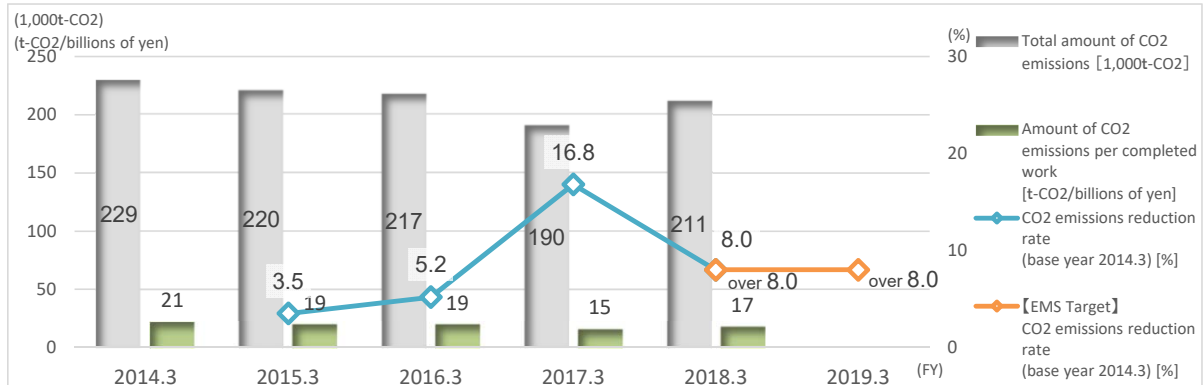
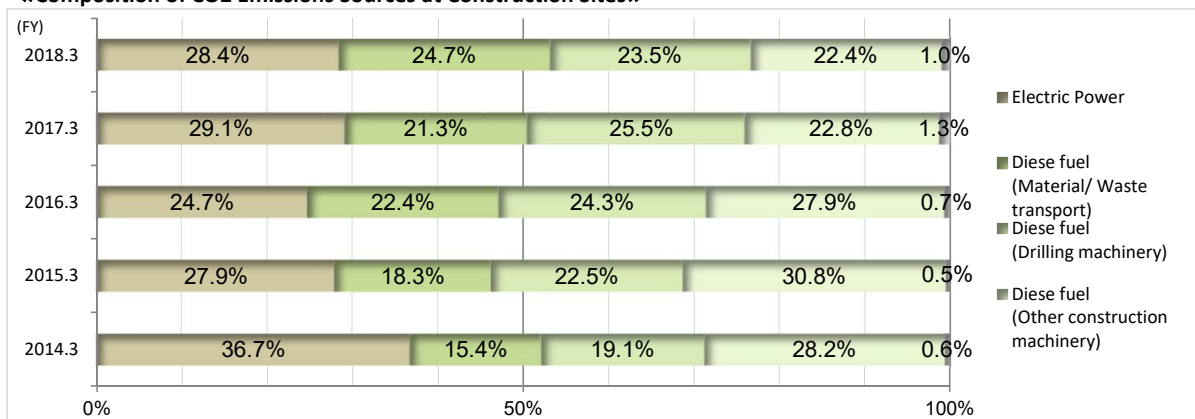


Reducing CO2 Emissions

CO2 Emissions Reduction at Construction Sites



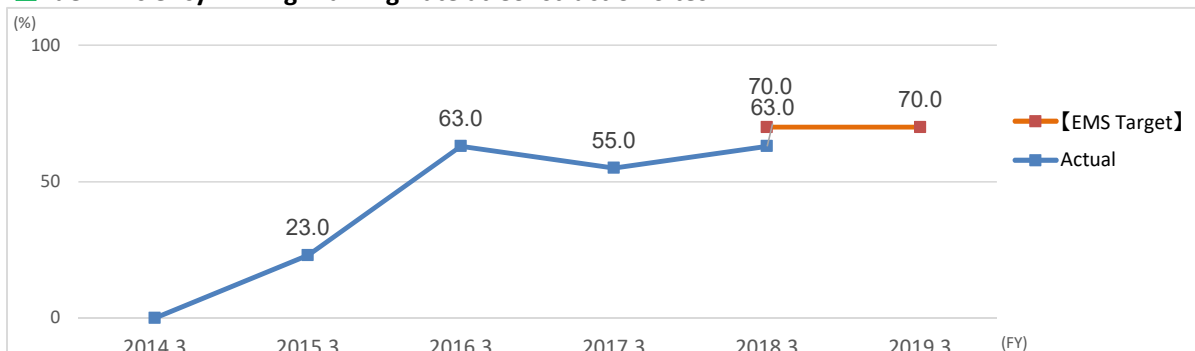
Composition of CO2 Emissions Sources at Construction Sites



	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
CO2 Emissions Reduction at Construction Sites						
Total amount of emissions	1,000t-CO2	229	220	217	190	211
Amount of emissions per completed work	t-CO2/billions of yen	21	19	19	15	17
CO2 emissions reduction rate *1	%	—	3.5	5.2	16.8	8.0
Composition of CO2 Emissions Sources at Construction Sites						
Electric Power	%	36.7	27.9	24.7	29.1	28.4
Diesel fuel		62.7	71.6	74.6	69.6	70.6
Material/ Waste transport		15.4	18.3	22.4	21.3	24.7
Drilling machinery		19.1	22.5	24.3	25.5	23.5
Other construction machinery		28.2	30.8	27.9	22.8	22.4
Kerosene		0.6	0.5	0.7	1.3	1.0

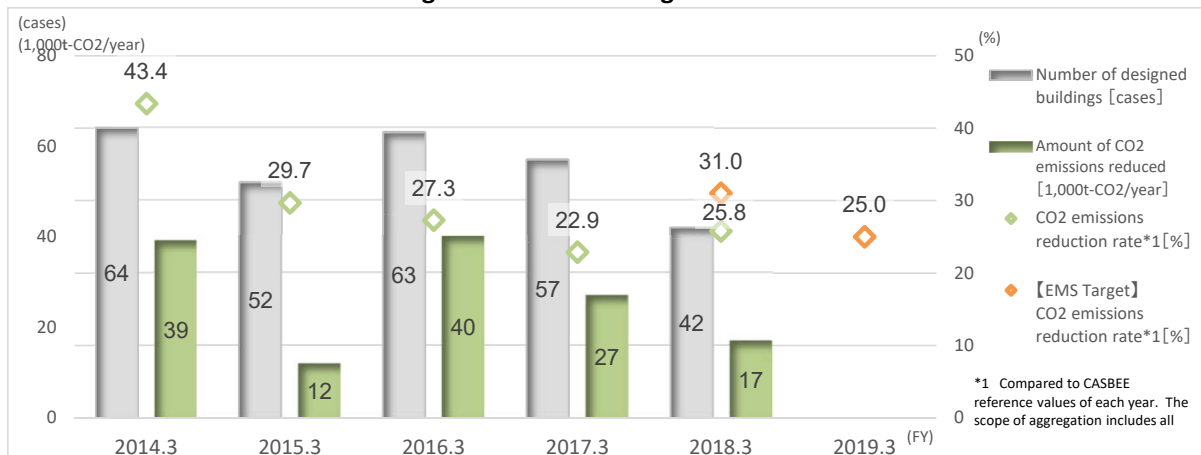
*1 base year 2014.3

Fuel Efficiency Driving Training Rate at Construction Sites



	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Fuel efficiency driving training rate at construction sites	%	—	23.0	63.0	55.0	63.0

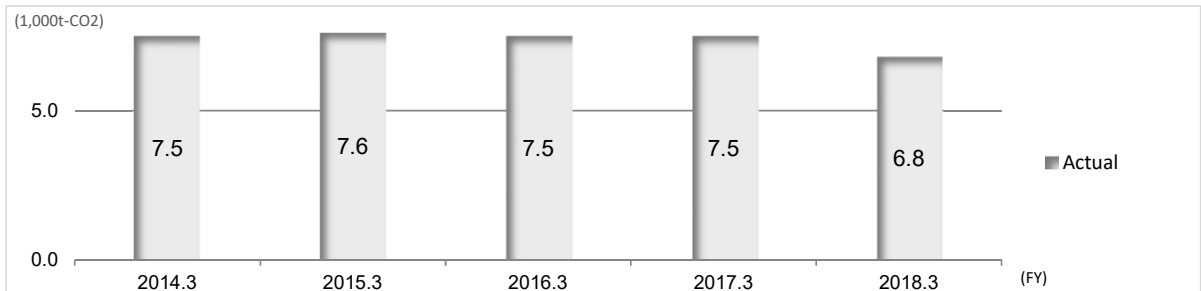
CO2 Emissions Reduction of Designed & Build Buildings



