

# Main Environmental Indicators (5 Years)

Latest update: 5th July, 2024

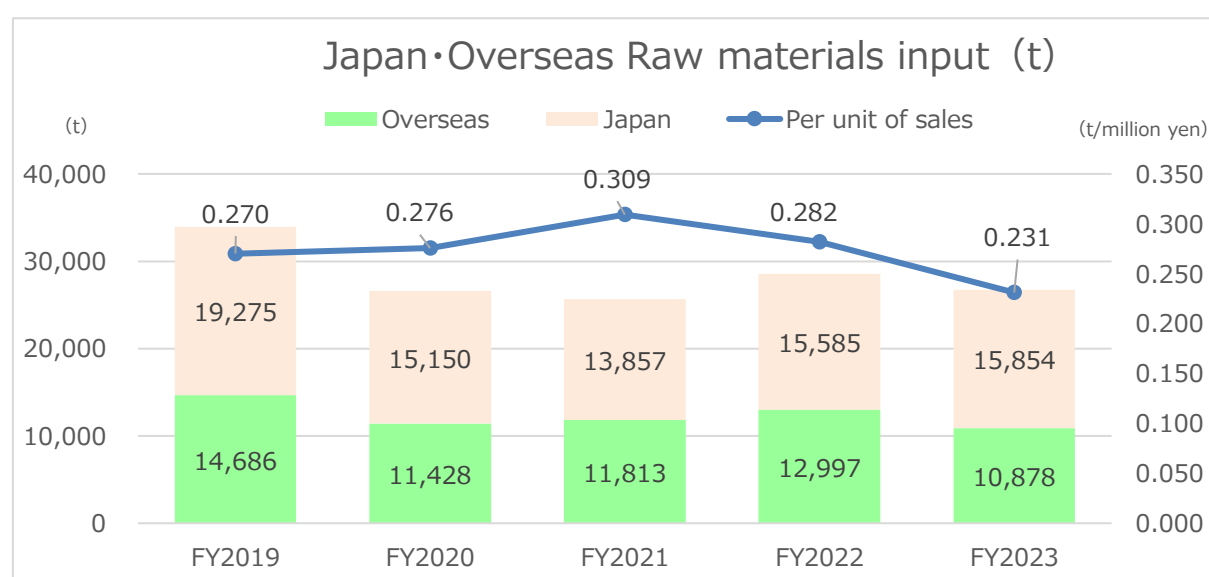
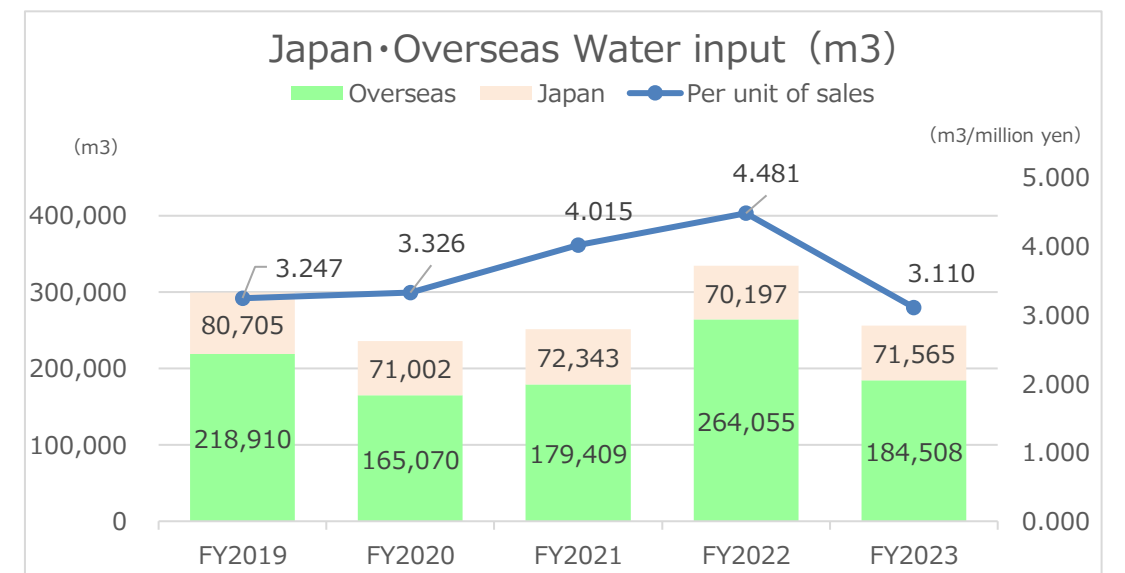
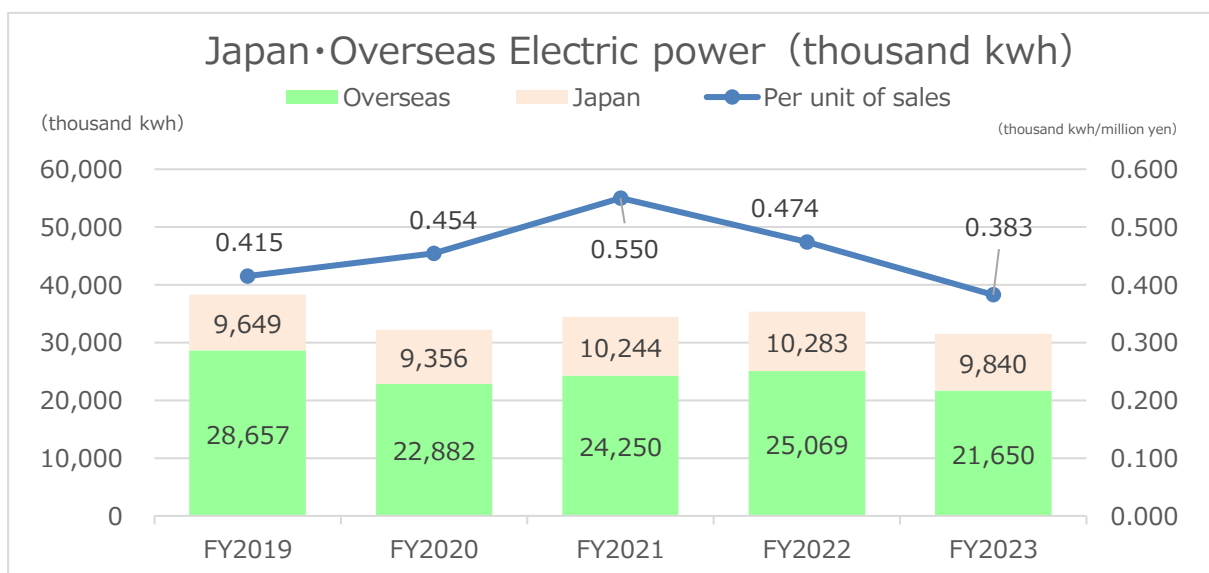
