SBTN Data and Tool Criteria

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Providing clear evidence is vital to ensuring the robustness and credibility of the science-based target-setting process. This additional guidance on data and tools is provided to explain the criteria applied by the SBTN when selecting datasets and tools for recommendation in the technical guidance documents. As with other resources published by SBTN, this is subject to change pending revision.

Table 1. Overarching Data Quality Criteria: This table informs the tables below, connecting these general criteria to the pressure and state estimation within the value chain assessment (Step 1b). In the absence of requirements in the methods, these criteria may inform the use of tools and data throughout the SBTN methodology.

Characteristic	Description
Relevance	Appropriate for application in the SBTN methodology and for use in answering the relevant question within the methods.
Representative	Tools and data recommended should represent as close a fit as possible to the context within the SBTN methods. This means for example, where possible data/tools used to estimate pressures should appropriately characterize the company or pressure consistent with SBTN characterization. State of nature data should similarly align with underlying definitions and principles of design in the SBTN methods. In addition, they should be appropriate for application within the geographic, ecological and social context being analyzed.
Spatial and Temporal resolution*	The spatial and temporal resolution of the data used are appropriate to the analysis context and the eventual use in decision making
Resource Stability and Preservation	Active effort to maintain a long-term persistence and preservation of datasets (minimum of 5 years after publication) with stable persistent identifiers (e.g. links, DOI etc.)
Accessibility	Data must be readily accessible online. Free access is preferred, but paid tools are acceptable when they contain data which are uniquely fit for purpose.
Interpretability	Data/tool outputs are interpretable with sufficient guidance (either in the methods or in the tool) to generate appropriate inputs for use in the SBTN methods. For further guidance on interpretation, end users should first approach the data and tool developers.
Coverage	Data/tools/approaches should be appropriate for analysis across major subsets of portfolios, corporate footprints etc. Where possible, data should comprehensively cover the spatial context of the assessment or facilitate harmonization, aggregation or summarization as appropriate to the stage of analysis.
Authoritative and Accurate	Data are recognised as authoritative and accurate. They have been through a third-party review process, e.g. peer-review in the scientific literature, reviewed by peers in the gray literature, and/or a validation exercise.

*note this may vary across metrics/indicators depending on data availability. There may be tradeoffs in data quality, accuracy, and precision associated with specific thresholds of spatial or temporal resolution.

Criteria	Description
Relevance	Covers one or more of the pressure categories included in scope for Step 1: water use, water pollution, land use (occupation), land conversion, and GHG emissions.
Representative	Pressure data is associated with specific unit processes/activities or commodities appropriate to the company completing the analysis.
Spatial Resolution	Data on pressures at an appropriate spatial resolution reflective of the company's measured or estimated pressures (the preferred resolution of these data are at the country or finer scale). *Note that companies will likely need more precise and accurate data as they proceed through the target-setting methods
Temporal resolution	Information within the tool is based on impacts of activities as measured or estimated from present to the recent past. Where possible, nominal present day estimates (range of years incorporated) should capture both a company's recent activities and those of the recent past.
Stability and Preservation	Data can be referenced with appropriate versioning and accessed for the duration of the five year assessment period (in accordance with validation and claims guidance for re-assessment of impacts).
Accessibility	Data must be readily accessible online. Free access is preferred, but paid tools are acceptable when they contain data which are uniquely fit for purpose.
Interpretability	Guidance on how to use the tool to generate outputs appropriate for use in Step 1 should be readily available and compatible with validation criteria. Tools should be accessible to non-expert users, but more advanced tools are possible if outputs meet SBTN validation requirements.
Coverage	Data should have broad multi-national or global extent to facilitate analysis across companies' value chain.
Authoritative and Accurate	Reflective of the best-available science and subject to appropriate review and/or validation as outlined in the general criteria

Table 3. Criteria for state of nature (pressure-sensitive and biodiversity) data/tools in Step 1

Criteria	Description
Relevance	Covers one or more of the appropriate state of nature metrics either required or recommended in the SBTN methods including pressure-sensitive state of nature and biodiversity data
Representative	Analysis approaches and definitions underlying tools and metrics are compatible with the aims of quantification
Spatial Resolution	Sufficiently fine spatial resolution to represent the current state of nature being measured and spatial variability across the company target boundary (for each pressure and value chain component) 'Note that companies will likely need more precise and accurate data as they proceed through the target-setting methods
Temporal Resolution	Captures nominal present conditions with appropriate level of detail for the observation.
Stability and Preservation	Data can be referenced with appropriate versioning and accessed for the duration of the five year assessment period (in accordance with validation and claims guidance for re-assessment of impacts).
Accessibility	Data must be readily accessible online. Free access is preferred, but paid tools are acceptable when they contain data which are uniquely fit for purpose.
Interpretability	Guidance on how to use the tool to generate outputs appropriate for use in Step 1 should be readily available and compatible with validation criteria. Tools should be accessible to non-expert users, but more advanced tools are possible if outputs meet SBTN validation requirements.
Coverage	Data should have broad multi-national or global extent to facilitate analysis across companies' value chain.
Authoritative and Accurate	Reflective of the best-available science and subject to appropriate review and/or validation as outlined in the general criteria