

Regional Green-Finance Policy Narratives in China: A Comparative Textual Analysis of Beijing, Shanghai, and Shenzhen

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Abstract: This study compares green-finance policy narratives in Beijing, Shanghai and Shenzhen through a structured analysis of Chinese-language municipal policy materials. Rather than treating local policy as a homogeneous backdrop, it identifies how the three cities combine regulatory discipline, financial incentives, disclosure infrastructure, market access, financial technology and industrial linkage in distinct governance architectures. Beijing emphasises coordination, standards and supervisory capacity; Shanghai foregrounds market integration, platform development and cross-border connectivity; and Shenzhen prioritises technology-enabled implementation and industry-facing financial innovation. The analysis uses a Chinese-original coding framework with English reporting labels, supplemented by descriptive high-frequency term comparisons. It does not estimate policy effects on financing costs or other market outcomes. The contribution is therefore institutional and comparative: it clarifies the organisational logic through which local green-finance policy is expected to shape the conduct of regulators, financial institutions, issuers, market platforms and technology providers. The study also provides a traceable framework for building a future city-year policy database suitable for causal evaluation.

1. Introduction

Green finance has become a central instrument through which governments seek to align capital allocation with climate mitigation, pollution control and broader low-carbon transformation. Yet policy ambition is not implemented through a single national template. In large and institutionally diverse economies, subnational governments translate national priorities into local combinations of regulation, incentives, information infrastructure and market-building measures ([1, 9]). The resulting local policy environments matter because firms and financial institutions act through concrete rules, platforms, disclosure expectations and implementation arrangements rather than through national strategy alone.

China offers a particularly useful setting for such analysis. National green-finance reforms have

been accompanied by strong local experimentation, yet the local dimension is often reduced to a control variable or treated as an undifferentiated institutional background. This overlooks a practical question for managers and policymakers: how do leading financial centres build different policy architectures around the same national green-transition objective? Existing research documents the importance of policy coordination, structural monetary support and policy uncertainty for green-finance development, but it offers limited systematic comparison of municipal policy narratives ([6, 7, 11]).

This study focuses on the policy-text dimension of green-finance governance and develops a comparative account of city-level policy narratives using Chinese-language municipal materials. It deliberately does not reproduce bond-pricing regressions or investor-survey analyses. This study also develops an English-language comparative account of city-level green-finance policy narratives from Chinese original-language materials. The aim is not to estimate whether a particular policy lowered financing costs, nor to claim that word frequency proves policy effectiveness. Instead, the study asks how local policy discourse identifies problems, prioritises instruments and describes expected transmission channels from public policy to market behaviour.

The study makes three contributions. First, it treats policy texts as governance instruments rather than as background descriptions. The analysis distinguishes regulatory discipline, financial incentives, disclosure infrastructure, market access, financial technology and industrial linkage. Second, it proposes a transparent bilingual workflow: original Chinese texts are coded in Chinese, whereas English labels are used only to report the analytical categories to an international audience. Third, it clarifies the comparative policy logic of Beijing, Shanghai and Shenzhen without converting a descriptive text corpus into unsupported causal claims. This distinction matters because a policy-narrative study can offer useful institutional insight even when it lacks the longitudinal treatment variation required for a quasi-experimental design.

The remainder of the paper reviews relevant literature, outlines the coding design, presents the comparative results, discusses their managerial and policy implications, and concludes with limitations and directions for a subsequent causal research agenda.

2. Literature Review and Analytical Framing

2.1 Green finance as an institutional and organisational field

Green-finance research commonly investigates whether financial instruments reduce financing costs, influence corporate environmental performance or channel capital toward low-carbon projects ([1]). These studies are valuable, but they often examine policy as a single exogenous condition. In practice, the institutional environment is assembled from multiple instruments that may reinforce or offset one another. Evidence from China shows that regulation, disclosure, credit conditions and green-finance infrastructure can affect financing and environmental outcomes through different channels[2].

