

The Hong Kong Jockey Club RIDING HIGH TOGETHER

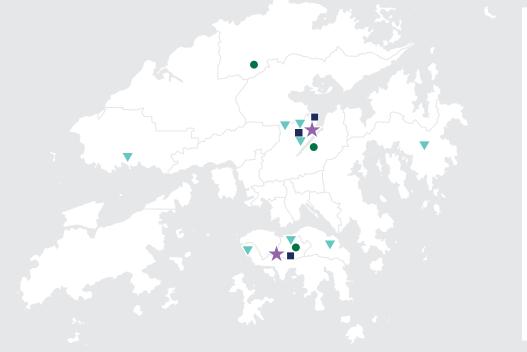
Working Together for a Greener Future

Environmental Report 2019

CONTENTS

02 About this Report

- *03* Message from the Chairman of the Sustainability Committee
- 04 Green Governance
- 08 Managing our Hoofprint
- 15 Waste Avoidance and Management
- 22 Transformative Philanthropy
- 27 Engagement
- *30* Conghua Racecourse
- *32* Performance Summary Data
- *36* Global Reporting Initiative (GRI) Content Index
- 43 Assurance Statement



ABOUT THIS REPORT

The Hong Kong Jockey Club (HKJC) – also referred to as 'the Club' – is pleased to present its Environmental Report 2019, a biennial report covering the financial years 2017/18 and 2018/19 (1 July 2017 to 30 June 2019).

This report is prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. Reporting the Club's performance and initiatives in the areas of environmental and resource management, it complements and should be read in conjunction with the Club's Annual Report. The Club's website (https://www.hkjc.com/ home/english/index.aspx) also offers extensive sources of information, especially regarding such aspects of corporate social responsibility and sustainability as governance, responsible gambling, employee wellness and community and charitable donations.

The report covers all entities over which the Club has operational control – including those outside Hong Kong. This report also covers the environmental projects supported by the Hong Kong Jockey Club Charities Trust (the "Trust"), while more information about the Trust and economic impacts of the Club is provided in the Annual Report and on the Club's website. Details of those entities can be found in the Club's 2019 Financial Report. In addition, this report covers The Hong Kong Jockey Club Kau Sai Chau Golf Course and Tai Kwun – Centre for Heritage & Arts under Other Operations.

Copies of previous Environmental Reports can be found on the HKJC website at https://corporate.hkjc.com/corporate/ english/history-and-reports/environmentalsustainability.aspx

The Club welcomes feedback on this report. Questions or comments can be sent to sustainability@hkjc.org.hk.

Hong Kong operations

- Racecourses (2)
 - Corporate (3)
- Other Operations (5) / Public Riding Schools (3)

Clubhouses (3)

Retail Branches and Telebet Centres (102)

Mainland operations

- 1. The Hong Kong Jockey Club Conghua Racecourse
- 2. Beijing Hong Kong Jockey Club Clubhouse
- 3. IT office operations Shenzhen

MESSAGE FROM THE CHAIRMAN OF THE SUSTAINABILITY COMMITTEE



CLUB'S PURPOSE:

As a world-class racing club, we act continuously for the betterment of our society

CLUB'S CORE VALUES:

- World-class Leadership
- Uncompromising Integrity
- Continuous Development
- Serving the Community

The Club continues to improve its practices to ensure efficient use of resources, while expanding operations and providing funding through the Charities Trust for environmental initiatives. Together with the community, the Club is working towards a greener future and a more sustainable Hong Kong.

Being an organisation whose sole purpose is the betterment of society, the Club is strongly committed to reducing its environmental footprint and to supporting Hong Kong's development towards a sustainable future.

Through investments in energy-efficient design and technology, and despite an expanding business, the Club has succeeded in reducing the carbon footprint of its Hong Kong operations over the last nine years. In 2018/19 this was 6.3% below the Club's baseline year of 2009/10. Much more needs to be done, and the Club will continue to take every opportunity to decarbonise.

Over the past two years, the Club has also worked hard to reduce consumption and avoid waste. Many single-use plastics have been phased out, notably at racecourses and clubhouses, and measures have been put in place to reduce paper usage and food waste. Unavoidable food waste is now sent to the Government's new organic waste treatment facility, the O·PARK1, for conversion into biogas and compost.

The Club likewise supports the proposed Municipal Waste Charging scheme in Hong Kong as a driver to reduce waste sent to landfill. In preparation, the Club has conducted a 12-month review of its municipal waste streams and practices and identified necessary changes to its waste handling processes and contracting practices.

A major part of the Club's support for sustainability is delivered through its Charities Trust. For example, in 2018 the Trust joined hands with The Chinese University of Hong Kong to co-host the Hong Kong chapter of the Sustainable Development Solution Network, which coordinates initiatives in support of the United Nation's Sustainable Development Goals. Further initiatives are detailed in this report.

The Club has much further to go in its environmental journey. Nonetheless, with the support of its members and community partners, and above all through the hard work of its staff, I am confident that the Club will continue to be a valued and valuable contributor to Hong Kong and its sustainable future.

With my sincere thanks to fellow members of the Club's Sustainability Committee for their dedication and support over the past two years.

Christoph Ganswindt

Executive Director, Information Technology and Sustainability Chairman of the Sustainability Committee

HKJC SUSTAINABILITY COMMITTEE Environmental governance is overseen by the HKJC Sustainability Committee which reports to the Board of Management. The committee reviews the environmental aspects of the Club's operations and coordinates contributions from departments in support of the Club's shared environmental objectives.



- Head of Raceday Operations, Tracks and Racing Facilities

 Stephen Higgins
- 2. Executive Manager, IT Operation Services - Louis Y T Yeung
- Executive Manager, Racing Event Marketing & Sponsorship

 Sandra S S Chan

- Sustainability Manager
 Gina Littlefair
- 5. Head of Strategic Procurement - Jacqueline C W Lam
- 6. Executive Manager, Sustainability - Shirlee Algire
- Executive Director,
 Information Technology & Sustainability
 Christoph Ganswindt

- Head of Public Affairs (Corporate & Charities Communications)
 Irene M T Chan
- Head of Property Facilities Management
 Raymond A K Koh
- Executive Manager, Charities
 (Grant Making Sports and Environment)
 Donna W Y Tang
- Head of Retail and Telebet Services
 Patrick T C Cheng
- 12. General Manager, Sha Tin Clubhouse - Jessica F W Kwok
- Acting Executive Manager, Logistics & Transport

 Alex W P Li
- Head of Dual Site Stables Operations and Owners Services
 - K L Cheng (not pictured)

The governance and implementation of the Club's environmental policies and practices are aligned with the Club's Purpose and Core Values, which underpin decision making and direction.

In the past two years, two additions have been added to the scope of the Club's environmental footprint: Conghua Racecourse ("CRC") and Tai Kwun – Centre for Heritage and Arts. More change to come means the Club has to continuously review its impacts and environmental strategies, ensuring its policies and practices are consistently applied across the wide variety of its business activities. For example, it is important to look at future impacts of property development and digitalisation. For CRC, the Club has set up a governance framework with an Environment Committee chaired by the General Manager, who is also a member of the Club's Sustainability Committee. In preparation for full operations, the Club completed all the requirements under the Environmental Impact Assessment and received completion acceptance in July 2019. The Club believes that this commitment to high environmental standards and good governance are fundamental to CRC's long term success and value creation. In the coming years, CRC will be measuring its environmental baseline and setting objectives for continual improvement.

At the operational level, the Club's sustainability strategy is spelled out in a number of environmental policies and guidelines which are continuously updated and reviewed. Responsibility for environmental compliance is vested in individual division or department heads in line with their areas of responsibility. Fundamental to strong governance and managing well is ensuring that the Club's staff know what is expected and have the required skills. Environmental education is offered to full-time staff, with two e-learning courses on environmental policies and guidelines being introduced in 2018 for new full-time employees. Annual technical training is also provided for key staff in waste compliance. Part-time employees receive training where appropriate.

Additionally, since April 2019 environmental training has been introduced to Membership Division's induction and "Journey to Excellence" programmes.

THE CLUB'S CORE ENVIRONMENTAL COMMITMENTS

The Club's Core Environmental Commitments

Six areas outlined in our Environmental Policy are aligned with the Club's core environmental objectives.



 Educating, training and motivating employees to carry out tasks in an environmentally responsible and

proactive manner.



2. Integrating environmental considerations into the delivery of our services and the planning, design, construction, operation and maintenance of our facilities.

