

Table S1 Hg emissions reduced by three retrofitting measures in each province

Province	Hg emissions reduced by three retrofitting measures (kg)						
	APCDs	SUS	PGE	Hg ⁰	Hg ²⁺	Hg _p	Total
Jiangsu	1355.30	1253.00	153.74	2164.08	581.51	16.45	2762.04
Inner Mongolia	1314.92	669.15	309.75	1420.21	848.74	24.88	2293.83
Shandong	1064.33	641.86	216.00	1086.35	812.10	23.73	1922.18
Shanxi	1060.45	574.01	151.02	1363.19	411.09	11.19	1785.47
Shaanxi	1336.42	282.24	85.26	1143.31	544.85	15.75	1703.91
Hebei	949.52	593.04	151.13	1341.40	341.43	10.86	1693.69
Guangdong	823.03	341.82	64.03	936.87	284.67	7.34	1228.88
Guizhou	232.47	880.83	39.64	840.37	303.64	8.93	1152.94
Zhejiang	473.50	437.96	101.00	904.13	106.08	2.25	1012.46
Liaoning	264.67	445.34	204.84	716.59	191.87	6.38	914.84
Henan	375.64	406.48	90.32	706.31	162.24	3.89	872.44
Sichuan	159.93	494.18	116.44	590.72	174.82	5.02	770.55
Anhui	468.29	49.68	97.29	656.09	-39.40	-1.43	615.26
Jiangxi	169.01	371.48	41.20	461.29	117.09	3.32	581.69
Fujian	468.13	53.47	25.28	367.73	172.87	6.27	546.88
Hunan	293.49	90.17	142.81	373.63	149.32	3.51	526.47
Jilin	239.62	127.43	132.23	336.85	157.86	4.58	499.29
Tianjin	128.12	325.51	23.91	354.02	120.04	3.49	477.54
Heilongjiang	152.22	139.85	81.64	171.53	196.20	5.98	373.71
Yunnan	188.77	93.22	8.54	184.33	103.19	3.00	290.52
Chongqing	/	258.63	/	186.37	71.43	0.84	258.63
Hubei	/	213.63	28.44	149.52	89.92	2.64	242.08
Beijing	/	211.37	13.86	161.82	61.15	2.26	225.23
Shanghai	198.33	/	10.28	205.18	3.47	-0.04	208.61
Guangxi	164.97	4.92	22.99	158.07	33.87	0.94	192.88
Qinghai	/	145.62	/	107.32	37.23	1.07	145.62
Gansu	135.30	2.44	/	163.46	-24.86	-0.88	137.73
Xinjiang	/	73.45	/	50.20	22.60	0.65	73.45
Ningxia	/	4.82	/	3.55	1.23	0.04	4.82
Sum	12016.43	9185.60	2311.64	17304.49	6036.25	172.91	23513.64

Note: The figures in Table S1 represent the sum of the amount of Hg emissions reduced by individual CFPPs' different retrofitting measures in each province. “/” means no data. Unit: kg.

Table S2 The source-receptor relationship of deposition reduction

	GD	GZ	HEB	IM	JS	LN	SHX	SD	SX	ZJ	Sum
BJ	0.08	0.09	5.55	3.82	1.22	0.54	1.01	5.79	3.13	0.12	21.35
TJ	0.05	0.05	3.70	1.16	1.01	0.50	0.41	9.62	0.99	0.09	17.58
HEB	0.70	0.70	106.90	37.20	11.10	4.90	10.20	79.90	39.80	1.00	292.40
SX	0.48	0.76	7.99	63.09	5.15	0.97	62.04	9.24	101.27	0.59	251.58
IM	2.80	3.00	28.70	211.50	13.00	20.40	36.40	23.50	41.40	2.80	383.50
LN	0.67	0.62	44.09	16.37	12.91	74.91	4.75	35.43	7.75	1.61	199.11
JN	0.75	0.68	12.69	12.71	8.77	15.95	4.89	18.46	6.99	1.35	83.24
HLJ	1.40	1.20	15.50	19.60	8.70	15.70	6.50	18.90	9.20	1.50	98.20
SH	0.10	0.09	0.28	0.37	9.00	0.15	0.24	0.82	0.33	10.13	21.51
JS	1.00	0.70	4.00	4.00	184.30	2.10	3.10	18.40	3.90	16.00	237.50
ZJ	2.05	0.92	2.66	3.49	28.29	1.46	2.62	6.30	3.48	47.45	98.72
AH	2.10	1.30	4.30	5.00	65.40	2.00	4.90	18.90	5.30	10.10	119.30
FJ	27.63	1.03	2.51	3.18	11.43	1.29	2.56	4.50	3.30	6.26	63.69
JX	12.30	1.70	3.70	4.60	22.90	1.90	4.00	10.00	4.80	9.10	75.00
SD	0.90	0.80	14.50	9.70	65.40	6.50	5.60	214.30	10.40	2.40	330.5
HEN	1.10	1.30	8.80	10.50	19.50	1.80	25.10	28.40	26.70	1.80	125.00
HB	2.70	4.90	6.10	8.60	17.40	1.80	15.10	17.90	9.20	2.90	86.60
HN	27.60	4.80	6.20	7.80	18.90	2.30	8.80	18.10	8.30	3.90	106.70
GD	144.90	1.30	3.10	3.50	11.40	1.50	2.90	6.00	3.70	3.90	182.20
GX	18.20	7.50	4.90	5.90	12.80	1.80	6.40	10.40	6.10	3.00	77.00
HAN	2.44	0.24	0.46	0.49	1.27	0.22	0.46	0.84	0.52	0.42	7.36
CQ	0.73	17.71	1.79	2.88	3.03	0.56	6.86	3.43	2.81	0.64	40.44
SC	2.10	22.50	4.60	9.30	6.50	1.60	25.00	6.40	6.80	1.80	86.60
GZ	1.40	147.30	2.40	3.30	4.80	0.90	5.60	5.20	3.40	1.00	175.30
YN	3.40	24.00	4.20	4.90	7.30	1.90	6.00	5.20	4.70	2.10	63.70

	GD	GZ	HEB	IM	JS	LN	SHX	SD	SX	ZJ	Sum
XZ	3.80	3.40	4.60	5.10	7.70	2.50	4.60	4.40	4.90	2.80	43.80
SHX	0.80	3.20	3.30	20.00	5.00	0.90	182.50	5.30	11.20	0.90	233.10
GS	1.00	2.70	2.10	9.20	3.10	0.90	24.10	2.00	3.50	0.90	49.50
QH	1.62	1.55	2.25	3.57	3.57	1.20	2.78	2.08	2.52	1.25	22.39
NX	0.11	0.36	0.26	2.89	0.36	0.10	3.36	0.24	0.59	0.11	8.38
XJ	3.30	2.90	5.10	6.80	7.90	2.80	5.10	4.70	5.50	2.50	46.60
Sum	268.21	259.30	317.23	500.52	579.11	172.05	473.88	594.65	342.48	140.42	3647.85

Note: Beijing (BJ); Tianjin (TJ); Hebei (HEB); Shanxi (SX); Inner Mongolia (IM); Liaoning (LN); Jilin (JL); Heilongjiang (HLJ); Shanghai (SH); Jiangsu (JS); Zhejiang (ZJ); Anhui (AH); Fujian (FJ); Jiangxi (JX); Shandong (SD); HEN (Henan); Hubei (HB); Hunan (HN); Guangdong (GD); Guangxi (GX); Hainan (HAN); Chongqing (CQ); Sichuan (SC); Guizhou (GZ); Yunnan (YN); Xizang (XZ); Shaanxi (SHX); Gansu (GS); Qinghai (QH); Ningxia (NX); Xinjiang (XJ). Provinces in the column are the receptors of Hg deposition reductions attributable to Hg reductions in sources. Provinces in row are the sources where their local Hg reduction contributed to deposition reductions in receptors. The figures in Table S2 represent the amount of Hg deposition reductions in receptors brought by Hg reductions in sources. Unit: kg.

Table S3 The health benefits received by each province

	Avoided deaths			Avoided IQ decrements		
	SUS	APCDs	PGE	SUS	APCDs	PGE
Beijing	0.89	0.62	0.15	156.81	32.82	121.00
Tianjin	0.92	0.55	0.14	177.22	33.06	118.96
Hebei	2.52	1.71	0.37	990.79	178.32	774.60
Shanxi	0.47	0.48	0.09	158.69	37.92	258.28
Inner Mongolia	0.38	0.28	0.10	98.38	29.12	92.20
Liaoning	1.74	1.25	0.37	249.26	61.20	193.83
Jilin	0.88	0.74	0.19	179.62	44.74	161.56
Heilongjiang	0.77	0.75	0.19	154.11	43.48	160.28
Shanghai	3.39	2.22	0.59	451.07	95.15	328.50
Jiangsu	6.24	3.15	0.90	1265.27	233.67	699.75
Zhejiang	5.54	3.31	1.03	1261.99	301.32	902.23
Anhui	3.18	1.51	0.57	916.55	209.75	481.52
Fujian	2.77	2.70	0.58	957.99	242.74	1014.74

	Avoided deaths			Avoided IQ decrements		
	SUS	APCDs	PGE	SUS	APCDs	PGE
Jiangxi	2.93	1.53	0.45	1047.95	208.54	583.74
Shandong	3.26	3.00	0.60	1021.47	232.39	985.92
Henan	0.85	0.61	0.16	279.31	62.17	242.78
Hubei	2.93	1.82	0.47	736.94	138.10	513.53
Hunan	1.79	1.22	0.50	500.10	152.48	372.29
Guangdong	4.33	5.40	0.84	1550.76	374.86	2049.52
Guangxi	1.25	1.13	0.25	472.98	112.18	474.77
Hainan	0.25	0.47	0.06	94.53	28.10	190.66
Chongqing	2.04	0.77	0.36	352.13	68.26	160.64
Sichuan	6.49	1.93	1.01	1128.91	190.88	417.24
Guizhou	1.63	0.23	0.09	643.03	47.79	138.89
Yunnan	0.83	0.45	0.10	304.47	45.01	205.92
Shaanxi	0.33	0.31	0.06	109.00	22.72	115.53
Gansu	0.08	0.06	0.02	36.79	8.17	31.28
Qinghai	0.02	0.01	0.00	15.53	3.20	11.45
Ningxia	0.02	0.02	0.00	8.71	2.23	9.22
Xinjiang	0.09	0.07	0.02	54.29	11.64	47.32

Note: The figures in Table S3 represent the health benefits (avoided deaths and avoided IQ decrements) in each province brought by different retrofitting measures.

Table S4 The provincial contributions to national health benefits

	Avoided deaths	Avoided IQ decrements
Jiangsu	17	4397.41
Shandong	16	4294.29
Hebei	8	2227.27
Inner Mongolia	7	2113.85
Guangdong	7	1824.25
Shaanxi	6	1640.06
Shanxi	6	1627.69
Guizhou	5	1411.91
Zhejiang	4	924.83
Liaoning	3	632.78

Note: This table show the top 10 provinces which made largest contribution to national total health benefits.

Table S5 The uncertainty range of Hg emission reductions and health impacts

	Uncertainty
Hg emissions	23.50 t (13.35 t, 36.67 t)
IQ decrements	30484.77 (5954.84, 59032.78)
Deaths	114 (46, 256)

Note: The lower and upper limits of the uncertainty ranges are P10 and P90 values of the statistical distributions in this study, which is evaluated by a Monte Carlo simulation with 10000 samplings.

