impact, „greenwashing” leads to the promotion of distorted or falsified information that misleads consumers about how environmental policies are supported. Ultimately, individuals wishing to adopt green consumption find themselves unable to distinguish concretely between sustainable and unsustainable corporate practices.

4. Conclusions

The phenomenon of *greenwashing* is widespread and merely creates an illusion in the consumer's mind, who deceives themselves into believing they are responsible and oriented toward consuming green/sustainable goods, products, and services. Even though the consumer's actions may reflect a declared, genuine care for the environment, they can be trapped by the deceptive practices of large organizations that profit from the recent discussions surrounding sustainable consumption and production practices. Therefore, education focused on adopting sustainable consumption practices must be increasingly developed to combat greenwashing. Consumers need adequate information to identify the signs of greenwashing to form an accurate understanding of the production methods involved in various markets. For instance, a noteworthy initiative is the introduction of a *greenwashing index* (e.g. <https://www.greenwashingindex.com>), which aims to inform end consumers about which organizational practices are genuinely sustainable and which are hidden behind greenwashing tactics. In addition, there are guides addressed both to the public and to companies, designed to help understand and prevent greenwashing (Horiuchi et al., 2009).

Moreover, *greenwashing* practices lead to an increase in consumer reluctance toward sustainable consumption, fostering a critical attitude toward „green consumerism.” At the macro level, investor confidence, especially among those directing capital toward supporting sustainable consumption and production practices, can be significantly eroded due to greenwashing practices (Pizzetti et al., 2019). As a result, we may witness a deepening of the gap between environmental attitudes and actual consumer behaviours, which could negatively impact the achievement of the objectives outlined in the SDGs.

As future research directions, it is recommended to explore this topic through studies examining how people relate to the phenomenon of greenwashing: to what extent are they aware of it and how exposed do they feel to it? How much attention do they pay to the production practices of goods, products, and services provided by suppliers? What is the real distance between the intention to adopt green consumption behaviours and the actual action, given the existence of greenwashing? On the other hand, another target group for such studies could be companies that claim to use sustainable production methods. In this context,

research could investigate the extent to which they truly adopt sustainable production methods that support green consumption and meet the needs of this consumer niche.

In conclusion, it remains to be seen through systematic analyses how the phenomenon of greenwashing has affected the achievement of the targets set in the SDGs.

References

1. Anderson Jr, W. T., & Cunningham, W. H. (1972). The socially conscious consumer. *Journal of Marketing*, 36(3), 23-31. <https://doi.org/10.1177/002224297203600305>
2. Antil, J. H., & Bennett, P. D. (1979). Construction and validation of a scale to measure socially responsible consumption behavior. *The conserver society*, 51, 51-68.
3. Arthur, R. (2023). The sustainable fashion Communication playbook. *UNEP and UNFCCC*, <https://doi.org/10.59117/20.500>
4. Baker, S. (1996). Sustainable development and consumption: The ambiguities-the Oslo ministerial roundtable conference on sustainable production and consumption, Oslo, 6–10 February 1995. <https://doi.org/10.1080/09644019608414249>
5. Braga, S., Martínez, M. P., Correa, C. M., Moura-Leite, R. C., & Da Silva, D. (2019). Greenwashing effect, attitudes, and beliefs in green consumption. *RAUSP Management Journal*, 54(2), 226-241. <https://doi.org/10.1108/RAUSP-08-2018-0070>
6. Brundtland, G. H. (1987). Our common future—Call for action. *Environmental conservation*, 14(4), 291-294. <https://doi.org/10.1017/S0376892900016805>
7. Cambridge Dictionary (n.d.). *Greenwashing*. Retrieved October 15, 2024, from <https://dictionary.cambridge.org/dictionary/english/greenwashing>
8. Dahl, R. (2010). Greenwashing: do you know what you're buying? *Environmental Health Perspectives*, 118(6), 246-252. <https://doi.org/10.1289/ehp.118-a246>
9. ElHaffar, G., Durif, F., & Dubé, L. (2020). Towards closing the attitude-intention-behavior gap in green consumption: A narrative review of the literature and an overview of future research directions. *Journal of cleaner production*, 275, 122556. <https://doi.org/10.1016/j.jclepro.2020.122556>
10. Fisk, G. (1973). Criteria for a theory of responsible consumption. *Journal of Marketing*, 37(2), 24-31. <https://doi.org/10.1177/002224297303700206>
11. Jakubczak, A., & Gotowska, M. (2020). Green consumerism vs. greenwashing. *European Research Studies*, 23(4), 1098-1112.
12. de Freitas Netto, S. V., Sobral, M. F. F., Ribeiro, A. R. B., & Soares, G. R. D. L. (2020). Concepts and forms of greenwashing: A systematic review. *Environmental Sciences Europe*, 32, 1-12. <https://doi.org/10.1186/s12302-020-0300-3>
13. Gleim, M., & J. Lawson, S. (2014). Spanning the gap: An examination of the factors leading to the green gap. *Journal of Consumer Marketing*, 31(6/7), 503-514. <https://doi.org/10.1108/JCM-05-2014-0988>
14. Henion, K. E., & Wilson, W. H. (1976). The ecologically concerned consumer and locus of control. *Ecological marketing*, 11, 131-144.
15. Hens, L., & Nath, B. (2003). The Johannesburg Conference. *Environment, Development and Sustainability*, 5, 7-39. <https://doi.org/10.1023/A:1025303511864>

