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REVIEW ARTICLE

Section: *Literature, Linguistics & Criticism***Libraries as pragmatic infrastructures of environmental sustainability: Speech acts, knowledge commons, climate communication, and ecological participation**Safaa Sayed Mahmoud¹, Lama Mahmoud Saleh Hababi^{2*}, Khaled Ahmed Abdel-Al Ibrahim² & Mohammad Osman Abdul Wahab³¹Department of Business Administration, College of Business, University of Bisha, Kingdom of Saudi Arabia²Department of Psychology, College of Education, Prince Sattam bin Abdulaziz University, Kingdom of Saudi Arabia³Department of English, Faculty of Languages and Translation, King Khalid University, Kingdom of Saudi Arabia*Correspondence: l.hababi@psau.edu.sa**ABSTRACT**

Libraries are often described as sustainable institutions because they share resources, preserve knowledge, and provide civic space. Yet sustainability is not produced by those material arrangements alone. It is also made through language: definitions establish legitimate categories, recommendations distribute responsibility, institutional commitments invite trust, and public programmes turn climate information into occasions for participation. This article develops the concept of the library as a pragmatic infrastructure of environmental sustainability. It reports a qualitative pragmatic-discourse analysis of four public texts issued by the International Federation of Library Associations and Institutions and its Environment, Sustainability and Libraries Section: the 2022 Green Library definition, the section profile, the Green Library Award page, and a 2022 planning article. The analysis combines speech-act theory with presupposition, implicature, modality, deixis, and felicity conditions, while drawing on knowledge-commons scholarship and climate-communication research. The texts do more than represent environmentally responsible librarianship. Assertives stabilise a professional identity; directives translate broad concern into expected conduct; commissive language projects accountable institutional agency; and scalar expressions connect local practice to planetary programmes. At the same time, inclusive and promotional formulations can obscure unequal capacity, undefined thresholds, and the material footprint of digital access. The article therefore proposes a pragmatic sustainability test organised around authority, clarity, capacity, evidence, uptake, and consequence. It argues that a library becomes a credible environmental actor when its words are answerable to operations and when community members can question, reinterpret, and help govern the commitments made in their name. Pragmatic analysis thus reveals the library not as a neutral channel for climate facts, but as a public institution in which environmental meanings, obligations, and forms of ecological citizenship are continually negotiated.

KEYWORDS: pragmatics, speech acts, green libraries, environmental sustainability, knowledge commons, climate communication, ecological participation, institutional discourse

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1. Introduction

The contemporary library occupies a curious position in environmental debate. It is at once a building that consumes energy, a service network that purchases devices and subscriptions, a custodian of long-lived collections, and a civic institution associated with sharing rather than private accumulation. Because of this mixed material and symbolic character, the claim that a library is “green” cannot be settled by architecture or technology alone. A low-energy building may host little environmental learning. A rich digital collection may widen access while concealing electricity use, device turnover, and outsourced infrastructures. A seed library or repair workshop may generate genuine community knowledge even when the institution has no impressive environmental certification. What counts as sustainability is consequently shaped not only by what libraries possess and do, but also by how they describe problems, assign obligations, justify choices, and invite public involvement.

This linguistic dimension matters because institutional language has effects. A definition creates a recognisable professional category. A guideline makes some actions normal and renders others peripheral. An award names exemplary conduct and encourages imitation. A programme announcement imagines an audience capable of responding. Even a catalogue record can frame an environmental issue by choosing a subject term, a description, or a relation among sources. Such utterances are not substitutes for material change, but neither are they merely decorative. They organise attention, coordinate expectations, and supply the public vocabulary through which action becomes discussable. In Austin’s (1962) terms, words can be ways of doing things; in environmental institutions, they can also be ways of postponing, disguising, or unevenly distributing what must be done.

This article calls libraries pragmatic infrastructures of environmental sustainability. “Infrastructure” here means more than a physical platform. It refers to the durable arrangements through which statements circulate, commitments become legible, questions receive answers, and participants acquire recognised roles. “Pragmatic” emphasises language in context: who speaks, with what authority, to whom, under which conditions, and with what possible consequences. The phrase therefore joins two propositions. First, libraries provide infrastructures for environmental knowledge as a commons. Secondly, the effectiveness and legitimacy of those infrastructures depend on communicative acts whose force exceeds their propositional content.

