CLEAN AIR ASIA

TRANSFORMING ASIA’S CITIES FOR 15 YEARS

2016 ANNUAL REPORT
Clean Air Asia is an international non-governmental organization leading the regional mission for better air quality, and healthier, more livable cities throughout Asia. We work with partners to reduce air pollution and greenhouse gas emissions across Asia by building capacity, advocating for effective and appropriate policies and practice, and informing stakeholders of air pollution and climate change impacts. We aim to reduce air pollution and greenhouse gas emissions in 1000+ cities in Asia through a range of innovative policies and programs covering air quality, transport and industrial emissions, and energy use. We work with energy, environment, health and transport ministries, cities, the private sector, development agencies, academia and civil society to provide leadership and technical knowledge in Air Quality and Climate Change, Low Emissions Urban Development, Clean Fuels and Vehicles, Green Freight and Logistics, and Clean Air Certification. Clean Air Asia is headquartered in Manila and has offices in Beijing and Delhi.

Clean Air Asia’s approach is one of science-based, actionable guidance combined with an ethos of partnerships and collaboration to ensure our work has meaningful and sustainable impact.

We are a member of multiple regional and international committees and forums, including the Air Quality Technical Working Group under the Regional Forum on Environment and Health, the Partnership for Clean Fuels and Vehicles, the Global Fuel Economy Initiative, the ASEAN Working Group on Environmentally Sustainable Cities, the Asian Co-benefits Partnership, the Climate and Clean Air Coalition, the Global Atmospheric Pollution Forum, the Asia LEDS Partnership, the Global LEDS Transport Working Group, the Partnership on Sustainable, Low Carbon Transport, and the Urban Electromobility Initiative.

Our Better Air Quality Conference, a biennial event first held in 2002, brings together more than 1,000 policymakers, practitioners and industry leaders in developing solutions for cleaner air and livable cities. It is Asia’s largest and most prestigious air quality gathering.

In 2008, Clean Air Asia became a United Nations-recognized partnership comprised of almost 250 organizations in Asia and internationally, with six Country Networks (Indonesia, Malaysia, Nepal, the Philippines, Sri Lanka and Vietnam).
Our Mission

Clean Air Asia leads efforts to enable Asia’s 1,000+ cities to reduce both air pollution and greenhouse gases, particularly CO2 emissions, and thereby contribute to more livable and healthy cities with blue skies and a low carbon footprint. We help to reduce emissions through policies, plans, programs, and concrete measures that cover air quality, transport and industrial emissions and energy use.

Our Approach

Actionable guidance for administrators and policymakers to reduce air pollution and greenhouse gases at city, national and regional levels.

High-level expertise in air quality management across Asia

An ethos of partnership, collaboration and cooperation.

Our Aims

Decision-makers have the knowledge, data and tools to understand and address their air pollution challenges.

Improved cooperation among city, national and regional-level stakeholders.

The development and implementation of effective science-based and stakeholder-inclusive policies and programs.
Executive Director’s Statement

Much has been achieved at Clean Air Asia since our last annual report. To update you on how Clean Air Asia is doing, we’ve prepared an overview of our achievements, challenges and opportunities relating to our priorities and the highlights of the year. In 2016, Clean Air Asia reached the age of 15. While we are “still in our teens”, 2016 was the culmination of 15 years of organizational development, practice and learning, and was also the year in which we set forward our new strategy and vision for an Asia free of air pollution.

With air pollution implicated in the deaths of 7 million people annually around the world, the Better Air Quality (BAQ) Conference and the World Clean Air Congress joined forces and created a landmark event to explore the scientific, technological and policy advances and innovations - at local, national and international levels - that could solve the global challenges to health and the environment. Organized by Clean Air Asia, the International Union of Air Pollution Prevention Associations, the Korean Society for Atmospheric Environment and hosted by the City of Busan, the theme of the conference was “Clean Air for Cities - Perspectives and Solutions”, which highlighted the complexity of air pollution solutions, particularly at the city level where the impact is directly felt and where the main sources are often found. More than 1000 participants from 51 countries attended the conference, collaborating for solutions and learning from successful experiences.

At the BAQ conference, we also launched our new strategy for 2017-2020. We felt that, with the gravity of the challenges ahead of us, we needed to broaden the scope of our work to include stationary and other sources of air pollution while strengthening our core competences, building capacity, improving policy, and informing for action.

We’ve also developed the landmark Guidance Framework for Better Air Quality in Asian Cities, providing cities and countries with the knowledge and direction needed to effectively reduce air pollution, and we will be focusing on its implementation in the next three years.

In China, we tracked the progress of more than 150 cities in their implementation of air quality policies and provided policy recommendations for improved implementation, and we are pleased that those recommendations are now starting to be translated into policy.

On a broader level, we built the capacity of more than 500 officials across Asia based on our regional system for knowledge management and capacity building. We are tracking the progress and impact of our capacity building, and we are starting to see real changes on the ground with Clean Air Action Plans being launched and improved control measures being put in place as a result of our work.

To aid our capacity building, we need to understand the current capacities of cities. In this respect, we launched a new online version of the Clean Air Asia city scorecard that can be used by cities and stakeholders to understand the current capacity and where more effort and capacity building is needed. Transport and other mobile sources continue to be sources of air pollution across Asia, and to meet that challenge we developed with partners the “Better Transport Data for Sustainable Transport Policies and Investment Planning” database covering more than 40 ADB Developing Member Countries in the region. We see this as a critical tool to ensure that long-term mobility solutions are being considered at a stage at which we know urbanization will increase at a rapid pace across the region.

In my 2015 annual report I mentioned that we would use 2016 to focus (and refocus) our work in India. We used the year to do just that, launching a dedicated India strategy, moving our office in Delhi to new and better premises, and hiring new staff at all levels. Our progress has been substantial following the reorganization; we have launched a city knowledge network in India, are currently evaluating more than 30 Indian cities for their air quality management capacity using our Clean Air Asia scorecard, created a vibrant youth network for better air quality, and achieved unprecedented online support and our partnerships.

Reducing air pollution and its impacts on the environment and people’s health is an urgent and momentous challenge across Asia. Clean Air Asia is fully cognizant of this and the urgency needed to meet this challenge. As we increase our efforts to build capacity, improve policy, and provide information on the detrimental effects of air pollution and the solutions for better air quality, I would like, together with Clean Air Asia’s Board of Trustees, to extend a special thank you to our many supporters for their generous support - our work for more better air quality and liveable cities across Asia would not be possible without your support and our partnerships.

Bjarne Pedersen
Clean Air Asia Executive Director

In 2016, Clean Air Asia reached the age of 15. While we are “still in our teens”, 2016 was the culmination of 15 years of organizational development, practice and learning.
Governance

Clean Air Asia is governed by its articles of incorporation, bylaws and operations manual approved by its nine-member Board of Trustees. The Board of Trustees, which meets annually, has oversight over Clean Air Asia.

Robert O’Keefe
Mr O’Keefe is Vice-President of the Health Effects Institute, which assesses the health impacts of air pollution in developing countries. He is regularly called upon to address prominent institutions, including the Executive Office of the US President, the US Congress, the European Parliament, the National Research Council, the Institute of Medicine, ADB and the World Bank. A long-time environmental regulator, he also serves as a member of the US Environmental Protection Agency’s National Clean Air Act Advisory Committee.

Mary Jane Ortega
Ms Ortega is Special Advisor to and former Secretary-General of the Regional Network of Local Authorities for the Management of Human Settlements (CITYNET). She is also Vice-President of the Global Executive Committee of ICLEI - Local Governments for Sustainability. From 1998 to 2007, she served three terms as Mayor of San Fernando City in the province of La Union, Philippines. She was also a steering committee member of UN Habitat and the UN Institute for Training and Research and the United Nations Advisory Committee of Local Authorities.

Carlos S. Rufino
Mr Rufino is Chairman of the Urban Land Institute in the Philippines and part of the leadership group of ULI Asia Pacific. Mr Rufino is also President of the Net Group of Companies and Vice-President of the Management Association of the Philippines, and serves on the boards of De La Salle University, the Philippine Daily Inquirer, Sunvar Realty Development Corporation and VAR Buildings, Inc. He is also the honorary consul of Ghana in the Philippines.

David Guerrero
Mr Guerrero is the Chair and Chief Creative Officer of BBDO Guerrero/Proximity Philippines. The agency is part of BBDO Worldwide and a member of the Omnicom Group, a global advertising, marketing and corporate communications company. Campaign Brief Asia has ranked his office as one of Asia’s Top 10 Creatives.

Elisea Gozun
Ms Gozun was the former Presidential Assistant II on Climate Change and the former Secretary of the Department of Environment and Natural Resources in the Philippines. In 2007, she was recognized by UNEP as the Champion of the Earth for Asia and the Pacific.

He Kebin
Dr He Kebin is an academic at the Chinese Academy of Engineering, and Dean and Professor of Tsinghua University’s School of Environment. With more than 25 years’ experience, he is a specialist in air quality management. He sits on various committees that advise government and organizations on air quality management in China. In 2015, he was elected to the Chinese Academy of Engineering in recognition of his achievements in environmental science.

Dr Bindu Lohani
Dr Lohani is a member of the Advisory Council on Sustainability of Ingersoll Rand and was former Vice-President of the Asian Development Bank (ADB) for Knowledge Management and Sustainable Development and a member of the ADB’s Management Team. Before joining ADB, he worked for the Government of Nepal and was Division Chairman of the Environmental Engineering Program at the Asian Institute of Technology in Bangkok.

Jagan Shah
Professor Jagan Shah is Director of India’s National Institute of Urban Affairs, which is at the forefront of urban policy formulation and research in India. Prof. Shah is an architect and architectural historian and theorist trained at the School of Planning and Architecture in New Delhi and has served as Director of the Sushant School of Architecture in Gurgaon.

