Ongoing Efforts to Ensure Coexistence with the Global Environment

The Eisai Group conducts business operations emphasizing protection of the global environment based on the Eisai Network Companies (ENW) Environmental Protection Policy. By quantitatively assessing resource input and environmental impact, we strive to reduce our burden on the environment and promote environmental protection activities worldwide.

The Eisai Group conducts business operations seeking coexistence with the global environment. Based on the Eisai Network Companies (ENW) Environmental Protection Policy, all employees recognize the importance of environmental protection and incorporate an environmental perspective in working to solve social issues.

Today, we face many global environmental issues, such as climate change and water shortages, which have substantial impact on a sustainable society. There are also significant issues concerning environmental protection, including air pollution, waste problems and destruction of the natural environment. In addition to observing environmental laws and regulations, ordinances and agreements with local governments, the Eisai Group implements more stringent voluntary standards and undertakes activities accordingly in order to ensure coexistence with the global environment through its business operations. In promoting business expansion into countries across the world, we will fulfill our corporate social responsibility by focusing on reducing environmental impact at each stage of business.

Fundamental Environmental Protection Policy

Eisai and its Group companies (hereafter ENW) place global environmental protection as an important component of business operations and strive to maintain the environment.

Environmental Protection Guidelines

Manufacturing and Drug Discovery Research Sites Worldwide

Glossary and CO_2 Emissions Coefficient

Glossary

Term	Description
ISO 14001	An international standard for environmental management issued by the International Organization for Standardization
EA21	EcoAction 21: an environmental management system certification for small- and medium-sized enterprises issued by Japan's Ministry of the Environment
PRTR	Pollutant Release and Transfer Register: A system for understanding, collecting and publicly disclosing information on the extent to which chemical substances involving environmental risk are either released into the environment or are contained in waste matter and transferred from operational sites
SOx	Sulfur oxides
NOx	Nitrogen oxides
BOD	Biochemical oxygen demand: A measure used to evaluate the quality of river water and factory wastewater
Scope 1	Energy-derived direct greenhouse gas (GHG) emissions. GHG emissions released directly into the atmosphere through the use of fuels
Scope 2	Energy-derived indirect GHG emissions. GHG emissions associated with the use of purchased energy (electricity and heat)
Scope 3	Other indirect GHG emissions. GHG emissions associated with business activities in a supply chain, other than Scope 1 and Scope 2 emissions
VOCs	Volatile organic compounds: Organic compounds that are volatile at ordinary temperatures and cause air pollution through the generation of photochemical oxidants
Zero emissions	The Eisai Group uses this term as a target of emission management. It indicates a ratio of waste sent to landfill to total waste of less than 1.0%.

Energy Consumption and CO_2 Emissions Coefficient Used in Emissions Calculations

Energy type	Calorific value per unit	CO_2 emissions coefficient	
	FY2014	In and before FY2012	In and after FY2013
Electric power	9.97 (GJ/MWh)	＊1	
LPG	50.1 (GJ/tons)	3.00 (tons/tons)	3.01 (tons/tons)
LNG	55.0 (GJ/tons)	2.70 (tons/tons)	2.76 (tons/tons)
Natural gas	40.2 (GJ/1,000 Nm		

