

## Data on KUBOTA Domestic Production Plants and Offices

	Item	1	Unit	Hanshin plant (Mukogawa)	Hanshin   (Amagasa		Hanshin plant Shin-yodogawa factory)	Keiyo plant (Funabashi)	Keiyo plan (Ichikawa)	t Hirak	kata plant	O	ajima plar	nt Sak	ai plant	Sakai Rir	nkai plant	Utsunomiya	plant	Tsukuba plan		uhoji ss center	Ryugasa	ki plant	Shiga pla	lant
INPUT	•																									
Energy	,	Coal/Coke t Town gas 1 Kerosene k	10,000 kWh t 1,000 m <sup>3</sup> <l< th=""><th>Volume of use         Calorific           4,487         447,33           12,193         367,02           4,439         182,48           4,543         166,74           0         75           1,164,40</th><th>2 2,919 2 2 0 3,531 1 8 0 0 0 144</th><th>Calorific Nersion GJ Vol 291,014 0 0 145,145 302 0 1,807 438,267</th><th>  Calorific a   Calorific a  </th><th>Volume of use         Calorification           5,049         486.81           24,728         744.29           2,284         93.87           12,223         448,58           189         7,23           20,28         1,801.09</th><th>9 662 65.8 8 0 0 0 0 0 9 19 7 6 45 1.7 2</th><th>0 5,229 0 0 0 4,971 713 142 736 528</th><th>Caloritic Conversion GJ 510,908 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</th><th></th><th>66   656, 77   255, 16   74,6 2  </th><th>on 6J Volume tries 124 3,626 158 0 642 2,563 81 0 805 138</th><th>354,191 0 105,331</th><th>Volume of use  1,889  0  872  0 1,229</th><th>184,018 0 35,849</th><th>835 8 0 1,032 4 573 6</th><th>0 12,404</th><th>2,455 100,90 1,047 38,40 0</th><th>G 248 0 0 0 2 182 9 17 0 0</th><th>24,333 0 7,472 624</th><th>Volume of use 356 0 0 259 26 3</th><th>Calorific conversion 6J 35,453 0 10,647 948 122 470 47,639</th><th>371 3 0   889 3 0  </th><th>Calorific onversion 35,855 ( 36,538 ( ( ( 72,393</th></l<>	Volume of use         Calorific           4,487         447,33           12,193         367,02           4,439         182,48           4,543         166,74           0         75           1,164,40	2 2,919 2 2 0 3,531 1 8 0 0 0 144	Calorific Nersion GJ Vol 291,014 0 0 145,145 302 0 1,807 438,267	Calorific a   Calorific a	Volume of use         Calorification           5,049         486.81           24,728         744.29           2,284         93.87           12,223         448,58           189         7,23           20,28         1,801.09	9 662 65.8 8 0 0 0 0 0 9 19 7 6 45 1.7 2	0 5,229 0 0 0 4,971 713 142 736 528	Caloritic Conversion GJ 510,908 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		66   656, 77   255, 16   74,6 2	on 6J Volume tries 124 3,626 158 0 642 2,563 81 0 805 138	354,191 0 105,331	Volume of use  1,889  0  872  0 1,229	184,018 0 35,849	835 8 0 1,032 4 573 6	0 12,404	2,455 100,90 1,047 38,40 0	G 248 0 0 0 2 182 9 17 0 0	24,333 0 7,472 624	Volume of use 356 0 0 259 26 3	Calorific conversion 6J 35,453 0 10,647 948 122 470 47,639	371 3 0   889 3 0	Calorific onversion 35,855 ( 36,538 ( ( ( 72,393
