Environment

Environment Aspect	Classification	Scope	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Nippon Shokubai		194	196	195	198	191
		Nippon Shokubai (Manufacturing Site)]	186	188	187	190	182
	Energy consumption (crude oil equivalent)	Group Companies in Japan	1,000 kL	27	27	27	195 198 187 190 27 27 86 91 98 104 797 763 780 747 63 63 304 347 .411 0.407 .194 0.199 .162 1,704 ,984 3,812 14.7 14.4 59.0 58.6 15.8 15.0 5.6 5.8 46.5 48.5 2.8 3.5 1.5 1.6 204 198 48 45 6.4 6.3 2.3 2.2 75 82 54 53 2.8 2.9 47 58 2.9 3.1 5.5 5.6 0.9 2.6 40 2.3 2.6 2.5 97 <td>26</td>	26
		Group Companies outside Japan	1 /6	91	86	86	91	89
Prevention of	Energy intensity	Nippon Shokubai (Manufacturing site)	L/tons- production volume	109	103	98	104	102
		Nippon Shokubai	1,000 tons	765	780	797	763	731
		Nippon Shokubai (Manufacturing Site)		749	763	780	747	716
global warming	CO2 emissions	Group Companies in Japan	-CO2	62	63	63	63	60
		Group Companies outside Japan	h/h	323	318	304	5 198 7 190 7 27 91 8 104 7 763 7 763 7 763 7 763 8 63 8 347 8 0.407 8 3,812 7 14.4 9 58.6 8 15.0 9 5.8 9 14 55 9 15 53 9 15 53 9 15 56 9 2 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7	342
	CO2 emissions intensity	Nippon Shokubai (Manufacturing Site)	tons/tons- production volume	0.436	0.417	0.411	0.407	0.402
	Energy source CO2 emissions intensity	Nippon Shokubai (Manufacturing site)	tons/tons- production volume	0.219	0.204	0.194	0.199	0.192
	Amount of calculated leakage of fluorocarbons	Nippon Shokubai	tons-CO2	2,513	2,276	6,162	1,704	3,194
	Scope3 emissions (Category No.1~7,12)	Nippon Shokubai	1,000 tons - CO2 1,000 tons	3,636	3,826	3,984	3,812	3,701
Environmental conservation for	CO2 emissions attirbutable to domestic logistics CO2 emissions intensity attributable to domestic	Nippon Shokubai	- CO2 kg/1,000	13.1	14.0	14.7	14.4	14.2
logistics	logistics	Nippon Shokubai	tons k	56.5	57.4	59.0	58.6	58.5
	Water consumption	Nippon Shokubai	million m3	15.2	15.8	15.8	15.0	14.9
Water		Group Companies in Japan		5.2	5.3	5.6	5.8	5.9
consumption		Group Companies outside Japan *1		46.6	47.1	46.5	48.5	47.4
		Nippon Shokubai		3.3	3.4	2.8	3.5	3.5
	SOx emissions	Group Companies in Japan	tons	1.6	1.9	1.5	1.6	1.4
		Nippon Shokubai		173	205	204	198	203
	NOx emissions	Group Companies in Japan	tons	54	44			43
Prevention of air and water	Dust emissions	Nippon Shokubai Group Companies in	tons	5.1 5.0	6.1 2.7			6.5 3.3
pollution	VOC emissions	Japan Nippon Shokubai	tons	67	60			89
	Voc emissions	Nippon Shokubai	COTIS	46	51			50
	COD emissions	Group Companies in Japan	tons	37	34	45		60
	Total phosphorous emissions	Nippon Shokubai	tons	2.7	2.8			2.7
	Total nitrogen emissions	Nippon Shokubai Nippon Shokubai	tons	51 3.2	54 3.9			55 2.8
	Waste* 2	Group Companies in Japan	1,000 tons	5.5				6.0
		Group Companies outside Japan		1.4	2.7	0.9	2.6	0.7
	Quantity of recycling	Nippon Shokubai	1,000 tons	37	40	40	40	34
Waste reduction		Group Companies in Japan		2.3	2.2	2.3	2.6	2.2
		Group Companies outside Japan		8.6	8.4	7.8	9.3	10.3
		Nippon Shokubai	tons	76	22	23	13	11
	Quantity of final off-site landfill	Group Companies in Japan		119	97	69	60	71
		Group Companies outside Japan		395	302	296	255	240
Chemical		Nippon Shokubai	1	108	98			78
	Substances subject to the PRTR law	Released into Atmosphere Released into Water	tons	48 59	42 55			41 37
management		Group Companies in	1	34	34			35
	[For the property of the control of	Japan Nippon Chalashai						
Environmental	Environmental protection cost (Investment) Environmental protection cost (Expense)	Nippon Shokubai Nippon Shokubai	┧	484 6,982	461 7,429	7,894	2,403 8,666	2,960 9,678
accounting	Economic effect resulting from environmental	Nippon Shokubai	million yen	2,655	4,292	5,346	2,649	2,577
	protection initiatives		2,000	7,232	J,J + 0	۷,∪+۶	۷,۵//	

