Mitsubishi Chemical Holdings Corporation

Fiscal 2015 Data Sheet

Contents

Environmental Data

Scope of calculation:

Data for fiscal 2013 and fiscal 2014 covers the five major operating companies (Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Mitsubishi Plastics, Inc., Mitsubishi Rayon Co., Ltd., and Life Science Institute, Inc.) as well as their domestic Group companies. With the addition of Taiyo Nippon Sanso Corporation, data for fiscal 2015 covers the six major operating companies and the activities of their domestic Group companies. The data represents 56% of the Mitsubishi Chemical Holdings Corporation (MCHC) Group's consolidated net sales (including overseas sales).

☑ The fiscal 2015 performance indicators with this tick mark have been assured by KPMG AZSA Sustainability Co., Ltd.
For the Independent Assurance Report, please see page 5 in this data sheet.

		FY2013	FY2014	**FY2015**
GHG Emissions				
☑ GHG emissions (thousand tonnes of CO_2e)*1		51,714	50,604	**55,294** *2
☑ Scope 1+2		9,114	8,764	**12,054** *2
☑ Scope 1		8,042	7,764	**7,771** *2
☑ Scope 2*3		1,072	1,000	**4,283** *2
☑ Scope 3*4		42,600	41,840	**43,240**
Category 1	Purchased goods and services	10,160	10,100	**9,680**
Category 2	Capital goods	250	320	**270**
Category 3	Fuel- and energy-related activities not included in Scope 1 or Scope 2	420	460	**400**
Category 4	Upstream transportation and distribution (including distribution services whose cost was borne by the Group)	570	760	**730**
Category 5	Waste generated in operations	130	140	**130**
Category 6	Business travel	30	60	**50**
Category 7	Employee commuting	30	30	**30**
Category 8	Upstream leased assets	—	—	**—**
Category 9	Downstream transportation and distribution	190	0	**0**
Category 10	Processing of sold products	—	—	**—**
Category 11	Use of sold products	20,530	20,630	**21,460**
Category 12	End-of-life treatment of sold products	9,280	8,690	**8,860**
Category 13	Downstream leased assets	—	—	**—**
Category 14	Franchises	—	—	**—**
Category 15	Investments	1,010	650	**640**

Energy Consumption				
☑ Energy consumption (TJ)*1		127,562	120,553	**165,851** *2
Direct consumption (TJ)		108,689	102,968	**103,877**
Coal (TJ)		19,761	19,385	**19,433**
Oil (TJ)		10,444	11,155	**10,242**
Gas (TJ)		11,807	11,119	**10,602**
By-product gas and by-product oil (TJ)		66,677	61,309	**63,600**
Indirect consumption (TJ)		18,873	17,585	**61,974**
Electricity (TJ)*5		18,660	18,350	**63,779**
Steam (TJ)*5		213	-765	**-1,805**

*1 Calculation standards: The MCHC Group's calculations are in accordance with the methods stipulated by the Act on the Rational Use of Energy and Act on Promotion of Global Warming Countermeasures. Regarding GHG emissions not covered by either law, the Group develops calculation methods for each type of GHG emission based on considerations such as the balance of chemical reactions.

*2 Due to the relation to energy management, 1.65 million tons CO_2 equivalent of GHG emissions produced and 18,110 TJ of energy consumed by closely involved affiliates are included.

*3 CO_2 emissions from electricity and steam that MCHC Group sold to other companies is excluded from Scope 2 GHG emissions

*4 Please refer to page 2 of this data sheet for the calculation method for Scope 3 GHG emissions

*5 Electricity and steam that the MCHC Group sold to other companies are excluded from the MCHC Group's calculations

Environmental Data

Calculation Method for Scope 3 GHG Emissions

Referenced Guidelines

Our Scope 3 GHG emissions are calculated in accordance with the Corporate Value Chain (Scope 3) Accounting and Reporting Standard and its technical guidance issued by the GHG Protocol, the Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain issued by the World Business Council for Sustainable Development (WBCSD), and the Green Value Chain Platform initiated by the Japanese government.
Especially, for the emission factors for greenhouse gas (GHG) emissions, we use data available in the Green Value Chain Platform and information provided by MiLCA, a life cycle assessment software developed by the Japan Environmental Management Association for Industry.

Scope of Calculation

Activities conducted by Group companies in Japan (Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Mitsubishi Plastics, Inc., Mitsubishi Rayon Co., Ltd., Life Science Institute, Inc., Taiyo Nippon Sanso Corporation, and their subsidiaries), which account for 56% of the Mitsubishi Chemical Holdings Corporation (MCHC) Group's net sales.