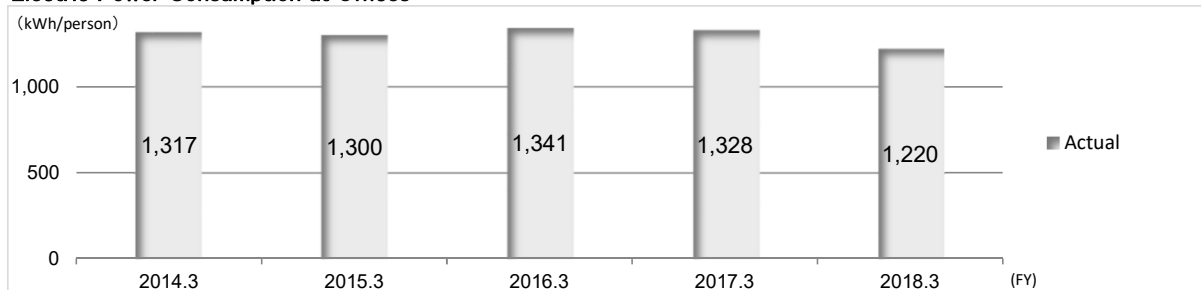
	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Number of designed buildings	cases	64	52	63	57	42
Total area of designed buildings	m ²	1,318,481	631,555	1,769,579	1,430,612	832,529
Amount of CO2 emissions reduced	1,000t-CO ₂ /year	39.0	12.0	40.0	27.0	17.0
CO2 emissions reduction rate	%	43.4	29.7	27.3	22.9	25.8

Reduction at Offices (Applicable facilities: Head Office, Tokyo Main Office, Osaka Main Office and other branch offices)

CO2 Emissions at Offices



Electric Power Consumption at Offices



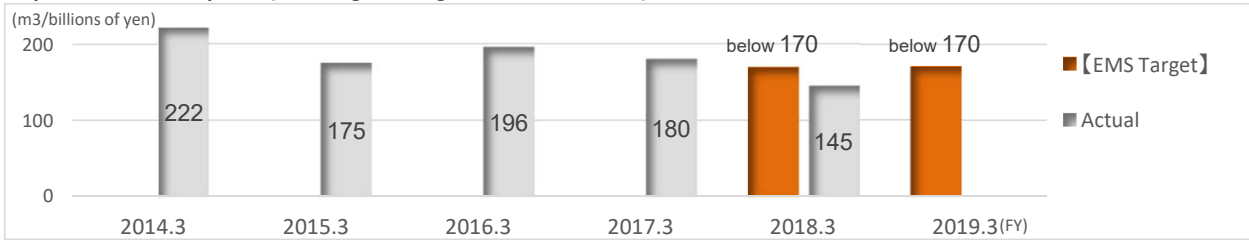
	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
CO2 Emissions at Offices						
	1,000t-CO ₂	7.5	7.6	7.5	7.5	6.8
Electric Power Consumption at Offices						
	kWh/person	1,317	1,300	1,341	1,328	1,220

Activities to Realize a Recycling Oriented Society

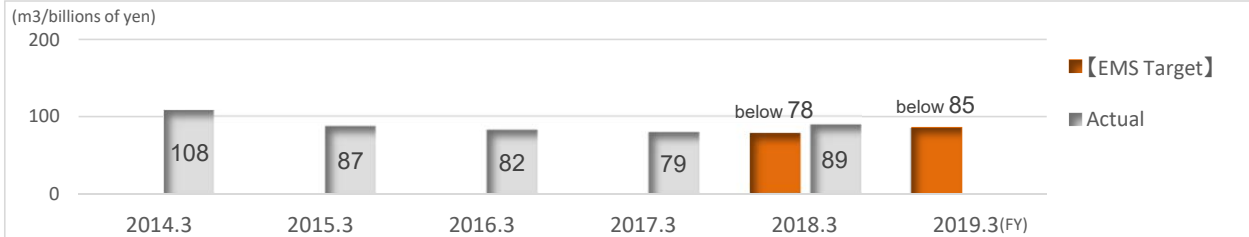
Reducing Tap Water Consumption

Tap Water Consumption Reduction at Construction Sites

Tap Water Consumption (Civil Engineering Construction Sites)



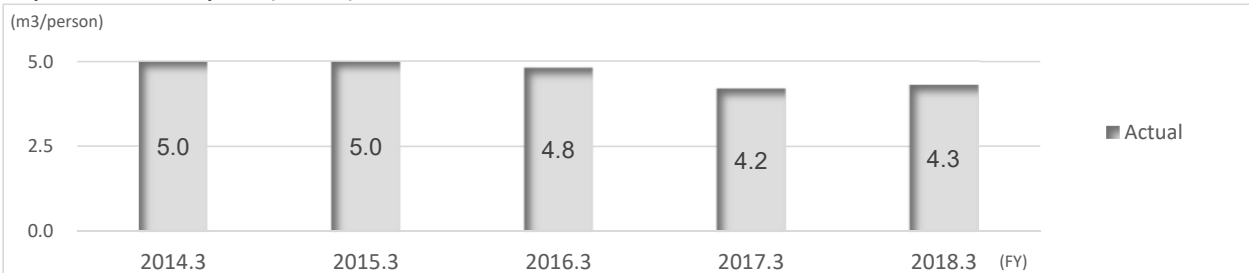
Tap Water Consumption (Building Construction Sites)



Tap Water Consumption Reduction at Offices

(Applicable facilities: Head Office, Tokyo Main Office, Osaka Main Office and other branch offices)

Tap Water Consumption (Offices)



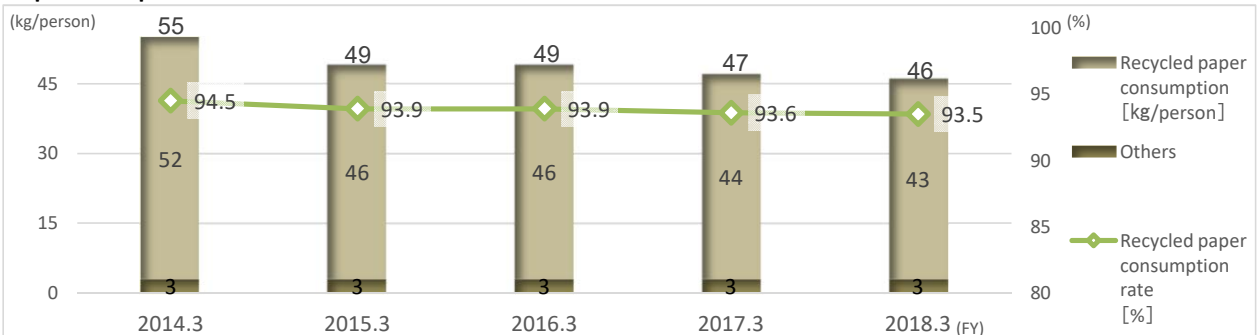
Tap Water Consumption	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Civil engineering construction sites	m3/billions of yen	222	175	196	180	145
Building construction sites	m3/billions of yen	108	87	82	79	89
Office	m3/person	5.0	5.0	4.8	4.2	4.3

Reducing Paper Consumption

Paper Consumption Reduction at Offices

(Applicable facilities: Head Office, Tokyo Main Office, Osaka Main Office, other branch offices, machinery plants, material/equipment centers, the Obayashi Technical Research Institute)