^{*1} Includes use of seawater as cooling water

^{*2} The quantity of off-site waste emission is obtained by subtracting the quantity of on-site reduction, on-site recycling, on-site landfill and off-site recycling from the quantity of waste generated.

Social

Social	T		1 -	1				= (= = : =	
Aspect	Class	sification	Scope	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
Employees		Nl	lo	1	1 4 00 5	4 1 5 1	4 0 4 0 1	4 4= -1	4 = 4 =
		Number of employees	Consolidated		4,006	4,161	4,219	4,454	4,510
	Number of employees	Number of employees	Nippon Shokubai	persons	2,163	2,207	2,253	2,306	2,353
	1	Male	Nippon Shokubai		1,983	2,022	2,069	2,114	2,156
		Female	Nippon Shokubai	0/	190	185	184	192	197
		Percentage of female	Nippon Shokubai	%	8.7	8.4	8.2	8.3	8.4
		Number of managers			F03	F16	F21	F20	F40
	Number of managers	Number of managers	Nippon Shokubai		502 494	516 506	521 509	530 514	548 530
	Number of managers	Male Female	Nippon Shokubai	persons	8	10	12	16	18
		Percentage of female	Nippon Shokubai	%	1.6	1.9	2.3	3.0	3.3
	Average age	Percentage of Terriale	Nippon Shokubai	ages	37.6	37.9	37.8	38.0	38.3
	Average age		пирроп эпокара	ages	37.0	37.5	37.0	30.0	30.3
		Average length of service	Nippon Shokubai		15.5	16.1	16.0	16.1	16.2
	Length of service	Male	Nippon Shokubai	years	15.7	16.2	16.1	16.3	16.4
		Female	Nippon Shokubai		13.1	14.1	14.4	13.8	14.4
	Participation rate of labor		Nippon Shokubai	%	68.5	68.4	68.8	69.7	69.4
	Tarticipation rate or labor	union 3	ттрроп эпокава	70	00.5	00.1	00.0	05.7	05.1
		Number of new graduate			1 1				
		hires (College graduate)	Nippon Shokubai		45	39	44	44	45
		Male	Nippon Shokubai	persons	42	35	38	38	39
	Number of hires	Female	Nippon Shokubai		3	4	6	6	6
	Transer of thres	Percentage of female	Nippon Shokubai	%	6.7	10.3	13.6	13.6	13.3
		Number of mid-career	Nippon Shokubai	70	6	8	9	13.0	16
		Male	Nippon Shokubai	persons	3	6	8	7	14
Employment		Female	Nippon Shokubai	Persons	3	2	1	6	2
2		Percentage of female	Nippon Shokubai	%	50.0	25.0	11.1	46.2	12.5
	Number of foreign nation		Nippon Shokubai	persons	5	5	5	5	4
	Employment rate of person		Nippon Shokubai	%	2.0	2.0	2.2	2.0	2.2
			1	1.4					
	Re-employment	Re-employment rate of			77.0	04.6	02.0	05.7	07.0
	. ,	retired employees	Nippon Shokubai	0.4	77.3	81.6	83.9	85.7	87.0
	T 1	Turnover rate of regular	Ni a a a Chala la i	- %	4.3	4.5		4.6	
	Turnover·Layoff	employees (Personal	Nippon Shokubai		1.2	1.5	1.4	1.6	1.4
						•	•	•	
	Child Care	Number of employees							
		using child care leave	Nippon Shokubai		16	25	24	21	23
		(Total numbers for fiscal							
		Male	Nippon Shokubai		0	3	2	2	3
		Female	Nippon Shokubai	persons	16	22	22	19	20
		Number of employees							
		using reduced working	Nimman Chalushai		25	26	20	27	20
		hours system for child	Nippon Shokubai		25	26	29	27	29
		care							
		Return rate from child							
		care leave of absence	Nippon Shokubai	%	100	100	100	100	97
	Nursing Care	Number of employees		persons					
		using nursing care leave	Nippon Shokubai		o	0	0	1	1
		and personal reasons of							
				•		l.	<u> </u>	J.	
Work-Life Balance		Average annual paid leave							
		acquisition days per	Ninnon Chal	4	1	12.7	42.3	43.	42.0
			Nippon Shokubai days			12.7	12.3	13.4	13.0
or it Line Dularite		employee (Labor union	імірроп Зпокираї	days	11.9				