The study asks three questions. How do professional library texts perform environmental sustainability through distinct speech acts? What assumptions about agency, scale, and participation are carried by presupposition, modality, deixis, and implicature? Under what conditions do institutional sustainability claims become felicitous—that is, credible acts capable of supporting accountable practice—rather than aspirational branding? To answer them, the article analyses a bounded corpus of four official English-language texts published by the International Federation of Library Associations and Institutions (IFLA) and its Environment, Sustainability and Libraries Section (ENSULIB). The corpus is small by design. It supports close, auditable interpretation of influential formulations without pretending to represent every library, language, or region.

2. From Speech Acts to Institutional Environmental Practice

Pragmatics studies meaning as situated action. It asks what speakers accomplish by uttering words, how hearers infer more than sentences explicitly encode, and how social relations shape what can appropriately be said. Austin’s distinction among locutionary, illocutionary, and perlocutionary dimensions remains useful. An institution can produce a locution with intelligible semantic content, perform an illocution such as defining or recommending, and seek perlocutionary effects such as trust, learning, or behavioural change. These layers should not be collapsed. A clear message may fail to persuade; an apparently successful campaign may produce compliance without deliberation; a sincere promise may fail because the speaker lacks resources or authority.

Searle’s (1976) taxonomy sharpens this account. Assertives commit a speaker to a representation of how things are. Directives attempt to get others to act. Commissives bind the speaker to a future course. Expressives display an attitude, while declarations alter an institutional state when issued under accepted procedures. In practice, public sustainability discourse often blends these forces. “Libraries can play an active role” is grammatically an assertion, pragmatically an authorisation, and indirectly a recommendation. An award announcement simultaneously evaluates past conduct, declares institutional recognition, and directs attention toward a model worth emulating. Classification is therefore an analytical starting point rather than a

mechanical labelling exercise.

Felicity conditions are especially important for environmental claims. A speech act works only under appropriate social and material conditions. A declaration requires recognised authority; a promise requires an intelligible obligation and a credible capacity to fulfil it; a directive presupposes that the addressee can reasonably act. Sustainability language adds a demanding temporal dimension. A pledge about emissions or resource stewardship cannot be judged at the moment of utterance alone. Its force depends on later budgets, procurement, maintenance, measurement, reporting, and opportunities for affected people to challenge the account. The perlocutionary effect of trust is not evidence that the commissive has been honoured.

Meaning also arises through presupposition and implicature. Presuppositions present certain propositions as already shared: that an environmental crisis exists, that institutions bear responsibility, or that a category called the green library is coherent. Because presupposed content is placed outside the immediate focus of dispute, it can efficiently build common ground. It can also conceal contestable choices. Implicatures allow readers to infer a speaker's priorities or expectations from what is said, how much is said, and what remains unsaid. A statement that a programme has "significant impact," for example, invites an inference of demonstrated consequence even if no metric, baseline, or counterfactual is supplied.

The environmental relevance of this framework lies in its account of the passage from information to coordinated action. Climate-communication research has long challenged the assumption that a deficit of facts is the sole barrier to engagement. Moser (2010) describes communication as an ongoing social process shaped by audience, purpose, context, trust, and feedback. Nisbet (2009) shows that frames select meaningful dimensions of complex issues, while Schäfer and Schlichting (2014) demonstrate the breadth of media-framing research. Pragmatics adds a fine-grained question: what social act does a frame perform here? A display on heat risk may assert evidence, warn visitors, advise protective action, invite testimony, or justify institutional policy. Its ethical and practical consequences depend on which force becomes dominant and whether recipients can answer.

3. Libraries, Knowledge Commons, and Ecological Citizenship

The idea of the knowledge commons helps explain why libraries are more than transmission channels. Commons scholarship directs attention away from the abstract availability of a resource and toward the rules, relationships, boundaries, and practices by which people create and govern it. Ostrom (1990) demonstrated that shared resources are not inevitably ruined by collective use; their durability depends on institutional arrangements, monitoring, participation in rule-making, and mechanisms for resolving conflict. Hess and Ostrom (2007) later extended this orientation to knowledge, whose production and accessibility are shaped by law, technology, professional norms, and community practice.