Yoshihiro Iwasaki
Mr Iwasaki has been President of Iwasaki Kigyo K.K. since 2007, and Iwasaki Fudosan K.K. since 2009. He was Director-General of ADB’s South Asia Department and was Senior Economist of the International Monetary Fund’s Asia Bureau.
Country Networks

Indonesia
Forum Udara Bersih Indonesia (FUBI), or the Indonesia Clean Air Forum, is Clean Air Asia’s Country Network in Indonesia. FUBI is comprised of representatives from the government, the private sector and civil society and aims to promote policy dialogue among stakeholders for the development of environmentally sustainable transport strategies and policies.

Nepal
Clean Air Network-Nepal (CANN) is Clean Air Asia’s Country Network in Nepal. CANN is an informal network of individuals, experts, national and international non-governmental organizations, government agencies and the private sector and aims to strengthen the public transport system, non-motorized transportation in Kathmandu, and the integration of co-benefits of air pollution and climate change mitigation.

Philippines
The Partnership for Clean Air (PCA) is Clean Air Asia’s Country Network in the Philippines. The PCA is a multi-sector network comprised of representatives from government, civil society, academic institutions and the private sector. PCA’s mission is to promote air quality management as a multi-stakeholder effort.

Sri Lanka
Clean Air Sri Lanka (CleanAirSL) is Clean Air Asia’s Country Network in Sri Lanka. CleanAirSL is a forum committed to the promotion of better air quality and livable cities and a reduction in air pollution and greenhouse gas emissions in Sri Lanka. It is comprised of representatives from government agencies, the private sector, non-governmental organizations, academia and development agencies.

Vietnam
The Vietnam Clean Air Partnership (VCAP) is Clean Air Asia’s Country Network in Vietnam. VCAP mobilizes individuals and organizations to take part in activities that improve air quality, protect public health and promote sustainable development.

Malaysia
The Malaysia Clean Air Network (MyCAN) was launched at Clean Air Asia’s Better Air Quality Conference in 2014. MyCAN is comprised of researchers, students and representatives from academia, governmental organizations and leading industries, who are working to improve air quality throughout Malaysia.
Late 1990s: Despite the prevalence and growing awareness of air pollution throughout Asia as the last millennium drew to a close, there existed no regional institution or program aimed at improving air quality. And while a number of universities and NGOs were working on the issue, there was little coordination among them.

The Asian Development Bank, the World Bank and USAID launched the Clean Air Initiative for Asian Cities (CAI-Asia) as Asia’s leading air quality network. CAI-Asia was part of a global Clean Air Initiative to demonstrate and promote innovative ways of improving air quality through experience-sharing and the building of partnerships. Through stakeholder outreach and collaboration, capacity building efforts, digital platforms and scientific research, CAI-Asia set about building the largest air quality network in Asia.

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Clean Air Asia Team

Manila office

Bjarne Pedersen  
Executive Director
Glynda Bathan  
Deputy Executive Director
Art Docena  
Finance and Administrative Services Manager
Kaye Patdu  
Head of Programs
Alvin Mejia  
Transport Program Manager
Katharine Thoday  
Cities for Clean Air Certification Program Director
Ritchie Anne Roño  
Cities Clean Air Partnership Program Manager

Dang Espita  
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Tanya Gaurano  
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Kathleen Dematera  
Environment Researcher
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Jerey Estrada  
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Lu Fu  
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Geetanjali Kaushik  
Air Quality Specialist
Sameera Kumar  
Transport Researcher
Bani Bains  
Communications Officer
Geeta Choudhary  
Finance and Administration Officer
Clean Air Asia Partnership

The Clean Air Asia Partnership is comprised of representatives from local and national governments, civil society, academic/research institutions, the private sector and development organizations who are committed to the promotion of better air quality management in Asian cities through:

- Encouraging the development and adoption of sound science as the basis of air quality management, sustainable transport, clean energy and urban development
- Stimulating the development and implementation of policies, programs and projects covering air quality, vehicle and industrial emissions, and energy use
- Fostering coordination and cooperation with other regional programs and initiatives related to air quality management, sustainable transport, clean energy and urban development in Asia

Clean Air Asia Partnership members include 45 city representatives, 33 government agency representatives, 116 representatives from NGOs and academia, 17 representatives from international development agencies and foundations, and 38 representatives from the private sector.

The Clean Air Asia Partnership is represented by the Partnership Council which, like the partnership itself, is multi-sectoral and covers the three main Asian sub-regions: East Asia, Southeast Asia and South Asia. The Partnership Council is principally responsible for preparing and facilitating biennial partnership meetings with support from Clean Air Asia.
A 2001 workshop in Hong Kong in partnership with the Environmental Protection Bureau and Hong Kong Polytechnic University inspired the creation of the Better Air Quality (BAQ) conferences, and resulted in the first BAQ Conference being held in Hong Kong in 2002. The biennial event has become Asia’s largest air quality gathering, covering issues such as transport, energy, industry and climate change.
Air pollution is responsible for 1 in 8 deaths globally and 2.6 million deaths in Asia (WHO).
2016 - our 15th anniversary year - was another busy and productive year for Clean Air Asia, with highlights that included the convening of the 9th Better Air Quality (BAQ) Conference in Busan, South Korea, the launch of the landmark Guidance Framework for Better Air Quality in Asian Cities in February, the release of the first two English-language versions of the groundbreaking “China Air” reports (2015 and 2016), the launch of the innovative Cities for Clean Air Certification initiative, and the unveiling of the new 2017-2020 Clean Air Asia strategy, which builds on our strengths, continues and expands our trajectory of work, and takes us to the next level in the fight for better air quality across Asia.

Throughout the year we continued to expand our work with cities and are now assisting more than 70 cities in Asia in establishing and implementing sound, science-based policies for clean air and its climate co-benefits through training, the provision of monitoring equipment, twinning, air quality management capacity assessment, and other capacity building programs. More than 500 cities now form part of our air quality and transport databases, in-depth air quality management reporting, and city partnerships.

We increased capacity of more than 550 trainees throughout Asia in 13 regional and national trainings, and our China office facilitated collaboration between 650 representatives from 95 cities - 55 environmental protection agencies and 36 local NGOs - in improving air quality. And our work in Dalian with the municipal government on the retrofitting of coal-fired boilers and coal pollution mitigation measures saw the city reduce 12,500 tonnes of SO2 emission and 9,300 tonnes of dust emissions.

In India, with a new team in place and a new office, 2016 proved to be a year of new directions, new initiatives and new collaborations. The work undertaken included the launch of Train for Clean Air: Clean Air for Kids project - a collaboration between Clean Air Asia and the US Embassy in Delhi, and the selection of 30 Indian cities for the application of our Clean Air Scorecard Tool.

In April, we were invited to be the co-organizer of the two-day “Alleviating Air Pollution in the Asian Region” meeting with the Growald Family Fund, which gathered together 65 representatives from 95 environmental protection agencies and 36 local NGOs - in improving air quality. And our work in Dalian with the municipal government on the retrofitting of coal-fired boilers and coal pollution mitigation measures saw the city reduce 12,500 tonnes of SO2 emission and 9,300 tonnes of dust emissions.

And our role as regional training hub for Train-For-Clean-Air was further recognized at the 14th meeting of the ASEAN Working Group on Environmentally Sustainable Cities. Together with ASEAN Secretariat, we will develop a proposal to build capacity of ASEAN cities in air quality using T4CA.

2016 IN REVIEW
Clean Air Asia, together with the Korean Society for Atmospheric Environment (KOSAE) and the International Union of Air Pollution Prevention Associations (IUAPPA), organized the most successful Better Air Quality (BAQ) Conference to date. The conference - our ninth - was held in 2016 with the 17th IUAPPA World Clean Air Congress (WCAC) from August 29 to September 2 in Busan, South Korea.

The theme of the conference was “Clean Air for Cities - Perspectives and Solutions”, which highlighted the complexity of air pollution and the need for solutions, particularly at the city level where the impacts are directly felt and where the main sources of air pollution are often found.

More than 1,000 people attended BAQ/WCAC, from 55 countries and 181 cities. Keynote speakers included World Health Organization Director-General Dr Margaret Chan, and International Energy Agency Executive Director Dr Fatih Birol.

In all, there were five plenary sessions, 65 breakout sessions (20 sessions for BAQ; 42 sessions for WCAC; 3 BAQ/WCAC joint sessions), 12 keynote messages/presentations, 300 oral presentations (99 from BAQ and 201 from WCAC), and 244 poster presentations, nine BAQ pre-events and post-events, two program launches (Clean Air Asia’s Clean Air Scorecard Tool and the Child Health and Mobility Initiative), five stakeholder roundtables (India, Vietnam, Nepal, Philippines, Malaysia), two social events and three technical tours, and 35 sponsors and exhibitors.

During the conferences, a stronger commitment to transformative policy action was forged to help improve air quality in cities around Asia. The 1,000 delegates, 500 significant research papers, review reports and numerous new initiatives at the conferences provided the stimulus for a significant step forward in atmospheric science and policy. It served as a call to action to find local solutions that address the impact of air pollution on public health and our urban future.

“Among the key messages that resonated across breakout sessions is this: Air pollution and climate change are complex issues and there is no silver bullet to address them,” said Clean Air Asia Deputy Executive Director Glynda Bathan-Baterina. “The only solution is an integrated one. This is the main message - we have to look at systems and transformative approaches to address these complex issues.”
Dr. Supat Wangwongwatana, a scientist and practitioner who has worked tirelessly for the past 26 years to improve air quality in Thailand and throughout Asia, was the recipient of the prestigious Kong Ha Award for Excellence in Air Quality Management.

Presenting the award at the 9th BAQ Conference, Clean Air Asia Executive Director Bjarne Pedersen said he was a worthy award honoree, embodying the true spirit of the award with his deep commitment, knowledge, enthusiasm and strong sense of partnership in pursuit of solutions to one of the most pressing issues of our time.

