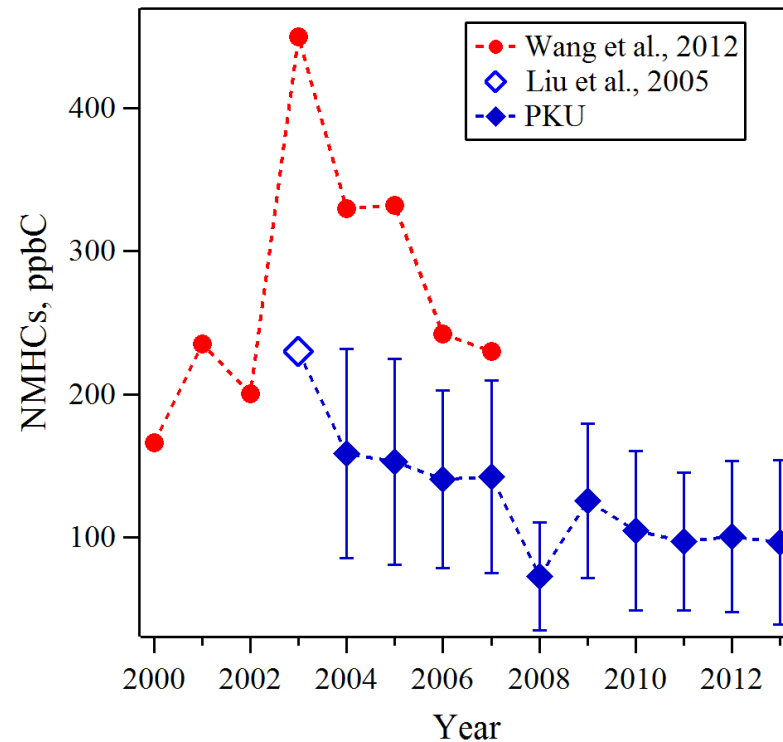
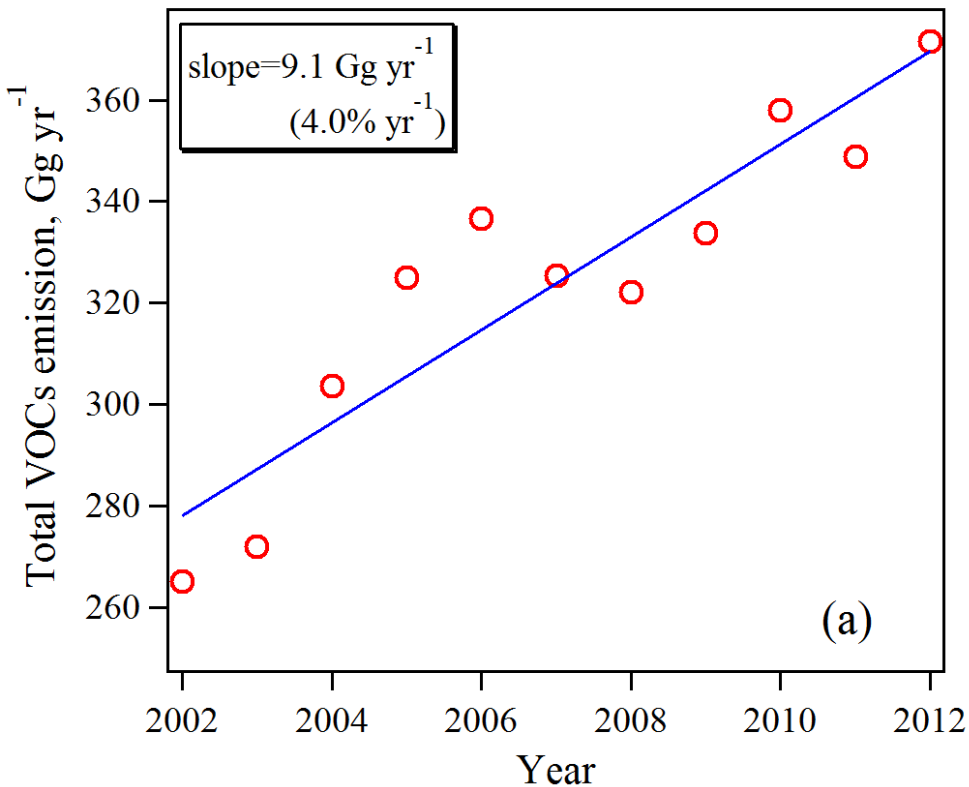