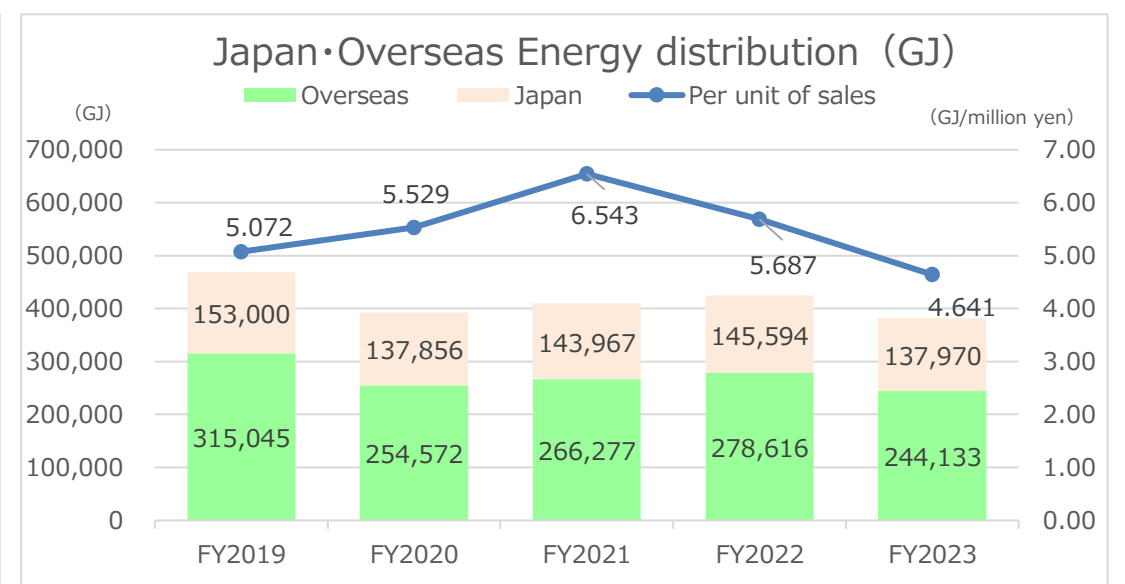
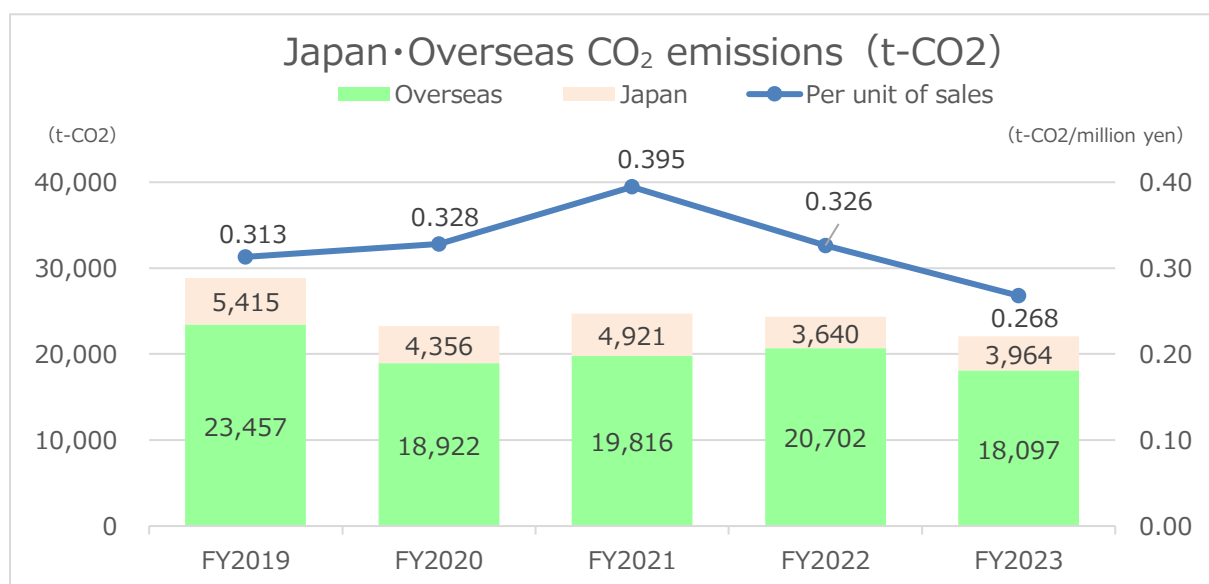
Japanese data gathered from: 1 manufacturing location, 8 non-manufacturing locations, 1 consolidated subsidiary, and 1 non-consolidated subsidiary.