“Dr Wangwongwatana has demonstrated technical expertise in the field of the highest standard. When we look at his achievements, we see multi-stakeholder participation and a strong commitment to transforming his scientific work into policies that champion our cause for cleaner air for everyone.”

Dr. Wangwongwatana’s many contributions include retrofitting the Mae Moh lignite-fired thermal power plant in Thailand’s Lampang province to significantly reduce sulfur dioxide emissions that were a large health burden for people within the vicinity of the plant.

“People said it was an impossible mission,” he said. “It took us eight years to achieve our goal. And from this, I want to deliver my message to all of you that when people question your goals for cleaner air, it can be done.”
The 9th BAQ Conference saw the unveiling of the new 2017-2020 Clean Air Asia strategy. Clean Air Asia Executive Director Bjarne Pedersen said the strategy built on the organization’s strengths, expanded the trajectory of work, and took Clean Air Asia to the next level in the fight for better air quality across Asia.

“We will link the interconnected issues of air quality, climate change and health with the sustainable development agenda in support of the Paris Agreement and in achieving the UN Sustainable Development Goals, including developing a compelling case for action among stakeholders in developing Asian cities and countries,” Mr Pedersen said.

“We will also continue to expand upon the work of the Air Quality and Climate Change Program; responding to the international call for action on air pollution and, under the Sustainable Transport Program, will focus on a holistic approach to mitigating emissions from transport.”

“And in new work streams, we will engage in the mitigation of stationary sources of pollution, indoor air pollution and transboundary haze, supporting countries to implement the roadmap on ASEAN Cooperation Towards Transboundary Haze Pollution Control.”

Clean Air Asia was a contributor to the International Energy Agency’s “Energy and Air Pollution 2016 - World Energy Outlook Special Report”, which focused attention and resources for the first time on such a key issue for the sustainability of Asian economies.
CAI Asia organized a Dialogue for Cleaner Fuels and Vehicles in Asia, which led to the Singapore Statement supported by 12 major international and local oil companies. This led to the development of the Roadmap for Cleaner Fuels and Vehicles in Asia launched in 2008. Guided by the regional roadmap, CAI Asia worked with national governments in Bangladesh, China, India, Indonesia, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand and Vietnam to push for a policy roadmap to improve emission standards for new and in-use vehicles and improve fuel quality.

CAI Asia began gathering air quality data from cities in Asia, and was the first organization to demonstrate that air quality in Asian cities had improved since the 1990s. Today, we track air quality in 478 cities in 17 Asian countries and contribute to the World Health Organization’s Outdoor Air Pollution Global Database.

The BAQ Conference was held in Manila, Philippines.
With a better understanding of the many benefits of coordinated air pollution and climate change mitigation strategies, ASEAN countries strengthened their commitment to collaboratively address regional air quality issues during a three-day Clean Air Asia capacity building workshop in Manila in November. The “Realizing Co-benefits through Air Pollution Reduction Strategies and Climate Change Policies” workshop from November 22-24, supported by the Canada Fund for Local Initiatives and the IBAQ Programme, in partnership with the ASEAN Secretariat, brought together 27 people from eight ASEAN countries to harmonize and align air quality initiatives and climate change policies, which in turn will enable cities in the region to capitalize on multiple economic, environmental and health returns.

Representatives from cities throughout the Philippines were trained in the use of Clean Air Asia’s Clean Air Scorecard Tool to assess their air quality management capacity in order to systematically address the air pollution challenges facing cities and, more broadly, airsheds during a national workshop in December. In collaboration with the Department of Environment and Natural Resources’ Environmental Management Bureau, the “National Airshed Assessment Workshop” brought together representatives from 19 cities and one municipality spanning 14 regions of the Philippines in a comprehensive assessment of air quality management capacity in identified airshed priority cities using the CAST.

The signing of a Letter of Agreement between Clean Air Asia and the Department of Environment and Natural Resources’ Environmental Management Bureau (EMB) will help ensure better air quality for cities throughout the Philippines. The Letter of Agreement put into operation Special Order No. 2015-991 of October 2015 designating the Air Quality Management Section and the Environmental Education and Information Division of the EMB as the national hub for the implementation of “Train-for-Clean-Air” (T4CA) courses in the Philippines and confirming Clean Air Asia as the regional training hub. T4CA assists cities in the development and implementation of clean air plans and in making informed air quality policies and decisions.

T4CA is comprised of six courses aimed at different city-level stakeholders: The Strategic Framework for Air-Quality Management (AQM) for High-Level Decision-Makers; AQ Monitoring for Smaller Cities; Emissions Inventories for Smaller Cities; Awareness-Raising for Media and Civil Society Groups; Developing Effective AQM Communication Strategy; and Curbing Emissions from the Transport Sector.

Peopled in seven out of 10 cities in developing Asian countries breathe air that is dangerous to their health and detrimental to the environment, and 896 cities in the region are at risk of unhealthy air quality. Levels of air quality management vary widely throughout the region and have not developed at a pace sufficient to respond to the changing urban landscape and the rapidly evolving air pollution crisis. Clean Air Asia, as the regional resource hub for air quality management training, is helping to strengthen the capacity of stakeholders through the Air Quality and Climate Program, supporting a range of initiatives at the city, subnational (regional), and national levels.

The Air Quality and Climate Change Program has three outcomes:

- A Guidance Framework for Better Air Quality in Asian Cities: We’ve developed the landmark Guidance Framework - the operational core of the Integrated Programme for Better Air Quality in Asia (IBAQ Programme) - which provides cities and countries with the knowledge and direction needed to effectively reduce air pollution.

- A regional system for knowledge management and capacity building: We’ve developed a regional training system which supports Asian governments and cities in managing air pollution and greenhouse gas emissions, in partnership with universities, research institutions and NGOs.

- Support for cities in the management of air pollution and greenhouse gas emissions: Using our Clean Air Scorecard Tool, we’re helping to assess cities’ strengths and weaknesses, which is shaping the development of targeted policies and action plans.

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- Support for cities in the management of air pollution and greenhouse gas emissions: Using our Clean Air Scorecard Tool, we’re helping to assess cities’ strengths and weaknesses, which is shaping the development of targeted policies and action plans.
Continuing to build the air quality management capacity of cities throughout the Philippines, the T4CA initiative helped Santa Rosa, Pasig and Legazpi develop emissions inventory work plans that enable improved identification and quantification of the sources and levels of ambient pollutants. The work plans, which complement the cities’ existing environmental plans, were developed during a “Emissions Inventories for Smaller Cities” workshop in September organized in Manila by the University of the Philippines’ National Center for Transportation Studies in conjunction with Clean Air Asia.

Clean Air Asia continued to promote city cooperation as a key mechanism with which to promote air quality improvements. At the “Mainstreaming Air Quality in Urban Development through South-South Twinning” workshop pre-event session of the 9th BAQ Conference, the focus was on the partnering or “twinning” of cities to share experiences and collaboratively address urban air quality management challenges to help solve the ever-worsening problem of air pollution throughout Asia. The workshop was a prelude to the implementation of the second phase of ADB’s “Mainstreaming Air Quality in Urban Development through South-South Twinning” project that is aimed at addressing the challenges of air quality management in Asian cities by promoting long-term planning and identifying strategies for South-South twinning to facilitate the sharing and learning of sound urban air quality management practices.

With smaller cities (from 500,000 to 1 million inhabitants) representing the world’s fastest growing urban agglomerations, Clean Air Asia and GIZ co-authored the “Handbook for Clean Air Management in Smaller Cities”, which was launched at the 9th BAQ Conference. It details key steps to enable smaller cities to implement air quality management measures to curb the health and environmental impacts of air pollution, anticipating that as they move towards the same growth trajectory as megacities in the region, they will likewise experience similar challenges in air quality management. The report reinforces the urgency for improved air quality management to be on the development agenda, particularly in smaller cities that often lack the financial capacity to fund the necessary initiatives.

To strengthen the Philippine media’s understanding of air quality issues and the complexities involved in reporting on air pollution, its sources and impacts, mitigation options, co-benefits, and data interpretation, Clean Air Asia and the Department of Environment and Natural Resources held a workshop for media and government communications staff in Metro Manila in December. The workshop not only empowered journalists to accurately and more effectively report on air pollution, it also enabled them to impart to the public the extent to which they are affected and inspire action for better air quality.
CAI-Asia established Country Networks in China, Nepal and Sri Lanka, and in 2009 added networks in India, Indonesia, Pakistan, Vietnam and the Philippines.

The BAQ Conference was held in Agra, India.


**IBAQ Programme 2016 Achievements**

**China**

Drawing on Guidance Framework and IBAQ Programme guidance, the implementation of provisions covering coal combustion pollution in the Action Plan for Air Pollution Prevention and Control is being strengthened in eight cities in Northeast China: Dalian, Changchun, Jinzhou, Suihua, Hegang, Jilin, Shuangyashan and Benzi.

Following a training workshop and the provision of technical support in Shanghai, Clean Air Asia is helping to address ozone and PM2.5 pollution issues in Yangtze River Delta provinces and cities by strengthening VOCs monitoring, emission source identification, and control policy enforcement in industrial zones in Shanghai, Jiangsu province (Nanjing, Suzhou, Nantong, Huai’an and Zhenjiang) and Zhejiang province (Hangzhou, Ningbo, Shaoxing and Huzhou).

Through a technical workshop and training activity in Chengdu, Clean Air Asia is promoting a science-based air quality management approach for 13 provinces (Sichuan, Guangdong, Hebei, Jiangsu, Hunan, Jiangxi, Heilongjiang, Liaoning, Guangxi, Shanxi, Yunnan, Guizhou and Ningxia) and 37 cities (Chengdu, Meishan, Mianyang, Zigong, Luzhou, Chongqing, Shanghai, Beijing, Shijiazhuang, Tangshan, Xingtai, Zhangjiakou, Jinan, Zhengzhou, Suzhou, Ningbo, Yixing, Yanancheng, Xinyu, Guangzhou, Shenzhen, Foshan, Zhangshun, Zhaoqing, Jieyang, Shaoguan, Dongguan, Zhaozhou, Changsha, Zhuhai, Xiangtan, Zhuzhou, Jinlin, Dalian, Benxi, Urumqi and Lanzhou).

