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Representations of Environmental Sustainability in Corporate Branding: An Analysis of Environmental Claims

Marketing

Master's thesis

Author:

Saana Portimojärvi

Supervisor:

Associate professor Kati Suomi

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Abstract

Environmental sustainability has become an increasingly important aspect of corporate communication, yet how environmental claims function in corporate branding remains unclear. This master's thesis examines how environmental claims are used in corporate branding to articulate corporate identities associated with environmental sustainability, with the analysis focusing on corporate websites of five Finnish listed companies in the Industrial Goods and Services sector. The study was conducted through a primarily deductive qualitative content analysis, drawing on the distinction between substantive and associative environmental claims and using signalling and legitimacy theories as interpretive lenses for assessing the communicative functions of the claims.

The results indicate an associative-reliant use of environmental claims in corporate branding, with associative claims predominating at an overall ratio of 2:1 to substantive claims. These claims were found to serve primarily legitimacy functions, framing organizations as active contributors to environmental sustainability through aspirational language and symbolic associations. Substantive claims were found to be largely substantiated through disclosed organizational actions, confirming their function as credible signals consistent with signalling theory. Five recurring identity themes using distinct combinations of substantive and associative claims were identified. These identity themes function simultaneously, first presenting the organization as an active participant in environmental sustainability through associative-dominant themes and then grounding the corporate identity in substantiated organizational actions through substantive-dominant themes.

For marketing literature, these findings extend the pattern of associative claim dominance to organization-level corporate branding in the Industrial Goods and Services sector. The study challenges the tendency to treat associative and substantive claims as separate categories, presenting how some claims might hold characteristics of both simultaneously. Identifying patterns of identity construction, the results indicate strategic and complementary use of both associative and substantive environmental claims in the construction of corporate identities associated with environmental sustainability.

Keywords: corporate branding, environmental claims, environmental sustainability, corporate identity, sustainability communication, signalling theory, legitimacy theory

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Tiivistelmä

Ympäristövastuullisuuden kasvavasta merkityksestä huolimatta ympäristöväittämien ymmärtäminen yritysbrändäyksen kontekstissa on puutteellista. Tämä Pro gradu -tutkielma tarkastelee ympäristöväittämien käyttöä yritysbrändäyksessä ja ympäristövastuullisten yritysidentiteettien viestinnässä. Tutkimus tarkastelee viiden suomalaisen pörssilistatun teollisuustuotteet ja -palvelut -alan yhtiön verkkosivujen kautta tapahtuvaa yritysbrändäystä. Tutkimus toteutettiin deduktiivisena laadullisena sisältöanalyysinä, joka pohjautui substantiivisten ja assosiatiivisten ympäristöväittämien erotteluun, käyttäen signaalointi- ja legitimeettiteorioita tutkinnallisina linseinä.

Tutkimuksen tulokset osoittavat, että ympäristöväittämien käyttö painottuu assosiatiivisiin väittämiin, joiden suhde oli 2:1 substantiivisiin väittämiin verrattuna. Assosiatiiviset ympäristöväittämät toimivat pääasiassa organisaation legitimeetin vahvistamisessa, esitellen organisaation aktiivisena toimijana ympäristövastuullisuuden saralla. Substantiiviset väittämät ovat puolestaan suurelta osin linjassa julkistettujen organisaatioiden toimien kanssa, vahvistaen niiden tehtävää signaalointiteorian mukaisina vahvoina signaaleina. Tutkimuksessa ilmeni viisi toistuvaa identiteettiin viittaavaa teemaa, jotka muodostuivat erilaisten substantiivisten ja assosiatiivisten väittämien yhdistelmien kautta. Nämä teemat toimivat yhdessä, esitellen yrityksen ensin aktiivisena toimijana ympäristövastuullisuuden saralla assosiatiivista viestintää painottavien teemojen kautta, ja sitten todentaen tätä muodostettua kuvaa signaalointia painottavien substantiivisten teemojen avulla.

Markkinoinnin tieteessä nämä tulokset laajentavat jo tunnistettua assosiatiivista painopistettä ympäristöväittämissä organisaatioiden laajuiseen yritysbrändäykseen teollisuustuotteet ja -palvelut -alalla. Tutkielma haastaa assosiatiivisten ja substantiivisten ympäristöväittämien käsittelyä erillisinä luokkina, osoittaen kuinka toisinaan ympäristöväittämät muodostuvat sekä assosiatiivisista että substantiivisista elementeistä. Tunnistamalla viestinnällisiä identiteettiä viittaavia teemoja, tulokset viittaavat suunnitelmalliseen ja toinen toistaan täydentävään ympäristöväitteiden käyttöön kommunikoitujen yritysidentiteettien rakentamisessa.

Avainsanat: yritysbrändäys, ympäristöväittämät, ympäristökestävyys, yritysidentiteetti, vastuullisuusviestintä, signaaliteoria, legitimeettiteoria

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1 Introduction

1.1 Background

As the Earth is warming faster than at any point in recorded history (United Nations 2025), environmental sustainability has become an increasingly important concern for societies, organizations, and stakeholders (Borges et al. 2023). Tightening regulation and growing stakeholder expectations have intensified pressure on organizations to address their environmental impacts and communicate sustainability-related commitments (Borges et al. 2023; Kim et al. 2024). Consequently, environmental sustainability has become not only an operational and strategic issue, but also a significant aspect of corporate communication and branding.

Stakeholder expectations toward organizations have extended beyond purely economic performance (Abratt & Kleyn 2023). In this context, environmental sustainability may function as a deeper organizational commitment, reflecting efforts to mitigate the negative impacts of human activity on ecosystems (Borges et al. 2023). As environmental sustainability becomes integrated into organizational values, strategies, and culture, organizations may seek to communicate these efforts in response to stakeholder pressure. Corporate branding offers a means for communicating these commitments in environmental sustainability (Biraghi & Gambetti 2015; Balmer 2012; Foroudi et al. 2022).

Corporate branding differs from product-level branding in that the organization itself is central to the brand (Aaker 2004; Balmer 2012). Rather than focusing solely on products or services, corporate branding communicates organizational values, purpose, and strategic positioning to stakeholders. Through such communication, organizations can articulate distinct corporate identities (Balmer 2012; Biraghi & Gambetti 2015). Given the emphasis on organizational values and strategic purpose, organizations may also seek to articulate their commitments, such as environmental sustainability, as part of their corporate identity (Foroudi et al. 2022; Koch & Gyrd-Jones 2019). Therefore, corporate branding provides an important context for examining how organizations communicate their environment-related values. This communication can be delivered through environmental claims, which are verbal or visual communication elements that directly or indirectly present the organization as connected to environmental sustainability (Lyon & Montgomery 2015; Seelig et al. 2021).

Environmental claims have been widely studied in the contexts of green advertising, product marketing, and stakeholder perceptions (Banerjee et al. 1995; Ganz & Grimes 2018; Seelig et al. 2021). Previous literature has also distinguished between substantive and associative environmental claims. Substantive claims are generally characterized by specificity, measurability, and clear links

to organizational actions or performance, whereas associative claims tend to be more symbolic, abstract, and image-oriented. (Carlson et al. 1993; Seelig et al. 2021; Wang et al. 2022) This distinction is particularly relevant in the context of corporate branding, as environmental claims may vary considerably in the extent to which they are substantiated through concrete organizational practices, actions, and performance.

Despite the established literature on environmental claims in advertising and product-level contexts (Banerjee et al. 1995; Xue & Muralidharan 2015), less attention has been paid to how environmental claims are used in corporate branding (Persakis et al. 2025). This represents an important gap, as sustainability communication has increasingly extended beyond product-specific environmental attributes toward broader organizational values, corporate sustainability, and identity construction (Balmer 2012; Foroudi et al. 2022). While scholars have recognized corporate branding as an important channel for sustainability communication, less is known about how environmental claims are used in corporate branding to articulate environmentally sustainable corporate identities (Jayanti 2017; Ll  cer-Falc  n et al. 2026). Therefore, examining environmental claims in corporate branding advances the understanding of how organizations communicate environmental sustainability at the organizational level.

In the light of the proposed EU Green Claims Directive (European Union 2024), examining environmental claims in corporate branding is timely also from a regulatory standpoint. While the proposed directive is primarily concerned with factually incorrect claims (European Union 2024), it signals a broader societal expectation of transparency and reliability in organizational communication, consistent with studies demonstrating how inconsistencies between environmental communications and actual performance affect stakeholder perceptions and trust (Torelli et al. 2020; Janik & Ryszko 2025). Thus, understanding the role of environmental claims in corporate branding and articulation of corporate identities is relevant not only for marketing research, but also for organizations, stakeholders, and society.

1.2 Purpose and research questions

The purpose of this thesis is to examine how environmental claims are used in corporate branding to communicate corporate identities related to environmental sustainability. The study focuses on corporate websites of Finnish listed companies operating in the Industrial Goods and Services sector. Aligned with the intended scope of the proposed EU Green Claims Directive (European Union 2024), this study assesses the level of substantiation of environmental claims by analysing their content in relation to disclosed organizational actions in sustainability reports and other organizational

disclosures. To further address societal and stakeholders' concerns, as well as concerns raised in marketing literature, this study incorporates the more abstract and less measurable associative environmental claims. The distinction between substantive and associative environmental claims is well recognized by scholars (e.g. Carlson et al. 1993; Yu et al. 2013), aligning this study with the current understanding of environmental claims in marketing and branding literature. This inclusion extends the scope beyond solely examining the alignment between environmental claims and organizational disclosures toward understanding how environmental claims are used in corporate branding to articulate corporate identities associated with environmental sustainability. To understand the use of environmental claims, the analysis draws on signalling and legitimacy theory. From a signalling perspective, environmental claims may function as signals to reduce information asymmetry. Legitimacy theory, in turn, explains how organizations may use environmental communication to align with societal expectations. (Spence 1973, Suchman 1995)

This study addresses current gaps in marketing literature. Through addressing the limited conceptualization of environmental claims in communicating sustainable corporate identities through corporate branding (Jayanti 2017; Llácer-Falcón et al. 2026; Persakis et al. 2025), this study advances the understanding of how substantive and associative claims are used in corporate branding to communicate identities associated with environmental sustainability.

As the study focuses merely on environmental claims in corporate branding, the study does not assess the objective environmental performance of organizations or determine whether environmental claims are ultimately true or false. Rather, the analysis examines whether claims are communicated in a substantive or associative manner and, in the case of substantive claims, the extent to which they are supported by disclosed organizational actions.

The main research question is:

- How are environmental claims used in corporate branding to articulate corporate identities associated with environmental sustainability?

This will be answered through the following sub-questions:

1. What types of substantive and associative environmental claims are communicated on corporate websites?
2. To what extent are environmental claims in corporate branding substantiated through disclosed organizational actions?

3. How do these claims contribute to the articulation of environmentally sustainable corporate identities on corporate websites?

1.3 Key concepts

The focus of this study is environmental sustainability and corporate branding. The theoretical framework is built on corporate branding and sustainability communication literature, with an emphasis on environmental claims, and the communicated corporate identity. Accordingly, main concepts in this study are corporate branding, corporate identity, environmental sustainability, environmental claims, substantive environmental claims, and associative environmental claims.

Corporate branding (CB) refers to the process through which organizations communicate their corporate identity to stakeholders through visual and verbal forms of communication. In corporate branding, the organization itself is central to the brand, presenting the firm as a distinguishable and unique identity standing behind its offerings. (Balmer 2012; Biraghi & Gambetti 2015) Through corporate branding, organizations communicate their values, purpose, positioning, and identity to stakeholders. Beyond purposes related to marketing, it may also serve strategic functions, including communication of broader organizational commitments such as environmental sustainability. (Abratt & Kleyn 2012; Balmer 2012; Biraghi & Gambetti 2015)

Corporate identity can be understood as the distinguishable and unique expression of an organization's values, purpose, and positioning communicated to stakeholders through corporate branding (Biraghi & Gambetti 2015; Koch & Gyrd-Jones 2019; Foroudi et al. 2022).

Environmental claims are verbal and visual communication elements that directly or indirectly associate an organization and its corporate identity with environmental sustainability (Lyon & Montgomery 2015; Seelig et al. 2021). These claims may appear as statements, symbols, imagery, certifications, or other indicators of environmental sustainability-related aspects of an organization (The International Organization for Standardization 2016; Lyon & Montgomery 2015).

Substantive environmental claims are objective and measurable environmental claims grounded in organizational actions and environmental performance (Wang et al. 2022). They are objective in nature, and communicate concrete information related to an organization's environmental behaviour. Substantive claims are supported by evidence such as data, targets, certifications, real imagery, or other disclosed organizational actions. They may be used to alleviate negative perceptions among stakeholders, connecting the environmental claims to disclosed organizational actions. This objective

evidence can be communicated through data, real pictures, and for example eco-labels. (Seelig et al. 2021; Wang et al. 2022)

Associative environmental claims are abstract and less measurable environmental claims that communicate environmental sustainability through symbolic and image-oriented associations. Compared to substantive claims, associative claims tend to rely on broader and more generalized statements regarding environmental sustainability and are less directly connected to disclosed organizational actions and environmental performance. Features of associative claims include the use of broad statements, and less definitive language with weaker factual grounding. (Wang et al. 2022; Schmuck et al. 2018)

1.4 Structure of this research

This thesis consists of six main chapters. The first chapter introduces the background, research gap, purpose, and research question of the study. The second chapter develops the theoretical framework, by discussing corporate branding, sustainability communication, and environmental claims. It examines environmental claims through the perspectives of legitimacy and signalling theory and explores how they are used in corporate branding to articulate corporate identities associated with environmental sustainability.

The third chapter outlines the methodology of this study, introducing its philosophical foundations and research strategy, and explains the process of data collection and analysis. Furthermore, it addresses the limitations and evaluates the trustworthiness of this study. As the study is conducted as a content analysis of environmental claims on corporate websites, the data consists of publicly available materials and disclosures.

The fourth chapter presents the empirical findings of the content analysis, including the distribution and types of environmental claims, their level of substantiation, and the environmental identity themes communicated through corporate branding. The fifth chapter discusses and interprets these findings in relation to the theoretical framework presented in Chapter 2. Finally, the sixth chapter presents the conclusions, managerial implications, and suggestions for future research.

2 Environmental claims in corporate branding

2.1 Defining corporate branding

Over the past decades, corporate branding (CB) has received increasing attention in marketing literature. Although there is no clear consensus on what constitutes a corporate brand, scholars generally agree that in corporate branding, the organization itself is a central part of the brand (Argenti & Druckemiller 2004; Aaker 2004; Balmer 2012; Koch & Gyrð-Jones 2019). In this sense, corporate branding can be understood as a pathway for delivering an organization's identity to its stakeholders.