Table S6 Mercury Emission reduction from small unit shutdown

Decommissioned power plant	Reduced coal consumption (kt)	Air pollutant control device	Emission reduction (kg)
Beijing Datang Gaojing Power Plant	1720.73	SCR+WFGD+ESP	77.236
Beijing Jingneng Thermal Power Plant	2210.19	SCR+SNCR+WFGD+ESP	99.206
Guohua Beijing Thermal Power Branch (First Thermal)	778.03	SCR+SNCR+WFGD+ESP	34.923
Tianjin First Thermal Power Plant	612.02	ESP	70.455
Tianjin Chentang Thermal Power Co.Ltd	197.14	ESP	22.694
Tianjin Yongli Power Union	166.16	ESP	19.128
Tianjin Chentang Thermal Power Phase III	1795.28	ESP	206.671
Qinhuangdao Electric Power Company Beishan Huashi Power Plant	14.00	ESP	1.456
Shijiazhuang Economic Development Zone Coal and Electricity Company	54.96	ESP	5.715
Tangshan Xinfeng Power Generation Co.Ltd	114.85	ESP	11.942
Tangshan New District Thermal Power Plant	685.33	ESP	71.262
Hengshui Xinyi Thermal Power Company	41.95	ESP	4.525
Cylinder thermal power plant	98.29	ESP	10.603
Luohe Power Plant	786.36	ESP	81.767
Zunhua Xinli Energy Development Co.Ltd	99.01	ESP	10.680
Hebei Huadian Shijiazhuang Luhua Thermal Power Co.Ltd	268.33	ESP	28.944
Hebei Huadian Shijiazhuang Thermal Power Co.Ltd	57.08	ESP	6.157
Xiandewang Coal gangue Power Plant	37.05	ESP	3.852
Tangshan Saide Thermal Power Company	443.04	ESP	46.068
Tangshan Huarun Thermal Power Co.Ltd	674.46	ESP	70.131
Hebei Xingtai Power Generation Co.Ltd	1314.00	ESP	141.740
Taiyi Power Generation Co., Ltd.	56.29	WFGD+ESP	3.319

Decommissioned power plant	Reduced coal consumption (kt)	Air pollutant control device	Emission reduction (kg)
Shanxi Jinneng Group Datong Thermal Power Plant	271.67	ESP	26.291
Jingle Power Plant	15.91	ESP	1.540
Gangyu Dongshan Thermal Power Plant	17.49	ESP	0.852
Hexi Power Plant	31.32	ESP	3.144
Luan Ronghai Power Plant	39.35	ESP	1.917
Pianguan Hongyuan Power Plant	0.49	ESP	0.047
Shuo Zhou Fuhua Electric Power Plant	152.65	ESP	14.773
Jingle Power Plant	15.91	ESP	1.540
Shentou Second Power Plant	1724.68	ESP	166.909
Taixing Power Co., Ltd.	39.64	ESP	3.836
Xuangang (self-supplied) power plant	41.90	ESP	4.055
Shentou Frist Power Plant	1666.08	ESP	161.238
Yongji Thermal Power Plant	147.70	ESP	14.294
Taiyuan Jinyang Power Generation Company	152.05	ESP	14.715
Gangyu Dongshan Thermal Power Plant	69.95	ESP	7.022
Qingxu Meijin Self-supplied power plant	23.75	ESP	2.298
Hohhot Thermal Power Plant (Northern Company)	279.40	ESP	31.983
Yuanbaoshan Power Generation Power Plant	976.27	ESP	107.726
Shandong Power Company Shangwan Thermal Power Plant	49.53	ESP	5.465
Fengzhen Power Plant (Northern Company)	1394.38	ESP	159.613
Baotou Frist Power Plant (Northern Company)	271.60	ESP	29.970
Shenhua Zhungeer Power Generation Company	331.50	ESP	36.578
Damo Power Plant	359.07	WFGD+ESP	24.138

Decommissioned power plant	Reduced coal consumption (kt)	Air pollutant control device	Emission reduction (kg)
Mengxi Cement Self-supplied Power Plant	46.96	ESP	5.182
Huolinhe Hongjun Aluminum Electric Company	550.27	WFGD+ESP	36.992
Ordos Thermal Power Plant	122.53	WFGD+ESP	8.237
Baori Hiller Power Plant	88.99	ESP	9.819
Jinzhou Thermal Power Company	11.27	ESP	1.001
Xiongyue Printing and Dyeing Factory Power Station	4.00	ESP	0.355
Huarun Power (Jinzhou) Plant	1161.14	WFGD+ESP	62.839
Liaoning Chuncheng Yinzhu Thermal Power Plant	63.70	ESP	5.658
Yingkou Paper Mill Power Station	5.52	ESP	0.490
State Power Investment Dalian Ganjingzi Thermal Power Plant	5.64	ESP	0.501
Guodian Power Dalian Development Zone Thermal Power Plant	434.44	ESP	40.034
Liaoyang Thermal Power Plant	29.50	ESP	2.620
Liaoyang First Thermal Power Plant	105.05	ESP	9.331
Tieling Thermal Power Plant	2.21	ESP	0.197
Jinzhou Donggang Electric Power Plant	3483.41	ESP	309.431
Changchun First Thermal Power Plant	623.12	ESP	46.944
Siping Thermal Power Plant	46.30	ESP	3.362
Hunjiang Power Plant	593.48	WFGD+ESP	26.258
Longjing Thermal Power Plant	28.75	ESP	2.088
Baicheng Power Generation Company	11.78	ESP	0.856
Huaneng Huaiyin Power Plant	517.30	WESP	66.586
Sheyanggang Power Plant	321.39	ESP	39.878
Yancheng Power Plant Unit 8	10.22	ESP	1.268

Decommissioned power plant	Reduced coal consumption (kt)	Air pollutant control device	Emission reduction (kg)
Yucheng Power Plant	445.08	WFGD+ESP	33.645
Nanjing Huarun Thermal Power Plant	661.19	ESP	82.040
Suzhou Dongwu Thermal Power Plant	27.65	ESP	3.431
Nanhua Thermal Power Plant	25.42	ESP	3.154
Huadian Yangzhou Power Plant	430.27	WESP	53.387
Xuzhou Power Power Plant	1208.23	ESP	149.916
Jiangyin Xingcheng Special Steel Power Plant (220kV)	17.26	ESP	2.221
Wuxi Shuanghejian Thermal Power Plant	32.29	ESP	4.007
Wuxi Xielian Thermal Power Plant	271.50	ESP	33.687
Yixing Thermal Power Plant	11.27	ESP	1.399
Jiangyin Huamei Thermal Power Plant (Huaguang)	5.01	WFGD+ESP	0.379
Suzhou Qiandeng Thermal Power Plant	2.99	ESP	0.371
Changshu Suyu Thermal Power Plant	36.71	WFGD+ESP	2.775
Yancheng Thermal Power Plant	81.01	ESP	10.051
Wuxi Xinyang Thermal Power Company Thermal Power Plant	8.92	ESP	1.107
Jiangsu Tianhong Chemical Power Plant (Xinyuan)	9.56	WFGD+ESP	0.722
Jiangyin Sanfangxiang Thermal Power Plant	47.91	WFGD+ESP	3.622
Changzhou First Thermal Power Plant	25.18	WFGD+ESP	1.903
Zhenjiang Dagang Thermal Power Plant	13.81	ESP	1.778
Hongze Thermal Power Plant	12.76	ESP	1.643
Liyang Thermal Power Plant	33.38	ESP	4.142
Jiangyin Chengxing Phosphorus Thermal Power Plant	42.55	WFGD+ESP	3.216
Zhangjiagang Aoyang Co., Ltd. Thermal Power Plant	7.48	ESP	0.963

Decommissioned power plant	Reduced coal consumption (kt)	Air pollutant control device	Emission reduction (kg)
Jiangyan Fertilizer Plant Thermal Power Station	4.31	ESP	0.534
Changzhou Zhenhua Cogeneration Power Plant	39.52	WFGD+ESP	2.988
Danyang Fertilizer Factory	6.81	WFGD+ESP	0.515
Guodian Jianbi Power Plant	902.20	ESP	116.129
Xuzhou Huamei Power Plant	458.27	ESP	56.861
Zhangjiagang Hengdong Thermal Power Plant	190.18	ESP	24.479
Nanjing Second Thermal Power Plant	776.59	ESP	96.358
Taicang Port Environmental Protection Power Plant	785.78	ESP	97.498
Suzhou Thermal Power Plant	8.45	ESP	1.049
Wujiang Thermal Power Plant	11.14	ESP	1.382
Qidong Blue Sky Thermal Power Plant	19.31	ESP	2.397
Jiangyin Huaxi Thermal Power Plant	68.46	WFGD+ESP	5.175
Jiangyin Huaqiang Stainless Steel Material Factory	4.74	WFGD+ESP	0.358
Wujiang Yingxiang Thermal Power Plant	1.31	ESP	0.162
Nantong Acetate Fiber Co.	0.95	ESP	0.118
Xinyi Tongxin Thermal Power Plant	88.99	ESP	11.042
Xuzhou West District Environmental Protection Thermal Power Plant	119.56	ESP	14.835
Wujin Hutang Thermal Power Plant	22.61	ESP	2.806
Jiangyin Hailan Group Thermal Power Plant	41.45	WFGD+ESP	3.133
Zhangjiagang bonded Zone Thermal Power Plant	28.88	ESP	3.718
Xuzhou Huamei Power Plant	229.13	ESP	28.431
Yixing Xielian Thermal Power Plant	283.95	ESP	35.232
Yancheng Power Plant Unit 9	280.77	ESP	34.837

Decommissioned power plant	Reduced coal consumption (kt)	Air pollutant control device	Emission reduction (kg)
Jiangyin Xingcheng Special Steel Power Plant (220kV)	17.26	ESP	2.221
Wuxian Waikutang Thermal Power Plant	3.81	ESP	0.472
Wujiang Thermal Power Plant	12.59	ESP	1.562
Taicang Xinzhonggang Xiexin Thermal Power Plant	170.13	ESP	21.109
Yancheng Thermal Power Plant	81.01	ESP	10.051
Xuzhou Jinshanqiao Thermal Power Plant	41.70	ESP	5.174
Jintai Environmental Protection Thermal Power Plant	77.69	ESP	9.639
Nanjing Xinsu Power Plant	13.38	ESP	1.661
Jiangsu Yangguan Xinqiao Thermal Power Plant	11.52	WFGD+ESP	0.871
Zhangjiagang Jinliu Thermal Power Plant	17.99	ESP	2.315
Wujiang Linhu Thermal Power Plant	55.41	ESP	6.875
Xuzhou Bashan Environmental Protection Thermal Power Plant	138.66	ESP	17.205
Suzhou Iron and Steel Plant	18.31	ESP	2.272
Shaoxing Thermal Power Plant	17.64	FF	1.022
Henghua Thermal Power Plant	56.59	ESP	6.514
Pinghu Thermal Power Plant	23.25	ESP	1.347
Ningbo Zhenhai Thermal Power Plant	16.15	ESP	1.858
Zhejiang Zheneng Qianqing Power Generation Co., Ltd.	347.82	ESP	41.531
Zhejiang Zheneng Qianqing Power Generation Co., Ltd.	375.64	ESP	44.854
Hongshan Thermal Power Company	41.42	ESP	4.946
Hongbao Thermal Power Plant	54.10	ESP	6.460
Deqing Zhongneng Thermal Power Co., Ltd.	11.24	WFGD+ESP	0.788
Ningbo Shunlong Electric Industry Co., Ltd.	30.71	ESP	3.535

Decommissioned power plant	Reduced coal consumption (kt)	Air pollutant control device	Emission reduction (kg)
Cixi Jinlun Energy Development Co., Ltd.	33.01	WFGD+ESP	2.315
Huangyan Thermal Power Co., Ltd.	31.20	WFGD+ESP	2.188
Hangzhou Huadian Banshan Power Generation Co., Ltd. (Coal Power)	414.65	ESP	49.511
Juhua Thermal Power Plant	196.29	ESP	22.593
Jinjiang Thermal Power Plant	125.20	ESP	14.411
Huashen Thermal Power Co., Ltd.	38.07	WFGD+ESP	2.670
Xiaoshan Power Plant	664.49	WFGD+ESP	46.597
Zhejiang Xinfeng Thermal Power Co., Ltd.	31.98	ESP	3.818
Zaozhuang Nanjiao Thermal Power Co., Ltd.	88.97	ESP	9.160
Lubei Enterprise Group Thermal Power Plant	301.41	ESP	29.913
Langgou Thermal Power Plant	9.28	ESP	0.921
Guozhuang Power Plant	4.36	ESP	0.449
Taoyang Power Plant	7.01	ESP	0.696
Yangzhuang Power Plant	14.48	ESP	1.437
Chazhuang Power Plant	29.48	WFGD+ESP	1.782
Caozhuang Power Plant	30.55	WFGD+ESP	1.847
Chazhuang Low Calorific Value Power Plant	57.92	WFGD+ESP	3.502
Baizhuang low calorific value power plant	102.20	ESP	10.143
Sun Paper Thermal Power Plant #1 Machine	102.57	ESP	10.180
Centennial power	379.73	ESP	37.687
Wusuotun Shengjian Power Plant	266.15	ESP	26.414
Yanggu Xiangguang Thermal Power Co., Ltd.	91.92	ESP	9.123
Xuchang Mine Power Plant	39.44	ESP	3.914

Decommissioned power plant	Reduced coal consumption (kt)	Air pollutant control device	Emission reduction (kg)
Yanggu Thermal Power Plant	141.64	ESP	14.057
Yinhe Thermal Power Plant	120.29	ESP	11.938
Dongming Petrochemical Thermal Power Co., Ltd.	8.75	WFGD+ESP	0.529
Yaxing Chemical Industry Co., Ltd.	17.75	ESP	1.761
Zibo Hongda Thermal Power Co., Ltd.	120.82	ESP	12.439
Yantai Power Plant	298.11	ESP	29.586
Linyi Power Plant	375.17	ESP	37.234
Binzhou Chemical Group Thermal Power Plant	10.87	WFGD+ESP	0.657
Zibo Thermal Power	437.14	ESP	45.006
Qingdao Haijing Chemical Company	7.50	ESP	0.744
Tengzhou Ruida Thermal Power Co., Ltd.	15.51	ESP	1.539
Dongying Tianxin Thermal Power Plant (Resale)	24.35	WFGD+ESP	1.472
Huangdao Power Plant	583.62	WFGD+ESP	26.488
Nanshan Power Plant	125.99	ESP	12.504
Chiping Huaxin Thermal Power Plant	1704.50	WFGD+ESP	103.060
Hebi Power Plant	14.00	ESP	1.690
Jiaozuo Power Plant #5~6	262.82	ESP	30.576
Luoyang Longyu Hongguang Co., Ltd.	403.99	ESP	47.000
Xinyuan Thermal Power Plant of Commercial Aluminum Industry	145.73	ESP	16.953
Shangqiu Fengyuan Thermal Power Co., Ltd.	237.03	ESP	27.576
Jiaozuo Power Plant 1~4 Machine	808.13	ESP	94.016
Suzhou Huiyuan Electric Heating Company	381.32	ESP	45.928
Jingdezhen Power Plant (Summary)	1774.81	WFGD+ESP	159.666