From an institutional perspective, policy narratives are not simply rhetoric. They define legitimate problems, identify relevant actors and select the tools through which compliance, coordination and innovation should occur. A regulatory narrative may emphasise standards, risk prevention and accountability; a market-integration narrative may foreground platforms, cross-border capital and product innovation; and a technology-enabled narrative may privilege data, digital infrastructure and application scenarios. This interpretation is consistent with research showing that digital finance and information infrastructure can reshape green-finance transmission mechanisms ([3,4]).

2.2 Policy instruments and green-finance transmission mechanisms

The literature identifies several mechanisms through which green-finance policy can influence market development ([5,6]). Regulatory instruments can reduce uncertainty by clarifying taxonomies, disclosure requirements and supervisory expectations. Incentive instruments can alter financing conditions through subsidies, risk compensation, guarantees or targeted credit. Disclosure and verification arrangements can improve information quality, while market-access and financial-technology tools can facilitate capital matching, monitoring and product innovation ([7, 8]).

These mechanisms are analytically distinct, even though they often overlap in practice. A city may use disclosure infrastructure to strengthen regulation, for example, or deploy digital platforms to support market access ([9, 10,11,12]). Consequently, a comparative policy study should not ask only which city has more documents or more frequent references to green finance. It should ask which instrument combinations are emphasised and what organisational problems they are designed to solve. This distinction also resonates with comparative evidence that green-finance outcomes are mediated by spatial and institutional context ([13]).

2.3 Comparative expectations

The three cases are expected to differ because their institutional roles differ. Beijing is closely associated with national policy coordination, regulatory authority and standard-setting. Shanghai is positioned as an international financial centre with strong platform, market and cross-border functions. Shenzhen combines a financial-services base with a technology and innovation ecosystem. These expectations are treated as analytical propositions rather than causal hypotheses and are assessed against the city-specific policy materials compiled from the Beijing, Shanghai and Shenzhen financial-regulatory authorities.

3. Materials and Methods

3.1 Corpus and case selection

The study uses city-specific policy-related materials collected from municipal government portals, local financial-authority websites and official policy-source lists for Beijing, Shanghai and Shenzhen. The supplied source inventory includes formal policy instruments as well as official policy interpretations, implementation communications and market-development materials. National taxonomy context is provided by the Green Bond Endorsed Projects Catalogue. At the municipal level, source attribution is maintained to the relevant financial-regulatory authority or official government portal.

The analytical period covers the years in which local green-finance material is available in the source inventory, with particular concentration in the post-2022 period. The design is comparative and purposive rather than statistically representative of all Chinese cities. Beijing, Shanghai and Shenzhen are selected because they are leading policy and financial centres with differentiated institutional capacities and documented local green-finance initiatives. As shown in Figure 1, the study is designed to support a comparative institutional interpretation of city-level policy narratives rather than issuer-level, bond-level, or causal inference. The Figure 1 also clarifies the evidentiary boundaries of the analysis by distinguishing what can be inferred from document-based coding and descriptive term frequencies from what would require outcome-based longitudinal data.

Analytical component	Operationalisation	Evidentiary scope	
 1. Unit of analysis	City-level policy-related documents and city-level narrative patterns	✓ Supports comparative institutional interpretation	✗ Does not support issuer-level, bond-level, or causal inference
 2. Source language	Original Chinese policy-related materials with English reporting labels	✓ Supports context-sensitive coding and transparent reporting	✗ Does not support automatic conceptual equivalence between Chinese and English policy terminology
 3. Quantitative element	Keyword-frequency counts and descriptive term profiles	✓ Supports pattern detection and cross-city comparison	✗ Does not support a direct measure of legal force, implementation strength, or policy effectiveness
 4. Qualitative element	Theory-guided coding of policy instruments and intended channels	✓ Supports interpretation of policy architecture	✗ Does not support proof that a stated policy channel operated in practice
 5. Case design	Comparative analysis of Beijing, Shanghai, and Shenzhen	✓ Supports purposive comparison of differentiated financial centres	✗ Does not support national-level generalisation

Figure 1. Analytical design and evidence boundaries

3.2 Chinese-original coding and English reporting labels

The coding procedure follows a Chinese-original, English-reporting principle. Documents are read and classified in Chinese. English labels are not used to replace the source language; they are reporting devices that allow an international readership to understand the coding framework. This approach preserves policy meaning while avoiding the false precision that would arise from translating an entire administrative corpus before interpretation. It also responds to the broader methodological problem that green-finance policy content, rather than policy presence alone, can shape information and coordination mechanisms ([2, 10]).