The literature presents various definitions of the corporate brand and corporate branding. Knox and Bickerton (2003) propose that a corporate brand is the visual, verbal, and behavioural expression of an organization's business model. According to Argenti and Druckemiller (2004), a company engages in corporate branding when it markets itself as a brand. Aaker (2004) argues that the corporate brand defines the organization that delivers and stands behind its offerings. Building on Aaker's (2004) and Argenti and Druckemiller's (2004) definitions, Biraghi and Gambetti (2015) conclude that corporate branding defines the organization's standing behind its offerings and presents that organization as a distinctive identity. Whereas Knox and Bickerton (2003) emphasize the expression of an organization's business model, Melewar and Saunders (2000) highlight the role of corporate branding in communicating the organization's goals, ethos, and culture to its stakeholders. Melewar and Saunders (2000) also recognize corporate branding as a pathway not only for expressing an organization's business model, but also for communicating the organization's corporate identity. These definitions suggest that a corporate brand can be understood as the organization-level expression of a firm's business model, identity, and distinctiveness from competitors, and corporate branding as the process through which these elements are communicated to stakeholders. This indicates that corporate branding extends beyond symbolic communication, functioning as mechanism through which organizations actively construct and project their identity to stakeholders.

As corporate branding defines the firm standing behind its offerings, the organization as an entity is central to the essence of a corporate brand (Aaker 2004). This organizational focus distinguishes a corporate brand from product brands both in the way they are understood and managed (Koch & Gyrð-Jones 2019). Balmer (2012) suggests that compared to customer-focused product brands, corporate brands often address multiple stakeholders in addition to customers. This broader target group, encompassing various stakeholders influences the approach to branding. Further exploring this difference, Koch and Gyrð-Jones (2019) argue that besides addressing a variety of stakeholders, corporate branding also involves a variety of internal actors within the organization. While product

brands are seen solely as the responsibility of the marketing department, corporate brands tend to concern the whole organization. Thus, corporate branding concerns a wider range of actors both inside and outside the organization. This further points to the role of corporate branding as means for communicating the firm's values, goals, and culture (Melewar & Saunders 2000).

Additionally, corporate branding has strategic relevance. Biraghi and Gambetti (2015) suggest that corporate branding can create value by strengthening positive associations with the company. Beyond the positive associations, successful corporate branding can improve the organization's ability to meet their strategic objectives, including fulfilment of the firm's purpose and creation of shareholder value (Balmer 2012). Therefore, corporate branding can be beneficial for organizations both from a brand recognition and strategic perspective. This suggests that corporate branding functions as a strategic means through which organizations communicate their values and shape stakeholder perceptions regarding their corporate identity.

Corporate branding presents a company as a distinguishable and unique identity (Koch & Gyrd-Jones 2019; Foroudi et al. 2022). This identity can be understood as the articulated expression of an organization's values, purpose, and distinctiveness, that is communicated to stakeholders (Biraghi & Gambetti 2015). This study approaches corporate identity as such expressions, communicated through corporate branding. When organizations present environmental sustainability as a central organizational value, environmental sustainability may well become integrated into the communicated corporate identity. Corporate branding can therefore communicate identities relating an organization with environmental sustainability-related values.

2.1.1 Corporate brand communication

Communication can be understood as transmission of information, ideas, or emotions from a sender to a receiver through verbal and non-verbal methods. (Borges et al. 2023) In corporate branding, communication conveys an organization's identity to its stakeholders. As corporate branding is concerned with what makes a company distinguishable, it seeks to create differentiation and recognizability. (Abratt & Kleyn 2012) Organizations can use various mechanisms including visual and verbal elements like slogans, symbolic imagery, and narratives to deliver the organization's identity to its stakeholders. Together, these elements of expression contribute to how organizations position themselves. (García García et al. 2017; Borges et al. 2023) Hence, corporate branding functions as a way for articulating a desired image of corporate identity.

Since the organization is considered an essential part of the corporate brand, the communication is shaped by the organizational identity, culture, and corporate strategy (Aaker 2004; Balmer 2012).

Therefore, a deeper purpose and commitment such as environmental sustainability can be embedded into corporate branding and the corporate identity it communicates (Foroudi et al. 2022; Koch & Gyrð-Jones 2019). This deeper commitment to environmental sustainability can be communicated, for example, through strategic language choices and environmental sustainability narratives (Morsing 2006).

Organizations can use different stationaries, including the organization's website, to communicate its corporate identity to its stakeholders. (Martinez-Sanchez et al. 2025) Corporate websites are important instruments for communication between an organization and its stakeholders. Websites can be used strategically to place information and communicate the organization's values and other relevant messages. (García García et al. 2017) Functioning as powerful tools for both verbal and visual communication, websites ensure immediacy and on-demand access for the organizations (Kassinis & Panayiotou 2018).

Verbal communication

Verbal expression of a corporate brand can be delivered through language choices, slogans, and narratives (Morsing 2006; Biraghi & Gambetti 2015). Language functions as a strategic tool, enabling organizations to communicate desired identities and meanings to stakeholders. Through the strategic and consistent use of language, organizations can ensure alignment between their verbal expression and broader branding objectives. (Morais & Lerman 2019)

Verbal communication extends to corporate narratives, which play a central role in expressing an organization's identity, values, and positioning. Beyond individual linguistic choices, corporate narratives operate at the organizational level, helping stakeholders understand who the organization is and how it differs from others. (Biraghi & Gambetti 2015; Morsing 2006) According to Morsing (2006), commitment to environmental sustainability can be communicated through carefully constructed sustainability narratives and strategic language choices. Similarly, Kassinis and Panayiotou (2018) recognize narratives and disclosures as effective methods for communicating environmental sustainability. These communicative elements can be categorized as environmental claims, which encompass linguistic choices, slogans, and narratives designed to convey environmental values and commitments to stakeholders.

Visual communication

Besides verbal communication, corporate branding includes visual elements such as the corporate name, typography, and visual imagery (Melewar & Saunders 2000; Kassinis & Panayiotou 2018).

Together these elements form a symbolic expression of an organization's identity communicated through visual elements (Baker & Balmer 2007). Communicating a coherent visual identity consistently builds recognition and positive brand associations, enabling organizations to gain competitive advantage and position themselves strategically (Melewar & Saunders 2000; Baker & Balmer 2007; Kassinis & Panayiotou 2018). This indicates that visual elements function not only as recognition mechanisms but also as strategic tools.

Visual identity communicates organizational values and positioning (Baker & Balmer 2007). It can be used to deliver environmentally conscious value propositions, positioning an organization as environmentally sustainable. Organizations can communicate its environmental sustainability through visual elements including color choices, symbolism, and visual imagery. Through using visual elements, companies can influence stakeholder perceptions, trust, and legitimacy. (Kassinis & Panayiotou 2018) This suggests that choosing a green colour scheme, using nature imagery and eco-symbolism can help with curating an environmentally sustainable image among stakeholders. Visual and verbal aspects of corporate branding are presented in Figure 1.

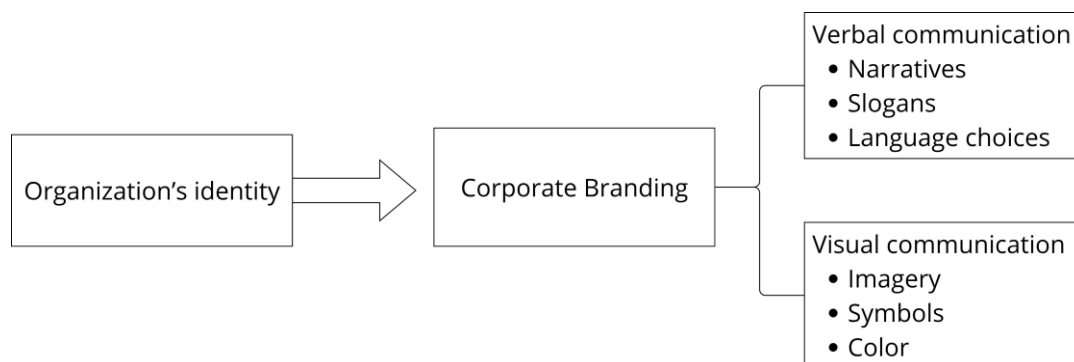


Figure 1 Visual and verbal aspects of corporate branding. (Aaker 2004; Melewar & Saunders 2000; Morsing 2006; Baker & Balmer 2007; Kassinis & Panayiotou 2018; Borges et al. 2023)

2.2 Environmental communication in corporate branding

Organizations are facing increasing expectations from their stakeholders to have a purpose beyond economic objectives (Abratt & Kleyn 2023). As a mechanism for communicating an organization's goals, values, and culture to its stakeholders, corporate branding can be leveraged to respond to these pressures. Foroudi et al. (2022) show that social commitments, including environmental sustainability, can be embedded into a corporate brand. Organizations can use corporate branding to respond to the increasing expectations regarding sustainability by communicating corporate identities that reflect their underlying, sustainability-related, values (Koch & Gyrd-Jones 2019; Foroudi et al. 2022).

2.2.1 Environmental claims

Environmental sustainability focuses on the impact of human actions on the carrying capacity and long-term viability of ecosystems (Borges et al. 2023). As environmental concerns have become increasingly prominent in society, stakeholders expect organizations to address sustainability-related issues and demonstrate concrete actions toward them (Abratt & Kleyn 2023; Kim et al. 2024). In response to these stakeholder expectations and tightening regulatory standards (Kim et al. 2024), organizations have integrated environmental sustainability into their strategies and organizational positioning. Consequently, communication has become an important component of sustainability strategies, as organizations seek to convey sustainability-related initiatives, values, and commitments.

These values and commitments are often shared through environmental claims. While the International Organization for Standardization (2016) defines environmental claims narrowly as statements, symbols or graphics indicating an environmental aspect of a product, component, or packaging, broader definitions have emerged in marketing and corporate branding literature. In marketing literature, environmental claims have been examined in the context of green advertising and marketing communication, where they serve to communicate environmental attributes and values to stakeholders (Ganz & Grimes 2018; Seelig et al. 2021). In the context of corporate branding, Lyon & Montgomery (2015) extend this concept to organizational identity, defining environmental claims as verbal and visual communication elements that associate the organization's identity with environmental sustainability. Building on this, the present study defines an environmental claim as a verbal and/or visual communication element that either directly or indirectly presents an organization and its identity as connected to environmental sustainability or performance (Banerjee et al. 1995; Lyon & Montgomery 2015; Seelig et al. 2021). Importantly, such claims are not necessarily a reflection of organizational practices, but rather a symbolic form of communication used to deliver desired corporate identities (Peattie & Crane 2005; Lyon & Montgomery 2015).

Banerjee et al. (1995) classify environmental claims as those that: a) explicitly or implicitly address the relationship between a brand and the biophysical environment, b) promote a green lifestyle with or without highlighting the brand, and c) present a corporate image of environmental sustainability. This study implements this classification in its criteria for what constitutes an environmental claim. Furthermore, Carlson et al. (1996) divide environmental claims into two categories: substantive and associative claims. This division is widely used in the literature, referenced by for example Seelig et al. (2021) and Wang et al. (2022), and it plays a central role in this study as well. This categorization is further elaborated in the section 2.2.2.

There is increasing interest but also scepticism about companies' environmental communication. Sustainability-related branding can evoke mistrust among stakeholders, especially if the claims are misaligned with the organization's actions. (Vallaster et al. 2012) Contrary to Vallaster et al. (2012), Kassinis and Panayiotou (2018) find that environmental communication, especially visual elements, do not have to reflect the organization's actions to produce desired organizational outcomes. While this study does not aim to study stakeholder perceptions, this contrast provides an interesting positioning into examining the types of environmental claims used in corporate branding.

2.2.2 Classification of environmental claims

In this study, signalling theory (Spence 1973) and legitimacy theory (Handelman & Arnold 1999) are considered to explain the rationale for the more abstract associative environmental claims, and the more specific, substantive claims, that tend to reflect the organization's disclosed actions.

Substantive environmental claims

Substantive environmental claims are objective in nature (Wang et al. 2022). They provide concrete and tangible information about an organization's environmental sustainability (Seelig et al. 2021) and are grounded in its environmental actions. Substantive claims can be used to alleviate negative perceptions among stakeholders through providing objective evidence about an organization's environmental sustainability. This evidence can be communicated for instance, through factual data, real pictures, and eco labels. (Wang et al. 2022)

Connected to organization's actions, substantive environmental claims tend to use descriptive and specific language, targets, metrics and reporting mechanisms to support the claims. According to Seelig et al. (2021) substantive claims can be product-oriented, communicating an environmentally friendly attribute of the brand/product (such as biodegradability), or process-oriented, communicating an environmental sustainability practice of the production, process, transportation, or packaging. Other substantive claims include claims regarding energy efficiency (if backed up by concrete measures) and claims regarding the usage of clean energy sources.

Associative environmental claims

Associative claims create perceptions about the environmental sustainability of a brand (Seelig et al. 2021). Compared to substantive environmental claims, associative environmental claims are less concrete. (Wang et al. 2022) They can include general statements not specific to the operations of the brand or use image-orientation to convey their environmental commitments. (Seelig et al. 2021) Associative claims often use broad and vague language. As a linguistic feature, vagueness is not a

defining characteristic of the claim type itself, but a feature which is especially prominent among image-oriented, associative claims, such as broad statements like “We care about the environment”. Since associative environmental claims are less definitive, their factual basis is weaker and more challenging to evaluate. (Schmuck et al. 2018) This lack of measurability and vague language distinguishes associative claims from substantive.

Associative claims are image-oriented, building perceptions of environmental sustainability without explicitly communicating concrete actions or organizational practices (Schmuck et al. 2018; Seelig et al. 2021). In addition to vague descriptions of environmental commitments, associative claims reference environmental facts or issues at a general level. The statements of environmental facts are not connected to the brand or its operations, but they can create perceptions of environmental commitment. (Seelig et al. 2021) The characteristics of associative and substantive environmental claims are presented in Table 1.

Dimensions	Substantive environmental claim	Associative environmental claim
Specificity	High	Low
Measurability	High	Low
Connection to actions	Strong	Weak
Factual grounding	Stronger	Weaker
Primary communicative function	Information	Image

Table 1. Dimensions of substantive and associative environmental claims (Schmuck et al. 2018; Seelig et al. 2021; Wang et al. 2022)

2.2.3 Legitimacy and signalling theory

This study’s analysis of environmental claims draws on signalling and legitimacy theory. According to *signalling* theory (Spence 1973), signals are used to reduce information asymmetry and communicate unobservable qualities of an organization to its stakeholders. Thus, from a signalling perspective, environmental claims act as signals designed to reduce information asymmetry by, for example, communicating the organization’s environmental sustainability performance or the commitment to long-term sustainability targets. The credibility of these claims as signals varies depending on their specificity, measurability, and verifiability. Claims supported by concrete targets, data, or demonstrated actions are generally perceived as more credible, stronger signals, than vague

or generalized statements. (Ganz & Grimes 2018) Therefore, substantive environmental claims may function as stronger signals compared to associative ones.

Whereas signalling theory emphasizes the role of environmental claims in reducing information asymmetry, *legitimacy* theory suggests that organizations communicate environmental sustainability not only to inform stakeholders, but to maintain social acceptance (Suchman 1995). In a context where environmental sustainability is expected, firms may engage in communication strategies that emphasize alignment with the societal values as a response to social expectations. Thus, environmental claims may act as symbolic communication to articulate desired corporate identities and values associated with environmental sustainability. Consequently, environmental claims may vary in the extent to which they reflect underlying organizational practices (Schmuck et al. 2018). This possible dissociation between environmental claims and disclosed corporate practices has been recognized in literature: According to Kassinis and Panayiotou (2018), organizations may use visual elements to convey specific beliefs, influence memorability, and enhance legitimacy. They found that these visual elements do not need to align with the organization's practices to convey the intended results among stakeholders, demonstrating Suchman's (1995) legitimacy theory.