Decommissioned power plant	Reduced coal consumption (kt)	Air pollutant control device	Emission reduction (kg)
Anyuan Industrial Co., Ltd. Anyuan Power Plant	145.13	ESP	22.232
Pingxiang Power Plant	953.85	ESP	70.896
Fenyi Power Plant	178.98	WFGD+ESP	16.102
Jiujiang Power Plant	538.08	ESP	79.456
Jiujiang Power Plant	591.89	WFGD+ESP	18.778
Jingmen Power Plant	868.75	ESP	110.846
Changyuan First Power Generation Co., Ltd.	513.65	ESP	67.988
Datang Xiangtan Power Plant	151.56	WFGD+ESP	8.795
Tang Leiyang Power Plant	85.78	WFGD+ESP	4.978
Baisha Power Company Baisha Plant	34.61	ESP	3.297
Yiyang Stone Coal Power Plant	290.05	ESP	27.628
Hunan Zhicheng Chemical Thermal Power Plant	6.78	ESP	0.670
Guangzhou Paper Factory	278.07	ESP	29.796
Guangzhou Meishan Sugar Factory	33.65	ESP	3.606
Doumen County Baijiao Sugar Factory (Yili)	78.84	WFGD+ESP	4.961
Lianzhou Power Plant 1~4	1428.88	ESP	147.593
Shantou First Thermal Power Plant	36.71	ESP	3.792
Deyi Thermal Power Plant	77.65	ESP	6.997
Yongding Jinye Thermal Power Co., Ltd.	47.31	WFGD+ESP	2.597
Shaowu Power Plant (expansion)	184.92	ESP	17.286
Luzhou Huangpu Electric Power Co., Ltd.	29.27	ESP	3.209
Guodian Minjiang Power Generation Co., Ltd.	1185.06	ESP	134.802
Weiyuan Nengxing Power Generation Company	61.71	ESP	6.767

Decommissioned power plant	Reduced coal consumption (kt)	Air pollutant control device	Emission reduction (kg)
Yibin Power Generation Co., Ltd.	903.21	ESP	99.039
Da'an Salt Plant Power Station	17.72	WFGD+ESP	1.183
Tianyuan Chemical Plant Power Station	180.34	ESP	19.775
Honghe Chemical Company Power Plant	9.76	ESP	1.110
Luhua Plant (Thermal Power)	3.00	ESP	0.329
Qianbei Power Plant	1411.06	ESP	192.673
Panxian Power Plant	2220.17	ESP	303.152
Guiyang Power Plant	760.25	ESP	107.689
Qingzhen Power Plant	751.59	ESP	102.626
Qujing Enhong Coal Mine Power Plant	239.56	ESP	16.302
Houyuan County, Fuyuan County	207.28	ESP	14.633
Captive power plant of Pinglang Coal Mine, Lufeng County	10.66	ESP	0.725
Captive power plant of Yipinglang Salt Mine, Lufeng County	744.80	ESP	50.682
Luxi County Guishan Coal Mine Power Plant	56.58	ESP	3.850
Shaanxi Qinling Power Generation Co., Ltd.	713.58	ESP	97.584
Shaanxi Qinling Power Generation Co., Ltd.	713.58	ESP	97.584
Datang Hancheng Power Plant	542.33	WFGD+ESP	45.183
Yellow River Energy-saving Self-provided Power Plant	62.37	WFGD+ESP	5.196
Xinjiang Red Wild Goose Pool power plant	198.41	WFGD+ESP	2.477
Xinjiang Hami First Power Plant	79.88	WFGD+ESP	0.997
Wusu Thermal Power	80.57	WFGD+ESP	1.006
Yili First Thermal Power Plant	214.29	ESP	4.555
Tashidian Thermal Power Plant	501.10	ESP	10.650

Decommissioned power plant	Reduced coal consumption (kt)	Air pollutant control device	Emission reduction (kg)
Beitun Thermal Power Plant	69.00	ESP	1.414
Lasqui Thermal Power Plant	69.00	ESP	1.414
Xinjiang Weihuliang Power Generation power plant	605.04	WFGD+ESP	12.859
Kashgar Power Generation Company	324.61	WFGD+ESP	6.899
Xinjiang Tiechanggou Power Generation power plant	326.20	ESP	6.933
Baicheng Power Plant	512.90	ESP	10.901
Yili Second Thermal Power Plant	248.34	ESP	5.278

Note: This table show the detailed information of power plants decommissioned during 2011-2015.

Table S7 Mercury Emission reduction from application of APCDs

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Tianjin Junliangcheng Power Plant	WFGD+ESP-FF	SCR	3.466
Tianjin Huaneng Yangliuqing Thermal Power Co., Ltd.	WFGD+ESP	SCR	26.273
Tianjin Datang Panshan Power Generation Co., Ltd.	WFGD+ESP	SCR	18.731
Tianjin Chentang Co.,Ltd.	ESP+FF	WFGD	5.085
Tianjin Guohua Panshan Power Generation Co., Ltd.	WFGD+ESP	SCR	16.590
Tianjin Guotou Jinneng Power Generation Co., Ltd.	WFGD+ESP	SCR	57.050
Sinopec Tianjin Branch Thermal Power Department Second Power Station Place	WFGD+ESP	WFGD	0.922
Guohua Dingzhou Power Generation Co., Ltd.	WFGD+ESP	SCR	44.217
Douhe Power Plant (Datang)	WFGD+ESP	SCR	42.549
Qian'an Datang Thermal Power Co., Ltd.	WFGD+ESP	SCR	6.776
Baoding Thermal Power Plant	WFGD+ESP	SCR	7.842
Tangshan Kailuan Dongfang Power Generation Co., Ltd.	ESP	SCR	63.497
Zhangjiakou Power Plant	WFGD+ESP	SCR	56.579
Hebei Guohua CangdongPower Generation Co. Ltd.	SCR+WFGD+ESP	SCR	24.401
Guodian Huaian Thermal Power Company	WFGD+ESP	SCR	27.896
Zhangzhou Huarun Thermal Power Co., Ltd.	WFGD+ESP	SCR	12.367
Handan Thermal Power Co., Ltd.	WFGD+ESP	SCR	7.690
Guodian Hebei Longshan Power Generation Co., Ltd.	WFGD+ESP	SCR	50.279
Qinhuangdao Power Generation Co., Ltd.	WFGD+ESP	SCR	46.462
Qinhuangdao Qinre Power Generation Co., Ltd.	ESP	SCR	120.419
Guodian Chengde Thermal Power Plant	WFGD+ESP	SCR	31.467
Luanhe Power Plant	ESP	SCR+WFGD	81.155

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Hengshui Hengxing Power Generation Co., Ltd.	WFGD+ESP	SCR	23.709
Hengfeng Power Generation Co., Ltd.	WFGD+ESP	SCR	26.080
Sanhe Power Generation Co., Ltd.	WFGD+ESP	SCR	34.709
Huaneng Shang'an Power Plant	ESP	WFGD	42.615
Hebei Xibaipo Power Generation Co., Ltd.	WFGD+ESP	SCR	25.392
Shougang Jingtang Iron and Steel Co., Ltd.	WFGD+ESP	SCR	27.731
Hebei Huadian Shijiazhuang Yuhua Thermal Power Co., Ltd.	WFGD+FF	SCR	11.226
Hebei Huadian Shijiazhuang Thermal Power Co., Ltd.	ESP	WFGD	81.878
Hebei Datang Wangtan Power Generation Co., Ltd.	WFGD+ESP	SCR	52.650
Shentou Second Power Plant	WFGD+ESP	SCR	43.469
Zhangze Power Plant	WFGD+ESP	SCR	15.065
Hejin Power Plant	WFGD+ESP	SCR	24.460
Shanxi Linfen Thermal Power Plant	ESP	SCR	37.633
Taiyuan First Thermal Power Plant	WFGD+ESP	SCR	61.130
Guodian Yuci Thermal Power Company	WFGD+ESP	SCR	20.568
Taiyuan Second Thermal Power Plant	WFGD+ESP	SCR+WFGD	56.177
Datang Yungang Thermal Power Company	ESP	SCR+WFGD	30.801
Tongmei Datang Tashan Power Generation Company	WFGD+ESP	SCR	43.932
Datang Yuncheng Power Generation Co., Ltd.	WFGD+ESP	SCR	35.384
Datang Linfen Thermal Power Co., Ltd.	WFGD+ESP	SCR	2.562
Sunshine Power Plant	WFGD+ESP	SCR	23.670
Shanxi Zhangshan Power Generation Company	WFGD+ESP	SCR	41.681
Zhaoguang Power Generation Co., Ltd.	WFGD+ESP-FF	SCR	51.689

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Liulin Power Plant	WFGD+ESP	SCR	7.815
Shanxi Huaguang Power Generation Company	WFGD+FF	SCR	29.862
Shanxi Xingeng Power Generation Co., Ltd	WFGD+ESP	SCR	129.223
Xinzhou Guangyu Coal and Electricity Co., Ltd.	WFGD+ESP	SCR	18.540
Luneng Hequ Power Plant	WFGD+ESP	SCR	37.613
Guodian Power Datong Power Generation Co., Ltd.	ESP	SCR	89.027
Datang Shener Power Plant	WFGD+ESP	WFGD	22.819
Yangcheng International Power Generation Co., Ltd.	WFGD+ESP	SCR+WFGD	93.302
Datang Yangcheng Power Generation Company	WFGD+ESP	SCR	128.550
Taigang Stainless Steel Self-supplied Power Plant	WFGD+ESP	SCR	15.477
Huadian Donghua Power Generation Company	WFGD+ESP	SCR	85.511
Baotou No. 3 Power Plant (Northern Company)	WFGD+ESP	SCR	27.621
Haibowan Power Plant (Northern Company)	WFGD+ESP	SCR+WFGD	102.267
Wuhai Thermal Power Plant (Northern Company)	WFGD+ESP	SCR	49.246
Tongliao Huolinhe Hangkou Power Generation Co., Ltd.	WFGD+ESP	SCR+WFGD	34.545
Dalat Power Generation Company (Northern Company)	WFGD+ESP	SCR	51.605
Guodian Inner Mongolia Dongsheng Thermal Power Co., Ltd.	WFGD+ESP	SCR+WFGD	29.963
Erdos Electric Power Co., Ltd.	WFGD+ESP	SCR+WFGD	109.310
Zhenglanqi Shangdu Power Generation Company (Northern Company)	WFGD+ESP	WFGD	111.108
Datang Tuoketuo Power Company	WFGD+ESP	SCR	174.885
Baiyinhua Jinshan Power Generation Co., Ltd.	WFGD+ESP	SCR	29.644
Suizhong Power Generation Co., Ltd.	WFGD+ESP	SCR	48.762
Huaneng Dalian Power Plant	WFGD+ESP	WFGD	59.310

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Liaoning Oriental Power Co., Ltd.	WFGD+ESP	WFGD	12.166
Huaneng Dandong Power Plant	WFGD+ESP	WFGD	21.761
Fuxin Power Generation Co., Ltd.	WFGD+ESP	WFGD	24.777
Guodian Power Dalian Zhuanghe Power Generation Company	WFGD+ESP	SCR	24.735
China Power Investment Fushun Thermal Power Company	WFGD+ESP	SCR	26.699
Huadian Liaoning Tieling Power Generation Co., Ltd.	WFGD+ESP	SCR	46.462
Huaneng Jiutai Power Plant	WFGD+ESP	WFGD	45.416
Changchun Thermal Power Development Co., Ltd.	WFGD+ESP	WFGD	35.032
Shuangliao Power Plant	WFGD+ESP	SCR	21.572
Guodian Jilin Jiangnan Thermal Power Co., Ltd.	WFGD+ESP	SCR	80.645
Siping First Thermal Power Company	WFGD+ESP	SCR	56.958
Harbin Thermal Power Plant	WFGD+ESP	SCR	6.185
Harbin Third Thermal Power Plant	WFGD+ESP	SCR	75.784
Huadian Energy Co., Ltd. Jiamusi Thermal Power Plant	WFGD+ESP	SCR	6.472
Huadian Group Qiqihar Thermal Power Plant	WFGD+ESP	SCR	8.847
Oilfield thermal power plant	WFGD+ESP	SCR	54.931
Wujing thermal power plant	WFGD+ESP	SCR	25.601
Waigaoqiao Power Co., Ltd.	WFGD+ESP	WFGD	21.892
Wujing Second Power Generation Co., Ltd.	WFGD+ESP	SCR	12.949
Waigaoqiao Second Power Generation Co., Ltd.	ESP	SCR+WFGD	48.698
Wujing Power Co., Ltd.	ESP	SCR+WFGD	6.353
Waigaoqiao Third Power Generation Co., Ltd.	WFGD+ESP	SCR	25.866
Changxing Island Second Power Plant	ESP	WFGD	4.641

