
Appendix A

Original Standard Clause → China Implementation Mapping

Community Data Center Standard — China Edition (v0.1)

Eternal Harmony AI | June 2026

Appendix A: Original Standard Clause → China Implementation Mapping

附录A：原标准条款与中国实施机制对照表

Community Data Center Standard — China Edition | Version v0.1, Revised June 2026

Submitted to: China Communications Industry Association Data Center Committee (CIDC)

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This appendix is an item-by-item cross-reference table between the English original (v0.1) and the China Edition (v0.1), for use by international researchers, comparative reference, and review committees. All original standard clause numbers are preserved.

General Principles

The China Edition retains the overall architecture and objectives of the English original v0.1 while undergoing systematic localization to align with China’s legal and regulatory framework, governance structure, and market practices. The core localization strategies include:

1. Legal Framework Mapping: Map the concept of “Community Benefits Agreement (CBA)” from the base standard to Chinese statutory procedures — social stability risk assessment, special public welfare funds, investment promotion evaluation framework
2. Administrative Level Correspondence: Map “State” to “Province/Autonomous Region/Municipality directly under the Central Government,” and “Municipal” to “City/County”
3. Dual Standard Citation: Incorporate Chinese mandatory and recommended national standards (GB/GB/T) alongside international standards
4. Pragmatic Mechanism Adjustment: Adjust implementation provisions based on actual conditions of China’s land system, tax system, and electricity market

I. Preamble

#	English Original v0. 1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
P-1	"over \$162 billion worth of US data center projects"	Changed to "using the international market as an example" (country-specific prefix removed)	Make the statement more universally applicable internationally, avoiding description solely of the US market.	—
P-2	Did not mention localized adaptation	Added "localized adaptation in combination with the laws and regulations of the People's Republic of China and community governance practices"	Clarify that the standard is not a simple translation but a customized adaptation to China's legal environment.	*Standardization Law of the People's Republic of China*
P-3	Only mentioned "structural mechanisms"	Added "a credible, enforceable, and highly transparent standardization framework"	Emphasize the credibility and enforceability of the framework itself to meet the Chinese market's demand for regulatory rigor.	—

II. Core Principles

#	English Original v0. 1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
CP-1	Principle 2: “legally binding (through Community Benefit Agreements)”	Key Change: Map CBA to three Chinese equivalent institutions: (1) Social stability risk assessment; (2) Special public welfare fund (*Charity Law*); (3) Local government investment promotion evaluation framework	The Community Benefit Agreement (CBA) mechanism in the base standard originates from practices in specific jurisdictions. In China, its functions can be realized through existing statutory mechanisms — such as embedding relevant objectives into social stability risk assessment, special public welfare funds, and the investment promotion evaluation framework — without introducing new legal instruments.	(1) NDRC Investment [2012] No. 2492; (2) Charity Law Articles 46 – 49; (3) Local investment promotion policies
CP-2	Principle 4: All metrics on “real-time public dashboard”	Key Change: Added CII differentiated disclosure arrangement — CII facilities report data to authorized regulatory platforms, replacing full real-time public disclosure with aggregated historical data	Articles 27 and 31 of the Data Security Law impose data security responsibilities on CII operators; real-time disclosure of operational data may pose security risks.	Data Security Law Articles 27 and 31; Regulations on the Security Protection of Critical Information Infrastructure (State Council Order No. 745)
CP-3	Principle 5: “does not require annual renegotiation or corporate goodwill”	Concept implemented in subsequent chapters through special public welfare funds and ongoing investment mechanisms	Maintain consistency of principles; achieve automatic continuity through Chinese legal instruments.	—