 Preventing pollution, minimising waste through source reduction and recycling, and conserving natural resources.





 Supporting community-based environmental efforts, conservation and programmes.

 Encouraging the same level of environmental performance among our business partners, suppliers, contractors and sub-contractors.



 Complying with applicable legal requirements and other environmental requirements to which the Club facilities pertain.



PRIORITIES, MATERIALITY & RISK

Priorities, Materiality & Risk

The Club routinely engages with its wide range of stakeholders, using its annual business planning process to review progress, assess priorities and set clear targets for environmental performance.

In addition to this routine engagement, the Club works with the Government on trials of municipal solid waste charging and improve building and energy efficiency. The Club also engages with civil society organisations and industry partners such as *Drink Without Waste*, a coalition committed to reducing single-use plastic beverage bottles in Hong Kong's waste stream.

The matrix on this page presents the environmental and social issues identified as commanding the highest priority for the Club and its stakeholders, developed with reference to GRI standards of reporting.

As can be seen, the three areas currently accorded top priority in environmental

sustainability are carbon emissions, energy and waste. Details of the Club's performance and ongoing work in these areas can be found on sections under "Managing our Hoofprint". The performance summary and GRI Content Index can be found at the end of this report.

On an ongoing basis the Club evaluates materiality of its environmental risks, continually reviewing and setting objectives and targets based on risks and opportunities identified.



MATRIX ON SUSTAINABILITY ISSUES

CARBON FOOTPRINT & EMISSIONS

The Club is committed to being environmentally responsible and managing its "hoofprint". This includes careful use of energy, water and other natural resources in its operations.

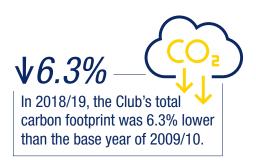


The Club is committed to being environmentally responsible and managing its "hoofprint". This includes careful use of energy, water and other natural resources in its operations. Performance indicators are set and internally a 'user-pays' principle is applied to drive accountability.

The Club also makes wide-ranging efforts to engage staff, customers and the wider community in supporting environmental initiatives and contributing to change.

Carbon Footprint & Emissions

In 2018/19, the Club's total carbon footprint was essentially unchanged from the previous year, and was 6.3% lower than the base year of 2009/10. This excludes Conghua Racecourse as this facility was in the final stages of construction and pre-operation during most of the reporting period. Overall, the decrease in CO₂-e emissions over the past nine years reflects smart investments in energy efficiency. With electricity accounting for more than 90% of reported emissions, efforts have focused on improving energy efficiency, notably through more efficient air conditioning systems, lighting and IT infrastructure.



Carbon Emissions (CO₂-e in tonnes)

	2018/19	2017/18	2016/17	2009/10 Baseline
HONG KONG OPERATIONS ⁽¹⁾	109,879	109,896	111,836	116,434
MAINLAND OPERATIONS ⁽²⁾	7,357	7,451	7,599	8,765
OTHER OPERATIONS				
Kau Sai Chau Public Golf Course	4,694	4,737	4,874	2,741
Public Riding Schools	562	579	672	469
Tai Kwun – Centre for Heritage and $\mbox{Arts}^{\mbox{\tiny (3)}}$	5,131	_	_	_

(1) Historical data revised in alignment with financial reporting.

(2) The carbon emission factors published by the National Development and Reform Commission (NDRC) were adopted.

(3) 2018/19 was the first full year of operations at Tai Kwun. Data is for buildings and public areas managed and operated by The Jockey Club CPS Limited only.

ENERGY CONSUMPTION & EFFICIENCY



The Club monitors and optimises energy efficiency at all office buildings, clubhouses and racecourses through active facility management and via its Building Management Systems (BMS). The BMS at Sha Tin Communications & Technology Centre (SCTC) has about 12,000 monitoring and control points, as well as over 300 energy meters allowing costs to be recharged to different departments. At the racecourses, almost 70,000 monitoring and control points have been installed. Similarly, paper use, waste and other environmental charges can be recharged on a user-pays principle.

Electricity consumption has decreased by approximately 0.5% since the base year 2009/10, while Towngas consumption remained unchanged during the same period. Petrol consumption has decreased while diesel consumption has increased due to additional horse transporters travelling between Conghua and Sha Tin under the Club's new dual site operations model.

Electricity savings were recorded in 2018/19 because of the continued extension of the District Cooling System to Sha Tin Central Complex (STCC) and other operational areas in Sha Tin in 2017/18. In addition, variable speed drivers have been installed in the chillers at the Energy Centre of Sha Tin Racecourse, while LED lights with motion sensors were installed at back of house areas and rear staircases at SCTC, STCC and Shatin Grandstands, which dim lighting by up to 40% when an area is unoccupied.

Energy Consumption

	2018/19	2017/18	2016/17	2009/10 Baseline
HONG KONG OPERATIONS				
Electricity (kWh) ⁽¹⁾	174,006,240	174,290,097	171,590,670	174,835,923
Towngas (units)	873,354	873,496	857,637	798,673
Diesel (litres)	273,910	181,759	164,258	420,343
Biodiesel (B5) (litres)	217,691	222,180	200,424	-
Petrol (litres)	53,238	62,514	70,647	77,833
LPG (litres)	0	6,881	12,462	11,685
MAINLAND OPERATIONS ⁽²⁾				
Electricity (kWh)	7,965,973	8,056,567	8,212,671	9,383,904
Natural gas (m³)	228,808	236,587	232,993	230,748

 Historical data revised in alignment with financial reporting. The data has been updated since the 2018/19 Annual Report.

(2) Includes Beijing Clubhouse from 2009/10 and office operations in Shenzhen from 2016/17. Data for 2009/10 baseline updated with adjustment in emission factors.

ENERGY CONSUMPTION & EFFICIENCY (continued)

Electricity consumption has decreased by approximately 0.5% since the base year 2009/10, while Towngas consumption remained unchanged during the same period.



Upgrades and other changes in the Club's operations have also impacted energy consumption, such as a new restaurant and kitchen at Sha Tin Clubhouse which opened in June 2018. The latter has increased CO_2e by 67 tonnes from the previous year. In order to maximise efficiencies of lighting and air conditioning, shift work has been optimised from three shifts to one at Sha Tin Data Centre, with the number of hours where lighting is used being reduced by approximately 60%. For front of house operations, the clubhouses and racecourses have been using Light Emitting Diode (LED) lighting in everincreasing amounts since 2011.

Fuel Consumption

Since the opening of Conghua Racecourse in August 2018, and owing to the dual site nature of operations, fuel consumption has increased. This is expected to continue as more horses transfer to CRC. In the past 12 months, the impact on the Club's CO₂-e emissions has increased by approximately 240 tonnes.

Although fuel for transportation has risen, it is useful to put this rise into perspective. The pie chart on the following page shows that fuel for vehicles accounts for less than 3% of the Club's overall energy consumption when compared with the racecourses, which account for 50%. This reflects the Club's focus on the high impact areas of buildings, (racecourses, offices, residential units and clubhouses) notably the use of electricity for airconditioning and lighting.

ENERGY CONSUMPTION & EFFICIENCY (continued)

Energy Consumption

	2018/19	2017/18	2016/17	2009/10 Baseline
Total Energy Consumption (GJ)	70,289	48,039	48,298	21,081
OTHER OPERATIONS				
Kau Sai Chau Public Golf Course				
Electricity (kWh)	5,269,113	5,189,831	5,138,762	5,075,433
Diesel (litres) (1)	655,013	680,152	682,981	-
Petrol (litres) (1)	28,346	31,218	30,952	_
Public Riding Schools				
Electricity (kWh)	992,384	1,034,662	1,135,878	780,391
Biodiesel (B5) (litres)	3,884	3,458	3,063	-
Tai Kwun – Centre for Heritage and	Arts (2)			
Electricity (kWh)	6,412,017	-	-	-
Diesel (litres)	483	-	-	_

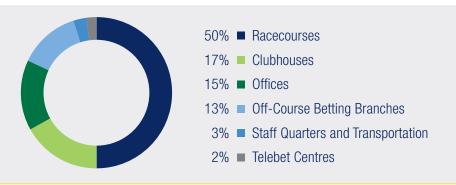
Tai Kwun

The Jockey Club CPS Limited manages the public and administrative areas of Tai Kwun – Centre for Arts and Heritage. Thus, the environmental data and consumption figures reported herein do not reflect tenants, licensees and other operators' spaces. In the past 12 months, the site and its environmental systems have been progressively established along with occupancy.