Water	usage		10,000 m <sup>3</sup>	97.5	21.2		2.6	127.8	1.7	í	21.1		17.4	1	5.4	6.	1	28.5		18.4	-	1.3	3.		31.5	j
OUTP CO <sub>2</sub> en	UT nission		t-C02	76,131	17,86	4	1,318	136,364	2,818	30	D,693		55,578	22	,476	12,0	)14	6,755	5	21,159	1,	376	1,99	98	3,170	0
Atmosp exhaust	gas	Main smoke and soot gene    Unit	ulume and on: m³N/h ulume: m³N/h, egulation: ppm	Melting furnaces	2.39 Regulation of volume	h zero sulfur re	ncentration 230 53	of volume 10.0 0.1	No smoke and	Regulation content  * Use of tow content  Regulation of volume	20.1 2.65	Regulatii conten Regulatii of yolur	; 2.86 ; 0 ; 2.4 ; 0	assured Regulation content 353 Regulation of volume Regulation of volume	2.18   0.319 1.997   0.549		oke and	content Concentration regulation 150	16 Conce	Boilers  ulation Regulated Measurally value Value 10.36 0.0 entration 230 1 entration 0.25 0.0	Regulation Recontent Resolution No sr	gulated Measured value noke and ating facilities	content Concentration regulation 20	lated Measured ue value vith zero sulfur	Regulation Regulated value  * Use of town gas with content Concentration regulation   180	Measur value ith zero sult
<b>D</b> unium un	Public water areas	pH BOD COD Nitrogen Phosphorus Hexavalent chromium	mg/L mg/L mg/L mg/L mg/L	Regulated   Measure value   Value	value		Regulated value   Measured value	Regulated value   Measuret value	Regulated   Measure   Value   Value	5.8—8.6 25 25 25 6 120 1 16		Regu val	value	value — — — — — — — — — — — — — — — — — — —	Measured value — — — — — — — — — — — — — — — — — — —	Regulated value 5.8—8.6 15 15 25 120 8 0.5 0.1	Measured value 7.2 ND 8 5.3 2.90 ND ND	\$1.8—8.6 25 - 120 16 0.5	7.5 5. 9.8 – 9.3 5.2 ND	egulated Measure value value value value value 7.6 20 3 20 8.6 60 7.1 8 0.8 0.5 ND 0.1 ND	value — — — — — — — — — — — — — — — — — — —	Measured value — — — — — — — — — — — — — — — — — — —	Regulated value	Measured value	8 0.8 0.05	7.1 7.1 14 1.4 0.14 ND
Drainage	Sewerage	Lead Regulation value of COD volume Regulation value of nitrogen volume Regulation value of nitrogen volume Pegulation value of phosphorus volume pH GOD COD SS	mg / L kg/day kg/day kg/day — mg / L mg / L mg / L	113 12.8 110 16.4 14 0.208 5.7—8.7 7.3 300 3 - 3	-	- - - 7.5 3 -	- NU	230.3 15.68 163.5 5.44 21.8 0.27	2.6 0.40 2.855 0.44 0.257 0.03	97 49.93 14 52.6 85 6.26 - - -	2.63 2.62 0.408 - -	5.0-	- - - 3.0 8.1 ND	- - - 5.7—8.7 300	-	3.3 5.5 0.44 - -	1.1 1.85 0.0575 - - -	- - - -	- - - -		- - - 5.7—8.7 300 - 300	-   -	5.0—9.0 600 600	- - - 8.1 130 100 9.5		- - - -
Wa	ste	Volume of discharge Resource recovery rate	t	12,840	3,397		947	: 28,422 99	164		i,095 99		33,336 100	1,	246	89	0	265 99		2,086	3	: °	25:	3	673 98	3

