

## Company thinking

### □ Background and purpose for accounting

- Frequent abnormal weather conditions caused by global warming can lead to increased insurance payments and increased premiums, and it may become difficult to continue to provide stable insurance. In order to reduce this risk, it is important to understand the emissions and how to reduce them for not only our company, but for our entire supply chain.
- In July 2008, we declared to become carbon neutral, including Scope 3 emissions, and started emissions accounting throughout our supply chain. We also established the "Nippon Koa Standards" that describe our accounting method.
- In February 2012, we were the first domestic company to be certified by the Carbon Neutral Certification Committee, and all of our fiscal 2012 emissions were scheduled to be offset.

### □ Utilization of accounting results

- In addition to publicizing our accounting results for external consumption, we are using them to offset the accounting results and be carbon neutral.
- We also assess each internal unit for the emissions and reduction efforts, and are including those results to assess the units and increase the awareness among our employees.

### □ Advantages of accounting

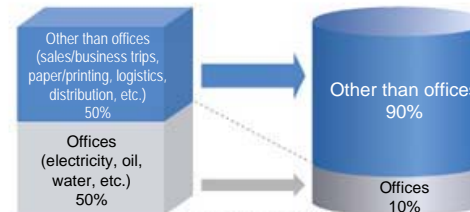
- Accounting for supply chain emissions allows timely PDCA for emissions reductions and allow us to control both CO<sub>2</sub> and costs.
- The cost reduction effect of Scope 3 emissions reductions is about nine times greater than those for Scope 1 and 2, so they are very effective.

Supports cost reduction

- By managing both CO<sub>2</sub> emissions and costs with a single tool, concurrent CO<sub>2</sub> reduction and cost reduction is possible.
- By starting with CO<sub>2</sub> reduction, the employees have greater motivation.

<CO<sub>2</sub> emissions percentage>

<Cost reduction results>



NipponKoa Sonpo example

Expanding the range of CO<sub>2</sub> accounting and efforts also reduces costs!  
The CO<sub>2</sub> emissions from offices and other areas are about the same. However, cost reduction results from non-office areas account for 90 percent of the total.

<http://www.nipponkoa.co.jp/environment/co2.html>

### □ Internal accounting organization

- Data which can be found at the head office is input there, and data which can only be found at branches (energy usage data, etc.) are input at branches and consolidated at the head office.
- We are using software that we have developed internally called "CO<sub>2</sub> & Cost Visualization System" to calculate supply chain emissions and cost reductions by month and by organization for continuous accounting.

## Company thinking

### ❑ To reduce supply chain emissions

- We acquired ISO 14001 certification for all of our offices, and all employees are involved through our efforts, such as "Eco Check" that gives points for the activities implemented at individual work places.
- We are also making efforts to reduce emissions throughout our entire value chain by communicating our environmental policy and procurement policy to our business partners.

<http://www.nipponkoa.co.jp/environment/overview.html>

### ❑ Tasks to account for supply chain emissions

- When trying to comprehend changes in emissions over time, fluctuations in emission factors, such as electricity, can prevent all of the reduction effects from being reflected in the results.

### ❑ For those starting to account for supply chain emissions

- From the point of view of starting from easy to calculate categories, Category 6 "Business Travel" and Category 7 "Employee Commuting" are relatively easy to acquire and suitable.
- When considering continuous accounting, calculating activities with large cost reduction impact will have a great economic effect.

Overall Image of Environmental Load from Business Activities (Upstream to Downstream) and Our Group's Environmental Preservation Efforts



Category	Accounting methods	
	Activity data	Emission factor
Category 1: Purchased goods and services	<ul style="list-style-type: none"> <li>Paper order amount</li> <li>Printed material order amount</li> </ul>	<ul style="list-style-type: none"> <li>Value provided by the Japan Paper Association</li> <li>Emission factor calculated from total domestic printed material shipments and energy used</li> </ul>
Category 4: Transportation and delivery (upstream)	<ul style="list-style-type: none"> <li>Mail expenses</li> <li>Transport expenses (use average ton-km, calculate ton-km from average fuel consumption or convert to fuel consumption)</li> </ul>	<ul style="list-style-type: none"> <li>3EID value</li> <li>Calculated, reported, public system value</li> </ul>
Category 5: Waste generated in operations	<ul style="list-style-type: none"> <li>Waste weight</li> </ul>	<ul style="list-style-type: none"> <li>Calculated, reported, public system value</li> </ul>
Category 6: Business travel	<ul style="list-style-type: none"> <li>Movement distance by means of transportation (first year only)</li> <li>Transportation expenses paid by means of transportation (from the second year)</li> <li>Fuel used (shuttle buses)</li> </ul>	<ul style="list-style-type: none"> <li>Transportation Ecology Mobility Foundation, Offset Guidelines, International Civil Aviation Organization (ICAO) values</li> <li>Emissions per expense calculated from initial year results (used from the second year)</li> </ul>
Category 7: Employee commuting		
Others	<ul style="list-style-type: none"> <li>Participants to external events</li> <li>Floor area of facilities at events</li> </ul>	<ul style="list-style-type: none"> <li>The Building-Energy Manager's Association of Japan value</li> <li>Emissions per participant calculated from internal award results</li> </ul>