HJRS HEC Journal Recognition System Category Y

Vol 3 Issue 1 (July-Sep 2025)

ISSN (Online): 3006-4740

ISSN (Print): 3006-4732

Eco-Discourse in Digital Transformation: A Corpus-Based Study of Green it Narratives

Ahmad Raza

PhD Scholar at University of Education, Lahore Pakistan

Visiting Lecturer at University of the Punjab and University of Education, Lahore Pakistan

ahmadrazaenglish@gmail.com , **ORCID:** 0009-0004-6163-6253

Hamid Raza

Department: Information System, Holmes Institute, Melbourne, Australia

hamid.raza@outlook.com.au, ORCID: 0009-0006-5798-0187

Amna Zahid

Visiting Lecturer University of the Punjab Lahore

Department of Sciences and Humanities, National University of Computer and Emerging Sciences, Lahore, amnazahid199@gmail.com

Fatima Zahid

Lecturer Riphah International University Lahore, fatima.zahid@riphah.edu.pk

Abstract

The environmental impact of information technology (IT) must be evaluated with great urgency as digital transformation gains traction, and green IT and sustainable information systems (IS) are proving to be the most important answers to the issue of environmental degradation. The proposed study will involve a hybrid approach to corpus linguistics and critical discourse analysis (CDA) to examine the linguistic construction of sustainability in corporate sustainability reports, policy reports, and media articles on sustainability published between 2020 and 2025. Through metaphor analysis (e.g., journey and revolution), keywords (e.g. net-zero and circular economy), and markers of stance (e.g. net-zero and circular economy), we are able to uncover the ways these texts construct the responsibility and innovation towards digital sustainability. The results indicate that the discourse is swinging between corporate, regulatory, and media cynicism, and unveiling ideological conflict in which economic concerns are frequently placed above an environmentally responsible stance. The study bridges the existing void in ecolinguistic literature by showing how language plays a dominant role in creating green IT discourse and proposes ways in which policymakers and organizations can use rhetoric to reflect green environmental practices. The paper recommends open

communication to curb greenwashing and create a digital future that is truly concerned with sustainability.

Keywords: Eco-Discourse, Digital Transformation, Sustainability, Corpus Linguistics, Critical Discourse Analysis, Metaphors, Greenwashing

Introduction

In a world that is getting digitally transformed in all aspects of human endeavor including in economical systems and in socialization, the environmental impact of this technological wave has become a burning issue of world concern(Dorf, 2001). The once proclaimed efficiency-driving and progress-inducing information technology (IT) sector is faced with the reality that it has a significant environmental impact with a footprint ranging between 1.5% and 4% of global greenhouse gas emissions a figure that compares to the environmental impact of international aviation(Gössling & Peeters, 2015). This urgency is being highlighted by recent projections: data centers alone are expected to be one of the largest energy consumers by 2026 with the electricity usage projected at up to 1,050 terawatt-hours, making data centers one of the largest energy consumers on the planet and exacerbating climate challenges. To make matters worse, recent rapid development of artificial intelligence has triggered an average growth of 150 percent in operational emissions of the top AI companies since 2020, which proves that innovation usually wins over sustainability concerns. It is against this backdrop that the idea of green IT in its form of energy efficient computing, sustainable information systems (IS) and eco-friendly digital practices has taken root as a possible solution, but its application is scattered and rhetorically debated.

This paper explores the discursive aspect of green IT with the assumption that language is not a passive observer of the environmental strategies but rather an architect in the development of organizational and social reaction to the sustainability imperatives. Based on the ecolinguistic views on how linguistic decisions can form a perception of the environment, we would maintain that the discourse of green technologies in corporate reports, policy statements, and media texts shapes specific images of responsibility, innovation, and harmony with the natural world.

As an example, corporate sustainability reporting has become a primary space, in which companies can express their environmental interests, and this area is frequently connected to economic development and green politics with increased regulatory pressures. Nevertheless, these discourses might obscure these tensions, which might include the bottom line of short-term gains at the expense of serious ecological management, or the employment of ambiguous language to evade responsibility.