Table 1. Policy-instrument taxonomy used for comparative coding

Code	Variable label	English category label	Illustrative coding logic
R	policy_regulation	Regulation and Standards	Taxonomy, supervision, standards, risk control, regulatory coordination
I	policy_incentive	Financial Incentives and Risk-Sharing Mechanisms	Subsidies, interest support, guarantees, risk compensation, preferential finance
D	policy_disclosure	Disclosure, Verification, and Post-Issuance Evaluation	Environmental disclosure, carbon accounting, certification, monitoring, post-issuance evaluation
M	policy_market_access	Market Access and Platform Development	Issuance channels, trading platforms, free-trade arrangements, cross-border participation
F	policy_fintech	Digital Finance and Data Infrastructure	Carbon accounts, data platforms, blockchain, digital risk assessment
L	policy_industrial_linkage	Industrial Linkages and Application Scenarios	Supply chains, industry application, project pools, scenario-based implementation

The codebook contains six instrument categories, which are summarised in Table 1. These

categories distinguish regulatory and standard-setting instruments, financial incentives, disclosure and verification arrangements, market-access mechanisms, digital-finance infrastructure, and industrial linkages. A document may receive more than one code when it explicitly combines multiple policy tools or implementation channels. Coding is guided by the stated policy instrument and intended implementation channel, not merely by the occurrence of a single word. For example, a reference to support is coded as an incentive only when the text specifies financing support, risk compensation, subsidies, guarantee arrangements or a comparable mechanism. Likewise, a reference to technology is coded as financial-technology infrastructure only when digital tools are linked to environmental data, carbon accounting, financial services or risk management.

3.3 Descriptive text analysis

The quantitative component uses the term-frequency output available in the source materials. Chinese high-frequency terms were translated into concise English equivalents for reporting. The translation is semantic rather than strictly literal where necessary. These labels are used to communicate the policy themes represented in the original Chinese corpus rather than to replace the original administrative terminology. The procedure is descriptive and does not use word frequency as a proxy for policy effectiveness. Frequency evidence is interpreted alongside the document register and the institutional context of the three cities.

The qualitative comparison proceeds in three stages. First, the documents are separated conceptually into formal policy instruments and related official communication. Second, each document is coded for the six policy categories. Third, city-level patterns are interpreted in relation to the intended policy mechanism: regulatory discipline, market integration or technology-enabled implementation. This sequence makes the analytical claims auditable. It also prevents the study from inferring policy effects solely from word frequency.

3.4 Reliability, traceability and boundary conditions

The credibility of a comparative policy-text analysis depends on a transparent separation between source evidence and interpretation. For this reason, the intended supplementary document register should retain the original Chinese title, issuing authority, publication date, document type, city, source URL and coding decisions for every included record. This audit trail allows readers to distinguish a formal regulatory instrument from an official interpretation, a local implementation notice or a policy-related market communication. It also prevents word-frequency results from being mistaken for measures of legal authority, fiscal commitment or implementation strength. The city comparison is therefore designed as a structured institutional interpretation, not as automated sentiment analysis or a mechanical count of policy attention.

A second safeguard concerns comparability across cities. Beijing, Shanghai and Shenzhen differ in administrative role, financial-market depth, industrial structure and policy-documentation practices. The coding framework does not assume that identical language has identical operational meaning in each setting. Instead, it compares the policy instrument, target actor and intended transmission channel specified in the document. Where a policy text combines multiple tools, multiple codes are permitted and the rationale should be recorded in the register. Such procedures are especially important for future work that converts this corpus into a city-year policy index or a quasi-experimental dataset, because treatment timing and policy intensity must be tied to formal, traceable instruments rather than to general communication volume.

4. Results

4.1 Comparative policy architectures

Figure 1 provides an English-language visualisation of selected high-frequency terms in the three city-specific corpora. It is included as descriptive lexical evidence only: word size represents relative prominence within each corpus and should not be interpreted as a measure of legal authority, policy intensity, implementation capacity, or policy effectiveness. The visual comparison is therefore read together with the structured coding framework and the city-level comparison presented below.