A total of 685 city officials throughout China were trained and the capacities of 105 cities to address air quality management issues were strengthened in the past two years.
Mongolia

As part of our IBAQ Programme, a review paper on air quality management highlighting the experiences and good practices between Beijing, Delhi and Ulaanbaatar was integrated into a Draft Action Plan and National Action Program on Reducing Air Pollution, along with relevant sections of the Guidance Framework. Clean Air Asia helped to facilitate the development of the Draft Action Plan by convening decision-makers, policymakers and air quality management stakeholders in Mongolia.

In collaboration with the Asia Center for Air Pollution Research, a training was provided for local emissions inventory (EI) compilers and relevant agencies in conjunction with the development of a guidance document on undertaking a national EI system in Mongolia.
CAI-Asia and FECO-MEP organized the first annual China City Air Quality Management Workshops. Since their inception, 12 workshops have been held and more than 90 cities have participated in technical and training workshops.
Our work in Vietnam led to the drafting of a Clean Air Action Plan in collaboration with the Can Tho People’s Committee, the Can Tho Department of Environment and Natural Resources, and the Vietnam Environment Administration, which will serve as the model for similar actions in other cities in Vietnam.

Following policymaker consultation facilitated by Clean Air Asia, national policymakers in Vietnam requested the development of EI guidelines and calculation tools for the urea production industry, emissions from which include ammonia and particulate matter that represent serious problems nationally. The guidelines support the implementation of the Ministry of Natural Resources and Environment’s Circular on Registration and Inventory of the Industrial Air Emission Sources in Vietnam.

Building on our support for the implementation of emissions registration in the country, an Emission Permitting model was developed that draws on both the Guidance Framework and international experience. The model, which supports the legislative priorities of the Pollution Control Department, covers emissions registration and the issuance of emissions permits for existing industrial facilities in Vietnam.
Philippines

In 2016, the IBAQ Programme identified priority areas of support for the Department of Environment and Natural Resources’ EMB, which focuses on the development of Local Roadmaps for Better Air Quality and is based on the Guidance Framework.

We partnered with the EMB in assessing the air quality management status and identifying the challenges and priorities of 19 cities and one municipality in the Philippines using the Guidance Framework and our Clean Air Scorecard Tool. With mobile sources found to be the greatest contributors to air pollution in the Baguio-La Trinidad-Itoig-On-Sablan-Tuba-Tublay (BLISTT) Airshed, and in line with the initial results of an air quality management assessment based on the Cordillera Autonomous Region’s action plan and using the Guidance Framework, a training to improve capacity for proper vehicle maintenance, fuel efficiency management and eco-driving was held in Baguio in November. The training convened 37 stakeholders from the BLISTT Airshed.

Technological impacts

The IBAQ Programme has led to the expansion of the Acid Deposition Monitoring Network in East Asia (EANET), which will enable better assessment of the program’s longer-term impacts on air pollution levels and emissions intensities. In 2016, Manila and Phnom Penh had new emissions monitoring equipment installed and received corresponding technical training.
2006

The BAQ Conference was held in Yogyakarta, Indonesia.

The First Governmental Meeting on Urban Air Quality in Asia was held in parallel with BAQ 2006 in Yogyakarta. The meeting was co-organized by CAI-Asia, UNEP, the State Ministry of Environment of the Republic of Indonesia, and the United Nations Centre for Regional Development. Governmental Meetings - which are a voluntary non-binding, knowledge-sharing platform - have since been held every two years during BAQ conferences to harmonize approaches between Asian countries in tackling urban air pollution and related areas.
In February 2016, we launched the landmark Guidance Framework for Better Air Quality in Asian Cities, which provides a viable solution to the growing air pollution problems facing countries and cities throughout the region.

The Guidance Framework, organized around key areas of concern in Asia, equips countries and cities with the knowledge and direction needed to effectively reduce air pollution, mapping out the steps and actions to be taken by national and local-level policymakers and decision-makers to improve air quality.

“This is for us, and hopefully for cities across Asia, a significant and transformative event,” said Clean Air Asia Executive Director Bjarne Pedersen at the launch. “There is now a profound understanding about the scale of the problem that we face. And let’s not underestimate the scale of the problem, the challenge that we face in terms of worsening air quality - air pollution is seen as the largest environmental health risk worldwide.”

In March and June, Clean Air Asia held regional workshops in Manila and Beijing on the implementation of the Guidance Framework for Better Air Quality in Asian Cities. The workshops, involving representatives from the Philippines, China, Mongolia and Vietnam, were designed to support countries and cities in improving their air quality management capabilities to address the growing air pollution problems prevalent throughout Asia.

“The training is one of the different forms of support that Clean Air Asia is able to provide to cities in Asia through the Integrated Programme for Better Air Quality in Asia and is an important step in implementing the Guidance Framework”

Clean Air Asia Executive Director Bjarne Pedersen
Representatives from more than 20 environment ministries throughout Asia gathered at the Sixth Governmental Meeting on Urban Air Quality in Asia in Busan, South Korea, in August at a BAQ Conference pre-event to collaboratively address the challenges of air pollution — “one of the most important issues of our time” — with the aim of achieving the Long-Term Vision for Urban Air Quality in Asia through the implementation of the Guidance Framework for Better Air Quality in Asian Cities.

The Guidance Framework, a core component of Clean Air Asia’s Integrated Programme for Better Air Quality in Asia (IBAQ Programme), was developed as an outcome of the Governmental Meetings and provides a viable solution to the region’s growing air pollution problems. With the regional implementation of the Guidance Framework under way, cities and countries throughout Asia are taking steps forward in improving air quality and in addressing urban air pollution.

The Governmental Meetings, a voluntary non-binding, knowledge-sharing platform organized by Clean Air Asia and the United Nations Environment Program - Regional Office for Asia Pacific and Clean Air Asia, are held every two years to harmonize approaches between Asian countries in tackling urban air pollution and other related issues.

“Urban air quality continues to be an important developmental problem in Asia. The choices made now and in the next years by Asian cities on how to develop will, to a large extent, determine emissions for the coming 20 to 30 years”
Clean Air Asia Executive Director Bjarne Pedersen

“The biennial Governmental Meetings are an integral part of the Better Air Quality conferences geared towards further strengthening and nurturing the air quality community in Asia,” said Clean Air Asia Executive Director Bjarne Pedersen. “We bring governments together in an informal manner to harmonize approaches between Asian countries in tackling urban air pollution.

“The Guidance Framework, in support of the Long-Term Vision, is helping and will continue to help Asian cities in improving their air quality management capacity and to better understand implement urban air quality management strategies.”
Clean Air Scorecard Tool launch

The launch of the new online version of Clean Air Asia’s Clean Air Scorecard Tool (CAST) on September 1 at the 9th BAQ Conference paved the way for better assessment of the air quality and management capacity of cities throughout Asia.

The online CAST, developed with support from the UPS Foundation, responds to the growing need for more accessible, objective and comprehensive understanding of air quality levels and the management capacity of cities in the region, and provides an accessible portal for cities and stakeholders to assess related policies and actions.

Since its development in 2010, the CAST has been applied in 24 Asian cities from nine countries: China (Changchun, Dalian, Foshan, Guangzhou, Hangzhou, Harbin, Jiangyin, Jinan, Tongxiang, Zhaoqiang), India (Visakhapatnam), Indonesia (Jakarta), Nepal (Kathmandu), Pakistan (Quetta), Philippines (Cagayan de Oro, Iloilo, Manilal), Sri Lanka (Colombo), Thailand (Bangkok, Chiang Mai, Korat), and Vietnam (Bac Ninh, Can Tho, Hanoi). Bringing the CAST online expands the outreach to allow the participation of more cities and stakeholders across the region.

The CAST can be accessed online at http://www.cleanairasia.org/cast

“Cities need a tool not just to monitor air quality levels, but to understand their overall air quality management capacity, which can provide an indication of how well prepared they are to respond to this environmental health risk.”

Clean Air Asia Executive Director Bjarne Pedersen
CAI-Asia was incorporated as a regional independent non-governmental organization, with Cornie Huizenga at the helm as the first Executive Director and Professor Jiming Hao from China’s Tsinghua University elected first Chair of the Board of Trustees. With its new status, CAI-Asia was able to more proactively facilitate and strengthen the air quality management agenda at local, national and regional levels.

CAI-Asia jointly implemented the three-year Sustainable Urban Mobility in Asia (SUMA) program, working with Asian cities and countries to strengthen the formulation and implementation of sustainable urban transportation and air quality management policies. SUMA involved studies, policy dialogues, action planning, training, conferences and pilot projects, focused on areas such as the social impacts of transportation, bus rapid transit, non-motorized transportation, electric bicycles, motorized two to three-wheelers, transportation demand management and fiscal measures.
Cities for Clean Air Certification Program

The consultations highlighted that cities faced challenges in integrating air quality considerations into city development decisions, vertical and horizontal coordination, and turning plans into actions. A Certification Advisory Committee was subsequently established representing each of the following six action areas to agree on the structure of the certification scheme.

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<td>5. Planning and infrastructure</td>
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<td>6. Air pollution reduction</td>
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Clean Air Asia’s Cities for Clean Air Certification Program is an innovative voluntary standard that supports and recognizes the actions that cities take to address air quality.

The development of the standard involved broad consultation with stakeholders from cities, city associations, national environmental authorities, development organizations, the private sector, NGOs and academic institutions.