Pragmatics illuminates those decisions because commons governance is partly achieved through talk and text. Rules are directives. Mission statements contain commitments. Metadata asserts relations and categories. Public consultations invite speech but also determine what counts as a relevant response. Meeting procedures allocate turns; moderation policies regulate tone; consent language establishes or fails to establish legitimate reuse. The knowledge commons is therefore a communicative order as well as an information resource. Its sustainability depends on whether participants understand obligations, recognise procedures as fair, and possess meaningful opportunities to influence them.

Ecological citizenship names the political subject formed within this order. Dobson (2003) distinguishes ecological citizenship from a thin consumer identity in which environmental responsibility means choosing greener products. Ecological obligations arise from relationships of material dependence and unequal ecological space; they cross public and private life and extend beyond national borders. In a library, ecological citizenship can involve learning to evaluate climate claims, deliberating about local adaptation, documenting environmental change, repairing shared objects, contributing to citizen science, or questioning the institution's own procurement. These practices require information, but they also require roles in which people can speak and be heard.

This distinction separates participation from attendance. A well-attended lecture may remain one-directional. A consultation may solicit views after the decisive options have been fixed. A community archive may extract stories without sharing authority over description or access. By contrast, ecological participation involves some capacity to shape questions, rules, interpretations, or resource allocation. The relevant pragmatic

condition is uptake: not simply that an utterance reaches a hearer, but that the response can enter the institutional process. A library functions as democratic environmental infrastructure when it preserves disagreement, makes expertise discussable without flattening it, and connects speech to decisions that participants can trace.

4. Corpus and Method

The corpus comprises four publicly accessible English-language texts issued by IFLA or ENSULIB: “What is a Green Library?”, identified as the section’s January 2022 definition; the ENSULIB section profile; the IFLA Green Library Award page; and the news article “To Plan and Develop a Green and Sustainable Library with the IFLA ENSULIB Section,” dated 4 April 2022. The pages were read in their public web versions on 9 September 2026. They were selected because together they perform four linked institutional functions: definition, professional self-description, evaluation and recognition, and practical encouragement. The corpus is a purposive case, not a statistically representative sample of global library discourse.

The analysis followed a recursive qualitative procedure. First, each text was read for explicit claims about environmental problems, library identities, expected actions, evidence, publics, and geographic scale. Secondly, clauses were interpreted by their predominant illocutionary force, using Searle’s classes while recording indirect or hybrid acts. Thirdly, close attention was given to modal verbs, evaluative predicates, presuppositions, scalar terms, pronouns, passive constructions, and implied agents. Fourthly, candidate readings were tested against genre and institutional context: a definition, for instance, carries a different authority from a local invitation, even where their grammar resembles. Finally, patterns were compared through the concepts of knowledge-commons governance, climate communication, ecological citizenship, and felicity.

No frequency counts are presented because the value of this small corpus lies in functional relations rather than statistical distribution. The study does not infer what authors privately intended, how readers actually responded, or whether named environmental practices reduced emissions. Those questions require interviews, reception research, or operational data. Claims below concern the action potential and accountability conditions of the published language. Short textual fragments are used as evidence, while paraphrase preserves attention to context without reproducing substantial portions of the source pages.

5. Defining the Green Library: Assertives and Presupposed Worlds

The Green Library definition begins by establishing a world in which environmental danger and organisational responsibility are already linked (IFLA, 2022a). It presents climate change and inequality as threats, then moves from a general class of organisations to libraries as institutions capable of a meaningful response. The sequence is predominantly assertive: it states what the environment means, what sustainable development involves, what dangers exist, and what a green and sustainable library is. Yet these assertives are constitutive. By publishing a professional definition, IFLA does not merely report an independently settled category; it helps stabilise the category across the field.

The formulation that a green and sustainable library considers environmental, economic, and social sustainability widens the predicate “green.” This is an important definitional act because it resists reducing sustainability to energy-efficient buildings. Operations, sharing economies, information access, education, inclusion, management, and global commitments become part of the institutional identity. The category is thereby made portable: a small library without capital for a new building may still enter it through services, governance, and community engagement. Definition here redistributes symbolic access to environmental legitimacy.