(1) Includes fuel data of Kau Sai Chau Public Golf Course since 2016/17.

(2) 2018/19 was the first full year of operations at Tai Kwun. Data is for buildings and public areas managed and operated by The Jockey Club CPS Limited only and does not reflect tenants, licensees and other operators' spaces.

ENERGY USE (Hong Kong Operations)



WATER MANAGEMENT

To help reduce general water usage, all divisions are expected to observe internal Water Management Guidelines. While there has been an increase in fresh water consumption since the base reporting year of 2011/12, much of this can be attributed to the installation of more water-cooled chillers, which have achieved corresponding savings in energy. Additionally, the extension of the District Cooling System to Sha Tin Communications and Technology Centre (SCTC), The Sha Tin Central Complex (STCC) and the Apprentice Jockey Quarters has increased the volume of water, impacting water use. Club policy is to provide drinking water using mains water where practical to reduce usage of bottled water. At SCTC a drinking water system using mains water with UV filtration was selected in preference to a conventional bottled water system, with savings estimated at HK\$200 million over the life of the building. This method of water filtration has been a long-term practice at the clubhouses and newlyrenovated offices.

The Club closely monitors its water pipes for leaks and makes repairs accordingly. In the past two years, water leaks at Beas River Country Club and Sha Tin Racecourse were discovered and repairs made.



Water Consumption

	2018/19	2017/18	2016/17	2015/16	2013/14
HONG KONG OPERATIONS					
Water – from municipal source (m³) ⁽¹⁾	2,017,023	1,953,976	1,898,235	1,823,039	1,738,946
MAINLAND OPERATIONS					
Water – from municipal source (m³) ⁽²⁾	100,712	98,144	99,012	92,021	97,117
	100,112	50,144	00,012	02,021	01,111

(1) Historical data revised in alignment with financial reporting.

(2) Includes Beijing Clubhouse from 2009/10 and office operations in Shenzhen from 2016/17. Data for 2009/10 baseline updated with adjustment in emission factors.

WATER MANAGEMENT

(continued)

Other Operations

Water Consumption

	2018/19	2017/18	2016/17	2013/14
WATER - FROM MUNICIPAL SOU	RCE (m³)			
Kau Sai Chau Public Golf Course	37,947	31,367	35,863	55,163
Public Riding Schools	8,318	6,880	8,834	9,944
Tai Kwun				
– Centre for Heritage and Arts $^{\scriptscriptstyle (1)}$	18,492	_	-	_

(1) 2018/19 was the first full year of operations at Tai Kwun. Data is for buildings and public areas managed and operated by The Jockey Club CPS Limited only.



Kau Sai Chau Public Golf Course has a self-sufficient irrigation system.

The Jockey Club Kau Sai Chau Public Golf Course, funded and operated by the Club, has a completely self-sufficient irrigation system, which collects and stores rainfall in reservoirs. About 70% of the North and South Courses return rainfall to the reservoirs, while the newer East Course has been designed with a fully-closed drainage system, providing 100% return through a system of five underground tanks and two lakes. The facility also has its own sewage treatment plant, with the effluent used to irrigate the courses.

GREEN MOBILITY & AIR QUALITY

The Club set a new target of 100% electric or hybrid for private vehicles by July 2022. Currently 50% of private vehicles owned by the Club are EV or hybrid and 80% of goods vehicles are Euro V or above. The Club operates a fleet of some 250 vehicles including pool cars, delivery vans, horse transporters and off-road vehicles for such work as track maintenance.

In November 2014, the Club established a policy of procuring only electric or hybrid passenger vehicles where practical. Having set a target for 25% of the passenger vehicle fleet to be electric/hybrid models by July 2019, it surpassed this figure by the end of March 2017. Additionally, for goods vehicles and off-road vehicles (where non-diesel options are not generally available) the Club is committed to phasing out all Euro IV and earlier models. Where feasible, the Club's off-road equipment uses biodiesel (Euro V B5 biodiesel), as do standby generators at both racecourses. This biodiesel is recycled from used cooking oil, some from the Club's kitchens, thereby supporting a circular economy.

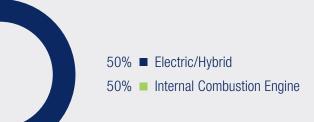
At Conghua Racecourse, a future incorporating low carbon transportation was taken into consideration in the planning of buildings and operations. Some 135 EV chargers are located in the main parking areas and the Club operates 42 electric golf carts and three hybrid passenger vehicles.

In January 2019, the Board of Management approved new targets for both private and goods vehicles. The new targets are 100% electric or hybrid for private vehicles and 100% Euro V or above for Light Goods Vehicles, Medium Goods Vehicles and Special Purpose Vehicles by July 2022. Currently 50% of private vehicles owned by the club are EV or hybrid and 80% of goods vehicles are Euro V or above. The Club would like to invest more. However, due to current market availability in Hong Kong, Special Purpose Vehicles are not available in either hybrid or EV versions.





2019 PRIVATE VEHICLES – ELECTRIC/HYBRID VS INTERNAL COMBUSTION ENGINE



Waste Hierarchy – Prioritising Waste Streams and Avoiding Waste at Source

In 2018/19, the Club conducted an operation-wide waste audit, with a strategic focus on identifying major municipal waste streams. This review gave the Club deeper insight into waste management and has guided its preparations for the Government's proposed waste charging plan, expected to come into effect in 2020. From this review the Club's highest priority streams were identified, namely:

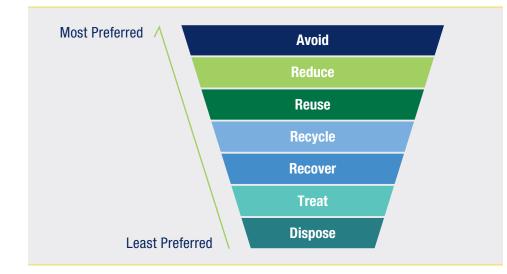
- Food
- Paper
- Plastics

As waste is a by-product of consumption, the Club updated its Waste Policy in early 2017 to highlight the importance of reducing consumption and avoiding waste wherever possible. This Policy also advocates minimising the disposal of waste at landfills by applying a waste management hierarchy. The Club's objectives are to support the Government's target of a 40% reduction in waste sent to landfill by 2022 and to seek the best environmental management options. Building on progress, the Club initiated a new policy in May 2018 to avoid the use of single-use plastics where viable alternatives

Sustainable Procurement Policy

Recognising that waste starts at the point of purchase, a Sustainable Procurement Policy has been put in place to support the purchase of products and services which result in lower environmental impacts.

Departments have been invited to suggest further items for phasing out. This has not only led to the phasing out of some forms of plastic packaging but also empowered staff and departments to further review their purchases.



exist.

In support of protected and endangered fish species, the Club continues to apply a ban on shark's fin and bluefin tuna and promotes sustainable seafood on its menus.

Food Management

In order to implement waste reduction initiatives, it is crucially important to engage the Club's staff, especially those on the front line. Catering staff receive yearly refresher training on food management and responsible waste disposal. Any excess quality food from operations is donated to Food Angel and St James' Settlement to be converted into nutritious meals. Other food waste from the Club's racecourses, clubhouses and staff canteens is collected and delivered on a daily basis to the Government's new organic waste treatment facility, the O-Park 1, for conversion into biogas and compost.

Food Donations have decreased in recent years because kitchens have become much more efficient in purchasing and preparing food, thus fulfilling the Club's strategy of reducing the amount of waste sent to landfill.



Reusable beer cups were introduced at the Riding High Together Festival in April 2019

Source Separation, Donations and Recycling (Hong Kong Operations)

	2018/19	2017/18	2016/17	2015/16	2009/10 Baseline
Donations, Food (kg)	9,501	12,410	15,489	18,584	_
RECYCLING:					
Food waste (kg)	1,051,662	858,676	865,472	917,071	_
Paper (kg)	576,923	534,756	526,980	550,508	385,967
Glass bottles (kg)	121,319	98,406	106,081	98,280	21,059
Plastic (kg)	91,967	61,617	38,417	14,443	4,367
Metal (kg)	17,465	4,824	5,495	3,325	3,927
Used cooking oil (litres)	22,394	13,316	15,347	13,828	_
e-waste (units)	3,298	5,178	13,686	13,707	5,137

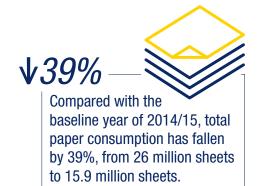


Paper

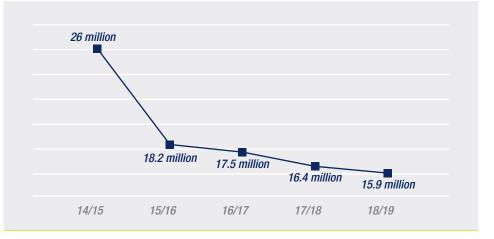
Paper Avoidance and Reduction

All of the paper used in Club offices is sustainably sourced, with 96% of purchases being 100% recycled paper and the remaining 4% being Forest Stewardship Council-certified paper.