Members of the Certification Advisory Committee:

City Governance | Bernadia Tjandradewi  
Secretary General, United Cities and Local Governments - Asia Pacific; Vijay Jagannathan, CityNet Secretariat

Air Quality Management | Nguyen Thi Kim Oanh  
Professor, Asian Institute of Technology; Arnico Panday, Senior Atmospheric Scientist and Coordinator of the Atmosphere Initiative, International Center for Integrated Mountain Development

Stationary Sources | Katsunori Suzuki  
Professor/Director, Global Standard Division, Institute of Science and Liberal Arts, Kanazawa University

Integrated Transport | Bert Fabian  
United Nations Environment Programme Officer, Transport Unit

Urban Development and Land Use Planning | Raymond Rufino  
Urban Land Institute Asia Pacific.

The certification scheme was launched at the 9th BAQ Conference in Busan, during which representatives from the private sector (Faurecia), the public sector (ADB) and nonprofit Sustainable Jersey shared how the initiative could encourage recognition and actions by cities and thus have a multiplier effect to drive action.

The certification scheme is piloting in cities in the Philippines (Baguio, Iloilo and Santa Rosa), Indonesia (Malang) and Nepal (Kathmandu) and an online management system was developed to support the rollout of certification, including enabling cities to track and upload their actions - providing both an individual management resource and a means of sharing and aggregating data and best practices.

Following the launch, the scheme is piloting in cities in the Philippines (Baguio, Iloilo and Santa Rosa), Indonesia (Malang) and Nepal (Kathmandu) and an online management system was developed to support the rollout of certification, including enabling cities to track and upload their actions - providing both an individual management resource and a means of sharing and aggregating data and best practices.

It is anticipated the first cities will achieve certification in 2018.

"Working towards certification is a way that our efforts can be recognized and we can feel confident we are moving in the right direction"  
-Cordelia Lacsamana, Baguio City Environment and Parks Management Officer

"We are just starting our journey to address clean air, and certification provides us with an opportunity to build visibility for taking action"  
-Erlinda Creencia, Head of the Santa Rosa Environment and Natural Resources Office
The “2016 International Environmental Partnership Cities Clean Air Partnership and Air Pollution Control Strategies Exchange Workshop”, organized by Clean Air Asia and the International Environmental Partnership in November, provided a platform on which to engage participants in the Cities for Clean Air Certification Program, which recognizes cities for their actions to improve air quality.

Local government associations, the League of Cities of the Philippines and Asosiasi Pemerintah Kota Seluruh Indonesia (the Association of Indonesian Municipalities) considered the challenges faced by the cities in their networks and opportunities to support and recognize them for the actions they take through certification.

Transport is an issue of particular concern. Many cities are already congested, yet current trends predict a steady increase in vehicle numbers from 40 vehicles per 1000 people in 2010 to 310 per 1000 people in 2035.

“The certification program helps participants contextualize the best practices of other cities,” said Program Director Katharine Thoday. “It inspires them to take action and provides impetus for the urgent efforts that need to be undertaken throughout the region to address air pollution.

“We’re laying the foundations for cities that lack the human resources and the infrastructure, and we’re building the political momentum so cities are able to allocate the resources needed to address these challenges.”

Alvin Asis, League of Cities Environment Officer
In 2008, CAI-Asia launched the CitiesACT database at a BAQ Conference pre-event. With support from ADB, the World Bank and the Global Atmospheric Pollution Forum, CitiesACT was developed as an online database providing access to air quality, climate change, transport and energy data and indicators for Asian cities and countries. CAI-Asia and UNEP developed the Long-Term Vision for Urban Air Quality in Asia, which describes the desired state of urban air quality in Asian cities in 2030. At the Second Governmental Meeting on Urban Air Quality in Asia, representatives from 15 environmental ministries agreed that the LTV would inspire Asian cities to develop and implement their own vision.

CAI-Asia was officially recognized by the United Nations as a Type II Partnership, sharing the guiding principles of the World Summit on Sustainable Development. The CAI-Asia Partnership Chair was Elisea Gozun.

In 2008, CAI-Asia began managing the five-year Clean Air and Blue Skies for Asia exchange program with support from Fredskorpsen, Norway. The program covered six countries: Hong Kong, Indonesia, Nepal, Philippines, Sri Lanka and Vietnam. Under the project, young professionals and civil servants were posted in partner organizations to gain practical skills in air quality management. There were 28 exchanges throughout the five years of the project that resulted in improved country programs on air quality and long-term collaboration between partner organizations.

CAI-Asia and the Partnership for Clean Fuels and Vehicles launched the UNEP Clean Fleet Management Toolkit at the Better Air Quality Conference in Bangkok, Thailand. Training on the toolkit was subsequently held in Chile, Slovenia, Dubai and St Lucia.

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More than 80% of people living in urban areas that monitor air pollution are exposed to air quality levels that exceed WHO limits.
At the Green Freight and Logistics Day pre-event session prior to the 9th BAQ Conference, representatives from Asian countries, multinational development institutions and the private sector were united in their belief that the adoption of greener freight made good business sense, with the evidence pointing to significant economic, environmental and social gains for the region.

What was required was the creation of new, and the alignment of existing, green freight programs and the implementation of the Global Green Freight Action Plan and labeling to provide incentives for companies interested in the development of a more sustainable delivery chain.

“Freight trucks comprise 5 percent of vehicles but generate up to 60 percent of transport emissions,” said Clean Air Asia Deputy Executive Director Glynda Bathan-Baterina at the Green Freight and Logistics Day pre-event session prior to the 9th BAQ Conference. “These vehicles are also primarily diesel-run, which means they significantly contribute to pollutants that affect health, such as particulate matter, as well as pollutants that affect both the climate and human health, for example black carbon. Thus, the business case for taking action is very compelling.”

Jim Blubaugh from the US Environmental Protection Agency’s Office of Transportation and Air Quality said the green freight landscape was rapidly evolving, and initiatives such as the Global Green Freight Action Plan offered blueprints to support such efforts as knowledge transfers, peer-to-peer partnerships, and government and industry exchanges.

However, there was a need to know how to make green freight interesting for investors, how to improve partnership mechanisms, and how to address investment gaps, said Sumit Pokhrel, Senior Climate Change Specialist with the ADB-led GMS Core Environment Program.

Denise Sioson, Diesel and HFC Initiative Coordinator with the Climate and Clean Air Coalition, said the benefits of green freight needed to be highlighted, and high-level support elicited by linking health and climate, and the linkages between national and global goals on the economic, social and environmental aspects of freight.

Ms Bathan-Baterina said there were three steps needed to advance the green freight agenda in Asia: Create, Align, Integrate.

“Firstly, there is a need for more national governments to create their respective national green freight programs and to create an enabling environment to make actions happen.

Secondly, seeking to align efforts will remain important to avoid the risk of duplication.

And thirdly, integrating the private sector into green freight programs is an important factor to success.”
The Cleaner Fuels and Vehicles session at the 9th BAQ Conference, co-organized by Clean Air Asia, UNEP and the Asian Clean Fuels Association, highlighted the importance of unified strategies among countries. Participants included representatives from environment ministries and local/city governments involved in the development of fuel economy policies and standards, organizations and researchers working on transport-related policies, automakers and auto parts manufacturers and suppliers.

The need for the continuous advancement of fuel and vehicle policies is Asia was paramount given the forecast growing demand for motorized travel in the region and the corresponding need to mitigate the accompanying environmental and health impacts.

And while Asian countries are becoming increasingly proactive in improving fuel standards, UN Environment Programme Officer Bert Fabian said only a few countries throughout the world had implemented low-sulfur fuel roadmaps, with more than half still reliant on high-sulfur fuels.

“Global progress on diesel fuel desulfurization needs to be accelerated and more widespread,” Mr Fabian said. “Fuel sulfur content is a key determinant of vehicle emissions such as particulate matter. Lowering sulfur content can also enable the use of more advanced emissions technologies that further reduce emissions.”

“Th e switch to low-sulfur fuel and more stringent standards for diesel fuel and vehicles would reduce cumulative emissions of diesel black carbon by an estimated 7.1 million metric tons through 2050, and an 85 percent reduction in developing regions by 2050.”

Bert Fabian, UNEP Programme Officer
A sia is rapidly urbanizing, which is fueling growing mobility and energy demands. In order to decouple rising emissions from urban growth, the development of sustainable modes of transport and clean energy, and the implementation of policies and measures aimed at reducing air pollution and greenhouse gas emissions are required.

Low Emissions Urban Development

Clean Air Asia’s Low Emissions Urban Development Program is working with governments and cities at the policy level, particularly on the integration of “avoid-shift-improve” strategies (reduce or avoid the need to travel; shift to or maintain share of more environmentally friendly modes; improve the energy efficiency of transport modes and vehicle technology), building awareness and capacity, promoting campaigns designed to bolster investments in sustainable urban development, and improving walking and cycling infrastructure and policies.

The Low Emissions Urban Development Program has three work streams:

Mainstreaming low-emissions transport strategies: Clean Air Asia is helping national and city governments integrate low emissions transport strategies into policies and investments and into urban master plans.

Knowledge management and exchanges on land use, transport and energy: Clean Air Asia is building an exchange platform with development agencies, governments and other partners. We are collecting and analyzing data on transport and energy-related air pollution and greenhouse gas emissions, and developing land-use indicators.

Placing walkability higher on the development agenda: Clean Air Asia is extensively involved in non-motorized transport projects and is helping to develop community-based walking and cycling indexes and is supporting such initiatives as bike-sharing schemes and the building of greenways.

“Motorized transportation continues to grow, and this has led to a commensurate rise in vehicle-related air pollution and its attendant health impacts. A change of focus is required; cities need to prioritize the promotion of walking, cycling and the use of public transport.”