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Baosteel Power Plant	WFGD+ESP	SCR	23.185
Huaneng Shanghai Shidongkou Power Generation Co., Ltd.	WFGD+ESP	SCR	17.776
Shanghai Petrochemical Co., Ltd. Thermal Power Division	ESP	WFGD	11.371
Huaneng Nanjing Power Plant	WFGD+ESP	SCR	24.396
Nanjing Second Thermal Power Plant	WFGD+ESP	SCR	2.475
Jiangsu Ligang Power Co., Ltd.	WFGD+ESP	SCR	34.060
Jiangsu Ligang Power Co., Ltd.	WFGD+WESP	SCR	76.397
Xuzhou Huaxin Power Generation Co., Ltd.	WFGD+ESP	SCR	25.227
Tianshenggang Power Generation Co., Ltd.	WFGD+WESP	SCR	28.973
Xuzhou China Resources Power Co., Ltd.	WESP	WFGD	84.723
Huaneng Nantong Power Plant	WFGD+ESP	WFGD	41.597
Jiangyin Thermal Power Co., Ltd.	WFGD+ESP	SCR	9.211
Yangzhou Second Power Generation Co., Ltd.	ESP	WFGD	52.236
China Guodian Corporation Jianbi Power Plant	WFGD+ESP	SCR	16.514
Xinhai Power Co., Ltd.	ESP	WFGD	47.921
Nanjing China Resources Thermal Power Co., Ltd.	WFGD+WESP	SCR	26.853
Jiangsu Zhenjiang Power Generation Co., Ltd.	WFGD+WESP	SCR	27.967
Jiangyin Sulong Thermal Power Co., Ltd.	WFGD+ESP	SCR	49.543
China Resources (Changshu)Power Co., Ltd.	WFGD+ESP	SCR	92.579
Jiangsu Xutang Power Generation Co., Ltd.	ESP	SCR+WFGD	21.015
Zhangjiagang Shazhou Electric Power Co., Ltd.	WFGD+ESP	SCR	57.496
Guodian Changzhou Power Generation Co., Ltd.	WFGD+ESP	SCR	63.141
Guodian Taizhou Power Generation Co., Ltd.	WFGD+ESP	SCR	100.969

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Datang Nanjing Power Plant	WFGD+ESP	SCR	52.429
Yangtze Petrochemical Company Thermal Power Plant	ESP	SCR+WFGD	47.352
Zhangjiagang Junma Polyester Products Co., Ltd.	WFGD+ESP	SCR	9.129
Jiangsu Huadian Yangzhou Power Generation Co., Ltd.	WFGD+WESP	SCR	22.007
Guodian Jiangsu Jianbi Power Generation Co., Ltd.	WFGD+ESP	SCR	21.748
Jiangsu Huaiyin Power Generation Co., Ltd.	WFGD+ESP	SCR	17.569
Taicang Port Xiexin Power Generation Co., Ltd.	WFGD+ESP	SCR	250.394
Nanjing Chemical Industry Park Thermal Power Co., Ltd.	WFGD+ESP	SCR	8.078
Huaneng (Suzhou Industrial Park) Power Generation Co., Ltd.	WFGD+ESP	SCR	43.301
Zhejiang Sanxingmsung Thermal Power Co., Ltd.	WFGD+ESP	SCR	5.501
Xiaoshan Jinjiang Green Energy Power Plant (garbage)	WFGD+ESP	SCR	0.119
Fuchunjiang Environmental Thermal Power Co., Ltd. (garbage)	ESP	SCR	2.521
Fuchunjiang Environmental Thermal Power Co., Ltd. (garbage)	WFGD+ESP	SCR	4.842
Hangzhou Hanglian Thermal Power Co., Ltd.	WFGD+ESP	SCR	2.922
Hangmin Thermal Power Plant 2	WFGD+ESP	SCR	2.402
Xiangsheng Thermal Power Plant	WFGD+ESP	SCR	0.770
Sanyuan Thermal Power Plant	ESP	SCR+WFGD	1.979
Yuhang Tangqi Thermal Power Plant	WFGD+ESP	SCR	0.203
Hangmin Thermal Power Plant 1	WFGD+ESP	SCR	3.440
Xinyada Thermal Power Plant	FF	SCR	0.942
Ningbo Jiufeng Thermal Power Co., Ltd.	FF	SCR	9.451
Ningbo Development Zone Thermal Power Co., Ltd.	FF	WFGD	4.056
Sinopec Zhenhai Refining & Chemical Company	FF	SCR	4.676

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Dadushi Thermal Power Plant	FF	SCR	10.099
Baofeng Thermal Power Plant	ESP	SCR	2.202
Hongbao Thermal Power Plant	FF	SCR	3.449
Ji'an Paper Container Factory	FF	SCR	3.937
Pinghu Thermal Power Plant	WFGD+ESP	SCR	1.249
Zhuji Bafang Thermal Power Co., Ltd. (garbage)	ESP	SCR	2.034
Jiyang Thermal Power Association Co., Ltd.	WFGD+ESP	SCR	8.896
Quzhou Donggang Thermal Power Plant	ESP	SCR	0.563
Beilun First Power Generation Co., Ltd.	ESP	SCR	20.513
Beilun Power Co., Ltd.	WFGD+ESP	SCR	21.686
Zhejiang Zheneng Jiaxing Power Generation Co., Ltd.	ESP	WFGD	20.654
Zhejiang Jiahua Power Generation Co., Ltd.	ESP	WFGD	64.163
Zhejiang Guohua Zheneng Power Generation Co., Ltd. (Qiangjiao)	FF	WFGD	38.842
Huaneng Yuhuan Power Plant	WFGD+ESP	SCR	32.526
Zhejiang Zheneng Yueqing Power Generation Co., Ltd.	FF	SCR	38.366
Zhejiang Datang Wushashan Power Plant	FF	SCR+WFGD	45.031
Zhejiang Lanxi Power Generation Co., Ltd.	ESP	SCR+WFGD	56.871
Taizhou Power Plant	FF	WFGD	20.050
Zhejiang Zheneng Changxing Power Generation Co., Ltd.	WFGD+ESP	SCR	19.648
Wenzhou Telulai Power Generation Co., Ltd.	WFGD+ESP	SCR	10.144
Hangzhou Huadian Banshan Power Generation Co., Ltd. (coal power)	WFGD+WESP	SCR	8.755
Guotou Xuancheng Power Plant	WFGD+ESP	SCR	25.354
Huaneng Chaohu Power Generation Co., Ltd.	WFGD+ESP	SCR	6.280

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Huadian Wuhu Power Generation Co., Ltd.	WFGD+ESP	SCR	26.689
Maanshan Dangtu Power Generation Co., Ltd.	WFGD+ESP	SCR	53.788
Huainan Luohe Power Plant	WFGD+ESP	SCR	15.257
Huaibei Guoan Power Generation Company	WFGD+ESP	SCR	11.737
Fuyang China Resources Power Generation Company	WFGD+ESP	SCR	58.045
Chizhou Jiuhua Power Generation Company	WFGD+WESP	SCR	15.583
Anqing Wanjiang Power Generation Company	WFGD+ESP	SCR	28.304
Magang Thermal Power Plant	WFGD+ESP	SCR	7.739
Anhui Huainan Pingwei Power Generation Co., Ltd.	WFGD+ESP	SCR	26.832
Anhui Hefei United Power Generation Co., Ltd.	WFGD+ESP	SCR	16.751
Anhui Maanshan Wannengda Power Generation Co., Ltd.	WFGD+ESP	SCR	28.096
Anhui Bengbu Xinyuan Thermal Power Corporation	WFGD+ESP	SCR	12.824
Anhui Huadian Suzhou Power Generation Co., Ltd.	WFGD+ESP-FF	SCR	3.535
Guodian Bangbu Power Co., Ltd.	WFGD+ESP	SCR	40.477
Huainan Pingwei Second Power Generation Co., Ltd.	WFGD+ESP	SCR	3.591
Huaihu Coal and Electricity Co., Ltd. Tianji Power Plant	WFGD+WESP	SCR	20.238
Huaizhe Coal and Electricity Co., Ltd. Fengtai Power Generation Branch	WFGD+WESP	SCR	40.477
Wuhu Power Generation Co., Ltd.	ESP-FF	WFGD	26.689
Kemen Power Plant	WFGD+ESP	SCR	25.440
Datang Ningde Power Plant	WFGD+ESP	SCR	93.272
Huaneng Fuzhou Power Plant	WFGD+WESP	SCR	22.007
Huayang Houshi Power Plant	ESP	WFGD	327.414
Guixi Power Generation Co., Ltd.	WFGD+FF	SCR	102.838

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Fengcheng Power Generation Co., Ltd.	WFGD+WESP	SCR	13.870
Guodian Jiujiang Power Plant	WFGD+FF	SCR	3.758
Huaneng Ruijin Power Plant	WFGD+ESP	SCR	13.309
Jiangxi Ganneng Co., Ltd. Fengcheng Phase II Power Plant	WFGD+ESP	SCR	9.403
Guodian Huangjinbu Power Co., Ltd.	WFGD+ESP	SCR	25.838
Xindian Power Plant	WFGD+ESP	SCR	10.525
Huangtai Power Plant	WFGD+ESP	SCR	10.565
Huadian Zouxian Power Generation Co., Ltd.	WFGD+ESP	SCR	20.947
Weifang Power Plant	WFGD+ESP	SCR	34.737
Zhangqiu Power Plant	ESP-FF	SCR+WFGD	10.585
Bainian Electric Power	WFGD+ESP	SCR	10.132
Liaocheng Power Plant	WFGD+FF	SCR	20.665
Huaneng Dezhou Power Plant	WFGD+ESP	SCR	169.256
Heze Power Plant1-2#	WFGD+FF	SCR	28.679
Tengzhou Xinyuan Thermal Power Company	WFGD+ESP	SCR	45.799
Shiliquan Power Plant	WFGD+ESP	SCR	25.659
Shiliquan Power Plant	WFGD+ESP	SCR	20.448
Zibo Thermal Power Plant	WFGD+ESP	SCR	94.660
Huangtai Power Plant	WFGD+ESP	SCR	87.546
Liaocheng Thermal Power Plant	WFGD+ESP	SCR	60.451
Zhanhua Power Plant	WFGD+ESP	SCR	33.559
Jiaxiang Power Plant	WFGD+ESP	SCR	72.988
Huaneng Dezhou Power Plant	ESP	WFGD	86.719

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Heze Power Plant5-6#	ESP	WFGD	13.354
Laicheng Power Plant	ESP	SCR+WFGD	20.226
Shengli Power Plant Phase II Unit	ESP-FF	SCR+WFGD	18.137
Shouguang Giant Energy Thermal Power Company (tuned)	ESP-FF	WFGD	69.666
Binzhou Tianhong Thermal Power Co., Ltd.	ESP	SCR+WFGD	0.619
Haiyang Thermal Power Plant	ESP	SCR+WFGD	1.983
Liyan Power Plant	ESP	WFGD	30.852
Tengzhou Xinyuan Thermal Power Company	ESP	WFGD	65.572
Qinbei Power Plant	ESP	WFGD	44.939
China Resources Shouyangshan Power Plant	ESP	SCR+WFGD	43.510
Fenghe Power Plant	WFGD+ESP	SCR	16.957
Yahekou Tianyi Company	WFGD+ESP	SCR	17.784
Nanyang Yahekou Power Plant	WFGD+ESP	SCR	9.582
Sanmenxia Huayang Power Generation Co., Ltd.	ESP	SCR+WFGD	7.420
Xuchang Longgang Power Generation Co., Ltd.	ESP	WFGD	9.830
Shangqiu Yudong Power Plant	ESP	WFGD	15.405
China Resources Dengfeng Power Plant	ESP	WFGD	21.775
Tongli Power Plant	SCR+ESP	WFGD	9.832
Datang Luoyang Thermal Power Co., Ltd.	WFGD+ESP	SCR	9.119
Datang Anyang Thermal Power Co., Ltd.	WFGD+ESP	SCR	15.444
Xingyang Power Plant	WFGD+ESP	SCR	35.558
Huadian Luohe Power Generation Co., Ltd.	WFGD+ESP	SCR	20.968
Huayu Power Plant Phase II	WFGD+ESP	SCR	9.776