The Club set it's first office paper reduction target in 2014/15, the aim being to reduce usage by 30% by 2016/17. This was exceeded, with a 32.5% saving achieved by 2016/17 and 39% by 2018/19, that is, from 26 million sheets to 15.9 million sheets. The Club is now working towards a paper reduction target of 40% by July 2021.



OFFICE PRINTING (NUMBER OF SHEETS)



Paper orders for 2018/19 fell by 3.4% even though the number of full-time employees grew by 3.5% during the same period.

Measures that have contributed to paper reduction include a managed print system implemented by the Club's IT Department; an e-procurement platform; and digital service and user workshops to train highusage departments to implement paper avoidance measures. Further reductions have been made possible by reducing the number of printers, default double print settings and transparent reporting of individual printing data.

PAPER (continued)

Paper Reduction – badges Magazine

In April 2018, Membership implemented a new channel to deliver its *badges* magazine, changing from a bilingual publication to either Chinese or English. This has reduced the number of pages by 38%, a significant saving. Many members also chose the online version.



Paper Reduction at Off-Course Betting Branches (OCBBs)

The Club continues to implement measures to reduce the amount of thermal paper used for bet receipts, which are not recyclable. The Club has adopted two strategies to manage thermal paper usage and waste. First, reducing the amount of thermal paper and second, providing separate bins for thermal paper at OCBBs and other retail venues. Furthermore, the Retail Department has been steadily migrating customer transactions to on-line channels which consume less or no paper. As a result, there has been an overall reduction of 400 million paper bet slips in the past five years.

the length of thermal paper bet receipts has been reduced to achieve further savings of six million metres a year.

The length of thermal paper bet receipts has been reduced to achieve further savings of six million metres a year. Additionally, every OCBB now utilises e-display monitors to communicate with customers which has reduced the need for paper posters and allows more up-todate information to be provided. Together, these measures have resulted in savings equivalent to 1,953 tonnes of carbon emissions in the past five years.

Paper Purchased

	2018/19	2017/18	2016/17	2009/10 Baseline
HONG KONG OPERATIONS				
Bet Slips (thousand sheets)	435,081	449,278	484,465	647,294
FSC paper	100%	100%	100%	19%
Bet Receipts (thousand paper rolls)	199	205	220	264 (2011/12)
Office Copy Paper (boxes)	6,335	6,555	6,372	9,714

PLASTICS & OTHER MATERIALS

Since January 2018, Beas River Equestrian Centre has updated its stable waste management protocols to eliminate the use of over 250,000 plastic bags per annum.

Plastics

Avoiding Plastic Waste

The Club implemented a Policy on Avoiding Single-Use Plastic in September 2018. This has led to a significant reduction of single-use plastic across all of the Club's operations. The Club has targeted the following categories, while also inviting departments to suggest other items that could be phased out:

- water in single-use plastic bottles
- plastic drinking straws
- single-use plastic utensils
- take-away food containers

Clubhouses and racecourses have stopped using almost all single-use plastic utensils since January 2019. With the exception of Chinese soup spoons, they have been replaced with eco-friendly and sustainably sourced wooden cutlery.



Reducing Disposable Plastics

The Club has rolled out an initiative to change the packaging of takeaway food to a plant based material called bagasse (a paper-like material made from sugar cane fibres). This initiative will make it easier for customers and staff to differentiate between plastic and non-plastic items, and enable improved sorting of plastic disposables. In addition, the Club-supported Green Angel programme operates at racing events to manually sort and separate different types of waste.

Eliminating Plastic Bags at Beas River Equestrian Centre (BREC)

In addition, BREC has eliminated the use of plastic bags and reduced transport of waste; since 2018 a single mobile waste compactor truck, has made one round trip a day to the Animal Waste Composting Plant in Yuen Long instead of four. BREC has also begun recycling the plastic packaging in which clean stable bedding is supplied, saving a further 75,000 plastic bags from going to landfill each year.

Free Water and Removal of Single-Use Plastic Water Bottles



To avoid the use of single-use plastic bottles, the Club provides free drinking water for all staff and customers at office buildings, racecourses and stables areas. The Club has also reviewed the personal care products provided at clubhouses to ensure that they do not contain microbeads.

Through the successful implementation of this policy, staff members have discovered other items within their sphere of influence to phase out. For example eliminating plastic packaging used for frequently purchased materials like bedding, and replacing plastic umbrella bags with umbrella dryers at the front of office buildings.

PLASTICS & OTHER MATERIALS (continued) The Club is working hard to improve clean separation of recyclable materials and to identify reuse options before disposal. This includes changing what we purchase and how we manage end-of-service disposal.

Waste Reduction at Clubhouses

Another area that has been examined is towel usage. In 2018, more than 796,000 towels were used in Happy Valley Clubhouse changing rooms and around 350,000 at Sha Tin Clubhouse. By reducing the number of towels, the clubhouses aim to reduce energy consumption used for washing and drying.

Responsible Disposal of Electrical and Electronic Equipment (WEEE)



The Club has been working with a Government electronic waste management company to recycle its electronic waste. As a result, 3,298 pieces of electronic waste have been removed from the Club over a one-year period.

In addition, the Club continues to donate used electronic equipment to Caritas Computer Workshop in Hong Kong. The equipment is refurbished and then donated to those in need.



New e-display units at an Off-Course Betting Branch

Reusing Retired Computer Equipment

Shenzhen HKJC Technology Development Limited, a subsidiary of the Club, has donated over 100 retired computers and items of networking equipment to rural primary schools since 2017. These include approximately 50 laptops, creating an opportunity to extend their lifecycles – a win-win for the Club and the recipient schools.

Digital Initiatives

Virtual Desktop Enhancement

Another area of significant investment by the Club is IT infrastructure and architecture. Upgrades have delivered environmental savings in terms of reducing both overall energy consumption and the future impact of electronic and electrical waste disposal.

The Club's computer equipment is normally replaced every five years. However, by upgrading its system to a "thin client" or Virtual Desktop Infrastructure (VDI), which is a much smaller, lightweight computer that needs less packaging, significant energy and waste savings will be realised in the future.

VDI is being rolled out between February 2019 and January 2020 and will reduce the number of computers in operation from 6,000 to 3,300.

Green Events

Hong Kong Government Green Events Charter & Guidebook

In 2018, the Environmental Protection Department of the Hong Kong SAR Government published its "Green Event Guidebook" in consultation with large organisations such as the Club. In September 2018, the Club became a signatory to the Government's "Green Event Pledge".

In line with the Green Event Guidebook, overall waste generated by the "Riding High Together Festival" in April 2019 decreased significantly. Key measures included reducing the packaging of prizes and merchandise; giving volunteers refillable water bottles; and transferring more event information, communications and ticketing to digital channels.



The Hong Kong Jockey Club has pledged to make reference to the Environmental Protection Department's Green Event Guidebook in order to enhance the environmental performance of events.



Upgraded computer systems at our Telebet office

The Hong Kong Jockey Club Charities Trust

For over a century, The Hong Kong Jockey Club has been contributing to the betterment of society, both directly and through its Charities Trust. In recent years, the Trust has become one of the world's top ten charity donors.

Approximately 90% of the Club's annual operating surplus after tax is donated to the Trust, enabling it to play a significant role in the community's development. Working with Government, nongovernmental organisations (NGOs) and community partners, the Trust is committed to improving the quality of life of the communities in which it serves and to provide relief to those in need. Some of the Trust's ongoing contributions and community partnerships have an environmental focus. A number of these are discussed on the following pages.

Sustainable Development Solutions Network – Hong Kong Chapter

In 2015, the United Nations announced global Sustainable Development Goals (SDGs) aimed at eradicating poverty and deprivation, growing economies, protecting the environment, and promoting peace and good governance.