Presupposition helps make this invitation efficient. The phrase “green and sustainable libraries” treats the class as available for further description. The statement that libraries may be of any size presupposes that size need not disqualify participation. Reference to a “clear sustainability agenda” presupposes that clarity is both recognisable and institutionally achievable. These assumptions build enabling common ground. They also place pressure on under-resourced libraries to translate general expectations into local practices without equivalent access to expertise, funding, or data.

One striking expression is “positive carbon handprint.” Its rhetorical value lies in reversing the familiar negative footprint: the library is imagined not only as a source of impacts to minimise but as an agent whose services enable wider benefits. The implicature is optimistic and relational. Yet a handprint is harder to delimit

than a footprint. If patrons borrow tools, attend climate workshops, or access evidence used in public policy, what portion of later change belongs to the library? The phrase can prompt attention to enabled action, but it requires a careful attribution rule if used for reporting. Otherwise, aspirational influence may be counted more generously than operational harm.

6. Directives, Modality, and Distributed Responsibility

Directives are the most visible bridge between environmental concern and practice. In the corpus they rarely appear as commands. Professional organisations generally lack coercive authority over diverse member institutions, so obligation is expressed through should, encouragement, guidance, criteria, and exemplary cases. The definition states that all organisations “should strive” to protect the environment and that sustainable libraries should possess an agenda (IFLA, 2022a). The planning article encourages librarians to consider award entry, use checklists, examine certification, and learn from selected projects (IFLA, 2022b). These are mitigated directives: they preserve institutional autonomy while establishing a normative horizon.

Mitigation is not weakness by definition. Advice can be more appropriate than command when addressees operate under different laws, climates, budgets, and community needs. The modal should acknowledges variation and leaves room for practical judgement. It also enacts politeness at organisational scale, protecting the negative face of institutions that do not wish to be ordered (Brown & Levinson, 1987). However, the ethical value of flexibility depends on what follows. If no mechanism distinguishes reasonable adaptation from avoidance, the same modal can sustain endless aspiration. “Should” becomes credible when paired with named responsibilities, timeframes, resources, and public reporting.

Directives also distribute roles. ENSULIB’s profile seeks to encourage librarians to inspire their communities and positions sustainable libraries as “exemplars, educators, and enablers.” The alliteration creates a memorable professional triad. Pragmatically, each noun carries a different relation to the public. An exemplar demonstrates conduct and invites imitation. An educator organises knowledge and learning. An enabler creates conditions in which others can act. The third role is the most participatory because it does not define the library as the sole source of expertise. Still, enabling can remain paternalistic if the institution decides in advance which actions count as legitimate and treats community members as recipients of empowerment.

The treatment of capability is similarly important. Dynamic can in the claim that libraries can play an active role grants possibility and professional agency. But capability is uneven. A national library, a municipal branch, a university library, and a volunteer rural service command different property rights, staff skills, technologies, and political relationships. Universal addressees can create solidarity, but they may also obscure structural inequality. A pragmatically adequate directive should identify the level at which agency resides and pair obligations with capacity-building. Where a library cannot control a building, it may still collect data, negotiate with the owner, disclose constraints, and convene users. The act changes, but responsibility does not disappear.

7. Commissives, Recognition, and the Credibility of Institutional Voice

Commissives bind speakers to future action. They are less explicit in the corpus than assertives and directives; there are few sentences of the form “we promise.” Nevertheless, commitment is a recurrent institutional keyword. ENSULIB describes its orientation toward global environmental agreements, while the award recognises libraries that communicate commitment. Mission language also functions prospectively: to encourage, support, promote, and provide is to project a continuing institutional course. These verbs construct an organisational voice whose credibility depends on more than rhetorical sincerity.

The award provides a particularly revealing scene. To grant an award is a declaration when the awarding body possesses accepted authority and follows recognised procedures. The act changes the recipient’s institutional status: a project becomes a winner, shortlist candidate, or example. It also performs an expressive act of approval and an assertive evaluation of merit. These forces combine to produce professional value. The declared exemplar may gain attention, legitimacy, funding opportunities, or influence beyond the immediate prize.

