

Environmental Performance Data

Category	Item	Scope of Data	Unit	2017/3	2018/3	2019/3	2020/3	2021/3
Environmental Accounting								
Environmental preservation cost	Investment	Daicel's business sites	100 million yen	1	15	40	49	64
	Expenses	Daicel's business sites		7	14	67	61	54
Economic benefit associated with environmental preservation activities		Daicel's business sites		2	3	25	11	18
Response to Climate Change								
Energy consumption	Japan		thousand kL	559	541	522	478	477
	Daicel's business sites			463	436	411	383	389
	Domestic Group companies			95	105	111	95	88
	Overseas			206	226	231	245	218
	Daicel Group Total			765	767	753	722	695
Energy intensity index (base year: FY2010/3)		Daicel's business sites	%	86	79	78	80	78
Greenhouse gas (GHG) emissions		Daicel Group	thousand t-CO ₂	—	—	—	3,503	3,252
Scope 1 Third-party certification		Daicel's business sites (including the headquarters)		1,656	1,595	1,558	1,498	1,469
Scope 2 Third-party certification		Daicel's business sites (including the headquarters)		80	61	47	41	38
Total emissions (Scope 1 and 2 of Daicel Corporation)		Daicel's business sites (including the headquarters)		1,735	1,656	1,605	1,539	1,507
Total CO ₂ emissions		Daicel's business sites (including the headquarters)		1,573	1,493	1,453	1,381	1,366
Energy-related CO ₂ emissions				1,333	1,220	1,164	1,081	1,058
Non-energy-related CO ₂ emissions				240	273	289	301	308
Methane (CH ₄)		Daicel's business sites (including the headquarters)		1	1	1	1	1
Nitrous Oxide(N ₂ O)				159	162	150	157	140
HFC				3	0	1	0	0
Energy intensity index (base year: FY2006/3)		Daicel's business sites (including the headquarters)	%	100	92	90	92	76
CO ₂ emissions (Scope 1 and 2 of Domestic Group companies)		Domestic Group companies	thousand t-CO ₂	260	249	213	180	169
Energy-related CO ₂ emissions				260	249	213	180	169
Non-energy-related CO ₂ emissions				0	0	0	0	0
CO ₂ emissions (Scope 1 and 2 of Overseas Group companies)		Overseas Group companies	thousand t-CO ₂	444	490	498	520	455
Energy-related CO ₂ emissions				438	483	493	514	449
Scope 1,2 emissions of Daicel Group		Japan		1,995	1,905	1,818	1,719	1,676
		Daicel's business sites (including the headquarters)		1,735	1,656	1,605	1,539	1,507
		Domestic Group companies		260	249	213	180	169
		Overseas		444	490	498	520	455
		Daicel Group Total		2,439	2,395	2,317	2,239	2,131

* Due to the change of boundaries, previous years' values are revised.

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Scope 3 Independent Assurance								
Scope 3 Independent Assurance	Category 1: Purchased goods and services	Daicel's business sites	thousand t-CO ₂	—	—	—	1,264	1,121
	Category 2: Capital goods	Daicel Group		—	—	—	981	843
	Category 3: Energy-related activities outside Scope 1 and 2	Daicel's business sites		—	—	—	136	112
	Category 4: Transportation and distribution (upstream)	Daicel's business sites		—	—	—	110	101
	Marine transport			17	18	17	16	14
	Rail transport			7.6	7.9	7.4	6.8	5.4
	Road transport	0.4		0.4	0.3	0.3	0.4	
	Category 5: Waste generated in operations	Daicel's business sites		8.9	9.3	9.2	8.9	8.4
	Category 6: Employee business travel	Daicel's business sites and Domestic Group companies		—	—	—	10	47
	Category 7: Employee commuting	Daicel's business sites and Domestic Group companies		—	—	—	8	2
—	—	—	—	—	2	2		
Industrial Waste Reduction								
Raw materials	Japan		t	—	—	—	890	843
	Daicel's business sites			—	—	—	—	—
	Domestic Group companies			—	—	—	—	—
	Overseas			—	—	—	—	—
Daicel Group Total		—	—	—	890	843		
Total waste generated	Japan		thousand t	146	146	145	169	133
	Daicel's business sites			139	137	136	161	124
	Domestic Group companies			8	9	9	9	9
	Overseas			15	14	17	17	13
Daicel Group Total		162	160	161	186	146		
Amount recycled	Japan		thousand t	137	136	135	160	125
	Daicel's business sites			130	128	127	152	116
	Domestic Group companies			7	8	8	8	9
	Overseas			14	12	16	15	12
Daicel Group Total		150	149	151	174	137		
Recycling rate	Japan		%	93	93	93	94	94
	Daicel's business sites			94	93	94	94	93
	Domestic Group companies			89	89	88	87	98
	Overseas			88	88	94	91	89
Daicel Group Total		93	93	94	94	93		
Landfill	Japan		thousand t	1.5	1.8	1.5	3.1	1.4
	Daicel's business sites			1.5	1.8	1.5	3.1	1.4
	Domestic Group companies			0.0	0.0	0.0	0.0	0.0
	Overseas			1.9	1.7	1.4	1.5	0.7
Daicel Group Total		3.4	3.5	2.9	4.6	2.1		

