

Abatement: The reduction or elimination of pollution.

Adverse health effect: A health effect from exposure to air contaminants that may range from relatively mild temporary conditions, such as eye or throat irritation, shortness of breath, or headaches to permanent and serious conditions, such as birth defects, cancer, or damage to lungs, nerves, liver, heart, or other organs.

Airshed: An airshed has similarities in climate, meteorology, and topology that could affect the interchange and diffusion of pollutants in the atmosphere, or those areas, which share common interest or face similar development programs, prospects, or problems

Air quality monitoring: Sampling for and measuring of pollutants present in the atmosphere.

Air pollution: Degradation of air quality resulting from unwanted chemicals or other materials occurring in the air.

Air quality standards: The level of pollutants prescribed by regulations that are not to be exceeded during a given time in a defined area.

Alternative fuels: Fuels such as methanol, ethanol, natural gas, and liquid petroleum gas that are cleaner burning. These fuels may be used in place of less clean fuels for powering motor vehicles.

Ambient air quality standards: Health- and welfare-based standards for outdoor air that identify the maximum acceptable average concentrations of air pollutants during a specified period of time.

Barangay: Pilipino term used to describe a community or village; also the smallest political unit in the country.

Benzene: An aromatic hydrocarbon that is produced by the burning of natural products like coal and petroleum.

Carbon dioxide (CO₂): A colorless, odorless gas that occurs naturally in the earth's atmosphere. Significant quantities are also emitted into the air by fossil fuel combustion.

Chlorofluorocarbons (CFCs): A family of inert, nontoxic, and easily liquefied chemicals used in refrigeration, air conditioning, packaging, insulation, or as solvents and aerosol propellants. CFCs are not destroyed in the lower atmosphere and just drift into the upper atmosphere where their chlorine components destroy the ozone.

Climate change (also referred to as global climate change): Used to imply a significant change from one climatic condition to another. In some cases, 'climate change' has been used synonymously with the term, global warming; scientists however, tend to use the term in the wider sense to also include natural changes in climate.

Emission standard: The maximum amount of a pollutant that is allowed to be discharged from a polluting source such as an automobile or smoke stack.

Exceedance: A measured level of an air pollutant higher than the national or state ambient air quality standards.

Exposure: The concentration of the pollutant in the air multiplied by the population exposed to that concentration over a specified time period.

Greenhouse gas: A gas, such as carbon dioxide or methane, which contributes to potential climate change.

Hydrocarbons: Compounds containing various combinations of hydrogen and carbon atoms. These may be emitted into the air by natural sources (e.g., trees) and as a result of fossil and vegetative fuel combustion, fuel volatilization, and solvent use. Hydrocarbons are a major contributor to smog.

Indoor air pollution: Air pollutants that occur within buildings or other enclosed spaces, as opposed to those occurring in outdoor, or ambient air. Some examples of indoor air pollutants are nitrogen oxides, smoke, asbestos, formaldehyde, and carbon monoxide.

Mobile sources: Sources of air pollution such as automobiles, motorcycles, trucks, off-road vehicles, boats, and airplanes.

Morbidity: Rate of disease incidence.

Mortality: Death rate.

Ozone depletion: Destruction of the stratospheric ozone layer that shields the earth from ultraviolet radiation harmful to life. This destruction of ozone is caused by the breakdown of certain chlorine and/or bromine containing compounds (chlorofluorocarbons or halons), which break down when they reach the stratosphere and then destroy ozone molecules.

PM_{2.5}: Includes tiny particles with an aerodynamic diameter less than or equal to a nominal 2.5 microns. This fraction of particulate matter penetrates most deeply into the lungs.

PM₁₀: Particulates smaller than 10 microns. Small particulates are of special concern because of their ability to penetrate deep into the lungs and cause major health impacts.

Pollutant: Generally, any substance introduced into the environment that adversely affects the usefulness of a resource or the health of humans, animals, or ecosystems.

Smog: A combination of smoke and other particulates, ozone, hydrocarbons, nitrogen oxides, and other chemically reactive compounds which, under certain conditions of weather and sunlight, may result in a murky brown haze that causes adverse health effects.

Stationary sources: Non-mobile sources such as power plants, refineries, and manufacturing facilities that emit air pollutants.