A felicitous award declaration therefore needs procedural and evidential conditions. Relevant authority must be established; criteria should be public and intelligible; applicants need a reasonable opportunity to

participate; claims require proportionate evidence; conflicts of interest should be managed; and recognition should remain open to later learning. None of these conditions guarantees ecological benefit, but together they reduce the distance between communicative skill and environmental performance. Awards can then operate as curated commons of tested practice rather than spectacles of virtue.

Commitment language also raises the question of institutional uptake. A promise made to a diffuse public can be difficult to answer. Libraries can strengthen reciprocity by publishing baselines, assigning responsible roles, setting review dates, and inviting questions in accessible formats. If a target is missed, explanation should not be treated as reputational failure by default. Honest revision may be more credible than selective success stories. Pragmatically, an accountable commissive includes a procedure for acknowledging changed conditions and repairing trust.

8. Climate Communication as Situated Public Work

Climate communication often fails when it imagines a generic public and a single movement from information to action. Libraries are well placed to resist this model because they encounter people in situated contexts: parents seeking a cool place during extreme heat, students evaluating sources, residents tracing a flood history, entrepreneurs interpreting regulations, or community groups debating land use. The same climate fact has different relevance, emotional weight, and action possibilities across these encounters. Pragmatic infrastructure begins with this plurality of purposes.

Framing is unavoidable and should be accountable. A climate display can foreground individual conservation, technological innovation, public health, justice, resilience, economic risk, or collective governance. Each frame makes some agents and responses more salient. An individual-behaviour frame may offer immediate steps but imply that household choices are the principal cause or solution. A catastrophe frame may communicate urgency but reduce efficacy. A technological frame may expand imagination while understating political conflict and rebound effects. The pragmatic task is not to find a perfectly neutral frame; it is to disclose perspective, connect claims to evidence, and keep alternative questions available.

Libraries can stage this openness through dialogic formats. A facilitated forum, citizen-science project, oral-history initiative, repair café, or community mapping session generates utterances rather than merely delivering them. Participants assert observations, question experts, request action, commit time, and negotiate rules. The library's role shifts from speaker to host, translator, curator, and record keeper. This does not eliminate power. Staff still select partners, schedule meetings, moderate conflict, describe outputs, and decide what enters the collection. Recognising those acts makes participation easier to evaluate.

Uncertainty presents a further challenge. Climate information includes robust conclusions alongside ranges, scenarios, and local unknowns. Assertives that suppress uncertainty can later appear deceptive; excessive hedging can imply that action lacks justification. Pragmatic competence requires matching modality to evidence and decision. "Will," "is likely to," "may," and "cannot be ruled out" carry different epistemic commitments. Librarians need not adjudicate science independently, but they can preserve source provenance, distinguish consensus from controversy, and help users understand what level of uncertainty matters for a particular choice.

9. Participation, Uptake, and the Governance of the Commons

The corpus repeatedly values community engagement, inclusion, and participation. These terms broaden environmental sustainability beyond resource efficiency and place social conditions inside the green library. Their pragmatic ambiguity, however, deserves scrutiny. Participation may mean receiving information, attending an event, contributing data, advising staff, co-designing a service, sharing authority, or governing a resource. These are not interchangeable. An institution can report high participation while preserving unilateral control over the problem definition and acceptable solutions.

Uptake provides a sharper criterion. In classical speech-act theory, an illocution must be recognised to take effect. In public institutions, recognition is necessary but insufficient. Ecological participation requires consequential uptake: the institution must possess a visible procedure for receiving, interpreting, responding to, and sometimes refusing public contributions. Refusal can be legitimate when evidence is false, rights are threatened, or resources are unavailable. What matters is that the grounds are explainable and contestable. Consider a community climate archive. Residents may contribute photographs, diaries, sensor readings, or

oral histories. The invitation is a directive, the deposit agreement a set of commissives, and the catalogue description an assertion about identity and relevance. If contributors cannot influence access conditions or correct harmful metadata, the project treats them as sources rather than governors. If the library establishes shared descriptive principles, consent review, and a mechanism for withdrawal or correction, it moves toward commons governance. Pragmatic details become institutional design.

Conflict is not evidence that participation has failed. Environmental decisions distribute benefits, burdens, and risks. A library that convenes debate about transport, energy, water, or land use will encounter disagreement about evidence and values. The promise of neutral space can become evasive if neutrality means avoiding power. A more credible stance is procedural fairness: disclose the purpose, evidence standards, sponsorship, moderation rules, and relation to decision-making; protect participants from abuse; distinguish scientifically unsupported claims from legitimate policy disagreement; and document unresolved questions.