Overseas data gathered from: 2 manufacturing locations, 9 consolidated subsidiaries, and 1 equity method affiliate.

Data collection period : Japan (April of the year shown to March of the following year) , Overseas (January of the year shown to December of the following year)

## Per Unit of Sales (Scope 1+2)

Reporting Content	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
CO2 emissions	t-CO <sub>2</sub> /million yen	0.313	0.328	0.395	0.326	0.268
Japan	t-CO <sub>2</sub> /million yen	0.117	0.112	0.151	0.102	0.104
Overseas	t-CO <sub>2</sub> /million yen	0.509	0.589	0.658	0.533	0.408
Energy input	GJ/million yen	5.072	5.529	6.543	5.687	4.641
Japan	GJ/million yen	3.313	3.549	4.417	4.070	3.630
Overseas	GJ/million yen	6.835	7.924	8.846	7.176	5.509
Electric power	thousand kwh	0.415	0.454	0.550	0.474	0.383
Japan	thousand kwh	0.209	0.241	0.314	0.287	0.259
Overseas	thousand kwh	0.622	0.712	0.806	0.646	0.489
Water input	m <sup>3</sup> /million yen	3.247	3.326	4.015	4.481	3.110
Japan	m <sup>3</sup> /million yen	1.748	1.828	2.219	1.962	1.883
Overseas	m <sup>3</sup> /million yen	4.749	5.138	5.960	6.801	4.164



