

Comparison of air pollution policies in the world's four major economies

	China	India	U.S.	EU
Change in satellite-based PM2.5 levels from 2010 to 2015	-17%	+13%	-15%	-20% (from 2005 to 2013)
PM2.5 trend	Falling since 2011; 2015 was the best on record	Increasing steadily for past 10 years; 2015 was the worst year on record	Falling since measurements started	Falling since measurements started
PM2.5 in capital city, annual ($\mu\text{g}/\text{m}^3$)	81	128	12	18
PM2.5 air quality standard, annual ($\mu\text{g}/\text{m}^3$)	35	40	15	25 (from 2020, 20)
Deaths per day from air pollution in 2013	2,700	1,800	250	640
Online PM2.5 monitoring	1,500 stations in 900 cities & towns	39 stations in 23 cities (as of Feb 2016)	770 stations in 540 cities & towns	1,000 stations in 400 cities & towns
Share of thermal power plants with basic pollution controls (desulphurization, particle controls)	95%	10%	60%	75%
Deadline for meeting national air quality standards	2030; most key cities have an interim target for 2017	None	2012; violating areas are currently implementing new plans	25 by 2015 20 by 2020
Consequences for missing targets	Promotion of province governors depends on	None	States must adopt emission reduction measures into law that are	Cities & countries face legal action for not meeting

	meeting targets		demonstrated to enable meeting targets; must account for pollution transport into downwind states; periodic review	standards
Coverage of government measures	National, regional and city-level action plans with measurable 5-year targets National emission standards for power plants, industrial sectors and vehicles	Mainly action in individual cities with no measurable targets Recently introduced India-wide emission standards for thermal power plants; Introduction of Bharat VI vehicle emission norms is proposed by April 2020	National air quality targets; implementation plans approved on federal level and executed on state level National emission standards for power plants, industrial sectors and vehicles	“Clean Air For Europe” action plan Europe-wide emission standards for power plants, industry and cars Most countries and key cities have own plans

Sources

Change in satellite-based PM2.5 levels from 2010 to 2015	Greenpeace analysis of NASA satellite data; EU coverage for recent years was not sufficient so EU analyzed from Boys et al 2014: Fifteen-year global time series of satellite-derived fine particulate matter, Environ. Sci. Technol, 10.1021/es502113p, 2014.
PM2.5 trend	As above.
PM2.5 in capital city (µg/m3)	New Delhi: data obtained from DPCC through RTI request Brussels and Washington, D.C.: WHO Ambient Air Pollution database

	Beijing: Beijing Municipal Environmental Monitoring Centre
PM2.5 air quality standard ($\mu\text{g}/\text{m}^3$)	National and EU regulation
Deaths per day from air pollution in 2013	Global Burden of Disease Study 2013 (GBD 2013) Results by Location, Cause, and Risk Factor. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2016.
Online PM2.5 monitoring	EU AirBase http://www.eea.europa.eu/data-and-maps/data/airreporting U.S. EPA AirData http://www3.epa.gov/airdata/ China Ministry of Environmental Protection online data platform India National AQI platform
Share of thermal power plants with basic pollution controls (desulphurization, particle controls)	Platts World Electric Power Plants database 2015Q4
Deadline for meeting national air quality standards	National and EU regulation
Consequences for missing targets	National and EU regulation
Coverage of government measures	National and EU regulation, http://pib.nic.in/newsite/mbErel.aspx?relid=134232