

# World Health Organization Regional Office for the Western Pacific Region Healthy Cities Recognition 2018

## Air Quality and Health

### Background

The burden of disease from environmental risks is a significant and growing threat to the global community. One of the main environmental risks is poor air quality and its effects on health.<sup>1</sup> The reduction of mortality and morbidity from air pollution is reflected in the Sustainable Development Goals 3, 7 and 11 and in indicators 3.9.1, 7.1.2 and 11.6.2.

As of 2012, as many as 6.5 million deaths globally are attributed to air pollution.<sup>2</sup> Ambient and household air pollution caused 2.8 and 3.7 million deaths, respectively, from noncommunicable diseases (NCDs) such as ischaemic heart disease (IHD), stroke, chronic obstructive pulmonary disease (COPD) and lung cancer. Thirty percent of global cardiovascular disease burden is attributable to ambient and household air pollution (13% and 17%, respectively) as well as 38% of deaths from stroke, 42% from lung cancer and 37% from COPD. In the Western Pacific Region, ambient and household air pollution accounts for 36% of deaths from IHD, 43% from stroke, 61% from lung cancer and 39% from COPD.<sup>3</sup>

Common ambient air pollutants such as PM<sub>10</sub>, PM<sub>2.5</sub>, O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, CO<sub>2</sub> and Pb in the atmosphere come from various sources and urban populations are most vulnerable to them. In 2014, approximately 90% of populations residing in cities were exposed to PM (particulate matter) levels that exceeded WHO air quality guidelines.<sup>4</sup> The case is significantly worse in low-income countries than in high-income countries. During the 2008–2013 period, the low- and middle-income countries in the Western Pacific Region saw an increasing trend in PM<sub>2.5</sub> and PM<sub>10</sub> levels while high-income countries observed a decreasing trend.<sup>5</sup>

Strategies are needed to improve access to clean energies, clean and efficient transport, control of industrial emissions, sound use of chemicals and a safe workplace. Policies and actions to address air quality are within the jurisdiction of many sectors, such as energy, housing, urban planning, transport, industry and waste management. The publication, Preventing NCDs by Reducing Environmental Risk Factors, outlines strategies that can be taken by different sectors.

### Recognition of Best Practice

This call for application is looking for good practices and success stories related to improving the air quality in urban settings.

---

<sup>1</sup> WHO (2016). Ambient air pollution: a global assessment of exposure and burden of disease. Geneva: WHO Public Health, Social and Environmental Determinants of Health Department.

<sup>2</sup> WHO (2016). Ambient air pollution: a global assessment of exposure and burden of disease. Geneva: WHO Public Health, Social and Environmental Determinants of Health Department.

<sup>3</sup> WHO (2017). Preventing noncommunicable diseases (NCDs) by reducing environmental risk factors. Geneva: World Health Organization.

<sup>4</sup> WHO (2014). Global Health Observatory, GHO data.

<sup>5</sup> WHO (2016). Ambient air pollution: a global assessment of exposure and burden of disease. Geneva: WHO Public Health, Social and Environmental Determinants of Health Department.

**Materials to be submitted**

A concise written report may be supplemented with supporting materials in the annex, such as high-resolution colour photographs in electronic format with captions, data and any other information.

**For further information, please contact:**

Mr Sangjin Lee (Technical Officer for Air Quality) at [leesi@who.int](mailto:leesi@who.int).

**World Health Organization Regional Office for the Western Pacific  
Healthy Cities Recognition 2018**

**Call for Applications for Best Practice**

**Title Page**

- a. **Thematic area**
- b. **City and Country name**
- c. **Full title of the project**
- d. **Contact details**
  - i. **Responsible person submitting the proposal**  
Please provide contact details (name, title, affiliation, email, address, telephone, fax)
  - ii. **Additional contact person**  
Please provide contact details (name, title, affiliation, email, address, telephone, fax)

---

**\*[Note: Please keep to the word limits as that will be taken into account in the scoring process.]**

1. **Background (< 2 pages)**  
Description of the city's air quality trend in the past 10 years and relevant situations that contribute to air pollution in the city.
2. **Strategy (< 1 page)**  
Description of initiative, strategy or activities that were implemented to improve the air quality of the city and to reduce the burden of diseases from air pollution.
3. **Initiatives and actions of the city (< 5 pages)**
  - a. **Team members**  
Evidence of a dedicated and functioning team in charge of all aspects pertaining to air quality and health plans. Please include a copy of the institutional organigram.
  - b. **Beneficiaries**  
Description of the population groups that benefitted from improved air quality.
  - c. **Equity: consideration of marginalized or vulnerable groups**  
Description of how the measures and actions to reduce air pollution took into account marginalized or vulnerable groups. For example, how the city prioritized the protection of children, women, elderly, the poor or people with disabilities.

**d. Process: specifics on the approaches and activities**

Description of how stakeholders in government and civil society communicated and collaborated in the planning and execution of measures to improve air quality in the past three years.

**e. Best practice example (< 3 case studies)**

Description of initiatives, policies or activities that have demonstrated improvement of air quality and its impact in different settings – housing, transport, industry and energy sector.

**4. Monitoring and evaluation of the outcome (< 2 pages)**

a. Description of air quality monitoring stations that were set up to gather evidence.

b. Description of air quality trends over time that shows the effectiveness of measures undertaken.

**5. Measures for sustainability (< 2 pages)**

Provide evidence or argument that the reduction in air pollution achieved by the initiative is not temporary but a long-term sustainable outcome. For example, describe the regular budget and human resources dedicated to the assessment and management of air pollution before and after the initiative.