

1      Supplementary Information for the paper entitled:

2      **Vehicular emissions in China in 2006 and 2010**

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1 **Table S1.** Fuel ratio of vehicles (%)

	LDVs		HDVs		LDTs		HDTs		MCs	RVs
Fuel type	gasoline	diesel								
Fuel ratio	96.5	3.5	11.1	88.9	27.3	72.7	0	100	100	100

2 \*LDVs: light-duty vehicles; HDVs: heavy-duty vehicles; LDTs: light-duty trucks; HDTs: heavy-duty trucks.

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6 **Table S2.** Total numbers of vehicles with different emission standards in China in 2006 ( $10^4$ )

Emission standard	LDGVs	LDDVs	HDGVs	HDDVs	LDGTs	LDDTs	HDGVs	HDDVs	MCs	RVs
Euro 0	229.9	9.6	2.5	20.0	15.6	42.1	0.0	40.9	1222.1	2168.3
Euro I	1113.3	51.3	16.6	134.2	95.7	260.4	0.0	284.6	4806.9	--
Euro II	956.2	34.9	5.6	45.5	44.5	118.7	0.0	83.9	2118.3	--

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10 **Table S3.** Total numbers of vehicles with different emission standards in China in 2010 ( $10^4$ )

Emission standard	LDGVs	LDDVs	HDGVs	HDDVs	LDGTs	LDDTs	HDGVs	HDDVs	MCs	RVs
Euro 0	339.3	12.4	1.7	14.0	15.3	40.7	0.0	39.9	1149.3	2168.3
Euro I	1132.3	41.3	13.3	107.3	75.9	202.3	0.0	293.0	4327.7	--
Euro II	1188.9	43.4	6.5	52.8	52.7	140.5	0.0	99.5	9984.3	--
Euro III	2835.2	103.4	7.1	57.8	109.3	291.3	0.0	228.2	1170.9	--
Euro IV	159.5	5.8	0.2	1.8	1.4	3.7	0.0	4.0	0.0	--

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1 **Table S4.** Vehicular emissions in each province in 2006 ( $10^4\text{t year}^{-1}$ )

Province	CO	$\text{NO}_\text{X}$	VOCs	$\text{NH}_3$	$\text{PM}_{2.5}$	$\text{PM}_{10}$	BC	OC
Beijing	97.6	10.7	16.2	0.07	0.9	0.9	0.7	0.2
Tianjin	34.4	4.1	6.5	0.03	0.4	0.4	0.3	0.1
Hebei	203.8	36.7	43.0	0.13	2.5	2.7	1.8	0.7
Shanxi	70.5	13.7	14.0	0.05	1.2	1.3	0.9	0.3
Nei mongol	80.6	17.9	15.4	0.05	1.4	1.4	1.0	0.3
Liaoning	88.8	17.9	17.2	0.07	1.7	1.8	1.3	0.4
Jilin	50.5	6.8	11.8	0.04	0.7	0.7	0.5	0.2
Heilongjiang	77.4	18.1	12.1	0.04	1.3	1.3	1.0	0.3
Shanghai	55.2	8.8	13.1	0.05	0.9	1.0	0.7	0.2
Jiangsu	204.1	22.3	54.0	0.15	2.3	2.5	1.6	0.7
Zhejiang	164.3	16.1	40.3	0.12	1.8	1.9	1.2	0.5
Anhui	146.0	33.4	26.9	0.08	2.2	2.3	1.6	0.5
Fujian	86.1	6.9	24.8	0.07	0.9	1.0	0.6	0.3
Jiangxi	68.7	9.9	18.7	0.05	1.0	1.0	0.7	0.3
Shandong	347.8	53.2	75.4	0.21	3.8	4.1	2.7	1.1
Henan	205.5	38.9	42.4	0.13	2.7	2.9	2.0	0.7
Hubei	101.7	16.3	24.2	0.07	1.4	1.5	1.0	0.4
Hunan	71.1	10.0	18.5	0.06	1.2	1.3	0.8	0.3
Guangdong	305.7	30.9	78.5	0.23	3.7	4.0	2.5	1.1
Guangxi	107.3	12.1	29.5	0.08	1.1	1.2	0.7	0.4
Hainan	20.2	2.0	5.7	0.02	0.3	0.3	0.2	0.1
Chongqing	28.6	6.2	6.9	0.03	0.6	0.7	0.5	0.1
Sichuan	109.4	13.1	27.7	0.08	1.4	1.5	1.0	0.4
Guizhou	28.9	5.4	6.6	0.02	0.5	0.5	0.4	0.1
Yunnan	77.6	12.2	18.4	0.06	1.2	1.3	0.9	0.3
Xizang	4.0	1.5	0.8	0.01	0.2	0.2	0.1	0.03
Shananxi	62.9	10.4	14.0	0.04	0.9	0.9	0.6	0.2
Gansu	32.9	8.1	5.5	0.02	0.6	0.6	0.4	0.1
Qinghai	13.2	3.4	2.0	0.01	0.2	0.2	0.2	0.1
Ningxia	13.7	2.5	3.2	0.01	0.2	0.2	0.2	0.1
Xinjiang	52.0	10.0	10.6	0.03	0.2	1.0	0.7	0.2