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Final landfill disposal rate		Japan	%	1.0	1.3	1.1	1.8	1.1	
		Daicel's business sites		1.1	1.3	1.1	1.9	1.2	
		Domestic Group companies		0.0	0.0	0.4	0.1	0.1	
		Overseas		Overseas Group companies	12.4	11.9	8.2	9.1	5.3
		Daicel Group		Total	2.1	2.2	1.8	2.5	1.5
Water Resources and Water Quality									
Water intake		Japan	million t	100	99	98	94	93	
		Daicel's business sites		93	91	91	88	87	
		Domestic Group companies		7	7	7	6	6	
		Overseas		Overseas Group companies	4	5	4	4	4
		Daicel Group		Total	104	103	102	98	98
Water discharge		Japan	million t	93	94	96	94	93	
		Daicel's business sites		88	89	91	90	88	
		Domestic Group companies		5	5	5	5	5	
		Overseas		Overseas Group companies	3	3	3	3	3
		Daicel Group		Total	96	96	98	97	96
Water usage		Japan	million t	7	5	3	0	0	
		Daicel's business sites		5	3	1	-2	-2	
		Domestic Group companies		2	2	2	2	2	
		Overseas		Overseas Group companies	2	2	2	1	2
		Daicel Group		Total	8	7	4	1	2
COD		Japan	t	848	844	853	856	775	
		Daicel's business sites		802	800	804	823	744	
		Domestic Group companies		46	45	49	33	31	
Total phosphorous		Japan	t	89	85	87	90	79	
		Daicel's business sites		83	81	85	88	76	
		Domestic Group companies		6	4	2	2	3	
Total nitrogen		Japan	t	214	197	187	177	145	
		Daicel's business sites		199	183	170	170	134	
		Domestic Group companies		15	14	17	7	10	

Category	Item	Scope of Data	Unit	2017/3	2018/3	2019/3	2020/3	2021/3
Atmospheric Emissions								
SOx emissions		Japan	t	602	210	250	230	348
		Daicel's business sites		559	187	248	229	347
		Domestic Group companies		43	23	2	1	1
NOx emissions		Japan	t	883	670	642	636	610
		Daicel's business sites		701	577	601	592	576
		Domestic Group companies		182	94	41	44	34
Soot and dust emissions		Japan	t	90	46	31	24	33
		Daicel's business sites		51	32	28	22	32
		Domestic Group companies		38	14	3	1	1
VOC emissions		Japan	t	1,535	1,438	1,072	903	954
		Daicel's business sites		1,531	1,430	1,065	900	951
		Domestic Group companies		4	8	7	3	4
Trichlorofluoromethane (CFC-11)		Japan	t	1.0	0.0	0.1	0.4	0.0
		Daicel's business sites		1.0	0.0	0.1	0.4	0.0
		Domestic Group companies		—	—	—	—	—
Dichlorodifluoromethane (CFC-12)		Japan	t	0.0	0.1	0.7	1.1	2.3
		Daicel's business sites		0.0	0.1	0.7	1.1	2.3
		Domestic Group companies		—	—	—	—	—
Chemical Substances								
Substances Subject to the PRTR	Released	Japan	t	43	60	77	44	34
		Daicel's business sites		34	45	66	37	28
		Domestic Group companies		9	15	11	7	6
	Amount released to air	Japan	t	34	41	37	23	19
		Daicel's business sites		25	26	26	16	13
		Domestic Group companies		9	15	11	7	6
	Amount released to water	Japan	t	9	19	40	21	15
		Daicel's business sites		9	19	40	21	15
		Domestic Group companies		0	0	0	0	0
	Transferred	Japan	t	73	74	81	84	80
Daicel's business sites		59		58	58	47	57	
Domestic Group companies		14		16	23	37	23	