With initiatives across a wide range of sectors, the Club is already addressing a number of these goals through various Trust-supported and initiated projects. In January 2018, the Trust joined hands with The Chinese University of Hong Kong (CUHK) to co-host the Hong Kong chapter of the United Nations Sustainable Development Solutions Network (SDSN) with the aim of promoting and mobilising expertise from different sectors and backgrounds to implement the UN's 17 SDGs.

The Trust and CUHK have established a long-term and productive partnership on a wide range of social and sustainable development issues. In 2013, the



Launch of the Sustainable Development Solutions Network in January 2018

Trust granted the university funding to establish the Jockey Club Museum of Climate Change (MOCC), the first of its kind in the world, as a means of raising public awareness of the impact of global warming. As of July 2019, the MOCC has attracted some 460,000 visitors.

In celebration of MOCC's 5th Anniversary, the Trust and CUHK announced the launch of the SDSN Youth Hong Kong programme in December 2018 to enhance understanding of the SDGs among young people, especially university students.

Green Buildings & Carbon Reduction

BEAM Plus is the green building assessment scheme adopted in Hong Kong to evaluate overall building performance in terms of energy and water efficiency, materials safety, indoor environmental quality and waste management. However, many NGOs and schools lack knowledge and expertise in green building assessment and management. In view of this, the Trust has approved funding for initiatives designed to lower the barriers to joining the green buildings movement, and to encourage more people to support the use of clean energy at their premises.

BEAM Plus in Schools Project

The Trust has approved a donation of HK\$86 million to the Business Environment Council in partnership with BEAM Society Limited and the Hong Kong Green Buildings Council to help transform schools into certified green buildings and to instil the concept of green building operations among teaching staff and students. The project will involve 120 primary and secondary schools, covering around 12% of all local schools in Hong Kong. An evaluation report will be prepared to review the effectiveness and impact of the project which will provide a reference for the school sector to go green.

Promoting Solar Power

The Trust has approved funding for the Hong Chi Association and CarbonCare InnoLab Limited to launch two initiatives promoting the use of solar power. The Hong Chi Association will install solar power systems at all of its 13 special schools serving people with various levels of intellectual disability. CarbonCare InnoLab will launch the Jockey Club SolarCare Project, which includes installation of solar power systems at 10 demonstration sites on NGO premises, to promote a low-carbon economy and wider uses of renewable energy in the social sector. It will also provide training for NGO staff and service users, along with school and public education workshops.

These two projects will generate estimated annual energy yields of 363 MWh and 610 MWh respectively, equivalent to avoiding a total of 770 tonnes of carbon emissions from fossil fuels. Through the Government's Feed-in Tariff Scheme, under which power companies purchase surplus electricity from renewable energy producers at favourable rates, the Hong Chi Association will generate a steady source of revenue which it will then use for the implementation of STEM education programmes for its students. Similarly, NGO partners of the Jockey Club SolarCare Project will use the proceeds received to organise activities and environmental initiatives.



Students learn about green buildings and carbon reduction



Responsible Consumption & Waste Management

As a strong supporter of recycling, the Trust has extended its support to promote responsible consumption and better waste management.

Hong Chi Jockey Club Glass Bottle Recycling Project

Since 2010, the Trust has donated almost HK\$20 million to implement the Hong Chi Jockey Club Glass Bottle Recycling Project. Over the nine years of the project, some 6,000 tonnes of glass bottles have been collected and recycled into eco-bricks, while approximately 450 training and vocational opportunities have been created for trainees with intellectual disabilities. Collection points have been set up in residential estates, shopping malls and hospitals around the city. From 14 points at the very beginning to a current total of 430 points, this expansion demonstrates the steadily increasing demand for better recycling in the community.

A total of 629 outreach workshops have also helped the public learn more about glass 'upcycling' and green lifestyles. With the Club's three-phase initiative now successfully concluded, the Government's Environmental Protection Department will take the project forward and extend it to all 18 districts of Hong Kong.

Jockey Club Responsible Consumption Programme

This three-year public education programme employs various marketing tools with the aim of instilling sustainability considerations into consumers' purchasing habits. Three main themes have been selected for the programme: reducing consumption of 'ugly food'; reducing consumption of shopping bags and packaging materials; and encouraging the use of second-hand clothes and accessories. The programme involves a secondary school competition on responsible consumption marketing, a public education video programme, and research on young people's responsible consumption.

Videos produced by students as part of a secondary school programme have attracted more than 6,600 views, while four public education videos broadcast on TV channels and social media have reached a total audience of 1.4 million. A social impact index for responsible consumption is also being developed to help measure the effectiveness of future programmes promoting responsible consumption.



The Club's Head of Charities (Grant Making – Elderly, Rehabilitation, Medical, Environment & Family) Imelda Chan (3rd right); Secretary for the Environment Wong Kam-sing (centre); HKBU's President Roland T Chin (3rd left) and guests officiate at the Jockey Club Responsible Consumption Programme launch ceremony.

Biodiversity & Conservation

Notwithstanding its small geographical area, Hong Kong supports a large number of plant and animal species including more than 2,100 native plants, 57 species of terrestrial mammals and over 500 species of birds. At the same time, as elsewhere in the world, biodiversity and nature are increasingly under threat in Hong Kong. The Trust has funded some major initiatives in this area.

Jockey Club Nature Conservation Centre

The Trust has agreed to donate HK\$130 million to establish the Jockey Club Nature Conservation Centre at Kadoorie Farm and Botanic Garden near Tai Po. Targeted for completion in mid-2021, this five-storey multifunctional centre will serve as the new base for the only wild animal rescue centre and sanctuary in Hong Kong. It will also support the implementation of ongoing conservation work and the hosting of environmental awareness and capacitybuilding programmes. More than 42,000 visitors are expected each year. The Centre will be constructed to blend into the natural terrace landscape. An environmentallyfriendly design will be adopted, including green spaces, photovoltaic glass, a solar heating system and the use of recycled materials.

Jockey Club Smart City Tree Management Project

Officially launched in 2018 with approved funding of HK\$32 million, this project makes use of smart sensing technologies to improve the efficiency and reliability of the city's urban tree risk management, and to encourage a collaborative approach to the protection of urban trees. Led by The Hong Kong Polytechnic University, it is a joint effort of three local universities, government departments and NGOs. The system is one of the world's first realtime monitoring systems for urban tree management and tree risk profiling using "big data". Some 115 university students have already been trained at capacitybuilding workshops, and another 3,600 secondary school students will benefit through a train-the-trainer approach. The

project will also reach out to the wider public through an interactive App and activities to encourage more community involvement in environmental protection.

Jane Goodall Exhibition

Funded exclusively by the Trust in 2019, "The Hong Kong Jockey Club Presents – Becoming Jane: Inspiring a Shared Planet" exhibition was the city's first-ever holistic presentation of primatologist Dr Jane Goodall's dedication to environmental conservation. Trust funding also covered educational programmes to enhance public understanding of wildlife conservation and appreciation, including public lectures targeting young people and young environmental professionals, and outreach workshops in over 75 schools.



The Trust funded Becoming Jane: Inspiring a Shared Planet exhibition in the summer of 2019.

Water Management

Water availability and management are recognised globally as important issues faced by the world. In Hong Kong, many people are unaware that the yield from rainfall collected in local catchments provides around 20 to 30% of the city's fresh water supply. About one third of Hong Kong's land is designated as water gathering grounds where surface run-off is collected for storage in reservoirs. Rich biodiversity in these water gathering grounds is crucial for maintaining the quantity and quality of fresh water. Unfortunately, the public has a low awareness of the linkage between these two important assets. Against this background, the Trust has supported a number of projects to increase public awareness of water conservation. Among these is the JC-Wise initiative.

JC-WISE Phase II Launch

The Trust supported The University of Hong Kong in launching the Jockey Club Water Initiative on Sustainability and Engagement (JC-WISE) Project in 2016, with a view to reinvigorating water conservation awareness. A footprint calculator mobile App developed under the initiative has recorded nearly 200,000 views and downloads. A Government-hosted online database containing information on seven selected river basins had attracted more than 34,000 users as of May 2019, and has been recommended by the Education Bureau as a reference for the senior secondary geography curriculum.



In view of these encouraging results, the Trust has approved new funding to extend the project for another three years, with enhancements to the water resources database and tailored and multi-tiered engagement programmes. Fifty schools and over 48,000 students will be engaged through the school partnership programme. Approximately 20,000 members of the public will directly participate in various educational activities, while the online resources will serve about 180,000 people.