**INPUT ( Energy input, Water input, and Rawmaterials input )**

Reporting Content	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
<b>INPUT</b>						
Energy input	GJ	468,044.5	392,427.1	410,244.1	424,209.8	382,102.8
Japan	GJ	152,999.7	137,855.6	143,967.0	145,594.3	137,969.6
Overseas	GJ	315,044.8	254,571.5	266,277.0	278,615.5	244,133.2
Electric power	thousand kwh	38,305.8	32,238.7	34,494.6	35,352.3	31,490.2
Japan	thousand kwh	9,648.5	9,356.4	10,244.2	10,282.8	9,840.4
Overseas	thousand kwh	28,657.3	22,882.2	24,250.4	25,069.5	21,649.8
Gas	m <sup>3</sup>	125,215.7	99,350.7	100,936.1	103,540.3	100,237.6
Japan	m <sup>3</sup>	125,215.7	99,350.7	100,936.1	103,540.3	100,237.6
Overseas	m <sup>3</sup>	23,644.2	18,363.0	48,106.9	46,425.4	45,322.7
Gasoline	k l	670.9	601.8	598.7	648.1	446.9
Japan	k l	316.2	261.3	293.6	255.9	42.7
Overseas	k l	354.7	340.6	305.1	392.2	404.2
Kerosene	k l	0.0	0.0	0.0	0.0	0.0
Japan	k l	0.0	0.0	0.0	0.0	0.0
Overseas	k l	0.0	0.0	0.0	0.0	0.0
Diesel fuel	k l	1,373.1	1,106.5	957.3	1,055.1	1,141.5
Japan	k l	944.6	734.2	639.8	702.6	808.3
Overseas	k l	428.5	372.3	317.4	352.5	333.2
Water input	m <sup>3</sup>	299,614.9	236,072.0	251,752.2	334,251.9	256,073.3
Water supply	m <sup>3</sup>	256,541.9	202,460.0	217,067.2	286,910.9	218,915.3
Japan	m <sup>3</sup>	70,719.0	64,460.0	68,901.0	68,181.0	69,584.0
Overseas	m <sup>3</sup>	185,822.9	138,000.0	148,166.2	218,729.9	149,331.3
Industrial water supply	m <sup>3</sup>	43,073.0	33,612.0	34,685.0	47,341.0	37,158.0
Japan	m <sup>3</sup>	9,986.0	6,542.0	3,442.0	2,016.0	1,981.0
Overseas	m <sup>3</sup>	33,087.0	27,070.0	31,243.0	45,325.0	35,177.0
Raw materials used in products, etc.	t	24,934.0	19,565.6	19,387.8	21,019.1	19,031.2
Japan	t	10,248.0	8,138.0	7,575.0	8,022.2	8,153.3
Overseas	t	14,686.0	11,427.6	11,812.8	12,996.9	10,878.0
Packaging and container materials	t	9,027.3	7,011.7	6,281.8	7,562.5	7,700.5
Japan	t	9,027.3	7,011.7	6,281.8	7,562.5	7,700.5
Overseas	t	0.0	0.0	0.0	0.0	0.0