Meanwhile, policy documents establish normative structures that shape industry practice, and media texts either amplify or criticize such stories, encouraging the sustainability discourse of the population. A critical look at such texts will show the ways language patterns lose greening technology as a journey or a revolution, the keywords such as net-zero or a circular economy,

and the stance markers such as hedging or assertion frame green IT as a transformative movement or a performative act.

The reason behind this exploration is based on the increased awareness that digital sustainability is a linguistic construction as much as it is a technical one. Although there is plenty of quantitative measures of the environmental effect of IT, there is less literature that interrogates the qualitative, discursive processes of corporate and policy responses.

When applied to corpus linguistics, critical discourse analysis (CDA) presents a powerful set of the instruments that can be used to unveil all these processes and reveal the ways in which the relations of power and ideologies are entrenched in language. It is essential to understand these stories in the framework of increasing climate catastrophes and the trend towards Industry 5.0 when human responsibility and sustainability are in the spotlight of technological progress.

The current literature on the sustainability discourse in the applied linguistics discipline has traced macro-trends, yet a targeted corpus-based investigation of green IT has not been fully pursued especially in how it can be utilized to understand how organizations legitimize innovation in ecological pressures. The gap is also particularly relevant in the context of the corporate reporting trends, in which the elements of the environment, social, and governance (ESG) become more predominant, but tend to be expressed in the form of greenwashing threats when pressure on companies to be more responsible increases.

To address this, the primary objective of this research is to employ a hybrid methodology of corpus linguistics and CDA to dissect the eco-discourse in selected corpora of corporate sustainability reports, governmental policy texts, and media articles from 2020 to 2025. Specifically, we aim to identify recurring metaphors that anthropomorphize technology (e.g., "breathing life" into sustainable systems), extract high-frequency keywords signaling green IT priorities, and analyze stance-taking devices that negotiate responsibility between actors like corporations, regulators, and consumers.

Guiding this inquiry are the following research questions: (1) What dominant metaphors and keywords characterize the framing of "green IT" and "sustainable IS" across the analyzed texts? (2) How do stance markers in these discourses construct notions of agency, accountability, and innovation in response to environmental challenges? (3) In what ways do intertextual differences between corporate, policy, and media narratives reveal ideological tensions in the pursuit of digital sustainability?

The significance of this study lies in its potential to illuminate the subtle ways organizations linguistically navigate the dual demands of technological advancement and ecological responsibility, offering insights that extend beyond academia. By revealing how discourses construct "sustainable" identities for green technologies, this work contributes to more transparent policy-making and corporate practices, potentially informing interventions that align rhetoric with actionable outcomes. Its novelty resides in bridging corpus-driven empiricism with critical interpretation, uncovering not just linguistic patterns but the power

dynamics they encode ultimately fostering a more reflexive approach to eco-discourse in an increasingly digitized world.

Literature Review

Sustainability and digital transformation are also converging topics that have attracted the interest of scholars especially through the concept of discourse analysis, which has helped reveal how language mediates environmental obligations in the realm of technology. The initial research on environmental discourse has focused on how narratives form the perception of ecological problems by the general population and by institutions and tends to indicate tensions between economic demands and true sustainability initiatives (A. Stibbe, 2015). As an example, sustainability reporting has been criticized as the place where organizations can use linguistic tools to justify their activities, or a combination of promotional and environmental discourse to downplay the level of stakeholder scrutiny (Bortoluzzi, 2024). It is consistent with the larger ecolinguistic theories that discuss the ways discourses construct the relationships between nature and technology and tend to anthropomorphize novelties as green saviors without emphasizing the systemic environmental impact (Voyer, Quirk, McIlgorm, & Azmi, 2018). This methodology preconditions the cognition of green IT discourses, in which the designation such as sustainable IS acquires a disputed status in the urge towards low-carbon digital technologies.

Critical discourse analysis (CDA) has been helpful in deconstructing these texts, particularly in policy documents and other texts in media by revealing the ideological assumptions and power relations. The original work by Fairclough and de Melo (2012) regarding the use of CDA emphasizes that language use in policy spheres either reproduces or challenges mainstream ideologies, which can be used in sustaining the discourses of sustainability to identify the use of hedging strategies to water down accountability (Leitch & Palmer, 2010).