ENGAGEMENT

This focus on training is

the Club.

designed to reach more of the

6.000 full-time and 15.000-

plus part-time employees of

The Club continues to roll out initiatives to embed sustainability among its employees and contribute to the wider community of Hong Kong. Sustainability training is incorporated into all executive and staff induction programmes. The Club also supports public and industry seminars, actively shares learning, joins business initiatives, and forms long-term partnerships with NGOs.

Environmental Training

Increased environmental training aligns with the Club's wider objective of ensuring that employees are equipped to carry out their duties in an environmentally responsible way. In 2017/18, the Club introduced three new training packages for full-time staff: sustainability induction, waste compliance training and e-learning on environmental policies and guidelines. Two training packages were specially developed for the part-time staff of Retail and Membership. This training – classroom and electronic – is designed to reach more of the Club's 6,000 full-time and 15,000-plus part-time employees.

In the lead up to the opening of Conghua Racecourse in 2018-19, environmental induction training was developed and work practices and instructions reviewed. This was crucial as over 90% of employees at Conghua are new recruits and many are new to the equine industry.

Green Action

As a further means of raising environmental awareness among its employees, the Club organises regular Green Action programmes, including recycling campaigns, awareness programmes, training and eco-tours. This year these included an eco-tour for staff and their families to Lamma Island, where they learned about the island's biodiversity and ecology. Last year the Club organised the Eco-rice Planting Activity at Long Valley, a workshop aimed at introducing the ecological importance of rice paddies and the story of rice farming revitalisation at Long Valley in Sheung Shui.



ENGAGEMENT

Support for Non-governmental Organisations



The Club received a Hong Kong Sustainability Award 2018-19 – Certificate of Excellence from the Hong Kong Management Association.

The Club actively shares best practice and engages the community on environmental issues. For example, it has provided knowledge and support to the Hong Kong Rugby Football Union for their Reusable Cup Initiative, which introduced reusable plastic beverage cups at major rugby events in 2019, including the Hong Kong Sevens. The Club also continues to provide tertiary students with tickets and access to environmental seminars, workshops and industry visits. In 2019, these events included the CUHK's Sustainability Conference.

The Club is a strong supporter of the conservation work carried out in Hong Kong by the World Wide Fund for Nature (WWF) and has been recognised as a Double Diamond Member of the WWF for its contributions. This year, as in the past several years, the Club supported WWF's Earth Hour by switching off external lighting at all 102 Off-Course Betting Branches (OCBBs). As part of its commitment under the Government's External Lighting Charter, the Club already switches off external lighting at OCBBs after midnight.



©CUHK Sustainability Conference 2019

ENGAGEMENT

Professional Associations

In partnership with the Business Environment Council (BEC), in particular its Circular Economy, Climate Change Business Forum and Sustainable Living Environment Advisory Groups, the Club is active in addressing major environmental issues affecting Hong Kong and helping local businesses make improvements in their environmental performance. With the aim of fostering sustainability and nurturing environmental practitioners, the Club supported the BEC to offer admission for tertiary students to attend seminars, workshops and industry visits in 2017-19. The Club also sits on the Board of Directors of the Hong Kong Institute of Qualified Environmental Professionals Limited (HKIQEP). This was established in 2015 to support Hong Kong's reputation and position as an international leader in environmental management, and to ensure the quality of work conducted across the growing environmental field in Hong Kong.

The Club is also a keen supporter of *Drink Without Waste,* a broad coalition of corporates and civil society members in Hong Kong brought together to focus on the management of single-use beverage packaging, which makes up a significant portion of municipal solid waste. This reflects the Club's efforts to reduce the use of single-use packaged beverages in its own operations.

Nature & Wellness Programmes for Club Members

Through its new Nature Explorer and Nature Discovery programmes Beas River Country Club (BRCC) invites Members to explore the biodiversity of the surrounding area. BRCC is home to many rare species of animals, butterflies, birds and plants.



A bird perches on a salvaged branch after Typhoon Mangkhut.



Many species of birds and butterflies have returned to Beas River owing to the introduction of new plants and an increase in food sources.

CONGHUA RACECOURSE

With the official opening of The Hong Kong Jockey Club Conghua Racecourse on 28 August 2018, Hong Kong racing entered a new era. With its state-of-the-art training and horse-care facilities. Conghua will enable the Club to take its world-class racing to an even higher level of excellence.

Preserving the surrounding environment is paramount to the Club's success in Conghua. We are implementing a rigorous programme to manage and monitor all major environmental aspects, including air emissions, ambient noise, waste water and solid waste.



Conghua Racecourse (CRC) is the Club's largest strategic investment in racing since the opening of Sha Tin Racecourse over 40 years ago. Over the next few years, a gradually increasing number of horses will be stabled at CRC to take advantage of its facilities. For much of the reporting period, CRC was still in a pre-operational phase. For this reason, although environmental monitoring occurred throughout the building and

CONGHUA RACECOURSE

operations testing phase, the data is not included in this report.

The governance of CRC accords with the international standard ISO14001. Its environmental management and performance is overseen by an Environmental Committee chaired by the General Manager and comprising the heads of key departments. A comprehensive



Water from the horse swimming pool is recycled, going through a six-stage filtration process.

environmental monitoring programme was established in the construction phase. Covering over 20 locations and the four key areas of air, noise, water and waste, to ensure that CRC continues to operate in accordance with the commitments and targets laid out in its Environmental Impact Assessment.

Following CRC's official opening in August 2018, priority has been put on training the growing number of new staff to implement its Environment Management System.

Recognising the need to protect the natural environment of the surrounding area, the Club has incorporated numerous environmental design features and devices with the aim of preventing noise, reducing odour and water emissions, and making efficient use of electricity and water.

CRC is designed with total separation of storm water and waste water drainage. Waste water from operations is treated at an on-site sewage treatment plant using membrane bioreactor technology for reuse in turf irrigation, floor washing, gardening, flushing and cooling towers. This enables



Horses arriving from Hong Kong as more trainers implement a dual-site model for training.

up to 2,000 m³/day of fresh water consumption to be saved. These measures also help maintain a clean environment around CRC, which is a bio-security zone.

Waste Management at Conghua Racecourse

All stables and operations waste is sent for processing at Conghua District's newlycommissioned municipal incinerator, which is used to generate electricity for the area. In addition, food waste and other recyclable materials are treated offsite in accordance with local requirements.

ENVIRONMENTAL PERFORMANCE

Environmental Performance (Hong Kong Operations)

	2018/19	2017/18	2016/17	2009/10 Baseline
CARBON EMISSIONS (CO ₂ -e in tonnes) ⁽¹⁾	109,879	109,896	111,836	116,434
Indirect emissions from electricity Fugitive emissions from refrigerant Direct emissions from facilities Direct emissions from transportation Indirect emissions from gas	102,204 3,481 2,322 1,379 493	101,641 4,230 2,318 1,190 517	103,961 3,972 2,290 1,099 514	109,822 2,686 2,367 1,057 502
CARBON EMISSIONS BY PURCHASED ELECTRICITY CONSUMPTION	I (CO ₂ -e in tonnes) ⁽¹⁾			
Racecourses Offices ⁽²⁾ Clubhouses Off-Course Betting Branches Telebet centres and Integrated contact centre Staff Quarters	51,282 17,657 16,772 13,572 1,881 1,040	50,863 17,614 16,811 13,192 2,053 1,108	51,260 18,164 17,192 13,914 2,315 1,116	52,982 13,827 18,082 15,938 7,981 1,012
CARBON EMISSION FACTORS (3)				
Electricity (Hong Kong Island) (kg CO ₂ -e/kWh) Electricity (Kowloon and New Territories) (kg CO ₂ -e/kWh) Towngas (kg CO ₂ -e/unit)	0.80 0.51 0.56	0.79 0.51 0.59	0.79 0.54 0.60	0.84 0.54 0.63
TOTAL ENERGY CONSUMPTION (GJ)	687,760	686,099	674,607	685,700
Electricity (kWh) ⁽¹⁾ Towngas (units) Diesel (litres) Biodiesel (B5) (litres) Petrol (litres) LPG (litres)	174,006,240 873,354 273,910 217,691 53,238 0	174,290,097 873,496 181,759 222,180 62,514 6,881	171,590,670 857,637 164,258 200,424 70,647 12,462	174,835,923 798,673 420,343 - 77,833 11,685
EMISSION OF OZONE-DEPLETING SUBSTANCES BY WEIGHT (kg CFC-11 equivalent)	28	76	54	132