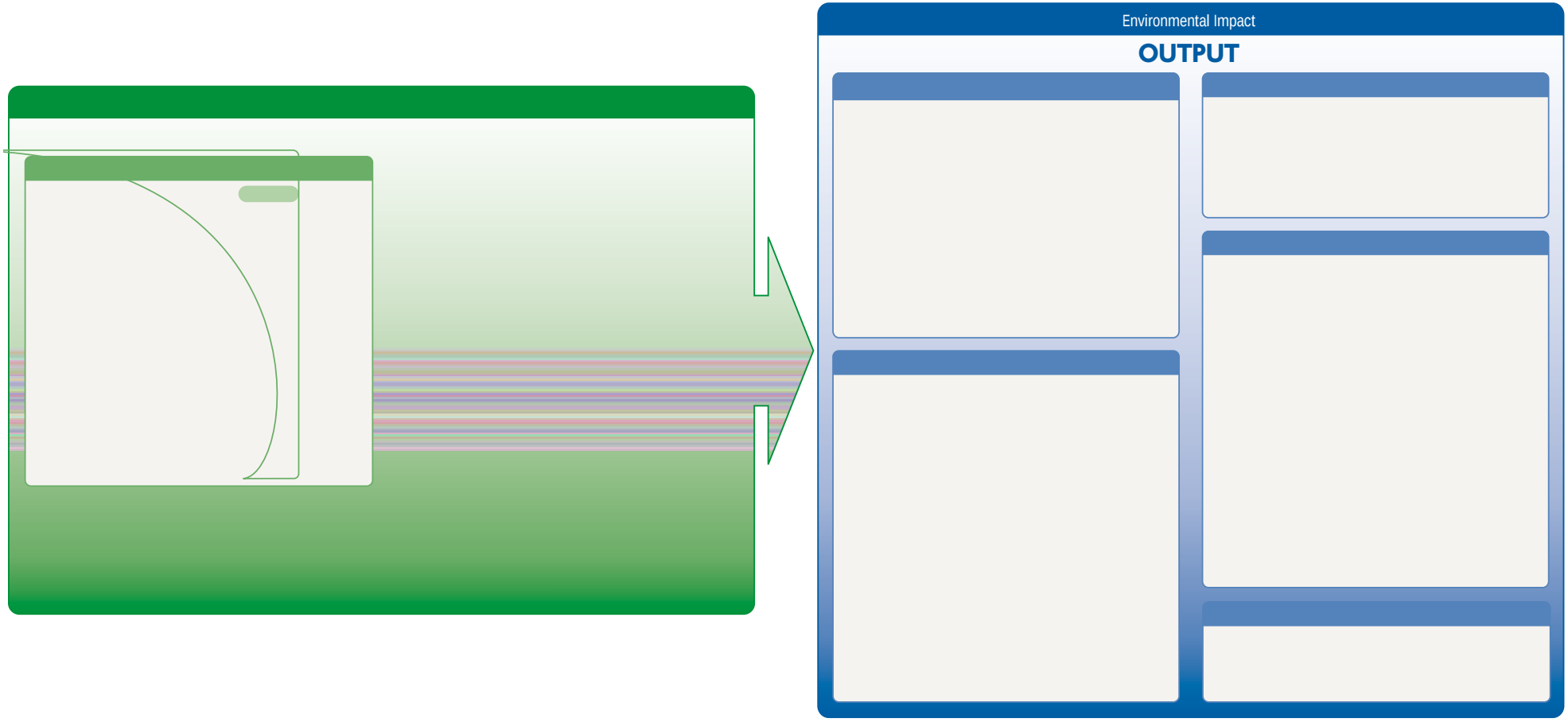
1 Environmental Protection Initiatives and Results

Fiscal 2014 Environmental Protection Initiatives and Results of the Eisai Group in Japan