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Qinbei Power Plant	WFGD+ESP	SCR	71.523
Pingdingshan Yaomeng Power Generation Co., Ltd.	WFGD+ESP	SCR	16.219
Datang Zhuzhou Power Plant	WFGD+ESP	SCR	9.665
Datang Leiyang Power Plant	WFGD+ESP	SCR	9.256
Huaneng Hunan Yueyang Power Generation Co., Ltd.	WFGD+ESP	SCR	128.731
Huaneng Hunan Yueyang Power Generation Co., Ltd.	WFGD+ESP	SCR	28.147
China Resources Power Liyujiang Co., Ltd.	WFGD+ESP	SCR	16.068
Datang Jinzhushan New Factory	WFGD+ESP	SCR	39.417
Datang Xiangtan New Factory(600MW)	WFGD+ESP	SCR	26.506
Sangzhisangzi comprehensive utilization of power plants	WFGD+ESP-FF	SCR	35.695
Shajiao A Power Plant No. 1~3	ESP	WFGD	18.506
Shajiao A Power Plant No. 4 and No. 5	WFGD+ESP	SCR	20.541
Shajiao C Power Plant	WFGD+ESP	SCR	63.823
Zhanjiang Power Plant	WFGD+ESP	SCR	4.405
Zhuhai Power Plant	ESP	SCR+WFGD	41.058
Zhuhai Jinwan Power Generation Co., Ltd.	WFGD+ESP	SCR	33.356
Red Bay Power Plant	WFGD+ESP	SCR	141.179
Red Bay Power Plant	WFGD+ESP	SCR	32.854
Huaneng Shantou Power Plant (phase I)	WFGD+ESP	SCR	7.803
Huaneng Shantou Power Plant (phase II)	ESP	WFGD	16.799
Shajiao B Power Plant	WFGD+ESP	SCR	18.236
Shenneng Hehe Power (Heyuan) Co., Ltd.	WFGD+ESP	SCR	14.936
Guohua Yuedian Taishan Power Plant 1 # -5 #	WFGD+ESP	SCR	59.893

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Guangdong Yudean Jinghai Power Generation Company No.1 and No.2	WFGD+FF	SCR	55.139
Guangdong Yudean Jinghai Power Generation Company No.1 and No.2	WFGD+ESP	SCR	40.435
Zhanjiang Zhongyue Energy Co., Ltd.	WFGD+ESP	SCR	68.029
Zhongshan Thermal Power Plant	ESP	SCR+WFGD	12.601
Guangdong Huizhou Pinghai Power Plant Co., Ltd.	WFGD+ESP	SCR	93.995
Mawan Power Plant	WFGD+ESP	SCR	65.357
Ruiming Power Plant (No. 1)	WFGD+ESP	SCR	14.087
Guodian Yongfu Power Generation Co., Ltd.	WFGD+ESP	SCR	7.804
Guotou Qinzhou Power Generation Co., Ltd.	WFGD+ESP	SCR	34.997
Huadian Guigang Power Generation Co., Ltd.	WFGD+ESP	SCR	15.934
Guangxi Fangchenggang Power Co., Ltd.	ESP	SCR+WFGD	19.087
Liuzhou Power Generation Co., Ltd.	ESP	WFGD	6.438
Datang Guiguan Heshan Power Generation Co., Ltd. (new unit)	FF	SCR+WFGD	80.711
Guodian Jintang Power Plant	FF	WFGD	65.736
Luzhou Chuannan Power Generation Co., Ltd.	SCR+ESP	SCR+WFGD	27.102
Bayujiang Oil-fired Power Generation Company	WFGD+ESP	SCR	24.434
Guang'an Power Plant (Phase I)	WFGD+ESP	SCR	42.653
Anshun Power Plant Phase II (Guodian Anshun Second Power Generation Co., Ltd.)	WFGD+ESP	SCR	23.232
Yaxi Power Plant	WFGD+ESP	SCR	23.147
Dalong Power Plant	WFGD+ESP	SCR	12.041
Dafang Power Plant	WFGD+ESP	SCR	25.393
Faer Power Plant	WFGD+ESP	SCR	51.545
Nayong Power Plant	ESP	SCR+WFGD	6.030

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Qianxi power plant	WFGD+ESP	SCR	28.121
Guizhou Yueqian Electric Power Co., Ltd. Pannan Power Plant (Yueqian)	WFGD+ESP	SCR+WFGD	46.004
Guizhou Qiandong Electric Power Co., Ltd.	WFGD+ESP	SCR+WFGD	16.957
Yunnan Diandong Energy Co., Ltd. Diandong Power Plant (Phase I)	WFGD+ESP	SCR+WFGD	16.844
Yunnan Yudong Yuwang Energy Co., Ltd. (Phase II)	WFGD+ESP	SCR	10.589
Guodian Xuanwei Power Generation Co., Ltd.	WFGD+ESP	SCR	21.474
Zhaotong Zhenxiong Power Plant	WFGD+ESP	SCR	68.815
Shaanxi Guohua Jinjie Energy Co., Ltd.	WFGD+ESP	SCR	110.665
Shaanxi Fugu Power Plant (Miaogou Gate)	WFGD+ESP	SCR	71.056
Datang Binchang Power Plant	WFGD+ESP-FF	SCR	59.459
Huadian Shaanxi Pucheng Power Plant Phase III	WFGD+ESP	SCR	62.139
Tongchuan Power Plant	WFGD+ESP	SCR	152.754
Hancheng Second Power Generation Co., Ltd.	WFGD+ESP	SCR	232.721
Weihsu Power Generation Co., Ltd.	WFGD+ESP	SCR	115.534
Fugu Qingshuichuan Power Plant	SCR+WFGD+ESP	SCR	17.235
Shanxi Baoji Second Power Generation Co., Ltd.	WFGD+ESP	SCR	29.953
Datang Huxian second power plant	ESP	SCR+WFGD	103.801
Xi'an Baqiao Thermal Power Co., Ltd.	ESP	SCR+WFGD	30.678
Huaneng Qinling Power Plant#Unit 8	WFGD+ESP	SCR	200.063
Guodian Baoji Power Generation Co., Ltd.	WFGD+ESP	SCR	68.391
Huadian Yuheng Power Plant	WFGD+ESP	SCR	81.966
Datang Jingtai Power Plant	WFGD+ESP	SCR	31.835
Datang Gangu Power Plant	ESP	SCR+WFGD	13.219

Power plant with new APCDs	APCDs in 2010	Newly built APCDs from 2010- 2014	Emission reduction (kg)
Jingyuan Second Power Generation Co., Ltd.	ESP	SCR+WFGD	20.895
Gansu Huaneng Pingliang Power Generation Co., Ltd.	ESP	WFGD	38.627
Gansu Power Investment Zhangye Power Generation Co., Ltd.	WFGD+ESP	SCR	11.016
Gansu Datang International Liancheng Power Generation Co., Ltd.	WFGD+FF	SCR	6.163
Gansu Power Investment Jinchang Power Generation Co., Ltd.	ESP	SCR+WFGD	13.545

Note: The figures in Table S7 represent the detailed information and reduced mercury of power plants with newly installed APCDs during 2011-2014.

Table S8 Mercury Emission reduction from energy efficiency improvement

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Beijing Datang Gaojing Power Plant	36	1975.98	0.988
Huaneng Beijing Thermal Power Co., Ltd.	83	4455.68	12.552
Beijing Jingneng Thermal Power Co., Ltd.	2	4711.01	0.320
Tianjin Junliangcheng Power Plant	13	4373.43	0.403
Tianjin Huaneng Yangliuqing Thermal Power Co., Ltd.	13	6571.92	5.288
Tianjin Datang Panshan Power Generation Co., Ltd.	6	6736.63	2.694
Tianjin Chentang Thermal Power Co., Ltd.	10	375	1.060
Tianjin Taida Jinlian Thermal Power Co., Ltd.	11	122.36	0.085
Tianjin Guohua Panshan Power Generation Co., Ltd.	13	6262.51	5.426
Tianjin Petrochemical Company Thermal Power Plant	4	637.94	0.194
Tianjin Chentang Thermal Power Phase III	3	3207.74	0.090
Tianjin Guodian Jinneng Thermal Power Co., Ltd.	17	3638.59	3.535
Tianjin Guotou Jinneng Power Generation Co., Ltd.	6	11264.82	3.863
Sinopec Tianjin Branch Thermal Power Department Second Power Station Place	17	354.64	0.459
Tianjin Jundian Thermal Power Co., Ltd.	9	3841.97	0.809
Guohua Dingzhou Power Generation Co., Ltd.	4	13484.21	3.471
Douhe Power Plant (Datang)	5	7010.52	2.287
Datang International Tangshan Thermal Power Co., Ltd.	11	3233.63	2.805
Qian'an Datang Thermal Power Co., Ltd.	14	950.09	0.787
Hebei Datang International Fengrun Thermal Power Co., Ltd.	4	3143.49	0.992
China Resources Power Tangshan Caofeidian Co., Ltd.	33	3270.17	6.388
Baoding Thermal Power Plant	6	1985.3	0.822

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Tangshan China Resources Thermal Power Co., Ltd.	19	517.09	0.077
Tangshan Kailuan Dongfang Power Generation Co., Ltd.	28	1026.27	0.970
Xiahuayuan power plant	7	1034.15	0.571
Hebei Datang International Zhangjiakou Thermal Power Co., Ltd.	20	3229.18	3.823
Hebei Guohua Cangdong Power Generation Co. Ltd.	9	14961.84	9.358
Guodian Huaian Thermal Power Company	7	3611.36	1.496
Hebei Jiantou Xuanhua Thermal Power Co., Ltd.	30	3447.46	8.156
Cangzhou China Resources Thermal Power Co., Ltd.	3	3864.96	0.769
Handan Thermal Power Co., Ltd.	12	2341.53	1.965
Jiaoyao Kengkou Power Plant	7	38.46	0.036
Wu'an Electric Power Company Thermal Power Plant	94	11.17	0.141
Fengfeng Minmetals Gangue Power Plant	295	116.78	2.717
Fengfeng Sunzhuang Mining Gangue Thermal Power Plant	40	92.73	0.498
Fengfeng Jiulongkou Meteorite Self-supplied Power Plant	260	119.15	2.443
Handan Mining Bureau Taoer Gangue Self-supplied Power Plant	37	231.95	1.152
Cixian Guantai Gangue Power Plant	154	26.71	0.552
Shenjiashuang Coal Mine Gangue Power Plant	42	26.96	0.152
Guodian power handan thermal power plant	14	1112.53	1.228
Hanfeng Power Plant	2	6776.21	1.820
Guodian Hebei Longshan Power Generation Co., Ltd.	5	6598.97	1.953
Fengfeng Xuecun Mine Gangue Thermal Power Plant	43	300.19	1.733
Luanhe Power Plant	135	1876.35	14.995
Yongmei Thermal Power Co., Ltd.	54	58.11	0.247

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Wu'an Xinhui Metallurgical Industry Co., Ltd.	527	64.67	4.577
Fengfeng Mining Area Pengnan Coking Co., Ltd.	75	193.12	1.945
Datang Hebei Power Generation Co., Ltd. Matou Thermal Power Branch	6	4387.33	2.076
Hengshui Hengxing Power Generation Co., Ltd.	11	3615.98	2.355
Hengfeng Power Generation Co., Ltd.	1	3614.17	0.214
Sanhe Power Generation Co., Ltd.	21	7182.71	9.728
Shijiazhuang Yongtai Thermal Power Plant	55	198.98	1.470
Shijiazhuang Dongfang Thermal Power Plant No. 2 Station B	17	723.22	1.651
Qian'an Thermal Power Company	56	173.16	1.302
Fengnan Qianjiaying Gangue Power Generation Company	162	84.95	1.848
Shijiazhuang Chengfeng Thermal Power Co., Ltd.	70	340.73	3.203
Shijiazhuang Mining Area Hengxing Power Plant	179	39.91	0.959
Tangshan Sed Thermal Power Company	53	217.17	0.908
Shijiazhuang Dongfang Thermal Power Plant No. 2 Station	69	13.59	0.126
Hebei Lingda Environmental Protection Energy Co., Ltd.	74	170.1	0.820
Xinji Dongfang Thermal Power Co., Ltd.	18	151.81	0.367
Shijiazhuang refinery self-supplied power plant	65	141.14	0.723
Kailuan Zhaogezhuang Mine Power Plant	540	41.57	3.014
Xinle Dongfang Thermal Power Co., Ltd.	246	70.56	1.369
Tangshan Sanyou Alkali Thermal Power Company	124	343.6	2.776
Gaocheng Tianyi Thermal Power Co., Ltd.	121	124.6	2.025
Zhaoxian Thermal Power Plant	69	31.09	0.288
Shijiazhuang Dongfang Thermal Power Factory No.3	90	43.99	0.532