In a context where environmental sustainability is expected from organizations (Abratt & Kleyn 2023), legitimacy theory suggests that organizations choose to embed environmental sustainability into their corporate brand to align with social expectations (Handelman & Arnold 1999). Thus, the communication of environmental claims may function as a strategic response to legitimacy pressures. Environmental claims enable organizations to demonstrate their organization-level alignment with environmental standards and respond to stakeholder expectations (Handelman & Arnold 1999). Accordingly, the pursuit of legitimacy may help explain the communication of corporate identities associated with environmental sustainability.

When the previously discussed categorization into associative and substantive claims is analysed through the lenses of signalling and legitimacy theories, following observations can be made. Substantive environmental claims characterized by measurability, specificity, and links to organizational actions (Carlson et al. 1996; Seelig et al. 2021; Wang et al. 2022) may be more likely to function as signals of the organization's environmental performance, aligning them with Spence's (1973) signalling theory. Associative claims on the other hand tend to be more abstract, symbolic and have fewer links to organizational actions. They are less measurable and may emphasize alignment with values opposed to proven actions or results. (Seelig et al. 2021) Thus, associative claims may serve primarily as legitimacy functions.

While substantive claims may tend to function as signals and associative claims as legitimacy functions, these theories are not limited to one claim type. Lyon and Montgomery (2015) suggest that firms may reduce their risk associated with poor environmental reputation through publicly expressing their commitments to the environment. This demonstrates an instance where both legitimacy theory and signalling theory can be considered. From a signalling perspective, the environmental commitments are expressed to communicate underlying qualities of environmental sustainability while legitimacy theory simultaneously considers the commitments as communicative expressions aiming to align the organization and its communicated corporate identity with stakeholder expectations.

Therefore, in this study, legitimacy theory and signalling theory are not treated as strict classification criteria but rather used as an interpretive lens for understanding the communicative functions of environmental claim types. This distinction supports the analytical foundation of the study aiming to examine how environmental claims are used in corporate branding to communicate environmental sustainability-related associations through articulated corporate identities.

While signalling and legitimacy theory are applied as *complementary interpretive lenses* in this study, it is important to acknowledge the underlying tensions between the perspectives. Signalling theory assumes that stakeholders are rational information seekers who evaluate signals based on their credibility, specificity, and verifiability (Spence 1973). From this perspective, organizations communicate environmental claims to reduce information asymmetry and the effectiveness of such communication is considered to depend on the quality of the signal. Legitimacy theory on the other hand does not assume rational information seeking. It suggests that organizations respond to socially constructed expectations, communicating environmental sustainability to maintain social acceptance regardless of the underlying performance (Suchman 1995). This distinction has practical implications for how environmental claims function in corporate branding as the claims serving as credible signals from a signalling perspective may simultaneously function as legitimacy-seeking gestures. This makes the two frameworks difficult to separate in practice.

Furthermore, signalling theory implies that weaker, less verifiable signals risk may become dismissed by stakeholders as noise rather than meaningful information (Ganz & Grimes 2018). Legitimacy theory, however, suggests that such communication may be effective in maintaining social acceptance since stakeholders may not critically evaluate the factual basis of environmental claims (Kassinis & Panayiotou 2018). This tension between the signalling and legitimacy theories is especially relevant in the context of corporate branding, where organizations may strategically combine substantive and

associative claims to simultaneously signal credible environmental performance and align with broader societal expectations. Rather than resolving this tension, this study takes it as an analytical opportunity and uses both theories to examine how environmental claims function communicatively in corporate branding and contribute to the communicated corporate identities associated with environmental sustainability. This classification of environmental claims and the interpretative lenses of signalling and legitimacy theory are presented in Figure 2.

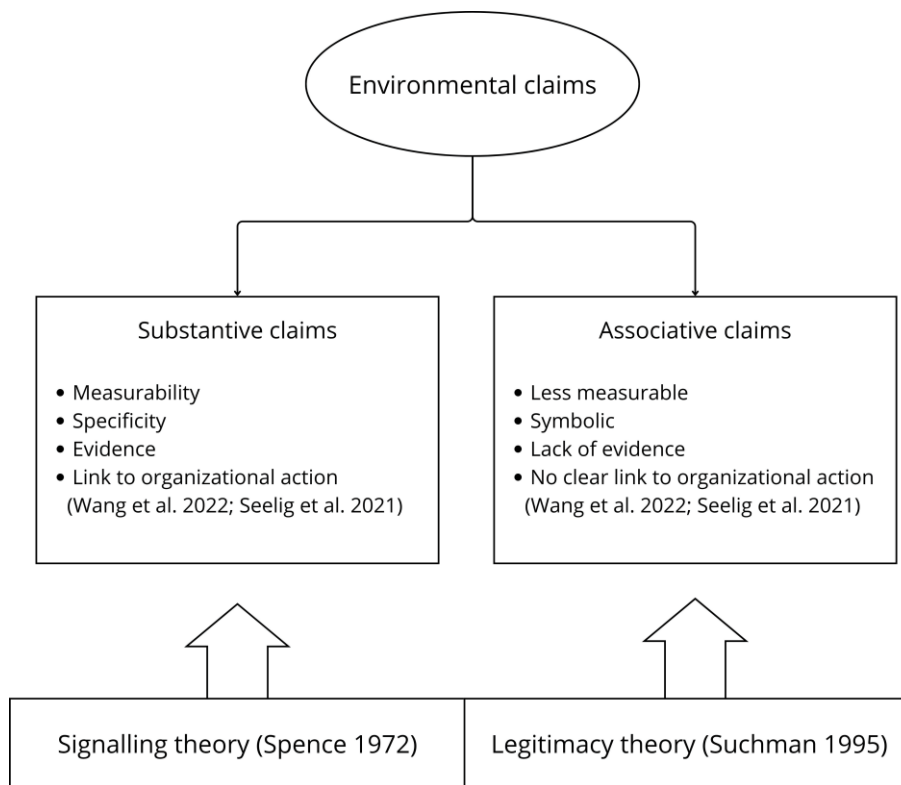


Figure 2. Classification of environmental claims. Classification of claims to substantive and associative categories through signalling and legitimacy theory (Spence 1973, Suchman 1995, Seelig et al. 2021, Wang et al. 2022).

2.2.4 Environmental claims and articulated corporate identity

The preceding sections have established that corporate branding functions as a mechanism through which organizations communicate their values, commitments, and identities to stakeholders. In the context of increasing societal expectations regarding environmental sustainability, organizations may seek to integrate sustainability-related meanings and associations into the corporate identities communicated through branding (Koch & Gyrð-Jones 2019; Foroudi et al. 2022). Environmental claims provide one means through which such meanings and associations can be articulated (Seelig et al. 2021).

As environmental claims explicitly or implicitly associate an organization with environmental sustainability, they provide observable indicators of how sustainability is communicated as part of

corporate identity. Examining environmental claims therefore enables the analysis of sustainability-related meanings, values, commitments, and associations communicated through corporate branding. Since environmental claims may take different forms and vary in their connection to organizational actions, the distinction between substantive and associative environmental claims is particularly relevant. (Seelig et al. 2021; Wang et al. 2022)

Substantive environmental claims communicate environmental sustainability through specific, measurable, and action-oriented information, whereas associative environmental claims rely more on symbolic, image-oriented, and value-based communication (Seelig et al. 2021; Wang et al. 2022). Together, these claim types contribute to the communication of sustainability-related meanings and associations and may therefore shape the environmentally sustainable identities articulated through corporate branding.

To further understand the communicative functions of these claims and the underlying drivers of communicating sustainability-related identities in corporate branding, signalling theory and legitimacy theory are used as interpretive lenses. Through these theoretical perspectives, the study seeks to explain how environmental claims function in corporate branding and why organizations communicate identities associated with environmental sustainability. This theoretical foundation enables the study to move beyond describing environmental claims toward interpreting their communicative functions and the identities they articulate.

2.2.5 Summary of the theoretical framework

The theoretical framework of this study is presented in Figure 3. It situates environmental claims within the context of corporate branding and the corporate identities these claims communicate.

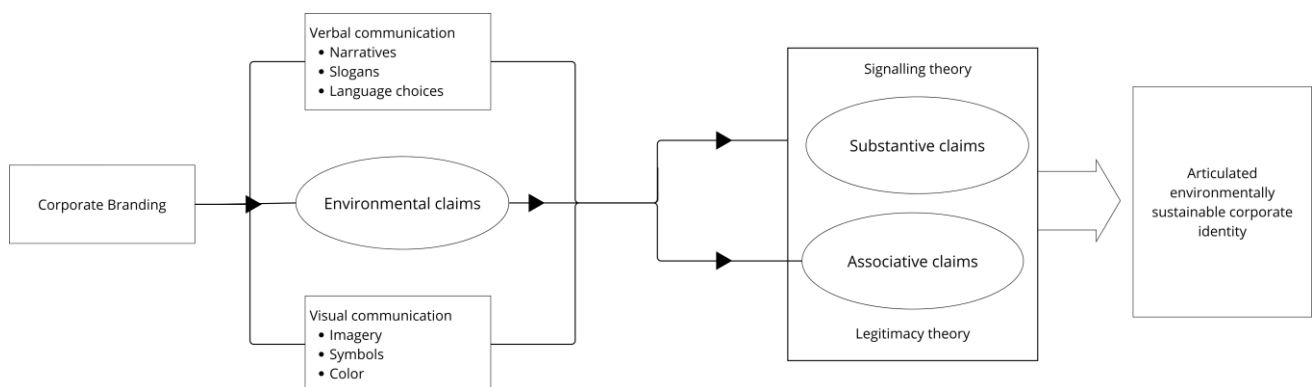


Figure 3. Summary of the theoretical framework of the study. Associative and substantive environmental claims in corporate branding and the environmental sustainability-related corporate identities they may communicate.

The study understands corporate branding as the visual and verbal communication through which organizations present their corporate identity to stakeholders. Corporate identity is examined as the observable identity articulated through corporate branding. In this context, corporate branding is considered the communicative process concerned with delivering the organization-level commitments and values to stakeholders. (Abratt & Kleyn 2012; Biraghi & Gambetti 2015; Koch & Gyrd-Jones 2019; Foroudi et al. 2022)

In response to stakeholder expectations related to environmental sustainability, organizations may seek to communicate sustainability-related values, associations, and commitments (Foroudi et al. 2022). These organization-level meanings and associations related to environmental sustainability may be embedded into corporate branding and communicated through environmental claims as part of the communicated corporate identity. This study understands environmental claims as verbal and visual communication elements through which sustainability-related values, associations, and organizational actions are communicated (Banerjee et al. 1995; Lyon & Montgomery 2015; Seelig et al. 2021).

Within corporate branding, environmental claims function as communicative elements that associate organizations and their communicated corporate identities with environmental sustainability. These claims are categorized as substantive or associative according to their specificity, measurability, and connection to disclosed organizational actions. To further understand the communicative functions of environmental claims, legitimacy and signalling theory are applied as interpretive lenses.

3 Methodology

3.1 Research Philosophy

Understanding research philosophical standpoints is essential for conducting research (Eriksson & Kovalainen 2008) and the research philosophy will guide the methodology of this study. Research philosophy refers to the system of beliefs and assumptions about how knowledge is developed. It sets out the world view in which the research is conducted and will shape the design of the research and how it is understood. (Saunders et al. 2023, 131) Thus, research philosophy provides a starting point for this qualitative content analysis guiding the methodological choices. According to Saunders et al. (2023), the central types of research assumptions are ontological assumptions, epistemological assumptions, and axiological assumptions.

Ontological assumptions are concerned with the nature of reality. Focused on the existence of humans, societies, and the world, ontology examines what the nature of the subject at hand is, what is real, and what can be considered as evidence. (Saunders et al. 2023, 133) In the context of qualitative content analysis, defining what can be considered as evidence becomes particularly important. The central ontological question is whether the social world exists objectively and independently of social actors, or whether the social world is constructed through social interaction. Objectivism assumes that the social world exists independently of social actors, whereas constructionism considers social reality to be created and sustained through the perceptions, meanings, and actions of social actors. (Eriksson & Kovalainen 2008, 13-15.)

In corporate branding, meanings of environmental sustainability are communicated and interpreted through interaction with stakeholders, but the environmental claims may reflect an objective reality of environmental sustainability. In this context, the ontological assumptions of this study reflect both constructionist and objectivist perspectives. Critical realism is a research philosophical standpoint that assumes reality to exist independently of human knowledge or perception, while recognizing that knowledge of this reality is partial, socially situated and shaped by one's interpretation (Mercier et al. 2023). Therefore, critical realism provides a suitable ontological foundation for this study. It acknowledges that an objective reality of environmental sustainability may exist, while considering the meanings and interpretations of environmental sustainability as socially constructed through corporate communication and stakeholder perceptions.

Ontological assumptions shape the *epistemological positioning*. Epistemology is concerned with how knowledge can be produced and argued for (Eriksson & Kovalainen 2008, 14-15). It refers to assumptions about knowledge, including what constitutes acceptable, valid, and legitimate

knowledge, and how it can be communicated within society (Saunders et al. 2023, 134). Epistemological assumptions differ in whether they seek permanent, reliable criteria for knowledge, what the role of the researcher is, and how the relationship between an idea and object, or concept and observation is established (Eriksson & Kovalainen 2008, 16.) In social science, epistemological assumptions range between positivism and interpretivism. Positivism considers the reality to be constituted of observable material things, while interpretivism sees reality and knowledge to be socially constructed (Eriksson & Kovalainen 2008, 14-16).

Since this study examines environmental claims in corporate branding, its ontological assumptions acknowledge not only the possible existence of objective sustainability-related practices, but also how such claims are communicated, interpreted, and understood within a social context. Consequently, this study aligns with an interpretivist epistemological position, considering environmental claims as communicative elements through which sustainability-related meanings and corporate identities are articulated. Simultaneously, the study recognizes that these interpretations may reflect an objective reality of environmental sustainability, aligning with the critical realist research philosophy. Thus, while critical realism assumes an objective underlying reality, interpretivism is suitable for examining how such reality is represented and communicated through environmental claims. Beyond aiming to describe observable phenomena, critical realism seeks to explain them by identifying the underlying causal mechanisms that generate them (Mercier et al. 2023). In this study, this involves examining observable environmental claims while interpreting associated communicative functions and meanings.

Axiological assumptions refer to how the role of values and ethics is understood in the research. It is concerned with whether the aim when conducting research is moral neutrality or if one's own values can shape the research. Axiology is shaped by both the ontological and epistemological assumptions. (Saunders et al. 2023, 135-137) As this study examines environmental claims in corporate branding, it acknowledges that values may influence both the interpretation of environmental claims and the broader societal understanding of sustainability. Therefore, the study is positioned as value aware, emphasizing reflexivity and transparency throughout the research process.