Theme	Targets	Results	Evaluation	Pages
Enhancement of environmental management	Enhancement and smooth operation of management systems	• Proper application of the PDCA cycle • Periodic and renewal inspection of ISO 14001 certification (Kawashima Plant, Kashima Plant, Sannova Co., Ltd., EIDIA Co., Ltd. Ibaraki Plant) • Interim and renewal inspections of EA21 certification (Sunplanet Co., Ltd., Eisai Distribution Co., Ltd.)	○	P7
	Planning and implementation of environmental education	Internal training sessions: 47; external training sessions: 15	○	P7
	Implementation of environmental communication	• Publication of the Environmental and Social Report 2014 • Local community meetings (Kawashima Plant) and administrative committee meetings (Kashima Plant)	○	P8
Energy conservation and combating climate change	Reduction of CO_2 emissions by 23% from fiscal 2005 level by fiscal 2020.	CO_2 emissions : 77,599 tons[*1] (22.8% decrease from fiscal 2013) 64,138 tons[*2] (29.9% decrease from fiscal 2005)	○	P9
	Promotion of the replacement of commercial vehicles with hybrid vehicles (Eisai Co., Ltd.)	Adoption rate for commercial vehicles: 55% (6% increase from fiscal 2013) (Adoption rate for company-owned vehicles: 74% Adoption rate for employee- owned vehicles: 44%)	○	P10
	Proper management of fluorocarbons	Change to hydrofluorocarbons and non-fluorocarbons, and regular inspection of equipment and facilities • 2 leakage accident in Kawashima Plant and Sannova Co., Ltd.	△	P8
	Purchase of wind-generated green power	Purchase of 1,000,000 kWh from Japan Natural Energy Co., Ltd.	○	—
Waste reduction	• Reduction of waste generated • Reduction of waste sent to landfill • Increase in recycled waste	• Amount of waste generated: 4,098 tons (decrease of 819 tons from fiscal 2013) • Amount of waste sent to landfill: 31 tons (increase of 7 tons from fiscal 2013) • Amount of recycled waste: 1,104 tons (decrease of 471 tons from fiscal 2013)	△	P12
	Ratio of waste sent to landfill to total waste < 1%	• Eisai Co., Ltd.: 0.26% • Eisai Group companies in Japan: 2.26% • Eisai Group in Japan: 0.77%	○	P12
	Implementation of onsite inspections based on the Waste Management and Public Cleansing Law	Implemented onsite inspections based on the Waste Management and Public Cleansing Law at more than 80 sites nationwide; confirmed that waste is being disposed of legally and in a proper manner	○	P12
Resource conservation	Promotion of awareness-raising activities and education to encourage green purchasing	Awareness-raising activities and education were provided on a timely basis. Total purchase amount dropped 6.2%, whereas the green purchasing rate declined to 29.7% (a 4.8% decrease from fiscal 2013).	△	P11
Management of chemical substances	Response to PRTR system and proper management of designated substances	Proper management based on an understanding of amounts of substances subject to the PRTR system that were handled, emitted and transferred	○	P13
	Reduction in usage of dichloromethane	Amount used: 365 tons (338% increase from fiscal 2013)	×	P133P551 459tTjs1sj0.551i7

2 Resource Input and Environmental Impact

Resource Input and Environmental Impact



Environmental Accounting

The Eisai Group in Japan has used a standardized form for assessing environmental costs to tabulate any discernible investments

The Eisai Group established the Company-Wide Environment and Safety Committee as a decision-making body for deliberation of important

The Eisai Group in Japan has compiled its procedures for responding to environmental incidents in its Disaster and Accident Response Manual and the Industrial Accident Reporting and Compilation Standards. We aim to minimize damage by collecting accurate information and taking swift and appropriate action and at the same time make every possible effort to prevent recurrence. At production plants and research facilities, in particular, we have been preparing for

The Eisai Group in Japan is committed to observing environmental laws and regulations, ordinances and agreements with local governments. In particular, at production plants and research facilities, we regularly measure the environmental burden of causative agents in air pollution and water pollution to check that there are no problems. Also, from the perspective of elgTD(damage by collery possib6e)TjT c1 Tand

Formation of a Low-Carbon Society

Toward the Formation of a Low-Carbon Society

The Eisai Group in Japan is promoting initiatives for the formation of a low-carbon society to help solve the problem of climate change. Eisai Co., Ltd. is participating in the Commitment to a Low Carbon Society initiated by the Federation of Pharmaceutical Manufacturers' Associations of Japan (FPMAJ), and the Eisai Group in Japan is implementing relevant initiatives based on its own medium-term plan for the reduction of CO_2 emissions. In fiscal 2014, our energy consumption showed a drastic decline following the transfer of the Misato Plant to another company. Tsukuba Research Laboratories forged ahead with its energy-saving efforts by installing a heat-pump air conditioning system that uses evaporative humidifiers and low air volume drafts. As a result, the Eisai Group in Japan reduced CO_2 emissions by 23% from fiscal 2013.

Among production plants and research facilities outside Japan, the Andover Research Institute in the United States closed one of its research divisions. However, increases in production volume at the Suzhou Plant in China and the North Carolina Plant in the United States pushed up overall energy consumption. On the whole, the Eisai Group's total CO_2 emissions, combining the Eisai Group in Japan and production plants and research facilities outside Japan, showed a 14% decrease from fiscal 2013. Looking ahead, we will respond to expected increases in production volume at overseas production sites following global business development by implementing energy-saving and other measures in order to promote the reduction of CO_2 emissions, and ultimately, to contribute to the formation of a low-carbon society.