Life Balarice		member)	Пірроп Зпокиваї	days	11.9				
TOTAL ETC Building		employee (Labor union member) Rate of taking annual paid	пирроп знокива	days	11.9				
one building		member) Rate of taking annual paid					66.1	71.6	69.0
		member)	Nippon Shokubai	days %	62.6	67.4	66.1	71.6	69.0
		member) Rate of taking annual paid leave (Labor union member)	Nippon Shokubai				66.1	71.6	69.0
		member) Rate of taking annual paid leave (Labor union member) Average annual paid leave	Nippon Shokubai	%					
	Paid leave	member) Rate of taking annual paid leave (Labor union member) Average annual paid leave acquisition days per	Nippon Shokubai				9.8	71.6	69.0
		member) Rate of taking annual paid leave (Labor union member) Average annual paid leave acquisition days per employee	Nippon Shokubai	%					
		member) Rate of taking annual paid leave (Labor union member) Average annual paid leave acquisition days per employee (Management)	Nippon Shokubai	%					
		member) Rate of taking annual paid leave (Labor union member) Average annual paid leave acquisition days per employee (Management) Rate of taking annual paid	Nippon Shokubai Nippon Shokubai	% days			9.8	11.4	10.9
		member) Rate of taking annual paid leave (Labor union member) Average annual paid leave acquisition days per employee (Management) Rate of taking annual paid leave (Management)	Nippon Shokubai Nippon Shokubai Nippon Shokubai	%					10.9
		member) Rate of taking annual paid leave (Labor union member) Average annual paid leave acquisition days per employee (Management) Rate of taking annual paid leave (Management) Average annual paid leave	Nippon Shokubai Nippon Shokubai Nippon Shokubai	% days			9.8	11.4	10.9
		member) Rate of taking annual paid leave (Labor union member) Average annual paid leave acquisition days per employee (Management) Rate of taking annual paid leave (Management)	Nippon Shokubai Nippon Shokubai Nippon Shokubai	% days			9.8	11.4	10.9 54.5
		member) Rate of taking annual paid leave (Labor union member) Average annual paid leave acquisition days per employee (Management) Rate of taking annual paid leave (Management) Average annual paid leave acquisition days per employee (All)	Nippon Shokubai Nippon Shokubai Nippon Shokubai	% days			9.8	11.4 57.1	10.9 54.5
		member) Rate of taking annual paid leave (Labor union member) Average annual paid leave acquisition days per employee (Management) Rate of taking annual paid leave (Management) Average annual paid leave acquisition days per	Nippon Shokubai Nippon Shokubai Nippon Shokubai	% days days			9.8 49.1 11.5	11.4 57.1 12.9	10.9 54.5 12.5
		member) Rate of taking annual paid leave (Labor union member) Average annual paid leave acquisition days per employee (Management) Rate of taking annual paid leave (Management) Average annual paid leave acquisition days per employee (All) Rate of taking annual paid leave (All)	Nippon Shokubai Nippon Shokubai Nippon Shokubai	% days			9.8	11.4 57.1	10.9 54.5
The Building		member) Rate of taking annual paid leave (Labor union member) Average annual paid leave acquisition days per employee (Management) Rate of taking annual paid leave (Management) Average annual paid leave acquisition days per employee (All) Rate of taking annual paid	Nippon Shokubai Nippon Shokubai Nippon Shokubai	% days days			9.8 49.1 11.5	11.4 57.1 12.9	10.9 54.5 12.5