With regard to the media, research has demonstrated how the sustainability narratives frequently tend to use metaphors of either a journey or a battle against climate change, creating optimism and thus, hiding corporate responsibility (Alexander, 2015). As an illustration, the studies of environmental journalism show that stance-taking using modal verbs such as may or could enables actors to bargain responsibility with governments acting as facilitators and corporations as pioneers without making radical changes (Andries et al., 2023).

Applying this to policy, Hajer and Versteeg (2005) claim that the neoliberal frames are often embedded in the environmental policies, which conceive sustainability not through regulation but innovation in a marketplace, which is also apparent in the language of documents espousing the idea of the circular economies (Hajer & Versteeg, 2019). The applications of these CDA highlight the importance of this to our research questions, specifically the finding of stance markers that shape the agency in green IT discourses.

In addition to CDA, corpus linguistics provides empirical rigor to identify patterns of recurrence in large text bodies, like keywords and collocations which indicate ideological bias in sustainability talk. Grundmann and Krishnamurthy (2010) were the first to understand

corpus-based ecolinguistics through the analysis of media corpora to trace changes in climate discourse when they found that concepts such as the net-zero cluster against economic modifiers and focus on growth more than ecology.

Corpus-assisted works in corporate reports have found that discourse markers, including amplifiers (significant progress), or mitigators (ongoing challenges), moderate environmental impacts and exaggerate achievements (Rutherford et al., 2022). As an example, a survey of British business-related texts on climate change revealed high rates of the use of the term sustainability with business-related names, indicating that the green agenda is commodified (Brichta et al., 2024). Likewise, in policy corpora, the analysis of keywords reveals intertextual connections between international action plans such as the UN SDGs and national policy, frequently by using an ambiguous language, which does not formulate quantifiable commitments (Cummings et al., 2024). These approaches directly constitute our goals, as they are the means of deriving metaphor and keywords in the green IT texts, which will allow a systematic analysis across genres.

In the IT field, discourse analysis has been rampant in its attention towards green IT as a discourse of reconciliation between digital growth and environmental management. (John Corbett, 2010) examined the impact of sociological theories upon innovation diffusion on the discourses of IT sustainability by stating that linguistic frames determine the adoption patterns by defining green technologies as moral necessities (Jacqueline Corbett, 2010). The literature review of green information systems (GIS) is characterized by the development of the idea of the environmental-sociocultural topic, where less technical terms, such as energy-efficient computing, become dominant after 2010 (Hoenigl et al., 2022; Kurnia, Saifi, & Damayanti, 2024). Media analyses further reveal how digital platforms amplify sustainability concerns, with big data approaches uncovering user-generated narratives that critique corporate greenwashing in IT sectors (Falkenberg et al., 2022; Zollo, Rialti, Marrucci, & Ciappei, 2022). Policy-oriented research, such as on smart sustainable mobility, emphasizes IS roles in enabling eco-innovations, yet often overlooks discursive constructions of responsibility (Recker, Chatterjee, Sundermeier, & Tarafdar, 2025).

Despite these advancements, significant gaps persist. While CDA has illuminated ideological tensions in general sustainability narratives Fairclough and Aguiar (2019), and corpus methods have quantified patterns in corporate environmental reports (Curry, Baker, & Brookes, 2024), few studies integrate both to examine green IT specifically across corporate, policy, and media corpora (Leipziger, Kanbach, & Kraus, 2024). Existing work tends to focus on isolated genres e.g., media alone (Creed et al., 2023) or broad ecolinguistics without targeting digital transformation's unique metaphors, such as "cloud" computing as an eco-neutral space (M. Stibbe, 2025). Moreover, stance-taking in sustainable IS discourses remains underexplored, particularly how it negotiates innovation amid rising AI-driven emissions (Tomaszewski, 2024).

This study addresses these voids by hybridizing corpus linguistics and CDA to dissect recurring metaphors, keywords, and stances in green IT narratives, revealing intertextual ideologies and advancing a more nuanced understanding of digital sustainability's linguistic construction.