Paper Consumption at Offices

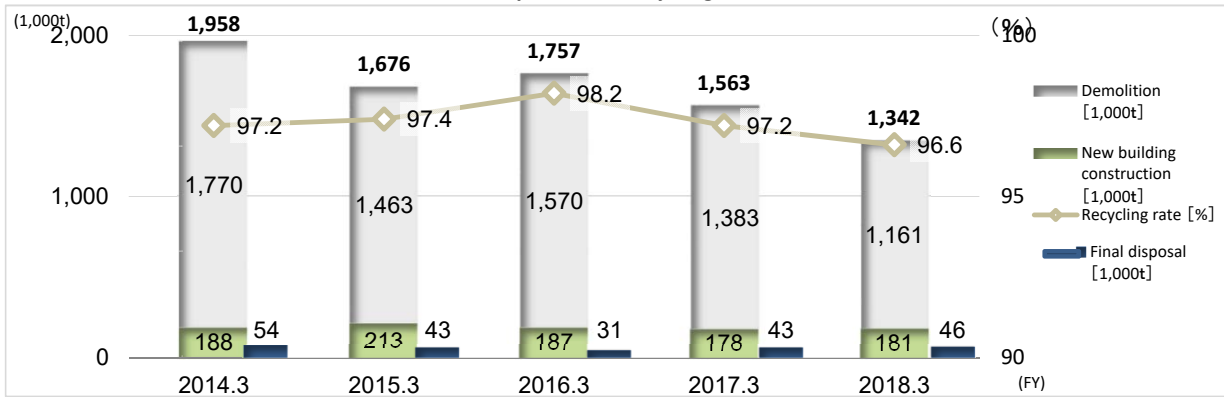


Paper consumption at offices	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Paper consumption at offices	kg/person	55	49	49	47	46
Recycled paper	kg/person	52	46	46	44	43
Others	kg/person	3	3	3	3	3
Recycled paper consumption rate at offices	%	94.5	93.9	93.9	93.6	93.5

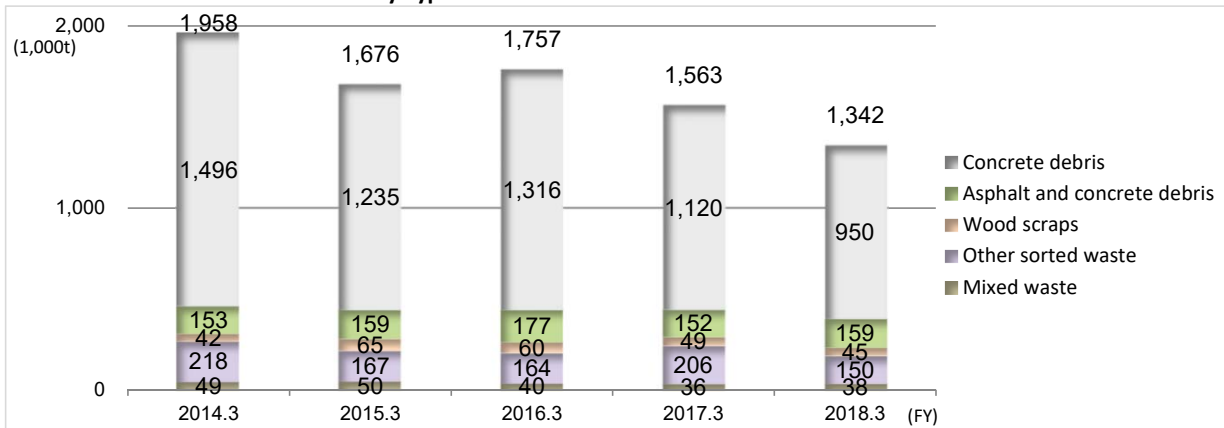
Reducing Waste Emissions

Construction Waste Emission Reduction

Amount of Construction Waste Emission, Final Disposal and Recycling Rate (Excluding sludge)



Breakdown of Waste Emissions by Type



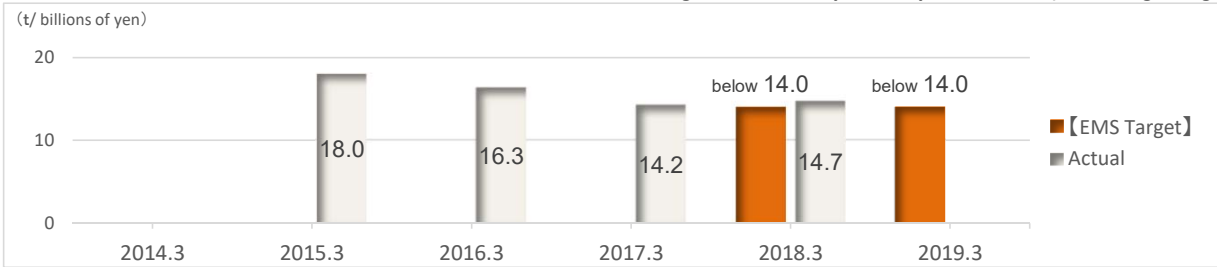
	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Amount of Construction Waste Emission, Final Disposal and Recycling Rate (Excluding sludge)						
Construction Waste Emissions		1,958	1,676	1,757	1,563	1,342
New building construction	1,000t	188	213	187	178	181
Demolition		1,770	1,463	1,570	1,383	1,161
Final disposal	1,000t	54	43	31	43	46
Recycling rate	%	97.2	97.4	98.2	97.2	96.6
▼ Breakdown of Waste Emissions by Type						
Construction Waste emissions		1,958	1,676	1,757	1,563	1,342
Concrete debris		1,496	1,235	1,316	1,120	950
Asphalt and concrete debris	1,000t	153	159	177	152	159
Wood scraps		42	65	60	49	45
Other sorted waste		218	167	164	206	150
Mixed waste		49	50	40	36	38

<<Construction Waste Disposal/ Recycling Ratio by Type>>

	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Concrete debris	Final disposal	0.0	0.0	0.0	0.0	1.0
	Reduction	0.0	0.0	0.0	0.0	0.0
	Recycle and reuse	100.0	100.0	100.0	100.0	99.0
Asphalt and concrete debris	Final disposal	0.0	0.0	0.0	0.0	0.0
	Reduction	0.0	1.0	0.0	0.0	0.0
	Recycle and reuse	100.0	99.0	100.0	100.0	100.0
Wood scraps	Final disposal	1.0	0.0	0.0	0.0	0.0
	Reduction	4.0	3.0	4.0	2.0	2.0
	Recycle and reuse	95.0	97.0	96.0	98.0	98.0
Other sorted waste	Final disposal	18.0	19.0	14.0	16.0	21.0
	Reduction	2.0	2.0	1.0	1.0	1.0
	Recycle and reuse	80.0	79.0	85.0	83.0	78.0
Mixed waste	Final disposal	28.0	23.0	22.0	25.0	25.0
	Reduction	9.0	5.0	6.0	5.0	6.0
	Recycle and reuse	63.0	72.0	72.0	70.0	69.0
sludge	Final disposal	18.0	8.0	7.0	6.0	1.7
	Reduction	18.0	28.0	33.0	28.0	25.5
	Recycle and reuse	64.0	64.0	60.0	66.0	72.8

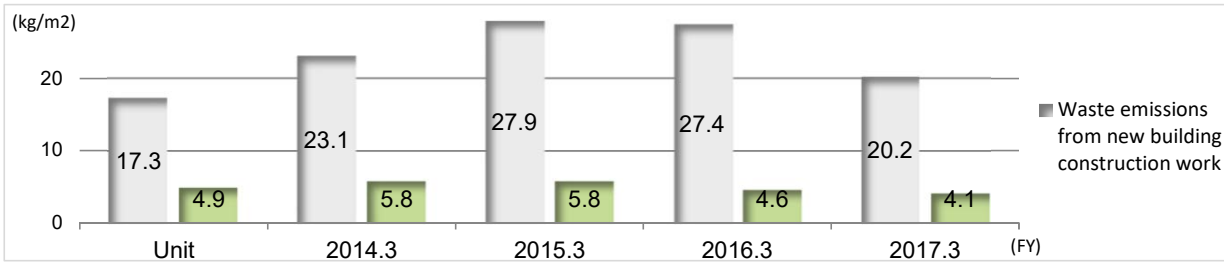
Construction Waste Emission Reduction of New Building Construction