## Results of PRTR Reporting (All numerals after the first 2 digits are rounded off) Unit: kg/year (dioxins: mg-TEQ/year)

Name		Number	Relea	ase v	ne	Transfer volume			
of plant or office	Name of substance	specified in Cabinet Order	Atmosphere	Public water areas	Soil	On-site landfills	Sewerage	Transfers to off-site	
	Ethylbenzene	40	3,100	0	0	0	0	61	
	Xylene	63	7,000	0	0	0	0	90	
Hanshin	1, 3, 5-trimethylbenzene	224	1,800	0	0	0	0	0	
plant	Toluene	227	53,000	0	0	0	0	1,500	
	Lead and its compounds	230	0	0	0	0	0	7,800	
	Nickel	231	3.2	0	0	0	0	120	
	Phenol	266	0	0	0	0	0	0	
	Ethylbenzene	40	6,800	0	0	0	0	0	
Hanshin	Xylene	63	22,000	0	0	0	0	0	
plant (Marushima)	Toluene	227	31,000	0	0	0	0	0	
	Nickel	231	0.7	0	0	0	0	16	
	Chromium and chromium (III) compounds	68	0	0	0	0	0	3,000	
	Toluene	227	1,900	0	0	0	0	0	
Hanshin plant	Nickel	231	3.0	0	0	0	0	110	
(Amagasaki)	Boron and its compounds	304	0	0	0	0	0	1,500	
	Manganese and its compounds	311	0.7	0	0	0	0	9,000	
	Molybdenum and its compounds	346	0	0	0	0	0	0	
Hanshin	Ethylbenzene	40	2,000	0	0	0	0	0	
plant	Xylene	63	2,500	0	0	0	0	0	
	Toluene	227	2,900	0	0	0	0	0	
	Bisphenol A type epoxy resin (liquid)	30	0	0	0	0	0	0	
Shin-	Xylene	63	1,800	0	0	0	0	0	
yodogawa factory	Cobalt and its compounds	100	0	0	0	0	0	140	
	Styrene	177	11,000	0	0	0	0	0	

Name		Number	Relea	ase v	olur	ne	Transfer volume			
of plant or office	Name of substance	specified in Cabinet Order	Atmosphere	Public water areas	Soil	On-site landfills	Sewerage	Transfers to off-site		
	Ethylbenzene	40	40,000	0	0	0	0	0		
	Xylene	63	69,000	0	0	0	0	0		
	Chromium and chromium (III) compounds	68	0	0	0	0	0	390		
Keiyo	Toluene	227	120,000	0	0	0	0	0		
plant (Funabashi)	Lead and its compounds	230	0	0	0	0	0	15,000		
	Nickel	231	0	0	0	0	0	24		
	Phenol	266	0	0	0	0	0	0		
	Manganese and its compounds	311	0	0	0	0	0	25,000		
Keiyo	Ethylbenzene	40	12,000	0	0	0	0	0		
plant (Distribution	Xylene	63	51,000	0	0	0	0	0		
center)	Toluene	227	12,000	0	0	0	0	0		
Keiyo plant	Xylene	63	1,800	0	0	0	0	0		
(Ichikawa)	Manganese and its compounds	311	0	0	0	0	0	50		
Keiyo plant (Gyotoku processing center)	Manganese and its compounds	311	0	0	0	0	0	46		
	Ethylbenzene	40	1,100	0	0	0	0	7,500		
	Xylene	63	1,900	0	0	0	0	16,000		
	Chromium and chromium (III) compounds	68	0	0	0	0	0	14,000		
	Cobalt and its compounds	100	0	0	0	0	0	0		
	1, 3, 5-trimethylbenzene	224	64	0	0	0	0	420		
Hirakata	Toluene	227	2,200	0	0	0	0	16,000		
plant	Lead and its compounds	230	0	0	0	0	0	2,700		
	Nickel	231	0	0	0	0	0	11		
	Boron and its compounds	304	0	0	0	0	0	0		
	Manganese and its compounds	311	0	0	0	0	0	12,000		
	Molybdenum and its compounds	346	0	0	0	0	0	0		

