Smog

Title	The effect of traffic density on smog pollution: Evidence from Chinese cities
Author Name	Rui Xie, Dihan Wei, Feng Han, Yue Lu, Jiayu Fang, Yu Liu & Junfeng Wang
Journal Name	Technological Forecasting and Social Change
Year	2019
Volume and Issue	144
Pages	421-427
Abstracts	Urban traffic congestion and smog pollution are critical urban development issues. In this study, the influencing mechanism of traffic density on smog pollution in cities is described from the perspectives of direct emissions, spatial agglomeration, and technology spillover effects. Based on an improved STIRPAT model, we examine a panel of 283 prefecture-level cities in China from 2003 to 2015 and find an inverted U-shaped relationship between traffic density and urban smog pollution in large and medium cities and no significant relationship in small cities. Furthermore, the traffic densities in large and medium cities are on the left side of the curve, so direct emissions remain important. The reduction in smog pollution caused by spatial agglomeration and technology spillovers is not sufficient to offset the increase caused by direct emissions. In advancing urbanization, the government should relax its household registration policy that restricts migration to large cities and should avoid any bias in its construction land distribution toward the mainland and small towns. By doing so, the government will further enhance the economic density and scale, shifting the traffic density to the right side of the inverted U-shaped curve so that spatial agglomeration and technology spillover effects can mitigate smog pollution.
Keywords	Traffic density; Urban smog pollution; $PM_{2.5}$; STIRPAT model.

Title	Phyllostachys edulis forest reduces atmospheric $PM_{2.5}$ and PAHs on hazy days at suburban area
Author Name	Yu Fang Bi, FeiYan Guo, LiuYang, Hao, An Ke Wang,Yu Kui Wang, Zhi Zhuang Wu & Xu Hua Du
Journal Name	Scientific Reports
Year	2018
Volume and Issue	8: 12591
Pages	--
Abstracts	This study is aim to illustrate *Phyllostachys edulis'* role in affecting air quality under hazy day and solar day. P. edulis is a crucial plants growing well at suburban area at China Southern. In this manuscript, on 2 weather conditions (hazy day; solar day), changes in atmospheric particulate matter (PM), polycyclic aromatic hydrocarbons (PAHs), associated volatile organic compounds (VOCs), and PAHs in leaves and soils were measured, with PM-detection equipment and the GC-MC method, in a typical bamboo forest at suburban areas. The results showed that: (1) Bamboo forest decreased atmospheric $PM_{2.5}$ and PM_{10} concentrations significantly by 20% and 15%, respectively, on the hazy day nightfall time, when they were times higher than that on any other time. Also, similar effects on atmospheric PAHs and VOCs were found. (2) Significant increases in PAHs of leaves and soil were found inside the forest on the hazy day. (3) Bamboo forest also reduced the atmospheric VOC concentrations, and changed the compounds of 10 VOCs present in the highest concentration list. Thus, bamboo forests strongly regulate atmospheric $PM_{2.5}$ through capture or retention, for the changes in atmospheric VOCs and increase in PAHs of leaves and soil.
Keywords	particulate matter (PM); volatile organic compounds (VOCs); PM-detection equipment; GC-MC method; polycyclic aromatic hydrocarbons (PAHs).

Title	How does smog influence domestic tourism in China? A case study of Beijing
Author Name	Jian Peng & Honglin Xiao
Journal Name	Asia Pacific Journal of Tourism Research
Year	2018
Volume and Issue	23, 12
Pages	1115-1128
Abstracts	This study took Beijing as a case to examine the potential impact of smog on the domestic demand of tourist destinations in China. Structural equation modelling (SEM) was employed to explore and confirm the causal relationships between perception of travel risk, travel dissatisfaction, negative destination and avoidance tendency. It is found that the Mainland Chinese residents have a strong perception of the potential travel risk caused by smog in Beijing. Moreover, the impact of travel risk perception on avoidance tendency is indirect and works through the mediating variables such as travel dissatisfaction or negative destination image.
Keywords	Smog; travel risk perception; destination image; travel satisfaction; visit intention; domestic tourism; structural equation modelling; Beijing; China; Asia pacific.

Title	**Public attention to the great smog event: a case study of the 2013 smog event in Harbin, China**
Author Name	Jiuchang Wei, Wanling Zhan, Xiumei Guo & Dora Marinova
Journal Name	Natural Hazards
Year	2017
Volume and Issue	89, 2
Pages	923-938
Abstracts	The 2013 outbreak of smog in China triggered unprecedented public attention in the country, which played a critical role in crisis communication and management. This study explores the determinants that influence public attention from the non-smog-stricken cities to the smog events. Following the literature on proximity, this study identified three influencing factors, namely cognitive, geographical, and organizational proximity, between two cities. We tested these factors by analyzing the public attention to the smog event that occurred in Harbin, China, on October 21, 2013. Data collected from Sina Weibo yielded 5409 Harbin smog-related Weibo posts sent between October 20, 2013, and October 31, 2013, from 113 cities. Results provide some support for the hypothesis.
Keywords	Public attention; Proximity; Harbin smog; Air quality; Crisis communication.