Amount of Construction Waste Emission Reduction of New Building Construction per Completed Work (excluding sludge)



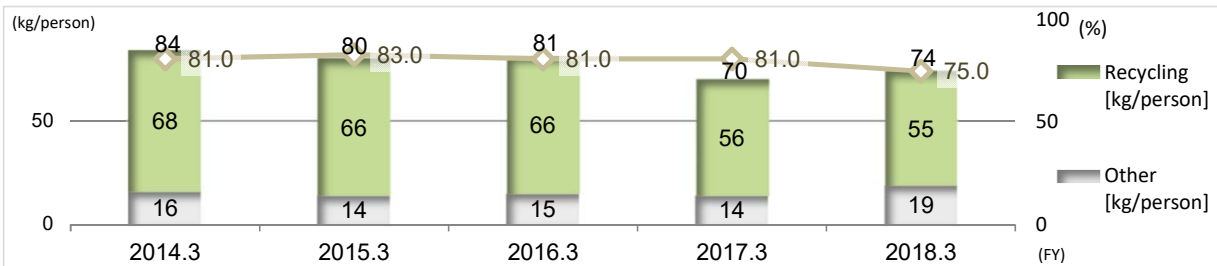
Construction Waste and Mixed Waste Emission of New Building Construction

Amount of Construction Waste and Mixed Waste Emission per Floor Area from New Building Construction (Excluding sludge)



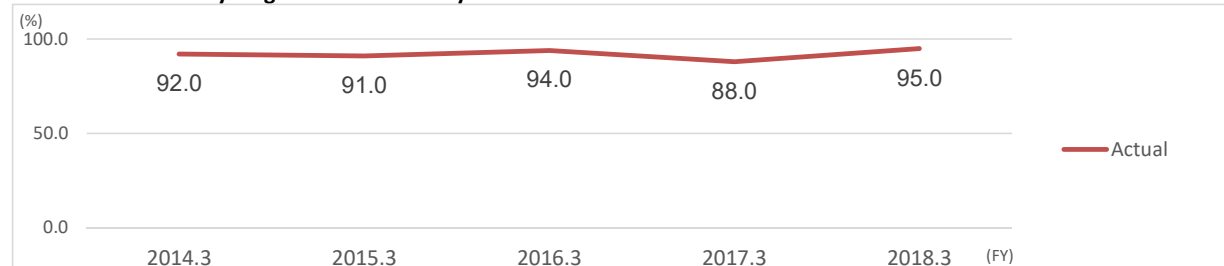
General Waste Emissions Reduction at Offices

Amount of General Waste Emissions at Offices



Industrial Waste Reduction at Machinery Plants

Industrial Waste Recycling Rate at Machinery Plants



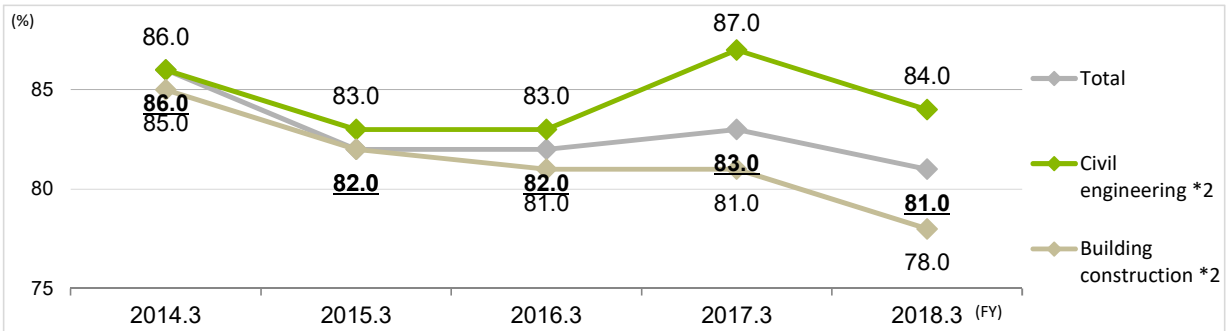
	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Waste emission per completed work (New Building Construction)	t/billions of yen	—	18.0	16.3	14.2	14.7
Waste emissions from new building construction work	kg/m2	17.3	23.1	27.9	27.4	20.2
Mixed waste Emission from new building construction		4.9	5.8	5.8	4.6	4.1
Amount of general waste emissions at office *1	kg/person	84	80	81	70	74
Recycling		68	66	66	56	55
Other		16	14	15	14	19
Recycling rate	%	81.0	83.0	81.0	81.0	75.0
Industrial waste reuse rate at machinery plants	%	92.0	91.0	94.0	88.0	95.0

*1 Applicable facilities: Head Office, Tokyo Main Office, Osaka Main Office, branch offices, machinery plants, material/equipment centers, the Obayashi Technical Research Institute

Emissions Reducing Management

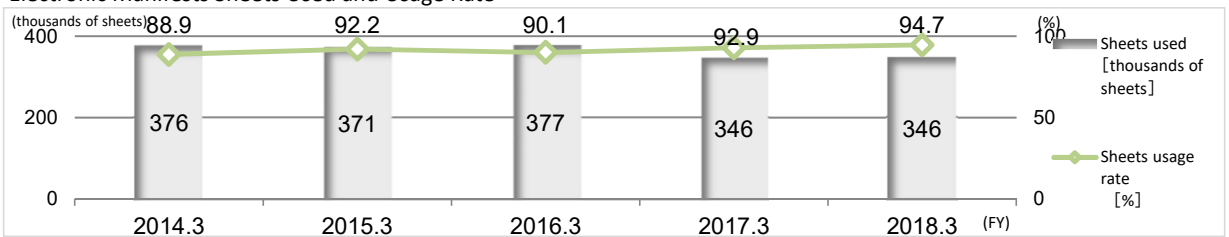
Zero Emissions

Zero Emissions Standards Achievement*1 Rate of Construction Sites



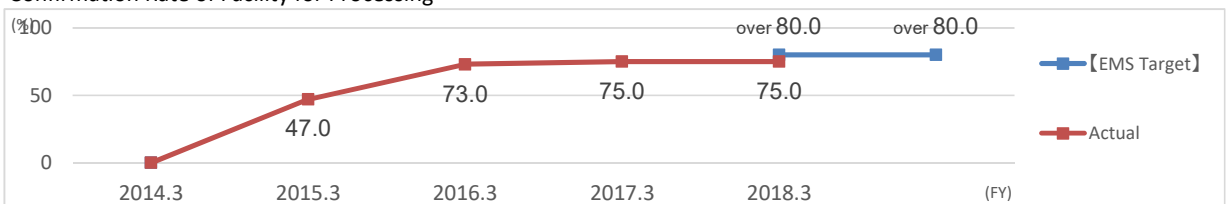
Electronic Manifests Sheets

Electronic Manifests Sheets Used and Usage Rate



Confirmation of Facility for Processing

Confirmation Rate of Facility for Processing



	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Total		86.0	82.0	82.0	83.0	81.0
Building construction *2	%	85.0	82.0	81.0	81.0	78.0
Civil engineering *2	%	86.0	83.0	83.0	87.0	84.0
Electric manifests sheets used	thousands of sheets	376	371	377	346	346
Electric manifests sheets usage rate	%	88.9	92.2	90.1	92.9	94.7
Confirmation of facility for processing implementation rate	%	—	47.0	73.0	75.0	75.0

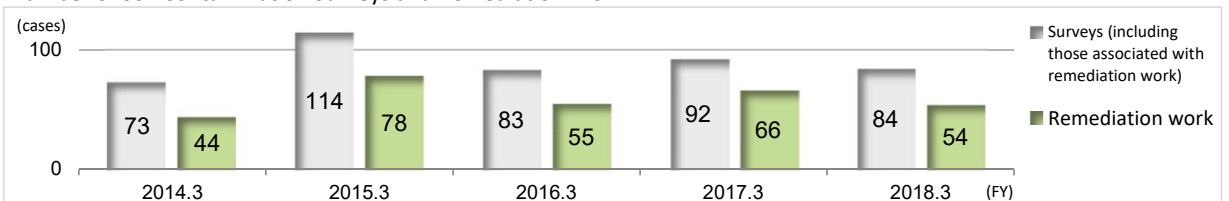
*1 Final disposal rate of construction Waste (excluding sludge) is below 5%. That amount of new building construction is below 5kg/m².