Name		Number	Relea	ase v	olur	ne	Transf	er volume
of plant or office	Name of substance	specified in Cabinet Order	Atmosphere	Public water areas	Soil	On-site landfills	Sewerage	Transfers to off-site
	Bisphenol A type epoxy resin (liquid)	30	0	0	0	0	0	1,700
	Ethylbenzene	40	1,700	0	0	0	0	570
Okajima	Xylene	63	13,000	0	0	0	0	4,300
plant	Chromium and chromium (III) compounds	68	0	0	0	0	0	9,200
	Phenol	266	0	0	0	0	0	C
	Manganese and its compounds	311	0	0	0	0	0	33,000
	Water-soluble zinc compounds	1	0	0	0	0	14	C
	2-aminoethanol	16	0	0	0	0	0	7,500
Sakai	Ethylbenzene	40	1,100	0	0	0	0	600
plant	Ethylene glycol	43	0	0	0	0	0	270
	Xylene	63	4,900	0	0	0	0	2,900
	Toluene	227	1,100	0	0	0	0	3,700
	2-aminoethanol	16	0	0	0	0	0	3,700
Sakai Rinkai	Ethylbenzene	40	48	0	0	0	0	140
plant	Xylene	63	220	0	0	0	0	560
	Toluene	227	470	0	0	0	0	580
	Ethylbenzene	40	5,500	0	0	0	0	190
	Ethylene glycol	43	0	0	0	0	0	(
Jtsunomiya	Xylene	63	25,000	0	0	0	0	560
	1, 3, 5-trimethylbenzene	224	3,000	0	0	0	0	61
	Toluene	227	1,600	0	0	0	0	970

Name		Number	Relea	ase v	Transfer volume			
of plant or office	Name of substance	specified in Cabinet Order	Atmosphere	Public water areas	Soil	On-site landfills	Sewerage	Transfers to off-site
	Water-soluble zinc compounds	1	0	41	0	0	0	760
	2-aminoethanol	16	0	0	0	0	0	6,100
	Ethylbenzene	40	16,000	0	0	0	0	240
Tsukuba	Ethylene glycol	43	0	0	0	0	0	0
plant	Xylene	63	70,000	0	0	0	0	3,100
	Chromium (VI) compounds	69	0	0	0	0	0	470
	Toluene	227	11,000	0	0	0	0	3,000
	Lead and its compounds	230	0	0	0	0	0	2,200
Kyuhoji	Xylene	63	800	0	0	0	0	870
business center	Toluene	227	1,100	0	0	0	0	2,000
	Ethylbenzene	40	2,100	0	0	0	0	73
Ryugasaki	Xylene	63	3,300	0	0	0	0	110
plant	Toluene	227	2,800	0	0	0	0	840
	Bis (2-ethylhexyl) adipate	9	0	0	0	0	0	290
Shiga plant	Styrene	177	38,000	0	0	0	0	0
ornga piarit	Di-n-butyl phthalate	270	0	0	0	0	0	67
Shin-yodogawa environmental plant center	Dioxins	179	0.0010	0	0	0	0	0.0065