Environmental Load Data

The environmental load data from Daicel's business sites, Domestic Group Companies and Overseas Group companies for FY2021/3 are as follows.

1) Daicel's business sites

Item	Energy consumption	Greenhouse gas emissions	SOx emissions	NOx emissions	Soot and dust emissions	COD(BOD) emissions	PRTR substances		Landfill	Water consumption
	Crude oil equivalent kL	thousand t-CO ₂	t	t	t	t	Released	Transferred		
							t	t	t	t
Aboshi Plant	197,357	543	273	201	17	278	6	2	414	31,170
Ohtake Plant	139,291	862	56	317	12	369	12	5	238	39,963*
Arai Plant	22,138	49	18	46	2	89	1	0	225	14,876
Harima Plant	9,940	17	1	7	0	0	0	1	5	254
Hirohata Plant	11,374	20	0	1	0	0	6	1	31	360
Kanzaki Plant	7,665	12	0	4	0	6	2	46	523	237
Innovation Park	1,270	2	0	0	0	0	0	2	0	40

* Includes 33,037 thousand tonnes of seawater

2) Domestic Group companies

Item	Energy consumption	Greenhouse gas emissions	SOx emissions	NOx emissions	Soot and dust emissions	COD(BOD) emissions	PRTR substances		Landfill	Water consumption
	Crude oil equivalent kL	thousand t-CO ₂	t	t	t	t	Released	Transferred		
							t	t	t	t
Polyplastics Co., Ltd. Fuji Site	83,139	161	0	32	1	30	6	2	3	5,894
Dainichi Chemical Corp.	1,212	3	0	2	0	1	0	21	44	393
DM Novafoam Ltd.	2,264	4	1	1	0	0	0	0	0	53
Daicel Pack Systems Ltd.	546	1	0	0	0	0	0	0	3	131
Daicel Pyrotechnics Ltd.	120	0	0	0	0	0	0	0	0	2
Daicel Logistics Service Co., Ltd.	375	0	0	0	0	0	0	0	0	4

3) Overseas Group companies (From January to December 2020)

Item	Water consumption	Greenhouse gas emissions
	thousand t	thousand t-CO ₂
Daicel Nanning Food Ingredients Co., Ltd.	174	9
Shanghai Daicel Polymers, Ltd.	13	3
Daicel Safety Systems (Thailand) Co., Ltd. / Daicel Safety Technologies (Thailand) Co., Ltd.	105	15
Special Devices (Thailand) Co., Ltd.	6	1
Daicel Safety Systems (Jiangsu) Co., Ltd.	62	16
Daicel Safety Systems Americas, Inc.	42	20
Daicel Safety Systems Europe Sp. z o. o.	4	3
Daicel Safety Systems Korea, Inc.	5	2
Chiral Technologies, Inc.	0	1
Chiral Technologies Europe S.A.S.	0	1
Daicel Chiral Technologies (China) Co., Ltd.	4	1
Daicel Chiral Technologies (India) Private Ltd.	9	2
Polyplastics Taiwan Co., Ltd.	694	68
Polyplastics Asia Pacific Sdn. Bhd.	1,668	176
PTM Engineering Plastics (Nantong) Co., Ltd	742	88
Polyplastics (Nantong) Ltd.	38	4
LCP Leuna Carboxylation Plant GmbH	596	9
TOPAS Advanced Polymers GmbH	7	25
Lomapharm GmbH *	39	14

* More companies are added due to the change of boundaries.