*2 Construction waste emissions (excluding sludge) below 1,000t of renewal construction and waste emissions (excluding sludge) below 10t of Civil Engineering Work is

Remediation Work

Soil Contamination Surveys and Remediation Work

Number of Soil Contamination Surveys and Remediation Work



	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Surveys (including those associated with remediation work)	cases	73	114	83	92	84
Remediation work	cases	44	78	55	66	54

Activities to Realize a Society that Respect for the Natural World

Based on Biodiversity Policy within our Environment Policy, we aim to realize a society that respects the natural world.

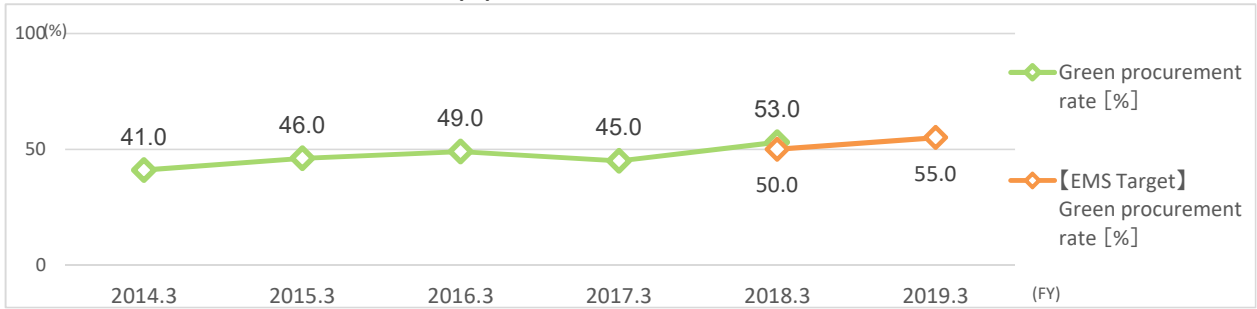
Obayashi Biodiversity Policy	
1	Contribute in making a recycling oriented society which conserves biodiversity.
2	Develop and make full use of new technologies to conserve biodiversity.
3	Promote sustainable society which reduces the impact on ecosystems.
4	Conserve biodiversity through self-owned facilities.
5	Communicate with the society to create a society in harmony with nature.
6	Educate and Promote biodiversity.

Other Activities

Construction Equipment Procurement

Green Procurement of Construction Equipment

Green Procurement Rate of Construction Equipment



	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Green procurement rate	%	41.0	46.0	49.0	45.0	53.0

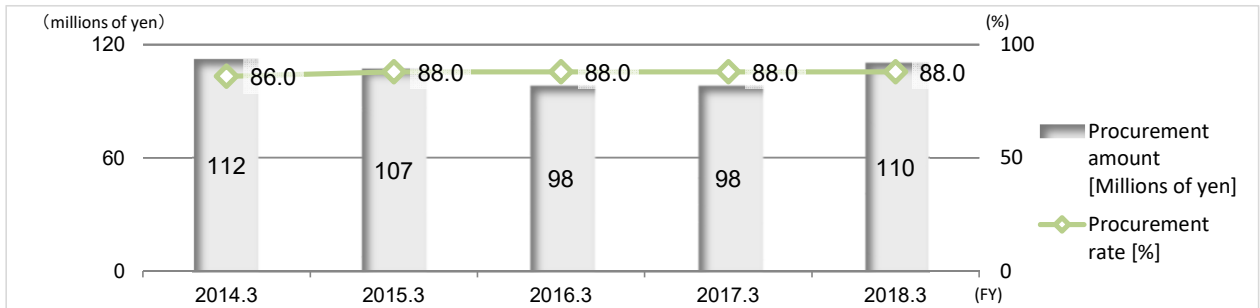
Calculation formula:

Green procurement: Green procurement cost divided by total cost of construction equipments

Green procurement include (treated soil, construction waste soil, recycled concrete aggregate, recycled asphalt and concrete, blast furnace cement concrete, blast furnace raw concret, steel scrap, polycarbonate (Precast concrete))

Green Procurement for Office Products and Other Items

Green Procurement Amount and Ratio*1 for Office Products and Other Items



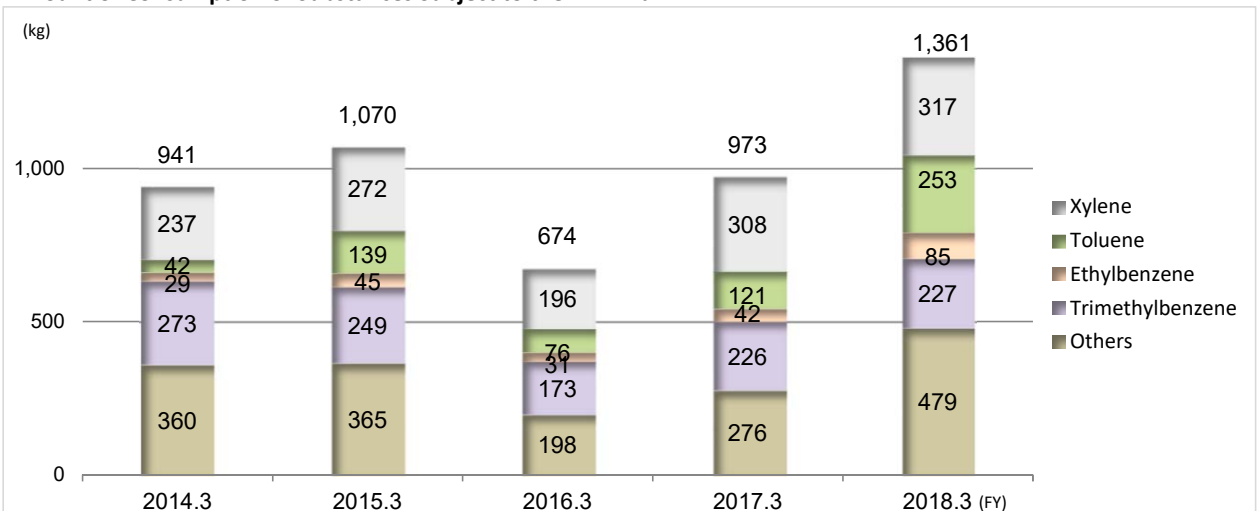
	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Green Procurement amount	Millions of yen	112	107	98	98	110
Green Procurement rate	%	86.0	88.0	88.0	88.0	88.0

Green procurement rate: Percentage of the total monetary amount of purchases of items used for the green procurement ratio calculation.

Chemical Substances Management

Substances Subject to the PRTR Law

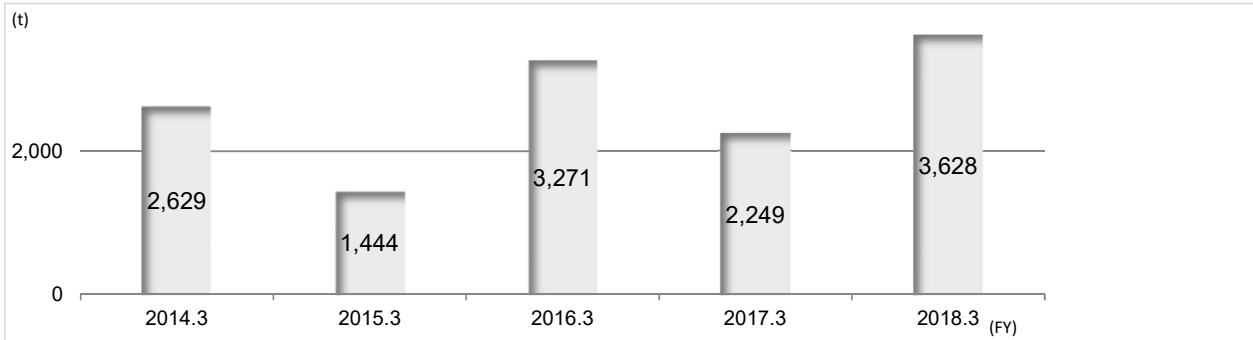
Amount of Consumption of Substances Subject to the PRTR Law *1



*1 A law to improve the monitoring and management of releases to the environment of designated chemical substances.