III. Pillar 1: Energy Accountability

#	English Original v0.1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
E-1	Grid impact neutral: "DC pays difference if rates increase"	Added specific hedging methods: invest in local distributed renewable energy, deploy supporting energy storage systems, pay capacity compensation / system regulation fees to the grid	Under China's electricity market structure, direct payment of price differences is not commercially feasible; it must be realized through electricity market mechanisms.	Circulars from the NDRC on time-of-use pricing and electricity spot markets
E-2	True renewable procurement: "verified hourly (not annual RECs)"	Key Change: Changed to "prioritize hourly verification," with verification mechanisms specified as "China's Green Electricity Certificate (GEC) trading system and the green electricity trading rules of the Beijing/Guangzhou Power Trading Centers"	China's renewable energy market is centered on GECs and green electricity trading (not the Western REC system); timeliness verification relies on China's electricity trading infrastructure.	NDRC Energy [2023] No. 1044; Green Power Certificate Issuance and Trading Rules (2024); Green electricity trading rules of various power trading centers
E-3	On-site generation: "Minimum 20%"	Key Change: Lowered to "encourage no less than 10%," added "flexibly assessed based on site conditions"	China faces land resource constraints; it is unrealistic for large data centers in big cities to achieve 20% on-site generation.	Reality of urban planning and intensive land use

#	English Original v0. 1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
E-4	Energy efficiency: "PUE ≤ 1.3"	Key Change: Replaced with GB 40879-2021 energy efficiency grades (Grade 1 ≤ 1.20, Grade 2 ≤ 1.30), and cited NDRC Industry [2021] No. 1464 national hub node PUE ≤ 1.25 target	Align with Chinese mandatory and recommended national standards.	GB 40879-2021; NDRC Industry [2021] No. 1464
E-5	Transition period (none)	New: "Green electricity trading and hourly verification advance in step with electricity market infrastructure development"	Acknowledge the phased and regional disparities in China's electricity market reform.	NDRC Energy-related documents on electricity spot market construction

IV. Pillar 2: Water Stewardship

#	English Original v0. 1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
W-1	Local watershed balance: only required "restored to same local watershed"	Added specific replenishment examples: "pipe network leak repair, agricultural drip irrigation retrofit, or wetland restoration"	Translate abstract concepts into actionable projects in the Chinese context.	Provisions on paid use of water resources and ecological compensation under the Water Law of the People's Republic of China

#	English Original v0. 1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
W-2	PFAS emission control: only cited "EPA drinking water MCLs (4 ppt for PFOA/PFOS)"	Key Change: Dual citation — simultaneously reference "US EPA drinking water MCLs" and "China's Water Pollution Prevention and Control Law, Environmental Quality Standards for Surface Water (GB 3838-2002), Standards for Drinking Water Quality (GB 5749-2022)"	China currently has no unified PFAS drinking water MCLs. Dual citation ensures both high international standards and local Chinese legal basis are covered.	Water Pollution Prevention and Control Law; GB 3838-2002; GB 5749-2022; Ministry of Ecology and Environment (MEE) requirements on persistent organic pollutants; Priority Controlled New Pollutants List (2023 Edition) (Order No. 28)
W-3	PFAS-free transition: "use PFAS-free where technically feasible"	Changed to mandatory requirement "newly built facilities must use PFAS-free cooling and fire suppression systems"	A firmer stance to promote the adoption of PFAS-free liquid cooling technology.	Provisions on cleaner production and green technology orientation under the Circular Economy Promotion Law of the PRC
W-4	PFAS emission control (supplementary)	New: "Net Zero Addition" principle — effluent concentration not exceeding source water intake concentration; core pathway is source substitution	Strengthen the logical basis for emission control.	Source control principle under the Water Pollution Prevention and Control Law

V. Pillar 3: Waste Heat Utilization

#	English Original v0. 1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
H-1	Heat priority provision (core text only)	New: “China Implementation Note” — waste heat grid connection must obtain formal franchise or interconnection agreement approval from the local urban management bureau and its designated state-owned heating enterprise	Urban central heating in China is a municipal public utility operated under local government franchise. Direct supply of data center waste heat to community heating must obtain franchisee consent, otherwise it is illegal.	Measures for Administration of Franchise in Municipal Public Utilities (MOC Order No. 126, amended by MOHURD Order No. 24 in 2015); local heating regulations
H-2	Liquid cooling pathway: “where technically feasible”	Changed to mandatory “must adopt liquid cooling technology for ≥50% of IT load”	A firmer stance to promote the adoption of PFAS-free liquid cooling technology.	Reference to the Circular Economy Promotion Law
H-3	Community heat distribution (climate adaptability)	New: In tropical and subtropical regions, absorption cooling, agricultural drying, aquaculture, etc. are permitted as alternatives to heating; distribution ratio may be adjusted downward through community consultation but must not be zero	Adapt to actual climatic conditions in southern China and tropical provinces.	—

