

ASIA PACIFIC CLEAN AIR PARTNERSHIP

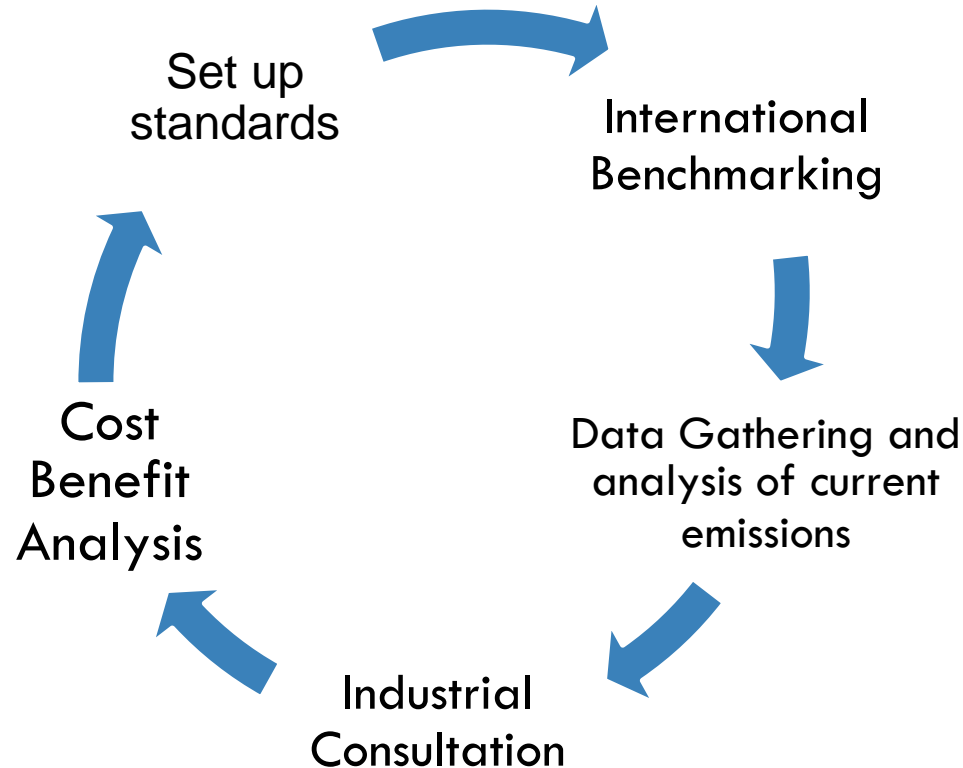
Case studies from Singapore

Reference : Mr. Zhang Kang En, Ministry of the Environment and Water Resources of Singapore

ISSUE: Tightening of Industrial Emission Standards

Industrial emissions are key sources of air pollution in Singapore. In order to further improve air quality, safeguard public health and work towards achieving Singapore's 2020 air quality targets, the National Environment Agency (NEA) undertook a review of the air pollutant emissions standards for industries.

Processes:




New industrial plants are required meet the tighter industrial emissions standards from 1 July 2015.

Existing plants are granted a grace period, until 1 July 2018, to comply with the revised standards for compounds of mercury, lead, cadmium, ammonia and hydrogen fluoride, and until 1 July 2023 to comply with the revised standards for particulate matter, nitrogen oxides, carbon monoxide and sulphur dioxide.


The grace period will give them time to adjust their plans (e.g. upgrades of equipment) and processes to meet the standards and still achieve their business outcomes.

Success

1. 4 criteria pollutants tightened as part of our move towards achieving 2020 air quality targets

Particulate substances	100 mg/Nm ³		50 mg/Nm ³
Carbon monoxide	625 mg/Nm ³		250 mg/Nm ³
Oxides of nitrogen	700 mg/Nm ³		400 mg/Nm ³
Sulphur dioxide	-		1,700 mg/Nm ³

2. 3 heavy metals and 2 toxic gases tightened to align Singapore's commitment to the Minamata Convention

Mercury	3 mg/Nm ³		0.05 mg/Nm ³
Cadmium	3 mg/Nm ³		0.05 mg/Nm ³
Lead	5 mg/Nm ³		0.5 mg/Nm ³
Ammonia	76 mg/Nm ³		30 mg/Nm ³
Hydrofluoric acid	50 mg/Nm ³		10 mg/Nm ³

Further information

For more information on the industrial air emissions standards, see the following websites:

<http://www.nea.gov.sg/corporate-functions/newsroom/news-releases/nea-announces-tighter-industrial-emissions-standards-for-better-air-quality>

<http://www.nea.gov.sg/training-knowledge/publications/environmental-protection-division-annual-report>