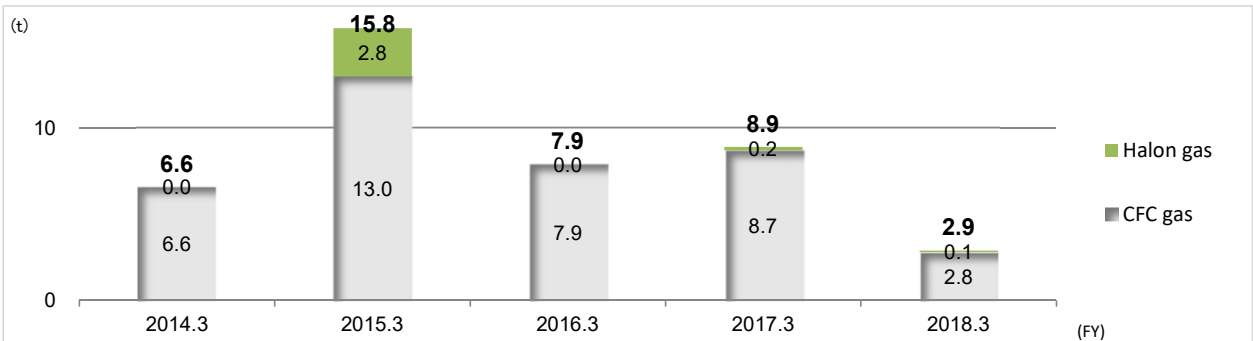
Asbestos

Asbestos Processed



CFC and Halon Gases

CFC and Halon Gases Collected and Processed



	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Xylene	kg	237	272	196	308	317
Toluene		42	139	76	121	253
Ethylbenzene		29	45	31	42	85
Trimethylbenzene		273	249	173	226	227
Others		360	365	198	276	479
Total		941	1,070	674	973	1,361
Tokyo Machinery Plant		569	443	344	448	964
Xylene	kg	175	159	134	172	241
Toluene		17	14	31	42	172
Ethylbenzene		17	16	12	16	39
Trimethylbenzene		158	118	88	129	167
Others		202	136	79	89	345
Osaka Machinery Plant		372	627	330	525	397
Xylene	kg	62	113	62	136	76
Toluene		25	125	45	79	81
Ethylbenzene		12	29	19	26	46
Trimethylbenzene		115	131	85	97	60
Others		158	229	119	187	134
Asbestos Processed						
Amount processed	t	2,629	1,444	3,271	2,249	3,628
CFC and Halon Gases Collected and Processed*1						
CFC and Halon Gases Collected and Processed	t	6.6	15.8	7.9	8.9	2.9
CFC gas		6.6	13.0	7.9	8.7	2.8
Halon gas		0.0	2.8	0.0	0.2	0.1

*1 Amount of recycled CFC gas and Halon gas was 0.9t and the amount of disposed CFC gas and Halon gas was 2.0t in FY2018.3.

PCB

Removal*2 of PCB waste materials*3

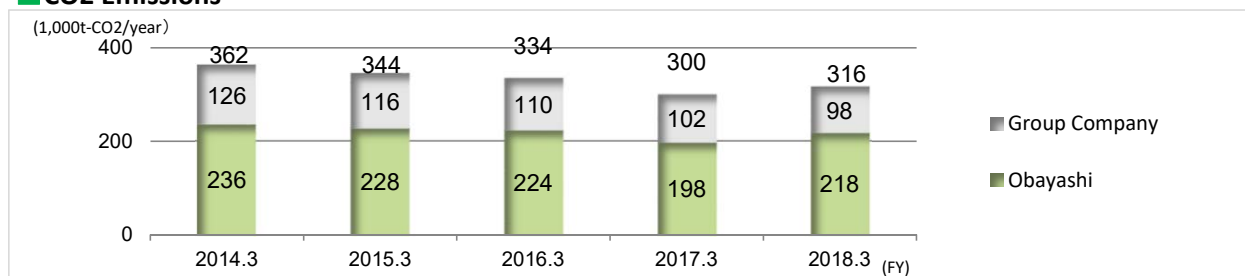
	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Capacitors	Units	0	2	133	140	0
Transformers		0	0	0	0	0

*2 Methods for the storage and disposal are regulated by law because these materials contain polychlorinated biphenyl (PCB), which is a toxic substance.

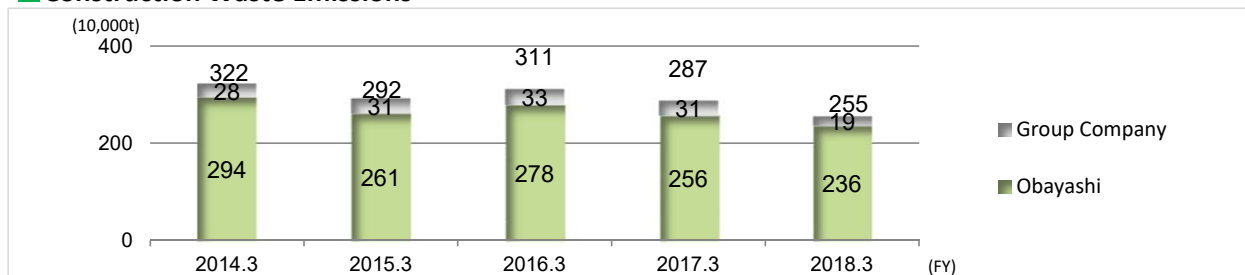
*3 PCB waste materials must be transported to Japan Environmental Safety Corporation, the company designated by the government of Japan.

CO2 Emissions Reduction

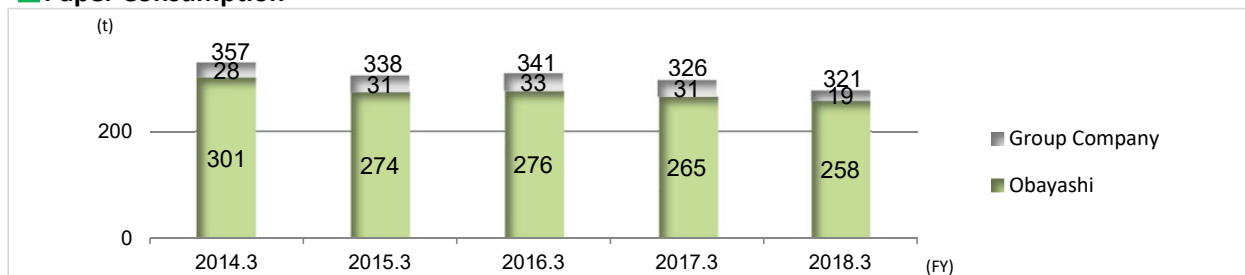
CO2 Emissions



Construction Waste Emissions



Paper Consumption



	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
CO2 Emissions		362	344	334	300	316
Group Company	1,000t-CO2	126	116	110	102	98
Obayashi		236	228	224	198	218
Construction Waste Emissions		322	292	311	287	255
Group Company	10,000t	28	31	33	31	19
Obayashi		294	261	278	256	236
Paper Consumption		357	338	341	326	321
Group Company	t	56	64	65	61	63
Obayashi		301	274	276	265	258

Scope of Group companies (Exclude companies for which separate data does not need to be collected, such as companies that operate within Obayashi offices)

[Construction Business] Obayashi Road Corporation, Naigai Technos Corporation, Obayashi Facilities Corporation, Oak Setsubi Corporation, Tokken Corporation, Soma Environmental Service Corporation, ATELIER G&B Co., Obayashi Design Partners

[Real Estate Business] Obayashi-Shinseiwa Real Estate Corporation

[Other Businesses] <Information> Oak Information System Corporation
 <Golf course> Ibaraki Green Co., Ltd.
 <Restaurant> Le Pont de Ciel Co., Ltd.
 <Renewable energy generation> Obayashi Clean Energy Corporation

Environmental policy includes support for Group companies in order to lower the environmental impact of the entire Obayashi Group. In line with this policy, the Group Company Environmental Activity Liaison Conference was formed to deal with issues for the entire Group. In addition, individual companies use their business activities for developing recyclable materials and increasing their use, combating the heat island effect, conserving energy for building operations, and other purposes.