VI. Pillar 4: Community Economic Benefit

#	English Original v0. 1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
CE-1	Community benefit fund	Added tiered requirements (2%→3%), governance structure requirement “majority must be community resident representatives,” and specified “special public welfare fund (*Charity Law*) or charitable trust” form	Tiered compliance aligns with China’s progressive regulatory characteristics; specifying the legal form ensures compliance.	Charity Law Articles 46-49
CE-2	Local employment: “within 30-mile radius”	Key Change: Changed to “within a 50 km radius”	Convert units to metric system, consistent with China’s prevailing measurement system.	—
CE-3	Property value guarantee: “Property Value Guarantee — if property values within 1 mile decline, DC compensates affected homeowners”	Completely deleted and replaced with “Community Quality of Life Enhancement Plan”: public landscaping, sound barriers, road repair, community center construction, and other verifiable deliverables	Core Change: Land in China is state-owned or collectively owned (Article 2, Land Administration Law); housing prices affected by multiple factors make causation difficult to prove. Shift compensation from uncontrollable “property value” to controllable public facility improvements.	Article 2, Land Administration Law; Chapter VII (Neighboring Relations), Property Rights Part, Civil Code of the PRC

#	English Original v0. 1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
CE-4	Tax transparency: "No Abatement Without CBA — DC may not accept tax incentives without binding CBA"	Key Change: Mapped to "integrate... into the local government's investment promotion evaluation framework, using it as a prerequisite for applying for industrial support funds, land use incentives, and administrative approval green channels"	China's tax authority is highly centralized (Article 3 of the Law on the Administration of Tax Collection); local governments cannot alter tax matters through private contracts. Use investment promotion evaluation framework to link incentives with compliance.	Article 3, Law on the Administration of Tax Collection of the PRC; local investment attraction and industrial support policies
CE-5	Utility rate protection	More specific wording, adding "deploy demand-side response systems," "capacity compensation or system regulation fees," and other Chinese electricity market terminology	Make it more operable within China's electricity market structure.	Series of NDRC regulations on electricity demand-side management and ancillary services

VII. Pillar 5: Transparency & Accountability

#	English Original v0. 1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
TA-1	Public dashboard	Key Addition: CII facility data exemption alternative clause — real-time data reported to authorized regulatory platforms, aggregated historical data replacing full real-time public disclosure	Data security compliance. CII operators must assume data security protection responsibilities.	Data Security Law Articles 27 and 31; Regulations on the Security Protection of Critical Information Infrastructure

#	English Original v0. 1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
TA-2	Independent audit: "accredited third party"	Key Change: Specified "accounting firm legally established within China (compliant with the *Certified Public Accountants Law*), following China Standards on Auditing (CSA)"	Ensure the legal validity and enforceability of audit reports in China.	Certified Public Accountants Law; China Standards on Auditing (CSA)
TA-3	Community monitoring	Explicitly establish 1-2 full-time monitoring positions; monitors "have the right to enter facility premises for environmental verification"	Procedural safeguards for community supervision enforcement.	Reference to the spirit of neighbor rights and environmental rights in the Civil Code
TA-4	Grievance mechanism	Added "matters involving health, safety, or environmental concerns shall initiate expedited processing procedures in accordance with relevant regulations"	Align with China's emergency incident and risk management mechanism requirements.	Reference to the Emergency Response Law (2024 Revision, effective November 1, 2024)
TA-5	Expansion public consultation: "minimum 90-day public comment period"	Added "specific timeline may be negotiated between the data center and community based on project scale and urgency"	Increase flexibility and acknowledge practical operability of complex projects.	Reference to local public participation management measures for construction projects