## Data on KUBOTA Domestic Production Subsidiaries

Item		Unit		ta-C.I. akai)	Kubota-C.I. Kubota-C.I. (Odawara) (Tochigi)		Air Cor	oota nditioner chigi)	Kubota Precision Machinery		Industry (Head office and plant)				
NPU <sup>-</sup>	г														
				Volume of use	Calorific conversion GJ	Volume of use	Calorific conversion GJ	Volume of use	Calorific conversion GJ	Volume of use	Calorific conversion GJ	Volume of use	Calorific conversion GJ	Volume of use	Calorific conversion G
		Electricity	10,000 kWh	3,354	325,116	3,031	293,857	711	68,457	217	21,585	1,242	120,757	1,086	103,355
		Coal/Coke	t	0	. 0	0	0	0	. 0	0	0	0	0	0	. (
_		Town gas	1,000 m <sup>3</sup>	197	8,079	39	1,591	0	. 0	167	6,866	877	36,043	81	3,34
Energ	у	Kerosene	kL	24	895	0	. 0	4	153	3	106	2	83	1	5
		Light oil	kL	0	. 0	39	1,508	19	734	0	0	10	390	0	
		Heavy oil, LPG, etc.			1,347		220		144,380		1,459		583		53
		Total			335,437		297,176		213,725		30,017		157,855		107,28
Water	usage		10,000 m <sup>3</sup>		5.0	36	3.9	31	1.9	6	.9	2	.0	17	7.5
CO <sub>2</sub> e	UT mission		t-C02	12	2,498	11,7	747	12,7	771	1,2	80	6,3	16	5,0	94
		Main smoke and soot ge	noratina facilities		_		_	Diagol	engines	Boi	lers		_		_
		Unit	liciallily lacillilics	Regulation Reg	gulated Measured	Regulation Regulation	ulated ! Measured	Regulation Reg	gulated ! Measured			Regulation Regulated Measured content value value		Regulation Regulated Measur content value value	
Atmospheric exhaust gas		SOx Regulation of volume and K-value regulation: m*N/h NOx Regulation of volume: m*N/h, Concentration regulation: ppm Soot and g/m*N		No smoke and soot generating facilities		No smoke and soot generating facilities		Concentration   concentratio		K-value regulation 2.3 0.059  Concentration regulation 0.3 0.005  Concentration regulation 0.3 0.005		No smoke and soot generating facilities		No smoke and soot generating facilities	
	ı	uusi		Regulated	Measured	Regulated	Measured	rogulation			Measured	Regulated	Measured	Regulated	Measured
				Regulated value	value	Regulated value	value	Regulated value	Measured value	Regulated value	value	Regulated value	value	Regulated value	value
		pH			_	5.8-8.6	; 7.9	5.8-8.6	8.1	5.8-8.6	7.5	_	-	5.8-8.6	; 7.3
	Public	BOD	mg / L	=	_	60 60	ND ND	20	1.4	30 30	0.0	_	-	160 160	ND 1.1
	water	COD	mg/L mg/L	_	_	120	0.2	60	0.95	20	_	_	_	120	1.1
	areas	Nitrogen Phosphorus	mg/L	-	_	16	0.07	8	0.35	2	_	_	_	16	<u> </u>
		Hexavalent chromium		_	_	0.5	ND	0.1	ND	0.1	ND	_	_	0.5	!
)roinoso		Lead	mg/L	_	_	0.1	ND	0.1	ND	0.1	ND	_	-	0.1	ND
)rainage		Regulation value of COD volume	kg/day	_	_	-	- 140	-	_	-	_	_	_	-	-
		Regulation value of	kg/day	_	_	_	<u> </u>	_	! -	_	<u> </u>	_	_	_	! -
		nitrogen volume Regulation value of phosphorus volume	kg/day	-	_	_	<u> </u>	_	-	_	<u> </u>	_	_	_	. –
		pH phosphoras volume	— —	5.7-8.7	7.5	-	_	-	_	-	_	- (no specific facilities)	-	-	_
	0	BOD	mg / L	300	1	-	! -	-	-	-	-	- Identities)	-	-	! -
	Sewerage	COD	mg/L	-	3	-	-	-	-	-	-	-	-	-	-
		SS	mg / L	300	ND	-	-	-	-	-	-	-	-	-	-
				-	10		-0				20		2.1		
Wa	aste	Volume of discharge	t		16		52		99		39	49			2
		Resource recovery rat	te %	10	JU	10	00	9	9	10	00	9	ರ	Ę	14

## Results of PRTR Reporting (All numerals after the first 2 digits are rounded off) Unit: kg/year (dioxins: mg-TEQ/year)

Name		Number	Relea	ase v	Transfer volume			
of plant or office	Name of substance	specified in Cabinet Order	Atmosphere	Public water areas	Soil	On-site landfills	Sewerage	Transfers to off-site
	Xylene	63	0.7	0	0	0	0	25
Kubota-C.I.	Organotin compounds	176	8.8	0	0	0	0	0
(Sakai)	Toluene	227	15	0	0	0	0	0.9
	Lead and its compounds	230	17	0	0	0	0	0
Kubota-C.I.	Organotin compounds	176	10	0	0	0	0	1.0
(Odawara)	Lead and its compounds	230	35	0	0	0	0	37
Kubota-C.I. (Tochigi)	Lead and its compounds	230	0	0	0	0	0	300
Kubota-C.I. (Ishizu-nishi factory)	Lead and its compounds	230	1.4	0	0	0	0	0
Kubota Air	Xylene	63	1,300	0	0	0	0	340
Conditioner (Tochigi)	Toluene	227	1,000	0	0	0	0	280
Nippon Plastic Industry (Head office and plant)	Lead and its compounds	230	0	0	0	0	0	90