Figure 2. English reporting visualisation of high-frequency green-finance policy terms

Note: The underlying source texts are Chinese. English terms are reporting labels translated from the Chinese-language frequency output; word-cloud size is descriptive and should not be interpreted as policy effectiveness.

As illustrated in Figure 2, the three city-specific corpora share a common green-finance vocabulary but differ in the secondary terms that frame their respective policy priorities. Figure 3 shows that all three cities use the core vocabulary of green finance, development and support, but they attach that vocabulary to different policy architectures. Beijing's narrative is centred on coordination, supervision and institutional reform. Its policy language links green finance to rule-setting, risk control and the organisational alignment of public and financial actors. The key policy problem is framed as one of institutional coherence: green finance requires credible standards, coordinated implementation and disciplined information flows.

Shanghai's narrative is more explicitly market-facing. The prominence of Pudong, international and free-trade language positions green finance within the city's role as a financial gateway and platform for capital allocation. The policy logic is not simply to regulate green activity, but to connect green-finance development with market access, product innovation and international compatibility. In this architecture, the primary challenge is to increase the depth, connectivity and allocative capacity of the green finance ecosystem.

Shenzhen's narrative foregrounds finance, technology, innovation, projects and industry. The central problem is framed less as a lack of rules or market channels and more as the need to convert technological and environmental information into practical financial applications. This creates a technology-enabled architecture in which data platforms, carbon-accounting tools, digital financial services and project-level innovation are expected to support green transition at the interface of finance and industry.

	 Beijing	 Shanghai	 Shenzhen
 Dominant narrative	Regulatory coordination and institutional reform	Market integration and international financial connectivity	Technology-enabled innovation and industry linkage
 Prominent instruments	Standards, supervision, policy coordination, and risk prevention	Product innovation, market platforms, cross-border access, and Pudong New Area experimentation	Digital finance, carbon-data infrastructure, supply-chain finance, and technology support
 Core implementation logic	Strengthen policy coherence and reduce institutional uncertainty	Improve allocation, participation, and market connectivity	Translate environmental data and innovation capacity into financeable applications
 Expected transmission channel	Rules and information discipline → more credible green finance governance	Market access and capital mobility → a deeper green finance ecosystem	Data and technology → more usable environmental information and scalable financial services
 Organisational emphasis	Regulators, public agencies, financial institutions, and standard setters	Exchanges, market institutions, cross-border participants, and financial intermediaries	Technology firms, financial institutions, industrial actors, and platform operators

Figure 3. Comparative green-finance policy narratives in Beijing, Shanghai and Shenzhen

4.2 High-frequency terms and narrative differentiation

To complement the qualitative coding, Table 2 reports selected raw high-frequency terms from the city-level policy-related materials. These counts are used to identify descriptive lexical patterns rather than to quantify policy strength. Because corpus size, document composition, and publication practices may differ across cities, the figures should not be interpreted as directly comparable measures of policy attention or implementation intensity.

Table 2. Selected high-frequency terms in city-level policy-related materials

English reporting term	Beijing	Shanghai	Shenzhen
Green	385	596	647
Finance	253	329	1125
Development	142	195	365
Support	99	132	255
Regulation	31	<4	<4
Risk	61	38	75
Policy	55	50	88
Reform	22	<4	<4
Technology-oriented	5	<4	26
Technology	27	<4	71
Innovation	29	55	182
Pudong	0	64	0
International	<4	28	<4
Free trade	0	4	0

As reported in Table 2, the terms green, finance, development, and support appear frequently across all three city-specific corpora, indicating a common high-level policy frame. However, because the table presents raw counts rather than standardised frequencies, the results should be interpreted as descriptive evidence of lexical emphasis rather than direct cross-city measures of policy intensity. All three cities situate green finance as an instrument of development rather than as

a narrow environmental compliance topic. However, the differentiating terms are more analytically useful than the common vocabulary. Beijing alone displays visible emphasis on regulation and reform, consistent with a governance-centred narrative. Shanghai's distinctive terms-Pudong, international and free trade-connect green finance with openness, platform development and external capital-market linkages. Shenzhen's stronger technology and innovation profile is consistent with a policy architecture that connects financial instruments to data capacity, projects and industrial implementation.

