SIEMENS

Data Management Practices and Greenhouse Gas Accounting Methodologies

Prepared for Coherent Corp

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Review of Siemens Data Quality Control and Assurance Processes and Associated Third-party Audit Rating

Greenhouse gas (GHG) emissions reporting completed by Siemens for Coherent Corp (Coherent) was developed in accordance with the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) GHG Protocol Corporate Standard and the Scope 2 Guidance addendum. The underlying data leveraged for these carbon accounting efforts is the energy utility invoice data managed by Siemens on behalf of Coherent. Under the utility bill management process, Siemens captures invoices, validates the accuracy and completeness of each invoice, enters invoice line-item details into our cloud-based utility management database, Navigator. If necessary, Siemens engages the utilities / suppliers directly to resolve invoice errors to ensure corrected data is reported. Invoice images are stored within the cloud-based reporting system to ensure transparency and to support further data auditing and verification purposes as needed.

The energy and water utility data entry and receipt process managed by Siemens includes the following control characteristics:

- Invoices are reviewed and processed by trained energy professionals; data entry accuracy rates have been demonstrated at a 99%+ level
- Each invoice undergoes a 100+ point rule validation check; this process includes the application of utility tariff and contract-specific data entry templates to ensure consistent and accurate data processing and rate application
- Invoice images are captured and provided within Navigator inside 24 hours of receipt by Siemens
- Validated invoice data is reported within Navigator within 24 to 48 hours; 95% of electronic and paper invoices are processed within the same day

A third-party auditor confirms the data integrity of Siemens data processing, validation, and management processes. This independent auditing process reviews over 25 tests across the following control points within the process: (1) Control Environment and Risk Assessment, (2) Access and Security, (3) Monitoring, (4) System Change Management, (5) Account Setup, (6) Invoice Processing, (7) Tax and Tariff Analysis, (8) Funds Management, and (9) Supply Management Services. This System and Organization Controls (SOC) 1 Type 2 audit is completed annually with the most recent report prepared for the January 1, 2022 through December 31, 2022 throughput period. Siemens received a “zero exceptions” review from this audit process.

Under specific circumstances, Siemens will estimate energy and water usage data to address gaps that could not reasonably be addressed by other means. There are two predominant scenarios where estimates will be applied:

- Locations where Coherent does not receive energy and/or water data: This category includes leased properties where the property owner receives and pays energy and water invoices, passing costs to

Coherent via rent charges. Efforts are made to obtain energy and water usage data for leased properties. However, for locations that are de minimis (<3% of Coherent global carbon emissions) and data capture effort have been unsuccessful, energy and water usage and associate carbon emissions are estimated. These estimates are based on the site use case (e.g., office, warehouse, etc.), building floor area, regionalized building energy and water use intensity factors, and local electric grid carbon emissions factors.

- Utility invoice record lag behind reporting timelines: Given that invoice data is often not available from the utilities and suppliers until 30 to 45 days after month the energy was actually used, complete energy usage data for the end of the reporting year may be unavailable for some energy accounts. Water invoice billing periods often follow a similar lag time as energy invoices, but some may also invoice on quarterly and semi-annual periods. Under these conditions, the data gaps will be estimated based on account-specific energy and water usage from the prior months and the same time period form prior years. Siemens will also solicit insight from Coherent to determine whether any significant changes at the site occurred that would impact energy and water usage.

Once actual data is available, the validated invoice data will be compared to the estimates made for the same accounts. Based on Siemens experience, the difference between the estimated values and actual data will typically be nominal. Therefore, it is not anticipated that Coherent would need to restate previously published emissions data upon receipt of actual data. Furthermore, as detailed within the CDP reporting guidance, it is not a requirement to restate emissions due to data corrections. Specifically, CDP states “a company that has previously responded to CDP’s climate change questionnaire may wish in the current reporting period to restate historical emissions data. While this is not strictly necessary, restatements can be warranted in some cases.” Therefore, Siemens will notify Coherent of the data updates, but is it not expected that Coherent would restate prior, published emissions data unless the changes were significant (i.e., +/-10% of the Coherent global carbon inventory).

Market-based Scope 2 GHG Emissions Accounting - Renewable Energy Documentation Criteria Explainer

The revised GHG Protocol Scope 2 Guidance published by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) as an addendum the original GHG Protocol was developed to standardize how corporations measure emissions from purchased electricity. This methodology is recognized as the leading, voluntary carbon accounting standard and has been adopted by CDP, RE100, SBTi and many other climate and sustainability frameworks. The Scope 2 addendum codifies two distinct methods for scope 2 accounting each with defined documentation requirements to establish specific emissions factors. The Scope 2 Guidance defines these two distinct methodologies as follows:

- Location-based method: “reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data).”
- Market-based method: “reflects emissions from electricity that companies have purposefully chosen (or their lack of choice). It derives emission factors from contractual instruments, which include any type of contract between two parties for the sale and purchase of energy bundled with attributes about the energy generation, or for unbundled attribute claims.”