Eisai Group in Japan CO_2 Emissions*1, *2

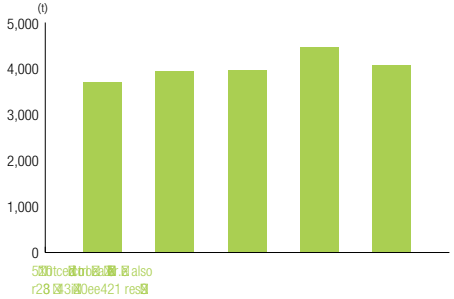
*1 Revisions were made to the fiscal 2013 data provided in the previous year's report by using the finalized coefficient shown below.
FY2012 carbon emissions coefficient based on power usage = 0.570 t- CO_2/MWh
Note: Data were revised from what was previously reported by re-totalization.

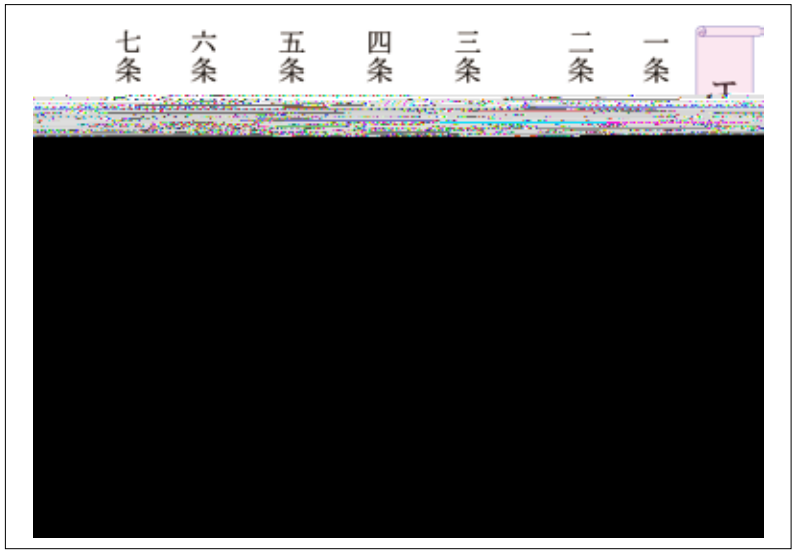
*2 Emissions from vehicles are not included.
*3 Emissions from business activities at offices outside Japan are not included.

Efforts Undertaken at Offices

In accordance with the “Seven Power-Saving Rules,” the Eisai Group in Japan strives to save electricity throughout the year, not only during the power-saving campaigns held in summer and winter. Offices, including administration and sales offices, concentrate on power-saving efforts, such as controlling the temperature of air-conditioning systems, turning off lights when not in use and shutting down computers when employees leave their seats for a while. At large buildings, we install demand controllers to control peak power. We also focus on raising employee awareness of reducing power by implementing regular energy-saving patrols and visualizing actual power savings achieved. CO_2 emissions originating from business activities at offices of the Eisai Group in Japan in fiscal 2014 totaled 4,139 tons, a 9.0% decrease from fiscal 2013. During fiscal 2014, at the headquarters office complex of Eisai Co., Ltd., we implemented such energy-saving measures as installing LED lighting in the company buildings and conducting a renewal of the air conditioners. Relocation, elimination and consolidation of sales offices and the resulting decline in energy consumption also contributed to reduced CO_2 emissions.

Office Activitiess CO_2 Emissions (Eisai Group in Japan)





Efforts concerning Commercial Vehicles

Eisai Co., Ltd. also undertakes efforts to reduce CO_2 emissions from sales operations. In Japan, the replacement of commercial vehicles with hybrid vehicles has been proceeding, whereby as a general rule, we have required to choose hybrid vehicles when purchasing new vehicles since 2010.