- Clean Air Asia Transport Program Manager Alvin Mejia

Throughout 2016, Clean Air Asia continued to promote sustainable mobility and a shift to non-motorized forms of transport and improved public transport. Improving pedestrian mobility in cities is a fundamental component of urban emissions-reduction strategies, yet it is one that is generally afforded little policy priority. At the 2nd Manila Urban Design Festival in June, Clean Air Asia highlighted the need for improved walking environments and pedestrian infrastructure such as sidewalks, walking paths and street crossings, and a shift to non-motorized and public transport were often overlooked in urban planning policy throughout Asia.

Walkability was also the focus of a key activity during the 9th BAQ Conference. Armed with state-of-the-art air quality sensors, 30 people took to the streets of Busan to measure levels of air pollution and assess the city’s walkability conditions. The Walkability and Air-Sensing Tour, organized by Clean Air Asia, Sonoma Technology and Ben’s Free Tour, gave conference participants the opportunity to use Sonoma Technology’s AirBeam sensor to measure fine particulate matter (PM2.5) during the walk and then later interpret the data on a map. The tour also explored the different elements that contribute to a pleasant walking experience by auditing streets using Clean Air Asia’s Walkability mobile phone app.

And at the conference’s regional “Sustainable Urban Mobility and Urban Planning” workshop, Clean Air Asia promoted walkability as a way to encourage people to be less reliant on cars and foster greater mobility. The workshop, which provided urban planners and local policymakers with an overview of global transport-planning experiences and lessons for developing cities in Asia, also facilitated discussions on how policies could improve the integration of public transport infrastructure and address the challenges of congestion and traffic accidents, as well as the environmental and health impacts of air pollution. Clean Air Asia saw the culmination of the “Better Transport Data for Sustainable Transport Policies and Investment Planning” project in December, a collaborative initiative spearheaded by ADB and implemented by Clean Air Asia and other partners. The project aimed to address the transport data challenge and to draw attention to the importance of tracking transport initiatives at the national level. At the core was the development of a Transport Databank covering Asia and the Pacific, which allows the public to access data gathered through the project, and the development of transport models tailored to 40 ADB Developing Member Countries in the same region, hinged on four key pillars: Urban Transport, Climate Change, Cross-border Transport and Logistics, and Road Safety and Social Sustainability. Our team also helped design a Transport Model utilizing collected transport data, provided analysis on transport sector pathways aimed at meeting the 1.5C and 2Cscenarios for climate change mitigation, and produced a range of think pieces on the utilization of transport data, including such topics as Transport Workforce Analysis, Open Data and Big Data for Transport Planning, and Transport Sector Data Needs in Global Agreements on Development and Climate Change.
Sophie Punte was appointed new CAI-Asia Executive Director and Robert O’Keefe of the Health Effects Institute was appointed new Chair of the Board of Trustees.

CAI-Asia, with support from the GIZ, began implementing the “Clean Air for Smaller Cities in the ASEAN Region” project which was aimed at empowering smaller cities to develop and implement “Clean Air Action Plans” with stakeholder participation. In its initial phase, country air quality management profiles focusing on smaller cities were prepared, national workshops to sensitize stakeholders on clean air issues were conducted, conferences for the dissemination of city experiences were convened, and a sustainable regional training system for clean air (Train-4-Clean-Air) was set up.
By 2035, there will be more than one billion vehicles in Asia, with an accompanying 400 percent rise in fuel consumption and CO2 emissions. The gains that have been made in curbing air pollution will be offset by the increase in vehicle numbers. To address this issue, there is a need for tighter vehicle-emission, and fuel-quality standards for all vehicles in tandem with improved fuel-economy standards, policies and programs.

Clean Air Asia’s Clean Fuels and Vehicles Program is supporting countries in the development, strengthening and implementation of fuel-quality, vehicle-emission, and fuel-economy standards. It has created venues - such as the ASEAN Forum for Clean Fuels and Vehicles - that bring together governments, the private sector, development agencies, investors and civil society to advance policies at the regional level.

The Clean Fuels and Vehicles Program has three work streams:

Facilitating the adoption of tighter vehicle-emission and fuel standards in Asian countries:

Clean Air Asia is working with national governments, industry and other stakeholders on the introduction of tighter standards with the aim of harmonizing standards throughout Asia.

Strengthening policy frameworks for the effective management of in-use vehicles:

Clean Air Asia is working with governments to improve vehicle inspection and maintenance systems, restrict imports and sales of polluting second-hand vehicles and engines, and phase out polluting vehicles.

Introducing clean fleet management programs for public and private fleet operators:

Clean Air Asia is developing tailored toolkits for bus and truck fleets, developing clean fleet management programs for bus, truck, corporate, government and other fleets, and building partner networks through which the programs can be rolled out.

Throughout 2016, Clean Air Asia continued to work towards the advancement and harmonization of fuel quality and vehicle emission policies and standards throughout the region, particularly in Southeast Asia.

Representatives from environment ministries and stakeholders throughout Southeast Asia came together at the “Supporting the Implementation and Advancement of Vehicle Emission Policies in Southeast Asia” workshop in Manila in February to provide support for, and learn from, the Philippine government’s push to implement Euro 4 national vehicle emission standards. Organized by Clean Air Asia, UNEP and the World Resources Institute in collaboration with the Philippine Department of Environment and Natural Resources, the workshop brought together governmental and non-governmental representatives from Cambodia, Laos, Vietnam, Thailand, Indonesia and Myanmar to support the Philippines at the outset of its implementation of Euro 4 emission standards and to share its experiences with other ASEAN countries.

Facing rising greenhouse gas emissions from Cambodia’s road transport sector, Clean Air Asia trained government representatives in the conducting of a sector-specific emissions inventory as the first step in the longer-term development of national and city-level mitigation policies and measures. The “Training on Greenhouse Gas Inventory for Road Transport in Cambodia”, held in Phnom Penh in June, brought together 10 delegates from the Ministry of Public Works and Transport (MPWT) and the Society for Community Development in Cambodia (SOFDEC) to improve their ability to gather data and estimate greenhouse gas emissions. The training was part of the capacity building component of the “Greenhouse Gas Emissions Inventory and Mitigation Plan for the Road Transport Sector in Cambodia” project implemented by the MPWT in partnership with Clean Air Asia and SOFDEC and supported by the Cambodia Climate Change Alliance.

Development in Cambodia (SOFDEC) to improve their ability to gather data and estimate greenhouse gas emissions. The training was part of the capacity building component of the “Greenhouse Gas Emissions Inventory and Mitigation Plan for the Road Transport Sector in Cambodia” project implemented by the MPWT in partnership with Clean Air Asia and SOFDEC and supported by the Cambodia Climate Change Alliance.
In August, Clean Air Asia published the “Vehicle Inspection and Maintenance in Asia: Status and Challenges” report, in conjunction with MAHA Maschinenbau Haldernweg GmbH & Co KG, which provided an update on the institutional framework, policies and practices on vehicle inspection and maintenance in 12 Asian countries/administrative regions: Bangladesh, People’s Republic of China and Hong Kong Special Administrative Region, India, Indonesia, Malaysia, Nepal, Pakistan, Philippines, Singapore, Sri Lanka and Vietnam. Inspection and maintenance policies were juxtaposed against trends or patterns of in-use vehicle statistics in the region, data on existing infrastructure and records of policy enforcement to identify gaps and issues in program implementation.

Clean Air Asia is continuing to roll out eco-driving to Indonesia through our Eco-Driving Program in Jakarta, organized in coordination with Komite Penghapusan Bensin Bertimbel (KPBB), the Committee for Leaded Gasoline Eradication, which is aimed at the development of cost-effective emissions-reduction strategies through improved eco-driving practices. The program is implemented with support from Toyota Motor Asia Pacific, DKI Jakarta and our local network in Indonesia, Forum Udara Bersih Indonesia. In November, as part of the second phase of the program and in collaboration with KPBB, Clean Air Asia conducted a workshop for 18 representatives from the government, civil society and the media to develop a comprehensive communications action plan to promote the broader uptake of eco-driving practices among Jakarta’s private vehicle owners.

Eco-driving was also the focus of attention in Bandung, where a December workshop organized by Clean Air Asia, the Institute for Global Environmental Strategies, the Institute Technology of Bandung and the City Government of Bandung brought together up to 30 public and private sector representatives, including the Ministry of Environment and Forestry, to learn about and practically apply the principles of eco-driving. The workshop was an important component of Bandung’s efforts to address the city’s worsening air pollution problem, to which vehicular emissions are making a significant contribution. It also helped inform the future development of an eco-driving manual.

“Driving more efficiently can result in significant improvements in fuel consumption and reductions of CO2 emissions, as well as increase road safety and traffic flows”

Clean Air Asia Transport Program Officer Pia Agatep
CAI-Asia embarked on multi-stakeholder dialogues with the Philippine Department of Environment and Natural Resources, which helped the Philippines develop its roadmap to Euro 4 vehicle emission standards and fuel quality standards, which was implemented in 2016.

CAI-Asia’s China office launched regional air quality management platforms in the Yangtze River Delta, the Pearl River Delta, and Northeast China to foster dialogue on regional collaboration. The forums and workshops established partnerships in the region, strengthened air quality management, and facilitated data and information-sharing among cities and provinces.

CAI-Asia embarked on multi-stakeholder dialogues with the Philippine Department of Environment and Natural Resources, which helped the Philippines develop its roadmap to Euro 4 vehicle emission standards and fuel quality standards, which was implemented in 2016.

CAI-Asia developed the Clean Air Scorecard Tool with support from ADB and the Swedish International Development Cooperation Agency to measure the air quality and management capacity of cities, allowing for objective and comprehensive analysis of air quality status, air quality management capacity, and air pollution reduction policies and actions.

The BAQ Conference was held in Singapore.

2010

15-YEAR MILESTONES
Freight accounts for 35 percent of the world’s transport energy use and is growing more rapidly than passenger transportation. In Asia, freight movement is expected to grow from 1 billion to 8 billion ton-kilometers between 2000 and 2050. Trucks comprise 5 percent of vehicles but generate up to 60 percent of transport emissions. Most countries lack effective national programs and policies, financing mechanisms, data and methodologies to support the private sector in improving fuel efficiency and reducing emissions across the supply chain.