Social Performance Data

Item		Scope of Data	Unit	2017/3	2018/3	2019/3	2020/3	2021/3
Employees								
Number of employees	Male	Consolidated	Persons	—	—	—	—	7,788
	Female			—	—	—	—	3,354
	Total			11,556	12,309	12,319	11,606	11,142
Number of employees by area	Japan	Consolidated	Persons	—	—	—	—	5,252
	Asia (excluding Japan)			—	—	—	—	4,389
	North America and Latin America			—	—	—	—	872
	Europe			—	—	—	—	629
	Total			—	—	—	—	11,142
Number of employees*1	Male	Non-consolidated*2	Persons	2,732	2,832	2,886	2,925	2,902
	Female			279	305	320	333	352
	Total			3,011	3,137	3,206	3,258	3,254
Number of full-time employees	Male	Non-consolidated*2	Persons	2,504	2,596	2,652	2,665	2,645
	Female			228	248	264	281	303
	Total			2,732	2,844	2,916	2,946	2,948
	Ages 18 and 19			35	31	33	31	31
	Ages 20 to 29			451	481	476	492	489
	Ages 30 to 39			548	599	658	684	690
	Ages 40 to 49			871	808	778	758	741
	Ages 50 to 59			827	925	971	981	997
Number of contract employees	Male	Non-consolidated*2	Persons	228	236	234	260	257
	Female			51	57	56	52	49
	Total			279	293	290	312	306
	Ages 18 and 19			—	—	—	—	0
	Ages 20 to 29			—	—	—	—	12
	Ages 30 to 39			—	—	—	—	26
	Ages 40 to 49			—	—	—	—	21
	Ages 50 to 59			—	—	—	—	21
Number of temporary staff	Male	Non-consolidated	Persons	44	38	49	13	3
	Female			54	53	67	40	19
	Total			98	91	116	53	22
Average age (Full-time employees)	Non-managers	Non-consolidated*2	Age	38.5	38.6	38.7	38.8	39.1
	Managers			50.3	50.5	50.6	50.9	51.0
	Male			41.8	41.9	42.0	42.1	42.3
	Female			41.1	41.4	41.6	41.9	41.8
	Total			41.8	41.8	41.9	42.1	42.3
Number of managers	Male	Non-consolidated*2	Persons	—	—	774	774	765
	Female			—	—	25	29	28
	Total			—	—	799	803	793