These patterns should not be read mechanically. A frequency count cannot distinguish whether a term appears in a legally binding rule, a policy interpretation or a news report. Nor can it reveal the budgetary weight, enforcement strength or implementation quality of a policy. Its value lies elsewhere: when paired with document classification and qualitative coding, it helps identify the vocabulary through which each city defines priority mechanisms. The results therefore support a narrative differentiation argument, not a ranking of policy performance.

4.3 From policy vocabulary to intended transmission channels

Figure 4 translates the comparative narrative patterns into intended transmission channels and organisational implications. It does not test whether these channels operated in practice. Instead, it identifies the mechanisms that the policy materials themselves indicate should connect local green-finance governance with the behaviour of firms, financial institutions, market intermediaries, and technology providers.

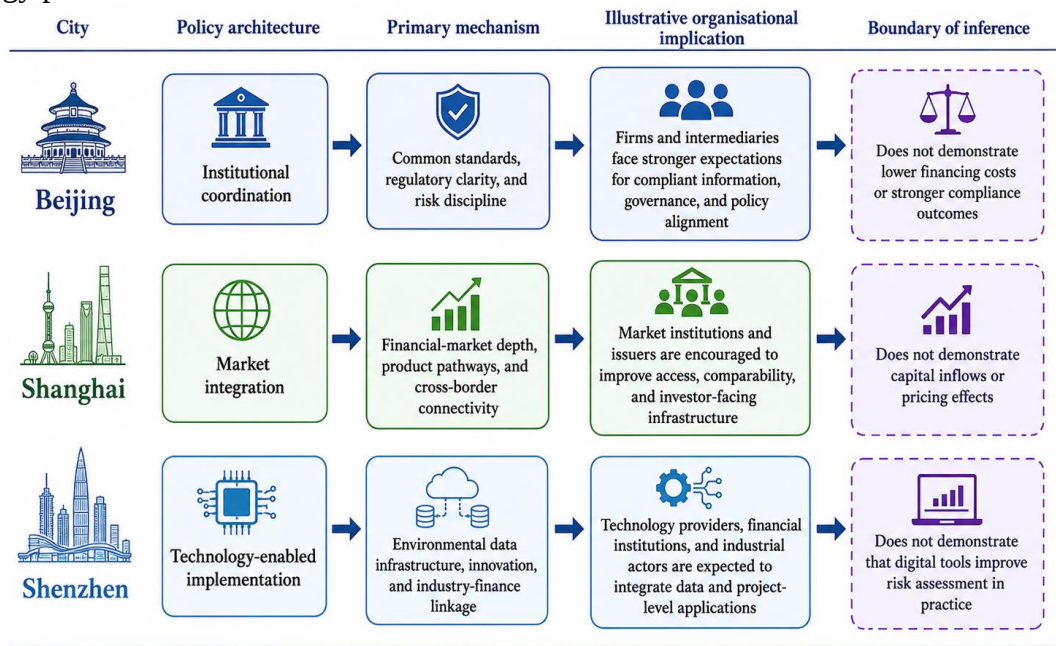


Figure 4. Policy architectures and intended transmission channels

As outlined in Figure 4, the three cities are not simply pursuing isolated versions of the same policy model. Rather, each city emphasises a different pathway through which green finance is expected to support local governance and market development. Beijing's architecture attempts to make green finance governable through coordination and standard-setting. Shanghai's architecture aims to make green finance scalable through market organisation and external connectivity. Shenzhen's architecture aims to make green finance operational through data, technology and industry-facing application. These are complementary functions in a multi-level green-finance system. Beijing supplies institutional legitimacy and policy discipline; Shanghai expands market-

facing infrastructure; Shenzhen develops operational tools and application scenarios.