Total suspended particulates (TSP): Fine liquid or solid particles such as dust, smoke, mist, fumes, or smog, found in air or emissions. This also includes PM_{2.5} and PM₁₀.

Source: Adapted from various air quality glossaries.

RELEVANT WEBSITES

Organization	Website address	Description & contents
Department of Environment and Natural Resources (DENR)	www.denr.gov.ph/	Provides comprehensive overview of the programs and projects that help protect, preserve, and enhance the natural resources of the Philippines.
Environmental Management Bureau (EMB)	www.emb.gov.ph/	Focuses on the laws and decrees for various aspects of the environment, e.g., air, hazardous waste, water, etc.
Partnership for Clean Air (PCA)	www.hangin.org/home/index.html	Features comprehensive information on the laws, pollution facts, and latest news related to pollution. It also gives an overview of ongoing projects and provides to various organizations, and environment-related NGOs in the Philippines.
Manila Observatory	www.observatory.ph/index.html	One of the objectives of this institution is to help measure pollutants but the site is currently under construction.
Resource Center for Environment and Sustainable Development	www.philngo.com/rcesd1.htm	Provides links to Philippine civil society groups and international institutions that implement sustainable development.
Philippine Business for Social Progress	www.uwint.org/philippines/philippinesbsp.html	Provides information to promote business sector commitment to social development.
The Environmental Broadcast Circle (EBC)	www.sdvillage.ph/ebc/	Includes a comprehensive list of all the media practitioners and educators who provide the public with information on the environment and sustainable development.
Social Weather Station	www.sws.org.ph/	Provides survey information based on social monitoring.
Asian Development Bank (ADB)	www.adb.org/vehicle-emissions/	Provides a very comprehensive overview of environment but focuses more on transport-related pollution.
Clean Air Initiative (The World Bank, ADB, and others)	www.worldbank.org/cleanair/caiasia/	Provides information on all topics under air quality management and also the linkages to various ongoing environment activities in the region. It has discussion space aimed to exchange ideas on various topics affecting the region.
Firefly Brigade	www.fireflybrigade.org/	Provides extensive information on the use of bicycles as an alternative mode of transport to protect the environment.
United Nations Development Programme (UNDP)	www.undp.org/energy/index.html	Provides information on energy and environment in relation to sustainable development .
US-Asia Environmental Partnership (US-AEP)	www.usaep.org/	Provides links to recent development in environment and its own projects in the region.
US-Environmental Protection Agency (US-EPA)	www.epa.gov/	Provides extensive information available on all technical and legal aspects of environment including air pollution.
Industrial Initiatives for Sustainable Development (IISE)	www.iise.org/iise/index.html	Focuses on cleaner production practices with special emphasis on the coastal areas.
World Health Organization (WHO)	www.who.int/environmental_information/	Provides extensive information on all technical aspects of environmental health including air pollution and WHO guidelines for various pollutants.

ACKNOWLEDGEMENTS

This Monitor is a joint effort of several government agencies, private sector, and civil society organizations at both the national and local levels. The valuable contributions of people who provided assistance in the preparation of this Monitor are acknowledged. The contribution, cooperation, and participation of the following are appreciated.

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Jannet Yanto, Elenida Basug, Winnie Passe,
Joy Goco, Adelaida B. Roman*

Metropolitan Manila Development Authority

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Rogelio Uranza*

Antipolo City Hall

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Local Government of Sorsogon City

Mayor Sally Lee

Private Sector:

Air & Waste Management Association

Cesar Pacheco

Motorcycle Development Program Participants

Associations Inc.

Mat Ocenar

Pennoni Phils. Inc.

Cynthia Nazario

Philippine Chamber of Commerce and Industry

Grace Morella

VMS Technologies, Inc.

Virgilio Lava, Jr.

Donors:

Asian Development Bank

*Anabel Abuzo, Warren Evans, Yue-Lang Feng,
Charles Melhuish, Elly Owano*

International Council for Local Environmental

Initiatives-Cities for Climate Protection Campaign

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Swisscontact

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Civil Society:

ABS-CBN Bantay Kalikasan

*Joannie Feliciano, Charles Feliz Simbillo,
Jane Foronda*

Federation of Jeepney Operators and Drivers

Association of the Philippines

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Miriam Public Education and Awareness Campaign
for the Environment

Ma. Teresa Oliva, Yolanda Princesa

Mother Earth Ltd.

