

Summary of Updates to the Emission Inventory

Update Date	Emission Inventory Revised	Revisions and Updates
March 2000	1990-1998	<ul style="list-style-type: none"> First publication of emission inventory for PM, SO₂, NO_x, NMVOCs and CO from combustion sources at the EPD's website.
December 2000	1990-1999	<ul style="list-style-type: none"> Amended emission inventory for Public Electricity Generation, Road Transport and Other Fuel Combustion sources.
December 2001	1990-2000	<ul style="list-style-type: none"> Amended combustion sources emissions (including emission factors for VOC emissions from coal-fired electricity generation units, vehicle kilometer travel (VKT) for Road Transport, emission estimation methods for Navigation and Civil Aviation and surrogates for Other Fuel Combustion emissions).
February 2003	1990-2001	<ul style="list-style-type: none"> Replaced Census and Statistics Department (C&SD) retained import data for fuel with Energy End-use data from Electrical and Mechanical Services Department (EMSD). Amended VKT data.
June 2004	1990-2002	<ul style="list-style-type: none"> Replaced emission estimated using emission factors with sophisticated EMFAC-HK model to estimate emissions from Road Transport. Included additional emission sources for RSP and VOC. Replaced 2000 to 2001 Public Electricity Generation emissions for SO₂, NO_x and PM with data provided the power companies.
January to March 2005	1990-2003	<ul style="list-style-type: none"> Amended 2000 to 2002 SO₂, NO_x and PM emissions for Public Electricity Generation according to data provided by the power companies. Updated emissions estimated using the EMFAC-HK model. Amended 2001-02 emissions using Energy End-Use Data from EMSD. Excluded Biogenic VOC emission sources from total VOC emission.
December 2005	1990-2004	<ul style="list-style-type: none"> Amended 2002-03 emissions using Energy End-Use Data from EMSD. Updated emission factors for VOC emissions from the printing industry.
December 2006	1990-2005	<ul style="list-style-type: none"> Amended 2003 to 2004 SO₂, NO_x and PM emissions for Public Electricity Generation according to data provided by the power companies. Updated fuel use for vehicles to calculate 1998 to 2004 SO₂ emissions. Updated emission factors for VOC emissions from the printing industry.

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January 2008	1990-2006	<ul style="list-style-type: none"> • Replaced Power Plant PM emissions with RSP emissions using emission factors from USEPA. • Updated emission factors for emission from non-road mobile equipment at the airport, container terminal and construction sites. • Included VOC emissions from evaporation of gasoline. • Included RSP emissions from tyre, brake and road wear. • Amended estimation method for VOC emissions from printing industry and fuel storage tanks. • Updated emission factors for Civil Aviation emission sources.
January 2009	1990-2007	<ul style="list-style-type: none"> • Used information collected from Government Departments and shipping industry to estimate emissions from local vessels. • Updated emission factors for emission from non-road mobile equipment at the airport and container terminal.
September 2012	1997-2010	<ul style="list-style-type: none"> • Based on the results from the Marine Emission Study report completed in 2012 to update emissions from Navigation. Additional information for fuel use and vessel activities were used to calculate the emission. • • Used updated version of EMFAC-HK (version 2.1) for Road Transport emission estimation. • Used updated version of EDMS (version 5.1.3) for Civil Aviation emission estimation. • Included emissions from auxiliary power units of the aircrafts parking at the gates of the airport. • Used sales report data to calculate VOC emissions from products controlled under the VOC Regulation. • Used further local reported and survey data for VOC emission calculation. • Used new reported and survey results to calculate emissions from Other Fuel Combustion sources. • Included RSP emissions from construction sites and cooking; Included VOC emissions from storage of naphthalene, aviation fuel and use of cleaning solvents associated with paint use.
February 2013	1997-2011	<ul style="list-style-type: none"> • Used C&SD data to derive fuel consumption data for construction sector from 1997 to 2011. • Amended VOC emissions from architectural paints in 2010 due to a correction in the paint consumption data.

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January 2014	1997-2012	<ul style="list-style-type: none"> • We compiled the emission inventory of FSP as it is one of the major air pollutants stipulated in the new Air Quality Objectives (AQOs) which takes effect from 1 January 2014. • Emissions of OGVs during shifting between berthing locations were compiled since more detailed vessel activity data were collected from the Marine Department. • New surrogates for fuel consumption for the construction and industrial sectors were derived from C&SD data since the previously used Energy End-Use data from EMSD are no longer suitable after a major revision. • Having regard to the real world developments, the sulphur content of aviation fuel, duration of landing and take-off cycles of aircraft at Hong Kong International Airport and hence the air pollutant emissions from Civil Aviation sector have been updated. • Screen printing emissions were updated according to additional survey data to cover emissions in the application of screen printing inks on non-paper substrates, of which this type of inks was exempted from the VOC Regulation.
January 2015	2009-2012	<ul style="list-style-type: none"> • VOC emissions from architectural paints in 2012 were updated using VOC contents of the latest sales reports submitted by importers. • VOC emissions from screen printing from 2009 to 2012 were revised based on our latest survey which revealed a reduction in the local use of non-regulated screen printing ink.
January 2016	1997-2014	<ul style="list-style-type: none"> • Emissions from asphalt production plants were estimated. • Emissions from Sludge Treatment Facility (STF) were estimated. • Emissions from landfill gas flaring were estimated. • Emissions from biomass burning were estimated. • Other Fuel Combustion sector was renamed as Other Combustion sector to better reflect the nature of the sources covered. • Radar data from CAD and chock-on chock-off data from AAHK were obtained to refine the emission inventory for Civil Aviation sector. • Used updated version of EMFAC-HK (version 3.1.1) for Road Transport emission estimation.