

# Supplemental Materials: Efficiency of Emission Control Measures on Particulate Matter Related Health Impacts and Economic Cost during the 2014 Asia-Pacific Economic Cooperation Meeting in Beijing

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**Table S1.** Characteristics (mean  $\pm$  SD) and comparison of particulate matter in various monitoring sites.

Air Pollutants, Various Periods	Urban Sites <i>N</i> = 8 <sup>a</sup>	Suburban Sites <i>N</i> = 3 <sup>a</sup>	Transportation Sites <i>N</i> = 5 <sup>a</sup>	Control Site <i>N</i> = 1 <sup>a</sup>	<i>F</i>	<i>p</i>
PM <sub>2.5</sub> (μg/m <sup>3</sup> )						
Total	113.11 $\pm$ 83.83	95.84 $\pm$ 70.69	136.88 $\pm$ 96.15	99.19 $\pm$ 85.32	1.754	0.159
Pre-APEC	123.77 $\pm$ 83.66	113.27 $\pm$ 76.17	157.36 $\pm$ 99.33	123.09 $\pm$ 93.60	0.607	0.613
During-APEC	50.56 $\pm$ 33.08	43.74 $\pm$ 28.76	75.73 $\pm$ 26.41	36.08 $\pm$ 25.24	3.628	0.022 <sup>b</sup>
Post-APEC	150.56 $\pm$ 88.17	118.48 $\pm$ 70.76	163.45 $\pm$ 110.62	122.83 $\pm$ 86.01	0.756	0.524
PM <sub>10</sub> (μg/m <sup>3</sup> )						
Total	162.28 $\pm$ 96.89	139.48 $\pm$ 81.42	161.42 $\pm$ 112.85	113.67 $\pm$ 87.48	2.038	0.111
Pre-APEC	170.04 $\pm$ 85.13	152.02 $\pm$ 76.91	142.10 $\pm$ 77.84	124.36 $\pm$ 84.83	0.689	0.564
During-APEC	79.78 $\pm$ 37.14	71.80 $\pm$ 33.27	94.04 $\pm$ 40.69	49.56 $\pm$ 24.37	2.919	0.047 <sup>b</sup>
Post-APEC	217.97 $\pm$ 100.02	178.98 $\pm$ 83.14	231.09 $\pm$ 140.98	153.12 $\pm$ 97.04	1.440	0.243

<sup>a</sup>: representing the total number of monitoring sites of each types; <sup>b</sup>: *p* < 0.05.

**Table S2.** Estimated proportion and numbers of deaths attributed to PM pollution pre, during and post APEC using by AirQ+ software.

Health Endpoints	Attributed Proportion (95% CI)			Attributed Cases (95% CI)			Attributed Cases per 100,000 Population at Risk (95% CI)		
	Pre-APEC	During-APEC	Post-APEC	Pre-APEC	During-APEC	Post-APEC	Pre-APEC	During-APEC	Post-APEC
<b>PM<sub>2.5</sub></b>									
Non-accidental deaths	4.45% <sup>a</sup> (3.65%, 5.25%)	1.73% (1.41%, 2.04%)	5.01% (4.1%, 5.90%)	12.9 (10.6, 15.2)	5.0 (4.1, 5.9)	14.5 (11.9, 17.1)	21.92 (17.96, 25.84)	8.49 (6.94, 10.04)	24.63 (20.20, 29.02)
Cardiovascular disease deaths	5.14% (3.88%, 6.27%)	2.00% (1.50%, 2.44%)	5.77% (4.36%, 7.03%)	4.7 (3.6, 5.8)	1.8 (1.4, 2.3)	5.3 (4.0, 6.5)	8.05 (6.08, 9.81)	3.12 (2.35, 3.82)	9.04 (6.83, 11.01)
Respiratory disease deaths	5.93% (3.54%, 8.37%)	2.31% (1.37%, 3.28%)	6.66% (3.98%, 9.38%)	2.0 (1.2, 2.9)	0.8 (0.5, 1.1)	2.3 (1.4, 3.2)	3.43 (2.05, 4.85)	1.34 (0.79, 1.90)	3.86 (2.30, 5.43)
<b>PM<sub>10</sub></b>									
Non-accidental deaths	4.44% (3.90%, 4.85%)	1.90% (1.67%, 2.08%)	5.82% (5.11%, 6.35%)	12.9 (11.3, 14.1)	5.5 (4.8, 6.0)	16.9 (14.8, 18.4)	21.85 (19.17, 23.84)	9.35 (8.19, 10.22)	28.64 (25.15, 31.23)
Cardiovascular disease deaths	5.92% (5.11%, 6.71%)	2.54% (2.19%, 2.89%)	7.74% (6.70%, 8.77%)	5.5 (4.7, 6.2)	2.3 (2.0, 2.7)	7.1 (6.2, 8.1)	9.27 (8.01, 10.51)	3.98 (3.43, 4.53)	12.12 (10.49, 13.73)
Respiratory disease deaths	4.44% (3.21%, 5.52%)	1.90% (1.37%, 2.37%)	5.82% (4.22%, 7.22%)	1.5 (1.1, 1.9)	0.6 (0.5, 0.8)	2.0 (1.4, 2.5)	2.57 (1.86, 3.20)	1.10 (0.79, 1.37)	3.37 (2.44, 4.18)

<sup>a</sup>: mean number and the 95% confidence interval were presented.

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