

RESOURCES UTILISATION AND CONSERVATION

- Sustainable Building Design
- Greening and Landscaping
- In-house Green Management



IN-HOUSE GREEN MANAGEMENT

ArchSD recognises that climate change is a significant risk and challenge locally and internationally. Therefore, to complement the concerted efforts of the Government in transitioning to a low-carbon economy, we adopt green operational practices through proactive environmental management and staff engagement. While incorporating environmental considerations into our projects, we also implement in-house initiatives to manage energy, waste, water, indoor air quality and other environmental aspects.

Energy Use and Carbon Emissions

ArchSD leverages and maintains an integrated management system, combining environmental protection, quality and occupational, health and safety into one single management system. Our recent upgrade of ISO 14001 Environmental Management System in 2017 and implementation of ISO 50001 Energy Management System for our APB Centre since 2014 reinforce our commitment to further improve our sustainability performance. In addition, at APB center, we have installed over 100 nos. photovoltaic panels on the roof top which can generate electricity as well as offsets part of the electricity bill.

Hong Kong Green Organisation

During the reporting year, ArchSD maintained the "Class of Excellence" of Energywise Certificate in the Hong Kong Green Organisation Certification (HKGOC) scheme in recognition of the achievement in energy conservation. Meanwhile, we were awarded with the Hong Kong Green Organisation (HKGO) Certificate which is jointly organised by the 11 organisations including the Environmental Protection Department (EPD) and the Environmental Campaign Committee (ECC) to commend the outstanding environmental performance of our department.



