

Scope III Emission Management Guideline

1. General Provisions

1.1. Background

The global surface temperature has risen by 0.7°C (1.7°C in Korea) over the past 100 years, and climate change entailing extreme weather phenomena, a rise in sea level, and the extinction of wild creatures has become a global issue, with international communities calling for international cooperation in preparation for climate change. Sustainability, in this regards, has been strengthened within the global market, by beefing up international standards and agreements thereof, and regulations on domestic energy and climate change have also been expanded. With the growth of the green finance market and rising demand for information on carbon by stakeholders, the systematic response of the enterprise management system is urgently called for.

GHG emissions in Korea have rapidly increased, the country ranking 7th over the globe as of 2010 due to the rapid growth of energy-intensive industry, with consequent pressure from the international community for reduction in GHG emissions. In addition, a domestic policy for climate change was set for 30% reduction BAU (Business As Usual) by 2020, signaling that it is a critical point for businesses to manage carbon emissions. Therefore, proactive management systems and outcomes are called for that include not only just internal reduction but also involve suppliers, logistics, employees, and product use to control and reduce carbon emissions. Following this trend, we also need to establish measures in preparation for such a business climate.

For voluntary introduction of carbon management systems, not just compulsory response to regulations, Hyundai E&C established the calculation of Scope 3 carbon emissions, representing suppliers, use of products and services, daily commutes and business trips by employees, methods of reduction, and calculates the metrics to lead the upcoming climate-energy market.

To that end, Hyundai E&C developed a manual for the calculation of Scope 3 carbon emissions and reduction to set up an internal carbon management system.

These guidelines are for Hyundai E&C's calculation of Scope 3 carbon emissions.

1. General Provisions

1.2. Purpose

Hyundai E&C aims to enhance employees' understanding and capacities in carbon management by controlling Scope 3 emissions and strengthening the carbon management system, step up responses to climate change and identify new business opportunities by taking on leadership in sustainable management with enhanced brand value as an eco-friendly business.

These guidelines are created to instruct working groups (executive lead, segment lead) about Scope 3 GHG emissions calculation.

1.3. Scope of application

Scope 3 emissions refers to indirect emissions of energy consumed and GHG outside the business activity territory, not subject to the control of the business, hence falling into the scope of the business' voluntary management not related to regulations

Hyundai E&C set the scope of Scope 3 emissions management including emissions from supply chains by suppliers (supply chains), emissions from the use of products/services by consumers (use), emissions from employees' business trips • daily commutes • internal water use and waste disposal (other Scope 3), and aims to calculate and manage these emissions according to these guidelines.

2. Scope 3 GHG Emissions Calculation Guidelines

2.1. Accountability and authority

We define roles and responsibilities by task and organization to build up a Scope 3 GHG emissions calculation system and consistent management

2.1.1. Chief Env. Officer

Highest ranking person responsible for enterprise environmental management, with accountability and authority on support and approval required for conducting Scope 3 emissions calculations.

- Heads up organization of task force for Scope 3 calculation and management
- Sources human resources for task force
- Provides necessary technical and financial support to task force
- Final confirmation on internal/external reports and results of review

The Chief Env. Officer can delegate to a person in charge the accountability and authority required for conducting Scope 3 emissions calculations and their management.

2.1.2. Person in charge

Person in charge of Scope 3 emissions calculation, with accountability and authority on the operation of the task force for Scope 3 calculations

- Operation of task force
- Allocates and manages human resources
- Reviews role and responsibility of each employee in charge
- Any other duties imposed by the director of a climate change committee

2. Scope 3 GHG Emissions Calculation Guidelines

2.1.3. General Manager

The general manager is responsible for the execution of Scope 3 emissions calculation, with accountability and authority on the management of actual emissions calculation, responses to verification, and reporting.

- Calculation planning
- Requests for data collection to segment managers
- Compiles estimation and supporting documents and reviews estimation
- Selects outsourcing verification agencies and responds to verification
- Confirms results of verification
- Revision of management manual contingent upon internal/external changes
- Reports the calculation

2.1.4. Segment Manager

More than 1 person can assume the role of segment manager, with accountability and authority on data collection for their respective segment

- Supply chain • Use segment
- other Scope 3 segments

2. Scope 3 GHG Emissions Calculation Guidelines

2.2. Scope 3 GHG emissions calculation and reporting process

Scope 3 GHG emissions calculation is conducted from January to April for the given year, with classification of supply chain, use, and other Scope 3.

2.2.1. Emissions calculation planning (1st-2nd week of Jan., General Manager)

After being informed by the Chief Env. Officer (or segment lead) of the annual environmental management plan and organizational structure, the general manager sets out calculations planning regarding the company's Scope 3 GHG emissions for the given year.

It is conducted for all modules, and calculation plans with those of prior years taken into account will be forwarded to people in charge

2.2.2. Selection of verification agency (3th-4th week of Jan., General Manager)

The general manager selects an agency for verification of Scope 3 GHG emissions, enters into a contract, and arranges the timeline for verification. Applied to all modules.

2.2.3. Selection of calculation subject (1st-2nd week of Feb., Segment Manager)

Segment managers for supply chains and use segments confirm the process of 'subject selection' and pre-select suppliers, products, and services subject to calculation for the given year.

2.2.4. Set-up of scenario, logic, and emissions coefficient (3rd-4th week of Feb., Segment Manager)

Segment leads for supply chains and use segments confirm 'calculation scenario, logic, coefficient' from the manual, establish calculation logic and the scenario for the given year, and pre-set up the emission coefficient.

2. Scope 3 GHG Emissions Calculation Guidelines

2.2.5. Data collection and completion of calculation(1st-4th week of March, Segment Manager)

Managers of each segment collect activity data required for emissions calculations, calculate emissions, and once calculations are completed, forward them to the general manager. Applied to all modules

2.2.6. Review of calculation and response to verification (1st-2nd week of April, General Manager)

The general manager confirms the consolidated calculations based on inputs made by each segment manager and compiles supporting documents to prepare for verification. Applied to all modules.

2.2.7. Completion of verification and reporting (3rd-4th week of April, General Manager)

The general manager completes the response to verification and reports verified emissions to the Chief Env. Officer (or person in charge). Once applied to all modules, Scope 3 emissions calculations for the given year are completed.