Environmental Accounting

We have embraced environmental accounting since 1999, as a quantitative means of monitoring and disclosing information for all of our environmental activities. Calculation standards for this environmental accounting are based on the 2002 Environmental Accounting Guidelines for the Construction Industry (by the current Japan Federation of Construction Contractors), and the 2005 Environmental Accounting Guidelines (by the Ministry of the Environment) as a reference.

Cost of Environmental Protection

		Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Cost within business area		Millions of yen	26,844	24,467	23,080	24,656	33,099
	Preventing pollution		8,262	6,558	3,627	8,443	13,729
	Protecting the global environment		197	159	1185	466	629
	Recycling resources		18,385	17,750	18,268	15,747	18,741
Upstream and downstream cost	Environmental design elements		1,707	1,592	1,627	1,591	1,711
Cost of management activities:			696	643	960	954	1,474
	Operating EMS		83	69	102	135	131
	Information disclosure /environmental advertisements		79	73	72	98	76
	Supervision and measurements		169	64	244	253	680
	Environmental education		1	4	16	10	7
	Improving surrounding appearance of construction site		47	54	151	84	410
	Departments associated with environmental activities		317	379	375	374	170
R&D costs (Environmental R&D activities)			3,670	3,612	3,573	3,722	3,594
Social activities costs (Contributions and assistance for environmental organizations)			1	1	3	5	7
Cost of correcting environmer		24	0.5	643	136	55	
	Nature restoration activities	23	0.3	579	104	19	
	Allowances & insurance for damage to the environment	1	0.2	64	32	36	
Total			32,942	30,316	29,887	31,064	39,940

Environmental Performance Indicators

	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
CO2 Emissions	Millions of yen/t-CO2	4.82	5.25	5.26	6.46	5.95
Construction Waste Emissions	Millions of yen/t	5.86	5.42	6.12	6.89	6.90

Calculation formula : CO2 emissions: Total sales from a project divided by CO2 emissions during construction

Construction waste emissions: Total sales from a project divided by volume of construction waste emissions (excluding sludge) produced when constructing a new

Impact on Environmental Protection

« Impact on Environmental Protection »

		Unit	2014.3	2015.3	2016.3	2017.3	2018.3	
Input	Energy Consumption	Construction sites	TJ *1	3,627	3,427	3,374	3,031	3,375
		of which, electricity purchased	GWh	151	111	99	106	118
		Offices, etc. *2	TJ	136	137	140	144	132
		of which, electricity purchased	GWh	13	13	13	13	13
	Water Consumption	Construction sites	1,000m3	1,466	1,197	1,235	1,225	1,267
		Offices, etc. *2	1,000m3	52	59	57	59	60
	Green Procurement Amount	Construction material	Millions of yen	56,496	55,509	64,708	59,667	77,218
		Recycled paper *2		44	49	47	47	47
Office supplies *3		96		107	98	98	110	
Sitewear		106		105	114	133	173	
Output	CO2 emissions	Construction sites	1,000 t-CO2	229	220	217	190	211
		Of which, Scope 1*4		145	159	163	135	151
		Of which, Scope 2*4		84	61	54	55	60
		Offices, etc. *2		7.5	7.6	7.5	7.5	6.8
		Of which, Scope 1*4		0.5	0.5	0.6	0.7	0.5
		Of which, Scope 2*4		7.0	7.1	6.9	6.8	6.3
	SOX emissions	Construction sites	t-SOX	195	196	197	169	189
		Offices, etc. *2		4	5	5	5	4
	NOX emissions	Construction sites	t-NOX	1,089	1,154	1,173	981	1,099
		Offices, etc. *2		11	11	12	12	11
	Construction waste (including sludge)		1,000 t	2,940	2,610	2,776	2,554	2,357
	Construction waste reuse (on site) (including sludge)		%	1.0	0.0	0.0	0.1	0.0
	Construction waste recycling (including sludge)		%	85.3	85.0	83.8	84.8	85.7
	Construction waste final disposal (including sludge)		1,000 t	257	129	108	116	75
Construction waste final disposal (excluding sludge)		%	2.8	2.6	1.8	2.7	3.4	
Products and services	CO2 emission reduction due to use of environmental design *5 *6	1,000 t-CO2	1364	429	1,390	957	586	

《Economic Impact》

			Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Input	Cost reductions due to resource and energy conservation measures at construction sites	Electricity used*7 (vs. previous year)	Millions of yen	262	-1,091	-322	195	302
		Light oil used*7 (vs. previous year)		-71	636	157	-1,200	731
		Kerosene used*7 (vs. previous year)		-67	-12	8	33	-11
		Materials purchased*8 (actual amount)		54	0.2	2	6.8	0
Output	Benefits from sorting construction site waste	Gain from sales of waste materials		23	254	186	177	447

*1 Unit for energy: 1 terajoule = 1 × 1,012 joules

*2 Applicable facilities: Head office, Tokyo Main Office, Osaka Main Office, other branch offices, machinery plants, material/equipment centers, and Technical Research Institute

*3 Calculated using the Biznet procurement system for office supplies, etc.

*4 The greenhouse gas emission categories prescribed in the Greenhouse Gas Protocol developed as the international standard for calculating and reporting the volume of greenhouse gas emissions

Scope 1: Direct emissions (caused by business activities)

Scope 2: Indirect emissions (caused by energy used (electricity, heat, etc.) for business activities)

*5 Comparison with CASBEE reference figures. Data cover all applications.

*6 Figures assume a useful building life of 35 years.

*7 Conversions for reductions in volume used from the previous fiscal year are as follows:

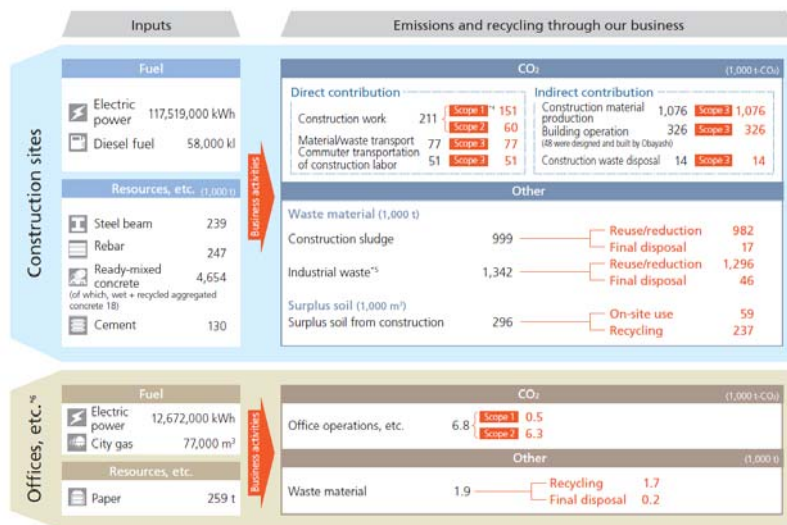
Electricity (27yen/kWh) (Source: Price Guidelines for New Electricity Rates by the Home Electric Appliances Fair Trade Conference)

Diesel fuel (116,000yen/kl), Kerosene (85,000yen/kl) (Source:2017.3 issue of Sekisan Shiryō magazine, published by the Economic Research Association)

*8 Waste materials reused at construction sites have been converted to construction material equivalents as follows:

Construction sludge → Backfilling soil (3,600yen/m³)

Concrete debris → Recycled crushed stone (1,125yen/m³) (Source: 2017.3 issue of Sekisan Shiryō magazine, published by the Economic Research Association)



Basic Unit for Calculating Environmental Protection Benefits (FY2018.3)