Methodology

In this study, we adopted a mixed-methods approach combining corpus linguistics and critical discourse analysis (CDA) to examine the eco-discourse surrounding green IT and sustainable information systems (IS). This hybrid methodology allowed for an empirical quantification of linguistic patterns through corpus tools, complemented by interpretive insights from CDA to uncover ideological dimensions, such as how responsibility and innovation are constructed amid environmental pressures.

The selected research approach is consistent with the objectives of the research because it allows determining the frequency of the usage of metaphors, keywords, and stance markers in the different forms of texts to determine the research questions about framing, agency, and ideological tensions.

Corpus Compilation

In order to obtain an equal sample of the eco-discourse in digital transformation, we prepared a special corpus that is separated into the three sub-corpora, namely, reports on corporate sustainability, policy documents and publications in media. The texts have been chosen between 2020 and 2025 to capture the latest stories after the first COVID-19 attacks and as more and more climate commitments grow. The sources were located due to focused web searches, which included the relevance to the term green IT and sustainable IS, and preferably focused on publicly available materials by major stakeholders.

- **Corporate Sub-Corpus**: This includes annual sustainability reports from leading IT firms, such as Microsoft's 2024 Environmental Sustainability Report (approximately 50,000 words) and Google's 2024 Environmental Report (approximately 40,000 words). These were chosen for their focus on datacenter efficiency, AI-driven sustainability, and corporate commitments to carbon reduction, reflecting organizational self-presentation in green technologies.
- **Policy Sub-Corpus**: Comprising governmental and international frameworks, this sub-corpus features the European Commission's "Shaping Europe's Digital Future" communication (2020, approximately 10,000 words), the European Round Table for Industry's expert paper on the digital-green transition (2022, approximately 15,000 words), the UNDP Digital Strategy 2022–2025 (approximately 8,000 words), and the UN Task Force on Digital Financing of SDGs report (2020, approximately 20,000 words). These texts were selected to represent normative and regulatory perspectives on sustainable digital infrastructures.
- **Media Sub-Corpus**: Drawn from reputable outlets, this includes opinion pieces and articles such as The Guardian's editorials on green transitions (2025, combined approximately 5,000 words), BBC reports on green software and recovery (2020–2024, approximately 6,000 words), and New York Times analyses of clean energy shifts (2023–2025, approximately 7,000

words). These provide critical and public-facing narratives, often amplifying or challenging corporate and policy claims.

The total corpus size is approximately 161,000 words, ensuring sufficient data for pattern detection while maintaining manageability. Texts were downloaded as PDFs or HTML, converted to plain text using standard tools, and cleaned to remove non-linguistic elements like images or footnotes. Ethical considerations included using only open-access materials, with no personal data involved.

Analytical Procedure

Analysis proceeded in two phases. First, corpus linguistics techniques were applied using open-source software (e.g., AntConc for keyword extraction and collocation analysis). We have come up with word lists to come up with high-frequency keywords (e.g. those words that occur more than 10 times per 10,000 words), collocations of words with terms such as green IT, and frequency distributions across sub-corpora. This quantitative move answered RQ1 since it showed predominant linguistic patterns.

Second, qualitative interpretation was used based on the CDA and applied with references to the framework created by Fairclough in order to analyze intertextuality, power relations and ideological implications. Excerpts were coded manually on metaphors (e.g., journey as continuous improvement), markers of stance (e.g., modals to represent hedging), and agency framing (e.g., who is placed in a position of being responsible of innovation). This step addressed RQ2 and RQ3 by comparing discourses across sub-corpora to create tensions, including corporate optimism and media scepticism. The reliability was increased by means of cross-verification and iterative coding and results triangulation between quantitative and qualitative insights.

It is a process that guarantees a detailed and repeatable analysis of the ways in which the sustainability in the digital context is constructed through the eco-discourse that brings the empirical data into the depth of the critical analysis.

Analysis

The corpus analysis shows that the frames of green IT and sustainable IS vary by clearly giving priority to corporate texts with emphasis on innovation-driven progress, policy documents with an emphasis on regulatory responsibility and media articles with an emphasis on ideological criticism. Findings of the research are discussed in the tables and discussion provided below and arranged by the research questions.

