Section 2. Suggestions for Improving Urban Air Quality Information Disclosure in China

After comparing the domestic and international AQTI evaluation results, we propose the following suggestions for improving urban air quality information disclosure in China:

- **Make up for deficiencies in domestic urban air pollutant monitoring and publish the results for the missing pollutants**
  - As the region of the world that suffers from the worst fine particulate matter pollution, China should begin monitoring and disclosing $PM_{2.5}$ as soon as possible.
  - Monitor and disclose O_3, CO and VOCs.
  - Launch airborne heavy metal pollutants monitoring and disclose the monitoring results.
- **Increase comprehensiveness of information disclosure**
  - In addition to publishing API values, detailed information for pollutant concentration values should also be published so that the general public can be fully and accurately informed about specifically monitored pollutant levels.
- **Increase comprehensiveness of information disclosure**
  - Add monitoring sites to expand the coverage areas. The positioning of the sites should be considered for better evaluation of the health effects from pollutant exposure in key regions.
  - In order to protect people living around specific pollution sources like roads, power plants and large-scale fixed pollution sources, the sites should be located where they can measure the concentrations of air pollutants where they will be representative of the exposure levels that people will experience. For urban monitoring sites an "industrial area station" could be built to reflect the effect that industrial emission levels have on the area, a "downtown and commercial area station" could be built to reflect the effects of transportation and a "residential area station" could be built to reflect the levels of exposure to residents.
  - Disclose air quality information by monitoring site.
- **Increase timeliness of information disclosure**
  - Disclose real-time air pollutant monitoring data.
- **Increase user-friendliness of information disclosure**
  - Publish air quality information in conjunction with maps so that the general public can have a more visual understanding of an area's air quality information, thus showing the public how to better protect their health.
  - In addition to publishing daily reports at a set time each day, a website or database should be created to provide real- time monitoring data and historical data.

In addition, based on what came to light during the research, we would like to put forward these other suggestions:

- **Air quality standards should be periodically revised and re-examined based on the results of the latest research on environment and health.**
- **In addition to monitoring air quality data, emissions data for key pollutants should also be methodically monitored and published in a timely manner.**
- **An early warning system should be established so as to give the public a timely warning about atmospheric pollution that could have serious effects on public health.**
  - An early warning system would allow the public to swiftly adopt safeguarding measures and reduce the harm air pollution can have on health. In addition, this would mobilize communities to adopt safeguarding and emergency measures,[85] limit atmospheric pollutant emissions and prevent air pollution incidents from occurring.
  - To ensure the effectiveness of the early warning system, the positioning of the monitoring sites need to be more representative and targeted. Forecasts and reports need to be disclosed more promptly. The comprehensiveness of information published needs to be increased and there also needs to be a more user-friendly and accessible type of disclosure.
- **Spread knowledge of the detrimental health effects of atmospheric air pollution to the public.**