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1 **Table S5.** Vehicular emissions in each province in 2010 ( $10^4\text{t year}^{-1}$ )

Province	CO	$\text{NO}_x$	VOCs	$\text{NH}_3$	$\text{PM}_{2.5}$	$\text{PM}_{10}$	BC	OC
Beijing	94.0	9.3	16.5	0.4	0.6	0.7	0.4	0.2
Tianjin	42.3	4.4	7.8	0.1	0.4	0.4	0.3	0.1
Hebei	246.9	42.5	46.6	0.3	3.0	3.3	2.2	0.8
Shanxi	96.5	16.2	19.7	0.2	1.1	1.2	0.8	0.3
Nei mongol	100.2	20.0	18.6	0.2	1.4	1.5	1.0	0.3
Liaoning	118.7	18.9	23.7	0.2	1.6	1.7	1.1	0.4
Jilin	62.1	8.7	13.5	0.1	0.8	0.8	0.5	0.2
Heilongjiang	106.7	21.2	19.6	0.2	1.5	1.6	1.1	0.4
Shanghai	47.7	7.6	10.6	0.2	0.7	0.7	0.5	0.2
Jiangsu	204.0	25.5	44.2	0.6	2.1	2.3	1.5	0.6
Zhejiang	172.6	17.0	35.2	0.5	1.5	1.6	1.0	0.5
Anhui	167.8	36.6	30.6	0.2	2.2	2.4	1.6	0.5
Fujian	97.1	8.3	24.6	0.2	0.8	0.9	0.5	0.3
Jiangxi	69.9	12.0	16.1	0.1	0.9	1.0	0.6	0.3
Shandong	377.0	61.1	71.5	0.7	4.0	4.3	2.8	1.1
Henan	227.5	43.5	42.9	0.4	2.7	2.9	2.0	0.7
Hubei	115.5	18.1	25.1	0.2	1.4	1.5	0.9	0.4
Hunan	95.2	11.7	22.1	0.2	1.1	1.2	0.8	0.3
Guangdong	326.3	31.0	75.8	0.7	3.2	3.5	2.1	1.0
Guangxi	107.7	14.3	25.5	0.2	1.1	1.1	0.7	0.3
Hainan	20.9	2.2	5.1	0.04	0.2	0.2	0.1	0.1
Chongqing	35.1	7.3	7.9	0.1	0.4	0.5	0.3	0.1
Sichuan	124.8	16.0	26.5	0.3	1.3	1.4	0.9	0.4
Guizhou	40.5	7.0	8.4	0.1	0.5	0.6	0.4	0.1
Yunnan	90.9	13.9	19.6	0.2	1.1	1.2	0.8	0.3
Xizang	5.3	1.5	1.1	0.01	0.1	0.2	0.1	0.03
Shananxi	77.6	13.0	15.5	0.2	0.8	0.9	0.6	0.2
Gansu	47.6	9.4	9.3	0.1	0.6	0.6	0.4	0.2
Qinghai	18.8	3.7	3.3	0.03	0.3	0.3	0.2	0.1
Ningxia	17.6	3.2	3.8	0.04	0.2	0.3	0.2	0.1
Xinjiang	62.8	3.8	12.2	0.1	1.0	1.0	0.7	0.2