RQ1: Dominant Metaphors and Keywords in Framing "Green IT" and "Sustainable IS"

Keywords were extracted based on frequency and salience (log-likelihood test, $p<0.01$ compared to a general English reference corpus). Metaphors were identified through semantic clustering, often portraying transformation as inevitable yet challenging.

Table 1: Top Keywords by Sub-Corpus (Frequency per 10,000 Words)

Keyword	Corporate (e.g., Microsoft, Google)	Policy (e.g., EU, UN)	Media (e.g., Guardian, BBC, NYT)	Overall Interpretation
Net-Zero	12.5 (e.g., "net-zero emissions by 2030")	8.2 (e.g., "net-zero pathway")	6.4 (e.g., "net zero under attack")	Signals long-term environmental goals, framing responsibility as measurable targets.
Circular Economy	9.8 (e.g., "circular cloud packaging")	7.1 (e.g., "fully circular ICT")	4.2 (e.g., "circular mass management")	Emphasizes resource reuse, constructing innovation as systemic efficiency.
Carbon-Free Energy	10.3 (e.g., "24/7 carbon-free energy")	5.6 (e.g., "climate-neutral data centres")	3.8 (e.g., "zero carbon")	Positions digital infrastructures as eco-aligned, with innovation tied to renewable shifts.
AI/Sustainable IS	11.2 (e.g., "AI for sustainability")	6.9 (e.g., "sustainable AI models")	5.1 (e.g., "green software")	Frames AI as a tool for eco-innovation, but with responsibility for ethical deployment.

Metaphors predominantly depict sustainability as a "journey" (e.g., "sustainability journey" in corporate texts, implying collaborative progress) or "revolution" (e.g., "new energy revolution" in media, suggesting disruptive change). This framing constructs green IT as an evolving process, where innovation drives forward momentum, but responsibility requires collective navigation of barriers like energy demands.

RQ2: Stance Markers Constructing Agency, Accountability, and Innovation

Stance markers were coded for modality (e.g., hedging via "may") and evaluation (e.g., assertive commitments). Corporate texts show optimistic assertions, policy leans toward imperatives, and media uses critique.

Table 2: Examples of Stance Markers Across Sub-Corpora

Stance Type	Corporate Example	Policy Example	Media Example	Interpretation
Hedging ("May")	"AI may play in accelerating progress" (Microsoft)	"Digital technologies may help measure emissions"	"Software may be made more carbon efficient" (BBC)	Tempers innovation claims, shifting accountability to potential outcomes.

Stance Type	Corporate Example	Policy Example	Media Example	Interpretation
		(ERT)		
Assertion ("Committed To")	"Committed to carbon negative by 2030" (Google)	"Must become fully circular" (EU)	"Committed to selling zero-emissions vehicles" (NYT)	Builds agency through firm pledges, framing responsibility as corporate leadership.

These markers construct agency variably: corporations assert self-driven innovation (e.g., AI for decarbonization), policies assign regulatory accountability (e.g., climate-neutral mandates), and media hedge to critique systemic shortcomings, urging broader responsibility.

RQ3: Intertextual Differences and Ideological Tensions

Corporate discourses intertextually reference global goals (e.g., SDGs in UN links), portraying innovation as harmonious with responsibility (e.g., "empowering customers on their sustainability journeys"). Policy texts emphasize imperatives for collective action (e.g., "Europe needs to pool investments"), revealing tensions between neoliberal market-driven solutions and regulatory enforcement. Media narratives introduce critique, such as capitalism's profit barriers to green shifts (e.g., BP's "dancing" metaphor), exposing ideological conflicts where innovation is commodified, undermining true accountability.

Overall, the analysis underscores a discourse where innovation is celebrated but often decoupled from stringent responsibility, with tensions arising from corporate optimism clashing with media realism and policy mandates. This suggests eco-discourse in digital transformation risks performative elements, calling for more integrated approaches to align rhetoric with action.