These conditions connect environmental communication to citizenship. People become ecological participants not by repeating an approved message but by entering relationships of responsibility and judgement. They need the capacity to ask who benefits, who pays, whose future is represented, and what evidence would change a decision. The library can support this agency through information literacy, data access, translation, accessible meetings, and preservation of public reasoning. Its contribution is infrastructural precisely because no single event completes the work.

10. Strategic Ambiguity, Digital Materiality, and Greenwashing

Greenwashing is often understood as false or misleading environmental representation. A pragmatic account examines mismatch among illocutionary force, felicity conditions, and material consequence. An assertive green claim is defective when evidence is unavailable or selectively framed. A commissive is weak when no actor, resource, or review point is attached. A directive is unfair when it assigns responsibility to people without capability while protecting powerful decision-makers. A participatory invitation is hollow when responses cannot influence anything. An award declaration is vulnerable when communicative polish substitutes for verified practice (IFLA, n.d.-b).

Digital services are a particularly important test. Library rhetoric often associates digital access with dematerialisation. Digital provision can reduce travel, printing, and duplicated physical objects, while reaching users unable to visit a building. It also relies on data centres, networks, user devices, software updates, mineral extraction, logistics, and electronic waste. Estimates of information and communication technology's climate footprint vary with system boundaries and technological change, which makes confident slogans risky. Freitag et al. (2021) argue for attention to both operational efficiency and demand growth. Libraries should therefore state what boundary a digital sustainability claim covers and what trade-offs remain outside it.

There is also a representational footprint. Repeated success narratives can crowd out maintenance, failure, and conflict. Photogenic gardens or visible recycling may receive attention while procurement, pensions, cloud contracts, refrigerants, and construction remain obscure. Pragmatic analysis asks what the discourse makes easy to say and what it renders awkward. A credible environmental institution creates genres for uncomfortable speech: incident reports, missed-target explanations, community objections, uncertainty notes, and revision histories. These texts are not signs of communicative weakness. They are infrastructures of institutional learning.

11. A Pragmatic Sustainability Test for Libraries

The analysis suggests a six-part test for environmental utterances in library settings. It is not a certification scheme and does not prescribe one universal outcome. It is a set of questions that can be applied to a policy, exhibition, programme invitation, procurement statement, award submission, or public target.

First, authority: who is speaking, and what right or mandate supports the act? A librarian may advise, a governing board may commit funds, and an accredited body may certify; their words do not carry the same institutional force. Secondly, clarity: what proposition, obligation, timescale, boundary, and affected group are specified? Productive flexibility should be distinguished from vagueness that prevents assessment. Thirdly, capacity: does the responsible actor control the necessary resources, and what dependencies or constraints are disclosed? Directives without capacity plans often move burdens downward.

Fourth, evidence: what baseline, method, source provenance, and uncertainty support the assertion?

Evidence should be proportionate to the strength of the claim and accessible enough for relevant publics to inspect. Fifth, uptake: how can addressees respond, correct, contest, or co-design, and how will that response enter a decision? Attendance and reach are useful indicators but do not prove consequential participation. Sixth, consequence: what operational or civic change followed, who benefited or bore costs, what unintended effects appeared, and when will the claim be revisited?

Applied prospectively, the test improves design. Before announcing a carbon target, a library can identify the authorised speaker, measurement boundary, responsible units, public reporting schedule, and consultation route. Before a climate forum, staff can state whether the aim is education, advice, deliberation, or decision, then design uptake accordingly. Applied retrospectively, the test supports repair. A missed target can be explained, a directive revised, a dataset corrected, or an excluded group invited into governance. The result is not perfect speech but answerable speech.

