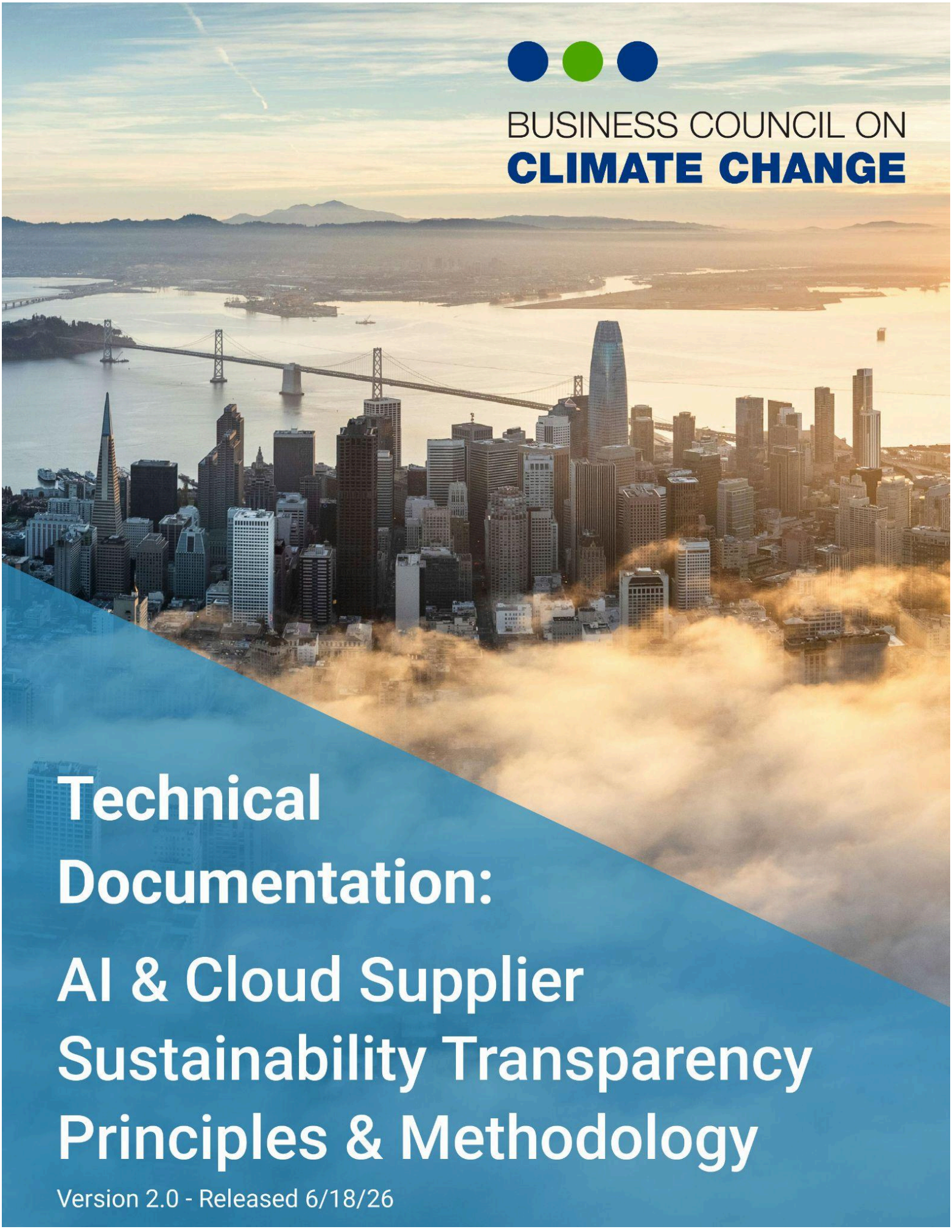

BUSINESS COUNCIL ON
CLIMATE CHANGE

Technical Documentation:

AI & Cloud Supplier Sustainability Transparency Principles & Methodology

Version 2.0 - Released 6/18/26

This document is intended solely to promote transparency, consistency, and informed decision-making. Each organization independently determines its procurement practices, sustainability objectives, vendor relationships, and business decisions.

Executive summary

Many organizations seek greater transparency from their artificial intelligence (AI) and cloud suppliers on company-level and model-level energy usage, greenhouse gas (GHG) emissions, and water consumption. Customers call for this transparency to maintain their own sustainability performance and reporting commitments, and in response to demands from their customers, investors, and employees. This document proposes a common framework intended to promote consistency, comparability, and transparency regarding environmental impacts associated with AI and cloud services.

Alignment principles:

- Inclusively measure energy, GHGs, water consumption
- Standards, science, industry aligned
- Actionable for decision-making & reporting
- Comparable across models and vendors
- Relatable to efficiency metrics in billing
- Respectful of vendor competitive sensitivities
- Independent business decision-making by each participating organization

Details of these expectations are described below.

The transparency principles and methodologies described below are voluntary and are intended solely to promote consistency, comparability, and informed decision-making. Nothing in this document is intended to establish procurement requirements, contracting standards, or commercial obligations. Each organization independently determines whether and how it incorporates these principles into its sustainability, procurement, reporting, or business practices.