Human right	Number of Child Labor and	Force Labor	Consolidated	numbers	0	0	0	0	0
					<u>I</u>				
Human resources development	Training	Total number of hours spent on employee's	Nippon Shokubai	hours	_	_	53,450		55,783
		Training time per	Nippon Shokubai		_	_		24.9	23.7
Occupational	Number of injuries with loss of workdays		Nippon Shokubai	numbers	0	1	-	2	2
safety and health			Partner company		1	1		3,450 57,458 23.7 24.9 1 2 3 1 0.27 0.54 100 124 42 54 5*4 5*4 257 193 151 103 - 58 849 885 neral (General cloye es) es) 1 3 0 0 0	1
	Frequency of injuries with loss of workdays		Nippon Shokubai	%	0.00	0.28	0.27	0.54	0.54
	Expense	Amount paid for activities on social contributions (incl. Donation)	Nippon Shokubai	million yen	149	118	100	124	126
		Donation	Nippon Shokubai		83	57	42	54	54
Social contribution		Number of participants for "Japan-China Friendship Forest Development and Global Warming <u>Prevention"</u> Number of participants for	Nippon Shokubai		17	17	5 ^{*4}	57,458 7 24.9 2 3 1 7 0.54 124 2 54 7 193 103 58 885 (General employe es) 6 3 0 0 0 0	3*4
Social contribution	Volunteer activity	Number of participants for "Contributing to Our Forests and Water Number of participants for	Nippon Shokubai	-persons	228	236	257	193	175
		Number of participants for "Contributing to the "Yugawara Myriad Leaves Forest""	Nippon Shokubai		167	150	151	103	56
		Number of participants for "Japan-Indonesia Friendship Forest of Banten Bay for	Nippon Shokubai PT. Nippon Shokubai Indonesia		_	_	_	58	60
Compliance	Number of participants in the rank-based training for		Nippon Shokubai	persons	500 (Manag ers)	312 (Mid level employe es)	(General employe	(General employe	522 (Manag ers)
	Number of internal reporting		Nippon Shokubai	numbers	1	Ź	1	3	4
Compliance with laws and	Number of violators for "Fo Bribery Laws in Nippon Sho		Consolidated	persons	0	0	0	0	0
	Fine and penalty for bribery		Consolidated	yen	0	0	0	0	0
	Number of violators for "For Compliance with Competition Laws in Nippon Shokubai Group's Code of		Consolidated	persons	0	0	0	0	0
Contribution	Political Contribution		Nippon Shokubai	yen	0	0	0	0	0
	* 3 All applicable employe	es join the labor union hase	d on the Union Shop A	roomont	•		u		

^{*3} All applicable employees join the labor union based on the Union Shop Agreement.
*4 Because of preparatory period for coming new activities, the secretariat and NPO members performed maintenance work.

Corporate Governance

Aspect	Classif	ication	Scope	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
	Number of Members of the Board	Members of the Board (incl. Outside Members of the Board)	Nippon Shokubai	persons	8	9	9	9	9
		Outside Members of the Board	Nippon Shokubai		2	3	3	3	3
Related information for management	Number of Members of Auditors Meeting	Statutory Corporate Auditors (incl. External Statutory Corporate	Nippon Shokubai	persons	4	4	4	4	4
		External Statutory Corporate Auditors	Nippon Shokubai		2	2	2	2	2
	Outside Officers composition ratio of the Nominating and Remuneration Committee* 5		Nippon Shokubai	%		66.7	66.7	66.7	66.7
	Remuneration of Members of the Board (except Outside Members of the Board)		Nippon Shokubai		394	364	391	380	334
	Remuneration of Statutory Corporate Auditors (except External Statutory Corporate Auditors)		Nippon Shokubai	million yen	45	46	48	48	47
	Remuneration of Outside Officers (except External Statutory Corporate Auditors)		Nippon Shokubai		22	32	36	35	34
	Voting rights for Bonus for Member of the Board		Nippon Shokubai	voting	Yes	Yes	Yes	Yes	Yes
Shareholder	Dividend Interim Annual		Nippon Shokubai Nippon Shokubai	yen	65 150	75 150	75 160	80 170	90 180
	Dividend Payout Ratio	Japanese GAAP IFRS* 6	Consolidated Consolidated	%	23.4	31.4 -	26.3 28.2	9 3 4 2 66.7 380 48 35 Yes	_ 64.7

^{*5} The Nominating and Compensation Committee was established in 2016.

*6 The Group has prepared its consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS) from FY2018 (Date of transition: April 1, 2017).