VIII. Compliance Tiers

#	English Original v0. 1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
CT-1	Tier 1: "Binding CBA in place"	Key Addition: Replaced with "complete social stability risk assessment and filing" as the entry-level core requirement	Social stability risk assessment is a statutory prerequisite for approval of major projects in China, more fundamental and critical than the original CBA standard.	NDRC Investment [2012] No. 2492
CT-2	Tier 1	New: "Complete PFAS baseline testing of soil and groundwater before construction"	Prerequisite for environmental risk management.	Reference to the polluter-pays principle in the Environmental Protection Law
CT-3	Tier 2	Introduced "in accordance with China Standards on Auditing (CSA)" and "verification through GEC/green electricity trading rules"	Ensure compliance verification aligns with Chinese law and professional practice.	CSA; Green Power Certificate/Green Electricity Trading Rules
CT-4	Tier 2	New: "Publish a PFAS-free transition plan (if PFAS is still currently in use)"	Timetable requirements for PFAS phase-out.	Priority Controlled New Pollutants List (2023 Edition)
CT-5	Tier 3	New: "Establish a PFAS environmental remediation escrow fund"	Special response to long-term, potential environmental risks of PFAS contamination.	Reference to environmental remediation principles in the Environmental Protection Law; Emergency Response Law (2024 Revision)
CT-6	Tier 3	New: "Community Quality of Life Enhancement Plan fully implemented and subject to regular independent evaluation"	Verifiable deliverable replacing the original "property value guarantee."	—

IX. Implementation Mechanisms

#	English Original v0.1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
IM-1	Legal: "Municipal Ordinance — local government requires CBA compliance"	Key Change: Mapped to "city or county local regulations or local government rules (*Legislation Law* (2023 Amendment) Article 93, Chapter V, Section 2 'Rules')"	Precise localization of legal terminology, corresponding to administrative divisions and legislative powers in China's Constitution and Legislation Law.	Constitution Article 30; Legislation Law of the PRC (2023 Amendment), Article 93 (Chapter V, Section 2 "Rules")
IM-2	Legal: "State Regulatory Framework — conditions tax incentives on compliance"	Key Change: Mapped to "provincial, autonomous region, municipality directly under the central government regulatory framework — linking industrial support funds, land use incentives, and administrative approval green channels to compliance with this standard"	Provincial governments lack tax legislative power but can achieve compliance incentives through industrial support and administrative approval.	Constitution Article 30; various provincial industrial support policies
IM-3	Financial: "Community Benefit Fund — legally structured fund"	Clarified as "special public welfare fund (*Charity Law*) or charitable trust"	Clarify legal identity and regulatory requirements in China.	Charity Law Articles 46-49
IM-4	Financial: "Third-Party Audit"	Specified "accounting firm legally established within China, following China Standards on Auditing (CSA)"	Ensure legal validity of audit reports in China.	Certified Public Accountants Law; CSA

X. Metrics Index

#	English Original v0.1	China Edition v0.1 Change	Change Rationale	Legal / Policy Basis
M-1	PUE: “≤ 1.3”	“≤ 1.30 (GB 40879-2021 Grade 2); national computing hub nodes ≤ 1.20 (GB 40879-2021 Grade 1)”	Align with national energy efficiency standards and the “East Data West Computing” policy.	GB 40879-2021; NDRC Industry [2021] No. 1464
M-2	ECI: unit “\$ rate change”	Retain “\$0 (zero electricity rate increase for residential users)”	Dimension retained in USD for ease of international comparison.	—
M-3	CBI: “\$ benefit / \$ revenue”	Retain USD unit	Same as above.	—
M-4	CHI (Community Heat Index) — new	Added climate zone differentiation note	Accommodate climate differences across China’s vast territory.	Reference to the *Building Climate Zoning Standard* (GB 50178)
M-5	WCI (Water Community Index) — new	New metric: weighted composite of water replenishment ratio × PFAS-free index	Strengthen quantitative assessment of water resource stewardship.	—

Usage Notes

– Original clause numbering is preserved to enable direct cross-referencing with the English original v0.1. – Each Change Rationale is grounded in specific provisions of Chinese laws, regulations, or policy documents; complete citations are listed in the “Legal/Policy Basis” column. – The China Edition is not a simple translation; it is a systematic, legally grounded localization designed to ensure enforceability within China’s governance framework while preserving the integrity of the original standard’s objectives. – For the full text of cited legal and policy documents, please refer to the [Bibliography](#).

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