As the freight sector is highly fragmented and covers multiple modes, governments and the private sector need to collaborate nationally and regionally.

Clean Air Asia’s Green Freight and Logistics Program helped initiate the Global Green Freight Action Plan under the Climate and Clean Air Coalition’s Diesel Emissions Initiative, launching the Green Freight and Logistics agenda on to the world stage. The program continues to develop and lead green freight logistics concepts and projects in Asia, and is working towards a Regional Cooperation Agreement on Green Freight in Asia in cooperation with the United Nations Centre for Regional Development, the United Nations Economic and Social Commission for Asia and the Pacific, and other partners.

The Green Freight and Logistics Program has three work streams:

- Establishing regional and national green freight programs and initiatives: implementation of the China Green Freight Initiative and working with other governments on the development of green freight programs.

- Mobilizing a Green Freight Asia Network of private sector companies and associations:
  
  Clean Air Asia helped develop and expand the Green Freight Asia Network, is developing methodologies and tools for CO2 measurement and reporting, is facilitating public and private stakeholder engagement, and is building a platform for technologies, capacity building and financing solutions.

- Improve knowledge and data on the road freight sector to inform policies, programs and initiatives:
  
  To build confidence in green freight technologies and strategies, projects are being implemented in a range of countries in such areas as clean technologies and urban freight. Supporting the Environmentally Sustainable Transport Forum, a set of green freight indicators is being developed, as well as a database and processes to collect and report data from different Asian countries.

International experts and government and private sector representatives from throughout Asia gathered in Bangkok in June to collaboratively develop national and regional action plans for the scaling up of green freight initiatives. The Asian Development Bank’s Greater Mekong Subregion (GMS) Regional Workshop on Green Freight and Logistics in Southeast Asia, organized by Clean Air Asia, GIZ and ADB’s GMS Core Environment Program, brought together up to 80 delegates from Asia (Cambodia, Lao PDR, Myanmar, Viet Nam, Singapore, Thailand, the Philippines, China, India and Japan) and Europe (Germany, Switzerland, the Netherlands) to share experiences and best practices in developing more energy-efficient freight transport and improved logistics management, and to prioritize the measures required for sustainable action plans.

In 2016, Clean Air Asia’s China Green Freight Initiative (CGFI) was able to expand its sphere of influence, engaging a number of leading stakeholders in green freight practices. The CGFI, which was launched in 2012, promotes green technology, green management and green driving in the freight sector with joint efforts from the government, carriers, NGOs, research institutes and development organizations. In 2016, Clean Air Asia and CGFI partners called for pioneering green shippers to join the initiative. This resulted in P&G, Lenovo, Walmart, IKEA, Infinitus and Zhongdi being awarded the first CGFI Green Shippers at the annual CGFI Seminar in December.
CAI-Asia marked 10 years of partnership.

CAI-Asia supported China’s Guangdong Project Management Office in the development of a Global Environment Facility project proposal and in project implementation. The Guangdong Green Freight Demonstration Project, funded by the World Bank, kicked off in 2011 and ran until 2014, promoting fuel-efficient truck technologies, modern logistics management tools, and information coordination platforms to improve the energy efficiency of trucks in Guangdong province.

CAI-Asia launched the Transport Emissions Evaluation Models for Projects (TEEMP) which enabled the estimation of emissions in both “project” and “no-project” scenarios and which could be used to evaluate the short to long-term impacts of projects. TEEMP primarily evaluates the impacts of transport projects on CO2 emissions and air pollutant emissions using data gathered during project feasibility and actual operations. The toolkit has been endorsed and adopted by multilateral development banks such as ADB, and applied to World Bank, Global Environment Facility and ADB projects.

CAI-Asia conducted field walkability surveys in 21 Asian cities (Bangalore, Bhubaneswar, Cebu, Chennai, Colombo, Davao, Hanoi, Ho Chi Minh City, Hong Kong, Indore, Jakarta, Karachi, Kathmandu, Kuta, Lanzhou, Male, Manila, Pune, Rajkot, Surat, Ulaanbaatar) covering 10 countries (China, India, Indonesia, Maldives, Mongolia, Nepal, Pakistan, the Philippines, Sri Lanka and Vietnam). The walkability study provided an overview of pedestrian infrastructure and policies, and included pedestrian interview surveys and an assessment of pedestrian-related policies and guidelines.

CAI-Asia’s India office conducted a walkability survey in six Indian cities that resulted in three cities—Chennai, Hyderabad, and Bhubaneswar—agreeing to improve walkability.
Clean Air Asia’s China office is helping to build the air quality management capacity throughout the country at multiple levels and on multiple fronts. This work is backed up by comprehensive research on air quality.

More than 30 representatives from China took part in, and presented at, our 9th BAQ Conference in Busan, South Korea, sharing their air quality management experiences at national level and city levels. The flagship event received its highest level of coverage in the Chinese media.

Clean Air Asia organized six technical workshops and trainings in 2016, in collaboration with the Foreign Economic Cooperation Office, Ministry of Environmental Protection (FECO-MEP) and our local partners in Beijing-Tianjin-Hebei Province, the Yangtze River Delta and the Pearl River Delta, Northeast China and Chengdu-Chongqing city cluster, the Asian Development Bank, Tsinghua University, East China University of Science and Technology, and Sinopec Shanghai Petrochemical Company Ltd. The workshops saw the participation of 618 representatives from 100 local environmental protection agencies and national and international experts. The topics covered Ground-Level Ozone Pollution Control, VOCs Control in the Pharmaceutical and Petrochemical Industry, Coal-fired Boilers Retrofit and Pollution Control, Science-based Air Quality Management System, Emission Inventory Development, and VOCs Monitoring and Source Identification in Industrial Zones.
The reach of our online Knowledge Hub has continued to grow, with registered users numbering 350 by the end of 2016. The Knowledge Hub enables users to access city best practices in air quality management, tailored international experience and topic-oriented training materials.

The Help Desk features 12 international and domestic experts with a range of expertise who provide answers to questions raised by hub users.

In November, Clean Air Asia collaborated with China Road Transport Association, the Technical Center of the China FAW Group and 360Che.com in launching the Mr. Trucker campaign to promote eco-driving concepts and approaches among truck drivers, expanding green freight practices in China by reaching a growing number of truck owner-operators and small carriers and honing their driving skills.

We continued to raise public and media awareness about diesel exhaust pollution via the “Neglected Diesel Engine Pollution” campaign, which saw a range of informational products released, including a public education video, photos and subway billboards on diesel engines’ contributions to urban air pollution and health.

With the concentration of ground-level ozone increasing in China and the number of attainment cities decreasing, the development of more effective pollution-control strategies was on the agenda at Clean Air Asia’s Yangtze River Delta Workshop on Ground-Level Ozone Pollution Control in March in Hangzhou. The workshop – organized by Clean Air Asia, the Yangtze River Delta Regional Air Quality Forecast Center, the Zhejiang Environmental Science Research and Design Institute, and the Zhejiang Environmental Monitoring Center in Zhejiang – was aimed at supporting ozone pollution control in the Yangtze River Delta.

Environmental protection staff from 15 cities in northeast China gathered in October to strategize air pollution control measures for coal-fired boilers. The two-day workshop, organized by FECO-MEP, Clean Air Asia and the Dalian Environmental Protection Bureau, brought together 65 delegates from 15 cities in Heilongjiang, Jilin and Liaoning provinces.

A two-day training on volatile organic compounds (VOCs) enabled environmental protection officials in China’s Hebei Province to strengthen their capacity to control emissions from major industrial sources. The training for more than 230 staff from 203 local environmental protection agencies in Hebei, conducted by Hebei’s Department of Environmental Protection, the Asian Development Bank and Clean Air Asia in October in Shijiazhuang, was focused on the pharmaceutical and chemical industries – two of the two main sources of VOCs emissions – providing local environmental protection departments with technical and decision-making support for more effective emissions control.

The 12th China City Air Quality Management Workshop, organized by the Foreign Economic Cooperation Office of the Ministry of Environmental Protection (FECO-MEP) and Clean Air Asia and co-organized by Chengdu Environmental Protection Bureau in Chengdu in November, introduced a science-based policy-making mechanism for cities to meet the 2017 air quality targets required by the Air Pollution Control and Prevention Action Plan.

At an air-quality management workshop organized by Clean Air Asia in 2015, representatives from environmental protection bureaus in a number of cities said it was difficult to regulate industrial coal-fired boilers. They said types of boilers varied across industries and enterprises, end-of-pipe control technologies were not clarified, and it was hard to implement policies. In order to tackle this problem, Clean Air Asia together with domestic and foreign experts have developed training materials focused on the control of small coal-fired boilers. The topic was also discussed by experts at Clean Air Asia’s Yangtze River Delta Workshop on Ground-Level Ozone Pollution Control held in March in Hangzhou.
CAI-Asia became “Clean Air Asia” and established four core programs: Air Quality and Climate Change, Low Emissions Urban Development, Clean Fuels and Vehicles, and Green Freight and Logistics.

The China Green Freight Initiative - a national program focused on energy efficiency and reduced greenhouse gases and air pollutants in the freight sector - was launched. The initiative is a collaboration between Clean Air Asia, the China Road Transport Association and the Research Institute of Highways of the Ministry of Transport.

Clean Air Asia completed the benchmarking of air pollution levels in 250 Asian cities against WHO guideline values and interim targets as part of ADB’s “Air Quality Interventions: Improving Air Quality Monitoring Systems in Asian Cities” project. Under the project, Clean Air Asia also assessed air quality monitoring systems to inform the development of a best practices book and recommendations for improvements.