Evaluation of volatile organic compounds (VOCs) emission trends in Beijing based on ambient measurements during 2002–2013

Ming Wang, Min Shao, Wentai Chen, Sihua Lu, Ying Liu, Bin Yuan, Qian Zhang,
Zhang Qiang, Limin Zeng, Min Hu, Tong Zhu, Bill Kuster, Paul Goldan,
C.C.CHANG, Shaw Liu

2014-06-10



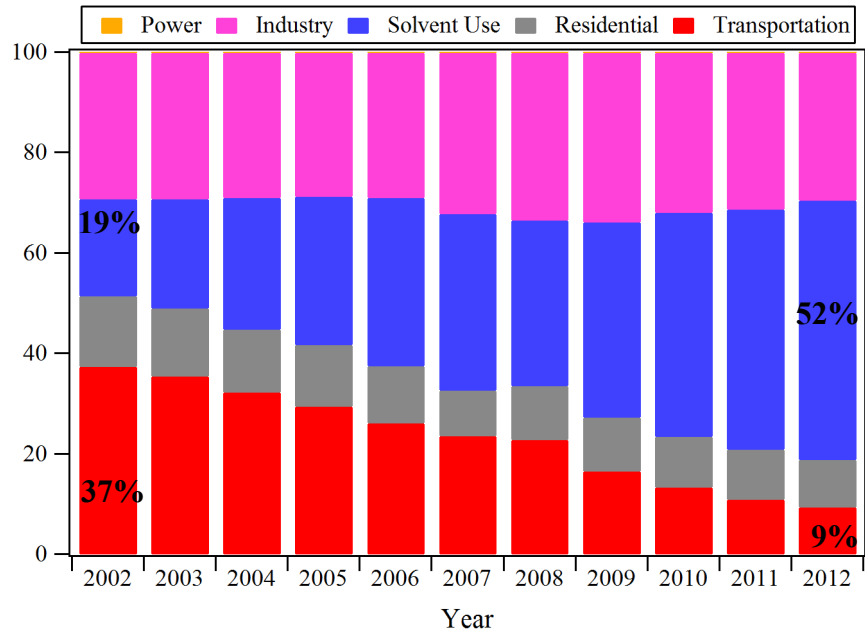
2004-2012: VOCs emission in Beijing increased by ~22%,

(from Qiang Zhang, MEIC)