Hong Kong Green Organisation (HKGO) Certificate

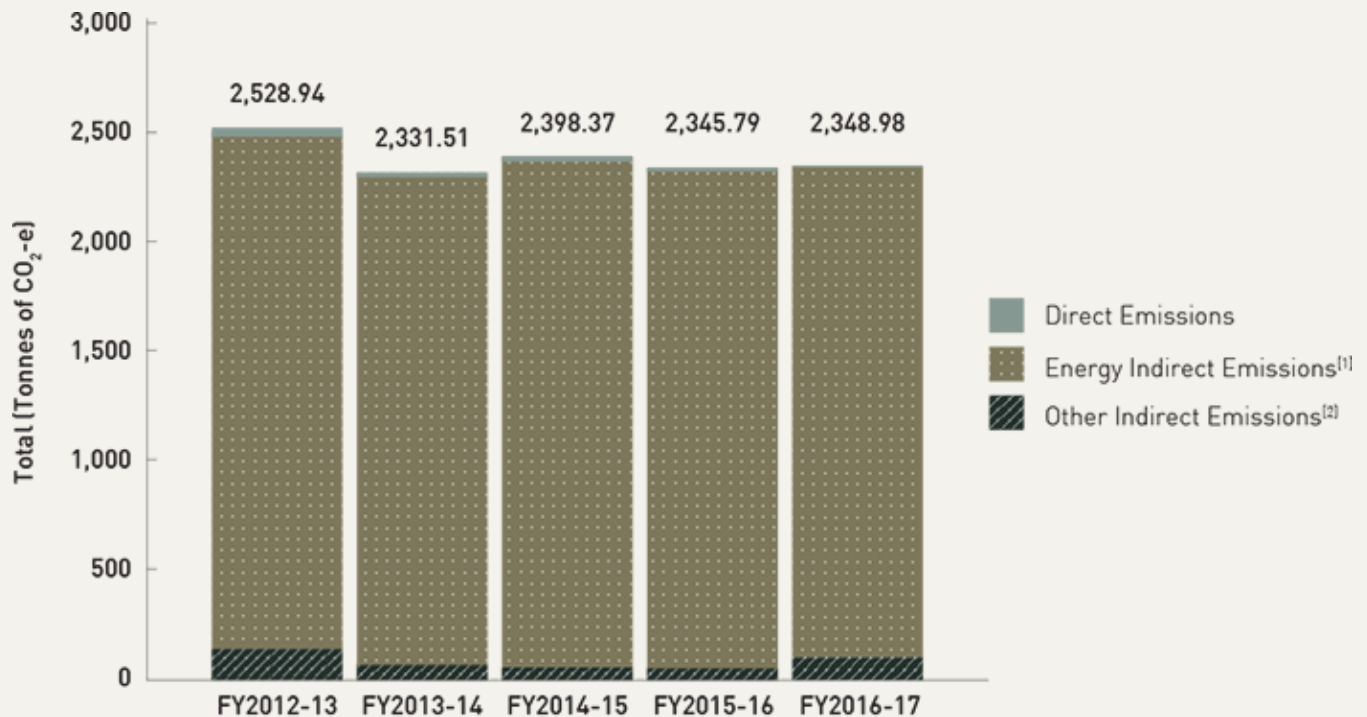


"Class of Excellence" of Energywi\$e Certificate

In support of the carbon emissions reduction targets set out in the Hong Kong's Climate Action Plan 2030+, ArchSD conducts carbon audits regularly to enhance our carbon performance. By keep tracking our carbon emissions at QGO and APB Centre, we can monitor our progress and identify areas for improvements in a timely manner. The three major greenhouse gas contributors including CO₂, CH₄ and N₂O are taken into account in these carbon audits.

Carbon Emissions in the Queensway Government Offices

Minor fluctuations in the carbon emissions for ArchSD offices in QGO were observed in the past five financial years. With enhanced staff's awareness on energy conservation and implementation of energy saving measures in QGO, there was about 7.1% reduction in carbon emissions in this 5 year period.