**OUTPUT ( CO2 emissions, Water effluent and Waste material )**

Reporting Content	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
<b>OUTPUT</b>						
CO2 emissions						
Scope 1+2	t-CO <sub>2</sub>	28,871.4	23,278.1	24,736.1	24,341.6	22,060.7
Japan	t-CO <sub>2</sub>	5,414.6	4,355.9	4,920.5	3,639.9	3,963.7
Overseas	t-CO <sub>2</sub>	23,456.8	18,922.2	19,815.6	20,701.7	18,097.0
Scope 1	t-CO <sub>2</sub>	3,241.7	2,823.2	2,765.2	2,943.6	2,428.7
Japan	t-CO <sub>2</sub>	1,400.9	1,142.6	1,227.0	1,132.6	640.4
Overseas	t-CO <sub>2</sub>	1,840.9	1,680.6	1,538.2	1,811.0	1,788.3
Scope 2	t-CO <sub>2</sub>	25,629.7	20,454.9	21,970.9	21,398.0	19,632.0
Japan	t-CO <sub>2</sub>	4,013.7	3,213.3	3,693.5	2,507.4	3,323.3
Overseas	t-CO <sub>2</sub>	21,616.0	17,241.6	18,277.4	18,890.7	16,308.7
Water input	m <sup>3</sup>	37,388.4	30,596.1	31,904.6	29,446.6	29,714.9
Japan	m <sup>3</sup>	37,388.4	30,596.1	31,904.6	29,446.6	29,714.9
Overseas *Data not extracted	m <sup>3</sup>	*	*	*	*	*
Waste material	t	5,479.6	4,824.3	5,106.2	4,749.5	4,662.4
Japan	t	3,465.0	2,974.7	3,449.9	3,380.6	3,234.9
Overseas	t	2,014.6	1,849.6	1,656.3	1,368.9	1,427.5
Remaining waste after treatment	t	805.8	715.9	764.3	792.9	758.5
Japan	t	34.7	14.6	15.7	5.6	0.0
Overseas	t	771.1	701.2	748.6	787.3	758.4
Resource Recovery Rate	%	85.3%	85.2%	85.0%	83.3%	83.7%
Japan	%	99.0%	99.5%	99.5%	99.8%	100.0%
Overseas	%	61.7%	62.1%	54.8%	42.5%	46.9%
Sulfur oxide (SOx) emissions	kg	0.0	0.0	0.0	0.0	0.0
Japan	kg	0.0	0.0	0.0	0.0	0.0
Overseas	kg	0.0	0.0	0.0	0.0	0.0
Nitrogen oxide (NOx) emissions	kg	0.0	0.0	0.0	0.1	0.1
Japan	kg	0.0	0.0	0.0	0.0	0.0
Overseas	kg	0.0	0.0	0.0	0.1	0.1
Dust emissions	kg	0.0	0.0	0.0	0.0	0.0
Japan	kg	0.0	0.0	0.0	0.0	0.0
Overseas	kg	0.0	0.0	0.0	0.0	0.0

\*1 Energy consumption calculated based on formulas in the Japanese Act on the Rational Use of Energy.

\*2 Overseas CO2 emission coefficients by country are drawn from CO2 Emissions from Fuel Combustion: Highlights, 2013 Edition.

\*3 From FY2017 onward, waste materials for promotional items are included in calculations.

## Scope 1+2+3 emissions in Japan

Reporting Content	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
CO2 emissions	t-CO <sub>2</sub>	276,565	280,069	227,671	202,662	207,777
Scope 1	t-CO <sub>2</sub>	1,401	1,143	1,227	1,133	640
Scope 2	t-CO <sub>2</sub>	4,014	3,213	3,694	2,507	3,323
Scope 3	t-CO <sub>2</sub>	271,150	275,713	222,750	199,022	203,813
Category 1 (Purchased goods and services)	t-CO <sub>2</sub>	120,833	102,793	77,745	93,828	103,039
Category 2 (Capital goods)	t-CO <sub>2</sub>	4,046	36,188	5,709	2,118	2,356
Category 3 (Fuel- and energy-related activities not included in Scope 1 or Scope 2)	t-CO <sub>2</sub>	1,023	936	1,017	837	698
Category 4 (Upstream transportation and distribution)	t-CO <sub>2</sub>	5,648	4,089	3,794	4,198	4,594
Category 5 (Waste generated in operations)	t-CO <sub>2</sub>	1,950	1,715	1,858	1,119	514
Category 6 (Business travel)	t-CO <sub>2</sub>	134	138	129	128	101
Category 7 (Employee commuting)	t-CO <sub>2</sub>	309	317	295	285	235
Category 8 (Upstream leased assets)	t-CO <sub>2</sub>	0	0	0	0	0
Category 9 (Downstream transportation and distribution)	t-CO <sub>2</sub>	736	409	338	376	411
Category 10 (Processing of sold products)	t-CO <sub>2</sub>	0	0	0	0	0
Category 11 (Use of sold products)	t-CO <sub>2</sub>	121,317	115,073	118,285	84,216	80,559
Category 12 (End-of-life treatment of sold products)	t-CO <sub>2</sub>	14,415	13,331	12,567	10,845	10,241
Category 13 (Downstream leased assets)	t-CO <sub>2</sub>	0	0	0	0	0
Category 14 (Franchises)	t-CO <sub>2</sub>	0	0	0	0	0
Category 15 (Investments)	t-CO <sub>2</sub>	739	723	1,014	1,073	1,063