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Huaneng Shang'an Power Plant	5	12836	4.470
Hebei Xibaipo Power Generation Co., Ltd.	12	6641.11	5.501
Xibaipo Second Power Generation Co., Ltd.	4	6442.37	2.032
Hebei Yongxin Paper Industry Power Plant	273	146.08	5.355
Shougang Jingtang Iron and Steel Co., Ltd.	21	4725.5	2.405
Hebei Xingtai Power Generation Co., Ltd.	5	456.49	0.180
Xingtai Guotai Power Generation Co., Ltd.	11	3183.14	2.761
Hebei Huadian Shijiazhuang Yuhua Thermal Power Co., Ltd.	31	3251.62	2.984
Shentou Second Power Plant	10	5131.13	3.646
Yushe Power Plant	11	2608.01	4.624
Zhangze Power Plant	6	3252.29	1.732
Shanxi Puguang Power Generation Co., Ltd.	4	3434.12	1.300
Hejin Power Plant	3	3822.03	1.085
Taiyuan First Thermal Power Plant	9	1947.83	0.079
Guodian Yuci Thermal Power Company	14	3186.06	3.170
Taiyuan Second Thermal Power Plant	22	6108.33	0.406
Datang Yungang Thermal Power Company	26	4975.97	9.194
Tongmei Datang Tashan Power Generation Company	1	6105.99	0.434
Datang Yuncheng Power Generation Co., Ltd.	4	5401.16	1.535
Datang Linfen Thermal Power Co., Ltd.	41	2782.13	0.680
Wuxiang Hexin Power Plant	11	6005.28	6.254
Shuozhou Greet Power Plant	63	1347.35	6.639
Hepo Power Plant Phase II	22	1052.74	3.733

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Sunshine Power Plant	8	5618.88	3.485
Shanxi Zhangshan Power Generation Company	14	8481.07	6.899
Zhaoguang Power Generation Co., Ltd.	16	8102.84	9.723
Shanxi Huaguang Power Generation Company	53	5554.32	20.919
Shanxi Xingeng Power Generation Co., Ltd	25	7350.85	18.581
Xishan Power Co., Ltd.	70	641.65	7.240
Shanxi Jinneng Group Datong Thermal Power Co., Ltd.	61	1241.65	12.209
Yangquan Nanmei Longchuan Power Generation Company	12	1032.4	0.414
Lu'an Ronghai Power Plant	58	1353.01	6.138
Lukuang Yuwu Power Plant	1	1391.43	0.109
Yuncheng Guanlv Power Plant	23	795.44	1.732
Huozhou Coal and Electricity Fangshan Power Plant	2	523.92	0.169
Pingshuuo Power Plant	7	3651.83	2.302
Xinzhou Guangyu Coal and Electricity Co., Ltd.	59	1311.28	2.251
Luneng Hequ Power Plant	1	12153.84	0.864
Datang Shener Power Plant	7	5811.85	2.891
Wangqu Power Plant	3	6606.82	1.408
Jinqiao Power Plant (Northern Company)	22	3142.42	9.333
Hohhot Thermal Power Plant (Northern Company)	10	6024.24	4.436
Huadian Donghua Power Generation Company	29	3172.82	10.873
Baotou No. 1 Power Plant (Northern Company)	11	4591.82	8.584
Baotou No. 2 Power Plant (Northern Company)	15	5246.32	10.624
Baotou No. 3 Power Plant (Northern Company)	12	3073.93	3.738

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Hope Aluminum Group Hope Power Plant	28	9782.07	32.087
Chifeng Thermal Power Company	36	1626.84	13.463
Jingneng (Chifeng) Energy Development Co., Ltd.	53	1497.3	5.983
Tongliao Huolinhe Kengkou Power Generation Co., Ltd.	7	5315.07	4.397
Dalat Power Generation Company (Northern Company)	2	15746.01	3.851
Mengxi Power Plant (Northern Company)	6	2906.41	4.009
Inner Mongolia Guohua Zhungeer Power Generation Co., Ltd.	12	7660.11	12.410
Guodian Inner Mongolia Dongsheng Thermal Power Co., Ltd.	24	3622.81	11.738
Shenhua Shendong Power Company Shangwan Thermal Power Plant	34	1584.21	6.008
Shenhua Zhugeer Energy Co., Ltd. Gangue Power Generation Company	30	4329.97	14.489
Erdos Erdos Shuangxin Power Co., Ltd.	31	2766.58	19.715
Huaneng Hulunbeier Energy Company	21	21947	62.221
Inner Mongolia Guohua Hulunbeier Power Generation Co., Ltd.	34	4757	16.390
Linhe Power Generation Company (Northern Company)	13	3084.93	5.414
Huadian Zhuozishan Power Generation Company	14	3795.25	7.173
Zhenglanqi Shangdu Power Generation Company (Northern Company)	7	20781.45	17.901
Xilin Gol Thermal Power Company (Northern Company)	3	453.5	0.313
Datang Inner Mongolia Duolun Coal Chemical Co., Ltd.	21	756.89	2.146
Zhongyan Lantai Salt Industry Group Power Plant	61	1951.15	13.275
Datang Tokto Power Generation Company	4	26122.14	7.941
Suizhong Power Generation Co., Ltd.	9	14469.2	12.651
Shenyang China Resources Thermal Power Co., Ltd. (Shen Hai)	31	2401.54	6.936
Huaneng Dalian Power Plant	7	6422.78	3.308

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Angang Second Power Plant	44	4252.04	35.925
Fushun Thermal Power Plant	52	787.27	4.616
Liaoning Oriental Power Co., Ltd.	14	2978.57	4.116
Fushun Petrochemical Company Thermal Power Plant	24	1329.6	3.598
Huaneng Dandong Power Plant	12	3197.33	3.248
Huaneng Yingkou Power Plant	3	7979.98	2.700
Fuxin Power Generation Co., Ltd.	22	4654.71	9.715
Liaoyang Petrochemical Company Thermal Power Plant	23	1217.97	2.610
Liaoning Qinghe Power Generation Co., Ltd.	17	6266.8	12.014
Beipiao Power Generation Co., Ltd.	43	150.02	1.239
Dalian Taishan Thermal Power Co., Ltd.	48	1209.43	11.147
Fuxin Jinshan Coal Gangue Thermal Power Co., Ltd.	35	2997.34	9.774
Guodian Power Dalian Zhuanghe Power Generation Company	4	5248.92	2.072
Guodian Kangping Power Generation Co., Ltd.	11	4652.16	5.771
China Power Investment Fushun Thermal Power Company	24	2782.58	5.653
Liaoning Datang International Jinzhou Thermal Power Co., Ltd.	1	2752.51	0.233
Huaneng Yingkou Thermal Power Plant	32	3043.21	8.243
Liaoning Shenmei Hongyang Thermal Power Co., Ltd.	33	2866.84	3.762
Huadian Shenyang Sujiatun Jinshan Thermal Power Co., Ltd.	16	2469.96	7.588
China Power Investment Dalian Ganjingzi Thermal Power Plant	78	2780.96	24.461
Shenyang Economic Development Zone Thermal Power Co., Ltd.	109	139.97	2.930
Shenyang Antibiotic Factory	220	116.74	4.932
Dalian Thermal Power Group Co., Ltd. Donghai Thermal Power Plant	3	296.19	0.171

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Dalian Thermal Power Group Co., Ltd. Xianghai Thermal Power Plant	27	681.42	3.533
Dalian Thermal Power Co., Ltd. Beihaitou Thermal Power Plant	43	366.69	3.028
Dalian Jinzhou Thermal Power Co., Ltd.	64	140.3	1.724
Dalian Pulandian Thermal Power Plant	199	40.5	1.548
Angang first power plant	13	427.23	1.066
Jinxi Petrochemical Company Thermal Power Plant	87	528.01	2.893
Liaoning Chuncheng Yinzhong Thermal Power Co., Ltd.	128	62.1	0.741
Fuxin Jiechao Coal Gangue Thermal Power Plant	11	305.78	0.379
Dengta Hongyang Thermal Power Co., Ltd.	46	280.23	0.513
Huaneng Jiutai Power Plant	8	5096.67	3.931
Huaneng Changchun Thermal Power Plant	25	2818.6	6.794
Changchun Second Thermal Power Plant	18	1125.89	4.433
Huichun Power Plant	8	2387.35	2.453
Changchun Thermal Power Development Co., Ltd.	1	3337.51	0.429
Datang Liaoyuan Thermal Power Plant	20	2500.51	6.424
Changchun Thermal Third Power Plant	41	2682.23	14.126
Shuangliao Power Plant	8	2249.75	2.312
Guodian Longhua Yanji Thermal Power Co., Ltd.	42	1848.94	9.975
Xinli Thermal Power Co., Ltd.	45	1656.75	16.306
Siping Thermal Power Co., Ltd.	39	763.5	6.513
Hunjiang Power Plant	25	720.99	3.942
Baishan Thermal Power Co., Ltd.	17	2119.27	4.628
Tonghua Thermal Power Co., Ltd.	40	1574.04	8.087

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Baicheng Power Generation Company	28	4520.16	16.257
Dacheng Corn Development Co., Ltd.	175.5506	53.24	0.992
Jien Nickel Changchun High-tech Power Plant	121	385.54	4.951
Fuel ethanol power plant	9	321.31	0.632
Yuanyuan Thermal Power Co., Ltd.	4	190.97	0.167
Huadian Thermal Power Plant	102	45.95	1.025
Mushi Thermal Power Co., Ltd.	101.0	530.26	7.235
Harbin Third Power Plant	22.0	6284.05	12.895
Harbin Thermal Power Plant	36.0	2313.03	5.782
Harbin Power Plant	123.0	458.86	7.624
Xinhua Huaneng Power Generation Co., Ltd.	4.0	2542.12	0.807
Fulaerji Plant	16.0	4841.93	10.466
Fulaerji Thermal Power Plant	25.0	273.68	0.924
Heilongjiang Jixi Thermal Power Co., Ltd.	2.0	1297.06	0.206
Bei'an Power Plant	31.0	578.67	2.423
Shuangyashan Power Plant	4.0	6825.68	2.166
Huadian Energy Co., Ltd. Jiamusi Thermal Power Plant	1.0	2683.88	0.186
Huadian Group Qiqihar Thermal Power Plant	44.0	3146.39	9.614
Harbin First Thermal Power Plant	36.0	2752.08	5.900
Shuangyashan Thermal Power Co., Ltd.	9.0	1794.53	1.281
Nenjiang Haixin Thermal Power Co., Ltd.	27.0	145.85	0.532
Heihe Thermal Power Plant	89.0	493.15	5.929
Seven Coal Company Thermal Power B Factory	49.0	86.95	0.576

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Shuangyashan Mining Bureau Gangue Thermal Power Plant	323.8	99.78	4.365
Wujing Thermal Power Plant	1.0	3381.89	0.198
Wu Jing Second Power Generation Co., Ltd.	1.0	3707.94	0.253
Waigaoqiao Second Power Generation Co., Ltd.	6.0	7679.54	2.695
Shanghai Shangdian Caojing Power Co., Ltd.	9.0	9000.41	4.737
Changxing Island Second Power Plant	13.0	156.76	0.159
Qingpu Thermal Power Plant	50.0	80.23	0.532
Jinshan Thermal Power Plant	7.0	3125.92	1.705
Huaneng Nanjing Power Plant	3.0	3154.13	0.729
Nanjing Second Thermal Power Plant	59.0	107.74	0.653
Xuzhou China Resources Power Co., Ltd.	14.0	5473.97	9.654
Huaneng Nantong Power Plant	1.0	6751.65	0.564
Jiangyin Thermal Power Co., Ltd.	41.0	912.61	3.328
China Guodian Group Jianbi Power Plant	23.0	17091.06	39.256
Xinhai Power Co., Ltd.	30.0	8190.92	3.765
Nanjing China Resources Thermal Power Co., Ltd.	5.0	3258.46	1.256
Jiangsu Zhenjiang Power Generation Co., Ltd.	25.0	8407.57	19.368
Nanjing Meishan Energy Co., Ltd.	79.0	467.8	2.119
Jiangyin Sulong Thermal Power Co., Ltd.	3.0	6337.74	1.598
Jiangsu Xutang Power Generation Co., Ltd.	1.0	5249.18	0.473
Yixing China Resources Thermal Power Co., Ltd.	1.0	788.86	0.138
Yixing Linggu Thermal Power Co., Ltd.	12.0	409.06	0.858
Guodian Changzhou Power Generation Co., Ltd.	5.0	7412.55	2.902

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Guodian Taizhou Power Generation Co., Ltd.	1.0	11616.17	0.895
Jiangsu Nanre Power Generation Co., Ltd.	12.0	7170.14	6.632
Datang Nanjing Power Plant	8.0	7412.52	4.709
Yangzi Petrochemical Company Thermal Power Plant	15.0	2177.46	5.711
Jinling Petrochemical Company Thermal Power Plant	12.0	1351.39	2.836
South Asia Thermal Power (Kunshan) Co., Ltd.	11.0	1049.88	2.019
Wuxi Thermal Power Plant	107.0	105.59	0.959
Wuxi Nengda Thermal Power Plant	59.0	182.61	1.884
Taicang Hongda Thermal Power Plant	47.0	126.76	1.042
Changshu Second Thermal Power Plant	17.0	14.19	0.020
Yanjiang Thermal Power Plant	13.0	49.51	0.055
Jiangyin Huaxi Thermal Power Plant	4.0	17.5	0.003
Nantong Acetate Fiber Co.	5.0	403.59	0.353
Zhenjiang Hongshun Power Plant	8.0	140.76	0.096
Zhenjiang Jindong Paper Company Thermal Power Plant	24.0	1410.88	1.942
Nantong Guanyinshan Environmental Thermal Power Co., Ltd.	71.0	143.13	0.862
Suzhou Jinhuasheng Paper Industry Thermal Power Plant	15.0	954.46	2.503
Xuzhou West District Environmental Thermal Power Co., Ltd.	48.0	61.57	0.517
Kunshan Xinyuan Thermal Power Company	31.0	457.19	2.478
Xiangshui Chenjiagang Thermal Power Company	141.0	97.08	0.785
Binhai Senda Coastal Thermal Power Plant	106.0	197.78	1.779
Qinyuan Thermal Power Plant	41.0	111.47	0.799
Wuxi Youlian Thermal Power Co., Ltd.	3.0	350.38	0.089