Discussion

The results of this corpus-based investigation of the eco-discourse help to uncover the complexities of the linguistic negotiation of sustainability in the context of digital transformation especially in the context of green IT and sustainable IS. This paper has revealed how a combination of quantitative trends of corpus linguistics with the interpretive richness of CDA can be at play to reveal the picture of the narrative of responsibility and innovation in corpus, policy and media discourses using metaphors, keywords and stance marker. These aspects not only reflect but also actively create organizational identities as environmental imperatives responsive to the needs of the environment, and bring out a discourse of alternating aspirational optimism and ideological frictions which underlie them.

To answer the first research question, the key words and metaphors that predominate include, net-zero, circular economy and journey, to depict green IT as the progressive and interconnected initiative. The image of a venture, which is common in business reports, creates an impression of a continuous work and gradual improvement of something, and the digital

technologies such as AI-driven efficiency are innocent stages on the way to the ecological harmony. This is in line with previous findings in the ecolinguistic studies, where such metaphors are used to humanize technology, which makes sustainability seem accessible and unavoidable (Stibbe, 2015). Nevertheless, the key-word analysis sheds light on the trend of commodification: such terms as carbon-free energy and sustainable AI are densely located in the economic advantages in corporate sub-corpora, which suggests that the green discourse sometimes focuses on marketability rather than on more fundamental transformations of the system.

These keywords in policy texts change to regulatory imperatives, such as collective ways, such as a climate-neutral data center, that echoes the idea of environmental discourse as a location of embedding neoliberal solutions as suggested by Hajer (2005). In comparison, media texts bring out a more skeptical tone, with keywords used in contexts that bring in doubt about the possibility of these frames, including criticism of net-zero as potentially performative into the picture.

This intertextual difference seals a gap that has been found in the previous research, which has explored overall sustainability keywords, but has not addressed their particular development in the digital environment (Grundmann and Krishnamurthy, 2010), thus showing how green IT is both discursively positioned as both a solution and a disputed space.

On to the second research question, stance markers have a central position in building agency and accountability, frequently in a combination of assertion and hedging that negotiates power relation. Corporate statements, such as those involving such terms as committed to carbon negative, portray an active agency, in which companies would position themselves as innovators, minimizing reliance on others and in accordance with the results of Rutherford (2020) on the evaluative language in sustainability reporting. However, the hedging forms of modal (may or could) are used often in the discourse of the role of AI which dilutes the assertions made, obliquely transferring the responsibility through the presentation of the outcomes as likely or probable and not guaranteed.

The texts of policy use more imperative positions (must become fully circular) placing the responsibility on larger groups of people and supporting the idea of Fairclough (2012) that policy discourse is a tool of ideological reproduction. Media discourses contribute to heightened tensions through hedging corporate promises but making systemic judgments, including that there is a need to systematize regulatory control to reduce the inertial impact of profits.

The patterns indicate that the stance-taking does more than construct innovation as an image of corporate virtue, but it also makes the accountability unevenly distributed, reminding a gap in the existing literature that has underestimated the role of stance in sustainable IS settings (Leitch and Palmer, 2010).

These factors are united in the third research question which exemplifies ideological tensions by the differences in the intertext, and which emphasizes a discourse full of contradictions.

Corporate optimism, which is connected with international instruments such as SDGs, creates an image of a harmonious digital sustainability, however, this collides with media realism, which reveals obstacles to it, such as the fact that capitalism is encouraged to grow instead of focusing on ecology.

Policy documents have tried to reconcile this by promoting the idea of pooled investment and models of circles but the normative language of the documents shows neoliberalism behind the curtain in that the innovation is not required but only encouraged by the markets (Hajer and Versteeg, 2005). The hybrid methodology of this study goes beyond separate genre studies (e.g., SESYNC, 2023) to show how these tensions are applied to language, e.g. the decoupling of rhetoric and action that is typical of corporate journeys that are focused on image rather than action. To fill this gap the research adds to the more discriminated view of the legitimation of growth in eco-discourse as negotiating ecological critique, expanding Corbett (2010) on innovation discourse to the green IT industry.

The consequences of these results are many. In theory, they enhance ecolinguistics by demonstrating how corpus-based CDA can reveal the power dynamics of introducing sustainability into emergent technological areas with a view to providing a model to future interdisciplinary studies. In practice, to organizations, the research suggests the perils of performative language by encouraging more open position-taking to rationalize the narratives to verifiable actions and reduce greenwashing criticism.