Item		Scope of Data	Unit	2017/3	2018/3	2019/3	2020/3	2021/3	
Number of new managers per year	Male	Non-consolidated*2	Persons	20	27	28	31	42	
	Female			3	0	7	2	5	
	Total			23	27	35	33	47	
Number of new graduates recruited	Male	Non-consolidated*2	Persons	81	79	65	51	37	
	Female			12	10	9	14	12	
	Total			93	89	74	65	49	
Number of new mid-career employees recruited	Male	Non-consolidated*2	Persons	71	79	70	44	30	
	Female			11	13	11	22	9	
	Total			82	92	81	66	39	
Support for Human Resource Development									
Average annual training time per person		Non-consolidated*2	Hours	—	—	—	—	15.3	
Number of participants in job grade-specific training			Persons	282	364	406	341	325	
Number of participants in technician or engineer-specific ethics training			Persons	—	44	54	54	44	
Promoting Diversity and Inclusion									
Ratio of female employees (Full-time employees)	Total	Consolidated	%	—	—	—	—	30.1	
	Managers			—	—	—	—	9.1	
	Total	Non-consolidated*2		8.3	8.7	9.1	9.5	10.3	
Managers	2.0		2.1	3.1	3.6	3.5			
Number of foreign nationals in the workforce	Male	Non-consolidated*2	Persons	12	12	12	14	15	
	Female			2	2	2	3	4	
	Total			14	14	14	17	19	
Ratio of employees with disabilities (As of June 1, every year)*3	Consolidated (Japan)		%	—	—	—	—	1.78	
	Non-consolidated			—	—	2.19	2.17	2.17	
Number of newly rehired post-retirement employees per year		Non-consolidated*2	Persons	50	30	34	52	54	
Ratio of post-retirement reemployment*4			%	98.0	96.9	97.1	91.2	94.7	
Total number of rehired post-retirement employees		Non-consolidated*2	Persons	177	181	188	167	184	
			Persons	177	181	188	167	184	
Foster a corporate culture that meets employee needs									
Average length of service (Full-time employees)	Male	Non-consolidated*2	Years	18.0	18.0	16.9	16.8	17	
	Female			15.0	14.5	16.6	15.9	15.9	
	Total			17.7	17.6	16.9	16.4	16.9	
Employee turnover rate (Full-time employees only and excluding mandatory retirement)		Non-consolidated*2	%	1.0	1.1	1.0	1.0	1.0	
				1.0	1.1	1.0	1.0	1.0	
Ratio of the used portion of employees' annual paid leave	Non-managers		Non-consolidated	%	70.0	70.5	76.4	79.4	75.7
	Managers				43.8	46.3	54.4	57.2	55.8
	Male	61.7			64.1	70.7	73.8	70.6	
	Female	68.2			66.7	70.2	71.3	69.5	
	Total	63.2			64.4	70.6	73.6	70.5	
Number of employees taking childcare leave	Male	Consolidated (Japan)	Persons	—	—	—	75	54	
	Female			—	—	—	23	21	
	Total			—	—	—	98	75	
Ratio of employees taking childcare leave	Male	Consolidated (Japan)	%	—	—	—	49.7	36.7	
	Female			—	—	—	100.0	100.0	
	Total			—	—	—	56.3	44.6	

Social Performance Data

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Number of employees taking childcare leave	Male	Persons	0	25	50	52	30	
	Female		1	2	7	11	7	
	Total		1	27	57	63	37	
Ratio of employees taking childcare leave ^{*5}	Male	%	0.0	29.4	52.6	57.8	40.0	
	Female		100	100	100	100	100	
	Total		1.1	33.3	76.3	78.9	70.0	
Number of employees using shorter working hours for childcare	Male	Persons	0	0	0	0	0	
	Female		10	1	11	13	19	
	Total		10	1	11	13	19	
Number of employees taking nursing care leave	Male	Persons	—	—	—	—	2	
	Female		—	—	—	—	0	
	Total		—	—	—	—	2	
Number of employees taking nursing care leave	Male	Persons	0	0	0	0	0	
	Female		0	0	0	0	0	
	Total		0	0	0	0	0	
Number of employees using shorter working hours for nursing care	Male	Persons	0	0	0	0	1	
	Female		0	0	0	0	1	
	Total		0	0	0	0	2	
Number of labor union members	Non-consolidated ^{*2}	Persons	1,970	2,069	2,122	2,166	2,155	
Ratio of labor union members	Non-consolidated ^{*2}	%	65.6	66.0	72.8	72.9	73.1	
Occupational Health and Safety								
Number of occupational accidents	Number of accidents without lost workdays	Daicel's business sites and onpremise partner companies	Cases	10	3	12	13	13
		Domestic Group companies		2	1	3	7	3
		Overseas Group companies		16	14	11	23	9
	Total number of accidents without lost workdays	Daicel Group	28	18	26	43	25	
	Number of lost-time accidents	Daicel's business sites and onpremise partner companies	Cases	2	1	5	10	6
		Domestic Group companies		2	2	6	6	5
		Overseas Group companies		16	14	18	17	17
Total number of lost-time accidents	Daicel Group	20	17	29	33	28		
Total	Daicel Group	Cases	48	35	55	76	53	
Occupational accident frequency rate ^{*6}	Daicel's business sites and onpremise partner companies	—	1.10	0.59	1.56	2.19	1.85	
	Domestic Group companies		1.43	1.03	3.00	4.20	2.63	
	Overseas Group companies		2.18	1.86	1.81	2.63	1.93	
	Daicel Group		1.69	1.41	1.84	2.64	1.98	
Occupational accident severity rate	Daicel's business sites and onpremise partner companies	—	0.000	0.000	0.017	0.048	0.018	

