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Japan Electronics and Information Technology Industries Association (JEITA)

To: Media representatives

### **Green x Digital Consortium Releases Technical Specifications for Data Exchange (Version 1.0)**

The Green x Digital Consortium, for which the Japan Electronics and Information Technology Industries Association (JEITA; chaired by Keiji Kojima, President & CEO, Hitachi, Ltd.) serves as secretariat, today released its Technical Specifications for Data Exchange (Version 1.0), which lays out technical specifications (data items, a common data format, and API linkage specifications, etc.) for CO<sub>2</sub> data<sup>\*1</sup> shared across the supply chain using digital technology. These specifications are designed to enable global-level cross-industry CO<sub>2</sub> data linkage and incorporate internationally accepted specifications. Their utilization will enable data exchange across solutions, contributing to the realization of CO<sub>2</sub> data visualization throughout the supply chain from upstream to downstream.

There is a strong call to achieve decarbonization throughout the supply chain in all industries so as to realize carbon neutrality by 2050. For those greenhouse gases emitted in the course of business activities in the supply chain, we need to accurately assess and reduce CO<sub>2</sub> across the supply chain, including direct emissions (Scope 1), indirect emissions from the generation of purchased energy (Scope 2), and all other indirect emissions occurring in upstream and downstream activities (Scope 3). While various CO<sub>2</sub> data visualization solutions have been developed, the lack of common specifications to link data between different solutions has made it difficult to grasp CO<sub>2</sub> data from upstream to downstream in the supply chain when different solutions are being used.

The Green x Digital Consortium's Visualization Working Group (led by Kōichi Inagaki, NEC Corporation) accordingly launched the Data Format and Linkage Sub-Working Group (led by Takuya Nagamiya, Fujitsu, Ltd.) in April 2022 to present a common data format and linkage specifications (a data platform, etc.) for sharing CO<sub>2</sub> data using digital technology. The Tech Specs for Data Exchange (Version 1.0) created by the Data Format and Linkage SWG were released today as a methodology based on the Pathfinder Network developed by the international framework WBCSD Partnership for Carbon Transparency (PACT)<sup>\*2</sup> that also takes into account the needs of companies participating in the Consortium as well as domestic systems.

These technical specifications form a set with the CO<sub>2</sub> Visualization Framework<sup>\*3</sup>, a CO<sub>2</sub> data calculation methodology announced by the Green Digital Consortium on June 30, 2023. By using the "common language" of the data calculation methodology and the technical specifications, companies developing solutions for CO<sub>2</sub> data visualization will be able to achieve data linkage among multiple solutions. There will also be no need to make individual adjustments to other companies' specifications, which will boost development efficiency. User companies will now have a much wider range of options when they introduce solutions. Even if a company and its suppliers use different solutions, they will be able to transfer CO<sub>2</sub> data without doing anything extra, helping to realize CO<sub>2</sub> data visualization in the supply chain. For more details on the specifications, please see our website.

Comment from WBCSD PACT:

Our partnership with the Green x Digital Consortium demonstrates the value of a collaborative and interoperability-focussed approach to enabling value chain transparency. Thanks to Green x Digital's facilitation, organizations ranging from startups to corporations have collaborated and contributed to PACT. Green x Digital members have created interoperable technology solutions and implemented the PACT Framework and related technological foundations through supplier engagement programs. We congratulate and recommend Green x Digital for their significant contributions to the field of value chain transparency in Japan, and look forward to continued collaboration.

Technical Specifications for Data Exchange: <https://www.gxdc.jp/pdf/data02.pdf>

\*<sup>1</sup> CO<sub>2</sub> data

Refers in the press release and in the CO<sub>2</sub> Visualization Framework to CO<sub>2</sub>-equivalent greenhouse gas emissions (expressed as kg CO<sub>2</sub>e, etc.) as stipulated by the IPCC. Includes greenhouse gases other than carbon dioxide.

\*<sup>2</sup> WBCSD Partnership for Carbon Transparency (PACT)

The World Business Council for Sustainable Development comprises a coalition of CEOs from around 200 companies aiming to realize sustainable development. The WBCSD is the main convener of the GHG Protocol. PACT was set up under the auspices of the WBCSD to boost emissions transparency in the value chain and accelerate decarbonization. It defines the necessary methodologies and technical specifications for emissions data exchange, which it releases in the form of the Pathfinder Framework and the Pathfinder Network Technical Specifications. The Green x Digital Consortium participates in the PACT ecosystem.

Website: <https://www.carbon-transparency.com/>

\*<sup>3</sup> CO<sub>2</sub> Visualization Framework

A methodology document developed by the Methodology Sub-Working Group (led by Masahiko Shibata, Mizuho Research & Technologies, Ltd.), laying out calculations and common rules on CO<sub>2</sub> exchange in the supply chain using digital technology so as to realize CO<sub>2</sub> data distribution based on primary data that reflect suppliers' emission reduction efforts. The Framework adopts the approach of the WBCSD PACT Pathfinder Framework while also taking into account the needs of companies participating in the Consortium as well as domestic systems.

CO<sub>2</sub> Visualization Framework:

[https://www.gxdc.jp/pdf/CO2\\_VisualizationFrameworkEdition\\_1.0\\_en.pdf](https://www.gxdc.jp/pdf/CO2_VisualizationFrameworkEdition_1.0_en.pdf)

Green x Digital Consortium

The Consortium was established in October 2021 to help realize carbon neutrality by 2050 through the digitalization of environment-related fields and the creation of new business models. It promotes collaborative creation among Consortium members on themes such as visualization of CO<sub>2</sub> emissions in the supply chain and the introduction of renewable energies. The Consortium is headed by Professor Noboru Koshizuka (Graduate School of Interdisciplinary Information Studies, The University of Tokyo) and has 155 members (as of August 4, 2023).

Website: <https://www.gxdc.jp/>

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