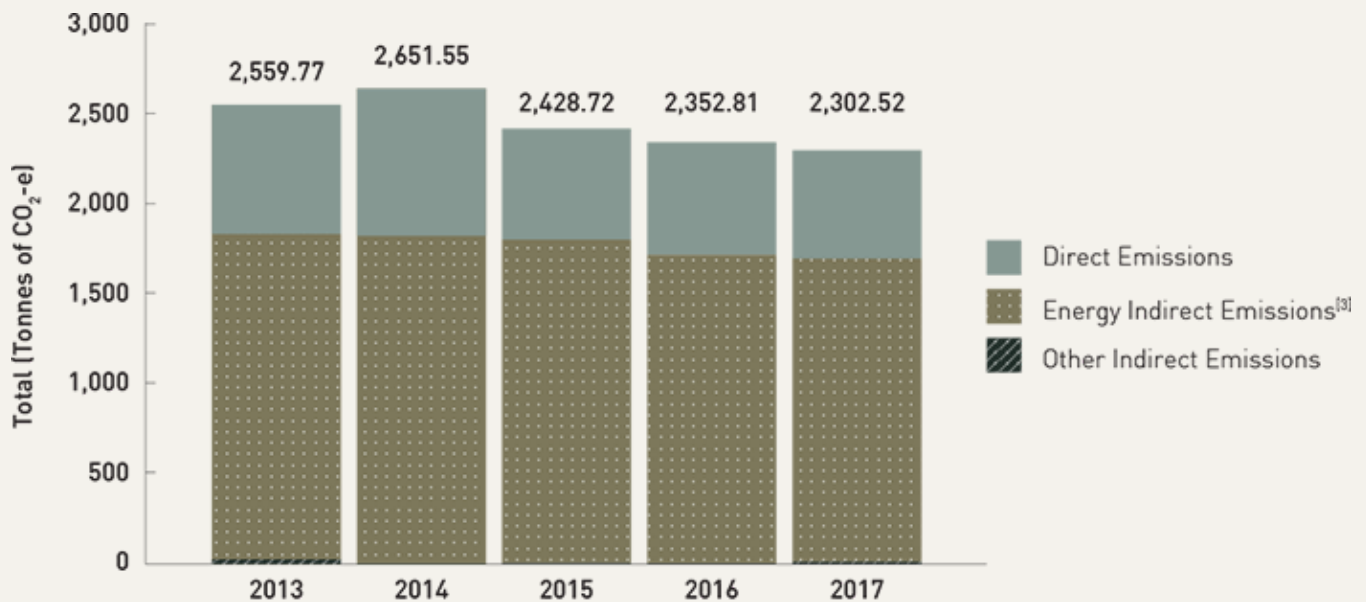


	FY2012-13	FY2013-14	FY2014-15	FY2015-16	FY2016-17
Direct Emissions (Tonnes of CO ₂ -e)	24.05	14.90	18.92	6.90	6.87
Energy Indirect Emissions (Tonnes of CO ₂ -e) ^[1]	2,385.64	2,277.59	2,344.73	2,255.11	2,247.02
Other Indirect Emissions (Tonnes of CO ₂ -e) ^[2]	119.25	39.02	34.72	83.78	95.09
Total (Tonnes of CO₂-e)^[2]	2,528.94	2,332.51	2,398.37	2,345.79	2,348.98

- [1] Territory-wide default emission factor was used for the calculation of emissions.
- [2] The figures in FY 2012-13, FY 2013-14, FY 2014-15, FY 2015-16 and FY 2016-17 are calculated by using the actual paper consumption (A3 & A4) and waste paper collected for recycling in QGO.

Carbon Emissions in APB Centre

In the past five years from 2013 to 2017, except for an increase in 2014, the amount of carbon emissions in APB Centre was in a downward trend. With upgrading / enhanced maintenance of the air-conditioning system and applications of various energy efficient features, the carbon emissions was recorded a drop of about 10.0% in this 5 year period.



	2013	2014	2015	2016	2017
Direct Emissions (Tonnes of CO ₂ -e)	732.33	886.29	619.08	628.22	601.86
Energy Indirect Emissions (Tonnes of CO ₂ -e) ^[3]	1,785.41	1,756.58	1,802.93	1,719.53	1,686.67
Other Indirect Emissions (Tonnes of CO ₂ -e)	42.04	8.68	6.72	5.05	13.98

	2013	2014	2015	2016	2017
Total (Tonnes of CO ₂ -e)	2,559.77	2,651.55	2,428.72	2,352.81	2,302.52

[3] Territory-wide default emission factor was used for the calculation of emissions.

Waste Management

ArchSD continues to strengthen waste management by establishing new waste targets and initiatives. We have set up various waste collection facilities for a wide range of items including waste paper, plastic bottles, aluminium cans, used CDs or DVDs and used printer toner cartridges in our offices at APB Centre and QGO. Furthermore, we proactively engage our IT equipment suppliers to facilitate the reuse and recycling of our old computer accessories and electrical appliances. In the reporting year, we successfully recycled over 20,000 kg of A3 and A4 waste paper, and attained the "Class of Excellence" Wastewi\$e Certificate of HKGOC in recognition of our effort in waste management.



"Class of Excellence" of Wastewi\$e Certificate

Water Management

ArchSD is committed to responsible water resource management. This includes regular monitoring of potable water and flushing water consumption at our offices and promoting water conservation by establishing the Department's General Circular "Measures of Green Housekeeping". Over the years, we have also installed a variety of water saving devices including sensor taps, dual flush cisterns and devices in APB Centre.

Indoor Air Quality Management

Indoor air quality (IAQ) is another key focus area of ArchSD in sustainability management. To safeguard the health and safety of our staff, we strictly follow the relevant guidelines published by the Environmental Protection Department (EPD) to foster a working environment with good IAQ. We joined the Indoor Air Quality Certification Scheme organised by EPD and regularly monitor and assess our IAQ performance by engaging accredited bodies to conduct IAQ assessments. Under the HKGOC scheme, we were awarded "Basic Level" of IAQwi\$e Certificates for both QGO and APB Centre during the reporting year.





"Basic Level" of IAQWi\$e Certificates for QGO and APB Centre

Cultivating a Green Culture

We endeavor to continuously raise the environmental awareness among our staff and encourage them to put the environmental principles into practice. A designated team of 74 Green Wardens (previously known as energy warden) with staff members from various branches and divisions has been appointed to assist in implementing and monitoring the environmental programmes of ArchSD. Our staff are urged to proactively participate in environmental activities and training to enhance their environmental awareness and professional qualifications in specific green aspects. Up to December 2017, 172 staff members of ArchSD have obtained the BEAM Pro qualification.