3.2 Research Strategy

A *primarily deductive qualitative content analysis* was conducted to identify and categorize visual and verbal environmental claims communicated through corporate branding. The analysis was theoretically informed by the distinction between substantive and associative environmental claims, as well as by signalling and legitimacy theory. Environmental claims identified on corporate websites

were systematically assessed using a theory-derived coding framework based on literature concerning substantive and associative claims. They were coded according to their characteristics including measurability, specificity, and connection to disclosed organizational actions. This coding is further discussed in Section 3.4. The collected and coded data were then analysed to identify patterns in the use of environmental claims and the sustainability-related meanings communicated through them. This method choice *aligns with the critical realist positioning of the study, as critical realist studies emphasize moving between the concrete and abstract* (Mercier et al. 2023). In this study, this means examining observable environmental claims and interpreting the meanings and communicative functions associated with them. The findings were subsequently interpreted to examine how environmental sustainability is communicated through corporate branding and articulated as part of sustainability-related corporate identities.

Qualitative content analysis is suitable for systematically interpreting textual data and identifying meanings and patterns within the material (Zhang & Wildemuth 2009). As the study is concerned with the use of environmental claims in corporate branding, qualitative content analysis allows the interpretation of such communication in a systematic and theoretically informed way. In the study, the environmental claims are initially analyzed deductively in the coding process to substantive and associative categories. Later, an inductive layer is added to identify environmental sustainability-related themes in the communicated corporate identities. (Zhang & Wildemuth 2009)

To ensure the adequacy of the qualitative content analysis, the study followed Krippendorff's (2019) six-step framework as a structural basis for data collection and analysis. First, a body of *data* must be chosen for the content analyst to begin an analytical effort. In this study, this comprises the visual and verbal environmental claims communicated through corporate branding, and the supporting organizational disclosures collected from corporate websites. This selection will be elaborated further in section 3.3.

Second, a *research question* is needed to seek an answer from the chosen data (Krippendorff 2019). In this study the main research question is "How are substantive and associative environmental claims used in corporate branding to articulate environmentally sustainable corporate identities?" This question is answered through three sub-questions: "What types of substantive and associative environmental claims are communicated on corporate websites?" and "To what extent are environmental claims in corporate branding substantiated through disclosed organizational actions?" and "How do these claims contribute to the articulation of environmentally sustainable corporate identities on corporate websites?". The structure of the research is established in accordance with

these questions. In this content analysis, the aim is to first, examine the environmental claims and categorize them, second, to examine their level of substantiation, and third, identify and interpret meanings and patterns within the material.

The third step is *determining a context* in which the data is made sense of (Krippendorff 2019). Here, this refers to the context of corporate branding and sustainability communication in Finnish listed companies in the Industrial Goods and Services sector.

The fourth step in Krippendorff's (2019) framework is to have an *analytical construct* for operationalizing what the analyst knows about the context of the data. When doing this, the analyst must ensure that their analytical constructions model their chosen contexts. In this study this refers to a *theory-driven coding framework* based on the distinction between substantive and associative environmental claims. In this framework, environmental claims are coded according to their characteristics such as measurability, specificity, language, substantiation, visual communication, and connection to disclosed organizational actions.

Fifth step for content analysis is *defining inferences* which are intended to answer the research question and that constitute the basic accomplishment of the content analysis (Krippendorff 2019). In this study the inferences are the findings about the prevalence and characteristics of substantive and associative environmental claims, their level of substantiation, and the sustainability-related meanings and associations communicated through environmental claims in corporate branding. These patterns were subsequently interpreted in relation to signalling theory, legitimacy theory, and the concept of articulated corporate identity.

Finally, the content analyst must have a way through which they can *validate* the evidence (Krippendorff 2019). When assessing the substantiation of environmental claims, this study uses supporting organizational disclosures such as sustainability reports, annual reports, certifications, and other publicly available disclosures for validating the substantiation of the claims. Table 2 presents the operationalization table of this research.

Research question	Sub-questions	Concept	Data source	Analysis
How are substantive and associative environmental claims used in corporate branding to construct environmentally sustainable corporate identities?	What types of substantive and associative environmental claims are communicated on corporate websites?	Environmental claims, Substantive environmental claims, Associative environmental claims	Corporate websites	Deductive qualitative content analysis using theory-driven coding framework
	To what extent are environmental claims in corporate branding substantiated through disclosed organizational actions?	Claim substantiation	Corporate websites, Sustainability reports, Annual reports, Other organizational disclosures	Qualitative substantiation assessment
	How do environmental claims contribute to the articulation of environmentally sustainable corporate identities on corporate websites?	Articulated corporate identity and environmental sustainability communication	Coded environmental claims and supporting organizational disclosures	Interpretation through signalling theory, legitimacy theory, corporate branding and corporate identity literature

Table 2. Operationalization table of the study.

3.3 Data collection

The empirical data for this study were collected from the English language corporate websites and organizational disclosures of five Finnish listed companies operating in the Industrial Goods and Services sector, as categorized on the Nasdaq Helsinki stock exchange. This sector was selected because its operations are associated with considerable environmental impacts and increasing stakeholder scrutiny regarding environmental sustainability, creating strong incentives for communicating environmental sustainability-related commitments and initiatives (Deegan 2002; Kim et al. 2024). Consequently, the sector provides a relevant empirical context for examining environmental claims in corporate branding.

Aligned with the purpose of this study, corporate websites were selected as the primary data source. They are recognized as important platforms for corporate branding, enabling organizations to communicate organization-level values, commitments, and associations through both visual and verbal communication (Simões et al. 2015; García García et al. 2017; Kassinis & Panayiotou 2018; Lyon & Montgomery 2015). In addition, websites provide organizations with opportunities to position themselves and communicate sustainability-related messages as part of their corporate

branding (Simões et al. 2015; Capriotti & Moreno 2007). Thus, they are relevant in evaluating environmental sustainability in corporate branding.

The empirical material was collected through purposive sampling from website sections where corporate identity and environmental sustainability positioning were expected to be communicated more explicitly. These sections included the company homepage, corporate introduction page (e.g., “About us” or “Our story”), and the main page for sustainability-related communication (e.g. “Sustainability” or “Our sustainability journey”). The homepage was included because it commonly functions as the initial entry point for communicating the organization’s values and strategic priorities (Singh et al. 2005). Corporate introduction pages were included because they are used to communicate organizational identity, history, and self-presentation (Fu & Zhu 2022). Sustainability-related pages were included because they explicitly communicate environmental commitments, priorities, and sustainability-related initiatives, through which organizations disclose and promote sustainability information to stakeholders (Morsing & Schultz 2006). Together, these website sections provide a focused sample of corporate branding communication in which environmental claims are likely to appear.

In addition, annual reports, sustainability reports, certifications, and other sustainability-related disclosures were collected for the assessment of claim substantiation. These organizational disclosures available on the corporate websites were used as supporting evidence when evaluating the extent to which environmental claims were connected to disclosed organizational actions.

The primary unit of analysis in this study was an environmental claim. Environmental claims were collected as sentences, paragraphs, images, or other discrete communication elements that met the criteria of an environmental claim. Both visual and verbal environmental claims were included in the analysis. Verbal claims included sustainability-related statements, narratives, and slogans, whereas visual claims included sustainability-related imagery, certifications, symbols, and other visual communication elements associated with environmental sustainability.

To support the definition of environmental claims, the classification developed by Banerjee et al. (1995) was used as a guide during the data collection process. According to Banerjee et al. (1995), environmental claims may:

- a) Explicitly or implicitly address the relationship between a brand and the biophysical environment.
- b) Promote a green lifestyle with or without highlighting the brand.

c) Present a corporate image of environmental sustainability.

Initially, a broad set of environmental claims was collected from the predefined website sections using the outlined identification criteria by Banerjee et al. (1995). During the preliminary review of the collected material, a substantial proportion of the collected claims were found to be repeated across multiple website sections or to represent closely related elements of the same environmental message. To avoid overrepresentation of similar claims and improve analytical clarity, identical and substantially overlapping claims were recorded only once. A claim was considered identical if the verbal wording or visual element appeared without modification across website sections. A claim was considered substantially overlapping if it communicated the same environmental message using only minor linguistic variation, without introducing new specificity, a different target, or a distinct action. Claims were retained as separate entries if they added distinct content — for instance, a general commitment statement and a specific emission reduction target addressing the same theme were treated as separate claims due to their difference in specificity and measurability. Consequently, the final dataset consisted of unique environmental claims representing distinct sustainability-related messages. Table 3 presents the numbers of environmental claims and organizational disclosures collected from each corporate website. The final dataset consisted of 145 environmental claims, including 104 verbal claims and 41 visual claims. These claims formed the basis for the subsequent coding, substantiation assessment, and qualitative content analysis. To maintain analytical focus on patterns of environmental claim use rather than company-specific reputations, the five companies are referred to as Companies A, B, C, D, and E throughout the analysis.

Company	Website sections	Sector	Number of verbal claims	Number of visual claims	Total number of claims	Supporting organizational disclosures
Company A	Homepage, About us, Sustainability	Industrial Goods and Services NASDAQ HELSINKI	27	3	30	Annual report 2025
Company B	Homepage, About us, Sustainability	Industrial Goods and Services NASDAQ HELSINKI	14	4	18	Annual review 2025, Press release 16.10.2025
Company C	Homepage, About us, Sustainability	Industrial Goods and Services NASDAQ HELSINKI	15	10	25	Annual report 2025
Company D	Homepage, About us, Sustainability	Industrial Goods and Services NASDAQ HELSINKI	24	15	39	Sustainability statement 2025, Press releases: 28.09.2026, 17.02.2026, 13.03.2026, 02.03.2026
Company E	Homepage, About us, Sustainability	Industrial Goods and Services NASDAQ HELSINKI	24	9	33	Annual report 2025, Press release 12.12.2025, Cicero Shades of Green 28.08.2025
Total			104	41	145	

Table 3. Overview of the sample. Overview of the sampled companies, website sections, environmental claims and supporting organizational disclosures.

3.4 Data Analysis

The analysis proceeded in three stages. First, the identified environmental claims were organized in an Excel spreadsheet and coded as either substantive or associative. The coding was guided by a theoretically informed coding framework derived from the substantive-associative distinction established in prior literature and elaborated in the theoretical framework of this study. To support the classification process, each verbal claim was evaluated according to the following indicators:

- Specificity
- Measurability
- Connection to organizational actions
- Factual grounding
- Language
- Communicative function

and visual claims according to:

- Connection to organizational action
- Communicative function
- Type

Claims characterized by organizational action, measurable commitments, or concrete practices and certifications were coded as substantive. Claims relying on symbolic associations, broad statements

of the environment, or environmental imagery were coded as associative. Both verbal and visual claims were included in the coding process. The coding frameworks used in this study are found in Table 4 for verbal claims and in Table 5 for visual claims.

Second, the substantiation of each environmental claim was assessed by comparing the claims with publicly available organizational disclosures and other sustainability-related documents accessible through the corporate websites. In practice, the substantiation was assessed by comparing the content of the claim itself with information found in publicly available disclosures. For example, a claim referring to the Science Based Targets initiative was substantiated by comparing its content regarding the SBTi with information disclosed in Annual reports. The assessment focused on whether the organization provided supporting evidence for the claim communicated through corporate branding, such as reported outcomes or environmental initiatives. This enabled an evaluation of the extent to which environmental claims communicated through corporate branding were supported by disclosed organizational actions.

Third, a *qualitative analysis* was conducted to examine how environmental sustainability-related identities were communicated through corporate branding. The claims were analyzed collectively to identify recurring themes, narratives, and patterns in the way organizations presented themselves as environmentally sustainable. Consistent with qualitative content analysis (Zhang & Wildemuth 2009), the study involved an iterative process of comparing claims to identify patterns and similarities in how environmental claims were used in corporate branding. Particular attention was paid to how associative and substantive claims were combined in the communicative process.

Criteria	Substantive environmental claims	Associative environmental claims	Source
Specificity	Specific environmental statement	Broad environmental statement	Carlson et al. 1993; Ganz & Grimens 2018; Seelig et al. 2021
Measurability	Measurable, quantifiable, or verifiable	Less measurable	Seelig et al. 2021; Wang et al. 2022
Connection to organizational action	Connected to organizational action	Few or no clear links to organizational action	Seelig et al. 2021
Factual grounding	Objective basis e.g. Statistical data, third-party certifications	Limited factual grounding or no direct connection to disclosed organizational evidence	Schmuck et al. 2018; Wang et al. 2022
Language	Concrete, factual	Symbolic, aspirational, vague	Schmuck et al. 2018
Communicative function	Evidence-oriented	Image-oriented	Carlson et al. 1993; Ganz & Grimens 2018
Example	We reduced CO2 emissions by 15% in 2023	Building a greener future	

Table 4. Coding framework for verbal environmental claims. (Carlson et al. 1993; Ganz & Grimes 2018; Schmuck et al. 2018; Seelig et al. 2021; Wang et al. 2022)

Criteria	Substantive environmental claims	Associative environmental claims	Source
Connection to organizational action	Connected to organizational action	Few or no clear links to organizational action	Seelig et al. 2021
Communicative function	Concrete, factual	Symbolic, aspirational, vague	Schmuck et al. 2018
Type	Certifications, performance indicators	Symbolic nature imagery, aspirational product or process-related imagery	Carlson et al. (1996); Yu et al. (2013)

Table 5. Coding framework for visual environmental claims. (Carlson et al. 1996; Yu et al. 2013; Schmuck et al. 2018; Seelig et al. 2021)

3.5 Trustworthiness

The trustworthiness of this study is assessed through the criteria of credibility, transferability, dependability, and confirmability, following Bryman and Bell's (2011) framework for evaluating trustworthiness in qualitative research. Trustworthiness is proposed as a criterion for assessing how good a qualitative study is and it seeks to evaluate both the internal and external validity, as well as reliability and objectivity of the study (Bryman & Bell 2011).

Credibility refers to the degree to which the research has been conducted according to appropriate research practices and whether the findings accurately represent the data being studied (Bryman & Bell 2011). In this study, credibility is strengthened through the use of a theory-derived coding framework and maintaining transparency in coding procedures. Additionally, multiple sources of

evidence, including corporate websites and supporting organizational disclosures, are utilized and direct examples of environmental claims are presented in the findings.

Transferability refers to the extent to which the findings may be applicable to other contexts and settings (Bryman & Bell 2011). To support transferability, this study provides a detailed description of the research context, including the focus on Finnish listed companies operating in the Industrial Goods and Services sector. These descriptions of the context allow readers to assess the applicability of the findings to other organizational and industry settings. As the analysis is limited to a specific cultural and sectoral context, the transferability of the findings may be constrained by differences in cultural, regulatory, and industry-specific conditions. Nevertheless, the distinction between substantive and associative environmental claims, as well as the application of signalling and legitimacy theory, may provide transferrable insights into how organizations communicate environmental sustainability through corporate branding.

Dependability is concerned with the stability and consistency of the research process over time and under different conditions (Bryman & Bell 2011). This study enhances dependability by providing a detailed description of the data collection, coding, and the analysis procedures. This is intended to improve the consistency and transparency of the research process and enable other researchers to follow and assess the analytical procedures applied in this study. The coding framework for environmental claims was derived from previous literature and it was applied across the dataset systematically. Furthermore, the analysis process was documented transparently, allowing the reader to evaluate the consistency of the research process. Since the study relies on publicly available data, the sources are accessible, and the analytical procedures can therefore be reviewed and replicated to a certain extent.