Transparency expectations

Company impacts. On an annual basis, AI companies are encouraged to publicly disclose a complete scope 1, 2, and 3 GHG emissions inventory aligned with the Greenhouse Gas Protocol.

Model impacts and efficiency. For each AI model version made available to customers, AI companies are encouraged to publicly disclose:

- Total model training energy use, GHG emissions, and water consumption impacts.

- Annual average of total model inference energy use, GHG emissions, and water consumption efficiency per 1,000 tokens.

Individual customer model usage. On an annual basis, AI companies are encouraged to provide customers with their total token usage for each model such that customers may calculate their associated energy use, GHG emissions, and water consumption. Suppliers may additionally provide calculated customer-specific impact estimates and relevant methodology.

Methodologies and boundaries shall reflect full system boundary impacts as defined in this document.

Impact calculation methodologies and boundaries

Company impacts. See the Greenhouse Gas Protocol, a corporate standard. Suppliers should report Scope 2 emissions in both location-based and market-based formats.

Model impacts. For each model version provided, suppliers should report annually:

Model training impact metrics.

- Energy consumption in megawatt-hours (MWh)
- GHG emissions in metric tons of CO_2-equivalent, including Scope 1, Scope 2 location-based and market-based, and relevant Scope 3 emissions described below using 100 year global warming potential (GWP_{100}) values for non-CO_2 GHGs as provided by the IPCC in AR6
- Water consumption in liters, both direct and indirect from energy consumption

Model training impacts boundaries.

- Suppliers should report total training impacts across the full system boundary including all model training, pre-training, mid-training, post-training, retraining, preparation, experimental, failed, and aborted runs, and associated overhead activities. Reporting should include energy use, GHG emissions, and water consumption across:
  - Training and development compute across GPU, CPU, and other accelerators
  - Data lifecycle processes, including data collection, transfer, storage, preprocessing, labeling, and synthetic data generation
  - Networking infrastructure and data movement, including internal and external data transfer

    - Cooling systems and processes, including from fugitive refrigerant emissions
    - Shared infrastructure, including idle or reserved capacity, and other data center overhead processes
    - Upstream impacts associated with energy and water use
    - Embodied impacts from manufacture and end-of-life treatment of IT and data center hardware, equipment, and buildings, allocated over their useful life
- Suppliers should disclose the allocation methodology used to attribute shared infrastructure and embodied impacts.
- For models derived from previously trained systems, suppliers should report:
    - Incremental impacts caused by modification, adaptation, quantization, retraining, or deployment of the derived model
    - Model lineage, including the upstream models on which the system is based
    - Impacts from upstream model training, reported with this same standard.

Model inference efficiency metrics.

- Annual average energy intensity in kilowatt-hours per 1,000 tokens (kWh/1,000 tokens)
- GHG emissions in metric tons of CO_2-equivalent per 1,000 tokens, including Scope 1, Scope 2 location-based and market-based, and relevant Scope 3 emissions described below using 100 year global warming potential (GWP_{100}) values for non-CO_2 GHGs as provided by the IPCC in AR6
- Water consumption in liters per 1,000 tokens, both direct and indirect from energy consumption
- Tokens defined as production user input tokens plus output tokens calculated using publicly available and disclosed tokenizer
- Averages for energy use, GHG emissions, and water consumption shall be calculated by dividing total inference impacts within the described boundary by total number of input and output tokens for the period.

Model inference boundaries.

- Suppliers shall report inference efficiency across the full production system boundary required to process user requests including intermediate calls, orchestration, routing, and tool or function execution. Reporting shall include energy use, GHG emissions, and water consumption across:

    - Model inference compute across GPU, CPU, and other accelerators
    - Data processing and retrieval processes, including data storage access, retrieval-augmented generation, caching, and memory systems
    - Networking infrastructure and data movement, including internal and external data transfer
    - Cooling systems and processes, including from fugitive refrigerant emissions
    - Shared infrastructure, including idle or reserved capacity, and other data center overhead processes
    - Upstream impacts associated with energy and water use
    - Embodied impacts from manufacture and end-of-life treatment of IT and data center hardware, equipment, and buildings, allocated over their useful life
- Suppliers shall disclose the allocation methodology used to attribute shared infrastructure and embodied impacts.

About BC3

The Business Council on Climate Change (BC3) is a membership-driven non-profit organization dedicated to incubating, scaling, and sharing world-leading solutions to address climate change. Corporate members convene to learn, share information, develop best practices, and support the advancement of climate solutions. This methodology and supporting resources were assembled from the best practices and research of a coalition of BC3 members and expert advisors.

Antitrust Notice. This document is intended solely for educational, informational, transparency, and reporting purposes. It is not intended to facilitate coordination among competitors or to establish common procurement requirements, contracting standards, supplier requirements, or commercial practices. All business decisions, including procurement, sustainability, vendor, and contracting decisions, remain independently determined by each organization.