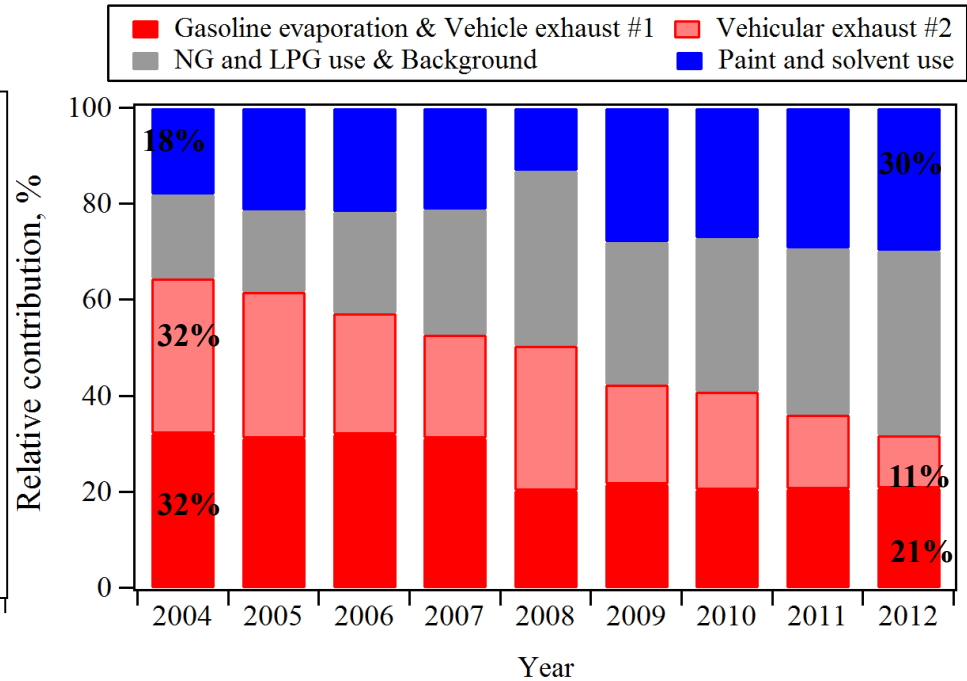
2004-2012: mixing ratios decreased by ~30%

Temporal changes of VOCs sources in Beijing

MEIC



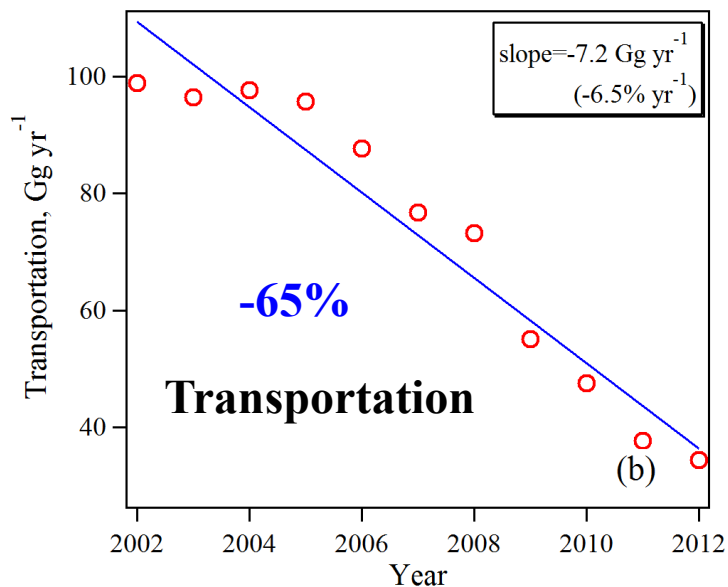
PMF



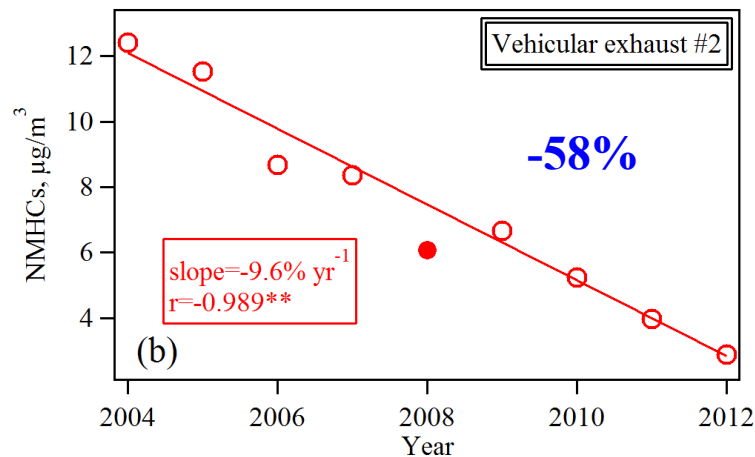
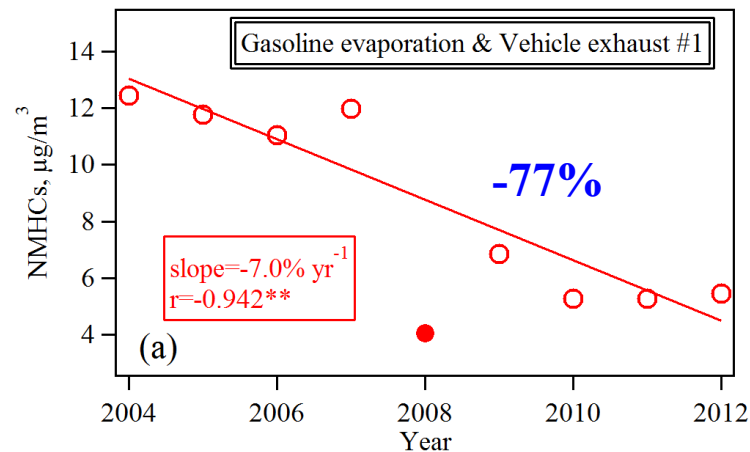
- **Relative contributions from transportation decreased;**
- **Relative contributions from solvent use increased.**