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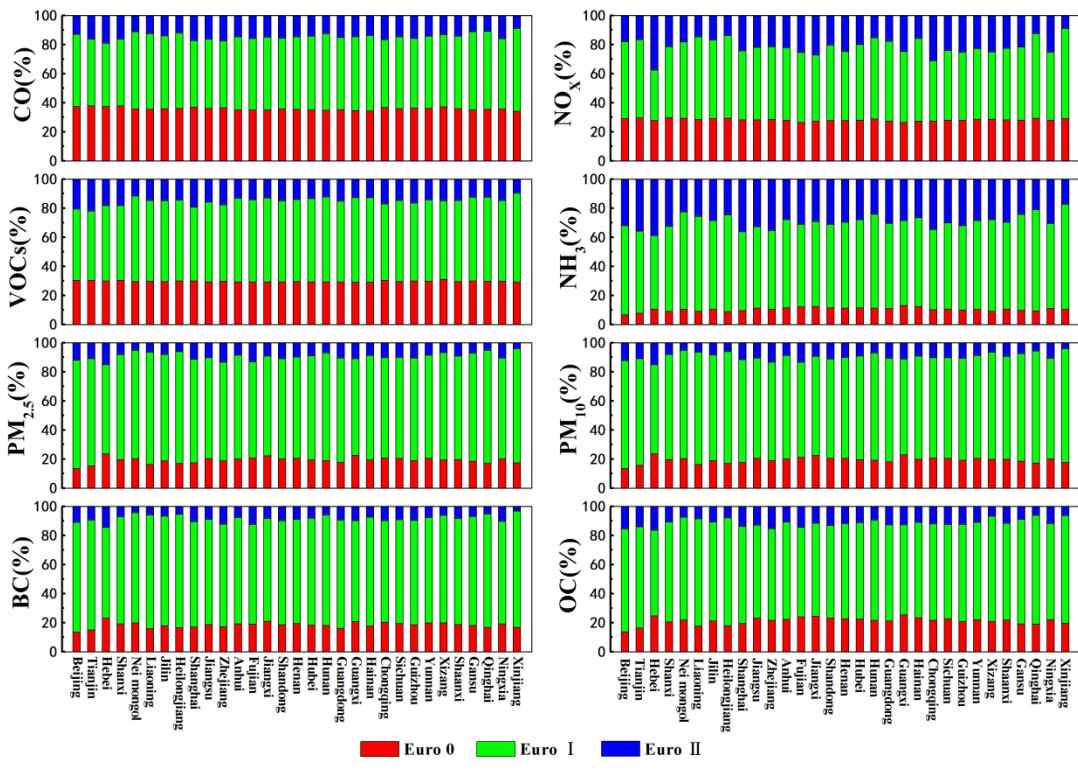
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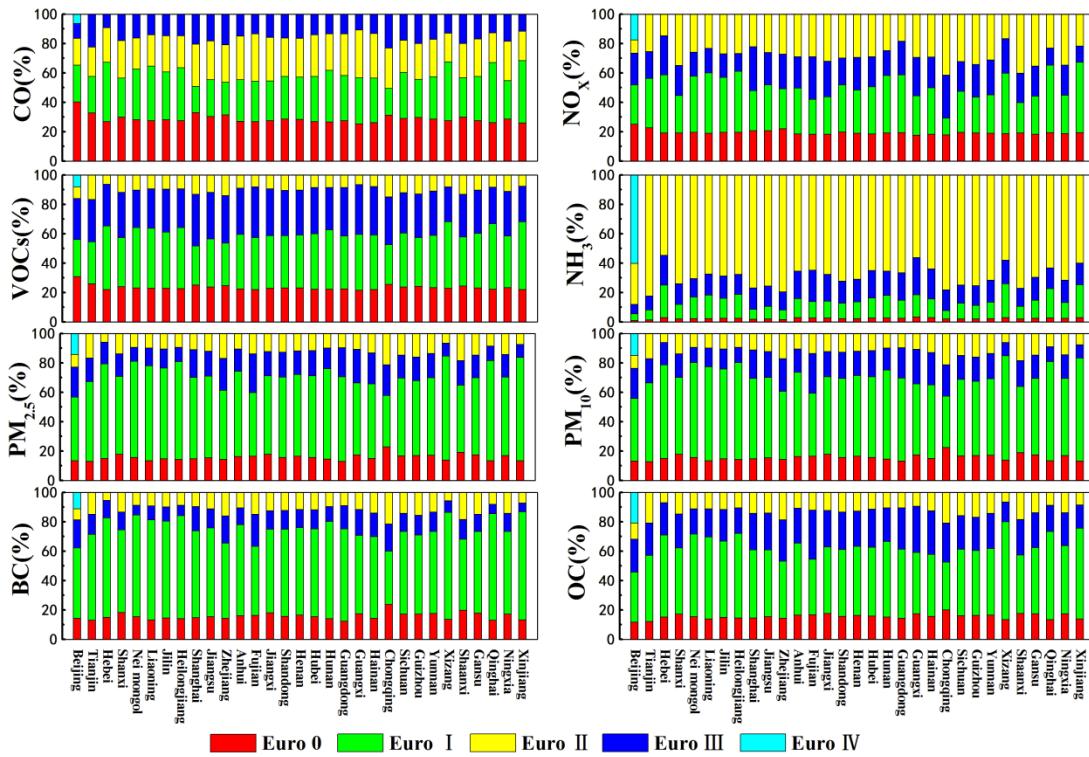
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2 **Fig. S1.** Contributions of vehicles with different emission standards to 2006 emissions  
3 of eight pollutants by province.

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6 **Fig. S2.** Contributions of vehicles with different emission standards to 2010 emissions  
7 of eight pollutants by province.