1 YKK AP Inc.

	Companies' approach
Background and purpose of accounting	• Understanding our CO2 emissions across the entire supply chain is important in reducing the environmental load, and it allows us to implement effective measures. • We expect we will be able to meet our clients' demands for information disclosure, and also to have our stakeholders better understand the company's environmental load reduction efforts.
Utilization of accounting results	• To become involved in reducing the environmental load by taking advantage of reduction opportunities in larger categories. • To improve the transparency of our emissions by establishing internal calculation methods and calculation mechanisms. • To respond to our customers' demands for information disclosure. • Appealing to our customers, the environmental load reduction effect (amount of contributions of reducing CO2 emissions) due to using windows with high heat insulation capabilities.
Benefits of accounting	• The emissions from the entire supply chain can be clarified and then effective measures can be taken. • The transparency of our emissions will be improved, so that we will be able to respond to our customers' demands for information disclosure.
Internal system for accounting	• Data is collected from the Procurement, Logistics and Accounting departments, and then calculated by the Environmental department.
Efforts to reduce supply chain emissions	• Because our emissions from raw materials account for about 70 percent of our overall CO2 emissions across the entire supply chain, we are aggressively promoting a transition to raw materials with lower CO2 emissions. • With respect to logistics, we dispatching vehicles in a more efficient way, improving loading rates and attempting a modal shift. • We are starting "green" procurement and the reduction of emissions resulting from waste.
Issues in supply chain emissions accounting	• Improved accuracy for emission factor and activity data. • Activity data and emission factors for overseas facilities need to be developed and improved.

YKK AP Inc.

	Companies' approach
☐ **Other remarks**	• Our leading window products itself consumes less energy during usage, but the loss of heat that goes out through the window is huge (as shown in Figure 1 below). By providing plastic windows with high heat insulation capabilities, it can contribute to a reduction in whole-house air conditioning energy usage, leading to a possible reduction of CO2 emissions. By making a comparison between YKK AP's domestic supply chain CO2 emissions (including Scope 1&2) and the CO2 emissions reduction effects of our housing windows sold (also known as "avoided CO2 emissions") in FY2014, we have found that our avoided CO2 emissions exceeded our supply chain emissions (as shown in Figure 2 below). We will aim to contribute in realizing a low carbon society in our business as a whole, through promoting windows with high heat insulation capabilities.

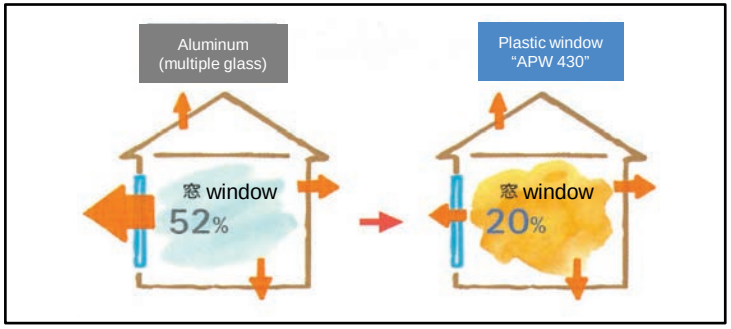


Fig. 1: Comparison of loss (%) of heat escaping through windows

[Calculation assumptions]
Residential insulation specs: compliant with the Energy-Saving Standard of 1999 ●House model: two-storied, total floor area of 120.08㎡, and ratio of opening of 26.8% (for 4 to 8 regions), compliant with the calculation model in the "Description of methods for calculating energy consumption as a basis for decisions by owners of housing" ●Areas applied: Revised Energy-Saving Standard (of 2013), for 6 regions

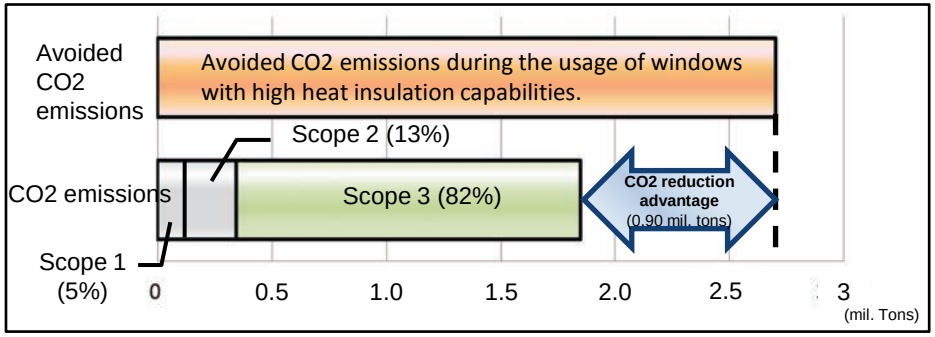


Fig. 2: Supply chain CO2 emissions and avoided CO2 emissions from the use of our housing windows