Calculation Method by Category

Category 1 Purchased goods and services	Calculated by multiplying the amounts of raw materials and services in physical or monetary units purchased by the MCHC Group in Japan from outside the Group by the respective emission factor for each type of raw material or service.
Category 2 Capital goods	Calculated by multiplying the amounts invested in capital goods during the year by an emission factor per unit of investment amount. The capital investment in Japan is estimated by multiplying the consolidated capital investment of the MCHC Group by the ratio of net sales of the MCHC Group in Japan.
Category 3 Fuel- and energy-related activities not included in Scope 1 or Scope 2	This category includes emissions associated with the extraction, production, and transportation of purchased fuels and those consumed in the generation of electricity that is purchased by the MCHC Group in Japan. Fuel: calculated by multiplying the amount purchased during the year by an emission factor for each fuel type. Electricity and steam: calculated by multiplying the amount purchased from outside the Group by the emission factor of purchased energy.
Category 4 Upstream transportation and distribution(including distribution services whose cost was borne by the Group)	This category includes GHG emissions generated during the international transportation of purchased coal, coal derived products, and methanol (raw materials whose GHG emissions from transportation are included in Category 1, such as naphtha, are not included in the scope of calculation for this category). Downstream transportation and distribution that the Group bears the cost of these services are included in the same category as last year. Of GHG emissions generated in transporting products within Japan that have been sold (downstream side), the emissions are calculated by subtracting the Scope 1 emissions of the Group's logistics subsidiaries in Japan from total emissions resulting from the shipping of cargoes that were reported under the Act on Promotion of Global Warming Countermeasures. The emissions related to international transportation of exported goods are calculated by focusing on large transportation volume for petrochemical products and coal products. The emissions are calculated by multiplying transportation volume (ton-kilometer) by the emission factor for each mode of transportation, where the transportation volume is calculated by multiplying the freight volume by the transportation distance.
Category 5 Waste generated in operations	This category includes GHG emissions generated during the incineration, landfill disposal, and recycling of waste emitted from production sites in Japan. Waste that is incinerated or disposed of in landfill includes items such as sludge and plastic, and the GHGs that are released during incineration are calculated by multiplying the amount of waste by a corresponding emission factor.
Category 6 Business travel	The amount of business travel expenses for two Group companies for the year is calculated, and the ratio to net sales for these amounts is used as the representative figure for the MCHC Group in Japan (business travel expense ratio). The business travel expenses for the entire MCHC Group in Japan (Domestic MCHC group) are estimated by multiplying the net sales for the MCHC Group by the Domestic MCHC group net sales ratio and the business travel expense ratio. GHG emissions are calculated by multiplying this amount by an emission factor calculated based on each business trip's details in a certain Group company and the emission factors for each transportation mode.
Category 7 Employee commuting	The number of employees at each worksite in Japan is multiplied by the ratios of transportation modes used for commuting in each prefecture (according to a national survey in 2010) to estimate the number of employees using each mode of transportation for the entire MCHC Group in Japan. Commute distances are calculated using the national statistics for Japan, and these are multiplied by the emission factor for each mode of transportation.
Category 8 Upstream leased assets	Since the amount of applicable lease assets is negligible, this category is not estimated.
Category 9 Downstream transportation and distribution	The emissions associated with the transportation of sold products fall within Category 4 as the Group basically bears the cost of transporting products.
Category 10 Processing of sold products	The MCHC Group's main product group is raw materials products, and since these products can be processed into many types of products it is difficult to rationally calculate the GHG emissions associated with the products' processing. Therefore, in accordance with the WBCSD calculation guidance for the chemical industry, we exclude this category from the scope of calculation.
Category 11 Use of sold products	The amount of GHG emissions generated from combustion of fuel products sold outside of the MCHC Group (cokes, coke oven gas, etc.) is calculated by multiplying the amount of each type of fuel sold by an emission factor. In regard to Taiyo Nippon Sanso Corporation, which was newly added to the Group in fiscal 2015, CO_2 emissions generated from the products TNSC sold such as dry ice and air separation units (ASU), have been newly added to the calculations.
Category 12 End-of-life treatment of sold products	The final disposal location (Japan or overseas) is estimated for each type of the product sold that is used as raw materials, and the emissions are calculated by multiplying the disposal amount for each location by the emission factor for each final product and the disposal method for each location. The disposal method for final products overseas in fiscal 2015 is estimated to be 20% incineration and 80% landfill disposal.
Category 13 Downstream leased assets	Since the amount of applicable lease assets is negligible, this category is not estimated.
Category 14 Franchises	As the Group does not have any businesses in this format, there are no emissions in this category.
Category 15 Investments	The amount of GHG emissions related to investments are calculated for the 9 main investee companies in which MCHC held special investment shares (shareholding ratios of 20-50%) by multiplying the emissions of these companies by MCHC's shareholding ratio (number of shares held by MCHC/total number of issued shares). The investee companies'GHG emissions are based on figures published in accordance with the Act on Promotion of Global Warming Countermeasures, however, since the actual figures for fiscal 2015 have yet to be announced, the figures for fiscal 2013 were used as a substitute as they were the most recently published figures. As an exception, we collected the actual fiscal 2015 emissions data by a hearing directly from Kashima Kita Electric Power Corporation, which accounted for about 90% of the total Category 15 emissions.