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Yizheng Lianzhong Thermal Power Co., Ltd.	20.0	250.88	0.877
Jiangsu Liwen Paper Co., Ltd.	14.0	1586.15	3.379
Yixing Sanmu Thermal Power Plant	28.0	133.49	0.654
Shenghong Group Co., Ltd.	69.0	245.74	1.439
Suhua Group Co., Ltd.	17.0	274.08	0.815
Jiangsu Meilan Group Co., Ltd. Thermal Power Plant	8.0	414.05	0.281
Suzhou Huilong Thermal Power Co., Ltd.	9.0	423.06	0.323
Xuzhou Hualong Thermal Power Co., Ltd.	48.0	206.47	1.733
Hai'an Meiya Thermal Power Co., Ltd.	55.0	114.34	1.100
Zhangjiagang Yongxing Thermal Power Co., Ltd.	142.0	226.39	5.621
Jiangsu Huachang Chemical Co., Ltd.	13.0	233.26	0.257
Jiangshan Pesticide Chemical Co., Ltd. (new plant)	7.0	218.01	0.267
Huai'an Huaerrun Chemical Co., Ltd.	180.0	4.53	0.143
Hai'an Huaxin Thermal Power Co., Ltd.	62.0	88.57	0.466
Suzhou Iron and Steel Plant	94.0	29.61	0.236
Wuxi Huilian Garbage Thermal Power Co., Ltd.	14.0	117.44	0.139
Zhejiang Sanxing Thermal Power Co., Ltd.	37.0	668.76	1.699
Xiaoshan Jinjiang Green Energy Power Plant (garbage)	135.0	160.04	1.976
Hangzhou Qinghua Thermal Power Co., Ltd.	48.0	11.12	0.044
Hongshan Thermal Power Company	62.7	141.8	0.610
Hongbao Thermal Power Company	64.0	155.57	0.684
Hangmin Thermal Power Plant 2	102.0	130.91	1.512
Sanyuan Thermal Power Plant	24.0	167.19	0.372

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Yuhang Chongxian Thermal Power Plant	39.0	42.81	0.139
Yuhang Tangqi Thermal Power Plant	99.0	47.1	0.291
Yuhang Hailian Thermal Power Plant	44.0	99.2	0.363
Yongtai Thermal Power Plant	32.0	132.29	0.649
Ningbo Guangyao Thermal Power Co., Ltd.	254.0	206.57	4.361
Xielian Thermal Power Plant	56.0	51.54	0.198
Dadushi thermal power	31.0	168.69	0.483
Xiexin Thermal Power	20.0	245.38	0.694
Ji'an Paper Container Factory	80.0	343.12	1.569
Rongcheng Thermal Power Plant	32.0	138.44	0.627
Jiaxing Green Energy Co., Ltd. (garbage)	25.0	81.98	0.141
Delixi Garbage Power Plant	72.0	145.97	0.722
Huzhou Xiexin Environmental Thermal Power Co., Ltd.	12.0	148.88	0.253
Deqing Zhongneng Thermal Power Co., Ltd.	63.0	95.83	0.415
Jiayi Xinshi Thermal Power Co., Ltd.	74.0	52.02	0.545
Deqing Jianeng Garbage Incineration Power Plant	264.0	40.23	0.784
Shaoxing Yuandong Thermal Power Co., Ltd.	17.0	279.21	0.326
Zhejiang Xinfeng Thermal Power Co., Ltd.	32.0	210.56	0.954
Shaoxing Baisheng Thermal Power Co., Ltd.	23.0	197.37	0.312
Zhejiang Zhenya Thermal Power Co., Ltd.	18.0	306.29	0.780
Shaoxing Qiqi Thermal Power Co., Ltd.	25.0	125.95	0.216
Zhejiang Blue Star Group Co., Ltd.	29.0	106.56	0.212
Zhejiang Tianma Thermal Power Co., Ltd.	31.0	482.82	1.028

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Shaoxing Meijia Thermal Power Co., Ltd.	28.0	586.06	2.424
Shaoxing Zhonghuan Renewable Energy Development Co., Ltd. (garbage)	3.0	186.97	0.039
Zhuji Bafang Thermal Power Co., Ltd. (garbage)	102.0	169.04	0.550
Jiyang Thermal Power Association Co., Ltd.	48.0	210.28	0.040
Shaoxing Xianheng Thermal Power Co., Ltd.	20.0	162.56	0.223
Dongyang Hengdian Thermal Power Plant	86.0	139.75	1.701
Lanxi Thermal Power Co., Ltd.	20.0	40.07	0.055
Quzhou Donggang Thermal Power Plant	150.0	227.5	1.970
Beilun Power Co., Ltd.	4.0	11010.4	1.942
Zhejiang Zheneng Jiaxing Power Generation Co., Ltd.	7.0	3270.03	1.428
Zhejiang Jiahua Power Generation Co., Ltd.	16.0	19522.67	22.429
Zhejiang Guohua Zheneng Power Generation Co., Ltd. (Shenglong)	4.0	12093.35	3.018
Huaneng Yuhuan Power Plant	5.0	21770.99	8.483
Zhejiang Zheneng Yueqing Power Generation Co., Ltd.	9.0	13667.49	9.009
Zhejiang Datang Wushashan Power Plant	5.0	13501.7	4.911
Zhejiang Lanxi Power Generation Co., Ltd.	4.0	12453.36	3.384
Taizhou Power Plant	3.0	6344.12	1.385
Zhejiang Zheneng Changxing Power Generation Co., Ltd.	5.0	6514.51	2.400
Zhenhai Power Generation Co., Ltd.	16.0	4177.86	5.555
Wenzhou Power Generation Co., Ltd	6.0	3291.9	0.203
Wenzhou Telulai Power Generation Co., Ltd.	6.0	3163.41	1.381
Hangzhou Huadian Banshan Power Generation Co., Ltd. (coal power)	2.0	1099.97	0.137
Juhua Thermal Power Plant	32.0	1206.23	4.626

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Zhejiang Juhong Thermal Power Co., Ltd.	9.0	940.08	0.581
Guotou Xuancheng Power Plant	7.0	3377.77	1.946
Huaneng Chaohu Power Generation Co., Ltd.	5.0	6808.09	3.238
Wuhu Tianmenshan Power Plant	38.0	6701.43	9.693
Guodian Tongling Power Generation Co., Ltd.	6.0	6964.33	3.948
Huadian Wuhu Power Generation Co., Ltd.	14.0	7133.3	9.435
Maanshan Dangtu Power Generation Co., Ltd.	2.0	6867.53	1.113
Huaibei Guoan Power Generation Company	45.0	3051.14	12.972
Puyang China Resources Power Generation Company	61.0	6892.92	34.067
Huadian Liu'an Power Generation Company	5.0	450.24	0.414
Chizhou Jiuhua Power Generation Company	11.0	3612.14	3.754
Anqing Wanjiang Power Generation Company	10.0	3403.07	2.757
Huainan Qiandian Power Plant	7.0	1307.96	1.683
Linhuan Zhongli Power Generation Co., Ltd.	9.0	3103.43	5.133
Ma Steel Tangcha Thermal Power Plant	13.0	2686.79	6.420
Ma Steel Thermal Power Plant	52.0	1762.82	0.717
Meizhou Bay Thermal Power Plant	6.0	4246.57	2.272
Songyu Power Plant	8.0	3317.8	1.544
Nanpu Power Plant	6.0	3508.03	1.877
Datang Ningde Power Plant	2.0	13340.32	1.786
Xiamen Ruixin Thermal Power Company	5.0	586.59	0.445
Longyan Yanshi Power Plant	16.0	3602.9	8.752
Xiamen Tenglong Thermal Power Plant	23.0	630.24	2.201

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Jinjiang Thermal Power Plant	51.0	826.77	6.402
Datang International Xinyu Power Plant	2.0	1801.14	0.425
China Power Investment Xinchang Power Generation Co., Ltd.	28.0	6878.74	17.063
Guixi Power Generation Co., Ltd.	22.0	9015.9	5.176
Fenxi Second Power Generation Co., Ltd.	4.0	2359.7	0.920
Fengcheng Power Generation Co., Ltd.	7.0	6362.33	4.929
Jiangxi Fengcheng Phase II Power Generation Co., Ltd.	14.0	6774.46	11.193
Anyuan Industrial Co., Ltd. Anyuan Power Plant	120.0	61.74	1.489
Linqing Canal Thermal Power Plant	18.0	445.45	1.182
Xindian Power Plant	2.0	3302.58	0.501
Baiyanghe Power Plant	18.0	4566.52	7.551
Huaneng Jining Power Plant	14.0	5096	5.879
Huaneng Dezhou Power Plant	10.0	15348.3	16.646
Huaneng Rizhao Power Plant	45.0	3612.86	23.971
Huaneng Power International Co., Ltd. Rizhao Power Plant	6.0	8187.23	2.775
Qufu Shengcheng Thermal Power Co., Ltd.	10.0	2243.09	3.307
Jiexiang Power Plant	4.0	3679.15	1.274
Huangtai Power Plant	16.0	7574.98	9.860
Laiwu Power Plant	7.0	3651.72	2.213
Liaocheng Thermal Power	7.0	4798.08	3.517
Canal power plant	12.0	6234.79	6.478
Zhanhua Power Plant	8.0	1674.19	1.160
Zouxian Power Plant	11.0	14537.26	13.847

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Huadian Zouxian Power Generation Co., Ltd.	4.0	10810.7	3.448
Shiliquan Power Plant	16.0	4680.33	1.238
Zibo Thermal Power	26.0	5427.75	12.724
Qingdao Power Plant	47.0	6885.07	13.486
Weifang Power Plant	12.0	11426.68	10.393
Tengzhou Xinyuan Thermal Power Company	12.0	5424.78	7.908
Laicheng Power Plant	3.0	6468.41	1.471
Zhangqiu Power Plant	22.0	5325.97	9.355
Bainian power	8.0	5178.03	3.363
Guodian Shiheng Power Plant	5.0	6576.79	2.847
Liaocheng Power Plant	1.0	6643.25	0.504
Guodian Shiheng Power Generation Co., Ltd.	10.0	3887.3	3.366
Guodian Liaocheng Power Generation Co., Ltd.	1.0	7007.01	0.607
Guodian Penglai Power Plant	5.0	3755.45	1.626
Guodian Faixian Power Plant	5.0	7274.44	3.149
Datang Lubei Power Generation Co., Ltd.	6.0	4244.58	1.655
Heze Power Plant 1-2#	17.0	1515.94	2.232
Liyan Power Plant	15.0	3101.48	2.014
Dezhou Thermal Power	6.0	442.53	0.391
Huayu Thermal Power Plant	13.0	2718.07	5.210
Shandong Gaotang Thermal Power Plant	23.0	232	0.382
Huasheng Jiangquan Thermal Power Plant 3#	19.0	795.96	2.230
Jining Dongjiao Thermal Power Plant	135.0	252.13	5.019

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Jining Shengyuan Thermal Power Co., Ltd.	129.0	77.13	0.862
Gucheng Mine Power Plant 2#	55.0	118.33	0.315
Heze Jinjiang Environmental Protection Energy Co., Ltd.	106.0	51.66	0.265
Pucun Mine#3 unit	90.0	161.8	1.261
Jinan Nanjiao Thermal Power Plant	7.0	124.56	0.062
Laizhou Longtai Thermal Power Plant	13.0	260.2	0.375
Dongping Thermal Power Plant	72.0	47.88	0.508
Dahe Thermal Power Plant	17.0	68.02	0.170
Laiyang Power Plant	25.0	106.5	0.393
Jiaonan Yitong Thermal Power Co., Ltd. Boyuan Thermal Power Plant	18.0	58.24	0.051
Huali Thermal Power Plant (synthetic leather)	28.0	112.99	0.466
Binzhou Chemical Group Thermal Power Plant	24.0	277.69	0.983
Donghai Thermal Power Plant	7.0	8909.19	3.016
Jidong Xincun Coal Mine	78.0	14.48	0.167
Chenguang Power Plant	83.0	33.34	0.408
Huajin Group	84.0	42.87	0.531
Dongtan Coal Mine	125.0	221.84	1.341
Dongming Petrochemical Thermal Power Co., Ltd.	158.0	168.17	3.918
Dongming Petrochemical Thermal Power Co., Ltd.	158.0	168.17	3.918
Huasheng Jiangquan Thermal Power Plant	13.0	1152.26	2.209
Qingbei Power Plant	9.0	20366.48	14.553
Huayang Power Plant Phase II	5.0	5687.45	2.514
China Resources Shouyangshan Power Plant	3.0	6900.86	1.396