The Scope 2 guidance requires that reporting companies account for scope 2 emissions under both the location-based and market-based methodologies and report both values in parallel. Market-based accounting for scope 2 emissions is only necessary for operations where those purposeful electricity source choices have been made and the necessary data requirements are met. The following table outlines the various sources of eligible, market-based emissions factors and the relative credibility for each documentation source.

Emission Factors	Examples / Notes	Precision
Energy attribute certificates	• Renewable Energy Certificates (RECs) • Generator Declarations (U.K.) for fuel mix disclosure • Guarantees of Origin (GOs) • Electricity contracts (e.g., PPAs) that also convey RECs or GOs • Other certificate instruments meeting the Scope 2 Quality Criteria	Higher  Lower
Contracts	• Contracts that convey attributes to the entity using the power where certificates do not exist • Contracts for power that are silent on attributes, but where attributes are not otherwise tracked or claimed	
Supplier / utility emission rates	• Emission rate allocated and disclosed to retail electricity users, representing the entire delivered energy product (not only the supplier's owned assets) • Green energy tariffs • Voluntary renewable electricity program or product	
Residual mix	• Calculated by EU country under RE-DISS project • Within the U.S. residual mix data is available on a fragmented basis (e.g., select markets, Green-e reporting, select utilities, etc.)	
Other grid-average emission factors	• eGRID total output emission rates (U.S.) • Defra annual grid average emission factor (UK) • IEA national electricity emission factors	

Note: Adapted from WRI/WBCSD Scope 2 Accounting Guidance

Renewable energy purchases completed by Coherent triggers the market-based reporting requirement under the revised WRI/WBCSD GHG Protocol Scope 2 Guidance and all renewable energy procurements executed by Coherent to date have been backed by documentation that exceed the minimum criteria established by the guidance. The majority or Coherent's renewable procurements are backed by contracts that guarantee solicitation and retirement of market-specific energy attribute certificates. The certifying agencies that establish the various energy attribute certificates all have protocols to guard against double counting by ensuring the certificates are retired on behalf of the entity that purchased the attributes. This is accomplished with registry systems that document each unique certificate and 3rd party auditing procedures designed to ensure that sellers adhere to strict accounting standards. Green-e, for example, established an "annual verification process that requires all providers of Green-e® Energy certified products to complete an annual third-party verification audit of their renewable energy purchases and sales".

Scope 3 GHG Emissions Accounting – Categories 3, 6, and 7

Siemens supported calculation of Coherent's Scope 3 emissions for three categories defined by the WRI/WBCSD GHG Protocol Corporate Value Chain (Scope 3) Standard – Fuel and Energy Related Activities (FERA, Category 3), Business Travel (Category 6), and Employee Commuting (Category 7). These three categories were determined to be material to Coherent's operations and measurable based on currently available data and information management practices. Coherent intends to improve data management practices to enable reporting additional scope 3 emissions categories in future reports.

FERA emissions were based on Coherent's reported energy usage volumes for electricity, natural gas, diesel, and fuel oil. Well-to-tank (WTT) fuels conversion factors were obtained from the U.K. Department for Environment, Food, and Rural Affairs (DEFRA) to account for the upstream Scope 3 emissions associated with extraction, refining and transportation of the raw fuel sources to an Coherent's operations prior to combustion. DEFRA factors were also applied to electricity use to account for the scope 3 emissions of extraction, refining and transportation of primary fuels before their use in the generation of electricity. DEFRA emissions factors were also applied to report the Scope 3 emissions associated with non-U.S. grid losses (the energy loss that occurs in getting the electricity from the power plant to the Coherent operations). Transmission and distribution (T&D) factors for Coherent's U.S. operations were obtained form the U.S. EPA eGrid tables.

Scope 3 emissions associated with employee business travel was based on reports provided by third-party platform Coherent uses for travel management (Luxe Travel Management). These reports provide emission data for three travel categories – airfare, hotels, and rental cars. A limited portion of the Coherent, global

employees (~12%) leverage this travel management platform. Total travel emissions were extrapolated from these reports based on total, annual spend for business travel. As more Coherent employes report business travel activities through a centralized platform, accounting accuracy for scope 3 emissions from business travel will improve.

Lastly, scope 3 emissions associated with employee commuting to and from Coherent operations was estimated based on data provide by Coherent Human Resources. Total employee count break outs by direct (5 days on location per week) and indirect (3 days on location per week) and country were used to estimate emissions. Regional information provided by government and other publicly available sources were used to estimate average commute distance and adoption of various transport modes (e.g., drive alone, carpool, public transit, etc.).

Biodiversity Risk Screening

Siemens completed a biodiversity risk screening analysis for Coherent's global facility portfolio. The World Wildlife Fund (WWF) Biodiversity Risk Filter (launched January 2023) was used to identify biodiversity risks and prioritize locations for further analysis. The WWF biodiversity risk tools are recommended by the Taskforce on Nature-related Financial Disclosures (TNFD). Siemens entered Coherent locations within the WWF Biodiversity Risk Filter and summarized potential risk types (physical, reputational), risk categories (i.e., provisioning services, regulating & supporting services - Enabling, regulating services - mitigating, cultural services, pressures on biodiversity, environmental factors, socioeconomic factors, additional reputational factors), as well as indicators.