The BAQ Conference was held in Hong Kong.
In March 2016, Clean Air Asia launched the groundbreaking English-language version of the “China Air 2015: Air Pollution Prevention and Control Progress in Chinese Cities” report. The report – the first of a series to be produced annually by Clean Air Asia’s China office as part of the “Promoting Science-Based and Stakeholder-Inclusive Air Quality Management in China” Project – provided air quality data for 74 major cities from 2013-2014, as well as the pollution-control policies of those cities, the three key regions (Beijing-Tianjin-Hebei Province, the Yangtze River Delta and the Pearl River Delta) and nationally, and analysis of Beijing and Shanghai’s experiences.

The second report in the series, “China Air 2016”, was launched at the 9th BAQ Conference. Introducing the report, Clean Air Asia China Director Dr Fu Lu said: “With the adoption of pollution control measures required by the Action Plan in the past three years, we saw a continuous air quality improvement in the 161 cities across China. This year the report draws conclusions on positive policy results and top city performers, points out city laggards and puts forward recommendations for short and long-term air quality improvements in China. In the 74 key cities, the annual average concentrations of PM2.5, PM10, SO2 and NO2 of the 74 key cities decreased by 14.1 percent, 11.4 percent, 21.9 percent and 7.1 percent on average compared with 2014 levels.” The report was covered in the media more than 1750 times, and was well received by local environmental bureaus. In addition, five governmental websites, five governmental WeChat accounts and 10 governmental Weibo accounts posted articles and information about the report.

Clean Air Asia collaboration with the Foreign Economic Cooperation Office of China’s Ministry of Environmental Protection

The signing of a memorandum of understanding between Clean Air Asia and the Foreign Economic Cooperation Office (FECO) of China’s Ministry of Environmental Protection on June 7 will help strengthens air-quality management in Chinese cities and the sharing of information throughout the Asia region. The memorandum of understanding, signed at the Global Green Tech & Green Finance Summit in Beijing, is focused on collaboration in the following key areas for the coming two years: Providing in-depth AQM support to Chinese cities; promoting experience-sharing between China and other Asian countries at national and municipal levels; and supporting the Integrated, Intelligent and International Platform for Environmental Technology (3iPET) that FECO is developing.
The overall objective of Clean Air Asia’s work in India is to improve air quality and contribute to more livable and healthy cities through a three-year strategy of “Advancing Clean Air Action in Indian Cities”. Towards this, the India office is engaging cities in an active process of air quality management through scientific research, policy support and public engagement.

With a new team in place and a new office, 2016 was a year of new directions, new initiatives and new collaborations for our India office.

In the week preceding Diwali in October, Clean Air Asia partnered with WWF-India to create a street play, or nukkad natak, which was performed in six different locations of Delhi to reach diverse audiences. Titled “Saans-e-Dilli” (“The Breath of Delhi”), the play presented a futuristic picture of a deserted Delhi on Diwali day as a result of polluted air of the city.

More than 500 people watched the play, which also received coverage in the Hindustan Times, one of India’s leading national dailies.

In November, we selected 30 Indian cities for the application of our Clean Air Scorecard Tool, with the assessment underway and scheduled for launch in 2017.

In order to bring the air quality conversation to stakeholders beyond Delhi, Clean Air Asia India held a stakeholder consultation workshop in Auranagabad, Maharashtra, in November with the Maharashtra Pollution Control Board and Marathwada University. The workshop, which featured a presentation on the findings of the application of the CAST, brought together representatives from government, academia, civil society and industry. Clean Air Asia submitted for review a report on air quality management status in Auranagabad to stakeholders.

In December, we launched the Train for Clean Air: Clean Air for Kids project - a collaboration between Clean Air Asia and the US Embassy in Delhi involving 90 students from three Delhi schools. Clean Air Asia developed a bilingual (English and Hindi) school program in which Year 6-8 students were engaged in interactive classroom activities on air quality, a walkability survey and an air-sensing activity in the vicinity of the schools. The project led to the development of the Clean Air Asia Train for Clean Air: Clean Air for Kids toolkit that was launched by officials from the Central Pollution Control Board, UNESCO and the US Embassy.
Our India team created a unique platform for young technology enthusiasts to contribute to better air quality solutions in India with a two-day Code for Clean Air Hackathon in December. Eight teams from leading technology colleges, such as IIT-Delhi, DTU and NSIT, participated in the hackathon and coded an air quality concept app. The selection of the best app was judged by senior officials from the Central Pollution Control Board, the Delhi government and interactive design/entrepreneurship experts. The hackathon led to several promising app ideas, which Clean Air Asia is now developing as an air quality app.

The hackathon also led to the launch of the Clean Air Asia Youth Clean Air Network (YCan) in December. Recognizing the lack of young people’s voices on air quality in India, YCan has close to 100 members in Delhi who have been working on evidence-based advocacy for better air quality, with strategies in development to take the initiative to other Indian cities.

Clean Air Asia and WWF-India collaborated to stage a street play at various locations in Delhi to promote a pollution and firecracker-free Diwali. The play was performed by 15 WWF volunteers who were jointly trained by Clean Air Asia and WWF.
Clean Air Asia refocused its strategy and developed a 2013-2014 Business Plan to clarify its goals and have a greater impact with its four core programs. Bjarne Pedersen was appointed Clean Air Asia’s new Executive Director.

Clean Air Asia launched projects promoting low sulfur fuels in China with a focus on knowledge and experience transfers to Chinese city officials responsible for vehicle emission control.

2013: Clean Air Asia applied the Transport Emissions Evaluation Models for Projects (TEEMP) tool to assess potential reductions in air pollutants and CO2 emissions of the bus priority corridor component of the World Bank’s Harbin Project.

Clean Air Asia organized the 1st Clean Fuels and Vehicles Forum in the ASEAN Region in cooperation with the Singapore National Environment Agency. The forum was designed for ASEAN senior officials from the energy, environment and transport ministries to gain wider access to policy strategies for cleaner fuels and efficient vehicles. The forum was also aligned with the Brunei Action Plan and the Bangkok Declaration 2020 implementation and supported the efforts of the ASEAN working groups on land transport, environment and energy.
2016 Financial Statement

The gains from Clean Air Asia’s new financial strategy, implemented since 2014, continued to show with growth of 28 percent on the 2015 level and an increase of the unrestricted fund balance to USD $503,777 as of 31 December, 2016.

For the year 2016, support and income revenues for Clean Air Asia amounted to USD $3,704,847, which includes deferred grants from 2015 realized in 2016, and excludes grants received in 2016 applicable to future periods.

Corresponding grant expenses amounted to USD $3,020,643, with general and administrative expenses down to USD $519,501, representing 14 percent of the total 2016 revenues (21 percent comparative figure for 2015).

The excess of revenues over expenditures for 2016 amounted to USD $72,393 increasing the fund balance to USD $503,777 as of 31 December, 2016.

Clean Air Asia’s 2016 financial statements were audited by SGV&Co., an independent auditing firm in the Philippines and a member firm of Ernst & Young Global. SGV&Co. issued an unqualified opinion on the financial statements as of and for the year ended 31 December, 2016, which are presented in accordance with Philippine Financial Reporting Standards (using the accrual basis of accounting), adopted from pronouncements issued by the International Accounting Standards Board. Our audited financial statements are available on www.cleanairinitiative.org/portal/annualreport.

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a. Unrestricted funds are those without donor-imposed restrictions and can be used for general operating expenses of the Center.

b. Restricted funds are for projects undertaken under grants and subject to donor-imposed restrictions. The Center is restricted from using the fund for purposes other than its intended use.
Clean Air Asia launched two initiatives: The Integrated Programme for Better Air Quality in Asia (IBAQ Programme) to expand Clean Air Asia’s air quality work throughout the region, and the precursor to the current Cities for Clean Air Certification Program, the Cities Clean Air Partnership.

Clean Air Asia was identified as the Regional Training Hub on Air Quality under the framework of the ASEAN Working Group for Environmentally Sustainable Cities.

The BAQ Conference was held in Colombo, Sri Lanka.

Clean Air Asia’s award-winning Walkability app was launched for Android and IOS, enabling people to conduct walkability audits of their cities.

2014: The Green Freight India Working Group was launched - an informal group of stakeholders working to streamline freight in India with representation from the government, industry, academia, carriers, shippers and NGOs.
98% of cities in low and middle-income countries with more than 100,000 inhabitants do not meet WHO air quality guidelines.
Clean Air Asia’s India office developed a Green Trucks Toolkit that provides strategies on fuel savings and helps shippers and carriers determine their carbon footprint and be provided with carbon-offset solutions.

Clean Air Asia’s online Chinese AQM Knowledge Hub was launched - the first online knowledge hub to support Chinese environmental administrators, researchers and NGOs with air quality data, air quality management policy design, best practices and emission-control technologies.

Clean Air Asia officially presented the Guidance Framework for Better Air Quality in Asian Cities to environment ministries from Asian countries at the Asia Pacific Clean Air Partnership Joint Forum.

Clean Air Asia launched the landmark "China Air 2015: Air Pollution Prevention and Control in Chinese Cities" report.

Clean Air Asia consolidated its role as the regional training hub of the Train-For-Clean-Air (T4CA) training program, and was officially recognized as the regional T4CA training hub to institutionalize the training program throughout Asia. T4CA assists cities in the development and implementation of clean air plans and in making informed air quality policies and decisions.

Clean Air Asia’s online Chinese AQM Knowledge Hub was launched - the first online knowledge hub to support Chinese environmental administrators, researchers and NGOs with air quality data, air quality management policy design, best practices and emission-control technologies.
Donors

Aramco Far East (Beijing) Business Services
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Cambodia Climate Change Alliance
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Guangdong Provincial Department of Transport
Hanoi Urban Transport Development

Institute for Global Environmental Strategies
International Council on Clean Transportation
International Environmental Partnership
MAHA Maschinenbau Haldenwang
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USEPA-SmartWay Transport Partnership
UPS Foundation
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Wuppertal Institute

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