Table 1. Pragmatic sustainability test for library environmental claims

Dimension	Core question	Common failure	Practical repair
Authority	Who is entitled and accountable to perform the act?	Symbolic voice without decision power	Name the mandate and responsible body
Clarity	What action, boundary, and timescale are meant?	Vague commitment or elastic impact	Define terms, scope, and completion conditions
Capacity	Can the responsible actor reasonably act?	Burdens displaced to staff or users	Match obligations with resources and dependencies
Evidence	What supports the assertion?	Selective metrics or untraceable claims	Publish baselines, methods, uncertainty, and sources
Uptake	How can people answer and influence the process?	Attendance mistaken for participation	Document responses and their decision pathway
Consequence	What changed, for whom, and at what cost?	Communication counted as achievement	Review outcomes, trade-offs, and unintended effects

12. Discussion

The concept of pragmatic infrastructure changes how the green library is evaluated. Conventional approaches tend to separate environmental performance from communication: the first concerns buildings and operations, the second publicises achievements or educates users. The corpus itself begins to bridge that division by including communication, education, engagement, and social sustainability within the definition. Pragmatic analysis goes further. Communication is part of performance because definitions allocate attention, directives shape routines, promises organise expectations, and declarations distribute legitimacy. Material and discursive infrastructures are interdependent.

Unequal capacity is the most persistent tension. Global professional discourse needs inclusive terms, but universal address can conceal differences in finance, climate exposure, infrastructure, language, and political freedom. A directive suitable for a wealthy university may be impossible for a small public library whose electricity, building, and procurement are centrally controlled. Pragmatic adequacy requires differentiated agency. Institutions should state what they control, what they can influence, and what they need from higher authorities. Such candour can turn apparent limitation into advocacy evidence.

The study has limitations. Four institutional webpages cannot represent the diversity of environmental communication across libraries, nor do they reveal drafting processes or audience interpretations. English-language analysis cannot establish how illocutionary force changes across translations. Website text is also dynamic, and later revisions may alter formulations. Most importantly, the method evaluates communicative conditions, not carbon reductions or community outcomes. A larger project should combine corpus analysis with interviews, meeting observation, programme materials, operational data, and reception research across different library systems.

For practice, the immediate implication is modest but demanding: every environmental message should be designed with a reply path. A shelf label can point to evidence and a feedback channel. A target can identify

its boundary and review date. A workshop can show how participant knowledge will be preserved or used. An award case can distinguish verified outcomes from plausible influence. These changes make language less spectacular but more trustworthy. They also place librarianship's familiar commitments—to provenance, access, contextual description, and intellectual freedom—inside environmental governance. Credibility depends on clear links from language to choice, consequence, and review.

13. Conclusion

Libraries become environmental institutions not only when they retrofit buildings or curate climate collections, but when they create durable conditions for meaningful, accountable public action. The official discourse examined here performs substantial professional work. It defines a broad sustainability identity, recommends practices, legitimates exemplars, and connects local initiatives with global goals. Its assertives, directives, commissive orientations, and declarations help organise a field whose members differ widely in scale and capacity.

The same analysis shows why good intentions and fluent narratives are insufficient. A definition can conceal contested thresholds; a directive can ignore capability; a commitment can lack an accountable speaker; an invitation can produce attendance without uptake; and a success story can mistake communication for consequence. These are pragmatic failures because the relationship among words, institutions, addressees, and future action has broken down.

The proposed pragmatic sustainability test—authority, clarity, capacity, evidence, uptake, and consequence—offers a way to inspect that relationship. It does not turn environmental judgement into a linguistic checklist. Rather, it asks whether an utterance creates obligations that can be understood, answered, and revised. This criterion is especially appropriate for libraries, whose public value rests on more than possessing information. Libraries organise encounters among evidence, memory, expertise, disagreement, and collective possibility.

Seen in this light, a knowledge commons is sustained through communicative reciprocity. Climate information becomes civic infrastructure when people can trace its sources, interpret its relevance, contribute situated knowledge, challenge institutional claims, and follow their words into decisions. Ecological citizenship emerges through these repeated practices of speaking, listening, judging, and caring for shared conditions. The green library is therefore best understood not as a finished label but as an accountable conversation embodied in operations. Its credibility begins when environmental words acquire material consequences and when the communities addressed by those words gain a genuine role in determining what follows.

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Declarations

Data availability: The article analyses public institutional webpages. The source register and representative Romanized excerpts are included. A reusable corpus should be archived only after checking institutional copyright, webpage changes, and journal data-sharing requirements.

Ethics: The corpus contains no private or personal data. Institutional texts are quoted briefly for scholarly analysis.

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