1

Hokuetsu Corporation



		Companies' approach		
1	Background and purpose of accounting	 Environmentally friendly management has been one of our ideals, and we have actively worked on preserving the environment by changing to environmentally friendly fuels and installing highly efficient facilities. We can obtain greater benefits, if we can implement these measures not only by our company but also throughout our supply chain. We attempt to reduce emissions more efficiently, by identifying GHG emissions throughout the supply chain, and its reduction potentials. Demands for environmental information from consumers and investors is expected to increase in the future, so we need to disclose information more concisely and clearly. We believe that Scope 3 emissions accounting is a needed tool, in order to disclose this kind of information. 		
2	Utilization of accounting results	 We utilize the results on GHG emissions reductions activities throughout the supply chain. In the future, we will account GHG emissions for each product, and aim for a more detailed emissions reductions. We use the results to disclose them on our corporate reports and websites, to respond to information disclosure demands, and to answer to external company assessment questionnaires. 		
3	Benefits of accounting	 We can clarify the categories of which GHG emissions were achieved. We can asses the secular changes of the emissions for each category. Scope 3 emissions accounting is recognized as a standard accounting tool domestically and overseas, so a highly transparent information disclosure is possible. 		
4	Internal system for accounting	 The environment department collects activity data from each division and accounts the emissions. Categories 1,4 are collected from the procurement division, Categories 2,10,15 are collected from the accounting division, Categories 3,5 are collected from the environment division, Categories 4,8,9 are collected division, and Categories 6,7 are collected from the affaires and personnel division. 		

2

Hokuetsu Corporation



		Companies' approach		
5	Efforts to reduce supply chain emissions	Category 1: Purchased goods and services represents approximately 30% of our overall emissions. We believe that we need to change from the chemicals that we use to a more environmentally friendly alternative product, in order to reduce emissions. Category 4: Transportation and delivery (upstream) represents a little under 20% of our overall emissions. We have been considering activities such as promoting modal shifts to transportation modes of railways and ships, or reducing energies of transportation modes (e.g. enlarging or reducing fuel of ships). We will proceed on further reducing Scope 1 and Scope 2 emissions by reducing energies and enhancing productivity in facilities. Category 4: Category 4: Transportation and delivery (Category 4: Transportation and delivery (Category 4: Transportation modes of railways and ships, or reducing energies of transportation modes (e.g. enlarging or reducing fuel of ships). Category 4: Category 4: Category 4: Transportation modes of railways and ships, or reducing energies and enhancing productivity in facilities.		
6	Issues in supply chain emissions accounting	The usages for our products are diverse, so it is difficult to identify the details of our emissions at the downstream of our supply chain. Accounting of emissions from the downstream are mainly based on scenarios, so the emissions will largely differ, depending on the scenario. Therefore, we realize that we cannot compare our Scope 3 emissions with other companies.		
7	Other	 We will further enhance the accuracy of our accounting, by focusing on the categories that realistically have reduction potential. The accounting results are disclosed every year, through are corporate reports and environmental journals. (http://www.hokuetsucorp.com/en/ir/ir_library.html) 		

3

Hokuetsu Corporation



Catagory	Accounting methods ※Accounting period : April 2017 – March 2018		
Category	Activity data	Emission factor	
Category 1: Purchased goods and services	Procurement amount of materials	MOE DB ^{*1} , CFP - DB ^{*2}	
Category 2: Capital goods	Procurement amount of capital goods	MOE DB ^{※1}	
Category 3: Fuel and energy related activities not included in Scope 1 or 2	Amount of electrical and steam energy used	MOE DB [*] 1	
Category 4: Transportation and delivery (upstream)	 Fuel consumption related to cargo owners' transportation Purchased volume and shipping volume (not related to the cargo owner) 	Fuel method, ton - kilometers method	
Category 5: Waste generated in operations	Emissions per waste type and disposal method	• MOE - DB ^{*1}	
Category 6: Business travel	Number of employees	MOE - DB ^{*1}	
Category 7: Employee commuting	Transportation expenses paid	• MOE - DB ^{*1}	
Category 8: Leased assets (upstream)	Total floor space of leased property	Emission factor per leased property	
Category 9: Transportation and delivery (downstream)	Shipping amount of the relative products	Ton - kilometers method	
Category 10: Processing of sold products	Sales volume	Emission factors per processing method	
Category 11: Use of sold products	Not applicable because there were no emissions during usage	• –	
Category 12: End-of-life treatment of sold products	There were zero emissions because it was carbon neutralized	• _	
Category 13: Leased assets (downstream)	Total floor space of leased property	Emission factor per leased property	
Category 14: Franchises	Not applicable because there are no franchises	• –	
Category 15: Investments	Emissions from investee companies	• –	
Other	Not calculated (too small)	• –	

^{*1 &}quot;Emission Factor Database on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain, (Ver. 2.3)"

^{*2 &}quot;Carbon Footprint Communication Program Basic Database, Ver. 1.01