Sonia S. Mendoza

Partnership for Clean Air

Jojie Manalaysay, Brian Gonzales

Philippine Greens

Roberto Verzola

UP National Center for Transport Studies

Karl Vergel

Zero Waste Recycling Movement of the Philippines

Foundation Inc.

Gloria Asper

PHILIPPINES AT A GLANCE

Society	Economy
CapitalManila	GDP-real growth rate 3.9% ^b
Population76.5 M ^c	GDP3,322.6B ^b
Population growth rate2.32% ^{ch}	GDP-COMPOSITION BY SECTOR^a
Birth rate28 births/1,000 population ^{ci}	Agriculture..... 16%
Death rate6.5 deaths/1,000 population ^{ci}	Industry.....31%
Net migration rate1.03 migrants/1,000 population ^{ci}	Services.....53%
Sex ratio0.99 male/female ^c	GNP per capitaUS\$1,016.0 ^e
Total fertility rate3.6 children born/woman ^c	GNP-real growth rate4.2% ^a
Poverty (% below poverty line)37.5% ^e	GNPPhP3,302.6B ^b
Urban population (% of total population)56.9% ^{cj}	(In percent)^b
Infant mortality rate32 deaths/1,000 live births ^c (1998)	Gross domestic investment/GDP18.8
Under-five mortality rate .44 deaths/1,000 live births ^c (1998)	Exports of goods and services/GDP51.3
Life expectancy at birth (both sexes)68.3 years ^{ch}	Gross domestic savings/GDP14.6
Child malnutrition (% of children below 5)28% ^{ck}	Gross national savings/GDP20.7
Access to safe water (% of population)83% ^f	Inflation rate (consumer prices)4.4% ^d
Adult literacy rate (% of population age 15+)94.8% ^{fj}	Labor force48.4 M ^d
	Participation rate64.3% ^d
	Employment by sector (In % total employment)^b
	Agriculture.....40.1%
	Government and social services.....19.5%
	Services.....44.2%
	Manufacturing.....9.5%
	Construction.....5.3%
	Unemployment10.1 M ^d
	Unemployment rate11.1% ^d
	Budget^e
	Programmed public expenditure (2001)..... PhP700B
	Local government programmed expenditure.....PhP128B
	Industries: Textiles, pharmaceuticals, chemicals, wood products, food processing, electronics assembly, Petroleum refining, fishing
	Industrial production growth rate0.5% ^b
	Agriculture-products: Rice, coconuts, corn, sugarcane, bananas, pineapples, mangoes; pork, eggs, beef, fish
	Exports of goods and servicesPhP1,648.2 B ^b
	Imports of goods and servicesPhP1,342.6 B ^b
	Currency conversion averageUS\$1=PhP44.1938 B ^b
	Debt-externalUS\$52.06 B ^b
	Currency 1 Philippine Peso (PhP) = 100 centavos
Geography	
Location: Southeastern Asia, archipelago between the Philippine Sea and the South China Sea, east of Vietnam	
Area Total300,000 sq km	
Land.....298,170 sq km	
Water1,830 sq km	
Land boundaries0 km	
Coastline36,289 km	
Climate: Tropical marine; northeast monsoon (November to April); southwest monsoon (May to October)	
Elevation extremes	
Lowest point:Philippine Sea: 0 m	
Highest point:Mount Apo: 2,954 m	
Natural resources: timber, petroleum, nickel, cobalt, silver, gold, salt, copper	
Land use	
Arable land:.....19%	
Permanent crops:.....12%	
Permanent pastures:4%	
Forests and woodland:46%	
Other:19% ^e	
Environmental issues: Air and water pollution in Metro Manila; solid waste management; deforestation; marine and coastal pollution	

Sources: ^a World Development Indicators 2000, ^b Selected Philippine Economic Indicators Bangko Sentral ng Pilipinas (SPEI-BSP), ^c National Statistics Office (NSO), ^d National Statistical Coordination Board (NSCB), ^e National Economic and Development Authority (NEDA), ^f Human Development Report 2000, ^g National Income Accounts, Department of Budget and Management (DBM), December 2001