Environmental Performance (continued)

Environmental Performance (Hong Kong Operations)

	2018/19	2017/18	2016/17	2009/10 Baseline
WATER CONSUMPTION – FROM MUNICIPAL SOURCE (m ³) ⁽⁴⁾	2,017,023	1,953,976	1,898,235	-
MATERIALS PURCHASED				
Bet slips (thousand sheets)	435,081	449,278	488,465	647,294
FSC paper	100%	100%	100%	18.6%
Office copy paper (boxes)	6,335	6,555	6,372	9,714
Recycled paper	97%	94%	73%	11%
Horse bedding – newspaper (23kg bags)	246,418	286,066	349,100	585,260
Horse bedding – wood shaving (18-21kg bags)	447,001	465,541	477,969	70,130
SOURCE SEPARATION, DONATIONS AND RECYCLING				
Donations, Food (kg): (5)	9,501	12,410	15,489	_
Recycling:				
Food waste (kg) ⁽⁶⁾	1,051,662	858,676	865,472	-
Paper (kg)	576,923	534,756	526,980	385,967
Glass bottles (kg)	121,319	98,406	106,081	21,059
Plastic (kg)	91,967	61,617	38,417	4,367
Metal (kg)	17,465	4,824	5,495	3927
Used cooking oil (litres) ⁽⁷⁾	22,394	13,316	15,347	-
e-waste (units)	3,298	5,178	13,686	5,137

(1) Historical data revised in alignment with financial reporting.

(2) Data of the Sha Tin Communications and Technology Centre included since 2015/16.

(3) The carbon emission factors reference sustainability reports published by energy companies.

(4) Water consumption in 2013/14 (baseline) was 1,738,946 m³.

(5) Data available since November 2013.

(6) Data available since 2012/2013.

(7) Data available since 2013/2014.

Environmental Performance (continued)

Environmental Performance (Other Operations)

	2018/19	2017/18	2016/17	2009/10 Baseline ⁽
CARBON EMISSIONS (CO2-e in tonnes)				
Kau Sai Chau Public Golf Course	4,694	4,737	4,874	2,741
Public Riding Schools	562	579	672	469
Tai Kwun – Centre for Heritage and Arts ⁽¹⁰⁾	5,131	_	_	_
TOTAL ENERGY CONSUMPTION (GJ) ⁽⁹⁾	70,289	48,039	48,298	21,081
Kau Sai Chau Public Golf Course				
Electricity (kWh)	5,269,113	5,189,831	5,138,762	5,075,433
Diesel (litres) ⁽⁹⁾	655,013	680,152	682,981	-
Petrol (litres) ⁽⁹⁾	28,346	31,218	30,952	-
Public Riding Schools				
Electricity (kWh)	992,384	1,034,662	1,135,878	780,391
Biodiesel (B5) (litres)	3,884	3,458	3,063	-
Tai Kwun – Centre for Heritage and Arts ⁽¹⁰⁾				
Electricity (kWh)	6,412,017	_	-	-
Diesel (litres)	483	_	_	_
				2013/14
	2018/19	2017/18	2016/17	Baseline
WATER CONSUMPTION – FROM MUNICIPAL SOURCE (m ³)				
Kau Sai Chau Public Golf Course	37,947	31,367	35,863	55,163
Public Riding Schools	8,318	6,880	8,834	9,944
Tai Kwun – Centre for Heritage and Arts ⁽¹⁰⁾	18,492	-	-	-

(8) Corrected from the 2019 Annual Report. The base year should be 2009/10.

(9) Includes fuel data of Kau Sai Chau Public Golf Course since 2016/17

(10) 2018/19 was the first full year of operations at Tai Kwun. Data is for buildings and public areas managed and operated by The Jockey Club CPS Limited only.

Environmental Performance (continued)

Environmental Performance (Mainland Operations)⁽¹¹⁾

	2018/19	2017/18	2016/17	2009/10 Baseline
CARBON EMISSIONS (CO2-e in tonnes) ⁽¹²⁾	7,357	7,451	7,599	8,765
Indirect emissions from electricity Direct emissions from facilities	6,896 461	6,974 477	7,130 469	8,300 465
TOTAL ENERGY CONSUMPTION (GJ)	36,915	37,521	37,953	42,089
Electricity (kWh) Natural gas (m³)	7,965,973 228,808	8,056,567 236,587	8,212,671 232,993	9,383,904 230,748
WATER CONSUMPTION – FROM MUNICIPAL SOURCE (m ³)	100,712	98,144	99,012	87,268
SOURCE SEPARATION, DONATIONS AND RECYCLING (13)				
RECYCLING (kg):				
Food waste	73,620	58,540	45,048	-
Paper	7,924	7,346	6,808	_
Plastics	2,114	1,703	1,494	-
Glass bottles	1,944	1,189	974	_
DISPOSAL, GENERAL WASTE (kg) ⁽¹⁴⁾	78,050	64,970	57,672	_

(11) Data available since 2012/2013.

(12) Includes Beijing Clubhouse from 2009/10 and office operations in Shenzhen from 2016/17. Data for 2009/10 baseline updated with adjustment in emission factors.

(13) Utilising carbon emission factors published by the National Development and Reform Commission (NDRC).

(14) Revised as general waste from green waste in previous reports to avoid ambiguity.

GENERAL D	DISCLOSURES	
Organization	al Profile	
102-1	Name of the organization	ER – About This Report
102-2	Activities, brands, products, and services	AR – Financial Report (Business Review)
102-3	Location of headquarters	AR – Back cover
102-4	Location of operations	AR – Financial Report (Financial Statements)
102-5	Ownership and legal form	AR – Financial Report (Financial Statements)
102-6	Markets served	AR – Financial Report (Business Review)
102-7	Scale of the organization	AR – Financial Report (Business Review)
102-8	Information on employees and other workers	AR – Financial Report (Statistical Summary) (Group Employees)
102-9	Supply chain	ER – Waste Avoidance and Management
102-10	Significant changes to the organization and its supply chain	ER – About This Report ER – Message from the Chairman of the Sustainability Committee
102-11	Precautionary Principle or approach	AR – Financial Report (Business Review)
102-12	External initiatives	The Club subscribes to various external environmental charters, such as the Environment Bureau's Charter on External Lighting, the Green Outdoor Event Commendation Scheme under the Hong Kong Awards for Environmental Excellence and the Food Wise Charter, together with community projects under the Government's Environment and Conservation Fund.
102-13	Membership of associations	WEB – About HKJC

(About GRI Standards: On pages 39-42 of this Report, 2016 or 2018 refers to the year of the GRI Standard's update)

GENERAL DISCLOSURES Strategy		
Ethics and In	tegrity	
102-16	Values, principles, standards, and norms of behavior	AR – Core Values ER – Green Governance (The Club's Core Environmental Commitments)
Governance		
102-18	Governance structure	AR – Board of Management ER – Green Governance
Stakeholder I	Engagement	
102-40	List of stakeholder groups	ER – Green Governance (Priorities, Materiality & Risk) The Club engages a wide range of stakeholders including the Club's customers, members and employees; suppliers; governmen departments; local community bodies; District Councils; and the media.
102-41	Collective bargaining agreements	Not applicable as there is no legislation applied in Hong Kong
102-42	Identifying and selecting stakeholders	On environmental aspects, the Club has identified key stakeholder groups including government departments, business peers, green groups, customers and employees, as well as partners involved in planning and implementing Club-funded community projects.
102-43	Approach to stakeholder engagement	ER – Green Governance (Priorities, Materiality & Risk) The Club maintains regular engagement with different stakeholder groups through a wide variety of means including customer service channels, electronic communications and publications, Club websites, surveys, focus groups and workshops.
102-44	Key topics and concerns raised	ER – Green Governance (Priorities, Materiality & Risk)

GENERAL DISCLOSURES Reporting practice		
102-46	Defining report content and topic Boundaries	ER – Green Governance (Priorities, Materiality & Risk)
102-47	List of material topics	ER – Green Governance (Priorities, Materiality & Risk)
102-48	Restatements of information	Historical data was revised in alignment with financial reporting. Refer to the footnotes of Performance Summary Data for details of restatements.
102-49	Changes in reporting	ER – About This Report
102-50	Reporting period	ER – About This Report
102-51	Date of most recent report	The last GRI report, Environmental Report 2017, was published in December 2017.
102-52	Reporting cycle	ER – About This Report
102-53	Contact point for questions regarding the report	ER – About This Report
102-54	Claims of reporting in accordance with the GRI Standards	ER – About This Report
102-55	GRI content index	ER – GRI Content Index
102-56	External assurance	This report has been assured by HKQAA.