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Xinxiang Baoshan Power Plant	6.0	5754.74	3.053
Fenghe Power Plant	4.0	5807.11	1.798
Yahekou Tianyi Company	3.0	5907.56	1.372
Dengfeng Qidi Energy Co., Ltd.	37.0	3126.69	5.712
Sanmenxia Huayang Power Generation Co., Ltd.	8.0	2239.48	1.399
Luoyang Shouyangshan Power Plant	7.0	3620.09	2.240
Luoyang Shuangyuan Thermal Power Co., Ltd.	12.0	1634.6	1.734
Zhengzhou Thermal Power Plant	10.0	4330.11	1.350
Shangqiu Yudong Power Plant	7.0	2420.65	1.125
Xinxiang Yuxin Power Generation Co., Ltd.	21.0	2577.12	2.820
Gongyi Yulian Power Plant	8.0	6793.42	2.683
Longda Power Plant	2.0	282.64	0.006
China Resources Dengfeng Power Plant	9.0	3193.49	1.907
Guodian Yuyuan Power Generation Co., Ltd.	8.0	1331.04	1.603
Datang Luoyang Thermal Power Co., Ltd.	9.0	2656.81	1.850
Pingdong Thermal Power Co., Ltd.	28.0	1862.03	1.626
Panshi Power Plant	7.0	1180.45	0.604
Pingdingshan Ruiping Power Plant	17.0	1102.61	2.822
Taixiang Power Plant	21.0	1360.03	1.410
Datang Anyang Thermal Power Co., Ltd.	18.0	2582.37	3.085
Luoyang Longyu Hongguang Co., Ltd.	89.0	321.5	4.308
China Resources Luoyang Thermal Power Co., Ltd.	81.0	371.93	4.535
Coking Coal Group Lifeng Power Plant	1.0	238.71	0.036

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Zhonglv Power Plant	28.0	351.75	1.483
Qingyang Aluminum Electric Second Factory	3.0	566.63	0.124
Yongmei thermal power plant	46.0	291.93	2.022
Fengying Electric Power Co., Ltd.	7.0	230.51	0.243
Jiaozuo Handian Power Generation Co., Ltd.	27.0	240.31	0.977
Luyang Power Plant	12.0	10400.59	8.283
Huadian Luohe Power Generation Co., Ltd.	24.0	3092.44	4.926
Huayu Power Plant Phase II	1.0	5983.33	0.033
Dabieshan Power Plant	8.0	5293.56	4.275
Yangluo Power Plant	4.0	4702.4	2.169
Ezhou Power Plant	13.0	2531.4	3.796
Hanyuan Power Generation Company	8.0	2351.57	2.170
Hanxin Power Generation Company	7.0	2647.26	1.604
Xisaishan Power Company	8.0	3053.88	2.115
Puqi Power Plant	22.0	2859.67	7.256
Jingzhou Thermal Power Plant	14.0	2830.31	3.431
Huangshi Power Generation Co., Ltd.	22.0	1976.51	1.627
Huadian Changsha Power Generation Co., Ltd.	4.0	4209.93	1.439
Datang Zhuzhou Power Plant	5.0	2350.49	1.186
Xiangtan Iron and Steel Company Thermal Power Plant	290.0	1173.77	32.024
Datang Leiyang Power Plant	3.0	3704.51	1.178
Leiyang comprehensive utilization power plant	10.0	507.07	0.983
Huaneng Hunan Yueyang Power Generation Co., Ltd.	9.0	8553.46	6.840

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Yueyang Yuehua Thermal Power Plant	56.0	789.65	8.574
Datang Shimen Power Plant	4.0	2004.46	0.913
Huadian Shimen Power Plant	2.0	1787.44	0.407
Taoyuan Chuangyuan Aluminum Industry Self-supplied Power Plant	38.0	4575.18	19.797
China Resources Power Liyujiang Co., Ltd.	11.0	3079.7	8.648
Zixing Coal Gangue Power Generation Co., Ltd.	34.0	399.35	2.633
China Resources Power Hunan Co., Ltd.	13.0	6411.93	9.492
Huaxiang Chemical Co., Ltd. Thermal Power Plant	3.0	67.37	0.019
Datang Jinzhushan New Factory	7.0	5992.29	0.639
Loudi Liangang Self-supplied power plant	202.0	2120.11	40.291
China Resources Lianyuan Power Plant	6.0	2109.06	0.443
Shajiao A Power Plant No. 4 and No. 5	11.0	3543.23	2.256
Shajiao C Power Plant	2.0	11738.58	1.359
Huangpu Power Plant 5~6	6.0	3303.52	1.528
Shaoguan Yuejiang Power Generation Co., Ltd.	19.0	3160.92	4.630
Maoming Power Plant No. 5	19.0	1219.52	1.786
Maoming Power Plant No. 6	10.0	1206.51	0.930
Yunfu Power Plant No. 5 and No. 6	16.0	2606.69	3.216
Yuelong Power Generation Company	7.0	1244.69	0.672
Meixian Power Plant No. 5 and No. 6	30.0	1355.4	5.338
Zhanjiang Power Plant	7.0	5384.18	0.926
Zhuhai Jinwan Power Generation Co., Ltd.	2.0	5898.62	0.683
Guangdong Huizhou Pinghai Power Plant Co., Ltd.	17.0	9144.14	14.702

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Guohua Huizhou Thermal Power Plant	7.0	3475.52	1.408
Huaneng Shantou Power Plant (phase II)	1.0	2776.21	0.214
Huaneng Haimen Power Plant	4.0	18421.88	3.706
Guangzhou Power Plant	2.0	931.67	0.108
Zhujiang Power Plant	1.0	5662.14	0.328
Hengyun D Power Plant	37.0	3202.5	6.857
Guangdong Baolihua Power Co., Ltd. #1, #2	28.0	1388.66	5.104
China Resources Power (Xingning) Co., Ltd.	13.0	1332.4	1.335
Guangzhou China Resources Thermal Power Co., Ltd. (B Factory)	11.0	3834.9	2.441
Guangzhou Wanglong Thermal Power Co., Ltd.	6.0	1079.25	0.375
Foshan Nanhai Jingneng Power Generation Co., Ltd.	11.0	3089.14	1.967
Renhua Huayue Coal Gangue Power Company	4.0	707.96	0.372
Xinhui Shuangshui Power Generation B Factory	8.0	1700.98	1.786
Guodian Yongfu Power Generation Co., Ltd.	37.0	2597.98	8.139
Guotou Qinzhou Power Generation Co., Ltd.	8.0	4963.44	2.883
Huadian Guigang Power Generation Co., Ltd.	6.0	4852.6	2.465
Guangxi Fangchenggang Power Co., Ltd.	5.0	4812	2.037
Liuzhou Power Generation Co., Ltd.	22.0	1948.33	3.629
Guangxi Baise Yinhai Power Generation Co., Ltd.	15.0	1335.5	3.300
Water Power Construction Group Tiandong Power Plant	3.0	1084.95	0.536
Guodian Jintang Power Plant	24.0	5475.28	18.493
Luzhou Chuannan Power Generation Co., Ltd.	3.0	4244.48	2.090
Luzhou Huangpu Electric Power Co., Ltd.	51.0	55.42	0.902

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Bashu Jiangyou Power Plant	11.0	2500.48	5.157
Bashu Jiangyou Coal Power Generation Company	13.0	1604.31	2.935
Gaoba power plant	253.6	366.67	29.684
Baima power station	135.7	513.38	13.065
Guang'an Power Plant (Phase I)	17.0	1556.54	7.448
Guang'an Power Plant (Phase III)	12.0	4984.2	11.214
Guang'an Power Plant (Phase II)	8.0	2010.14	3.015
Guodian Dongyue Thermal Power Plant	31.0	2160.68	21.383
Yaxi Power Station	10.0	4861.36	5.805
Dafang Power Plant	9.0	5420.42	5.825
Bijie Power Plant	7.0	1727.99	2.810
Fa'er power plant	10.0	11464.93	13.689
Yemazhai Power Plant	10.0	2521.47	1.213
Nayong Power Plant	5.0	10355.37	2.411
Xishui Power Plant	11.0	2419.19	3.630
Qianxi Power Plant	13.0	6402.48	4.261
China Huadian Corporation Yunnan Kunming Second Power Plant	3.0	1916.59	0.581
Yunnan Diandong Energy Co., Ltd. Jidong Power Plant (Phase I)	6.0	5952.62	3.161
Yunnan Diandong Yuwang Energy Co., Ltd. (Phase II)	3.0	3650.74	0.831
China Investment Qujing Power Generation Co., Ltd.	6.0	2721.67	1.651
Yunnan Datang International Honghe Power Generation Co., Ltd.	1.0	1668.18	0.287
Guodian Kaiyuan Power Generation Co., Ltd. Xiaolongtan Power Plant Phase III	7.0	1680.4	2.025
Shaanxi Guohua Jinjie Energy Co., Ltd.	6.0	17106.71	11.547

Power plant of energy efficiency improvement	Reduced coal consumption rate (g/kw•h)	power generation (GW•h)	Emission reduction (kg)
Shaanxi Fugu Power Plant (Miaogou Gate)	3.0	8203	2.556
Datang Binchang Power Plant	7.0	5923.28	4.307
Huadian Shaanxi Pucheng Power Plant Phase III	9.0	6495.05	6.072
Hancheng Second Power Generation Co., Ltd. Phase II	4.0	5221.71	2.170
Tongchuan Power Plant	12.0	6014.75	7.497
Weihe Power Generation Co., Ltd.	15.0	6722.43	13.084
Fugu Qingshuichuan Power Plant	14.0	3075.65	5.216
Lueyang Power Plant No. 6	3.0	1880.75	0.781
Shaanxi Baoji Second Power Generation Co., Ltd.	1.0	5554.52	0.254
Datang Huxian Second Power Plant	9.0	4232.77	3.957
Shenhua Shendong Power Guojiawan Power Plant	7.0	2830.08	1.531
Xijiao Thermal Power Plant No. 3 and No. 4	13.0	600.8	1.840
Datang Baoji Thermal Power Plant (new)	16.0	3542.59	5.888
Datang Weihe Thermal Power Plant (new)	18.0	3108.23	5.811
Shaanxi Xinli Power Generation Co., Ltd.	31.0	629.5	4.598
Shaanxi Huadian Pucheng Power Generation Co., Ltd.	8.0	6361.67	7.043
Xijiao Thermal Power Plant	21.0	223.35	1.105

Note: The figures in Table S8 represent the detailed information of power plants with energy efficiency improvement during 2011-2014, including reduced coal consumption rate (g/kw•h), power generation (GW•h) and emission reduction (kg).

Table S9 Reference data for calculation of mercury content in consumed coal^{1,2}

Region	Proportion of coal washing (%)	Mercury content (g/t)	
		Produced coal	Consumed coal
Anhui	19.93	0.20	0.20
Beijing	0.77	0.55	0.15
Chongqin	8.61	0.26	0.26
Fujian	0.00	0.07	0.14
Gansu	0.00	0.09	0.07
Guangdong	0.01	0.06	0.16
Guangxi	0.02	0.35	0.22
Guizhou	0.23	0.21	0.21
Hainan	0.00	0.00	0.16
Hebei	1.45	0.15	0.16
Heilongjiang	6.09	0.05	0.10
Henan	5.13	0.19	0.18
Hubei	0.00	0.16	0.20
Hunan	0.00	0.14	0.15
Inner Mongo	0.63	0.17	0.17
Jiangsu	1.79	0.27	0.19
Jiangxi	0.00	0.27	0.23
Jilin	0.59	0.07	0.11
Liaoning	9.89	0.14	0.14
Ningxia	1.49	0.21	0.20
Qinghai	0.00	0.04	0.08
Shaanxi	0.23	0.21	0.21
Shandong	4.53	0.14	0.15
Shanghai	0.00	0.00	0.18
Shanxi	6.22	0.15	0.15
Sichuan	4.20	0.16	0.17
Tianjin	0.00	0.00	0.18
Xinjiang	0.27	0.03	0.03
Xizang	0.00	0.00	0.00
Yunnan	1.15	0.10	0.10
Zhejiang	0.03	0.00	0.18

Note: The figures in Table S9 represent the proportion of coal washing (%) and mercury content in each region (g/t).

Table S10 Removal efficiency and speciation profiles of mercury for APCDs^{2,3}

APCD	Removal efficiency (%)	speciation profiles (%)		
		Hg ⁰	Hg ²⁺	Hg _p
ESP ²	32.4	58	41	1.3
FF ³	67.2	50	49	0.5
WFGD+ESP ²	60.3	84	16	0.6
WFGD+FF ³	86.0	78	21	1
SCR+WFGD+ESP ³	70.2	72	27	1
SCR+WFGD+FF ²	87.8	37	61	2

Note: The figures in Table S10 show the removal efficiency (%) and mercury speciation profiles (%) of different types of APCDs.

Supplemental References

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