Environmental Data

Scope of calculation:

Data for fiscal 2013 and fiscal 2014 covers the five major operating companies (Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Mitsubishi Plastics, Inc., Mitsubishi Rayon Co., Ltd., and Life Science Institute, Inc.) as well as their domestic Group companies. With the addition of Taiyo Nippon Sanso Corporation, data for fiscal 2015 covers the six major operating companies and the activities of their domestic Group companies. The data represents 56% of the Mitsubishi Chemical Holdings Corporation (MCHC) Group's consolidated net sales (including overseas sales).

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	FY2013	FY2014	**FY2015**
Environmental Impact			
☑ NOx emissions (thousand tonnes)	9.94	8.88	**8.04**
☑ SOx emissions (thousand tonnes)	3.22	3.06	**3.08**
☑ Particulate emissions (thousand tonnes)	0.21	0.2	**0.2**
☑ VOC emissions (thousand tonnes)*1	4.57	5.67	**4.91**
☑ COD (thousand tonnes)*2	1.93	1.75	**1.74**
☑ Total nitrogen (thousand tonnes)*2	5.76	5.68	**5.53**
☑ Total phosphorus (thousand tonnes)*2	0.07	0.06	**0.05**

*1 VOC: Chemicals subject to data collection are specified as VOC by the Japanese pollutant release and transfer register (PRTR) system and in the PRTR chemical survey of the Japan Chemical Industry Association, as well as ethylene and propylene.

*2 Total COD emissions, total nitrogen emissions and total phosphorous emissions include total volume of emissions into rivers, lakes and oceans. Exclude emissions into sewage systems.

Water Usage/Discharge			
☑ Water usage (million m^3) (excluding seawater)	181	174	**171**
☑ Water discharge (million m^3) (excluding seawater)	118	105	**104**
Water discharge into oceans (million m^3) (excluding seawater)	62	52	**39**
Water discharge into lakes and rivers (million m^3)*3	52	49	**58**
Water discharge into sewers (million m^3)	4	4	**7**

*3 Figures for fiscal 2013 and fiscal 2014 have been revised due to a revision in the method of calculating discharge volume at a company.

Waste			
☑ Waste generated (thousand tonnes)*4	368(31)	380(29)	**372(29)**
☑ Landfill disposal (thousand tonnes)*5	6(4.9)	8(5.4)	**8(5.1)**
☑ PRTR chemical substance emissions (thousand tonnes)	1.20	1.63	**1.11**

*4 Figures in parentheses denote volume of waste generated from the waste treatment business (not included).

*5 Figures in parentheses denote volume of landfill disposal from the waste treatment business (not included).

Environmental Accounting			
Environmental protection cost			
Investment amount (million yen)	5,908	6,785	**5,396**
Expense amount (million yen)	33,899	36,205	**33,720**
Economic benefit of environmental protection measures (million yen)*6	3,441	3,243	**2,652**

*6 Scope of calculation: Mitsubishi Tanabe Pharma Corporation, Mitsubishi Plastics, Inc., Mitsubishi Rayon Co., Ltd., and each company's Group companies in Japan.

There were no significant environmental accidents or leaks and no hazardous wastes as defined by the Basel Convention were transported.

Social Data

Data is for the period from April 1 to March 31 of each fiscal year or as of March 31

Scope of calculation:

In fiscal 2013, figures are those employed by the four operating companies (Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Mitsubishi Plastics, Inc., and Mitsubishi Rayon Co., Ltd.), excluding those seconded to other companies but including those seconded from other companies.

Employees of the four operating companies in fiscal 2014, and those of the original four operating companies and Taiyo Nippon Sanso Corporation in fiscal 2015, respectively include those seconded to other companies but exclude those seconded from other companies.

Life Science Institute, Inc. has no employees other than those seconded from the Group.