ECONOMIC

ECONOMIC PERFORMANCE		
GRI 103: Ma	anagement Approach 2016	
103-1	Explanation of the material topic and its Boundary	AR – Financial Report (Business Review)
103-2	The management approach and its components	AR – Financial Report (Business Review)
103-3	Evaluation of the management approach	AR – Financial Report (Business Review)
GRI 201: Ec	onomic Performance 2016	
201-1	Direct economic value generated and distributed	AR – Financial Report (Business Review)
201-3	Defined benefit plan obligations and other retirement plans	AR – Financial Report (Group Consolidated Financial Statements and Statistics)
INDIRECT E	CONOMIC IMPACTS	
GRI 103: Ma	anagement Approach 2016	
103-1	Explanation of the material topic and its Boundary	AR – Charities and Community
103-2	The management approach and its components	AR – Charities and Community
103-3	Evaluation of the management approach	AR – Charities and Community
GRI 203: Ind	lirect Economic Impacts 2016	
203-1	Infrastructure investments and services supported	AR – Charities and Community
203-2	Significant indirect economic impacts	AR – Charities and Community
ANTI-CORR	UPTION	
GRI 103: Ma	anagement Approach 2016	
103-1	Explanation of the material topic and its Boundary	AR – Financial Report (Business Review)
103-2	The management approach and its components	AR – Financial Report (Business Review)
103-3	Evaluation of the management approach	AR – Financial Report (Business Review)
GRI 205: An	ti-Corruption 2016	
205-2	Communication and training about anti-corruption policies and procedures	AR – Financial Report (Business Review)

ENVIRONMENTAL

ENERGY		
GRI 103: Ma	anagement Approach 2016	
103-1	Explanation of the material topic and its Boundary	ER – Managing our Hoofprint (Energy Consumption & Efficiency)
103-2	The management approach and its components	ER – Managing our Hoofprint (Energy Consumption & Efficiency)
103-3	Evaluation of the management approach	ER – Managing our Hoofprint (Energy Consumption & Efficiency)
GRI 302: En	ergy 2016	
302-1	Energy consumption within the organization	ER – Managing our Hoofprint (Energy Consumption & Efficiency)
302-4	Reduction of energy consumption	ER – Managing our Hoofprint (Energy Consumption & Efficiency)
WATER		
GRI 103: Ma	anagement Approach 2016	
103-1	Explanation of the material topic and its Boundary	ER – Managing our Hoofprint (Water Management)
103-2	The management approach and its components	ER – Managing our Hoofprint (Water Management)
103-3	Evaluation of the management approach	ER – Managing our Hoofprint (Water Management)
GRI 303: Wa	ater and Effluents 2018	
303-1	Interactions with water as a shared resource	ER – Managing our Hoofprint (Water Management) ER – Transformative Philanthropy
303-2	Management of water discharge-related impacts	ER – Conghua Racecourse (CRC) ER – Managing our Hoofprint (Water Management)
303-5	Water consumption	ER – Performance Summary Data

Environmental (continued)

EMISSIONS	3	
GRI 103: Ma	anagement Approach 2016	
103-1	Explanation of the material topic and its Boundary	ER – Managing our Hoofprint (Carbon Footprint & Emissions)
103-2	The management approach and its components	ER – Managing our Hoofprint (Carbon Footprint & Emissions)
103-3	Evaluation of the management approach	ER – Managing our Hoofprint (Carbon Footprint & Emissions)
GRI 305: Em	nissions 2016	
305-1	Direct (Scope 1) GHG emissions	ER – Performance Summary Data
305-2	Energy indirect (Scope 2) GHG emissions	ER – Performance Summary Data
305-5	Reduction of GHG emissions	ER – Performance Summary Data
305-6	Emissions of ozone-depleting substances (ODS)	ER – Performance Summary Data
EFFLUENTS	S AND WASTE	
GRI 103: Ma	anagement Approach 2016	
103-1	Explanation of the material topic and its Boundary	ER – Waste Avoidance and Management
103-2	The management approach and its components	ER – Waste Avoidance and Management
103-3	Evaluation of the management approach	ER – Waste Avoidance and Management
GRI 306: Eff	luents And Waste 2016	
306-2	Waste by type and disposal method	ER – Performance Summary Data
COMPLIAN	CE	
GRI 103: Ma	anagement Approach 2016	
103-1	Explanation of the material topic and its Boundary	ER – Green Governance
103-2	The management approach and its components	ER – Green Governance
103-3	Evaluation of the management approach	ER – Green Governance
GRI 307: En	vironmental Compliance 2016	
307-1	Non-compliance with environmental laws and regulations	Zero – No breach of environmental laws and regulations recorded

SOCIAL

TRAINING AND EDUCATION		
GRI 103: Ma	nagement Approach 2016	
103-1	Explanation of the material topic and its Boundary	AR – Employees
103-2	The management approach and its components	AR – Employees
103-3	Evaluation of the management approach	AR – Employees
GRI 404: Tra	ining and Education 2016	
404-2	Programs for upgrading employee skills and transition assistance programs	AR – Employees (Employee Development)
LOCAL CO	MMUNITIES	
GRI 103: Ma	nagement Approach 2016	
103-1	Explanation of the material topic and its Boundary	AR – Charities and Community AR – Responsible Sports Wagering and Lottery ER – Engagement
103-2	The management approach and its components	AR – Charities and Community AR – Responsible Sports Wagering and Lottery ER – Engagement
103-3	Evaluation of the management approach	AR – Charities and Community AR – Responsible Sports Wagering and Lottery ER – Engagement
GRI 413: Lo	cal Communities 2016	
413-1	Operations with local community engagement, impact assessments, and development programs	AR – Charities and Community ER – Conghua Racecourse (CRC) ER – Engagement
413-2	Operations with significant actual and potential negative impacts on local communities	AR – Responsible Sports Wagering and Lottery

ASSURANCE STATEMENT



VERIFICATION STATEMENT

Scope and Objective

Hong Kong Quality Assurance Agency ("HKQAA") was commissioned by Hong Kong Jockey Club ("HKUC") to undertake an independent verification for the Environmental Report 2019 (hereinafter referred to as "the Report"). The Report stated the major activities and achievements on environmental performance of HKJC for the period from 1⁴¹ July 2017 to 30th June 2019.

The aim of this verification is to provide a limited assurance on the reliability of the report contents. The Report has been prepared in accordance with the Core Option of the GRI Sustainability Reporting Standards (GRI Standards).

Level of Assurance and Methodology

The process applied in this verification was based on the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board. Our evidence gathering process was designed to obtain a limited level of assurance as set out in the standard for the purpose of devising the verification conclusion. The reference guidelines for this verification process also include:

- ISO 14064-1:2006 'Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals'
- ISO 14064-3:2006 'Specification with guidance for the validation and verification of greenhouse gas assertions'
- The criteria set in the GRI Standards: Core Option.

The verification process included reviewing relevant documentation, interviewing responsible personnel and verifying supporting evidence of the selected data and information presented in the Report based on sampling. Accuracy and reliability of the sampled aggregated information and data were tested. Also, HKJC's data management mechanism was reviewed to confirm the extent of reliability.

Independence

HKJC is responsible for the collection and presentation of the information presented. HKQAA does not involve in calculating, compiling, or in the development of the Report. Our verification activities are independent from HKJC.

Conclusion

Based on the verification results and in accordance with the verification procedures undertaken, HKQAA has obtained limited assurance and is in the opinion that:

- · No material errors or omissions were identified in the report contents and data;
- The Report has been prepared in accordance with the GRI Standards: Core Option;
- The Report provides a balanced representation of HKJC's environmental performance in the reporting period. It is a prudent and reliable presentation of the environmental issues of HKJC in an inclusive and responsive manner.

Nothing has come to HKQAA attention that the selected environmental performance information and data contained in the Report has not been prepared and presented fairly and honestly, in all material aspects, in accordance with the verification criteria.

Opportunities for improvement on the reporting structure and content are separately submitted to HKJC for their consideration for the compilation of future reports. It does not affect our opinion on the Report.

Signed on behalf of Hong Kong Quality Assurance Agency

line

Jorine Tam Director, Corporate Business December 2019