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Physical and Mental Health							
Ratio of employees taking health checkups	Non-consolidated ^{*2}	%	100	100	100	100	100
Ratio of employees taking specific medical examinations			—	79.2	80.9	84.6	84.0
Ratio of employees taking specific health guidance			—	41.2	50.6	55.6	58.6
Research and Development							
Research and development expenses	Consolidated	million yen	16,806	18,843	20,749	21,295	19,540
Number of research and development staff		Persons	1,128	1,183	1,318	1,376	1,361
Social Contribution							
Social contribution activity expenditure	Non-consolidated	million yen	146	129	219	246	324

Notes: The number of employees is the number as of the end of March each year.

*1 Excludes directors, subordinate directors, and loaned staff. Includes full-time employees and contract employees. Contract employees are full-time employees working under a fixed-term contract, and excludes part-time employees.

*2 Includes employees on loan to Group companies and companies outside the Group.

*3 The method of calculating the employment rate for persons with disabilities is based on the legal employment rate. As of June 1, 2021, the employment rate for persons with disabilities is 2.43%.

*4 Ratio of employees using the reemployment system after mandatory retirement.

*5 Ratio of employees taking childcare leave=Number of employees taking childcare leave ÷ Number of employees who gave birth or those employees whose spouse gave birth

*6 Occupational Accident Frequency Rate = (number of people involved in an occupational accident / total actual working hours) × 1 million hours

Governance Data

Item		Scope of Data	Unit	2016	2017	2018	2019	2020
Corporate Governance								
Number of Directors	Male	Non-consolidated	Persons	7	7	8	9	9
	Female			1	1	0	1	1
	Total			8	8	8	10	10
Female ratio		Non-consolidated	%	12.5	12.5	0	10	10
Number of Outside Directors (number of independent directors)	Male	Non-consolidated	Persons	2(2)	3(3)	4(4)	4(4)	4(4)
	Female			1(1)	1(1)	0(0)	1(1)	1(1)
	Total			3(3)	4(4)	4(4)	5(5)	5(5)
Term of office for Directors		Non-consolidated	Years	1	1	1	1	1
Frequency of meetings of the Board of Directors		Non-consolidated	Times	14	14	15	14	16
Attendance at Board of Directors meetings	Directors	Non-consolidated	%	99.1	98.2	97.5	99.3	97.5
	Outside Directors			97.6	96.3	96.7	100	96.3
	Audit & Supervisory Board Members			97.1	97.1	97.3	100	100
	Outside Audit & Supervisory Board Members			95.2	97.6	95.6	100	100
Number of Audit & Supervisory Board Members	Male	Non-consolidated	Persons	5	5	5	5	5
	Female			0	0	0	0	0
	Total			5	5	5	5	5
Female ratio		Non-consolidated	%	0.0	0.0	0.0	0.0	0.0
Number of Outside Audit & Supervisory Board Members (number of independent officers)	Male	Non-consolidated	Persons	3(3)	3(3)	3(3)	3(3)	3(3)
	Female			0(0)	0(0)	0(0)	0(0)	0(0)
	Total			3(3)	3(3)	3(3)	3(3)	3(3)
Term of office for Audit & Supervisory Board Members		Non-consolidated	Years	4	4	4	4	4
Frequency of meetings of the Audit & Supervisory Board		Non-consolidated	Times	14	14	14	14	15
Attendance of Audit & Supervisory Board Members	Audit & Supervisory Board Members	Non-consolidated	%	97.1	97.1	100	100	100
	Outside Audit & Supervisory Board Members			95.2	97.6	100	100	100
Compliance								
The number of consultation and reporting received		Non-consolidated	Cases	16	31	52	51	54
Anti-corruption violations			Cases	0	0	0	0	0
Political contribution			million yen	—	0.04	0.05	0.13	0.09