Breakdown of Energy Consumption

		Electric power (MWh)	LPG (tons)	LNG (m^3)	Natural gas (1,000 m^3)	Processed natural gas (1,000 m^3)	Kerosene (kl)	Light oil (kl)	Fuel oil A (kl)	Gasoline (kl)	Industrial steam (GJ)	Cold water (GJ)
In Japan	Amount used	103,545 gas (1,00081.15ndustrial steam										

Group Companies in Japan CO_2 Emissions

(tons)

Company name	2010	2011	2012	2013	2014
Sunplanet Co., Ltd.	1,321	897	601	614	605
Sannova Co., Ltd.	6,767	7,972	8,214	8,964	8,995
Elmed Eisai Co., Ltd.	118	133	129	173	168
Bracco-Eisai Co., Ltd.	88	99	110	123	112
Eisai Distribution Co., Ltd.	1,370	1,810	2,053	2,633	2,772
KAN Research Institute, Inc.	549	557	575	626	2,735
EIDIA Co., Ltd.	687	752	736	946	875
Eisai Food & Chemical Co., Ltd.	49	64	66	74	71
Others	339	400	309	123	—
Group Companies in Japan Total	11,288	12,683	12,793	14,276	16,333

Eisai Co., Ltd. CO_2 Emissions

(tons)

Office name	2010	2011	2012	2013	2014
Kawashima Plant	24,122	26,371	26,386	29,141	27,545
Misato Plant*	17,726	20,247	20,288	20,597	—
Honjo Facility	845	960	1,063	1,223	1,156
Kashima Plant	6,975	7,912	7,840	8,701	8,324
Tsukuba Research Laboratories	17,720	20,050	20,659	22,466	20,514
Headquarters office complex	1,844	1,880	1,914	2,150	2,064
Communication offices (sales offices in Japan)	1,506	1,638	1,699	1,977	1,662
Eisai Co., Ltd. Total	70,738	79,059	79,847	86,254	61,266
Eisai Group in Japan Total	82,026	91,742	92,641	100,530	77,599

The Eisai Group in Japan is working to achieve zero emissions and conducting waste disposal with three goals in mind, specifically, reduce the amount of waste generated, increase the amount of recycled waste and decrease the amount of waste sent to landfill. In fiscal 2014, we attained zero emissions

Chemical substances that are used in the research and development and production of pharmaceutical products include some substances subject to the PRTR system that could have an impact on the environment. The amounts of these substances handled, released into the environment and transferred as waste need to be understood and properly managed. Therefore, in addition to using our unique reagent management system to monitor the usage of reagents by the Eisai Group in Japan, we are also striving to reduce our usage of PRTR substances and to control their release into the environment. With regard to the usage of these substances exceeding the amount of the designated limit, we surely report this matter to the authorities of the relevant prefectural

VOCs, such as ethyl acetate, acetone and methanol, are highly volatile and turn into gas in the atmosphere, and as is the case with NOx discharged from production plants, cause the generation of photochemical oxidants. In view of preventing air pollution, these substances need to be controlled to reduce their release into the atmosphere.

In response, main production plants and research facilities of the Eisai Group in Japan implement the same level of efforts as for PRTR substances to reduce the usage of VOCs and stipulate equipment operating procedures to minimize their release from production or research processes. The graph on the right shows the amount handled and released

Saving Resources

Effective Use of Water Resources

Securing sufficient water resources is essential in producing high-quality pharmaceutical products. The recent climate change has been causing severe water shortages in many regions across the world, adding increased significance every year to the effective use of water resources. The Eisai Group is working to reduce water consumption as well as ensure the quality of wastewater discharged from its production plants and research facilities. In response to the Water Pollution Control Act, production plants and research facilities of the Eisai Group in Japan have also upgraded their system to prevent contamination of groundwater both in terms of software (programs and procedures) and hardware (facilities and equipment).

Water consumption of the Eisai Group in fiscal 2014 totaled 3,376,000 tons, a 13% decrease from fiscal 2013. The Eisai Group in Japan, accounting for

Eisai Group Water Consumption

Suzhou Plant Water Consumption

Green Purchasing

As one environmental effort undertaken by employees on a daily basis, the Eisai Group in Japan is promoting green purchasing, an initiative to purchase what is needed in the quantity needed, and if there are two products equivalent in both quality and price, to give preference to the one that is more environment-friendly. The initiative is designed to shift away from a society of mass-production and mass-consumption. Eisai Co., Ltd., in particular, has been actively committed to this initiative through participation in the Green Purchasing Network* and in accordance with its own Green Purchasing Guidelines.

Reduction of Copy Paper Consumption

Eisai Co., Ltd. is promoting the reduction of copy paper consumption. Our previous efforts had focused on the practice of two-sided copying, which became popular but did not translate into reduced paper consumption as expected. Thus, we shifted our focus to raising awareness via our corporate website and other means, letting employees rethink if copying is really needed and linking their efforts to cost savings.