Confirmability refers to the objectivity of the study. It is concerned with whether the researcher allowed their own subjectivity, personal values, or theoretical inclinations affect the findings (Bryman & Bell 2011). Throughout the study, *reflexivity* was emphasized by acknowledging the potential influence of the researcher's values, assumptions, and interpretations on the research process. This was particularly relevant when evaluating associative environmental claims, which may involve a greater degree of interpretation. *To alleviate this subjectivity, theory-derived criteria were applied systematically.*

3.6 Limitations

This study is subject to certain limitations. As the content analysis focused on Finnish listed companies operating in the Industrial Goods and Services sector, the findings may not be generalizable to companies operating in other geographical contexts or industries. This study intends to provide analytical rather than statistical generalization. Another limitation comes from examining environmental claims as communication elements through publicly available corporate websites, sustainability reports, and other organizational disclosures. This study does not assess the actual environmental performance or impacts of the organizations examined. Accordingly, the substantiation of environmental claims is evaluated in relation to organizational disclosures rather than verified sustainability outcomes. Similarly, the study focuses on communicated corporate identity rather than organizational intentions and is therefore limited to observable articulated identities.

Moreover, the categorization of environmental claims, particularly associative claims, involves an element of researcher interpretation due to the abstract and symbolic nature. Although this study draws on established classifications of substantive and associative claims (e.g. Carlson et al.; Yu et al.), the analysis of associative claims remains partly interpretive.

As the study is conducted within the still evolving regulatory context of the proposed European Union Green Claims Directive, the study aligns with its intended scope rather than finalized regulatory requirements. Finally, it is worth noting that while the companies are referred to anonymously, identification may be possible given the relatively small number of listed companies in the selected sector.

4 Results

This chapter presents the findings of the content analysis conducted across the corporate websites of five Finnish listed companies operating in the Industrial Goods and Services sector. The analysis is based on a total of 145 environmental claims, comprising 104 (72%) verbal and 41 (28%) visual claims, collected from the predefined website sections of each company. The findings were organized around the three sub-questions of this study. First, substantive, and associative environmental claims were identified from the collected claims. Second, the extent to which these claims are substantiated through disclosed organizational actions is examined. Third, the contribution of environmental claims to the articulation of environmentally sustainable corporate identities is analysed. These three stages of analysis aim to address the main research question of how environmental claims are used in corporate branding to articulate corporate identities associated with environmental sustainability.

4.1 Distribution and types of environmental claims

The analysis identified both substantive and associative environmental claims across all five companies, with associative claims predominating throughout the dataset. The overall claim distribution was 98 (68%) associative and 47 (32%) substantive environmental claims. Within the total number of 145 environmental claims, the ratio between associative and substantive claims was approximately 2:1.

While associative claims predominated throughout the dataset, variety in the associative-substantive distributions was recognized both across website sections and between visual and verbal claims. Within visual claims, associative claims represented 78% of the claims, while verbal claims showed a more balanced distribution. Table 6 presents the distribution of substantive and associative claims across verbal and visual categories.

	Associative claim	Substantive claim	All environmental claims
Verbal claim	66 (63%)	38 (37%)	104
Visual claim	32 (78%)	9 (22%)	41
Total	98	47	145

Table 6. Distribution of substantive and associative environmental claims.

Visual claims

Out of the total 41 visual claims, 32 (78%) were categorized as associative and 9 (22%) as substantive. Thus, within the visual claims, the distribution was overwhelmingly associative. The majority of associative visual claims consisted of general sustainability-related images with limited or indirect connection to organizational functions, as well as process-related images. These images included for example imagery of construction workers with renewable energy sources, as well as lifestyle-oriented images depicting interactions between humans and products or services in everyday settings. Nature imagery, often associated with environmental branding (Kassinis & Panayiotou 2018; Lyon & Montgomery 2015), was less prevalent than expected, with only 7 of the visual claims categorized as nature related. While associative visual claims consisted of a variety of product, process, nature, and lifestyle related imagery, the substantive visual claims consisted primarily of certification badges and third-party validation symbols. Certifications such as EcoVadis and CDP ratings accounted for 7 of the 9 substantive visual claims, with the remaining two consisting of graphs and data visualizations presenting measurable environmental performance or future targets. All nine substantive visual claims were identified on sustainability pages, while homepage and about us sections contained exclusively associative visual claims.

Verbal claims

Within the 104 verbal claims, 65 (62,5%) were categorized as associative and 39 (36,5%) as substantive. In comparison to the associative-substantive distribution of visual claims, verbal claims reflected a more balanced distribution while remaining associative-dominant. Associative claims were characterized by broad commitment statements, aspirational language, and image-oriented framing with limited connection to organizational actions. The claims frequently displayed vague and generalized language, such as referencing sustainable future or organizational purpose. In the dataset, such claims were identified across all companies. Commitments to environmental sustainability were communicated through statements such as:

“We enhance our customers’ sustainability.” – Company A

“Together with our 2,000 experts, we create a seamless, safe and clean society for tomorrow.” – Company A

“We believe in protecting food, people and the planet....” – Company C

“We reduce our environmental impact and promote the transition towards a low-carbon future. Sustainability guides our operations and investments.” – Company C

Substantive verbal claims, in contrast, were characterized by specificity, measurable targets, and references to concrete organizational actions. These included quantified emission reduction targets,

statements about already accomplished actions related to environmental sustainability, and references to third-party certifications and frameworks, such as the Science Based Targets initiative. Substantive claims within the dataset included statements such as

“As part of our sustainability ambitions, we have updated our emission reduction targets, which have been validated and approved by the Science Based Targets initiative.” – Company C

“Already in 2008, we integrated sustainable development into the core of our corporate strategy and proudly published our first Sustainability Report.” - Company D

Variation across website sections

Besides varying associative-substantive distribution among visual and verbal claims, the distribution also varied across website sections. Homepage contained predominantly associative claims, with verbal claims distributing as 21 (72%) associative and 8 (28%) substantive. Furthermore, all the five homepages used visual imagery associating them with themes related to environmental sustainability. The associative claims on companies’ homepages included claims such as:

“Our expertise enables the energy transition.” – Company A

“[Company D] upholds high sustainability standards across its global supply chain.” – Company D

With substantive claims consisting of claims like:

“... our emission reduction goals are verified by SBTi.” – Company B

“[Company D] is the first in the industry to achieve carbon neutral manufacturing units globally.” – Company D

With an even stronger emphasis on associative communication, about us -sections presented a claim distribution of 13 (87%) associative and 2 (13%) substantive claims. Out of the two substantive claims, both were found on Company E’s website:

“We want to be the front-runner in responsible production: we commit to 100% carbon neutrality by 2035 and 100% recyclability in our own production by 2025.” – Company E

“We have already achieved a 99% lifetime recyclability rate for our EV fast chargers.” – Company E

Associative environmental claims were found on all the companies about us -sections within the dataset. These claims focusing on communicating the organization’s values and purposes included:

“[Company B] creates value by owning and developing business operations sustainably and in the long term.” – Company B

“Our goal is to charge our planet for the better by powering the electric movement together with our customers.” – Company D

“Our passion is to help customers move toward an emission-free future.” – Company E

Sustainability pages, in contrast, presented a more balanced distribution between the claim categories with verbal claim distribution being 31 (52%) associative and 29 (48%) substantive environmental claims including substantive claims such as:

“We help our customers achieve their own sustainability goals, and we are committed to ambitious emission reductions in line with the Science Based Targets initiative.” – Company A

“Since 2013, a top leadership score of A or A- on CDP Climate list, a mark of our long-term commitment to environmental work and sustainability.” – Company D

“In our operations we follow Science Based Targets (SBT) and GHG Protocol methodologies in managing Scope 2 and Scope 3 emissions.” – Company E

Thus, the claim distribution on the sustainability pages was close to even. This difference became especially notable among the visual claims, where all substantive claims were found in the sustainability pages. This variation indicates that the communicative functions of environmental claims differ across website sections.

4.2 Alignment of environmental claims and disclosed organizational actions

This section examines the extent to which environmental claims communicated through corporate branding were substantiated through disclosed organizational actions. The substantiation of each claim was assessed by comparing the claim against publicly available organizational disclosures, including annual reports, sustainability reports, press releases, and third-party certification announcements. Claims were categorized as substantiated, partially substantiated, not substantiable independently, not substantiated, or not substantiable. Claims categorized as not substantiable independently referred to claims whose content could not be verified independently due to their direct connection to and dependence on adjacent claims. For example, Company E’s claim regarding the company’s sustainability performance:

“This places us among top-rated companies globally for sustainability performance.” – Company E

follows directly from their statement regarding EcoVadis rating:

“[Company E] has been awarded a Gold rating by EcoVadis.” – Company E

Consequently, this claim is difficult to substantiate independently, although it was categorized as substantive during the initial coding in section 4.1.

Since associative claims are not substantiable due to their aspirational and non-specific nature, this part of the analysis focused on substantive claims. In total, 47 visual and verbal substantive claims were assessed. Out of these claims, 36 (77%) claims were characterized as fully substantiated, 8 (17%) as partially substantiated, and 3 (6%) were found to be not substantiable independently. None of the claims were found to lack substantiation. The absence of entirely unsubstantiated claims indicates a general alignment between the substantive environmental claims communicated through corporate branding and disclosed organizational actions.

Company	Fully substantiated	Partially substantiated	Not substantiable independently	Total substantive
A	9 (82%)	2 (18%)	0	11
B	3 (75%)	1 (25%)	0	4
C	4 (80%)	0	1 (20%)	5
D	10 (77%)	3 (23%)	0	13
E	10 (72%)	2 (14%)	2 (14%)	14
Total	36	8	3	47

Table 7. Substantiation of claims. Substantiation of both visual and verbal substantive claims across the five companies.

The substantiation patterns varied across companies. Companies D and E demonstrated the highest number of fully substantiated claims with 10 each, reflecting their extensive use of verifiable third-party certifications and quantified targets. Similarly, Company A showed strong substantiation with 9 fully substantiated claims out of 11, therefore presenting the highest percentage of fully substantiated claims (82%). Companies B and C presented fewer substantive claims in comparison, with Company C presenting 4 of 5 fully substantiated claims and one claim that was not substantiable independently. Company B on the other hand had 3 of 4 claims substantiated fully and the remaining one partially.

Partially substantiated claims were identified across Companies A, B, D, and E. These claims had supporting evidence confirming the claim’s general direction without fully verifying the specific wording or metric communicated. Such claims included Company E’s commitment to 100% recyclability in its own operations by 2025:

“We want to be the front-runner in responsible production: we commit to 100% carbon neutrality by 2035 and 100% recyclability in our own production by 2025.” – Company E

The commitment to 100% recyclability in own production by 2025 was confirmed in the Annual report 2023. However, in the Annual report 2025 the recyclability rate was set to be – both achieved and targeted – as 99%. Consequently, the claim was categorized as partially substantiated. While it was supported by earlier disclosures, it was not confirmed in the most recent organizational disclosures.

Similarly, Company D’s claim about energy efficiency and sustainability leadership was partially substantiated:

“For over a century, we have enabled cities to grow taller, more accessible, and energy efficient. For us, leading in our industry also means leading in sustainability.” – Company D

Energy efficiency improvements were confirmed through CDP reporting and Annual report 2025, however the broader sustainability leadership claim was not independently verified through specific metrics available in disclosures.

Overall, the substantiation assessment indicates that the substantive environmental claims communicated through corporate branding were largely aligned with disclosed organizational actions. Some of the partially substantiated claims like Company D’s claim about enabling cities to grow taller, can be characterized by a mix of associative-substantive features within the claim. While one element of the claim was substantiated, another remained to lack verification and possibly also verifiability. The strongest substantiation within the dataset came from third-party certifications and targets, such as SBTi-verified emission reduction goals and certification badges from EcoVadis and CDP, providing verifiable evidence for the communicated claims.

4.3 Environmental sustainability-related identities

Analysis of the corporate branding content on the companies’ websites revealed several recurring identity-related themes. These themes were consistently communicated across multiple websites through a combination of visual and verbal branding elements. Similarly, the environmental claims indicating these themes were not confined to a single claim category. Rather, the identification of identity themes drew upon environmental claims from both substantive and associative claim categories, as well as the claim substantiation. Table 8 presents the identified themes and illustrates their distribution across companies included in the dataset.

THEME	Company A	Company B	Company C	Company D	Company E
Enabler of others' sustainability	x	x	x	x	x
Future society and leader framing	x	x	x	x	x
Concrete environmental actions	x	x	x	x	x
Business model as environmental solution	x		x		x
External validation stacking	x	x	x	x	x

Table 8. Environmental identity themes. Themes communicated through corporate branding across the five companies.

4.3.1 Enabler of others' sustainability

All companies communicated an identity positioning that framed the organization as an enabler of its customers' sustainability efforts. This identity was conveyed through statements about helping customers achieve their sustainability targets, reduce emissions, and emphasizing joint work towards environmental sustainability. These positionings were communicated through verbal claims including:

“We enhance our customers' sustainability.” – Company A

“[Company B]'s businesses enable future-proof, sustainable choices for customers in various industries.” – Company B

Within this theme, the nuances of the positioning varied across companies, ranging from portraying sustainability as a shared objective to presenting sustainability as a solution offered to customers. In some companies within the dataset, both nuances were evident across different sections of the corporate websites. Company A emphasized its role in supporting customers in achieving sustainability through claims such as:

“Our know-how helps our customers achieve their emission reduction targets.” – Company A

“Our goal is to enhance sustainability among our customers by, among other things, using lower-carbon materials, phasing out fossil fuels, ...” – Company A

These statements position Company A as a sustainability partner whose role is to support its customers' environmental performance. In contrast, Companies B and C placed emphasis on the customers' decision-making by positioning themselves as sustainable choices for their customers. This positioning was reflected in claims including:

“Our businesses enable future-proof, sustainable choices for customers in various industries.” – Company B

“Our innovative products help billions of consumers around the world make responsible lifestyle choices every day.” – Company C

For C, the emphasis on decision-making was primarily communicated through the Homepage and About us sections on the website. In the sustainability section, the communicated positioning was closer to Company A, placing emphasis on helping the customer in their sustainability endeavours:

“The way we can contribute is by focusing on developing circular packaging solutions with improved end-of-life management to help our customers achieve their sustainability targets.” – Company C

Whereas Company A and C communicated their commitments to helping their customers achieve their sustainability targets, Company D emphasized not only helping their customers, but working together with them. This angle was implied through claims such as:

“We believe that this urban growth must be sustainable, inclusive, and innovative – shaping communities where people thrive, while reducing the environmental impact from [Company D] and our customers.” – Company D

“Our sustainability leadership is about creating lasting impact, and we invite the world to rise with us.” – Company D

“...working together with our suppliers to thrive sustainability.” – Company D

Thus, Company D communicated an angle of collaborative work towards achieving a common goal of sustainability.