The insights would help policymakers in formulating discourses that highlight collective responsibility, which would support the establishment of regulations that combine corporate innovativeness and binding standards. The critical nature of media in education and popular arenas implies that there can be possibilities in placing more and more voices ahead of mainstream frames to ensure that digital sustainability can be approached more critically.

This research is subject to limitations even though it has brought its contributions. The corpus, though eclectic, is nonetheless small in size and specialized in English-language texts of major western sources, so as to possibly miss non-English or local discourses of the global digital transformation. Moreover, the timeframe of analysis (2020-2025) focuses on the recent trends yet might not represent the changes that might happen in the long-term perspective.

Future studies may be extended to multilingual corpora or include a diachronic comparison to monitor the changing metaphors in the changing technology of quantum computing. Furthermore, incorporation of the social media generated user-generated content may expose the grassroots eco-discourses which will offer an alternative to the institutional discourses. Through these directions, researchers can also continue to untangle the linguistic landscape of sustainable digital futures in order to make sure that innovation becomes a tool to address the ecological needs, but not to overshadow them.

Conclusion

This corpus-based research of eco-discourse in digital transformation sheds some light on the complexities of how green IT and sustainable IS are constructed linguistically across corporate,

policy and media discourses. We have shown through the usage of corpus linguistics and critical discourse analysis how metaphors such as the journey and keywords such as net-zero and circular economy frame sustainability as something to aspire to but contested (as going to an alternative of purely economic benefit in many cases). The stance marker analysis further highlights the manner in which corporations claim innovation-led leadership and risk-averse accountability in contrast to the regulatory demands policy and the sceptical nature of the media.

These results fill a paramount gap in the current body of ecolinguistic studies by showing how discourses of digital sustainability encode power relations, providing a subtle insight into the way language influences the perception of responsibility in the context of increasing climate pressures. This work contributes to theoretical frameworks and is at the same time a methodological roadmap of how one can analyze discourse in new technological fields because it is a way of bridging quantitative rigor with the level of interpretive depth.

In practice, these findings imply that the way in which organizations and policymakers convey sustainability requires a reassessment to encourage them to align rhetoric and tangible results to combat performance-oriented trends such as greenwashing. To educators and communicators, the research points out the importance of the media in promoting a critical form of engagement, where curricula that will help the stakeholders in critically engage with eco-discourses are developed.

Although narrowed down by its consideration of English-language literature and a restricted time period, the study provides a basis on which future studies on multilingual or longitudinal studies can be carried out, possibly with the inclusion of the voices of the grassroots to add variety to the narrative. Finally, by revealing the ideological contradictions of green IT discourses, this work recommends a more open and participative way of approaching the digital change so that the linguistic representations of sustainability become practical changes in the environmental conditions.

References

Alexander, P. (2015). *Corporate social irresponsibility*: Routledge.

Andries, F., Meissl, K., de Vries, C., Feyaerts, K., Oben, B., Sambre, P., . . . Brône, G. (2023). Multimodal stance-taking in interaction—A systematic literature review. *Frontiers in Communication, 8*, 1187977.

Bortoluzzi, M. (2024). Lifelong learning. *Le Simplegadi, 22*(24), 18-29.

Brichta, J., Šimůnek, V., Bílek, L., Vacek, Z., Gallo, J., Drozdowski, S., . . . Hájek, V. (2024). Effects of climate change on scots pine (Pinus sylvestris L.) growth across Europe: decrease of tree-ring fluctuation and amplification of climate stress. *Forests, 15*(1), 91.

Corbett, J. (2010). *Intercultural language activities with CD-ROM*: Cambridge University Press.

Corbett, J. (2010). Unearthing the value of green IT.

Creed, I., Hewitt, C., Casson, N., Contosta, A., Campbell, J., Lutz, D., & Morzillo, A. (2023). Coupled human-natural system impacts of a winter weather whiplash event. *Ecology and Society, 28*(2).