We also changed the way we conduct meetings and installed dedicated power supply taps to encourage meetings that use personal computers instead of paper. As a result, copy paper consumption began to show a marked decline in the latter half of fiscal 2014. In the future, we will further upgrade this initiative and expand its scope to other Group companies.

Air Pollutant Emissions and Pollutant Load in Wastewater

Air Pollutant Emissions

Air Pollutant Emissions in Fiscal 2014 by Site

Category	Operational site/ Company	SOx (kg)	NOx (kg)	Soot and dust (kg)
Eisai Co., Ltd.	Kawashima Plant	1,005	6,014	352
	Tsukuba Research	258	2,723	63
	Subtotal	1,263	8,737	415
Group				

10 Resource Input and Environmental Impact (Eisai Group in Japan)

Principal PRTR Substances Handled

	2012	2013	2014
Kawashima Plant			
Water-soluble zinc compounds (tons)	13	13	15
Toluene (tons)	7	7	6
Isophytol (tons)	126	144	162
Tsukuba Research Laboratories			

11 Resource Input and Environmental Impact (Group Companies outside Japan)

Eisai Inc., North Carolina Plant (North Carolina, U.S.)

H3(8.0)840cm

Principal Chemical Substances Used

	2012	2013	2014
North Carolina Plant			
Isopropanol (tons)	0.6	0.3	–
Methanol (tons)	0.5	0.7	–
Acetonitrile (tons)	0.2	0.2	–
Sulfuric acid (tons)	0.8	0.3	2.3
Sodium hydroxide (tons)	1.4	1.1	0.4
Suzhou Plant			
Ethanol (tons)	16.6	17.3	27.2
Methanol (tons)	0.4	0.4	0.8
Acetonitrile (tons)	0.3	0.3	0.4
Ethyl acetate (tons)	0.1	0.1	0.1
Hydrochloric acid (tons)	0.0	0.0	0.0
Bogor Plant			
Methanol (l)	220.0	245.0	194.0
Acetonitrile (l)	107.0	97.0	74.5
Anhydrous ethanol (l)	43.0	47.9	34.2
Isoamyl alcohol (l)	12.9	8.9	5.6
Glacial acetic acid (l)	9.2	8.0	7.6
Andover Research Institute			
Methanol (U.S. tons)	16.6	7.7	1.5
Ethyl acetate (U.S. tons)	11.3	7.1	2.7
Acetonitrile (U.S. tons)	5.6	2.4	2.6
Toluene (U.S. tons)	4.9	3.3	0.2
Dichloromethane (U.S. tons)	3.9	0.9	2.3
European Knowledge Centre			
Ethyl acetate (tons)	2.0	1.1	0.1
Hexane (tons)	1.7	1.1	0.1
Dichloromethane (tons)	1.0	0.7	0.1
Acetone (tons)	0.7	0.3	0.0
Eisai Knowledge Centre, India			
Ethyl acetate (tons)	62.9	78.2	70.7
Acetone (tons)	50.0	76.4	60.5
Ethylbenzene (tons)	22.5	25.3	13.9
Methanol (tons)	19.4	30.6	20.3
Ethanol (tons)	15.7	8.4	4.6
Aluminum chloride (tons)	10.1	15.2	10.9
Piperidine hydrochloride (tons)	8.7	11.2	11.3
Propionyl chloride (tons)	6.8	8.2	8.4
Tetrahydrofuran (tons)	4.1	8.9	4.8
Toluene (tons)	0.4	4.7	1.9
Paraformaldehyde (tons)	2.6	3.2	2.8
Morphotek Inc.			
Ethanol (l)	482	400	295
Sodium hydroxide (tons)	298	–	–
Aqueous sodium hydroxide (l)	–	–	0
Aqueous potassium hydroxide (l)	456	2,423	–
Phosphoric acid (l)	342	416	–
H3 Biomedicine Inc.			
Acetonitrile (tons)		1.6	2.9
Dichloromethane (tons)		1.5	1.1
Methanol (tons)		1.2	0.6
Ethyl acetate (tons)		0.6	1.1
Hexane (tons)		0.6	1.1