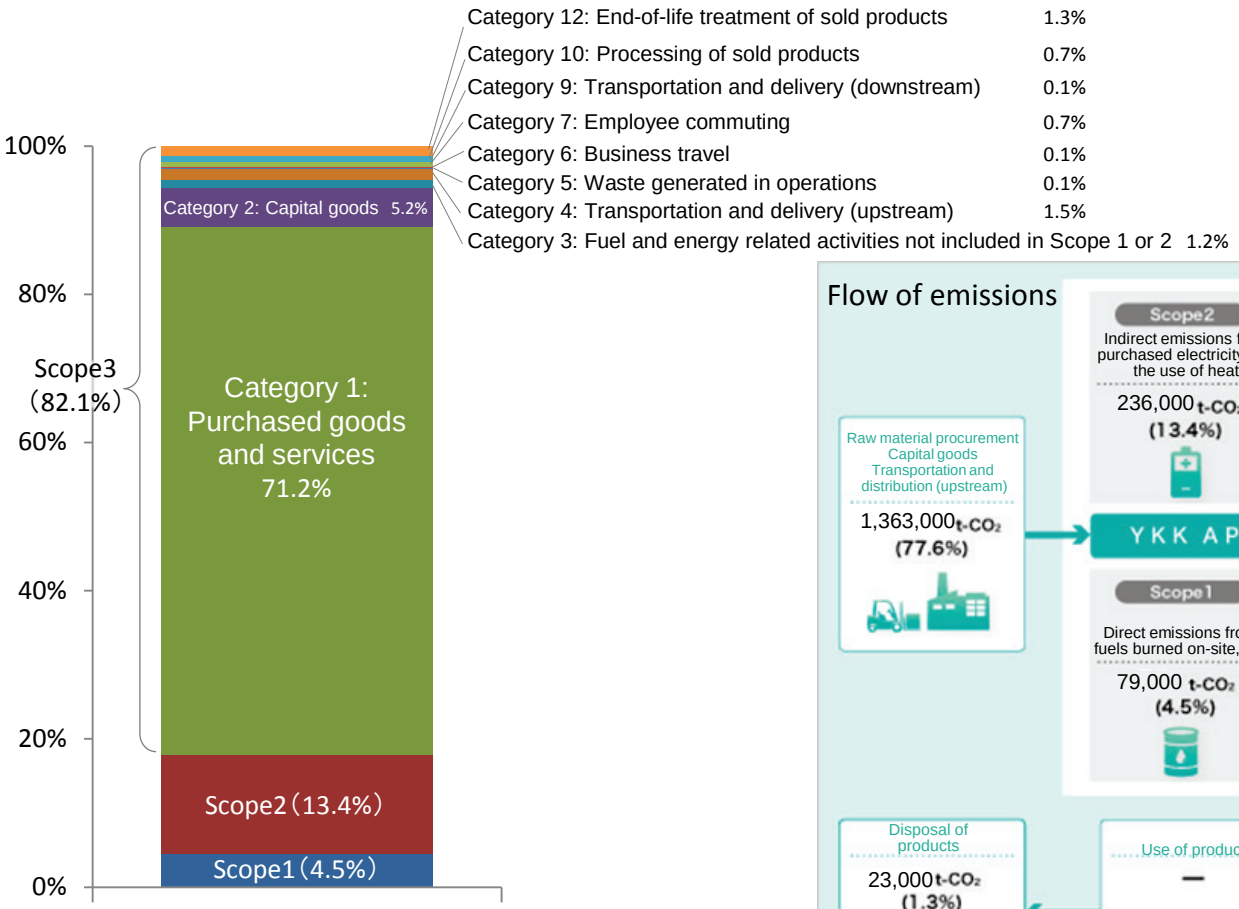
[Calculation assumptions] (These calculations are compliant with "Guidelines for Assessing the Contribution of Products to Avoided Greenhouse Gas Emissions", The Institute of Life Cycle Assessment, Japan)
The effects of our well-insulating housing windows on residential air-conditioning energy usage (i.e. CO2 reduction advantage) have been calculated as the "avoided CO2 emissions."
●Target for comparison: our recent windows (plastic) against those of 1990 (aluminum) ●Duration of use: 30 yrs (lifetime) ●Method: avoided emissions per unit of window x number of units shipped in FY2014

3 YKK AP Inc.

Category	Accounting methods	
	Activity data	Emission factor
Category 1: Purchased goods and services	• Weight of procured raw materials and other materials	• Emission factor database (*1, *2)
Category 2: Capital goods	• Value of procured capital goods	• Emission factor database (*2)
Category 3: Fuel and energy related activities not included in Scope 1 or 2	• Electricity and fuel energy usage	• Emission factor database (*1, *2)
Category 4: Transportation and delivery (upstream)	• Calculated based on accounting methods for specified cargo owners in accounting, reporting and public disclosure systems	• Mandatory Greenhouse Gas Accounting and Reporting System Emission Factors（*3）
Category 5: Waste generated in operations	• Volume of waste disposed of, by type	• Emission factor database (*2)
Category 6: Business travel	• Transportation expenses paid, by mode of transportation	• Emission factor database (*2)
Category 7: Employee commuting	• Transportation expenses paid, by mode of transportation	• Emission factor database (*2)
Category 8: Leased assets (upstream)	• Not calculated because emissions from the operations of leased assets are included in Scope 1,2.	
Category 9: Transportation and delivery (downstream)	• Freight transport tonne-km depending on the scenario settings	• Mandatory Greenhouse Gas Accounting and Reporting System Emission Factors（*3）
Category 10: Processing of sold products	• Shipping weight	• Emission factor per weight of products fabricated by our company
Category 11: Use of sold products	• Not calculated because there are no direct emissions from windows and doors itself	
Category 12: End-of-life treatment of sold products	• Shipping weight	• Emission factor database (*2)
Category 13: Leased assets (downstream)	• Not calculated because we did not rent to a another company	
Category 14: Franchises	• Not calculated, because we are not the franchiser	
Category 15: Investments	• Not calculated because we are neither an investment company nor a financial service providing company	
”Other”	• Calculations are ignored because it is an option category	

*1 "Carbon Footprint Communications Program Basic Database, Ver. 1.01 (Domestic Data)"
*2 "Emission Factor Database on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain, Ver. 2.0“
*3Mandatory Greenhouse Gas Accounting and Reporting System List of Emission Factors（http://ghg-santeikohyo.env.go.jp/）

Accounting results



The breakdown of the amount of domestic emissions for YKK AP in FY2014