This finding has direct relevance for business management. Corporate issuers, banks, exchanges, technology firms and investors do not merely respond to national green-finance policy; they operate within local implementation environments. A firm in a regulation-centred environment may face stronger compliance and disclosure expectations. A firm in a market-centred environment may benefit more from product diversity, platform access and investor connectivity. A firm in a technology-centred environment may encounter greater incentives to integrate environmental data with operational, supply-chain and financing decisions. Consequently, a firm's green-finance strategy should be assessed against the policy architecture of its local financial ecosystem rather than against generic national policy language alone.

5. Discussion

5.1 Theoretical implications: policy narratives as governance architectures

The principal theoretical contribution is to shift attention from policy presence to policy architecture. Much empirical work codes policy as a binary event or uses aggregate policy counts. Those approaches are necessary for causal evaluation, but they can obscure the institutional content of local governance. The present comparison shows why the same national green-finance objective can be operationalised through different bundles of regulation, incentives, information infrastructure and market organisation. This insight complements prior work that links green-finance arrangements to environmental, financial and regional outcomes ([1, 5, 9]).

The analysis also suggests that Chinese municipal green-finance narratives perform a coordination function. They make claims about what kinds of information should be trusted, which actors should cooperate and where green-finance capacity should be built. Beijing frames coordination through rules and supervisory capacity; Shanghai frames it through market platforms and external connectivity; Shenzhen frames it through data, technology and project implementation. These differentiated pathways are consistent with the view that effective sustainable-finance systems depend on institutional complementarity rather than a single uniform instrument ([7,8]).

5.2 Managerial implications

For financial institutions, the results imply that regional policy reading should be treated as part of strategic intelligence rather than as a peripheral compliance task. Banks and asset managers should map local policy instruments to business functions: regulation and standards to risk governance; disclosure infrastructure to due diligence; market-access tools to product and distribution strategy; and financial technology to monitoring and data capability. This recommendation aligns with evidence that digital-finance capacity and information transparency can condition green-finance development ([2, 10]).

For corporate issuers and project sponsors, the comparison suggests that policy alignment should be concrete. In Beijing, credible governance, reporting and alignment with standards may be especially salient. In Shanghai, issuers may need to demonstrate market readiness, disclosure comparability and cross-border accessibility. In Shenzhen, project data, technical verification and application relevance may carry particular weight. These distinctions matter because the empirical literature consistently identifies information quality, governance and verifiable green attributes as important conditions for green-finance credibility ([3, 12, 13]).

For policymakers, the key implication is that specialisation should not be mistaken for fragmentation. A national system can benefit when cities pursue differentiated roles, provided that common taxonomy, disclosure and verification standards remain interoperable. The danger is not

diversity itself; it is incompatibility. Policy coordination should therefore focus on shared minimum standards and data comparability, while leaving room for cities to experiment with their distinctive strengths.

5.3 Methodological implications and limitations

This study has deliberately modest evidentiary claims. The corpus includes both formal policy instruments and official policy-related communication. That is appropriate for narrative analysis, but it means document frequency is not a measure of legal force. The study also uses translated reporting labels, which improve accessibility but cannot reproduce every nuance of Chinese administrative language. These limitations are important because policy uncertainty, disclosure quality and local institutional variation can affect green-finance outcomes through channels not observable from textual frequency alone ([6, 11]).

Most importantly, this design does not identify policy effects on financing costs, investment, emissions or firm performance. A causal extension would require a reconstructed city-year or issuer-year panel, clear policy effective dates, credible control cities or firms, and sufficient pre- and post-treatment observations. A subsequent difference-in-differences or event-study design could then test whether particular policy instruments altered financing outcomes. The policy-narrative analysis developed here is best viewed as a necessary institutional foundation for that later work, not a substitute for it.

5.4 A policy-architecture roadmap for future evaluation

The comparative framework can also guide the next generation of empirical policy research. A city-level policy index should not be constructed by counting every document equally. Instead, future researchers should first create a traceable register that separates formal instruments, implementation rules, policy interpretations and promotional communication. Documents should then be coded by legal authority, effective date, tool type, target population and implementation mechanism. This would create a more defensible bridge between policy content and later outcome-based evaluation.