## Emissions of PRTR-listed Substances and Movement in Japan (FY2023) (Unit : t)

Designated Chemical Substance	Emissions and Movement
[(3-Alkanamidopropyl)(dimethyl)ammonio]acetate (limited to those the alkane is linear chain and C=8, 10, 12, 14, 16 or 18 and the mixture thereof) and (Z)-[[3-(octadec-9-enamido)propyl](dimethyl)ammonio]acetate and the mixture thereof	0.287
2-(N-Dodecyl-N,N-dimethylammonio)acetate	0.141
2-aminoethanol	0.006
4-Isopropyl-3-methylphenol	0.421
Polymer of acrylic acid	0.076
Alpha-Alkyl-omega-hydroxypoly(oxyethane-1,2-diyl) (limited to those the alkyl group is C=16-18 and the mixture thereof, and the number average molecular weight is less than 1,000), alpha-alkenyl-omega-hydroxypoly(oxyethane-1,2-diyl) (limited to those the alkenyl group is C=16-18 and the mixture thereof, and the number average molecular weight is less than 1,000), and the mixture thereof	0.944
Ethylenediaminetetraacetic acid and its potassium and sodium salts	0.076
sodium dodecyl sulfate	0.336
Trimethyl (octadecyl) ammonium salts	0.024
poly(oxyethylene)alkyl ether(alkyl C=12-15)	0.030
sodium poly(oxyethylene) dodecyl ether sulfate	0.442
Methyl(2-pentyl-3-oxocyclopentyl)acetate	0.102
zinc compounds(water-soluble)	0.128



**Reference: Japanese CO2 emission calculation coefficient**

Reporting Content	FY2019	FY2020	FY2021	FY2022	FY2023
Electric power					
Hokkaido Electric Power Co., Inc. (t-CO2/thousand kwh)	0.656	0.601	0.550	0.537	0.541
Tohoku Electric Power Co., Inc. (t-CO2/thousand kwh)	0.528	0.522	0.457	0.488	0.471
TEPCO Energy Partner, Inc. (t-CO2/thousand kwh)	0.455	0.442	0.443	0.456	0.390
CHUBU Electric Power Co., Inc. (t-CO2/thousand kwh)	0.452	0.426	0.379	0.388	0.459
The Kansai Electric Power Co., Inc. (t-CO2/thousand kwh)	0.334	0.318	0.351	0.311	0.434
The Chugoku Electric Power Co., Inc. (t-CO2/thousand kwh)	0.636	0.585	0.521	0.540	0.552
Kyushu Electric Power Co., Inc. (t-CO2/thousand kwh)	0.347	0.371	0.480	0.389	0.475
ENNET Corp. (t-CO2/thousand kwh)	0.450	0.409	0.385	0.408	0.367
Tepco Customer Service Corp. (t-CO2/thousand kwh)	0.508	0.533	0.495	0.558	0.420
Kerosene (t-CO2/kl)	2.503	2.503	2.503	2.503	2.503
LP Gas (t-CO2/t)	2.994	2.994	2.994	2.994	2.994
City Gas (t-CO2/thousand Nm3 )	2.053	2.053	2.053	2.053	2.053
Gasoline (t-CO2/kl)	2.290	2.290	2.290	2.290	2.290
Diesel fuel (t-CO2/kl)	2.619	2.619	2.619	2.619	2.619
B·C Heavy oil (t-CO2 /kl)	3.096	3.096	3.096	3.096	3.096

Note: Calculations are based on the Japanese government's Act on the Rational Use, etc. of Energy.

**Reference: Overseas CO2 emission calculation coefficient**

Reporting Content	FY2019	FY2020	FY2021	FY2022	FY2023
Electric power					
Indonesia	0.755	0.755	0.755	0.755	0.755
China	0.764	0.764	0.764	0.764	0.764
Thailand	0.522	0.522	0.522	0.522	0.522
Philippines	0.492	0.492	0.492	0.492	0.492
Malaysia	0.688	0.688	0.688	0.688	0.688
Singapore	0.500	0.500	0.500	0.500	0.500
Taiwan	0.764	0.764	0.764	0.764	0.764
Hong Kong	0.768	0.768	0.768	0.768	0.768
Korea	0.545	0.545	0.545	0.545	0.545
India	0.856	0.856	0.856	0.856	0.856
Vietnam	0.429	0.429	0.429	0.429	0.429

Note: Overseas CO2 emission coefficients by country are drawn from CO2 Emissions from Fuel Combustion: Highlights, 2013 Edition. Source: IEA