Distinguishing it from the other companies in the dataset, E’s enabler positioning was most explicitly communicated through claims directly linked to its offerings, such as:

“Our goal is to charge our planet for the better by powering the electric movement together with our customers.” – Company E

“Our business enables the decarbonization of transport.” – Company E

Rather than communicating enablement primarily through general sustainability commitments, Company E grounded its identity as an enabler in a specific environmental function – facilitating the transition to emission-free transportation.

Across the dataset, all five companies communicated identity themes positioning them as enabler of others’ sustainability, yet the specific framing varied. Some companies emphasized helping their customers or working together with them, while others placed emphasis on customers’ decision-making and independence. Unlike other firms within the dataset, Company E’s enabler identity was rooted directly in the environmental impacts of its core offering, indicating a close connection between the communicated identity and the company’s business operations.

4.3.2 Future society and sustainability leader framing

Within the theme of future society and sustainability, two related but distinct positionings were identified. Some companies positioned themselves as sustainability leaders, while others focused on presenting themselves as builders of a sustainable future society. The overall theme was present throughout all companies within the dataset and the two distinct positionings appeared simultaneously in the same company's branding in several cases.

The future society positioning was especially prominent in Companies A, D, and E. Within these companies, the positioning was communicated through verbal environmental claims including:

“Delivering the essentials of tomorrow's society.” – Company A

“We shape the future of cities.” – Company D

“We charge our planet for the better by powering the electric movement.” – Company E

Whereas Company A communicated this through slogans and framed its communicated organizational purpose around building a sustainable future, Company D focused on framing itself through urban sustainability. Instead of referencing a sustainable future in general, Company D positioned itself as a shaper of sustainable cities. These positionings were communicated primarily through verbal environmental claims, while visual claims functioned as supportive elements. Visual claims consisted of associative imagery, primarily found in Company D's communication. This imagery depicted futuristic urban scenery with substantial greenery and soft light.

Sustainability leadership positioning was most prominently communicated through Companies B, C, and D. This positioning was constructed through communicating visions or goals related to becoming sustainability leader or ‘forerunner’. Aside from broad, associative statements, also substantive elements were used in defending these visions. Company B claimed a forerunner positioning through statements like:

“Forerunner in sustainability.” – Company B

While also connecting this positioning to their organizational actions and commitments to green transition:

“Our goal is to be a forerunner in the green transition – through concrete actions that help transform our industries and build a more sustainable future.” – Company B

Meanwhile Company C positioned itself through framing sustainability leadership within the food packaging market:

“Our vision is to be the first choice for sustainable packaging solutions globally” – Company C

“[Company C] is a key leading global player in sustainable food-on-the-go and food-on-the-shelf packaging solutions.” – Company C

Presenting itself as both a future city shaper and sustainability leader, Company D concluded:

“Our sustainability leadership is about creating lasting impact, and we invite the world to rise with us.” – Company D

“For us, leading in our industry also means leading in sustainability.” – Company D

While Company B communicated aspirations toward a forerunner position, Companies C and especially D made more direct claims to current industry leadership or market position in environmental sustainability.

Both positionings within this theme relied predominantly on associative claims, including slogans, aspirational statements, and symbolic imagery. Substantive claims appeared primarily as anchoring elements within broader associative narratives.

4.3.3 Concrete environmental actions

Alongside the associative narratives and enabler positioning identified in the preceding themes, concrete environmental actions were communicated by all companies within the dataset. This communication consisted of substantive environmental claims, delivering specific actions, quantified targets, and achieved environmental outcomes to the stakeholders. Most claims within this theme were substantiated through organizational disclosures, making the claims within this theme more verifiable in comparison to the themes with associative-reliant communication. This theme frames the organizations as environmentally sustainable through concrete numbers and actions related to emission mitigation or quantified targets related to environmental performance.

The specific nature of these concrete action claims varied across companies. Some communicated project-level actions:

“In Northern Finland, we are constructing a high-voltage transmission line for the national grid operator using low-carbon concrete elements in the foundations.” – Company A

“The partnership with the John Nurminen Foundation aligns with [Company B]’s goals to develop future maritime infrastructure and reduce the burden on water resources.” – Company B

Meanwhile others focused more on their quantified future targets or already done actions towards carbon neutrality:

“We want to be the front-runner in responsible production: we commit to 100% carbon neutrality by 2035 and 100% recyclability in our own production by 2025.” – Company E

“[Company D] is the first in the industry to achieve carbon neutral manufacturing units globally” – Company D

“The way we can contribute is by focusing on developing circular packaging solutions with improved end-of-life management to help our customers achieve their sustainability targets.” – Company C

While concrete environmental actions were communicated across all five companies, the specificity and measurability of these claims varied considerably. Companies A, D, and E communicated highly specific, substantiated, actions through quantified targets such as Company E’s commitment to 100% carbon neutrality by 2035, and project-level actions like Company A’s statement about their use of low-carbon concrete element in a project in Northern Finland. In contrast, the actions of Companies C and B were communicated on a more general level, such as Company C’s claim regarding their focus on circular packaging solution development. This variation indicates that companies may differ in the extent to which they ground their communicated identity associated with concrete environmental actions with verifiable commitments.

4.3.4 Business model as an environmental solution

Within the dataset, Companies E, A, and C presented identity themes where they and their products or services were presented as environmental solutions. These themes connected the organization directly into sustainability, depicting sustainability as a core of their business and strategy. Such communication involved both substantive and associative claims, as well as supporting visual imagery.

Company E’s positioning as an environmental solution was notably strong. As noted in the preceding discussion of the enabler theme, Company E presents its core product as a solution for sustainability. The company makes both visual and verbal claims indicating the environmentally sustainable nature of its business model. Visual claims include product-related images and certification badges, while verbal claims include statements like:

“Our goal is to charge our planet for the better by powering the electric movement together with our customers.” – Company E

“The designation reflects the sustainability impact of our business model, with the majority of revenue derived from activities that support the transition to a low-carbon economy.” – Company E

“Our business enables the decarbonization of transport.” – Company E

Although a service provider rather than a product manufacturer, Company A positions itself similarly to Company E. From their associative slogan to their substantive claims, the company frames itself to be delivering what is needed for a sustainable future. Through this, it paints sustainability not only as a value, but a core function of its operations:

“Our expertise enables the energy transition.” – Company A

“Together with our 2,000 experts, we create a seamless, safe and clean society for tomorrow.” – Company A

“We are seeking new ways to build energy infrastructure with lower emissions and offer our customers low-carbon alternatives.” – Company A

Differing from Companies E and A in how its business model is presented as environmentally sustainable, Company C focuses on communicating their sustainability by framing their core product category itself as an environmental solution – packaging that prevents food waste and enables sustainable consumption.

“Sustainable packaging solutions for food and everyday necessities.” – Company C

“The way we can contribute is by focusing on developing circular packaging solutions with improved end-of-life management to help our customers achieve their sustainability targets.” – Company C

While these framings are closely connected to the identity themes of enabling customer’s environmental sustainability identified in section 4.3.1, with some claims appearing across both themes, the communicative functions differ. Whereas section 4.3.1 examined how organization presents themselves in relation to their customers’ sustainability, this section examines how sustainability is embedded into and communicated as a core function of the organization’s business model. This makes the organization not merely an enabler of others’ sustainability but a sustainable entity by virtue of what it does.

4.3.5 External validation stacking

All companies within the dataset communicated external validation through their corporate branding initiatives. This external validation was communicated both through verbal and visual claims, with strong emphasis on substantive environmental claims. Regarding visual claims, the external validation elements appeared predominantly in the sustainability sections of the corporate websites. External validation was communicated through visual elements in Company D through EcoVadis, CDP Climate list certifications, and Clean 200 badge. For Company E, visual elements included Nasdaq Green Equity badge, EcoVadis, and UN Global Compact badge. Verbal communication

related to external validation of sustainability included claims related to Science Based Targets initiative with Companies A, B, C, and E implying that their emission reduction follows the SBTi:

“... our emission reduction goals are verified by SBTi.” – Company B

“... we have updated our emission reduction targets, which have been validated and approved by the Science Based Targets initiative.” – Company C

“In our operations we follow Science Based Targets (SBT)” – Company E

“We help our customers achieve their own sustainability goals, and we are committed to ambitious emission reductions in line with the Science Based Targets initiative.” – Company A

Verbal claims also referenced EU CSRD and ESRS requirements, and ESG laws and regulations in general. These claims referenced compliance with ESG laws and regulations, as well as the alignment of sustainability reporting with CSRD:

“We continuously improve the transparency of our sustainability data and ensure our operations comply with ESG laws and regulations.” – Company A

“Our sustainability reporting is aligned with CSRD and ESRS requirements.” – Company E

Other certifications and badges related to sustainability performance were used on the websites of Companies D and E. These included EcoVadis, Clean 200 ranking badge, Nasdaq Green Equity badge, and the UN Global Compact badge. Found on the sustainability sections of the websites, these verbal claims were combined with substantive visual claims, presenting visual proof of these third-party validations. Similarly to these visual claims, the verbal claims communicating third-party validations were substantive:

“EcoVadis Platinum medal for sustainability performance, with [Company D] reaching the top 1% of all companies assessed.” – Company D

“For the 7th year in a row, ranked on the Clean 200 list as the only elevator and escalator company.” – Company D

“Since 2013, a top leadership score of A or A- on CDP Climate list, a mark of our long-term commitment to environmental work and sustainability.” – Company D

“[Company E] has been awarded a Gold rating by EcoVadis.” – Company E

“Nasdaq Green Equity Designation is granted for companies whose core business makes a clear positive environmental contribution.” – Company E

“[Company E] is a member of the United Nations Global Compact, the world’s largest corporate sustainability initiative, since September 2023.” – Company E

Companies D and E demonstrated the most extensive external validation communication within the dataset, stacking multiple verbal and visual certification claims across their sustainability pages.

While all the five companies presented some level of external validation, the patterns of such communication differed across the companies. Companies' A and B communication regarding external validation was more limited with Company A referencing ESG compliance through expressing their compliance with ESG laws and referencing SBTi's, and Company B's external validation was limited to the SBTi reference noted above. In contrast, Companies D and especially E stacked both verbal and visual claims regarding these certifications substantially. Four of the companies within the dataset expressed alignments with SBTi with only one claiming alignment with the CSRD requirements, thus communicating this mandatory regulatory compliance as part of its environmental identity. In regards of distribution across website sections, the substantive-dominant themes (external validation stacking, and concrete environmental actions) appeared most heavily on the sustainability sections with associative-dominant themes (enabler of others' sustainability, business model as environmental solution, and future society and leader framing) showing a more even distribution across website sections. Although the associative-dominant themes appeared more evenly, the theme was most prominent on the homepages.

Together, these five identity themes illustrate how environmental claims function collectively to articulate corporate identities associated with environmental sustainability through corporate branding. While four of the five themes were communicated across all companies, the business model as an environmental solution theme was specific to Companies A, C, and E. This theme reflected the direct connections between the companies' core business operations and environmental outcomes. The specific framings, emphasis, and combinations of claim types differed both across theme types and companies, indicating distinct approaches to environmental identity construction.

5 Discussion

The purpose of the study was to examine how environmental claims are used in corporate branding to articulate corporate identities associated with environmental sustainability. This purpose is addressed through three sub-questions: 1) What types of substantive and associative environmental claims are communicated through corporate websites? 2) To what extent are environmental claims in corporate branding substantiated through disclosed organizational actions? 3) How do environmental claims contribute to the articulation of environmentally sustainable corporate identities on corporate websites? Corporate branding literature has recognized that organizations communicate environmental sustainability in response to stakeholder expectations, yet the mechanisms through which environmental claims operate at the organizational level have received limited empirical attention (Koch & Gyrd-Jones 2019; Foroudi et al. 2022; Persakis et al. 2025). Throughout this chapter, the findings are interpreted in relation to the theoretical framework and previous literature to provide a theoretically informed understanding of the role of environmental claims in corporate branding.

5.1 Associative and substantive environmental claims

Corporate branding literature has recognized that organizations seek to communicate organizational commitments to environmental sustainability (Koch & Gyrd-Jones 2019; Foroudi et al. 2022). However, empirical research examining the specific communicative functions through which environmental claims are used at the organizational level remains limited (Persakis et al. 2025). The study addresses this by examining how substantive and associative claims function as communicative elements in corporate branding.

While both associative and substantive environmental claims were identified throughout the dataset, associative claims were more dominant, constituting an overall ratio of 2:1. A similar reliance on associative claims has been recognized in product marketing contexts (Seelig et al. 2021), and this finding extends that pattern to the context of organization-level corporate branding in the Industrial Goods and Services sector. Through the lens of Suchman's (1995) legitimacy theory, the predominance of associative claims indicates organizational efforts to align with societal expectations regarding environmental sustainability. This is consistent with corporate branding literature recognizing that organizational values related to sustainability are communicated in response to stakeholder expectations (Koch & Gyrd-Jones 2019; Foroudi et al. 2022). Thus, the findings suggest that legitimacy enhancement constitutes a central communicative function of environmental claims in corporate branding.

This legitimacy-enhancing function was particularly evident in the visual claims within the dataset with associative-substantive distribution of visual claims indicating that they serve primarily legitimacy-enhancing functions. These findings are consistent with Kassinis and Panayiotou (2018), who recognized the role of visual elements in enhancing organizational legitimacy and Xue and Muralidharan (2015) whose findings indicate that associative visual claims hold an important role in generating positive stakeholder perceptions regarding environmental efforts. Although the visual claims identified in this study were frequently linked to organizational operations, products, and sustainability-related activities, their communicative function was primarily symbolic rather than focused on communicating measurable environmental performance. Consequently, associative visual claims were predominantly used to symbolically associate organizations with environmental sustainability. This finding contributes to the corporate branding literature by demonstrating that visual environmental claims function primarily as legitimacy-enhancing elements, reinforcing verbal sustainability communication through symbolic associations with environmental sustainability. An exception to this pattern was evident in third-party certification badges, which constituted the majority of substantive visual claims and functioned as credible signals of verifiable environmental performance rather than purely symbolic associations. This suggests that although visual claims are predominantly associative in corporate branding, consistent with Kassinis and Panayiotou's (2018) recognition of visual claims, third-party certifications represent a distinct claim type that extends beyond purely symbolic associations. By providing independently verifiable evidence of environmental performance, certifications function as credible signals reducing information asymmetry (Spence 1973; Ganz & Grimes 2018) and combine legitimacy-enhancing and signalling functions in a distinct manner.

Beyond the visual-verbal distinction, associative and substantive claims were frequently used together to communicate and reinforce sustainability-related corporate identities rather than functioning as separate forms of environmental communication. This complementary use indicates that the two claim types perform distinct roles while contributing to the same communicative purpose. This finding challenges the tendency in environmental claims literature to examine associative and substantive claims as distinct categories (Seelig et al. 2021; Persakis et al. 2025) and suggests that such an approach may lead to an incomplete picture of how environmental sustainability is communicated through corporate branding.

