

	Company thinking	
Background and purpose for accounting	 Within the NTT Group's main business of providing telecommunications services, we believe that the amount of CO₂ emissions from manufacturing telecommunication equipment installed in telecommunication buildings, and manufacturing and use of telecommunication device by customers. Therefore, we have been implementing CO₂ emissions reduction measures in our supply chain, such as promoting the purchase of products with lower CO₂ emissions when they are made and when they are used. By accounting for our supply chain emissions, we aim to understand the scope of measures we will need for reductions, and to give sincere answers when stakeholders ask us to disclose such information. 	
Utilization of accounting results	 We aim to promote planning and implementation of more effective reduction measures for supply chain emissions by specifying categories with high CO₂ emissions and by analyzing the causes of emissions in the applicable categories. We shall be able to disclose more information by making our supply chain emissions public on our web site, etc. We believe that through disclosing supply chain emissions on our web site, our information disclosure will be fulfilled for stakeholders requests. 	
Advantages of accounting	 By specifying the categories with high levels of CO₂ emissions, we will be able to clarify the boundaries of measures and these priorities. By disclosing information on our supply chain emissions, we shall be able to give more information per the requests of our stakeholders, and then our brand image related to environment will be more and more improved. 	
Internal accounting organization	 Data was collected from the persons in charge of environmental matters that are assigned in the various NTT Group companies and from related internal departments. This data was used by the Environment Promotion Office of NTT to account for supply chain emissions of the supply chain for the entire NTT Group. We were using two types of data for scope 3 calculation. One was the data collected every year, such as annual consumption of various types of energy, and waste emissions by type, and the other was the data disclosed by financial statements, such as the number and procurement amounts of telecommunication equipment both used in telecommunication building and sold to customers. Our calculations used original emission factor that are made from the high volume of data, such as LCA results of various telecommunications services, etc. 	

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	Company thinking		
☐ To reduce supply chain emissions	 Category 1 and 2 emissions account for the majority of emissions. Category 11 emissions cannot be-negligible, either. We are continuing our efforts to promote procurement of products with lower CO₂ emissions when manufactured and when in use. In order to make this effective, we believe that collaboration with the manufacturers making the equipment is important. We will also continue to procure products with high energy-saving effects and will try to introduce energy saving equipment to our customers. From the result, category 15 is relatively large, because it involves investments in power generating companies. 		
Tasks to account for supply chain emissions	 Methodologies to verify the appropriateness of data accuracy and the concepts of the calculations are necessary. Because the boundary of the calculations is widely spread, emission factors that are commonly used in our group need to be kept and database must be made. More accurate calculations are necessary in order to execute the reduction measures, and to that end the collected data must be more detailed and more refined, and the boundaries must be expanded. 		
For those starting to account for supply chain emissions	 Because the accounting range of supply chain emissions is so large, we felt that it was important for us to understand which categories were accounting for the highest percentage of emissions. Therefore, we were emphasis of acquiring an overview rather than accuracy. There were categories that we were not expecting, such as Category 15 (investments). These categories were able to be calculated in accordance with advises from expert, such as determination of accounting boundaries, and methodologies for calculation. We believe it would be helpful to receive advice from specialists when accounting for emissions for the first time. 		

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Catamani	Accounting methods		
Category	Activity data	Emission factor	
Category 1: Purchased goods and services	Quantity and procurement amount of equipment sold to customers	 Emission factor Database, Ver. 2.0 Carbon footprint system trial project 3EID 	
Category 2: Capital goods	Procurement amount for telecommunications equipment	• 3EID	
Category 3: Fuel and energy related activities not included in Scope 1 or 2	Annual consumption of energy for each type	 Emission factor Database, Ver. 2.0 CFP Basic Database, Ver. 1.01 	
Category 4: Transportation and delivery (upstream)	 Quantity and procurement amount of equipment sold to customers Weight and distance of transport that is subcontracted 	 Carbon footprint system trial project 3EID Ministry of Land, Infrastructure and Transportation 	
Category 5: Waste generated in operations	Waste quantity by type	Emission factor Database, Ver. 2.0	
Category 6: Business travel	Number of employees	NTT Group intensity (*1)	
Category 7: Employee commuting	Number of employees	NTT Group intensity (*1)	
Category 8: Leased assets (upstream)	Fuel and electricity used by leased assets are calculated in Scope 1 or 2.		
Category 9: Transportation and delivery (downstream)	Calculated in Category 4 because most of downstream logistics is subcontracted.		
Category 10: Processing of sold products	Not included in calculations because there is no processing of intermediate products in our main business		
Category 11: Use of sold products	 Number of telecommunications subscriptions Quantity and procurement amount of equipment sold to customers 	Intensity calculated by NTT group(*1)	
Category 12: End-of-life treatment of sold products	Being calculated (calculated from the quantity and procurement amount of equipment sold to customers)		
Category 13: Leased assets (downstream)	Being calculated (calculated from data on annual operating time of leased assets)		
Category 14: Franchises	Total floor area of sales offices	Environment Bureau, Tokyo Prefecture	
Category 15: Investments	In the Scope 1 and 2 emissions of the invested companies, emissions are calculated based on the percentage of shares owned.		

*1: Original unit made from actual data based on communications services LCAs, etc.