A second step is to connect city-level policy architecture with organisational outcomes. For example, a regulation-centred policy environment may be examined through disclosure completeness, third-party verification, auditability of environmental indicators or supervisory actions. A market-integration environment may be examined through issuance channels, investor breadth, product diversity, trading activity or cross-border participation. A technology-enabled environment may be examined through use of carbon-accounting systems, environmental data integration, project-monitoring capacity or supply-chain finance adoption. The analytical advantage of this design is that it compares outcomes against the mechanism each policy architecture actually claims to activate.

The framework also clarifies the limits of a one-size-fits-all performance metric. It would be misleading to judge Beijing, Shanghai and Shenzhen by a single count of green-finance products or a single aggregate financing-cost outcome. Such metrics may reward the city that has the most visible market activity while underestimating the importance of regulatory capacity or data infrastructure. A stronger evaluation design would use a common baseline of transparency, integrity and interoperability, supplemented by role-specific indicators. This approach recognises specialisation while retaining accountability. Table 3 summarises how the policy architectures identified in this study can be translated into a future outcome-evaluation agenda. It links each narrative architecture to a testable policy claim, candidate organisational evidence, and the principal validity challenge that a subsequent empirical design would need to address.

Table 3. From policy narratives to a future outcome-evaluation agenda

Policy architecture	Narrative claim to be tested	Candidate organisational evidence	Main validity challenge
Regulatory coordination	Standards and risk controls improve institutional credibility	Disclosure completeness; verification coverage; compliance records; supervisory consistency	Separating genuine compliance from formal reporting
Market integration	Market access and connectivity deepen participation and allocation	Investor breadth; issuance channels; product diversity; secondary-market activity	Separating policy effects from national interest-rate and market cycles
Technology-enabled implementation	Data and digital tools improve the usability of environmental information	Carbon-accounting adoption; data linkages; monitoring quality; technology-finance projects	Measuring actual use rather than announced platforms
Cross-city interoperability	Specialisation is complementary when standards remain comparable	Common taxonomies; interoperable disclosure; mutual recognition; cross-city projects	Identifying coordination effects across overlapping policy layers

As summarised in Table 3, the framework provides a disciplined route from qualitative interpretation to subsequent outcome-based evaluation. Once a dated and document-classified policy database is available, researchers can assess whether a specific policy instrument is associated with measurable changes relative to a defensible comparison group. Once a dated, document-classified policy database is available, researchers can assess whether a discrete instrument changed a measurable outcome relative to a defensible comparison group. The current paper does not take that step, because the supplied policy corpus does not yet establish common treatment dates, a complete control group or a city-year outcome panel. Its contribution is to specify the institutional mechanisms that a later causal design should test rather than to imitate causal language without the required evidence.

6. Conclusion

This study compared green-finance policy narratives in Beijing, Shanghai and Shenzhen using a structured analysis of Chinese-language policy-related materials. The evidence indicates that the three cities share a broad development-oriented green-finance agenda but differ systematically in the mechanisms they foreground: Beijing emphasises regulatory coordination and standards; Shanghai foregrounds market integration and cross-border connectivity; and Shenzhen prioritises technology-enabled implementation and industrial application. These distinctions build on the city-level policy materials compiled from official municipal sources.

The value of this comparison lies in clarifying that local green-finance policy is not a generic policy backdrop. It is an organisational architecture that assigns different roles to regulators, financial institutions, issuers, market platforms and technology providers. International readers should therefore avoid treating Chinese green-finance policy as a unitary national phenomenon. Its local implementation is differentiated, and those differences shape the practical conditions under which firms and financial actors interpret green-finance opportunities and obligations.

The study also establishes a disciplined boundary for future research. The policy-text evidence supports comparative institutional interpretation, not causal effect claims. The next empirical stage should construct a transparent city-year policy database and combine it with dated issuance or firm-

level information. Only then can researchers test whether the policy architectures identified here translate into measurable changes in financing costs, disclosure quality, investor participation or environmental performance.

Declarations

Data availability: The policy-related materials used in this study are drawn from publicly accessible municipal government and local financial-authority sources listed in the study's source inventory. The revised reference list includes only sources cited in the main text. A full Chinese-language document register, including title, issuing authority, publication date, document type and URL, should be supplied as supplementary material at submission (https://osf.io/tym54/overview?view_only=a7311707dcdf467b934277ab1d947b13).

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