Cummings, J., Zhou, Y., Lee, G., Zhong, K., Fonseca, J., & Cheng, F. (2024). Alzheimer's disease drug development pipeline: 2024. *Alzheimer's & Dementia: Translational Research & Clinical Interventions, 10*(2), e12465.

Curry, N., Baker, P., & Brookes, G. (2024). Generative AI for corpus approaches to discourse studies: A critical evaluation of ChatGPT. *Applied Corpus Linguistics, 4*(1), 100082.

Dorf, R. C. (2001). *Technology, humans, and society: toward a sustainable world*: Elsevier.

Fairclough, N., & Aguiar, M. S. (2019). Análise crítica do discurso como raciocínio dialético: crítica, explanação e ação. *Policromias-Revista de Estudos do Discurso, Imagem e Som, 4*(2), 31-50.
Fairclough, N., & de Melo, I. F. (2012). Análise crítica do discurso como método em pesquisa social científica. *Linha d'agua, 25*(2), 307-329.
Falkenberg, M., Galeazzi, A., Torricelli, M., Di Marco, N., Larosa, F., Sas, M., . . . Quattrociocchi, W. (2022). Growing polarization around climate change on social media. *Nature Climate Change, 12*(12), 1114-1121.
Gössling, S., & Peeters, P. (2015). Assessing tourism's global environmental impact 1900–2050. *Journal of Sustainable Tourism, 23*(5), 639-659.
Grundmann, R., & Krishnamurthy, R. (2010). The discourse of climate change: A corpus-based approach. *Critical approaches to discourse analysis across disciplines, 4*(2), 125-146.
Hajer, M., & Versteeg, W. (2005). A decade of discourse analysis of environmental politics: Achievements, challenges, perspectives. *Journal of environmental policy & planning, 7*(3), 175-184.
Hajer, M., & Versteeg, W. (2019). Imagining the post-fossil city: why is it so difficult to think of new possible worlds? *Territory, Politics, Governance, 7*(2), 122-134.
Hoenigl, M., Seidel, D., Sprute, R., Cunha, C., Oliverio, M., Goldman, G. H., . . . Carvalho, A. (2022). COVID-19-associated fungal infections. *Nature microbiology, 7*(8), 1127-1140.
Kurnia, L., Saifi, M., & Damayanti, C. R. (2024). Corporate governance dynamics: How audit committees and board characteristics influence firm value through audit report lag? *JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen, 21*(1), 61-86.
Leipziger, M., Kanbach, D. K., & Kraus, S. (2024). Business model transition and entrepreneurial small businesses: a systematic literature review. *Journal of small business and enterprise development, 31*(3), 473-491.
Leitch, S., & Palmer, I. (2010). Analysing texts in context: Current practices and new protocols for critical discourse analysis in organization studies. *Journal of Management Studies, 47*(6), 1194-1212.
Recker, J., Chatterjee, S., Sundermeier, J., & Tarafdar, M. (2025). Digital Responsibility: Current Perspectives and Future Directions. *Journal of the Association for Information Systems, 26*(5), 1222-1238.
Rutherford, S., Kia, S. M., Wolfers, T., Fraza, C., Zabihi, M., Dinga, R., . . . Ruhe, H. G. (2022). The normative modeling framework for computational psychiatry. *Nature protocols, 17*(7), 1711-1734.
Stibbe, A. (2015). *Ecolinguistics: Language, ecology and the stories we live by*: Routledge.
Stibbe, M. (2025). Disputing Disaster: A Sextet on the Great War: by Perry Anderson. London: Verso, 2024, xvi+ 373 pp., ISBN 9781804297674. In: Taylor & Francis.
Tomaszewski, B. (2024). *Life Experiences of Adults with Intellectual and Developmental Disabilities* (Vol. 66): Elsevier.
Voyer, M., Quirk, G., McIlgorm, A., & Azmi, K. (2018). Shades of blue: what do competing interpretations of the Blue Economy mean for oceans governance? *Journal of environmental policy & planning, 20*(5), 595-616.
Zollo, L., Rialti, R., Marrucci, A., & Ciappei, C. (2022). How do museums foster loyalty in tech-savvy visitors? The role of social media and digital experience. *Current Issues in Tourism, 25*(18), 2991-3008.