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		FY2013	FY2014	**FY2015**
Basic Information				
☑ Number of employees		16,580	20,886	**22,508**
☑ Number of employees by gender	Male	14,186	17,742	**19,194**
☑	Female	2,394	3,144	**3,314**
☑ Number of employees by age group	20s or younger	2,004	2,164	**2,423**
☑	30s	4,316	5,042	**5,177**
☑	40s	6,098	8,235	**8,621**
☑	50s or older	4,162	5,445	**6,287**
☑ Average age		42.0	42.9	**42.7**
☑ Number of new employees[*1]		266	360	**455**
☑ Number of employee turnover[*2]		189	421	**971**
☑ Number of unionized employees		11,941	14,451	**15,117**
☑ Percentage of unionized employees		72.0	69.2	**67.2**
☑ Number of layoffs[*3]		0	0	**2**

*1 Calculation methods changed and from fiscal 2014 include the total number of new employees. (Until fiscal 2013 this number included regular university graduate recruits only.)

*2 Calculation methods changed and from fiscal 2014 refer to the number of people who left the four core operating companies, including retirees, as the total employee turnover. In fiscal 2013, employee turnover was 453, including retirees.

*3 People leaving at the company's behest (dismissal)

Diversity				
☑ Percentage of female employees		14.4	15.1	**14.7**
☑ Percentage of female managers[*4]		6.1	7.4	**7.1**
☑ Percentage of employees with disabilities		2.1	2.1	**2.2**
☑ Number of employees rehired post-retirement		1,121	1,023	**1,038**

*4 Percentage of female employees to employees at assistant manager level and above.

Work-Life Balance				
☑ Number of employees taking childcare leave	Total	235	288	**283**
☑	Male	14	16	**27**
☑	Female	221	272	**256**
☑ Number of employees taking family care leave		19	12	**9**
☑ Acquisition rate of annual paid leave		66.7	66.9	**66.8**

Occupational Health			
☑ Lost-time injuries frequency rate[*5, *6]	0.32	0.32	**0.48**

*5 Scope of calculation: the six operating companies (Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Mitsubishi Plastics, Inc., Mitsubishi Rayon Co., Ltd., Life Science Institute, Inc., and Taiyo Nippon Sanso Corporation) and their Group companies in Japan which have divisions engaging in manufacturing.

*6 Lost-time injuries frequency rate: Number of lost-time injuries and fatalities per million hours worked.

Other			
☑ Number of employees taking volunteer leave	61	48	**39**
Charitable contributions (million yen) [*7]	2561	1,888	**1,656**
Political contributions (million yen) [*7]	18	27	**26**

*7 Scope of aggregation: In fiscal 2013, employees of five operating companies (Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Mitsubishi Plastics, Inc., Mitsubishi Rayon Co., Ltd. and Life Science Institute, Inc.).
From fiscal 2014 onward, employees from six operating companies (Mitsubishi Chemical Corporation, Mitsubishi Tanabe Pharma Corporation, Mitsubishi Plastics, Inc., Mitsubishi Rayon Co., Ltd., Life Science Institute, Inc., and Taiyo Nippon Sanso Corporation).

Independent Assurance Report

Independent Assurance Report

To the President and CEO of Mitsubishi Chemical Holdings Corporation

We were engaged by Mitsubishi Chemical Holdings Corporation (the "Company") to undertake a limited assurance engagement of the environmental and social performance indicators marked with ☑ for the period from April 1, 2015 to March 31, 2016 (the "Indicators") included in its Fiscal 2015 Data Sheet (the "Data sheet") for the fiscal year ended March 31, 2016.

The Company's Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the "Company's reporting criteria"), as described in the Data sheet, which are derived, among others, from the Act on the Rational Use of Energy, Act on Promotion of Global Warming Countermeasures, GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard and WBCSD Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain, G4 Sustainability Reporting Guidelines of the Global Reporting Initiative and Environmental Reporting Guidelines of Japan's Ministry of the Environment.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information', 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements', issued by the International Auditing and Assurance Standards Board, and the 'Practical Guidelines for the Assurance of Sustainability Information' of the Japanese Association of Assurance Organizations for Sustainability Information. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Data sheet, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing with the Company's responsible personnel to obtain an understanding of its policy for the preparation of the Data sheet and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical reviews of the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and also recalculating the Indicators.
- Visiting to the Nagahama plant of Mitsubishi Plastics, Inc. selected on the basis of a risk analysis.
- Evaluating the overall statement in which the Indicators are expressed.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Data sheet are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Data sheet.

Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

KPMG AZSA Sustainability Co., Ltd.

KPMG AZSA Sustainability Co., Ltd.
Tokyo, Japan
October 28, 2016