Temporal changes of traffic-related VOCs emissions

MEIC

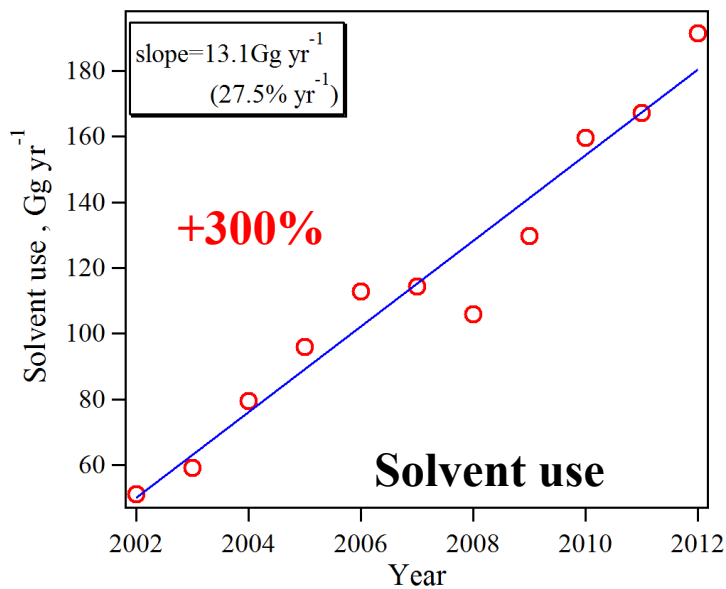


PMF

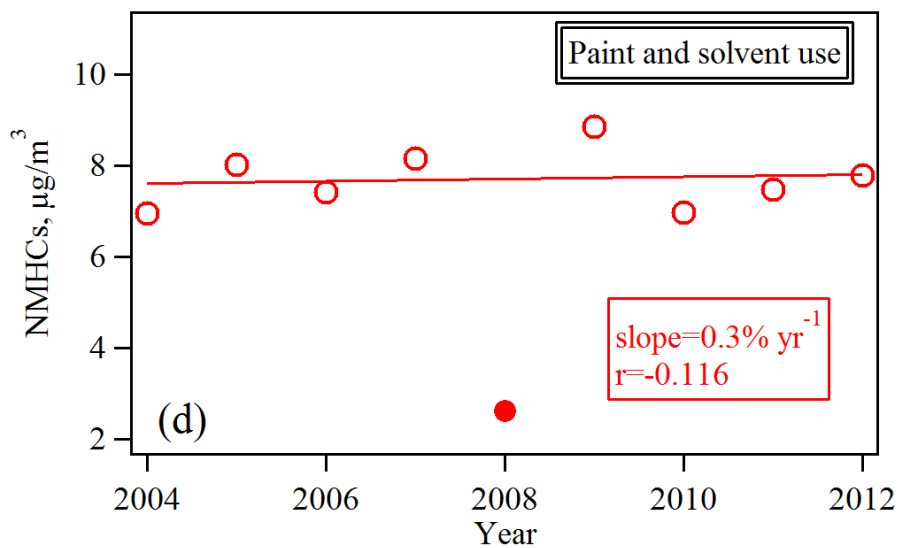


Temporal changes of VOCs emissions from MEIC inventory

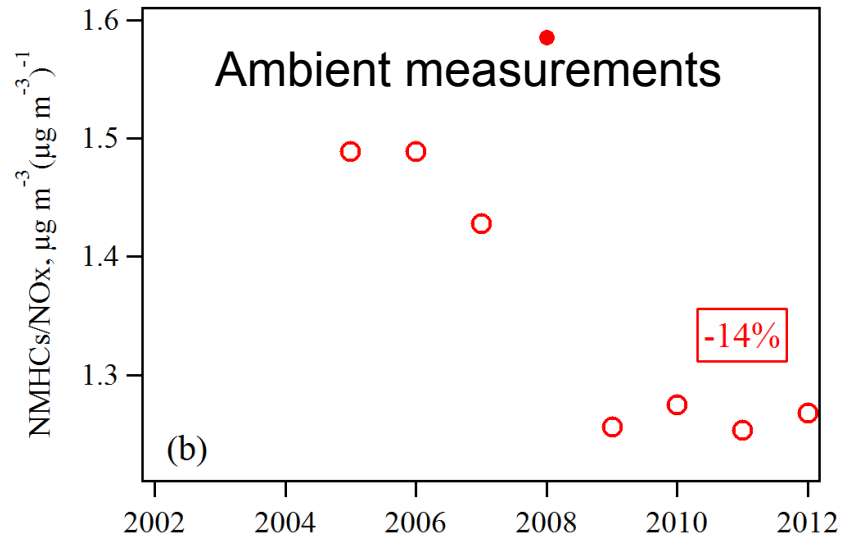
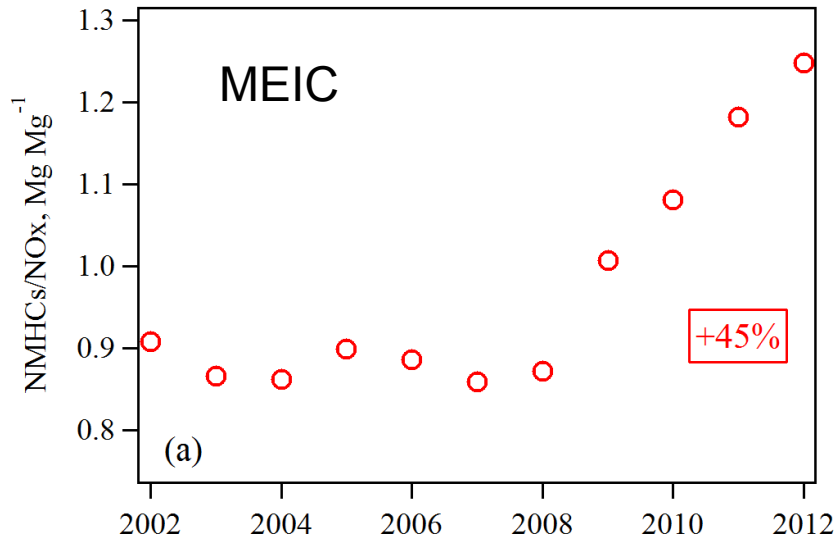
MEIC



PMF



Temporal changes in VOCs/NO_x ratios



- The NMVOCs/NO_x ratios in the MEIC inventory increased by 45% during 2005-2012;
- The inferred VOCs/NO_x ratios based on PMF results decreased by 11% during 2005-2012, similarly with temporal changes in NMHCs/NO_x ratios from ambient measurement .