16. Horiuchi, R., Schuchard, R., Shea, L., & Townsend, S. (2009). Understanding and preventing greenwash: A business guide. *London: Futerra Sustainability Communications*, 1-39.
17. Kim, Y., Oh, S., Yoon, S., & Shin, H. H. (2016). Closing the green gap: The impact of environmental commitment and advertising believability. *Social Behavior and Personality: an international journal*, 44(2), 339-351. <https://doi.org/10.2224/sbp.2016.44.2.339>
18. Kronthal-Sacco, R., & Whelan, T. (2024). *Sustainable market share index*. Center for Sustainable Business. New York University Stern. <https://www.stern.nyu.edu/sites/default/files/2024-05/2024%20CSB%20Report%20for%20website.pdf>
19. Merriam-Webster. (n.d.). Greenwash. In *Merriam-Webster.com dictionary*. Retrieved November 2, 2024, from <https://www.merriam-webster.com/dictionary/greenwash>
20. Nielsen (2018). *The Database: What Sustainability Means Today*. Retrieved October 10, 2024 from <https://www.nielsen.com/insights/2018/what-sustainability-means-today/>
21. Nielsen (2023). Nielsen study reveals: Sustainability-themed advertising is here to stay. Retrieved October 15, 2024, from <https://www.nielsen.com/news-center/2023/nielsen-study-reveals-sustainability-themed-advertising-is-here-to-stay/>
22. Oxford English Dictionary, s.v. „greenwashing (n.)” Retrieved October 15, 2024, from <https://doi.org/10.1093/OED/3883558326>.
23. Pizzetti, M., Gatti, L., & Seele, P. (2021). Firms talk, suppliers walk: Analyzing the locus of greenwashing in the blame game and introducing ‘vicarious greenwashing’. *Journal of business ethics*, 170(1), 21-38. <https://doi.org/10.1007/s10551-019-04406-2>
24. Quoquab, F., Mohammad, J., & Sukari, N. N. (2019). A multiple-item scale for measuring „sustainable consumption behaviour” construct: Development and psychometric evaluation. *Asia Pacific Journal of Marketing and Logistics*, 31(4), 791-816. <https://doi.org/10.1108/APJML-02-2018-0047>
25. Roundtable, O. M. (1994). Oslo roundtable on sustainable production and consumption. *Ministry of the Environment: Oslo, Norway*.
26. Rumpala, Y. (2011). „Sustainable consumption” as a new phase in a governmentalization of consumption. *Theory and Society*, 40, 669-699. <https://doi.org/10.1007/s11186-011-9153-5>
27. 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>
28. UL (n.d.). *Sins of Greenwashing*. Retrieved October 20, 2024, from <https://www.ul.com/insights/sins-greenwashing>
29. United Nations (n.d.). *Greenwashing – the deceptive tactics behind environmental claims*. Retrieved October 21, 2024, from <https://www.un.org/en/climatechange/science/climate-issues/greenwashing>
30. United Nations (2024). *Ensure sustainable consumption and production patterns*. Retrieved October 22, 2024, from https://sdgs.un.org/goals/goal12#targets_and_indicators
31. Yang, Z., Nguyen, T. T. H., Nguyen, H. N., Nguyen, T. T. N., & Cao, T. T. (2020). Greenwashing behaviours: Causes, taxonomy and consequences based on a

- systematic literature review. *Journal of business economics and management*, 21(5), 1486-1507. <https://doi.org/10.3846/jbem.2020.13225>
32. Young, W., Hwang, K., McDonald, S., & Oates, C. J. (2010). Sustainable consumption: green consumer behaviour when purchasing products. *Sustainable development*, 18(1), 20-31. <https://doi.org/10.1002/sd.394>
 33. Zhu, Q., & Sarkis, J. (2016). Green marketing and consumerism as social change in China: Analyzing the literature. *International Journal of Production Economics*, 181, 289-302. <https://doi.org/10.1016/j.ijpe.2016.06.006>
 34. <https://www.greenwashingindex.com>
 35. <https://www.un.org/sustainabledevelopment/sustainable-consumption-production/>
 36. <https://sdgs.un.org/goals/goal12>