While the associative and substantive claims are used as complementary to one another, the distribution of environmental claim types across corporate website sections suggests that different sections serve different communicative purposes. Whereas the homepage and about us sections focus

primarily on associative claims, communicating broader associations, and aligning the organization with societal expectations (Suchman 1995; Handelman & Arnold 1999), the sustainability sections rely more heavily on communicating measurable actions and specific targets, suggesting a stronger orientation towards reducing information asymmetry through concrete signals (Spence 1973; Ganz & Grimes 2018). This variation indicates that environmental claims are strategically placed across corporate branding touchpoints according to their communicative purpose. The homepage and about us sections are primarily concerned with communicating the organization's values, positioning, and self-presentation (Fu & Zhu 2022), consistent with corporate branding literature emphasizing communication regarding the organizational identity and purpose (Balmer 2012; Biraghi & Gambetti 2015). In contrast, sustainability sections provide more detailed information and evidence to support the broader sustainability-related narratives. This indicates that corporate websites combine symbolic and information-focused forms of environmental communication, with the emphasis varying according to the communicative role of each website section.

5.2 Substantiation of environmental claims

While legitimacy enhancement emerged as a central communicative function, the patterns also revealed a strategic use of substantive claims in communicating verifiable environmental results or actions. In environmental claims literature, these claims are seen as risk management elements (Torelli et al. 2020) and signals aiming to reduce information asymmetry (Ganz & Grimes 2018). Through assessing claim substantiation, this study adds to the existing literature by connecting empirical findings with the current understanding of substantive claims and their functions in relation to Spence's (1973) signalling theory.

During the substantiation assessment, majority of substantive claims were found to be fully substantiated, with none lacking substantiation entirely. This indicates strong alignment between communicated environmental claims and disclosed organizational actions, confirming the use of substantive claims as credibility signals in the context of corporate branding and extending Ganz and Grimes' (2018) findings to the organizational level. The high degree of substantiation further suggests that these signals are credible, functioning not only to reduce information asymmetry but also as risk management against possible misalignment between environmental communication and actual organizational performance (Torelli et al. 2020; Janik & Ryszko 2025). The pattern is also consistent with the direction of ongoing regulatory developments, as the proposed European Union Green Claims Directive (European Union 2024) seeks to strengthen verification and substantiation requirements for explicit environmental claims. The findings suggest that the analysed organizations

are already broadly aligned with these expectations, thus potentially indicating sector-specific legitimacy pressures rather than general compliance.

Alongside fully substantiated claims, a few partially substantiated claims arose from the dataset. These claims held some level of substantiation while remaining partly unsubstantiated. From a signalling perspective, partial substantiation indicates that the signal is weak or incomplete (Spence 1973; Ganz & Grimes 2018), thus creating information asymmetry rather than reducing it as the stakeholders cannot fully verify the communicated claim. From a legitimacy theory perspective, partial substantiation is less problematic. Legitimacy theory is concerned with maintaining social acceptance through symbolic communication even in cases where the specific details are not confirmed (Suchman 1995; Kassinis & Panayiotou 2018). Consequently, partially substantiated claims still serve their legitimacy function. This finding brings a legitimacy perspective to the often signalling-reliant substantive claims literature (Ganz & Grimes 2018), suggesting that substantive claims hold both legitimacy and signalling functions.

Partially substantiated claims are categorized as substantive as they present themselves as concrete and verifiable. Yet, the partial substantiation indicates that they function more like associative claims in practice and their credibility cannot be fully established through disclosed evidence. In one instance within the dataset, Company E communicated a commitment to 100% recyclability in own production by 2025, which was later disclosed as 99% in subsequent organizational reports. This presents how well-intentioned substantive claims can become partially substantiated over time as organizational performance evolves, raising questions about the temporal dimension of claim substantiation.

Together, the substantiation patterns indicate that organizations in the Industrial Goods and Services sector generally support their substantive environmental claims with disclosed evidence, while associative claims serve primarily symbolic functions that operate independently of organizational disclosures.

5.3 Communicated identities in corporate branding

Environmental claims have been examined primarily at the product or message level, with limited attention to how they function collectively to construct organizational-level identities (Jayanti 2017; Ll  cer-Falc  n et al. 2026; Persakis et al. 2025). This analysis revealed five recurring identity themes through which organizations construct corporate identities associated with environmental sustainability in corporate branding. Rather than relying on a single claim type, each theme operated

through distinct combinations of associative and substantive claims while still relying predominantly on one or the other.

Three of the five themes relied predominantly on associative environmental claims. These themes included enabler of others' sustainability, future society and leadership framing, and business model as an environmental solution. Across these themes a common characteristic was the positioning of the organization as an active contributor to environmental sustainability through aspirational language and symbolic associations. These findings extend the understanding of legitimacy theory in corporate branding by identifying associative environmental claims as systematic communicative elements, through which legitimacy-driven identity themes are constructed across the sector (Suchman 1995; Handelman & Arnold 1999).

Two themes, in contrast, were predominantly substantive. These themes regarding concrete environmental actions and external validation stacking focused on presenting the organization's achievements and operations through descriptive and verifiable claims in a more formal manner. Through these substantive-dominant identity themes, the companies presented themselves as professional and proven actors in environmental sustainability. These findings indicate similar contributions to literature as the associative themes, identifying a more systematic way of using substantive claims not only as strong signals (Spence 1973; Ganz & Grimes 2018) but as credibility-enhancing identity construction.

On the websites, these identity themes did not operate independently but rather worked together to communicate a layered corporate identity. While the associative themes, especially prominent on homepages, first framed organizations as active contributors to environmental sustainability, the substantive themes, more frequent on sustainability-related pages, provided concrete validation for these aspirational narratives. These findings indicate that environmentally sustainable corporate identities are constructed through both image-focused aspirational associations and concrete, quantifiable actions, reflecting the complementary functions of legitimacy enhancement and environmental signalling in corporate branding (Suchman 1995; Spence 1973).

While corporate branding literature has recognised that environmental sustainability can be embedded into corporate identity (Koch & Gyrd-Jones 2019; Foroudi et al. 2022), the role of environmental claims as the specific communicative mechanism through which environmentally sustainable identities are constructed has received limited empirical attention (Jayanti 2017; Persakis et al. 2025). This study addresses this gap by demonstrating that environmental identity is communicated through a sequential and layered structure, in which associative environmental claims establish sustainability-

related associations before substantive claims provide concrete validation. This indicates that substantive and associative claims hold complementary roles in the communication of corporate identities associated with environmental sustainability.

The prevalence of four identity themes across all five companies suggests that certain environmental identity communication strategies are characteristic of the Industrial Goods and Services sector broadly, rather than being company-specific communication choices. As the exception, business model as environmental solution -theme appeared only in companies whose core offerings have a direct and demonstrable environmental function, suggesting that this identity positioning requires a specific alignment between business operations and environmental outcomes. The associative and substantive layer, their functions and themes are presented in Table 9.

Associative layer	Substantive layer
Establishes identity	Validates identity
Legitimacy function	Signalling function
Themes: Enabler, Future society, Business model	Themes: Concrete actions, external validation theme

Table 9. Identity layers in corporate branding.

5.4 Managerial implications

Although associative environmental claims were found to dominate throughout the dataset with a ratio of 2:1, the credibility of the associative claims was grounded in practical actions and results through substantive claims. Considering the current emphasis on associative claims, especially regarding visual ones, managers should evaluate whether their substantive claims are sufficient to ground their environmental identity credibly while seeking to find balance between communicating broader sustainability aspirations and demonstrating concrete environmental actions and achievements.

The findings of this study suggest that different website sections serve different communicative functions in corporate branding. Therefore, organizations should consciously design their homepage, about us, and sustainability pages with different communicative objectives in mind. For instance, homepages and about us sections may focus on communicating broader sustainability values and organizational purposes, while sustainability pages should provide specific, verifiable evidence of environmental performance to substantiate the broader narratives.

Similarly, the partial substantiation findings suggest that managers should regularly audit their environmental claims against their most recent organizational disclosures to ensure substantive claims remain accurate over time. This is particularly relevant in light of the proposed EU Green Claims Directive, which emphasizes the substantiation of environmental claims in organizational communication. Such an audit can be carried out through cross-referencing website claims against the most recent sustainability report.

5.5 Future research

This study offers several avenues for future research. As the sample was limited to five companies within the Industrial Goods and Services sector, future research could expand the sample size to allow for broader generalization of the findings. This would enable comparative analysis across companies of different sizes and across national contexts.

During the data collection and substantiation assessment, similar environmental themes and claims were observed in the sustainability reports and annual reports of the analysed organizations. Considering that the findings of this study indicate environmental sustainability narratives and identity themes extending across corporate website sections, analysing how these narratives within corporate branding may extend to organizational reporting provides an interesting avenue for future research. Therefore, examining whether and how these themes extend into formal organizational reporting would provide a more comprehensive understanding of environmental identity communication across corporate branding channels. This is relevant also in relation to stakeholder communication, thus extending this research into an interdisciplinary territory.

Finally, in the context of evolving regulatory requirements and growing stakeholder pressures around sustainability, a temporal analysis of how environmental claim usage in corporate branding changes over time would provide insights into how the regulations and the anticipation of them affects how organizations present their environmental sustainability.

6 Conclusion

This study examined how environmental claims are used in corporate branding to articulate corporate identities associated with environmental sustainability. As the role of sustainability communication has increased in the recent years and organizations are facing both societal and regulatory pressures to articulate their environmental sustainability, understanding how environmental claims function in such communication is relevant. This study addressed the topic through three sub-questions concerning the types of environmental claims communicated, their level of substantiation, and their contribution to the articulation of corporate identities associated with environmental sustainability. The theoretical framework drew on corporate branding and environmental claims literature, using signalling and legitimacy theories as interpretive lenses. Through this, the study explored the communicative mechanisms of environmental claims in the context of corporate branding through corporate websites.

The study found that environmental claims communicated through corporate branding were largely associative, with a distribution ratio of 2:1. Associative claims served primarily legitimacy-enhancing efforts while substantive claims functioned as signals of verifiable environmental performance. Rather than operating independently, these claims worked together in varying combinations across the website sections. The strategic distribution indicates that environmental communication is purposefully structured, suggesting that environmental claims in corporate branding operate as an integrated communicative system through which both legitimacy and reducing information asymmetry are managed.

The findings suggest that the majority of substantive claims were fully aligned with the disclosed organizational actions, further strengthening their role as credible signals. The substantiation patterns revealed that claim substantiation varies from fully substantiated signals to partially substantiated claims that blur the boundary between associative and substantive communication. These findings, and the partially substantiated claims in particular, indicate that substantive claims do not exclusively serve signalling functions but also carry legitimacy-enhancing dimensions. Furthermore, the temporal dimension introduced by evolving organizational performance indicates that the credibility of claims is subject to change as organizational realities develop over time.

Overall, the analysis demonstrates that environmental claims function as strategic elements through which companies may communicate organization-level narratives associating the company with environmental efforts. Through this structured and layered use of associative and substantive environmental claims, five identity themes were identified. The prevalence of shared identity themes

across the analysed companies in the Industrial Goods and Services sector suggests that environmental identity communication in this sector follows recognizable patterns, reflecting sector-level legitimacy pressures alongside individual strategic choices. These findings contribute to corporate branding literature by empirically identifying the communicative mechanisms through which environmental claims communicate organization-level sustainability identities. This demonstrates that legitimacy enhancement and signalling function not as competing logics but as complementary dimensions of environmental identity communication.

References

- Aaker, D. (2004) Leveraging the Corporate Brand. *California management review*. Vol. 46(3), 6-18.
- Abratt, R. – Kleyn, N. (2023) The conscientious corporate brand: definition, operationalization, and application in a B2B context. *Journal of Business & Industrial Marketing*, Vol. 38(10), 2122-2133.
- Abratt, R. – Kleyn, N. (2012) Corporate identity, corporate branding, and corporate reputations: Reconciliation and integration. *European Journal of Marketing*, Vol. 26(7-8), 1048-1063.
- Aspo (2026) About us. <https://www.aspo.com/about-us> Searched: 02.06.2026.
- Aspo (2026) Annual review 2025.
[https://www.aspo.com/hubfs/Aspon%20vuosi%202025%20\(kaikki\)/Aspo-Annual-Review-2025.pdf](https://www.aspo.com/hubfs/Aspon%20vuosi%202025%20(kaikki)/Aspo-Annual-Review-2025.pdf) Searched: 04.06.2026.
- Aspo (16.10.2025) Aspo Plc Press Release. <https://www.aspo.com/press-releases/aspo-has-set-science-based-emission-reduction-targets-now-approved-by-sbti-3167626> Searched: 04.06.2026.
- Aspo (2026) Sustainability. <https://www.aspo.com/sustainability> Searched: 02.06.2026.
- Aspo (2026) Your expert partner in B2B. <https://www.aspo.com> Searched: 02.06.2026.
- Baker, M. – Balmer, J. (2007) Visual identity: trappings or substance? *European Journal of Marketing*. Vol. 31(5/6), 366-381)
- Balmer, J.M. (2012) Strategic corporate brand alignment: Perspectives from identity based views of corporate brands. *European Journal of Marketing*, Vol. 46(7-8), 1064-1092.
- Banerjee, S. – Gulas, C. S. – Iyer, E. (1995). Shades of Green: A Multidimensional Analysis of Environmental Advertising. *Journal of Advertising*, 24(2), 21–31.
- Barkus, J. J. – Schmitt, B. H. – Zarantonello, L. (2009) Brand Experience: What Is It? How Is It Measured? Does It Affect Loyalty? *Journal of Marketing*, Vol. 73, 52-68.
- Biraghi, S. – Gambetti, C. (2015) Corporate branding: Where are we? A systematic communication-based inquiry. *Journal of Marketing Communications*. Vol. 21(4), 260-283.
- Borges, E. – Campos, S. – Teixeira, M. S. – Lucas, M. R. – erreira-Oliveira, A. T. – Rodrigues, A. S. – Vaz-Velho, M. (2023). How Do Companies Communicate Sustainability? A Systematic Literature Review. *Sustainability*, 15(10), 8263.
- Bruhn, M. – Schnebelen, S. – Schäfer, D. (2014) *Industrial Marketing Management*. Vol. 43(1), 164-176.