《Basic Unit for Calculating Environmental Protection Benefits (FY2018.3)》

	Electric Power	Diesel fuel	Kerosene	Gas
Primary energy*1	9.97MJ/kWh	37.7MJ/L	36.7MJ/L	44.9MJ/m ³
CO ₂ *2	By electric utility company*4	2.58kg-CO ₂ /L	2.49kg-CO ₂ /L	2.23kg-CO ₂ /Nm ³
SOX*3	0.335	0.069	0.007	0
	g-SOX/kWh		g-SOX/MJ	
NOX*3	0.778	0.463	0.069	0.058
	g-NOX/kWh		g-NOX/MJ	

*1 Electricity: Ordinance for Enforcement of the Act on the Rational Use of Energy

All others except electricity: Calculation Methods and Emission Coefficients for Calculation, Report and Announcement Systems (after 2014.3 revisions)

*2 Calculation Methods and Emission Coefficients for Calculation, Report and Announcement Systems (after 2014.3 revisions)

*3 Building Life Cycle Assessment Guidelines, Architectural Institute of Japan (after 2013.2 revisions)

*4 Emission coefficients for individual electric utilities

Power companies	Effective emission factor	Power companies	Effective emission factor
	(kg-CO ₂ /kWh)		(kg-CO ₂ /kWh)
Hokkaido Electric Power Co., Inc.	0.632	The Chugoku Electric Power Co., Inc.	0.691
Tohoku Electric Power Co., Inc.	0.545	Shikoku Electric Power Co., Inc.	0.510
Tokyo Electric Power Co., Inc.	0.486	Kyushu Electric Power Co., Inc.	0.462
Chubu Electric Power Co., Inc.	0.485	The Okinawa Electric Power Co., Inc.	0.799
Hokuriku Electric Power Company	0.640	Alternative	0.512
The Kansai Electric Power Co., Inc.	0.509	CO ₂ emission coefficients for individual electric utilities (Announced on 2017.12), Ministry of the Environment	

•For the cost of pollution prevention and protecting the global environment, the portion of these costs accounted for by construction sites is estimated by using figures from sample sites, construction sales during the fiscal year and other data.

•The portion of resource recycling costs accounted for by the processing and disposal of construction waste materials from construction sites is the actual amount according to the manifest multiplied by an average processing unit price for each item at individual branches (cost includes construction sites of Obayashi alone and all costs at joint construction projects where Obayashi is the main contractor).

Environmental Management System (EMS)

Results of External Assessment of EMS

		2018.3
Certification body		Japan Testing Center for Construction Materials
Implementation period		From August 29 to September 7, 2017
Assessed items		Head Office, Tokyo Main Office, Sapporo Branch, Tohoku Branch, Kyushu Branch, Technical Research Institute, Tokyo Machinery Works, Renewable Energy Power Stations
Number of deficiencies	Serious deficiencies	0 case
	Minor deficiencies	0 case
Number of items under observation		3 cases

Results of Internal Audit of EMS

		2018.3
Audited items		All branches and departments
Number of audits	Planned/ Implemented (Implementation rate)	258cases/260cases (99%)
		56cases/56cases (100%)
		192cases/194cases (99%)
		10cases/10cases (100%)
Number of internal auditors (active)		555people
Number of deficiencies		3cases
Number of items under observation		115cases

Environmental Targets and Results

Environmental Targets	Unit		2014.3	2015.3	2016.3	2017.3	2018.3			2019.3
			Actual				EMS Target	Actual	Evaluation	Target
Reducing CO2 Emissions										
CO2 emissions reduction rate from construction sites (base year 2014.3)	%	Low-Carbon	—	3.5	5.2	16.8	over 8.0	8.0	×	over 8.0
CO2 emissions reduction rate of designs & build buildings*1			43.4	29.7	27.3	22.9	over 31.0	25.8	△	over 25.0
Fuel efficiency driving training rate at construction sites			—	23.0	63.0	55.0	over 70.0	63.0	△	over 70.0
Reducing Resource Consumption										
Water consumption at construction sites	m3/billions of yen	Recycling-Oriented	Civil: 222	Civil: 175	Civil: 196	Civil: 180	Civil: below 170	Civil: 145	△	Civil: below 170
			Building: 108	Building: 87	Building: 82	Building: 79	Building: below 78	Building: 89		Building: below 85
Reducing Waste Emissions										
Amount of construction waste emissions (excluding sludge) per completed work from new building construction work	t/billions of yen	Recycling-Oriented	—	18.0	16.3	14.2	below 14.0	14.7	×	below 14.0
Confirmation rate of facilities for processing	%		—	47.0	73.0	75.0	over 80.0	75.0	×	over 80.0
Implementing Green Procurement										
Green procurement ratio for construction materials and supplies *2	%	Others	41.0	46.0	49.0	45.0	over 50.0	53.0	○	over 55.0

Legend and Notes

○: Targets achieved

△: Targets have yet to be achieved, but results have improved from the previous fiscal year

×: Targets have yet to be achieved

*1 Figure represent comparisons with the CASBEE reference values, with the scope of aggregation including all building uses.

*2 The ratio of the green procurement value to the total procurement value of all monitored items for the green procurement ratio.

■ Selection of Environmental Protection Activities at Construction Sites

Our construction sites use an Environmental Site Navipack, which is an environmental management system implementation tool produced for those sites. The tool selects environmental protection activities from the 17 items shown above and implements these activities.

Environmental protection activities	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
1. Reduce consumption of resources and energy	construction project offices	530	505	497	533	498
2. Reduce the volume of waste materials	–	Mandatory				
3. Reduce the volume of surplus soil from construction activities	construction project offices	340	312	298	302	295
4. Reduce the amount of engine exhaust gas	construction project offices	540	516	493	519	492
5. Reduce the generation of dust	construction project offices	520	492	486	529	491
6. Reduce the generation of CO2	–	Mandatory				
7. Reduce the generation of substances harmful to the ozone layer	construction project offices	98	77	94	101	161
8. Reduce the use of tropical timber for concrete forms	construction project offices	222	213	226	224	225
9. Reduce noise	construction project offices	532	511	499	538	499
10. Reduce vibrations	construction project offices	513	494	487	529	491
11. Reduce odors	construction project offices	256	249	207	266	263
12. Reduce the generation of hazardous chemical substances	construction project offices	171	159	152	239	234
13. Reduce the generation of water pollutants	construction project offices	434	453	457	474	456
14. Reduce the generation of soil pollutants	construction project offices	277	263	241	264	263
15. Reduce ground subsidence	construction project offices	218	210	182	183	200
16. Use green procurement	–	Mandatory				
17. Reduce changes in the natural environment and ecosystem	construction project offices	71	81	82	67	65

■ Deficiencies and Complaints 2018.3

Items	Unit	2014.3	2015.3	2016.3	2017.3	2018.3
Deficiencies	cases	3	6	0	1	6
Claims	cases	959	828	891	1,056	1,229

Obayashi designates items as deficient and requiring management in the following cases:

Note that we strive to prevent conflicts for reoccurring by aptly responding to the complaints we receive and caring for the environment surrounding our sites.

- When administrative guidance has been received
- When a civil fine must be paid
- When a written apology must be submitted
- When there is a penalty involving more than a small fine
- When there is compensation payment
- When a government agency has submitted a recommendation to take corrective actions

◀ Deficiencies and correspondence ▶

Deficiencies	cases	Correspondence
Disposed asbestos as asbestos-containing waste	1	Dug up the asbestos and disposed in proper way. Conducted asbestos related recurrence prevention education, and plot asbestos related construction team to manage similar cases.
Carried out surplus soil without checking the regulations	1	Submitted a recurrence prevention measure report. Checked the regulations before starting all the construction.
Used industrial waste disposal carrier with expired permission	1	Submitted a remedial report for updating the permission. Placed the outline of the contract in the construction site so that all employee can check the expiration date.
Felled a tree from reserved forest without permission	1	Submitted a recurrence prevention measure report/ remedial report. Made checklists of reserved forest permission and held education program to all related employees.
Disposed construction waste without contracting disposal outsourcing agreement	2	Submitted a remedial report to the administration. Made industrial waste disposal company to submit construction disposal carrying schedule and checked it is agreement is contracted.