- Capriotti, P. – Moreno, A. (2007). Communicating corporate responsibility through corporate web sites in Spain. *Corporate Communications*, 12(3), 221–237.
- Carlson, L. – Grove, S. J. – Kangun, N. (1993). A Content Analysis of Environmental Advertising Claims: A Matrix Method Approach. *Journal of Advertising*, 22(3), 27–39.
- Carlson, L. – Grove, S. J. – Kangun, N. – Polonsky, M. J. (1996) An International Comparison of Environmental Advertising: Substantive versus Associative Claims. *Journal of Macromarketing*, Vol. 16 (2), 57-68,.
- Cicero Shades of Green (28.08.2022) Kempower Corporation Shades of Green assessment. <https://www.nasdaq.com/sites/acquia.prod/files/2024-09/KEMPOWR-green-equity-assessment-report-fi4000513593.pdf> Searched: 04.06.2026.
- Dyllick, T. – Hockerts, K. (2002) Beyond the business case for corporate sustainability. *Business Strategy and the Environment*. Vol. 11, 130-141.
- Elo, S. – Kääriäinen, M. – Pölkki, T. – Utriainen, K. – Kyngäs, H. (2014) Qualitative Content Analysis: A Focus on Trustworthiness. *SAGE Open*, Vol. 4(1).
- Enersense (2026) About us. <https://enersense.com/about-us/> Searched: 02.06.2026.
- Enersense (2026) Annual report 2025. <https://storage.mfn.se/d0f117b0-76df-452f-bbb1-f5ee81511a87/enersense-annual-report-2025.pdf> Searched: 04.06.2026.
- Enersense (2026) Sustainability. <https://enersense.com/about-us/sustainability/> Searched: 02.06.2026.
- Enersense (2026) We are Enersense. <https://enersense.com> Searched: 02.06.2026.
- Eriksson, Päivi, and Anne Kovalainen. *Qualitative Methods in Business Research* / Päivi Eriksson and Anne Kovalainen. 2008.
- Erjasola, A-M. – Lipponen, J. – Vehkalahti, K. – Aula, H-M. – Pirttilä-Backman, A-M. (2021) From the brand logo to brand associations and the corporate identity: visual and identity-based logo associations in a university merger. *Journal of Brand Management*. Vol. 28, 241-253.
- Fu, H. – Zhu, H. (2022) Discursive construction of corporate identity through websites: An intercultural perspective on the commercial banks of the United States and China. *Front Psychol*. Vol. 13.
- Ganz, B. – Grimes, A. (2018). How claim specificity can improve claim credibility in green advertising: measures that can boost outcomes from environmental product claims. *Journal of Advertising Research*, Vol. 58 (4).

- García García, M. – Carrillo-Durán, V. – Tato Jimenez, J. (2017). Online corporate communications: website usability and content. *Journal of Communication Management* (London, England), 21(2), 140–154.
- Handelman, J. M. – Arnold, S. J. (1999) The Role of Marketing Actions with a Social Dimension: Appeals to the Institutional Environment. *Journal of Marketing*, 63(3), 33–48.
<https://doi.org/10.2307/1251774>
- Hatch, M.J. – Schultz, M. (2001) Are the Strategic Stars Aligned for Your Corporate Brand? *Harvard Business Review*, Vol. 79(2).
- Hamzah, Z. L. – Alwi, S. F. S. – Othman, M. N. (2014) Designing corporate brand experience in an online context: A qualitative insight. *Journal of Business Research*. Vol. 67(11), 2299-2310.
- Huhtamaki (2026) About us. <https://www.huhtamaki.com/en/about/> Searched: 03.06.2026.
- Huhtamaki (2026) Annual Report 2025.
https://www.huhtamaki.com/globalassets/global/investors/reports-and-presentations/en/2025/huhtamaki_annual-report-2025.pdf Searched: 03.06.2026.
- Huhtamaki (2026) Sustainability. <https://www.huhtamaki.com/en/sustainability/> Searched: 03.06.2026.
- Huhtamaki (2026) This is Huhtamaki. <https://www.huhtamaki.com/en/> Searched: 03.06.2026
- Janik, A. – Ryszko, A. (2026) Greenwashing in Sustainability Reporting: A Systematic Literature Review of Strategic Typologies and Content-Analysis-Based Measurement Approaches. *Sustainability*, Vol. 18(1), 17.
- Jayanti, R. – Ahuja, M. (2018) Sustainability based corporate identity: A study of corporate websites. *Academy of Marketing Studies Journal*, Vol. 22(3).
- Järventie-Thesleff, R. – Moisander, J. – Laine, P-M. Organizational dynamics and complexities of corporate brand building – A practice perspective. *Scandinavian Journal of Management*. Vol. 27(2), 196-204.
- Kassinis, G. - Panayiotou, A. (2018). Visuality as Greenwashing: The Case of BP and Deepwater Horizon. *Organization & Environment*, 31(1), 25–47.
- Kempower (2026) About Kempower. <https://kempower.com/about-us/> Searched: 02.06.2026.
- Kempower (12.12.2025) Kempower achieves Gold in EcoVadis sustainability assessment.
<https://investors.kempower.com/releases/kempower-achieves-gold-in-ecovadis-sustainability-assessment/> Searched: 04.06.2026.
- Kempower (2026) Annual Report 2025. https://investors.kempower.com/wp-content/uploads/sites/2/2026/03/annual_report_2025.pdf Searched: 04.06.2026.

- Kempower (2024) Annual Report 2023. https://investors.kempower.com/wp-content/uploads/sites/2/2024/03/kempower_annual_report_2023_final.pdf Searched: 04.06.2026.
- Kempower (2026) Sustainability <https://kempower.com/sustainability/> Searched: 02.06.2026.
- Kempower (2026) Kempower. <https://kempower.com> Searched: 02.06.2026.
- Knox, S. – Brickerton, D. (2003) The Six Conventions of Corporate Branding. *European Journal of Marketing: Special Edition on Corporate and Service Brands*. Vol. 35 (7-8), 998-1016.
- Kone (17.02.2026) KONE awarded EcoVadis Platinum Medal for sustainability excellence. Press Prelease. <https://www.kone.com/en/news-and-insights/releases/kone-awarded-ecovadis-platinum-medal-for-sustainability-excellence-2026-02-17.aspx> Searched: 04.06.2026.
- Kone (2026) KONE in brief. <https://www.kone.com/en/company/> Searched: 03.06.2026.
- Kone (28.09.2023) KONE is the first in the industry to achieve carbon neutral manufacturing units globally. Press Release. <https://www.kone.com/en/news-and-insights/releases/kone-is-the-first-in-the-industry-to-achieve-carbon-neutral-manufacturing-units-globally-2023-09-28.aspx> Searched: 04.06.2026.
- Kone (02.03.2026) KONE recognized as a sustainability leader with CDP A-List position. <https://www.kone.com/en/news-and-insights/releases/kone-recognized-as-a-sustainability-leader-with-cdp-a-list-position-2026-02-03.aspx> Searched: 04.06.2026.
- Kone (13.03.2024) KONE recognized as Supplier Engagement Leader by CDP and ranked 55th on Clean200 list. Press Release. <https://www.kone.com/en/news-and-insights/releases/kone-recognized-as-supplier-engagement-leader-by-cdp-and-ranked-55th-on-clean200-list-2024-03-13.aspx> Searched: 04.06.2026.
- Kone (2026) Sustainability at KONE. <https://www.kone.com/en/sustainability/> Searched: 03.06.2026.
- Kone (2026) Sustainability Statement 2025. https://www.kone.com/en/Images/Sustainability-Statement-2025_tcm17-141649.pdf Searched: 04.06.2026.
- Kone (2026) We shape the future of cities. <https://www.kone.com/en/> Searched: 02.06.2026.
- Kim, M.Y. – Bendle, T.N. – Hulland, J. – Pfarrer, D.M. (2024) Corporate sustainability research in marketing: Mapping progress and broadening our perspective. *Original Empirical research*, Vol. 52, 1495-1512.
- Koch, C.H. – Gyrð-Jones, R.I. (2019) Corporate brand positioning in complex industrial firms: Introducing a dynamic, process approach to positioning. *Industrial Marketing Management*, Vol. 81, 40-53.

- Krippendorff, Klaus. *Content Analysis: An Introduction to Its Methodology*. 4th edition., SAGE Publications, Inc., 2019.
- Kumar, V. – Kaushik, A. K. (2018) Building consumer-brand relationships through brand experience and brand identification. *Journal of Strategic Marketing*. Vol. 28(1), 39-59.
- Llácer-Flacón, S. – Vilaplana-Aparicio, M. – González-Díaz, C. (2026) Corporate Communication of Sustainability in the Fashion Industry: A Systematic Literature Review. *Administrative Sciences*, Vol. 16(2), 76.
- Luo, G. – Hao, J. – Ma, H. (2024) The impact of corporate philanthropy on the evolution of social media brand community – based on the case of ERKE. *Asia Pacific Journal of Marketing and Logistics*, Vol. 36 (3), 533–548.
- Lyon, T. – Montgomery, A. (2015). The Means and End of Greenwash. *Organization & Environment*, 28(2), 223–249.
- Martinez-Sanchez, M. – Buil, T. – Molla, M. (2025) Visual Identity in the Digital Age. Decoding Brand Adaptation in the Digital Environment. *Visual Review*. Vol. 17(2), 245-258.
- Melewar, T. – Saunders, J. (2000) Global corporate visual identity systems: Using an extended marketing mix. *European Journal of Marketing*, Vol. 32(5/6), 538-550.
- Mercier, J. – Sanders, J. – Munford, R. (2023) Fine Companions: Critical Realism and Framework Analysis. *International Journal of Qualitative Methods*.
- Morais, R. – Lerman, D. (2019). The brand language brief: A pillar of sound brand strategy. *Journal of Brand Strategy*, 8(3), 265–281. <https://doi.org/10.69554/SACQ3116>
- Morsing, M. (2006). Corporate social responsibility as strategic auto-communication: on the role of external stakeholders for member identification. *Business Ethics (Oxford, England)*, 15(2), 171–182.
- Morsing, M. – Majken Schultz (2006) Corporate social responsibility communication: Stakeholder information, response and involvement strategies. *Business Ethics: A European Review*, Vol. 15(4), 323-338.
- Nascimento, J. – Loureiro, S.M.C. (2024) Mapping the sustainability branding field: emerging trends and future directions. *Journal of Product & Brand Management*. Vol. 33(2), 234.
- Nasdaq (2026) Share Screener. <https://www.nasdaq.com/european-market-activity/shares> Searched: 01.06.2026.
- O'Donnell, N. – Ma, Y. – Lee, Y-J. – Choi, M. (2023) Corporate social advocacy and brand authenticity: Evaluating the influences of promise types and value congruence. *Journal of Marketing Communications*. Vol. 31 (7), 709-725.

- Peattie, K. – Crane, A. (2005). Green marketing: legend, myth, farce or prophesy? *Qualitative Market Research*, 8(4), 357–370.
- Persakis, A. – Nikolopoulos, T. – Negkakis, I. C. – Pavlopoulos, A. (2025) Greenwashing in marketing: a systematic literature review and bibliometric analysis. *International Review on Public and Nonprofit Marketing*, Vol. 22, 957-992.
- Saunders, M. – Lewis, P. – Thornhill, A. (2023) *Research Methods for Business Students* (9th edition). Pearson International Content.
- Seelig, M. – Sun, R. – Deng, H. – Pal, S. (2021). Is it all for show?: Environmental brand identification on skin care and cosmetic websites. *Journal of Marketing Communications*, 27(4), 436–456.
- Simões, C. – Singh, J. – Perin, M. (2015). Corporate brand expressions in business-to-business companies' websites: Evidence from Brazil and India. *Industrial Marketing Management*, 51, 59–68.
- Singh, S. N. – Dalal, N. – Spears, N. (2005). Understanding Web home page perception. *European Journal of Information Systems*, 14(3), 288–302.
- Suchman, M. (1995). MANAGING LEGITIMACY - STRATEGIC AND INSTITUTIONAL APPROACHES. *The Academy of Management Review*, 20(3), 571–610.
- Schmuck, D. – Matthes, J. – Naderer, B. (2018) Misleading Consumers with Green Advertising? An Affect-Reasin-Involvement Account of Greenwashing Effects in Environmental Advertising. *Journal of Advertising*. Vol. 42(2), 127-145.
- Schroeder, J. (2017) Corporate branding in perspective: a typology. *European Journal of Marketing*, Vol. 51(9-10), 1522-1529.
- Spence, M. (1973). Job market signaling. *The Quarterly journal of economics*, 87(3), 355–374.
- Tian, Y. – Kamran, Q. (2023) Mapping the intellectual linkage of sustainability in marketing. *Business and Society Review*, Vol. 128, 251-274.
- Torelli, R. – Balluchi, F. – Lazzini, A. (2019) Greenwashing and environmental communication: Effects on stakeholders' perceptions. *Business Strategy and the Environment*, Vol. 29, 407-421.
- The International Organization for Standardization (2016) ISO 14021:2016.
<https://www.iso.org/obp/ui/en/#iso:std:iso:14021:ed-2:v1:en> Searched: 15.05.2026.
- Urde, M. (2003) Core value-based corporate brand building. *European Journal of Marketing*, Vol. 37(7-8), 1017-1040.

United Nations (2025) Causes and Effects of Climate Change.

<https://www.un.org/en/climatechange/science/causes-effects-climate-change> searched: 25.11.

Vallaster, C. – Lindgreen, A. – Maon, F. (2012) Strategically Leveraging Corporate Social Responsibility: A Corporate Branding Perspective. University of California, Berkeley. Vol. 54, 3.

Wang, C. – Zhang, R. – Feng, T. – Tao, J. (2022) Impending green customizations: the roles of negative perceptions, environmental responsibility and claim type. *Management Decision*. Vol. 61 (6), 2698-2719.

Xue, F. – Muralidharan, S. (2015). A Green Picture is Worth A Thousand Words?: Effects of Visual and Textual Environmental Appeals in Advertising and the Moderating Role of Product Involvement. *Journal of Promotion Management*, 21(1), 82–106.

Youngtak, K. – Bendle, N. – Hulland, J. – Pfarrer, M. (2024) Corporate sustainability research in marketing: Mapping progress and broadening our perspective. *Journal of the Academy of Marketing Science*, Vol. 52(5), 1495-1512.

Appendices

Appendix 1 Explanation of the use of AI

Generative artificial intelligence (AI) tools were used in the preparation of this thesis. AI-assisted tools were primarily utilized for finding literature, language refinements, improving clarity and readability of text. All AI-generated suggestions were critically evaluated and reviewed or verified. Below these usages are explained in detail for full transparency.

1. OpenAI's ChatGPT (GPT-4 version)

- Searching and summarizing literature: literature review and methodology
 - The purpose was to identify potentially relevant literature regarding the theme of this research. Prompts included for example: “Find 5 peer-reviewed articles about environmental claims, marketing, corporate branding” or “Explain main arguments of Seelig et al. 2021.”
 - To ensure accuracy, the literature was subsequently retrieved from Volter.
- Improving text clarity and correcting spelling and grammar: throughout the overall process (excluding abstract)
 - Text clarity and grammar were evaluated with AI throughout the writing process to improve clarity and correct grammatical errors. To accomplish this, sections of the thesis were attached with prompts such as: “find main errors with language structure” and “which sentences are not ok”.
 - While improving text clarity and grammar, texts or sentences generated by the AI were not placed into the thesis but taken as suggestions for improvements that were subsequently implemented by the researcher.
- Exploring options for research strategy: methodology
 - To find a suitable research strategy for a qualitative content analysis and understanding of the possibilities for practical implementation.
 - All the final decisions were made independently from AI's input.
- Evaluating sections of the thesis in regards of conceptual clarity and repetition

- To improve clarity and avoid repetition, AI was used to evaluate the text.
 - Prompts included for example: Is this repetitive? *attached text* and all outputs were critically evaluated.
2. Keenious (website page: <https://keenious.com/landing>)
- Searching and summarizing articles: literature review, introduction and discussion
 - This AI was used for searching and summarizing literature articles. The prompts included for example “Explain Kassinis and Panayiotou 2018” and “Summarize Persakis et al. 2025”.
 - The purpose was to ensure understanding of literature and find literature that supported the theme of this study. All the outputs were confirmed either from the articles, or if I had read them previously, my understanding of them.